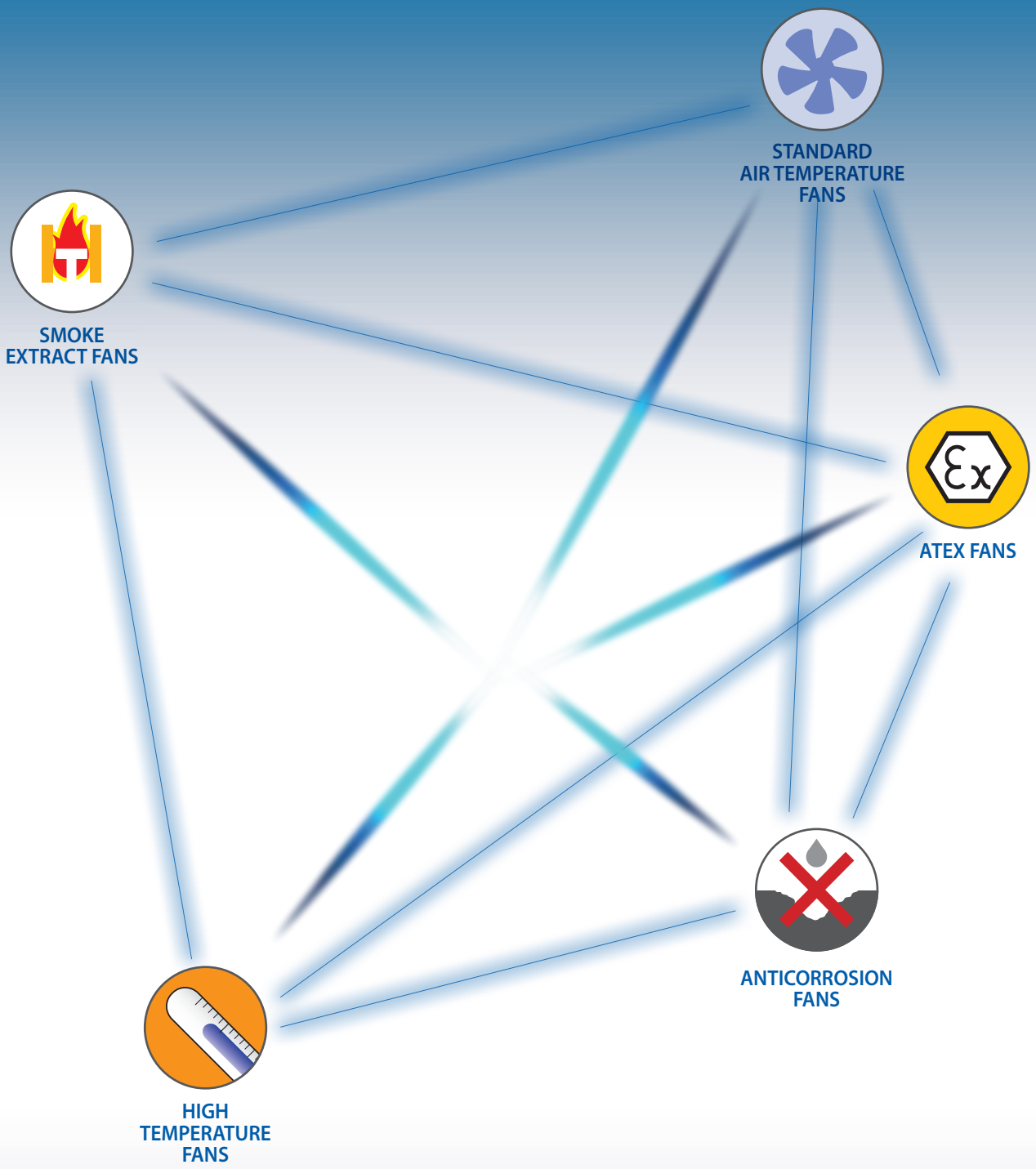

elicent®
advanced ventilation
Dal 1970 la ventilazione made in Italy

INDUSTRIAL AND BUILDING VENTILATION

MAICO GROUP

MAICO VENTILATOREN

Maico Elektroapparate-Fabrik GmbH
Ventilazione civile e industriale

AEREX HAUSTECHNIKSYSTEME

Aerex HaustechnikSysteme GmbH

MAICO ITALIA

Ventilazione civile e industriale

DYNAIR INDUSTRIAL VENTILATION · elicent aspirazione evoluta

BSB

BSB Engineering Service Ltd.
Serrande e serrande tagliafuoco

COMPETAIR Systemhaus für Raumluftkomfort

Filiale commerciale

AIRMASTER FANS Airmaster® Fan Company

USA - Filiale commerciale

MAICO CHINA

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MAICO POLAND

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Membro di

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Associazione internazionale dei maggiori produttori mondiali di ventilazione residenziale

ANACE
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Associazione Nazionale Antincendio e Controllo Evacuazione del fumo

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Work team for the promotion of the green building design technology
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INDEX

LEGEND

Ps / Hs	Static pressure (mm/H_2O - Pa)
Pd	Dynamic pressure (mm/H_2O - Pa)
Pt / Ht	Total pressure (mm/H_2O - Pa)
Q	Air delivery (m^3/h)
U	Rated voltage (V)
M	Rated voltage and frequency single-phase (230V-50Hz)
T	Rated voltage and frequency three-phase (400V-50Hz)
rpm	Nominal motor speed
Pm	Installed motor power (kW)
In	Maximal absorbed current (A)
IP	Motor mechanical protection
Cl	Motor Insulation class
S	Outlet area (m2)
C	Air velocity (m/s)

Pd2	Impeller inertia moment (Kgm2)
Lp	Sound pressure level (dB)
Lw	Sound power level (dB)
Reg.	Speed regulator
P	n° Poles
2 poles	3000 nominal rpm
4 poles	1500 nominal rpm
6 poles	1000 nominal rpm
8 poles	750 nominal rpm

Standards achieved: Performance tests according to EN ISO 5801 standard - Acoustic tests according to EN60651 standard.

Warning:

1. The images are for illustrative purposes and do not constitute part of a contract.
2. The information and designs available in this publication are subject to a process of continuous checks and updates. Despite the accurate and timely verification, it is possible that the data in the meantime, has undergone major changes. For this reason, they do not constitute part of a contract.

SPECIFICATION FOR THE FANS ECO DESIGN

The Directive **2009/125/EC** (also known as Eco-design Directive) is the frame document by the means of which the European Union has defined the requirements for the eco-compliance design of energy using products.

Scope of the Directive is the **objective 20-20-20**, established by the Kyoto Protocol, according to which the consumption of energy must decrease of 20% and the quote of energy produced by renewable sources must increase of 20% within the year 2020.

The use of CE mark is subordinated to the fans compliance with the efficiency requirements which have to be declared on the data label of the products and on the commercial literature.

As far as ventilation products are concerned, concrete measures have been defined **by 2 Regulations:**

1. **Regulation n° 327/2011/EU** (Lot 11) specific to products with power input between 125W and 500 kW which came into force on the 1st January 2013. The products affected by this Regulation are defined as "FANS". Such products have to respect minimum levels of efficiency (N), reported on the documentation and the product data plate.

2. **Regulations n°1253/2014 (Ecodesign) and 1254/2014 (Energy labelling)** (Lot 6) specific to residential and non- residential products with power input superior to 30 W and max airflow up to 250 m3/h or between 250 and 1000 m3/h according to sub classifications.
The products affected by this Regulations are defined **"VENTILATION UNITS"** which can be residential or non-residential, unidirectional or bidirectional.

Residential Ventilation Units (RVU) are submitted to the respect of:

- a SEC value (Specific Energy Consumption) which cannot be superior to 0 kWh/m2.a. The SEC value is reported on the Product Data Sheets (issued for each single model) and on the energy label (as a letter).
- a max sound power level (LwA) value which cannot exceed 45 dB(A).
Besides, all Residential Ventilation Units have to be combined to a multi-speed regulation when put into service and Bidirectional Ventilation Units (Heat recovery units) have to be provided with a thermal by-pass.

Non Residential Ventilation Units (NRVU) are submitted to the respect of:

- all Heat Recovery Systems (except bidirectional ventilation units with thermovector fluid): a minimum thermal efficiency of 67% and an efficiency bonus E = (ηt_nrvu – 0,67)*3.000 if the thermal efficiency ηt_nrvu is at least of 67%, otherwise E = 0.
- Bidirectional ventilation units with thermovector fluid: a minimum thermal efficiency ηt_nrvu of of 63% and an efficiency bonus E : E = (ηt_nrvu – 0,63)*3.000 if the thermal efficiency ηt_nrvu is at least of 63%, otherwise E=0.
- Unidirectional Ventilation Units (UVU): a minimum efficiency (ηvu) of ηvu = 6,2% * ln(P) + 35,0 % if P ≤ 30 kW and 56,1% if P > 30 kW.
- a maximum internal Specific Fan Power (SFP int_limit) in W/(m3/s) of: 1.700 + E – 300*qnom /2 – F if qnom < 2 m3/s and 1.400 + E – F if qnom ≥ 2 m3/s (for Bidirectional Ventilation Units with thermovector fluid); 1.200 + E – 300*qnom /2 – F if qnom < 2 m3/s and 900 + E– F if qnom ≥ 2 m3/s (for others bidirectional Heat Recovery Systems); 250 (for Unidirectional Ventilation Unit to be used with a filter).

Besides, all Non Residential Ventilation Units have to be combined to a multi-speed regulation when put into service and Bidirectional Ventilation Units have to be provided with a Heat Recovery System and a thermal by-pass.

At last, the following ranges are excluded by the Directive because of construction or application specificities:

- Explosion-proof ATEX fans
- Anticorrosive or Antiacid fans
- Fans designed for emergency in case of fire
- Fans designed for the extraction of air with a temperature exceeding 100°C in continuous service

EXPERIENCE, TECHNOLOGY AND SERVICE

Elicent®, a division of Maico Italia SpA, is an Italian leading brand in the building ventilation industry internationally known for the design and manufacture of quality domestic, commercial and industrial fans. Elicent® success is based on the credo of high performance, precise styling and on a strong commitment in maintaining and developing a reputation for quality, reliability and service. The knowledge and experience in product application is supported by an extensive range of fans 100% made in Italy, a specialised and trained team to guarantee technical consultation and precise on-line sales service as well as on a customer-oriented management process to ensure flexibility and assistance.

elicent® advanced ventilation

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elicent® advanced ventilation

The indoor air quality is essential to ensuring good quality of life and safety in residential, commercial and industrial buildings. We have passionately worked for over 45 years with the objective of manufacturing not simply fans, but innovative, technologically advanced, environmentally friendly and human health focused products.

MAICO GROUP

The path followed by our company is part of the history of a large German industrial group, which started as early as 1928, the year when Christian Maier set up Maico Elektroapparate. Since then, the group has been able to build up a well established industrial reality and to acquire the technological and commercial know-how which has allowed it to become one of the top names in the ventilation industry. In the last few years, the group focus to grow on a global level has been speeded up and materialised with important investments in emerging markets: a culturally exciting and highly promising scenario.

CSQ IQNet CERTIFIED MANAGEMENT SYSTEM UNI EN ISO 9001:2015

The compliance of the company Quality System with the UNI EN ISO 9001 standard is a guarantee that it will continue to meet the requirements of its customers. Maico Italia guarantees the compliance of its Quality System through approval by an independent third party which is recognised at a national and international level: CSQ (Quality System Certification). In 2003 Maico Italia obtained the certification ISO 9001 for the high standards of its Quality System. In 2009, the quality management system was adjusted to the new ISO 9001:2008 and in 2016 to the new ISO 9001:2015.

Our production is CE certified and compliant
with ErP Directive 2009/125/CE
and EU Regulations 327/2011 and 1253/2014.

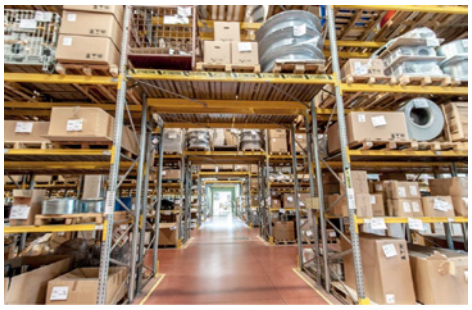
ErP

Maico Italia Headquarters in Lonato del Garda, Brescia, Italy.

AN EFFICIENCY-ORIENTED ORGANISATION

Our business organisation is characterised by strong coordination and cohesion in throughout every one of its stages.
We monitor the whole manufacturing process, step-by-step, from design to delivery. Punctual pre- and after-sales service has always been our great strength, as well as rigorous yet flexible logistics that enable us to operate as leaders in highly competitive markets. Thanks to our method, we promise unique coordination and cohesion. Every department operates in a productive system that works as a large, efficiency-oriented organisation.

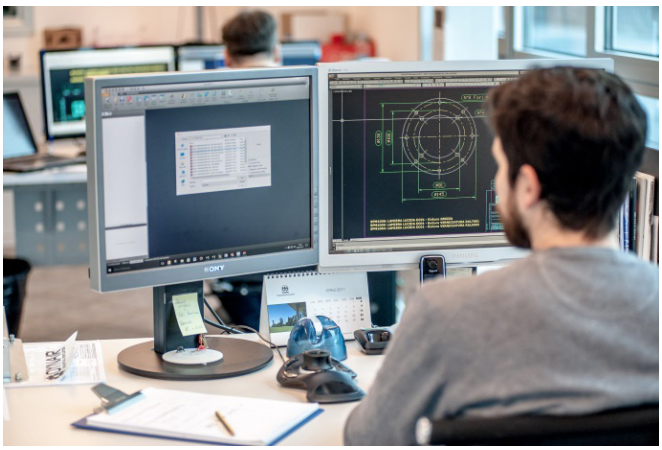
The carpentry production unit



2000 sqm of warehouse
15.000 finished products on stock

The production facilities

R&D



Design

A STRUCTURED AND WIDESPREAD PRESENCE

We chose to work intimately: with an extensive network of representatives, distributors and local partnerships in over 70 countries around the world, we are able to provide expert, clear and immediate commercial and technical support and maintain profitable, long-term trade relations.

A DIRECT LINE

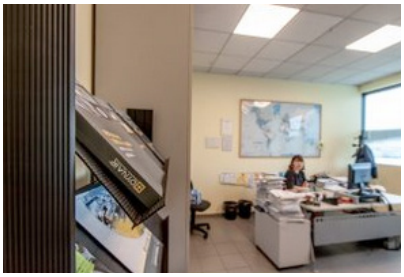
An extensive commercial network and a team of 21 commercial experts and back-office assistants at your service to listen and provide you with pre- and after-sales support.

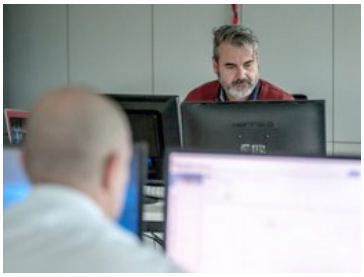
Our commercial experts and back-office assistants, all with consultancy-based training, accompany you step-by-step and know how to guide you in choosing the right solution, with the help of two technologically-advanced support tools:

• The **BlowDyn 2.0 selection software**, a highly accurate tool that can quickly and easily identify the most suitable product for producing any ventilation installation or system.

• the **CFD** (Computational Fluid Dynamics) **analysis software** for simulating all the fluid dynamics variables, i.e. the conditions of use for a ventilation system.

sales@maico-italia.it





TECHNICAL INTRODUCTION

This section is intended to give a brief overview of the most common technical aspects of industrial, commercial and domestic ventilation. For more details please refer to specialized publications.

1. DEFINITIONS

Fan performance are usually expressed through a characteristic curve that, for a certain revolution per minute of the impellor and for specific air conditions, provides the value of the static pressure (ps), or total pressure (pt), given the volumetric flow rate (Q).
Also the value of the absorbed mechanical power (Pw) and the efficiency (n) are expressed given the volumetric flow rate (Q).

1.1 FLOW RATE

Volumetric flow rate is the fluid volume that pass through the fan in a specific amount of time. It is normally expressed in cubic meters per hour (m^3/h), cubic meters per second (m^3/s) or cubic feet per minute (cfm).
The relationship between the flow rate of a ducted fan, the speed of the fluid in the duct and the cross section area of the duct itself is expressed by the following formula:

$$V = \frac{Q}{A*3600} \qquad (1.1)$$

Where:
V = fluid average speed in m/s
Q = flow rate in m^3/h
A = duct cross section area in m^2

1.2 STATIC, DYNAMIC AND TOTAL PRESSURE

When a fluid is in movement, there are three types of pressure involved. Pressure is normally expressed in pascal (Pa), millimetres of water gate (mmH_2O o mmWG) or inches of water gate (inWG).

STATIC PRESSURE (ps)
It is defined as the pressure applied by the fluid to the wall of the duct or of the container in which it's hold. It expresses the potential energy suitable to overcome the resistance given by the system to the fluid transit.
It acts equally in every direction and it is independent from fluid speed.
With reference to environment pressure, static pressure is positive when it is bigger than ambient pressure and negative when it is lower.

DYNAMIC PRESSURE (pd)
It is defined as the pressure related to the energy that belongs to the mass unit of the fluid because of its speed. It expresses the kinetic energy of the fluid in movement. It acts in the same direction of the fluid movement and it is always positive.
The dynamic pressure is function of fluid speed and density and is expressed by the following formula:

$$pd = 1/2 * r * V^2 \qquad (1.2)$$

Where:
pd = dynamic pressure in Pa
r = fluid density in kg/m^3
V = fluid speed in m/s

TOTAL PRESSURE (pt)
It is defined as the algebraic sum of static pressure (ps) and dynamic pressure (pd):

$$pt = ps + pd \qquad (1.3)$$

When a fan is operating with shut inlet or outlet, flow rate is null. So fluid speed and, consequently, dynamic pressure are null. Therefore the result is:

$$pt = ps$$

This working condition corresponds to the beginning point (on the left) of the fan performance curve.

When a fan is operating with free inlet and outlet (both inlet and outlet not ducted), static pressure is null. Therefore the result is:

$$pt = pd$$

This working condition corresponds to the ending point (on the right) of the fan performance curve.

1.3 ABSORBED POWER AND EFFICIENCY

A fan needs some mechanical power to give a certain flow rate at a certain total pressure. This mechanical power depends also from the aeraulic efficiency of the fan and is given by the following formula:

$$Pw = \frac{Q*pt*100}{\eta} \qquad (1.4)$$

Where:
Pw = mechanical power in W
Q = flow rate in m3/s
pt = total pressure in Pa
η = fan aeraulic efficiency in %

Mechanical power is given by an electric motor, that also absorb a certain electrical power from power supply network. Following formulas are commonly used:

- three-phase motor

$$Pe = V * I * \sqrt{3} * \cos\varphi = \frac{Q*pt*100}{\eta_{mot}} \qquad (1.5)$$

- mono-phase motor

$$Pe = V * I * \cos\varphi = \frac{Pw}{\eta_{mot}} \qquad (1.6)$$

Where:
Pe = electrical power absorbed from power supply network in W
Pw = mechanical power in W
I = absorbed power in A
V = supply voltage in V
η_{mot} = motor efficiency in %

1.4 WORKING POINT

The energy that a fan receives from the electric motor is transferred to the volume unit of fluid in transit in the form of pressure. The pressure that a fan can give is not constant, though, but is function of the flow rate according to the fan characteristic curve. Also the absorbed power varies with the flow rate.

To have a certain amount of air circulating in a system, it is necessary to apply to the fluid a certain energy, in the form of pressure, to win the frictions encountered in the movement. The pressure to be applied varies with the flow rate and is given by the following formula:

$$p = Kr * Q^2 \qquad (1.7)$$

where:
p = pressure needed by the system
Kr = factor depending on system characteristics
Q = airflow

Kr factor remains constant for variations not too big of the airflow and can be obtained starting from the 1.7 in a certain working point, calculated or measured. Once Kr factor is obtained, it is possible to draw a curve of p against Q, that is the system characteristic curve. A fan installed in a system will give the airflow corresponding to the value of static pressure necessary to overcome the resistance to the air movement in the system.
If on the same diagram are drawn both the static pressure curve of the fan (fan characteristic curve) and the aeraulic resistance curve (system characteristic curve), the crossing point of the two curves will be the working point (see Fig 1).

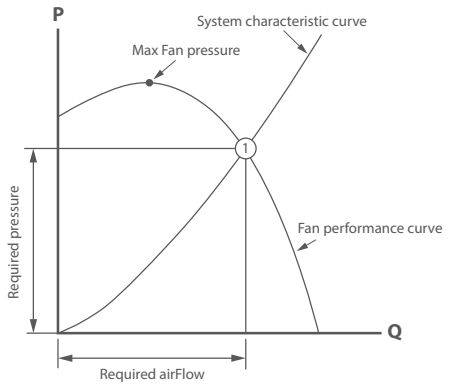


FIG. 1

1.5 VARIATION IN AIR DENSITY

Fans characteristics in Dynair catalogue refers to working conditions with air at 15°C and at 0 m above sea level, that means with density r = 1,225 kg/m^3.
In case working conditions are different from standard, it is recommended to adjust required performance in order to make the selection with performance in standard conditions (+15 °C at 0 m above sea level).

To adjust the pressure (static or total) from real working conditions to standard conditions, the following formula is used:

$$p_0 = p_1 * \frac{\rho_0}{\rho_1} \qquad (1.8)$$

Where:
p_0 = pressure adjusted to standard density
p_1 = pressure required in real working conditions
r_1 = air density in real working conditions
r_0 = standard air density (1,225 kg/m^3)

The same relationship is valid for the fan absorbed power.
Airflow, instead, remains substantially unchanged.

In section 6 of Dynair Industrial Catalogue there is a table with air density values against variation of temperature and altitude.

2 FANS CLASSIFICATION

Fans are rotation machines able to create a continuous air flow with an aerodynamic action. There are substantially two types of fans, axials and centrifugals.
In axial fans the air stream is parallel to the impellor rotation axis and air discharge is in the same direction of air inlet. In centrifugal fans the air stream is pushed in radial direction from the impellor rotation axis and typically air discharge is at 90° from air inlet.

Axial fans can have the impellor with metal sheet blades (generally cut and pressed in shape) or with airfoil blades (generally in technopolimer or in aluminium alloy). There are fans for wall, duct or roof application. Generally, given static pressure is not high. Centrifugal fans can have forward curved, backward curved or radial blades. There are several types: with volute casing, in-line, roof-fans…
Compared to axials, they normally give higher static pressure.
Forward curved centrifugal fans are normally small/medium items. They are cheap and with an efficiency not very high. As working point moves towards free inlet/outlet condition absorbed power grows rapidly, becoming even higher than the maximum value of the motor.
Double inlet versions, direct drive or belt driven, are normally used in box fans or air handling units.
Backward curved centrifugal fans have higher efficiency and can reach bigger dimensions. Absorbed power remains within motor limit, even in free inlet/outlet condition.

3 FAN LAWS

Performance of Dynair geometrically similar fans can be calculated using the following relationships between rotational speed, impeller diameter and air density.

3.1 Given a certain impellor diameter and air density and changing the rotational speed (rpm):

$$Q_2 = Q_1 * \left[\frac{rpm_2}{rpm_1}\right] \quad p_2 = p_1 * \left[\frac{rpm_2}{rpm_1}\right]^2 \quad Pw_2 = Pw_1 * \left[\frac{rpm_2}{rpm_1}\right]^3 \qquad (3.1)$$

3.2 Given a certain rotational speed and air density and changing the impellor diameter (D):

$$Q_2 = Q_1 * \left[\frac{D_2}{D_1}\right]^3 \quad p_2 = p_1 * \left[\frac{D_2}{D_1}\right]^2 \quad Pw_2 = Pw_1 * \left[\frac{D_2}{D_1}\right]^5 \qquad (3.2)$$

4 NOISE AND VIBRATIONS

Fans are rotating mechanical machines, so they inevitably generate noise and vibrations. The problem for designers or users, then, is not if the fan is noisy or vibrating, but how much it is noisy and vibrating, or rather if the noise and vibrations level is compatible with project needs.

4.1 SOUND POWER AND PRESSURE

The generation of a sound (or noise) is due to an item vibrations and the sound is propagated in every mean that can vibrate.

The sound source produces in the air little alternate pressure fluctuations around the barometric equilibrium pressure, causing compressions and de-compressions that are propagated creating a sound wave. The value (effective value) of such fluctuation is called sound pressure and is measured in pascal (Pa).
Human ear and any microphone sense the sound pressure itself.
Conventionally, it's been introduced the sound pressure level (Lp):

$$Lp = 20 * \log \frac{p}{p_0} \qquad (4.1)$$

Where:
Lp = sound pressure level in dB
p = actual sound pressure in Pa
p_o = reference sound pressure (2*10^-5 Pa)

The sound emission by a certain machine implies a loss of a certain amount of energy. Such energy, referred to time measure unit, is the sound power and is measured in watt (W). Conventionally, it's been introduced the sound power level (Lw):

$$Lw = 10 * \log \frac{Pw}{Pw_0} \qquad (4.2)$$

Where:
Lw = sound power level in dB
Pw = actual sound power in W
Pwo = reference sound power ($1*10^{-12}$ W)

The same noise source with the same sound power generates different sound pressure levels depending on the distance of the receiving point, on the position of the noise source (how close from a reflecting surface), on the environment conformation (more o less reverberating) and other factors.
The sound power level (Lw), then, is an absolute quantity for each fan.
The sound pressure level (Lp), that is the quantity perceived by the user, depends on the installation, on the environment and on the position of the user against the fan.

ATTENTION: The sound pressure level (Lp) indicated in every fan manufacturer catalogue is measured in particular testing conditions and may be different from what is obtained in a real installation.

4.2 SOUND PRESSURE CALCULATION

Supposing a free field spherical propagation in an ideal elastic medium, the sound pressure level Lp, at a distance r from a noise source which sound power level is Lw, can be calculated with the following formula

$$Lp = Lw - 10 * \log 4\pi^2 r + DI$$

or

$$Lp = Lw - 20 * \log r + DI - 11 \quad [dB] \qquad (4.3)$$

Where
DI= 10 * log Q

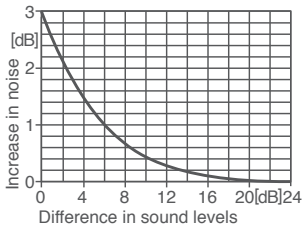
The term DI represents the effect of the source directionality, with Q defined as directionality factor.
The factor Q has different values, generally between 1 and 8.
It is an empiric value, estimated according to experience. Some publications suggest an estimation of such value according to the position of the fan against reflecting walls, others according to the mutual position between the fan and the auditor in a certain environment.
Indeed it is often ignored, because the directionality effects of the sound source are covered by diffusion phenomena created by objects and surfaces present in the sound field.

Known the sound pressure level Lp1 in a certain point 1, located at distance r1 from noise source, the Lp2 level in point 2, at distance r2 in the same direction, can be calculated using the following formula

$$Lp_2 = Lp_1 + 20 * \log \frac{r_1}{r_2} [dB] \qquad (4.4)$$

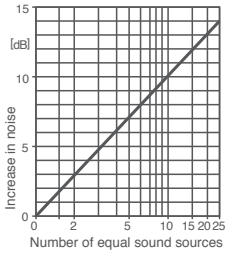
Example:
Lp1 = Sound pressure level at 3m = 60 dB
Lp2 = Sound pressure level at 1m = 60 + 20*log3 = 69,5 dB

In case of two sources with different noise levels, the combined value can be calculated using the following chart:



Example:
Two sources have sound values of 60 and 65 dB respectively.
The difference is 5 dB, that in the graph gives 1 as adding value.
The combined sound level is 65 + 1 = 66 dB

In case of various sources with the same sound level, the global value can be calculated using the following chart:



Example:
Five sources have a sound level of 60 dB
From the graph, the adding value is 7
The global sound level is 60 + 7 = 67 dB

4.3 SOUND SPECTRUM

Every sound or noise consists normally in a mix of sounds at different frequencies. For better describing a sound, it is sometimes necessary to use sound octave bands (frequencies of 63, 125, 250, 500, 1000, 2000, 4000 and 8000 Hz are universally used), indicating for each frequency the level of sound power or pressure.

The human ear is more sensible to certain frequencies rather than others. For this reason the sound pressure level is often "weighted" (i.e. giving more weight to some frequencies rather than others), obtaining a total sound pressure value, starting from the values at each frequency, that better reflects the hearing sensation of the auditor. The "A" weighting scale, according to ISO 3744, is universally the one more often used and the calculated total value is normally indicated in dBA or dB(A).

4.4 FAN LAWS FOR NOISINESS

Also for fan noisiness there is a similitude law like the ones explained in Chapter 3. According to AMCA 300/67, there are the following relationships:

$$Lp_2 = Lp_1 + 50 * \log \frac{rpm_2}{rpm_1} \qquad (4.5)$$

$$Lp_2 = Lp_1 + 70 * \log \frac{D_2}{D_1} \qquad (4.5)$$

4.5 VIBRATIONS AND BALANCING

The vibrations generated by a fan are normally due to the residual unbalancing of the impellor and, for this reason, essentially of sinusoidal shape, with frequency equal to the rotational frequency of the impellor itself.
In time, it is possible that the impellor residual unbalancing can increase because of corrosion phenomena or, more commonly, because of dirt accumulation. Therefore it is essential, during periodical maintenance, to clean the impellor from such dirt deposits.

Other vibrations sources can be the presence of turbulences in the airflow (especially on fan inlet side), excessive pressure drop, natural frequency of the support structure too close to fan speed, problems on motor bearings…

Typical solution against vibrations transmission, from the fan to the support structure or to the duct system to which the fan is connected, is the use of anti-vibration supports (opportunely selected for the type of installation and for the weight of the fan) and of anti-vibration joints.

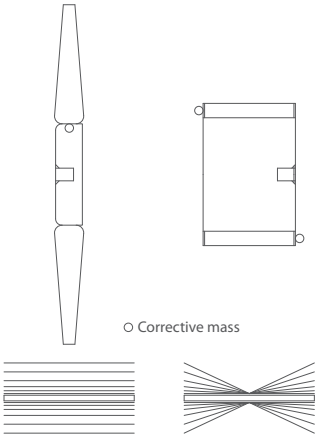
Vibrations are normally measured and described by the vibration speed V [mm/s]. In case of sinusoidal vibrations, the maximum speed of vibration is equal to the product eω where e is the residual eccentricity of the impellor baricenter and ω is the angular speed.

The norm ISO 1940 describes the acceptable vibrations level according to balancing degrees (G1 - G2,5 - G6,3 - etc.). The balancing degree normally approved for fans up to 15kW is G6,3. The degree of balancing points out the maximum speed of the vibrations.
For sinusoidal vibrations the effective value of the vibrations is equal to $1/\sqrt{2} * e\omega$, or 0,71 eω, therefore the effective value (rms) maximum acceptable is normally 4,5 mm/s.

To minimize vibrations emission, impellors are subject to balancing, that can be either static or dynamic.
The static balancing process consists, in case an impellor of mass M has a heavier side (and so a residual eccentricity equal to e), in the addition of an additional weight m at a distance m diametrically opposite, on the same perpendicular plan to the impellor axis, such as

$$m * r = M * e$$

An impellor can be perfectly balanced from a static point of view, but still present a oscillating vibration in correspondence of its shaft.
This problem generally happens on impellors of a certain thickness (generally those of the centrifugal fans). The dynamic balancing foresees the addition of additional masses on two different plans, both perpendicular to impellor axis, such to compensate the oscillating motion.



The balancing process can be made through rotating or non-rotating machines. The balancing process made through a rotating machine is frequently confused with the "dynamic" balancing, but the two things are completely different (being the real meaning of dynamic balancing explained above).

5 MOTORS AND DRIVES

Motors installed on Dynair fans are of different type, depending on fan typology, on application, on size… They can be shaded poles motors, external rotor motors, squirrel cage motors… In case of special applications, High Temperature or Explosion-proof motors are used. Please refer to specific catalogue section to know which motor type is installed on each fan range.

5.1 POWER SUPPLY

The rated power supply tension of the motors used by Dynair is generally 230V for single-phase motors and 230/400V or 400/690V for 3-phase motors. The frequency is 50Hz. In case of different tension and/or frequency please refer to Dynair.

If the 3-phase power supply is 400V, 230/400V motors have to be connected in star and 400/690V motors have to be connected in delta.

5.2 STARTING

There are different methods for starting a motor.
The D.O.L. (Direct On Line) system, or direct starting, is the more commonly used. It has however the disadvantage to require an elevated starting current and this, especially in case of motors of big dimensions, can create problems to the power supply system and/or towards the energy supplying Company. For 400/690V 3-phase motors the most immediate solution is to use (if possible) a star/delta starting. This reduces both the starting current and torque down to approximately one third of the values that would occur in case of direct starting in delta. The connection in star must be done only at motor starting and for a brief period of time.
More sophisticated starting methods foresee the use of drives (inverter or soft-starter) that partialize supply frequency or tension at the start-up.

5.3 SPEED CONTROLLING

The need of controlling the performances of a ventilation system depends on various factors: comfort increase, noise emission reduction, adaptation to the environmental conditions, reduction of absorbed electric power...
The performances of a ventilation system can be easily controlled modifying the fan rotational speed.
The absorption of mechanical power to the fan shaft is reduced by the third power of the variation of rotational speed (if speed is halved, the power is reduced to an eighth of the absorption at full speed). By how much the absorbed electric power is reduced, however, it depends on the characteristics of motor and control drive.

There are different methods for controlling the speed of a fan. Below are listed the more common ones, that can be used with Dynair fans.

TENSION VARIATION

In small dimensions motors, speed can be regulated through the variation of the supply tension. This type of regulation is especially suitable for shaded pole and external rotor motors. There are essentially two types of controllers: electronic and with autotransformer.
The ones with autotransformer are generally more expensive, but they increase the stability of the motor, being the tension supplied independent from the load. The tension regulation is not recommendable on 2-poles motors.

In the case of single-phase motor with capacitor, it is advisable (especially in case of use of an electronic controller) that the supply tension is varied only on the primary winding, leaving the secondary one (with capacitor) with full tension ("3-wires" connection, as described in the specific catalogue section).

FREQUENCY VARIATION

The speed of a squirrel cage motor can be effectively controlled varying the supply power frequency by mean of an inverter.
The way of speed controlling is ideal, although generally more expensive. So it is more frequently used on bigger size motors, in case of several motors controlled by the same inverter or in case it is required an extremely precise speed control.
Attention: not all motors can be controlled through inverter. It is recommended to ask advise to Dynair in advance.

As the motor cooling impeller is fitted, as standard, to the motor shaft, consequently also the cooling of the motor is reduced. On the other hand, also the power absorbed by the motor is reduced. In any case it is recommendable not to reduce the rotational speed below 50% of nominal speed (so not to reduce supply frequency below 25 Hz).
For motors of a certain size (and value…) it is appropriate to foresee for the motor a protection system against overheating (for example using PTCs).

If it is required to control a fan of small dimensions and mono-phase power supply is available, a valid solution (with good efficiency) is to use a small inverter with mono-phase inlet and three-phase outlet and a fan with three-phase motor.

DOUBLE POLARITY MOTORS

It is possible to install, on certain fan ranges, double polarity motors. Typically 2/4, 4/6, 4/8 and 6/8 poles motors are used, but not only. This solution allows to get different fan speed simply selecting the polarity of the motor itself.
4/6 e 6/8 poles motors have two separate windings.
2/4 e 4/8 poles motors can have a single winding (Dahlander, the most commonly used as it is cheaper) or two separate windings.

DELTA/STAR SWITCHING

Normally three-phase motors can be started in star connection and then quickly switched to delta connection. But they cannot run continuously in star connection.
Some specific Dynair fan ranges (indicated in our catalogue with "2V") are fitted with special increased slip motors and can be run continuously in star connection. The result is to have a double speed motor, similar to a 4/6 poles motor, but more economical.

VARIATION OF RAPPORTO DI TRASMISSIONE

It is possible only for belt driven fans and only for setting the system during installation and commissioning.
Changing ratio between pulleys diameters it is possible to have any required fan rotational speed and adapt very precisely fan performance to system requirements.

6 VENTILATION SYSTEM DESIGN

To design a ventilation system and to choose the appropriate fan and ducting (if necessary) type, it is necessary to take into account all the following elements:
- type of application (industrial, commercial, domestic…)
- type of installation (air intake or supply free or ducted…)
- kind of carried fluid (clean air or with gas or dust, temperature, presence of explosive elements…)
- place of installation (wall, roof, false ceiling…) and eventual limitation of space and dimensions
- eventual noise level limits
- type of power supply (tension, frequency…)
- eventual required accessory (anti-vibration supports or joints, speed controller…)

But, obviously, the most important parameters for the selection are the flow rate and, in case of ducted installation, pressure drop.

6.1 FLOW RATE

To design a ventilation system, the first step is to know the required air volume to be extracted or supplied from or to a certain environment in a certain period of time.

There several criteria to calculate such air volume. Frequently different criteria can be applied at the same time to a certain environment: in this case it is recommended to use the one indicating the higher air volume.
See below a short list of some of these criteria.

*N° OF AIR CHANGES PER HOUR RECOMMENDED FOR A CERTAIN ENVIRONMENT TYPOLOGY

The airflow required (in m3/h) is given by environment volume (in m3) multiplied by recommended number of air changes per hour. See table below (note: values are indicative).

Environment	ric./ora
Chicken Farm	8÷15
Cattle Farm	15÷25
Hotel Halls	4
Garage (parking)	8
Garage (repairing)	10÷20
Lavatories - Showers	6
Galvanic Bath	25÷30
Banks	4
Cafes - Pubs	10
Carpentry	10÷12
Paper Hill	15÷20
Heating Plants	50÷60
Churches	10÷15
Cinemas / Theaters	10÷15
Dyers	15÷20
Tannery (drying)	35
Tannery (working)	18
Chromium Plating Plants	6÷10
Rubber Factories	10÷20
Bakeries	6÷10
Chemical Factories	15÷20
Environment	**ric./ora**
Factories (general)	6÷10
Woodworks	6÷15
Textile - Factoryes	5
Foundries	20÷30
Bread Oven	20÷30
Electric Ovens	30
Industrial Ovens	20
Furnace Rooms	20÷30
Mushroom Bed	10÷20
Halls	6÷20
Milk (working)	15
Cleaners - Dyers	20÷30
Boiler Houses (engine rooms)	20÷30
Warehouses for perishable goods	15
Warehouses for not perishable goods	5
Tobacco Processing	12
Canteens	4÷6
Motors (engine rooms)	5÷10
Mills	15÷30
Shops	5
Work Shops	6÷10
Hospitals	6
Gymnasium	10÷20
Swimming Pools	20÷30
Pump Rooms	6÷12
Restaurant (kitchens)	20÷40
Restaurant (rooms)	12
Environment	**ric./ora**
Waiting Rooms	10
Dancing Halls	8÷16
Casino	10÷20
Meeting Rooms	6÷8
Meeting Halls	10÷20
Schools	6
Dusty plants	10÷20
Plants metallurgik	5÷10
Supermarket	5÷10
Typography	15÷25
Toilet	30
Transformer Rooms	12÷30
Tecnical Rooms	15

***N° OF AIR CHANGES PER HOUR RECOMMENDED BY NUMBER OF PEOPLE IN THE ENVIRONMENT**

The airflow required (in m3/h) is given by the number of people normally present in a certain environment multiplied by the fresh air flow rate recommended by local norms (every Country has normally its own rules).
Generally the recommended fresh air flow rate is between 20 and 30 m3/h per person, increased by 10-20 m3/h in case smoke is allowed.

*** HEAT QUANTITY TO BE EXTRACTED FROM A CERTAIN ENVIRONMENT**

$$Q = \frac{P * 3600}{\rho * cp * \Delta T} \qquad (6.1)$$

Where:
Q = flow rate in m3/h
P = heat to be extracted in kW
ρ = air density in kg/m3
ΔT = temperature difference between air intake and outlet in °C
cp = air specific heat capacity (≈1)

6.2 PRESSURE DROP

In case of ducted ventilation, it is necessary to know the pressure drop given by the system. A ventilation system is composed by various elements (ducting, bends, filters, grilles…) and has a static pressure drop given the sum of each element resistance.

The calculation of the system pressure drop is essential for a correct design and for a correct fan selection. Pleas refer to specialized publications, dedicated software or specialist consultancy.

7 CONVERSION FACTORS

AIR FLOW		
Multiply	**for**	**to have**
m³/s	60	m³/min
	3600	m³/h
	1000	l/s
	60000	l/min
	2118,9	CFM
m³/min	0,0167	m³/s
	60	m³/h
	16,667	l/s
	1000	l/min
	35,315	CFM
m³/h	0,0003	m³/s
	0,0167	m³/min
	0,2778	l/s
	16,667	l/min
	0,58858	CFM
l/s	0,001	m³/s
	0,06	m³/min
	3,6	m³/h
	60	l/min
	2,1189	CFM
l/min	0,000016	m³/s
	0,001	m³/min
	0,06	m³/h
	0,0167	l/s
	0,03531	CFM
CFM	0,0004719	m³/s
	0,02832	m³/min
	1,699	m³/h
	0,47195	l/s
	28,317	l/min

AIR FLOW		
Multiply	**for**	**to have**
m/s	60	m/min
	39,37	in/sec
	3,2808	fps
	196,85	fpm
m/min	0,0167	m/s
	0,65617	in/sec
	0,05468	fps
	3,2808	fpm
in/sec	0,0254	m/s
	1,524	m/min
	0,0833	fps
	5	fpm
fps	0,3048	m/s
	18,288	m/min
	12	in/sec
	60	fpm
fpm	0,00508	m/s
	0,3048	m/mm
	0,2	in/sec
	0,0167	fps

DENSITY		
Multiply	**for**	**to have**
kg/m³	0,06243	lb/ft³
lb/ft³	16,02	kg/m³

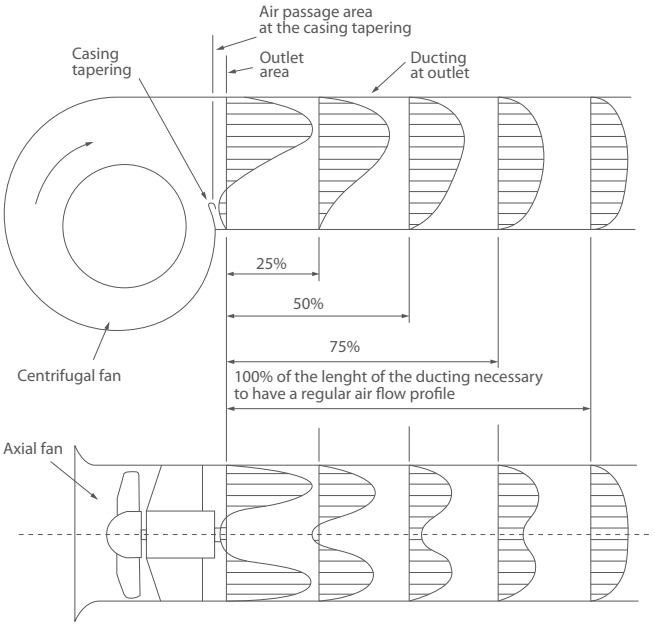
PRESSURE		
Multiply	**for**	**to have**
kg/m²	1	mmH_2O
	0,07343	mmHg
	9,7898	Pa
	0,0000966	Atm
	0,00142	psi
	0,03937	in-wg
	0,002891	in-Hg
mmH_2O	1	kgf/m²
	0,07343	mmHg
	9,7898	Pa
	0,0000966	Atm
	0,00142	psi
	0,03937	in-wg
	0,002891	in-Hg
mmHg	13,619	kgf/m²
	13,619	mmH_2O
	133,32	Pa
	0,001316	Atm
	0,01934	psi
	0,53616	in-wg
	0,03937	in-Hg
Pa	0,10215	kgf/m²
	0,10215	mmH_2O
	0,007501	mmHg
	0,0000099	Atm
	0,000145	psi
	0,004022	in-wg
	0,0002953	in-Hg
Atm	10350	kgf/m²
	10350	mmH_2O
	760	mmHg
	101300	Pa
	14,696	psi
	407,48	in-wg
	29,921	in-Hg
psi	704,28	kgf/m²
	704,28	mmH_2O
	51,715	mmHg
	6894,8	Pa
	0,06805	Atm
	27,728	in-wg
	2,036	in-Hg
in-wg	25,4	kgf/m²
	25,4	mmH_2O
	1,8651	mmHg
	248,66	Pa
	0,002454	Atm
	0,03607	psi
	0,07343	in-Hg
in-Hg	345,91	kgf/m²
	345,91	mmH_2O
	25,4	mmHg
	3386,4	Pa
	0,03342	Atm
	0,49115	psi
	13,619	in-wg

8 INSTALLATION TIPS

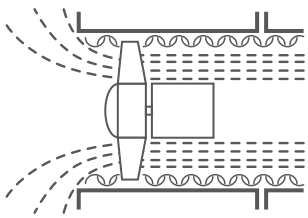
During design and installation of a ventilation system, there are some tricks that reduce the creation of turbulence.
Turbulences unavoidably bring to a performance reduction, compared to what mentioned in the Catalogue (that is the result of laboratory test, made in ideal conditions according to precise reference norms) and to an increase of noise emission.

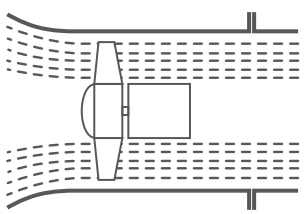
Find below a selection of these tips.

Before installing a "disturbing" element in the ducting (bend, split element, filter…) it is necessary to foresee, between the fan outlet and such element, a distance that allows the airflow to achieve a regular speed profile (see picture below). Such distance is generally equal to 2,5 times the duct diameter, for an average air speed lower than 12,5 m/s (in case of rectangular duct use equivalent diameter). Above such air speed value, it is necessary to add one diameter for each 5 m/s increase.

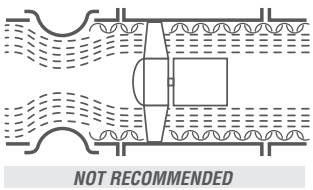


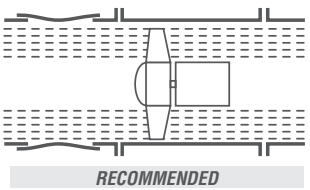
* In case of an axial fan installation with free inlet (not ducted) it is opportune to foresee an bell inlet cone.

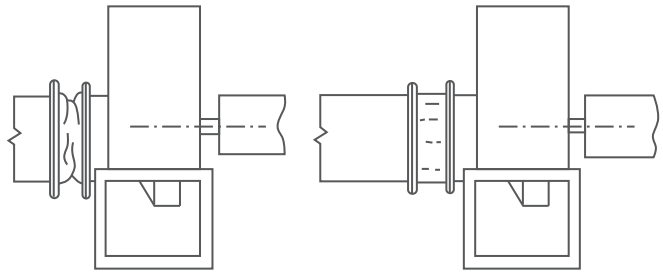




* In case of fan installation with anti-vibration joint, it is opportune that the same is installed reasonably tight.

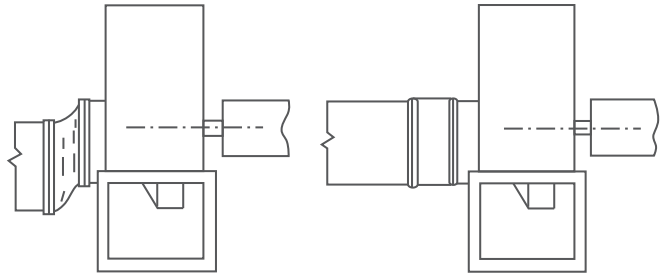






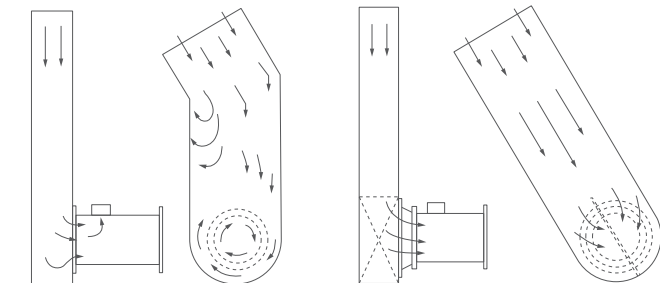
NOT RECOMMENDED | RECOMMENDED

* During installation it is opportune that ducting is well aligned with fan inlet (and outlet)



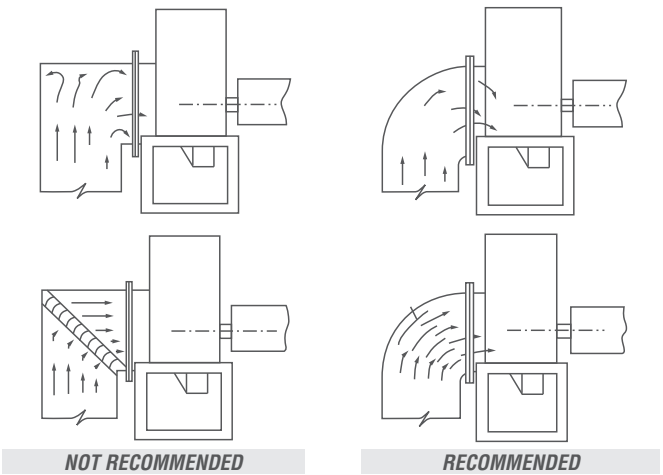
NOT RECOMMENDED | RECOMMENDED

* During installation it is opportune that ducting doesn't have a bend such to create air whirls at fan inlet.



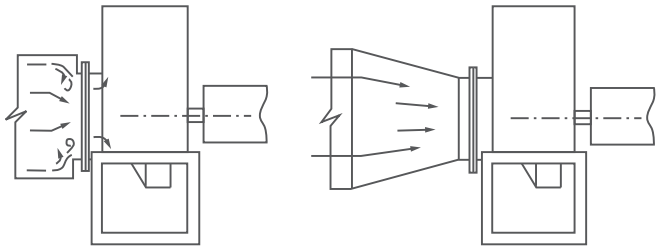
NOT RECOMMENDED | RECOMMENDED

* It is opportune that eventual bends close to fan inlet have air rectifiers.



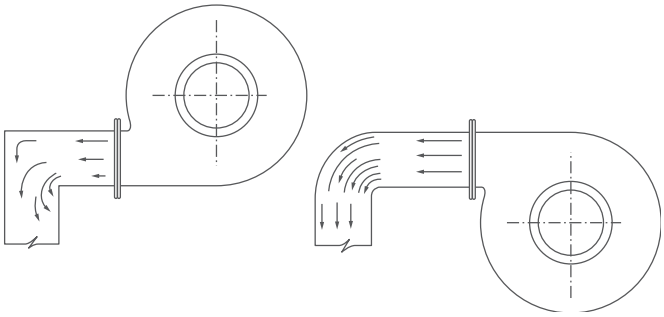
NOT RECOMMENDED | RECOMMENDED

* Eventual duct diameter changes, especially if close to fan inlet, must be smooth, possibly with small angle.



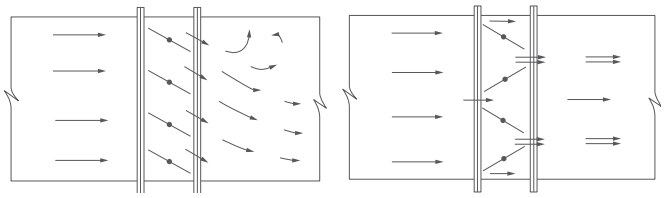
NOT RECOMMENDED | RECOMMENDED

* If it necessary to install a bend close to fan outlet, it is necessary for the bend to be smooth and with air rectifiers.



NOT RECOMMENDED | RECOMMENDED

* If it is necessary to install setting shutters along the duct, it is preferable to use shutters with opposite blades, to reduce creation of whirls and turbulence.



NOT RECOMMENDED | RECOMMENDED

9 CONCLUSIONS

This section of the present catalogue has a divulgative purpose .
Dynair cannot be held responsible in case of possible inaccuracies, errors and/or omissions.

According with our policy of continuous development, all data included in Dynair catalogue can be modified without prior or successive notice

Dynair remains at your disposal for consultancies, fan selections and offers.

Section 1

elicent®
advanced ventilation

INDUSTRIAL
AND BUILDING
VENTILATION FANS

Products compliant with
the ErP Directive 2009/125/CE and
further Regulations.

FANS FOR STANDARD AIR TEMPERATURE

A wide range of 21 series of fans designed for standard application for clean, non-abrasive air with temperature up to 100°C in continuous service.

PLATE MOUNTED AXIAL FANS

IEL Compact and high efficiency axial fans p. 12

IEM Plate mounted axial fans p. 15

IES Small capacity axial fans p. 18

DUCTED AXIAL FANS

CMZ Compact and high efficiency ducted axial fans p. 21

CMP Ducted axial fans p. 23

PMP Portable axial fans p. 37

ZOO Belt-driven axial fans p. 40

CENTRIFUGAL AND AXIAL ROOF FANS

TAC-N Axial roof fans p. 42

TCR Centrifugal roof fans with external rotor motor p. 45

TCF / TCV Single speed centrifugal roof fans Horizontal and vertical discharge p. 47

TCF 2V / TCV 2V Double speed centrifugal roof fans Horizontal and vertical discharge p. 51

CENTRIFUGAL BOX FANS

MBX Slim-line acoustic cabinet fans p. 59

ELIBOX Direct drive double inlet box fans p. 63

E-CUBE Direct drive backward curved box fans p. 65

FORWARD CURVED BLADES CENTRIFUGAL FANS

IC Medium pressure forward curved blades centrifugal fans p. 70

ICS Forward curved blades centrifugal fans p. 73

BACKWARD CURVED BLADES CENTRIFUGAL FANS

PDL Backward curved blades centrifugal fans for clean or slightly dusty air p. 78

PF Backward curved blades centrifugal fans for dusty air p. 84

HT Backward curved blades centrifugal fans for dusty air p. 90

IEL

Compact and high efficiency axial fans

230 V | 400 V | IP44 | IP54 | min -25°C | max 60°C | CE

DESCRIPTION

- Ventilation of medium to large premises.
- IEL fans must be used for direct exhausting only.
- Wall and panel mounting.
- Suitable for clean air with temperature range from -25°C to +60°C.

CONSTRUCTION

- Supporting frame in drawn galvanized steel sheet, with radius inlet cone. Models 63 and 71 supporting frame in drawn steel sheet, with radius inlet cone, epoxy coated.
- Helical impeller with sickle-shaped on bionic finding blades in technopolymer (200-400) or die-cast aluminium alloy (450-710) directly united to the motor rotor.
- Execution 5 (impeller directly coupled to motor shaft). Airflow from motor to impeller.
- Inlet protection guard in steel rod, according to EN ISO 12499. Models 200,250,630 and 710 with protection function and motor support. Models 310-560 with motor support bracket in steel powder coated epoxy.
- External rotor motor, with built in thermal protection, suitable for adjustable, three-phase double speed (delta-star YΔ) or single-phase.
- Standard configuration "partly completed machinery" according to Directive 2006/42/EC.

UPON REQUEST

- Reverse airflow version.

ACCESSORIES

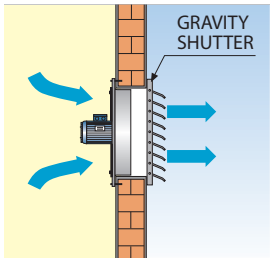
- S - Gravity shutter.
- D - Spacer manufactured in epoxy painted steel sheet.
- R - Impeller side protection guard manufactured according to UNI ISO 12499 rules and protected against atmospheric agents.

ErP

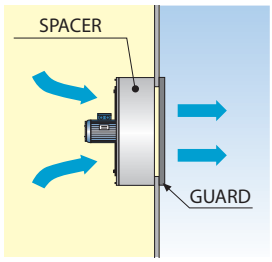
Compliant with Erp Directive and EU Regulation 327/2011 (FAN).
Measurement category: C
Efficiency category: Static
According to EN ISO 5801/AMCA210

- 13 models
- Ø 200 to 710 mm

INSTALLATIONS



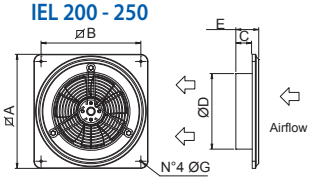
WALL



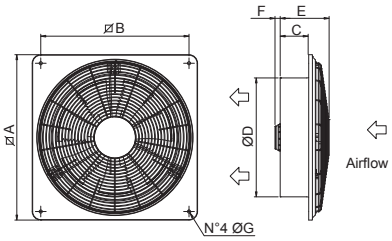
PANEL

DIMENSIONS (mm)

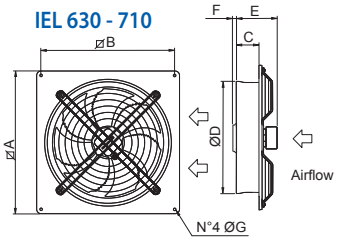
IEL 200 - 250



IEL 310 - 350 - 400 - 450 - 500 - 560



IEL 630 - 710



TYPE	A	B	C	ØD	E	F	G	Kg*
IEL 200	345	305	44	215	76	-	8,5	2,6
IEL 250	400	350	57	265	80	-	8,5	3,2
IEL 310	465	405	77	312	151	-	10	4,5
IEL 350	525	465	90	365	167	-	10	6
IEL 400	580	520	100	413	172	-	10	9
IEL 450	630	570	107	457	210	33	10	15
IEL 500	700	640	137	512	239	23	10	17,5
IEL 560	765	695	122	569	217	42	10	22,5
IEL 630	800	730	93	643	158	67	12	20,9
IEL 710	850	800	93	719	198	28	12	28,6

* Indicative weights

ACCESSORIES pag. 20 / **REGULATORS** pag. 200

PERFORMANCE

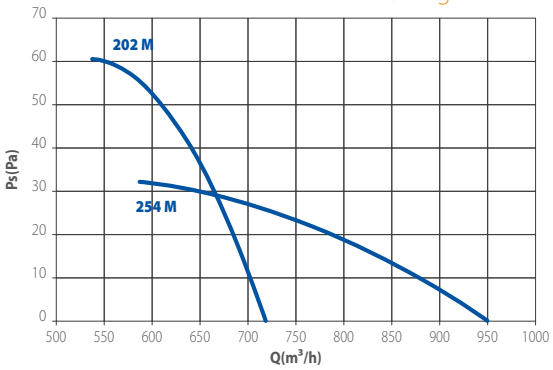
	CODE	MODEL	MAX AIRFLOW	V at 50Hz	A	kW	SPEED	POLE	RATING	MOTOR INSULATION	SOUND LEVEL* dB (A)	
			m³/h				rpm	N°	IP	CLASS	Lp	Lw
SINGLE PHASE	1IE0019	IEL 202 - M	719	230	0,38	0,08	2.800	2	54	F	48	65
	1IE0020	IEL 254 - M	952	230	0,24	0,05	1.400	4	54	F	40	58
	1IE0021	IEL 314 - M	1966	230	0,42	0,10	1.400	4	54	F	44	62
	1IE0022	IEL 354 - M	2859	230	0,56	0,12	1.400	4	54	F	46	64
	1IE0023	IEL 404 - M	3934	230	1,05	0,24	1.400	4	54	F	47	65
	1IE0031	IEL 454 - M	5900	230	2,90	0,60	1.400	4	44	F	57	75
	1IE0027	IEL 504 - M	8876	230	3,20	0,72	1.400	4	54	F	55	73
THREE PHASE	1IE0024	IEL 404/6 - T	3600	400	0,46 / 0,27	0,23 / 0,17	1.400 / 900	4 / 6	54	F	51/47	69/65
	1IE0030	IEL 454/6 - T	5750	400	1,10 / 0,66	0,54 / 0,36	1.400 / 900	4 / 6	44	F	56/52	74/70
	1IE0028	IEL 504/6 - T	8550	400	1,45 / 0,96	0,84 / 0,54	1.400 / 900	4 / 6	54	F	58/54	76/72
	1IE0029	IEL 564/6 - T	11500	400	2,20 / 1,10	1,05 / 0,58	1.400 / 900	4 / 6	54	F	62/57	80/75
	1IE0016	IEL 636/8 - T	10850	400	1,25 / 0,72	0,62 / 0,44	900 / 690	6 / 8	54	F	53/50	71/68
	1IE0017	IEL 716/8 - T	13000	400	1,70 / 1,05	0,94 / 0,62	900 / 690	6 / 8	54	F	53/50	71/68

* **Lp:** Sound pressure level measured in free field conditions, in hemispherical propagation, measurement category C in accordance with EN ISO13349, at the point of maximum efficiency, at a distance of 3 meters from inlet side (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

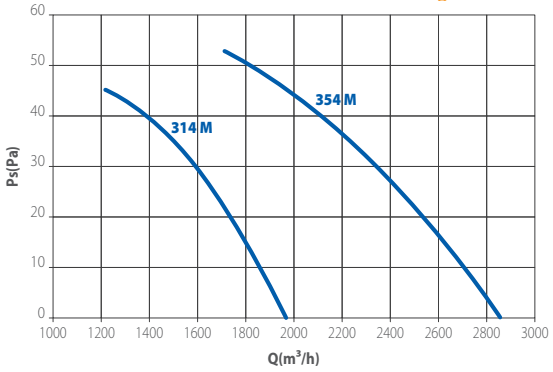
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.

CURVES

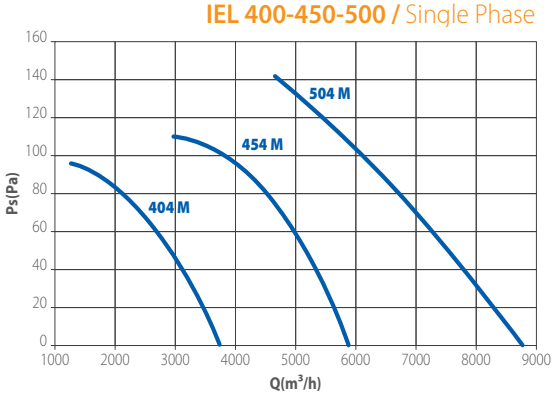
IEL 200 - 250 / Single Phase



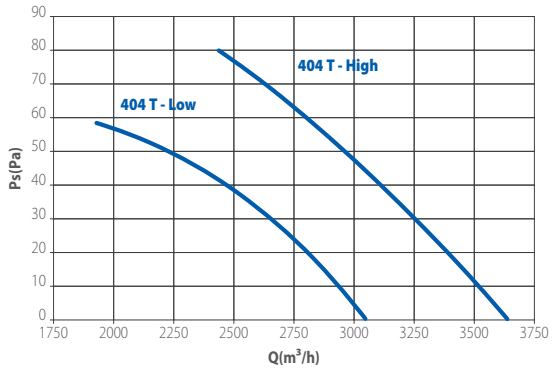
IEL 310-350 / Single Phase



IEL 400-450-500 / Single Phase



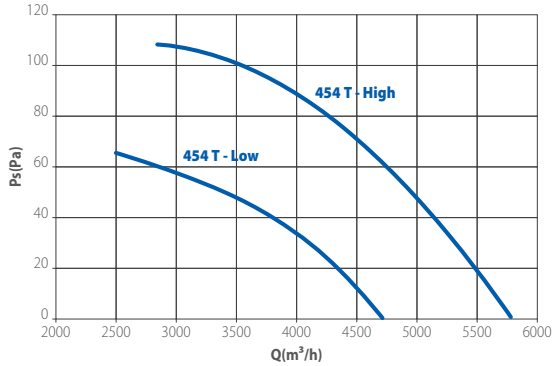
IEL 400 / Three Phase



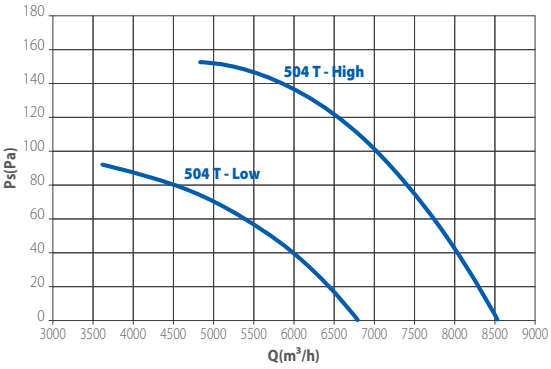
1

CURVES

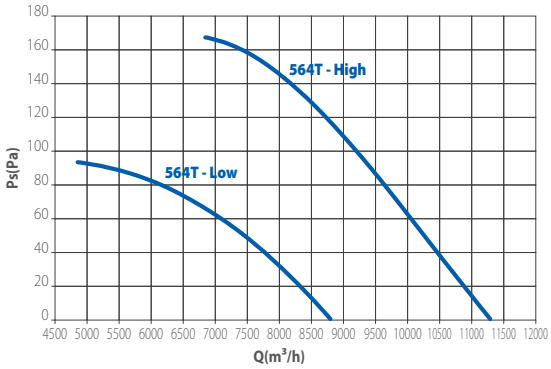
IEL 450 / Three Phase



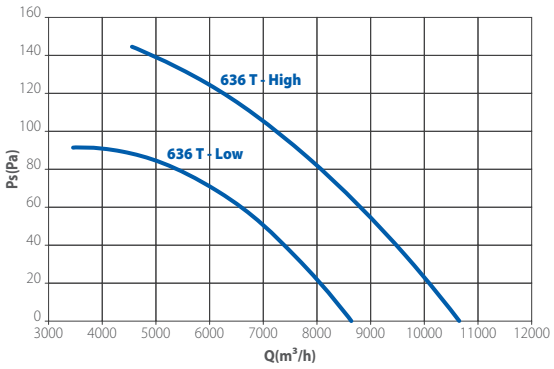
IEL 500 / Three Phase



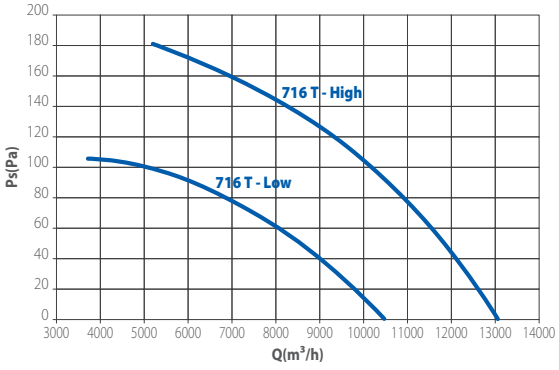
IEL 560 / Three Phase



IEL 630 / Three Phase



IEL 710 / Three Phase



IEM

230 V | 400 V | IP44 | IP55 | min -15°C | max 50°C | CE

- 10 models
- Ø 200 to 700 mm

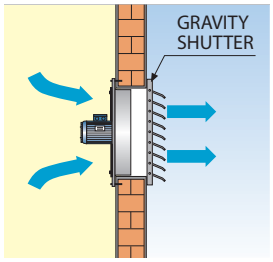
IEM 200/250/314/350 400/508/568/638/718
The models are not affected by the ErP Directive 2009/125/CE and UE Regulation 327/2011.

IEM 312T/454T/504T/506T/564T 566T/634T/636T/714T/716T
For extra UE markets only.

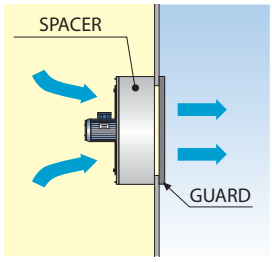
VERSIONS

■ **IE ATEX**
Explosion proof version according to Directives 94/9/CE and 2014/34/UE
See page 101.

INSTALLATIONS



WALL



PANEL

DESCRIPTION

- Plate mounted ventilation units for wall installation, specifically designed for replacing stale air in commercial and industrial buildings.
- Suitable for clean air with temperature range from -15°C to +50°.

CONSTRUCTION

- Supporting frame in drawn galvanized steel sheet, with radius inlet cone. Models 63 and 71 supporting frame in drawn steel sheet, with radius inlet cone, epoxy coated.
- Axial impeller with aerofoil profile blades in polymer or die-cast aluminium and die-cast aluminium hub. Variable pitch angle in still position with setting means.
- Balanced according to ISO 1940.
- Execution 5 (impeller directly coupled to motor shaft).
- Air flow from motor to impeller.
- Inlet protection guard and motor support in steel rod, epoxy coated.
- According to EN ISO 12499 norm.

MOTORIZATIONS

- **IEM 200 and 254:** motors IP 44, class B.
- **IEM 252, 310/710:** Asynchronous three-phase or single-phase motors according to standards IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F.
- All suitable for service S1 (continuous running at constant load).

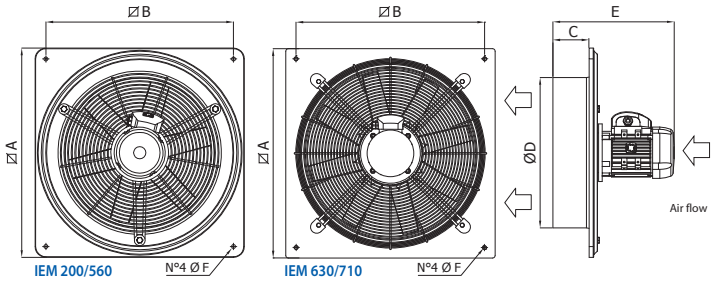
UPON REQUEST

- Impeller with aerofoil blades in die-cast aluminium alloy.
- Airflow from impeller to motor.

ACCESSORIES

- S - Gravity shutter.
- D - Spacer protected against atmospheric agents.
- R - Impeller side protection guard manufactured according to UNI ISO 12499 rules and protected against atmospheric agents.

DIMENSIONS (mm)



TYPE	A	B	C	ØD	E	ØF	Kg*
IEM 200	345	305	44	215	210	8,5	5
IEM 250	400	350	57	265	250	8,5	7
IEM 310	465	405	77	312	285	10	11
IEM 350	525	465	90	365	315	10	12
IEM 400	580	520	100	413	325	10	14
IEM 450	630	570	107	457	370	10	18
IEM 500	700	640	137	512	405	10	22
IEM 560	765	695	122	569	385	10	25
IEM 630	800	730	93	640	385	12	26
IEM 710	850	800	93	710	440	12	35

* Indicative weights

ACCESSORIES pag. 20 / **REGULATORS** pag. 200

PERFORMANCE

	CODE	MODEL	MAX AIRFLOW m³/h	V at 50Hz	A	kW	POLE N°	RATING IP	MOTOR INSULATION CLASS	SOUND LEVEL* dB (A) Lp	Lw
SINGLE PHASE	1IE0210	IEM 202 - M	1.050	230	0,52	0,09	2	44	B	52,6	70,1
	1IE0212	IEM 204 - M	700	230	0,38	0,09	4	44	B	37,5	55
	1IE0260	IEM 252 - M	1.850	230	1,20	0,12	2	55	F	67,2	84,7
	1IE0262	IEM 254 - M	1.323	230	0,35	0,09	4	44	B	52,1	69,6
	1IE0310	IEM 312 - M	3.100	230	2,10	0,25	2	55	F	67	84,5
	1IE0312	IEM 314 - M	2.125	230	1,10	0,09	4	55	F	51,9	69,4
	1IE0360	IEM 354 - M	3.200	230	1,10	0,12	4	55	F	55,3	72,8
	1IE0410	IEM 404 - M	3.100	230	1,10	0,12	4	55	F	56,1	73,6
	1IE0456	IEM 454 - M	6.800	230	3,20	0,37	4	55	F	83,2	65,7
THREE PHASE	1IE0211	IEM 202 - T	1.050	400	0,17	0,05	2	44	B	52,6	70,1
	1IE0213	IEM 204 - T	700	400	0,16	0,03	4	44	B	37,5	55
	1IE0261	IEM 252 - T	1.850	400	0,50	0,12	2	55	F	67,2	84,7
	1IE0263	IEM 254 - T	1.323	400	0,16	0,03	4	44	B	52,1	69,6
	1IE0311	IEM 312 - T (I)	3.100	400	0,90	0,25	2	55	F	67	84,5
	1IE0313	IEM 314 - T	2.125	400	0,60	0,09	4	55	F	51,9	69,4
	1IE0361	IEM 354 - T	3.200	400	0,60	0,12	4	55	F	55,3	72,8
	1IE0411	IEM 404 - T	3.100	400	0,60	0,12	4	55	F	56,1	73,6
	1IE0457	IEM 454 - T (I)	6.800	400	1,10	0,37	4	55	F	65,7	83,2
	1IE0504	IEM 504 - T (I)	8.400	400	1,60	0,55	4	55	F	84,6	67,1
	1IE0506	IEM 506 - T (I)	5.000	400	0,66	0,18	6	55	F	56,3	73,8
	1IE0505	IEM 508 - T	3.800	400	0,71	0,12	8	55	F	49,1	66,6
	1IE0563	IEM 564 - T (I)	11.500	400	1,90	0,75	4	55	F	88,9	71,4
	1IE0564	IEM 566 - T (I)	7.500	400	0,87	0,25	6	55	F	62,6	80,1
	1IE0565	IEM 568 - T	5.500	400	0,71	0,12	8	55	F	56,4	73,9
	1IE0604	IEM 634 - T (I)	13.500	400	2,50	1,10	4	55	F	92,3	74,8
	1IE0605	IEM 636 - T (I)	9.500	400	1,20	0,37	6	55	F	66,0	83,5
	1IE0606	IEM 638 - T	7.100	400	1,1	0,25	8	55	F	59,8	77,3
	1IE0705	IEM 714 - T (I)	17.500	400	4,80	2,20	4	55	F	97,6	80,1
	1IE0706	IEM 716 - T (I)	13.250	400	2,01	0,75	6	55	F	67,1	84,6
	1IE0707	IEM 718 - T	9.900	400	1,41	0,37	8	55	F	60,2	77,7

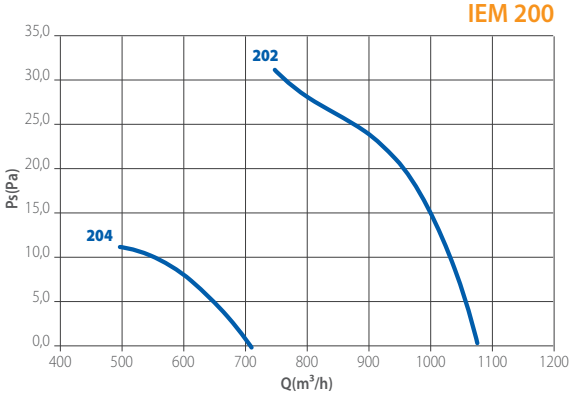
* **Lp:** Sound pressure level measured in free field conditions, in hemispherical propagation, measurement category C in accordance with EN ISO13349, at the point of maximum efficiency, at a distance of 3 meters from inlet side (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specificweight. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz

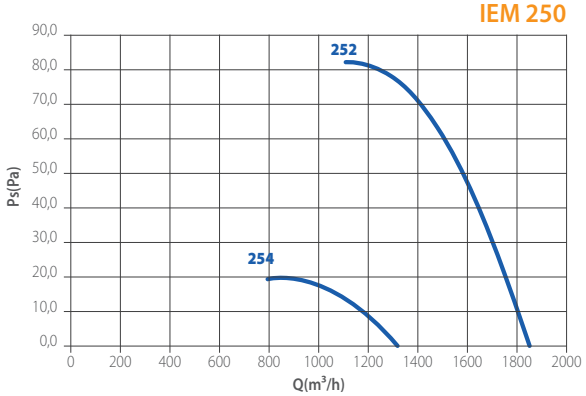
(I) Available for extra UE markets only

CURVES

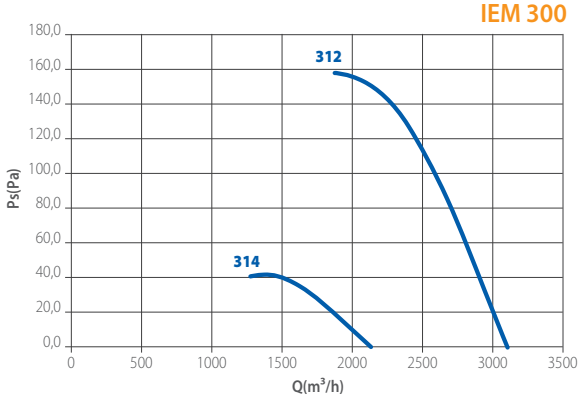
IEM 200



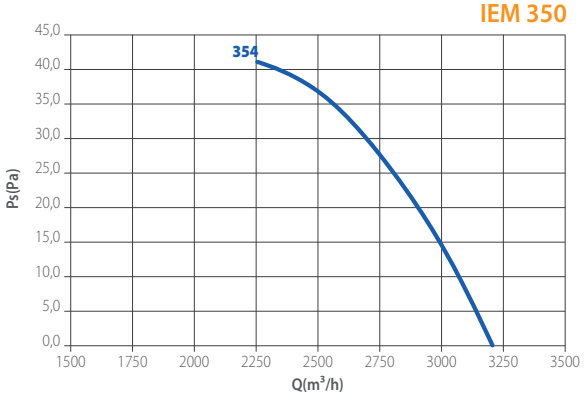
IEM 250



IEM 300

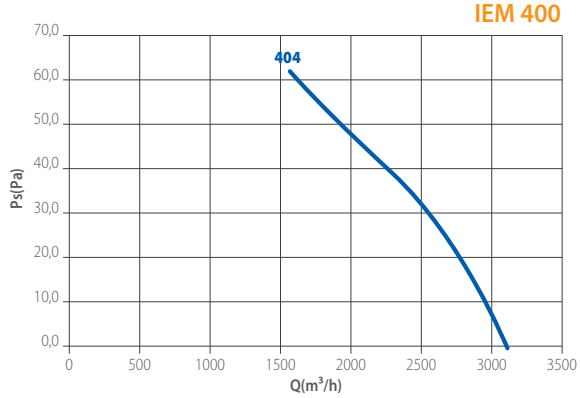


IEM 350

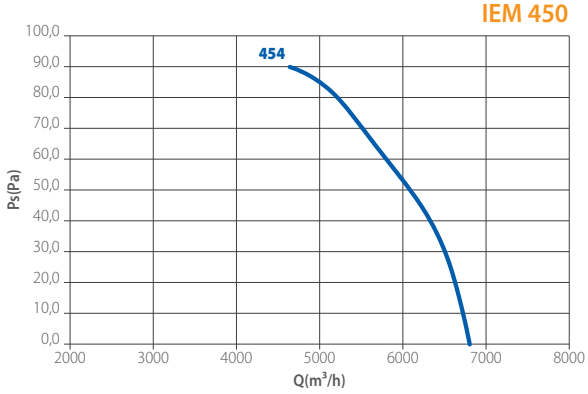


CURVES

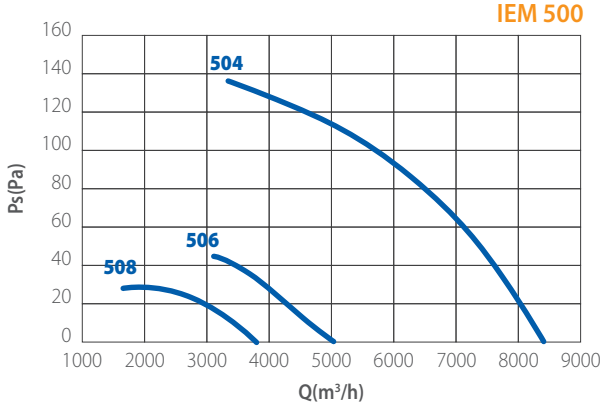
IEM 400



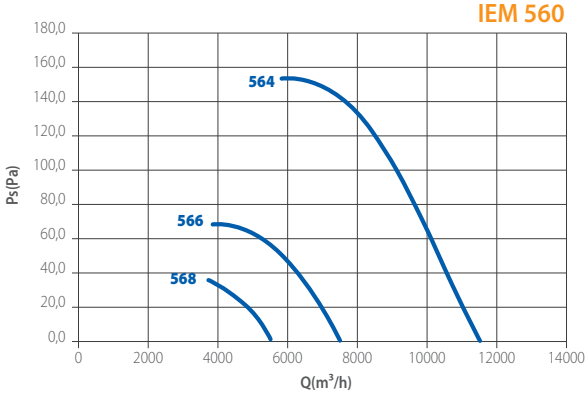
IEM 450



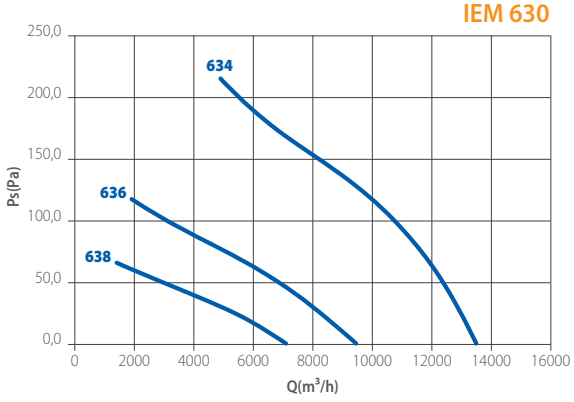
IEM 500



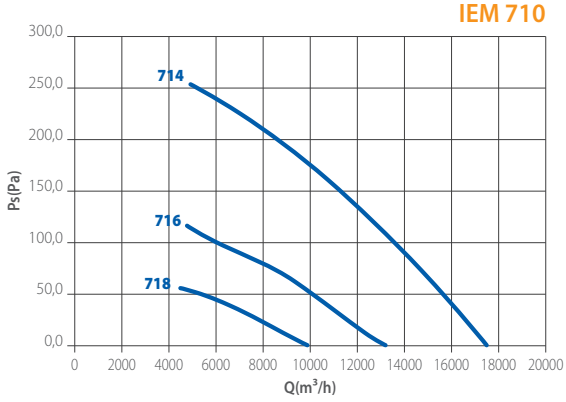
IEM 560



IEM 630



IEM 710



IES

Small capacity axial fans

230 V | IP20 | min -10°C | max 40°C | CE

DESCRIPTION

- Ventilation of small premises.
- IES fans must be used for direct exhausting only.
- Wall and panel mounting.
- Suitable for clean air with temperature range from -10°C to +40°C

CONSTRUCTION

- Supporting frame in drawn steel sheet, with wide radius inlet cone, epoxy coated.
- Impeller in drawn aluminium, properly shaped to grant the maximum efficiency.
- Execution 5 (direct coupling motor/impeller). Air-flow from motor to impeller.
- Inlet protection guard in steel painted rod, manufactured according to norms UNI 12499 and weatherproof.
- Shielded pole motor, single-phase, IP20, class B, with supply cable and built-in thermal protection. Service S1 (continuous working to constant load).

ACCESSORIES

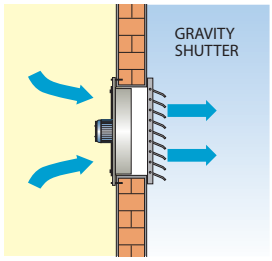
- S - Gravity shutter.
- D - Spacer manufactured in epoxy painted steel sheet.
- R - Impeller side protection guard manufactured according to UNI ISO 12499 rules and protected against atmospheric agents.

ErP

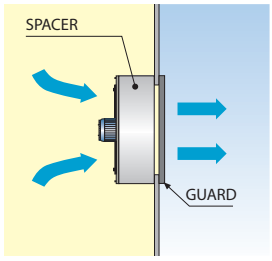
The series is not affected by the ErP Directive2009/125/CE.

- Ø 200 to 350 mm
- Light and compact
- Single-phase motors with integrated supply cables.

INSTALLATIONS

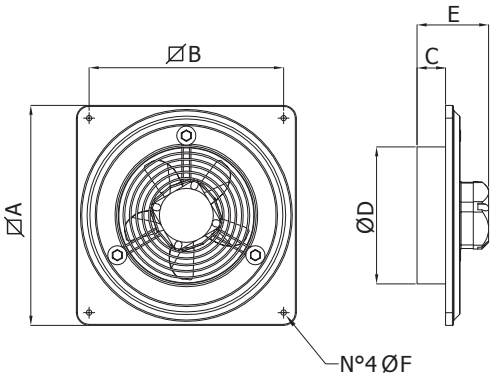


WALL



PANEL

DIMENSIONS (mm)



TYPE	A	B	C	ØD	E	ØF	Kg*
IES 200	345	305	44	215	110	8,5	3,2
IES 250	400	350	57	265	125	8,5	4
IES 310	465	405	77	315	145	10	5,6
IES 350	525	465	90	365	180	10	7,4

* Indicative weights

ACCESSORIES pag. 20 / **REGULATORS** pag. 200

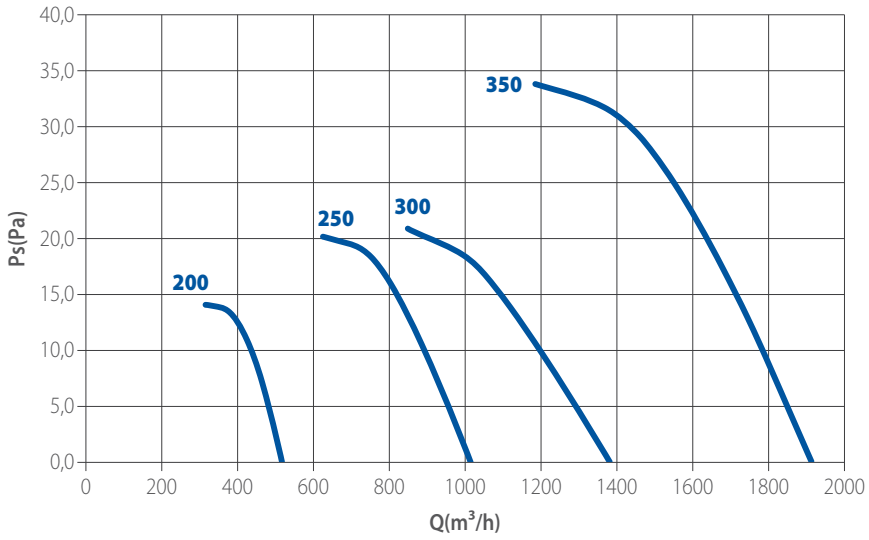
PERFORMANCE

CODE	MODEL	MAX AIRFLOW	V at 50Hz	A	W	SPEED	POLE	RATING	MOTOR INSULATION	SOUND LEVEL* dB (A)	
		m³/h				rpm	N°	IP	CLASS	Lp	Lw
1EL0202	IES 200	518	230	0,25	36	1300	4	20	B	37,9	55,4
1EL0251	IES 250	1015	230	0,42	60	1300	4	20	B	37,8	55,3
1EL0302	IES 300	1382	230	0,42	60	1300	4	20	B	48,3	65,8
1EL0351	IES 350	1949	230	0,76	120	1300	4	20	B	54	71,5

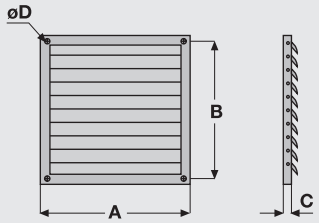
*** Lp:** Sound pressure level measured in free field conditions, in hemispherical propagation, measurement category C in accordance with EN ISO13349, at the point of maximum efficiency, at a distance of 3 meters from inlet side (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight. Power supply 230V/1Ph/50Hz.

CURVES



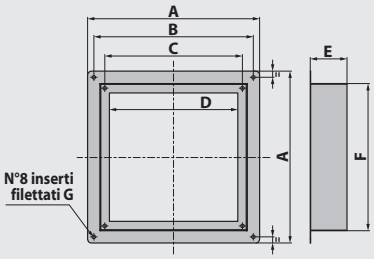
Series IEL - IEM - IES



S - Gravity shutter

CODE	MODEL	A	B	C	ø D	Kg
1SE 2000	S 200	275	250	10	10	1,0
1SE 2500	S 250	325	300	10	10	1,5
1SE 3000	S 310	375	350	10	10	2,0
1SE 3500	S 350	425	400	10	01	2,5
1SE 4000	S 400	475	450	10	10	3,0
1SE 4500	S 450	530	500	15	10	3,5
1SE 5000	S 500	630	600	15	10	4,0
1SE 5600	S 560	660	630	15	10	4,5
1SE 6300	S 630	760	730	15	10	5,5
1SE 7000	S 710	830	800	15	10	6,0

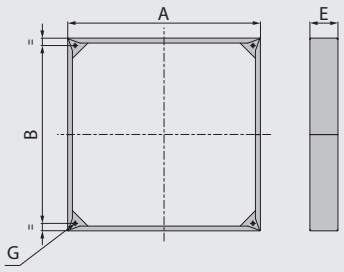
Dimensions in mm



D - Spacer

CODE	MODEL	A	B	C	D	E	F	G	Kg
1DP 2002	D 20	340	305	249	230	70	280	M6	1,8
1DP 2502	D 25	390	350	299	280	70	330	M6	2,2
1DP 3002	D 30	445	405	349	330	100	380	M6	3,0
1DP 3502	D 35	510	465	399	380	100	430	M6	3,4
1DP 4003	D 40	560	520	449	420	120	480	M6	4,6
1DP 4502	D 45	610	570	499	470	120	530	M6	5,0
1DP 5003	D 50	680	640	602	570	150	630	M8	5,4
1DP 5602	D 56	750	695	631	605	150	685	M8	6,6

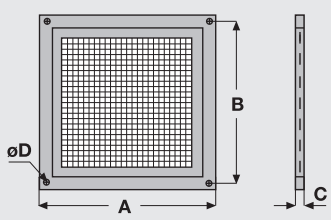
Dimensions in mm



D - Spacer

CODE	MODEL	A	B	E	G	Kg
1DP 6301	D 63	790	729	210	M8	9,8
1DP 7003	D 71	840	800	150	M8	6,5

Dimensions in mm



R - Impeller side protection guard

CODE	MODEL	A	B	C	ø D	Kg
5RE 7020	R 20	275	250	10	10	1,3
5RE 7025	R 25	325	300	10	10	1,5
5RE 7031	R 31	375	350	10	10	1,9
5RE 7035	R 35	425	400	10	10	2,3
5RE 7040	R 40	475	450	10	10	2,7
5RE 7045	R 45	530	500	15	10	2,8
5RE 7050	R 50	630	600	15	10	4,0
5RE 7056	R 56	660	630	15	10	4,6
5RE 7063	R 63	760	730	15	10	5,3
5RE 7070	R 71	830	800	15	10	6,0

Dimensions in mm

230 V | 400 V | IP44 | IP55 | min -25°C | max 60°C | CE

DESCRIPTION

The ducted axial fans of CMZ series are used for ducted installations requiring large airflow with relatively low pressure drop, like ventilation and cooling systems in industrial, naval, commercial, civil, energetic fields. These fans are particularly easy to install and to maintain thanks to their compact size and the total absence of protruding parts. The motor-impeller groups are perfectly speed controllable and ensure low noise running. The series consists of 6 different sizes with impeller diameter from 310 to 560 mm. The fans are suitable for conveying clean air with temperature from -25°C to +60°C.

CONSTRUCTION

- Short casing in steel sheet, with fixing flanges manufactured according to UNI ISO 6580-EUROVENT standard. Protected against atmospheric agents by epoxy paint.
- High quality aerofoil profiled impellers in mineral fibres reinforced technopolymer (310 to 400) and die cast a aluminum alloy (450 to 560). Blades are directly fixed to the motor external rotor.
- Execution 5 (with impeller directly coupled to the motor) and airflow from motor to impeller.
- External rotor motors with built-in thermal protection, double speed three-phase and single-phase, speed adjustable. Connection box on the casing (up to model 400) and on the motor (models 450 to 560).

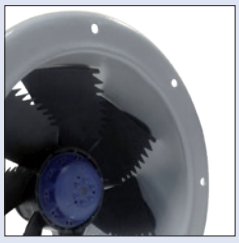
UPON REQUEST

- Casing protected against atmospheric agents by hotdip galvanizing

ACCESSORIES

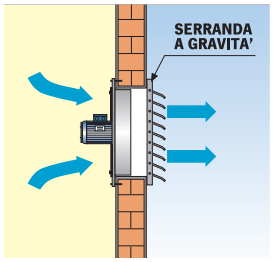
- CCr - Flat protection guard
- CCga - Flexible connectors.
- CCst - Support feet.
- CCbo - Inlet/outlet bell mouth.
- CCsa and CCsb - Silencers, with and without pod, in three lengths.
- CCf - Counter flange flat.
- CCfc - Counter flange with collar.
- Anti-vibration mounts.

Compliant with Erp Directive and EU Regulation 327/2011 (FAN)
Measurement category: C
Effi ciency category: Static
According to EN ISO 5801 / AMCA 210.

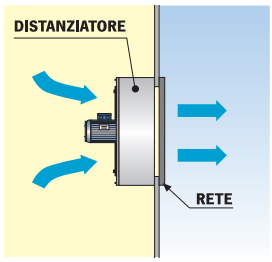


Models from 310 to 400:
impeller in mineral fibres reinforced technopolymer.

INSTALLATION

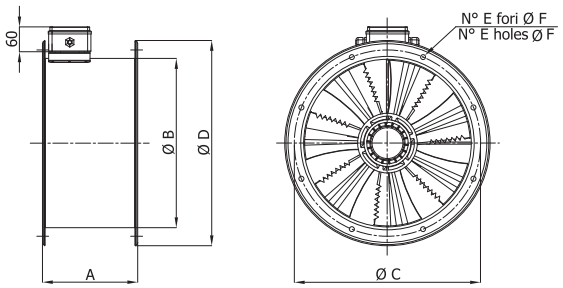


WALL



PANEL

DIMENSIONS (mm)



TYPE	A	B	C	D	E	F	Kg*
CMZ 314	200	305	355	395	8	10	10
CMZ 354	200	355	395	446	8	10	13
CMZ 404	230	405	450	496	8	12	16
CMZ 454	230	455	500	546	8	12	23
CMZ 504	250	505	560	598	12	12	26
CMZ 564	250	565	620	658	12	12	30

* Indicative weight

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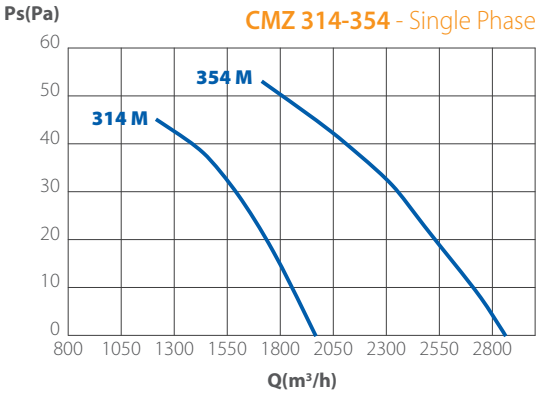
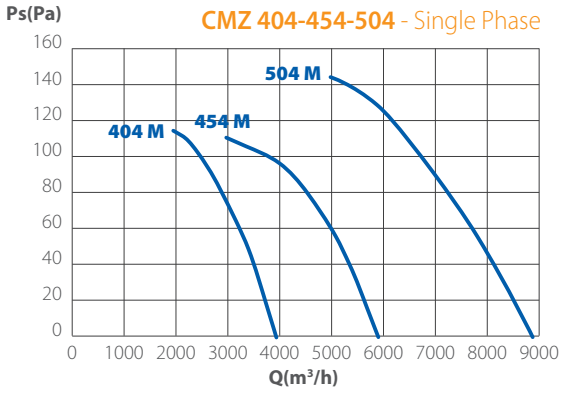
PERFORMANCE

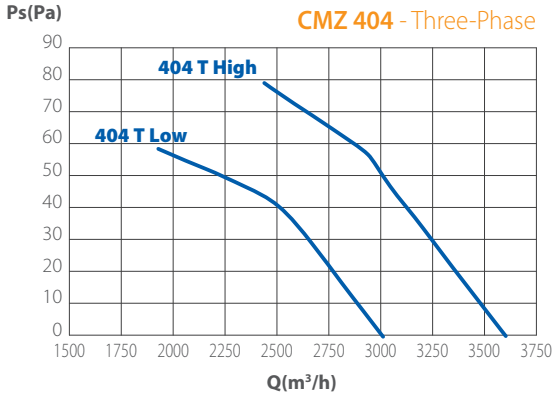
	CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	MOTOR CLASS	SOUND LEVEL dB(A)*	
			m³/h	V	A	kW	RPM/1′	N°	IP		Lw	Lp
SINGLE-PHASE	1CM0030	CMZ 314 SINGLE-PHASE	1.966	230	0,42	0,10	1.400	4	54	F	72	55
	1CM0035	CMZ 354 SINGLE-PHASE	2.859	230	0,56	0,12	1.400	4	54	F	74	56
	1CM0040	CMZ 404 SINGLE-PHASE	3.934	230	1,05	0,24	1.400	4	54	F	80	62
	1CM0045	CMZ 454 SINGLE-PHASE	5.900	230	2,90	0,60	1.400	4	54	F	85	67
	1CM0050	CMZ 504 SINGLE-PHASE	8.876	230	3,20	0,72	1.400	4	54	F	83	65
THREE-PHASE	1CM0041	CMZ 404 THREE-PHASE	3.600 / 3.400	400	0,46 / 0,27	0,23 / 0,17	1.400	4	54	F	79 / 76	62 / 58
	1CM0046	CMZ 454 THREE-PHASE	5.750 / 4.500	400	1,10 / 0,66	0,54 / 0,35	1.400	4	54	F	84 / 80	66 / 62
	1CM0051	CMZ 504 THREE-PHASE	8.550 / 7.450	400	1,45 / 0,96	0,84 / 0,54	1.400	4	54	F	86 / 81	68 / 63
	1CM0056	CMZ 564 THREE-PHASE	12.000 / 11.500	400	2,20 / 1,10	1,05 / 0,58	1.400	4	54	F	90 / 85	73 / 67

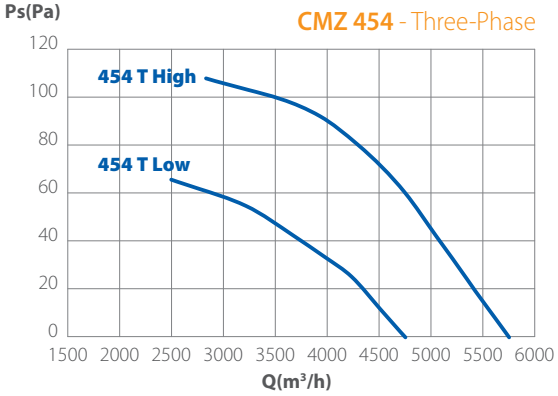
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specificweight.
Compliant with ErP 2009/125/EC Directive and EU Regulation 327/2011. Measurement category: C. Efficiencycategory: Static. Power supply 400V/3Ph/50Hz.
* **Lp:** Sound pressure level measured in free fieldconditions,propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, ata distance of 3 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

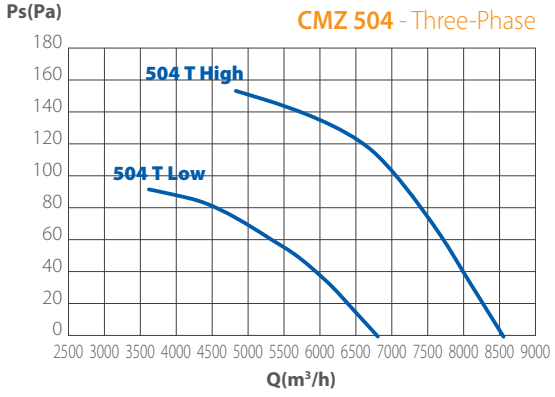
CURVES

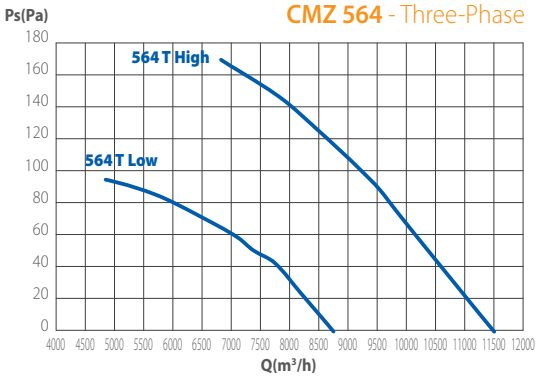


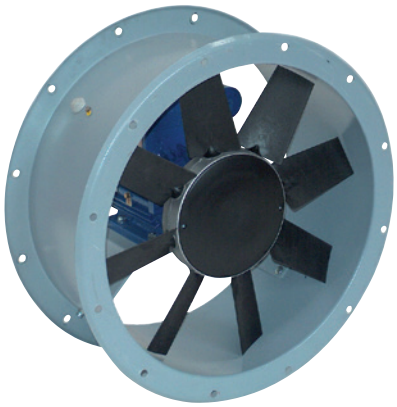












230 V | 400 V | IP55 | min -15°C | max 50°C | CE

DESCRIPTION

The axial fans of CMP series are used for ducted installations requiring large airflow with relatively low pressure drop, like ventilation and cooling systems in industrial, naval, commercial, civil, energetic fields. This series has, compared to centrifugal fans, the advantage of being smaller in dimensions and easier to be installed. The series consists of different sizes with impeller diameter from 310 to 1600 mm. CC fans can be fitted with motors of different polarity, depending on size and required performance. Suitable for conveying clean air with temperature from -15°C to +50°C in continuous service.

CONSTRUCTION

- Short casing in steel sheet, with fixing fl anges manufactured according to ISO 13351 standard. Protected against atmospheric agents by epoxy paint.
- Axial impeller with aerofoil profile blades in technopolymer and die-cast aluminium hub, balanced according ISO 1940. Variable pitch angle in still position with setting means.
- Execution 5 (with impeller directly coupled to motor with feet) and airflow from motor to impeller.
- Asynchronous three-phase or single-phase motors according to international standards IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F.
- Service S1.

UPON REQUEST

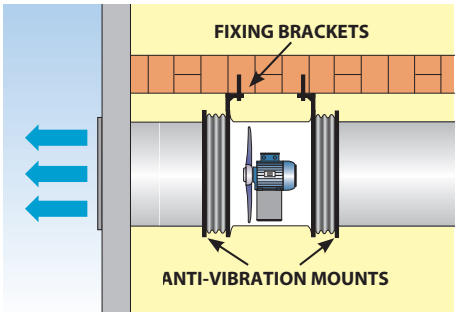
- Impeller with aerofoil profile blades in technopolymer and die-cast alluminium hub
- Casing protected against atmospheric agents by hot-dip galvanizing
- Air flow from impeller to motor
- Outer terminal box
- Iso-rotating or controrotating multistage versions.
- ATEX version according to Directive 94/9/CE. e 2014/34/UE.

ACCESSORIES

- CCpro - Extension (for long casing version) with inspection porthole
- CCr - Flat protection guard
- CCrc - Conic protection guard
- CCga - Flexible connectors
- CCst - Support feet
- CCbo - Inlet/outlet bell mouth
- CCsa and CCsb - Silencers, with and without pod, in three lengths
- Ccf - Counter flange flat
- CCfc - Counter fl ange with collar
- Anti-vibration mounts.

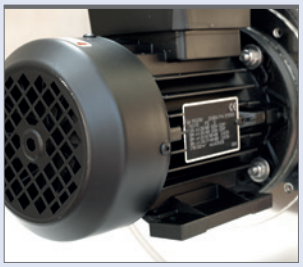
Compliant with Erp Directive and EU Regulation 327/2011 (FAN)
Measurement category: C
Effi ciency category: Static
According to EN ISO 5801 / AMCA 210.

INSTALLATION

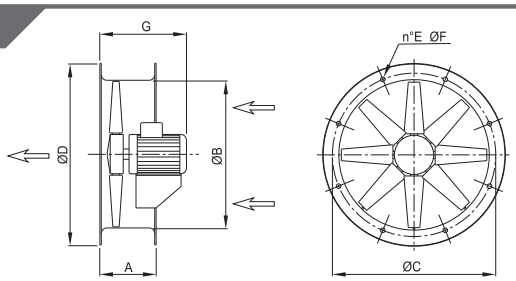



Aerofoil profile blades impeller


Inspection door for CCpro


IP55 fan-cooled ball bearing motors

DIMENSIONS (mm)



TYPE	A	ØB	ØC	ØD	E	ØF	G*	kg**
CMP 310	200	305	355	395	8	10	380	13
CMP 350	200	355	395	446	8	10	380	15
CMP 400	230	405	450	496	8	12	430	17
CMP 450	230	455	500	546	8	12	430	19
CMP 500	250	505	560	598	12	12	440	28
CMP 560	250	565	620	658	12	12	440	30
CMP 630	250	635	690	730	12	12	470	33
CMP 710	250	708	770	810	16	12	520	52
CMP 800	350	808	860	910	16	12	580	90
CMP 900	350	908	970	1030	16	16	680	120
CMP 1000	350	1010	1070	1130	16	16	750	215
CMP 1120	350	1130	1190	1250	20	16	750	230
CMP 1250	350	1260	1320	1380	20	16	750	260
CMP 1400	450	1415	1470	1540	20	16	815	350
CMP 1600	450	1615	1680	1730	24	18	815	470

* Indicative maximum size with standard motors. / ** Indicative weight

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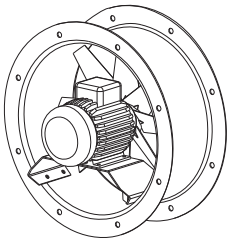
EXECUTIONS

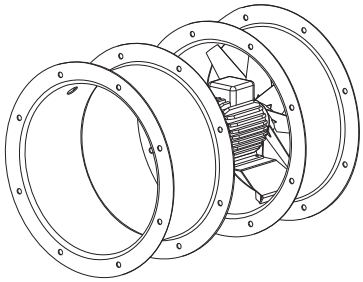
Short Casing

The fans of CMP series are in short casing execution as standard, for ease of transport and installation and for cost saving. This execution is also suitable for assembling in the initial or final part of a ducted system. In this case a correct installation foresees the use of the inlet/outlet bell mouth "CCbo" (see accessories).



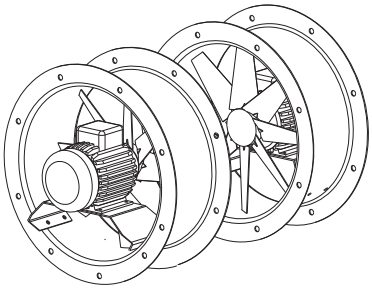
Long Casing

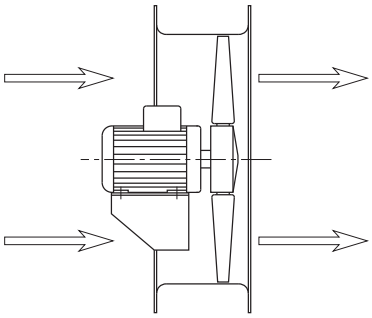
The CMP series fans can be provided in long casing execution, with impeller and motor completely protected inside the casing, by using the extension "CMPpro" (see accessories).
The extension " CCpro" is complete of inspection porthole and holes for cable entry.



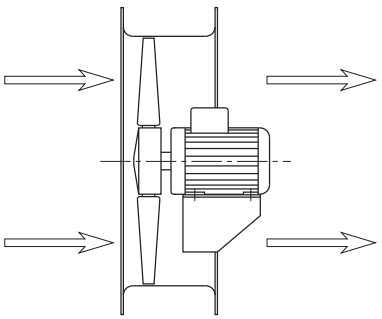
Multistage

The fans of the CMP series foresee the possibility of multistage execution, iso-rotating or contra-rotating (assembly of two or more single-stage fans, with impellers rotating in the same or in the opposite direction). This configuration allows to considerably increase the pressure developed. Specifically, the CC series with two contra-rotating stages develops 2.5 times the pressure of a single-stage fan of equal diameter and speed, with a power absorption not bigger than 2 times. In addition, the multistage option, compared to the single-stage one, has a favourable relation performances/ noise, as the required performance can be achieved with a lower rotational speed.





Standard airflow from MOTOR to IMPELLER



Upon request airflow from IMPELLER to motor

PERFORMANCE

CODE	MODEL	PHASE	POLES	MAX AIRFLOW	A	kW	SPEED	RATING	MOTOR INSULATION CLASS	SOUND LEVEL*	
			N°	m³/h			RPM/1'	IP		Lw	Lp
1CM3144	CMP 314 DY/6/45/MG	SINGLE-PHASE	4	2.239	1,3	0,12	1440	55	F	71	51
1CM3544	CMP 354 DY/6/45/MG	SINGLE-PHASE	4	3.373	1,3	0,12	1440	55	F	72	51
1CM4049	CMP 404 DY/6/30/MG	SINGLE-PHASE	4	3.262	1,3	0,12	1440	55	F	74	53
1CM3123	CMP 312 3H/4/25/MG	THREE-PHASE	2	3.218	0,63	0,25	2880	55	F	90	69
1CM3145	CMP 314 DY/6/45/MG	THREE-PHASE	4	2.239	0,4	0,12	1440	55	F	71	51
1CM3546	CMP 352 DY/6/30/MG	THREE-PHASE	2	4.410	1,27	0,55	2880	55	F	88	68
1CM3545	CMP 354 DY/6/45/MG	THREE-PHASE	4	3.373	0,4	0,12	1440	55	F	72	51
1CM4053	CMP 402 DY/6/30/MG	THREE-PHASE	2	6.509	2,36	1,1	2880	55	F	90	70
1CM4050	CMP 404 DY/6/30/MG	THREE-PHASE	4	4.608	0,56	0,12	1440	55	F	74	53
1CM4054	CMP 404 3H/4/40/MG	THREE-PHASE	4	3.262	0,4	0,18	1440	55	F	73	52
1CM4549	CMP 452 DY/6/30/MG	THREE-PHASE	2	9.101	3,17	1,5	2880	55	F	94	74
1CM4550	CMP 454 3H/6/35/MG	THREE-PHASE	4	7.751	1,04	0,25	1440	55	F	76	55
1CM4542	CMP 454 DY/6/45/MG	THREE-PHASE	4	5.904	0,69	0,37	1440	55	F	79	58
1CM5044	CMP 504 VS/8/30/MG	THREE-PHASE	4	10.631	2,5	0,55	1440	55	F	80	59
1CM5047	CMP 504 VS/8/35/MG	THREE-PHASE	4	9.382	1,99	0,75	1440	55	F	78	58
1CM5048	CMP 504 VS/8/40/MG	THREE-PHASE	4	8.212	1,47	1,10	1440	55	F	82	61
1CM5049	CMP 506 VS/8/30/MG	THREE-PHASE	6	5.502	0,66	0,18	960	55	F	73	52
1CM5050	CMP 508 VS/8/35/MG	THREE-PHASE	8	4.691	0,71	0,12	720	55	F	63	43
1CM5642	CMP 564 VS/8/30/MG	THREE-PHASE	4	15.998	3,54	0,75	1440	55	F	83	62
1CM5644	CMP 564 VS/8/35/MG	THREE-PHASE	4	12.938	2,5	1,1	1440	55	F	84	63
1CM5645	CMP 564 VS/8/45/MG	THREE-PHASE	4	11.570	1,99	1,5	1440	55	F	80	60
1CM5646	CMP 566 3H/6/40/MG	THREE-PHASE	6	9.700	1,2	0,18	960	55	F	76	55
1CM5647	CMP 566 3H/6/45/MG	THREE-PHASE	6	8.352	0,87	0,25	960	55	F	76	56
1CM5648	CMP 566 3H/6/50/MG	THREE-PHASE	6	7.164	0,66	0,37	960	55	F	72	52
1CM5649	CMP 568 VS/8/35/MG	THREE-PHASE	8	6.469	0,71	0,12	720	55	F	69	49
1CM6341	CMP 634 VS/8/30/MG	THREE-PHASE	4	21.701	4,8	1,10	1440	55	F	83	62
1CM6342	CMP 634 VS/8/35/MG	THREE-PHASE	4	17.168	3,54	1,5	1440	55	F	85	64
1CM6343	CMP 634 VS/8/45/MG	THREE-PHASE	4	15.084	2,5	2,2	1440	55	F	82	62
1CM6344	CMP 636 3H/8/35/MG	THREE-PHASE	6	13.838	1,71	0,25	960	55	F	76	55
1CM6345	CMP 636 VS/8/35/MG	THREE-PHASE	6	11.390	1,2	0,37	960	55	F	77	56
1CM6346	CMP 636 VS/8/45/MG	THREE-PHASE	6	8.460	0,87	0,55	960	55	F	75	54
1CM6347	CMP 638 3H/10/40/MG	THREE-PHASE	8	9.540	1,1	0,18	720	55	F	71	51
1CM6348	CMP 638 3H/10/45/MG	THREE-PHASE	8	8.100	0,83	0,25	720	55	F	69	48
1CM7143	CMP 714 VS/8/30/MG	THREE-PHASE	4	25.920	6,39	1,5	1440	55	F	88	68
1CM7141	CMP 714 VS/8/35/MG	THREE-PHASE	4	23.119	4,8	2,2	1440	55	F	87	67
1CM7144	CMP 714 VS/8/40/MG	THREE-PHASE	4	20.491	3,54	3,00	1440	55	F	84	64
1CM7145	CMP 716 3H/6/40/MG	THREE-PHASE	6	16.995	2,01	0,37	960	55	F	79	58
1CM7146	CMP 716 VS/8/35/MG	THREE-PHASE	6	15.091	1,71	0,55	960	55	F	75	55
1CM7147	CMP 716 VS/8/40/MG	THREE-PHASE	6	13.032	1,2	0,75	960	55	F	76	55
1CM7148	CMP 718 3H/6/45/MG	THREE-PHASE	8	12.708	1,41	0,25	720	55	F	74	53
1CM7149	CMP 718 3H/12/45/MG	THREE-PHASE	8	11.628	1,1	0,37	720	55	F	73	53
1CM8042	CMP 804 VS/5/19/MG	THREE-PHASE	4	31.478	7,75	2,2	1440	55	F	93	72
1CM8043	CMP 804 VS/10/19/MG	THREE-PHASE	4	31.500	10,74	3	1440	55	F	92	72
1CM8044	CMP 804 VS/5/23/MG	THREE-PHASE	4	26.140	6,39	3	1440	55	F	89	69
1CM8045	CMP 804 VS/10/23/MG	THREE-PHASE	4	27.299	7,75	4	1440	55	F	92	72
1CM8046	CMP 804 VS/5/30/MG	THREE-PHASE	4	22.619	4,8	4	1440	55	F	94	73
1CM8041	CMP 804 VS/10/27/MG	THREE-PHASE	4	23.627	6,39	5,5	1440	55	F	94	74
1CM8047	CMP 806 4Z/6/28,5/MG	THREE-PHASE	6	20.340	2,74	0,55	960	55	F	82	61
1CM8048	CMP 806 VS/10/15/MG	THREE-PHASE	6	19.951	3,91	0,75	960	55	F	84	63
1CM8049	CMP 806 VS/10/23/MG	THREE-PHASE	6	18.374	2,74	1,1	960	55	F	84	63
1CM8050	CMP 806 VS/5/30/MG	THREE-PHASE	6	16.596	1,71	1,1	960	55	F	89	69
1CM8051	CMP 806 VS/10/27/MG	THREE-PHASE	6	12.758	2,01	1,5	960	55	F	84	63
1CM8052	CMP 808 4Z/6/38,5/MG	THREE-PHASE	8	21.528	3,38	0,55	720	55	F	85	65
1CM8053	CMP 808 4Z/6/45/MG	THREE-PHASE	8	20.124	2,24	0,75	720	55	F	79	59
1CM8054	CMP 808 4Z/6/48,5/MG	THREE-PHASE	8	17.424	2,04	1,1	720	55	F	80	60
1CM9042	CMP 904 VS/5/19/MG	THREE-PHASE	4	41.839	10,74	3	1440	55	F	94	73
1CM9043	CMP 904 VS/5/23/MG	THREE-PHASE	4	50.000	16,71	4	1440	55	F	94	73
1CM9044	CMP 904 VS/10/19/MG	THREE-PHASE	4	35.230	7,75	5,5	1440	55	F	92	72
1CM9045	CMP 904 VS/5/27/MG	THREE-PHASE	4	39.500	14,38	5,5	1440	55	F	95	75
1CM9046	CMP 904 VS/10/23/MG	THREE-PHASE	4	30.121	6,39	7,5	1440	55	F	93	73
1CM9041	CMP 904 VS/10/30/MG	THREE-PHASE	4	33.000	10,74	9,2	1440	55	F	95	75
1CM9047	CMP 906 VS/5/19/MG	THREE-PHASE	6	28.141	3,91	0,75	960	55	F	87	66
1CM9048	CMP 906 VS/5/23/MG	THREE-PHASE	6	31.921	6,95	1,1	960	55	F	86	65
1CM9049	CMP 906 VS/10/23/MG	THREE-PHASE	6	23.231	2,74	1,5	960	55	F	84	63
1CM9050	CMP 906 VS/5/27/MG	THREE-PHASE	6	28.649	5,45	1,5	960	55	F	86	66
1CM9051	CMP 906 VS/10/27/MG	THREE-PHASE	6	19.649	2,01	2,2	960	55	F	86	65
1CM9052	CMP 906 VS/10/30/MG	THREE-PHASE	6	25.229	3,91	3	960	55	F	86	66
1CM9053	CMP 908 5Z/9/41,5/MG	THREE-PHASE	8	29.016	4,21	1,1	720	55	F	82	61
1CM9054	CMP 908 5Z/9/46,5/MG	THREE-PHASE	8	25.812	3,38	1,5	720	55	F	80	59
1CM1042	CMP 1004 VS/10/27/MG	THREE-PHASE	4	59.648	14,38	11	1440	55	F	96	76
1CM1041	CMP 1004 VS/10/33/MG	THREE-PHASE	4	69.998	28,12	15	1440	55	F	97	77
1CM1043	CMP 1004 VS/5/19/MG	THREE-PHASE	4	47.812	10,74	4	1440	55	F	97	77
1CM1044	CMP 1004 VS/5/23/MG	THREE-PHASE	4	61.841	21,67	5,5	1440	55	F	98	77
1CM1045	CMP 1004 VS/10/19/MG	THREE-PHASE	4	39.802	7,75	7,5	1440	55	F	96	75
1CM1046	CMP 1004 VS/5/30/MG	THREE-PHASE	4	51.451	16,71	7,5	1440	55	F	98	78
1CM1047	CMP 1004 VS/10/23/MG	THREE-PHASE	4	43.574	14,38	9,2	1440	55	F	98	77
1CM1048	CMP 1006 VS/5/19/MG	THREE-PHASE	6	37.861	5,45	1,1	960	55	F	88	68
1CM1049	CMP 1006 VS/5/23/MG	THREE-PHASE	6	49.900	12,38	1,5	960	55	F	89	69
1CM1050	CMP 1006 VS/5/30/MG	THREE-PHASE	6	29.768	3,91	2,2	960	55	F	87	66
1CM1051	CMP 1006 VS/10/19/MG	THREE-PHASE	6	34.650	8,85	3	960	55	F	90	69
1CM1052	CMP 1006 VS/10/23/MG	THREE-PHASE	6	26.050	2,74	4	960	55	F	87	67
1CM1053	CMP 1006 VS/10/33/MG	THREE-PHASE	6	27.562	6,95	5,5	960	55	F	89	68
1CM1054	CMP 1008 VS/10/19/MG	THREE-PHASE	8	34.999	5,54	1,1	720	55	F	82	62
1CM1055	CMP 1008 VS/10/23/MG	THREE-PHASE	8	25.884	4,21	1,5	720	55	F	83	62

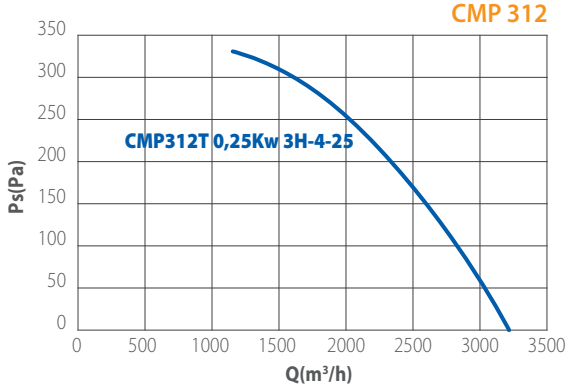
PERFORMANCE

CODE	MODEL	PHASE	POLES	MAX AIRFLOW	A	kW	SPEED	RATING	MOTOR INSULATION CLASS	SOUND LEVEL*	
			N°	m³/h			RPM/1'	IP		Lw	Lp
1CM1056	CMP 1008 VS/10/33/MG	THREE-PHASE	8	21.787	5,54	2,2	720	55	F	83	62
1CM1120	CMP 1126 5Z/8/33,5/MG	THREE-PHASE	6	65.520	16,97	4	960	55	F	95	75
1CM1121	CMP 1126 5Z/8/38,5/MG	THREE-PHASE	6	56.880	12,38	5,5	960	55	F	93	72
1CM1122	CMP 1126 5Z/8/45/MG	THREE-PHASE	6	48.240	8,85	7,5	960	55	F	96	75
1CM1123	CMP 1128 5Z/8/36/MG	THREE-PHASE	8	46.080	7,25	2,2	720	55	F	85	65
1CM1124	CMP 1128 5Z/8/41,5/MG	THREE-PHASE	8	39.600	5,54	3	720	55	F	90	69
1CM1250	CMP 1256 6W/4/36/MG	THREE-PHASE	6	78.840	22,87	11	960	55	F	98	77
1CM1251	CMP 1256 6W/4/29/MG	THREE-PHASE	6	73.080	16,97	5,5	960	55	F	97	77
1CM1252	CMP 1256 6W/4/33/MG	THREE-PHASE	6	65.160	12,38	7,5	960	55	F	96	76
1CM1253	CMP 1258 6W/4/27/MG	THREE-PHASE	8	59.040	9,32	2,2	720	55	F	91	70
1CM1254	CMP 1258 6W/4/31/MG	THREE-PHASE	8	51.840	7,25	3	720	55	F	90	69
1CM1255	CMP 1258 6W/4/36/MG	THREE-PHASE	8	45.360	5,54	4	720	55	F	92	72
1CM1400	CMP 1406 6W/5/28/MG	THREE-PHASE	6	104.040	30,51	11	960	55	F	98	77
1CM1401	CMP 1406 6W/5/32/MG	THREE-PHASE	6	91.800	22,87	15	960	55	F	98	77
1CM1402	CMP 1408 6W/5/29/MG	THREE-PHASE	8	84.960	16,33	5,5	720	55	F	97	74
1CM1403	CMP 1408 6W/5/35/MG	THREE-PHASE	8	71.280	12,22	7,5	720	55	F	90	70
1CM1600	CMP 1606 9W/5/26/MG	THREE-PHASE	6	142.920	42,51	15	960	55	F	103	83
1CM1601	CMP 1606 9W/5/31/MG	THREE-PHASE	6	119.520	30,51	22	960	55	F	105	85
1CM1602	CMP 1608 9W/5/33/MG	THREE-PHASE	8	114.120	23,48	11	720	55	F	98	77
1CM1603	CMP 1608 9W/5/27/MG	THREE-PHASE	8	93.240	16,33	7,5	720	55	F	98	78

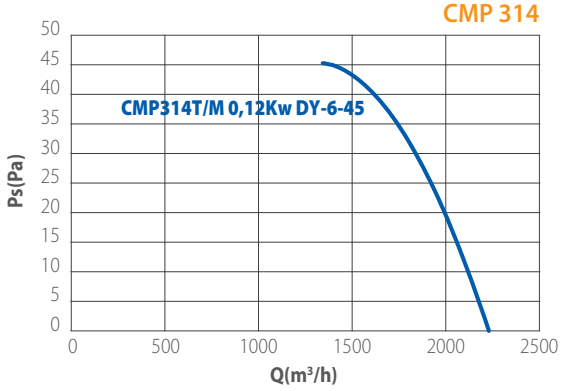
* Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight.
Compliant with ErP 2009/125/EC Directive and EU Regulation 327/2011. Measurement category: C. Efficiency category: Static. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free field conditions, propagation spherical, measurement category D in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 3 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

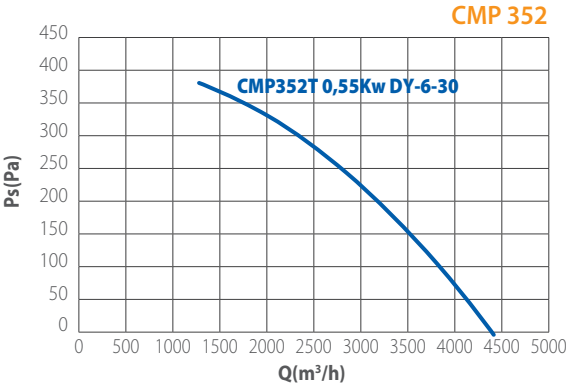
CMP 312



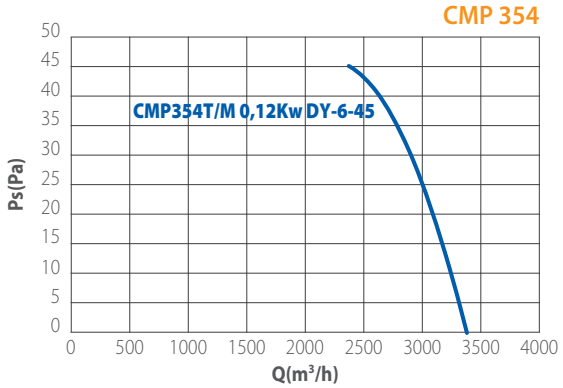
CMP 314



CMP 352

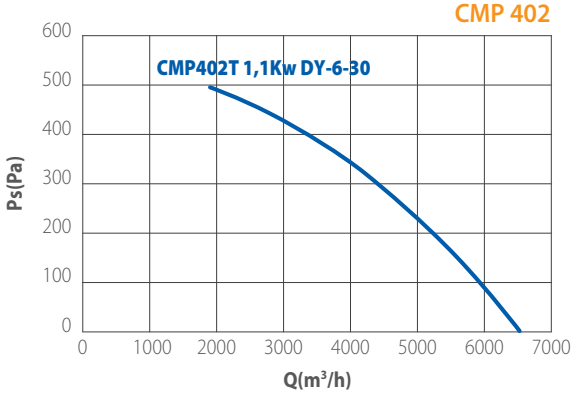


CMP 354

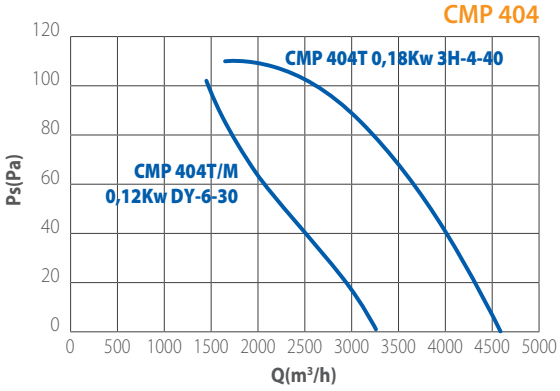


CURVES

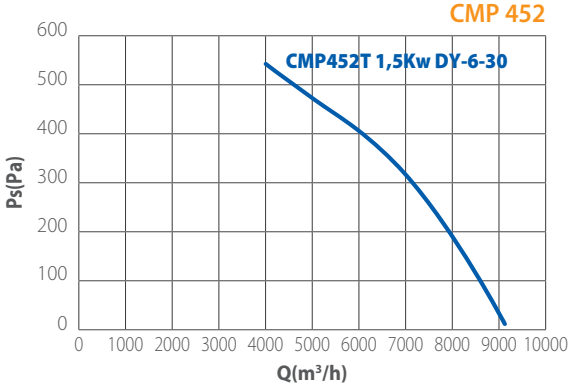
CMP 402



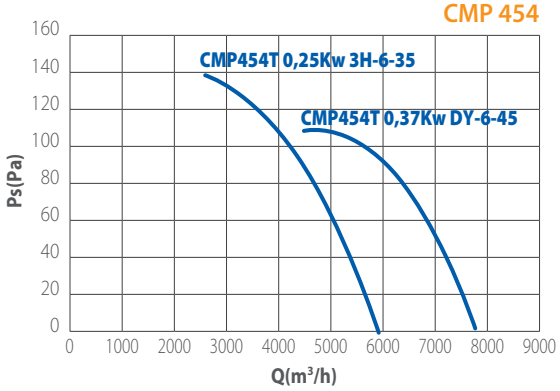
CMP 404



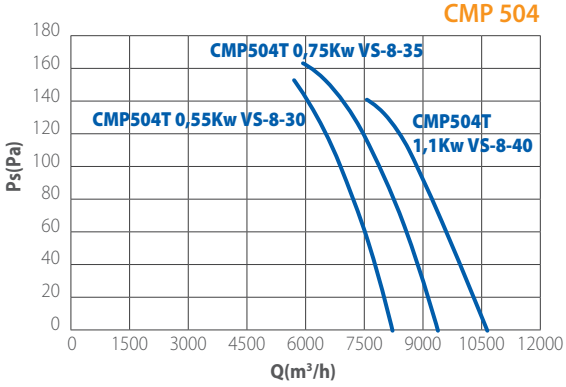
CMP 452



CMP 454



CMP 504



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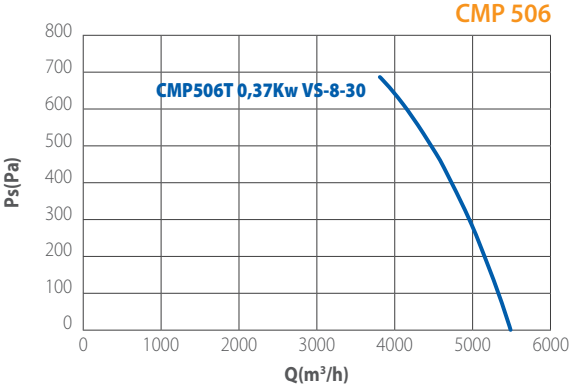

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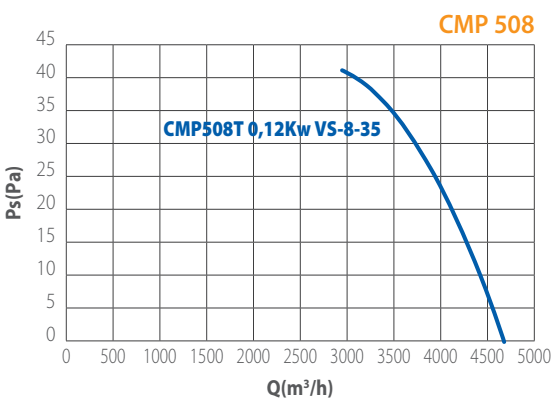
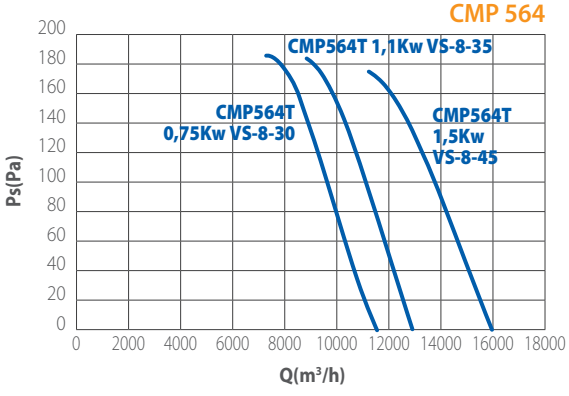


CMP 564



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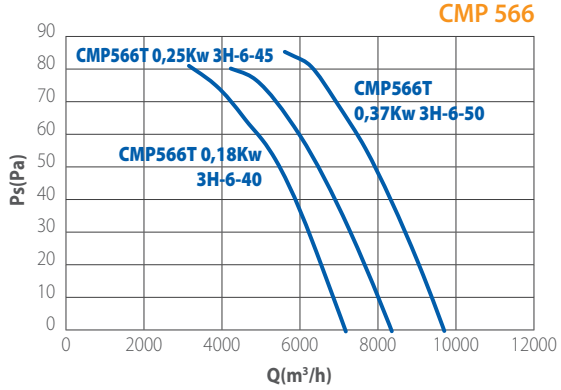
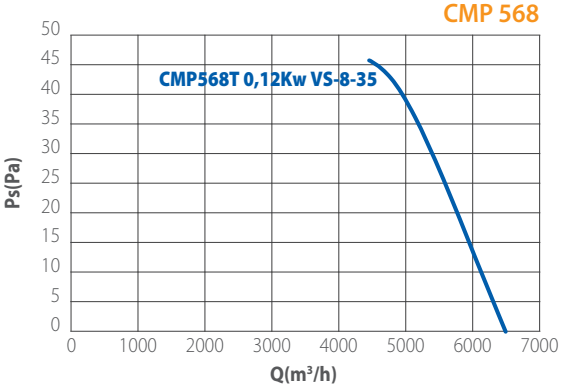
CURVES

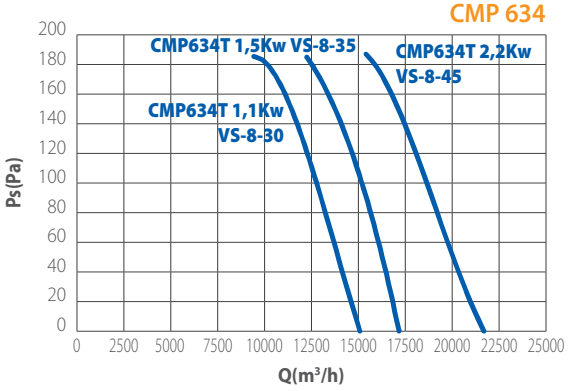
CMP 566



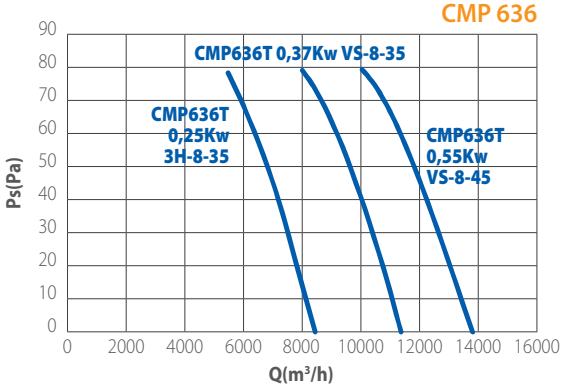
CMP 568



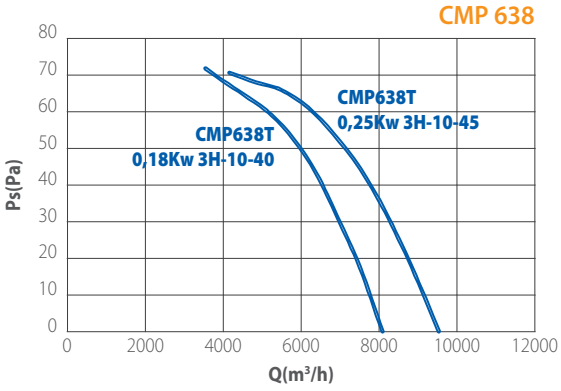
CMP 634



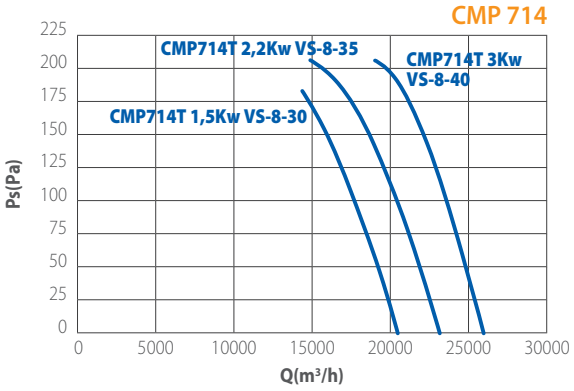
CMP 636



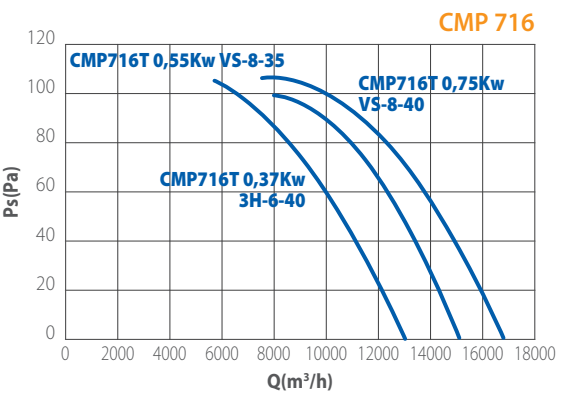
CMP 638



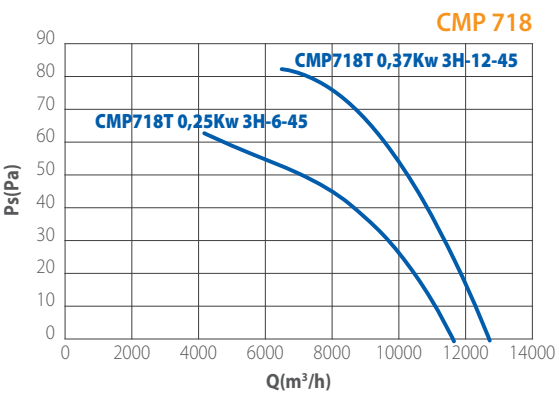
CMP 714



CMP 716

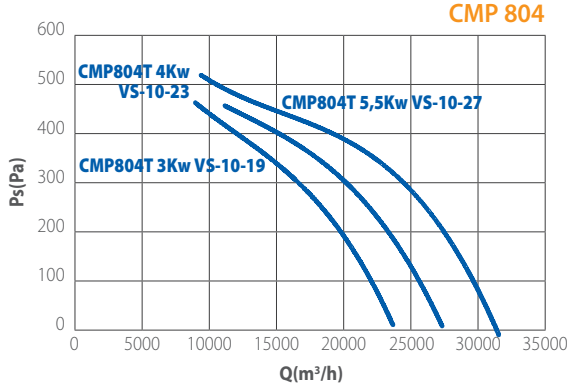


CMP 718

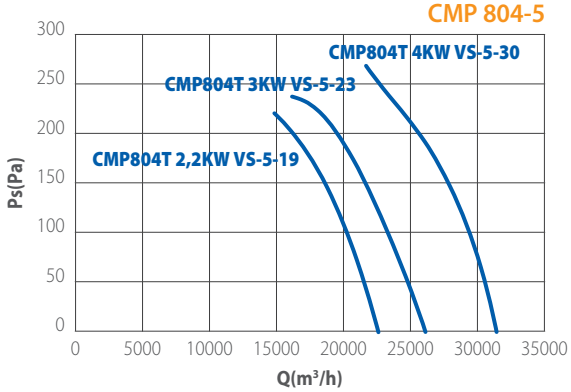


CURVES

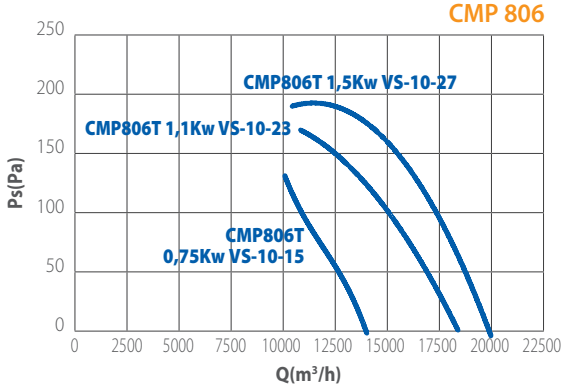
CMP 804



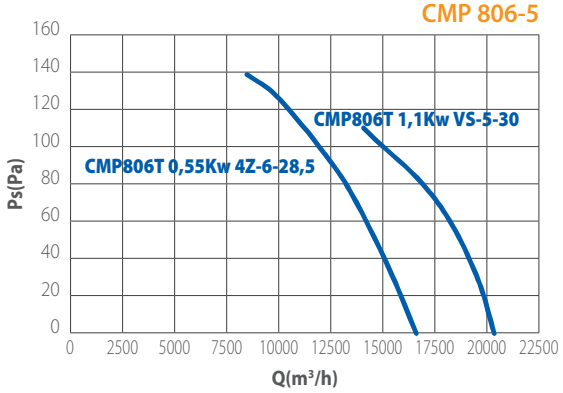
CMP 804-5



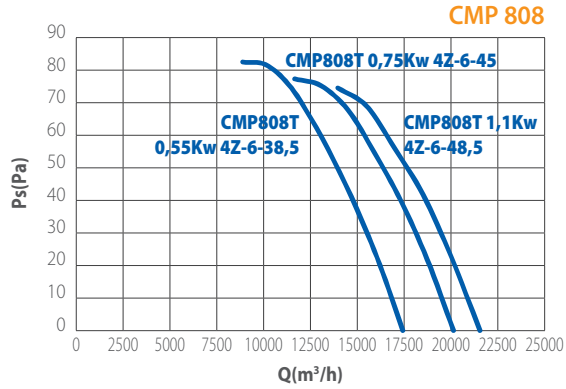
CMP 806



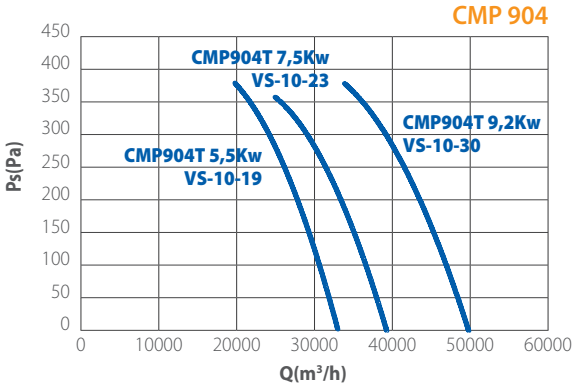
CMP 806-5



CMP 808



CMP 904



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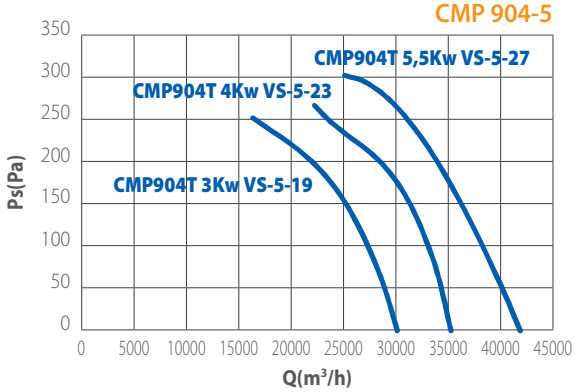

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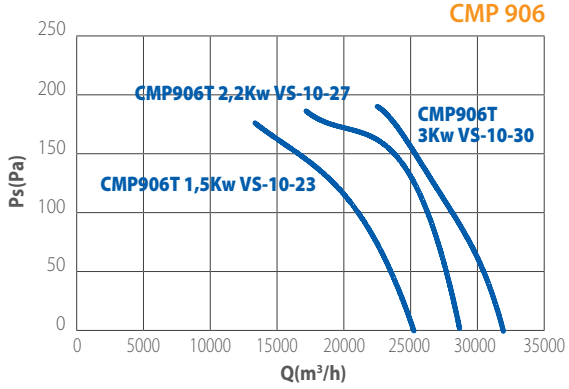

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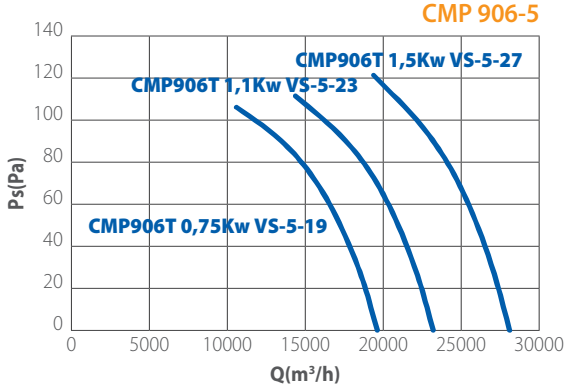
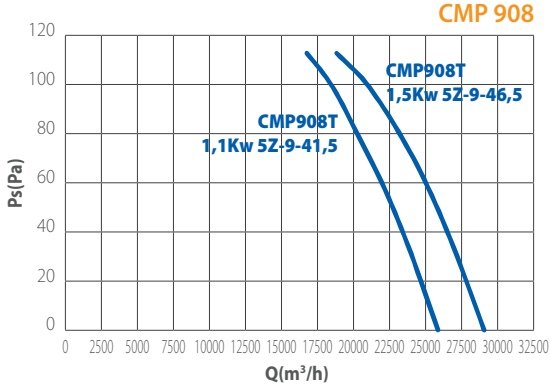
CURVES

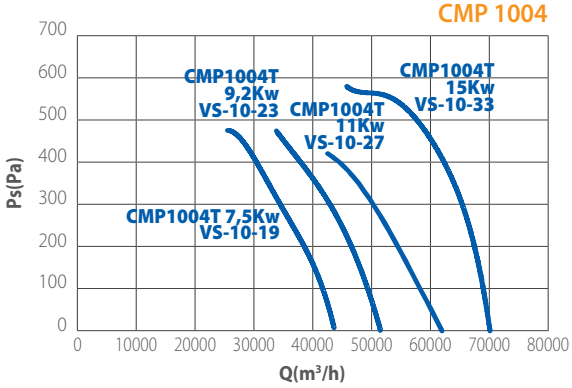
CMP 906-5



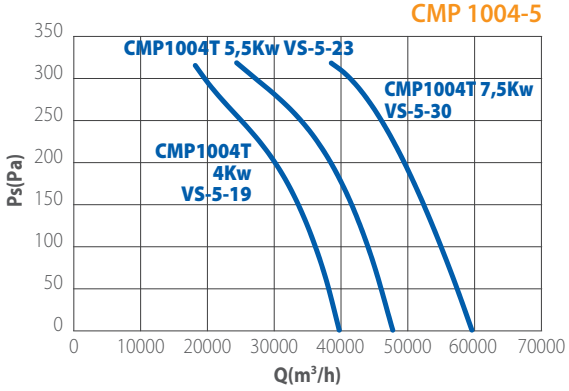
CMP 908



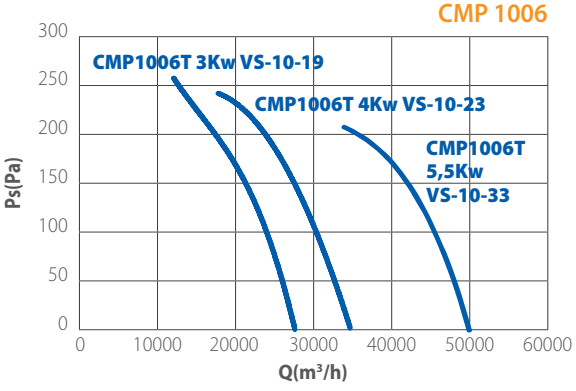
CMP 1004



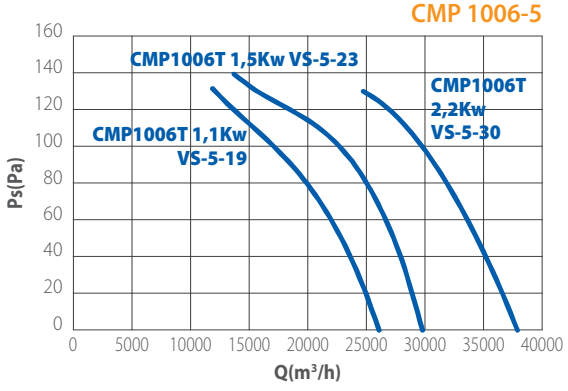
CMP 1004-5



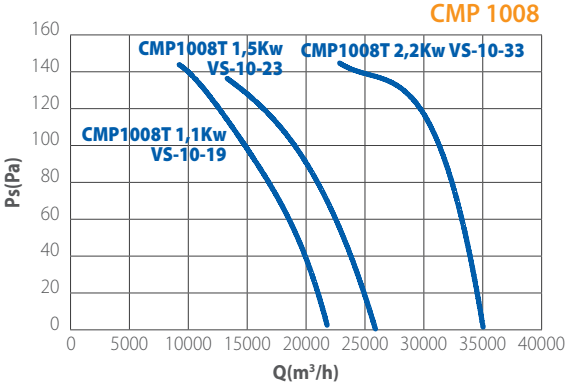
CMP 1006



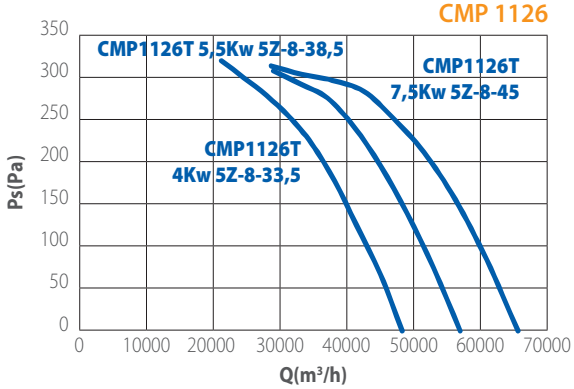
CMP 1006-5



CMP 1008

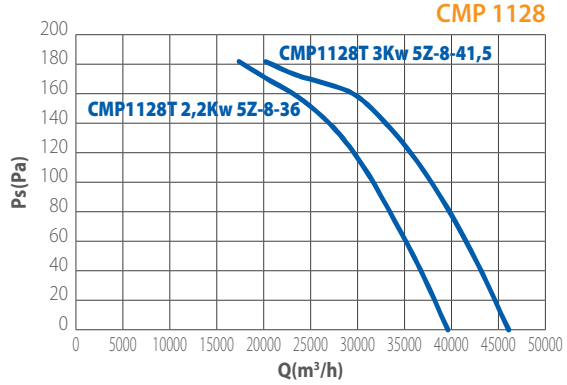


CMP 1126

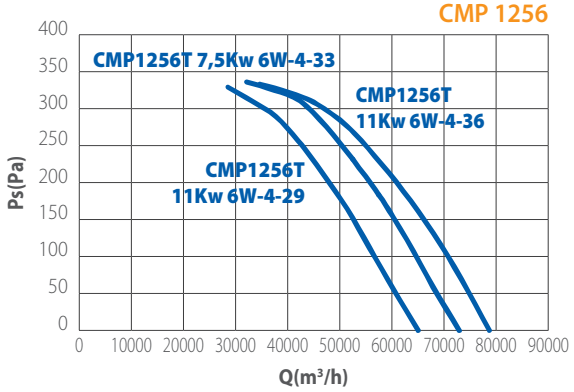


CURVES

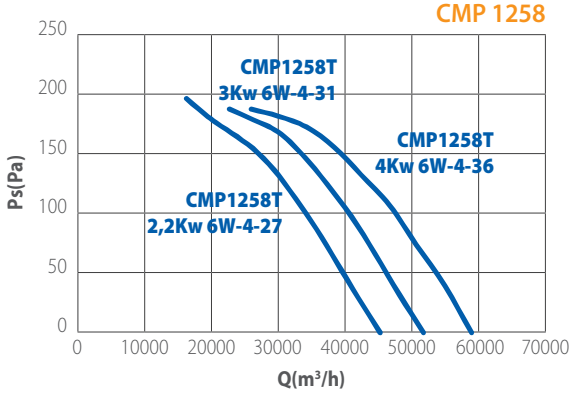
CMP 1128



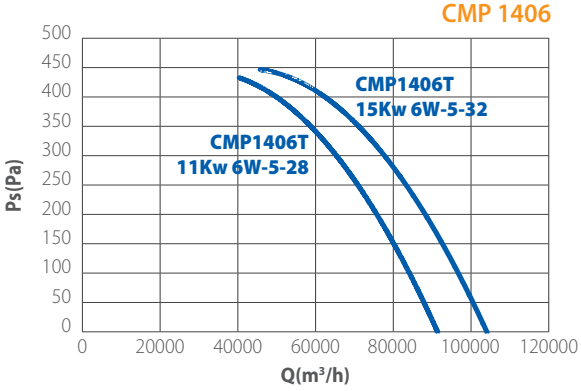
CMP 1256



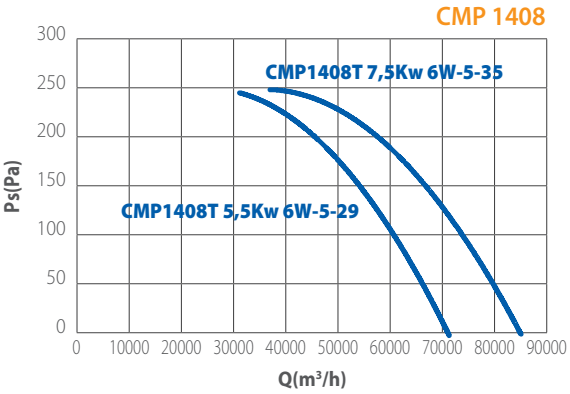
CMP 1258



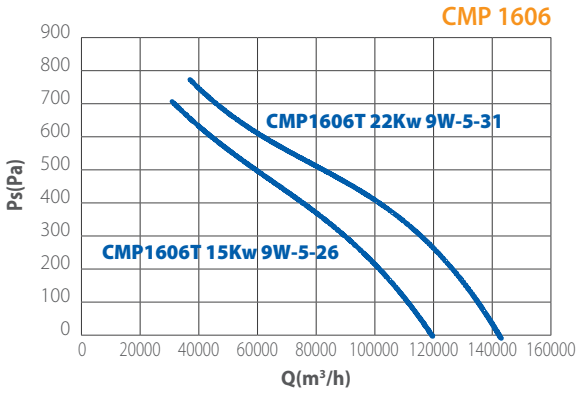
CMP 1406



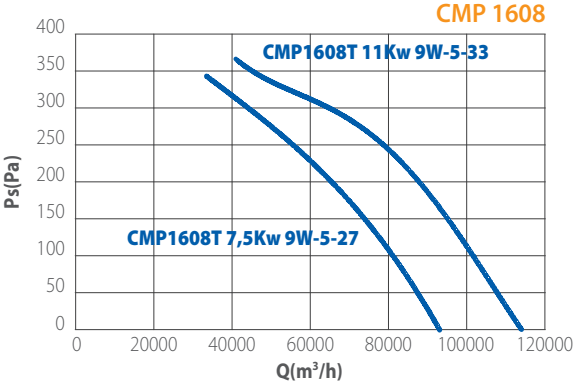
CMP 1408



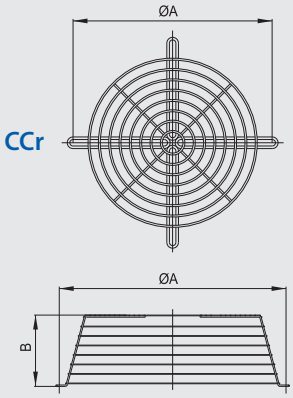
CMP 1606



CMP 1608



Series CMP - CMZ



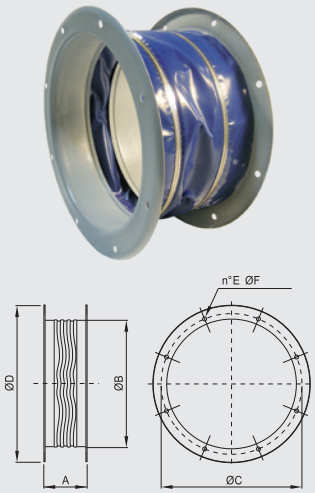
CCr / CCrc - Protection guards

They prevent from casual contact with moving parts of the fan. Manufactured in steel rod according to UNI 12499 standard and protected against atmospheric agents.
CCr: flat version (for long case and short case on impeller side).
CCrc: conic version (short case version on motor side). Not available on CCZ.

CODE	TYPE	ØA	kg
5RE9031	CCr 31	355	0,4
5RE9035	CCr 35	395	0,6
5RE9040	CCr 40	450	0,7
5RE9045	CCr 45	500	1
5RE9050	CCr 50	560	1,4
5RE9056	CCr 56	620	2
5RE9063	CCr 63	690	2,2
5RE9071	CCr 71	770	2,7
5RE9080	CCr 80	860	4
5RE9090	CCr 90	970	5
5RE9100	CCr 100	1070	5
5RE9102	CCr 112	1190	6
5RE9105	CCr 125	1320	9
5RE9110	CCr 140	1490	12
5RE9113	CCr 160	1690	14

CODE	TYPE	ØA	B	kg
5RE1581	CCrc 31	355	115	1
5RE1582	CCrc 35	395	115	1,1
5RE1583	CCrc 40	450	115	1,3
5RE1584	CCrc 45	500	115	1,5
5RE1585	CCrc 50	560	115	1,8
5RE1586	CCrc 56	620	115	2,2
5RE1587	CCrc 63	690	115	3
5RE1588	CCrc 71	770	150	4,5
5RE1589	CCrc 80	860	150	5,8
5RE1590	CCrc 90	970	305	7
5RE1591	CCrc 100	1070	305	8,5
5RE1592	CCrc 112	1190	305	10
5RE1593	CCrc 125	1320	305	11

Dimensions in mm
Sizes 1400 and 1600 upon request.

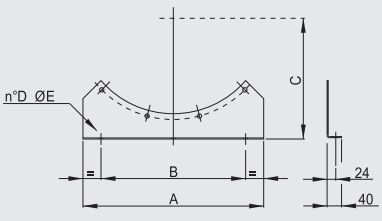


CCga - Antivibration flexible connectors

It prevents the propagation of vibrations along the ducted system. Manufactured with two flanges in steel sheet, according to UNI ISO6580 – EUROVENT standard for fixing to the fan and to the duct, and a strong flexible fabric joint. Working temperatures from –30°C to +80°C. Components in steel sheet protected against atmospheric agents by epoxy paint. Special executions are available for different working temperatures. Dimensions of CCga 140 and 160 upon request.

CODE	TYPE	A	ØB	ØC	ØD	E	ØF	kg
1SU5310	CCga 31	200	315	355	395	8	10	3,7
1SU5350	CCga 35	200	350	395	446	8	10	4,2
1SU5400	CCga 40	200	400	450	496	8	12	4,6
1SU5450	CCga 45	200	450	500	546	8	12	5,2
1SU5500	CCga 50	200	500	560	598	12	12	5,7
1SU5560	CCga 56	200	560	620	658	12	12	6,8
1SU5630	CCga 63	200	630	690	730	12	12	7,6
1SU5710	CCga 71	200	710	770	810	16	12	8,4
1SU5800	CCga 80	200	800	860	910	16	12	9,5
1SU5900	CCga 90	200	900	970	1030	16	16	10,8
1SU6000	CCga 100	200	1000	1070	1130	16	16	12,5
1SU6120	CCga 112	200	1120	1190	1250	20	16	14,1
1SU6125	CCga 125	200	1250	1320	1380	20	16	15,8

Dimensions in mm
Sizes 1400 and 1600 upon request.



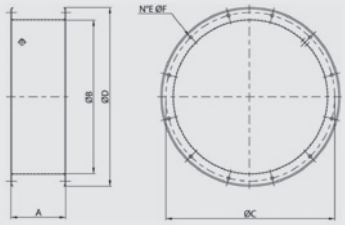
CCst - Support feet

Suitable to fasten the fan on the floor or to the ceiling. Manufactured in steel sheet and protected against atmospheric agents by epoxy paint.

CODE	TYPE	A	B	C	D	ØE	kg
1ST0310	Support feet CC 310 (couple)	320	200	280	2	10	1,0
1ST0350	Support feet CC 350 (couple)	350	250	300	2	10	1,0
1ST0400	Support feet CC 400 (couple)	400	300	320	2	10	1,0
1ST0450	Support feet CC 450 (couple)	450	350	350	2	10	1,5
1ST0500	Support feet CC 500 (couple)	500	400	380	2	10	2,0
1ST0560	Support feet CC 560 (couple)	560	460	410	2	10	2,5
1ST0630	Support feet CC 630 (couple)	630	480	450	2	10	2,8
1ST0710	Support feet CC 710 (couple)	710	550	490	2	10	3,0
1ST0800	Support feet CC 800 (couple)	800	660	540	3	14	3,8
1ST0900	Support feet CC 900 (couple)	900	760	600	3	14	4,5
1ST1000	Support feet CC 1000 (couple)	1000	860	640	3	14	4,8
1ST1120	Support feet CC 1120 (couple)	1120	820	710	3	14	6,8
1ST1250	Support feet CC 1250 (couple)	1250	950	770	3	14	7,7
1ST1400	Support feet CC 1400 (couple)	1400	1100	850	3	14	11
1ST1600	Support feet CC 1600 (couple)	1600	1300	960	3	16	21,5

Dimensions in mm

Series CMP - CMZ

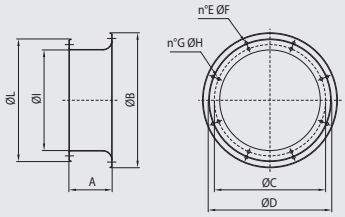


CCpro - Long casing

It turns the standard short case execution into a long case version, also at site, with impeller and motor completely protected inside the casing. Manufactured in steel sheet, with fixing flanges according to UNI ISO6580 – EUROVENT standard. Protected against atmospheric agents by epoxy-paint. Complete of inspection porthole and holes for cable entry. Dimensions of CCpro 150 and 160 upon request.

CODE	TYPE	A	ØB	ØC	ØD	E	ØF	kg
1CC9313	CCpro 31	180	315	355	395	8	10	4
1CC9351	CCpro 35	180	350	395	446	8	10	5
1CC9402	CCpro 40	200	400	450	496	8	12	5,5
1CC9451	CCpro 45	200	450	500	546	8	12	7
1CC9502	CCpro 50	200	500	560	598	12	12	7,5
1CC9561	CCpro 56	200	560	620	658	12	12	8,2
1CC9632	CCpro 63	240	630	690	730	12	12	10,5
1CC9712	CCpro 71	280	710	770	810	16	12	13
1CC9802	CCpro 80	240	800	860	910	16	12	20
1CC9901	CCpro 90	340	900	970	1030	16	16	30
1CC9912	CCpro 100	410	1000	1070	1130	16	16	39
1CC9921	CCpro 112	410	1130	1190	1250	20	16	58
1CC9927	CCpro 125	410	1260	1320	1380	20	16	65
1CC9930	CCpro 140	510	1415	1470	1540	20	16	88

Dimensions in mm
Sizes 1600 upon request.

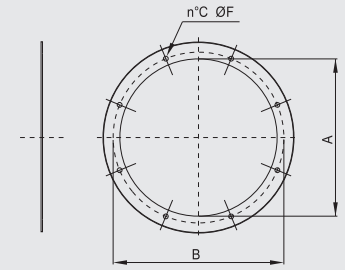


CCbo - Inlet/outlet cone

It allows a higher fan efficiency in case of installation with inlet or outlet not ducted. Manufactured in steel sheet, with one flange according to UNI ISO6580 – EUROVENT to be fitted to the CC fan, and an aerodynamically shaped bell mouth, with fixing holes for a protection guard (of one size bigger, example CCbo 71 + CCr 80). Protected against atmospheric agents by epoxy paint.

CODE	TYPE	A	B	C	D	E	F	G	H	I	L	kg
5BO9631	CCbo 31	175	442	355	395	8	10	8	10	307	395	4,4
5BO9635	CCbo 35	175	496	395	450	8	12	8	10	357	446	5
5BO9640	CCbo 40	175	546	450	500	8	12	8	12	407	496	5,6
5BO9645	CCbo 45	175	598	500	560	12	12	8	12	457	546	6,3
5BO9650	CCbo 50	190	658	560	620	12	12	12	12	507	598	8,5
5BO9656	CCbo 56	190	730	620	690	12	12	12	12	567	658	8,5
5BO9663	CCbo 63	190	810	690	770	16	12	12	12	637	730	9,8
5BO9671	CCbo 71	230	910	770	860	16	12	16	12	708	810	12,4
5BO9680	CCbo 80	250	1025	860	970	16	12	16	12	808	910	15,2
5BO9690	CCbo 90	300	1125	970	1070	16	16	16	16	910	1030	29,4
5BO9700	CCbo 100	300	1245	1070	1190	20	16	16	16	1010	1130	33,3
5BO9712	CCbo 112	300	1380	1190	1320	20	16	20	16	1130	1250	37,3
5BO9725	CCbo 140	300	1525	1320	1470	20	16	20	16	1260	1380	42,5

Dimensions in mm
Sizes 1500 and 1600 upon request.

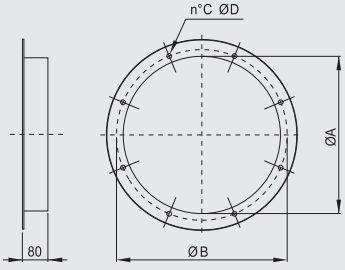


CCf - Flat counter flange

Ring plate with holes according to UNI ISO6580 – EUROVENT standard, compatible with fan flange. It is used for easier connection between the CC fan and the duct.

CODE	TYPE	ØA	ØB	C	ØD	kg
5BO1031	CCf 31	315	355	8	10	1,2
5BO1035	CCf 35	350	395	8	10	1,5
5BO1040	CCf 40	400	450	8	12	1,7
5BO1045	CCf 45	450	500	8	12	1,9
5BO1050	CCf 50	500	560	12	12	2,1
5BO1056	CCf 56	560	620	12	12	2,4
5BO1063	CCf 63	630	690	12	12	2,7
5BO1071	CCf 71	710	770	16	12	3,3
5BO1081	CCf 80	800	860	16	12	3,7
5BO1092	CCf 90	900	970	16	16	4,7
5BO1110	CCf 100	1000	1070	16	16	5,2
5BO1120	CCf 120	1120	1190	20	16	7,2
5BO1250	CCf 125	1250	1320	20	16	8

Dimensions in mm
Sizes 1400 and 1600 upon request.



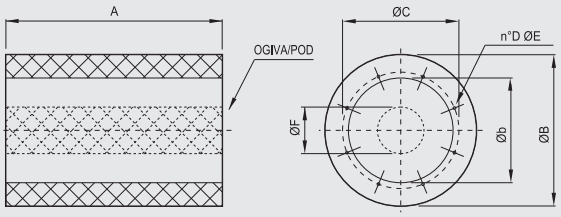
CCfc - Counter flange with collar

Counter flange with addition of 80 mm of round duct. It is used for easier connection between the CC fan and the duct.

CODE	TYPE	ØA	ØB	C	ØD	kg
5BO1531	CCfc 31	315	355	8	10	1,3
5BO1535	CCfc 35	350	395	8	10	1,5
5BO1540	CCfc 40	400	450	8	12	1,7
5BO1545	CCfc 45	450	500	8	12	2
5BO1550	CCfc 50	500	560	12	12	2,2
5BO1556	CCfc 56	560	620	12	12	2,5
5BO1563	CCfc 63	630	690	12	12	2,9
5BO1571	CCfc 71	710	770	16	12	3,3
5BO1580	CCfc 80	800	860	16	12	3,8
5BO1590	CCfc 90	900	970	16	16	4,2
5BO1600	CCfc 100	1000	1070	16	16	5
5BO1620	CCfc 112	1120	1190	20	16	5,8
5BO1625	CCfc 125	1250	1320	20	16	6,5

Dimensions in mm
Sizes 1400 and 1600 upon request.

Series CMP - CMZ



The cylindrical silencers CCs are available in two versions, **without pod (CCsa)** and **with pod (CCsb)**. The presence of the pod allows a higher noise attenuation, but creates an additional pressure drop in the system. Both the versions can be fixed to the corresponding flange of the CC in inlet and outlet. The CCsa series doesn't create additional losses. The CCsb series gives an additional loss, as shown in the diagram at page 123. Silencers can be provided with length equal to 1 - 1,5 - 2 times the diameter (b). These silencers are manufactured completely in galvanized steel. The internal part and the pod are made in perforated sheet, to effectively allow the sound absorption of the acoustic lining in mineral wool. The working temperature is included from -40°C and +150°C in S1 service.

CCsa / CCsb - Silencers with and without pod

TYPE	A 1Ø	ØB	Øb	ØC	D	ØE	ØF
CCsa / CCsb 31	315	455	315	355	8	M8	140
CCsa / CCsb 35	350	495	355	395	8	M8	200
CCsa / CCsb 40	400	540	400	450	8	M10	200
CCsa / CCsb 45	450	610	450	500	8	M10	245
CCsa / CCsb 50	500	660	500	560	12	M10	245
CCsa / CCsb 56	560	720	560	620	12	M10	295
CCsa / CCsb 63	630	790	630	690	12	M10	295
CCsa / CCsb 71	710	870	710	770	16	M10	380
CCsa / CCsb 80	800	1000	800	860	16	M10	380
CCsa / CCsb 90	900	1100	900	970	16	M12	380
CCsa / CCsb 100	1000	1200	1000	1070	16	M12	650

SILENCERS CCsb	
1SI0313	COMPONENTS SILENCER CCS 31 C/OGIVA L=315
1SI0315	COMPONENTS SILENCER CCS 31 C/OGIVA L=470
1SI0314	COMPONENTS SILENCER CCS 31 C/OGIVA L=630
1SI0353	COMPONENTS SILENCER CCS 35 C/OGIVA L=350
1SI0351	COMPONENTS SILENCER CCS 35 C/OGIVA L=525
1SI0354	COMPONENTS SILENCER CCS 35 C/OGIVA L=700
1SI0402	COMPONENTS SILENCER CCS 40 C/OGIVA L=400
1SI0401	COMPONENTS SILENCER CCS 40 C/OGIVA L=600
1SI0403	COMPONENTS SILENCER CCS 40 C/OGIVA L=800
1SI0450	COMPONENTS SILENCER CCS 45 C/OGIVA L=450
1SI0620	COMPONENTS SILENCER CCS 45 C/OGIVA L=675
1SI0451	COMPONENTS SILENCER CCS 45 C/OGIVA L=900
1SI0500	COMPONENTS SILENCER CCS 50 C/OGIVA L=500
1SI0520	COMPONENTS SILENCER CCS 50 C/OGIVA L=750
1SI0501	COMPONENTS SILENCER CCS 50 C/OGIVA L=1000
1SI0563	COMPONENTS SILENCER CCS 56 C/OGIVA L=560
1SI0561	COMPONENTS SILENCER CCS 56 C/OGIVA L=840
1SI0564	COMPONENTS SILENCER CCS 56 C/OGIVA L=1120
1SI0633	COMPONENTS SILENCER CCS 63 C/OGIVA L=630
1SI0631	COMPONENTS SILENCER CCS 63 C/OGIVA L=945
1SI0634	COMPONENTS SILENCER CCS 63 C/OGIVA L=1260
1SI0715	COMPONENTS SILENCER CCS 71 C/OGIVA L=710
1SI0700	COMPONENTS SILENCER CCS 71 C/OGIVA L=1065
1SI0716	COMPONENTS SILENCER CCS 71 C/OGIVA L=1420
1SI0815	COMPONENTS SILENCER CCS 80 C/OGIVA L=800
1SI0810	COMPONENTS SILENCER CCS 80 C/OGIVA L=1200
1SI0816	COMPONENTS SILENCER CCS 80 C/OGIVA L=1600
1SI0901	COMPONENTS SILENCER CCS 90 C/OGIVA L=900
1SI0900	COMPONENTS SILENCER CCS 90 C/OGIVA L=1350
1SI0902	COMPONENTS SILENCER CCS 90 C/OGIVA L=1800
1SI1002	COMPONENTS SILENCER CCS 100 C/OGIVA L=1000
1SI1000	COMPONENTS SILENCER CCS 100 C/OGIVA L=1500
1SI1003	COMPONENTS SILENCER CCS 100 C/OGIVA L=2000
1SI1121	COMPONENTS SILENCER CCS 112 C/OGIVA L=1.120
1SI1120	COMPONENTS SILENCER CCS 112 C/OGIVA L=1.680
1SI1122	COMPONENTS SILENCER CCS 112 C/OGIVA L=2.240
1SI1251	COMPONENTS SILENCER CCS 125 C/OGIVA L=1.250
1SI1250	COMPONENTS SILENCER CCS 125 C/OGIVA L=1.875
1SI1252	COMPONENTS SILENCER CCS 125 C/OGIVA L=2.500

SILENCERS CCsa	
1SI0317	COMPONENTS SILENCER CCS 31 S/OGIVA L=315
1SI0316	COMPONENTS SILENCER CCS 31 S/OGIVA L=470
1SI0318	COMPONENTS SILENCER CCS 31 S/OGIVA L=630
1SI0355	COMPONENTS SILENCER CCS 35 S/OGIVA L=350
1SI0352	COMPONENTS SILENCER CCS 35 S/OGIVA L=525
1SI0356	COMPONENTS SILENCER CCS 35 S/OGIVA L=700
1SI0404	COMPONENTS SILENCER CCS 40 S/OGIVA L=400
1SI0625	COMPONENTS SILENCER CCS 40 S/OGIVA L=600
1SI0405	COMPONENTS SILENCER CCS 40 S/OGIVA L=800
1SI0452	COMPONENTS SILENCER CCS 45 S/OGIVA L=450
1SI0621	COMPONENTS SILENCER CCS 45 S/OGIVA L=675
1SI0453	COMPONENTS SILENCER CCS 45 S/OGIVA L=900
1SI0502	COMPONENTS SILENCER CCS 50 S/OGIVA L=500
1SI0521	COMPONENTS SILENCER CCS 50 S/OGIVA L=750
1SI0503	COMPONENTS SILENCER CCS 50 S/OGIVA L=1000
1SI0565	COMPONENTS SILENCER CCS 56 S/OGIVA L=560
1SI0562	COMPONENTS SILENCER CCS 56 S/OGIVA L=840
1SI0566	COMPONENTS SILENCER CCS 56 S/OGIVA L=1120
1SI0635	COMPONENTS SILENCER CCS 63 S/OGIVA L=630
1SI0632	COMPONENTS SILENCER CCS 63 S/OGIVA L=945
1SI0636	COMPONENTS SILENCER CCS 63 S/OGIVA L=1260
1SI0712	COMPONENTS SILENCER CCS 71 S/OGIVA L=710
1SI0710	COMPONENTS SILENCER CCS 71 S/OGIVA L=1065
1SI0713	COMPONENTS SILENCER CCS 71 S/OGIVA L=1420
1SI0801	COMPONENTS SILENCER CCS 80 S/OGIVA L=800
1SI0800	COMPONENTS SILENCER CCS 80 S/OGIVA L=1200
1SI0802	COMPONENTS SILENCER CCS 80 S/OGIVA L=1600
1SI0903	COMPONENTS SILENCER CCS 90 S/OGIVA L=900
1SI0690	COMPONENTS SILENCER CCS 90 S/OGIVA L=1350
1SI0904	COMPONENTS SILENCER CCS 90 S/OGIVA L=1800
1SI1001	COMPONENTS SILENCER CCS 100 S/OGIVA L=1500
1SI1005	COMPONENTS SILENCER CCS 100 S/OGIVA L=2000
1SI1124	COMPONENTS SILENCER CCS 112 S/OGIVA L=1120
1SI1123	COMPONENTS SILENCER CCS 112 S/OGIVA L=1680
1SI1125	COMPONENTS SILENCER CCS 112 S/OGIVA L=2240
1SI1254	COMPONENTS SILENCER CCS 125 S/OGIVA L=1250
1SI1253	COMPONENTS SILENCER CCS 125 S/OGIVA L=1875
1SI1255	COMPONENTS SILENCER CCS 125 S/OGIVA L=2500

Series CMP - CMZ

CCsa / CCsb - Cylindrical silencers

CCsa: without pod

A= 1 x Øb

Octave spectium (Hz) of noise attenuation in dB

TYPE CCsa	63	125	250	500	1K	2K	4K	8K
31	1	1	3	8	14	9	8	7
35	0	0	3	9	14	10	8	6
40	0	0	4	10	13	8	8	5
45	1	1	4	12	12	9	6	6
50	0	0	4	13	11	9	6	5
56	0	0	4	14	11	8	5	4
63	1	1	5	14	10	9	5	5
71	1	1	5	12	9	7	5	5
80	2	3	7	9	8	6	5	4
90	2	3	7	13	8	6	5	4
100	2	3	8	12	8	4	4	4
112	2	3	8	13	7	5	4	3
125	2	3	9	13	7	4	4	3

A= 1,5 x Øb

Octave spectium (Hz) of noise attenuation in dB

TYPE CCsa	63	125	250	500	1K	2K	4K	8K
31	1	2	5	12	19	13	11	8
35	0	0	5	12	21	13	11	9
40	1	1	5	14	19	12	10	8
45	1	1	6	17	17	13	9	8
50	1	1	6	18	17	12	9	7
56	1	2	7	20	15	11	8	5
63	1	2	7	20	14	12	8	6
71	2	2	7	18	11	9	6	7
80	2	5	10	13	12	9	7	7
90	2	5	11	16	11	7	7	5
100	2	5	12	17	10	6	6	5
112	3	5	12	18	8	6	5	4
125	3	6	12	17	8	5	5	4

A= 2 x Øb

Octave spectium (Hz) of noise attenuation in dB

TYPE CCsa	63	125	250	500	1K	2K	4K	8K
31	4	6	6	16	26	17	13	9
35	0	2	6	15	25	16	12	10
40	0	2	7	18	24	15	12	9
45	0	1	7	21	21	15	10	8
50	1	2	8	23	21	14	11	8
56	1	1	9	24	19	14	10	7
63	1	2	9	25	17	14	10	7
71	2	4	9	24	14	11	8	8
80	4	6	13	22	14	10	9	7
90	4	6	14	23	13	9	7	6
100	4	6	16	23	12	7	7	6
112	4	6	15	23	10	7	6	6
125	5	8	17	22	10	6	6	5

CCsb: with pod

A= 1 x Øb

Octave spectium (Hz) of noise attenuation in dB

TYPE CCsb	63	125	250	500	1K	2K	4K	8K
31	0	1	4	9	16	17	13	10
35	0	0	4	11	22	21	15	12
40	0	1	4	11	20	18	14	11
45	0	1	6	14	21	19	13	9
50	1	2	5	13	20	16	11	8
56	1	1	6	15	21	17	11	8
63	1	1	6	15	19	16	10	8
71	1	2	7	15	20	18	12	10
80	2	3	9	12	17	15	9	8
90	2	4	8	15	16	11	8	7
100	4	8	14	20	24	21	14	10
112	4	6	13	20	21	14	8	7
125	4	7	12	18	19	10	6	6

A= 1,5 x Øb

Octave spectium (Hz) of noise attenuation in dB

TYPE CCsb	63	125	250	500	1K	2K	4K	8K
31	2	4	5	13	23	26	18	12
35	1	1	7	15	33	32	22	17
40	1	2	6	15	31	27	19	14
45	1	2	7	19	31	28	18	12
50	2	3	7	19	29	24	14	10
56	2	3	9	22	32	27	15	11
63	2	2	9	22	29	23	14	10
71	2	3	11	22	31	25	13	11
80	3	6	13	18	26	22	12	11
90	3	5	12	20	24	16	10	9
100	6	10	22	30	37	29	16	12
112	6	10	19	29	33	20	11	10
125	6	10	18	26	29	14	9	7

A= 2 x Øb

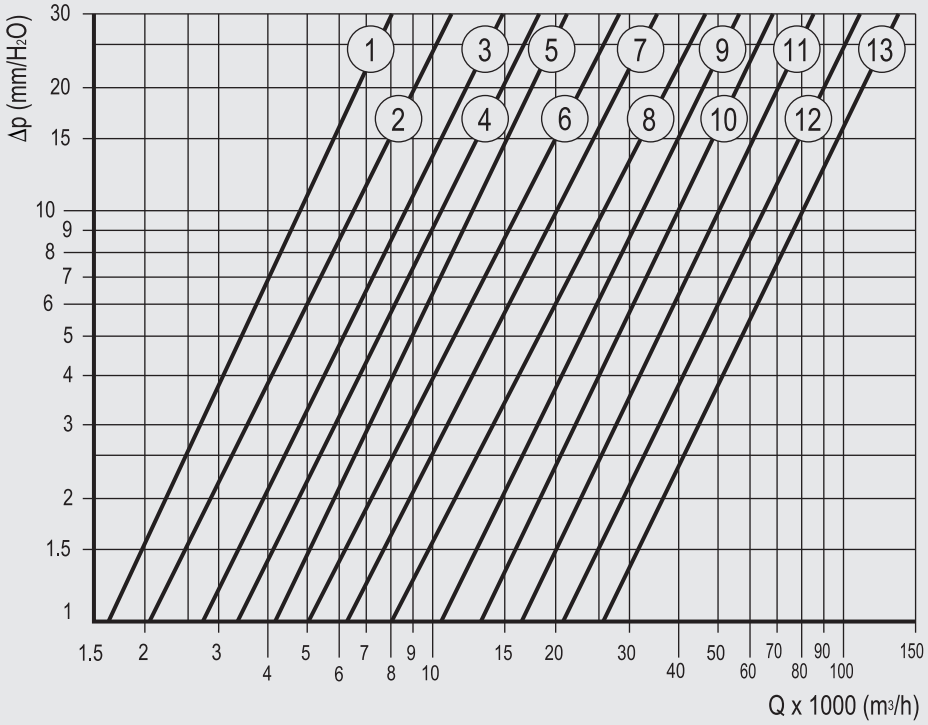
Octave spectium (Hz) of noise attenuation in dB

TYPE CCsb	63	125	250	500	1K	2K	4K	8K
31	3	6	7	17	32	33	22	17
35	1	2	8	19	40	39	27	20
40	1	2	9	20	37	35	23	16
45	2	3	10	23	39	36	21	15
50	2	3	10	24	38	32	18	12
56	1	2	12	27	41	35	18	12
63	2	3	11	27	37	29	15	12
71	3	5	14	29	41	32	18	15
80	3	6	16	29	35	26	15	12
90	4	7	17	30	34	20	12	11
100	7	13	28	39	47	38	19	13
112	8	14	26	36	42	24	13	11
125	7	13	25	35	37	17	11	9

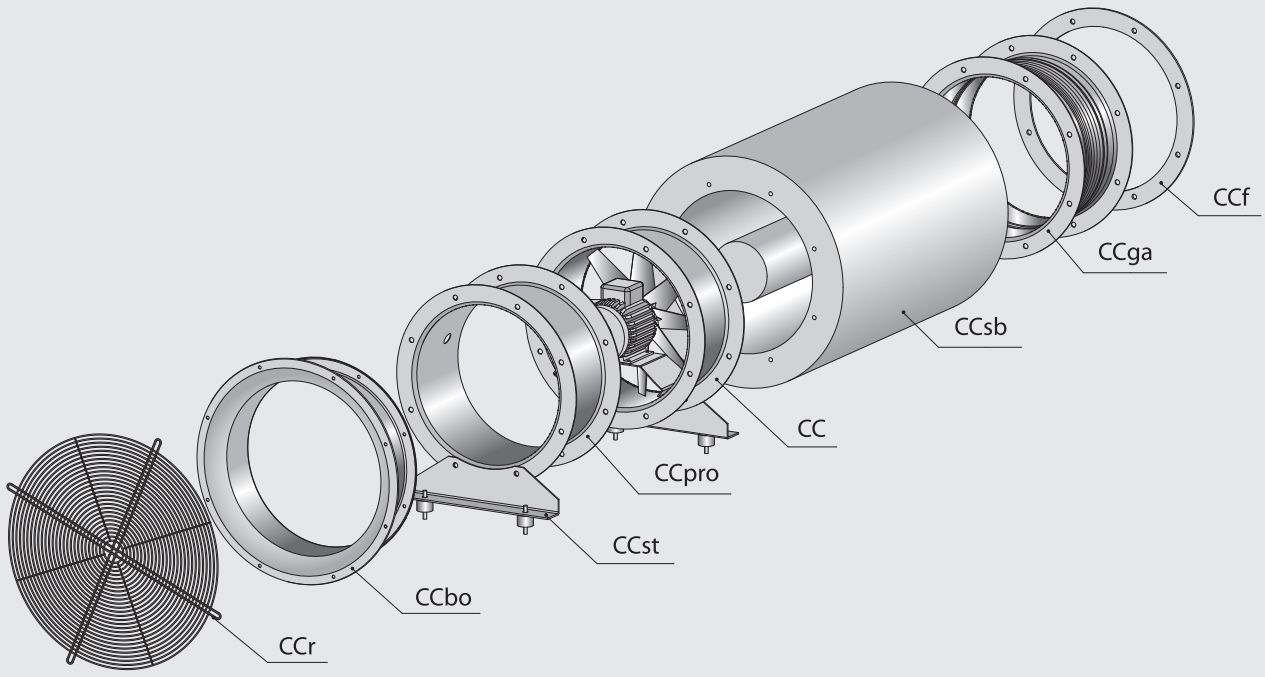
Series CMP - CMZ

CCsb - Silencer with pod loss charge diagram

N.B.: Without pod (CCsa) loss charge irrelevant.



TYPE	n°
CCsb 31	1
CCsb 35	2
CCsb 40	3
CCsb 45	4
CCsb 50	5
CCsb 56	6
CCsb 63	7
CCsb 71	8
CCsb 80	9
CCsb 90	10
CCsb 100	11
CCsb 112	12
CCsb 125	13



PMP

High efficiency portable duct axial fans

230 V | 400 V | IP55 | min -15°C | max 50°C | CE

DESCRIPTION

The PMP series is designed for situations where powerful air throws are necessary; this can happen in particular situations, for instance, to create scenic effects or to cool people working close to high temperature heat sources (mancooler).
In fact it can be easily moved and set in the most suitable position and orientation.
Working temperature from -15°C to +50°C in continuous service. PMP is supplied with an electrical plug fi xed on the fan in order to ease its connection and use.

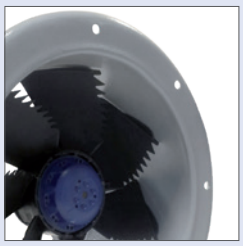
CONSTRUCTION

- Casing in steel sheet and support stand in tubular metal, protected against the atmospheric agents with epoxy paint. Side hand-wheels for the orientation of the throw.
- Protection guards in inlet and outlet manufactured according to rules UNI 12499.
- Aerofoil profi le impeller with blades in mineral fibres reinforced technopolymer (models 310 to 400) and die cast aluminium alloy (models 450 and 560).
- Execution 5 (with impeller direct coupled on the shaft end) and air fl ow from motor to impeller.
- External rotor motors with built in thermal protection, double speed three-phase and single phase speed-adjustable, all motors with connection box.

UPON REQUEST

- Larger models (630 and 710).

Compliant with Erp Directive and EU Regulation 327/2011 (FAN)
Measurement category: C
Effi ciency category: Static
According to EN ISO 5801 / AMCA 210.

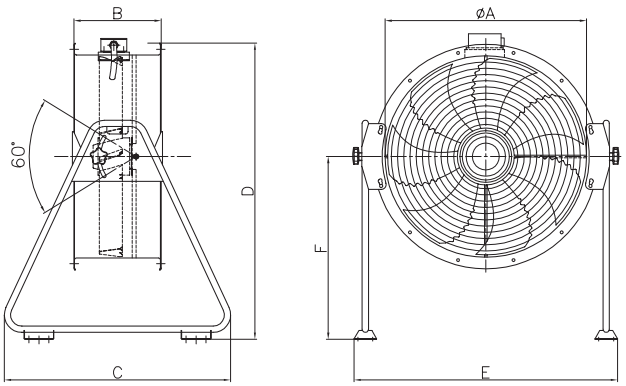


Models from 310 to 400:
impeller in mineral fibres reinforced technopolymer.

Electrical plug on board

Knob for flow direction regulation

DIMENSIONS (mm)



TYPE	ØA	B	C	D	E	F	Kg
PMP 314	305	200	630	780	651	582	17
PMP 354	355	200	630	805	691	582	20
PMP 404	405	230	630	830	766	582	22
PMP 454	455	230	630	855	816	582	25
PMP 504	535	250	874	1022	842	723	36
PMP 564	565	250	874	1047	902	723	40

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PERFORMANCE

	CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	MOTOR CLASS	SOUND LEVEL dB(A)	
			m³/h	V	A	kW	GIRI/1'	N°	IP		Lw	Lp
SINGLE-PHASE	1PM0030	PMP 314 SINGLE-PHASE	1.966	230	0,42	0,10	1.400	4	55	F	72	55
	1PM0035	PMP 354 SINGLE-PHASE	2.860	230	0,56	0,12	1.400	4	55	F	74	56
	1PM0040	PMP 404 SINGLE-PHASE	3.900	230	1,05	0,24	1.400	4	55	F	80	62
	1PM0045	PMP 454 SINGLE-PHASE	5.900	230	2,90	0,60	1.400	4	55	F	85	67
	1PM0050	PMP 504 SINGLE-PHASE	8.880	230	3,20	0,72	1.400	4	55	F	83	65
THREE-PHASE	1PM0041	PMP 404 THREE-PHASE	3.600	400	0,46 / 0,27	0,23 / 0,17	1.400	4	55	F	76/79	58/62
	1PM0047	PMP 454 THREE-PHASE	5.750	400	1,10 / 0,66	0,54 / 0,36	1.400	4	55	F	80/84	62/66
	1PM0051	PMP 504 THREE-PHASE	8.550	400	1,45 / 0,96	0,84 / 0,54	1.400	4	55	F	81/86	63/68
	1PM0056	PMP 564 THREE-PHASE	11.500	400	2,20 / 1,10	1,05 / 0,58	1.400	4	55	F	85/90	67/73

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight. Compliant with ErP 2009/125/EC Directive and EU Regulation 327/2011. Measurement category: C. Efficiency category: Static. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 3 meters, inlet side (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

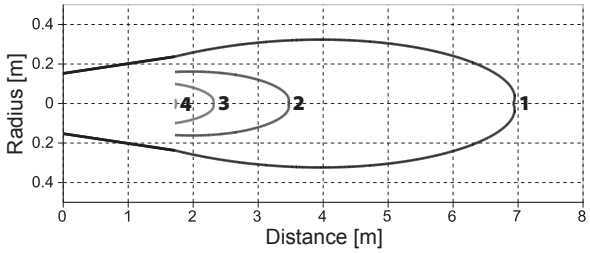
AIR VELOCITY DIAGRAMS

Reading of the curves:
- The horizontal axis shows the length of the air throw.
- The vertical axis shows the radius of the air flow as function of the air throw.
- The air speed is highlighted on the curves with numbers from 1 to 5 each one corresponding to the same value in [m/s].

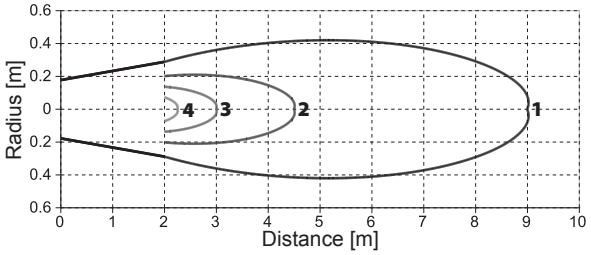
Example: CCP 454
- On the axis of the flow the speed will be of 1 m/s at a distance of 13 m.
- In the radius of 0.6 meter from the axis of the flow the speed will be of 1 m/s at 8 m of distance

Curves	Air Velocity (m/s)
1	1
2	2
3	3
4	4
5	5
6	6

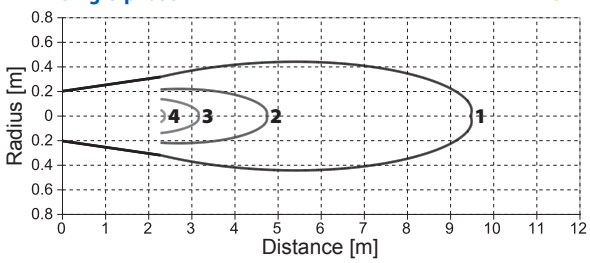
PMP 314



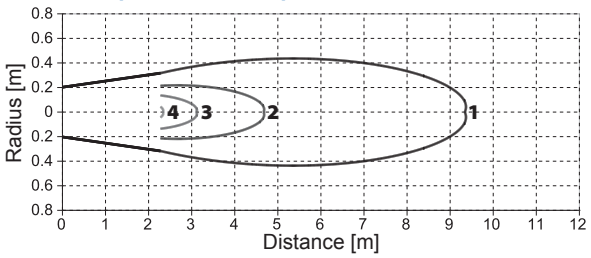
PMP 354



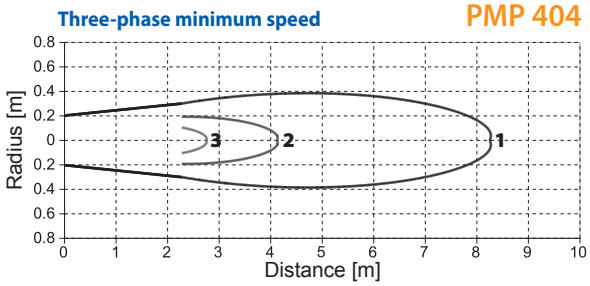
Single-phase PMP 404



Three-phase maximum speed PMP 404

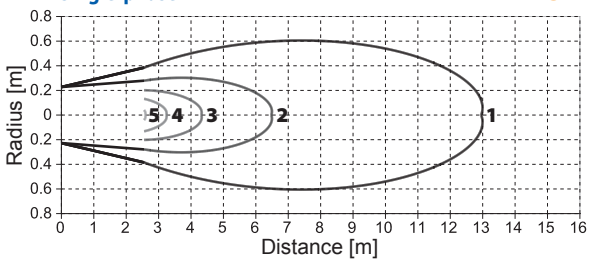


Three-phase minimum speed PMP 404

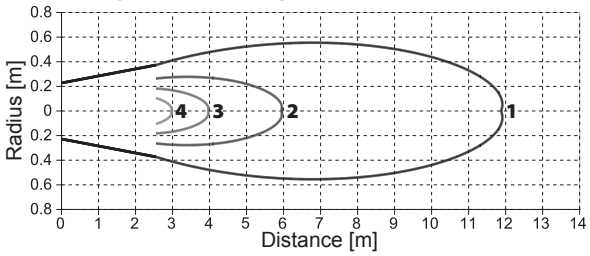


AIR VELOCITY DIAGRAMS

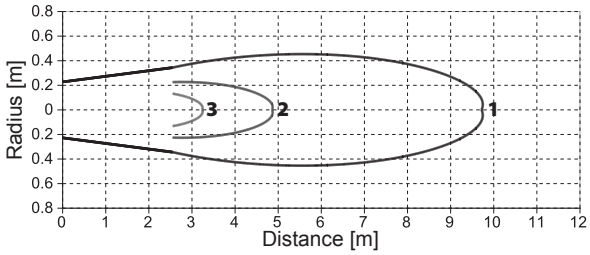
Single-phase — PMP 454



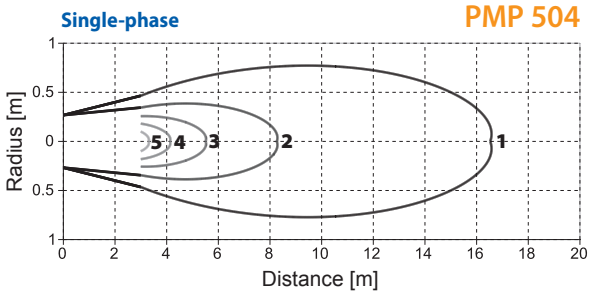
Three-phase maximum speed — PMP 454



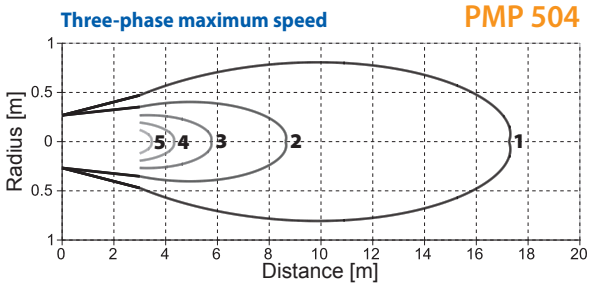
Three-phase minimum speed — PMP 454



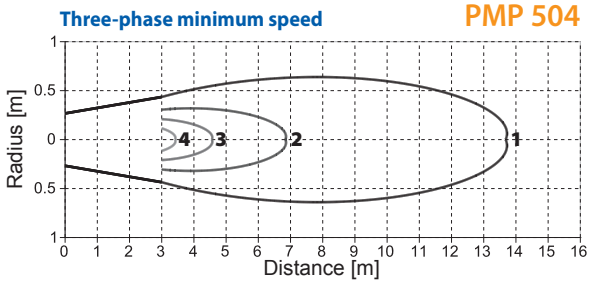
Single-phase — PMP 504



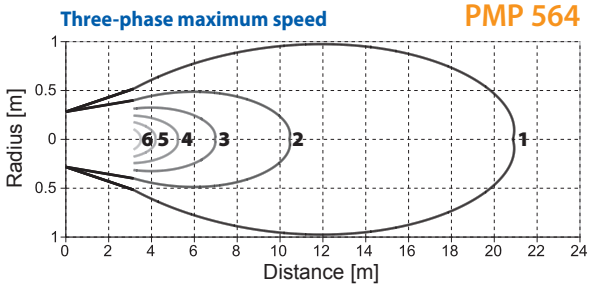
Three-phase maximum speed — PMP 504



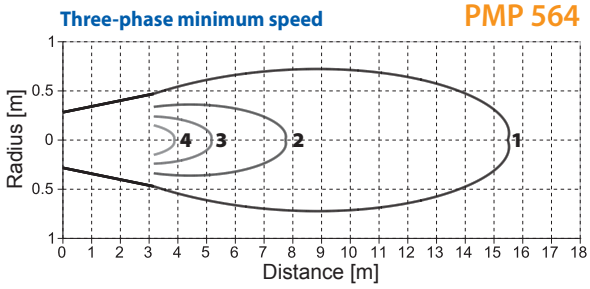
Three-phase minimum speed — PMP 504



Three-phase maximum speed — PMP 564



Three-phase minimum speed — PMP 564



ZOO

400 V | IP54 | min -15°C | max 50°C | CE

DESCRIPTION

The ZOO range are belt-driven fans which have been specifi cally designed to exhaust air with a high concentration of humid or corrosive substances. Typical applications are in greenhouses, farm sheds, car washes, creameries and tanneries, compressor premises and so on. They are suitable for wall installation and for air with a temperature range from -15°C to +50°C.
They are available in 5 sizes with diameters from 660 to 1270 mm and in 2 versions:
ZOO R with wire guards on both sides. ZOO S with a wire inlet guard and a self-acting louver.
They are easy to clean and maintain.

CONSTRUCTION

- Belt-driven fans.
- Airfl ow outside the motor.
- Housing manufactured in galvanized steel sheet.
- Impeller blades made of stainless steel AISI 304 with aluminium hub.
- Asynchronous three phase motor ball bearing motors 230/400V - 50Hz suitable for continuous running.
- Protection grade IP54, Class F

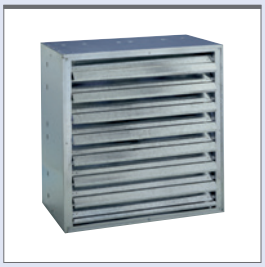
UPON REQUEST

Single-phase versions.

The series is not affected by ErP Directive 2009/125/CE and further Regulations.

VERSIONS

- **ZOO R**
  Version with internal and external protection guard
- **ZOO S**
  Version with internal protection guard and self-acting louver

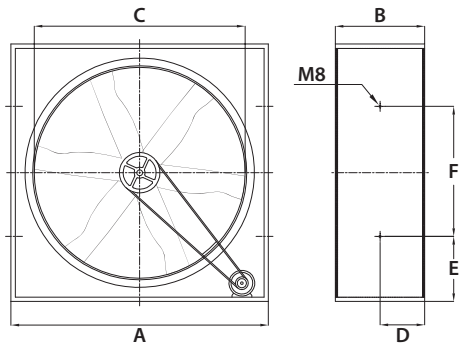


ZOO-S
With self-acting louver.

Impeller blades in stainless steel AISI 304 with aluminium hub

Belt-driven transmission

DIMENSIONS (mm)



TYPE	A	B	C	D	E	F	Kg
ZOO 63 R	800	330	660	165	200	400	30
ZOO 63 S	800	400	660	200	200	400	34
ZOO 75 R	960	330	790	165	240	480	34
ZOO 75 S	960	400	790	200	240	480	46
ZOO 95 R	1150	330	990	165	288	576	43
ZOO 95 S	1150	400	990	200	288	576	52
ZOO 125 R	1380	330	1270	165	346	692	52
ZOO 125 S	1380	400	1270	200	346	692	72

* Pesi indicativi

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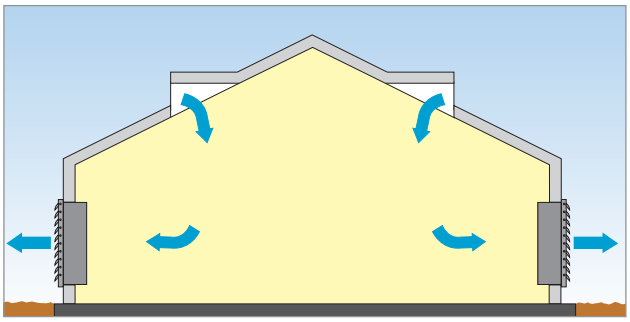
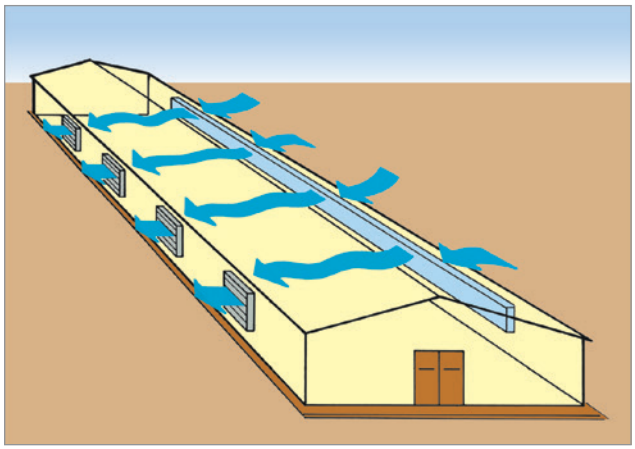
PERFORMANCE

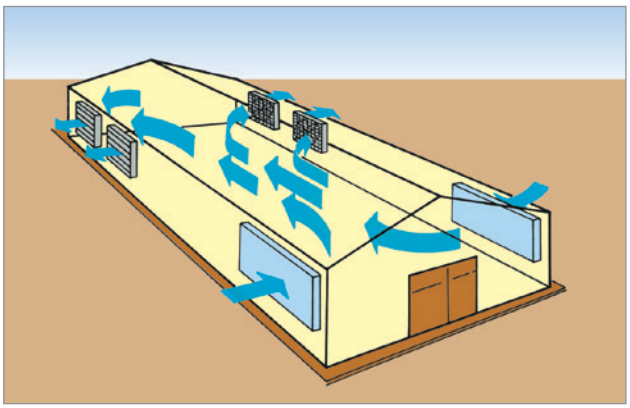
CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	MOTOR SPEED	SPEED IMPELLER	PRESSURE SOUND
		m3/h	V	A	KW	RPM/1'	RPM/1'	dB (A)
ZOO R - Version with internal and external protection guard								
7ZO1000	ZOO 63 R	10.000	400	1,2	0,37	1400	560	63
7ZO1100	ZOO 75 R	20.000	400	1,5	0,55	1400	560	64
7ZO1200	ZOO 95 R	24.000	400	1,5	0,55	1400	560	69
7ZO1271	ZOO 125 R	30.000	400	2,2	0,75	1400	420	63
7ZO1270	ZOO 125 R - Potentiated	40.000	400	3	1,10	1400	560	64
ZOO S - Version with internal protection guard and self-acting louver								
7ZO1001	ZOO 63 S	10.000	400	1,2	0,37	1400	560	63
7ZO1150	ZOO 75 S	20.000	400	1,5	0,55	1400	560	64
7ZO1201	ZOO 95 S	24.000	400	1,5	0,55	1400	560	69
7ZO1251	ZOO 125 S	30.000	400	2,2	0,75	1400	420	63
7ZO1250	ZOO 125 S - Potentiated	40.000	400	3	1,10	1400	560	64

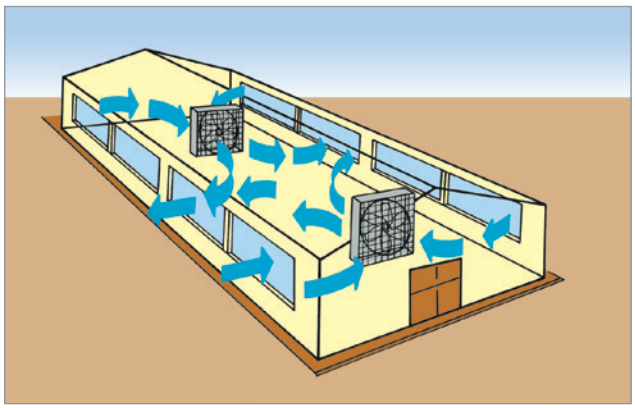
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3
Lp: sound pressure level measured at 5 m

INSTALLATIONS

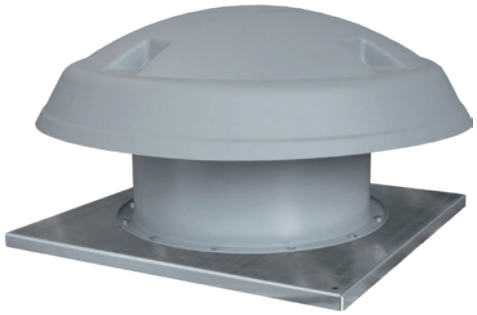








TAC-N



230 V | 400 V | IP55 | min -15°C | max 50°C | CE

DESCRIPTION

TAC-N roof fans are suitable for extracting large air volumes. Therefore they are particularly designed for air exchange of large volume premises and plants. Main features of TAC-N series are high strength, easy installation and maintenance, high efficiency (thanks to axial impeller with airfoil blades). This range has the possibility to be easily ducted and, if required, the possibility of making a version for air intake (with reverse fl ow). The use of the TACC series is foreseen for clean air with temperature range from -15°C to + 50°C.

CONSTRUCTION

- Fixing base in galvanized steel sheet.
- Casing in steel sheet, epoxy coated.
- Axial impeller with aerofoil profile blades in glass reinforce polyamide and die-cast aluminium hub, balanced according ISO 1940. Variable pitch angle in still position with setting means.
- Weatherproof upper cover in ABS (models 400 to 630) and multilayer fiberglass (models 710 to 900)
- Airflow from motor to impeller.
- Protection guard on outlet side, in steel rod, manufactured according to norms UNI 10615 and weatherproof.
- Asynchronous three-phase motor according to international standards IEC 60034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP 55, class F. All suitable to S1 service (continuous working at constant load).

ACCESSORIES

- SA - Inlet gravity shutter
- CB - Counter-base to be walled up
- BA and RD - Support base and Reduction
- PB - Support base/Silenced reduction
- CCrc - Motor side protection grid

UPON REQUEST

Upper cover in alluminium
(Max size TACC 800)

Compliant with Erp Directive and EU Regulation 327/2011 (FAN)
Measurement category: C
Effi ciency category: Static
According to EN ISO 5801 / AMCA 210

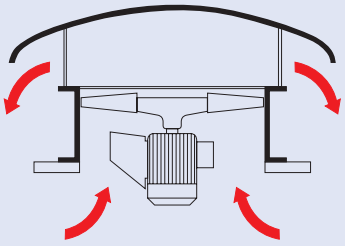
- 28 models
- Airflow up to 29.000 m³/h
- Available versions for intake only

VERSIONS

- **TAC-N Standard** (exhaust)
- **TAC-N Reverse flow** (intake)

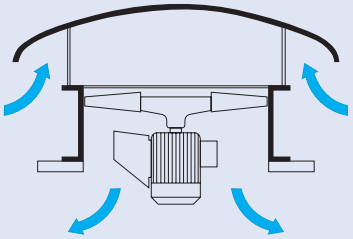
Standard version (exhaust)

MOTOR
IMPELLER

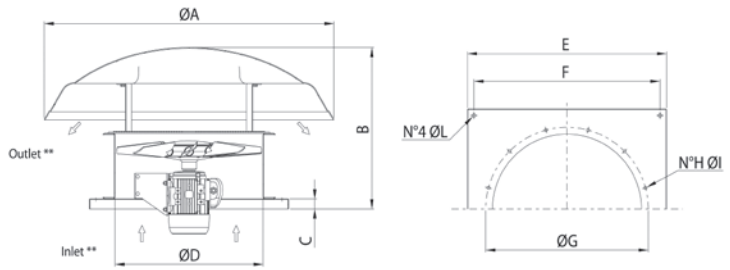


Reverse flow version (intake)

IMPELLER
TO MOTOR



DIMENSIONS (mm)



TYPE	A	B	C	D	E	F	G	H	I	L	Kg*
TAC-N 400	900	515	38	400	650	600	450	8	12	12	38
TAC-N 450	900	525	38	450	650	600	500	8	12	12	45
TAC-N 500	900	555	38	500	760	710	560	12	12	14	49
TAC-N 560	1100	550	38	560	760	710	620	12	12	14	52
TAC-N 630	1100	565	38	630	930	870	690	12	12	14	59
TAC-N 710	1300	670	38	710	930	870	770	16	12	14	80
TAC-N 800	1600	800	38	800	1100	1030	860	16	12	14	140
TAC-N 900	1600	780	50	900	1100	1220	970	16	16	16	210

* Indicative weight

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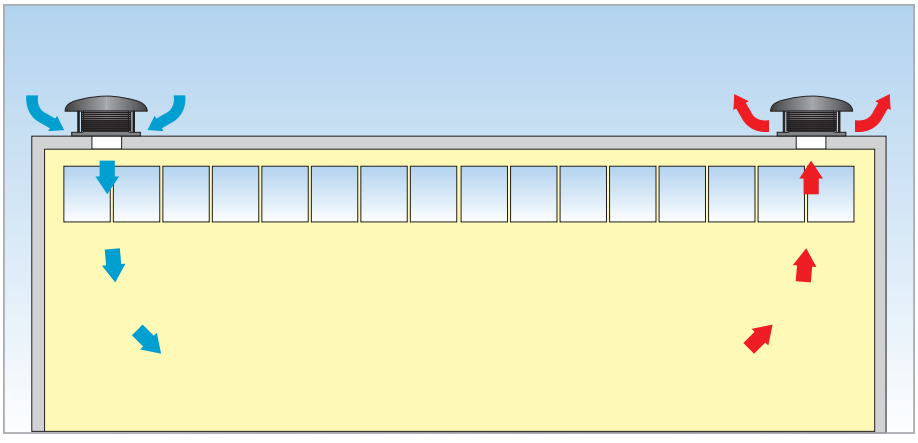
PERFORMANCE

CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	RATING	LEVELS SOUND dB (A)	
		m³/h	V	A	KW	GIRI/1'	IP	Lw	Lp
STANDARD VERSION (exhaust)									
1TA0407	**TAC-N 404** THREE-PHASE	3.900	400	0,56	0,18	1.380	55/F	73	46
1TA0458	**TAC-N 454** THREE-PHASE	5.000	400	0,69	0,25	1.370	55/F	79	52
1TA0512	**TAC-N 504** THREE-PHASE	7.000	400	1,47	0,55	1.380	55/F	82	55
1TA0569	**TAC-N 564** THREE-PHASE	10.000	400	1,99	0,75	1.400	55/F	80	54
1TA0645	**TAC-N 634** THREE-PHASE	13.200	400	2,5	1,1	1.405	55/F	82	56
1TA0722	**TAC-N 714** THREE-PHASE	18.200	400	3,54	1,50	1.425	55/F	84	58
1TA0814	**TAC-N 804** THREE-PHASE	24.500	400	7,75	4,00	1.450	55/F	92	66
1TA0916	**TAC-N 904** THREE-PHASE	45.000	400	16,71	9,2	1.450	55/F	94	67
1TA0513	**TAC-N 506** THREE-PHASE	4.700	400	0,66	0,18	900	55/F	73	46
1TA0570	**TAC-N 566** THREE-PHASE	6.200	400	0,66	0,18	900	55/F	72	46
1TA0646	**TAC-N 636** THREE-PHASE	7.400	400	0,87	0,25	910	55/F	75	48
1TA0723	**TAC-N 716** THREE-PHASE	11.600	400	1,20	0,37	915	55/F	76	49
1TA0815	**TAC-N 806** THREE-PHASE	16.500	400	2,74	1,1	945	55/F	84	57
1TA0917	**TAC-N 906** THREE-PHASE	28.700	400	6,95	3	960	55/F	86	59
REVERSE FLOW VERSION (immission)									
A RICHIESTA	**TAC-N 404** THREE-PHASE / REVERSE FLOW	3.900	400	0,56	0,18	1.380	55/F	73	46
A RICHIESTA	**TAC-N 454** THREE-PHASE / REVERSE FLOW	5.000	400	0,69	0,25	1.370	55/F	79	52
A RICHIESTA	**TAC-N 504** THREE-PHASE / REVERSE FLOW	7.000	400	1,47	0,55	1.380	55/F	82	55
A RICHIESTA	**TAC-N 564** THREE-PHASE / REVERSE FLOW	10.000	400	1,99	0,75	1.400	55/F	80	54
A RICHIESTA	**TAC-N 634** THREE-PHASE / REVERSE FLOW	13.200	400	2,5	1,1	1.405	55/F	82	56
A RICHIESTA	**TAC-N 714** THREE-PHASE / REVERSE FLOW	18.200	400	3,54	1,50	1.425	55/F	84	58
A RICHIESTA	**TAC-N 804** THREE-PHASE / REVERSE FLOW	24.500	400	7,75	4,00	1.450	55/F	92	66
A RICHIESTA	**TAC-N 904** THREE-PHASE / REVERSE FLOW	45.000	400	16,71	9,2	1.450	55/F	94	67
A RICHIESTA	**TAC-N 506** THREE-PHASE / REVERSE FLOW	4.700	400	0,66	0,18	900	55/F	73	46
A RICHIESTA	**TAC-N 566** THREE-PHASE / REVERSE FLOW	6.200	400	0,66	0,18	900	55/F	72	46
A RICHIESTA	**TAC-N 636** THREE-PHASE / REVERSE FLOW	7.400	400	0,87	0,25	910	55/F	75	48
A RICHIESTA	**TAC-N 716** THREE-PHASE / REVERSE FLOW	11.600	400	1,20	0,37	915	55/F	76	49
A RICHIESTA	**TAC-N 806** THREE-PHASE / REVERSE FLOW	16.500	400	2,74	1,1	945	55/F	84	57
A RICHIESTA	**TAC-N 906** THREE-PHASE / REVERSE FLOW	28.700	400	6,95	3	960	55/F	86	59

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight.
Compliant with ErP 2009/125/EC Directive and EU Regulation 327/2011. Measurement category: C. Efficiency category: Static.
The calculation of energy efficiency is without protective grille and without roof cowl. Power supply 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free field conditions, propagation spherical, measurement category D in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 6 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

INSTALLATION



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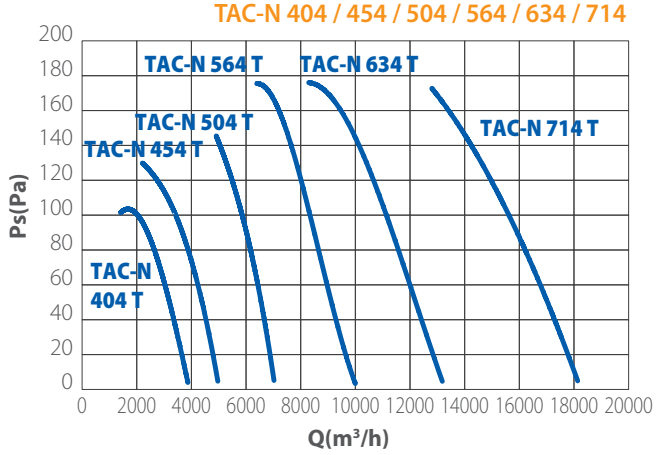
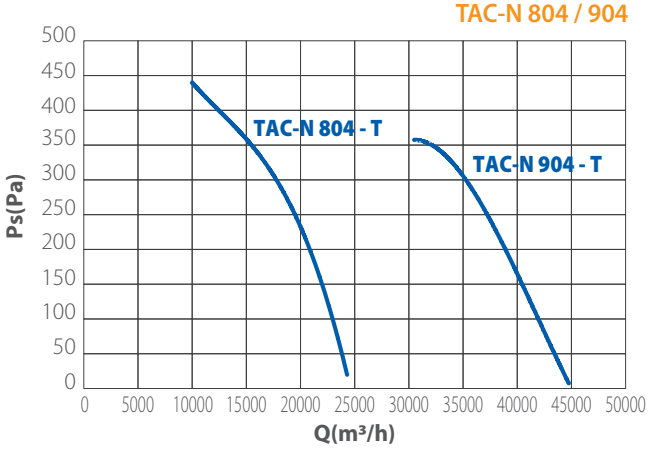
CURVES

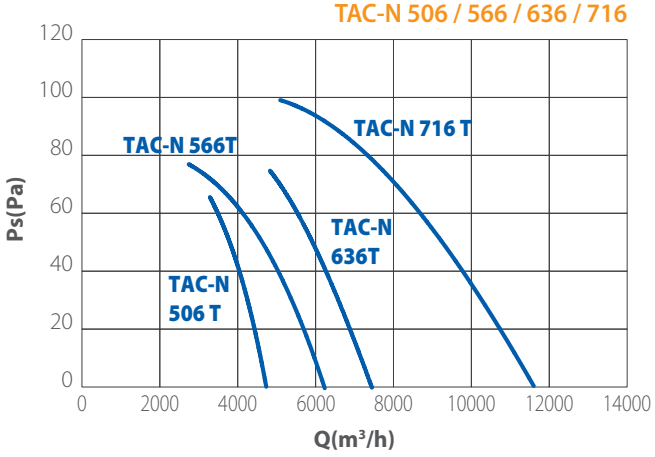
TAC-N 404 / 454 / 504 / 564 / 634 / 714



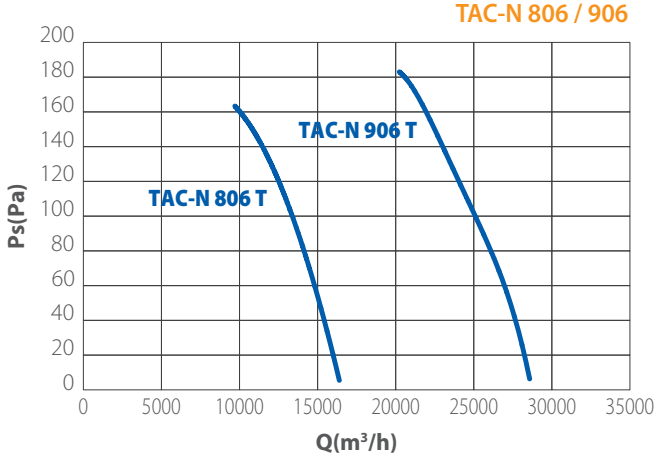
TAC-N 804 / 904



TAC-N 506 / 566 / 636 / 716



TAC-N 806 / 906



TCR

Centrifugal roof fans with external rotor motor

DESCRIPTION

These fans are designed for direct or ducted ventilation of civil, commercial and industrial buildings. The characteristics of this series are the compact design and ease of installation. They can exhaust clean air up to the maximum temperature of 40°C. The three-phase or single-phase external rotor motor allows full speed regulation, also with a cheap electronic regulator. In the three-phase version, it is also possible to obtain the double speed feature by delta/ star switching. Available for horizontal (REA) or vertical discharge (REV).

CONSTRUCTION

- Base frame in galvanized steel sheet.
- Protection guard in drawn steel rod protected against the atmospheric agents.
- Backward curved wheel in galvanized steel sheet (mod. 200 in plastic), with high efficiency and low noise level.
- Upper cover in aluminium (REA).
- Outer defl ector (REV) in ABS.
- External rotor motor, three-phase or single phase, IP 44/B 200-250, IP 44/F 310-400, tropycalized with integral thermal protection.

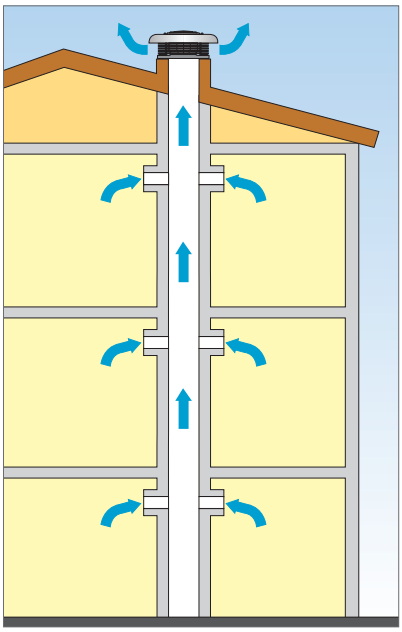
ACCESSORIES

- TS - Backdraught gravity shutter
- GR - Silencers
- CB - Counter base to be walled up
- BA - Support base for corrugated roof coverings
- Service switch
- Speed regulators
- PB - Support base/Silenced reduction. Not available for size 200.
- CCr - Flat protection guard

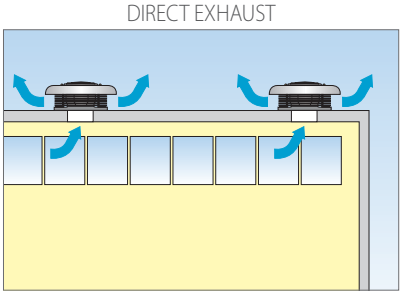
Compliant with ErP Directive and EU Regulation 1253/2014
(Ventilation Unit)
Measurement category: C
Efficiency category: Static
According to EN ISO 5801/AMCA 210.

INSTALLATION

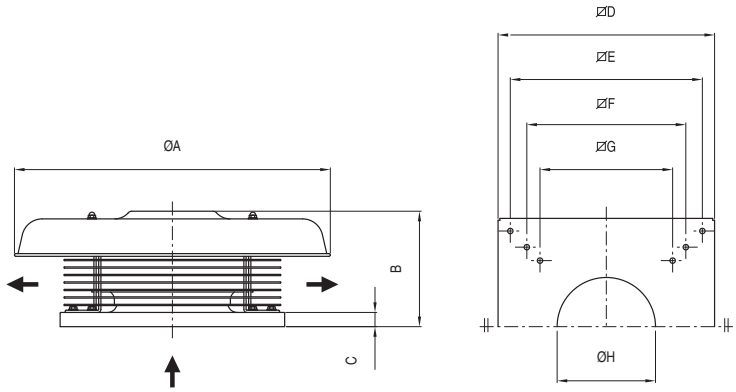
DUCTED EXHAUST



DIRECT EXHAUST



DIMENSIONS (mm)



REA	ØA	B	C	D	E	F	G	ØH	Kg*
TCR 200	395	180	23	300	265	-	220	125	6
TCR 250	490	220	38	400	360	-	257	178	10
TCR 310	555	275	38	400	360	-	307	220	14
TCR 350	690	320	38	500	450	-	380	270	25
TCR 400	810	360	38	650	600	530	471	296	40

* Indicative weight

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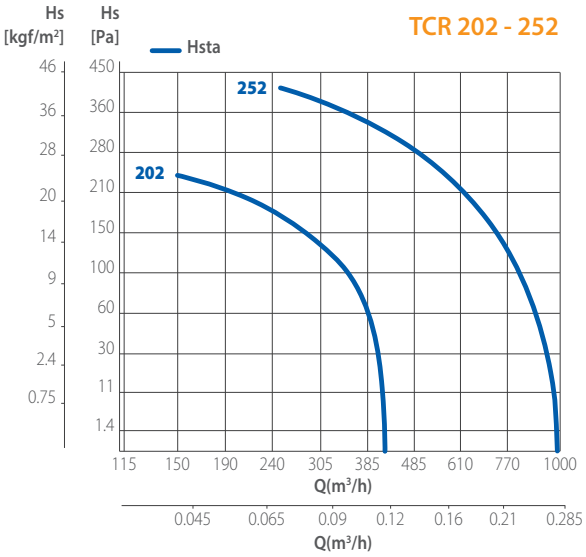
PERFORMANCE

CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	DEGREE OF PROTECTION	LEVELS SOUND (a 6 mt) dB (A)*	
		m³/h	V	A	KW	GIRI/1'	IP	Lw	Lp
1TR2002	TCR 202 SINGLE-PHASE	420	230	0,30	0,06	2.600	44	68	44
1TR2502	TCR 252 SINGLE-PHASE	1.000	230	0,90	0,20	2600	44	77	53
1TR2503	TCR 254 SINGLE-PHASE	800	230	0,80	0,12	1.800	44	66	43
1TR3002	TCR 314 SINGLE-PHASE	1.650	230	0,70	0,17	1.320	44	69	46
1TR3503	TCR 354 SINGLE-PHASE	3.110	230	1,80	0,40	1.320	44	75	52
1TR3003	TCR 314 THREE-PHASE	1.700 / 1.100	400	0,35 / 0,20	0,18	1.350 / 950	44	69	46
1TR3504	TCR 354 THREE-PHASE	3.300 / 2.200	400	0,70 / 0,40	0,40	1.350 / 950	44	76	53
1TR4001	TCR 404 THREE-PHASE	4.000 / 2.700	400	1,30 / 0,70	0,70	1.300 / 900	44	75	52

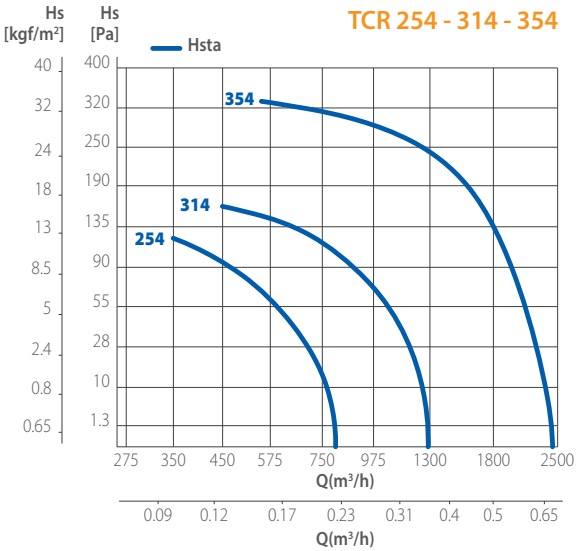
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight.
Compliant with ErP 2009/125/EC Directive and EU Regulation 1253/2014. Measurement category: C. Efficiency category: Static. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
In compliance with EU Regulation 1253/2014, the single flow Ventilation Unitsmust be connected to a multiple speed regulation (local demand controller or equivalent) when put into service.
Lp: Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 6 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

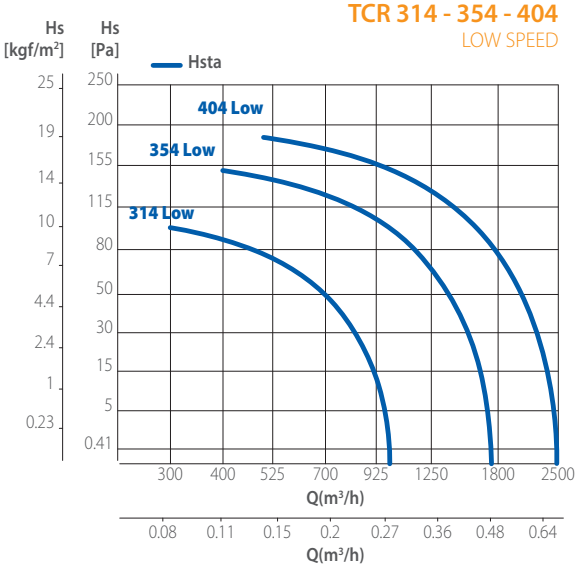
TCR 202 - 252



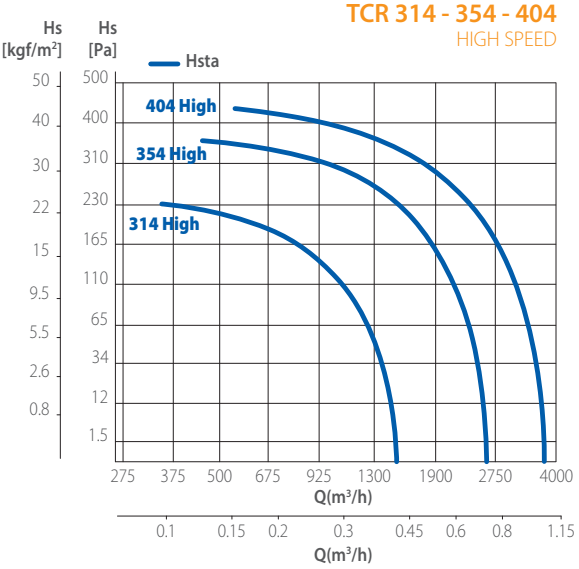
TCR 254 - 314 - 354



TCR 314 - 354 - 404
LOW SPEED



TCR 314 - 354 - 404
HIGH SPEED

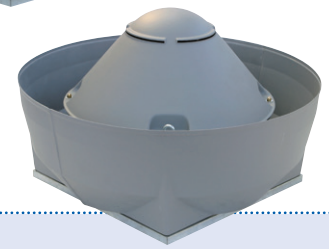


TCF - TCV

Single speed centrifugal roof extractors

TCF
Horizontal outlet

TCV
Vertical outlet



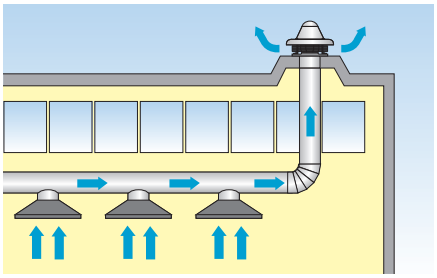
The series in not affected by the ErP Directive 2009/125/CE and further Regulations.

VERSIONS

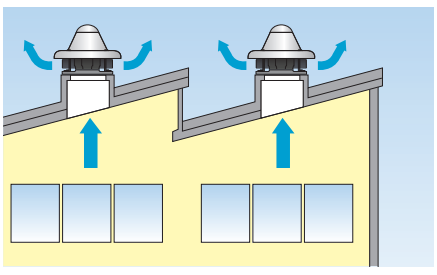
- **TCF / TCF-V ATEX**
  Explosion proof version according to Directives 94/9/CE and 2014/34/UE. See page 106
- **TCF AT**
  High temperature version, suitable to convey air up to 200°C in continuous service. See page 168
- **TCF HT**
  High Temperature version for emergency smoke exhaust in case of fire according to EN 12601-3 CE marked in Class F400. See page 196

INSTALLATION

DUCTED EXHAUST



DIRECT EXHAUST



DESCRIPTION

Centrifugal roof fans designed for direct or ducted ventilation in residential, commercial and industrial buildings. Available in vertical or horizontal discharge.
They are designed for easy installation, high efficiency low noise level. The motor is outside the air flow, this allows the fan to exhaust clean or slightly dusty air with temperature of +100°C. Available for horizontal outlet (TCF) or vertical discharge (TCV).

CONSTRUCTION

- Base frame in galvanized steel sheet.
- Protection guard in drawn steel rod protected against the atmospheric agents, manufactured according to EN ISO 12499.
- Backward curved wheel in galvanized steel sheet, with high efficiency and low noise level, statically and dynamically balanced according ISO 1940.
- Upper cover in ABS, with appropriate slots for motor cooling.
- Outer deflector (TCV) in ABS

MOTOR

- Asynchronous three-phase motor or single phase motor manufactured according to international standards IEC 600034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP 55, class F.
- Service S1 (continuous working at constant load).

ACCESSORIES

- TS - Backdraught gravity shutter
- GR - Silencer
- CB - Counterbase
- BA - Support base for wawed roof coverings
- RA - Inlet Protection Guard
- Service switch
- PB - Support base/Silenced reduction
- CCr - Flat protection guard

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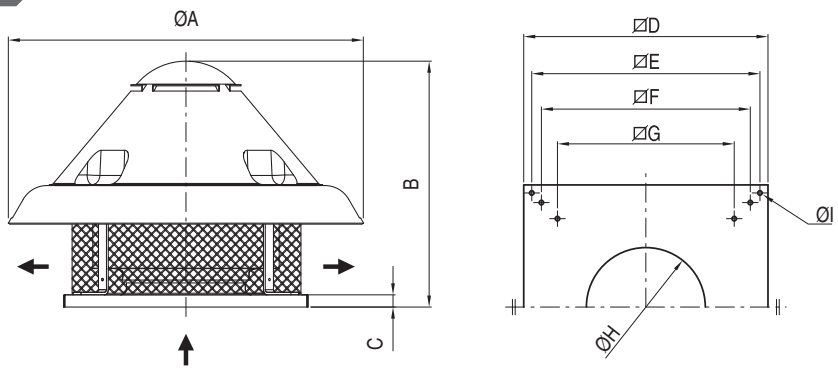
TCF

DIMENSIONS (mm)



TYPE	ØA	B	C	D	E	F	G	ØH	ØI	Kg*
TCF 250	600	500	38	400	360	-	257	180	12	16
TCF 310	600	510	38	400	360	-	307	220	12	18
TCF 350	755	580	38	500	450	-	380	270	12	27
TCF 400	910	640	38	650	600	530	471	296	12	32
TCF 450	910	650	38	650	600	530	471	296	12	40
TCF 500	1000	750	38	760	710	650	550	320	14	57
TCF 560	1000	750	38	760	710	650	550	370	14	60
TCF 630	1100	850	38	930	870	775	665	430	14	78
TCF 750	1100	880	38	930	870	775	665	480	14	120
TCF 800	1100	880	38	930	870	775	665	530	14	140

* Indicative weight

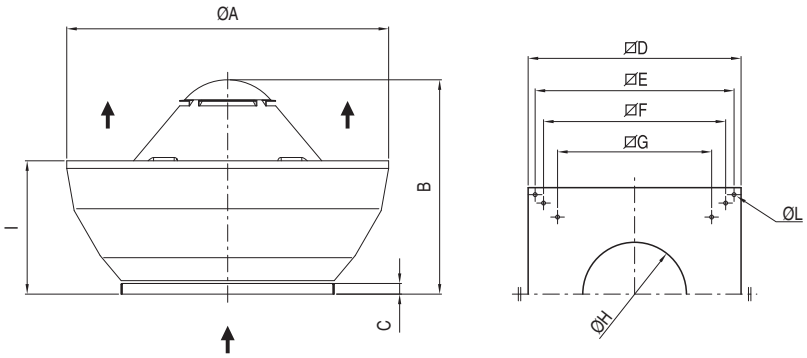
PERFORMANCE

CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	LEVELS SOUND (a 6 mt) dB(A)	
		m³/h	V	A	kW	RPM/1′	N°	IP	Lw	Lp
1TF2520	TCF 254 SINGLE-PHASE	967	230	1,00	0,09	1.450	4	55	65	41
1TF3020	TCF 314 SINGLE-PHASE	1960	230	1,30	0,12	1.450	4	55	74	51
1TF3022	TCF 316 SINGLE-PHASE	1313	230	1,4	0,15	950	6	55	59	42
1TF3520	TCF 354 SINGLE-PHASE	3341	230	2,20	0,25	1.450	4	55	77	54
1TF3522	TCF 356 SINGLE-PHASE	2239	230	1,8	0,18	950	6	55	63	45
1TF4020	TCF 404 SINGLE-PHASE	4608	230	4,3	0,55	1450	4	55	80	56
1TF4022	TCF 406 SINGLE-PHASE	3087	230	1,8	0,18	950	6	55	65	47
1TF4520	TCF 454 SINGLE-PHASE	4981	230	5,5	0,75	1450	4	55	81	58
1TF2521	TCF 254 THREE-PHASE	967	400	0,60	0,09	1.450	4	55	65	41
1TF3021	TCF 314 THREE-PHASE	1960	400	0,70	0,12	1.450	4	55	74	51
1TF3023	TCF 316 THREE-PHASE	1313	400	0,6	0,09	950	6	55	59	42
1TF3521	TCF 354 THREE-PHASE	3341	400	0,80	0,25	1.450	4	55	77	54
1TF3523	TCF 356 THREE-PHASE	2239	400	0,8	0,18	950	6	55	63	45
1TF4021	TCF 404 THREE-PHASE	4608	400	1,60	0,55	1.450	4	55	80	56
1TF4023	TCF 406 THREE-PHASE	3087	400	0,8	0,18	950	6	55	65	47
1TF4024	TCF 408 THREE-PHASE	2304	400	0,71	0,12	720	8	55	59	41
1TF4521	TCF 454 THREE-PHASE	4981	400	2,20	0,75	1.450	4	55	81	58
1TF4522	TCF 456 THREE-PHASE	3337	400	1,2	0.37	950	6	55	67	49
1TF4523	TCF 458 THREE-PHASE	2491	400	1,2	0.25	720	8	55	60	43
1TF5020	TCF 504 THREE-PHASE	7194	400	2,5	1.10	1450	4	55	84	60
1TF5021	TCF 506 THREE-PHASE	4820	400	1,2	0.37	950	6	55	69	52
1TF5022	TCF 508 THREE-PHASE	3597	400	1,2	0.25	720	8	55	63	45
1TF5520	TCF 566 THREE-PHASE	6252	400	1,8	0.55	950	6	55	76	52
1TF5521	TCF 568 THREE-PHASE	4689	400	1,8	0.25	720	8	55	64	46
1TF6020	TCF 636 THREE-PHASE	9958	400	2,74	1.10	950	6	55	82	59
1TF6021	TCF 638 THREE-PHASE	7468	400	2,04	0.55	720	8	55	70	52
1TF7520	TCF 756 THREE-PHASE	13055	400	5.45	2.20	950	6	55	86	63
1TF7521	TCF 758 THREE-PHASE	9791	400	3.38	1.10	720	8	55	74	56
1TF8020	TCF 806 THREE-PHASE	19667	400	6.6	3,00	950	6	55	93	69
1TF8021	TCF 808 THREE-PHASE	14750	400	4.21	1.50	720	8	55	80	63

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specifi c weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free fi eld conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 6 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

TCV

DIMENSIONS (mm)



TYPE	ØA	B	C	D	E	F	G	ØH	I	ØL	Kg*
TCV 250	650	510	38	400	360	-	257	180	290	12	18
TCV 310	650	510	38	400	360	-	307	220	290	-	18
TCV 350	800	580	38	500	450	-	380	270	340	-	27
TCV 400	980	640	38	650	600	530	471	296	400	12	32
TCV 450	980	650	38	650	600	530	471	296	400	12	40
TCV 500	1200	750	38	760	710	650	550	320	490	14	58
TCV 560	1200	750	38	760	710	650	550	370	490	14	60
TCV 630	1400	850	38	930	870	775	665	430	540	14	78
TCV 750	1400	880	38	930	870	775	665	480	540	14	110
TCV 800	1400	880	38	930	870	775	665	530	540	14	110

* Indicative weight

PERFORMANCE

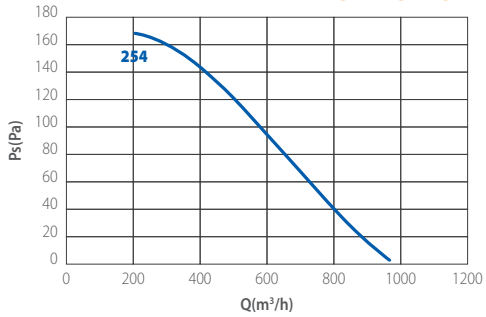
CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	LEVELS SOUND (a 6 mt) dB(A)	
		m³/h	V	A	kW	RPM/1'	N°	IP	Lw	Lp
1TF2522	TCV 254 SINGLE-PHASE	967	230	1,00	0,09	1.450	4	55	65	41
1TF3025	TCV 314 SINGLE-PHASE	1.960	230	1,30	0,12	1.450	4	55	74	51
1TF3027	TCV 316 SINGLE-PHASE	1.313	230	1,40	0,15	950	6	55	59	42
1TF3525	TCV 354 SINGLE-PHASE	3.341	230	2,20	0,25	1.450	4	55	78	54
1TF3527	TCV 356 SINGLE-PHASE	2.239	230	1,80	0,18	950	6	55	63	45
1TF4026	TCV 404 SINGLE-PHASE	4.608	230	4,30	0,55	1450	4	55	80	56
1TF4028	TCV 406 SINGLE-PHASE	3.087	230	1,80	0,18	950	6	55	65	47
1TF4525	TCV 454 SINGLE-PHASE	4.981	230	5,50	0,75	1450	4	55	81	58
1TF2523	TCV 254 THREE-PHASE	967	400	0,60	0,09	1.450	4	55	65	41
1TF3026	TCV 314 THREE-PHASE	1.960	400	0,70	0,12	1.450	4	55	74	51
1TF3028	TCV 316 THREE-PHASE	1.313	400	0,60	0,09	950	6	55	59	42
1TF3526	TCV 354 THREE-PHASE	3.341	400	0,80	0,25	1.450	4	55	77	54
1TF3528	TCV 356 THREE-PHASE	2.239	400	0,80	0,18	950	6	55	63	45
1TF4027	TCV 404 THREE-PHASE	4.608	400	1,60	0,55	1.450	4	55	80	56
1TF4029	TCV 406 THREE-PHASE	3.072	400	0,80	0,18	950	6	55	65	47
1TF4030	TCV 408 THREE-PHASE	2.304	400	0,71	0,12	720	8	55	59	41
1TF4526	TCV 454 THREE-PHASE	4.981	400	2,20	0,75	1.450	4	55	81	58
1TF4527	TCV 456 THREE-PHASE	3.337	400	1,20	0.37	950	6	55	67	49
1TF4528	TCV 458 THREE-PHASE	2.491	400	1,20	0.25	720	8	55	60	43
1TF5024	TCV 504 THREE-PHASE	7.194	400	2,50	1.10	1450	4	55	84	60
1TF5025	TCV 506 THREE-PHASE	4.820	400	1,20	0.37	950	6	55	69	52
1TF5026	TCV 508 THREE-PHASE	3.597	400	1,20	0.25	720	8	55	63	45
1TF5523	TCV 566 THREE-PHASE	6.252	400	1,80	0.55	950	6	55	76	52
1TF5524	TCV 568 THREE-PHASE	4.689	400	1,80	0.25	720	8	55	64	46
1TF6023	TCV 636 THREE-PHASE	9.958	400	2,74	1.10	950	6	55	82	59
1TF6024	TCV 638 THREE-PHASE	7.468	400	2,04	0.55	720	8	55	70	52
1TF7523	TCV 756 THREE-PHASE	13.055	400	5,45	2.20	950	6	55	86	63
1TF7524	TCV 758 THREE-PHASE	9.791	400	3,38	1.10	720	8	55	74	56
1TF8023	TCV 806 THREE-PHASE	19.667	400	6,60	3,00	950	6	55	93	69
1TF8024	TCV 808 THREE-PHASE	14.750	400	4,21	1.50	720	8	55	80	63

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specifi c weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free fi eld conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 6 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

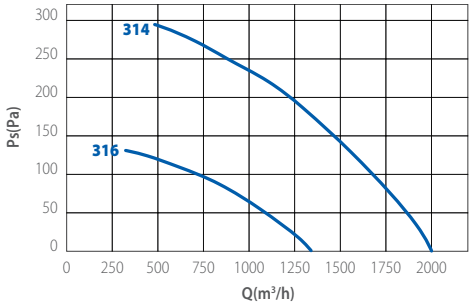
1

CURVES

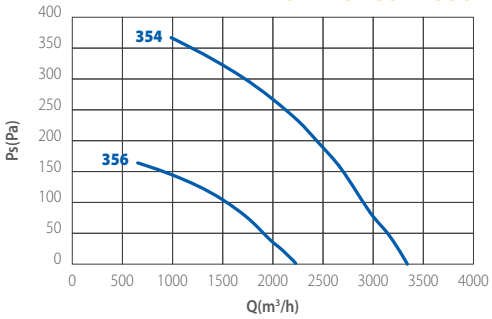
TCF - TCV 254



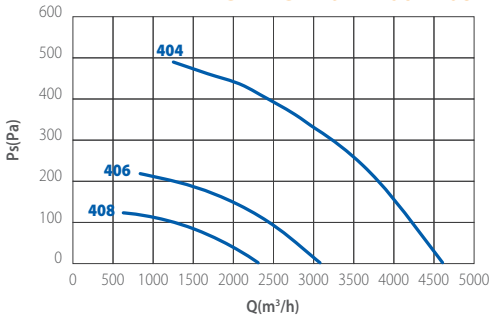
TCF - TCV 314 - 316



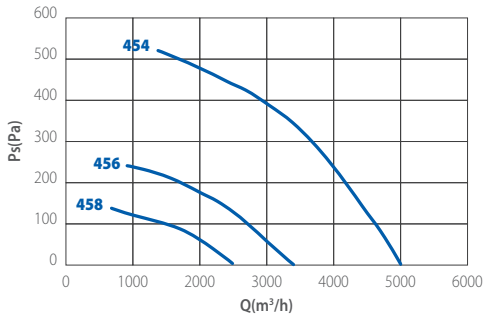
TCF - TCV 354 - 356



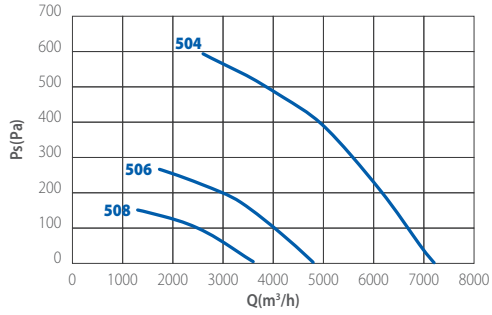
TCF - TCV 404 - 406 - 408



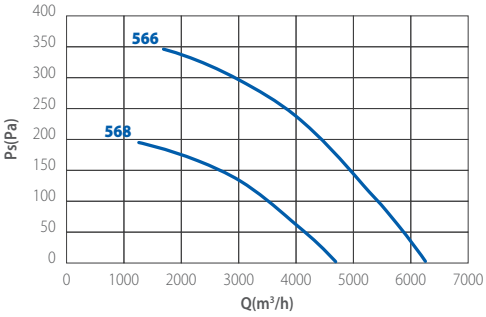
TCF - TCV 454 - 456 - 458



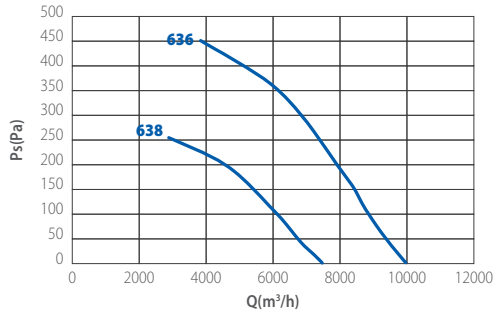
TCF - TCV 504 - 506 - 508



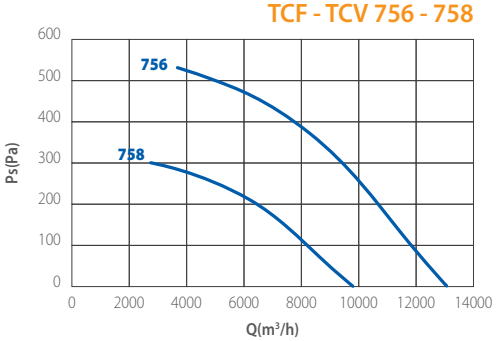
TCF - TCV 566 - 568



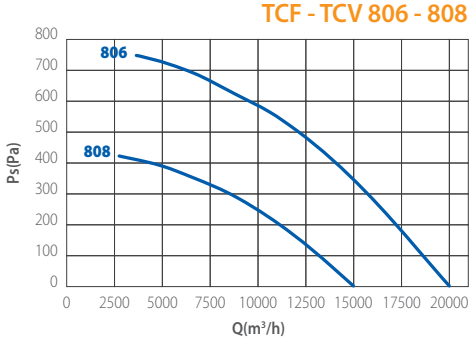
TCF - TCV 636 - 638



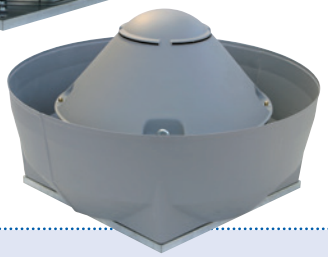
TCF - TCV 756 - 758



TCF - TCV 806 - 808



TCF 2V
Horizontal outlet



TCV 2V
Vertical outlet

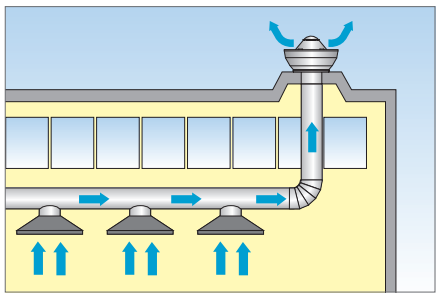
The series in not affected by the ErP Directive 2009/125/CE and further Regulations.

VERSIONS

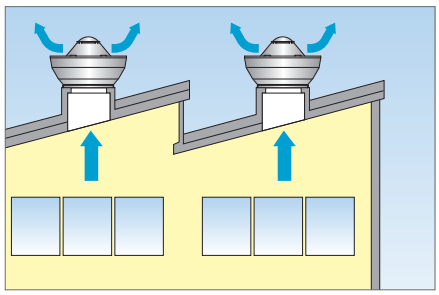
- **TCF 2V – TCV 2V ATEX**
  Explosion-proof version according to Directives 94/9/CE and 2014/34/UE. See page 106
- **TCF 2V AT**
  High temperature version, suitable to convey air up to 200°C in continuous service. See page 170
- **TCF HT**
  High Temperature version for emergency smoke exhaust in case of fire according to EN12601-3 CE marked in Class F400. See 196

INSTALLATION

DUCTED EXHAUST



DIRECT EXHAUST



DESCRIPTION

The main characteristic of this series is a special double polarity three-phase motor which allows the double speed feature. Available with horizontal outlet (TCF-2V) or vertical discharge (TCV-2V). The motor is outside the air flow, this allows the fan to exhaust clean or slightly dusty air also with grease and impurities with temperature of +100°C. Therefore they are ideal for installation in kitchens, commercial and industrial buildings and wherever it is required the possibility of changing the performances and the noise level according to the needs.

CONSTRUCTION

- Base frame in galvanized steel sheet.
- Protection guard in drawn steel rod protected against the atmospheric agents, manufactured according to EN ISO 12499.
- Backward curved wheel in galvanized steel sheet, with high efficiency and low noise level, statically and dynamically balanced according ISO 1940.
- Upper cover in ABS, with appropriate slots for motor cooling.
- Outer deflector (TCF-V-2V) in ABS.

MOTOR

- Asynchronous and double polarity three-phase motor manufactured according to international standards IEC 60034, IEC 60072, EMC 2014/30/ UE, LVD 2014/35/UE, CE marked, IP 55, class F.

ACCESSORIES

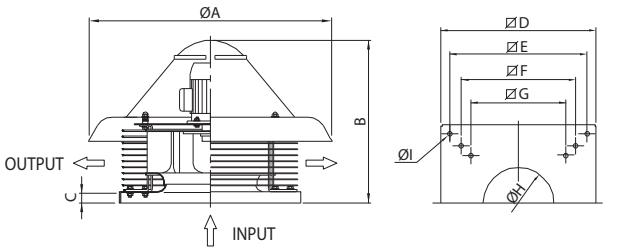
- TS - Backdraught gravity shutter
- GR - Silencers
- CB - Counterbase
- BA - Support base for waved roof coverings
- RA - Inlet side Guard
- Service switch;
- Speed regulator;
- PB - Support base/Silenced reduction
- CCr - Flat protection guard

ACCESSORIES pag. 56 / **REGULATORS** pag. 200

1

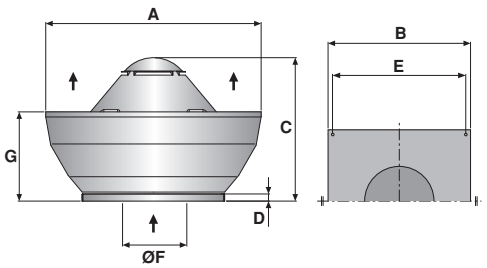
DIMENSIONS (mm)

TCF 2V



TYPE	ØA	B	C	D	E	F	ØG	ØH	ØI	Kg
TCF 2V 310	600	510	38	400	360	-	307	220	12	18
TCF 2V 350	755	580	38	500	450	-	380	270	12	27
TCF 2V 400	910	640	38	650	600	530	471	296	12	32
TCF 2V 450	910	650	38	650	600	530	471	296	12	40
TCF 2V 500	1000	750	38	760	710	650	550	320	14	57
TCF 2V 560	1000	750	38	760	710	650	550	370	14	60
TCF 2V 630	1100	850	38	930	870	775	665	430	14	78
TCF 2V 750	1100	880	38	930	870	775	665	480	14	120
TCF 2V 800	1100	880	38	930	870	775	665	530	14	140

TCV 2V



TYPE	Ø A	B	C	D	E	Ø F	G	Kg
TCV 2V 310	650	400	510	38	360	220	290	20
TCV 2V 350	800	500	580	38	450	270	340	30
TCV 2V 400	980	650	640	38	600	296	400	35
TCV 2V 450	980	650	650	38	600	296	400	42
TCV 2V 500	1200	760	750	38	710	320	490	50
TCV 2V 560	1350	760	750	38	870	370	490	63
TCV 2V 630	1400	930	850	38	870	430	540	80
TCV 2V 750	1400	930	880	38	870	480	540	120
TCV 2V 800	1400	930	880	38	870	530	540	145

PERFORMANCE

TCF 2V

CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	DEGREE OF PROTECTION	LEVELS SOUND dB(A)	
		m³/h	V	A	KW	GIRI/1'	N°	IP	Lp	Lw
1TF3024	**TCF 2V 314/6** THREE-PHASE	2.000 / 1.340	400	0,55 / 0,18	0,18 / 0,06	1400 / 950	4 / 6	55	74 / 59	51 / 42
1TF3524	**TCF 2V 354/6** THREE-PHASE	3.340 / 2.230	400	1,05 / 0,60	0,25 / 0,09	1400 / 950	4 / 6	55	78 / 63	54 / 45
1TF4025	**TCF 2V 404/6** THREE-PHASE	4.600 / 3.070	400	1,57 / 0,60	0,55 / 0,2	1400 / 950	4 / 6	55	80 / 65	56 / 47
1TF4524	**TCF 2V 454/6** THREE-PHASE	5.000 / 3.400	400	3 / 1,27	0,75 / 0,27	1400 / 950	4 / 6	55	81 / 67	58 / 49
1TF5023	**TCF 2V 504/6** THREE-PHASE	7.195 / 4.800	400	3,4 / 1,43	1,4 / 0,45	1400 / 950	4 / 6	55	84 / 69	60 / 52
1TF5522	**TCF 2V 566/8** THREE-PHASE	6.250 / 4.690	400	2,24 / 1,22	0,65 / 0,25	950 / 720	6 / 8	55	76 / 64	52 / 46
1TF6022	**TCF 2V 636/8** THREE-PHASE	9.960 / 7.470	400	4,07 / 2,23	1,3 / 0,55	950 / 720	6 / 8	55	82 / 70	59 / 52
1TF7522	**TCF 2V 756/8** THREE-PHASE	13.050 / 9.800	400	6 / 3,32	2,2 / 0,9	950 / 720	6 / 8	55	86 / 74	63 / 56
1TF8022	**TCF 2V 806/8** THREE-PHASE	20.000 / 15.000	400	9,32 / 8,43	3,70 / 2,60	950 / 720	6 / 8	55	93 / 80	69 / 63

TCV 2V

CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	DEGREE OF PROTECTION	LEVELS SOUND dB(A)	
		m³/h	V	A	KW	GIRI/1'	N°	IP	Lw	Lp
1TF3016	**TCV 2V 314/6** THREE-PHASE	2.000 / 1.340	400	0,55 / 0,18	0,18 / 0,06	1400 / 950	4 / 6	55	74 / 59	51 / 42
1TF3515	**TCV 2V 354/6** THREE-PHASE	3.340 / 2.230	400	1,05 / 0,60	0,25 / 0,09	1400 / 950	4 / 6	55	78 / 63	54 / 45
1TF4006	**TCV 2V 404/6** THREE-PHASE	4.600 / 3.070	400	1,57 / 0,76	0,55 / 0,2	1400 / 950	4 / 6	55	80 / 65	56 / 47
1TF4507	**TCV 2V 454/6** THREE-PHASE	5.000 / 3.400	400	3 / 1,27	0,75 / 0,27	1400 / 950	4 / 6	55	81 / 67	58 / 49
1TF5004	**TCV 2V 504/6** THREE-PHASE	7.195 / 4.800	400	3,4 / 1,43	1,4 / 0,45	1400 / 950	4 / 6	55	84 / 69	60 / 52
1TF5510	**TCV 2V 566/8** THREE-PHASE	6.250 / 4.690	400	2,24 / 1,22	0,65 / 0,25	950 / 720	6 / 8	55	76 / 64	52 / 46
1TF6013	**TCV 2V 636/8** THREE-PHASE	9.960 / 7.470	400	4,07 / 2,23	1,3 / 0,55	950 / 720	6 / 8	55	82 / 70	59 / 52
1TF7525	**TCV 2V 756/8** THREE-PHASE	13.050 / 9.800	400	6 / 3,32	2,2 / 0,9	950 / 720	6 / 8	55	86 / 74	63 / 56
1TF8025	**TCV 2V 806/8** THREE-PHASE	20.000 / 15.000	400	9,32 / 8,43	3,70 / 2,60	950 / 720	6 / 8	55	93 / 80	69 / 63

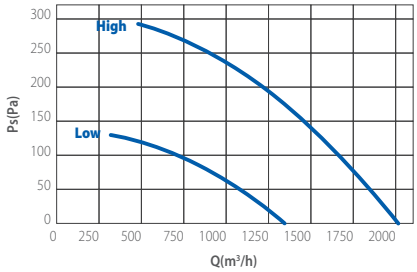
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight.
Power supply 400V/3Ph/50Hz.

Lp: Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 6 meters (for comparative purposes only).

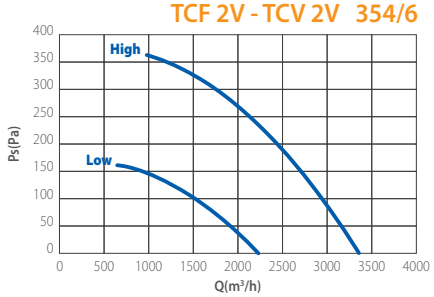
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

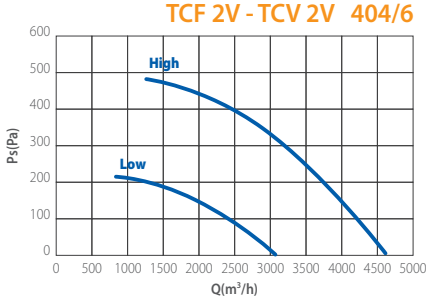
TCF 2V - TCV 2V 314/6



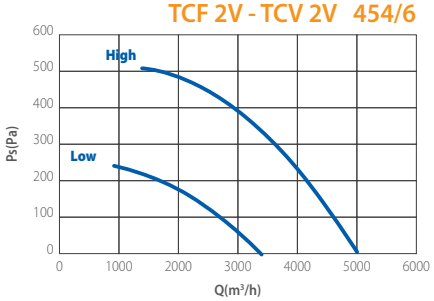
TCF 2V - TCV 2V 354/6



TCF 2V - TCV 2V 404/6



TCF 2V - TCV 2V 454/6



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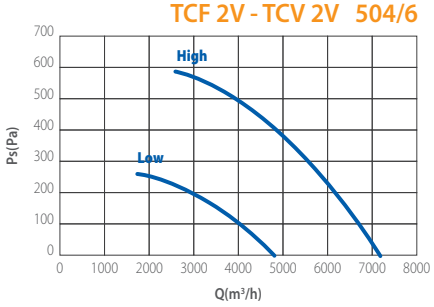
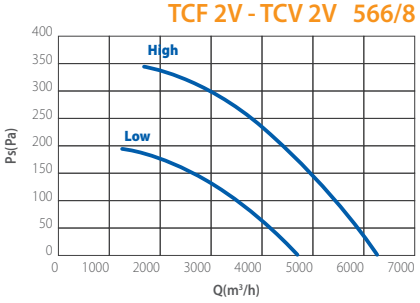
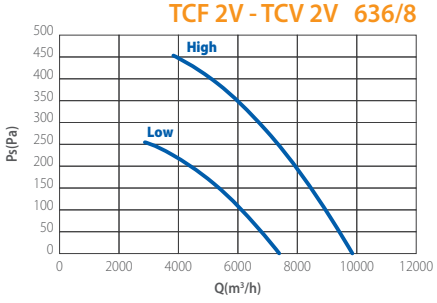


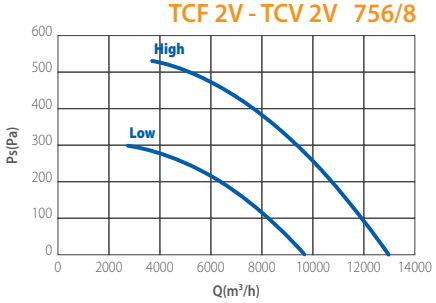
TCF 2V - TCV 2V 566/8



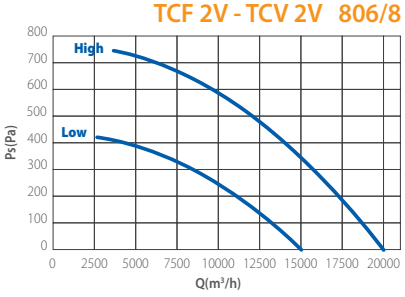
TCF 2V - TCV 2V 636/8



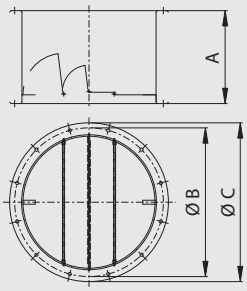
TCF 2V - TCV 2V 756/8



TCF 2V - TCV 2V 806/8



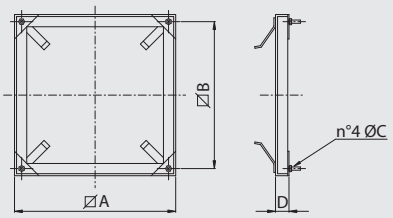
Series TAC-N



SA - Gravity shutter

CODE	TYPE	A	B	C	Kg
1SE9211	TAC-N 400	350	450	496	7
1SE9212	TAC-N 450	350	500	546	8
1SE9213	TAC-N 500	350	560	598	9,3
1SE9214	TAC-N 560	400	620	658	11,5
1SE9215	TAC-N 630	450	690	730	15
1SE9216	TAC-N 710	500	770	810	24
1SE9217	TAC-N 800	450	860	910	27
1SE9218	TAC-N 900	600	970	1030	38

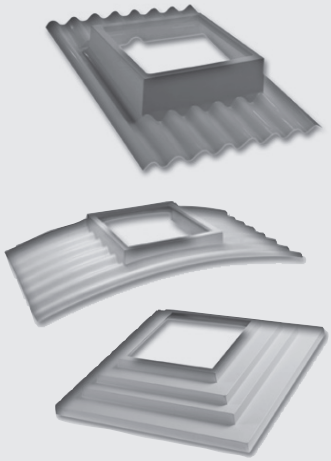
Dimensions in mm



CB - Counter-base to wall up

CODE	TYPE	A	B	C	Kg
1CB4000	TAC-N 400 - 450	630	600	M8x30	2,1
1CB5500	TAC-N 500 - 560	740	710	M10x40	2,5
1CB6000	TAC-N 630 - 710	900	870	M10x40	3,1
1CB8000	TAC-N 800	1080	1030	M10x40	6
1CB9000	TAC-N 900	1270	1220	M12x40	8

Dimensions in mm



Ba - Support base and reductions

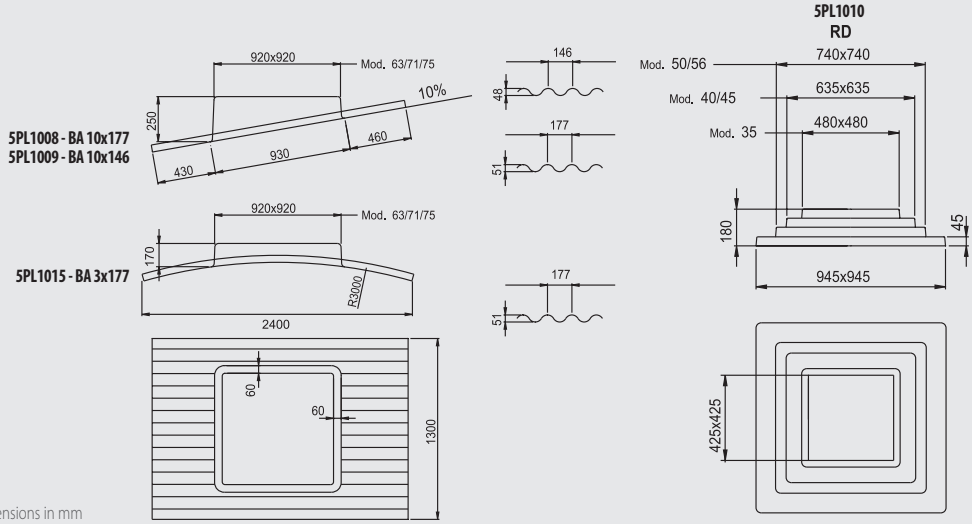
GENERAL DESCRIPTION - The support base BA and reduction RD are suitable for installation of roof fans on waved coverings, avoiding detrimental stagnation of water near to the fan and expensive carpentry works. The support base BA is suitable for roof fans having base 930mm X 930 mm or bigger. With the suitable reduction RD it is possible to use the base for roof fans from a minimum base dimension of 500X500. The reduction RD is a single element that can be easily cut to fit the exact fan dimension.

VERSION

- BA 10x177 (Cod. 5PL1008): suitable for "EURO" roof coverings pitch 177,height 51 mm and 10% slope.
- BA 3x177 (Cod. 5PL1015): suitable for "EURO" roof coverings pitch 177 mm, height 51 mm and radius of curvature of the sheet of 3 meters.
- BA 10x146 (Cod. 5PL1009): suitable for "INTERNATIONAL" roof coverings pitch 146 mm, height 48 mm, and 10% slope.
- Reduction RD (Cod. 5PL1010).

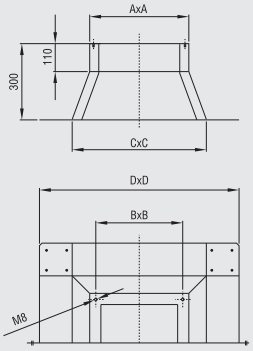
CONSTRUCTION - In polyester resins strengthen with stratified fibre glass. The finishing is RAL 9002(light grey). The external surface is treated against the action of atmospheric agent.

INSTALLATION - A correct fitting foresees the overlap to the covering slab upstream and the underexposure downstream. Furthermore it must be foreseen a side overlap of at least one and quarter wave for each side.



Dimensions in mm

Series TAC-N

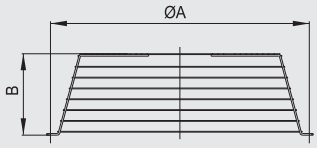


PB - Support base / Silenced reduction

The silenced support base (PB) purling box is suitable for the installation of roof fans on flat covering. This support contains an acoustic isolation to reduce the noise of the fans at the inlet side support. Base frame in galvanized steel sheet. Internally lined with acoustic material.

CODE	TYPE	AxA	BxB	CxC	DxD
5PB4000	40/45	630	600	770	1030
5PB5000	50/56	740	710	880	1140
5PB6300	63/71	910	870	1050	1310

Dimensions in mm



CCrc - Motor side protection grid

They prevent from casual contact with moving parts of the fan. Manufactured in steel rod according to UNI 12499 standard and protected against atmospheric agents. CCrc: conic version (short case version on motor side).

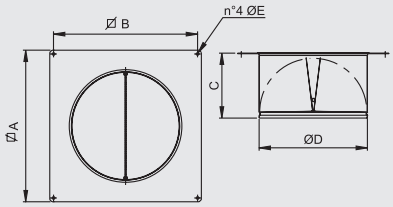
CODE	TYPE	ØA	B	kg
5RE1583	CCrc for TAC-N 40	450	115	1,3
5RE1584	CCrc for TAC-N 45	500	115	1,5
5RE1585	CCrc for TAC-N 50	560	115	1,8
5RE1586	CCrc for TAC-N 56	620	115	2,2
5RE1587	CCrc for TAC-N 63	690	115	3
5RE1588	CCrc for TAC-N 71	770	150	4,5
5RE1589	CCrc for TAC-N 80	860	150	5,8
5RE1590	CCrc for TAC-N 90	970	305	7

Dimensions in mm

Series TCR - TCF / TCV - TCF 2V / TCV 2V

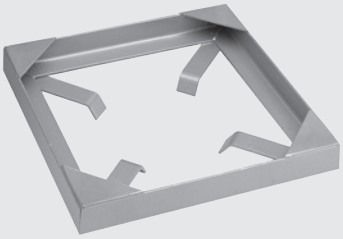
TS - Gravity shutter

They avoid heat dispersion through the roof when this fan is not working with a negligible opening pressure. The shutter flaps are opened by the air depression produced by the fan when working, and they shut down by gravity after switching-off. The structured is made in galvanized steel sheet.



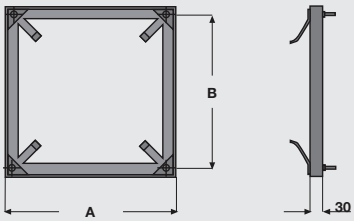
CODE	TYPE	A	B	C	ØD	ØE	kg
1TS2000	TS 20	240	220	105	160	10	1,2
1TS2500	TS 25	280	257	125	200	10	1,5
1TS3000	TS 31	330	307	150	250	10	1,9
1TS3500	TS 35	410	380	200	310	10	3,1
1TS4000	TS 40	500	471	220	350	10	3,8
1TS4000	TS 45	500	471	220	350	10	3,8
1TS5500	TS 50	590	550	270	450	12	5,2
1TS5500	TS 56	590	550	270	450	12	5,2
1TS6000	TS 63	700	665	300	500	12	7,9
1TS6000	TS 75	700	665	300	500	12	7,9
1TS6500	TS 80	700	665	300	500	12	7,9

Dimensions in mm

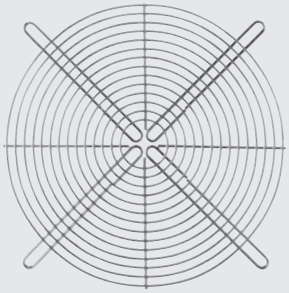


CB - Controbasi a murare

The counter base ensures an effective anchorage to the concrete support, through the fixing of four metal strips suitably designed.
It is made in solid steel with arrangement for fixing to the fan base.



CODE	TYPE	A	B	KG
1CB2000	CB 20	290	265	1,5
1CB3000	CB 25-31	390	360	2,5
1CB3500	CB 35	490	450	2,8
1CB4000	CB 40-45	630	600	3,2
1CB5500	CB 50-56	740	710	3,6
1CB6000	CB 63-75	900	870	4,0
1CB8000	CB 80	900	870	4,0



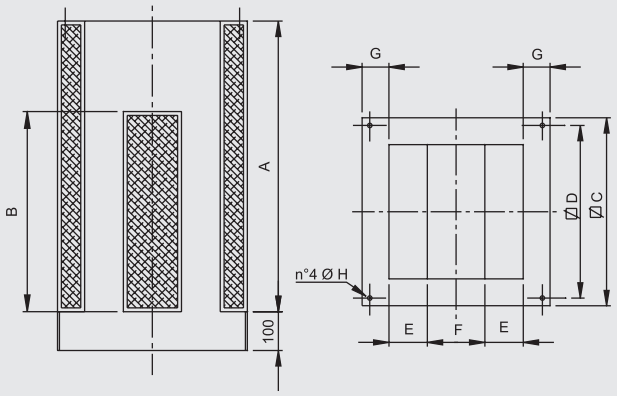
CCr - Protection guards

They prevent from casual contact with moving parts of the fan. Manufactured in steel rod according to UNI 12499 standard and protected against atmospheric agents.

CODE	MODELLO
1KT1110	KIT PROTECTION GUARDS FOR ROOF FANS 25
1KT1120	KIT PROTECTION GUARDS FOR ROOF FANS 30
1KT1130	KIT PROTECTION GUARDS FOR ROOF FANS 35
1KT1140	KIT PROTECTION GUARDS FOR ROOF FANS 40/45
1KT1150	KIT PROTECTION GUARDS FOR ROOF FANS 55
1KT1155	KIT PROTECTION GUARDS FOR ROOF FANS 60/65/70/75/80

Series TCR - TCF / TCV - TCF 2V / TCV 2V

GR - Silencers



CODE	TYPE	A	B	C	D	E	F	G	ØH	kg
1SI0310	GR 25	750	650	390	360	95	100	50	M8	28
1SI0310	GR 31	750	650	390	360	95	100	50	M8	28
1SI0350	GR 35	750	650	490	450	120	150	50	M8	37
1SI0400	GR 40	750	650	640	600	145	250	50	M8	42
1SI0400	GR 45	750	650	640	600	145	250	50	M8	42
1SI0560	GR 50	750	650	750	710	200	250	50	M10	42
1SI0560	GR 56	750	650	750	710	200	250	50	M10	50
1SI0630	GR 63	1000	800	920	870	210	400	50	M10	79
1SI0630	GR 75	1000	800	920	870	210	400	50	M10	79
1SI0630	GR 80	1000	800	920	870	210	400	50	M10	79

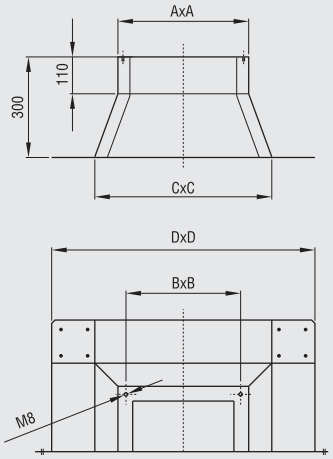
Dimensions in mm

Silencers with central pod. They reduce the noise of the fan. Sound absorbing material: mineral wool. Frame in galvanized steel sheet. Attention: the use of a Silencer together with a TS shutter requires special version of the silencer itself, with a reduced pod. Please mention it when ordering the silencer.

Octave (HZ) spectrum of noise attenuation in dB								
TYPE	63	125	250	500	1000	2000	4000	8000
GR 25	2	4	6	10	16	18	15	11
GR 31	2	4	6	10	16	18	15	11
GR 35	3	5	9	11	19	20	18	14
GR 40	3	4	8	9	18	15	10	6
GR 45	3	4	8	9	18	15	10	6
GR 50	4	5	11	15	16	12	9	5
GR 56	4	5	11	15	16	12	9	5
GR 63	3	4	5	8	14	9	7	3
GR 75	3	4	5	8	14	9	7	3
GR 80	3	4	5	8	14	9	7	3

PB - Purling Box

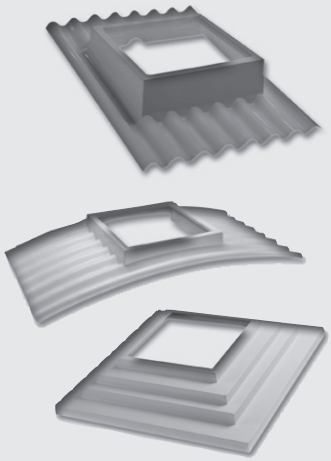
The silenced support base (PB) purling box is suitable for the installation of roof fans on flat covering. This support contains an acoustic isolation to reduce the noise of the fans at the inlet side support. Base frame in galvanized steel sheet. Internally lined with acoustic material.



CODE	TYPE	AxA	BxB	CxC	DxD
5PB3100	25/31	380	360	520	780
5PB3500	35	480	450	620	880
5PB4000	40/45	630	600	770	1030
5PB5000	50/56	740	710	880	1140
5PB6300	63/75	910	870	1050	1310

Dimensions in mm

Series TCR - TCF / TCV - TCF 2V / TCV 2V



BA - Support base for roof fans

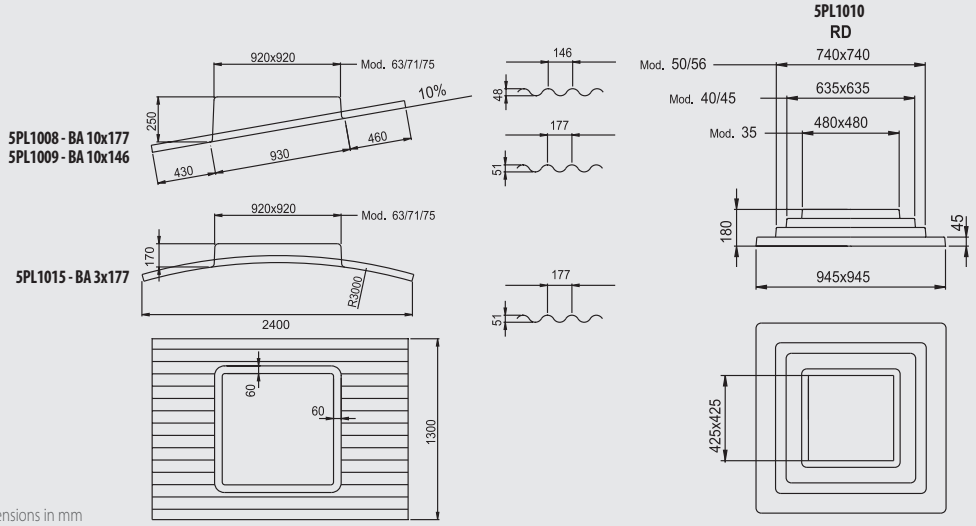
GENERAL DESCRIPTION - The support base BA and reduction RD are suitable for installation of roof fans on waved coverings, avoiding detrimental stagnation of water near to the fan and expensive carpentry works. The support base BA is suitable for roof fans having base 930mm X 930 mm or bigger. With the suitable reduction RD it is possible to use the base for roof fans from a minimum base dimension of 500X500. The reduction RD is a single element that can be easily cut to fit the exact fan dimension.

VERSION

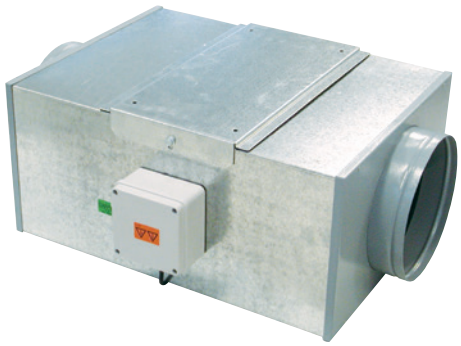
- BA 10x177 (Cod. 5PL1008): suitable for "EURO" roof coverings pitch 177,height 51 mm and 10% slope.
- BA 3x177 (Cod. 5PL1015): suitable for "EURO" roof coverings pitch 177 mm, height 51 mm and radius of curvature of the sheet of 3 meters.
- BA 10x146 (Cod. 5PL1009): suitable for "INTERNATIONAL" roof coverings pitch 146 mm, height 48 mm, and 10% slope.
- Reduction RD (Cod. 5PL1010).

CONSTRUCTION - In polyester resins strengthen with stratified fibre glass. The finishing is RAL 9002(light grey). The external surface is treated against the action of atmospheric agent.

INSTALLATION - A correct fitting foresees the overlap to the covering slab upstream and the underexposure downstream. Furthermore it must be foreseen a side overlap of at least one and quarter wave for each side.



Dimensions in mm



230 V | IP44 | min -10°C | max 60°C | CE

DESCRIPTION

The MINI-BOX series consists of centrifugal in-line fans, with acoustically insulated casing and with round spigot (diameter from 100mm to 315mm) for easy connection to round duct system. Main features of this range are: modularity, extremely quit operation, reduced dimensions and ease of installation (thanks to included support bracket) and maintenance (thanks to accessible motor/impellor).
The ultra-slim shape of these fans make them ideal for false ceiling installation in houses, offi - ces, public premises... They are suitable to convey clean air with a temperature range from -10°C to +60°C.

CONSTRUCTION

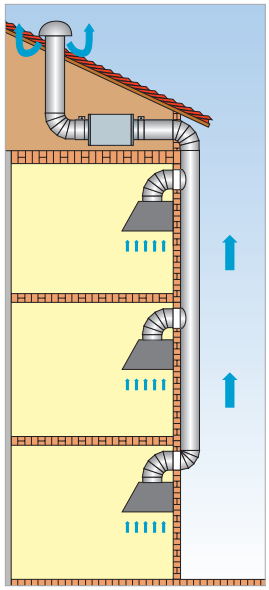
- Casing in galvanized steel sheet, lined with acoustic insulation (thickness 10 mm).
- Single-phase electric motor, IP44, class F, with thermal protection, suitable for speed control (using the suitable speed regulators shown in this catalogue).
- Fitting bracket
- Backward curved impeller with high effi ciency and low noise level.
- Outer terminal box IP55.

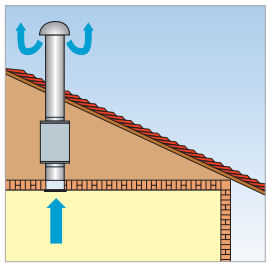
ACCESSORIES

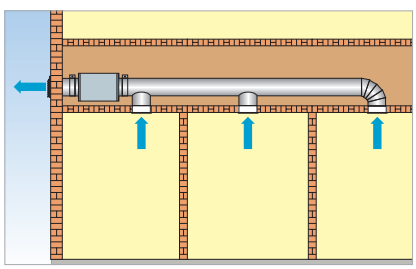
- Electric heaters.
- Backdraught shutters
- Duct clamps
- Protection guards

Compliant with ErP Directive and EU Regulation 1253/2014 (Ventilation Unit)
Measurment category: C
Efficiency category: Static
According to EN ISO 5801 / AMCA 210

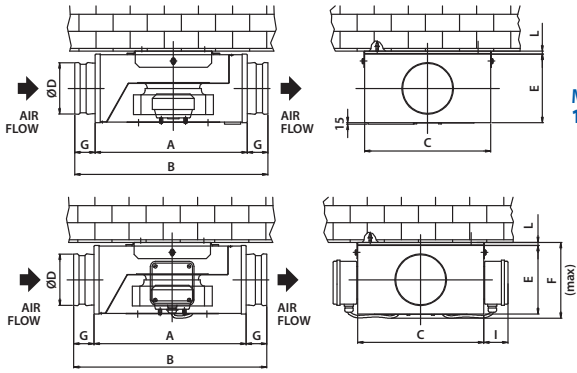
INSTALLATIONS



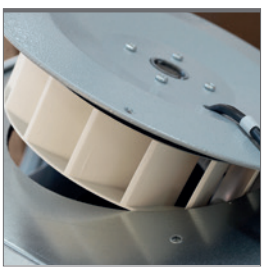


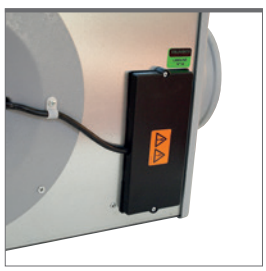


DIMENSIONS (mm)



TYPE	A	B	C	D	E	F	G	I	L	kg
MBX100	433	525	307	99	167	-	50	-	10	7,8
MBX125	433	515	307	124	167	-	40	-	10	7,8
MBX150	433	515	307	150	187	-	40	-	10	8,2
MBX200	503	580	373	198	233	260	40	60	10	12,8
MBX250	503	610	373	247	283	310	55	60	10	14,8
MBX315	503	610	423	314	343	370	55	60	10	17,4


Easy access to motor/impeller


Integrated terminal box (up to model 150)

ACCESSORIES pag. 61 / **REGULATORS** pag. 200

1

PERFORMANCE

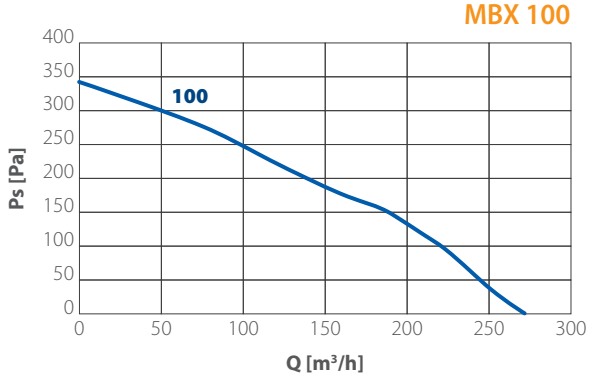
CODE	MODEL	DUCT	MAX AIRFLOW	MAX PRESSURE	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	RATING	SOUND LEVELS (a 1,5 mt) dB (A)	
		Ø mm	m³/h	Pa	V	A	KW	RPM/1'	IP	Lw	Lp
1MB4101	MBX 100	100	271	342	230	0,23	0,6	1990	44	56	44
1MB4126	MBX 125	125	334	344	230	0,23	0,6	1700	44	56	45
1MB4151	MBX 150	150	412	352	230	0,23	0,6	2530	44	59	47
1MB4201	MBX 200	200	655	424	230	0,49	1,15	2550	44	54	42
1MB4251	MBX 250	250	1035	537	230	0,65	0,2	2550	44	63	52
1MB4316	MBX 315	315	1148	651	230	1,14	0,35	2630	44	63	51

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz. In compliance with EU Regulation 1253/2014, the single flow Ventilation Units must be connected to a multiple speed regulation (local demand controller or equivalent) when put into service.

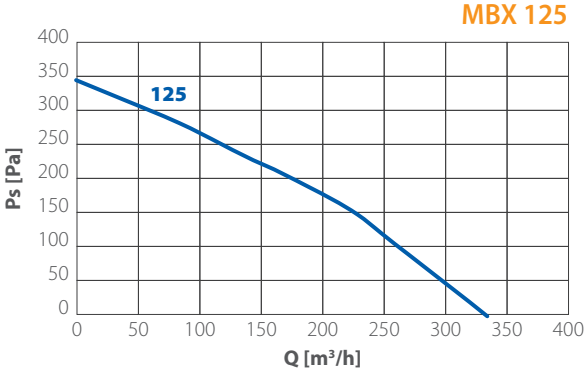
Lp: Sound pressure levels measured in free field conditions, propagation hemispherical, measurement category D in accordance with EN ISO 13349, at the maximum efficiency point, at a distance of 1,5 meters from inlet side (for comparative purposes only).
Lw: Sound power levels obtained according to ISO 3746. Tolerance +/- 3 dB(A).

CURVES

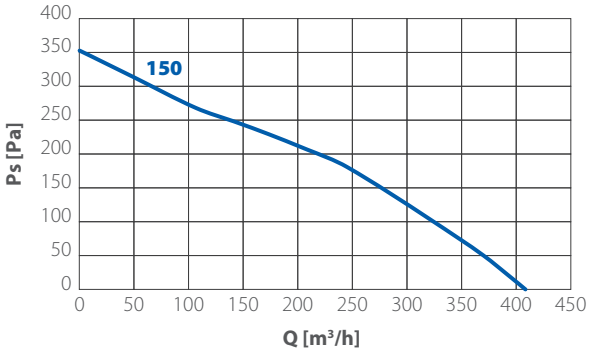
MBX 100



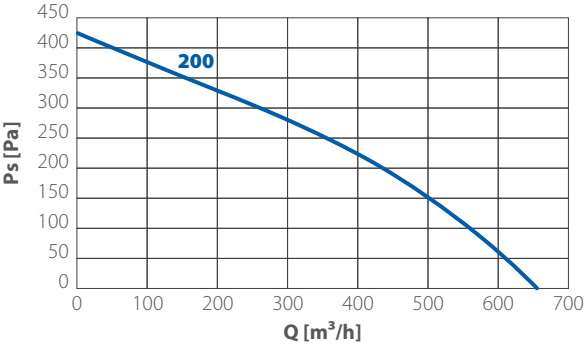
MBX 125



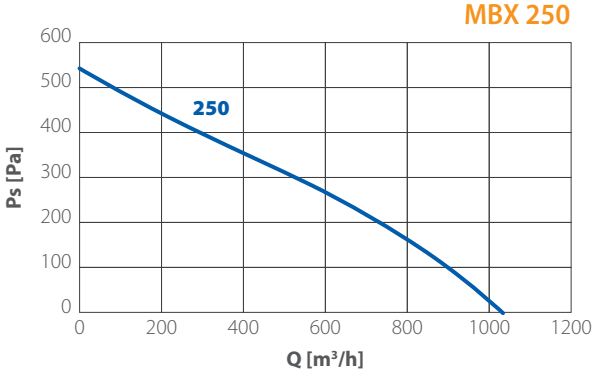
MBX 150



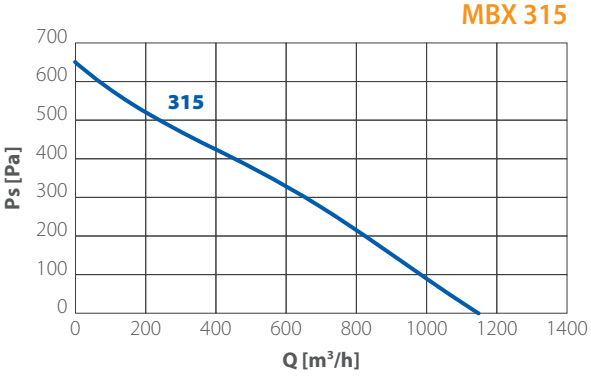
MBX 200



MBX 250



MBX 315



Series MBX

Duct clamps

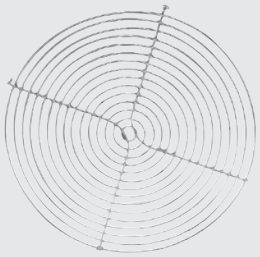
Duct clamp manufactured in galvanized steel sheet, inside lined with expanded polyurethane.
Necessary to connect the fan to the duct.

CODE	DESCRIPTION
2FA1000	DUCT CLAMPS 100
2FA1250	DUCT CLAMPS 125
2FA1500	DUCT CLAMPS 150
2FA1600	DUCT CLAMPS 160
2FA2000	DUCT CLAMPS 200
2FA2500	DUCT CLAMPS 250
2FA3150	DUCT CLAMPS 315

Shutter

Back draught throttle shutter in galvanized steel sheet with gasket on the closing of the fins, for greater sealing and less noise trasmission.

CODE	DESCRIPTION
2SA1000	SHUTTER 100
2SA1250	SHUTTER 125
2SA1500	SHUTTER 150
2SA1600	SHUTTER 160
2SA2000	SHUTTER 200
2SA2500	SHUTTER 250
2SA3150	SHUTTER 315



Protection guard

Set composed by protection guard manufactured in steel rod protected against the corrosion and screws for the fixing on the round side of the fan.
ATTENTION: this accessory is compulsary if the side of the fan is not ducted or protected in any other way.

CODE	DESCRIPTION
2SR1000	PROTECTION GUARD 100
2SR1250	PROTECTION GUARD 125
2SR1500	PROTECTION GUARD 150
2SR1600	PROTECTION GUARD 160
2SR2000	PROTECTION GUARD 200
2SR2500	PROTECTION GUARD 250
2SR3150	PROTECTION GUARD 315

Series MBX

BE - Post-heating electric heater

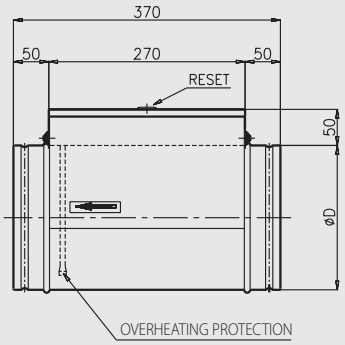
230 V | 400 V | CE

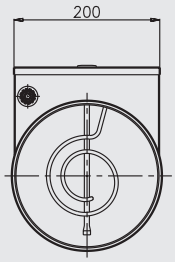
CODE	MODEL	ØD	MIN. AIRFLOW	TENSIONE A 50 Hz	Vat 50 Hz	A	TEMPERATURE INCREASE
		mm	m³/h	V	Kw		
1BA2100	BE 100-0,6-M	100	40	230	0,6	2,8	
1BA2125	BE 125-0,6-M	125	70	230	0,6	2,8	
1BA2126	BE 125-1,2-M	125	70	230	1,2	5,5	
1BA2160	BE 160-1,2-M	160	110	230	1,2	5,5	
1BA2161	BE 160-2,0-M	160	110	230	2,0	9,1	
1BA2200	BE 200-2,0-M	200	170	230	2,0	9,1	
1BA2201	BE 200-6,0-T	200	170	400	6,0	8,7	
1BA2250	BE 250-2,4-M	250	270	230	2,4	10,9	
1BA2251	BE 250-6,0-T	250	270	400	6,0	8,7	
1BA2315	BE 315-6,0-T	315	450	400	6,0	8,7	

$$\Delta T\ [^{\circ}C] \simeq \frac{P\ [kW]}{Q\ [m^3/s] \cdot \delta\ [kg/m^3]}$$

ΔT = Incremento Temperatura
P = Potenza Riscaldante
Q = Portata Aria
δ = Densità Aria

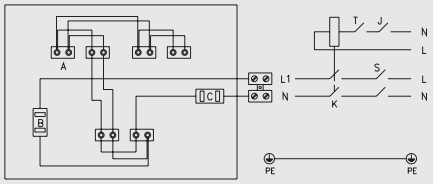
Dimensions (mm)



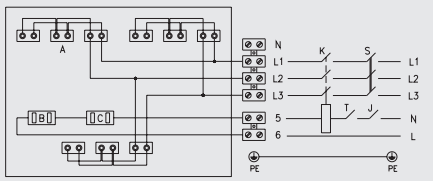


Wiring

SINGLE-PHASE 230V



THREE-PHASE 400V



LEGEND

A - Heating element
B - Automatic overheating protection
C - Manual overheating
J - Ambient thermostat switch
K - Contactor
S - Service switch
T - Ambient thermostat

230 V | 400 V | IP20 | min -20°C | max 40°C | CE

DESCRIPTION

The fans of the BOX-D series are particularly designed for air extraction, supply or filtration (air temperature from -20°C to +40°C). Their main characteristic is the low noise level which makes them ideal for urban environments (apartments, houses, bar, restaurants, gymnasiums, offices) and industrial sites where the noise is a problem. The low noise level is due to their plenum lined with acoustic material, that allows a remarkable reduction of noise level, inevitably generated by the fan. The blower consists of a double inlet forward curved centrifugal fan with built-in motor.

CONSTRUCTION

- Frame in extruded aluminium profile; removable panels in galvanized steel sheet; all this brings to an excellent aesthetic impact. Weatherproof cover in galvanized steel sheet.
- The blower is fitted using suitable support feet and is completely isolated from the casing by anti-vibration mounts and gaskets.
- Acoustic lining in self-extinguishing technopolymer.
- Double inlet blower, forward curved, with direct drive built-in asynchronous motor, single phase or three-phase, IP20, class F.
- Weatherproof upper cover with suitable holes for lifting hooks.

UPON REQUEST

- Versions with double skin panels (13mm thick) and round spigots (BOX-DR)

ACCESSORIES

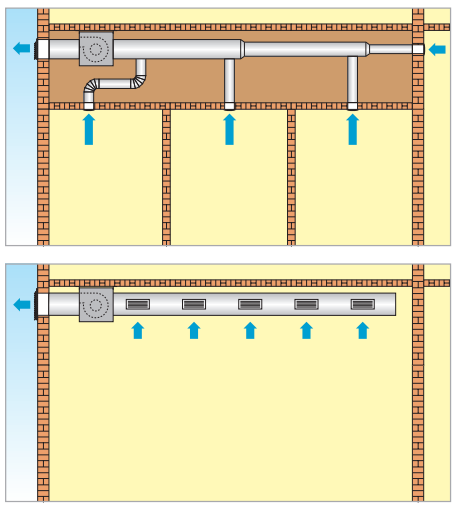
- Rainproof outlet with guard.
- Support feet.
- Filtering section (standard version with filter in polyester with efficiency 90.1%, class EU4).

Compliant with ErP Directive and EU Regulation 1253/2014 (Ventilation Unit)
Measurment category: C
Effi ciency category: Static
According to EN ISO 5801 / AMCA 210

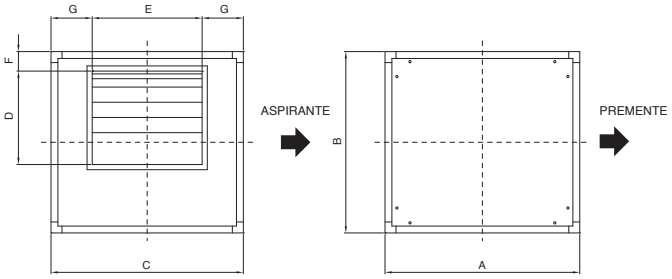
Forward curved blades

Removable panels for motor inspection

INSTALLATION



DIMENSIONS (mm)



TYPE	A	B	C	D	E	F	G	Kg*
ELIBOX 3/8 B	287	245	430	100	300	30	65	8
ELIBOX 7/7 A	420	420	420	220	245	65	90	24
ELIBOX 7/7 B	420	420	420	220	245	65	90	24
ELIBOX 9/7 A	500	500	500	280	240	70	130	28
ELIBOX 9/7 B	500	500	500	280	240	70	130	28
ELIBOX 9/9 A	500	500	500	280	310	70	95	33
ELIBOX 9/9 B	500	500	500	280	310	70	95	33
ELIBOX 10/8 A	600	550	600	300	280	75	160	35
ELIBOX 10/8 B	600	550	600	300	280	75	160	35
ELIBOX 10/10 A	600	550	600	300	345	75	147,5	36
ELIBOX 10/10 B	600	550	600	300	345	75	147,5	36
ELIBOX 12/9 A	750	640	750	360	385	80	215	65
ELIBOX 12/12 A	750	640	750	360	410	80	170	66

* Indicative weight

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1

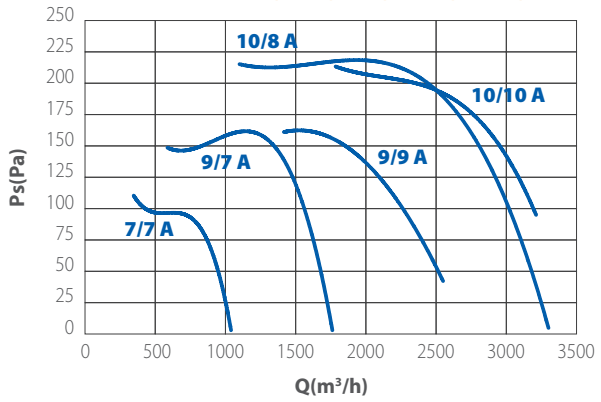
PERFORMANCE

CODE	MODEL	MAX AIRFLOW	MAX PRESSURE	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	MOTOR CLASS	LEVELS SOUND dB (A)	
		m³/h	Pa	V	A	KW	GIRI/1'	N°	IP		Lw	Lp
UPON REQUEST	ELIBOX 3/8 B (I) SINGLE-PHASE	568	101	230	0,30	0,08	1360	4	32	B	54	39
1EB1000	ELIBOX 7/7 A SINGLE-PHASE	1041	143	230	0,60	0,07	950	6	20	F	64	50
1EB1002	ELIBOX 7/7 B SINGLE-PHASE	1500	278	230	1,20	0,15	1.400	4	44	F	74	60
1EB1502	ELIBOX 9/7 A SINGLE-PHASE	1762	185	230	1,50	0,20	1.400	6	55	F	69	54
1EB1501	ELIBOX 9/7 B SINGLE-PHASE	2370	464	230	3,60	0,37	1.400	4	20	F	78	63
1EB1703	ELIBOX 9/9 A SINGLE-PHASE	2551	194	230	1,80	0,20	950	6	55	F	74	59
1EB1704	ELIBOX 9/9 B SINGLE-PHASE	3119	458	230	4,40	0,55	1.400	4	20	F	81	67
1EB1904	ELIBOX 10/8 A SINGLE-PHASE	3302	296	230	3,60	0,37	950	6	20	F	79	64
1EB1901	ELIBOX 10/8 B SINGLE-PHASE	2394	581	230	4,60	0,37	1.400	4	20	F	75	61
1EB1905	ELIBOX 10/10 A SINGLE-PHASE	3214	242	230	3,10	0,24	950	6	44	F	75	61
1EB1903	ELIBOX 10/10 B SINGLE-PHASE	3343	586	230	4,60	0,55	1.400	4	20	F	78	63
1EB2003	ELIBOX 12/9 A SINGLE-PHASE	5500	377	230	7,6	0,74	950	6	44	F	74	60
1EB2004	ELIBOX 12/12 A SINGLE-PHASE	5750	376	230	6	0,51	950	6	44	F	77	62
1EB2002	ELIBOX 12/9 THREE-PHASE	6330	393	400	7 / 4,10	1,10	950	6	20	F	85	70
1EB2001	ELIBOX 12/12 THREE-PHASE	7808	408	400	8,25 / 4,75	1,10	950	6	20	F	88	73

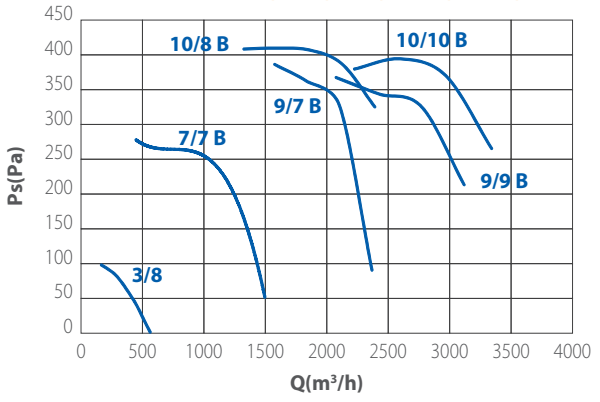
(I) Available for extra UE markets only.
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight.
Compliant with ErP 2009/125/EC Directive and EU Regulation 1253/2014. Measurement category: C. Efficiency category: Static.
In conformity with EU Reg. 1253/2014, the single flow ventilation units must be connected to a VSD when put into service.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz IP / Class referring to the electric motor.
Lp: Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 6 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

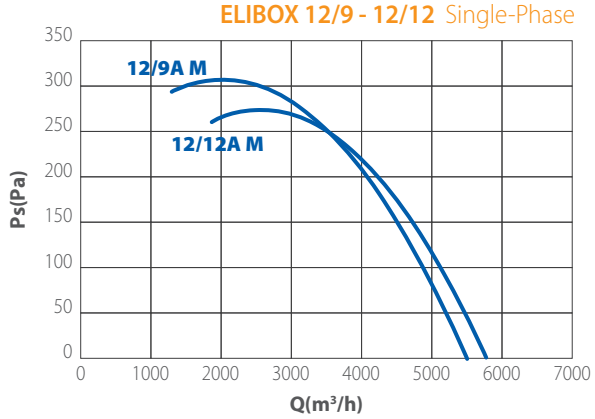
ELIBOX 7/7 - 9/7 - 9/9 - 10/8 - 10/10 A



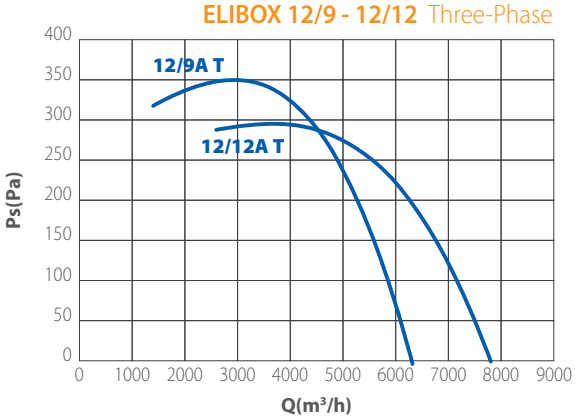
ELIBOX 7/7 - 9/7 - 9/9 - 10/8 - 10/10 B



ELIBOX 12/9 - 12/12 Single-Phase



ELIBOX 12/9 - 12/12 Three-Phase



E-CUBE

Backward curved centrifugal box fans

Compliant with ErP Directive and EU Regulation 1253/2014 (Ventilation Unit)
Measurment category: C
Efficiency category: Static
According to EN ISO 5801 / AMCA 210

VERSIONS

■ **E-CUBE PLUS**
Version for industrial kitchen
(temperature up to 180°C in continuous service)
See page 175

230 V | 400 V | IP20 | min -15°C | max 50°C | CE

DESCRIPTION

These fans are designed for direct or ducted ventilation in any residential, commercial and industrial buildings application. Designed for easy installation, their main characteristics are high efficiency and low noise level, thanks to the backward curved impeller and to the acoustic construction with double skin and acoustically lined panels.
Suitable for conveying clean or slightly dusty air with temperature range from -15°C to +50°C in continuous service. The range is also available with circular inlet and outlet (E-CUBE/BT)

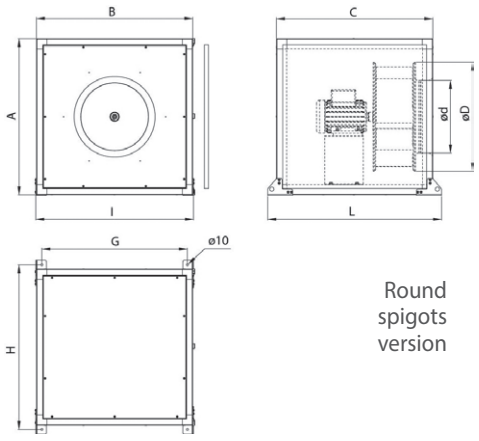
CONSTRUCTION

- Frame in extruded aluminium profiles and removable double skin panels in galvanized steel sheet; all this brings to an excellent aesthetic impact.
- Acoustic lining of the panels in self-extinguishing techno-polymer.
- Backward curved impeller directly coupled to the motor.
- B3 Motor fitted using suitable reinforced support seat.
- Support brackets with holes suitable for lifting and easy installation.
- Motor equipment:
  - Asynchronous three-phase motor or single-phase motor manufactured according to international standards IEC 60034, IEC 60072, EEMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP 55, class F.
  - All suitable to S1 service (continuous working at constant load).

ACCESSORIES

- Weatherproof cover.
- Rainproof discharge outlet with guard.
- Anti-vibration supports.
- Floor support feet.
- Square / Round outlet connector.

DIMENSIONS (mm)



Round spigots version

TYPE	A	B	C	D	d	d1	E	F	G	H	I	Kg
E-CUBE 250	500	500	500	260	180	247	55	40	468	530	506	30
E-CUBE 310	500	500	500	314	220	314	55	40	468	530	506	32
E-CUBE 350	640	640	640	384	270	354	55	40	605	667	643	48
E-CUBE 400	640	640	640	427	296	397	55	40	605	667	643	52
E-CUBE 450	750	750	750	468	296	450	55	30	698	698	756	82
E-CUBE 500	750	750	750	525	327	500	55	30	698	698	756	90
E-CUBE 560	750	750	750	580	370	560	55	30	698	698	756	135
E-CUBE 630	1000	1000	1000	650	430	630	75	50	948	948	1006	146
E-CUBE 710	1000	1000	1000	730	476	710	75	50	948	948	1006	150

Dimensions in mm
* Indicative weight

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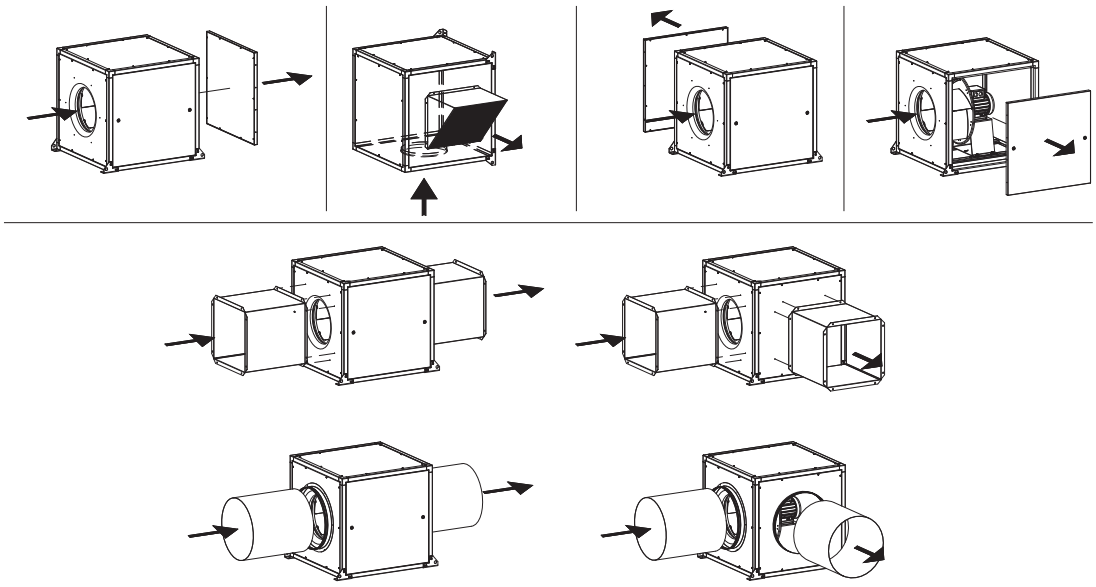
EXAMPLES OF INSTALLATION



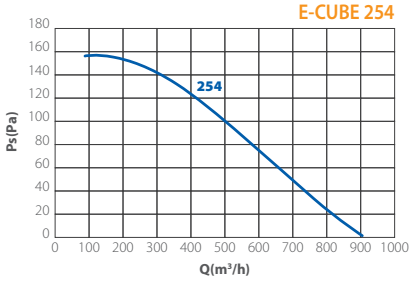
PERFORMANCE

CODE	MODEL	POLE	MAX AIRFLOW	ABSORBED CURRENT	POWER	RATING	MOTOR INSULATION CLASS	LEVELS SOUND dB (A)	
		N°	m³/h	A	KW	IP		Lw	Lp
E-CUBE standard with circular inlet and rectangular outlet									
1SC2509	**E-CUBE 254** SINGLE-PHASE	4	919	1,00	0,09	55	F	57	36,5
1SC3109	**E-CUBE 314** SINGLE-PHASE	4	1862	1,30	0,12	55	F	66,2	45,7
1SC3506	**E-CUBE 354** SINGLE-PHASE	4	3174	2,20	0,25	55	F	69,7	49,2
1SC4012	**E-CUBE 404** SINGLE-PHASE	4	4378	4,30	0,55	55	F	71,9	51,3
1SC4518	**E-CUBE 454** SINGLE-PHASE	4	4732	5,50	0,75	55	F	75,4	54,9
1SC2512	**E-CUBE 254** THREE-PHASE	4	919	0,60	0,09	55	F	57	36,5
1SC3112	**E-CUBE 314** THREE-PHASE	4	1862	0,70	0,12	55	F	66,2	45,7
1SC3507	**E-CUBE 354** THREE-PHASE	4	3174	0,80	0,25	55	F	69,7	49,2
1SC4013	**E-CUBE 404** THREE-PHASE	4	4378	1,60	0,55	55	F	71,9	51,3
1SC4519	**E-CUBE 454** THREE-PHASE	4	4732	2,20	0,75	55	F	75,4	54,9
1SC4520	**E-CUBE 456** THREE-PHASE	6	3170	1,20	0,37	55	F	66,6	46,1
1SC5012	**E-CUBE 504** THREE-PHASE	4	6834	2,50	1,10	55	F	78	57,4
1SC5013	**E-CUBE 506** THREE-PHASE	6	4579	1,20	0,37	55	F	69,1	48,6
1SC5606	**E-CUBE 566** THREE-PHASE	6	5939	1,80	0,55	55	F	70,1	49,5
1SC6306	**E-CUBE 636** THREE-PHASE	6	9460	2,74	1,10	55	F	76,3	55,8
UPON REQUEST	**E-CUBE 716** THREE-PHASE	6	12.400	5,45	2,20	55	F	80	59,8
E-CUBE/BT with circular inlet and outlet									
1SC2513	**E-CUBE/BT 254** SINGLE-PHASE	4	919	1,00	0,09	55	F	57	36,5
1SC3113	**E-CUBE/BT 314** SINGLE-PHASE	4	1862	1,30	0,12	55	F	66,2	45,7
1SC3512	**E-CUBE/BT 354** SINGLE-PHASE	4	3174	2,20	0,25	55	F	69,7	49,2
1SC4008	**E-CUBE/BT 404** SINGLE-PHASE	4	4378	4,30	0,55	55	F	71,9	51,3
1SC4521	**E-CUBE/BT 454** SINGLE-PHASE	4	4732	5,50	0,75	55	F	75,4	54,9
1SC2514	**E-CUBE/BT 254** THREE-PHASE	4	919	0,60	0,09	55	F	57	36,5
1SC3114	**E-CUBE/BT 314** THREE-PHASE	4	1862	0,70	0,12	55	F	66,2	45,7
1SC3513	**E-CUBE/BT 354** THREE-PHASE	4	3174	0,80	0,25	55	F	69,7	49,2
1SC4014	**E-CUBE/BT 404** THREE-PHASE	4	4378	1,60	0,55	55	F	71,9	51,3
1SC4522	**E-CUBE/BT 454** THREE-PHASE	4	4732	2,20	0,75	55	F	75,4	54,9
1SC4523	**E-CUBE/BT 456** THREE-PHASE	6	3170	1,20	0,37	55	F	66,6	46,1
1SC5014	**E-CUBE/BT 504** THREE-PHASE	4	6834	2,50	1,10	55	F	78	57,4
1SC5015	**E-CUBE/BT 506** THREE-PHASE	6	4579	1,20	0,37	55	F	69,1	48,6
1SC5607	**E-CUBE/BT 566** THREE-PHASE	6	5939	1,80	0,55	55	F	70,1	49,5
1SC6307	**E-CUBE/BT 636** THREE-PHASE	6	9460	2,74	1,10	55	F	76,3	55,8
UPON REQUEST	**E-CUBE/BT 716** THREE-PHASE	6	12.400	5,45	2,20	55	F	80	59,8

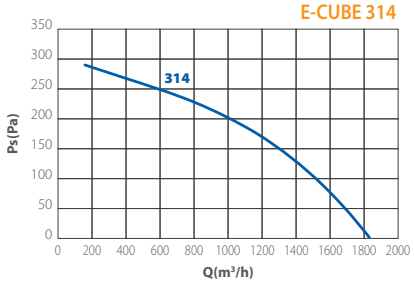
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight.
Compliant with ErP 2009/125/EC Directive and EU Regulation 1253/2014. Measurement category: C. Efficiency category: Static.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz +/- 10%.
In compliance with EU Regulation 1253/2014, the single flow Ventilation Units must be connected to a VSD (Variable Speed Drive) when put into service.
Lp: Sound pressure level measured in free field conditions, propagation spherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 3 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

PERFORMANCE

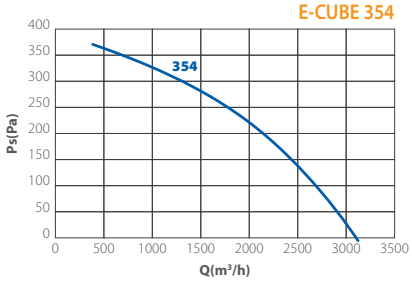
E-CUBE 254



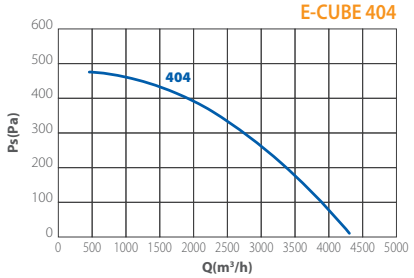
E-CUBE 314



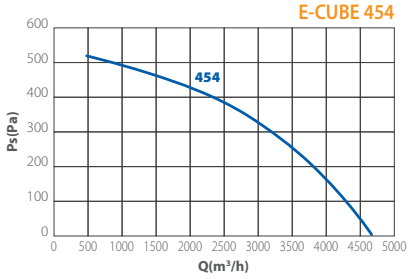
E-CUBE 354



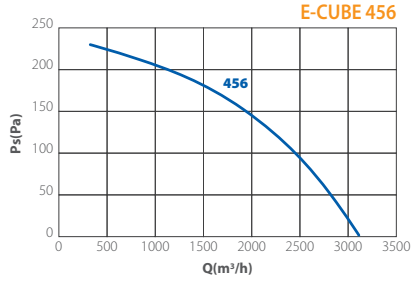
E-CUBE 404



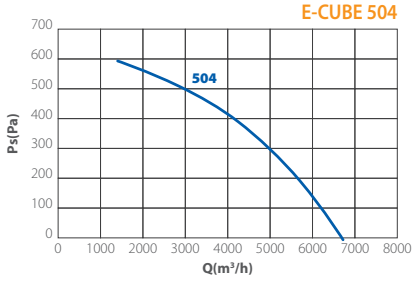
E-CUBE 454



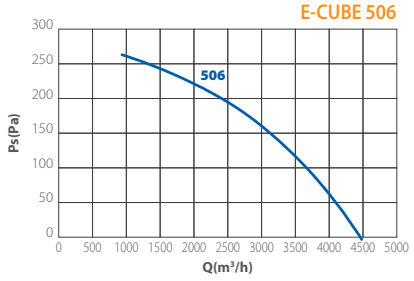
E-CUBE 456



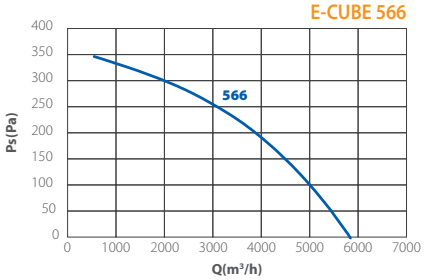
E-CUBE 504



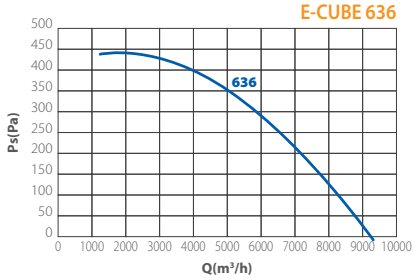
E-CUBE 506



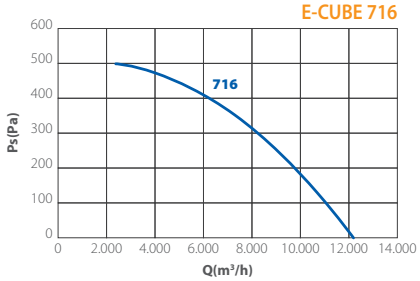
E-CUBE 566



E-CUBE 636

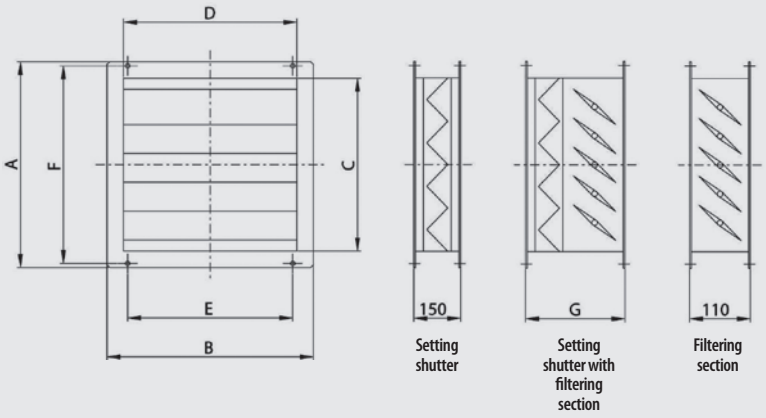


E-CUBE 716



Series ELIBOX

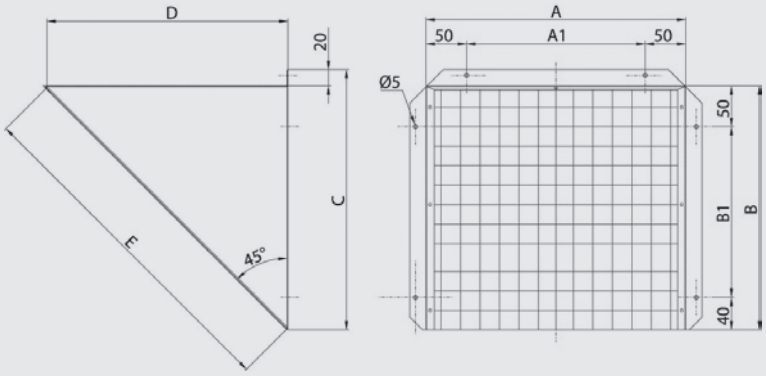
Filtering section



TYPE	A	B	C	D	E	F	G
7/7	375	375	315	315	300	360	180
9/7	458	458	398	398	253	443	210
10/7	505	555	445	495	415	490	210
12/7	595	705	535	645	500	580	210

Dimensions in mm

Rain proof discharge outlet with guard



CODE	TYPE	A	A1	B	B1	C	D	E
5TR0185	**7/7**	267	167	245	155	265	240	340
5TR0187	**9/7**	320	220	300	210	320	296	420
5TR0188	**10/7**	357	257	330	240	350	326	460
5TR0183	**12/7**	420	320	380	290	400	376	530

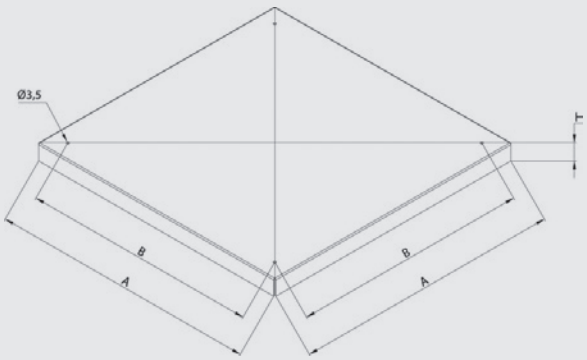
Dimensions in mm

Feet

CODE	TYPE
1AL5002	FEET FOR ELIBOX (4 PCS)

Series E-CUBE

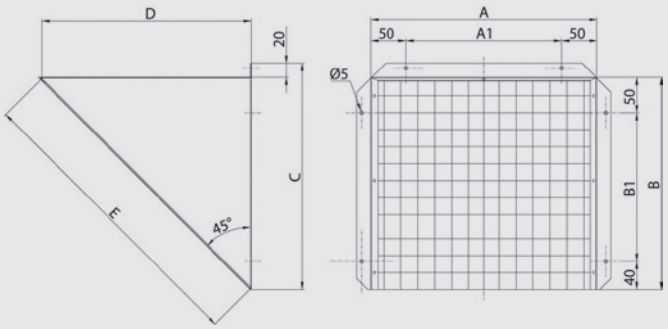
Weatherproof cover



CODE	TYPE	A	B	H	Kg
5TE0080	25 / 31	550	480	35	4,4
5TE0081	35 / 40	700	618	35	6,8
5TE0082	45 / 50 / 56	800	720	50	9,3
5TE0083	63 / 71	1050	970	50	15,3

Dimensions in mm

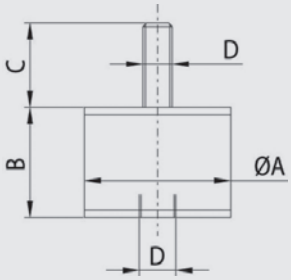
Rain proof discharge outlet with guard



CODE	TYPE	A	A1	B	B1	C	D	E
5TR0185	25 / 31	267	167	245	155	265	240	340
5TR0187	35 / 40	320	220	300	210	320	296	420
5TR0188	45 / 50 / 56	357	257	330	240	350	326	460
5TR0183	63 / 71	420	320	380	290	400	376	530

Dimensions in mm

Anti-Vibration Supports

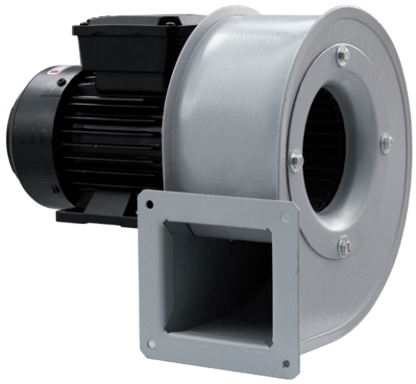


CODE	TYPE	ØA	B	C	D	Compression load for 1 support (Kg)
5ST0004	25 / 31 / 35 / 40	30	20	23	M8	21 ÷ 45
5ST0005	45 / 50 / 56 / 63 / 71	40	30	28	M10	46 ÷ 65

Dimensions in mm

Square to round outlet connector

CODE	TYPE
5RA2010	SQUARE TO ROUND OUTLET CONNECTOR E-CUBE 25
5RA2011	SQUARE TO ROUND OUTLET CONNECTOR E-CUBE 31
5RA2012	SQUARE TO ROUND OUTLET CONNECTOR E-CUBE 35
5RA2013	SQUARE TO ROUND OUTLET CONNECTOR E-CUBE 40
5RA2014	SQUARE TO ROUND OUTLET CONNECTOR E-CUBE 45
5RA2015	SQUARE TO ROUND OUTLET CONNECTOR E-CUBE 50
5RA2018	SQUARE TO ROUND OUTLET CONNECTOR E-CUBE 56
5RA2019	SQUARE TO ROUND OUTLET CONNECTOR E-CUBE 63
5RA2020	SQUARE TO ROUND OUTLET CONNECTOR E-CUBE 71



230 V | 400 V | IP44 | IP55 | 100°C | CE

DESCRIPTION

The centrifugal fans of the IC series are designed to convey clean and not-dusty air and smoke with temperature of +100°C. They are suitable for all the industrial applications where small air volumes and high pressures are required.
The series consists of different models with impeller diameter from 100 to 180 mm. The motor is directly fitted to the forward curved impeller. The casing is easily adjustable, also on site, to the required discharge angle every 45°, including 180° and 225° position.

CONSTRUCTION

- Volute casing in steel sheet, protected against atmospheric agents by epoxy paint.
- Single inlet, single width forward curved impeller (sirocco type), in galvanized steel sheet.
- Execution 5 (with impeller directly coupled to flanged motor)
- Standard orientation LG270°.
- Asynchronous three-phase or single-phase motors according to international standards IEC 600034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP 55, class F, B35 shape. IC 100 T and M with motor shape B14, IP44, class B.

ACCESSORIES

- Inlet and outlet protection guard according to UNI 12499 rules and protected against atmospheric agents.
- Motor support in steel sheet epoxy painted.

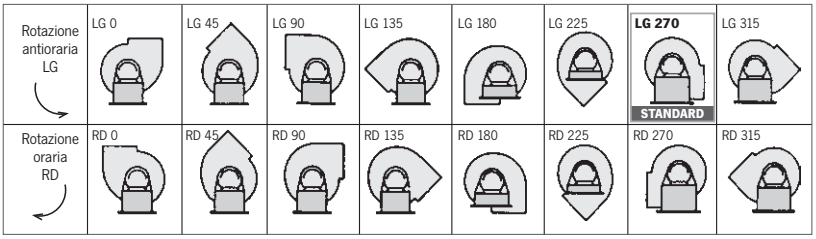
UPON REQUEST

- Rotation RD upon request.

INSTALLATION

The centrifugal fans with forward curved impellers must always be installed to ducted systems, eventually with the use of additional resistance (for example setting shutters), that can limit the air flow in such a way that the absorbed current is within the acceptable values stated on the motor rating label.

DISCHARGE ANGLES *(motor side view)*




Forward curved blade


UNELMEC type IP55 motor

The series in not affected by the ErP Directive 2009/125/CE and further Regulations.

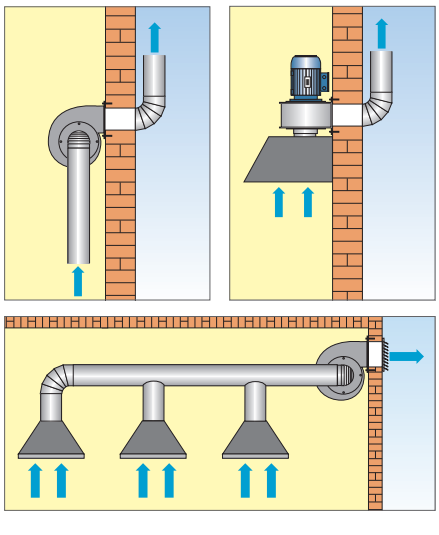
VERSIONS

IC ATEX – IC ATEX INOX
Explosion proof version according to Directives 94/9/CE and 2014/34/UE
See page 125

IC INOX
Corrosion resistance version, with casing, flanges and impeller in stainless steel AISI 304
See page 156

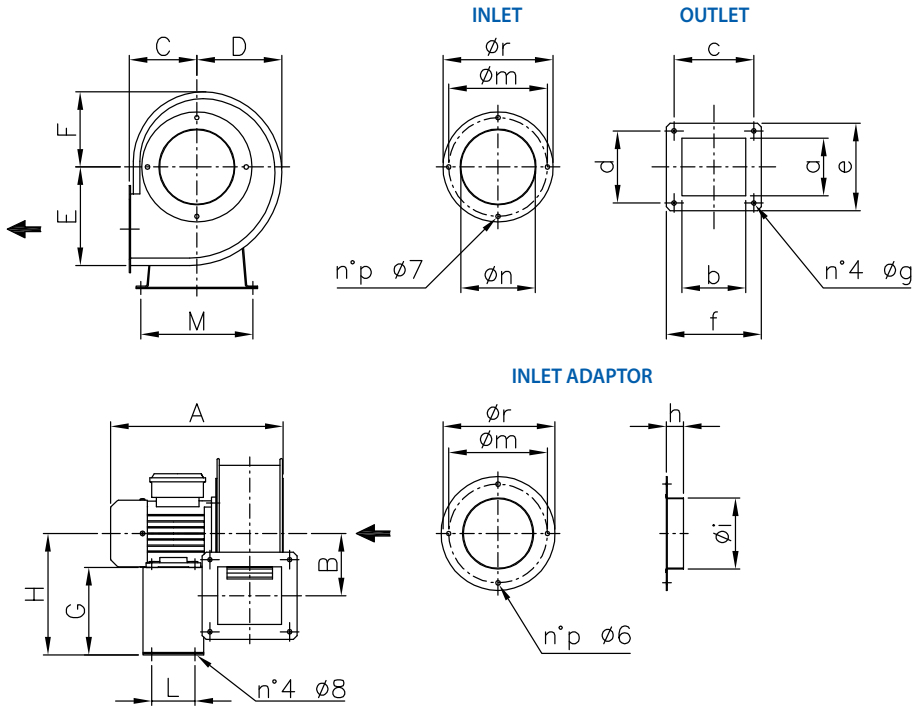
IC AT
Version suitable to convey hot gases, from min. 100°C up to 150°C maximum
See page 172

INSTALLATIONS



ACCESSORIES pag. 76 / **REGULATORS** pag. 200

DIMENSIONS (mm)



TYPE	A	B	C	D	E	F	G	H	L	M	kg
IC 100	220	82	86	112	130	99	120	176	71	140	4
IC 120	300	97	109	137	156	116	160	223	80	185	7
IC 140	350	115	126	158	184	136	152	223	90	185	10
IC 160	390	132	143	175	207	148	180	260	100	230	17
IC 180	400	140	156	200	227	171	180	260	100	230	20

TYPE	a	b	c	d	e	f	g	h	i	m	n	p	r
IC 100	76	84	105	95	115	125	6	20	100	130	90	4	145
IC 120	102	102	125	125	150	150	7	20	125	160	115	4	178
IC 140	118	118	148	148	175	175	8	30	125	180	135	4	195
IC 160	135	135	165	165	195	195	8	40	160	222	155	8	240
IC 180	148	148	180	180	210	210	8	40	160	222	170	8	240

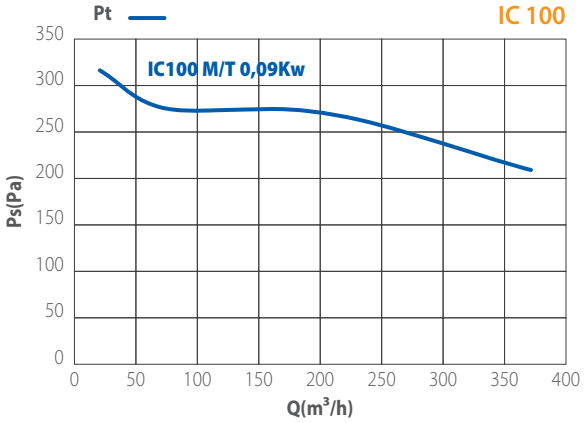
Inlet adaptor supplied, not assembled.

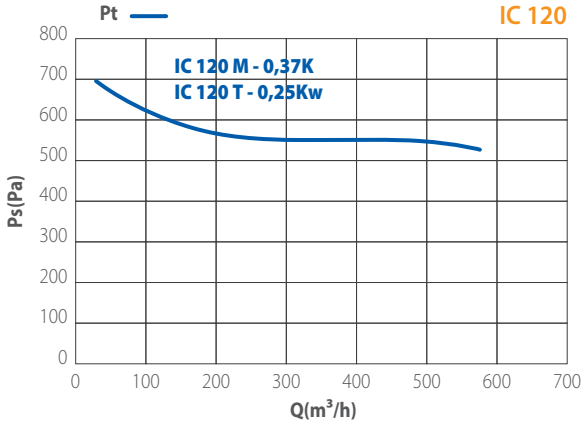
PERFORMANCE

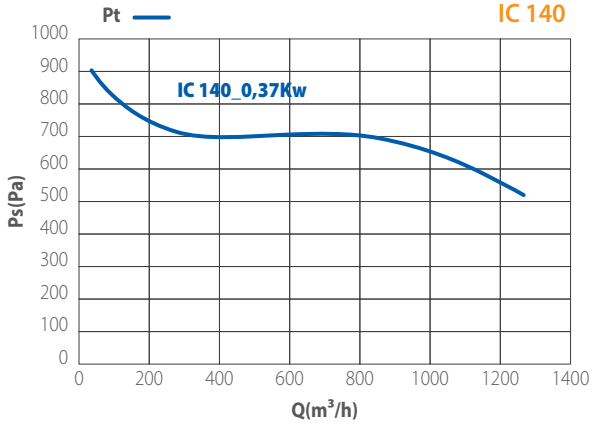
	CODE	MODEL	DUCT	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	MOTOR CLASS	LEVELS SOUND dB (A)	
			Ø mm	m³/h	V	A	kW	RPM/1'	N°	IP		Lw	Lp
SINGLE-PHASE	1IC0000	IC 100 SINGLE-PHASE	100	428	230	0,36	0,09	2.800	2	44	B	73	62
	1IC0200	IC 120 SINGLE-PHASE	125	900	230	1,75	0,37	2.800	2	55	F	78	67
	1IC0400	IC 140 SINGLE-PHASE	125	1.188	230	2,80	0,37	2.800	2	55	F	84	73
	1IC0601	IC 160 SINGLE-PHASE	160	2.318	400	5,2	0,75	2.800	2	55	F	89	78
	1IC0801	IC 180 SINGLE-PHASE	180	2.790	400	6,7	1,1	2.800	2	55	F	92	81
THREE-PHASE	1IC0001	IC 100 THREE-PHASE	100	428	400	0,17	0,09	2.800	2	44	B	73	62
	1IC0201	IC 120 THREE-PHASE	125	900	400	0,90	0,25	2.800	2	55	F	78	67
	1IC0401	IC 140 THREE-PHASE	125	1.267	400	1,10	0,37	2.800	2	55	F	84	73
	1IC0600	IC 160 THREE-PHASE	160	2.318	400	1,90	0,75	2.800	2	55	F	89	78
	1IC0800	IC 180 THREE-PHASE	180	2.790	400	2,30	1,10	2.800	2	55	F	92	81

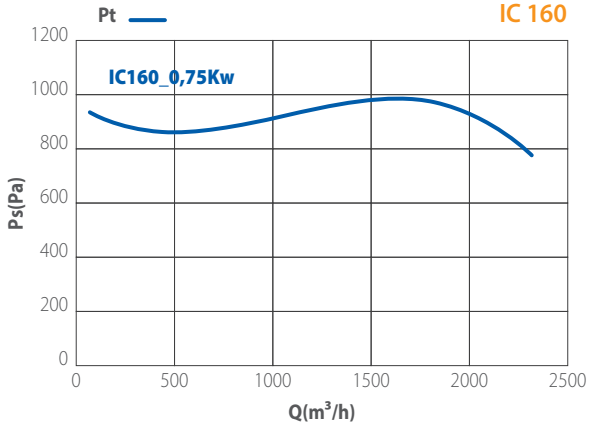
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specifi c weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free fi eldconditions, propagation spherical, measurement category D in accordance with EN ISO 13349, at the point of maximum effi ciency,at a distance of 1,5 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

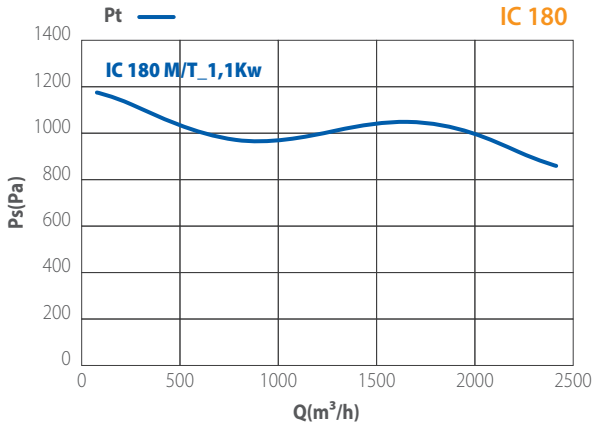
CURVES


Pt
IC 100
IC100 M/T 0,09Kw
Ps(Pa)
0
50
100
150
200
250
300
350
0
50
100
150
200
250
300
350
400
Q(m³/h)


Pt
IC 120
IC 120 M - 0,37K
IC 120 T - 0,25Kw
Ps(Pa)
0
100
200
300
400
500
600
700
800
0
100
200
300
400
500
600
700
Q(m³/h)


Pt
IC 140
IC 140_0,37Kw
Ps(Pa)
0
100
200
300
400
500
600
700
800
900
1000
0
200
400
600
800
1000
1200
1400
Q(m³/h)


Pt
IC 160
IC160_0,75Kw
Ps(Pa)
0
200
400
600
800
1000
1200
0
500
1000
1500
2000
2500
Q(m³/h)


Pt
IC 180
IC 180 M/T_1,1Kw
Ps(Pa)
0
200
400
600
800
1000
1200
1400
0
500
1000
1500
2000
2500
Q(m³/h)

230 V | 400 V | IP55 | 100°C | CE

DESCRIPTION

The fans of the ICSL series find their principal application in the civil and industrial ventilation plants, heating and conditioning. They can convey clean air and light smoke with temperature of +100°C. The series consists of different models with impeller diameter from 200 to 450 mm. All sizes are available with discharge angle adjustable by every 45°, with the exclusion of 180° and 225° orientation, which require a special construction.

CONSTRUCTION

- Volute casing in folded steel sheet, protected against atmospheric agent by epoxy paint.
- Single inlet, single width, forward curved impeller (sirocco type), manufactured in galvanized steel sheet from type 200 to 315 and in steel sheet with welded blades epoxy painted from type 355 to 450.
- Execution 4 (with impeller directly coupled to motor with feet).
- Standard orientation LG 270°.
- Asynchronous three-phase or single-phase motors according to international standards IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F.

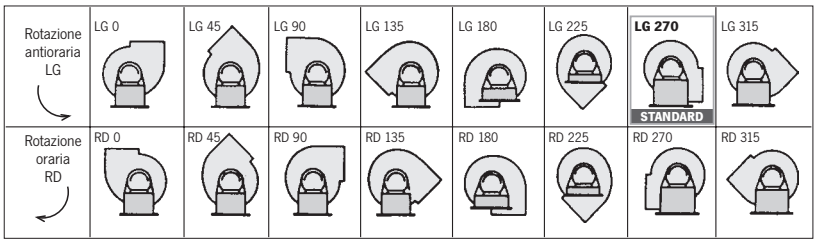
ACCESSORIES

- Inlet and outlet protection guard manufactured according to UNI 12499 norm and protected against the atmospheric agents.
- Round inlet cone, in steel sheet epoxy coated.

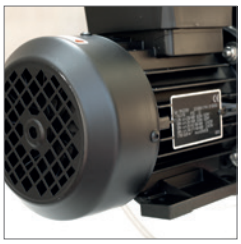
INSTALLATION

The centrifugal fans with forward curved impellers must always be installed to ducted systems, eventually with the use of additional resistance (for example setting shutters), that can limit the air flow in such a way that the absorbed current is within the acceptable values stated on the motor rating label.

DISCHARGE ANGLES *(motor side view)*




Forward curved blade


UNELMEC type IP55 motor

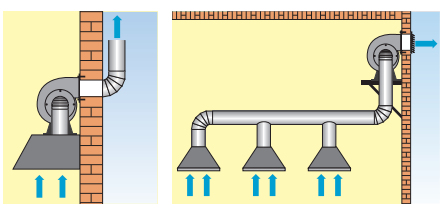

Supplied with support motor

The series in not affected by the ErP Directive 2009/125/CE and further Regulations.

VERSIONS

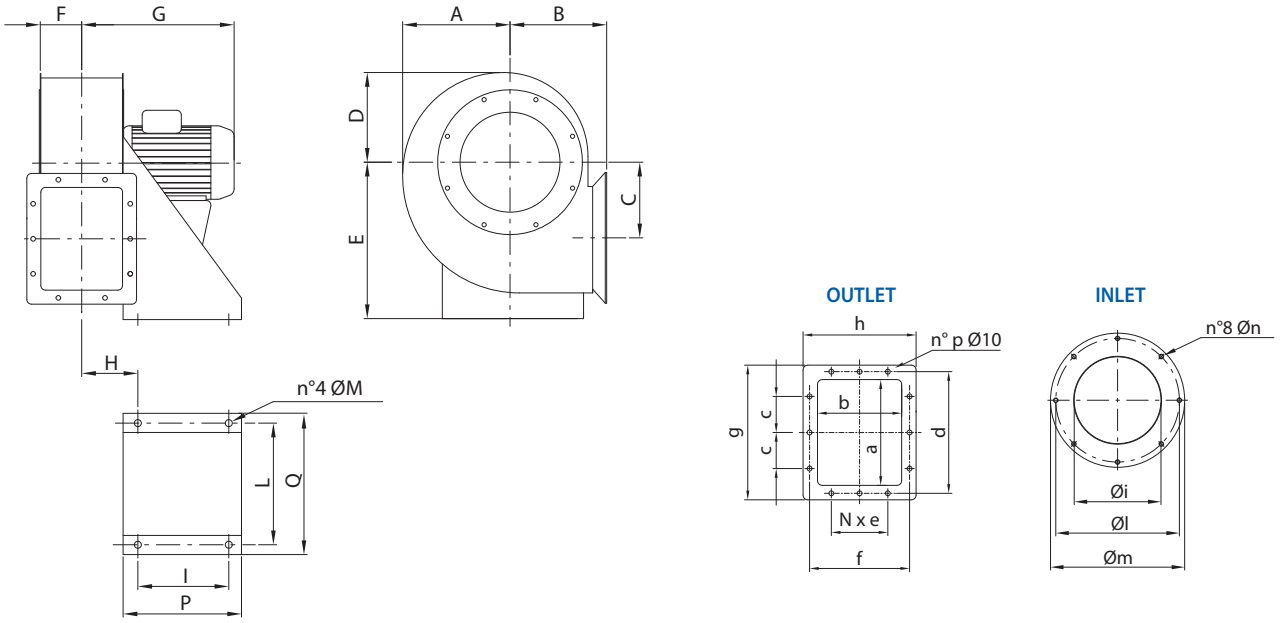
■ **ICS ATEX**
Explosion proof version according to Directives 94/9/CE and 2014/34/UE.
See page 129

INSTALLATION



ACCESSORIES pag. 77 / **REGULATORS** pag. 200

DIMENSIONS (mm)



TYPE	A	B	C	D	E	F	G	H	I	L	M	P	Q	a	b	c	d	N x e	f	g	h	i	l	m	n	p	kg
ICS 200	183	173	120	156	280	70	340	100	140	218	12	200	259	180	135	75	213	1x100	168	240	195	166	235	255	M6	10	20
ICS 225	210	190	142	175	310	80	380	110	140	218	12	200	284	200	155	75	233	1x100	188	260	215	189	260	280	M6	10	29
ICS 250	231	207	162	193	335	90	440	120	205	270	12	265	314	220	175	75	253	1x100	208	280	235	212	290	310	M6	10	39
ICS 280	257	227	170	216	365	100	420	130	205	270	12	265	334	260	195	100	293	1x125	228	320	255	242	310	340	M8	10	37
ICS 315	288	250	192	244	405	110	460	140	205	319	12	265	381	300	215	100	333	1x150	248	360	275	277	335	375	M8	10	51
ICS 355	321	272	212	270	445	123	490	153	245	354	15	305	421	340	240	125	373	2x100	273	400	300	304	395	425	M8	12	67
ICS 400	358	300	235	301	505	138	600	168	245	370	15	305	471	385	270	125	425	2x100	310	465	350	354	445	465	M8	12	117
ICS 450	406	334	267	337	560	153	590	183	340	439	15	400	516	430	300	150	470	2x100	340	510	380	404	490	520	M8	12	153

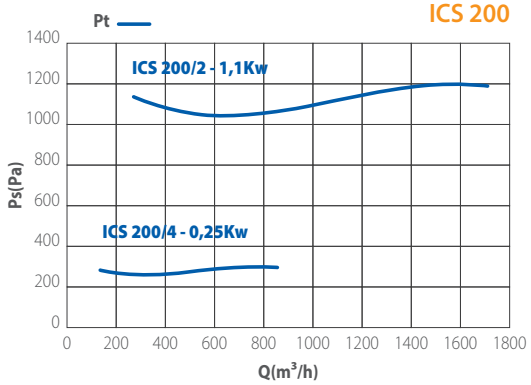
PERFORMANCE

CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	MOTOR CLASS	PRESSIONE SONORA (a 1,5 mt) dB (A)	
		m^3/h	V	A	KW	GIRI	N°	IP		LW	LP
1IS0200	**ICS 200/2** THREE-PHASE	3.100	400	2,50	1,10	2800	2	55	F	95	84
1IS0201	**ICS 200/4** THREE-PHASE	1.550	400	1,00	0,25	1400	4	55	F	79	68
1IS0222	**ICS 225/2** THREE-PHASE	3.902	400	4,90	2,20	2800	2	55	F	95	84
1IS0223	**ICS 225/4** THREE-PHASE	1.950	400	1,60	0,55	1400	4	55	F	79	68
1IS0250	**ICS 250/4** THREE-PHASE	2.450	400	2,20	0,75	1400	4	55	F	81	70
1IS0251	**ICS 250/6** THREE-PHASE	1.930	400	1,20	0,37	950	4	55	F	72	61
1IS0281	**ICS 280/4** THREE-PHASE	3.540	400	3,70	1,50	1400	4	55	F	81	70
1IS0282	**ICS 280/6** THREE-PHASE	2.820	400	2,50	0,75	950	4	55	F	75	64
1IS0302	**ICS 315/4** THREE-PHASE	5.760	400	6,70	3,00	1400	4	55	F	88	77
1IS0303	**ICS 315/6** THREE-PHASE	4.200	400	3,40	1,10	950	4	55	F	78	67
1IS0350	**ICS 355/4** THREE-PHASE	7.800	400	9,40	4,00	1400	4	55	F	94	83
1IS0351	**ICS 355/6** THREE-PHASE	5.030	400	4,20	1,50	950	4	55	F	84	73
1IS0400	**ICS 400/4 A** THREE-PHASE	9.300	400	14,38	7,50	1400	4	55	F	96	85
1IS0401	**ICS 400/4 B** THREE-PHASE	5.850	400	10,74	5,50	1400	4	55	F	95	84
1IS0402	**ICS 400/6** THREE-PHASE	6.290	400	5,30	2,20	950	4	55	F	86	75
1IS0403	**ICS 400/8** THREE-PHASE	4.720	400	4,00	1,10	750	4	55	F	78	67
1IS0450	**ICS 450/4 A** THREE-PHASE	10.770	400	17,30	11,00	1400	4	55	F	100	88
1IS0451	**ICS 450/4 A** THREE-PHASE	7.100	400	15,40	9,20	1400	4	55	F	98	86
1IS0452	**ICS 450/6** THREE-PHASE	7.140	400	10,00	4,00	950	4	55	F	90	79
1IS0453	**ICS 450/8** THREE-PHASE	5.450	400	6,80	2,20	750	4	55	F	82	71

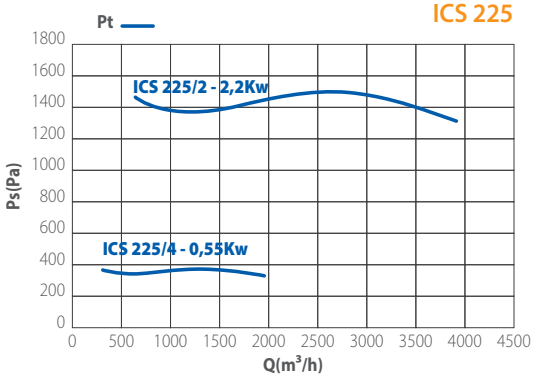
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight.
Power supply 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free fieldconditions, propagation spherical, measurement category D in accordance with EN ISO 13349, at the point of maximum efficiency,at a distance of 1,5 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

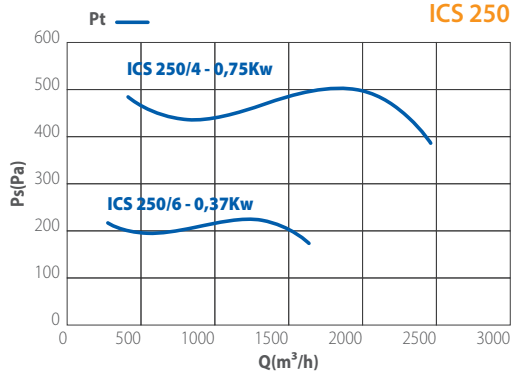
ICS 200



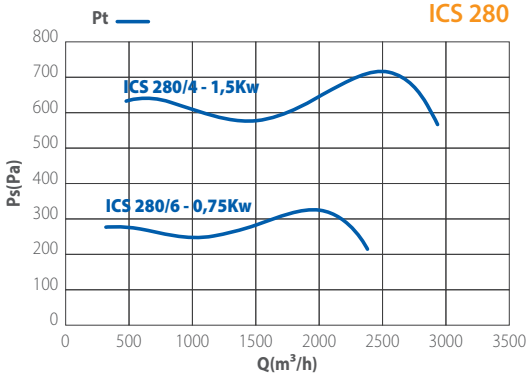
ICS 225



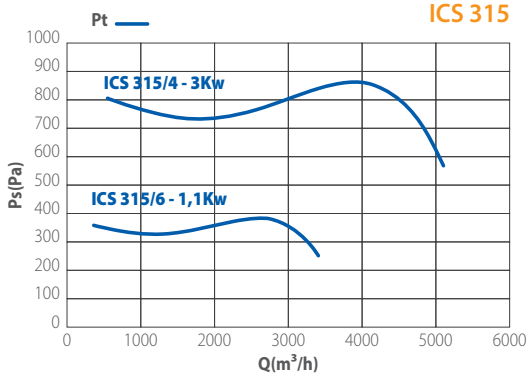
ICS 250



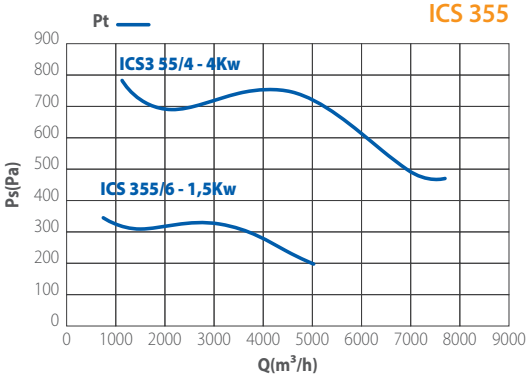
ICS 280



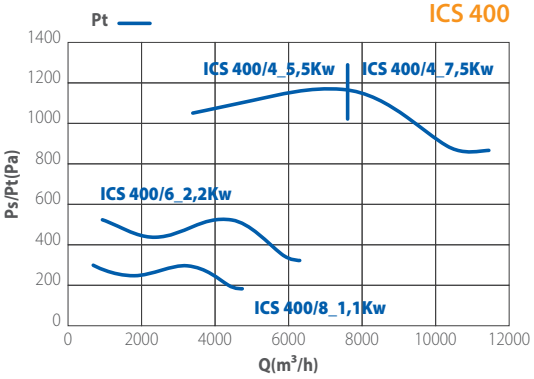
ICS 315



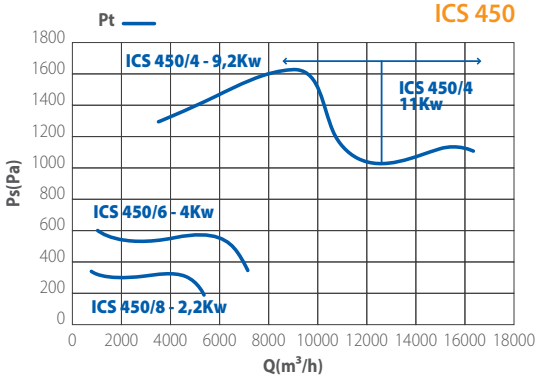
ICS 355



ICS 400

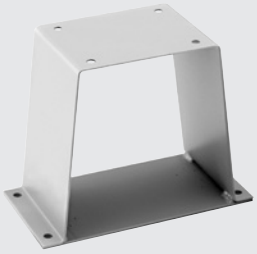


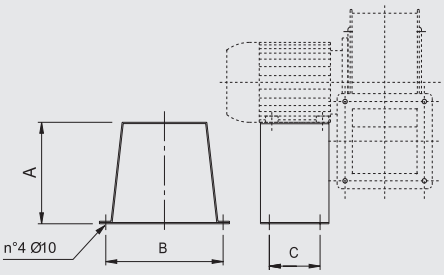
ICS 450



Series IC

Motor support

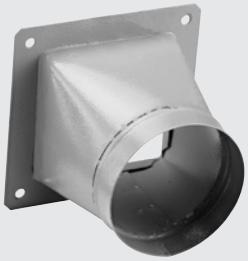




CODE	DESCRIPTION	A	B	C	Kg
1SE 6007	MOTOR SUPPORT IC 100*	120	140	71	0,5
1SE 6005	MOTOR SUPPORT IC 120	160	185	80	1,0
1SE 6017	MOTOR SUPPORT IC 140	152	185	90	2
1SE 6006	MOTOR SUPPORT IC 160/180	180	230	100	2,5

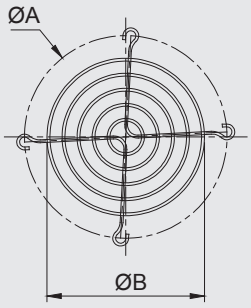
** Available only for version with specific motor. Please contact us.*

Square to round outlet connector



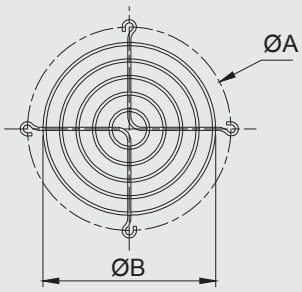
CODE	Ø MM	DESCRIPTION
5RD 1100	100	CONNECTOR IC 100
5RD 1120	125	CONNECTOR IC 120
5RD 1140	125	CONNECTOR IC 140
5RD 1160	160	CONNECTOR IC 160
5RD 1180	160	CONNECTOR IC 180

Outlet guard



CODE	DESCRIPTION	ØA	ØB
5RE0109	OUTLET GUARD IC 100	142	110
5RE0111	OUTLET GUARD IC 120	177	131
5RE0113	OUTLET GUARD IC 140	209	152
5RE0115	OUTLET GUARD IC 160	233	194
5RE0117	OUTLET GUARD IC 180	255	194

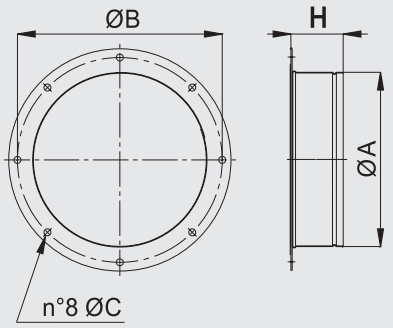
Inlet guard



CODE	DESCRIPTION	ØA	ØB
5RE1500	INLET GUARD IC 100	130	110
5RE1501	INLET GUARD IC 120	160	131
5RE1502	INLET GUARD IC 140	180	152
5RE1503	INLET GUARD IC 160-180	222	194

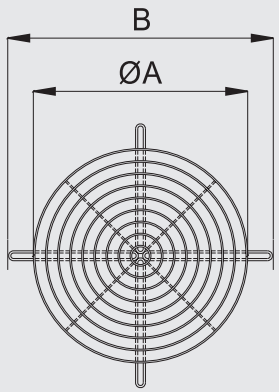
Series ICS

Round inlet adaptor



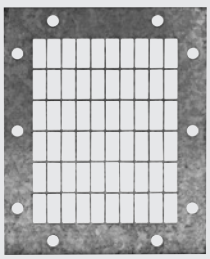
CODE	DESCRIPTION	A	B	C	H	kg
5BO2100	INLET ADAPTOR ICS 200	200	235	8	40	0,5
5BO2202	INLET ADAPTOR ICS 225	200	260	8	40	0,6
5BO2601	INLET ADAPTOR ICS 250	250	290	8	54	0,7
5BO2801	INLET ADAPTOR ICS 280	250	310	9,5	54	0,8
5BO8319	INLET ADAPTOR ICS 315	315	355	9,5	55	0,8
5BO8361	INLET ADAPTOR ICS 355	350	395	9,5	55	1,0
5BO8403	INLET ADAPTOR ICS 400	400	445	9,5	55	1,0
5BO8600	INLET ADAPTOR ICS 450	450	490	9,5	55	1,1

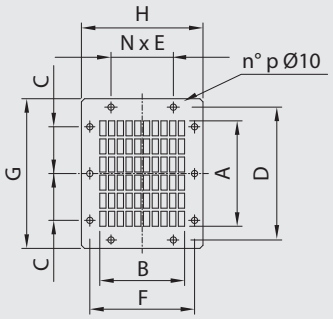
Inlet guard



CODE	DESCRIPTION	A	B	kg
5RE9025	INLET GUARD ICS 200	260	235	0,4
5RE9025	INLET GUARD ICS 225	260	260	0,4
5RE9025	INLET GUARD ICS 250	260	290	0,4
5RE9031	INLET GUARD ICS 280	320	310	0,6
5RE9031	INLET GUARD ICS 315	320	355	0,6
5RE9035	INLET GUARD ICS 355	360	395	0,8
5RE9040	INLET GUARD ICS 400	400	445	0,9
5RE9045	INLET GUARD ICS 450	460	490	1,1

Outlet guard





CODE	DESCRIPTION	A	B	C	D	NxE	F	G	H	kg
5RE7500	OUTLET GUARD ICS 200	169	136	75	213	1x100	168	240	195	0,7
5RE7505	OUTLET GUARD ICS 225	198	164	75	233	1x100	188	260	215	0,8
5RE7510	OUTLET GUARD ICS 250	227	178	75	253	1x100	208	280	235	1,0
5RE7515	OUTLET GUARD ICS 280	256	192	100	293	1x125	228	320	255	1,2
5RE7520	OUTLET GUARD ICS 315	285	220	100	333	1x150	248	360	275	1,4
5RE7525	OUTLET GUARD ICS 355	343	248	125	373	2x100	273	400	300	1,6
5RE7530	OUTLET GUARD ICS 400	401	276	125	425	2x100	310	465	350	2,2
5RE7535	OUTLET GUARD ICS 450	430	304	150	470	2x100	340	510	380	2,6

PDL

Backward curved blade centrifugal fans for clean or slightly dusty air

400 V | IP55 | max 80°C | CE

DESCRIPTION

The fans of the PDL series find their main application in commercial and industrial plants of air-conditioning, ventilation, heating and filtering; they can be used as well in industrial processing (baker ovens, spray booths, boilers, silos, cooling systems, etc.). PDL fans can convey clean or slightly dusty air and smoke with max. temperature from minimum temperature of -20°C to a max. temperature of +80°C in standard configuration and up to 300°C with specials constructions. The series foresees direct drive version (execution 4) and belt drive version (execution 1, 9 and 12). Suitable for very high capacities and low pressure.

CONSTRUCTION

- Volute casing in steel sheet , protected against atmospheric agents by epoxy paint.
- Aerodynamically shaped inlet cone in steel sheet, protected against atmospheric agents by epoxy paint.
- Single inlet backward curved wheel with high efficiency, manufactured in steel sheet and epoxy painted. For high rotational speed, versions in class 3 are foreseen.
- For execution 1 - 9 - 12: mono-block support in cast iron with ball bearings, , designed for easy lubrication. Pulleys, belts and motor support. Belt protection guard.
- Asynchronous three-phase motors according to international standards IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F, suitable to S1 service (continuous working at constant load).

ACCESSORIES

- TS - Condensation drain hole
- PI - Inspection door
- CFA - Inlet counter-fl ange
- CFP - Outlet counter-fl ange
- RA - Inlet protection guard
- RP - Outlet protection guard
- GA - Inlet fl exible connector
- GP - Outlet flexible connector
- Inlet vane control
- Outlet setting shutter
- Anti-vibration mounts

ErP

Compliant with ErP Directive 2009/125/CE and EU Regulation 327/2011 (FAN).

VERSIONS

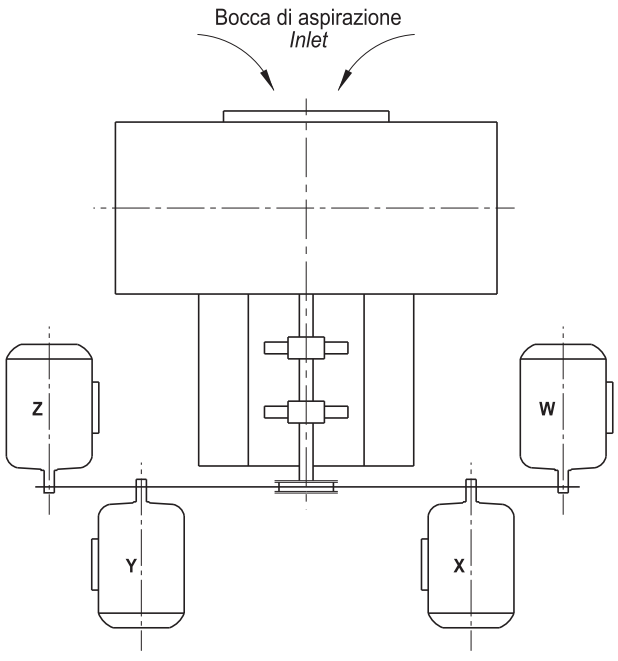
■ PDL ATEX
Explosion proof versions II2G/GD ac1cording to ATEX Directives 94/9/CE and 2014/34/UE.
See page 138

■ PDL AT 150
High temperature version suitable for conveying hot gases, Max 150°C (PDL AT Execution 4).
Upon request

■ PDL AT 300
High temperature version suitable for conveying hot gases, Max 300°C (PDL AT Execution 1,12).
Upon request

■ PDL INOX
Corrosion resistant version, manufactured with casing, inlet side and impeller in stainless steel AISI304.
Upon request

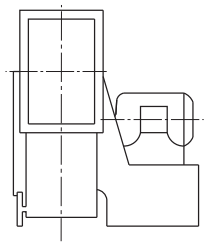
MOTOR POSITION



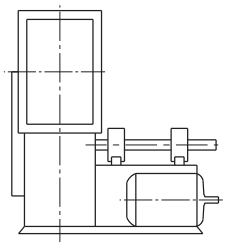
ACCESSORIES pag. 94 / **REGULATORS** pag. 200

EXECUTIONS

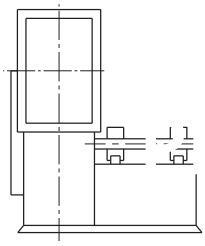
4 Impeller directly coupled to the motor supported by the motor support base.



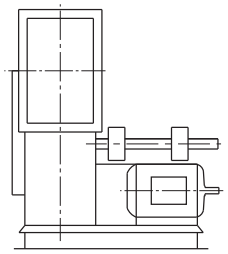
9 Same as execution 1 with arrangement for the motor assembled on the side of the support base.



1 Arrangement for belt drive with impeller directly coupled to the support shaft carried by the motor support base.



12 Same as execution 1 with arrangement for fan and motor mounted on common basement.



PERFORMANCE

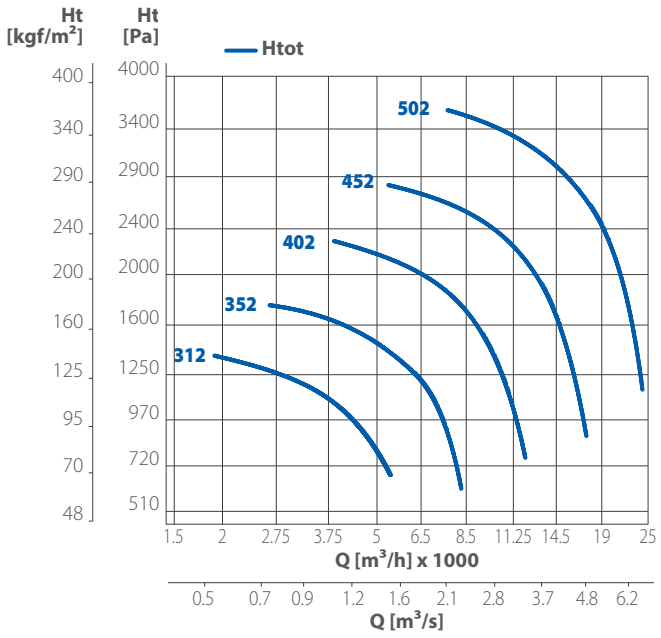
CODE	MODEL	MAX AIRFLOW	MAX PRESSURE	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	POLE	DEGREE OF PROTECTION	MOTOR CLASS	PRESSIONE SONORA (a 1,5 mt) dB (A)
		m^3/h		V	A	KW	N°	IP		
UPON REQUEST	**PDL 312** THREE-PHASE	5400	1370	400	4,90	2,20	2	55	F	68
UPON REQUEST	**PDL 314** THREE-PHASE	2700	330	400	0,60	0,18	4	55	F	50
UPON REQUEST	**PDL 352** THREE-PHASE	7700	1620	400	6,40	3,00	2	55	F	71
UPON REQUEST	**PDL 354** THREE-PHASE	3850	400	400	1,18	0,37	4	55	F	54
UPON REQUEST	**PDL 402** THREE-PHASE	12000	2050	400	10,60	5,50	2	55	F	78
UPON REQUEST	**PDL 404** THREE-PHASE	5400	510	400	1,60	0,55	4	55	F	61
UPON REQUEST	**PDL 452** THREE-PHASE	17000	2900	400	20,40	11,00	2	55	F	79
UPON REQUEST	**PDL 454** THREE-PHASE	7700	3500	400	2,70	1,10	4	55	F	62
UPON REQUEST	**PDL 502** THREE-PHASE	24200	3450	400	33,50	18,50	2	55	F	85
UPON REQUEST	**PDL 504** THREE-PHASE	10800	840	400	5,40	2,20	4	55	F	68
UPON REQUEST	**PDL 506** THREE-PHASE	6850	346	400	1,80	0,55	6	55	F	58
UPON REQUEST	**PDL 564** THREE-PHASE	17000	1030	400	8,50	4,00	4	55	F	73
UPON REQUEST	**PDL 566** THREE-PHASE	9500	450	400	3,50	1,10	6	55	F	63
UPON REQUEST	**PDL 634** THREE-PHASE	24200	9690	400	14,70	7,50	4	55	F	77
UPON REQUEST	**PDL 636** THREE-PHASE	15300	560	400	5,30	2,20	6	55	F	67
UPON REQUEST	**PDL 714** THREE-PHASE	34200	1750	400	29,00	15,00	4	55	F	80
UPON REQUEST	**PDL 716** THREE-PHASE	21600	760	400	9,10	4,00	6	55	F	70
UPON REQUEST	**PDL 804** THREE-PHASE	47500	2310	400	41,00	22,00	4	55	F	81
UPON REQUEST	**PDL 806** THREE-PHASE	30600	1000	400	15,20	7,50	6	55	F	71
UPON REQUEST	**PDL 904** THREE-PHASE	68500	2970	400	80,50	45,00	4	55	F	88
UPON REQUEST	**PDL 906** THREE-PHASE	42500	1280	400	29,00	15,00	6	55	F	78
UPON REQUEST	**PDL 1004** THREE-PHASE	95400	3710	400	134,00	75,00	4	55	F	92
UPON REQUEST	**PDL 1006** THREE-PHASE	61000	1610	400	42,50	22,00	6	55	F	82

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 1,5 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

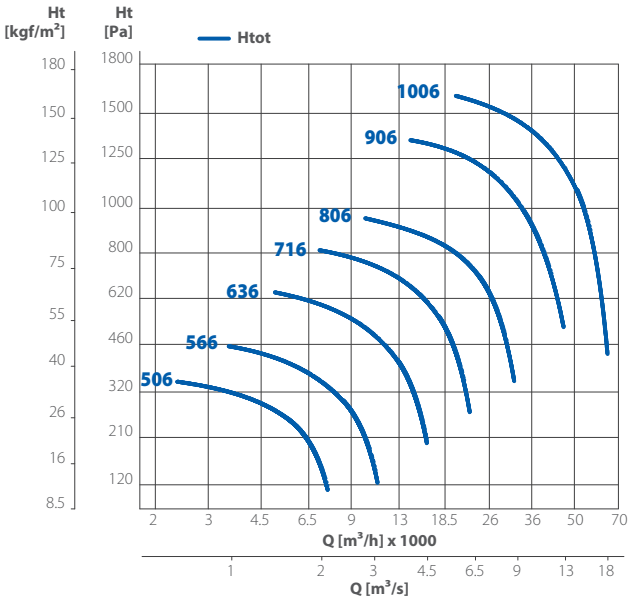
1

CURVES

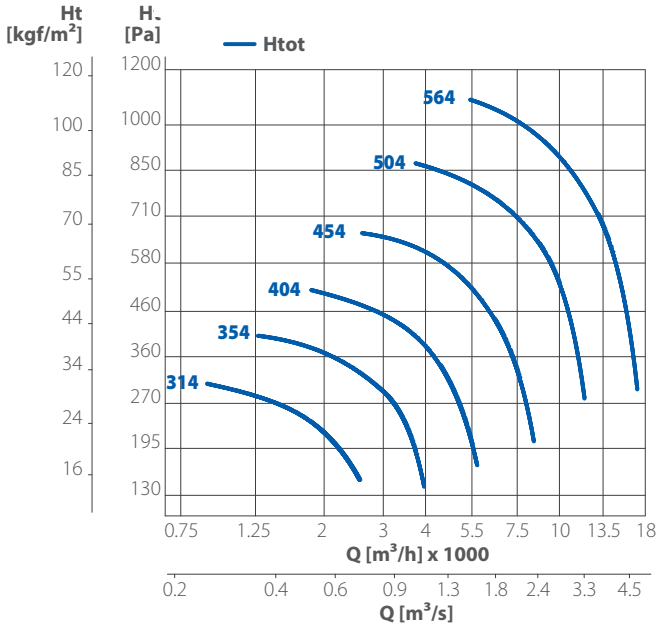
2 POLES



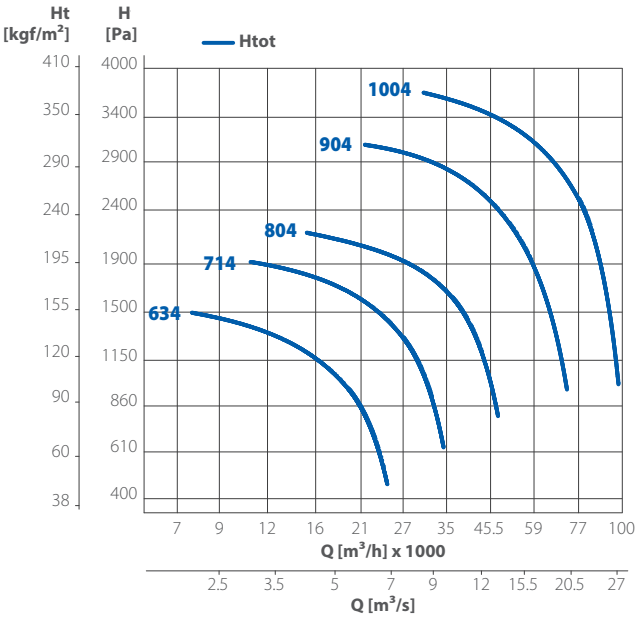
6 POLES



4 POLES A

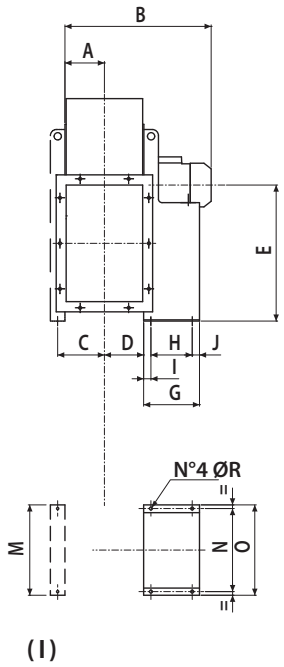


4 POLES B

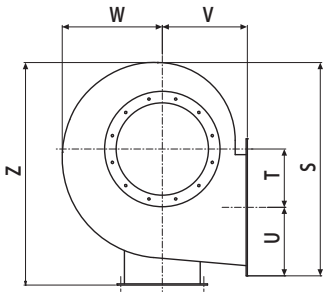


DIMENSIONS (mm)

ARRANGEMENT - 4



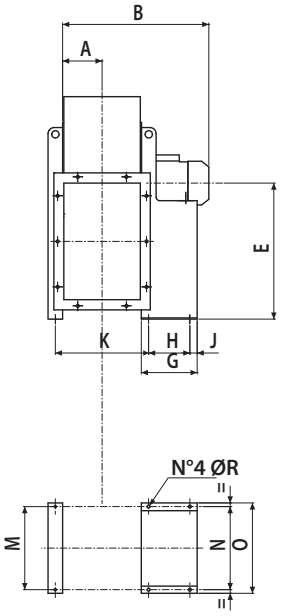
(I)

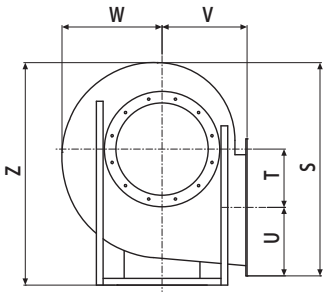


PDL 31/50

TYPE	A	B	C	D	E	G	H	I	J	M	N	O	R	S	T	U	V	W	Z
PDL 312 T	117	553	135	117	400	246	133	55	58	350	234	260	10	653	196	201	225	332	656
PDL 314 T	117	553	135	117	400	145	86	45	14	350	184	206	10	653	196	201	225	332	656
PDL 352 T	130	611	153	131	450	276	197	30	49	395	289	324	12	725	216	221	255	375	739
PDL 354 T	130	611	153	131	450	189	121	45	23	395	203	225	10	725	216	221	255	375	739
PDL 402 T	147	704	174	147	500	336	237	40	59	445	337	372	12	798	245	242	285	400	811
PDL 404 T	147	565	174	147	500	211	121	45	45	445	203	225	10	798	245	242	285	400	811
PDL 452 T	163	844	191	165	560	436	337	50	49	495	395	440	14	895	275	267	320	445	914
PDL 454 T	163	647	191	165	560	246	133	55	58	495	234	260	10	895	275	267	320	445	914
PDL 502 T	183	884	211	185	600	436	337	50	49	545	395	440	14	997	303	294	360	502	1001
PDL 504 T	183	718	211	185	600	276	197	30	49	545	289	324	12	997	303	294	360	502	1001
PDL 506 T	183	640	211	185	600	211	121	45	45	545	203	225	10	997	303	294	360	502	1001

(I) The front support is optional up to model 500





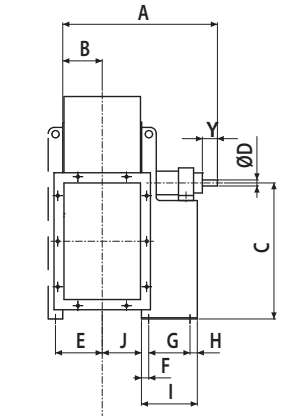
PDL 56/100

TYPE	A	B	C	D	E	G	H	J	K	M	N	O	R	S	T	U	V	W	Z
PDL 564 T	205	795	23	207	670	275	197	49	468	632	289	324	12	1151	332	335	400	570	1155
PDL 566 T	205	743	23	207	670	245	133	58	493	632	234	260	10	1151	332	335	400	570	1155
PDL 634 T	230	885	23	232	750	335	237	59	846	702	337	372	12	1282	373	369	450	630	1290
PDL 636 T	230	845	23	232	750	275	197	49	786	702	289	324	12	1282	373	369	450	630	1290
PDL 714 T	257	1045	27	254	850	439	316	60	606	772	772	826	20	1402	427	408	500	690	1436
PDL 716 T	257	940	27	254	850	336	201	75	606	772	772	826	20	1402	427	408	500	690	1436
PDL 804 T	287	1239	47	285	950	463	361	39	668	862	862	862	20	1590	478	461	560	782	1602
PDL 806 T	287	1107	47	285	950	439	316	60	668	862	862	862	20	1590	478	461	560	782	1602
PDL 904 T	322	1427	47	319	850	540	441	39	731	962	962	1026	20	1770	538	509	630	870	1783
PDL 906 T	322	1328	47	319	850	460	361	39	731	962	962	1026	20	1770	538	509	630	870	1783
PDL 1004 T	360	1635	67	358	950	690	590	45	803	1056	1056	1128	20	1985	607	564	710	976	1995
PDL 1006 T	360	1482	67	358	950	500	400	45	803	1056	1056	1128	20	1985	607	564	710	976	1995

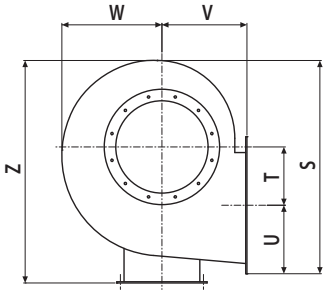
1

DIMENSIONS (mm)

ARRANGEMENT - 1



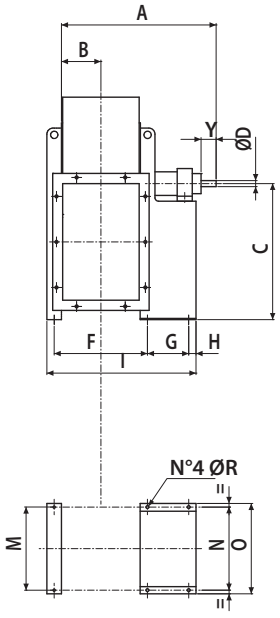
(I)

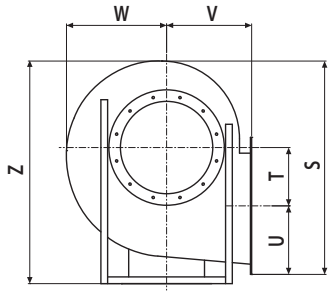


PDL 31/50

TYPE	A	B	C	D	E	F	G	H	I	J	Y	M	N	O	R	S	T	U	V	Z	W
PDL 310	644	117	400	24	135	40	284	23	347	117	24	350	288	324	12	653	196	201	225	656	332
PDL 350	816	130	450	28	153	50	407	28	485	131	28	395	355	400	14	725	216	221	255	739	375
PDL 400	869	147	500	38	174	50	407	28	485	147	38	445	355	400	14	798	245	242	285	811	400
PDL 450	902	163	560	38	191	50	407	28	485	165	38	495	355	400	14	895	275	267	320	914	445
PDL 500	1047	183	600	42	211	50	477	33	560	185	42	545	364	418	17	997	303	294	360	1001	502

(1) The front support is optional up to model 500

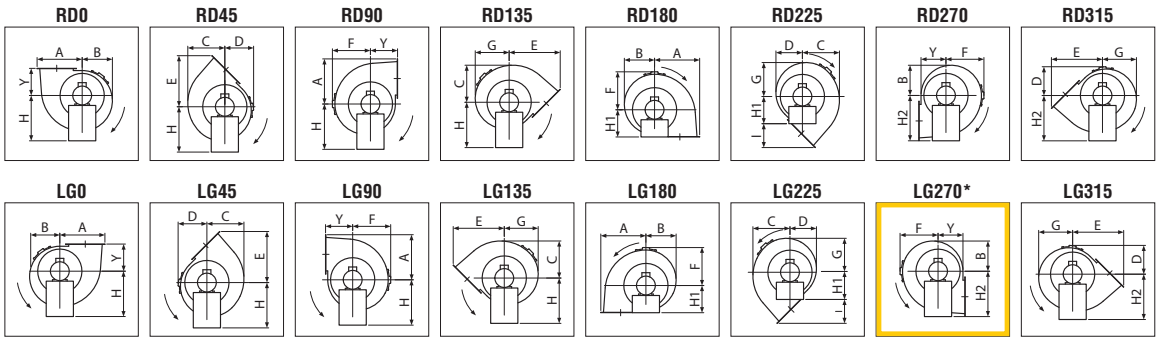




PDL 56/100

TYPE	A	B	C	D	F	G	H	I	Y	M	N	O	R	S	T	U	V	Z	W
PDL 560	1177	205	670	48	488	477	33	1021	48	632	632	692	17	1151	332	335	400	1155	570
PDL 630	1233	230	750	48	537	477	33	1070	48	702	702	762	17	1282	373	369	450	1290	630
PDL 710	1340	257	850	48	600	551	39	1217	55	772	772	826	19	1402	427	408	500	1436	690
PDL 800	1422	287	950	55	662	551	39	1299	55	862	862	926	19	1590	478	461	560	1602	782
PDL 900	1491	322	850	55	731	551	39	1368	55	962	962	1026	19	1770	538	509	630	1783	870
PDL 1000	1710	360	950	65	803	607	45	1522	55	1056	1056	1128	19	1985	607	564	710	1995	976

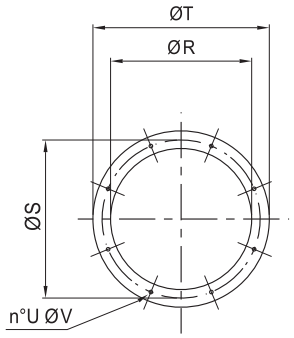
DIMENSIONS AND DISCHARGE ANGLES



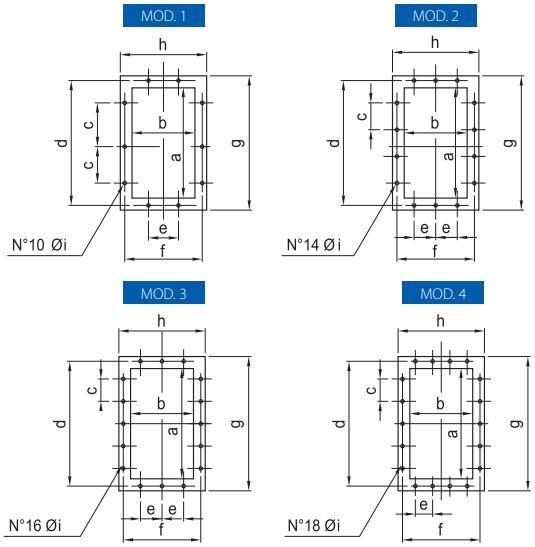
* Standard version.

TYPE	A	B	C	D	E	F	G	I	Y	H	H1	H2
PDL 31	397	256	316	253	440	332	288	215	225	400	225	400
PDL 35	437	289	359	278	492	375	325	237	255	450	255	450
PDL 40	487	311	387	306	543	400	353	258	285	500	285	500
PDL 45	542	354	435	342	609	445	398	289	320	560	320	560
PDL 50	597	401	490	380	676	502	450	316	360	600	360	600
PDL 56	667	485	555	425	754	570	542	354	400	670	400	670
PDL 63	742	540	619	476	843	630	603	393	450	750	450	750
PDL 71	835	568	719	497	944	690	662	444	500	850	500	850
PDL 80	939	652	811	562	1061	782	749	501	560	950	560	950
PDL 90	1047	723	905	633	1186	870	835	556	630	850	630	1060
PDL 100	1171	815	1015	718	1330	976	936	620	710	950	710	1180

DIMENSIONS (mm)



INLET					
TYPE	ØR	ØS	ØT	U	ØV
31	320	366	400	8	10
35	360	405	440	8	10
40	405	448	485	8	10
45	455	497	535	8	10
50	505	551	585	8	10
56	565	629	665	16	10
63	635	698	735	16	12
71	715	775	815	16	12
80	805	861	905	16	12
90	905	958	1005	16	12
100	1007	1067	1107	16	12



OUTLET										
TYPE	a	b	c	d	e	f	g	h	Øi	MOD.
31	322	229	125	366	125	273	402	309	12	1
35	361	256	125	405	125	300	441	336	12	1
40	404	288	125	448	125	332	484	368	12	2
45	453	322	125	497	125	366	533	402	12	2
50	507	361	125	551	125	405	587	441	12	2
56	569	404	160	629	160	464	669	504	14	2
63	638	453	160	698	160	513	738	553	14	2
71	715	507	160	775	160	567	815	607	14	3
80	801	569	200	871	200	639	921	689	14	2
90	898	638	200	968	200	708	1018	758	14	4
100	1007	715	200	1077	200	785	1127	835	14	4

PF

Backward curved blade centrifugal fans for dusty air

400 V IP55 max 80°C CE

DESCRIPTION

Fans of PF series find their main application in industrial plants of conditioning, ventilation, heating and filtering; they can also be used as part of manufacturing process (wood industry, chemical industry, mills, mines, foundries, etc.).
They can convey very dusty (not abrasive) air and smoke, with temperature from -20°C to +80°C in the standard configuration and up to 300°C with specials constructions. The series foresees direct drive version (execution 4) and belt drive version (execution 1, 9 and 12).
Suitable for high capacity, medium pressures.

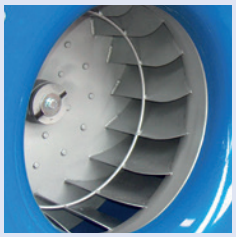
CONSTRUCTION

- Volute casing in steel sheet , protected against atmospheric agents by epoxy paint.
- Aerodynamically shaped inlet cone in steel sheet, protected against atmospheric agents by epoxy paint.
- Single inlet backward curved wheel with high efficiency, manufactured in steel sheet and epoxy painted. For high rotational speed, versions in class 3 are foreseen.
- For execution 1 - 9 - 12: mono-block support in cast iron with ball bearings, , designed for easy lubrication. Pulleys, belts and motor support. Belt protection guard.
- Asynchronous three-phase motors according to international standards IEC 60034, IEC60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F, suitable to S1 service (continuous working at constant load).

ACCESSORIES

- TS - Condensation drain hole
- PI - Inspection door
- CFA - Inlet counter-flange
- CFP - Outlet counter-flange
- RA - Inlet protection guard
- RP - Outlet protection guard
- GA - Inlet flexible connector
- GP - Outlet flexible connector
- Inlet vane control
- Outlet setting shutter
- Anti-vibration mounts

Compliant with ErP Directive 2009/125/CE and EU Regulation 327/2011 (FAN).



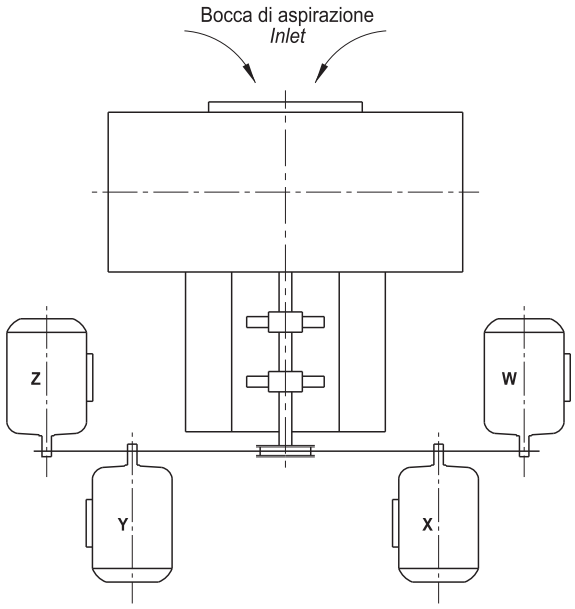
Backward curved blade

VERSIONS

■ PF ATEX
Explosion-proof version according to Directives 94/9/CE and 2014/34/UE - II2G/2D/2GD with EEx-d motors. See page 144

■ PF AT
Version suitable to convey air with temperature up to 150°C in execution 4 and up to 300°C in execution 1 - 12. Upon request.

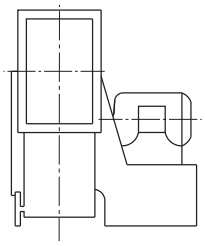
MOTOR POSITION



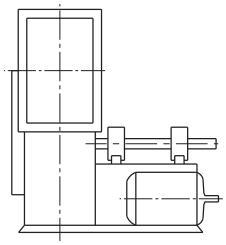
ACCESSORIES pag. 94 / **REGULATORS** pag. 200

EXECUTIONS

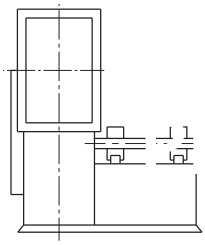
4 Impeller directly coupled to the motor supported by the motor support base.



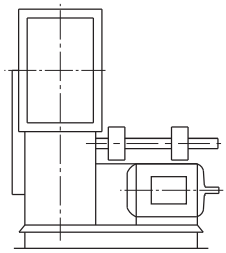
9 Same as execution 1 with arrangement for the motor assembled on the side of the support base.



1 Arrangement for belt drive with impeller directly coupled to the support shaft carried by the motor support base.



12 Same as execution 1 with arrangement for fan and motor mounted on common basement.



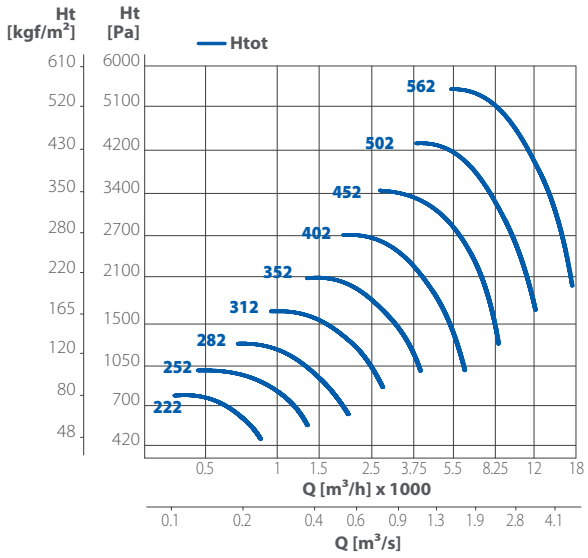
PERFORMANCE

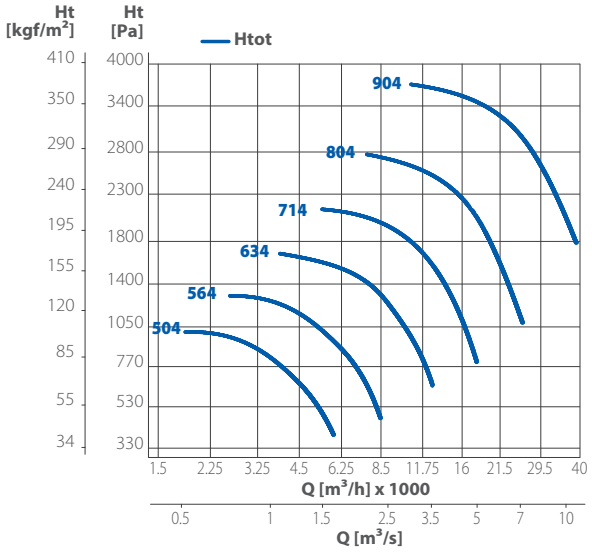
CODE	MODEL	MAX AIRFLOW	MAX PRESSURE	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	POLE	DEGREE OF PROTECTION	MOTOR CLASS	LEVEL SOUND
		m³/h	Pa	V	A	KW	N°	IP		dB (A)
7PF2211	**PF 222** THREE-PHASE	800	83	400	0,60	0,18	2	55	F	62
7PF2514	**PF 252** THREE-PHASE	1.370	110	400	1,10	0,37	2	55	F	62
7PF2820	**PF 282** THREE-PHASE	1.800	143	400	1,90	0,75	2	55	F	64
7PF3115	**PF 312** THREE-PHASE	2.520	182	400	3,40	1,50	2	55	F	70
7PF3524	**PF 352** THREE-PHASE	3.960	230	400	4,90	2,20	2	55	F	73
7PF4031	**PF 402** THREE-PHASE	6.000	308	400	8,00	4,00	2	55	F	77
7PF4521	**PF 452** THREE-PHASE	7.900	385	400	14,10	7,50	2	55	F	80
7PF5021	**PF 502** THREE-PHASE	11.000	490	400	27,50	15,00	2	55	F	84
UPON REQUEST	**PF 504** THREE-PHASE	5400	960	400	3,60	2	4	55	F	68
UPON REQUEST	**PF 562** THREE-PHASE	16200	5065	400	39,50	22	2	55	F	87
UPON REQUEST	**PF 564** THREE-PHASE	7900	1250	400	6,80	3	4	55	F	70
UPON REQUEST	**PF 634** THREE-PHASE	11000	1530	400	11,30	6	4	55	F	73
UPON REQUEST	**PF 714** THREE-PHASE	18000	2040	400	22,00	11	4	55	F	76
UPON REQUEST	**PF 804** THREE-PHASE	25200	2620	400	35,00	19	4	55	F	81
UPON REQUEST	**PF 806** THREE-PHASE	16000	1120	400	12,30	6	6	55	F	71
UPON REQUEST	**PF 904** THREE-PHASE	32400	3400	400	68,00	37	4	55	F	84
UPON REQUEST	**PF 906** THREE-PHASE	21600	1480	400	22,00	11	6	55	F	74

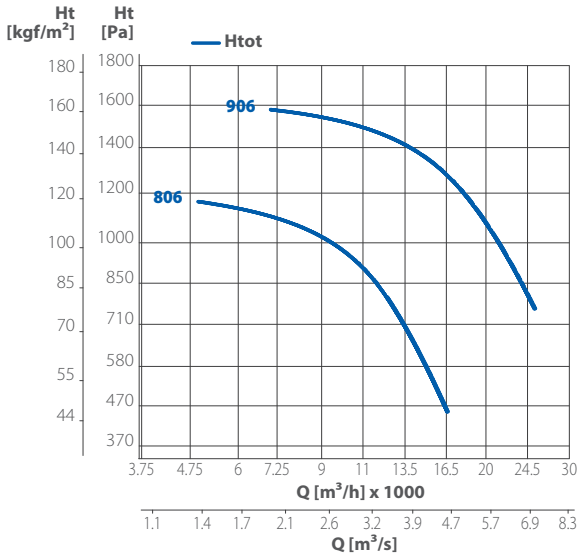
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 1,5 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

1

CURVES

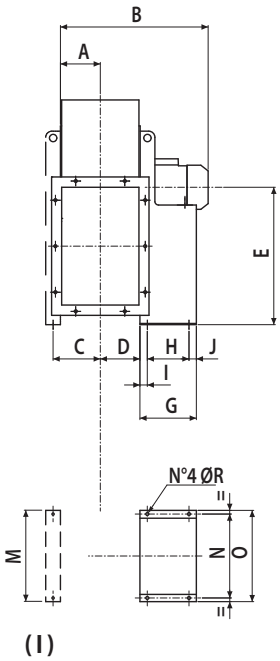

Ht [kgf/m²]
Ht [Pa]
Htot
610 520 430 350 280 220 165 120 80 48
6000 5100 4200 3400 2700 2100 1500 1050 700 420
562
502
452
402
352
312
282
252
222
0.5 1 1.5 2.5 3.75 5.5 8.25 12 18
Q [m³/h] x 1000
0.1 0.2 0.4 0.6 0.9 1.3 1.9 2.8 4.1
Q [m³/s]

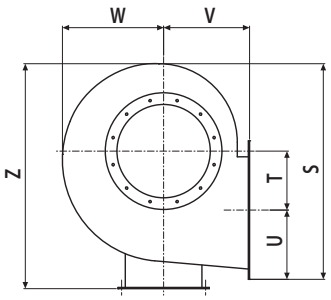

Ht [kgf/m²]
Ht [Pa]
Htot
410 350 290 240 195 155 120 85 55 34
4000 3400 2800 2300 1800 1400 1050 770 530 330
904
804
714
634
564
504
1.5 2.25 3.25 4.5 6.25 8.5 11.75 16 21.5 29.5 40
Q [m³/h] x 1000
0.5 1 1.5 2.5 3.5 5 7 10
Q [m³/s]


Ht [kgf/m²]
Ht [Pa]
Htot
180 160 140 120 100 85 70 55 44
1800 1600 1400 1200 1000 850 710 580 470 370
906
806
3.75 4.75 6 7.25 9 11 13.5 16.5 20 24.5 30
Q [m³/h] x 1000
1.1 1.4 1.7 2.1 2.6 3.2 3.9 4.7 5.7 6.9 8.3
Q [m³/s]

DIMENSIONS (mm)

ARRANGEMENT - 4

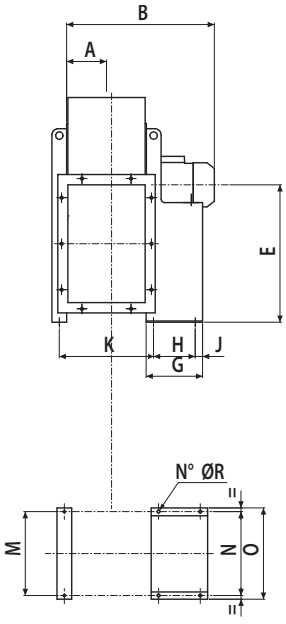


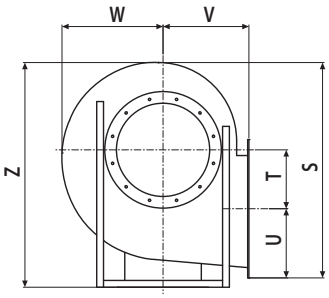


PF 22/50

TYPE	A	B	C	D	E	G	H	I	J	M	N	O	R	S	T	U	V	W	Z
PF 222 T	59	307	69	55	255	150	86	48	16	250	184	206	10	407	150	82	165	226	430
PF 252 T	86	396	92	77	315	195	121	48	26	280	203	225	10	525	175	138,5	195	276	527
PF 282 T	95	438	103	86	375	217	121	48	48	315	203	225	10	583	202	150,5	200	305	606
PF 312 T	105	505	103	96	400	246	133	55	58	350	234	260	10	649	229	164	225	332	656
PF 352 T	115	530	128	106	450	246	133	55	58	395	234	260	10	725	253	184	255	375	738
PF 402 T	127	606	145	118	500	276	197	30	49	445	289	324	12	798	286	201	285	400	811
PFL 452 T	141	673	158	132	560	336	237	40	59	495	337	372	12	895	321	220,5	320	445	914
PF 502 T	157	810	174	148	600	436	337	50	49	545	395	440	14	997	355	242	360	502	1000
PF 504 T	157	613	174	148	600	246	133	55	58	545	234	260	10	997	355	242	360	502	1000

(1) The front support is optional up to model 500





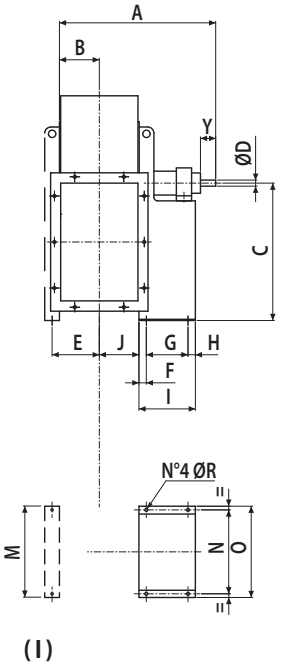
PF 56/90

TYPE	A	B	E	G	H	J	K	M	N	O	R	S	T	U	V	W	Z
PF 562 T	177	938	670	460	357	33	426	632	434	488	17	1141	390	267	400	570	1155
PF 564 T	177	691	670	276	197	49	386	632	324	324	12	1141	390	267	400	570	1155
PF 634 T	195	792	750	336	237	59	435	702	337	372	12	1282	439	294	450	630	1300
PF 714 T	216	942	670	436	316	60	497	772	772	826	20	1399	500	335	500	690	1415
PF 804 T	241	1092	755	460	361	39	546	862	862	926	20	1570	560	309	560	782	1591
PF 806 T	241	906	755	336	201	75	546	862	862	926	20	1570	560	309	560	782	1591
PF 904 T	275	1236	850	540	441	39	600	962	962	1026	20	1758	630	408	630	870	1781
PF 906 T	275	1065	850	436	316	60	600	962	962	1026	20	1758	630	408	630	870	1781

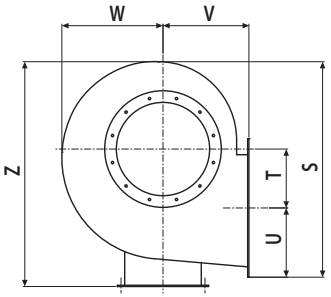
1

DIMENSIONS (mm)

ARRANGEMENT - 1



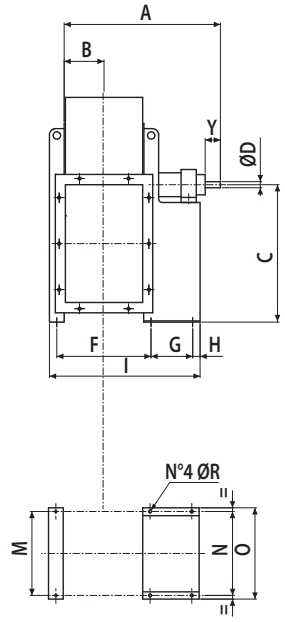
(I)

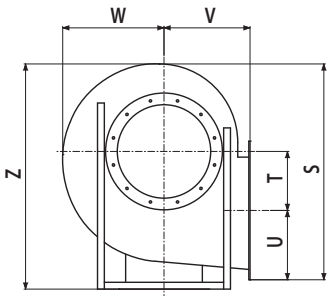


PF 35/50

TYPE	A	B	C	D	E	F	G	H	I	J	Y	M	N	O	R	S	T	U	V	W	Z
PF 350	783	115	450	28	128	50	407	28	485	106	28	395	355	400	14	725	253	184	255	375	738
PF 400	820	127	500	38	145	50	407	28	485	118	38	445	355	400	14	798	286	201	285	400	811
PF 450	847	141	560	38	158	50	407	28	485	132	38	495	355	400	14	895	321	220,5	320	445	914
PF 500	985	157	600	42	174	50	477	33	560	148	42	545	364	418	17	997	355	242	360	502	1000

(I) The front support is optional up to model 500

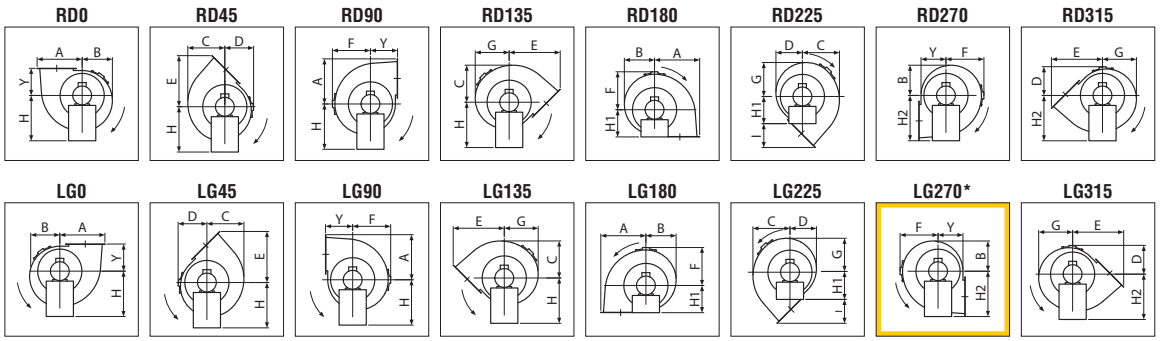




PF 56/90

TYPE	A	B	C	D	F	G	H	I	Y	M	N	O	R	S	T	U	V	W	Z
PF 560	1058	177	670	48	410	477	33	943	48	632	632	692	17	1141	390	267	400	570	1155
PF 630	1102	195	750	48	450	477	33	983	48	702	702	762	17	1282	439	294	450	630	1300
PF 710	1241	216	670	48	497	551	39	1114	48	772	772	826	19	1399	500	335	500	690	1415
PF 800	1306	241	755	55	546	551	39	1183	55	862	862	926	19	1570	560	309	560	782	1591
PF 900	1360	275	850	55	600	551	39	1237	55	962	962	1026	19	1758	630	408	630	870	1781

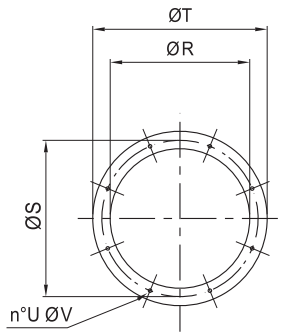
DIMENSIONS AND DISCHARGE ANGLES



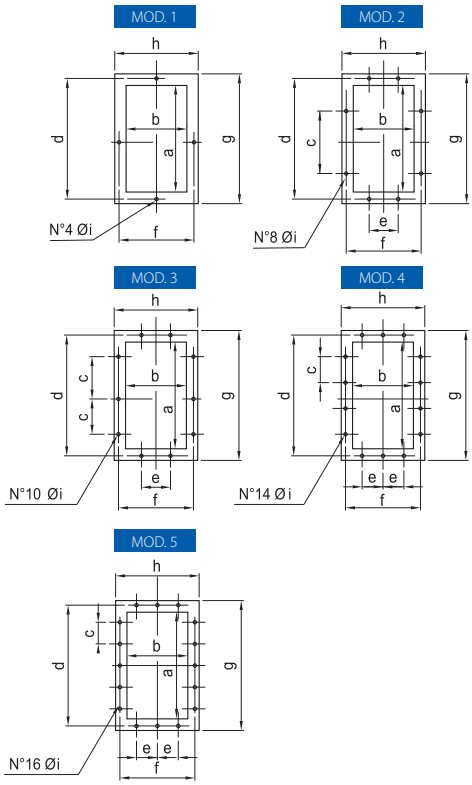
* Standard version.

TYPE	A	B	C	D	E	F	G	I	Y	H	H1	H2
PF 22	232	175	200	190	280	226	190	115	165	255	165	255
PF 25	313,5	211,5	255	215	360	276	235	165	195	315	195	315
PF 28	352,5	230,5	287	226	391	305	262	191	200	375	200	375
PF 31	393	256	316	253	437	332	288	212	225	400	225	400
PF 35	437	288	359	278	489	375	325	234	255	450	255	450
PF 40	487	311	387	306	546	400	353	261	285	500	285	500
PF 45	541,5	353,5	435	342	609	445	398	289	320	560	320	560
PF 50	597	400	490	380	677	502	450	317	360	600	360	600
PF 56	657	485	555	425	747	570	542	347	400	670	400	670
PF 63	733	550	619	476	836	630	603	386	450	750	450	750
PF 71	835	565	719	497	944	690	662	444	500	670	500	850
PF 80	929	641	811	562	1053	782	749	493	560	755	560	950
PF 90	1038	721	905	633	1180	870	835	550	630	850	630	1060
PF 100	1171	814	1015	718	1330	976	936	620	710	950	710	1180
PF 110	1309	932	1133	793	1491	1084	1037	691	800	1060	800	1320
PF 120	1464	1048	1270	898	1671	1214	1163	771	900	1190	900	1500
PF 140	1635	1145	1395	990	1863	1325	1272	863	1000	1320	1000	1700

DIMENSIONS (mm)



INLET					
TYPE	ØR	ØS	ØT	U	ØV
22	130	150	170	4	8
25	185	219	255	8	8
28	205	241	275	8	8
31	228	265	298	8	8
35	255	292	325	8	10
40	285	332	365	8	10
45	320	366	400	8	10
50	360	405	440	8	10
56	405	448	485	12	10
63	455	497	535	12	10
71	505	551	585	12	10
80	565	629	665	12	10
90	635	698	735	12	12

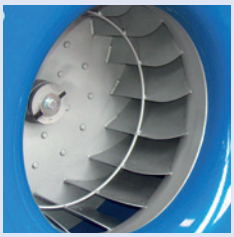


OUTLET										
TYPE	a	b	c	d	e	f	g	h	Øi	MOD.
22	124	103	-	145	-	125	164	143	8	1
25	207	148	112	241	112	182	277	218	12	2
28	231	166	112	265	112	200	301	236	12	2
31	258	185	112	292	112	219	328	255	12	3
35	288	205	125	332	125	249	368	285	12	3
40	322	229	125	366	125	273	402	309	12	3
45	361	256	125	405	125	300	441	336	12	3
50	404	288	125	448	125	332	484	368	12	4
56	453	322	125	497	125	366	533	402	12	4
63	507	361	125	551	125	405	587	441	12	4
71	569	404	160	629	160	464	669	504	14	4
80	638	453	160	698	160	513	738	553	14	4
90	715	507	160	775	160	567	815	607	14	5

HT

Backward curved blade centrifugal fans for dusty air

Compliant with ErP Directive 2009/125/CE and EU Regulation 327/2011 (FAN).



Backward curved blades

DESCRIPTION

The fans of the HT series find their principal application in the industrial plants of pneumatictransport, suction and filtering in foundries, cement factories, mines, marble, ceramics and glass factories, furnaces, etc. They can convey clean or slightly dusty air and smoke, with temperature from -20°C to +80°C in the standard configuration and up to 150°C with specials constructions. The series foresees direct drive version (execution 4) and belt drive version (execution 1, 9 and 12). Suitable for medium and low capacities, high pressures.

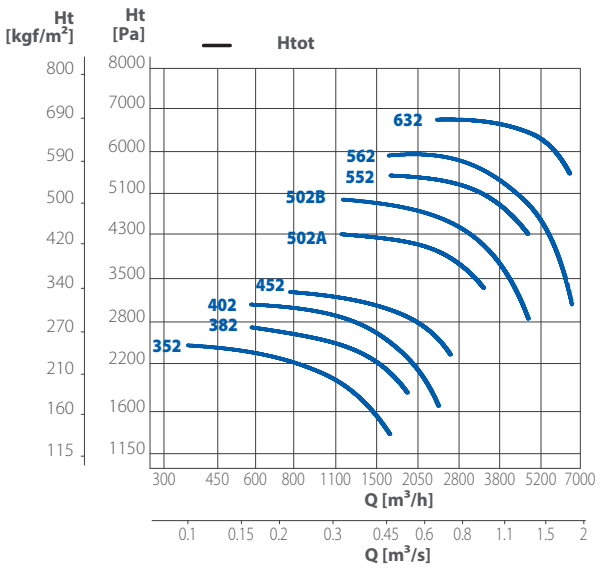
CONSTRUCTION

- Volute casing in steel sheet , protected against atmospheric agents by epoxy paint.
- Aerodynamically shaped inlet cone in steel sheet, protected against atmospheric agents by epoxy paint.
- Single inlet backward curved wheel with high efficiency, manufactured in steel sheet and epoxy painted. For high rotational speed, versions in class 3 are foreseen.
- Asynchronous three-phase motors according to international standards IEC 600034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/ CE, CE marked, IP 55, class F, suitable to S1 service (continuous working at constant load).

ACCESSORIES (available upon request)

- TS - Condensation drain hole
- PI - Inspection door
- CFA - Inlet counter-flange
- CFP - Outlet counter-flange
- RA - Inlet protection guard
- RP - Outlet protection guard
- GA - Inlet flexible connector
- GP - Outlet flexible connector
- Inlet vane control
- Outlet setting shutter
- Anti-vibration mounts

CURVES



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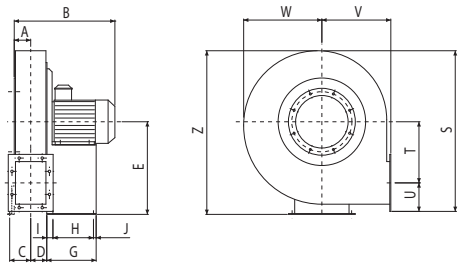
PERFORMANCE

CODE	MODEL	MAX AIRFLOW	MAX PRESSURE	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	POLE	RATING	MOTOR CLASS	LEVEL SOUND
		m^3/h	mm H_2O	V	A	KW	N°	IP		dB(A)
7HT3511	**HT 352** THREE-PHASE	1.420	270	400	2,50	1,10	2	55	F	63
7HT3813	**HT 382** THREE-PHASE	2.200	358	400	4,90	2,20	2	55	F	68
7HT4016	**HT 402** THREE-PHASE	3.000	380	400	6,40	3,00	2	55	F	76
7HT4510	**HT 452** THREE-PHASE	3.600	435	400	8,00	4,00	2	55	F	70
7HT5026	**HT 502** THREE-PHASE (5,5 kw)	3.300	490	400	8,50	4,00	2	55	F	75
7HT5027	**HT 502** THREE-PHASE (4 kw)	4.000	545	400	10,80	5,50	2	55	F	75
7HT5524	**HT 552** THREE-PHASE	5.500	600	400	14,10	7,50	2	55	F	78
7HT5606	**HT 562** THREE-PHASE	6.500	660	400	20,60	11,00	2	55	F	78
7HT6303	**HT 632** THREE-PHASE	8.800	680	400	27,50	15,00	2	55	F	82

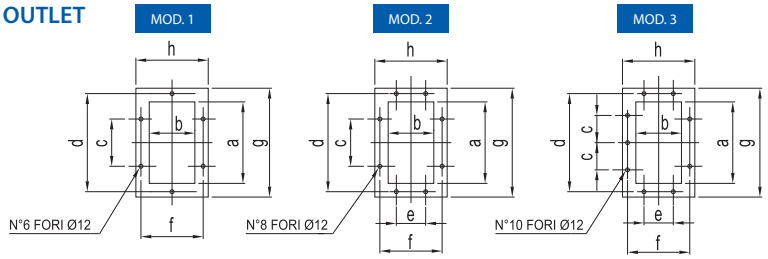
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 1,5 meters (for comparative purposes only).

DIMENSIONS (mm)

TYPE	A	B	C	D	E	G	H	I	J	N	O	R	S	T	U	V	W	Z
HT 352 T	65	377	70	56	355	211	121	45	45	203	225	10	585	215	108	250	315	617
HT 382 T	71	437	76	63	375	246	133	55	58	234	260	10	585	215	108	250	340	659
HT 402T	71	437	76	63	375	246	133	55	58	234	260	10	640	238	118	280	340	659
HT 452T	78	503	86	70	400	276	197	30	49	289	324	12	705	265	128	300	375	713
HT 502AT	86	520	94	78	450	276	197	30	49	289	324	12	780	297	139	335	410	795
HT 502BT	86	560	94	78	450	336	237	40	59	336	372	12	780	297	139	335	410	795
HT 552T	95	579	106	88	500	336	237	40	59	337	372	12	880	337	151	375	460	893
HT 562T	95	684	106	88	500	436	337	50	49	395	440	14	880	337	151	375	460	893
HT 632T	105	703	116	98	560	436	337	50	49	395	440	14	985	381	164	425	515	1000

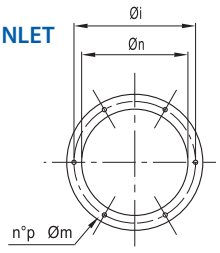


OUTLET



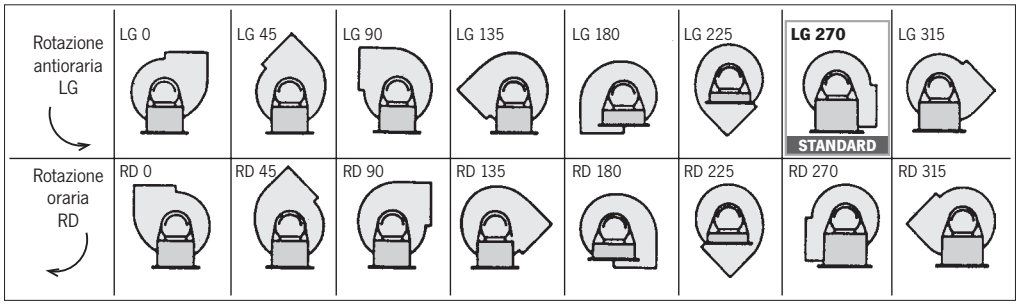
TYPE	a	b	c	d	e	f	g	h	Mod.
HT 352	146	105	112	182	-	139	216	175	1
HT 382	166	117	112	200	-	151	236	187	1
HT 402	166	117	112	200	-	151	236	187	1
HT 452	185	131	112	219	-	165	255	201	1
HT 502/A	207	148	112	241	112	182	277	218	2
HT 502/B	207	148	112	241	112	182	277	218	2
HT 552	231	166	112	265	112	200	301	236	2
HT 562	231	166	112	265	112	200	301	236	2
HT 632	258	185	112	292	112	219	328	255	3

INLET



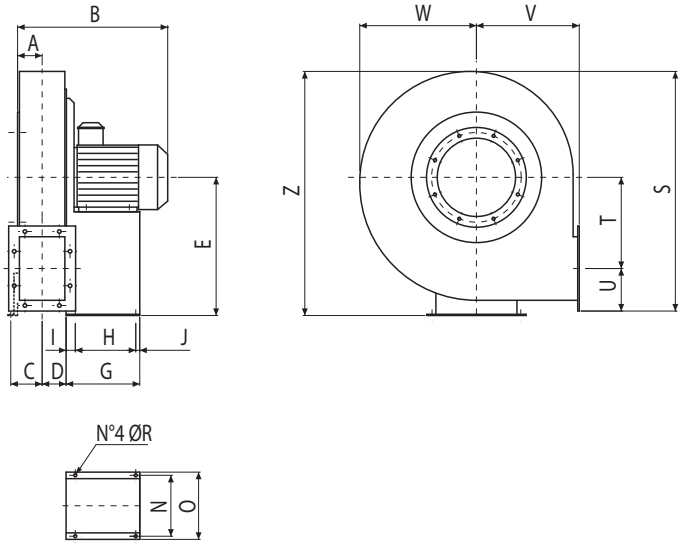
TYPE	Øn	Øi	p	Øm
HT 352	185	219	8	8
HT 382	205	241	8	8
HT 402	205	241	8	8
HT 452	228	265	8	8
HT 502/A	255	292	8	10
HT 502/B	255	292	8	10
HT 552	285	332	8	10
HT 562	285	332	8	10
HT 632	320	366	8	10

DISCHARGE ANGLES (motor side view)



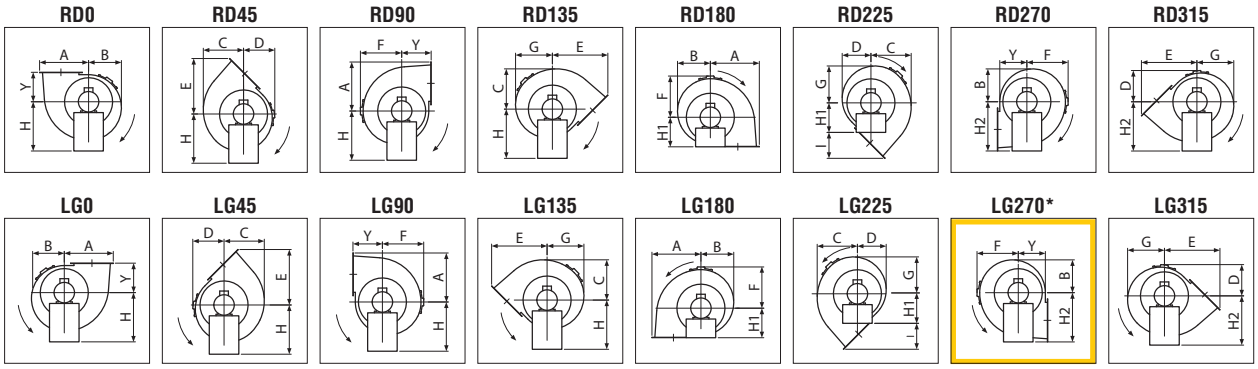
1

DIMENSIONS (mm)



TYPE	A	B	C	D	E	G	H	I	J	N	O	R	S	T	U	V	W	Z
HT 352 T	65	377	70	56	355	211	121	45	45	203	225	10	585	215	108	250	315	617
HT 382 T	71	437	76	63	375	246	133	55	58	234	260	10	585	215	108	250	340	659
HT 402T	71	437	76	63	375	246	133	55	58	234	260	10	640	238	118	280	340	659
HT 452T	78	503	86	70	400	276	197	30	49	289	324	12	705	265	128	300	375	713
HT 502AT	86	520	94	78	450	276	197	30	49	289	324	12	780	297	139	335	410	795
HT 502BT	86	560	94	78	450	336	237	40	59	336	372	12	780	297	139	335	410	795
HT 552T	95	579	106	88	500	336	237	40	59	337	372	12	880	337	151	375	460	893
HT 562T	95	684	106	88	500	436	337	50	49	395	440	14	880	337	151	375	460	893
HT 632T	105	703	116	98	560	436	337	50	49	395	440	14	985	381	164	425	515	1000

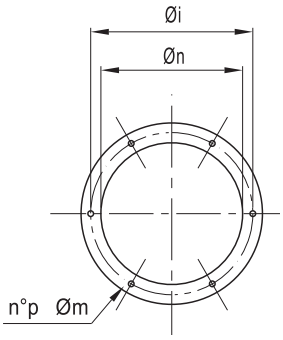
DIMENSIONS OF MODELS ACCORDING TO THE DISCHARGE ANGLE.



* Standard version.

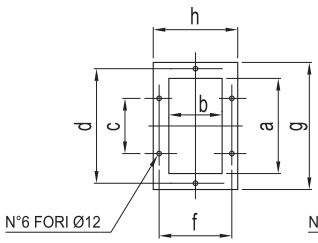
TYPE	A	B	C	D	E	F	G	I	Y	H	H1	H2
HT 35	323	262	287	272	405	315	280	155	250	355	250	355
HT 40	356	284	314	293	450	340	302	170	280	375	280	375
HT 45	393	313	350	319	490	375	335	190	300	400	300	400
HT 50	436	345	386	350	546	410	370	211	335	450	335	450
HT 56	488	393	438	392	613	460	418	238	375	500	375	500
HT 63	545	440	493	438	688	515	472	263	425	560	425	560

DIMENSIONS (mm)

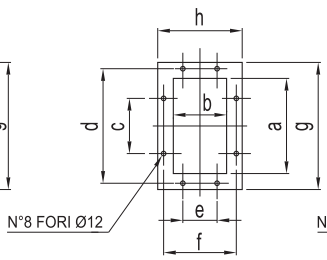


INLET				
TYPE	Øn	Øi	p	Øm
HT 352	185	219	8	8
HT 382	205	241	8	8
HT 402	205	241	8	8
HT 452	228	265	8	8
HT 502/A	255	292	8	10
HT 502/B	255	292	8	10
HT 552	285	332	8	10
HT 562	285	332	8	10
HT 632	320	366	8	10

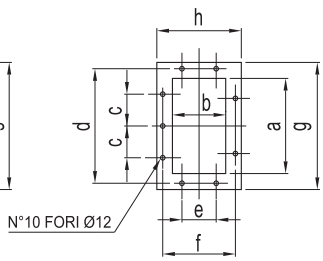
MOD. 1



MOD. 2



MOD. 3



OUTLET									
TYPE	a	b	c	d	e	f	g	h	Mod.
HT 352	146	105	112	182	-	139	216	175	1
HT 382	166	117	112	200	-	151	236	187	1
HT 402	166	117	112	200	-	151	236	187	1
HT 452	185	131	112	219	-	165	255	201	1
HT 502/A	207	148	112	241	112	182	277	218	2
HT 502/B	207	148	112	241	112	182	277	218	2
HT 552	231	166	112	265	112	200	301	236	2
HT 562	231	166	112	265	112	200	301	236	2
HT 632	258	185	112	292	112	219	328	255	3

Series PDL - PF - HT

PDL

CFA - Inlet counter flange

CODE	MODEL
5BO1334	CFA PDL 31
5BO1330	CFA PDL 35
5BO1343	CFA PDL 40
5BO1341	CFA PDL 45
5BO8086	CFA PDL 50
5BO8103	CFA PDL 56
5BO8093	CFA PDL 63
5BO8101	CFA PDL 71
5BO1357	CFA PDL 80
5BO1359	CFA PDL 90
5BO8040	CFA PDL 100

CFP - Outlet counter flange

CODE	MODEL
5BO1362	CFP PDL 31
5BO1340	CFP PDL 35
5BO1344	CFP PDL 40
5BO1348	CFP PDL 45
5BO1381	CFP PDL 50
5BO8104	CFP PDL 56
5BO1310	CFP PDL 63
5BO1390	CFP PDL 71
5BO1392	CFP PDL 80
5BO1360	CFP PDL 90
5BO8100	CFP PDL 100

GA - Inlet flexible connector

CODE	MODEL
5SU3101	GA PDL 31
5SU3500	GA PDL 35
5SU4022	GA PDL 40
5SU4024	GA PDL 45
5SU5003	GA PDL 50
5SU4020	GA PDL 56
5SU1403	GA PDL 63
5SU1100	GA PDL 71
5SU8000	GA PDL 80
5SU9002	GA PDL 90
5SU1129	GA PDL 100

GP - Outlet flexible connector

CODE	MODEL
5SU3148	GP PDL 31
5SU3501	GP PDL 35
5SU4023	GP PDL 40
5SU5601	GP PDL 45
5SU1181	GP PDL 50
5SU4021	GP PDL 56
5SU1402	GP PDL 63
5SU1101	GP PDL 71
5SU3079	GP PDL 80
5SU9003	GP PDL 90
5SU1128	GP PDL 100

PF

CFA - Inlet counter flange

CODE	MODEL
5BO1321	CFA PF 22
5BO1325	CFA PF 25
5BO1328	CFA PF 28
5BO1327	CFA PF 31
5BO1323	CFA PF 35
5BO1364	CFA PF 40
5BO1334	CFA PF 45
5BO1330	CFA PF 50
5BO1347	CFA PF 56
5BO8105	CFA PF 63
5BO1380	CFA PF 71
5BO8087	CFA PF 80
5BO1391	CFA PF 90

CFP - Outlet counter flange

CODE	MODEL
5BO1358	CFP PF 22
5BO5019	CFP PF 25
5BO1329	CFP PF 28
5BO1324	CFP PF 31
5BO1365	CFP PF 35
5BO1362	CFP PF 40
5BO1340	CFP PF 45
5BO1344	CFP PF 50
5BO1348	CFP PF 56
5BO1381	CFP PF 63
5BO8104	CFP PF 71
5BO1310	CFP PF 80
5BO1390	CFP PF 90

GA - Inlet flexible connector

CODE	MODEL
5SU1404	GA PF 22
5SU3142	GA PF 25
5SU1405	GA PF 28
5SU3137	GA PF 31
5SU1096	GA PF 35
5SU3147	GA PF 40
5SU3101	GA PF 45
5SU3500	GA PF 50
5SU1102	GA PF 56
5SU1406	GA PF 63
5SU1180	GA PF 71
5SU8004	GA PF 80
5SU9000	GA PF 90

GP - Outlet flexible connector

CODE	MODEL
5SU1407	GP PF 22
5SU3143	GP PF 25
5SU1131	GP PF 28
5SU3138	GP PF 31
5SU1130	GP PF 35
5SU3148	GP PF 40
5SU3501	GP PF 45
5SU4023	GP PF 50
5SU5601	GP PF 56
5SU1181	GP PF 63
5SU4021	GP PF 71
5SU1402	GP PF 80
5SU1101	GP PF 90

HT

CFA - Inlet counter flange

CODE	MODEL
5BO1325	CFA HT 35
5BO3801	CFA HT 38
5BO1328	CFA HT 40
5BO1327	CFA HT 45
5BO1326	CFA HT 50
5BO1364	CFA HT 55-56
5BO1334	CFA HT 63

CFP - Outlet counter flange

CODE	MODEL
5BO8108	CFP HT 35
5BO1332	CFP HT 38-40
5BO4505	CFP HT 45
5BO5019	CFP HT 50
5BO1329	CFP HT 55-56
5BO1324	CFP HT 63
UPON REQUEST	GIUNTI GA E GP

UPON REQUEST
INLET AND OUTLET FLEXIBLE CONNECTORS
(GA / GP)

elicent® advanced ventilation

INDUSTRIAL AND BUILDING VENTILATION FANS

EX ATEX
AIR TEMPERATURE

ATEX is a short name for Directive ATEX 94/9/CE, updated by Directive 2014/34/UE of the European Community, in force from the 1st of July 2003. The word ATEX is obtained from the fusion of the French wording: "**AT**mosphere **EX**plosible".
This Directive harmonizes the standards of the European Community members about the electro/mechanical machinery to be used in potentially explosive environment such as underground pits, petrochemical industries, power plants, food production plants, woodworking plants, breeding plants, greenhouses, industrial workshops.
An explosive atmosphere is a mixture of air and combustible gases, vapours, fumes or dusts under atmospheric conditions where combustion rapidly expands itself (explosion) after ignition. The application of the ATEX Directive comprehends all the machines that are going to be installed within the European Community, in potentially explosive environments. The ATEX 94/9/CE European Directive classifies the hazardous areas depending on the kind of dangerous substances:

G Gas
D Dust
GD Gas-Dust

The ATEX Directive identifies the European certifi ed bodies that are able to examine the documentation, to carry out testing and checking, to fi le the technical documents and to release the certifi cation for the equipment to be used in hazardous areas.
Elicent Atex range is certifi ed according to EN14986 by independent Notified Bodies.
Products that are according to ATEX are labelled:

Dangerous areas include any area in which explosive atmospheres may occur under specifi c conditions. The user or system designer shall classify the hazardous areas as indicated in the European directive 1999/92/EC under his own responsibility.
The link between the hazardous area (according to European Directive 1999/92/CE) and protection class of the device to be installed is defi ned in the following table:

PROTECTION DEGREE	CATEGORY	USAGE AREA IN PRESENCE OF GAS	CATEGORY	USAGE AREA IN PRESENCE OF DUSTS	HAZARDOUS LEVEL OF THE OPERATIONAL ZONE
Very High	1G	Zona 0	10	Zona 20	Explosive atmophere ALWAYS PRESENT
High	2G	Zona 1	20	Zona 21	Explosive atmophere PROBABLE
Normal	3G	Zona 2	30	Zona 22	Explosive atmophere UNLIKELY

ATEX fans are not affected by the ErP Directive 2009/125/CE and further Regulations.

INTRODUCTION

ATEX is a European Directive that requires all employers to control the risks related to the explosion of some atmospheres. For this purpose it is necessary to make an assessment of the risk of explosion in the company / facility to enable the identification of all the places where explosive atmospheres may occur and thus provide itself with the means to avoid the explosions. Following are some guidelines that cannot be exhaustive due to the complexity of the topic.

REGULATIONS REFERENCES

On March 29th 2014, the new ATEX Directive was published in the Official Journal of the European Union. It represents an update in the regulatory scenery of the equipment that can be used in areas with a potentially explosive atmosphere. The new Directive of the 26th of February 2014 is called ATEX 2014/34 / EU and goes to repeal, with effect from the 20th of April 2016, the present ATEX Directive 94/9/EC. It mainly regards the harmonization of the laws of the Member States and aims to ensure free circulation within the EU of products to which it applies.
The main changes concern the legal situation of economic operators such as the legal representative, the distributor, the importer and the manufacturer. It was also expanded the article regarding the "definitions".

DIRECTIVE 94/9/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL dated March 23rd 1994 on the Approximation of the laws of the Member States concerning Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres.

DIRECTIVE 1999/92 / EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL dated December 16th 1999 on minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres. To comply with the provisions of the Directives it is necessary to classify the areas of hazardous areas and related equipment.

DEFINITIONS

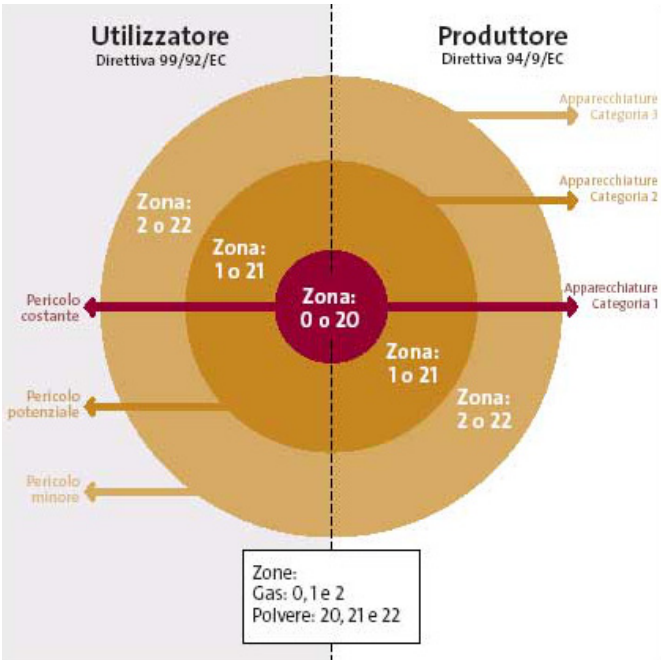
POTENTIALLY EXPLOSIVE ATMOSPHERE
A potentially explosive atmosphere consists of a mixture of air and flammable substances in the form of gases, vapors, mists or dusts in which, after ignition has occurred, combustion spreads to the entire mixture.
The main difference between "gaseous" and "dusty" atmosphere is the mass per volume unit; that of gases and vapors is about a thousand times lower than that of the powders. In addition, the gases disperse in the air by convection and diffusion to form a homogeneous atmosphere. The powders are much heavier than air and deposit faster.
The trigger that generates the explosion can be caused not only by the electrical plant, but also by non-electrical equipment, such as hot surfaces, sparks originated by impact or friction between surfaces.

Conditions that can cause an explosion:

- Presence of flammable substances in the air like gas, vapor or mist or dust;
- The ignition temperature of the substance is equal to or lower than the temperature at which it may find itself for reasons depending on the ambient temperature, the temperature of processing, or for other reasons (eg. Contact with hot surfaces);
- The concentration of gas, vapors, mist or dust emitted around the ignition point is in the range of flammability;
- The presence, within the volume occupied by gases, vapors, mists or dusts in dangerous concentration, of an ignition source with a sufficient energy to ignite the explosive atmosphere;
- The presence of fuel and oxidizing agent are sufficient to support the explosion that manifests by an increase in volume which could result in a wave shock with the destructive effects.

EXPLOSION RISK AREA
The purpose of zoning is dual (according to ATEX 1999/92 / EC):

- To define the types of material used in the indicated zones, provided they are suitable for gases, vapors or mists and / or dusts.
- To classify in zones the different dangerous areas in order to avoid sources of ignition and make a proper selection of electrical and non-electrical materials. The zones are defined according to the presence of an explosive atmosphere of gas or dust.

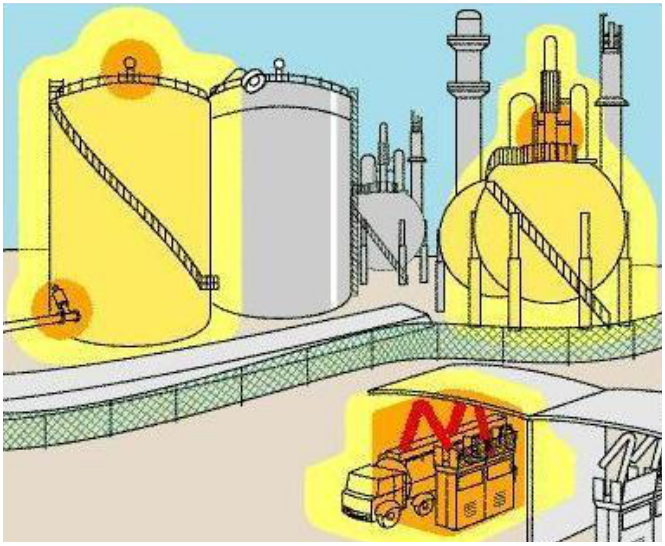


Group I: equipment intended for use in mines with presence of firedamp.
Group II: equipment to be used in environments with explosive atmospheres other than mines subject to firedamp.

Group I - Non surface equipments (mines)
Constant presence of firedamp or slack **Category M1**
Probable presence of firedamp or slack **Category M2**

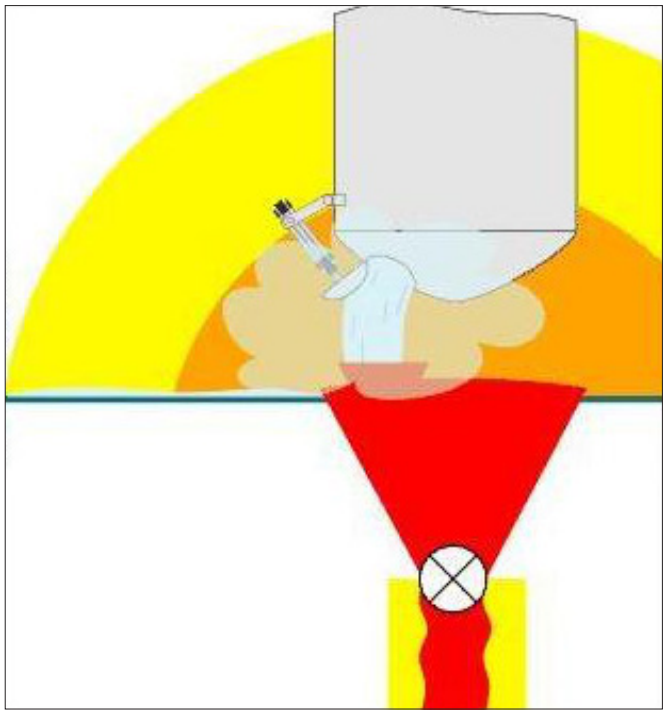
Group II - Surface equipments
GAS (G)
Zone 0 - Category 1 (high probability) Zone 1 - Category 2 (probable) Zone 2 - Categort 3 (low probability)
DUSTS (D)
Zone 20 - Category 1 (high probability) Zone 21 - Category 2 (probable) Zone 22 - Category 3 (low probability)

Examples of classification of GAS zones



GAS

Colour	Zones	Presence of Gas
Red	0	Continuously present (During long periods)
Orange	1	Not Likely to be present (regular service)
Yellow	2	Accidentally present (short time service never in regular service)



DUSTS

Colour	Zones	Presence of Dust
Red	20	Continuously present (During long periods)
Orange	21	Not Likely to be present (Regular service)
Yellow	22	Accidentally present (short time service never in regular service)

WARNING: The classification and definition of the zones, in compliance with Directive 99/92/EC, is the responsibility of the plant owner. The execution and the product analysis, in accordance to Directive 94/9/EC and 2014/34/UE is the responsibility of the manufacturer.

Choice of the device classification according to the zone

Protection Degree	Category	Usage area in presence of gas	Category	Usage area in presence of dusts	Hazardous level of the operational zone
Very High	1G	Zona 0	1D	Zona 20	Explosive atmophere ALWAYS PRESENT
High	2G	Zona 1	2D	Zona 21	Explosive atmophere PROBABLE
Normal	3G	Zona 2	3D	Zona 22	Explosive atmophere UNLIKELY

N.B. Equipment of a higher category can be installed in place of equipment of a lower category.

WARNING: Only the institutes listed as notified body according to Directive 94/9/CE (the NANDO list: New Approach Notified and Designated Organisations) are qualified for examining and verifying the documents as well as for issuing conformity certificates.

MAICO ITALIA ATEX FANS - TECHNICAL NOTES

In accordance to the Directive 94/9/EC and 2014/34/EU, Maico Italia ATEX fans are considered non-electrical equipment that have been subject to conformity assessment procedures as required by the applicable technical standards and which method of construction have been validated by notified bodies as IMQ (NB 0051) and TUV north (NB 0044).
Maico Italia ATEX fans use an electrical motor sourced from the best manufacturers which has also been checked and certified by a notified body (for more information see section "Atex electrical equipment").
Maico Italia ATEX fans are designed and manufactured in category 2 Gas and Dust (2G / 2D) or category 3 gas and dust (3G / 3D) temperature class T3 or T4 standard. They can be used in surface installations GROUP II, in areas with risk of explosion such as 2G in ZONE 1 or 2D in ZONE 21 or 3G in ZONE 2 or 3D in zone 22.

RELATION BETWEEN FAN EXECUTION AND THERMAL CLASS				
Execution	**Fan Thermal Class Inside**	**Motor Thermal class**	**Ambient temperature**	**Conveyed stream temperature**
Centrifugal Execution 4 - 5	T4 (135°C)	T4 or higher	-20°C ÷ +60°C	-20°C ÷ +40°C
	T3 (200°C)	T3 or higher	-20°C ÷ +60°C	-20°C ÷ +40°C
Centrifugal Executions 1 - 9 - 12 - 8	T3 (200°C)	T3 or higher	-20°C ÷ +60°C	-20°C ÷ +55°C
	T2 (300°C)	T2 or higher	-20°C ÷ +60°C	-20°C ÷ +135°C
Axial Execution 4 - 5 Both flows	T4 (135°C)	T4 or higher	-20°C ÷ +40°C	-20°C ÷ +40°C
	T3 (200°C)	T3 or higher	-20°C ÷ +40°C	-20°C ÷ +40°C
	Tx (max Temperature allowed by the motor)	Tx	-20°C ÷ +40°C	-20 ÷ Tx (max temperature allowed by the motor)*

*In the case of axial fans with free inlet it is understandable that the conveyed stream temperature and the ambient temperature are the same.

EXAMPLES OF SURFACE EQUIPMENTS ASSOCIATION GROUP II/FAN/MOTOR				
Explosive atmosphere	**Gas Zone**	**Fan mark**	**Motor mark**	**Zone of possible use**
Always present	0	/	/	/
High probability	1	II 2GD	II 2G Ex-d IIC T.. II 2G Ex-d/de IIB T..	2G – 3G 2G – 3G
Low probability	2	II 3GD	II 3G Ex-nA IIC T..	3G

Explosive atmosphere	Dusts Zone	Fan mark	Motor mark	Zone of possible use
Always present	0	/	/	/
High probability	21	II 2GD	II 2D Ex tD A21 IP65 T..	2G – 2D - 3G – 3D
Low probability	22	II 3GD	II 3D Ex tD A22 IP55 T..	3D(*) - 3G

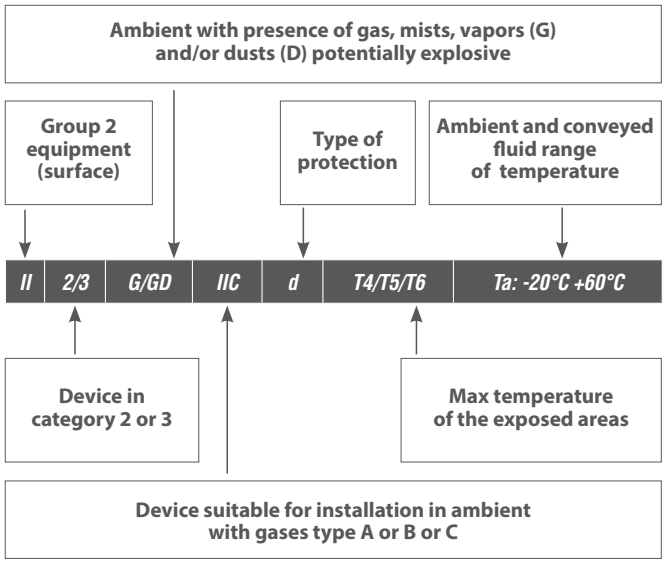
(*) only for conductive dusts

MARKING AND ENCLOSED DOCUMENTATION

The CE marking and the Declaration of Conformity state that the fan has been constructed in compliance with the UE Directives.

The ATEX mark identifes a construction suitable for use in potentially explosive area.

Fan marking:



The ATEX fan has to be complete of:

A CE Declaration of Conformity of the fan and the electrical motor. Installation, maintenance and storage instructions both for the fan and the motor.

Besides, Maico Italia **ATEX** fans are provided with a certificate issued by a notified body **IMQ** or **TUV Nord**, according to the series:


Certificato / Certificate

Direttiva 94/9/CE
Certificato di Esame del Tipo
Apparecchiatura di categoria 2

Directive 94/9/CE
Type Examination Certificate
Category 2 Equipment

IMQ 10 ATEX 018 X

Apparecchiatura / Equipment — Tipo / Type - Serie / Series
Ventilatore / Fan — DEC ****/ IC ****
Costruttore / Manufacturer — Indirizzo / Address
MAICO ITALIA S.p.A.
Via Maestri del Lavoro, 12
25017 Lonato del Garda (BS)
Italy

43AK00008

EN 14986:2007

II 2G or
II 2D or
II 2GD

TÜV NORD

Statement of Conformity

Statement of Conformity Number: TÜV 14 ATEX 138667

for the equipment: Centrifugal suction fans execution 4

of the manufacturer: Maico Italia S.p.A.

Address: Via Maestri del Lavoro, 12
25017 Lonato del Garda (BS)
Italy

Order number: 8000433319

Date of issue: 2014-05-14

EN 13463-1:2009 EN 13463-5:2011 EN 14986:2007

II 2/2 G c IIB+H2 TX
II 2/2 D c TX

Meyer

ATEX ELECTRICAL EQUIPMENT

PROTECTION TYPES

The use of electrical equipment in potentially explosive atmospheres is quite usual today. These equipment have to be manufactured in such a way to avoid risks of explosion. An explosion can occur when the three following conditions happen:

- presence of a potentially explosive atmosphere;
- possibility of transmission of the explosion;
- existence of ignition sources.

The recognized types of protection eliminate one of these conditions and thus make an explosion impossible. Two types of protection prevent the presence of a potentially explosive atmosphere inside the electrical device:

- oil immersion (safety "o");
- pressurized apparatus (safety "p").

Two types of protection make impossible the transmission of an internal explosion to the potentially explosive surrounding atmosphere:

- sand filling (safety "q");
- flameproof enclosure (safety "d").

Lastly, three types of protection eliminate any source of ignition such as sparks, overheating, etc.:

- increased safety (safety "e");
- intrinsic safety (safety "i");
- protection "n" (restricted to zone 2).

In practice, only four of these seven types of protection are applicable to electric motors:

- pressurized device (symbol Ex p);
- flameproof enclosure (symbol Ex d);
- increased safety (symbol Ex e);
- non sparking protection (symbol Ex n).

Electric motors have an additional type of protection (symbol Ex de) which is a combination of:

- flameproof enclosure "d" for motor frame;
- increased safety "e" for terminal box.

ENCLOSURE GROUPS

The standards classify electrical equipment into two groups.

Group I: electric device to be installed in mines or galleries susceptible to firedamp or coal dust.
Group II: electric device to be installed in surface plants susceptible to other explosive Atmospheres.

The enclosures for equipment intended for use on the surface, providing "d" protection (flameproof), are divided into three sub-groups, in relation to the inflammable substances for which they are suitable: Group IIA, Group IIB, Group IIC.
A motor that belongs to a certain enclosure group is also suitable for lower enclosure groups: a motor in group IIB is also suitable for group IIA; a motor in group IIC is also suitable for group IIA and IIB.

TEMPERATURE CLASSES (FOR GAS ATMOSPHERES)

The electrical devices are classified into 6 classes according to the maximum surface temperatures. The maximum surface temperature is the highest temperature which is reached during the service at nominal conditions, by any part of the electrical device.

For electric motors this is:
The temperature of the outside surface of the enclosure for "d" and "p" protection modes;
The temperature of any internal or external point for type of protection "e" or "n".

TEMPERATURE CLASSES FOR GAS ATMOSPHERES			
Ignition temperature of the explosive mixture	Temperature class	Maximum surface temperature of electrical equipment with 40°C ambient temperature	
[°C]		[°C]	[°F]
Over 450	T1	450	842
From 300 to 450	T2	300	572
From 200 to 300	T3	200	392
From 135 to 200	T4	135	275
From 100 to 135	T5	100	212
From 85 to 100	T6	85	185

IGNITION TEMPERATURES AND ENCLOSURE GROUPS OF GASES AND VAPOURS

Combustible gases and vapours are divided into classes according to their ignition temperature and into groups according to their explosive capacity. Markings on motors and other electrical equipment with the symbols used to indicate the protection mode, the enclosure group, and the temperature class, indicate the zone in which such equipment can be installed.

CLASSIFICATION OF THE MORE COMMON COMBUSTIBLE GASES AND VAPOURS ACCORDING TO TEMPERATURE CLASS AND GROUP						
GROUP	TEMPERATURE CLASSES					
	T1	T2	T3	T4	T5	T6
I	Methane (firedamp) (grisou)					
IIA	Acetic acid Acetone Ammonia Benzole Benzene Butanone Carbon monoxide Ethane Ethyl acetate Ethyl Chloride Methane Methanol Methyl acetate Methyl alcohol Methyl Chloride Naphtalene Propane Toluene Xylene	Acetic anhydride I amyl acetate n butane n butyl alcohol Amylic alcohol Butyl acetate Cyclohexanon Ethyl alcohol Iso butylic alcohol Liquefied gas Natural gas Propyl acetate	Cyclohexane Cyclohexanol Decane Diesel fuels Gasoline Heating oil Heptane Hexane Jet fuels Pentane Petroleum*	Acetaldehyde Ether		
IIB	Coke-oven gas Water gas (carburetted)	1,3- butadiene Ethylene Ethylbenzene Ethylene oxide	Hydrogen sulphide Isoprene Petroleum*	Etere etilico		
IIC	Hydrogen	Acetylene				Carbon disulphide Ethyl nitrate

* according to the chemical composition

TEMPERATURE FOR ATMOSPHERES WITH COMBUSTIBLE DUSTS

The flash point of the flammable dust must be taken into account in providing protection against flammable dust (cloud form or layers dusts).

The surface temperature of the enclosure indicated on the motor plate must be inferior to the one of the reference ignition temperature.

The reference temperature is the lowest between the two values thus calculated:

TS1 = 2/3 Tcl - (Tcl = ignition temperature of the cloud of dust)

TS2 = T5mm - 75K - (T5mm = ignition temperature of a 5mm layer of dust).

Tamm = lowest between TS1 and TS2.

CALCULATION OF THE FLASH POINTS FOR COMBUSTIBLE DUSTS		
Dust ignition temperature	Cloud Tcl	Layer T5mm
Safety temperature	Ts1 = 2/3 Tcl	Ts2 = T5mm - 75K
Maximum surface Temp.	Tamm = lowest between Ts1 and Ts2	
Surface temperature of the motor ≤ Tamm		

EXAMPLES OF FLASH POINTS FOR COMBUSTIBLE DUSTS		
	Cloud [°C]	Layer [°C]
Aluminium	590	> 450
Carbon dust	380	225
Flour	490	340
Wheat dust	510	300
Methylcellulose	420	320
Phenolic resin	530	> 450
Polyethylene	420	fusione
PVC	700	> 450
Soot	810	570
Starch	460	435
Sugar	490	460

CHOICE OF THE ATEX MOTOR

The connection between danger zones and the categories of equipment to be used is defined in Directive 1999/92/EC. The specific construction standards for the protection modes (e.g. Ex d) also define the motor category that can be obtained by applying the standards (e.g. 2G).

CHOOSING THE PROTECTION MODE FOR ZONES IN WHICH GAS IS PRESENT				
Explosive Atmosphere	Danger Zone	Protection guaranteed by Equipment	Motor Category	Protection Mode
Always present	0	Very High	1G	IEC EN 60079-26
Probable	1	High	2G	Ex d / Ex de / Ex e
Improbable	2	Normal	3G	Ex nA

CHOICE OF PROTECTION MODE FOR AREAS WHERE COMBUSTIBLE DUST IS PRESENT				
Explosive Atmosphere	Danger Zone	Protection guaranteed by Equipment	Motor Category	Protection Mode
Always present	20	Very High	1D	Currently not provided for
Probable	21	High	2D	Ex tD - A21 - IP6x
Improbable	22 Conductive dusts	Normal	2D	Ex tD - A21 - IP6x
Improbable	22 Non-conductive dusts	Normal	3D	Ex tD - A22 - IP5x

NB: Equipment of a higher category can be installed in place of equipment of a lower category.
NB: The reported tabs serve as examples and are not exhaustive.

CERTIFICATION

Explosion-proof and increased safety motors must be approved by a European Commission notified body according to the criteria defined by the ATEX Directive. The motors are classified according to the hazardous atmosphere present at the place of installation. The choice of the type of motor protection should be made according to the installation zone. The danger level of a zone is determined by the type of atmosphere present in the zone. It is the user's responsibility to determine the type of protection, the group of custody and the maximum surface temperature of the device to be installed. The user also has the responsibility for proper installation, connection to the network, the use and maintenance of the device. Certificates of compliance with the CENELEC standards are valid in all countries outside the European Union and nations belonging to CENELEC. CENELEC members are the electro-technical committees of the following countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, United Kingdom, Spain, Sweden and Switzerland.

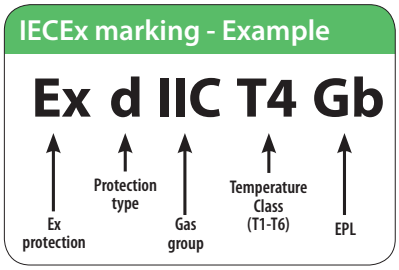
OUTLINES ON IECEX CERTIFICATION

This certification, in force for some years in different countries of the world, such as USA, Australia, UK, China, India, Brazil, etc.. facilitates the sale of equipment, eliminating the need for duplicate certificates and evidence provided by the acceding countries. It is important to emphasize that the system requires IECEx certification of products (EXTR, CoC), the QAR companies, repairers and the competence of persons (COPC), which are basic requirements for the design, construction and maintenance of facilities. The IEC standard (gas and dust) for equipment (60079-x) and for plants are applied; These rules bring significant changes to both the equipment (marking EPL) and the electrical installations (60079-14). For any information, please contact our technical department.

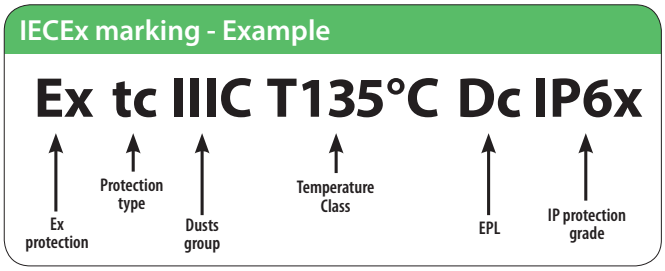
REQUIREMENTS AND STANDARD FOR THE IECEX MARKING

The IECEx scheme applies only to electric devices. The compliance to the scheme is evaluated on the basis of the IEC standards issued by CT31, the IEC Technical Committee in charge of drafting and defining the international standards for the Ex products. The technical reference standards are the IEC 60079 relative to electrical equipments designed for potentially explosive atmospheres due to flammable gases and combustible dusts. Once the product is in conformity with the applicable standards, it must be marked as indicated in the IEC 60079-0 standard.

Example of IECEx marking for gas



Example of IECEx marking for dusts



EPL: Equipment Protection Level

ASSIGNED ZONES TO EPL VALUES			
Zone G (gas)	**EPL**	**Zone D (dusts)**	**EPL**
0	Ga	20	Da
1	Gb	21	Db
2	Gc	22	Dc

HARMONIZED TECHNICAL NORMS OF REFERENCE (INDICATIVE AND NOT EXHAUSTIVE LIST)

EN 60079-10 (CEI 31-30);
Electrical apparatus for explosive gas atmospheres, classification of hazardous areas.

EN 50281-3 (CEI 31-52);
Electrical apparatus for use in the presence of combustible dust, classification of areas where combustible dusts are or may be present.

EN 13821;
Potentially explosive atmospheres. Explosion prevention and protection. Determination of minimum ignition energy of dust/air mixtures.

EN 1839;
Determination of explosion limits of gases and vapours.

EN 14034-2;
Determination of explosion characteristics of dust clouds - Part 2: Determination of the minimum rate of explosion pressure rise (dp/dt) max of dust clouds.

EN 14034-3;
Determination of explosion characteristics of dust clouds - Part 3: Determination of the lower explosion limit LEL of dust clouds.

EN 15188;
Determination of the spontaneous ignition behaviour of dust accumulations.

EN 14756;
Determination of the limiting oxygen concentration (LOC) for gases and vapours.

NORMS RELATIVE TO THE PROTECTION MODES:

• Measures to ensure the absence of the trigger source.
prEN 13463-4; Protection by inherent safety (g)
EN 13463-5; Protection by constructional safety 'c'.

• Measures to ensure the inefficiency of the trigger source.
EN 13463-6; Protection by control of ignition source 'b'

• Measures to ensure the absence of contact between the trigger source and the atmosphere.
prEN 13463-7; Protection by pressurization (p)
EN 13463-8; Protection by liquid immersion 'k'

• Measures to ensure the limitation of the explosion and the non propagation of the flame.
EN 13463-3; Protection by flameproof enclosure 'd'
EN 12874; Flame arresters

• Norms relative to the measures to limit the effects of explosion
EN 14373; Explosion supression systems
EN 14491; Dust explosion venting protective systems
EN 14994; Gas explosion venting protective systems
EN 14460; Explosion resistant design
EN 15089; Explosion Isolation Systems

IEM ATEX

Explosion-proof plate mounted axial fans

Certificate
IMQ 10 ATEX 002 X

- 10 models
- Ø from 200 to 700 mm
- ATEX II2G
- Antistatic impeller

DESCRIPTION

The axial fans of the IEM-ATX series are manufactured and certified according to the Atex Directives 94/9/CE and 2014/34/EU. They are suitable to convey clean air in the temperature range: -20°C / + 40°C. This version is suitable for installation in zone 1/21, areas in which it is necessary to guarantee high security against explosions and fi re that could be caused by the presence of fl ammable gas (II2G) and/or dusts (II2D/II2G/D). **They are certified by IMQ (Italian Institute for Quality) according to EN 14986 (IMQ Certificate IMQ 10 ATEX 002 X)**. The optimized inlet cone reduces noise level and increases effi ciency.

CONSTRUCTION

- Supporting frame in drawn steel sheet, with wide radius inlet cone.
- Impeller with airfoil blades in glass reinforced antistatic polyamide and hub in die-cast aluminium alloy, balanced according ISO 1940.
- Execution 5 (direct coupling motor/impeller). Airflow from motor to impeller.
- Inlet protection guard in steel painted rod, manufactured according to norms UNI 12499 and weatherproof.

MOTOR

- Asynchronous three-phase or single-phase motors according to international standards IEC 60034, IEC 60072, IEC 60079 and/or IEC61241, EMC 2004/108/CE, LVD 2006/95/ CE, with Atex certification for explosive atmospheres category G group II thermal class T4 protection Exd, CE marked, IP55, class F. Suitable to S1 service (continuous working at constant load).

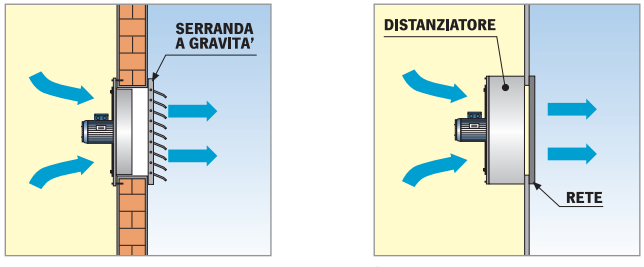
ACCESSORIES

- S - Gravity shutter
- D - Spacer manufactured in epoxy painted steel sheet
- R - Impeller side protection guard manufactured according to UNI ISO 12499 rules and protected against atmospheric agents
- ATEX service switch.

UPON REQUEST

- Airflow from impeller to motor.
- Versions with different temperature ranges.
- Versions with motors for different atmospheres.
- Versions with motors suitable for speed regulation.
- Versions with double polarity motors.

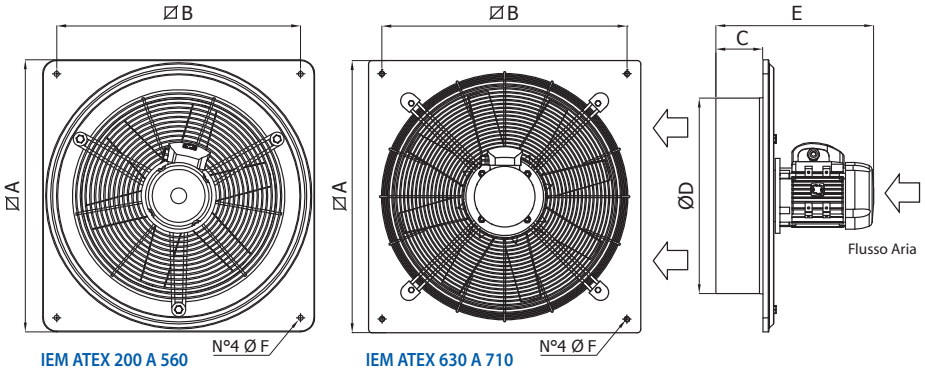
INSTALLATION



WALL PANEL

ACCESSORIES pag. 105 / **REGULATORS** pag. 200

DIMENSIONS (mm)



TYPE	A	B	C	ØD	E	ØF	kg*
IEM 200 ATEX	345	305	44	215	210	8,5	7
IEM 250 ATEX	400	350	57	265	250	8,5	9
IEM 310 ATEX	465	405	77	312	285	10	13
IEM 350 ATEX	525	465	90	365	315	10	14
IEM 400 ATEX	580	520	100	413	325	10	16
IEM 450 ATEX	630	570	107	457	370	10	20
IEM 500 ATEX	700	640	137	512	405	10	24
IEM 560 ATEX	765	695	122	569	385	10	27
IEM 630 ATEX	800	730	93	640	385	12	29
IEM 710 ATEX	850	800	93	710	440	12	38

*Indicative weigth

PERFORMANCE

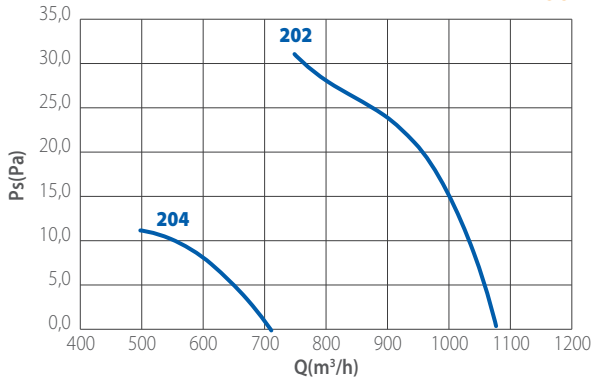
CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	LEVELS SOUND dB (A) a 3 mt	
		m³/h	V	A	KW	RPM/1'	N°	IP	Lw	Lp
1XE2001	IEM-ATX 202 M	1.060	230	1,76	0,18	2.800	2	55	70,1	52,6
1XE2002	IEM-ATX 204 M	700	230	0,88	0,06	1.400	4	55	55	37,5
1XE2507	IEM-ATX 252 M	1.700	230	1,76	0,18	2.800	2	55	84,7	67,2
1XE2520	IEM-ATX 254 M	1.300	230	0,88	0,09	1.400	4	55	69,6	52,1
1XE3000	IEM-ATX 312 M	3.200	230	1,91	0,25	2.800	2	55	84,5	67
1XE3020	IEM-ATX 314 M	2.200	230	0,88	0,09	1.400	4	55	69,4	51,9
1XE3520	IEM-ATX 354 M	3.300	230	1,15	0,12	1.400	4	55	72,8	55,3
1XE4000	IEM-ATX 404 M	4.900	230	1,54	0,18	1.400	4	55	73,6	56,1
1XE4500	IEM-ATX 454 M	6.800	230	2,66	0,37	1.400	4	55	83,2	65,7
1XE2003	IEM-ATX 202 T	1.200	400	0,50	0,12	2.800	2	55	70,1	52,6
1XE2004	IEM-ATX 204 T	700	400	0,30	0,09	1.400	4	55	55	37,5
1XE2508	IEM-ATX 252 T	1.700	400	0,33	0,12	2.800	2	55	84,7	67,2
1XE2521	IEM-ATX 254 T	1.300	400	0,30	0,09	1.400	4	55	69,6	52,1
1XE3001	IEM-ATX 312 T	3.200	400	0,80	0,25	2.800	2	55	84,5	67
1XE3021	IEM-ATX 314 T	2.200	400	0,30	0,09	1.400	4	55	69,4	51,9
1XE3521	IEM-ATX 354 T	3.300	400	0,54	0,12	1.400	4	55	72,8	55,3
1XE4010	IEM-ATX 404 T	4.900	400	0,64	0,18	1.400	4	55	73,6	56,1
1XE4504	IEM-ATX 454 T	6.800	400	1,30	0,37	1.400	4	55	83,2	65,7
1XE5000	IEM-ATX 504 T	9.100	400	1,50	0,55	1.400	4	55	84,6	67,1
1XE5064	IEM-ATX 506 T	5.800	400	0,80	0,18	960	6	55	73,8	56,3
1XE5001	IEM-ATX 508 T	4.100	400	0,55	0,12	720	8	55	66,6	49,1
1XE5600	IEM-ATX 564 T	12.500	400	2,00	0,75	1.400	4	55	88,9	71,4
1XE5601	IEM-ATX 566 T	7.700	400	1,20	0,25	960	6	55	80,1	62,6
1XE5602	IEM-ATX 568 T	5.500	400	0,95	0,18	720	8	55	73,9	56,4
1XE6300	IEM-ATX 634 T	14.000	400	2,80	1,10	1.400	4	55	92,3	74,8
1XE6301	IEM-ATX 636 T	9.000	400	1,40	0,37	960	6	55	83,5	66
1XE6302	IEM-ATX 638 T	6.800	400	1,20	0,25	720	8	55	77,3	59,8
1XE7002	IEM-ATX 714 T	17.500	400	4,80	2,20	1.400	4	55	97,6	80,1
1XE7003	IEM-ATX 716 T	11.200	400	2,20	0,75	960	6	55	84,6	67,1
1XE7004	IEM-ATX 718 T	8.700	400	1,30	0,37	720	8	55	77,7	60,2

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz

Lp: Sound pressure level measured in free fieldconditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 3 meters, inlet side (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

IEM ATEX 200



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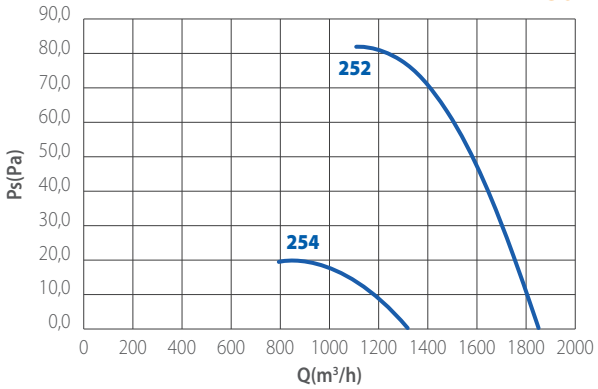

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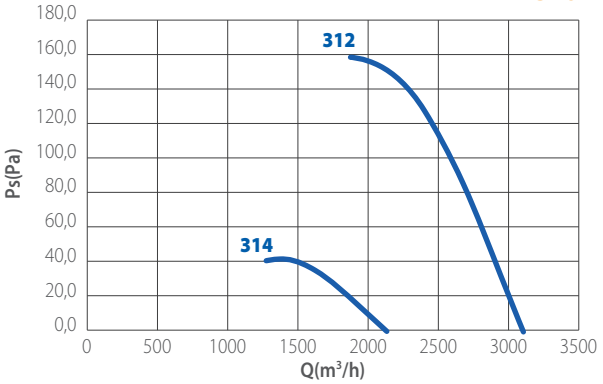

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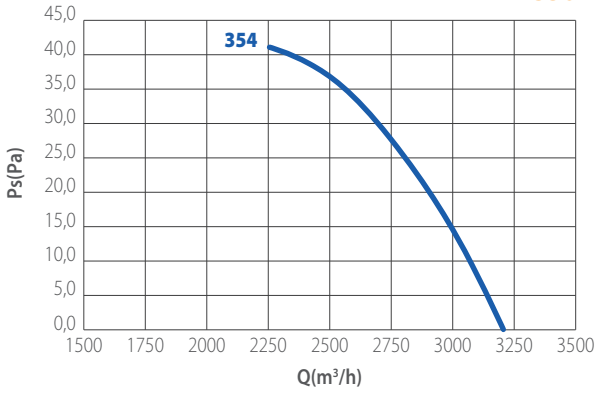

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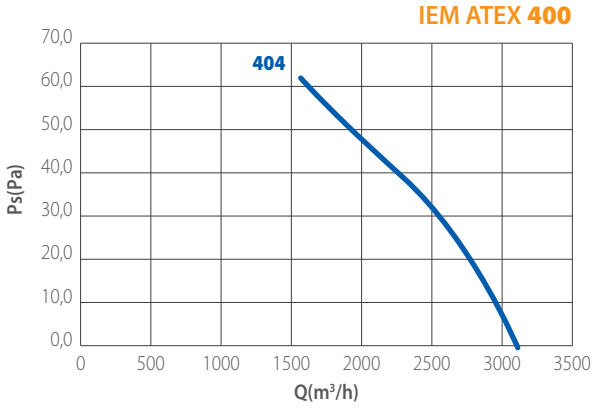
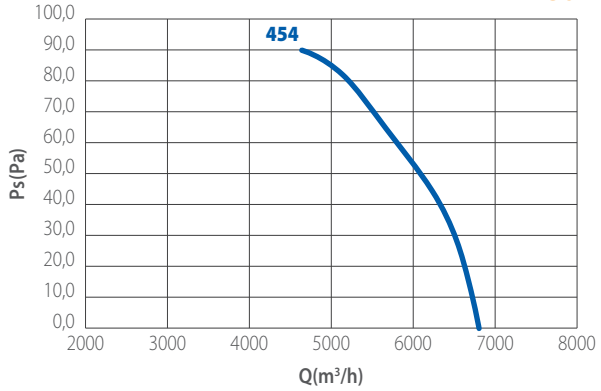


CURVES

IEM ATEX 450



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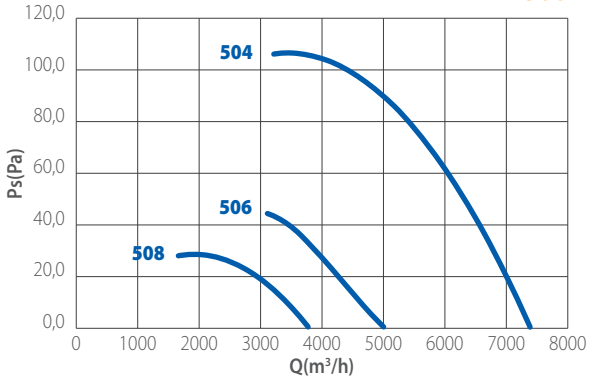

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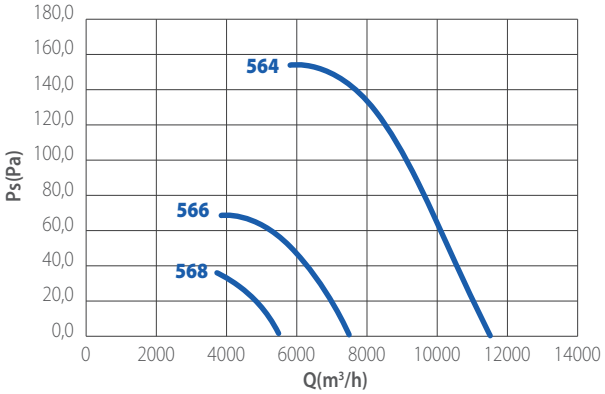
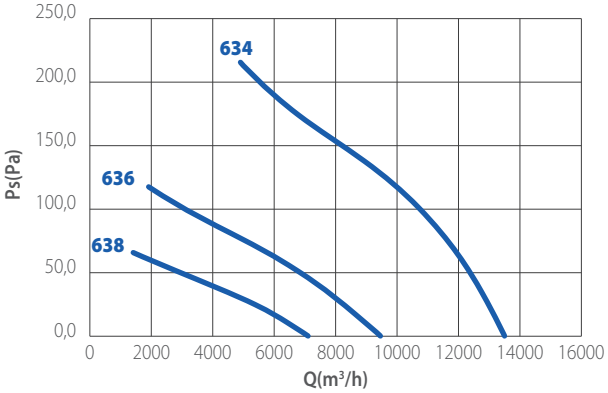
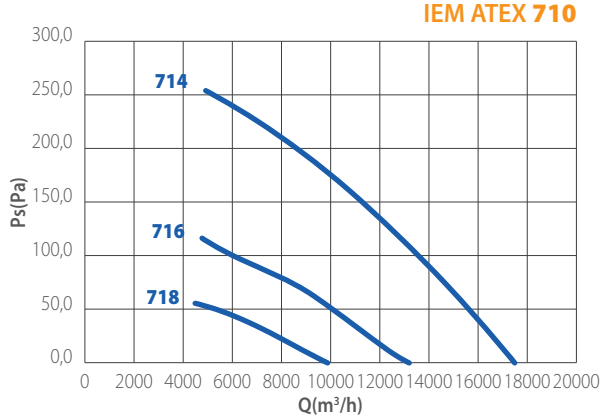


IEM ATEX 630



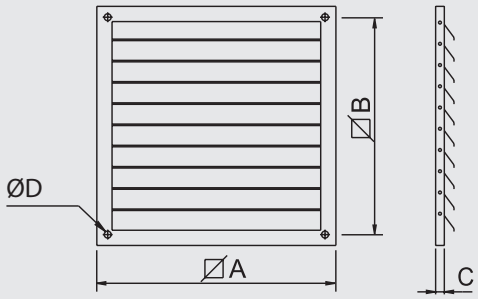
IEM ATEX 710



Series IE ATEX

NB: Accessories not included in the Type Examination Certificate. Please contact us for any different construction requirements.

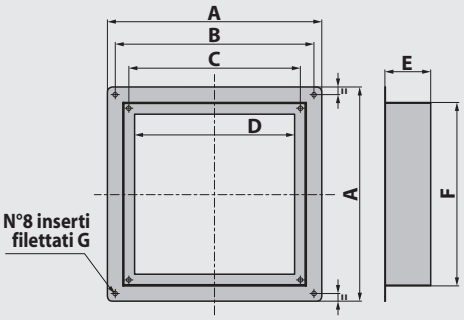
S - Gravity Shutter



CODE	TYPE	A	B	C	ØD	Kg*
1SE2000	S 20	275	250	10	10	1.0
1SE2500	S 25	325	300	10	10	1.5
1SE3000	S 31	375	350	10	10	2.0
1SE3500	S 35	425	400	10	10	2.5
1SE4000	S 40	475	450	10	10	3.0
1SE4500	S 45	530	500	15	10	3.5
1SE5000	S 50	630	600	15	10	4.0
1SE5600	S 56	660	630	15	10	4.5
1SE6300	S 63	760	730	15	10	5.5
1SE7000	S 71	830	800	15	10	6.0

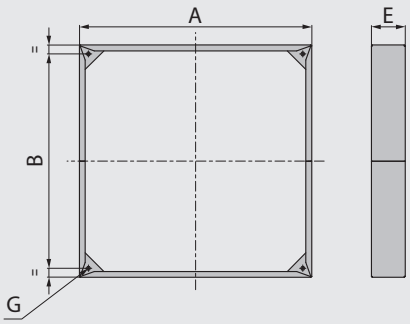
Dimensions in mm
* indicative weight

D - Spacer



CODE	TYPE	A	B	C	D	E	F	G	Kg*
1DP2002	D 20	340	305	249	230	70	280	M6	1,8
1DP2502	D 25	390	350	299	280	70	330	M6	2,2
1DP3002	D 30	445	405	349	330	100	380	M6	3,0
1DP3502	D 35	510	465	399	380	100	430	M6	3,4
1DP4003	D 40	560	520	449	420	120	480	M6	4,6
1DP4502	D 45	610	570	499	470	120	530	M6	5,0
1DP5003	D 50	680	640	602	570	150	630	M8	5,4
1DP5602	D 56	750	695	631	605	150	685	M8	6,6

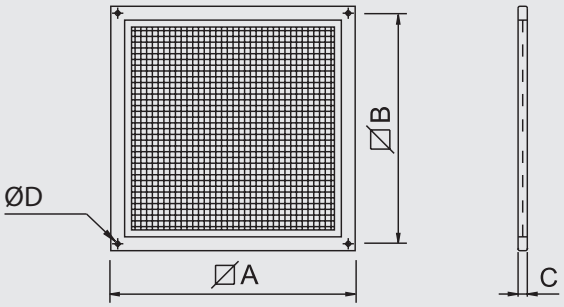
Dimensions in mm
* indicative weight



CODE	TYPE	A	B	E	G	Kg*
1DP6301	D 63	790	729	210	M8	9,8
1DP7000	D 71	840	800	115	M8	6,5

Dimensions in mm
* indicative weight

RA - Protection grill



CODE	TYPE	A	B	C	ØD	Kg*
5RE7020	R 20	275	250	10	10	1,3
5RE7025	R 25	325	300	10	10	1,5
5RE7031	R 31	375	350	10	10	1,9
5RE7035	R 35	425	400	10	10	2,3
5RE7040	R 40	475	450	10	10	2,7
5RE7045	R 45	530	500	15	10	2,8
5RE7050	R 50	630	600	15	10	4,0
5RE7056	R 56	660	630	15	10	4,6
5RE7063	R 63	760	730	15	10	5,3
5RE7070	R 71	830	800	15	10	6,0

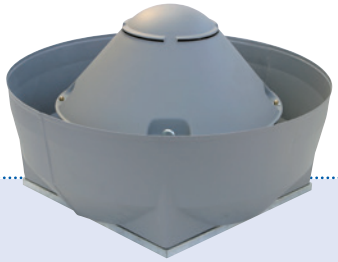
Dimensions in mm
* indicative weight

TCF / TCF-V ATEX

Explosion-proof Centrifugal Roof Fans

TCF
Horizontal discharge

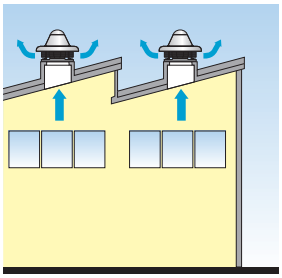
TCF-V
Vertical discharge



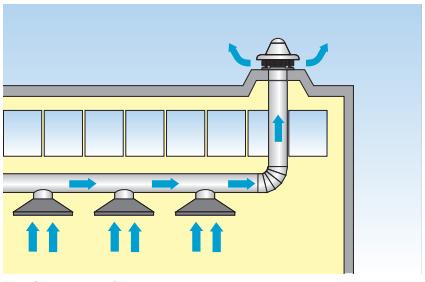
Certificate
IMQ 10 ATEX 020 X

- Sizes Ø from 250 to 800 mm
- ATEX II2G

INSTALLATION



DIRECT EXHAUST



DUCT EXHAUST

DESCRIPTION

The centrifugal roof fans of the TCF-ATEX and TCF-V ATEX are designed and constructed to operate in potentially explosive environments, **These fans are certified by IMQ according to ATEX Directive 94/9/CE, 2014/34/EU and to EN 14986 (Certificate IMQ 10 ATEX 020 X)**. They are suitable for exhausting clean or slightly dusty air with temperature from -20°C to +40°C and for installation in zone 1/21, areas where it is necessary to guarantee high security against explosions and fires due to the presence of flammable gas (II2G) and/or dusts (II2D/II2GD). These fans are designed for direct or ducted ventilation in residential, commercial and industrial buildings. Available in two versions: horizontal discharge (TCF) or vertical discharge (TCF-V).

CONSTRUCTION

- Base frame in galvanized steel sheet.
- Protection guard in drawn steel rod protected against the atmospheric agents, manufactured according to UNI 12499.
- Backward curved wheel in galvanized steel sheet, with high efficiency and low noise level, statically and dynamically balanced according ISO 1940.
- Upper cover in ABS, with appropriate slots for motor cooling.
- Outer deflector (FCV) in ABS.
- Motor separated from the conveyed airflow.

MOTOR

- Asynchronous three-phase motor or singlephase motor according to international standards IEC 60034, IEC 60072, IEC 60079and/or IEC61241, EMC 2004/108/CE, LVD 2006/95/CE, with Atex certification for explosive atmospheres category G group II thermal class T4 protection Exd, CE marked, IP55, class F. All suitable to S1 service (continuous working at constant load).

ACCESSORIES

- TS - Backdraught gravity shutter
- GR - Silencer
- CB - Counterbase to wall up
- BA - Support base for wawed roof coverings
- RA - Inlet Protection Guard
- ATEX service switch.
- PB - Support base/Silenced reduction
- CCr - Flat protection guard

UPON REQUEST

- Versions with different temperature ranges.
- Versions with motors for different atmospheres.
- Versions with motors suitable for speed regulation.
- Versions with double polarity motors.
- Versions with aluminium cover.

ACCESSORIES pag. 111 / **REGULATORS** pag. 200

PERFORMANCE

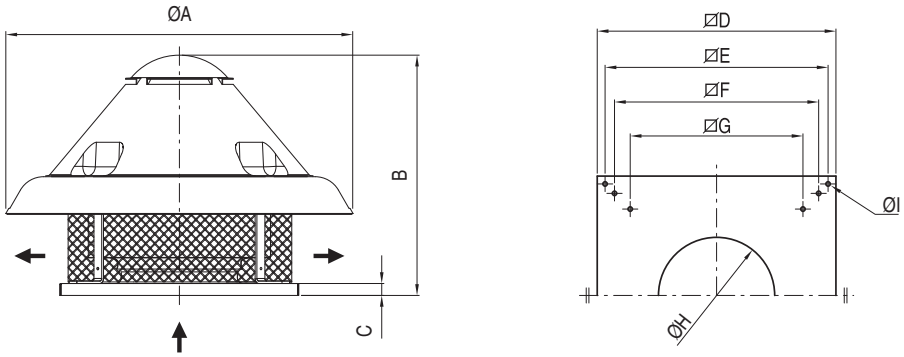
CODE	MODEL	MAX AIRFLOW	V at 50Hz	A	KW	SPEED	POLE	RATING	SOUND LEVEL* dB (A)	
		m³/h				rpm	N°	IP	Lw	Lp
TCF ATEX										
1XT2501	TCF-ATX 254 M	970	400	0,68	0,06	1400	4	55	65	41
1XT3001	TCF-ATX 314 M	2000	400	1,15	0,12	1400	4	55	74	51
1XT3501	TCF-ATX 354 M	3340	400	2,04	0,25	1400	4	55	78	54
1XT4000	TCF-ATX 404 M	4600	400	3,87	0,55	1400	4	55	80	56
1XT2506	TCF-ATX 254 T	970	400	0,30	0,09	1400	4	55	65	41
1XT3006	TCF-ATX 314 T	2000	400	0,54	0,12	1400	4	55	74	51
1XT3007	TCF-ATX 316 T	1315	400	0,60	0,12	950	6	55	59	42
1XT3506	TCF-ATX 354 T	3340	400	1,00	0,25	1400	4	55	78	54
1XT3507	TCF-ATX 356 T	2240	400	0,80	0,18	720	6	55	63	45
1XT4006	TCF-ATX 404 T	4600	400	1,50	0,55	1400	4	55	80	56
1XT4007	TCF-ATX 406 T	3070	400	0,80	0,18	950	6	55	65	47
1XT4008	TCF-ATX 408 T	2300	400	0,65	0,12	720	8	55	59	41
1XT4506	TCF-ATX 454 T	5000	400	2,00	0,75	1400	4	55	81	58
1XT4507	TCF-ATX 456 T	3340	400	1,40	0,37	950	6	55	67	49
1XT4508	TCF-ATX 458 T	2500	400	1,20	0,25	720	8	55	60	43
1XT5006	TCF-ATX 504 T	7200	400	2,80	1,10	1400	4	55	84	60
1XT5007	TCF-ATX 506 T	4820	400	1,40	0,37	950	6	55	69	52
1XT5008	TCF-ATX 508 T	3600	400	1,20	0,25	720	8	55	63	45
1XT5506	TCF-ATX 566 T	6250	400	1,80	0,55	950	6	55	76	52
1XT5507	TCF-ATX 568 T	4690	400	1,20	0,25	720	8	55	64	46
1XT6006	TCF-ATX 636 T	9960	400	3,20	1,10	950	6	55	82	59
1XT6007	TCF-ATX 638 T	7470	400	1,90	0,55	720	8	55	70	52
1XT7506	TCF-ATX 756 T	13055	400	4,90	2,20	950	6	55	86	63
1XT7507	TCF-ATX 758 T	9800	400	3,60	1,10	720	8	55	74	56
1XT8006	TCF-ATX 806 T	19670	400	9,10	3,00	950	6	55	93	69
1XT8007	TCF-ATX 808 T	14750	400	4,30	1,50	720	8	55	80	63
TCF-V ATEX										
1XT2500	TCF-V ATX 254 M	970	400	0,68	0,06	1400	4	55	65	41
1XT3000	TCF-V ATX 314 M	2000	400	1,15	0,12	1400	4	55	74	51
1XT3500	TCF-V ATX 354 M	3340	400	2,04	0,25	1400	4	55	78	54
1XT4003	TCF-V ATX 404 M	4600	400	3,87	0,55	1400	4	55	80	56
1XT2507	TCF-V ATX 254 T	970	400	0,30	0,09	1400	4	55	65	41
1XT3008	TCF-V ATX 314 T	2000	400	0,54	0,12	1400	4	55	74	51
1XT3009	TCF-V ATX 316 T	1315	400	0,60	0,12	950	6	55	59	42
1XT3508	TCF-V ATX 354 T	3340	400	1,00	0,25	1400	4	55	78	54
1XT3509	TCF-V ATX 356 T	2240	400	0,80	0,18	720	6	55	63	45
1XT4009	TCF-V ATX 404 T	4600	400	1,50	0,55	1400	4	55	80	56
1XT4010	TCF-V ATX 406 T	3070	400	0,80	0,18	950	6	55	65	47
1XT4011	TCF-V ATX 408 T	2300	400	0,65	0,12	720	8	55	59	41
1XT4509	TCF-V ATX 454 T	5000	400	2,00	0,75	1400	4	55	81	58
1XT4510	TCF-V ATX 456 T	3340	400	1,40	0,37	950	6	55	67	49
1XT4511	TCF-V ATX 458 T	2500	400	1,20	0,25	720	8	55	60	43
1XT5009	TCF-V ATX 504 T	7200	400	2,80	1,10	1400	4	55	84	60
1XT5010	TCF-V ATX 506 T	4820	400	1,40	0,37	950	6	55	69	52
1XT5011	TCF-V ATX 508 T	3600	400	1,20	0,25	720	8	55	63	45
1XT5508	TCF-V ATX 566 T	6250	400	1,80	0,55	950	6	55	76	52
1XT5509	TCF-V ATX 568 T	4690	400	1,20	0,25	720	8	55	64	46
1XT6008	TCF-V ATX 636 T	9960	400	3,20	1,10	950	6	55	82	59
1XT6009	TCF-V ATX 638 T	7470	400	1,90	0,55	720	8	55	70	52
1XT7508	TCF-V ATX 756 T	13055	400	4,90	2,20	950	6	55	86	63
1XT7509	TCF-V ATX 758 T	9800	400	3,60	1,10	720	8	55	74	56
1XT8008	TCF-V ATX 806 T	19670	400	9,10	3,00	950	6	55	93	69
1XT8009	TCF-V ATX 808 T	14750	400	4,30	1,50	720	8	55	80	63

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specifi c weight. Power supply 230V/1Ph/50Hz or 400V/3Ph/50hz.

* **Lp:** Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 6 meters (for comparative purposes only).

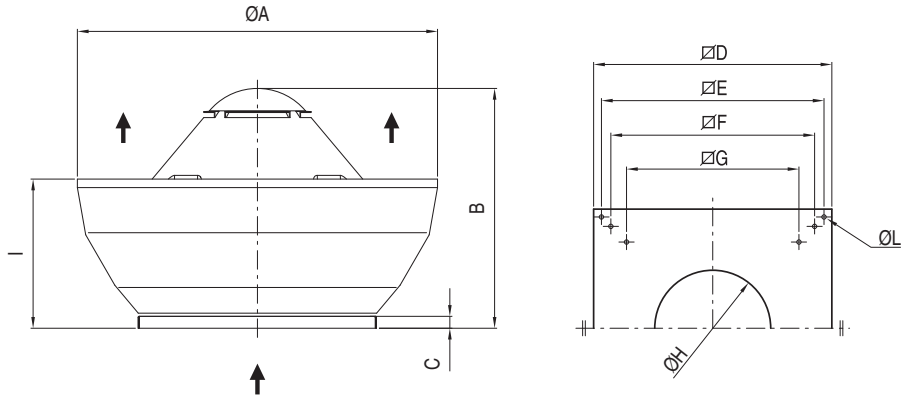
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

DIMENSIONS (mm)



TYPE	ØA	B	C	D	E	F	G	ØH	ØI	Kg*
TCF-ATX 250	600	500	38	400	360	-	257	180	12	16
TCF-ATX 310	600	510	38	400	360	-	307	220	12	18
TCF-ATX 350	755	580	38	500	450	-	380	270	12	27
TCF-ATX 400	910	640	38	650	600	530	471	296	12	32
TCF-ATX 450	910	650	38	650	600	530	471	296	12	40
TCF-ATX 500	1000	750	38	760	710	650	550	320	14	57
TCF-ATX 560	1000	750	38	760	710	650	550	370	14	60
TCF-ATX 630	1100	850	38	930	870	775	665	430	14	78
TCF-ATX 750	1100	880	38	930	870	775	665	480	14	120
TCF-ATX 800	1100	880	38	930	870	775	665	530	14	140

* Indicative weights

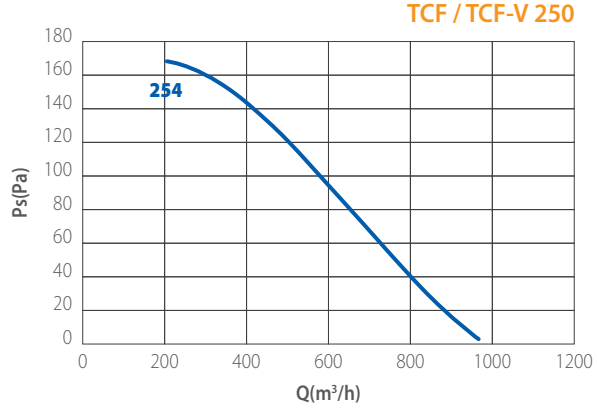


TYPE	ØA	B	C	D	E	F	G	ØH	I	ØL	Kg*
TCF-V-ATX 25	650	510	38	400	360	-	257	180	290	-	18
TCF-V-ATX 31	650	510	38	400	360	-	307	220	290	-	18
TCF-V-ATX 35	800	580	38	500	450	-	380	270	340	-	27
TCF-V-ATX 40	980	640	38	650	600	530	471	296	400	12	32
TCF-V-ATX 45	980	650	38	650	600	530	471	296	400	12	40
TCF-V-ATX 50	1200	750	38	760	710	650	550	320	490	14	58
TCF-V-ATX 56	1200	750	38	760	710	650	550	370	490	14	60
TCF-V-ATX 63	1400	850	38	930	870	775	665	430	540	14	78
TCF-V-ATX 75	1400	880	38	930	870	775	665	480	540	14	110
TCF-V-ATX 80	1400	880	38	930	870	775	665	530	540	14	110

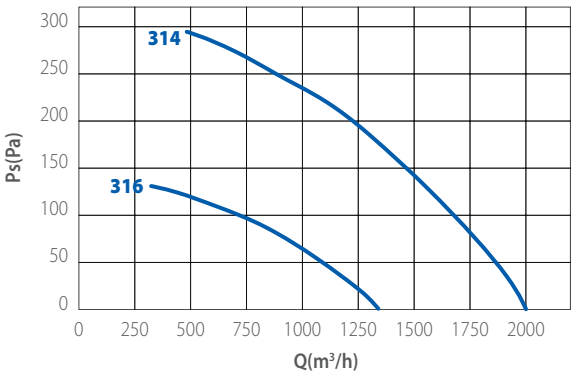
* Indicative weights

CURVES

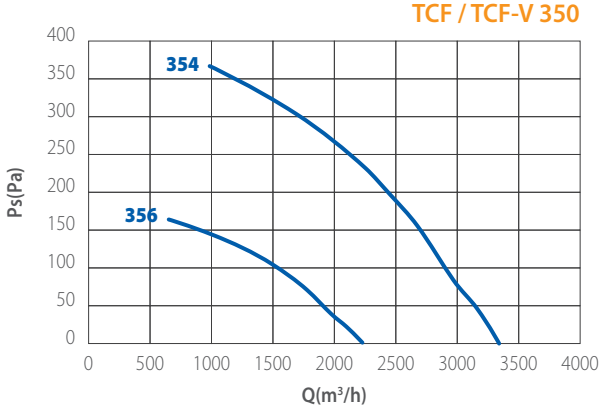
TCF / TCF-V 250



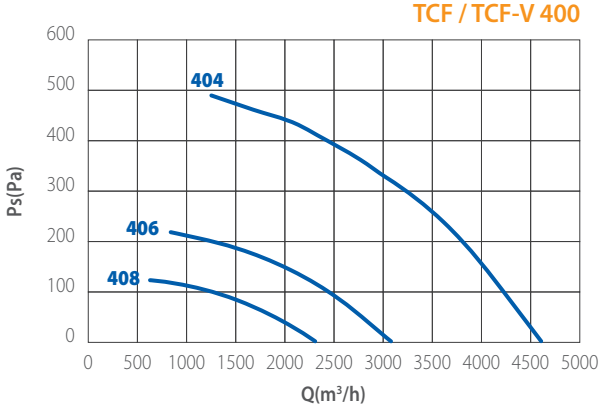
TCF / TCF-V 310



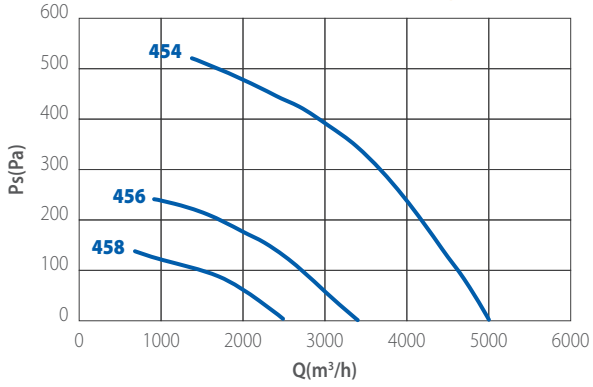
TCF / TCF-V 350



TCF / TCF-V 400

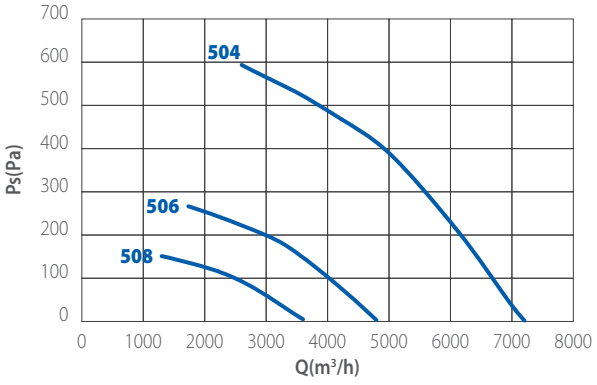


TCF / TCF-V 450

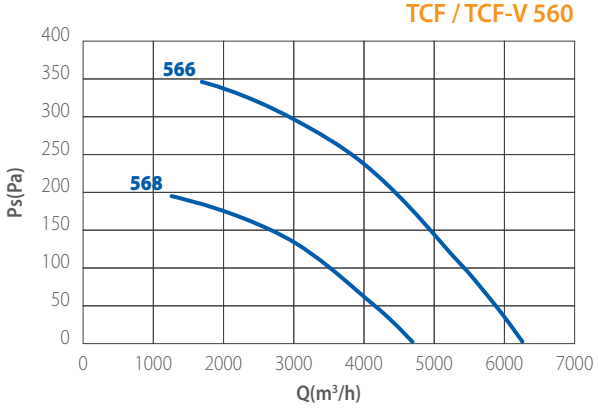


CURVES

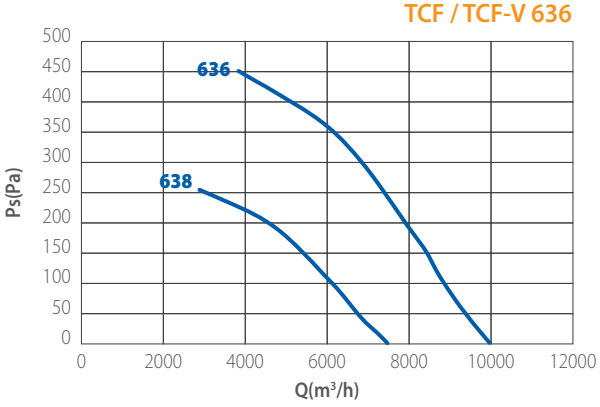
TCF / TCF-V 500



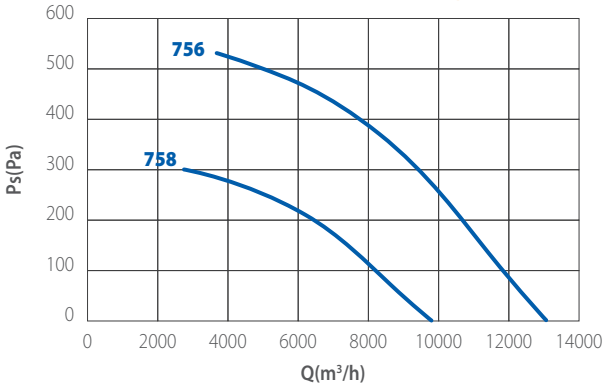
TCF / TCF-V 560



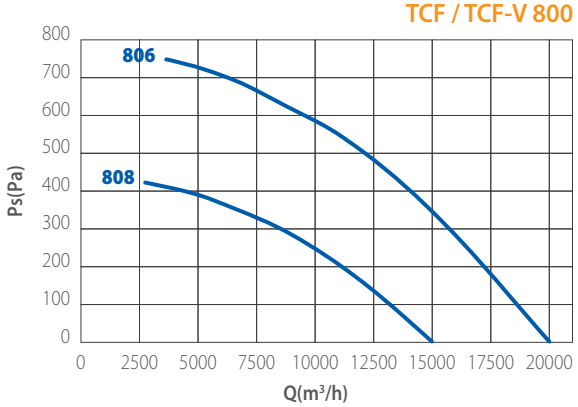
TCF / TCF-V 636



TCF / TCF-V 750



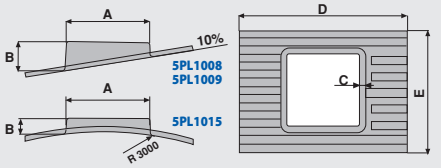
TCF / TCF-V 800



Series TCF / TCF-V ATEX

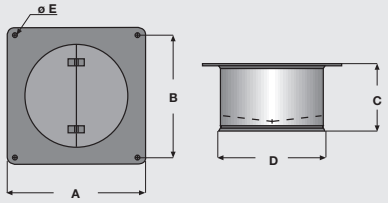
NB: Accessories not included in the Type Examination Certificate. Please contact us for any different construction requirements.

BA - Support base for waved roof coverings



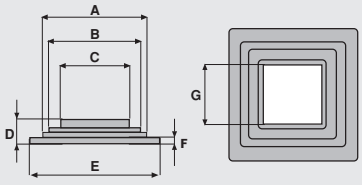
CODE	MODEL	A	B	C	D	E	WAVE PACE	WAVE HEIGHT
5PL1008	BA 10x177	920	250	60	1820	1300	177	51
5PL1009	BA 10x146	920	250	60	1820	1300	146	48
5PL1015	BA 3x177	920	170	60	2400	1300	177	51

TS - Backdraught gravity shutter



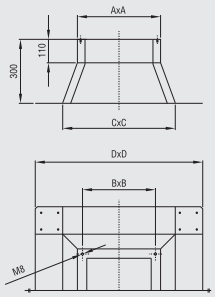
CODE	MODEL	A	B	C	D	E	KG
1TS2500	TS 250	280	257	150	200	10	1,5
1TS3000	TS 300	330	307	170	250	10	1,9
1TS3500	TS 350	410	380	200	310	10	3,1
1TS4000	TS 400/450	500	471	220	350	10	3,8
1TS5500	TS 550	590	550	270	450	12	5,2
1TS6000	TS 600/700	700	665	300	500	12	7,9

PL - Reductions



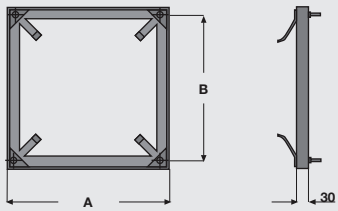
CODE	MODEL	A	B	C	D	E	F	G
5PL1010	PL	740	635	480	180	945	45	425

PB - Silenced reduction support base



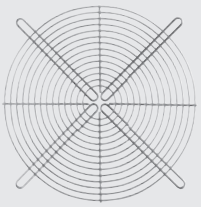
CODE	MODEL	AxA	BxB	CxC	DxD
5PB3100	PB 250/300	380	360	520	780
5PB3500	PB 350	480	450	620	880
5PB4000	PB 400/450	630	600	770	1030
5PB5000	PB 500/550	740	710	880	1140
5PB6300	PB 600/700	910	870	1050	1310

CB - Counterbase to wall up



CODE	MODEL	A	B	KG
1CB3000	CB 250/300	390	360	2,5
1CB3500	CB 350	490	450	2,8
1CB4000	CB 400/450	630	600	3,2
1CB5500	CB 550	740	710	3,6
1CB6000	CB 600/700	900	870	4,0
1CB8000	CB 800	800/900	890	4,0

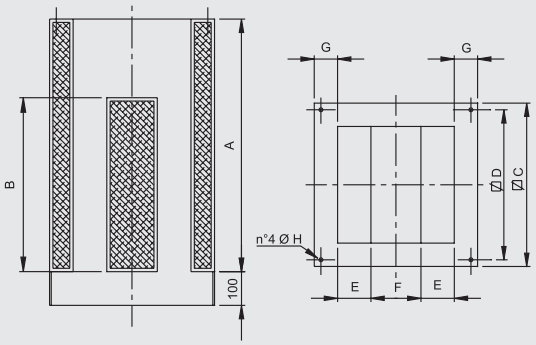
RA - Inlet Protection Guard



CODE	MODEL
1KT1110	RA TCF / TCF-V 250
1KT1120	RA TCF / TCF-V 300
1KT1130	RA TCF / TCF-V 350
1KT1140	RA TCF / TCF-V 400/450
1KT1150	RA TCF / TCF-V 550
1KT1155	RA TCF / TCF-V 600/700

GR - Silencers

Silencers with central pod. They reduce the exhausting noise of the fan. Sound absorbing material: mineral wool. Frame in galvanized steel sheet.
NB: the use of a silencer together with a TS shutter requires special version of the silencer itself with a reduced pod. Please mention it when ordering the silencer.

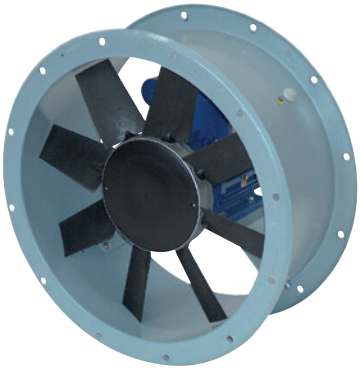


CODE	TYPE	A	B	C	D	E	F	G	ØH	kg
1SI0310	GR 25	750	650	390	360	95	100	50	M8	28
1SI0310	GR 31	750	650	390	360	95	100	50	M8	28
1SI0350	GR 35	750	650	490	450	120	150	50	M8	37
1SI0400	GR 40	750	650	640	600	145	250	50	M8	42
1SI0400	GR 45	750	650	640	600	145	250	50	M8	42
1SI0560	GR 50	750	650	750	710	200	250	50	M10	50
1SI0560	GR 56	750	650	750	710	200	250	50	M10	50
1SI0630	GR 71	1000	800	920	870	210	400	50	M10	79
1SI0630	GR 75	1000	800	920	870	210	400	50	M10	79
1SI0630	GR 80	1000	800	920	870	210	400	50	M10	79

Octave (Hz) spectrum of of noise attenuation in dB								
TYPE	63	125	250	500	1000	2000	4000	8000
GR 25	2	4	6	10	16	18	15	11
GR 31	2	4	6	10	16	18	15	11
GR 35	3	5	9	11	19	20	18	14
GR 40	3	4	8	9	18	15	10	6
GR 45	3	4	8	9	18	15	10	6
GR 50	4	5	11	15	16	12	9	5
GR 56	4	5	11	15	16	12	9	5
GR 71	3	4	5	8	14	9	7	3
GR 75	3	4	5	8	14	9	7	3
GR 80	3	4	5	8	14	9	7	3

CMP ATEX

Explosion-proof ducted axial fans



Certificate IMQ ATEX 019 X

DESCRIPTION

The ducted axial fans of the CMP-ATX series are designed and constructed to operate in potentially explosive environments and suitable for conveying air with temperature from -20°C to +40°C. These fans are certified by IMQ according to ATEX Directive 94/9/CE, 2014/34/EU and to EN 14986 (Certificate IMQ ATEX 019 X). They are suitable for installation in zone 1/21, that are areas where it is necessary to guarantee high security against explosions and fires due to the presence of flammable gas (II2G) and/or dusts (II2D/II2GD). The tube axial fans of CMP series are used for ducted installations requiring large airflow with relatively low pressure drop, like ventilation and cooling systems in industrial, naval, commercial, civil, energetic fields. This series has, compared to centrifugal fans, the advantage of being smaller in dimensions and easier to be installed. The series consists of different sizes with impeller diameter from 310 to 1600 mm.

CONSTRUCTION

- Short casing in steel sheet, with fixing flanges manufactured according to UNI ISO 6580-EUROVENT standard. Protected against atmospheric agents by epoxy paint.
- Axial impeller with aerofoil profile blades in glass reinforce antistat polyamide and die-cast aluminium hub, balanced according ISO 1940. Variable pitch angle in still position with setting means.
- Impeller and sparkproof band in alluminium, according to the type of construction.
- Execution 4 (with impeller directly coupled to motor) and airflow from motor to impeller.

MOTOR

- Asynchronous three-phase motors or singlephase according to international standards IEC 60034, IEC 60072, IEC 60079 and/or IEC61241, EMC 2004/108/CE, LVD 2006/95/CE, with Atex certification for explosive atmospheres category G group II thermal class T4 protection Exd, CE marked, IP55, class F. Suitable to S1 service (continuous working at constant load).

ACCESSORIES

- CCpro - Extension (for long casing version) with inspection porthole
- CCr - Flat protection guard
- CCrc - Conic protection guard
- CCga - Flexible connectors
- CCst - Support feet
- CCbo - Inlet/outlet bell mouth
- CCsa-CCsb - Silencers, with and without pod, in three lengths
- Ccf - Flange
- CCfc - Counter flange with collar
- Anti-vibration mounts.
- External ATEX terminal box.
- ATEX service switch.

UPON REQUEST

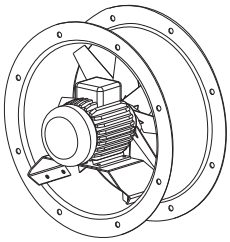
- Versions with double polarity motors.

ACCESSORIES pag. 120 / **REGULATORS** pag. 200

EXECUTIONS

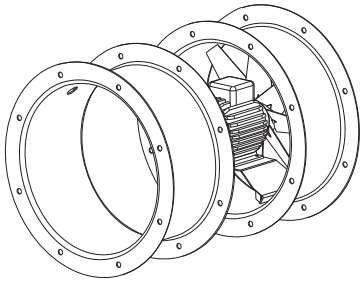
Short Casing

The fans of CC series are in short casing execution as standard, for ease of transport and installation and for cost saving. This execution is also suitable for assembling in the initial or final part of a ducted system. In this case a correct installation foresees the use of the inlet/outlet bell mouth "CCbo" (see accessories).



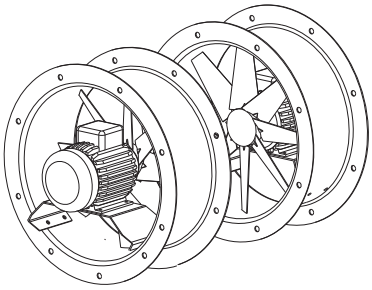
Long Casing

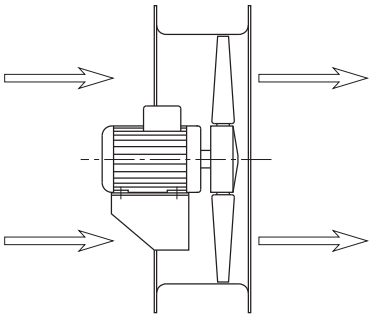
The CC series fans can be provided in long casing execution, with impeller and motor completely protected inside the casing, by using the extension "CCpro" (see accessories).
The extension " CCpro" is complete of inspection porthole and holes for cable entry.



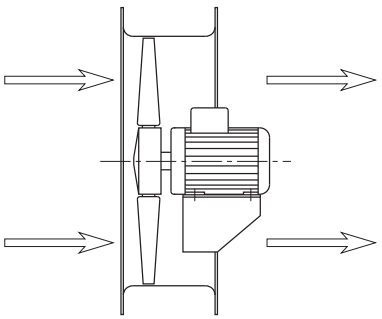
Multistage

The fans of the CC series foresee the possibility of multistage execution, iso-rotating or contra-rotating (assembly of two or more single-stage fans, with impellers rotating in the same or in the opposite direction). This configuration allows to considerably increase the pressure developed. Specifically, the CC series with two contra-rotating stages develops 2.5 times the pressure of a single-stage fan of equal diameter and speed, with a power absorption not bigger than 2 times. In addition, the multi-stage option, compared to the single-stage one, has a favourable relation performances/ noise, as the required performance can be achieved with a lower rotational speed.





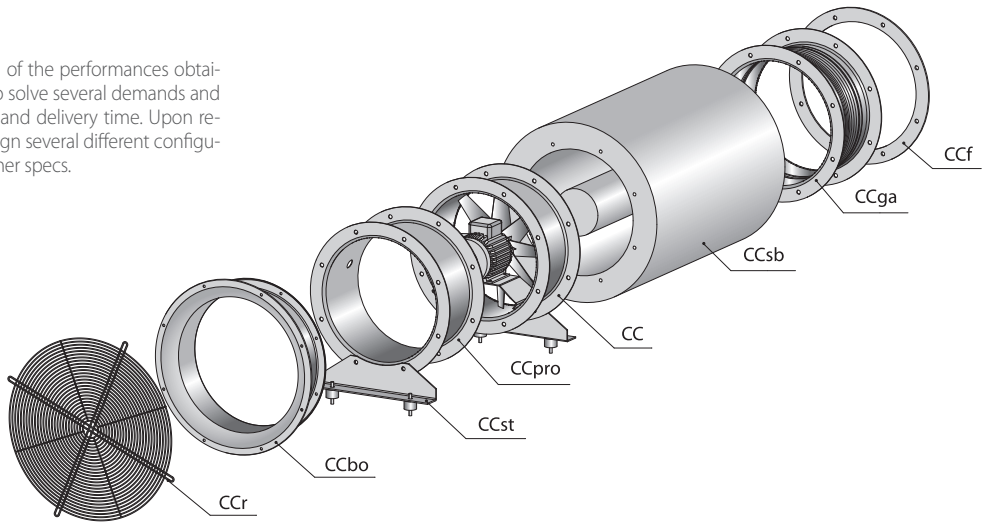
Standard airflow from MOTOR to IMPELLER



Upon request airflow from IMPELLER to motor

PERFORMANCE

Note: in this catalogue , a selection only of the performances obtainable with the CC series is shown, able to solve several demands and chosen to combine cost/ performances and delivery time. Upon request, our technical service is able to design several different configurations and installations, based on customer specs.



PERFORMANCE

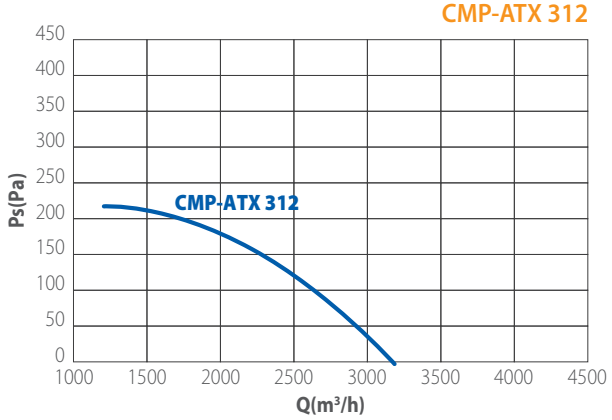
CODE	MODEL	PHASE	POLE	MAX AIRFLOW	ABSORBED CURRENT	POWER	RATING	MOTOR INSULATION CLASS	SOUND LEVEL	
			N°	m³/h	A	KW	IP		LW	LP
1XM3002	CMP-ATX 312	SINGLE-PHASE	2	3.150	1,91	0,25	55	F	88	67
1XM3003	CMP-ATX 314-A	SINGLE-PHASE	4	2.300	1,15	0,12	55	F	73	52
1XM3004	CMP-ATX 314-B	SINGLE-PHASE	4	2.000	1,15	0,12	55	F	63	42
1XM3500	CMP-ATX 352	SINGLE-PHASE	2	5.100	3,79	0,55	55	F	89	68
1XM3501	CMP-ATX 354-A	SINGLE-PHASE	4	3.300	1,15	0,12	55	F	76	55
1XM3502	CMP-ATX 354-B	SINGLE-PHASE	4	2.800	1,15	0,12	55	F	68	47
1XM4002	CMP-ATX 402	SINGLE-PHASE	2	7.600	7,6	1,1	55	F	91	70
1XM4003	CMP-ATX 404-A	SINGLE-PHASE	4	5.200	1,54	0,18	55	F	80	59
1XM4004	CMP-ATX 404-B	SINGLE-PHASE	4	4.000	1,54	0,18	55	F	73	52
1XM4500	CMP-ATX 454-A	SINGLE-PHASE	4	6.500	2,66	0,37	55	F	78	57
1XM4501	CMP-ATX 454-B	SINGLE-PHASE	4	5.500	2,66	0,37	55	F	75	54
1XM4502	CMP-ATX 454-C	SINGLE-PHASE	4	5.000	1,54	0,18	55	F	74	53
1XM3001	CMP-ATX 312 / II2G IIBT4	THREE-PHASE	2	3.150	0,8	0,25	55	F	88	67
1XM3000	CMP-ATX 314-A / II2G IIBT4	THREE-PHASE	4	2.300	0,54	0,12	55	F	73	52
1XM3005	CMP-ATX 314-B / II2G IIBT4	THREE-PHASE	4	2.000	0,54	0,12	55	F	63	42
1XM3503	CMP-ATX 352 / II2G IIBT4	THREE-PHASE	2	5.100	1,5	0,55	55	F	89	68
1XM3504	CMP-ATX 354-A / II2G IIBT4	THREE-PHASE	4	3.300	0,54	0,12	55	F	76	55
1XM3505	CMP-ATX 354-B / II2G IIBT4	THREE-PHASE	4	2.800	0,54	0,12	55	F	68	47
1XM4000	CMP-ATX 402 / II2G IIBT4	THREE-PHASE	2	7.600	2,4	1,1	55	F	91	70
1XM4001	CMP-ATX 404-A / II2G IIBT4	THREE-PHASE	4	5.200	0,64	0,18	55	F	80	59
1XM4005	CMP-ATX 404-B / II2G IIBT4	THREE-PHASE	4	4.000	0,64	0,18	55	F	73	52
1XM4503	CMP-ATX 452 / II2G IIBT4	THREE-PHASE	2	10.500	3,4	1,5	55	F	76	92
1XM4504	CMP-ATX 454-A / II2G IIBT4	THREE-PHASE	4	6.500	1,3	0,37	55	F	78	57
1XM4505	CMP-ATX 454-B / II2G IIBT4	THREE-PHASE	4	5.500	1,3	0,37	55	F	75	54
1XM4506	CMP-ATX 454-C / II2G IIBT4	THREE-PHASE	4	5.000	0,64	0,18	55	F	74	53
1XM5000	CMP-ATX 504-A / II2G IIBT4	THREE-PHASE	4	9.000	1,5	0,55	55	F	86	65
1XM5001	CMP-ATX 504-B / II2G IIBT4	THREE-PHASE	4	8.000	1,5	0,55	55	F	78	57
1XM5002	CMP-ATX 506 / II2G IIBT4	THREE-PHASE	6	5.700	0,8	0,18	55	F	76	55
1XM5003	CMP-ATX 508 / II2G IIBT4	THREE-PHASE	8	4.000	0,95	0,18	55	F	69	48
1XM5600	CMP-ATX 564-A / II2G IIBT4	THREE-PHASE	4	12.500	2	0,75	55	F	85	64
1XM5601	CMP-ATX 564-B / II2G IIBT4	THREE-PHASE	4	10.000	2	0,75	55	F	86	65
1XM5602	CMP-ATX 566 / II2G IIBT4	THREE-PHASE	6	7.700	1,2	0,25	55	F	74	53
1XM5603	CMP-ATX 568 / II2G IIBT4	THREE-PHASE	8	5.500	0,95	0,18	55	F	66	45
1XM6300	CMP-ATX 634-A / II2G IIBT4	THREE-PHASE	4	16.200	2,8	1,1	55	F	88	67
1XM6301	CMP-ATX 634-B / II2G IIBT4	THREE-PHASE	4	14.300	2,8	1,1	55	F	85	64
1XM6302	CMP-ATX 636 / II2G IIBT4	THREE-PHASE	6	10.500	1,4	0,37	55	F	79	58
1XM6303	CMP-ATX 638 / II2G IIBT4	THREE-PHASE	8	8.000	0,95	0,18	55	F	73	52
1XM7000	CMP-ATX 714-A / II2G IIBT4	THREE-PHASE	4	19.500	4,8	2,2	55	F	98	77
1XM7001	CMP-ATX 714-B / II2G IIBT4	THREE-PHASE	4	16.300	4,8	2,2	55	F	88	67
1XM7002	CMP-ATX 716 / II2G IIBT4	THREE-PHASE	6	12.700	2,2	0,75	55	F	87	66
1XM7003	CMP-ATX 718 / II2G IIBT4	THREE-PHASE	8	9.600	1,3	0,37	55	F	81	60
1XM8000	CMP-ATX 804-A / II2G IIBT4	THREE-PHASE	4	29.500	11,4	5,5	55	F	94	73
1XM8001	CMP-ATX 804-B / II2G IIBT4	THREE-PHASE	4	25.800	8,7	4	55	F	96	75
1XM8002	CMP-ATX 804-C / II2G IIBT4	THREE-PHASE	4	22.000	6,6	3	55	F	97	76
1XM8003	CMP-ATX 806-A / II2G IIBT4	THREE-PHASE	6	19.000	3,9	1,5	55	F	83	62
1XM8004	CMP-ATX 806-B / II2G IIBT4	THREE-PHASE	6	16.300	3,2	1,1	55	F	84	63
1XM8005	CMP-ATX 806-C / II2G IIBT4	THREE-PHASE	6	14.000	2,2	0,75	55	F	86	65
1XM8006	CMP-ATX 808-A / II2G IIBT4	THREE-PHASE	8	14.200	1,9	0,55	55	F	76	55
1XM8007	CMP-ATX 808-B / II2G IIBT4	THREE-PHASE	8	12.500	1,9	0,55	55	F	78	57
1XM8008	CMP-ATX 808-C / II2G IIBT4	THREE-PHASE	8	11.000	1,3	0,37	55	F	80	59
1XM9000	CMP-ATX 904-A / II2G IIBT4	THREE-PHASE	4	48.500	17,9	9	55	F	100	79
1XM9001	CMP-ATX 904-B / II2G IIBT4	THREE-PHASE	4	43.000	14,8	7,5	55	F	99	78
1XM9002	CMP-ATX 904-C / II2G IIBT5	THREE-PHASE	4	39.200	11,4	5,5	55	F	95	74
1XM9003	CMP-ATX 906-A / II2G IIBT4	THREE-PHASE	6	32.000	6,7	3	55	F	89	68
1XM9004	CMP-ATX 906-B / II2G IIBT4	THREE-PHASE	6	28.500	4,9	2,2	55	F	88	67
1XM9005	CMP-ATX 906-C / II2G IIBT4	THREE-PHASE	6	26.000	4,9	1,5	55	F	86	65
1XM9006	CMP-ATX 908-A / II2G IIBT4	THREE-PHASE	8	24.200	4,3	1,5	55	F	83	62
1XM9007	CMP-ATX 908-B / II2G IIBT4	THREE-PHASE	8	20.800	3,6	1,1	55	F	81	60
1XM9008	CMP-ATX 908-C / II2G IIBT4	THREE-PHASE	8	19.000	3,6	1,1	55	F	79	58
1XM1000	CMP-ATX 1004-A / II2G IIBT4	THREE-PHASE	4	73.000	28	15	55	F	111	90
1XM1001	CMP-ATX 1004-B / II2G IIBT4	THREE-PHASE	4	65.000	21,3	11	55	F	105	84
1XM1002	CMP-ATX 1004-C / II2G IIBT4	THREE-PHASE	4	54.000	14,8	7,5	55	F	98	77
1XM1003	CMP-ATX 1006-A / II2G IIBT4	THREE-PHASE	6	47.500	12,3	5,5	55	F	92	71
1XM1004	CMP-ATX 1006-B / II2G IIBT4	THREE-PHASE	6	43.000	9,1	4	55	F	95	74
1XM1005	CMP-ATX 1006-C / II2G IIBT4	THREE-PHASE	6	35.000	5,2	3	55	F	87	66
1XM1006	CMP-ATX 1008-A / II2G IIBT4	THREE-PHASE	8	35.500	5,2	2,2	55	F	86	65
1XM1007	CMP-ATX 1008-B / II2G IIBT4	THREE-PHASE	8	32.500	4,3	1,5	55	F	88	67
1XM1008	CMP-ATX 1008-C / II2G IIBT4	THREE-PHASE	8	26.000	3,6	1,1	55	F	81	60
1XM1120	CMP-ATX 1126-5Z-8-45	THREE-PHASE	6	65.520	14,8	7,5	55	F	95	74
1XM1121	CMP-ATX 1126-5Z-8-38,5	THREE-PHASE	6	56.880	12,3	5,5	55	F	98	77
1XM1122	CMP-ATX 1126-5Z-8-33,5	THREE-PHASE	6	48.240	9,1	4	55	F	89	68
1XM1123	CMP-ATX 1128-5Z-8-41,5	THREE-PHASE	8	46.080	7	3	55	F	88	67
1XM1124	CMP-ATX 1128-5Z-8-36	THREE-PHASE	8	39.600	5,2	2,2	55	F	92	71
1XM1250	CMP-ATX 1256-6W-4-36	THREE-PHASE	6	78.840	21,6	11	55	F	104	83
1XM1251	CMP-ATX 1256-6W-4-33	THREE-PHASE	6	73.080	14,8	7,5	55	F	99	78
1XM1252	CMP-ATX 1256-6W-4-29	THREE-PHASE	6	65.160	12,3	5,5	55	F	94	73
1XM1253	CMP-ATX 1258-6W-4-36	THREE-PHASE	8	59.040	9	4	55	F	97	76
1XM1254	CMP-ATX 1258-6W-4-31	THREE-PHASE	8	51.840	7	3	55	F	92	71
1XM1255	CMP - ATX 1258-6W-4-27	THREE-PHASE	8	45.360	5,2	2,2	55	F	88	67
1XM1400	CMP - ATX 1406-6W-5-32	THREE-PHASE	6	104.040	29	15	55	F	102	94
1XM1401	CMP - ATX 1406-6W-5-28	THREE-PHASE	6	91.800	22	11	55	F	100	92
1XM1402	CMP - ATX 1408-6W-5-35	THREE-PHASE	8	84.960	15,9	7,5	55	F	100	92
1XM1403	CMP - ATX 1408-6W-5-29	THREE-PHASE	8	71.280	12,7	5,5	55	F	94	87
1XM1600	CMP - ATX 1606-9W-5-31	THREE-PHASE	6	142.920	44	22	55	F	105	97
1XM1601	CMP - ATX 1606-9W-5-26	THREE-PHASE	6	119.520	29	15	55	F	103	95
1XM1602	CMP - ATX 1608-A-9W-5-33	THREE-PHASE	8	114.120	22	11	55	F	102	94
1XM1603	CMP - ATX 1608-B--9W-5-27	THREE-PHASE	8	93.240	15,9	7,5	55	F	98	90

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.

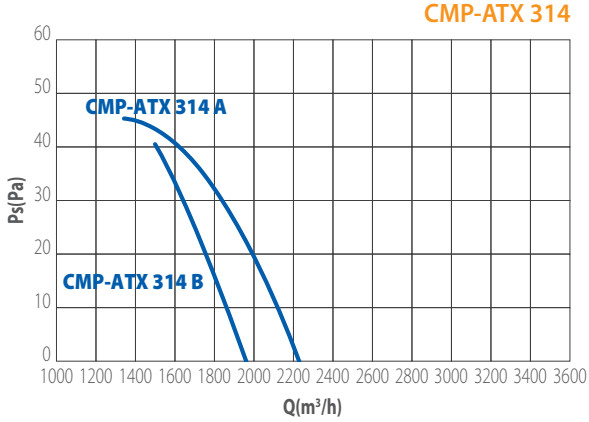
Lp: Sound pressure level measured in free field conditions, propagation spherical, measurement category D in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 3 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

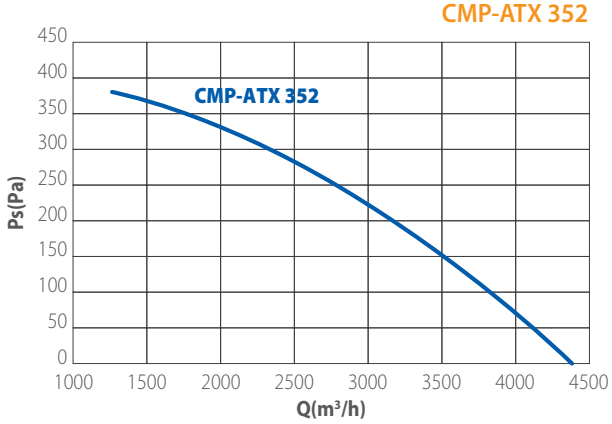
CMP-ATX 312



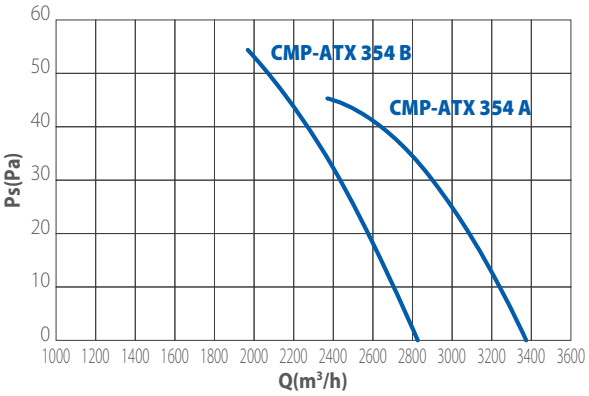
CMP-ATX 314



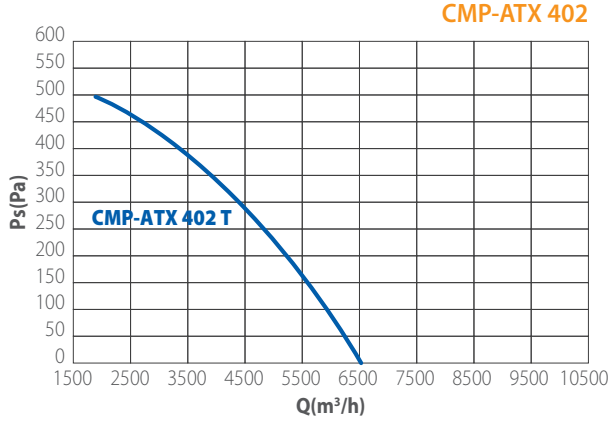
CMP-ATX 352



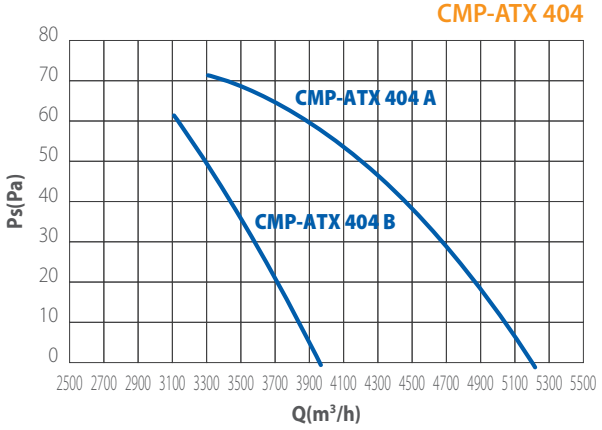
CMP-ATX 354



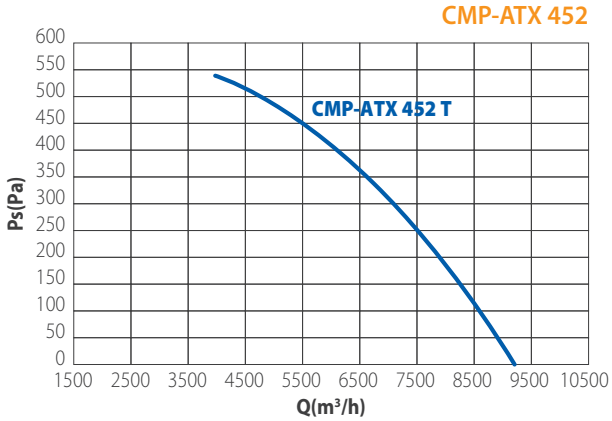
CMP-ATX 402



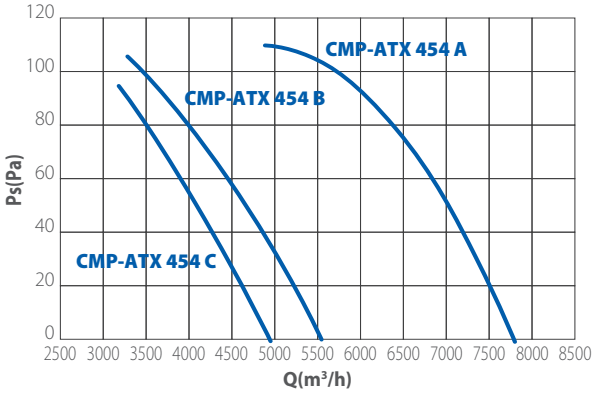
CMP-ATX 404



CMP-ATX 452

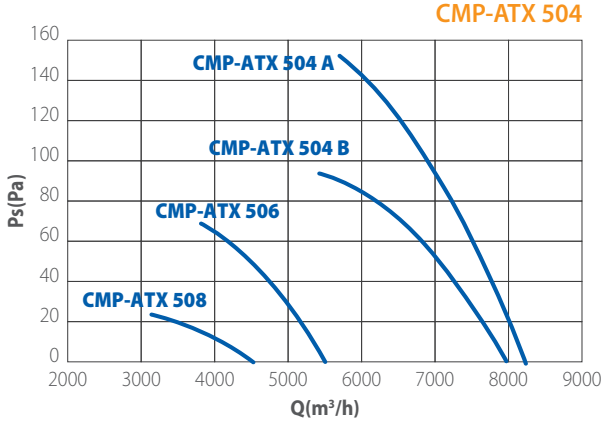


CMP-ATX 454

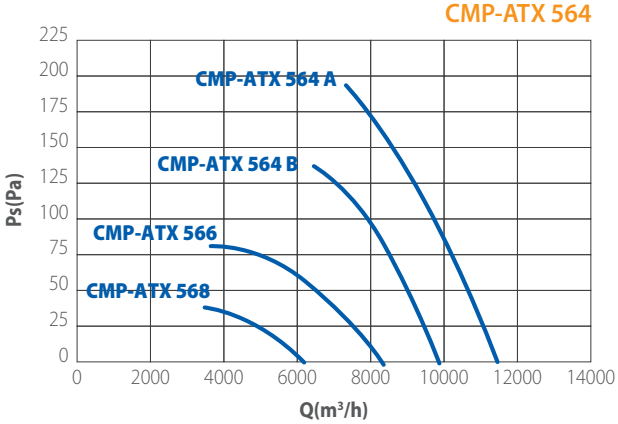


CURVES

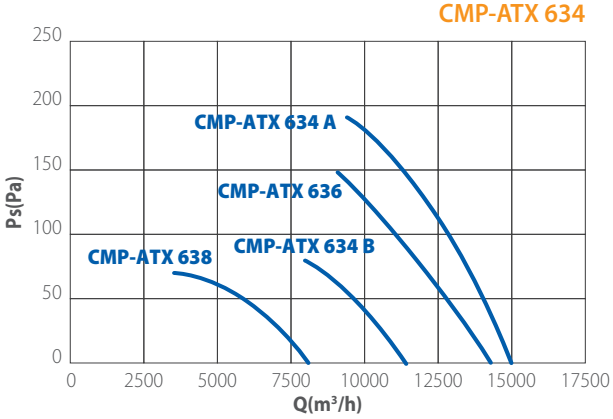
CMP-ATX 504



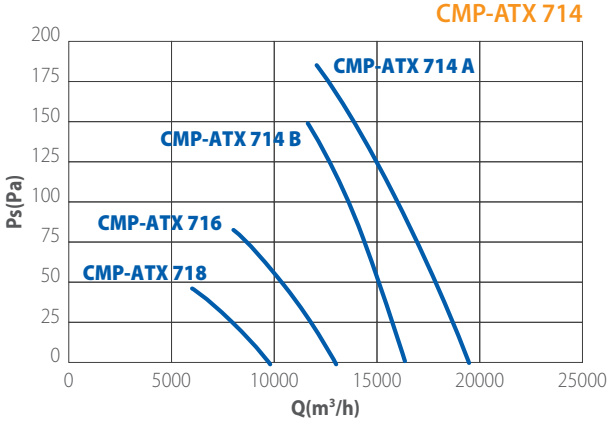
CMP-ATX 564



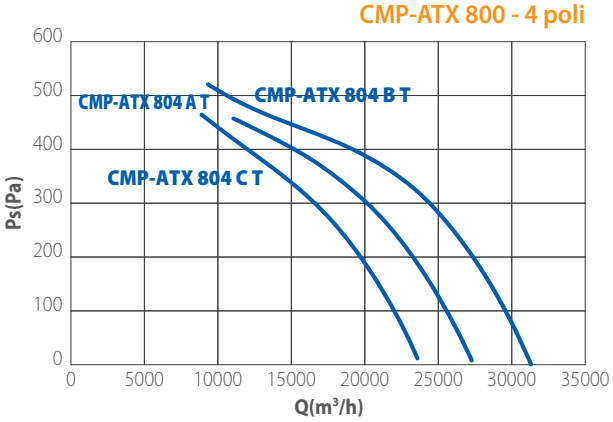
CMP-ATX 634



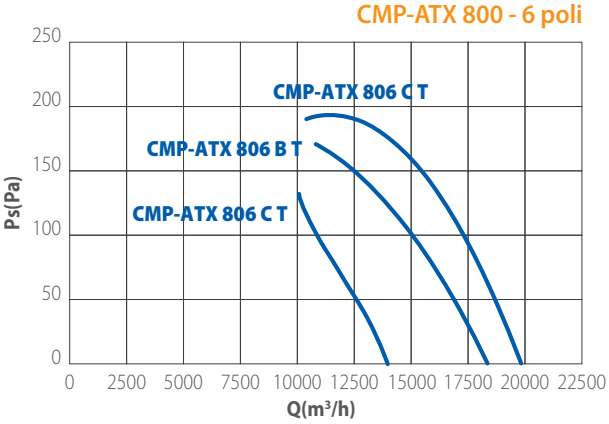
CMP-ATX 714



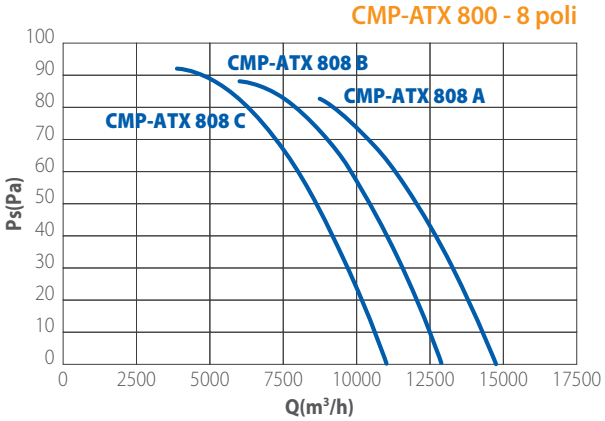
CMP-ATX 800 - 4 poli



CMP-ATX 800 - 6 poli

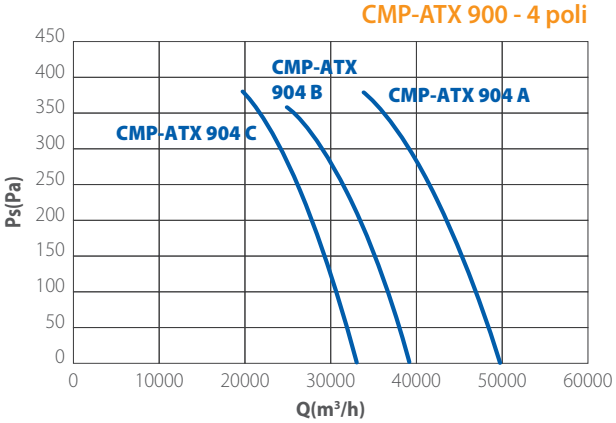


CMP-ATX 800 - 8 poli

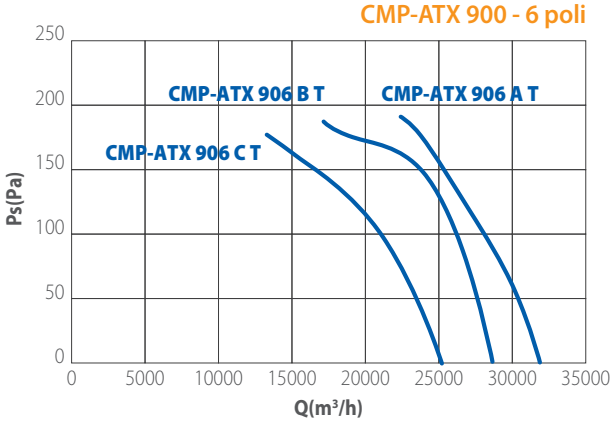


CURVES

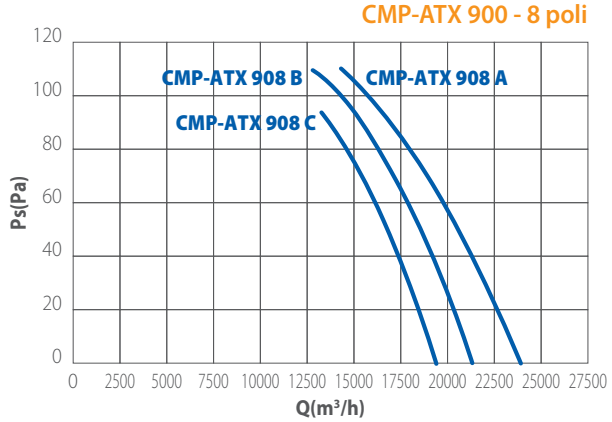
CMP-ATX 900 - 4 poli



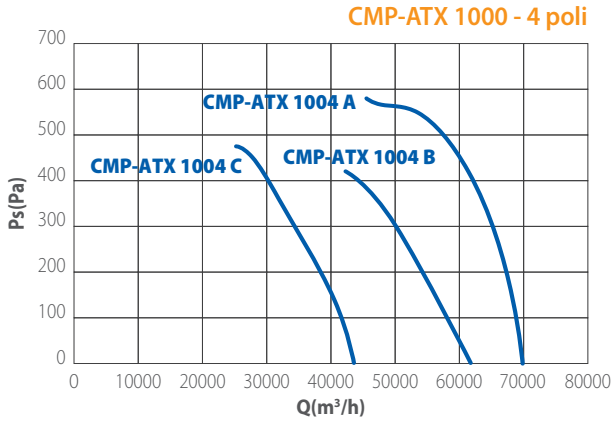
CMP-ATX 900 - 6 poli



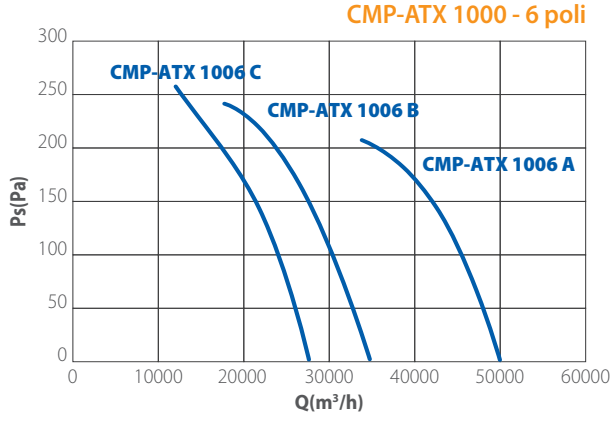
CMP-ATX 900 - 8 poli



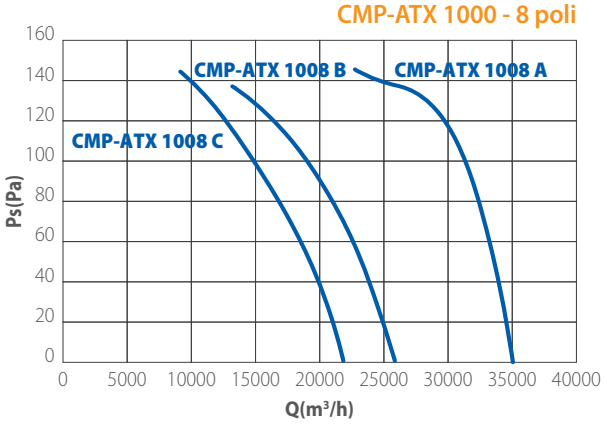
CMP-ATX 1000 - 4 poli



CMP-ATX 1000 - 6 poli

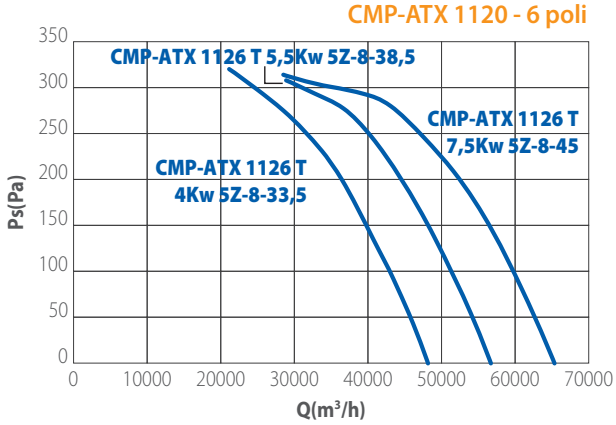


CMP-ATX 1000 - 8 poli

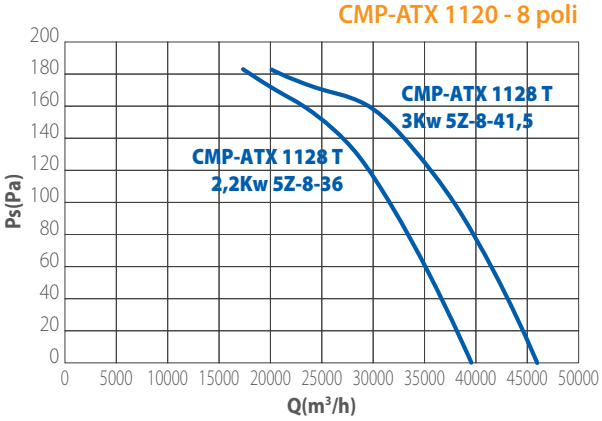


CURVES

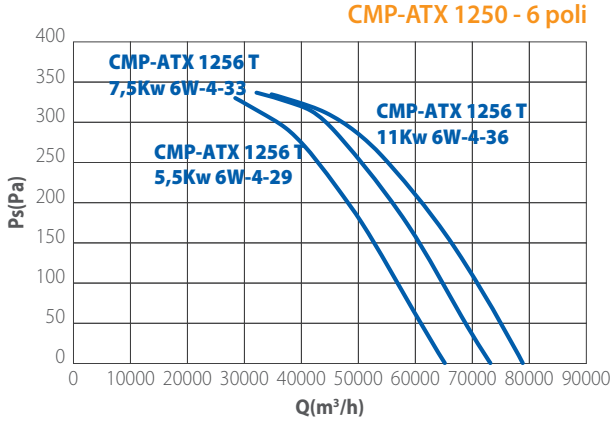
CMP-ATX 1120 - 6 poli



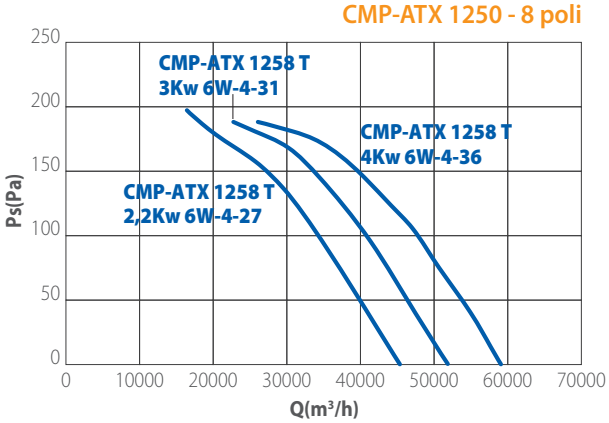
CMP-ATX 1120 - 8 poli



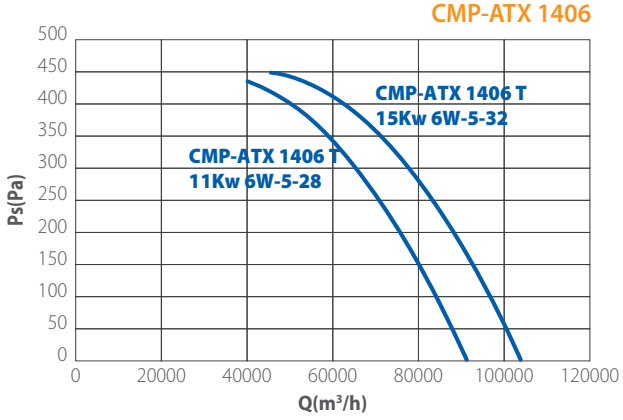
CMP-ATX 1250 - 6 poli



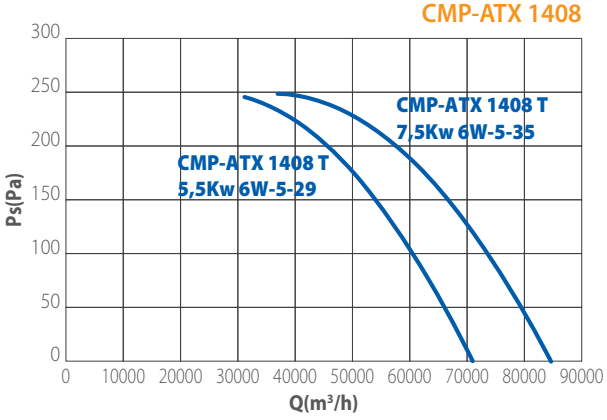
CMP-ATX 1250 - 8 poli



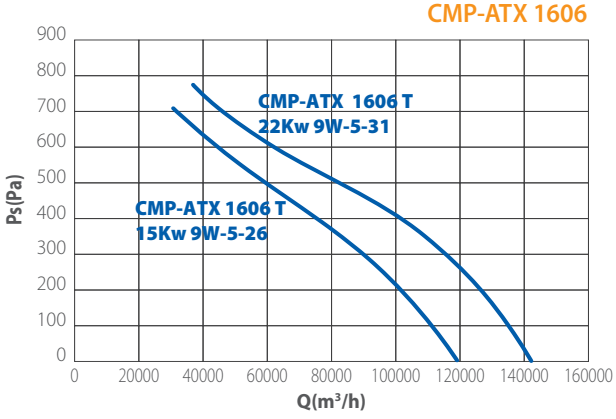
CMP-ATX 1406



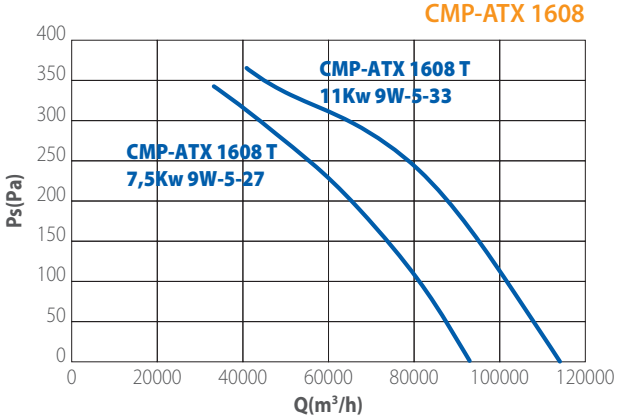
CMP-ATX 1408



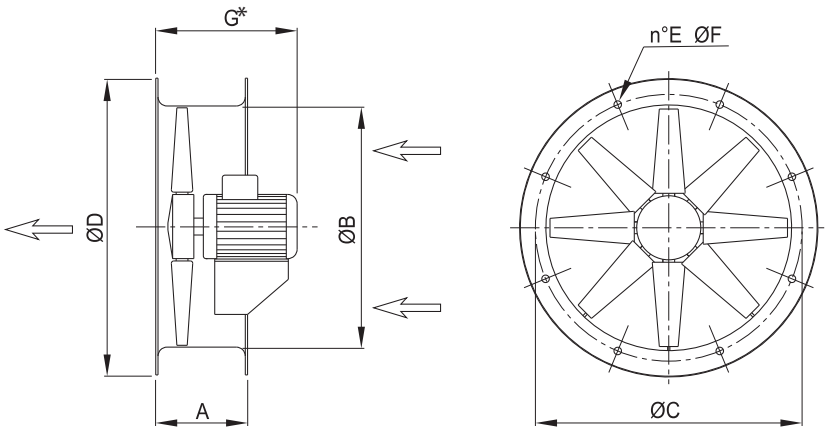
CMP-ATX 1606



CMP-ATX 1608



DIMENSIONS (mm)



*Indicative quote, variable according to the motor supplier.

TYPE	A	ØB	ØC	ØD	E	ØF	G*	kg**
CMP-ATX 310	200	305	355	395	8	10	380	24
CMP-ATX 350	200	355	395	446	8	10	380	27
CMP-ATX 400	230	405	450	496	8	12	430	32
CMP-ATX 450	230	455	500	546	8	12	430	40
CMP-ATX 500	250	505	560	598	12	12	440	41
CMP-ATX 560	250	565	620	658	12	12	440	44
CMP-ATX 630	250	635	690	730	12	12	470	55
CMP-ATX 710	250	708	770	810	16	12	520	70
CMP-ATX 800	350	808	860	910	16	12	580	135
CMP-ATX 900	350	908	970	1030	16	16	680	195
CMP-ATX 1000	350	1010	1070	1130	16	16	750	232
CMP-ATX 1120	350	1130	1190	1250	20	16	750	247
CMP-ATX 1250	350	1260	1320	1380	20	16	750	278
CMP-ATX 1400	450	1415	1470	1540	20	16	815	500
CMP-ATX 1600	450	1615	1680	1730	24	18	815	790

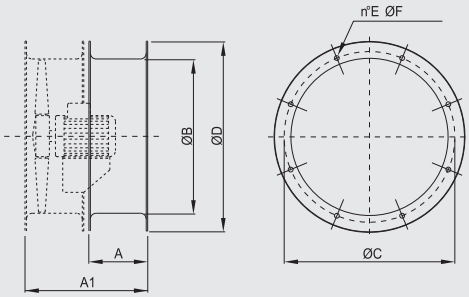
**Indicative weights

Series CMP ATEX

NB: accessories not included in the Type Examination Certificate. Please contact us for any different construction requirments.

CCpro - Long casing extension

Turns the standard short case execution into a long case version, also at site, with impeller and motor completely protected inside the casing. Manufactured in steel sheet, with fixing flanges according to UNI ISO6580 – EUROVENT standard. Protected against atmospheric agents by epoxy-paint. Complete of inspection porthole and holes for cable entry.

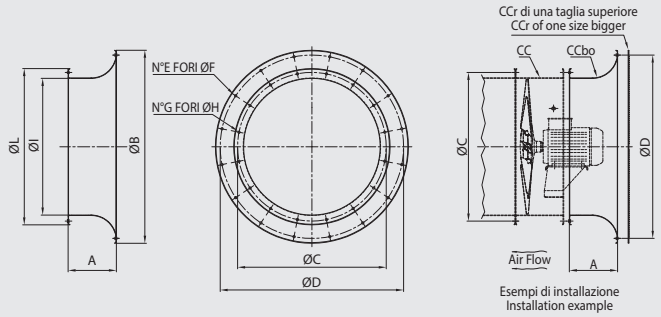


CODE	TYPE	A	A1	ØB	ØC	ØD	E	ØF	kg
1CC9313	CCpro 31	180	380	305	355	395	8	10	4
1CC9351	CCpro 35	180	380	355	395	446	8	10	5
1CC9402	CCpro 40	200	430	405	450	496	8	12	5,5
1CC9451	CCpro 45	200	430	455	500	546	8	12	7
1CC9502	CCpro 50	200	450	505	560	598	12	12	7,5
1CC9561	CCpro 56	200	450	565	620	658	12	12	8,2
1CC9632	CCpro 63	240	490	635	690	730	12	12	10,5
1CC9712	CCpro 71	280	530	708	770	810	16	12	13
1CC9802	CCpro 80	240	590	808	860	910	16	12	20
1CC9901	CCpro 90	340	690	908	970	1030	16	16	30
1CC9912	CCpro 100	410	760	1010	1070	1130	16	16	39
1CC9921	CCpro 112	410	760	1130	1190	1250	20	16	58
1CC9927	CCpro 125	410	760	1260	1320	1380	20	16	65

Dimensions in mm
1400/1600: upon request
The reported item codes are relative to the assembled extension

CCbo - Inlet/outlet cone

It allows a higher fan efficiency in case of installation with inlet or outlet not ducted. Manufactured in steel sheet, with one flange according to UNI ISO6580 – EUROVENT to be fitted to the CC fan, and an aerodynamically shaped bell mouth, with fixing holes for a protection guard (of one size bigger, example CCbo 71 + CCr 80). Protected against atmospheric agents by epoxy paint.

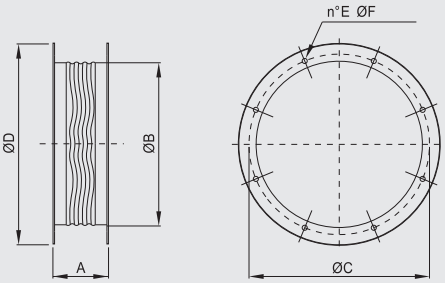


CODE	TYPE	A	B	C	D	E	F	G	H	I	L	kg
1CC9631	CCbo 31	175	442	355	395	8	10	8	10	307	395	4,5
1CC9635	CCbo 35	175	496	395	450	8	12	8	10	357	446	5
1CC9640	CCbo 40	175	546	450	500	8	12	8	12	407	496	5,6
1CC9645	CCbo 45	175	598	500	560	12	12	8	12	457	546	6,3
1CC9650	CCbo 50	190	658	560	620	12	12	12	12	507	598	8,5
1CC9656	CCbo 56	190	730	620	690	12	12	12	12	567	658	8,5
1CC9663	CCbo 63	190	810	690	770	16	12	12	12	637	730	9,8
1CC9671	CCbo 71	230	910	770	860	16	12	16	12	708	810	12,4
1CC9680	CCbo 80	250	1025	860	970	16	16	16	12	808	910	15,2
1CC9690	CCbo 90	300	1125	970	1070	16	16	16	16	910	1030	29,4
1CC9700	CCbo 100	300	1245	1070	1190	20	16	16	16	1010	1130	33,3
1CC9712	CCbo 112	300	1380	1190	1320	20	16	20	16	1130	1250	37,3
1CC9725	CCbo 125	300	1525	1320	1470	20	16	20	16	1260	1380	42,5
-	CCbo 140	300	1735	1470	1680	24	18	20	16	1415	1540	49,8
-	CCbo 160	300	1935	1680	1880	24	18	24	18	1615	1750	57,2

Dimensions in mm
N.B.: Airflow direction could vary from impeller to motor.

CCga - Flexible connectors

It prevents the propagation of vibrations along the ducted system. Manufactured with two flanges in steel sheet, according to UNI ISO6580 – EUROVENT standard for fixing to the fan and to the duct, and a strong flexible fabric joint. Working temperatures from –30°C to +80°C. Components in steel sheet protected against atmospheric agents by epoxy paint. Special executions are available for different working temperatures.



CODE	TYPE	A	ØB	ØC	ØD	E	ØF	kg
1SU5310	CCga 31	200	305	355	395	8	10	5
1SU5350	CCga 35	200	355	395	446	8	10	6
1SU5400	CCga 40	200	405	450	496	8	12	7
1SU5450	CCga 45	200	455	500	546	8	12	8
1SU5500	CCga 50	200	505	560	598	12	12	9
1SU5560	CCga 56	200	565	620	658	12	12	10
1SU5630	CCga 63	200	635	690	730	12	12	11
1SU5710	CCga 71	200	708	770	810	16	12	13
1SU5800	CCga 80	200	808	860	910	16	12	21
1SU5900	CCga 90	200	908	970	1030	16	16	23
1SU6000	CCga 100	200	1010	1070	1130	16	16	26
1SU6120	CCga 112	200	1130	1190	1250	20	16	29
1SU6125	CCga 125	200	1260	1320	1380	20	16	32

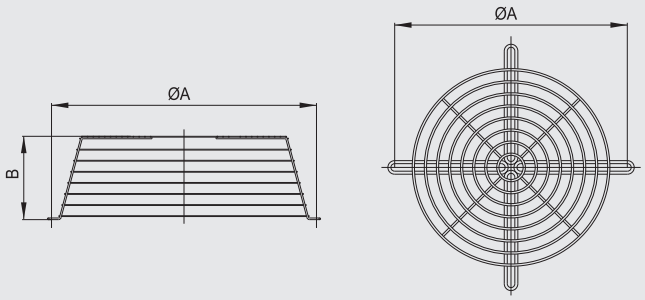
Dimensions in mm
1400/1600: upon request

Series CMP ATEX

NB: accessories not included in the Type Examination Certificate. Please contact us for any different construction requirments.

CCr/CCrc - Protection guards

They prevent from casual contact with moving parts of the fan. Manufactured in steel rod according to UNI 12499 standard and protected against atmospheric agents.
CCr: flat version (for long case and short case on impeller side).
CCrc: conic version (short case version on motor side).



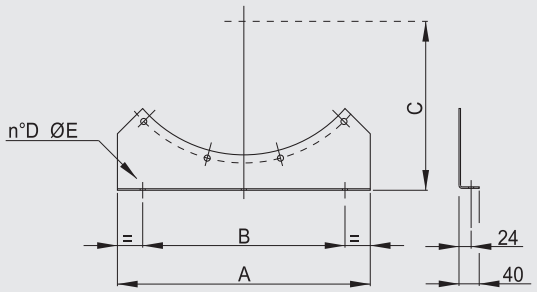
CODE	TYPE	ØA	kg
5RE9031	CCr 31	355	0,6
5RE9035	CCr 35	395	0,7
5RE9040	CCr 40	450	0,8
5RE9045	CCr 45	500	1,0
5RE9050	CCr 50	560	1,3
5RE9056	CCr 56	620	1,6
5RE9063	CCr 63	690	1,9
5RE9071	CCr 71	770	2,2
5RE9080	CCr 80	860	3,0
5RE9090	CCr 90	970	3,4
5RE9100	CCr 100	1070	3,5
5RE9102	CCr 112	1190	4,0
5RE9105	CCr 125	1320	4,5
5RE9110	CCr 140	1490	5,0
5RE9113	CCr 160	1690	6,0

CODE	TYPE	ØA	B	kg
5RE1581	CCrc 31	355	115	1
5RE1582	CCrc 35	395	115	1,1
5RE1583	CCrc 40	450	115	1,3
5RE1584	CCrc 45	500	115	1,5
5RE1585	CCrc 50	560	115	1,8
5RE1586	CCrc 56	620	115	2,2
5RE1587	CCrc 63	690	115	3
5RE1588	CCrc 71	770	150	4,5
5RE1589	CCrc 80	860	150	5,8
5RE1590	CCrc 90	970	305	7
5RE1591	CCrc 100	1070	305	8,5
5RE1592	CCrc 112	1190	305	10
5RE1593	CCrc 125	1320	305	11

Dimensions in mm
1400/1600: upon request

CCst - Support feet

Suitable to fasten the fan on the floor or to the ceiling. Manufactured in steel sheet and protected against atmospheric agents by epoxy paint. Supplied in sets of 2.

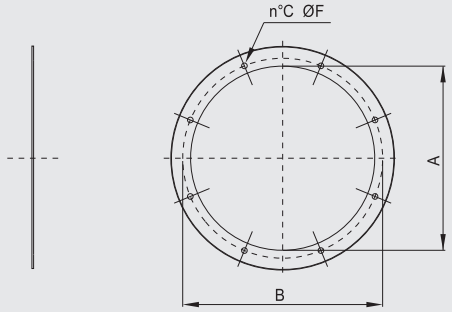


CODE*	TYPE	A	B	C	D	ØE	kg**
1ST0310	CCst 31	320	200	280	2	10	1,1
1ST0350	CCst 35	350	250	300	2	10	1,25
1ST0400	CCst 40	400	300	320	2	10	1,3
1ST0450	CCst 45	450	350	350	2	10	1,5
1ST0500	CCst 50	500	400	380	3	10	2,1
1ST0560	CCst 56	560	460	410	3	10	2,5
1ST0630	CCst 63	630	480	450	3	10	2,8
1ST0710	CCst 71	700	550	490	3	10	3,1
1ST0800	CCst 80	800	660	540	3	14	3,7
1ST0900	CCst 90	900	760	600	3	14	4,5
1ST1000	CCst 100	1000	860	640	3	14	4,7
1ST1120	CCst 112	1120	820	710	3	14	6,8
1ST1250	CCst 125	1250	950	770	3	14	7,7
1ST1400	CCst 140	1400	1100	850	3	14	11,0
1ST1600	CCst 160	1600	1300	960	3	16	21,5

Dimensions in mm
* Item code of the set of 2.
** Weight of single support

CCf - Counter flange

Ring plate with holes according to UNI ISO6580 – EUROVENT standard, compatible with fan flange. It is used for easier connection between the CC fan and the duct.



CODE	TYPE	ØA	ØB	C	ØF	kg
5BO1031	CCf 31	315	355	8	10	1,2
5BO1035	CCf 35	356	395	8	10	1,5
5BO1040	CCf 40	406	450	8	12	1,7
5BO1045	CCf 45	456	500	8	12	1,9
5BO1050	CCf 50	508	560	12	12	2,1
5BO1056	CCf 56	568	620	12	12	2,4
5BO1063	CCf 63	640	690	12	12	2,7
5BO1071	CCf 71	710	770	16	12	3,3
5BO1081	CCf 80	810	860	16	12	3,7
5BO1092	CCf 90	910	970	16	16	4,7
5BO1110	CCf 100	1010	1070	16	16	5,2
5BO1212	CCf 112	1130	1190	20	16	7,2
5BO1210	CCf 125	1260	1320	20	16	8

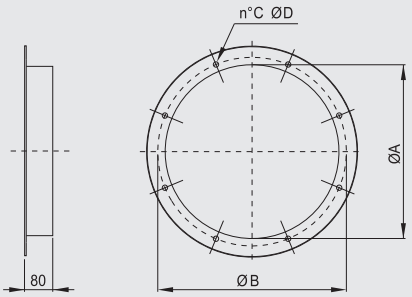
Dimensions in mm
1400/1600: upon request

Series CMP ATEX

NB: accessories not included in the Type Examination Certificate. Please contact us for any different construction requirments.

Counter flange with collar CCfc

Counter flange with addition of 80 mm of round duct. It is used for easier connection between the CC fan and the duct.

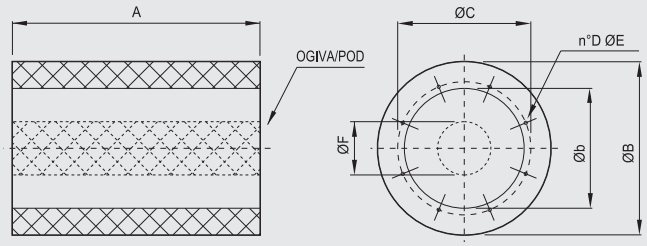


CODE	TYPE	ØA	ØB	C	ØD	kg
5BO1531	CCfc 31	305	355	8	10	1,3
5BO1535	CCfc 35	355	395	8	10	1,5
5BO1540	CCfc 40	405	450	8	12	1,7
5BO1545	CCfc 45	455	500	8	12	2
5BO1550	CCfc 50	505	560	12	12	2,2
5BO1556	CCfc 56	565	620	12	12	2,5
5BO1563	CCfc 63	635	690	12	12	2,9
5BO1571	CCfc 71	710	770	16	12	3,3
5BO1580	CCfc 80	808	860	16	12	3,8
5BO1590	CCfc 90	908	970	16	16	4,2
5BO1600	CCfc 100	1010	1070	16	16	5
5BO1620	CCfc 112	1130	1190	20	16	5,8
5BO1625	CCfc 125	1260	1320	20	16	6,5

Dimensions in mm
1400/1600: upon request

CCsa/CCsb - Cylindrical silencers

The cylindrical silencers CCs are available in two versions, without pod (CCsa) and with pod (CCsb). The presence of the pod allows a higher noise attenuation, but creates an additional pressure drop in the system. Both the versions can be fixed to the corresponding flange of the CC in inlet and outlet. The CCsa series doesn't create additional losses. The CCsb series gives an additional loss, as shown in the diagram at page 50.
Silencers can be provided with length equal to 1 - 1,5 - 2 times the diameter (b). These silencers are manufactured completely in galvanized steel. The internal part and the pod are made in perforated sheet, to effectively allow the sound absorption of the acoustic lining in mineral wool. The working temperature is included from -40°C and +150°C.



TYPE CCsa / CCsb	ØB	Øb	ØC	D	ØE	ØF
31	455	315	355	8	M8	140
35	495	355	395	8	M8	200
40	540	400	450	8	M10	200
45	610	450	500	8	M10	245
50	660	500	560	12	M10	245
56	720	560	620	12	M10	295
63	790	630	690	12	M10	295
71	870	710	770	16	M10	380
80	1000	800	860	16	M10	380
90	1100	900	970	16	M12	380
100	1200	1000	1070	16	M12	650
112	1320	1120	1190	20	M12	650
125	1450	1250	1320	20	M12	650

Dimensions in mm

TYPE CCsa	A 1Ø	kg	A 1,5Ø	kg	A 2Ø	kg
31	315	8	472	11	630	14
35	355	10	532	14	710	17
40	400	12	600	17	800	21
45	450	15	675	20	900	24
50	500	18	750	25	1000	32
56	560	21	840	28	1120	35
63	630	24	945	33	1260	43
71	710	35	1065	49	1420	63
80	800	43	1200	61	1600	79
90	900	70	1350	94	1800	112
100	1000	113	1500	137	2000	161
112	1120	130	1680	154	2240	178
125	1250	152	1875	185	2500	213

Dimensions in mm

TIPO / TYPE CCsb	A 1Ø	kg	A 1,5Ø	kg	A 2Ø	kg
31	315	10	472	14	630	16
35	355	12	532	16	710	18
40	400	14	600	21	800	26
45	450	17	675	24	900	29
50	500	23	750	32	1000	39
56	560	28	840	37	1120	44
63	630	32	945	44	1260	55
71	710	44	1065	62	1420	78
80	800	56	1200	79	1600	101
90	900	130	1350	153	1800	175
100	1000	143	1500	180	2000	216
112	1120	165	1680	202	2240	238
125	1250	193	1875	240	2500	282

Dimensions in mm / Item code upon request.

Series CMP ATEX

Acoustic data tested in accordance to ISO 7235

CCsa / CCsb - Cylindrical silencers

CCsa: without pod

A= 1 x Øb								
Octave spectium (Hz) of noise attenuation in dB								
TYPE CCsa	63	125	250	500	1K	2K	4K	8K
31	1	1	3	8	14	9	8	7
35	0	0	3	9	14	10	8	6
40	0	0	4	10	13	8	8	5
45	1	1	4	12	12	9	6	6
50	0	0	4	13	11	9	6	5
56	0	0	4	14	11	8	5	4
63	1	1	5	14	10	9	5	5
71	1	1	5	12	9	7	5	5
80	2	3	7	9	8	6	5	4
90	2	3	7	13	8	6	5	4
100	2	3	8	12	8	4	4	4
112	2	3	8	13	7	5	4	3
125	2	3	9	13	7	4	4	3

CCsb: with pod

A= 1 x Øb								
Octave spectium (Hz) of noise attenuation in dB								
TYPE CCsb	63	125	250	500	1K	2K	4K	8K
31	0	1	4	9	16	17	13	10
35	0	0	4	11	22	21	15	12
40	0	1	4	11	20	18	14	11
45	0	1	6	14	21	19	13	9
50	1	2	5	13	20	16	11	8
56	1	1	6	15	21	17	11	8
63	1	1	6	15	19	16	10	8
71	1	2	7	15	20	18	12	10
80	2	3	9	12	17	15	9	8
90	2	4	8	15	16	11	8	7
100	4	8	14	20	24	21	14	10
112	4	6	13	20	21	14	8	7
125	4	7	12	18	19	10	6	6

A= 1,5 x Øb								
Octave spectium (Hz) of noise attenuation in dB								
TYPE CCsa	63	125	250	500	1K	2K	4K	8K
31	1	2	5	12	19	13	11	8
35	0	0	5	12	21	13	11	9
40	1	1	5	14	19	12	10	8
45	1	1	6	17	17	13	9	8
50	1	1	6	18	17	12	9	7
56	1	2	7	20	15	11	8	5
63	1	2	7	20	14	12	8	6
71	2	2	7	18	11	9	6	7
80	2	5	10	13	12	9	7	7
90	2	5	11	16	11	7	7	5
100	2	5	12	17	10	6	6	5
112	3	5	12	18	8	6	5	4
125	3	6	12	17	8	5	5	4

A= 1,5 x Øb								
Octave spectium (Hz) of noise attenuation in dB								
TYPE CCsb	63	125	250	500	1K	2K	4K	8K
31	2	4	5	13	23	26	18	12
35	1	1	7	15	33	32	22	17
40	1	2	6	15	31	27	19	14
45	1	2	7	19	31	28	18	12
50	2	3	7	19	29	24	14	10
56	2	3	9	22	32	27	15	11
63	2	2	9	22	29	23	14	10
71	2	3	11	22	31	25	13	11
80	3	6	13	18	26	22	12	11
90	3	5	12	20	24	16	10	9
100	6	10	22	30	37	29	16	12
112	6	10	19	29	33	20	11	10
125	6	10	18	26	29	14	9	7

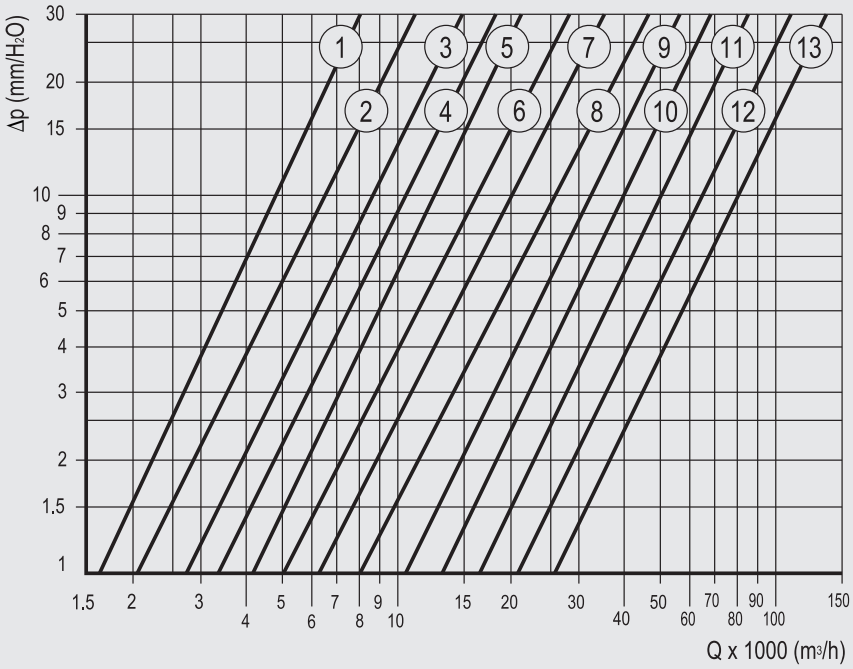
A= 2 x Øb								
Octave spectium (Hz) of noise attenuation in dB								
TYPE CCsa	63	125	250	500	1K	2K	4K	8K
31	4	6	6	16	26	17	13	9
35	0	2	6	15	25	16	12	10
40	0	2	7	18	24	15	12	9
45	0	1	7	21	21	15	10	8
50	1	2	8	23	21	14	11	8
56	1	1	9	24	19	14	10	7
63	1	2	9	25	17	14	10	7
71	2	4	9	24	14	11	8	8
80	4	6	13	22	14	10	9	7
90	4	6	14	23	13	9	7	6
100	4	6	16	23	12	7	7	6
112	4	6	15	23	10	7	6	6
125	5	8	17	22	10	6	6	5

A= 2 x Øb								
Octave spectium (Hz) of noise attenuation in dB								
TYPE CCsb	63	125	250	500	1K	2K	4K	8K
31	3	6	7	17	32	33	22	17
35	1	2	8	19	40	39	27	20
40	1	2	9	20	37	35	23	16
45	2	3	10	23	39	36	21	15
50	2	3	10	24	38	32	18	12
56	1	2	12	27	41	35	18	12
63	2	3	11	27	37	29	15	12
71	3	5	14	29	41	32	18	15
80	3	6	16	29	35	26	15	12
90	4	7	17	30	34	20	12	11
100	7	13	28	39	47	38	19	13
112	8	14	26	36	42	24	13	11
125	7	13	25	35	37	17	11	9

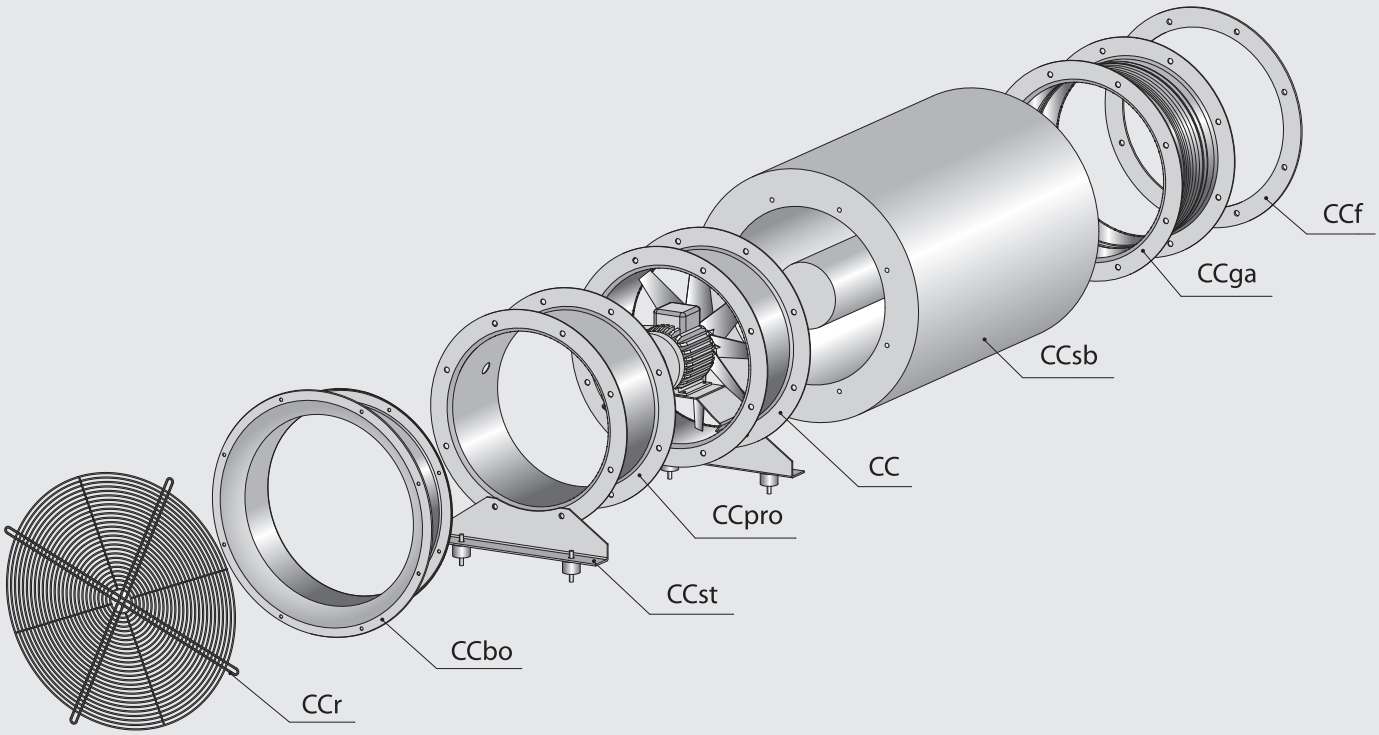
Series CMP ATEX

N.B.: Without pod (CCsa) loss charge irrelevant

CCsb - Silencer with pod loss charge diagram



TYPE	n°
CCsb 31	1
CCsb 35	2
CCsb 40	3
CCsb 45	4
CCsb 50	5
CCsb 56	6
CCsb 63	7
CCsb 71	8
CCsb 80	9
CCsb 90	10
CCsb 100	11
CCsb 112	12
CCsb 125	13



IC ATEX

Explosion-proof forward curved blade centrifugal fans

Certificate
IMQ 10 ATEX 018 X

- 10 models
- 5 sizes - Ø 100 to 180 mm
- ATEX II2G
- INOX STEEL AISI 304

400 V | IP55 | min -20°C | max +40°C | CE

DESCRIPTION

The centrifugal fans of the IC-ATEX and IC INOX-ATEX series are designed and constructed to operate in potentially explosive environments, according to the ATEX Directives 94/9 CE and 2014/34/EU. They are suitable to convey clean and non-dusty air in the temperature range of -20°C +40°C. They are suitable for installation in zone 1/21, that are areas where it is necessary to guarantee high security against explosions and fi res due to the presence of flammable gas (II2G) and/or dusts (II2D/II2GD). These fans are certified by IMQ according to ATEX Directive 94/9/CE and to EN 14986 (Certificate IMQ 10 ATEX 018 X). They are suitable for all the industrial applications where small air volumes and high pressures are required. The series consists of different models with impeller diameter from 100 to 180 mm. The motor is directly fitted to the forward curved impeller. The casing is easily adjustable, also on site, to the required discharge angle every 45°, including 180° and 225°. IC INOX-ATEX is made in stainless steel AISI304 and is suitable for conveying corrosive / acid air.

CONSTRUCTION

- Volute casing in steel sheet, protected against atmospheric agents by epoxy paint or in stainless steel AISI304 sheet.
- Single inlet, single gauge, forward curved impeller (sirocco type), in galvanized steel sheet or in stainless steel AISI304.
- Steel sheet inlet with epoxy fi nish or inox inlet on models IIB. Brass inlet on models with execution IIC.
- Execution 5 (with impeller directly coupled to fl anged motor).
- Motor separated from the conveyed airfl ow.
- Standard orientation LG270°.
- Inlet connector supplied (disassembled)

ACCESSORIES

- Motor support in steel or steel sheet.
- Inlet and outlet protection guard manufactured according to UNI 12499 norm and protected against the atmospheric agents.

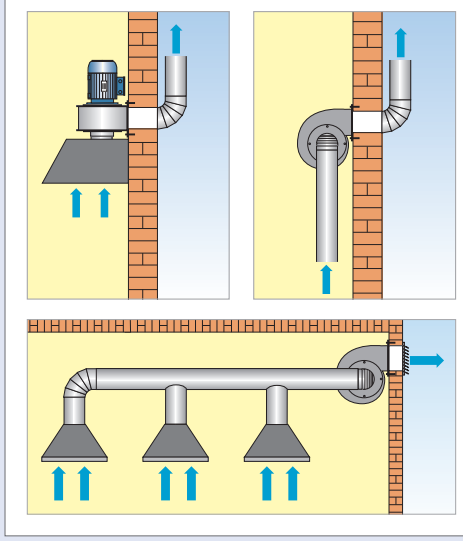
MOTOR

- IC-ATEX and IC-ATEX INOX asynchronous three-phase motors or single-phase according to international standards IEC 60034, IEC 60072, IEC 60079 and/or IEC61241, EMC 2004/108/ CE, LVD 2006/95/CE, with Atex certification for explosive atmospheres category G group II thermal class T4 protection Exd, CE marked, IP55, class F, B35 shape. Suitable to S1 service (continuous working at constant load).

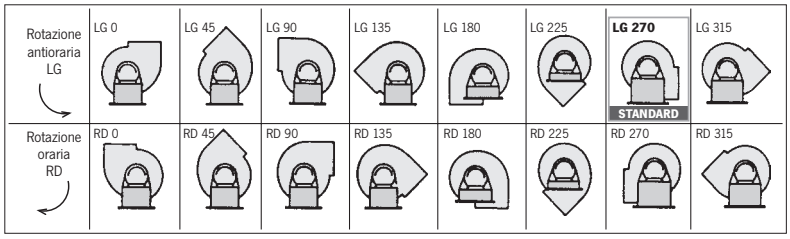
UPON REQUEST

- Versions with different temperature ranges.
- Versions with motors for different atmospheres.
- Versions with motors suitable for speed regulation.

INSTALLATION



DISCHARGE ANGLES (motor side view)



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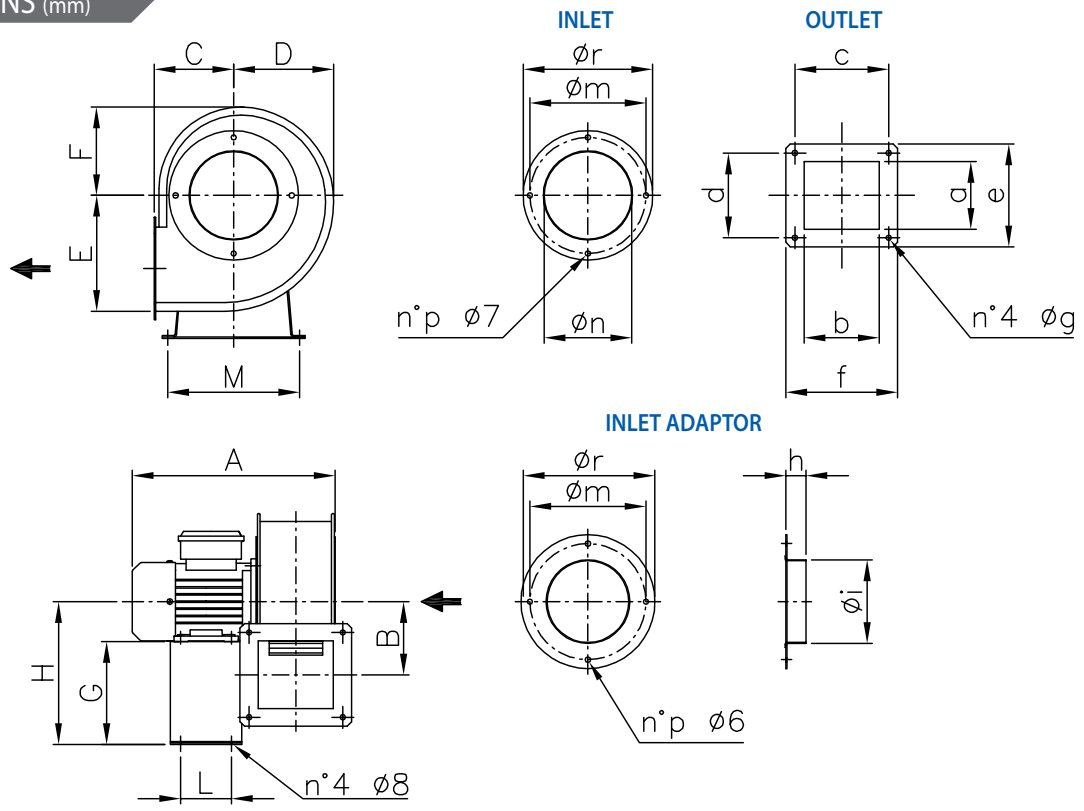
DIMENSIONS (mm)



N.B. Inlet adaptor supplied, not assembled

TYPE	A	B	C	D	E	F	G	H	L	M	kg
IC ATEX / IC ATEX INOX 100	220	82	86	112	130	99	120	176	71	140	4
IC ATEX / IC ATEX INOX 120	300	97	109	137	156	116	160	223	80	185	7
IC ATEX / IC ATEX INOX 140	350	115	126	158	184	136	152	223	90	185	10
IC ATEX / IC ATEX INOX 160	390	132	143	175	207	148	180	260	100	230	17
IC ATEX / IC ATEX INOX 180	400	140	156	200	227	171	180	260	100	230	20

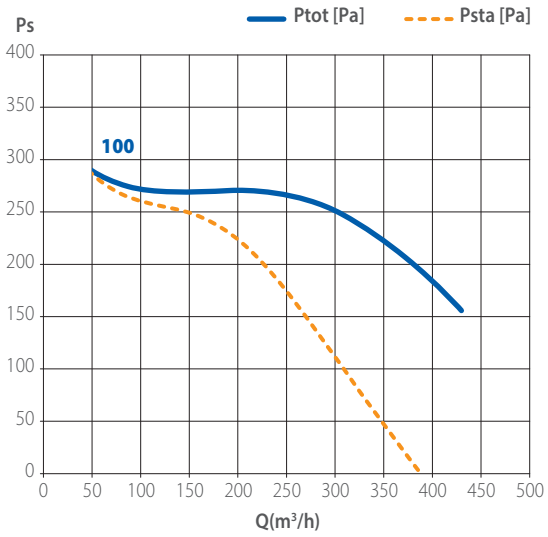
TYPE	a	b	c	d	e	f	g	h	i	m	n	p	r
IC ATEX / IC ATEX INOX 100	76	84	105	95	115	125	6	20	100	130	90	4	145
IC ATEX / IC ATEX INOX 120	102	102	125	125	150	150	7	20	125	160	115	4	178
IC ATEX / IC ATEX INOX 140	118	118	148	148	175	175	8	30	125	180	135	4	195
IC ATEX / IC ATEX INOX 160	135	135	165	165	195	195	8	40	160	222	155	8	240
IC ATEX / IC ATEX INOX 180	148	148	180	180	210	210	8	40	160	222	170	8	240

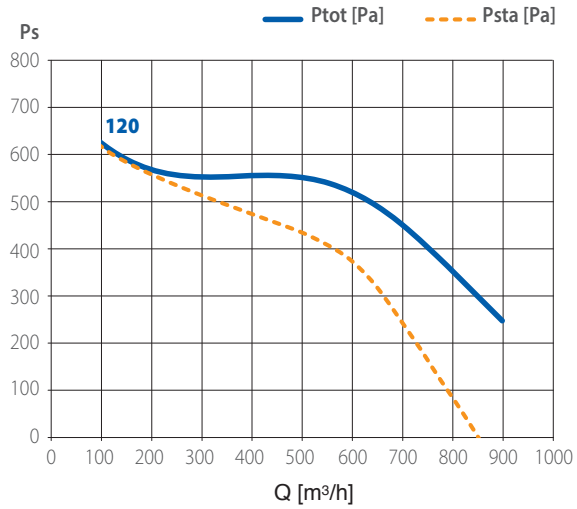
PERFORMANCE

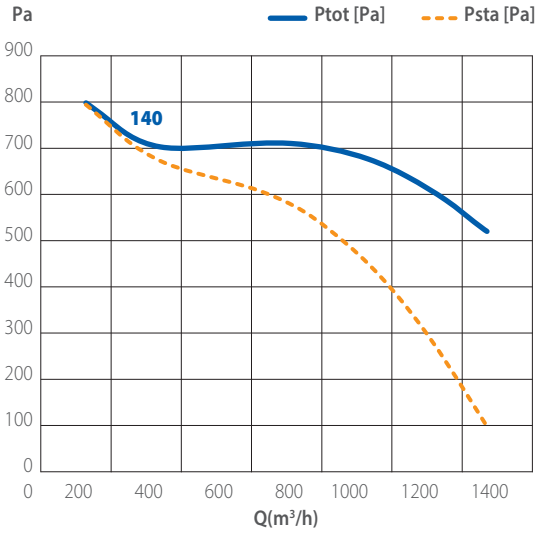
CODE	MODEL	PIPE	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	LEVELS SOUND (a 1,5 mt) dB (A)	
		Ø mm	m³/h	V	A	KW	GIRI/1'	N°	IP	Lw	Lp
Versione ATEX											
1XI1107	**IC 100 ATEX** SINGLE-PHASE	100	430	400	0,60	0,06	2.800	2	55	73	62
1XI1350	**IC 120 ATEX** SINGLE-PHASE	125	900	400	1,91	0,25	2.800	2	55	78	67
1XI1554	**IC 140 ATEX** SINGLE-PHASE	125	1.190	400	2,71	0,37	2.800	2	55	84	73
1XI1102	**IC 100 ATEX** THREE-PHASE	100	430	400	0,26	0,09	2.800	2	55	73	62
1XI1352	**IC 120 ATEX** THREE-PHASE	125	900	400	0,80	0,25	2.800	2	55	78	67
1XI1552	**IC 140 ATEX** THREE-PHASE	125	1.270	400	1,00	0,37	2.800	2	55	84	73
1XI1703	**IC 160 ATEX** THREE-PHASE	160	2.300	400	1,80	0,75	2.800	2	55	89	78
1XI1902	**IC 180 ATEX** THREE-PHASE	160	2.800	400	2,40	1,10	2.800	2	55	92	81
Versione ATEX INOX											
1XI1100	**IC 100 ATEX INOX** SINGLE-PHASE	100	430	400	0,60	0,06	2.800	2	55	73	62
1XI1357	**IC 120 ATEX INOX** SINGLE-PHASE	125	900	400	1,91	0,25	2.800	2	55	78	67
1XI1550	**IC 140 ATEX INOX** SINGLE-PHASE	125	1.190	400	2,71	0,37	2.800	2	55	84	73
1XI1101	**IC 100 ATEX INOX** THREE-PHASE	100	430	400	0,26	0,09	2.800	2	55	73	62
1XI1351	**IC 120 ATEX INOX** THREE-PHASE	125	900	400	0,80	0,25	2.800	2	55	78	67
1XI1551	**IC 140 ATEX INOX** THREE-PHASE	125	1.270	400	1,00	0,37	2.800	2	55	84	73
1XI1700	**IC 160 ATEX INOX** THREE-PHASE	160	2.300	400	1,80	0,75	2.800	2	55	89	78
1XI1900	**IC 180 ATEX INOX** THREE-PHASE	160	2.800	400	2,40	1,10	2.800	2	55	90	81

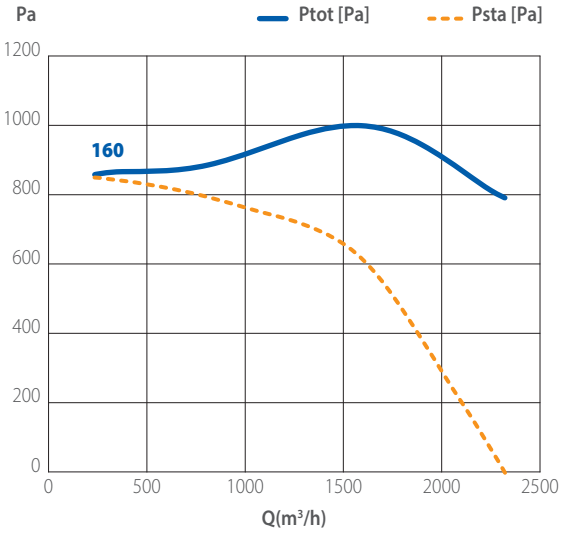
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free field conditions, propagation spherical, measurement category D in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 1,5 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES


Ps
Ptot [Pa]
Psta [Pa]
100
400
350
300
250
200
150
100
50
0
0 50 100 150 200 250 300 350 400 450 500
Q(m³/h)


Ps
Ptot [Pa]
Psta [Pa]
120
800
700
600
500
400
300
200
100
0
0 100 200 300 400 500 600 700 800 900 1000
Q [m³/h]


Pa
Ptot [Pa]
Psta [Pa]
140
900
800
700
600
500
400
300
200
100
0
0 200 400 600 800 1000 1200 1400
Q(m³/h)


Pa
Ptot [Pa]
Psta [Pa]
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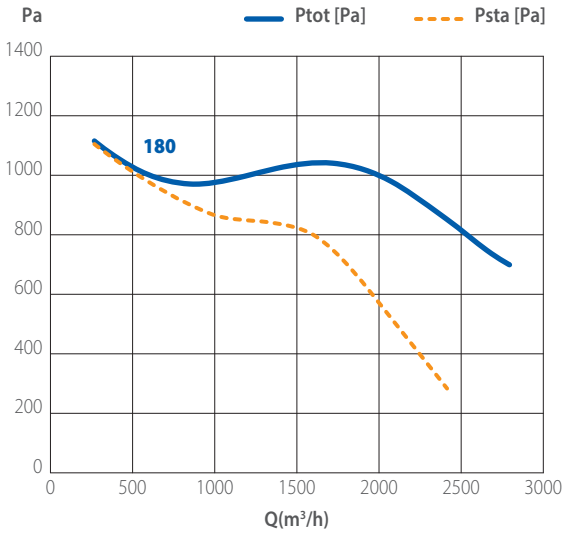
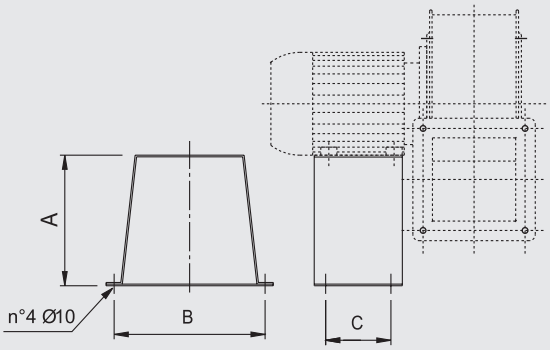
1200
1000
800
600
400
200
0
0 500 1000 1500 2000 2500
Q(m³/h)


Pa
Ptot [Pa]
Psta [Pa]
180
1400
1200
1000
800
600
400
200
0
0 500 1000 1500 2000 2500 3000
Q(m³/h)

Series IC ATEX / IC ATEX INOX

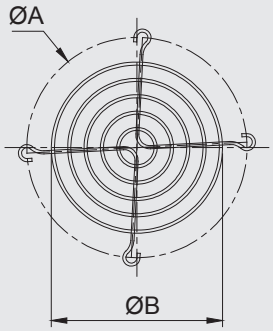
Motor Support



CODE	TYPE	A	B	C	Kg
1SE6007	100	120	140	71	0,5
1SE6005	120	160	185	80	1,2
1SE6017	140	152	185	90	1,3
1SE6006	160 - 180	180	230	100	1,7

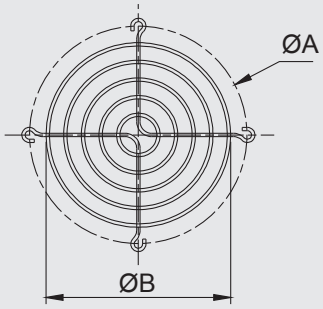
* Codes for models IC-ATX.
Codes for models IC ATEX INOX upon request.

Outlet Guard



CODE IC ATX	CODE IC ATX INOX	TYPE	ØA	ØB	Kg
5RE0109	5RE1109	Rete IC 100	142	110	0,06
5RE0111	5RE1111	Rete IC 120	177	131	0,12
5RE0113	5RE1113	Rete IC 140	209	152	0,13
5RE0115	5RE1115	Rete IC 160	233	194	0,15
5RE0117	5RE1117	Rete IC 180	255	194	0,2

Inlet Guard



CODE IC ATX	CODE IC ATX INOX	TYPE	ØA	ØB	Kg
5RE1500	5RE1511	Rete IC 100	130	110	0,06
5RE1501	5RE1512	Rete IC 120	160	131	0,12
5RE1502	5RE1513	Rete IC 140	180	152	0,12
5RE1503	5RE1509	Rete IC 160-180	222	194	0,15

Connector

CODE	ACCESSORY	MODEL	Ø MM
5RD1100	CONNECTOR	IC 100	100
5RD1120	CONNECTOR	IC 120	125
5RD1140	CONNECTOR	IC 140	125
5RD1160	CONNECTOR	IC 160	160
5RD1180	CONNECTOR	IC 180	160

ICS ATEX

Explosion-proof forward curved blades centrifugal fans

400 V IP55 max 80°C CE

DESCRIPTION

The centrifugal fans of the ICS-ATX series are designed and constructed to operate in potentially explosive environments, according to the ATEX Directives 94/9 CE and 2014/34/UE. They are suitable to convey clean air in the temperature range of -20°C +40°C. They are suitable for installation in zone 1/21, that are areas where it is necessary to guarantee high security against explosions and fires due to the presence of flammable gas (II2G) and/or dusts (II2D/II2GD). These fans are certified by IMQ according to ATEX Directive 94/9/CE and to EN 14986 (Certificate IMQ 10 ATEX 017 X). They are suitable for all the industrial applications where small air volumes and high pressures are required. The series consists of different models with impeller diameter from 200 to 450 mm. The motor is directly fitted to the forward curved impeller. The casing is easily adjustable, also on site, to the required discharge angle every 45°, excluding orientations 180° and 225°which require a special construction.

Certificate IMQ 10 ATEX 017 X

CONSTRUCTION

- Volute casing in folded steel sheet, protected against atmospheric agent by epoxy paint.
- Single inlet, single width, forward curved impeller (sirocco type), manufactured in galvanized steel sheet from type 200 to 315 and in steel sheet with welded blades epoxy painted from type 355 to 450.
- Brass inlet on models gauge execution IIC and steel sheet with epoxy finish on models IIB.
- Execution 4 (with impeller directly coupled to motor).
- Standard orientation LG 270°.

MOTOR

- Asynchronous three-phase motors or single phase according to international standards IEC 60034, IEC 60072, IEC 60079 and/or IEC61241, EMC 2004/108/CE, LVD 2006/95/ CE, with Atex certification for explosive atmospheres category G group II thermal class T4 protection Exd, CE marked, IP55/IP 65, class F. Suitable to S1 service (continuous working at constant load).

ACCESSORIES

- Inlet and outlet protection guard manufactured according to UNI 12499 norm and protected against the atmospheric agents.
- Round inlet cone, in steel sheet epoxy coated.

UPON REQUEST

- Double polarity motors.

INSTALLATION

The centrifugal fans with forward curved impellers must always be installed to ducted systems, eventually with the use of additional resistance (for example setting shutters), that can limit the air flow in such a way that the absorbed current is within the acceptable values stated on the motor rating label.

ACCESSORIES pag. 133 / **REGULATORS** pag. 200

PERFORMANCE

CODE	MODEL	PHASE	POLE	MAX AIRFLOW	ABSORBED CURRENT	POWER	RATING	MOTOR INSULATION CLASS	SOUND LEVEL	
			N°	m^3/h	A	KW	IP		Lw	Lp
1XS0200	ICS-ATX 200/2 LG II2G	THREE-PHASE	2	2000	2,40	1,10	55	F	95	84
1XS0201	ICS-ATX 200/4 LG II2G	THREE-PHASE	4	1500	1,00	0,25	55	F	79	68
1XS0225	ICS-ATX 225/2 LG II2G	THREE-PHASE	2	2300	4,80	2,20	55	F	95	84
1XS0226	ICS-ATX 225/4 LG II2G	THREE-PHASE	4	2100	1,50	0,55	55	F	79	68
1XS0251	ICS-ATX 250/4 LG II2G	THREE-PHASE	4	2600	2,00	0,75	55	F	81	70
1XS0252	ICS-ATX 250/6 LG II2G	THREE-PHASE	6	1700	1,40	0,37	55	F	71	61
1XS0281	ICS-ATX 280/4 A LG II2G	THREE-PHASE	4	3500	3,80	1,50	55	F	81	70
1XS0280	ICS-ATX 280/4 B LG II2G	THREE-PHASE	4	2800	2,80	1,1	55	F	81	70
1XS0282	ICS-ATX 280/6 LG II2G	THREE-PHASE	6	2300	2,20	0,75	55	F	75	64
1XS0316	ICS-ATX 315/4 A LG II2G	THREE-PHASE	4	5700	6,60	3	55	F	88	77
1XS0315	ICS-ATX 315/4 B LG II2G	THREE-PHASE	4	4500	4,80	2,2	55	F	88	77
1XS0317	ICS-ATX 315/6 LG II2G	THREE-PHASE	6	3600	3,20	1,1	55	F	78	67
1XS0356	ICS-ATX 355/4 A LG II2G	THREE-PHASE	4	7600	8,70	4	55	F	94	83
1XS0355	ICS-ATX 355/4 B LG II2G	THREE-PHASE	4	5500	6,60	3	55	F	94	83
1XS0357	ICS-ATX 355/6 LG II2G	THREE-PHASE	6	4900	3,90	1,5	55	F	84	73
1XS0401	ICS-ATX 400/4 A LG II2G	THREE-PHASE	4	9600	14,80	7,5	55	F	96	82
1XS0400	ICS-ATX 400/4 B LG II2G	THREE-PHASE	4	7000	11,40	5,5	55	F	95	81
1XS0402	ICS-ATX 400/6 LG II2G	THREE-PHASE	6	6300	4,90	2,2	55	F	86	72
1XS0403	ICS-ATX 400/8 T LG II2G	THREE-PHASE	8	4500	3,60	1,1	55	F	78	64
1XS0450	ICS-ATX 450/4 LG II2G	THREE-PHASE	4	11200	17,90	9	55	F	100	86
1XS0451	ICS-ATX 450/6 T LG II2G	THREE-PHASE	6	7400	9,10	4	55	F	90	76
1XS0452	ICS-ATX 450/8 LG II2G	THREE-PHASE	8	5400	5,20	2,2	55	F	82	68

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight. Power supply 400V/3Ph/50Hz.

Lp: Sound pressure level measured in free field conditions, propagation spherical, measurement category D in accordance with EN ISO 13349, at the point of maximum efficiency,at a distance of 1,5 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

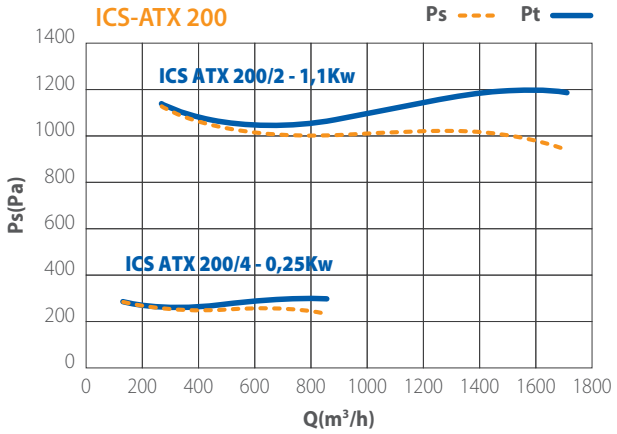
DISCHARGE ANGLES

Rotazione *Rotation* RD								
Forma/*Form*	0°	45°	90°	135°	180°	225°	270°	315°
Rotazione *Rotation* LG								

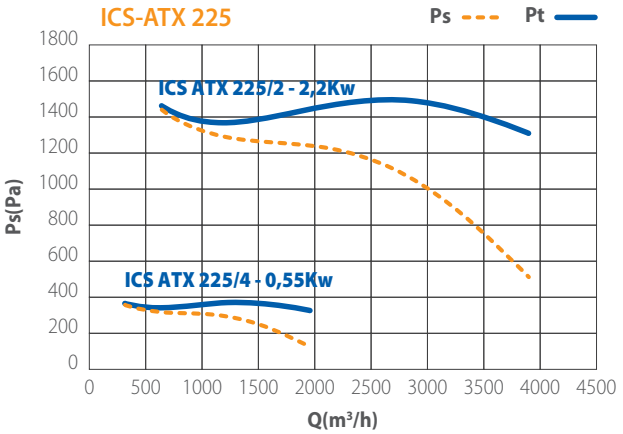
N.B.: Standard discharge angles LG 270°

CURVES

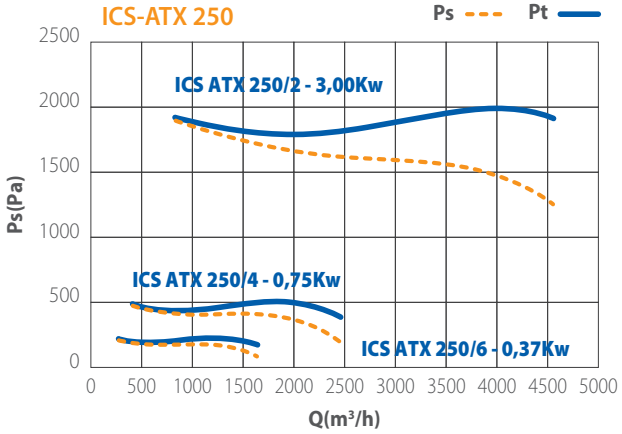
ICS-ATX 200



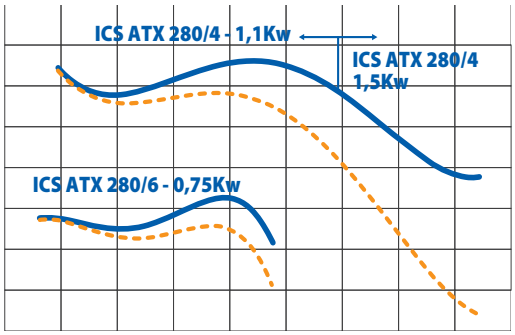
ICS-ATX 225



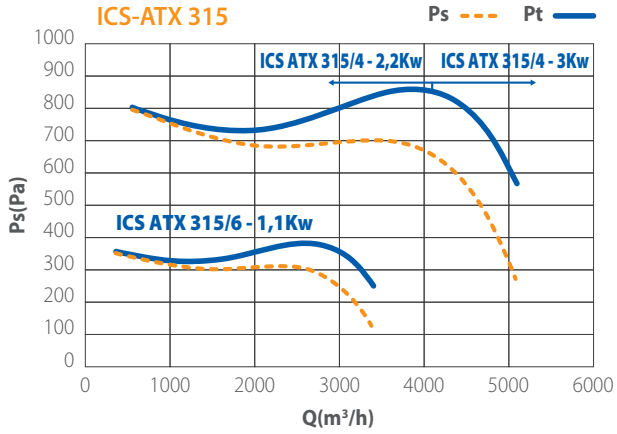
ICS-ATX 250



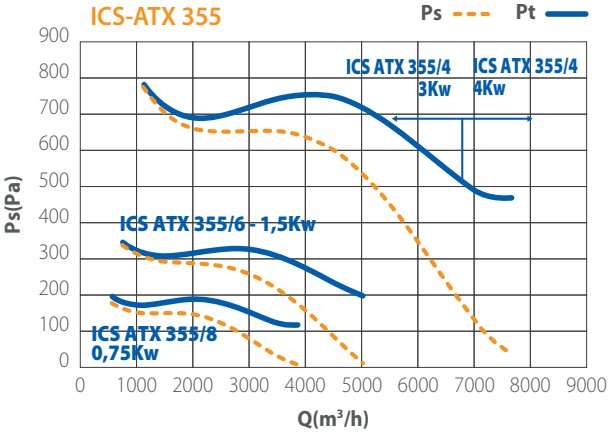
ICS-ATX 280



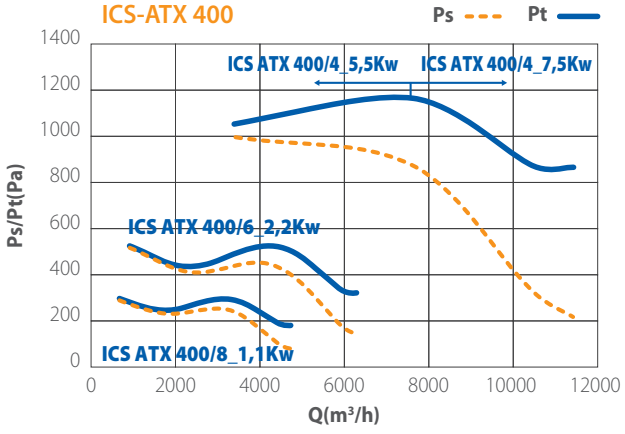
ICS-ATX 315



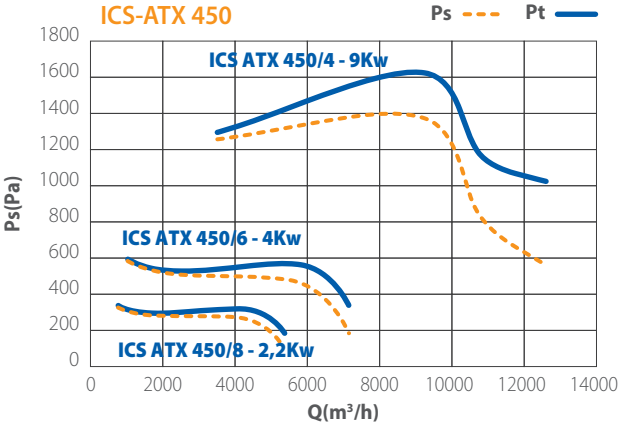
ICS-ATX 355



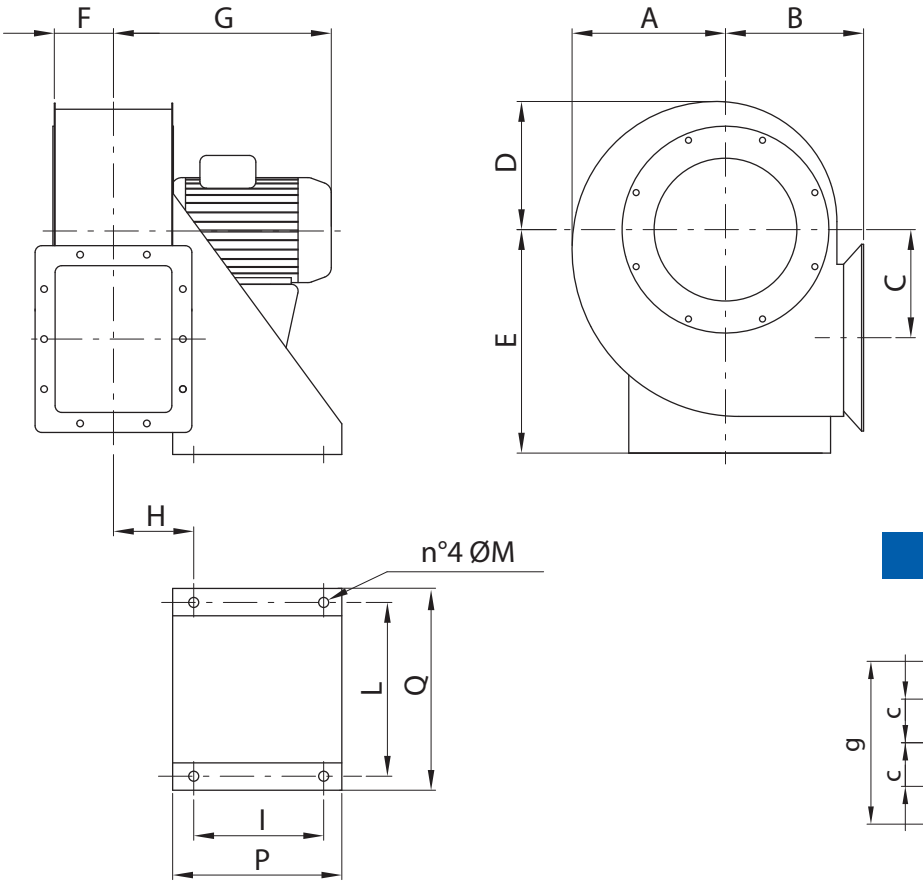
ICS-ATX 400



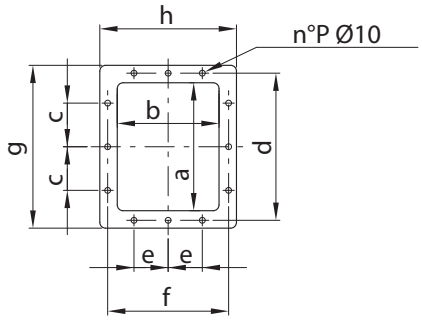
ICS-ATX 450



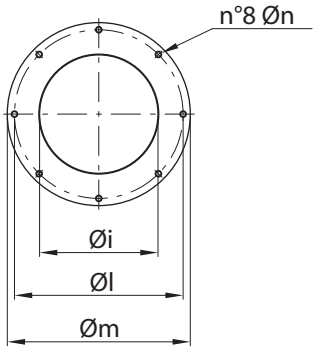
DIMENSIONS (mm)



OUT LET



INLET

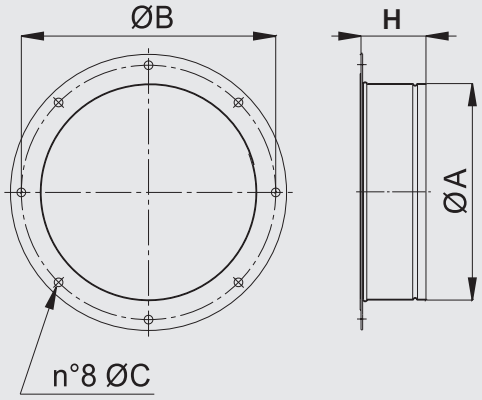


TYPE	A	B	C	D	E	F	G	H	I	L	M	a	b	c	d	e	f	g	h	i	l	m	n	P	kg
ICS-ATX 200	183	173	120	156	280	70	340	100	140	218	12	180	135	75	213	100	168	240	195	166	235	255	M8	10	20
ICS-ATX 225	210	190	142	175	310	80	380	110	140	218	12	200	155	75	233	100	188	260	215	189	260	280	M8	10	32
ICS-ATX 250	231	207	162	193	335	90	440	120	205	270	12	220	175	75	253	100	208	280	235	212	290	310	M8	10	39
ICS-ATX 280	257	227	170	216	365	100	420	130	205	270	12	260	195	100	293	125	228	320	255	242	310	340	M9,5	10	40
ICS-ATX 315	288	250	192	244	405	110	460	140	205	319	12	300	215	100	333	150	248	360	275	277	335	375	M9,5	10	55
ICS-ATX 355	321	272	212	270	445	123	490	153	245	354	15	340	240	125	373	100	273	400	300	304	395	425	M9,5	12	73
ICS-ATX 400	358	300	235	301	505	138	600	168	245	370	15	385	270	125	425	100	310	465	350	354	445	465	M9,5	12	123
ICS-ATX 450	406	334	267	337	560	153	590	183	340	439	15	430	300	150	470	100	340	510	380	404	490	520	M9,5	12	146

Series ICS ATEX

NB: accessories not included in the Type Examination Certificate. Please contact us for any different construction requirments.

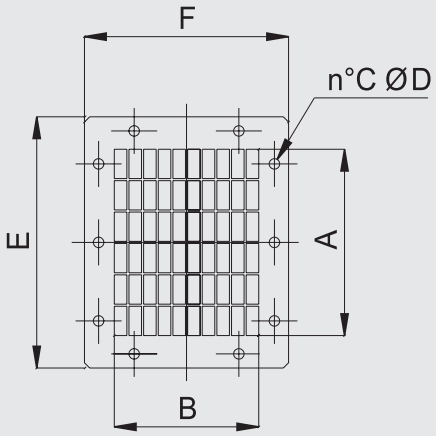
Round inlet adapter



CODE	TYPE	A	B	C	H	kg
5BO2100	200	200	235	8	40	0,5
5BO2202	225	200	260	8	40	0,6
5BO2601	250	250	290	8	54	0,7
5BO2801	280	250	310	9,5	54	0,8
5BO8319	315	315	355	9,5	55	0,8
5BO8361	355	350	395	9,5	55	1
5BO8403	400	400	445	9,5	55	1
5BO8600	455	450	490	9,5	55	1,1

Dimensions in mm
Indicative weights

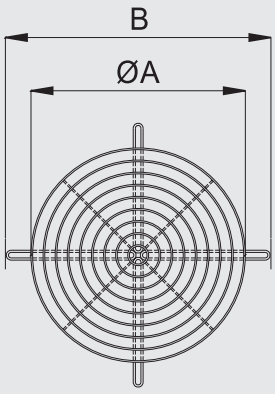
Outlet guard



CODE	TYPE	A	B	C	D	E	F	kg
5RE7500	200	169	136	10	10	240	195	0,7
5RE7505	225	198	164	10	10	260	215	0,8
5RE7510	250	227	178	10	10	280	235	1,0
5RE7515	280	256	192	10	10	320	255	1,2
5RE7520	315	285	220	10	10	360	275	1,4
5RE7525	355	343	248	12	10	400	300	1,6
5RE7530	400	401	276	12	10	465	350	2,2
5RE7535	455	430	304	12	10	510	380	2,6

Dimensions in mm
Indicative weights

Inlet guard



CODE	TYPE	A	B	kg
5RE9025	CCr25 x AL-ATX 200-225-250	200	245	0,4
5RE9031	CCr 31 x AL-ATX 280-315	320	384	0,6
5RE9035	CCr 35 x AL-ATX 355	360	434	0,8
5RE9040	CCr 40 x AL-ATX 400	400	479	0,9
5RE9045	CCr 45 x AL-ATX 450	460	529	1,1

Dimensions in mm
Indicative weights

ICA-D ATEX

Explosion-proof centrifugal fans in plastic material

ATEX II3G
II3GD upon request

DESCRIPTION

The ICA-D ATX series is designed for conveying smoke and corrosive (not abrasive) or highly humid vapours with temperature from -20°C to +40°C. The use of specific materials and components make ICA-D ATX suitable for installation in plant certified according to the ATEX Directive 94/9/CE and 2014/34/EU. Their installation is particularly indicated in ATEX certified plants category 3, zone 2, zone 2-22 (3G).
The backward curved impeller provide good characteristics of low noise and high efficiency. The ICA-D ATX fan, when its lifetime is finished, is easy to dispose, being manufactured with recyclable materials. Besides, such materials guarantee a longer life cycle in comparison to different types of metals.

CONSTRUCTION

- Volute in polyethylene.
- Single inlet impeller, in Polypropylene, with backward curved blades and aluminium hub (protected from the fluid).

MOTOR

- Motor support in epoxy painted steel sheet.
- Asynchronous three-phase or single-phase ATEX motors for explosive atmospheres category G group II thermal class T4 protection Exd according to international standards IEC 600034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F, B3 or B5 shape. Suitable to a S1 service (continuous working to constant load).

ACCESSORIES

- Inlet protection guard according to UNI 10615.
- Anti-vibration joint in PVC for inlet and outlet sides.
- Gravity shutter.
- Manual setting shutter.

UPON REQUEST

- ATEX II3GD
- Version with motor support in stainless steel AISI 304.
- Version with impeller in stainless steel AISI 304.
- Asynchronous single-phase ATEX motor with same characteristics as three-phase version.
- ATEX version category 2 zone 1, 1-21 (2G/2GD).

DISCHARGE ANGLES

Rotazione *Rotation* RD						
Forma/*Form*	0	45°	90°	135°	270°	315°
Rotazione *Rotation* LG						

N.B.: Standard discharge angles LG 270°

ACCESSORIES pag. 134 / **REGULATORS** pag. 200

PERFORMANCE

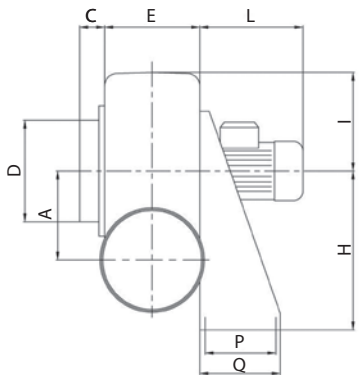
CODE	MODEL	PHASE	POLE	MAX AIRFLOW	ABSORBED CURRENT	POWER	RATING	MOTOR INSULATION CLASS	SOUND LEVEL	
			N°	m³/h	A	KW	IP		Lw	Lp
7PA2096	ICA-D 202	THREE-PHASE	2	1.100	0,64	0,18	55	F	79	65
7PA2625	ICA-D 252	THREE-PHASE	2	2.100	0,97	0,37	55	F	86	72
7PA2626	ICA-D 254	THREE-PHASE	4	1.050	0,47	0,12	55	F	71	56
7PA2890	ICA-D 282	THREE-PHASE	2	3.150	1,73	0,75	55	F	90	75
7PA2891	ICA-D 284	THREE-PHASE	4	1.600	0,68	0,18	55	F	74	60
7PA3219	ICA-D 312	THREE-PHASE	2	4.300	3,34	1,50	55	F	93	78
7PA3220	ICA-D 314	THREE-PHASE	4	2.250	0,89	0,25	55	F	77	63
7PA3221	ICA-D 316	THREE-PHASE	6	1.400	0,69	0,18	55	F	66	52
7PA3623	ICA-D 352	THREE-PHASE	2	6.700	4,90	2,20	55	F	94	80
7PA3624	ICA-D 354	THREE-PHASE	4	3.400	1,22	0,37	55	F	79	64
7PA3625	ICA-D 356	THREE-PHASE	6	2.100	0,69	0,18	55	F	68	53
7PA4094	ICA-D 404	THREE-PHASE	4	4.600	1,75	0,55	55	F	83	68
7PA4095	ICA-D 406	THREE-PHASE	6	2.800	0,89	0,25	55	F	73	59
7PA4600	ICA-D 454	THREE-PHASE	4	6.000	2,80	1,10	55	F	83	68
7PA4601	ICA-D 456	THREE-PHASE	6	3.000	1,37	0,37	55	F	73	59
7PA5057	ICA-D 504	THREE-PHASE	4	9.000	5,07	2,20	55	F	90	76
7PA5056	ICA-D 506	THREE-PHASE	6	5.600	2,23	0,55	55	F	81	66
7PA5663	ICA-D 564	THREE-PHASE	4	12.500	8,60	4,00	55	F	90	75
7PA5664	ICA-D 566	THREE-PHASE	6	8.000	4,04	1,50	55	F	80	66
7PA6353	ICA-D 634	THREE-PHASE	4	17.500	11,20	5,50	55	F	90	75
7PA6374	ICA-D 636	THREE-PHASE	6	11.000	5,60	2,20	55	F	80	66

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1,2 Kg/m³ specific weight. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.

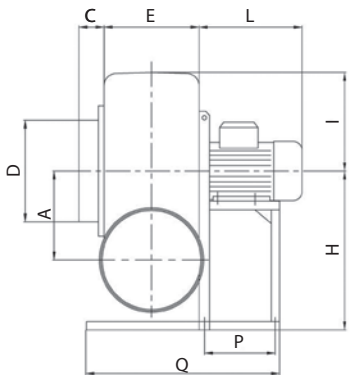
Lp: Sound pressure level measured in free field conditions, propagation spherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency at a distance of 1,5 meters, inlet side (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

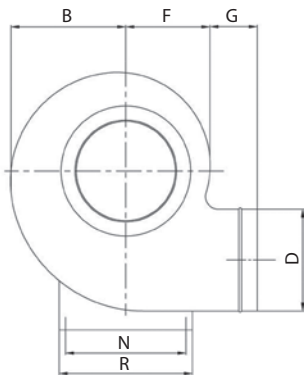
DIMENSIONS (mm)

Gr. 20 - 45



Gr. 50 - 63



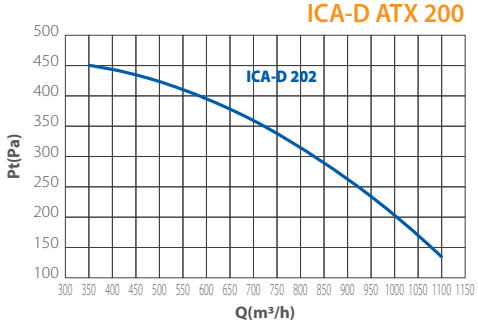


TYPE	A	B	C	D	E	F	G	H	I	L	N	P	Q	R	kg
ICA-D ATEX 20	140	180	35	160	160	138	55	250	150	195	200	100	140	235	17
ICA-D ATEX 25	173	228	35	200	185	170	55	310	190	220	255	100	140	290	24
ICA-D ATEX 28	208	255	40	225	195	190	70	350	210	240	280	120	190	316	33
ICA-D ATEX 31	240	280	40	250	200	210	70	410	230	290	320	150	230	355	45
ICA-D ATEX 35	260	312	40	280	237	230	55	445	270	290	355	150	230	390	51
ICA-D ATEX 40	290	356	40	315	252	264	55	495	295	240	325	170	250	365	47
ICA-D ATEX 45	324	400	40	355	287	395	55	550	330	290	370	170	250	410	61
ICA-D ATEX 50	360	460	50	400	355	355	80	630	395	300	289	197	636	325	77
ICA-D ATEX 56	410	490	50	450	365	380	80	710	410	340	289	237	696	325	120
ICA-D ATEX 63	445	610	50	500	415	420	80	800	505	420	337	237	741	373	131

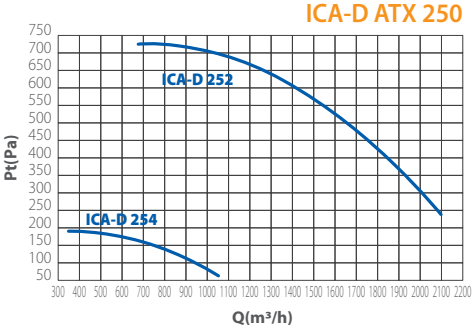
Indicative weights

CURVES

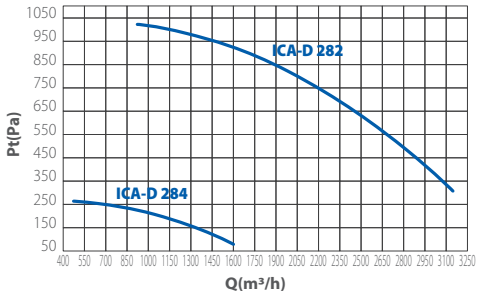
ICA-D ATX 200



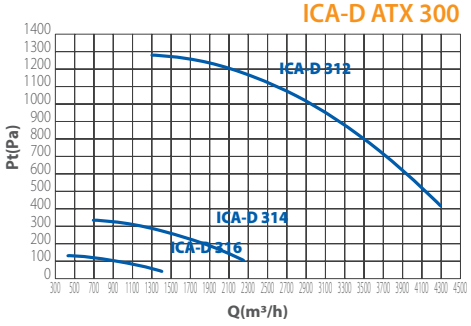
ICA-D ATX 250



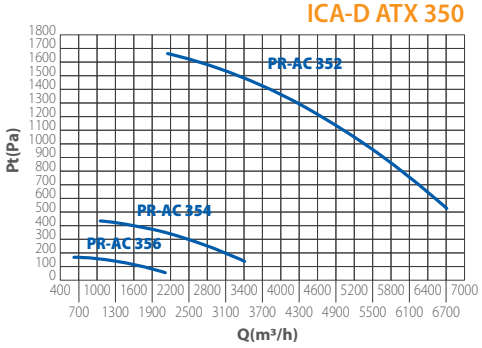
ICA-D ATX 280



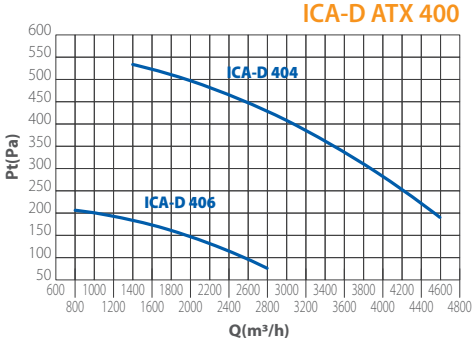
ICA-D ATX 300



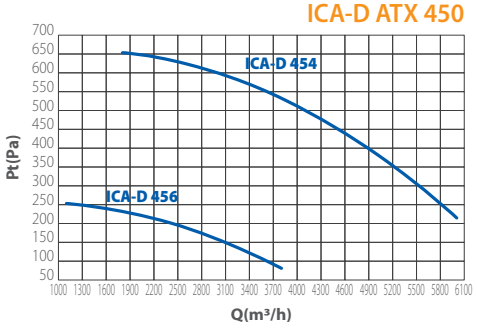
ICA-D ATX 350



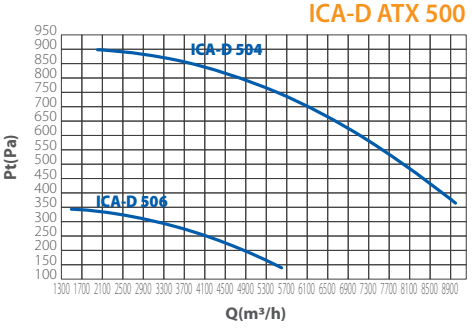
ICA-D ATX 400



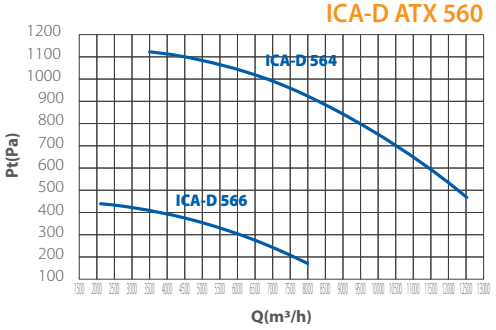
ICA-D ATX 450



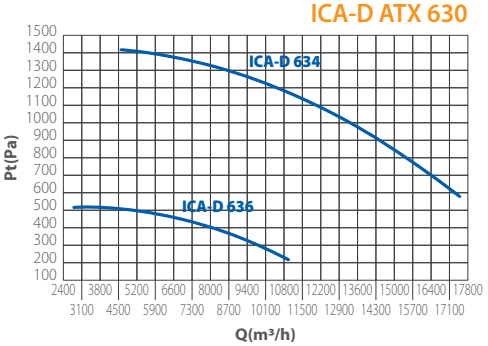
ICA-D ATX 500



ICA-D ATX 560



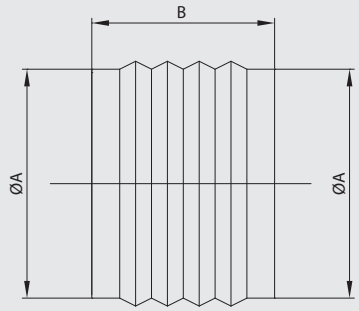
ICA-D ATX 630



Series ICA-D ATEX

NB: accessories not included in the Type Examination Certificate. Please contact us for any different construction requirments.

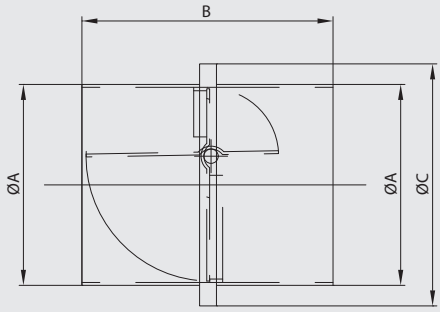
Inlet and outlet antivibration joint in pvc



CODE	TYPE	ØA	B
5SU3020	20	160	160
5SU3025	25	200	160
5SU3028	28	225	160
5SU3030	31	250	160
5SU3036	35	280	160
5SU3040	40	315	160
5SU3045	45	355	160
5SU3054	50	400	160
5SU3056	56	450	160
5SU3063	63	500	160

Dimensions in mm

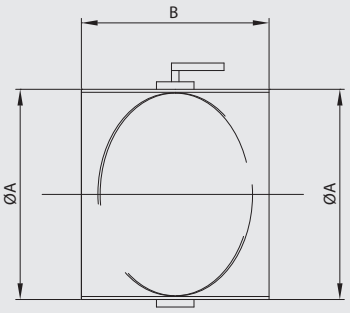
Gravity shutter



CODE	TYPE	ØA	B	ØC
1SE2021	20	160	200	240
1SE2026	25	200	200	280
1SE2028	28	225	200	305
1SE2031	31	250	200	330
1SE2035	35	280	200	360
1SE2040	40	315	210	435
1SE2045	45	355	210	475
1SE2049	50	400	210	520
(I)	56	450	210	570
(I)	63	500	210	620

Dimensions in mm
(I) tem code upon request

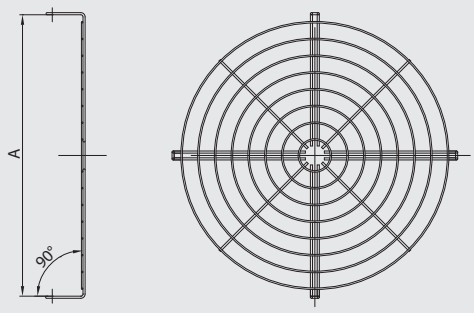
Manual setting shutter



CODE	TYPE	ØA	B
1SE2022	20	160	120
1SE2027	25	200	120
1SE2030	28	225	120
1SE2032	31	250	120
1SE2036	35	280	140
1SE2041	40	315	140
1SE2046	45	355	140
1SE2050	50	400	140
(I)	56	450	440
(I)	63	500	480

Dimensions in mm
(I) tem code upon request

Inlet protection guard according to UNI 10615



CODE	TYPE	ØA
5RE2002	20	160
5RE2552	25	200
5RE2802	28	225
5RE2029	31	250
5RE2502	35	280
5RE4004	40	315
5RE4504	45	355
5RE5008	50	400
5RE5600	56	450
5RE6300	63	500

Dimensions in mm

PDL ATEX

Explosion-proof backward curved blade centrifugal fans for clean or slightly dusty and low pressure air

Certificate:

TUV 14 ATEX 139957
TUV 14 ATEX 139958
TUV 14 ATEX 139959

Special version in stainless steel upon request.

DESCRIPTION

The fans of the PDL ATX series are built in conformity to ATEX Directives 94/9/CE and 2014/34/EU. They are suitable for installation in plants where the presence of flammable gas makes necessary to guarantee a correct air exhaust avoiding the risk of explosion, in particular certified ATEX plants category 3, zone 2, zone 2-22 (3G/3GD) and category 2, zone 1 and zone 1-21 (2G/GD) in the respective constructions.
The series PDL ATX is suitable for duct installations which move high airflow and low pressure air such as electrical storage rooms, chemical or petrochemical industries and so on. They are suitable to convey air with temperature from -20°C to +40°C.

CONSTRUCTION

- Volute casing in steel sheet , protected against atmospheric agents by epoxy paint. Connection flanges ISO 6580/EUROVENT 1-2.
- Aerodynamically shaped inlet cone.
- Single inlet backward curved wheel with high efficiency, manufactured in steel sheet and epoxy painted. For high rotational speed, versions in class 3 are foreseen.
- Execution 4 directly coupled and executions 1 – 9 – 12 with mono-block support in cast iron with ball bearings, designed for an ideal alignment of the ball bearings and an easy lubrication. Pulleys, belts and motor support suitable for the regulation of the belts tension. Belt protection guard according to EN12499.

MOTOR

- Asynchronous three-phase ATEX for explosive atmospheres category G group II thermal class T4 protection Exd motors according to international standards IEC 60034, IEC 60072, IEC60079 and/or 61241, EMC 2004/108/CE, LVD 2006/95/ CE, CE marked, IP 55, Class F, B3 or B5 format and ATEX certified da Notify body. Suitable to S1 service (continuous working at constant load).

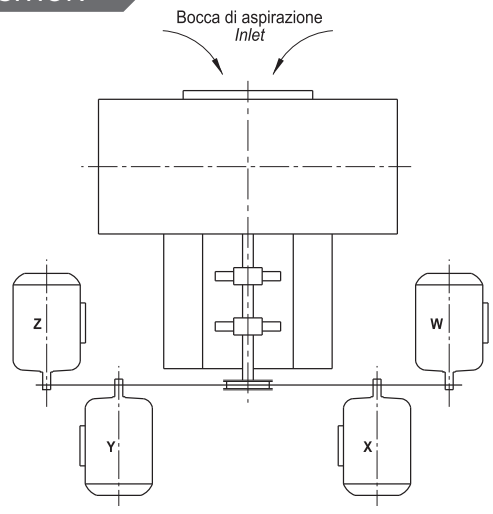
ACCESSORIES

- TS - Condensation drain hole
- PI - Inspection door
- CFA - Inlet counter-flange
- CFP - Outlet counter-flange
- RA - Inlet protection guard
- RP - Outlet protection guard
- GA - Inlet flexible connector
- GP - Outlet flexible connector
- Anti-vibration mounts

UPON REQUEST

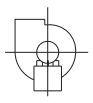
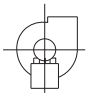
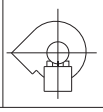
- Version with volute and impeller in stainless steel AISI 304 or AISI 316.
- Versions with double polarity motors.

MOTOR POSITION



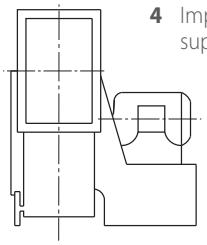
ACCESSORIES pag. 154 / **REGULATORS** pag. 200

DISCHARGE ANGLES

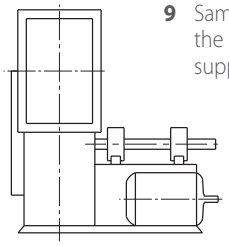
Rotazione Rotation RD								
Forma-Form	0	45	90	135	180(*)	225(*)	270	315
Rotazione Rotation LG								

NB.: Standard orientation LG270°
(*) Request special construction

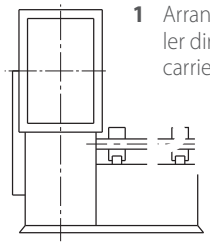
EXECUTIONS



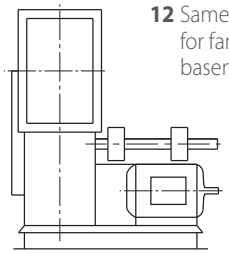
4 Impeller directly coupled to the motor supported by the motor support base.



9 Same as execution 1 with arrangement for the motor assembled on the side of the support base.



1 Arrangement for belt drive with impeller directly coupled to the support shaft carried by the motor support base.



12 Same as execution 1 with arrangement for fan and motor mounted on common basement.

PERFORMANCE

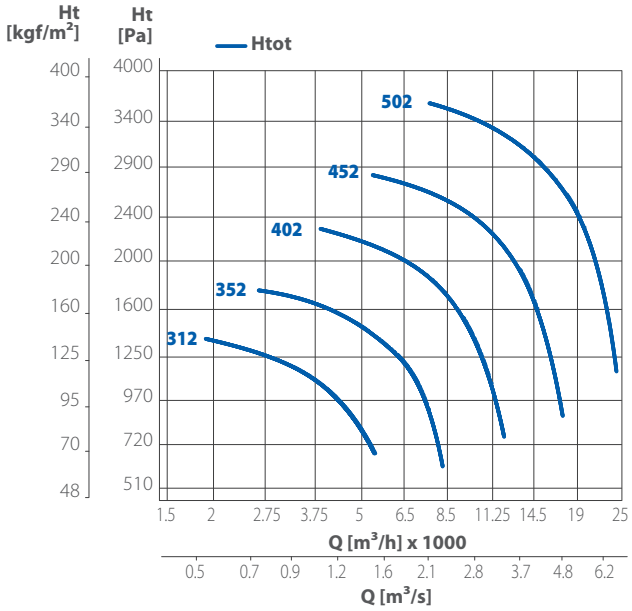
CODE	MODEL	PHASE	POLE	MAX AIRFLOW	ABSORBED CURRENT	POWER	RATING	MOTOR INSULATION CLASS	SOUND LEVEL	
			N°	m³/h	A	KW	IP		LW	LP
7PD0310	PDL-ATX 312 ES. 4 LG	THREE-PHASE	2	5400	4,90	2,20	55	F	82	68
7PD0311	PDL-ATX 314 ES. 4 LG	THREE-PHASE	4	2700	0,60	0,18	55	F	64	50
7PD0350	PDL-ATX 352 ES. 4 LG	THREE-PHASE	2	7700	6,40	3,00	55	F	85	71
7PD0351	PDL-ATX 354 ES. 4 LG	THREE-PHASE	4	3850	1,18	0,37	55	F	68	54
7PD0400	PDL-ATX 402 ES. 4 LG	THREE-PHASE	2	12000	10,60	5,50	55	F	92	78
7PD0401	PDL-ATX 404 ES. 4 LG	THREE-PHASE	4	5400	1,60	0,55	55	F	75	61
7PD0450	PDL-ATX 452 ES. 4 LG	THREE-PHASE	2	17000	20,40	11,00	55	F	93	79
7PD0451	PDL-ATX 454 ES. 4 LG	THREE-PHASE	4	7700	2,70	1,10	55	F	76	62
7PD0500	PDL-ATX 502 ES. 4 LG	THREE-PHASE	2	24200	33,50	18,50	55	F	99	85
7PD0501	PDL-ATX 504 ES. 4 LG	THREE-PHASE	4	10800	5,40	2,20	55	F	82	68
7PD0502	PDL-ATX 506 ES. 4 LG	THREE-PHASE	6	6850	1,80	0,55	55	F	72	58
7PD0560	PDL-ATX 564 ES. 4 LG	THREE-PHASE	4	17000	8,50	4,00	55	F	87	73
7PD0561	PDL-ATX 566 ES. 4 LG	THREE-PHASE	6	9500	3,50	1,10	55	F	77	63
7PD0630	PDL-ATX 634 ES. 4 LG	THREE-PHASE	4	24200	14,70	7,50	55	F	91	77
7PD0631	PDL-ATX 636 ES. 4 LG	THREE-PHASE	6	15300	5,30	2,20	55	F	81	67
7PD0710	PDL-ATX 714 ES. 4 LG	THREE-PHASE	4	34200	29,00	15,00	55	F	95	81
7PD0711	PDL-ATX 716 ES. 4 LG	THREE-PHASE	6	21600	9,10	4,00	55	F	85	71
7PD0800	PDL-ATX 804 ES. 4 LG	THREE-PHASE	4	47500	41,00	22,00	55	F	106	92
7PD0801	PDL-ATX 806 ES. 4 LG	THREE-PHASE	6	30600	15,20	7,50	55	F	96	82
7PD0900	PDL-ATX 904 ES. 4 LG	THREE-PHASE	4	68500	80,50	45,00	55	F	94	80
7PD0901	PDL-ATX 906 ES. 4 LG	THREE-PHASE	6	42500	29,00	15,00	55	F	84	70
7PD1000	PDL-ATX 1004 ES. 4 LG	THREE-PHASE	4	95400	134,00	75,00	55	F	102	88
7PD1001	PDL-ATX 1006 ES. 4 LG	THREE-PHASE	6	61000	42,50	22,00	55	F	92	78

Air performances measured according to EN ISO 5801 and ISO 5802 standards with air density with 1.2 kg/m³ specific weight. Power supply 400V/3Ph/50Hz.

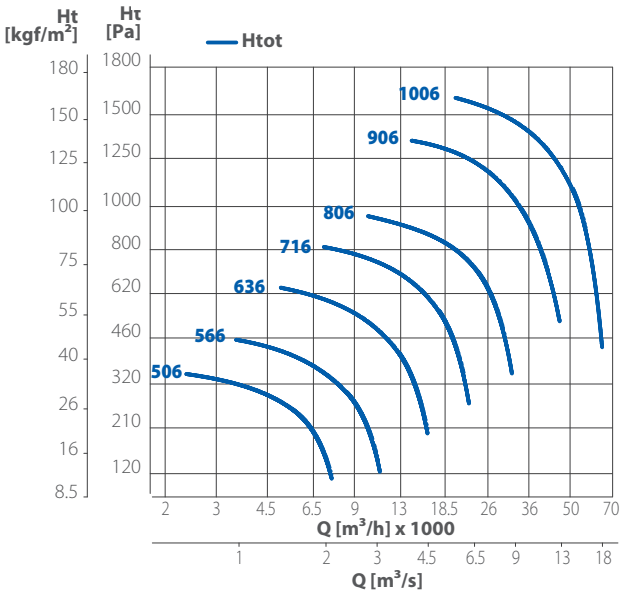
Lp: Sound pressure levels are measured in free field at the maximum output and at a distance of 1,5 meters from the fan.
During tests, the fan is ducted according to UNI 7179-73P standard.

CURVES

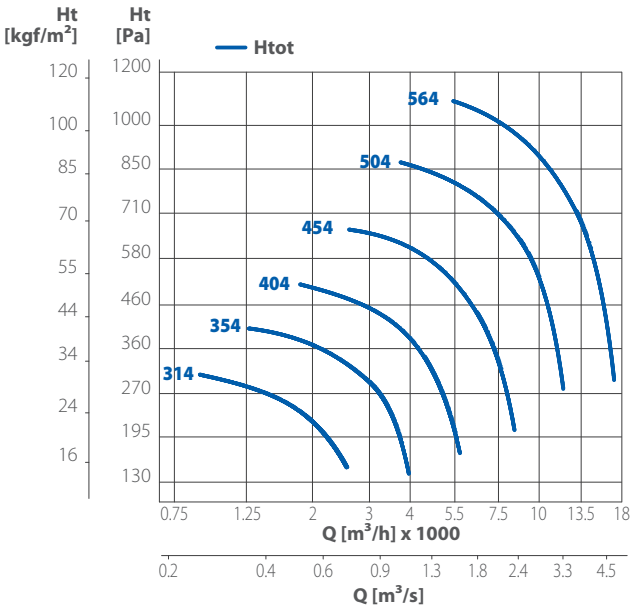
2 POLES



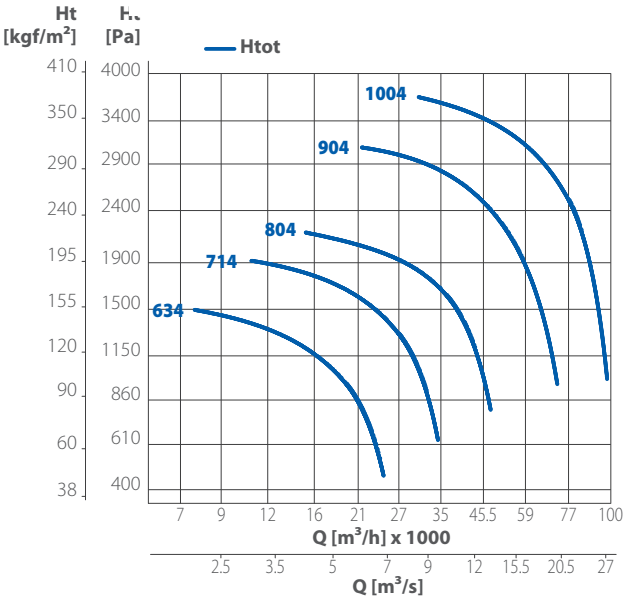
6 POLES



4 POLES A

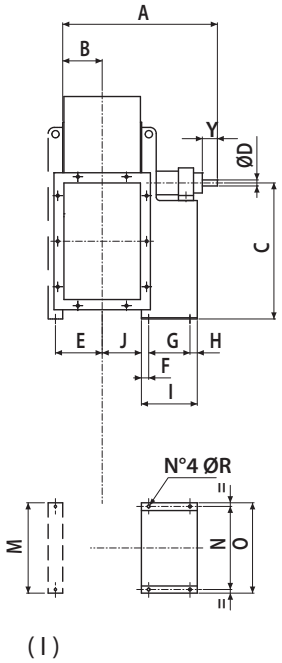


4 POLES B

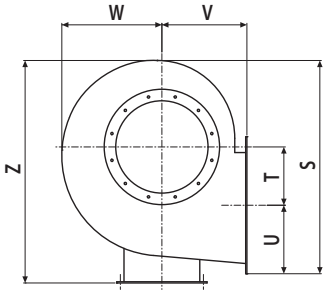


DIMENSIONS (mm)

ARRANGEMENT - 1



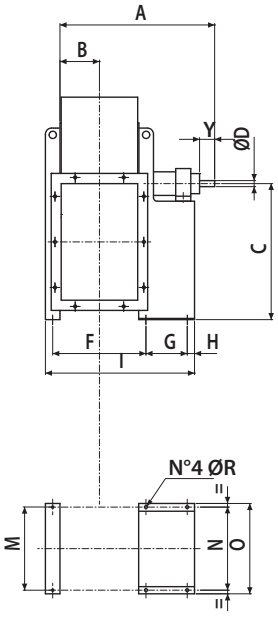
(I)

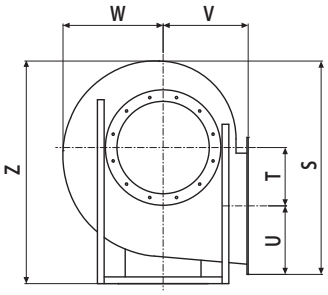


PDL ATX 31/50

TYPE	A	B	C	D	E	F	G	H	I	J	Y	M	N	O	R	S	T	U	V	Z	W
PDL ATX 310	644	117	400	24	135	40	284	23	347	117	24	350	288	324	12	653	196	201	225	656	332
PDL ATX 350	816	130	450	28	153	50	407	28	485	131	28	395	355	400	14	725	216	221	255	739	375
PDL ATX 400	869	147	500	38	174	50	407	28	485	147	38	445	355	400	14	798	245	242	285	811	400
PDL ATX 450	902	163	560	38	191	50	407	28	485	165	38	495	355	400	14	895	275	267	320	914	445
PDL ATX 500	1047	183	600	42	211	50	477	33	560	185	42	545	364	418	17	997	303	294	360	1001	502

(I) The front support is optional up to model 500



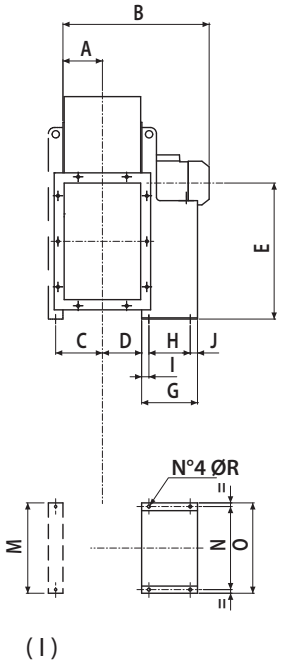


PDL ATX 56/100

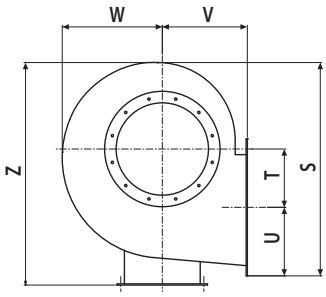
TYPE	A	B	C	D	F	G	H	I	Y	M	N	O	R	S	T	U	V	Z	W
PDL ATX 560	1177	205	670	48	488	477	33	1021	48	632	632	692	17	1151	332	335	400	1155	570
PDL ATX 630	1233	230	750	48	537	477	33	1070	48	702	702	762	17	1282	373	369	450	1290	630
PDL ATX 710	1340	257	850	48	600	551	39	1217	55	772	772	826	19	1402	427	408	500	1436	690
PDL ATX 800	1422	287	950	55	662	551	39	1299	55	862	862	926	19	1590	478	461	560	1602	782
PDL ATX 900	1491	322	850	55	731	551	39	1368	55	962	962	1026	19	1770	538	509	630	1783	870
PDL ATX 1000	1710	360	950	65	803	607	45	1522	55	1056	1056	1128	19	1985	607	564	710	1995	976

DIMENSIONS (mm)

ARRANGEMENT - 4



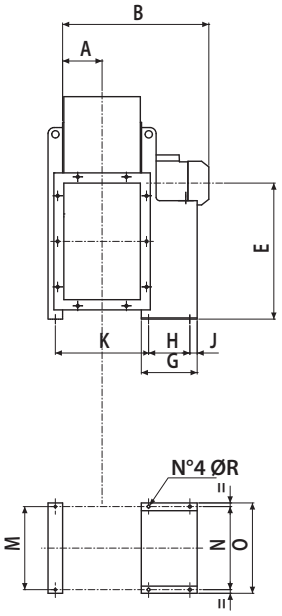
(I)

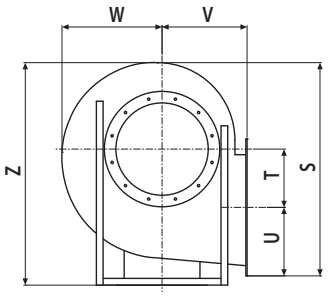


PDL ATX 31/50

TYPE	A	B	C	D	E	G	H	I	J	M	N	O	R	S	T	U	V	W	Z
PDL ATX 312 T	117	553	135	117	400	246	133	55	58	350	234	260	10	653	196	201	225	332	656
PDL ATX 314 T	117	553	135	117	400	145	86	45	14	350	184	206	10	653	196	201	225	332	656
PDL ATX 352 T	130	611	153	131	450	276	197	30	49	395	289	324	12	725	216	221	255	375	739
PDL ATX 354 T	130	611	153	131	450	189	121	45	23	395	203	225	10	725	216	221	255	375	739
PDL ATX 402 T	147	704	174	147	500	336	237	40	59	445	337	372	12	798	245	242	285	400	811
PDL ATX 404 T	147	565	174	147	500	211	121	45	45	445	203	225	10	798	245	242	285	400	811
PDL ATX 452 T	163	844	191	165	560	436	337	50	49	495	395	440	14	895	275	267	320	445	914
PDL ATX 454 T	163	647	191	165	560	246	133	55	58	495	234	260	10	895	275	267	320	445	914
PDL ATX 502 T	183	884	211	185	600	436	337	50	49	545	395	440	14	997	303	294	360	502	1001
PDL ATX 504 T	183	718	211	185	600	276	197	30	49	545	289	324	12	997	303	294	360	502	1001
PDL ATX 506 T	183	640	211	185	600	211	121	45	45	545	203	225	10	997	303	294	360	502	1001

(I) The front support is optional up to model 500



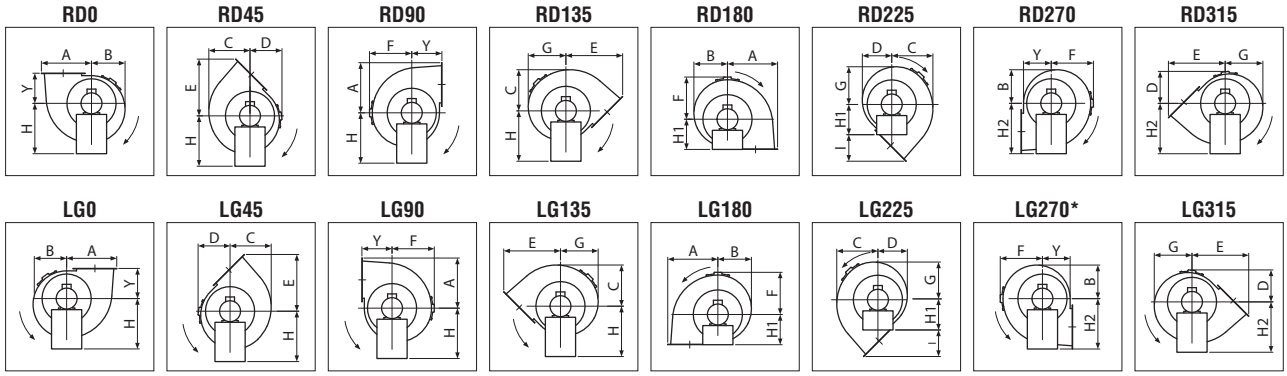


PDL ATX 56/100

TYPE	A	B	C	D	E	G	H	J	K	M	N	O	R	S	T	U	V	W	Z
PDL ATX 564 T	205	795	23	207	670	275	197	49	468	632	289	324	12	1151	332	335	400	570	1155
PDL ATX 566 T	205	743	23	207	670	245	133	58	493	632	234	260	10	1151	332	335	400	570	1155
PDL ATX 634 T	230	885	23	232	750	335	237	59	846	702	337	372	12	1282	373	369	450	630	1290
PDL ATX 636 T	230	845	23	232	750	275	197	49	786	702	289	324	12	1282	373	369	450	630	1290
PDL ATX 714 T	257	1045	27	254	850	439	316	60	606	772	772	826	20	1402	427	408	500	690	1436
PDL ATX 716 T	257	940	27	254	850	336	201	75	606	772	772	826	20	1402	427	408	500	690	1436
PDL ATX 804 T	287	1239	47	285	950	463	361	39	668	862	862	862	20	1590	478	461	560	782	1602
PDL ATX 806 T	287	1107	47	285	950	439	316	60	668	862	862	862	20	1590	478	461	560	782	1602
PDL ATX 904 T	322	1427	47	319	850	540	441	39	731	962	962	1026	20	1770	538	509	630	870	1783
PDL ATX 906 T	322	1328	47	319	850	460	361	39	731	962	962	1026	20	1770	538	509	630	870	1783
PDL ATX 1004 T	360	1635	67	358	950	690	590	45	803	1056	1056	1128	20	1985	607	564	710	976	1995
PDL ATX 1006 T	360	1482	67	358	950	500	400	45	803	1056	1056	1128	20	1985	607	564	710	976	1995

DIMENSIONS (mm)

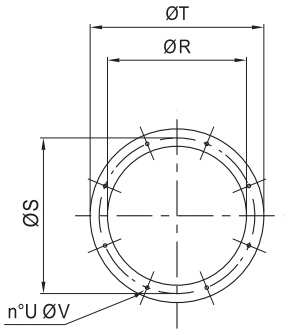
Dimensions of models according to the discharge angle.



* Standard version.

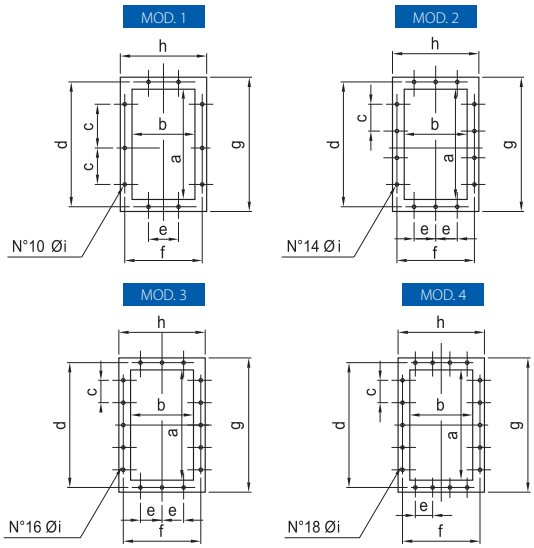
TYPE	A	B	C	D	E	F	G	I	Y	H	H1	H2
PDL ATX 31	397	256	316	253	440	332	288	215	225	400	225	400
PDL ATX 35	437	289	359	278	492	375	325	237	255	450	255	450
PDL ATX 40	487	311	387	306	543	400	353	258	285	500	285	500
PDL ATX 45	542	354	435	342	609	445	398	289	320	560	320	560
PDL ATX 50	597	401	490	380	676	502	450	316	360	600	360	600
PDL ATX 56	667	485	555	425	754	570	542	354	400	670	400	670
PDL ATX 63	742	540	619	476	843	630	603	393	450	750	450	750
PDL ATX 71	835	568	719	497	944	690	662	444	500	850	500	850
PDL ATX 80	939	652	811	562	1061	782	749	501	560	950	560	950
PDL ATX 90	1047	723	905	633	1186	870	835	556	630	850	630	1060
PDL ATX 100	1171	815	1015	718	1330	976	936	620	710	950	710	1180

Indicative weights



INLET					
TYPE	ØR	ØS	ØT	U	ØV
31	320	366	400	8	10
35	360	405	440	8	10
40	405	448	485	8	10
45	455	497	535	8	10
50	505	551	585	8	10
56	565	629	665	16	10
63	635	698	735	16	12
71	715	775	815	16	12
80	805	861	905	16	12
90	905	958	1005	16	12
100	1007	1067	1107	16	12

OUTLET										
TYPE	a	b	c	d	e	f	g	h	Øi	MOD.
31	322	229	125	366	125	273	402	309	12	1
35	361	256	125	405	125	300	441	336	12	1
40	404	288	125	448	125	332	484	368	12	2
45	453	322	125	497	125	366	533	402	12	2
50	507	361	125	551	125	405	587	441	12	2
56	569	404	160	629	160	464	669	504	14	2
63	638	453	160	698	160	513	738	553	14	2
71	715	507	160	775	160	567	815	607	14	3
80	801	569	200	871	200	639	921	689	14	2
90	898	638	200	968	200	708	1018	758	14	4
100	1007	715	200	1077	200	785	1127	835	14	4



PF ATEX

Explosion-proof backward curved blade centrifugal fans for dusty and medium pressure air

Certificate:

TUV 14 ATEX 139957
TUV 14 ATEX 139958
TUV 14 ATEX 139959

Special version in stainless steel upon request.

DESCRIPTION

The fans of the PF-ATX series are built-in conformity to the ATEX directive 94/9/CE and 2014/34/ EU. They are suitable for installation in plants where the presence of inflammable gas makes necessary to guarantee a correct air exhaust avoiding the risk of explosion, in particular certified ATEX plants category 3, zone 2, zone 2-22 (3G/3GD) and category 2, zone 1 and zone 1-21 (2G/GD) in the respective constructions. The series PF-ATX is suitable for duct installations which move high airflow and medium pressure air such as electrical storage rooms, chemical or petrochemical industries and so on. They are suitable to convey air with temperature from -20°C to +40°C.

CONSTRUCTION

- Volute casing in steel sheet, protected against atmospheric agents by epoxy paint. Connection flanges ISO 6580/EUROVENT 1-2.
- Aerodynamically shaped inlet cone.
- Single inlet backward curved wheel with high efficiency, manufactured in steel sheet and epoxy painted. For high rotational speed, versions in class 3 are foreseen.
- Execution 4 directly coupled and executions 1-9-12 with mono-block support in cast iron with ball bearings, designed for an ideal alignment of the ball bearings and an easy lubrication. Pulleys, belts and motor support suitable for the regulation of the belts tension. Belt protection guard according to EN12499.

MOTOR

- Asynchronous three-phase ATEX motors for explosive atmospheres category G group II thermal class T4 protection Exd according to international standards IEC 60034, IEC 60072, IEC60079 and/or 61241, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, Class F, B3 or B5 format and ATEX certified da Notify body. Suitable to S1 service (continuous working at constant load).

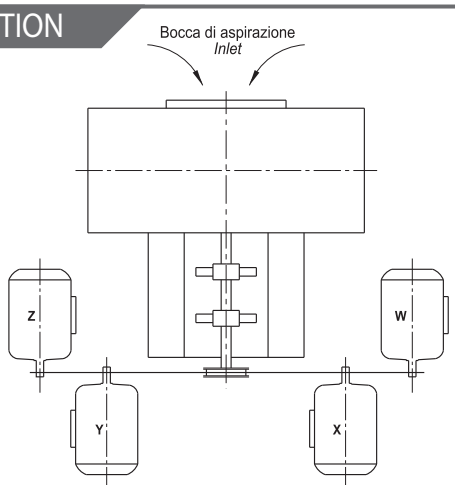
ACCESSORIES

- TS - Condensation drain hole
- PI - Inspection door
- CFA - Inlet counter-flange
- CFP - Outlet counter-flange
- RA - Inlet protection guard
- RP - Outlet protection guard
- GA - Inlet flexible connector
- GP - Outlet flexible connector
- Inlet vane control
- Outlet setting shutter
- Anti-vibration mounts

UPON REQUEST

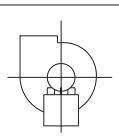
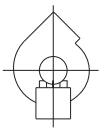
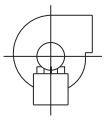
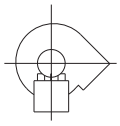
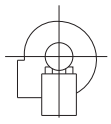
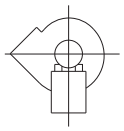
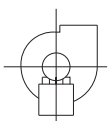
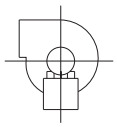
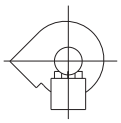
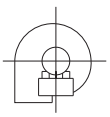
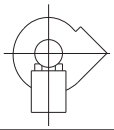
- Version with volute and impeller in stainless steel AISI 304 or AISI 316.
- Versions with double polarity motors.

MOTOR POSITION



ACCESSORIES pag. 154 / **REGULATORS** pag. 200

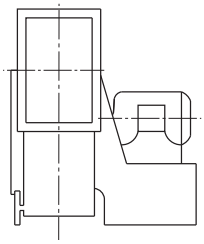
DISCHARGE ANGLES

Rotazione Rotation RD								
Forma-Form	0	45	90	135	180(*)	225(*)	270	315
Rotazione Rotation LG								

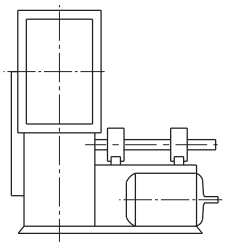
NB.: Standard orientation LG270°
(*) Request special construction

EXECUTIONS

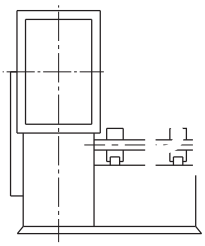
4 Impeller directly coupled to the motor supported by the motor support base.



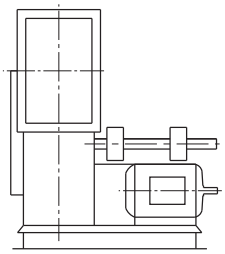
9 Same as execution 1 with arrangement for the motor assembled on the side of the support base.



1 Arrangement for belt drive with impeller directly coupled to the support shaft carried by the motor support base.

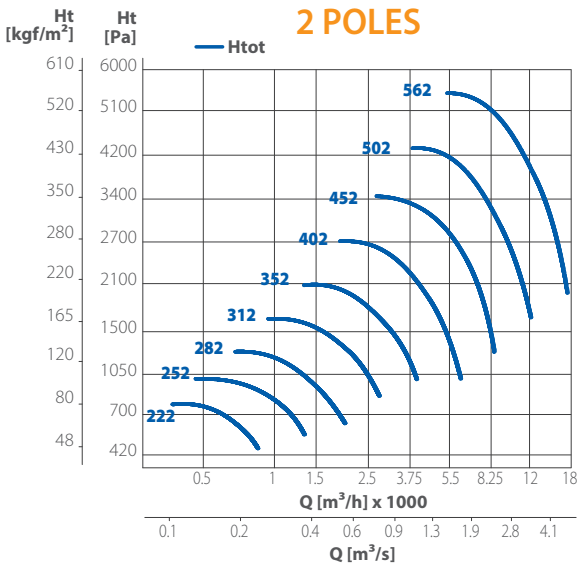


12 Same as execution 1 with arrangement for fan and motor mounted on common basement.

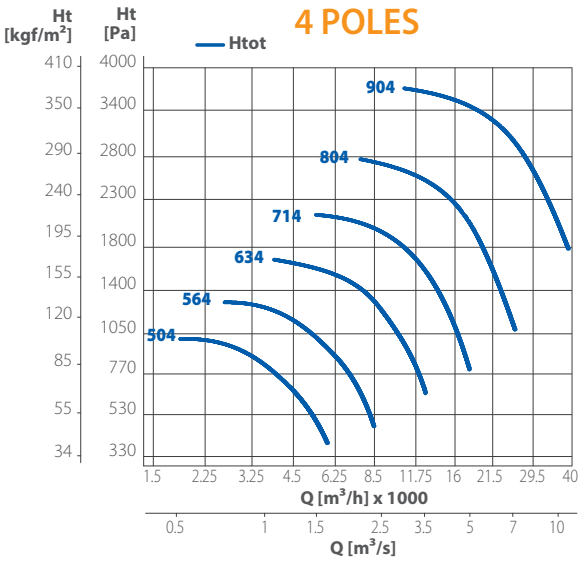


CURVES

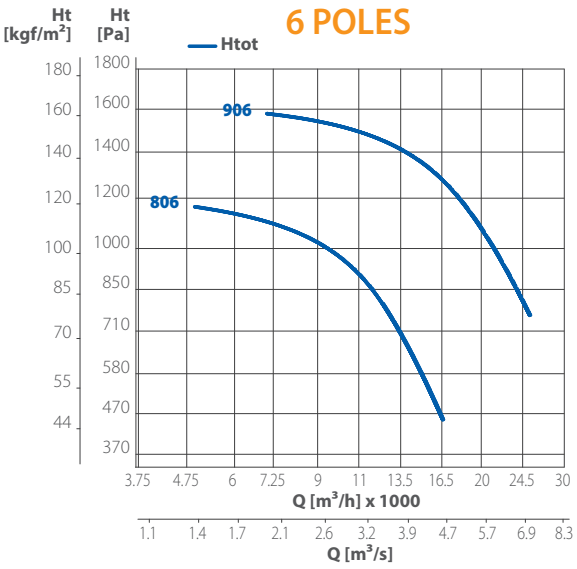
2 POLES



4 POLES



6 POLES



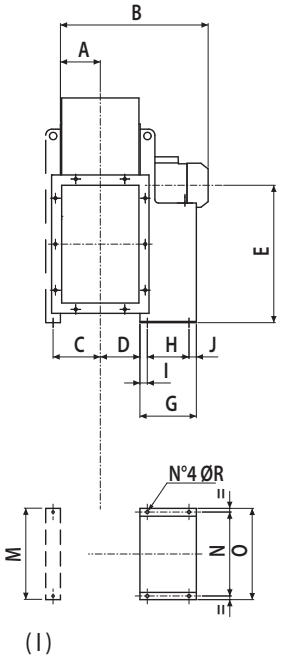
PERFORMANCE

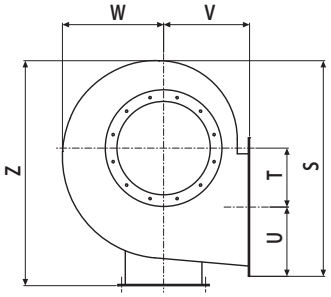
CODE	MODEL	PHASE	POLES	MAX AIRFLOW	A	kW	RATING	MOTOR INSULATION CLASS	SOUND LEVEL	
				m³/h			IP		Lw	Lp
7PF2220	PF-ATX 222 ES. 4 LG	THREE-PHASE	2	800	0,6	0,18	55	F	76	62
7PF2520	PF-ATX 252 ES. 4 LG	THREE-PHASE	2	1.370	1,1	0,37	55	F	76	62
7PF2821	PF-ATX 282 ES. 4 LG	THREE-PHASE	2	1.800	1,9	0,75	55	F	79	65
7PF3120	PF-ATX 312 ES. 4 LG	THREE-PHASE	2	2.520	3,4	1,50	55	F	84	70
7PF3520	PF-ATX 352 ES. 4 LG	THREE-PHASE	2	3.960	4,9	2,20	55	F	87	73
7PF4020	PF-ATX 402 ES. 4 LG	THREE-PHASE	2	6.000	8	4,00	55	F	91	77
7PF4522	PF-ATX 452 ES. 4 LG	THREE-PHASE	2	7.900	14,1	7,50	55	F	94	80
7PF5020	PF-ATX 502 ES. 4 LG	THREE-PHASE	2	11.000	27,5	15,00	55	F	98	84
7PF5022	PF-ATX 504 ES. 4 LG	THREE-PHASE	4	5.400	3,6	1,50	55	F	82	68
7PF5620	PF-ATX 562 ES. 4 LG	THREE-PHASE	4	16.200	39,5	22,00	55	F	101	87
7PF5621	PF-ATX 564 ES. 4 LG	THREE-PHASE	4	7.900	6,8	3,00	55	F	84	70
7PF6340	PF-ATX 634 ES. 4 LG	THREE-PHASE	4	11.000	11,3	5,50	55	F	87	73
7PF7140	PF-ATX 714 ES. 4 LG	THREE-PHASE	4	18.000	22	11,00	55	F	90	76
7PF8040	PF-ATX 804 ES. 4 LG	THREE-PHASE	4	25.200	35	18,50	55	F	95	81
7PF8060	PF-ATX 806 ES. 4 LG	THREE-PHASE	4	16.000	12,3	5,50	55	F	85	71
7PF9040	PF-ATX 904 ES. 4 LG	THREE-PHASE	4	32.400	68	37,00	55	F	98	84
7PF9060	PF-ATX 906 ES. 4 LG	THREE-PHASE	4	21.600	22	11,00	55	F	88	74

Air performances measured according to EN ISO 5801 and ISO 5802 standards with air density with 1.2 kg/m³ specific weight.
Power supply 400V/3Ph/50Hz.
Lp: Sound pressure levels are measured in free field at the maximum output and at a distance of 1,5 meters from the fan.
During tests, the fan is ducted according to UNI 7179-73P standard.

DIMENSIONS (mm)

ARRANGEMENT - 4

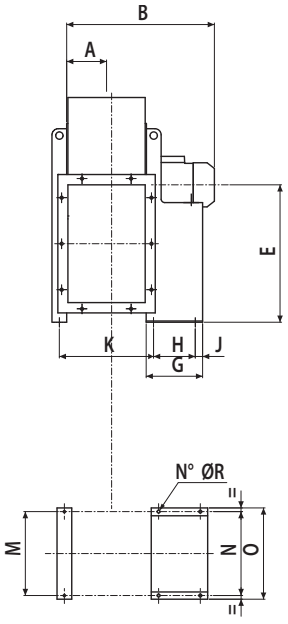


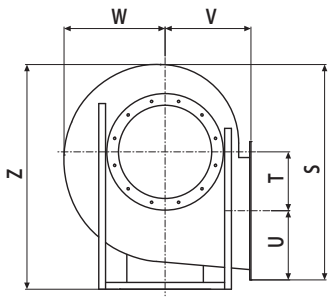


PF ATX 22/50

TYPE	A	B	C	D	E	G	H	I	J	M	N	O	R	S	T	U	V	W	Z
PF ATX 222 T	59	307	69	55	255	150	86	48	16	250	184	206	10	407	150	82	165	226	430
PF ATX 252 T	86	396	92	77	315	195	121	48	26	280	203	225	10	525	175	138,5	195	276	527
PF ATX 282 T	95	438	103	86	375	217	121	48	48	315	203	225	10	583	202	150,5	200	305	606
PF ATX 312 T	105	505	103	96	400	246	133	55	58	350	234	260	10	649	229	164	225	332	656
PF ATX 352 T	115	530	128	106	450	246	133	55	58	395	234	260	10	725	253	184	255	375	738
PF ATX 402 T	127	606	145	118	500	276	197	30	49	445	289	324	12	798	286	201	285	400	811
PF ATX 452 T	141	673	158	132	560	336	237	40	59	495	337	372	12	895	321	220,5	320	445	914
PF ATX 502 T	157	810	174	148	600	436	337	50	49	545	395	440	14	997	355	242	360	502	1000
PF ATX 504 T	157	613	174	148	600	246	133	55	58	545	234	260	10	997	355	242	360	502	1000

(I) The front support is optional up to model 500



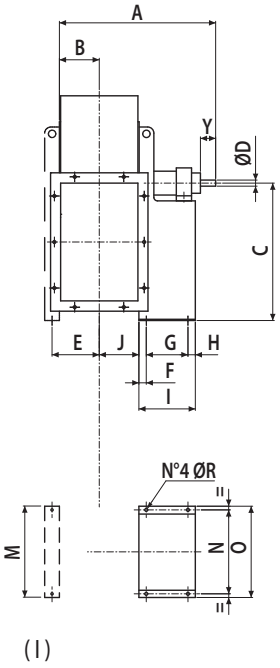


PF ATX 56/90

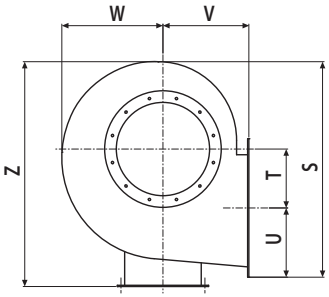
TYPE	A	B	E	G	H	J	K	M	N	O	R	S	T	U	V	W	Z
PF ATX 562 T	177	938	670	460	357	33	426	632	434	488	17	1141	390	267	400	570	1155
PF ATX 564 T	177	691	670	276	197	49	386	632	324	324	12	1141	390	267	400	570	1155
PF ATX 634 T	195	792	750	336	237	59	435	702	337	372	12	1282	439	294	450	630	1300
PF ATX 714 T	216	942	670	436	316	60	497	772	772	826	20	1399	500	335	500	690	1415
PF ATX 804 T	241	1092	755	460	361	39	546	862	862	926	20	1570	560	309	560	782	1591
PF ATX 806 T	241	906	755	336	201	75	546	862	862	926	20	1570	560	309	560	782	1591
PF ATX 904 T	275	1236	850	540	441	39	600	962	962	1026	20	1758	630	408	630	870	1781
PF ATX 906 T	275	1065	850	436	316	60	600	962	962	1026	20	1758	630	408	630	870	1781

DIMENSIONS (mm)

ARRANGEMENT - 1



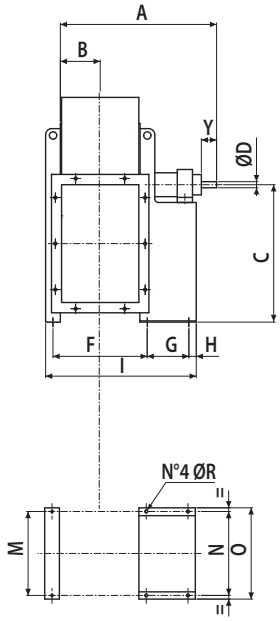
(I)

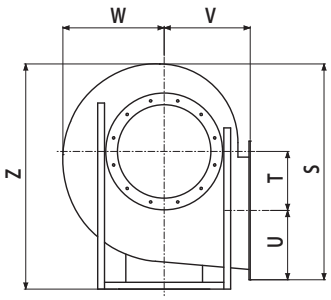


PF ATX 35/50

TYPE	A	B	C	D	E	F	G	H	I	J	Y	M	N	O	R	S	T	U	V	W	Z
PF ATX 350	783	115	450	28	128	50	407	28	485	106	28	395	355	400	14	725	253	184	255	375	738
PF ATX 400	820	127	500	38	145	50	407	28	485	118	38	445	355	400	14	798	286	201	285	400	811
PF ATX 450	847	141	560	38	158	50	407	28	485	132	38	495	355	400	14	895	321	220,5	320	445	914
PF ATX 500	985	157	600	42	174	50	477	33	560	148	42	545	364	418	17	997	355	242	360	502	1000

(I) The front support is optional up to model 500



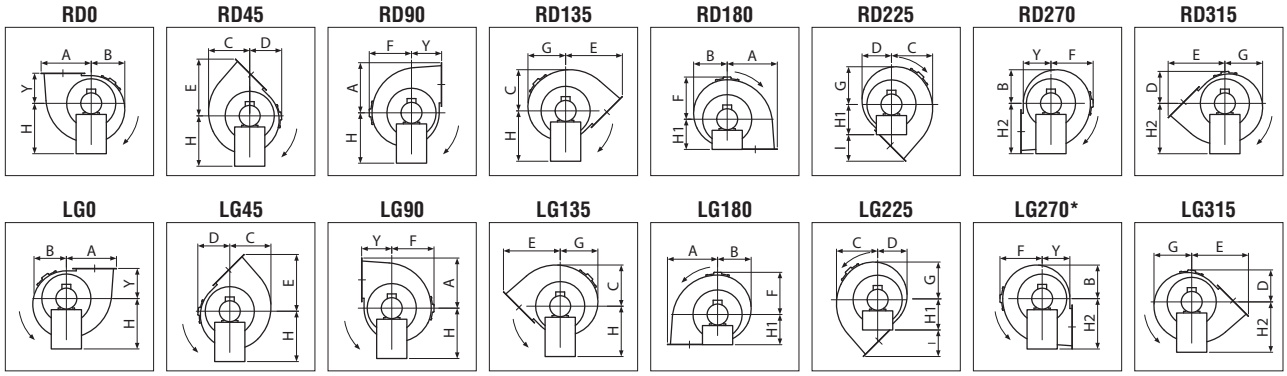


PF ATX 56/90

TYPE	A	B	C	D	F	G	H	I	Y	M	N	O	R	S	T	U	V	W	Z
PF ATX 560	1058	177	670	48	410	477	33	943	48	632	632	692	17	1141	390	267	400	570	1155
PF ATX 630	1102	195	750	48	450	477	33	983	48	702	702	762	17	1282	439	294	450	630	1300
PF ATX 710	1241	216	670	48	497	551	39	1114	48	772	772	826	19	1399	500	335	500	690	1415
PF ATX 800	1306	241	755	55	546	551	39	1183	55	862	862	926	19	1570	560	309	560	782	1591
PF ATX 900	1360	275	850	55	600	551	39	1237	55	962	962	1026	19	1758	630	408	630	870	1781

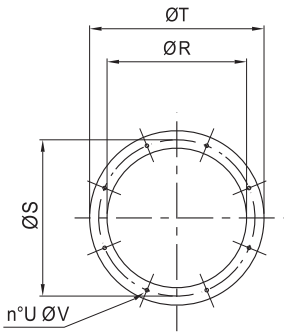
DIMENSIONS (mm)

Dimensions of models according to the discharge angle.

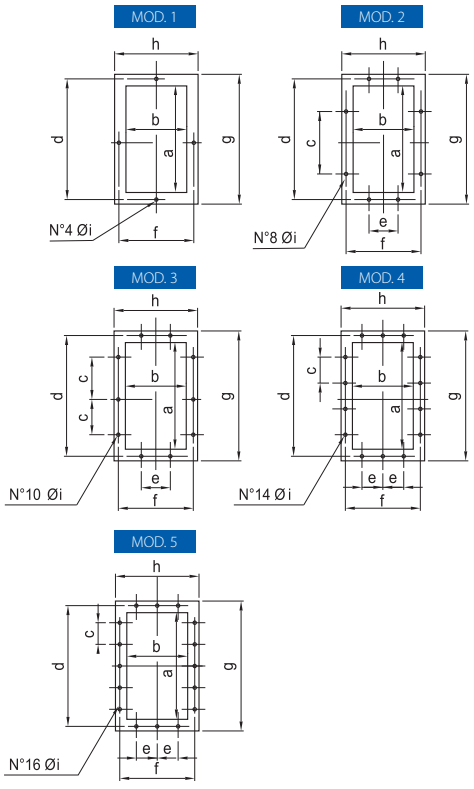


* Standard version.

TYPE	A	B	C	D	E	F	G	I	Y	H	H1	H2
PF ATX 22	232	175	200	190	280	226	190	115	165	255	165	255
PF ATX 25	313,5	211,5	255	215	360	276	235	165	195	315	195	315
PF ATX 28	352,5	230,5	287	226	391	305	262	191	200	375	200	375
PF ATX 31	393	256	316	253	437	332	288	212	225	400	225	400
PF ATX 35	437	288	359	278	489	375	325	234	255	450	255	450
PF ATX 40	487	311	387	306	546	400	353	261	285	500	285	500
PF ATX 45	541,5	353,5	435	342	609	445	398	289	320	560	320	560
PF ATX 50	597	400	490	380	677	502	450	317	360	600	360	600
PF ATX 56	657	485	555	425	747	570	542	347	400	670	400	670
PF ATX 63	733	550	619	476	836	630	603	386	450	750	450	750
PF ATX 71	835	565	719	497	944	690	662	444	500	670	500	850
PF ATX 80	929	641	811	562	1053	782	749	493	560	755	560	950
PF ATX 90	1038	721	905	633	1180	870	835	550	630	850	630	1060
PF ATX 100	1171	814	1015	718	1330	976	936	620	710	950	710	1180
PF ATX 110	1309	932	1133	793	1491	1084	1037	691	800	1060	800	1320
PF ATX 120	1464	1048	1270	898	1671	1214	1163	771	900	1190	900	1500
PF ATX 140	1635	1145	1395	990	1863	1325	1272	863	1000	1320	1000	1700



INLET					
TYPE	ØR	ØS	ØT	U	ØV
22	130	150	170	4	8
25	185	219	255	8	8
28	205	241	275	8	8
31	228	265	298	8	8
35	255	292	325	8	10
40	285	332	365	8	10
45	320	366	400	8	10
50	360	405	440	8	10
56	405	448	485	12	10
63	455	497	535	12	10
71	505	551	585	12	10
80	565	629	665	12	10
90	635	698	735	12	12



OUTLET										
TYPE	a	b	c	d	e	f	g	h	Øi	MOD.
22	124	103	-	145	-	125	164	143	8	1
25	207	148	112	241	112	182	277	218	12	2
28	231	166	112	265	112	200	301	236	12	2
31	258	185	112	292	112	219	328	255	12	3
35	288	205	125	332	125	249	368	285	12	3
40	322	229	125	366	125	273	402	309	12	3
45	361	256	125	405	125	300	441	336	12	3
50	404	288	125	448	125	332	484	368	12	4
56	453	322	125	497	125	366	533	402	12	4
63	507	361	125	551	125	405	587	441	12	4
71	569	404	160	629	160	464	669	504	14	4
80	638	453	160	698	160	513	738	553	14	4
90	715	507	160	775	160	567	815	607	14	5

HT ATEX

Explosion-proof backward curved blades centrifugal fans for dusty and high pressure air

400 V IP55 max 80°C CE

DESCRIPTION

The fans of the HT-ATX series are built-in conformity to the ATEX Directives 94/9/CE and 2014/34/UE. They are suitable for installation in plants where the presence of inflammable gas makes necessary to guarantee a correct air exhaust avoiding the risk of explosion, in particular certified ATEX plants category 3, zone 2, zone 2-22 (3G/3GD) and category 2, zone 1 and zone 1-21 (2G/GD) in the respective constructions. The series PV-L ATX is suitable for duct installations which move high airflow and high pressure air such as electrical storage rooms, chemical or petrochemical industries and so on. They are suitable to convey air with temperature from -20°C to +40°C.

CONSTRUCTION

- Volute casing in steel sheet, protected against atmospheric agents by epoxy paint. Connection flanges ISO 6580/EUROVENT 1-2.
- Single inlet backward curved wheel with high efficiency, manufactured in steel sheet and epoxy painted. For high rotational speed, versions in class 3 are foreseen.
- Aerodynamically shaped inlet cone.
- Execution 4 directly coupled and executions 1-9-12 with mono-block support in cast iron with ball bearings, designed for an ideal alignment of the ball bearings and an easy lubrication. Pulleys, belts and motor support suitable for the regulation of the belts tension. Belt protection guard according to EN12499.

MOTOR

- Asynchronous three-phase ATEX for explosive atmospheres category G group II thermal class T4 protection Exd motors according to international standards IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, Class F, B3 or B5 format and ATEX certified da Notify body. Suitable to S1 service (continuous working at constant load).

ACCESSORIES

- TS - Condensation drain hole
- PI - Inspection door
- CFA - Inlet counter-flange
- CFP - Outlet counter-flange
- RA - Inlet protection guard
- RP - Outlet protection guard
- GA - Inlet flexible connector
- GP - Outlet flexible connector
- Inlet vane control
- Outlet setting shutter
- Anti-vibration mounts

UPON REQUEST

- Version with volute and impeller in stainles steel AISI 304 or AISI 316.
- Versions with double polarity motors.

Certificate:

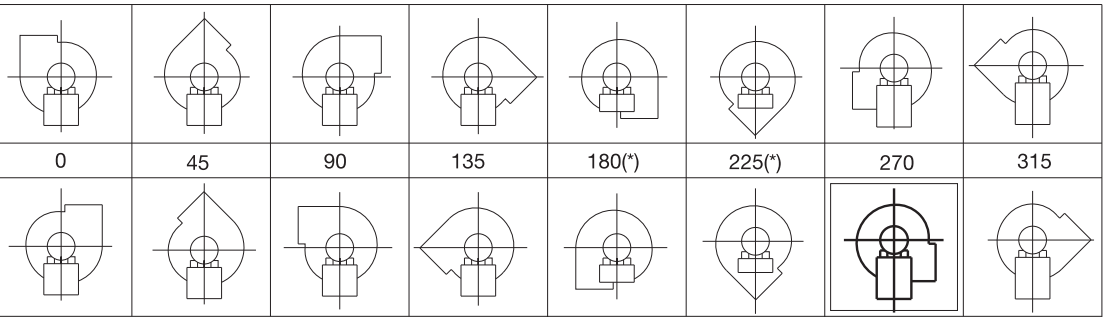
TÜV NORD

TUV 14 ATEX 139957
TUV 14 ATEX 139958
TUV 14 ATEX 139959

Special version in stainless steel upon request.

ACCESSORIES pag. 154 / **REGULATORS** pag. 200

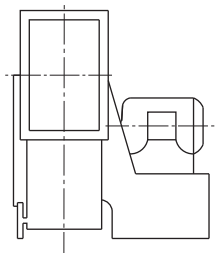
DISCHARGE ANGLES

Rotazione Rotation RD								
Forma-Form	0	45	90	135	180(*)	225(*)	270	315
Rotazione Rotation LG								

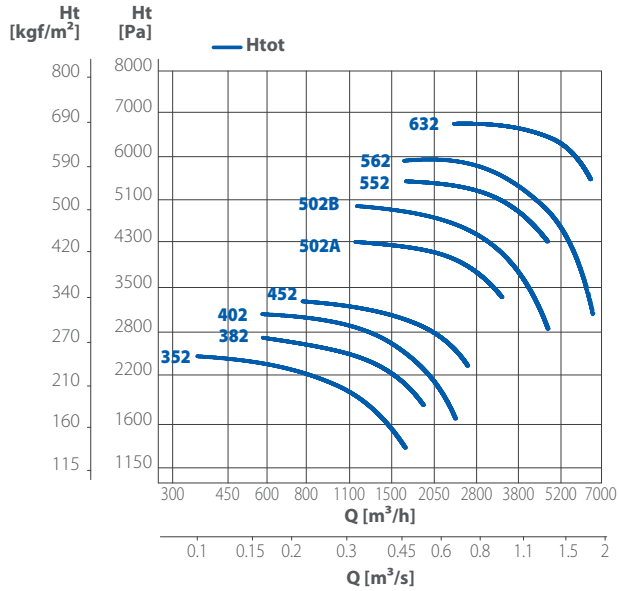
NB.: Standard orientation LG270°
(*) Request special construction

EXECUTIONS

4 Impeller directly coupled to the motor supported by the motor support base.



CURVES

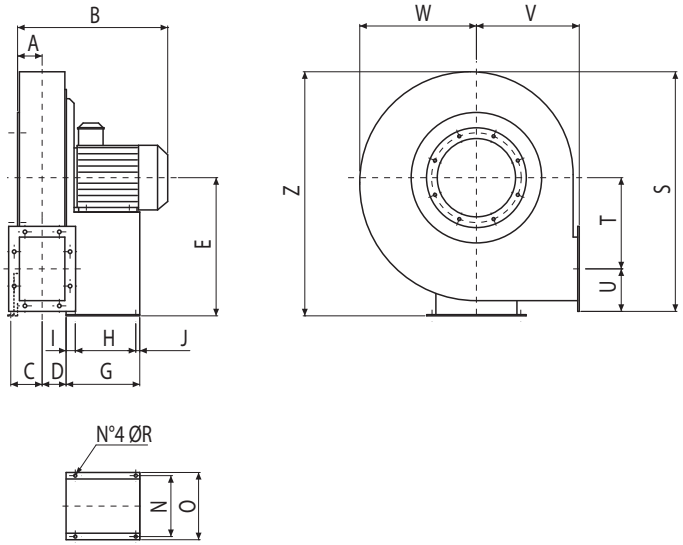


PERFORMANCE

CODE	MODEL	PHASE	Poles	MAX AIRFLOW	A	kW	RATING	MOTOR INSULATION CLASS	SOUND LEVEL	
				m³/h			IP		Lw	Lp
7HT3500	HT-ATX 352 ES. 4 LG	THREE-PHASE	2	1420	2,5	1,1	55	F	77	63
7HT3800	HT-ATX 382 ES. 4 LG	THREE-PHASE	2	1900	3,4	1,5	55	F	82	68
7HT4000	HT-ATX 402 ES. 4 LG	THREE-PHASE	2	2400	4,9	2,2	55	F	82	68
7HT4500	HT-ATX 452 ES. 4 LG	THREE-PHASE	2	2700	6,4	3	55	F	84	70
7HT5000	HT-ATX 502/A ES. 4 LG	THREE-PHASE	2	3300	8	4	55	F	89	75
7HT5001	HT-ATX 502/B ES. 4 LG	THREE-PHASE	2	4000	10,8	5,5	55	F	89	75
7HT5500	HT-ATX 552 ES. 4 LG	THREE-PHASE	2	5500	14,1	7,5	55	F	92	78
7HT5600	HT-ATX 562 ES. 4 LG	THREE-PHASE	2	6500	20,6	11	55	F	92	78
7HT6300	HT-ATX 632 ES. 4 LG	THREE-PHASE	2	8800	27,5	15	55	F	96	82

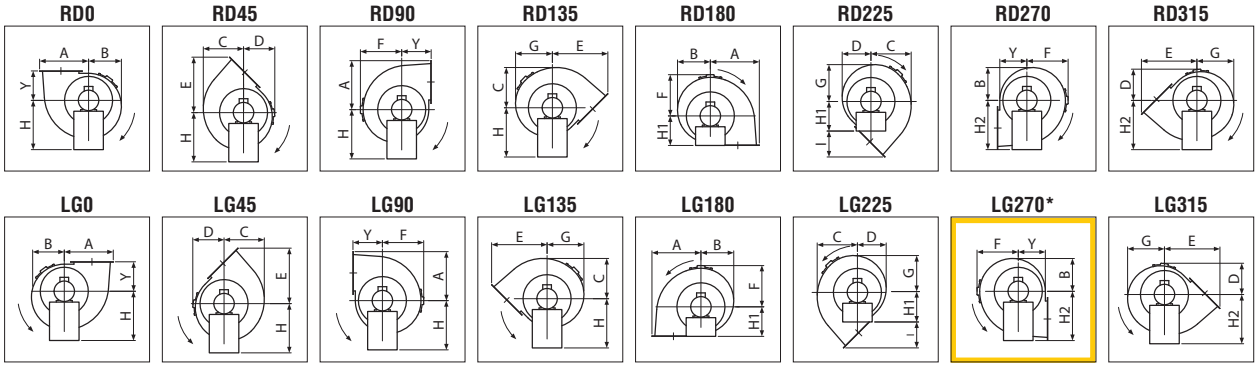
Air performances measured according to EN ISO 5801 and ISO 5802 standards with air density with 1.2 kg/m³ specific weight.
Power supply 400V/3Ph/50Hz.
Lp: Sound pressure levels are measured in free field at the maximum output and at a distance of 1,5 meters from the fan.
During tests, the fan is ducted according to UNI 7179-73P standard.

DIMENSIONS AND DISCHARGE ANGLES



TYPE	A	B	C	D	E	G	H	I	J	N	O	R	S	T	U	V	W	Z
HT ATX 352 T	65	377	70	56	355	211	121	45	45	203	225	10	585	215	108	250	315	617
HT ATX 382 T	71	437	76	63	375	246	133	55	58	234	260	10	585	215	108	250	340	659
HT ATX 402T	71	437	76	63	375	246	133	55	58	234	260	10	640	238	118	280	340	659
HT ATX 452T	78	503	86	70	400	276	197	30	49	289	324	12	705	265	128	300	375	713
HT ATX 502AT	86	520	94	78	450	276	197	30	49	289	324	12	780	297	139	335	410	795
HT ATX 502BT	86	560	94	78	450	336	237	40	59	336	372	12	780	297	139	335	410	795
HT ATX 552T	95	579	106	88	500	336	237	40	59	337	372	12	880	337	151	375	460	893
HT ATX 562T	95	684	106	88	500	436	337	50	49	395	440	14	880	337	151	375	460	893
HT ATX 632T	105	703	116	98	560	436	337	50	49	395	440	14	985	381	164	425	515	1000

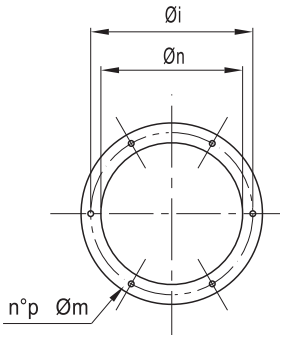
Dimensions of models according to the discharge angle.



* Standard version.

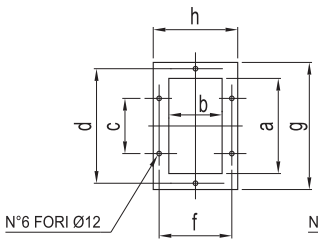
TYPE	A	B	C	D	E	F	G	I	Y	H	H1	H2
HT ATX 35	323	262	287	272	405	315	280	155	250	355	250	355
HT ATX 40	356	284	314	293	450	340	302	170	280	375	280	375
HT ATX 45	393	313	350	319	490	375	335	190	300	400	300	400
HT ATX 50	436	345	386	350	546	410	370	211	335	450	335	450
HT ATX 56	488	393	438	392	613	460	418	238	375	500	375	500
HT ATX 63	545	440	493	438	688	515	472	263	425	560	425	560

DIMENSIONS (mm)

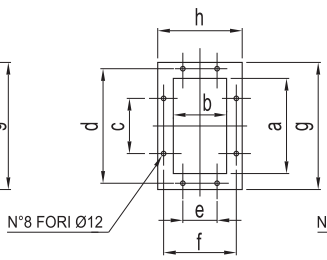


INLET				
TYPE	Øn	Øi	p	Øm
HT ATX 352	185	219	8	8
HT ATX 382	205	241	8	8
HT ATX 402	205	241	8	8
HT ATX 452	228	265	8	8
HT ATX 502/A	255	292	8	10
HT ATX 502/B	255	292	8	10
HT ATX 552	285	332	8	10
HT ATX 562	285	332	8	10
HT ATX 632	320	366	8	10

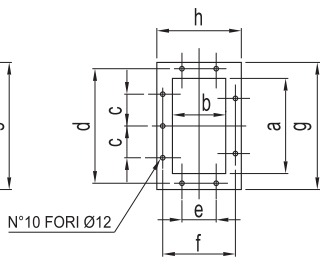
MOD. 1



MOD. 2



MOD. 3



OUTLET									
TYPE	a	b	c	d	e	f	g	h	Mod.
HT ATX 352	146	105	112	182	-	139	216	175	1
HT ATX 382	166	117	112	200	-	151	236	187	1
HT ATX 402	166	117	112	200	-	151	236	187	1
HT ATX 452	185	131	112	219	-	165	255	201	1
HT ATX 502/A	207	148	112	241	112	182	277	218	2
HT ATX 502/B	207	148	112	241	112	182	277	218	2
HT ATX 552	231	166	112	265	112	200	301	236	2
HT ATX 562	231	166	112	265	112	200	301	236	2
HT ATX 632	258	185	112	292	112	219	328	255	3

Series PDL ATX - PF ATX - HT ATX

PDL ATX

CFA - Inlet counterflange	
CODE	MODEL
5BO1334	CFA PDL ATX / 31
5BO1330	CFA PDL ATX / 35
5BO1343	CFA PDL ATX / 40
5BO1341	CFA PDL ATX / 45
5BO8086	CFA PDL ATX / 50
5BO8103	CFA PDL ATX / 56
5BO8093	CFA PDL ATX / 63
5BO8101	CFA PDL ATX / 71
5BO1357	CFA PDL ATX / 80
5BO1359	CFA PDL ATX / 90
5BO8040	CFA PDL ATX / 100

CFP - Outlet counterflange	
CODE	MODEL
5BO1362	CFP PDL ATX / 31
5BO1340	CFP PDL ATX / 35
5BO1344	CFP PDL ATX / 40
5BO1348	CFP PDL ATX / 45
5BO1381	CFP PDL ATX / 50
5BO8104	CFP PDL ATX / 56
5BO1310	CFP PDL ATX / 63
5BO1390	CFP PDL ATX / 71
5BO1392	CFP PDL ATX / 80
5BO1360	CFP PDL ATX / 90
5BO8100	CFP PDL ATX / 100

GA - Inlet flexible connector	
CODE	MODEL
5SU3101	GA PDL ATX / 31
5SU3500	GA PDL ATX / 35
5SU4022	GA PDL ATX / 40
5SU4024	GA PDL ATX / 45
5SU5003	GA PDL ATX / 50
5SU4020	GA PDL ATX / 56
5SU1403	GA PDL ATX / 63
5SU1100	GA PDL ATX / 71
5SU8000	GA PDL ATX / 80
5SU9002	GA PDL ATX / 90
5SU1129	GA PDL ATX / 100

GP - Outlet flexible connector	
CODE	MODEL
5SU3148	GP PDL ATX / 31
5SU3501	GP PDL ATX / 35
5SU4023	GP PDL ATX / 40
5SU5601	GP PDL ATX / 45
5SU1181	GP PDL ATX / 50
5SU4021	GP PDL ATX / 56
5SU1402	GP PDL ATX / 63
5SU1101	GP PDL ATX / 71
5SU3079	GP PDL ATX / 80
5SU9003	GP PDL ATX / 90
5SU1128	GP PDL ATX / 100

PF ATX

CFA - Inlet counterflange	
CODE	MODEL
5BO1321	CFA PF ATX/22
5BO1325	CFA PF ATX/25
5BO1328	CFA PF ATX/28
5BO1327	CFA PF ATX/31
5BO1323	CFA PF ATX/35
5BO1364	CFA PF ATX/40
5BO1334	CFA PF ATX/45
5BO1330	CFA PF ATX/50
5BO1347	CFA PF ATX/56
5BO8105	CFA PF ATX/63
5BO1380	CFA PF ATX/71
5BO8087	CFA PF ATX/80
5BO1391	CFA PF ATX/90

CFP - Outlet counterflange	
CODE	MODEL
5BO1358	CFP PF ATX/22
5BO5019	CFP PF ATX/25
5BO1329	CFP PF ATX/28
5BO1324	CFP PF ATX/31
5BO1365	CFP PF ATX/35
5BO1362	CFP PF ATX/40
5BO1340	CFP PF ATX/45
5BO1344	CFP PF ATX/50
5BO1348	CFP PF ATX/56
5BO1381	CFP PF ATX/63
5BO8104	CFP PF ATX/71
5BO1310	CFP PF ATX/80
5BO1390	CFP PF ATX/90

GA - Inlet flexible connector	
CODE	MODEL
5SU1404	GA PF ATX/22
5SU3142	GA PF ATX/25
5SU1405	GA PF ATX/28
5SU3137	GA PF ATX/31
5SU1096	GA PF ATX/35
5SU3147	GA PF ATX/40
5SU3101	GA PF ATX/45
5SU3500	GA PF ATX/50
5SU1102	GA PF ATX/56
5SU1406	GA PF ATX/63
5SU1180	GA PF ATX/71
5SU8004	GA PF ATX/80
5SU9000	GA PF ATX/90

GP - Outlet flexible connector	
CODE	MODEL
5SU1407	GP PF ATX/22
5SU3143	GP PF ATX/25
5SU1131	GP PF ATX/28
5SU3138	GP PF ATX/31
5SU1130	GP PF ATX/35
5SU3148	GP PF ATX/40
5SU3501	GP PF ATX/45
5SU4023	GP PF ATX/50
5SU5601	GP PF ATX/56
5SU1181	GP PF ATX/63
5SU4021	GP PF ATX/71
5SU1402	GP PF ATX/80
5SU1101	GP PF ATX/90

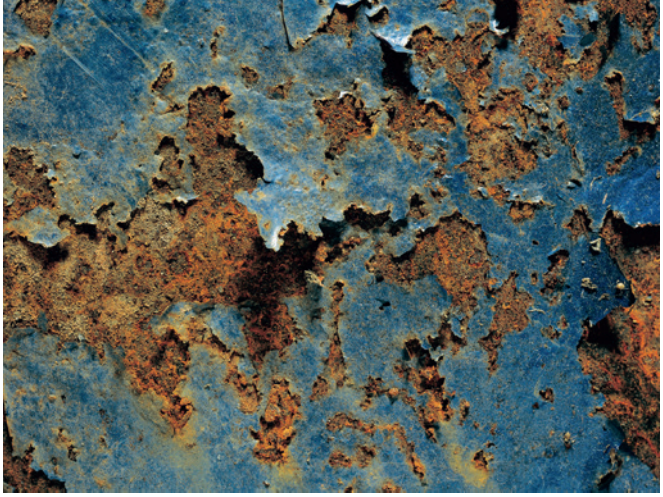
HT ATX

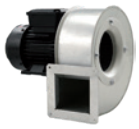
CFA - Inlet counterflange	
CODE	MODEL
5BO1325	CFA HT ATX/35
5BO3801	CFA HT ATX/38
5BO1328	CFA HT ATX/40
5BO1327	CFA HT ATX/45
5BO1326	CFA HT ATX/50
5BO1364	CFA HT ATX/55-56
5BO1334	CFA HT ATX/63

CFP - Outlet counterflange	
CODE	MODEL
5BO8108	CFP HT ATX/35
5BO1332	CFP HT ATX/38-40
5BO4505	CFP HT ATX/45
5BO5019	CFP HT ATX/50
5BO1329	CFP HT ATX/55-56
5BO1324	CFP HT ATX/63
A RICHIESTA	GIUNTI GA E GP

elicent® advanced ventilation

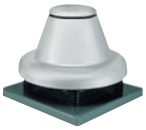
INDUSTRIAL AND BUILDING VENTILATION FANS





IC INOX
Forward curved blades centrifugal fans

p. 156



TCA
Centrifugal roof fans

p. 160

ICA-D
Centrifugal fans in plastic material

p. 163

ELICENT® range of anticorrosive / antacid fans are especially made for working atmospheres containing corrosive fluids. Made in spark-proof plastic material or inox steel AISI 304, they allow to operate in highly prohibitive environments for metal fans, though ensuring the same level of performance.

The range is not affected by the ErP Directive 2009/125/EC and further Regulations

ANTICORROSIVE FANS

Corrosion resistance material guideline

AGENTE	Materiale PVC	PE	PP	AISI 304
Acetone	3	2	3	1
Acido acetico	2	1	1	1
Acido citrico	1	1	1	1
Acido cromico	1	1	1	3
Acido lattico	2	1	1	2
Acido fosforico	1	2	1	2
Acido tartarico	2	1	1	n.d.
H2O	1	1	1	1
Alcool etilico	2	3	3	1
Alluminio				
Cloruro	1	1	n.d.	1
Solfato	1	1	1	1
Idrossido	1	n.d.	n.d.	1
Ammoniaca				
Cloruro	1	1	n.d.	3
Fosfato	1	1	1	1
Idrossido	1	n.d.	n.d.	1
Argento				
Nitrato	2	1	1	1
Bario				
Cloruro	1	1	1	1
Solfato	1	1	1	1
Idrossido	1	1	1	n.d.
Benzene	3	3	3	1
Benzina	1	1	3	1
Bromo liquido	3	3	3	3
Calcio				
Cloruro	1	1	n.d.	2
Carbonato	1	1	1	1
Carbonio				
Monossido	1	1	1	1
Tetracloruro	3	3	3	3
Cloro				
Gassoso secco	3	n.d.	3	3
Gassoso umido	2	n.d.	3	3
Clorobenzene	3	n.d.	3	1
Fenolo	2	1	1	1
Ferro				
Nitrato	1	1	n.d.	2
Solfato	1	1	n.d.	2
Formaldeide	2	1	1	1
Furfurolo	3	2	2	1
Idrogeno				
Perossido	1	2	2	2
Solfuro	2	1	1	1
Magnesio				
Cloruro	1	1	1	1
Carbonato	1	n.d.	1	1
Nitrato	1	1	1	1
Nafta	3	3	3	1
Nichel				
Cloruro	1	1	1	2
Solfato	1	2	1	1
Nitrato	1	1	1	1
Potassio				
Cloruro	1	1	1	1
Cianuro	1	1	1	1
Nitrato	1	1	1	1
Solfato	1	1	1	1
Rame				
Cianuro	3	n.d.	1	1
Cloruro	1	1	1	3
Nitrato	2	1	1	1
Solfato	1	1	3	1
Sodio				
Acetato	1	1	1	1
Carbonato	1	1	1	1
Cloruro	2	1	1	2
Clorato	1	1	1	1
Fosfato	1	1	1	1
Fluoruro	1	1	n.d.	2
Nitrato	1	1	1	1
Solfato	1	1	1	1
Zinco				
Cloruro	1	1	1	3
Nitrato	1	n.d.	1	n.d.
Solfato	1	1	1	1

ATTENTION: the indications given in the table have to be considered as general guideline, as the concentration of the watery solution of the chemical
agent (in case the agent is in a solution) and the working temperature are not taken into account.
1: resistance "GOOD"
2: resistance "LIMITED"
3: resistance "NONE"
n.d.: resistance unknown.

IC INOX

Anticorrosive centrifugal fans

- 10 models
- INOX Steel AISI 304
- Inlet connector supplied (not assembled)

DESCRIPTION

The centrifugal fans of the IC INOX series are designed to convey clean air with a high concentration of corrosive vapours in a temperature range from -20°C to +80°C.
They are suitable for all the industrial applications where small air volumes and high pressures are required. The series consists of different models with impeller diameter from 100 to 180 mm. The motor is directly fitted to the forward curved impeller. The casing is easily adjustable, also on site, to the required discharge angle every 45°, including 180° and 225° position.

CONSTRUCTION

- Casing, flanges and impeller in stainless steel AISI 304
- Execution 5 (with impeller directly coupled to flanged motor)
- Standard orientation LG270°.
- Asynchronous three-phase or single-phase motors according to international standards IEC 600034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP 55, class F, B35 shape. IC 100 T and M with motor shape B14, IP44, class B.

ACCESSORIES

- **SE** - motor support
- **RD** - outlet connector
- **RE** - Outlet protection guard
- **SR** - Inlet protection guard

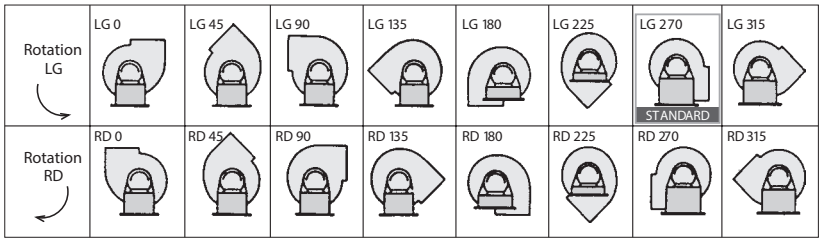
UPON REQUEST

- Rotation RD upon request.

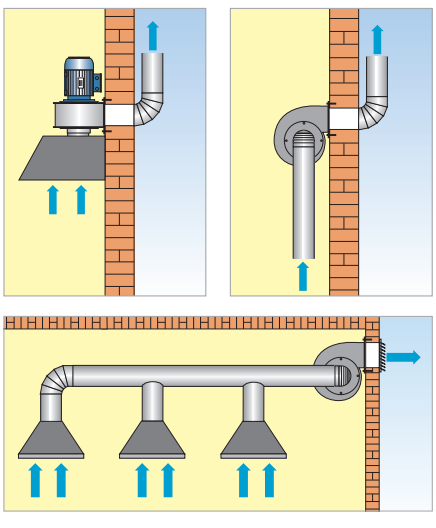
INSTALLATION

The centrifugal fans with forward curved impellers must always be installed to ducted systems, eventually with the use of additional resistance (for example setting shutters), that can limit the air flow in such a way that the absorbed current is within the acceptable values stated on the motor rating label.

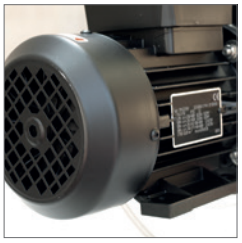
DISCHARGE ANGLES



INSTALLATION



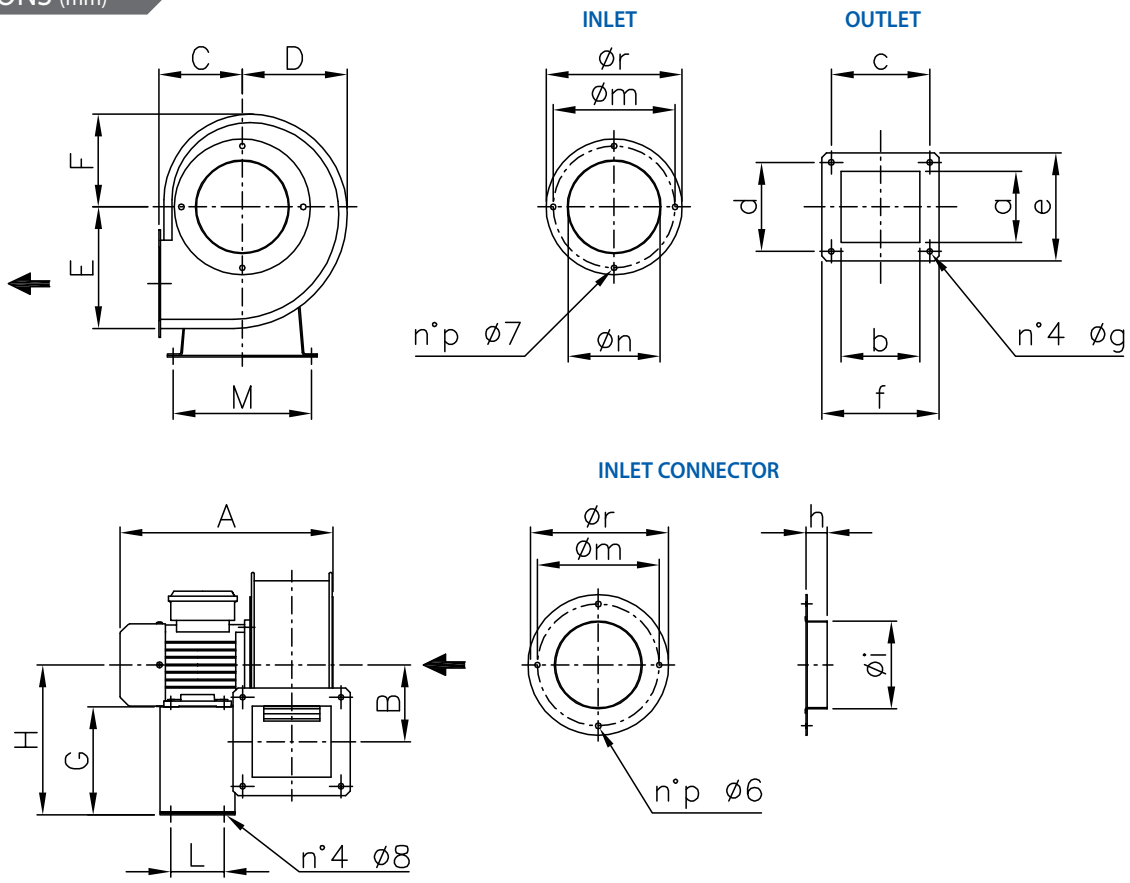
Forward curved blades



IP55 UNELMEC TYPE molens with ball bearing

ACCESSORIES pag. 159

DIMENSIONS (mm)



TYPE	A	B	C	D	E	F	G	H	L	M	kg
IC INOX 100	220	82	86	112	130	99	120	176	71	140	4
IC INOX 120	300	97	109	137	156	116	160	223	80	185	7
IC INOX 140	350	115	126	158	184	136	152	223	90	185	10
IC INOX 160	390	132	143	175	207	148	180	260	100	230	17
IC INOX 180	400	140	156	200	227	171	180	260	100	230	20

TYPE	A	b	c	d	e	f	g	h	i	m	n	p	r
IC INOX 100	76	84	105	95	115	125	6	20	100	130	90	4	145
IC INOX 120	102	102	125	125	150	150	7	20	125	160	115	4	178
IC INOX 140	118	118	148	148	175	175	8	30	125	180	135	4	195
IC INOX 160	135	135	165	165	195	195	8	40	160	222	155	8	240
IC INOX 180	148	148	180	180	210	210	8	40	160	222	170	8	240

Dimensions in mm / Indicative weights

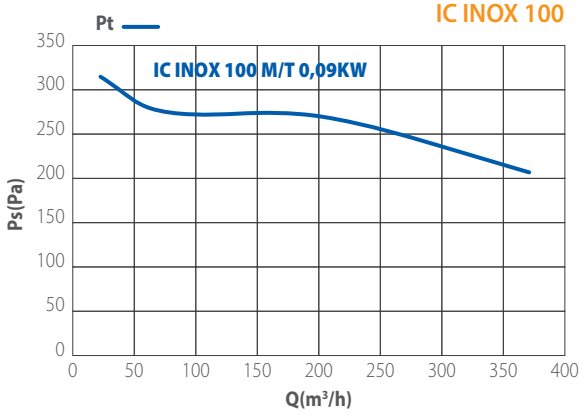
PERFORMANCE

CODE	MODEL	TUBAZIONE	MAX AIRFLOW	MAX PRESSURE	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	MOTOR CLASS	LEVELS SOUND (a 1,5 mt) dB (A)	
		Ø mm	m^3/h	Pa	V	A	KW	GIRI	N°	IP		Lw	Lp
1IC1006	IC 100 INOX SINGLE-PHASE	100	370	336	230	0,36	0,09	2800	2	44	B	73	62
1IC1202	IC 120 INOX SINGLE-PHASE	125	580	730	230	1,75	0,37	2800	2	55	F	78	67
1IC1405	IC 140 INOX SINGLE-PHASE	125	1267	925	230	2,80	0,37	2800	2	55	F	84	73
1IC1607	IC 160 INOX SINGLE-PHASE	160	2318	954	230	5,20	0,75	2800	2	55	F	89	78
1IC1895	IC 180 INOX SINGLE-PHASE	160	2408	1214	230	6,70	1,10	2800	2	55	F	91	81
1IC1007	IC 100 INOX THREE-PHASE	100	370	366	400	0,17	0,09	2800	2	44	B	73	62
1IC1203	IC 120 INOX THREE-PHASE	125	580	730	400	0,90	0,25	2800	2	55	F	78	67
1IC1406	IC 140 INOX THREE-PHASE	125	1267	925	400	1,10	0,37	2800	2	55	F	84	73
1IC1609	IC 160 INOX THREE-PHASE	160	2318	954	400	1,90	0,75	2800	2	55	F	89	78
1IC1811	IC 180 INOX THREE-PHASE	160	2408	1214	400	2,30	1,10	2800	2	55	F	91	81

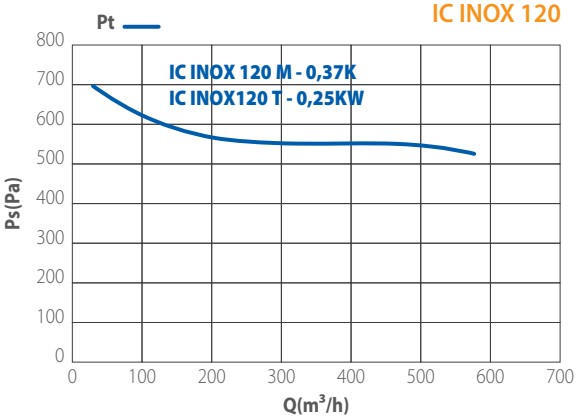
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free field conditions, propagation spherical, measurement category D in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 1,5 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

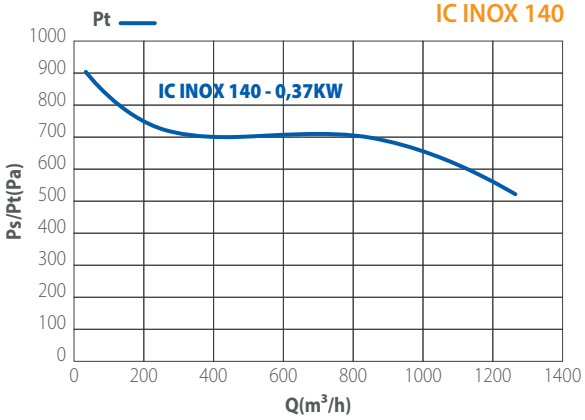
IC INOX 100



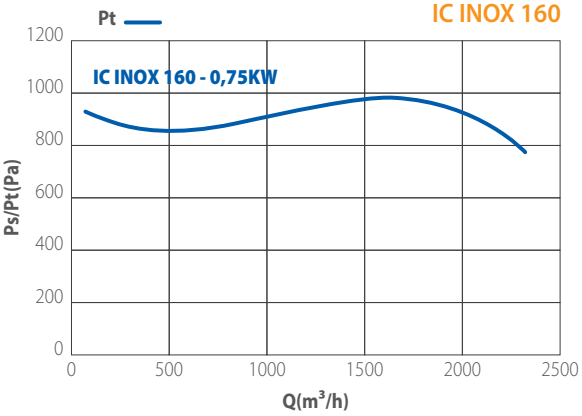
IC INOX 120



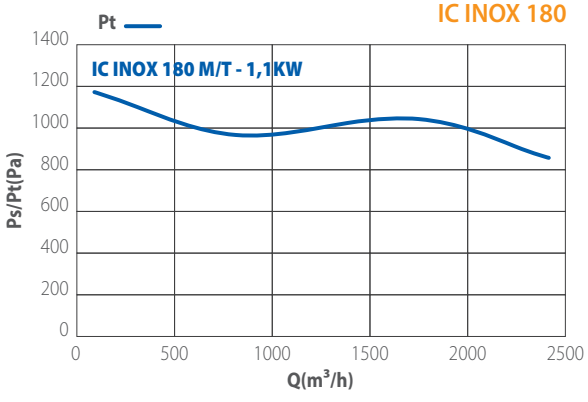
IC INOX 140



IC INOX 160

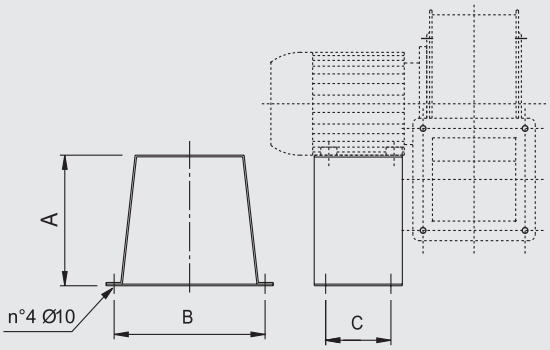


IC INOX 180



Series IC INOX

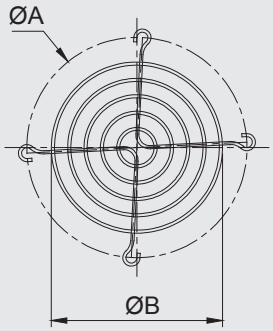
Motor Support



CODE	TYPE	A	B	C	Kg
1SE6007	100	120	140	71	0,5
1SE6005	120	160	185	80	1,2
1SE6017	140	152	185	90	1,3
1SE6006	160 - 180	180	230	100	1,7

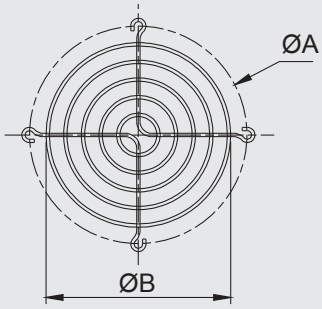
* Codes for models IC-ATX.
Codes for models IC ATEX INOX upon request.

Outlet Guard



CODE IC ATX	CODE IC ATX INOX	TYPE	ØA	ØB	Kg
5RE0109	5RE1109	Rete IC 100	142	110	0,06
5RE0111	5RE1111	Rete IC 120	177	131	0,12
5RE0113	5RE1113	Rete IC 140	209	152	0,13
5RE0115	5RE1115	Rete IC 160	233	194	0,15
5RE0117	5RE1117	Rete IC 180	255	194	0,2

Inlet Guard



CODE IC ATX	CODE IC ATX INOX	TYPE	ØA	ØB	Kg
5RE1500	5RE1511	Rete IC 100	130	110	0,06
5RE1501	5RE1512	Rete IC 120	160	131	0,12
5RE1502	5RE1513	Rete IC 140	180	152	0,12
5RE1503	5RE1509	Rete IC 160-180	222	194	0,15

Connector

CODE	ACCESSORY	MODEL	Ø MM
5RD1100	CONNECTOR	IC 100	100
5RD1120	CONNECTOR	IC 120	125
5RD1140	CONNECTOR	IC 140	125
5RD1160	CONNECTOR	IC 160	160
5RD1180	CONNECTOR	IC 180	160

TCA

Anticorrosive centrifugal roof fans

- 8 models
- Ideal for corrosive air
- Motor separated from the airflow

Backward curved blades

Motor separated from the airflow, IP55 UNELMELT type with ball-bearings.

DESCRIPTION

The centrifugal roof fans of the TCA series are designed to convey corrosive air with a max temperature of 60°C and they are suitable for direct or duct exhaust.

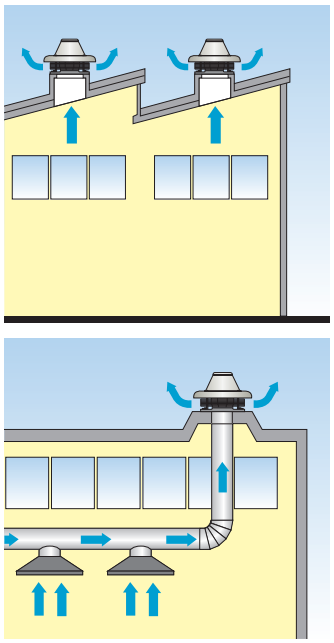
CONSTRUCTION

- Spark-proof construction
- Backward curved centrifugal roof fans
- Housing in polyethylene
- Impeller in polypropylene
- Stainless steel protection grid
- Stainless steel screws

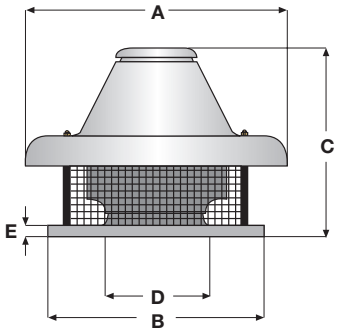
MOTOR

- Asynchronous three-phase or single-phase motors according to international standards IEC 600034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F, suitable to a S1 service (continuous working to constant load).

INSTALLATION



DIMENSIONS (mm)



TYPE	A	B	C	D	E	Kg
TCA 250	540	350	470	160	38	16
TCA 300	540	500	490	200	38	20
TCA 350	800	500	550	220	38	22
TCA 400	800	600	570	250	38	32
TCA 450	800	600	600	280	38	38

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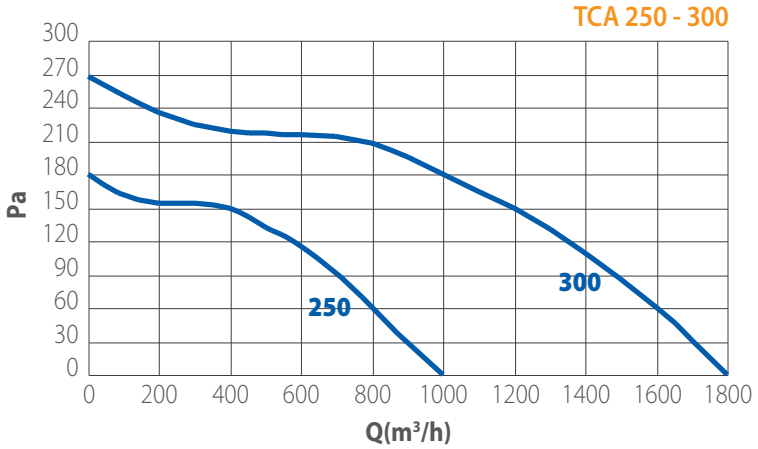
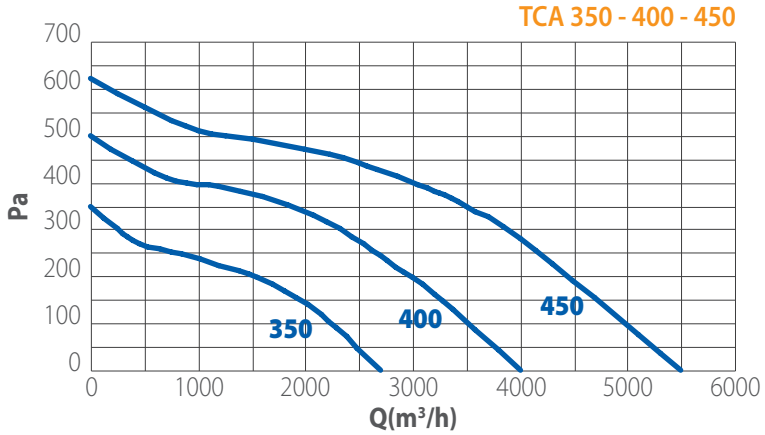
PERFORMANCE

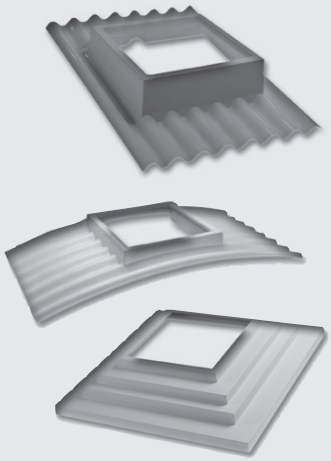
CODE	MODEL	MAX AIRFLOW	MAX PRESSURE	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	DEGREE OF PROTECTION	LEVELS SOUND (a 6 mt)
		m³/h	Pa	V	A	KW	GIRI/1'	N°	IP	dB (A)
1TC0250	TCA 250 SINGLE-PHASE	1000	180	230	0,9	0,09	1450	4	55	45
1TC0314	TCA 300 SINGLE-PHASE	1800	270	230	2,35	0,24	1450	4	55	53
1TC0354	TCA 350 SINGLE-PHASE	2700	350	230	3,15	0,37	1450	4	55	57
1TC0255	TCA 250 THREE-PHASE	1000	180	400	0,46	0,09	1450	4	55	45
1TC0320	TCA 300 THREE-PHASE	1800	270	400	0,76	0,24	1450	4	55	53
1TC0360	TCA 350 THREE-PHASE	2700	350	400	1,35	0,37	1450	4	55	57
1TC0404	TCA 400 THREE-PHASE	4000	500	400	1,6	0,55	1450	4	55	61
1TC0454	TCA 450 THREE-PHASE	5500	620	400	3,15	1,1	1450	4	55	66

CURVES





Series TCA



BA - Support base and reductions

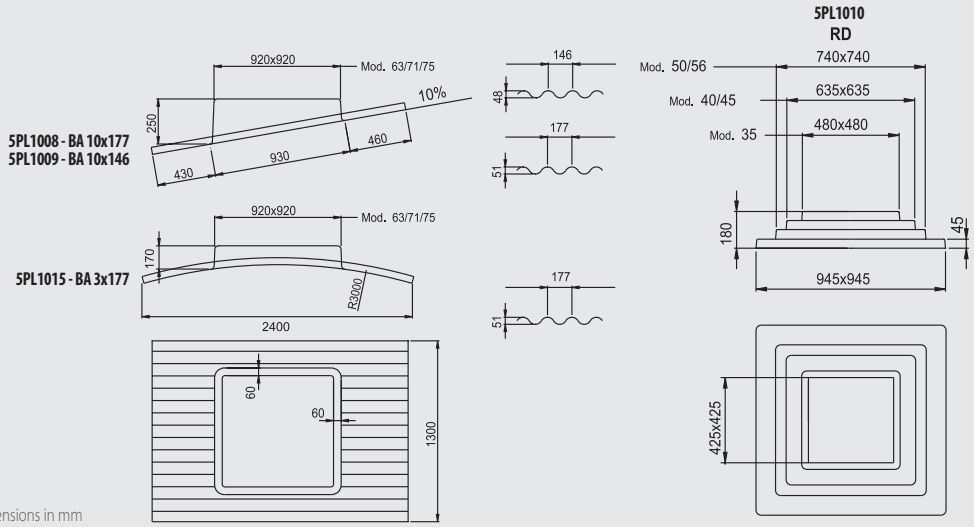
GENERAL DESCRIPTION - The support base BA and reduction RD are suitable for installation of roof fans on waved coverings, avoiding detrimental stagnation of water near to the fan and expensive carpentry works. The support base BA is suitable for roof fans having base 930mm X 930 mm or bigger. With the suitable reduction RD it is possible to use the base for roof fans from a minimum base dimension of 500X500. The reduction RD is a single element that can be easily cut to fit the exact fan dimension.

VERSION

- BA 10x177 (Cod. 5PL1008): suitable for "EURO" roof coverings pitch 177,height 51 mm and 10% slope.
- BA 3x177 (Cod. 5PL1015): suitable for "EURO" roof coverings pitch 177 mm, height 51 mm and radius of curvature of the sheet of 3 meters.
- BA 10x146 (Cod. 5PL1009): suitable for "INTERNATIONAL" roof coverings pitch 146 mm, height 48 mm, and 10% slope.
- Reduction RD (Cod. 5PL1010).

CONSTRUCTION - In polyester resins strengthen with stratified fibre glass. The finishing is RAL 9002(light grey). The external surface is treated against the action of atmospheric agent.

INSTALLATION - A correct fitting foresees the overlap to the covering slab upstream and the underexposure downstream. Furthermore it must be foreseen a side overlap of at least one and quarter wave for each side.



Dimensions in mm

ICA-D

Centrifugal fans in plastic material

- 14 modelli.
- Ideali per aria corrosiva.
- Sedia portamotore di serie.

VERSIONS

■ **ICA-D ATEX**
ATEX 3G version according to Directives 94/9/CE and 2014/34/UE.
See page 134

DESCRIPTION

The ICA-D series is particularly designed for conveying smoke and corrosive vapours and smokes, also with high humidity level and with fluid temperature range from -15°C to +70°C. The PR-AC is a centrifugal backward curved fan with technical and mechanical characteristics that grant a long lasting operation. The backward curved impeller provide good characteristics of low noise and high efficiency. The PR-AC fan, when its lifetime is finished, is easy to dispose, being manufactured with recyclable materials.

CONSTRUCTION

- Volute in polyethylene (PE).
- Single inlet impeller, in Polypropylene (PP), with backward curved blades and aluminium hub (protected from the fl uid).
- Motor support in epoxy painted steel sheet.
- Asynchronous three-phase or single-phase motors according to international standards IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F, B3 or B5 shape. Suitable to a S1 service (continuous working to constant load).

ACCESSORIES

- Inlet and outlet protection guard according to UNI 10615.
- Anti-vibration joint in PVC for inlet and outlet sides.
- Gravity shutter.
- Manual setting shutter.

UPON REQUEST

- Version with casing in PP, Polypropylene (PRAC/ PP).
- Version with casing in PER, anti-static and self-extinguishing polyethylene (PR-AC/PER).
- Version with motor support in stainless steel AISI304.

DISCHARGE ANGLES

Rotazione *Rotation* RD						
Forma/*Form*	0	45°	90°	135°	270°	315°
Rotazione *Rotation* LG						

N.B.: Standard discharge angles LG 270°

ACCESSORIES pag. 166

PERFORMANCE

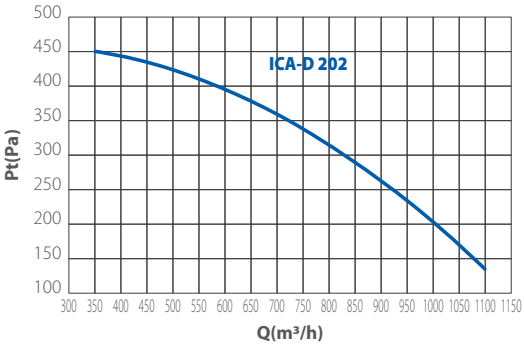
CODE	MODEL	PHASE	POLES	MAX AIRFLOW	A	kW	RATING	MOTOR INSULATION CLASS	SOUND LEVEL	
				m³/h			IP		Lw	Lp
7PA2095	ICA-D 202	SINGLE-PHASE	2	1.100	1,4	0,18	55	F	79	65
7PA2622	ICA-D 252	SINGLE-PHASE	2	2.100	2,2	0,37	55	F	86	72
7PA2623	ICA-D 254	SINGLE-PHASE	4	1.050	1,3	0,11	55	F	71	56
7PA2884	ICA-D 282	SINGLE-PHASE	2	3.150	4,4	0,75	55	F	90	75
7PA2887	ICA-D 284	SINGLE-PHASE	4	1.600	1,5	0,18	55	F	74	60
7PA3100	ICA-D 312	SINGLE-PHASE	2	4.300	8,5	1,50	55	F	93	78
7PA3101	ICA-D 314	SINGLE-PHASE	4	2.250	2	0,24	55	F	77	63
7PA3619	ICA-D 354	SINGLE-PHASE	4	1.400	2,7	0,37	55	F	79	64
7PA4091	ICA-D 404	SINGLE-PHASE	4	6.700	3,7	0,55	55	F	83	68
7PA2088	ICA-D 202	THREE-PHASE	2	1.100	0,55	0,18	55	F	79	65
7PA2610	ICA-D 252	THREE-PHASE	2	2.100	1,05	0,37	55	F	86	72
7PA2624	ICA-D 254	THREE-PHASE	4	1.050	0,55	0,11	55	F	71	56
7PA2888	ICA-D 282	THREE-PHASE	2	3.150	1,75	0,75	55	F	90	75
7PA2889	ICA-D 284	THREE-PHASE	4	1.600	0,7	0,18	55	F	74	60
7PA3216	ICA-D 312	THREE-PHASE	2	4.300	3,2	1,50	55	F	93	78
7PA3217	ICA-D 314	THREE-PHASE	4	2.250	0,85	0,24	55	F	77	63
7PA3218	ICA-D 316	THREE-PHASE	6	1.400	0,7	0,18	55	F	66	52
7PA3611	ICA-D 352	THREE-PHASE	2	6.700	4,54	2,20	55	F	94	80
7PA3620	ICA-D 354	THREE-PHASE	4	3.400	1,11	0,37	55	F	79	64
7PA3621	ICA-D 356	THREE-PHASE	6	2.100	0,7	0,18	55	F	68	53
7PA4092	ICA-D 404	THREE-PHASE	4	4.600	1,6	0,55	55	F	83	68
7PA4093	ICA-D 406	THREE-PHASE	6	2.800	0,87	0,25	55	F	73	59
7PA4598	ICA-D 454	THREE-PHASE	4	6.000	2,5	1,10	55	F	83	68
7PA4599	ICA-D 456	THREE-PHASE	6	3.800	1,23	0,37	55	F	73	59
7PA5054	ICA-D 504	THREE-PHASE	4	9.000	4,83	2,20	55	F	90	76
7PA5055	ICA-D 506	THREE-PHASE	6	5.600	1,65	0,55	55	F	81	66
7PA5657	ICA-D 564	THREE-PHASE	4	12.500	8,23	4,00	55	F	90	75
7PA5659	ICA-D 566	THREE-PHASE	6	8.000	2,82	1,10	55	F	80	66
7PA6352	ICA-D 634	THREE-PHASE	4	17.500	10,9	5,50	55	F	90	75
7PA6373	ICA-D 636	THREE-PHASE	6	11.000	5,17	2,20	55	F	80	66

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1,2 Kg/m³ specific weight. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.

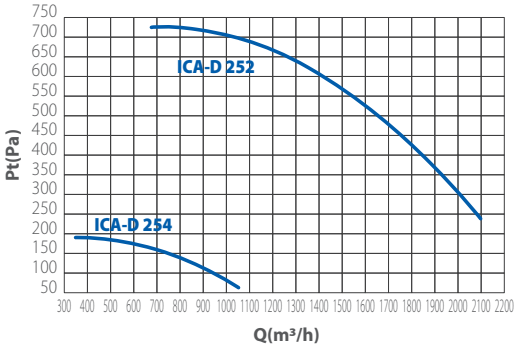
Lp: Sound pressure level measured in free field conditions, propagation spherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency at a distance of 1,5 meters, inlet side (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

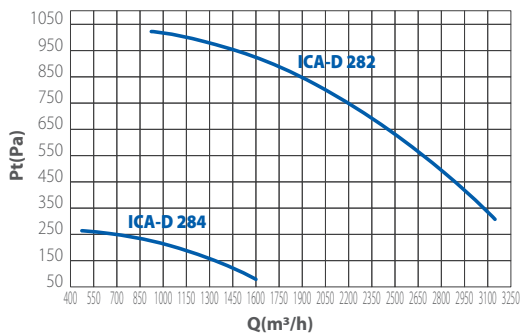
ICA-D 200



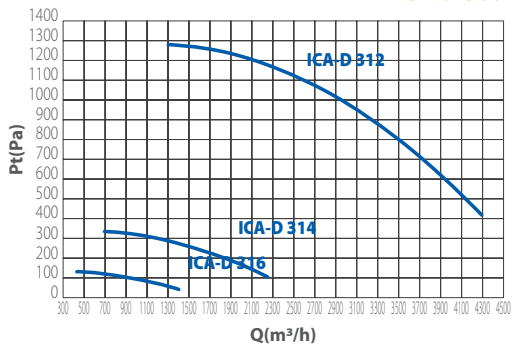
ICA-D 250



ICA-D 280

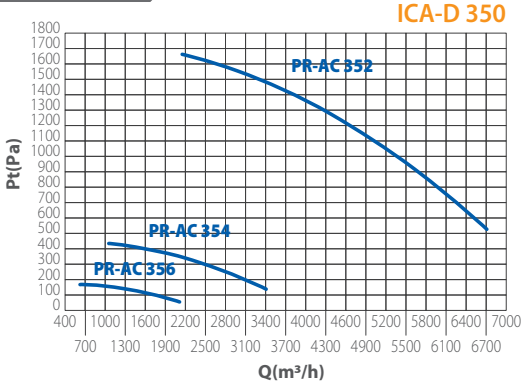


ICA-D 300

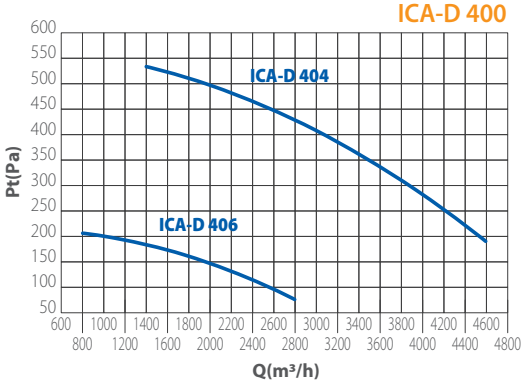


CURVES

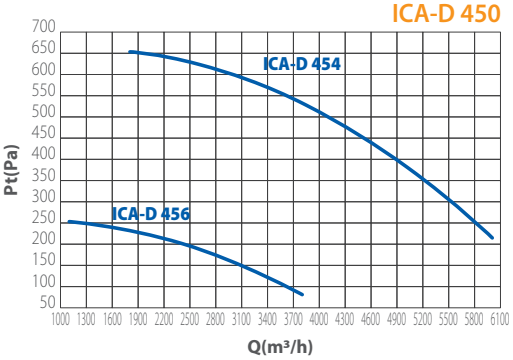
ICA-D 350



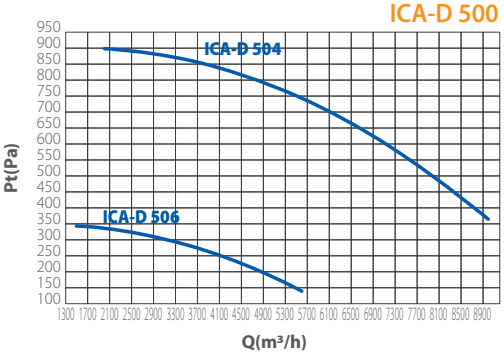
ICA-D 400



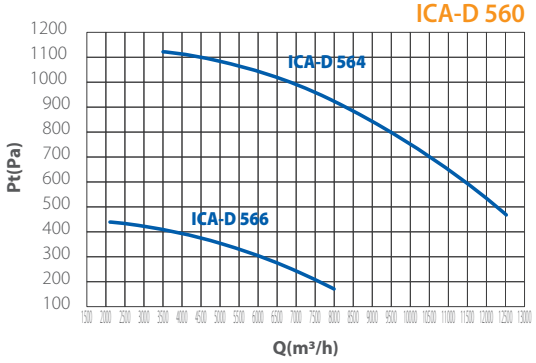
ICA-D 450



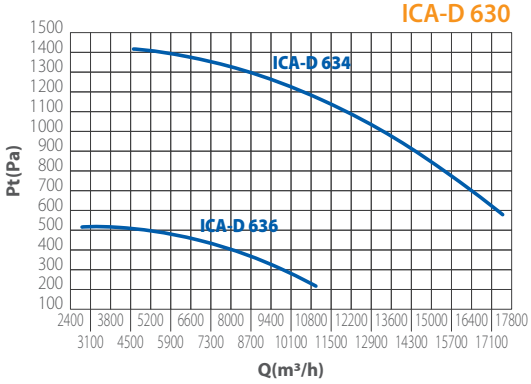
ICA-D 500



ICA-D 560



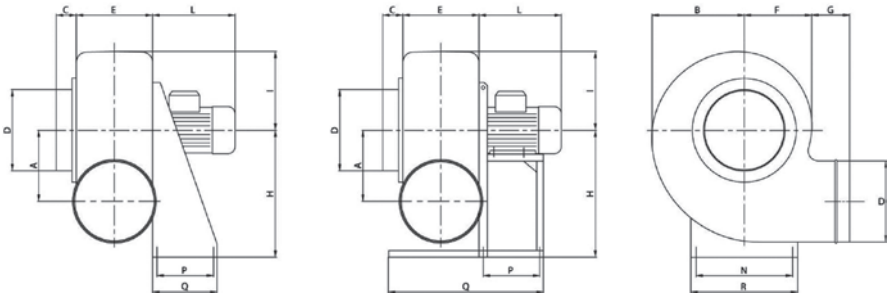
ICA-D 630



DIMENSIONS (mm)

Gr. 20 - 45

Gr. 50 - 63

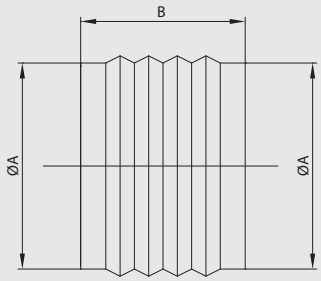


TYPE	A	B	C	D	E	F	G	H	I	L	N	P	Q	R	kg
20	140	180	35	160	160	138	55	250	150	195	200	100	140	235	17
25	173	228	35	200	185	170	55	310	190	220	255	100	140	290	24
28	208	255	40	225	195	190	70	350	210	240	280	120	190	316	33
31	240	280	40	250	200	210	70	410	230	290	320	150	230	355	45
35	260	312	40	280	237	230	55	445	270	290	355	150	230	390	51
40	290	356	40	315	252	264	55	495	295	240	325	170	250	365	47
45	324	400	40	355	287	395	55	550	330	290	370	170	250	410	61
50	360	460	50	400	355	355	80	630	395	300	289	197	636	325	77
56	410	490	50	450	365	380	80	710	410	340	289	237	696	325	120
63	445	610	50	500	415	420	80	800	505	420	337	237	741	373	131

Indicative weights

Series ICA-D

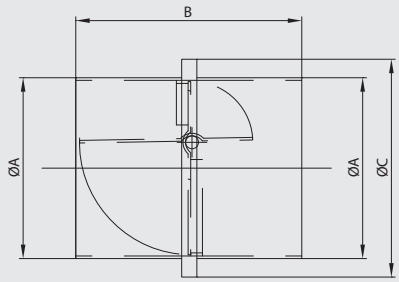
Inlet and outlet antivibration joint in PVC



CODE	TYPE	ØA	B
5SU3020	20	160	160
5SU3025	25	200	160
5SU3028	28	225	160
5SU3030	31	250	160
5SU3036	35	280	160
5SU3040	40	315	160
5SU3045	45	355	160
5SU3054	50	400	160
5SU3056	56	450	160
5SU3063	63	500	160

Dimensions in mm

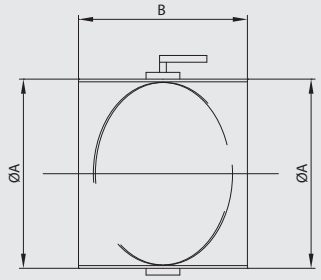
Gravity Shutter



CODE	TYPE	ØA	B	ØC
1SE2021	20	160	200	240
1SE2026	25	200	200	280
1SE2028	28	225	200	305
1SE2031	31	250	200	330
1SE2035	35	280	200	360
1SE2040	40	315	210	435
1SE2045	45	355	210	475
1SE2049	50	400	210	520
(1)	56	450	210	570
(1)	63	500	210	620

Dimensions in mm
(1) Item code upon request

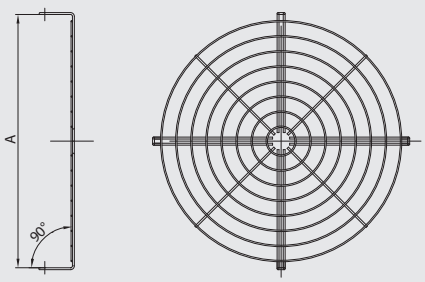
Manual setting shutter



CODE	TYPE	ØA	B
1SE2022	20	160	120
1SE2027	25	200	120
1SE2030	28	225	120
1SE2032	31	250	120
1SE2036	35	280	140
1SE2041	40	315	140
1SE2046	45	355	140
1SE2050	50	400	140
(1)	56	450	440
(1)	63	500	480

Dimensions in mm
(1) Item code upon request

Inlet protection guard according to UNI 10615



CODE	TYPE	ØA
5RE2002	20	160
5RE2552	25	200
5RE2802	28	225
5RE2029	31	250
5RE2502	35	280
5RE4004	40	315
5RE4504	45	355
5RE5008	50	400
5RE5600	56	450
5RE6300	63	500

Dimensions in mm

elicent®
advanced ventilation

INDUSTRIAL
AND BUILDING
VENTILATION FANS

HIGH TEMPERATURE
FANS (max 200°C)

In professional kitchens or in light industrial workshops it is essential to have a ventilation that ensures healthy air to the operators.

The A.T. Elicent fans are designed for extraction of high temperature air that is emitted during the normal activities of a professional kitchen or a workshop.

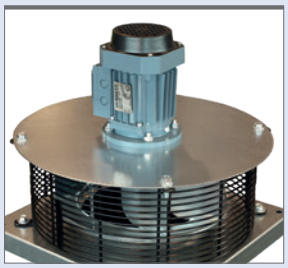
They are therefore mainly used in tertiary or light industrial environments such as factories, industrial kitchens, ovens, bakeries, pizzerias, canteens and so on. They are suitable for a continuous service and for conveying no abrasive or dusty air with maximum temperature up to 200 °C.

Their construction and the centrifugal impellers they are provided with guarantee a high performance.

The range is not affected by the ErP Directive2009/125/CE and further Regulations.

TCF A.T.

Single speed centrifugal roof fans for high temperature air (200°C)



Motor separated from the airflow

DESCRIPTION

Single speed centrifugal roof fans designed for direct or ducted ventilation in residential, commercial and industrial buildings. They are designed for easy installation, high efficiency low noise level. The motor is outside the airflow, this allows the fan to exhaust clean air with a temperature range from min. +100°C up to 200°C in continuous.

CONSTRUCTION

- Base frame in galvanized steel sheet.
- Protection guard in drawn steel rod protected against the atmospheric agents, manufactured according to UNI EN 12499.
- Backward curved wheel in galvanized steel sheet, with high efficiency and low noise level, statically and dynamically balanced according ISO 1940.
- Upper cover in aluminium, with appropriate slots for motor cooling.

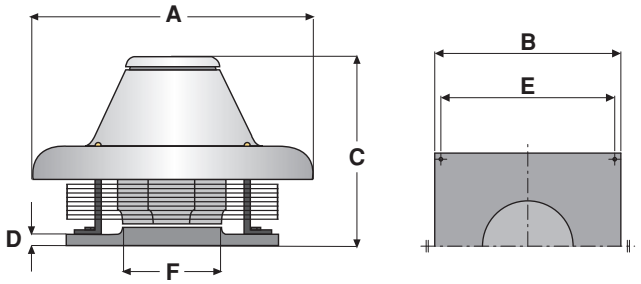
MOTOR EQUIPMENT

- Asynchronous three-phase motor or single-phase motor manufactured according to international standards IEC 600034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP 55, class F.

ACCESSORIES

- TS - Backdraught gravity shutter
- GR - Silencer
- CB - Counterbase
- BA - Support base for wawed roof coverings
- RA - Inlet Protection Guard
- Service switch
- PB - Support base/Silenced reduction
- CCr - Flat protection guard

DIMENSIONS (mm)



TYPE	Ø A	B	C	D	E	Ø F	Kg
TCF 350 A.T.	800	500	580	38	450	270	30
TCF 400 A.T.	800	640	640	38	600	296	33
TCF 450 A.T.	800	640	640	38	600	296	43
TCF 500 A.T.	950	760	730	38	710	320	60
TCF 560 A.T.	950	930	730	38	770	370	63
TCF 630 A.T.	1100	930	850	38	870	430	80
TCF 750 A.T.	1100	930	870	38	870	480	125
TCF 800 A.T.	1100	930	890	38	870	530	145

* Indicative weight

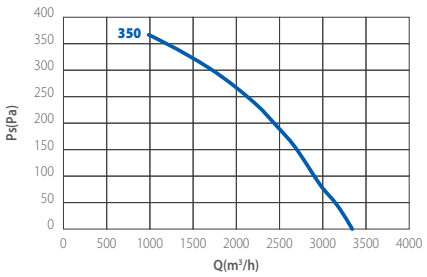
PERFORMANCE

CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	LEVELS SOUND dB(A)*	
		m³/h	V	A	KW	GIRI/1'	N°	IP	Lw	Lp
1TF3529	TCF 354 AT THREE-PHASE	3.341	400	0,8	0,25	1.400	4	55	78	54
1TF4031	TCF 404 AT THREE-PHASE	4.608	400	1,6	0,55	1.400	4	55	80	56
1TF4529	TCF 454 AT THREE-PHASE	4.981	400	2,2	0,75	1.400	4	55	81	58
1TF5027	TCF 504 AT THREE-PHASE	7.194	400	2,5	1,1	1.400	4	55	84	60
1TF5525	TCF 566 AT THREE-PHASE	6.252	400	1,8	0,55	950	6	55	76	52
1TF6025	TCF 636 AT THREE-PHASE	9.958	400	2,74	1,1	950	6	55	82	59
1TF7526	TCF 756 AT THREE-PHASE	13.055	400	5,45	2,2	950	6	55	86	63
1TF8026	TCF 806 AT THREE-PHASE	19.667	400	8,85	4	950	6	55	93	69

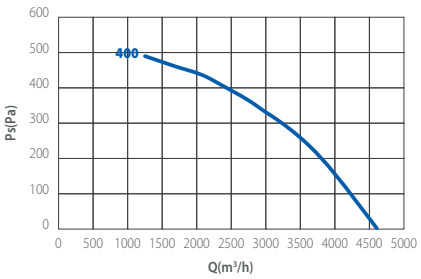
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 6 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

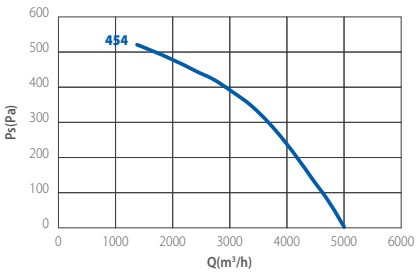
TCF AT 354



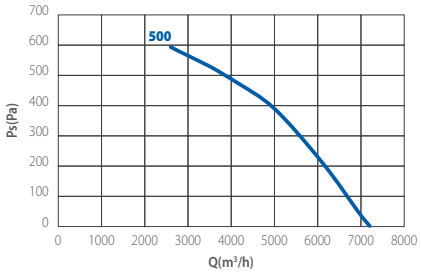
TCF AT 404



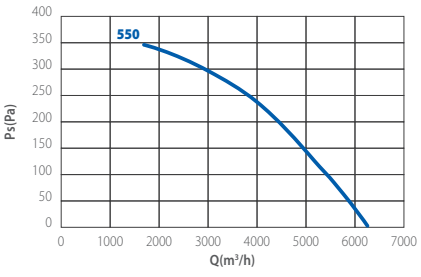
TCF AT 454



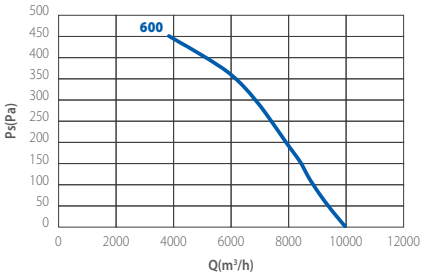
TCF AT 504



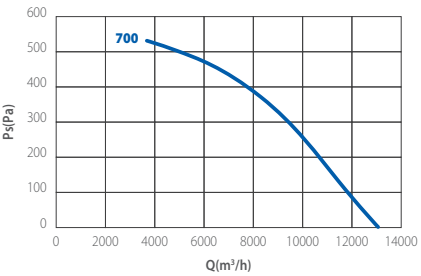
TCF AT 566



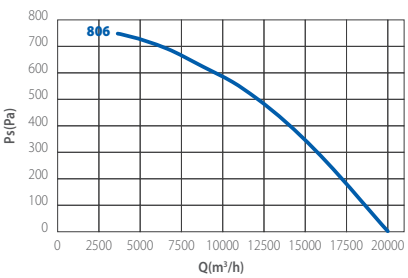
TCF AT 636



TCF AT 756

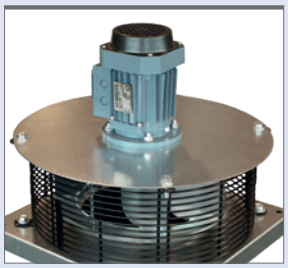


TCF AT 806



TCF A.T. 2V

Double speed centrifugal roof fans for high temperature air (200°C)



Motor separated from the airflow

DESCRIPTION

Double speed centrifugal roof fans designed for direct or ducted ventilation in residential, commercial and industrial buildings. They are designed for easy installation, high efficiency low noise level. The motor is outside the airflow, this allows the fan to exhaust clean air with a temperature range from min. +100°C up to 200°C in continuous.

CONSTRUCTION

- Base frame in galvanized steel sheet.
- Protection guard in drawn steel rod protected against the atmospheric agents, manufactured according to UNI EN 12499.
- Backward curved wheel in galvanized steel sheet, with high efficiency and low noise level, statically and dynamically balanced according ISO 1940.
- Upper cover in aluminium, with appropriate slots for motor cooling.

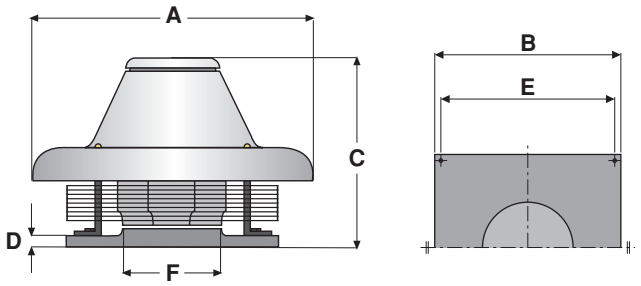
MOTOR EQUIPMENT

- Asynchronous three-phase motor or single-phase motor manufactured according to international standards IEC 600034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP 55, class F.

ACCESSORIES

- TS - Backdraught gravity shutter
- GR - Silencer
- CB - Counterbase
- BA - Support base for wawed roof coverings
- RA - Inlet Protection Guard
- Service switch
- PB - Support base/Silenced reduction
- CCr - Flat protection guard

DIMENSIONS (mm)



TYPE	Ø A	B	C	D	E	Ø F	Kg
TCF 350 A.T. 2V	800	500	580	38	450	270	30
TCF 400 A.T. 2V	800	640	640	38	600	296	33
TCF 450 A.T. 2V	800	640	640	38	600	296	43
TCF 500 A.T. 2V	950	760	730	38	710	320	60
TCF 560 A.T. 2V	950	930	730	38	770	370	63
TCF 630 A.T. 2V	1100	930	850	38	870	430	80
TCF 750 A.T. 2V	1100	930	870	38	870	480	125
TCF 800 A.T. 2V	1100	930	890	38	870	530	145

* Indicative weight

TCF A.T. 2V

PERFORMANCE

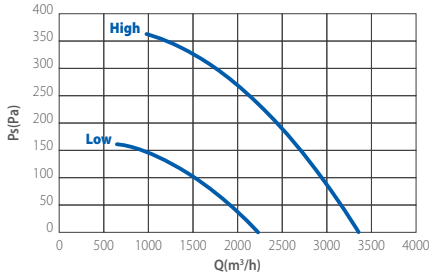
CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	DEGREE OF PROTECTION	LEVELS SOUND dB(A)*	
		m³/h	V	A	KW	GIRI/1'	N°	IP	Lp	Lw
1TF3530	TCF 354/6 AT 2V THREE-PHASE	3.341 / 2.239	400	0,9 / 0,31	0,29 / 0,09	1.350 / 950	4 / 6	55	54 / 45	78 / 63
1TF4032	TCF 404/6 AT 2V THREE-PHASE	4.608 / 3.072	400	1,57 / 0,76	0,55 / 0,20	1.350 / 950	4 / 6	55	56 / 47	80 / 65
1TF4530	TCF 454/6 AT 2V THREE-PHASE	4.981 / 3.337	400	2,05 / 0,95	0,75 / 0,27	1.350 / 950	4 / 6	55	58 / 49	81 / 67
1TF5028	TCF 504/6 AT 2V THREE-PHASE	7.194 / 4.820	400	3,4 / 1,43	1,4 / 0,45	1.350 / 950	4 / 6	55	60 / 51	84 / 69
1TF5526	TCF 566/8 AT 2V THREE-PHASE	6.252 / 4.689	400	2,24 / 1,22	0,65 / 0,25	960 / 670	6 / 8	55	52 / 46	76 / 64
1TF6026	TCF 636/8 AT 2V THREE-PHASE	9.958 / 7.468	400	4,07 / 2,23	4,07 / 2,23	960 / 670	6 / 8	55	59 / 52	82 / 70
1TF7527	TCF 756/8 AT 2V THREE-PHASE	13.055 / 9.791	400	6 / 3,32	2,2 / 0,9	960 / 670	6 / 8	55	63 / 56	86 / 74
1TF8027	TCF 806/8 AT 2V THREE-PHASE	19.667 / 14.750	400	9,32 / 8,43	3,70 / 2,60	950 / 670	6 / 8	55	98 / 80	69 / 63

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.

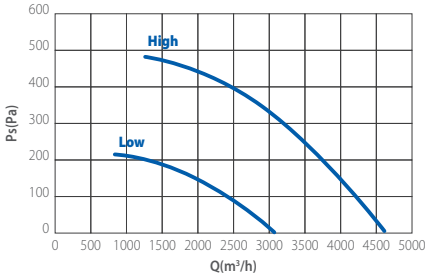
Lp: Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 6 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

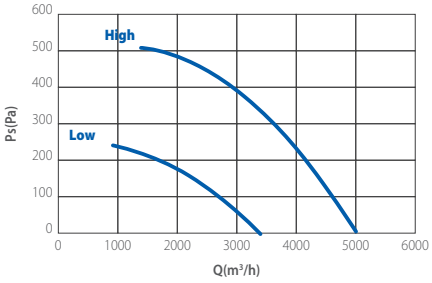
TCF 354/6 AT 2V



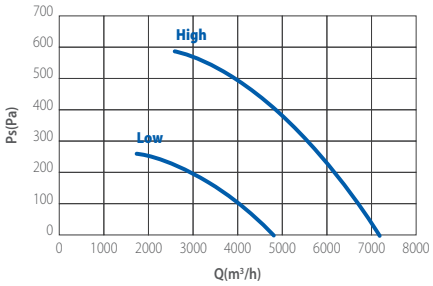
TCF 404/6 AT 2V



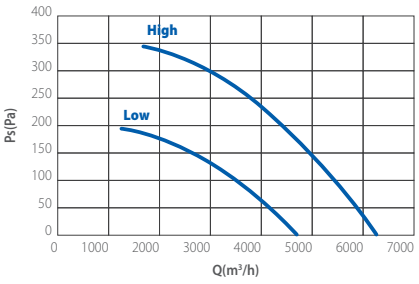
TCF 454/6 AT 2V



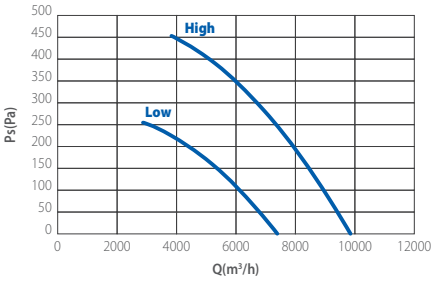
TCF 504/6 AT 2V



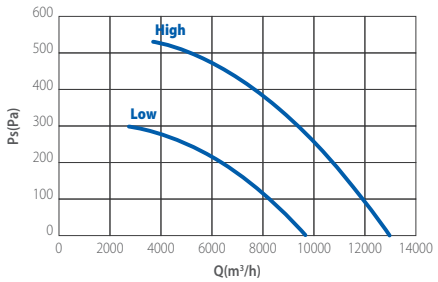
TCF 504/6 AT 2V



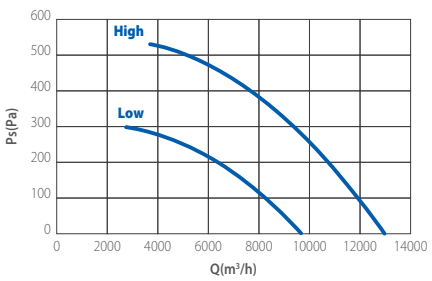
TCF 566/8 AT 2V



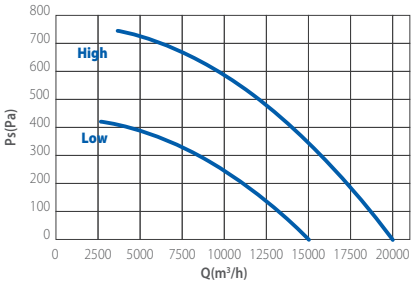
TCF 636/8 AT 2V



TCF 756/8 AT 2V



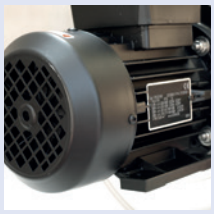
TCF 806/8 AT 2V



IC A.T.

Centrifugal fans for high temperature air (150°C)

Forward curved blades



IP 55 UNELMEC type ball-bearing motor

DESCRIPTION

The centrifugal fans of the IC A.T. series are designed to convey clean air with temperature range from +100°C to +150°C. They are suitable for all the industrial applications where small air volumes and high pressures are required.
The series consists of different models with impeller diameter from 100 to 180 mm. The motor is directly fitted to the forward curved impeller. The casing is easily adjustable, also on site, to the required discharge angle every 45°, including 180° and 225° position.

CONSTRUCTION

- Volute casing in steel sheet, protected against atmospheric agents by epoxy paint.
- Single inlet, single width forward curved impeller (sirocco type), in galvanized steel sheet.
- Execution 5 (with impeller directly coupled to flanged motor)
- Standard orientation LG270°.
- Asynchronous three-phase or single-phase motors according to international standards IEC 600034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP 55, class F, B35 shape. DIC 100 T and M with motor shape B14, IP44, class B.

ACCESSORIES

- Inlet and outlet protection guard according to UNI 12499 rules and protected against atmospheric agents.
- Motor support in steel sheet epoxy painted.

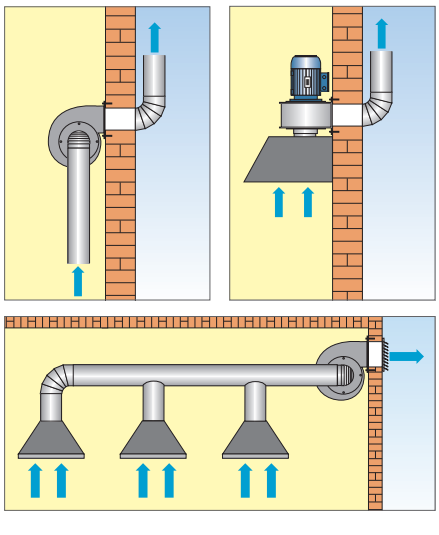
UPON REQUEST

- Rotation RD upon request.
- IC A.T. INOX suitable to convey hot gases, from min. 100°C up to 150°C maximum-.

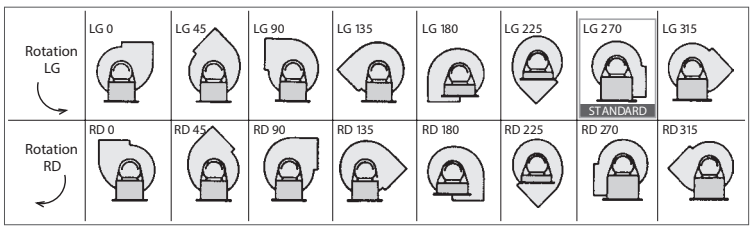
INSTALLATION

The centrifugal fans with forward curved impellers must always be installed to ducted systems, eventually with the use of additional resistance (for example setting shutters), that can limit the air flow in such a way that the absorbed current is within the acceptable values stated on the motor rating label.

INSTALLATION

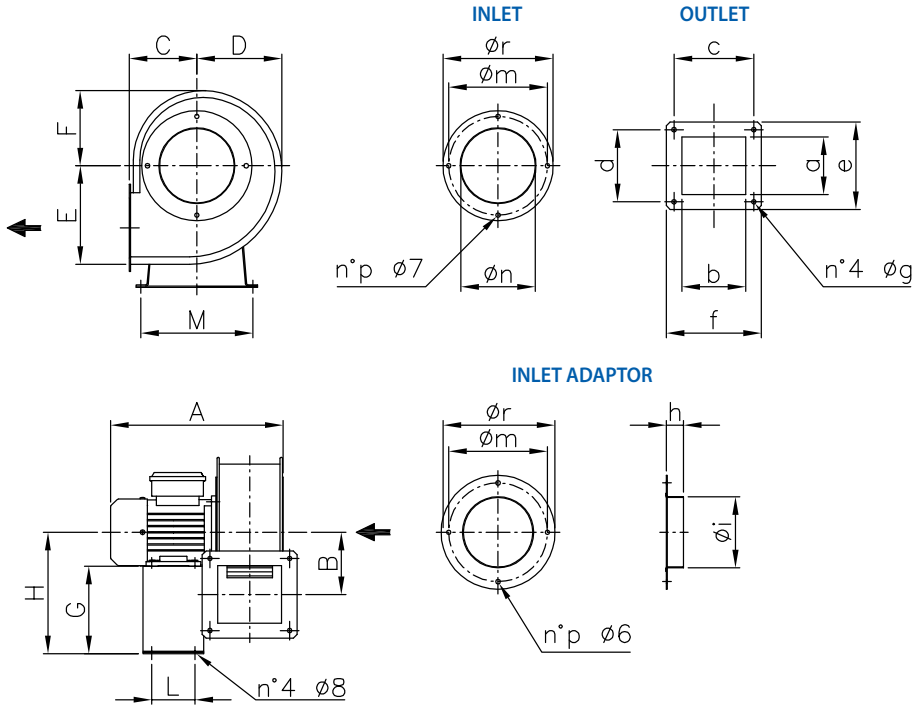


DISCHARGE ANGLES



N.B.: Standard discharge angles LG 270°

DIMENSIONI (mm)



TYPE	A	B	C	D	E	F	G	H	L	M	kg
IC A.T. 100	220	82	86	112	130	99	120	176	71	140	4
IC A.T. 120	300	97	109	137	156	116	160	223	80	185	7
IC A.T. 140	350	115	126	158	184	136	152	223	90	185	10
IC A.T. 160	390	132	143	175	207	148	180	260	100	230	17
IC A.T. 180	400	140	156	200	227	171	180	260	100	230	20

TYPE	a	b	c	d	e	f	g	h	i	m	n	p	r
IC A.T. 100	76	84	105	95	115	125	6	20	100	130	90	4	145
IC A.T. 120	102	102	125	125	150	150	7	20	125	160	115	4	178
IC A.T. 140	118	118	148	148	175	175	8	30	125	180	135	4	195
IC A.T. 160	135	135	165	165	195	195	8	40	160	222	155	8	240
IC A.T. 180	148	148	180	180	210	210	8	40	160	222	170	8	240

N.B. Inlet adaptor supplied, not assembled

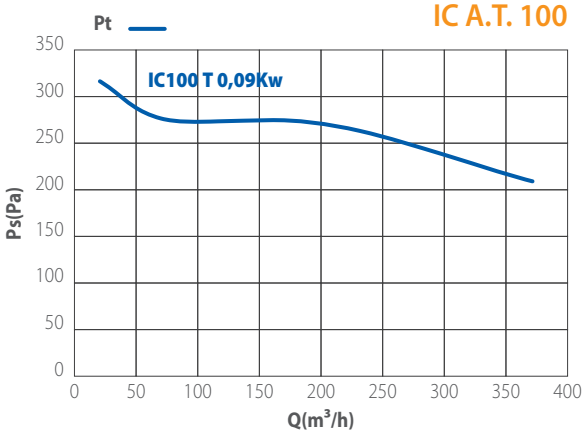
PERFORMANCE

	CODE	MODEL	PIPE	MAX AIRFLOW	MAX PRESSURE	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	POLE	RATING	MOTOR CLASS	LEVELS SOUND dB (A)	
			Ø mm	m^3/h	Pa	V	A	kW	RPM/1'	N°	IP		Lw	Lp
THREE-PHASE	1IC1031	IC 100 AT THREE-PHASE	100	370	336	400	0,17	0,09	2800	2	44	B	73	62
	1IC1281	IC 120 AT THREE-PHASE	125	580	730	400	0,90	0,25	2800	2	55	F	78	67
	1IC1495	IC 140 AT THREE-PHASE	125	1267	925	400	1,10	0,37	2800	2	55	F	84	73
	1IC1672	IC 160 AT THREE-PHASE	160	2318	954	400	1,90	0,75	2800	2	55	F	89	78
	1IC1842	IC 180 AT THREE-PHASE	160	2408	1214	400	2,30	1,10	2800	2	55	f	92	81

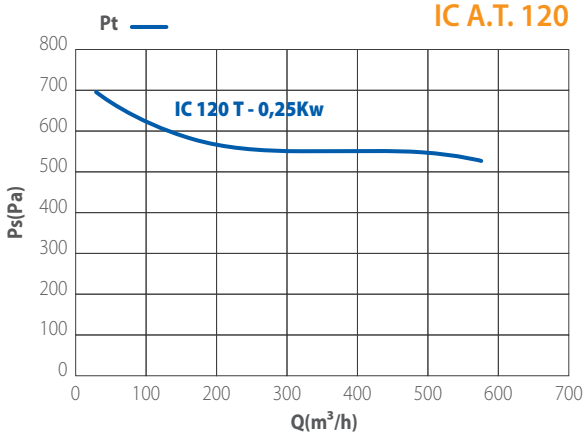
Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specifi c weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free fi eldconditions, propagation spherical, measurement category D in accordance with EN ISO 13349, at the point of maximum effi ciency,at a distance of 1,5 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

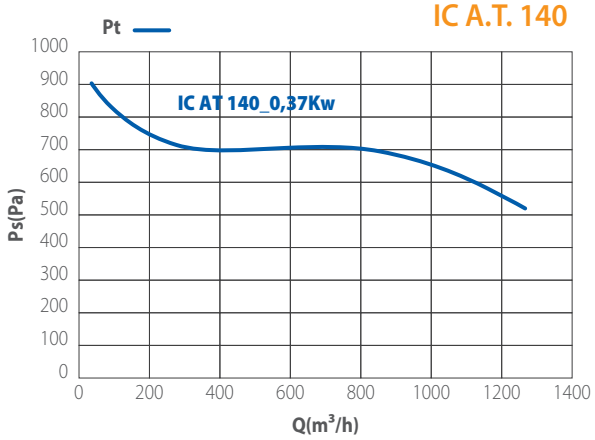
IC A.T. 100



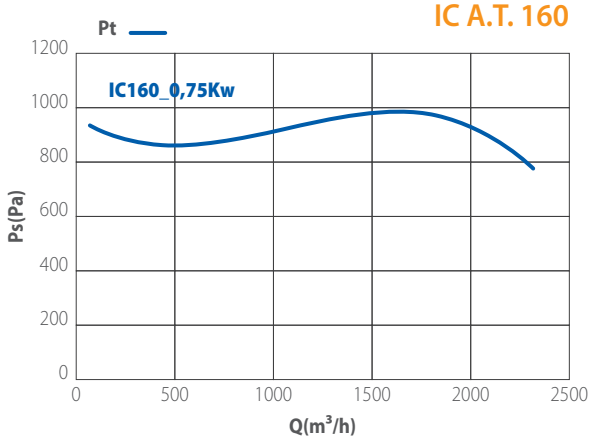
IC A.T. 120



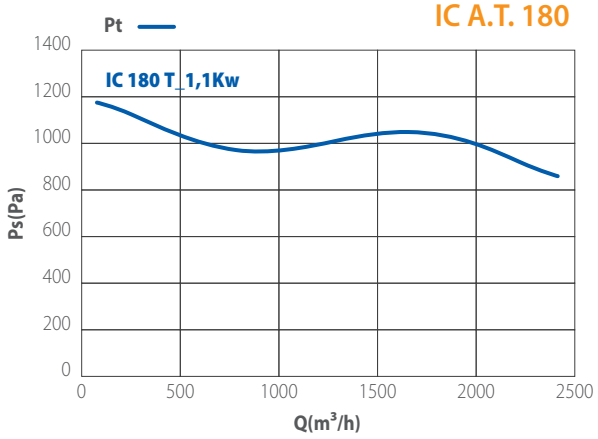
IC A.T. 140



IC A.T. 160



IC A.T. 180



E-CUBE PLUS

Backward curve centrifugal box fans.
High temperature for industrial kitchens (180°C).

400 V | IP55 | max 180°C | CE

DESCRIPTION

E-CUBE PLUS box fans are designed for ducted or direct industrial kitchen ventilation. Designed for an easy installation, E-CUBE K-AT motor is separated from the stream by a steel sheet panel which avoids the heating and the direct contact of the motor with dirty particles (grease and combustion residuals coming from the stoves), reducing the need of maintenance and cleaning operations. Double skin acoustically insulated panels reduce the noise level for a better comfort also in case of indoor installations. Suitable to convey clean and dusty air in a wide range of temperature, from +100°C up to +180°C. Highly silenced thanks to the backward curved impeller and double skin insulated panels. E-CUBE PLUS can be speed regulated through a self-transformer controller.

CONSTRUCTION

- Aluminium frame with double skin sound absorbing insulated panels removable from the impeller side.
- Motor external to the stream, B5 execution directly coupled to the impeller
- Sound absorbing and self-extinguishing material between the steel sheet layers of the panels
- Galvanized steel sheet backward curved impeller dynamically balanced according to ISO1940
- Punched mounting feet for an easy handling and fixing
- Asynchronous squirrel cage three-phase or single-phase motors according to international standards IEC 60034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP 55, Class F. Suitable to S1 service (continuous running with constant load).

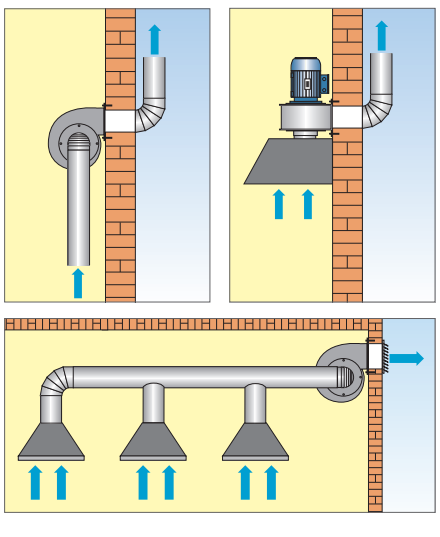
INSTALLATION

E-CUBE K-AT installation is easy thanks to the highly flexible positioning of the product. Indeed, this box fan can be indifferently installed in both vertical and horizontal position and is suitable for outdoor installations (we suggest the use of a water-proof protection cover, available on request as accessory).

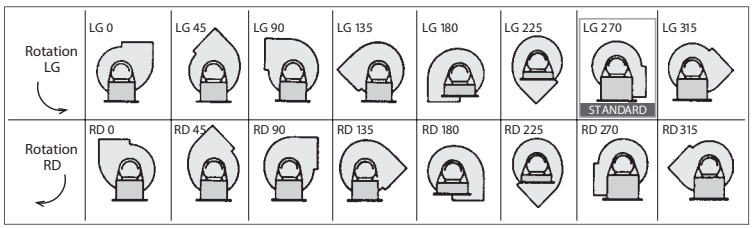
ACCESSORIES

- Water-proof protection cover
- Anti-vibration supports
- Floor support feet
- Round spigot inlet cone
- Square to round outlet adaptor
- Flexible connector (on demand from model 35, to be coupled with round spigot inlet cone or square to round outlet adaptor)
- Service switch IP67
- Grease collector tray

INSTALLATION



DISCHARGE ANGLES



N.B.: Standard discharge angles LG 270°

ACCESSORIES pag. 179

E-CUBE PLUS

PERFORMANCE

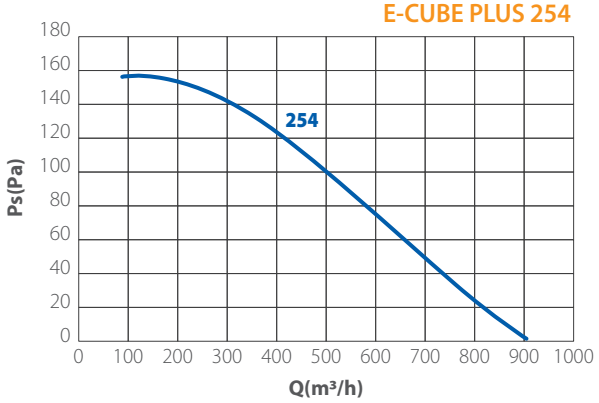
CODE	MODEL	PHASE	POLES	MAX AIRFLOW	A	kW	RATING	MOTOR INSULATION CLASS	SOUND LEVEL	
				m³/h			IP		Lw	Lp
1SK2507	E-CUBE PLUS 254 M	SINGLE-PHASE	4	919	1,00	0,09	55	F	57	36,5
1SK3108	E-CUBE PLUS 314 M	SINGLE-PHASE	4	1.900	1,30	0,12	55	F	66,2	45,7
1SK3512	E-CUBE PLUS 354 M	SINGLE-PHASE	4	3.170	2,20	0,25	55	F	69,7	49,2
1SK4014	E-CUBE PLUS 404 M	SINGLE-PHASE	4	4.400	4,50	0,55	55	F	71,9	51,3
1SK4515	E-CUBE PLUS 454 M	SINGLE-PHASE	4	4.730	5,50	0,75	55	F	75,4	54,9
1SK2508	E-CUBE PLUS 254 T	THREE-PHASE	4	919	0,60	0,09	55	F	57	36,5
1SK3109	E-CUBE PLUS 314 T	THREE-PHASE	4	1.900	0,70	0,12	55	F	66,2	45,7
1SK3513	E-CUBE PLUS 354 T	THREE-PHASE	4	2.700	0,80	0,25	55	F	69,7	49,2
1SK4016	E-CUBE PLUS 404 T	THREE-PHASE	4	4.400	1,60	0,55	55	F	71,9	51,3
1SK4516	E-CUBE PLUS 454 T	THREE-PHASE	4	4.730	2,20	0,75	55	F	75,4	54,9
1SK4517	E-CUBE PLUS 456 T	THREE-PHASE	6	3.200	1,20	0,37	55	F	66,6	46,1
1SK5014	E-CUBE PLUS 504 T	THREE-PHASE	4	6.800	2,50	1,10	55	F	78	57,4
1SK5015	E-CUBE PLUS 506 T	THREE-PHASE	6	4.580	1,20	0,37	55	F	69,1	48,6
1SK5602	E-CUBE PLUS 566 T	THREE-PHASE	6	5.939	1,80	0,55	55	F	70,1	49,5
1SK6305	E-CUBE PLUS 636 T	THREE-PHASE	6	9.460	2,74	1,10	55	F	76,3	55,8
1SK7004	E-CUBE PLUS 716 T	THREE-PHASE	6	12.400	5,45	2,20	55	F	80,3	59,8

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1,2 Kg/m³ specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.

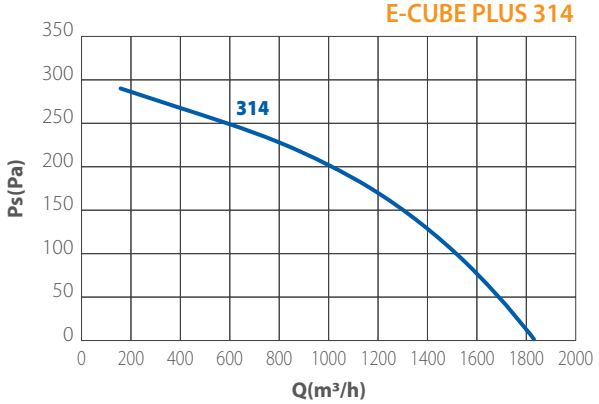
Lp: Sound pressure level measured in free field conditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 3 meters, inlet side (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

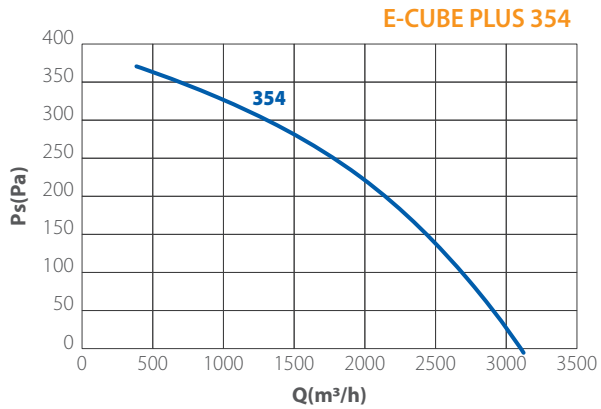
E-CUBE PLUS 254



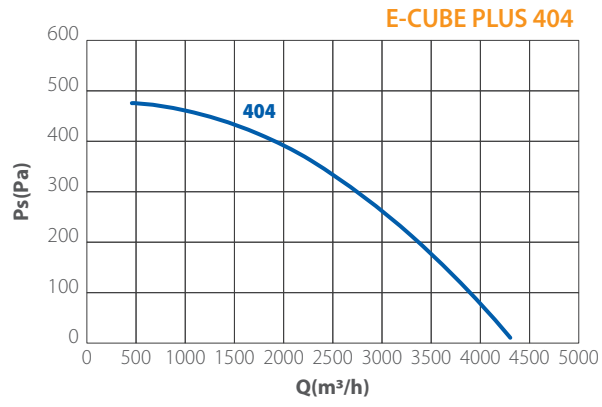
E-CUBE PLUS 314



E-CUBE PLUS 354

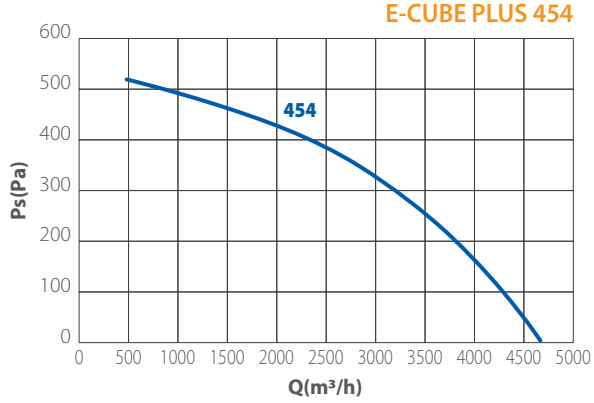


E-CUBE PLUS 404

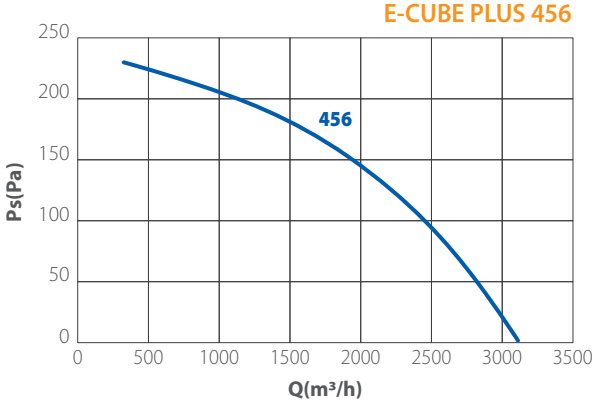


CURVES

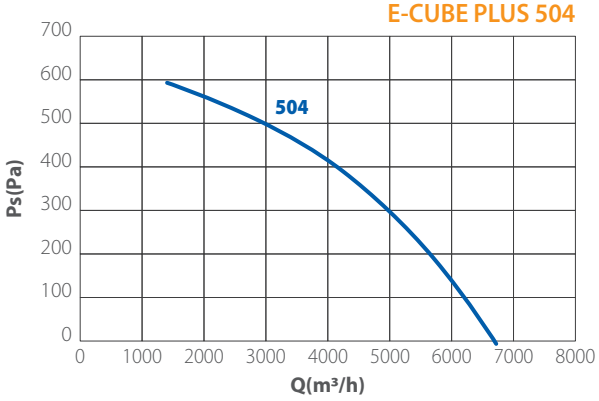
E-CUBE PLUS 454



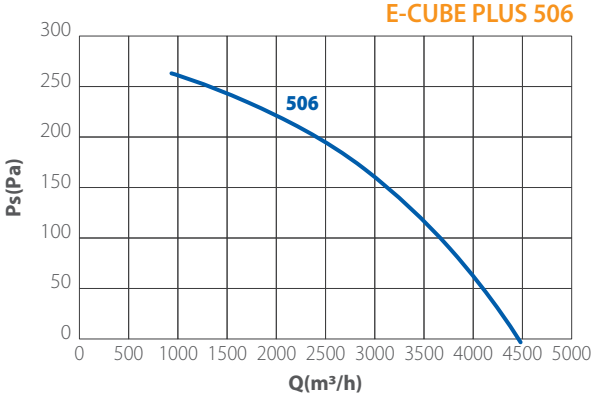
E-CUBE PLUS 456



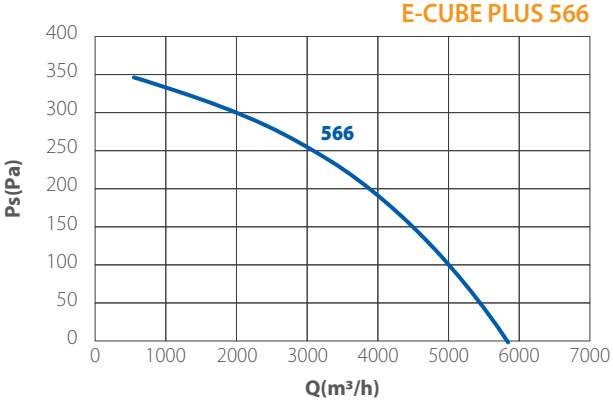
E-CUBE PLUS 504



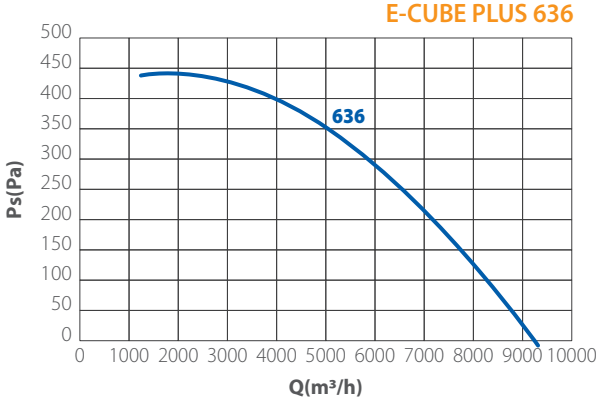
E-CUBE PLUS 506



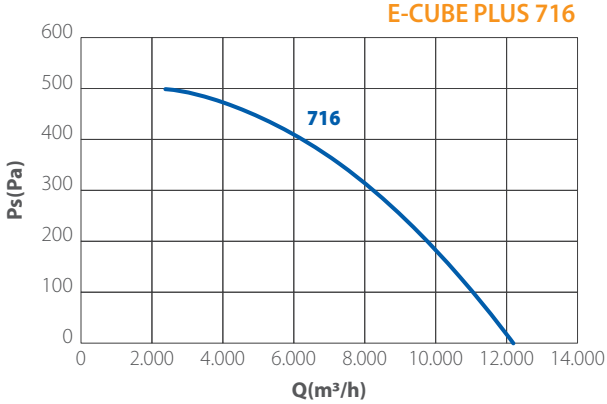
E-CUBE PLUS 566



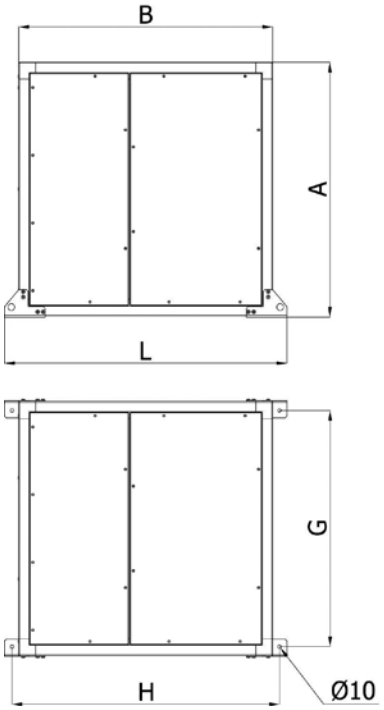
E-CUBE PLUS 636



E-CUBE PLUS 716

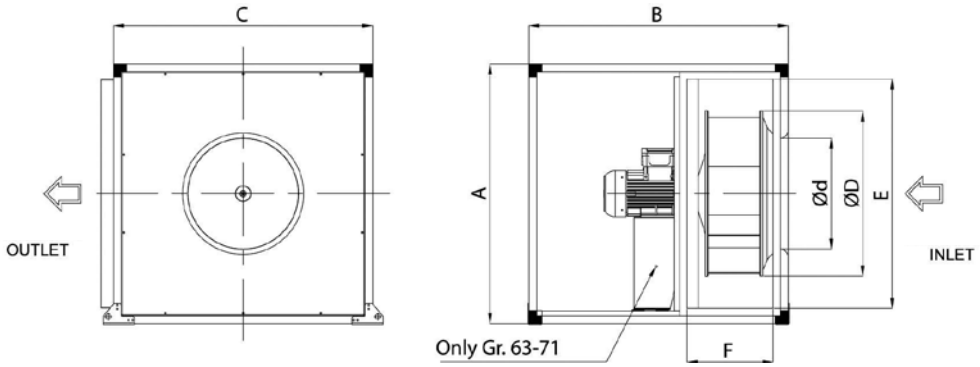


DIMENSIONS (mm)



TYPE	A	B	C	G	H	I	L
250	500	500	500	468	530	506	565
310	500	500	500	468	530	506	565
350	640	640	640	605	667	643	700
400	640	640	640	605	667	643	700
450	750	750	750	698	786	756	835
500	750	750	750	698	786	756	835
560	750	750	750	698	786	756	835
630	1000	1000	1000	948	1036	1006	1080
710	1000	1000	1000	948	1036	1006	1080

Dimensions in mm

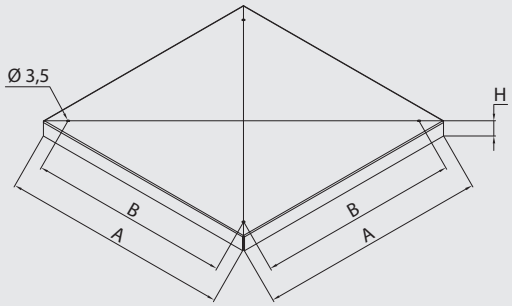


TYPE	A	B	C	D	d	E	F	Kg
250	500	500	500	260	180	420	130	28
310	500	500	500	315	220	420	130	30
350	640	640	640	385	270	555	210	46
400	640	640	640	430	296	555	210	50
450	750	750	750	470	296	640	245	80
500	750	750	750	525	327	640	245	88
560	750	750	750	580	370	640	245	150
630	1000	1000	1000	650	427	880	330	170
710	1000	1000	1000	730	477	880	330	175

Dimensions in mm
Indicative weights

Series E-CUBE PLUS

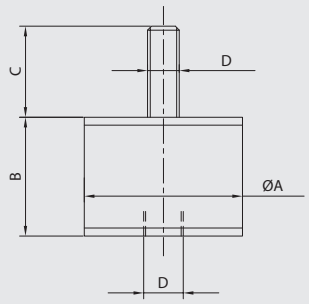
Waterproof protection cover



CODE	TYPE	A	B	H	Kg
5TE0080	25 / 31	550	480	35	4,4
5TE0081	35 / 40	700	618	35	6,8
5TE0082	45 / 50 / 56	800	720	50	9,3
5TE0083	63 / 71	1050	970	50	15,3

Dimensions in mm

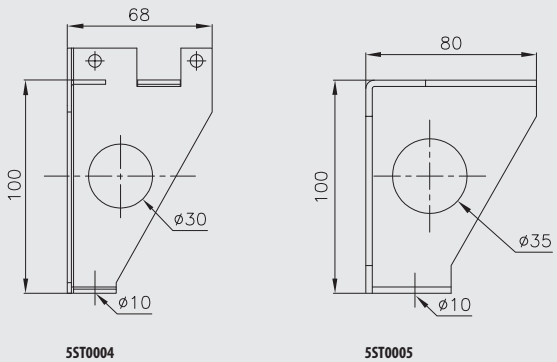
Anti-Vibration Supports



CODE	TYPE	ØA	B	C	D	Compression load for 1 support (Kg)
5SU1057	25 / 31 / 35 / 40	30	20	23	M8	21 ÷ 45
5SU1054	45 / 50 / 56 / 63 / 71	40	30	28	M10	46 ÷ 65

Floor support feet

To be used coupled with the condensate and grease drain inferior panel.

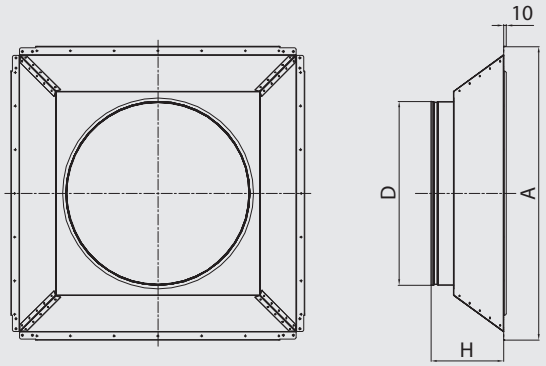


5ST0004 5ST0005

CODE	TYPE
5ST0004	25 / 31 / 35 / 40
5ST0005	45 / 50 / 56 / 63

Series E-CUBE PLUS

Square to round outlet adaptor

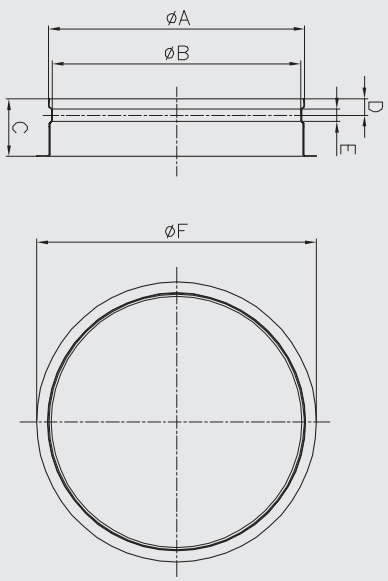


CODE	TYPE	A	D	H	Sp.
5RA2010	25	504	247	150	10/10
5RA2011	31	504	314	150	10/10
5RA2012	35	644	354	150	10/10
5RA2013	40	644	397	150	10/10
5RA2014	45	754	450	250	10/10
5RA2015	50	754	500	250	10/10
5RA2018	56	1004	560	250	10/10
5RA2019	63	1004	630	250	10/10
5RA2020	71	1004	710	250	10/10

Dimensions in mm

4

Round spigot inlet cone



CODE	TYPE	A	B	C	D	E	F
5TR0014	25	247	240	55	16	11	267
5TR0015	31	314	306	55	16	11	330
5TR0016	35	354	346	56	16	11	370
5TR0017	40	397	391	56	16	11	410
5TR0018	45	450	445	56	16	11	470
5TR0019	50	500	494	78,5	16	11	515
5TR0020	56	560	554	78,5	16	11	570
5TR0021	63	630	624	78,5	16	11	640
5TR0022	71	710	704	78,5	16	11	735

Dimensions in mm

elicent® advanced ventilation

INDUSTRIAL AND BUILDING VENTILATION FANS

Smoke extract fans are not affected by ErP Directive 2009/125/CE and further Regulations.

SMOKE EXTRACT FANS

The mechanical ventilation systems designed by Dynair® which are presented in this part, are the answer to problems connected to smoke extraction at high temperature and the ideal **solution for emergency exhaust in case of fire** (a solution mandatory in fire safety norms of most countries).

THERE ARE DIFFERENT POTENTIAL RISK ELEMENTS SUBSEQUENT TO A FIRE:

- the release of gas and toxic substances produced by the combustion which creates lachrymation and impossibility to escape;
- the diffusion of fire (the stay of ashes in the air) which leads to a reduced or an impossible visibility;
- the diffusion of very high temperature;
- the reduction of the oxygen needed by the fire and the increase of carbon monoxide in the air which lead to lose consciousness and to a death by lack of oxygen (according to statistics, more than 2/3 of fire victims die because of suffocation or poisoning by fire fumes).

FUNCTION AND ADVANTAGES OF MECHANICAL VENTILATION IN CASE OF FIRE:

1) **The mechanical ventilation removes fumes and puts** in depression the premise, thus preventing the diffusion of smoke into other rooms. This creates better conditions for the escape of the occupants and simplify the job of the firemen.

2) In case of closed premises, it is possible to easily exceed 1000° C, causing the combustion of any material just for heat radiation: a condition that would make useless any external extinguish operation. To **keep the temperature relatively low** (300°- 400° C) by extracting hot air, means to **avoid the collapse of the support structures**. In addition, the higher oxygen rate will cause a better combustion and thus, for most materials, a lower production of toxic smoke.

3) The mechanical ventilation allows the location of the exhaust outlets in places away from the one involved, being the CC-HT series easy to be connected to a duct sysem.

4) The mechanical ventilation **allows the extraction of cold fumes**, which, remaining at lower level, are extremely dangerous for the occupants and very difficult to be removed by static systems.

5) The mechanical ventilation allows the **ventilation** of the premises also in **normal activity situations** (clean air), thanks to the possibility of fitting double speed motors: at low speed for normal ventilation (so with lower noise level) and at high speed for emergency conditions. Obviuosly it is necessary to install the fan with a dedicated power line that automatically operates in case of fire.

CAR PARK VENTILATION SYSTEMS

BASIC PRINCIPLE

The ventilation of enclosed or underground car parks fulfils two key requirements: remove the pollutants emitted by cars and, in the event of a fire, control the hot fumes and gases produced by the fire, protecting the escape routes and easing access for the emergency teams.

SPECIAL TECHNOLOGY

In recent years, the jet or induction fans technology has been established as the new standard for normal ventilation and smoke extraction in case of fire in enclosed car parks. In fact, this technology represents the most innovative and cost-effective alternative to traditional ducted mechanical extraction systems. Carefully managing the project in all its development stages, which requires the fundamental use of fluid dynamics calculation programs, also ensures that the system is working correctly.

BENEFITS

Compared to a ducted ventilation system, the innovative based on jet or induction fans system ensures multiple benefits in terms of low cost and efficiency associated with its design, installation, operation and usage.

DESIGN

- The compact size of the fans allows to optimise the spaces and their flexibility of installation both when building new properties or refurbishing and/or certifying existing buildings;
- It saves design time as it does not require a complex ducted system to be designed and implemented;
- The system effectiveness can be measured with CFD (fluid dynamics calculation) modelling;
- It allows the project designer to benefit from a better pre-sales customer service.
- The project can be financially assessed within 24 hours;
- Final costs are in line with expected costs.

INSTALLATION

- It removes the need for costly and complex ducted and grilled systems;
- The fans are easy to install, ensuring time saving in terms of hours of work;
- The reduced size of the fans easies installation of other systems (sprinklers, lighting etc);
- Ease of scheduled and breakdown maintenance.

OPERATION

Major savings in running costs ensured by the system distinctive features:

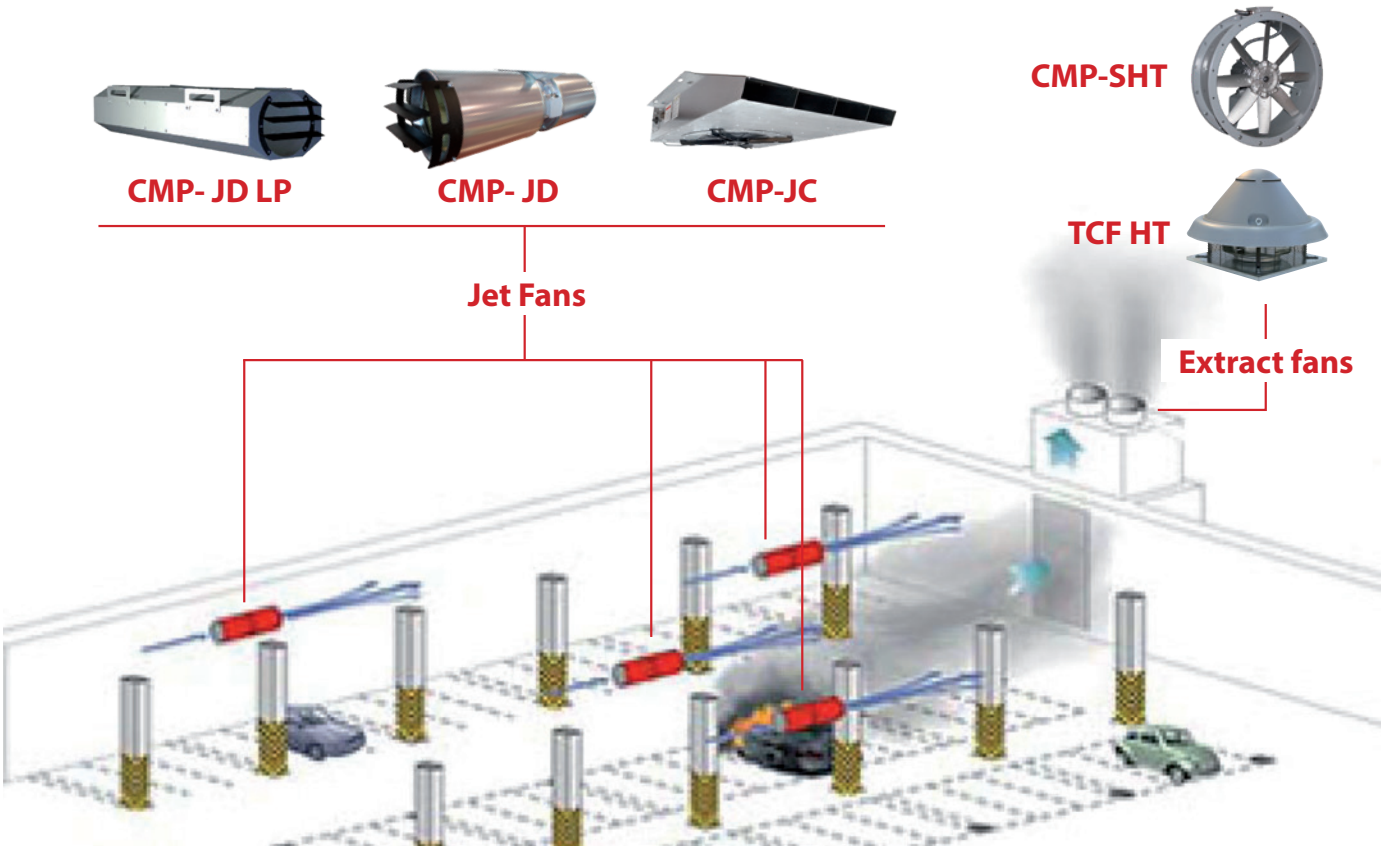
- Ventilation can be fully or partly operated: the Co (carbon monoxide) detectors and the smoke sensors, in fact, ensure that only the ventilators located in the areas where pollution levels are exceeded or where a fire has started are enabled;
- Less total power required as the accurate design ensures the optimal size of the ventilation system; more specifically, the inlet and exhaust fans can be smaller as the jet or induction fans generate a negligible pressure drop compared to ducted systems.

USE

- Better quality of breathable air: the system creates a continuous airflow able to mix the different layers of air and to avoid areas where air gets trapped;
- Optimised safety in the event of a fire: fast and effective toxic fume extraction, leading to safer escape routes, easier access for the emergency teams, promoting people safety and minimising the effects of fire on the building structures.

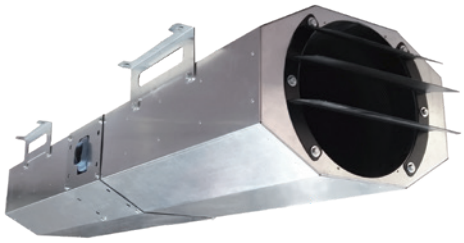
SOLUTION

The fully integrated car park ventilation system developed by MAICO ITALIA – ELICENT® includes three ventilation elements, some CO (carbon monoxide) detection sensors, a control panel and a CFD analysis: these are the essential requirements to design the most suitable ventilation system for a specific car park. The system is based on placing a set of axial impulse fans or centrifugal induction fans all along the parking area, which operate in a similar way to a ducted system: when installed on the ceiling, they move the air from the top layers to the bottom layers towards the exhaust areas; by effectively creating a continuous air flow, the fans are able to thoroughly cleanse the air at the bottom and the top layers of the car park, avoiding the creation of areas where air gets trapped.
The fans system is completed by air inlet devices operated by natural air or mechanical devices (parking access ramp, natural ventilation ducts, side openings or inlet fans) and exhaust fans.



CMP-JD LP HT

Low Profile impulse axial JET FANS
for car park ventilation



Applus F300/120

400 V IP55 CE

DESCRIPTION

Axial impulse fans suitable for installation in underground car parks and/or tunnels, especially designed and certified for fire smoke and hot gases extraction in case of fire.
They differ from the series CC-JD HT for their octagonal shape and their extreme compactness and Low Profile that allows an installation in garages with strong height limitations.
In the standard configuration (CC-JD LP) for normal ventilation (CO extract), the series can be used at the temperature of +50°C temperature range. The fire smoke extraction models (CC-JD LP HT) are CE certified to F300/120 class in compliance with Standard EN12101-3 by the independent notified body Applus.

CONSTRUCTION

- Silencers in galvanized steel sheet inside lined with high performance acoustic insulation material.
- Deflector on outlet side for optimum air discharge and air cleaning of all layers. Supplied as standard.
- Protection guard on inlet side.
- Fixing brackets in galvanized steel sheet for ceiling (or wall) installation. Supplied as standard and pre-assembled.
- Octagonal shaped silencers.
- Housing in electrolytically galvanized steel sheet.
- Hub impeller and airfoil profile blades made in aluminium. Balanced according to ISO 1940 G.6.3. Variable pitch angle in still position.
- Terminal box IP54, resistant to high temperature and supplied as standard.

MOTOR

- Asynchronous three-phase motors 380-420V 50Hz according to international standards IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE. Motors suitable for DOL (Direct On Line) start. CE marked. Protection IP55, class F or H. Execution 4 (with impeller directly coupled to motor with feet).

UPON REQUEST

- Versions for the sole normal ventilation (CO extraction) (CC-JD LP)
- Versions with reversible airflow
- Service switch IP67 certified for high temperature, assembled.

SUPPLIED

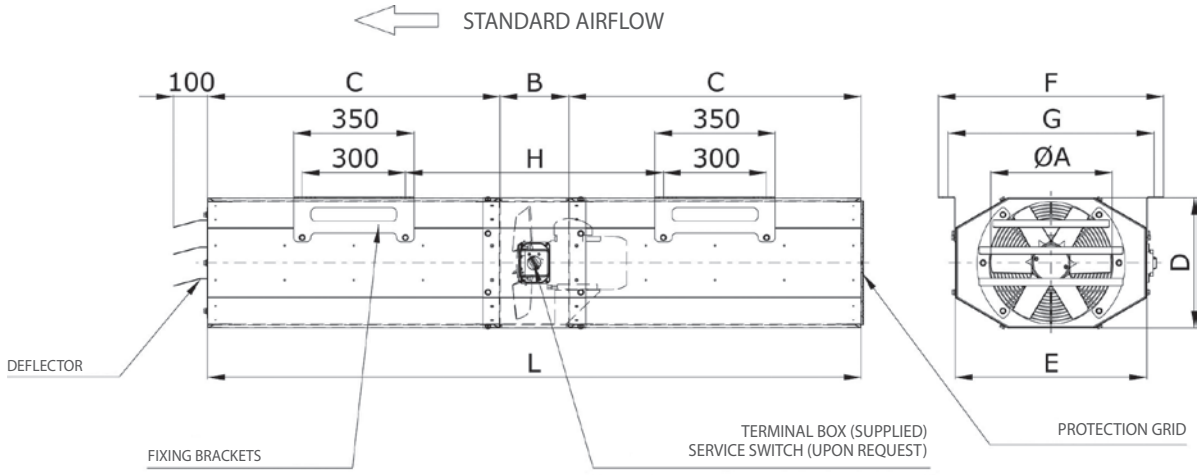
IP54 terminal box, resistant to high temperature.

UPON REQUEST

IP67 service switch certified for high temperature.

CMP-JD LP HT

DIMENSIONS (mm)



TYPE	ØA	B	C	D	E	F	G	L	Kg*
CC-JD 310	305	200	850	327	505	605	565	1900	70
CC-JD 350	355	200	850	377	555	655	615	1900	75
CC-JD 400	405	230	850	427	605	705	665	1930	90

* Indicative weight

PERFORMANCE

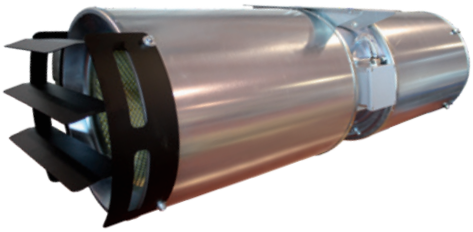
CODE	MODEL	SPEED	POWER	ABSORBED CURRENT	TENSION AT 50 Hz	MAX AIRFLOW	AIR VELOCITY	N	SOUND LEVEL dB(A)		TEMPERATURE CLASS
		RPM/1'	KW	A	V	m^3/s	m/s		Lw	Lp	
UPON REQUEST	CC-JD LP 312	2900	0,55	1,27	400	1,28	17,5	27	87	67	+50°C
UPON REQUEST	CC-JD LP 352	2900	1,1	2,36	400	1,7	17,7	37	90	70	
UPON REQUEST	CC-JD LP 402	2900	1,5	3,17	400	2,69	21	68	91	71	
UPON REQUEST	CC-JD LP HT 312	2900	0,75	1,57	400	1,28	17,5	27	87	67	F300/120
UPON REQUEST	CC-JD LP HT 352	2900	1,1	2,32	400	1,7	17,7	37	90	70	
UPON REQUEST	CC-JD LP HT 402	2900	1,5	3,01	400	2,69	21	68	91	71	
UPON REQUEST	CC-JD LP HT 312/4	2900/1440	0,80/0,20	1,91/0,60	400/400	1,28 / 0,63	17,5 / 8,7	27 / 7	87 / 70	67 / 50	
UPON REQUEST	CC-JD LP HT 352/4	2900/1440	1,10/0,25	2,9/0,80	400/400	1,7 / 0,84	17,7 / 8,8	37 / 9	90 / 73	70 / 53	
UPON REQUEST	CC-JD LP HT 402/4	2900/1440	1,50/0,37	3,54/1,25	400/400	2,69 / 1,33	21 / 10,4	68 / 17	91 / 75	71 / 54	

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.

Lp: sound pression level measured at 3 m in free field at maximum output. For comparative purpose only.
Lw: sound power level according to ISO3746 - Tolerance +/- 3 dB(A)

CMP-JD HT

Impulse axial JET FANS for car park ventilation



Applus F300/120

Certificate nr 0370-CPD-1149

400 V IP55 CE

DESCRIPTION

Axial impulse fans suitable for installation in underground car parks and/or tunnels, especially designed and certified for fi re smoke and hot gases extraction in case of fi re. In the standard configuration for normal ventilation (CO extract), the series can be used at the temperature of +50°C temperature range (CC-JD).
The fire smoke extraction models (CC-JD HT) are CE certified to F200, F300 class, in compliance with Standard EN12101-3 and guaranteed to operate at 300°C for 2 hours by the independent notified body Applus.

CONSTRUCTION

- Silencers in galvanized steel sheet inside lined with high performance acoustic insulation material.
- Deflector on outlet side for optimum air discharge and air cleaning of all layers. Supplied as standard.
- Protection guard on inlet side.
- Fixing brackets in galvanized steel sheet for ceiling (or wall) installation. Supplied as standard and pre-assembled.
- Silencers are fitted at both ends with an especially designed smooth bell shape to improve air performance and reduce losses and sound level.
- Housing in electrolytically galvanized steel sheet.
- Hub impeller and airfoil profile blades made in aluminium. Balanced according to ISO 1940 G.6.3. Variable pitch angle in still position.
- Terminal box IP54, resistant to high temperature and supplied as standard.

MOTOR

Asynchronous three-phase motors 380-420V 50 Hz according to international standards IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE.
Motors suitable for DOL (Direct On Line) start. CE marked. Protection IP55, class F or H.
Execution 4 (with impeller directly coupled to motor with feet).

UPON REQUEST

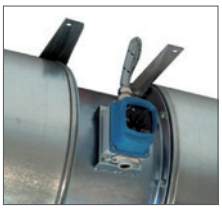
- Sizes up to Ø 1000 mm
- Versions: F400
- Versions with reversible airflow
- Service switch IP67 certified for high temperature, assembled.

QUICK DELIVERY

SUPPLIED

Terminal box IP54, resistant to high temperature

ON REQUEST

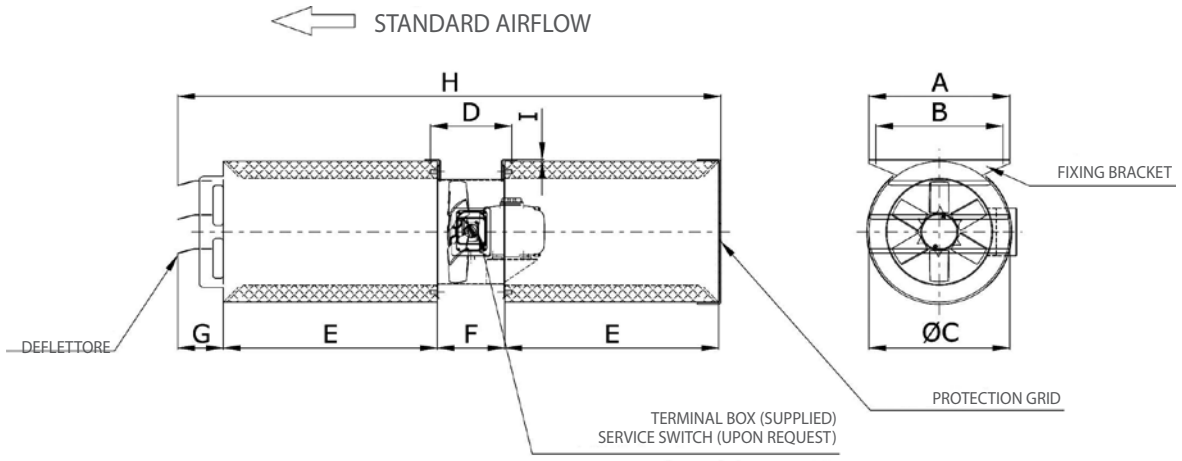


Sevice switch IP67, tested and certified for high temperature.

5

CMP-JD HT

DIMENSIONS (mm)



TYPE	A	B	ØC	D	E	F	G	H	I	Kg
CC-JD 310	415	375	415	241	630	200	134	1595	6	65
CC-JD 400	500	460	500	271	800	230	134	1965	6	80

* Indicative weight

PERFORMANCE

CODE	MODEL	SPEED	POWER	ABSORBED CURRENT	TENSION AT 50 Hz	MAX AIRFLOW	AIR VELOCITY	N	SOUND LEVEL dB(A)		TEMPERATURE CLASS
			KW	A	V	m^3/s	m/s		Lw	Lp	
UPON REQUEST	CC-JD 312	2900	0,55	1,27	400	1,28	17,5	27	85,5	65	+50°C
UPON REQUEST	CC-JD 402	2900	1,5	3,5	400	2,69	20,9	68	88,5	68	
UPON REQUEST	CC-JD HT 312	2900	0,75	1,57	400	1,28	17,5	27	85,5	65	
UPON REQUEST	CC-JD HT 402	2900	1,5	3,01	400	2,69	20,9	68	88,5	68	
UPON REQUEST	CC-JD HT 312/4	2900 / 1440	0,80 / 0,20	1,91 / 0,60	400 / 400	1,28 / 0,63	17,5 / 8,7	27 / 7	85,5 / 68,5	65/48	F300/120
UPON REQUEST	CC-JD HT 402/4	2900 / 1440	1,50 / 0,37	3,54 / 1,25	400 / 400	2,69 / 1,33	20,9 / 10,4	68 / 17	88,5 / 72,5	68/52	

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: sound pression level measured at 3 m in free field at maximum output. For comparative purpose only.
Lw: sound power level according to ISO3746 - Tolerance +/- 3 dB(A)

CMP-JC HT

Centrifugal induction fans for car park ventilation

Applus F300/120 F400

Certificate nr 0370-CPR-1772

400 V IP55 CE

DESCRIPTION

Centrifugal induction fans designed and suitable for installation in underground car parks and/or tunnels, especially designed and certified for fire smoke and hot gases extraction in case of fire.

The series is suitable for continuous running at the temperature of +50°C (CC-JC) and is CE certified to F300 and F400 classes (CC-JC HT), in compliance with Standard EN12101-3 and guaranteed to operate at 300°C for 2 hours by the independent notifi ed body Applus

CONSTRUCTION

- Hub impeller and airfoil profile blades made in steel sheet. Balanced according to ISO 1940.
- Housing in electrolytically galvanized steel sheet.
- Protection guard on inlet side.
- Fixing brackets in galvanized steel sheet for ceiling/wall installation supplied pre-assembled.
- Service switch mounted, suitable for high temperature.

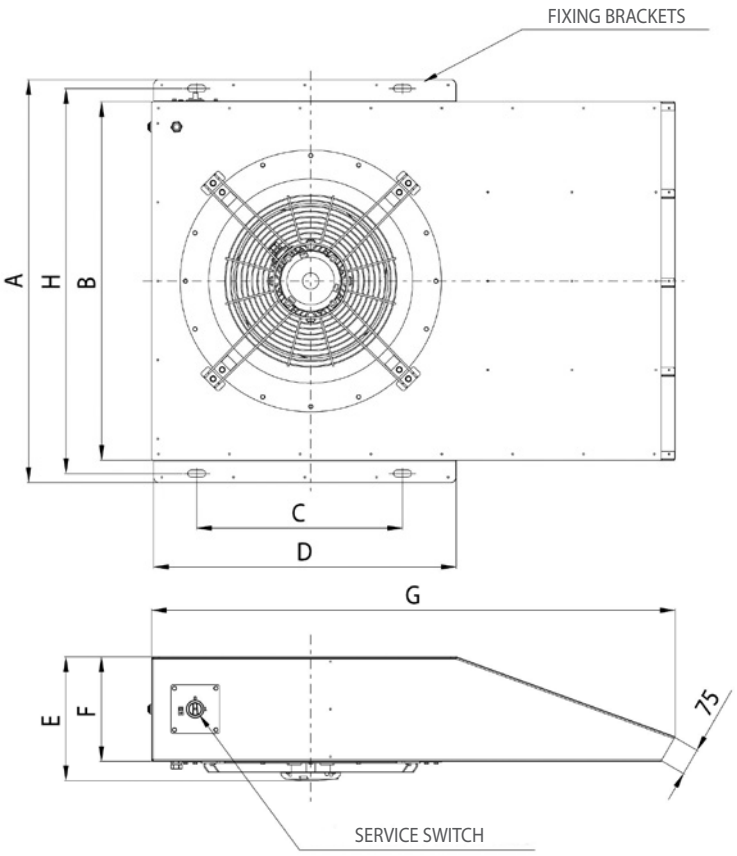
MOTOR

Asynchronous three-phase double polarity motor 380-420V - 50 Hz suitable to work up to a maximum temperature of 50°C (service S1) and 300°C for 120 minutes in case of fi re emergency (service S2). CE marked, IP55 protection, Class H. Execution 5: Impeller directly coupled on the motor shaft.

UPON REQUEST

- Outer terminal box resistant to high temperature.

DIMENSIONS (mm)



TYPE	A	B	C	D	E	F	G	Kg*
CC-JC 250	930	880	465	734	262	230	1206	110
CC-JC 300	1124	1074	575	846	345	291	1463	140

* Indicative weight

PERFORMANCE

CODE	MODEL	SPEED	POWER	ABSORBED CURRENT	TENSION AT 50 Hz	MAX AIRFLOW	AIR VELOCITY	N	SOUND LEVEL dB(A)		TEMPERATURE CLASS
		RPM/1'	KW	A	V	m^3/s	m/s		Lw	Lp	
UPON REQUEST	CC- JC 254/8	1440 / 720	1,2 / 0,3	2,9 / 1,2	400	1,61 / 0,8	26 / 12,9	50	90,5 / 75,5	70 / 55	+50°C
UPON REQUEST	CC- JC 304/8	1440 / 720	2,2 / 0,55	4,84 / 2	400	2,16 / 1,07	28,9 / 14,4	75	93,5 / 78,5	73 / 58	
UPON REQUEST	CC- JC HT 254/8	1440 / 720	1,2 / 0,3	2,9 / 1,2	400 / 400	1,61 / 0,8	26 / 12,9	50	90,5 / 75,5	70 / 55	F300 / 120 F400
UPON REQUEST	CC- JC HT 304/8	1400 / 720	2,2 / 0,55	4,84 / 2	400 / 400	2,16 / 1,07	28,9 / 14,4	75	93,5 / 78,5	73 / 58	

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.

Lp: sound pression level measured at 3 m in free field at maximum output. For comparative purpose only.
Lw: sound power level according to ISO3746 - Tolerance +/- 3 dB(A)

CMP-SHT

High efficiency duct axial fans

400 V IP55 CE

Applus F300/120 F400

Certificate nr
0370 - CPD - 1358
0370 - CPD - 1359

DESCRIPTION

High efficiency duct axial fans designed for high temperature smoke extraction. CMP-SHT fans are specifically dimensioned in a standard range suitable for the performance ratings which are normally requested by the building ventilation fi re smoke exhaust rules. The seri-es is suitable for running at the temperature of +60°C and is CE certifi ed F300, F400 (except 2 poles versions, certifi ed F300/120) according to EN 12101-3 and guaranteed to operate at 300°C for 2 hours by the independent notifi ed body Applus.

CONSTRUCTION

- Short casing in steel sheet, with fi xing flanges manufactured according to UNI ISO 6580-EUROVENT standard. Protected against atmospheric agents by epoxy paint.
- High effi ciency axial impeller in die-cast aluminium with aerofoil profi le blades, totally made. Balanced according ISO 1940. Variable pitch angle in still position.
- Execution 4 (with impeller directly coupled to motor with feet) and airfl ow from impeller to motor.
- Asynchronous three-phase motors according to international standards IEC 60034, IEC 60072, EMC 2004/108/CE, LVD 2006/95/CE, CE marked, IP 55, class F or H, F200, F300 or F400 certifi ed according to the European Directive EN 12101-3. Horizontal axis as stan-dard (other orientations on request).

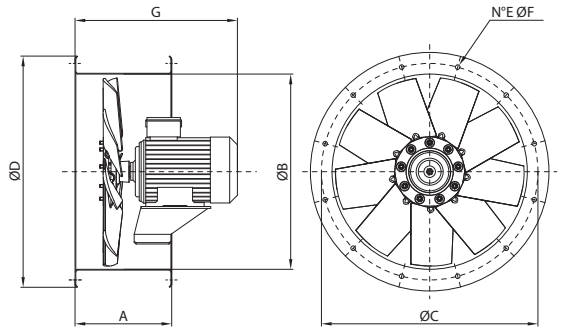
ACCESSORIES

- Extension with inspection door (CCpro)
- Inlet cone (CCbo)
- High tempeeration fl exible joint (CCga-HT)
- Flat protection grid (CCr)
- Support feet (CCst)
- Counter-fl ange (CCf)
- Counter-fl ange with collar (CCfc)
- Cylindrical silencers (CCsa/CCsb)
- Roof terminal (Kit TAV-HT)
- Anti-vibration mounts

UPON REQUEST

- External terminal box for high temperature, assembled.

DIMENSIONS (mm)



TYPE	A	ØB	ØC	ØD	E	ØF	G	Kg*
CMP-SHT 310	200	310	355	395	8	10	380	22
CMP-SHT 350	200	350	395	446	8	10	380	25
CMP-SHT 400	230	400	450	496	8	12	430	30
CMP-SHT 450	230	450	500	546	8	12	430	38
CMP-SHT 500	250	500	560	598	12	12	440	39
CMP-SHT 560	250	560	620	658	12	12	440	42
CMP-SHT 630	250	630	690	730	12	12	470	52
CMP-SHT 710	250	710	770	810	16	12	520	66
CMP-SHT 800	350	800	860	910	16	12	580	125
CMP-SHT 900	350	900	970	1030	16	16	680	180
CMP-SHT 1000	350	1000	1070	1130	16	16	750	215

* Indicative weight

ACCESSORIES pag. XX

PERFORMANCE

F300/120

CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	N°	RATING	SOUND LEVEL dB(A)
		m³/h	V	A	KW		IP	Lp
UPON REQUEST	**CMP-SHT 314** THREE-PHASE	2.410	400	1,36	0,55	4	55	51
UPON REQUEST	**CMP-SHT 312** THREE-PHASE	3.370	400	1,57	0,75	2	55	67
UPON REQUEST	**CMP-SHT 354** THREE-PHASE	3.040	400	1,36	0,55	4	55	55
UPON REQUEST	**CMP-SHT 352** THREE-PHASE	5.220	400	1,57	0,75	2	55	73
UPON REQUEST	**CMP-SHT 404** THREE-PHASE	4.250	400	1,36	0,55	4	55	59
UPON REQUEST	**CMP-SHT 402** THREE-PHASE	8.420	400	3,01	1,50	2	55	76
UPON REQUEST	**CMP-SHT 454** THREE-PHASE	6.690	400	1,36	0,55	4	55	80
UPON REQUEST	**CMP-SHT 452** THREE-PHASE	11.700	400	4,48	2,20	2	55	63
UPON REQUEST	**CMP-SHT 504A** THREE-PHASE	10.630	400	2,53	1,10	4	55	66
UPON REQUEST	**CMP-SHT 504B** THREE-PHASE	9.380	400	1,71	0,75	4	55	63
UPON REQUEST	**CMP-SHT 504C** THREE-PHASE	8.210	400	1,36	0,55	4	55	64
UPON REQUEST	**CMP-SHT 506A** THREE-PHASE	7.770	400	1,23	0,37	6	55	70
UPON REQUEST	**CMP-SHT 506B** THREE-PHASE	7.000	400	1,23	0,37	6	55	67
UPON REQUEST	**CMP-SHT 506C** THREE-PHASE	6.050	400	1,23	0,37	6	55	67
UPON REQUEST	**CMP-SHT 564A** THREE-PHASE	16.000	400	3,19	1,50	4	55	64
UPON REQUEST	**CMP-SHT 564B** THREE-PHASE	12.940	400	2,53	1,10	4	55	64
UPON REQUEST	**CMP-SHT 564C** THREE-PHASE	11.570	400	1,71	0,75	4	55	65
UPON REQUEST	**CMP-SHT 566A** THREE-PHASE	10.300	400	1,23	0,37	6	55	74
UPON REQUEST	**CMP-SHT 566B** THREE-PHASE	8.400	400	1,23	0,37	6	55	71
UPON REQUEST	**CMP-SHT 566C** THREE-PHASE	7.378	400	1,23	0,37	6	55	71
UPON REQUEST	**CMP-SHT 634A** THREE-PHASE	21.700	400	3,29	2,20	4	55	68
UPON REQUEST	**CMP-SHT 634B** THREE-PHASE	17.170	400	2,44	1,50	4	55	68
UPON REQUEST	**CMP-SHT 634C** THREE-PHASE	15.085	400	2,53	1,10	4	55	68
UPON REQUEST	**CMP-SHT 636A** THREE-PHASE	13.840	400	1,62	0,55	6	55	77
UPON REQUEST	**CMP-SHT 636B** THREE-PHASE	11.390	400	1,23	0,37	6	55	72
UPON REQUEST	**CMP-SHT 636C** THREE-PHASE	9.590	400	1,23	0,37	6	55	72
UPON REQUEST	**CMP-SHT 714A** THREE-PHASE	25.920	400	5,94	3,00	4	55	71
UPON REQUEST	**CMP-SHT 714B** THREE-PHASE	23.120	400	4,61	2,20	4	55	71
UPON REQUEST	**CMP-SHT 714C** THREE-PHASE	20.490	400	3,19	1,50	4	55	72
UPON REQUEST	**CMP-SHT 716A** THREE-PHASE	16.815	400	1,97	0,75	6	55	79
UPON REQUEST	**CMP-SHT 716B** THREE-PHASE	15.090	400	1,62	0,55	6	55	78
UPON REQUEST	**CMP-SHT 716C** THREE-PHASE	13.140	400	1,23	0,37	6	55	76
UPON REQUEST	**CMP-SHT 804A** THREE-PHASE	32.690	400	10,60	5,50	4	55	75
UPON REQUEST	**CMP-SHT 804B** THREE-PHASE	28.090	400	7,62	4,00	4	55	75
UPON REQUEST	**CMP-SHT 804C** THREE-PHASE	19.720	400	5,94	3,00	4	55	74
UPON REQUEST	**CMP-SHT 806A** THREE-PHASE	21.250	400	3,78	1,50	6	55	76
UPON REQUEST	**CMP-SHT 806B** THREE-PHASE	17.950	400	2,82	1,10	6	55	74
UPON REQUEST	**CMP-SHT 806C** THREE-PHASE	12.760	400	1,97	0,75	6	55	76
UPON REQUEST	**CMP-SHT 804A 5/10** THREE-PHASE	31.480	400	7,62	4,00	4	55	69
UPON REQUEST	**CMP-SHT 804B 5/10** THREE-PHASE	26.140	400	5,94	3,00	4	55	69
UPON REQUEST	**CMP-SHT 804C 5/10** THREE-PHASE	22.620	400	4,61	2,20	4	55	69
UPON REQUEST	**CMP-SHT 806A 5/10** THREE-PHASE	20.340	400	2,82	1,10	6	55	82
UPON REQUEST	**CMP-SHT 806B 5/10** THREE-PHASE	16.710	400	1,97	0,75	6	55	80
UPON REQUEST	**CMP-SHT 806C 5/10** THREE-PHASE	14.800	400	1,62	0,55	6	55	78
UPON REQUEST	**CMP-SHT 904A** THREE-PHASE *	39.950	400	14,20	11,00	4	55	74
UPON REQUEST	**CMP-SHT 904B** THREE-PHASE *	33.150	400	10,60	7,50	4	55	73
UPON REQUEST	**CMP-SHT 904C** THREE-PHASE	27.590	400	7,62	5,50	4	55	71
UPON REQUEST	**CMP-SHT 906A** THREE-PHASE	31.920	400	6,82	3,00	6	55	76
UPON REQUEST	**CMP-SHT 906B** THREE-PHASE	28.650	400	5,36	2,20	6	55	75
UPON REQUEST	**CMP-SHT 906C** THREE-PHASE	25.230	400	3,78	1,50	6	55	74
UPON REQUEST	**CMP-SHT 904A 5/10** THREE-PHASE	41.840	400	10,60	5,50	4	55	71
UPON REQUEST	**CMP-SHT 904B 5/10** THREE-PHASE	35.230	400	7,62	4,00	4	55	69
UPON REQUEST	**CMP-SHT 904C 5/10** THREE-PHASE	30.120	400	5,94	3,00	4	55	69
UPON REQUEST	**CMP-SHT 906A 5/10** THREE-PHASE	28.140	400	3,78	1,50	6	55	88
UPON REQUEST	**CMP-SHT 906B 5/10** THREE-PHASE	23.230	400	2,82	1,10	6	55	85
UPON REQUEST	**CMP-SHT 906C 5/10** THREE-PHASE	19.650	400	1,97	0,75	6	55	83
UPON REQUEST	**CMP-SHT 1004A** THREE-PHASE *	76.370	400	28,40	15,00	4	55	86
UPON REQUEST	**CMP-SHT 1004B** THREE-PHASE *	61.840	400	21,00	11,00	4	55	84
UPON REQUEST	**CMP-SHT 1004C** THREE-PHASE *	42.900	400	14,20	7,50	4	55	82
UPON REQUEST	**CMP-SHT 1006A** THREE-PHASE	50.000	400	12,20	5,50	6	55	86
UPON REQUEST	**CMP-SHT 1006B** THREE-PHASE	41.250	400	8,74	4,00	6	55	86
UPON REQUEST	**CMP-SHT 1006C** THREE-PHASE	38.140	400	6,82	3,00	6	55	85
UPON REQUEST	**CMP-SHT 1004A 5/10** THREE-PHASE *	59.650	400	14,20	7,50	4	55	81
UPON REQUEST	**CMP-SHT 1004B 5/10** THREE-PHASE	47.810	400	10,60	5,50	4	55	81
UPON REQUEST	**CMP-SHT 1004C 5/10** THREE-PHASE	39.800	400	7,62	4,00	4	55	81
UPON REQUEST	**CMP-SHT 1006A 5/10** THREE-PHASE	37.860	400	5,36	2,20	6	55	81
UPON REQUEST	**CMP-SHT 1006B 5/10** THREE-PHASE	29.770	400	3,78	1,50	6	55	81
UPON REQUEST	**CMP-SHT 1006C 5/10** THREE-PHASE	26.050	400	2,82	1,10	6	55	81

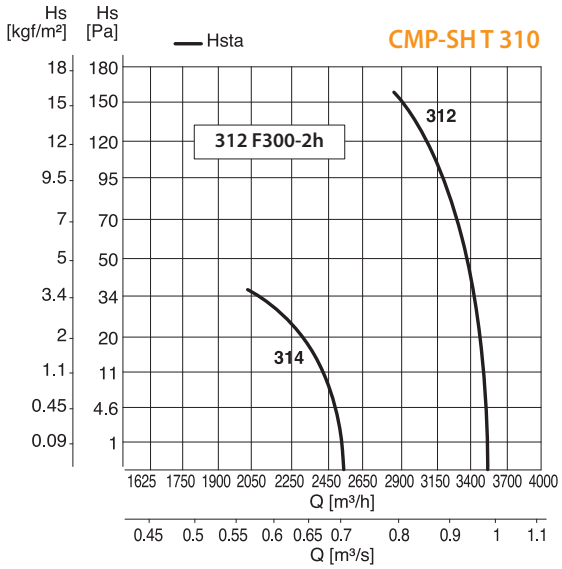
PERFORMANCE

F400

CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	N°	RATING	SOUND LEVEL dB(A)
		m³/h	V	A	KW		IP	Lp
UPON REQUEST	**CMP-SHT 314** THREE-PHASE	2.410	400	1,36	0,55	4	55	51
UPON REQUEST	**CMP-SHT 354** THREE-PHASE	3.040	400	1,57	0,75	4	55	55
UPON REQUEST	**CMP-SHT 404** THREE-PHASE	4.250	400	1,36	0,55	4	55	80
UPON REQUEST	**CMP-SHT 454** THREE-PHASE	6.690	400	1,36	0,55	4	55	66
UPON REQUEST	**CMP-SHT 504A** THREE-PHASE	10.630	400	2,53	1,10	4	55	63
UPON REQUEST	**CMP-SHT 504B** THREE-PHASE	9.380	400	1,71	0,75	4	55	64
UPON REQUEST	**CMP-SHT 504C** THREE-PHASE	8.210	400	1,36	0,55	4	55	70
UPON REQUEST	**CMP-SHT 506A** THREE-PHASE	7.770	400	1,23	0,37	6	55	67
UPON REQUEST	**CMP-SHT 506B** THREE-PHASE	7.000	400	1,23	0,37	6	55	67
UPON REQUEST	**CMP-SHT 506C** THREE-PHASE	6.050	400	1,23	0,37	6	55	64
UPON REQUEST	**CMP-SHT 564A** THREE-PHASE	16.000	400	3,18	1,50	4	55	64
UPON REQUEST	**CMP-SHT 564B** THREE-PHASE	12.940	400	2,53	1,10	4	55	65
UPON REQUEST	**CMP-SHT 564C** THREE-PHASE	11.570	400	1,71	0,75	4	55	74
UPON REQUEST	**CMP-SHT 566A** THREE-PHASE	10.300	400	1,23	0,37	6	55	71
UPON REQUEST	**CMP-SHT 566B** THREE-PHASE	8.400	400	1,23	0,37	6	55	71
UPON REQUEST	**CMP-SHT 566C** THREE-PHASE	7.378	400	1,23	0,37	6	55	68
UPON REQUEST	**CMP-SHT 634A** THREE-PHASE	21.700	400	3,19	2,20	4	55	68
UPON REQUEST	**CMP-SHT 634B** THREE-PHASE	17.170	400	2,53	1,50	4	55	68
UPON REQUEST	**CMP-SHT 634C** THREE-PHASE	15.085	400	2,53	1,10	4	55	77
UPON REQUEST	**CMP-SHT 636A** THREE-PHASE	13.840	400	1,62	0,55	6	55	72
UPON REQUEST	**CMP-SHT 636B** THREE-PHASE	11.390	400	1,23	0,37	6	55	72
UPON REQUEST	**CMP-SHT 636C** THREE-PHASE	9.590	400	1,23	0,37	6	55	71
UPON REQUEST	**CMP-SHT 714A** THREE-PHASE	25.920	400	5,94	3,00	4	55	71
UPON REQUEST	**CMP-SHT 714B** THREE-PHASE	23.120	400	4,61	2,20	4	55	72
UPON REQUEST	**CMP-SHT 714C** THREE-PHASE	20.490	400	3,19	1,50	4	55	79
UPON REQUEST	**CMP-SHT 716A** THREE-PHASE	16.815	400	1,90	0,75	6	55	78
UPON REQUEST	**CMP-SHT 716B** THREE-PHASE	15.090	400	1,62	0,55	6	55	76
UPON REQUEST	**CMP-SHT 716C** THREE-PHASE	13.140	400	1,23	0,37	6	55	75
UPON REQUEST	**CMP-SHT 804A** THREE-PHASE	32.690	400	10,60	5,50	4	55	75
UPON REQUEST	**CMP-SHT 804B** THREE-PHASE	28.090	400	7,62	4,00	4	55	74
UPON REQUEST	**CMP-SHT 804C** THREE-PHASE	19.720	400	5,94	3,00	4	55	76
UPON REQUEST	**CMP-SHT 806A** THREE-PHASE	21.250	400	3,78	1,50	6	55	74
UPON REQUEST	**CMP-SHT 806B** THREE-PHASE	17.950	400	2,82	1,10	6	55	76
UPON REQUEST	**CMP-SHT 806C** THREE-PHASE	12.760	400	1,97	0,75	6	55	69
UPON REQUEST	**CMP-SHT 804A 5/10** THREE-PHASE	31.480	400	7,62	4,00	4	55	69
UPON REQUEST	**CMP-SHT 804B 5/10** THREE-PHASE	26.140	400	5,94	3,00	4	55	69
UPON REQUEST	**CMP-SHT 804C 5/10** THREE-PHASE	22.620	400	4,61	2,20	4	55	82
UPON REQUEST	**CMP-SHT 806A 5/10** THREE-PHASE	20.340	400	2,82	1,10	6	55	80
UPON REQUEST	**CMP-SHT 806B 5/10** THREE-PHASE	16.710	400	1,97	0,75	6	55	78
UPON REQUEST	**CMP-SHT 806C 5/10** THREE-PHASE	14.800	400	1,62	0,55	6	55	74
UPON REQUEST	**CMP-SHT 904A** THREE-PHASE *	39.950	400	14,20	11,00	4	55	73
UPON REQUEST	**CMP-SHT 904B** THREE-PHASE *	33.150	400	10,60	7,50	4	55	71
UPON REQUEST	**CMP-SHT 904C** THREE-PHASE	27.590	400	7,62	5,50	4	55	76
UPON REQUEST	**CMP-SHT 906A** THREE-PHASE	31.920	400	6,82	3,00	6	55	75
UPON REQUEST	**CMP-SHT 906B** THREE-PHASE	28.650	400	5,36	2,20	6	55	74
UPON REQUEST	**CMP-SHT 906C** THREE-PHASE	25.230	400	3,78	1,50	6	55	71
UPON REQUEST	**CMP-SHT 904A 5/10** THREE-PHASE	41.840	400	10,60	5,50	4	55	69
UPON REQUEST	**CMP-SHT 904B 5/10** THREE-PHASE	35.230	400	7,62	4,00	4	55	69
UPON REQUEST	**CMP-SHT 904C 5/10** THREE-PHASE	30.120	400	5,94	3,00	4	55	88
UPON REQUEST	**CMP-SHT 906A 5/10** THREE-PHASE	28.140	400	3,78	1,50	6	55	85
UPON REQUEST	**CMP-SHT 906B 5/10** THREE-PHASE	23.230	400	2,82	1,10	6	55	83
UPON REQUEST	**CMP-SHT 906C 5/10** THREE-PHASE	19.650	400	1,97	0,75	6	55	86
UPON REQUEST	**CMP-SHT 1004A** THREE-PHASE *	76.370	400	28,40	15,00	4	55	84
UPON REQUEST	**CMP-SHT 1004B** THREE-PHASE *	61.840	400	21,00	11,00	4	55	82
UPON REQUEST	**CMP-SHT 1004C** THREE-PHASE *	42.900	400	14,20	7,50	4	55	86
UPON REQUEST	**CMP-SHT 1006A** THREE-PHASE	50.000	400	12,20	5,50	6	55	86
UPON REQUEST	**CMP-SHT 1006B** THREE-PHASE	41.250	400	8,74	4,00	6	55	85
UPON REQUEST	**CMP-SHT 1006C** THREE-PHASE	38.140	400	6,82	3,00	6	55	81
UPON REQUEST	**CMP-SHT 1004A 5/10** THREE-PHASE *	59.650	400	14,20	7,50	4	55	81
UPON REQUEST	**CMP-SHT 1004B 5/10** THREE-PHASE	47.810	400	10,60	5,50	4	55	81
UPON REQUEST	**CMP-SHT 1004C 5/10** THREE-PHASE	39.800	400	7,62	4,00	4	55	81
UPON REQUEST	**CMP-SHT 1006A 5/10** THREE-PHASE	37.860	400	5,36	2,20	6	55	81
UPON REQUEST	**CMP-SHT 1006B 5/10** THREE-PHASE	29.770	400	3,78	1,50	6	55	81
UPON REQUEST	**CMP-SHT 1006C 5/10** THREE-PHASE	26.050	400	2,82	1,10	6	55	81

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight.
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.
Lp: Sound pressure level measured in free field, spherical propagation, measurement category D according to EN ISO 13349, at the maximum output rate, at a distance of 3 m from inlet side. Data given only for comparative purpose.
Lw: Sound power level according to ISO 3746. Tolerance +/- 3 dB(A)

CURVES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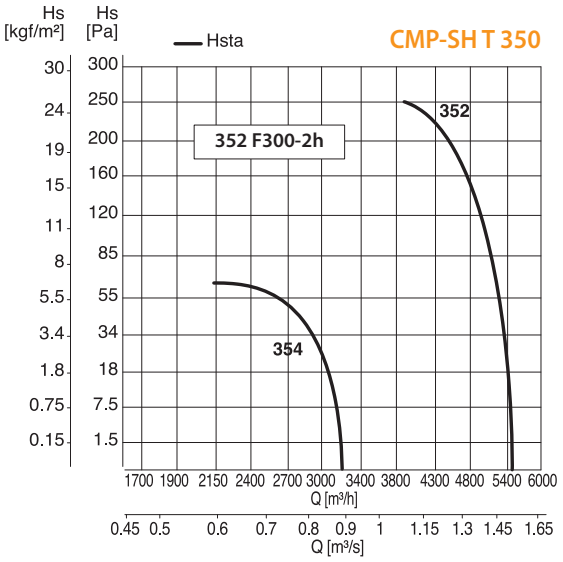
Hsta
Hs [kgf/m²]
Hs [Pa]
312 F300-2h
312
314
Q [m³/h]
Q [m³/s]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352
354
Q [m³/h]
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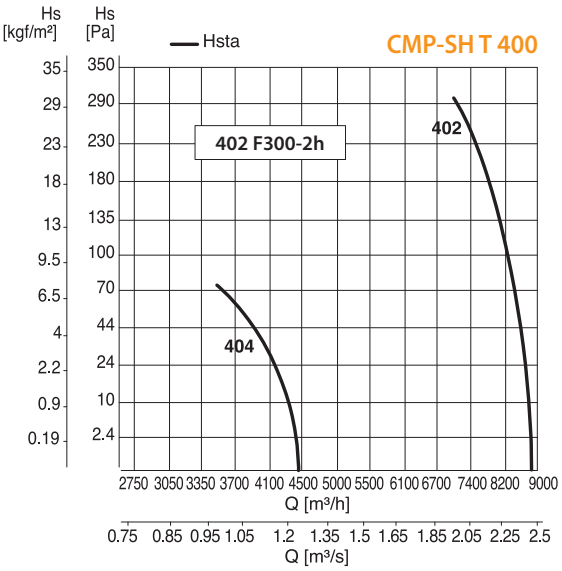
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402
404
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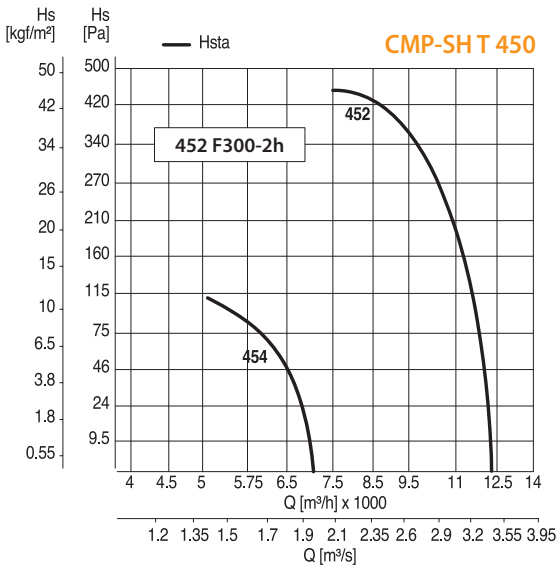
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Hs [Pa]
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452
454
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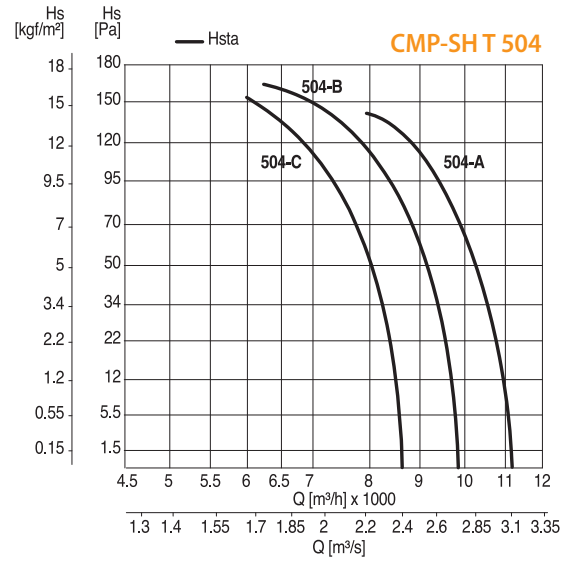
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Hs [Pa]
504-B
504-C
504-A
Q [m³/h] x 1000
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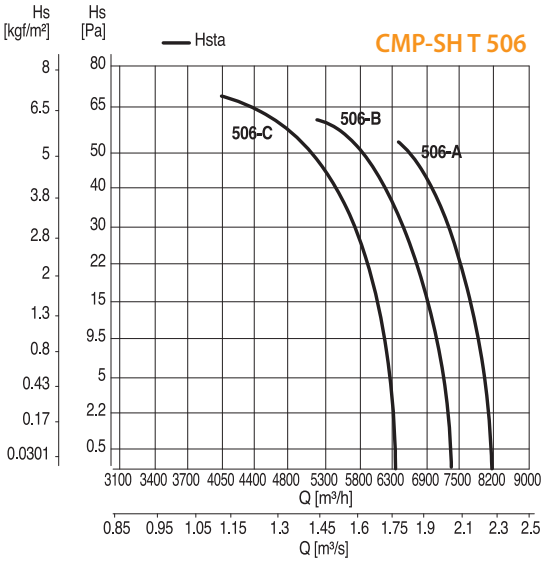
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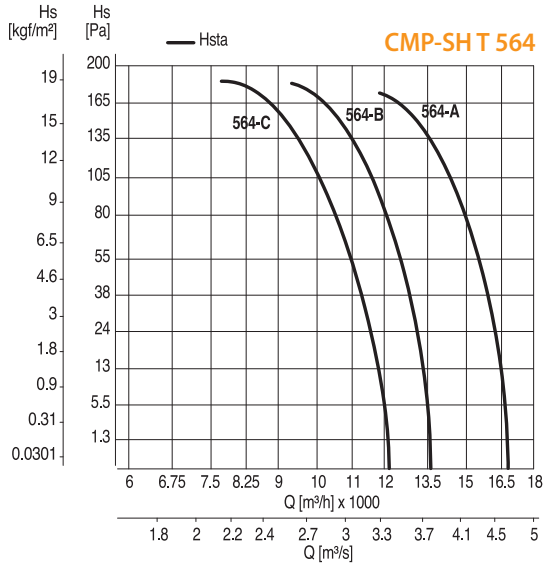
Hs [kgf/m²]
Hs [Pa]
506-C
506-B
506-A
Q [m³/h]
Q [m³/s]

5

CURVES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564-B
564-A
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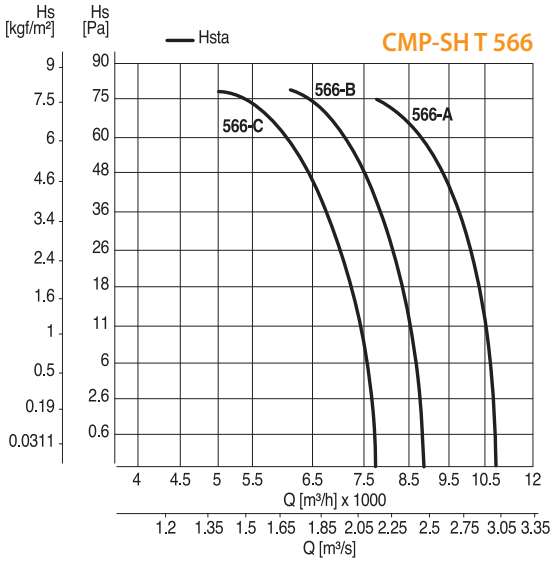
Hs [Pa]
Q [m³/h] x 1000
Q [m³/s]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566-B
566-A
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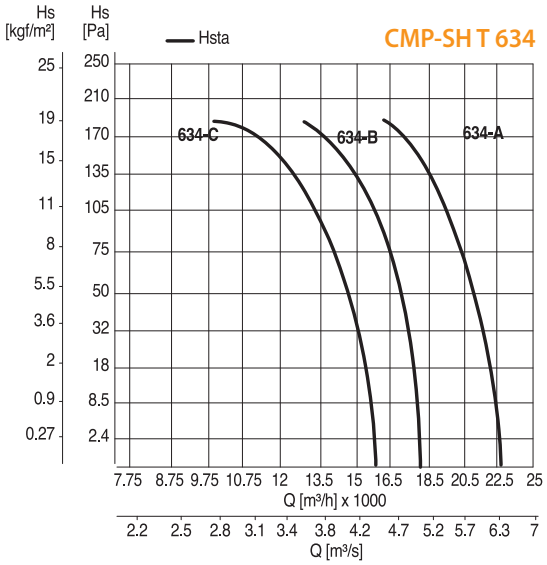
Q [m³/s]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634-B
634-A
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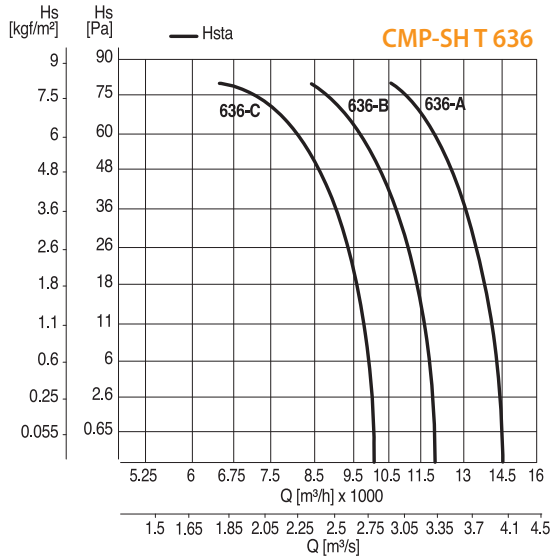
Hs [Pa]
Q [m³/h] x 1000
Q [m³/s]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Hs [Pa]
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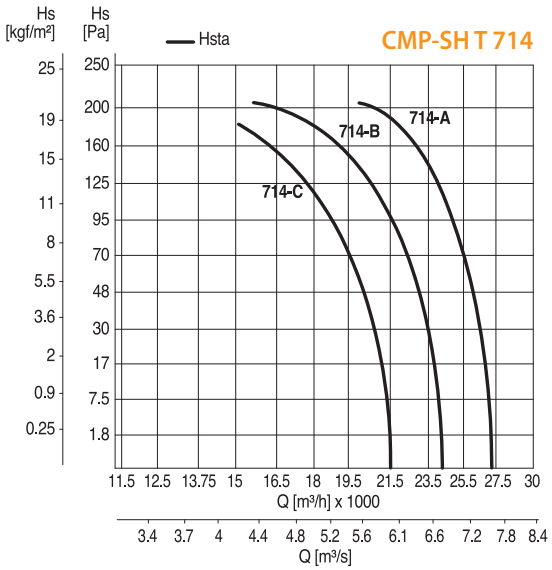
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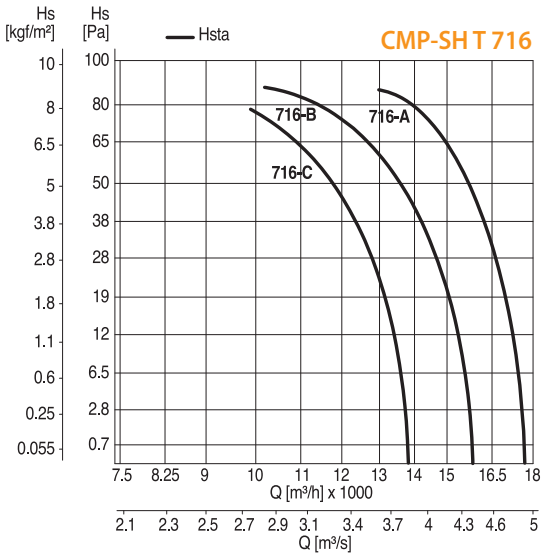
Hs [Pa]
Q [m³/h] x 1000
Q [m³/s]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716-B
716-A
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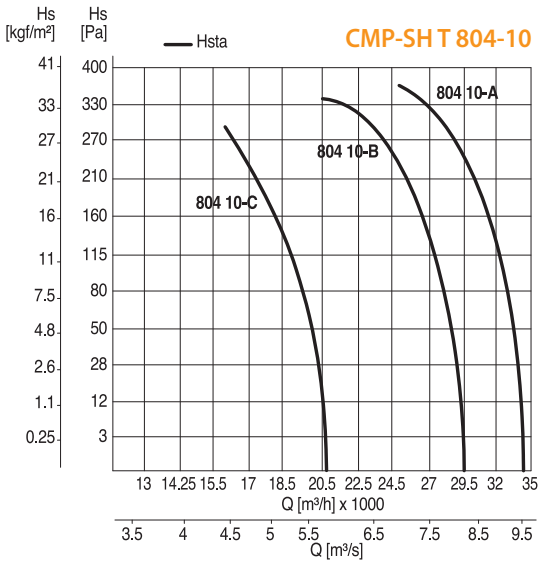
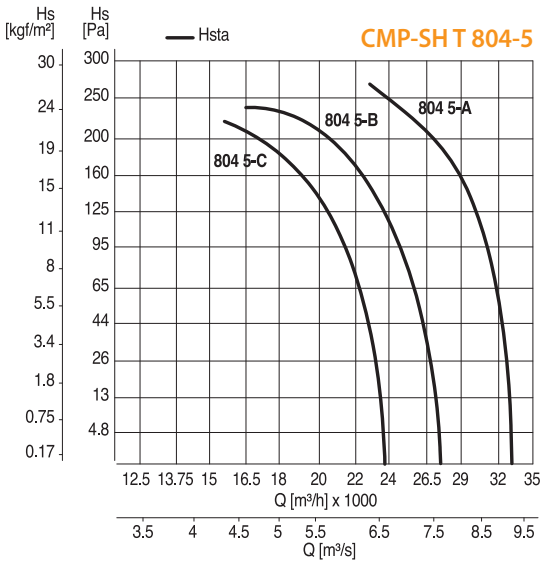
Hs [Pa]
Q [m³/h] x 1000
Q [m³/s]

CURVES


Hs [kgf/m²]
Hs [Pa]
Hsta
CMP-SH T 804-10
804 10-A
804 10-B
804 10-C
Q [m³/h] x 1000
Q [m³/s]


Hs [kgf/m²]
Hs [Pa]
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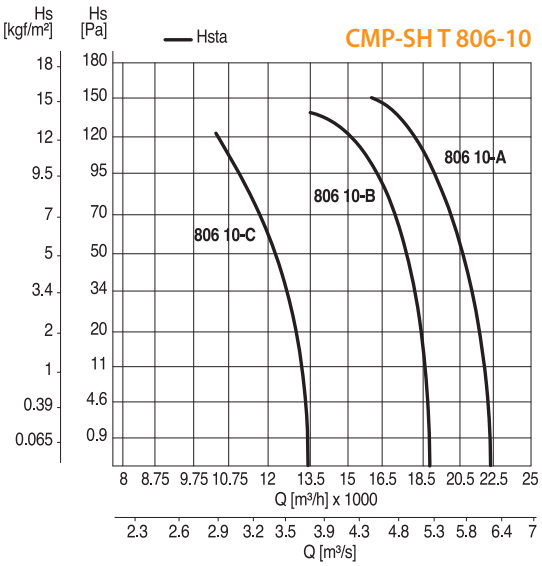
804 5-B
804 5-C
Q [m³/h] x 1000
Q [m³/s]


Hs [kgf/m²]
Hs [Pa]
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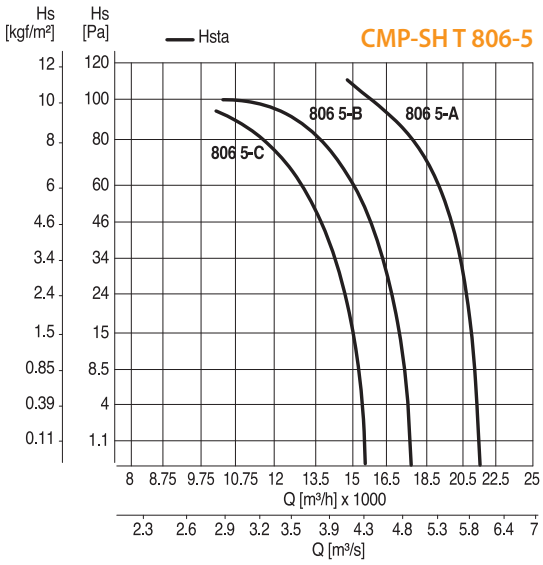
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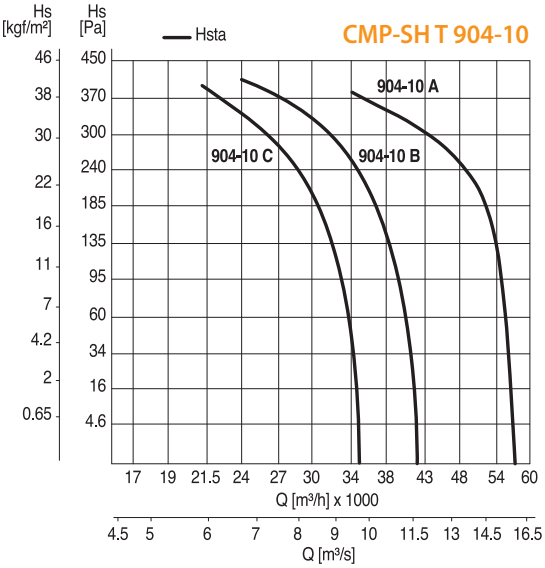
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Hs [Pa]
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904-10 C
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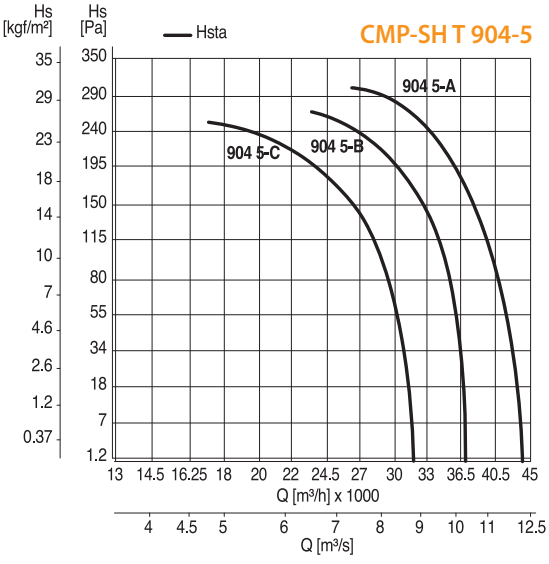
Q [m³/s]


Hs [kgf/m²]
Hs [Pa]
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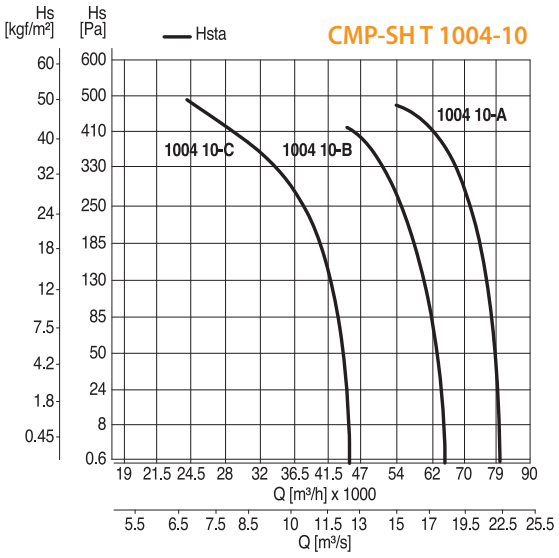
904 5-C
Q [m³/h] x 1000
Q [m³/s]

CURVES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Hs [Pa]
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Q [m³/h] x 1000
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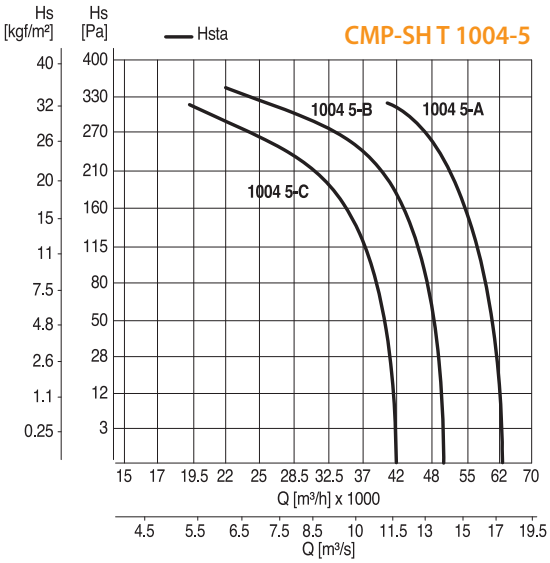
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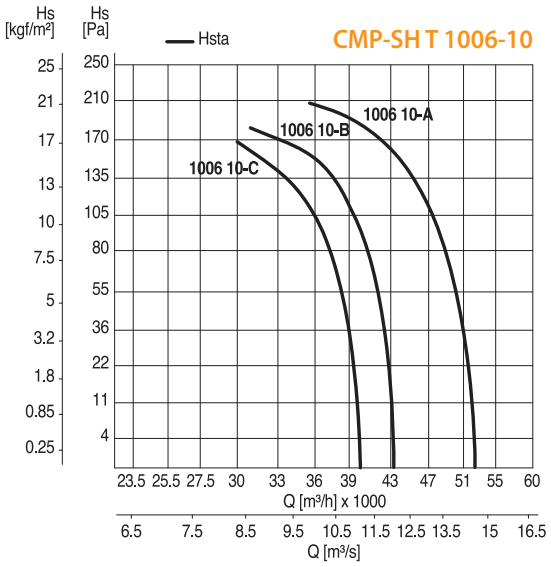
Q [m³/h] x 1000
Q [m³/s]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Hsta
Hs [kgf/m²]
Hs [Pa]
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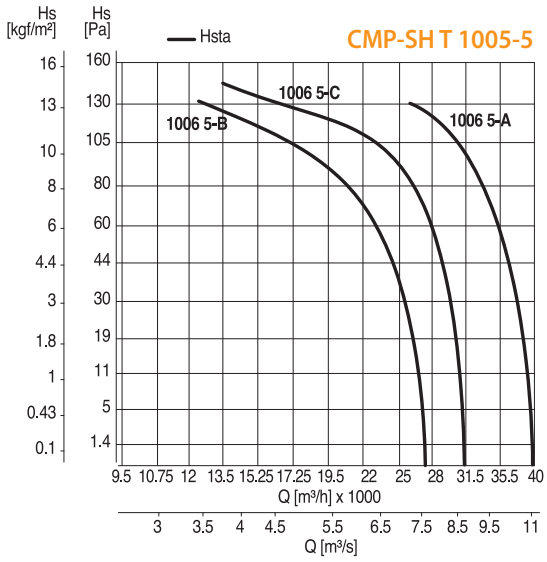
1006 10-B
1006 10-C
Q [m³/h] x 1000
Q [m³/s]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Hs [kgf/m²]
Hs [Pa]
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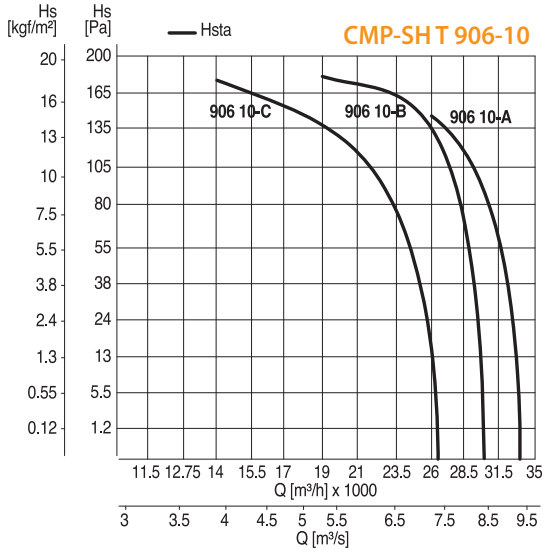
1006 5-B
1006 5-C
Q [m³/h] x 1000
Q [m³/s]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Hsta
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Hs [Pa]
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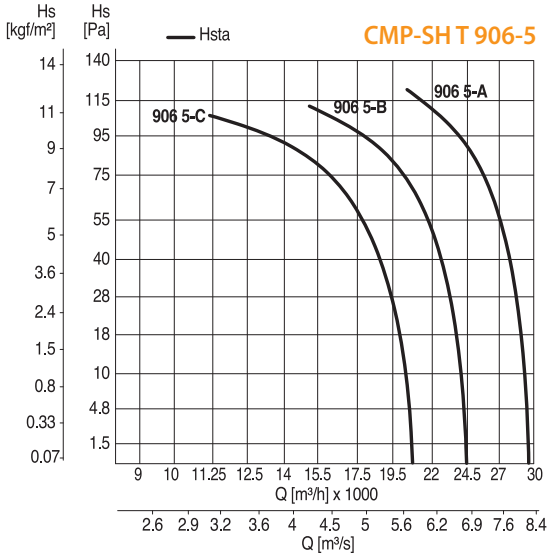
906 10-B
906 10-C
Q [m³/h] x 1000
Q [m³/s]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Hsta
Hs [kgf/m²]
Hs [Pa]
906 5-A
906 5-B
906 5-C
Q [m³/h] x 1000
Q [m³/s]

TCF HT

Applus F400

Certificate nr 0370-CPD-1148

400 V IP55 CE

DESCRIPTION

Centrifugal roof fans for direct or duct application and suitable for high temperature smoke extraction. The series is suitable for running at the temperature of +80°C and is CE certified to F400 by the independent notified body APPLUS according to EN12101-3.

CONSTRUCTION

- Base frame in galvanized steel sheet.
- Protection guard in drawn steel rod protected against the atmospheric agents.
- Backward curved wheel in galvanized steel sheet, with high efficiency and low noise level, statically and dynamically balanced according ISO 1940.
- Upper cover in ABS, with appropriate slots for motor cooling (collapsing controlled cowl in case of fi re)
- Double speed asynchronous three-phase motor manufactured according to internatio-nal standards IEC 60034, IEC 60072, EMC 2004/108/ CE, LVD 2006/95/CE, CE marked, IP55, class F. Electric supply: 400V / 50 HZ three phase.

UPON REQUEST

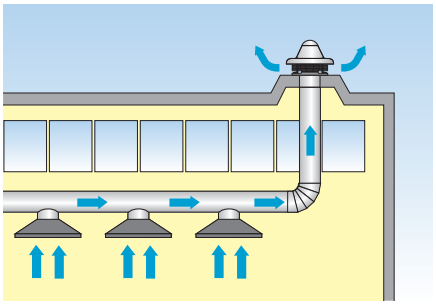
- 2 speed version with double polarity motor (TCF 2V)
- Service switch.

ACCESSORIES

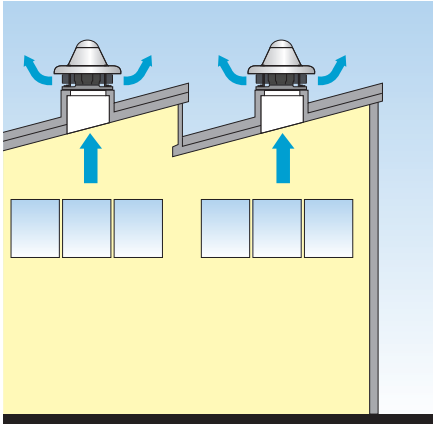
- Counter-base to be walled-up (CB).
- Inlet side grid (CCr).

INSTALLATION

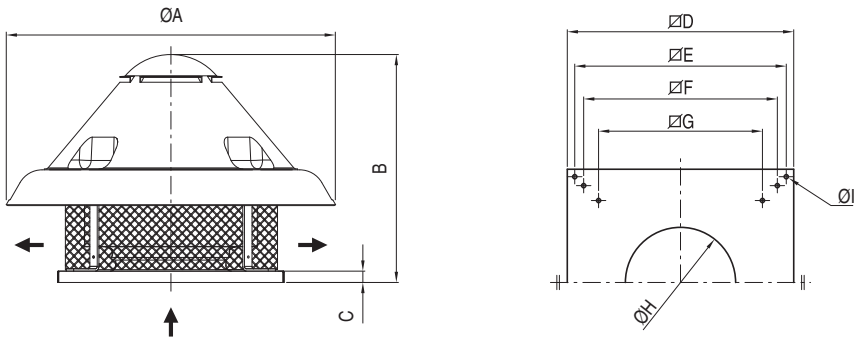
DUCTED EXHAUST



DIRECT EXHAUST



DIMENSIONS (mm)



TYPE	ØA	B	C	D	E	F	G	ØH	ØI	Kg*
TCF HT 40	900	640	38	650	600	530	471	296	12	30
TCF HT 45	900	650	38	650	600	530	471	296	12	38
TCF HT 50	1100	750	38	760	710	650	550	320	14	55
TCF HT 56	1100	750	38	760	710	650	550	370	14	57
TCF HT 63	1300	850	38	930	870	775	665	430	14	75
TCF HT 75	1300	880	38	930	870	775	665	480	14	108
TCF HT 80	1300	880	38	930	870	775	665	530	14	118

* Indicative weight

PERFORMANCE

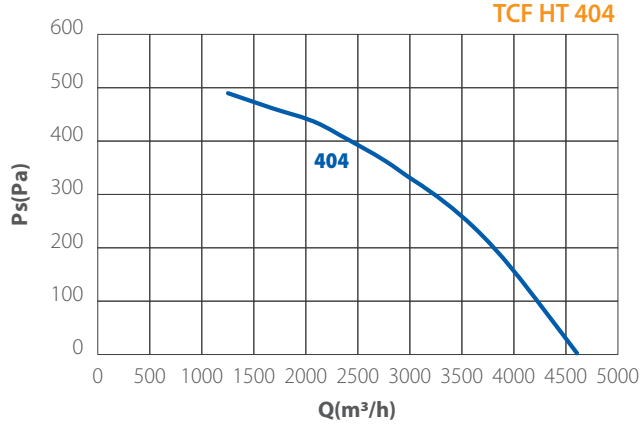
CODE	MODEL	MAX AIRFLOW	TENSION AT 50 Hz	ABSORBED CURRENT	POWER	SPEED	N°	RATING	SOUND LEVEL dB(A)	
		m^3/h	V	A	KW	RPM/1'		IP	Lp	Lw
UPON REQUEST	**TCF HT 404** THREE-PHASE	4.400	400	1,06	0,55	1400	4	55	56,3	79,9
UPON REQUEST	**TCF HT 454** THREE-PHASE	5.000	400	2,20	0,75	1400	4	55	57,9	81,4
UPON REQUEST	**TCF HT 504** THREE-PHASE	6.800	400	2,80	1,10	1400	4	55	60,4	84
UPON REQUEST	**TCF HT 566** THREE-PHASE	6.200	400	2,00	0,55	940	6	55	52,5	76,1
UPON REQUEST	**TCF HT 636** THREE-PHASE	11.000	400	3,40	1,10	940	6	55	58,8	82,3
UPON REQUEST	**TCF HT 756** THREE-PHASE	15.500	400	5,45	2,20	940	6	55	62,7	86,3
UPON REQUEST	**TCF HT 806** THREE-PHASE	18.000	400	6,60	3,00	940	6	55	69,2	92,8

Air performances measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m^3 specific weight. Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.

Lp: Sound pressure level measured in free fieldconditions, propagation hemispherical, measurement category C in accordance with EN ISO 13349, at the point of maximum efficiency, at a distance of 6 meters (for comparative purposes only).
Lw: Sound power level obtained in accordance with EN ISO 3746. Tolerance +/- 3 dB(A).

CURVES

TCF HT 404



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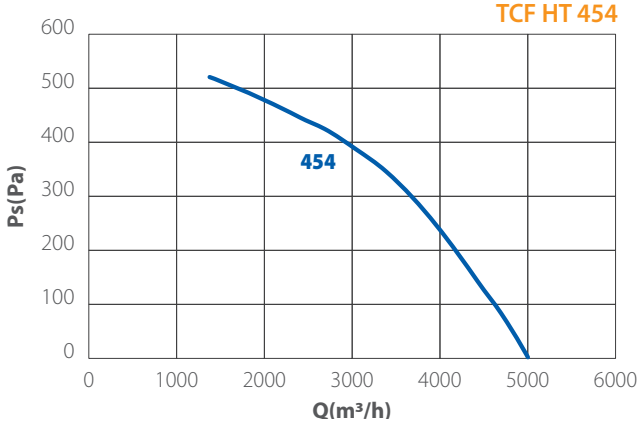

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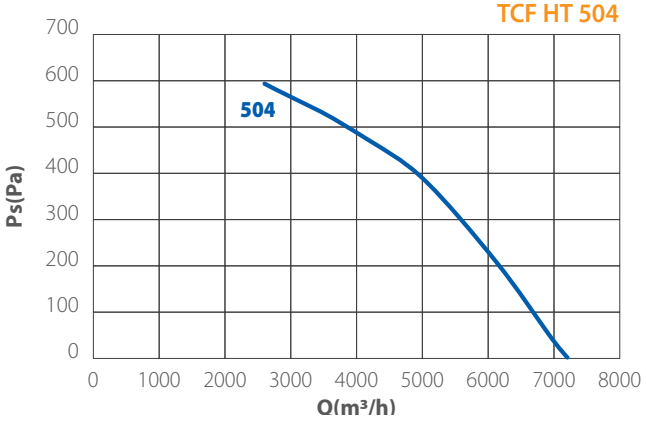

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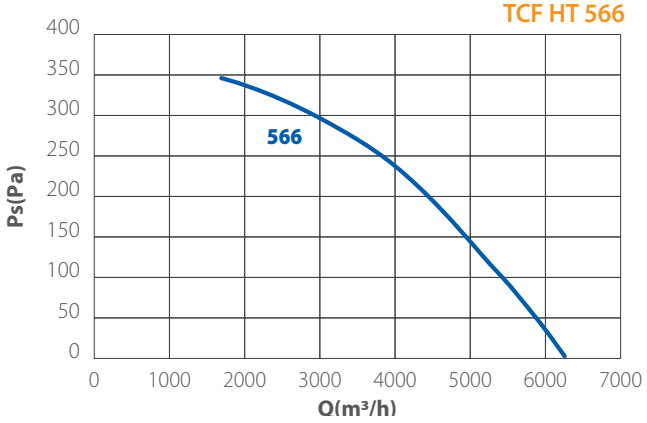

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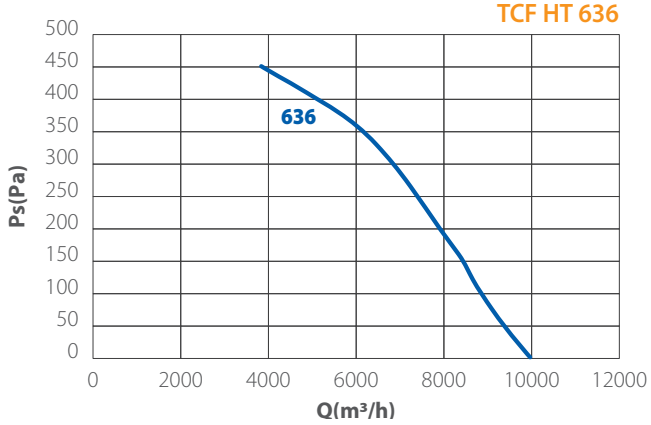

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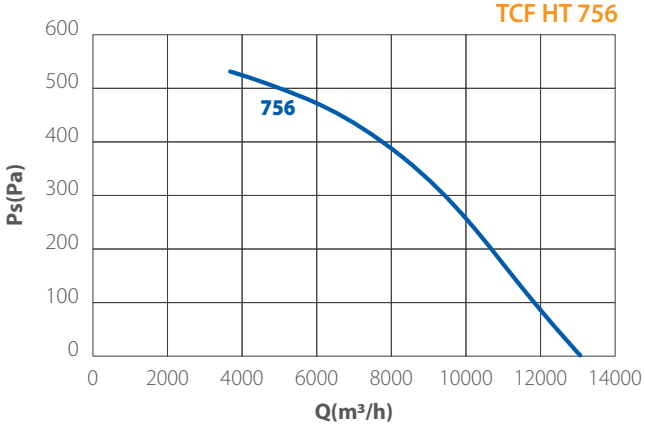

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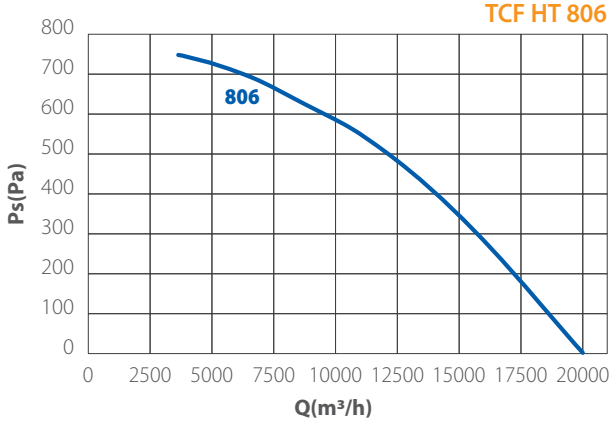


Section 6

elicent®
advanced ventilation

SPEED REGULATORS

SINGLE PHASE ELECTRONIC SPEED REGULATORS

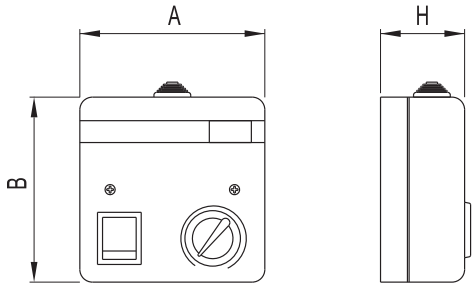
	TYPE	In max (A)	
	R10	1,50	p. 201
	R15	1,50	p. 202
	RV-1	4,00 (min 1,00)	p. 203
	RV-2	7,00 (min 4,00)	p. 204

SINGLE PHASE SELF TRANSFORMER SPEED REGULATORS

	TYPE	In max (A)	
	RVS	0,50	p. 205
	RVS-1	1,50	p. 206
	RVS-2	4,00	p. 207
	RVS-3	7,00	p. 208

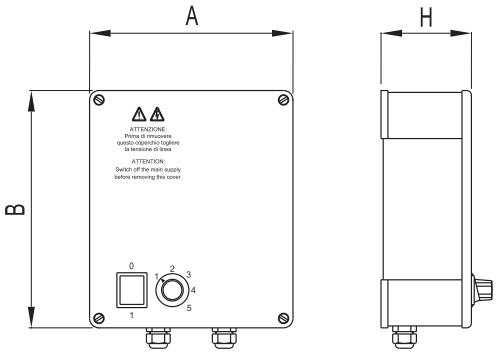
THREE-PHASE SELF-TRANSFORMER SPEED REGULATORS

	TYPE	In max (A)	
	RVST	2,00	p. 209
	RVST-1	4,00	p. 210
	RVST-2	7,00	p. 211
	RVST-3	14,00	p. 212



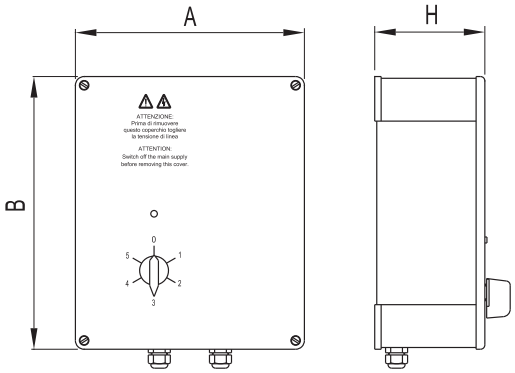
CODE	TYPE	A x B x H mm	kg
2RV4110	R10	110 x 80 x 42	0,5
2RV4111	R15	138 x 80 x 42	0,5
1RV2007	RV-1	110 x 110 x 50	0,5
2RV2000	RV-2	118 x 118 x 72	0,6
2RV4042	RV-S	118 x 118 x 58	0,7

Dimensions in mm



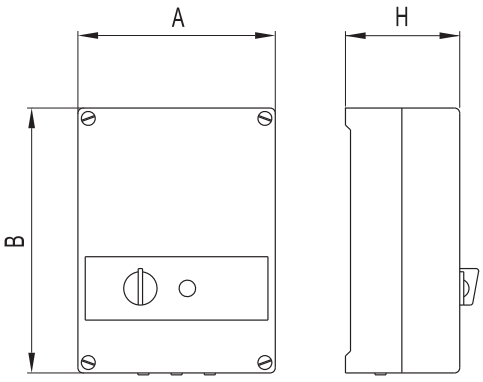
CODE	TYPE	A x B x H mm	kg
2RV4059	RVS-1	142 x 166 x 66	2,5
2RV4058	RVS-2	216 x 252 x 96	5
2RV4061	RVS-3	262 x 312 x 126	8,3

Dimensions in mm



CODE	TYPE	A x B x H mm	kg
2RV4062	RVST-1	262 x 312 x 126	11

Dimensions in mm



CODE	TYPE	A x B x H mm	kg
2RV4085	RVST	190 x 225 x 110	7,5
2RV4086	RVST2	253 x 316 x 143	20
2RV4087	RVST3	400 x 290 x 141	24

Dimensions in mm

R10

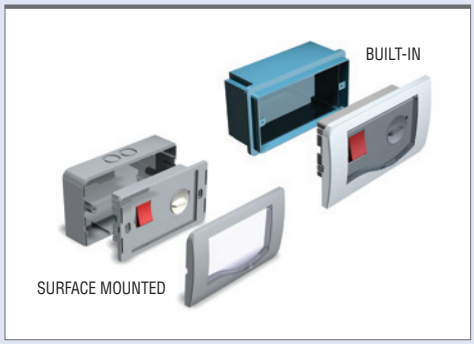
Single-phase electronic speed regulator 1 A

DESCRIPTION

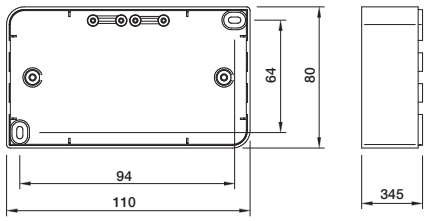
Manual voltage converter with continuous regulation by potentiometer.
Suitable for single-phase asynchronous adjustable motor.

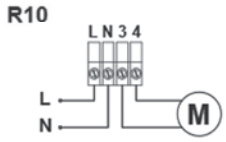
CONSTRUCTION

- Infinitely variable electronic speed controller by potentiometer
- New design with cover
- ON/OFF light switch
- Suitable for surface and built-in application
- Ease of connection by the means of removable terminals
- External trimmer for the adjustment of the fan minimum speed
- Protection fuse
- Single-phase 230V - 50/60 hZ
- Max. load 1 A
- Protection IP42
- Weight 0,5 Kg
- Dimensions 110x80x42
- CE marked



DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

R15

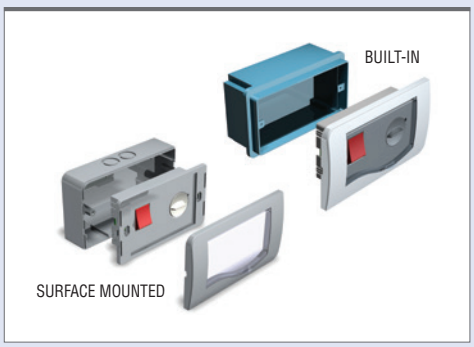
Single-phase electronic speed regulator 1,5 A

DESCRIPTION

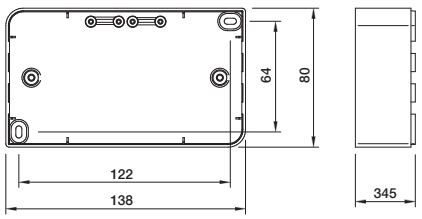
Manual voltage converter with continuous regulation by potentiometer. Suitable for single-phase asynchronous adjustable motor.

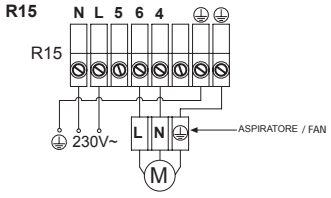
CONSTRUCTION

- Infinitely variable electronic speed controller by potentiometer
- New design with cover
- ON/OFF light switch
- Suitable for surface and built-in application
- Ease of connection by the means of removable terminals
- External trimmer for the adjustment of the fan minimum speed
- Protection fuse
- Single-phase 230V – 50/60 hZ
- Max. load 1,5 A
- Protection IP42
- Weight 0,5 Kg
- Dimensions 138x80x42
- CE marked



DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

RV/1

Single-phase electronic speed regulator 4 A

DESCRIPTION

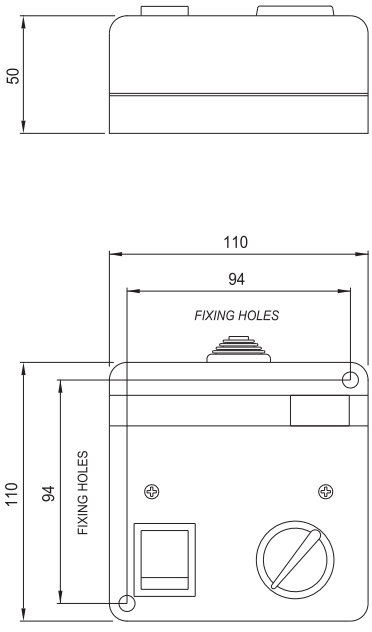
Manual voltage converter with continuous regulation by potentiometer. Electronic tuning by triac phase control closed loop type. Suitable for single-phase asynchronous adjustable motor.
Note: all regulators by triac control can cause electric hum in the motor at low speed. We advise against reducing under 50% the nominal speed of the electric motor. Motor electric hum can be minimized by using 3 wire capacitor/star winding.

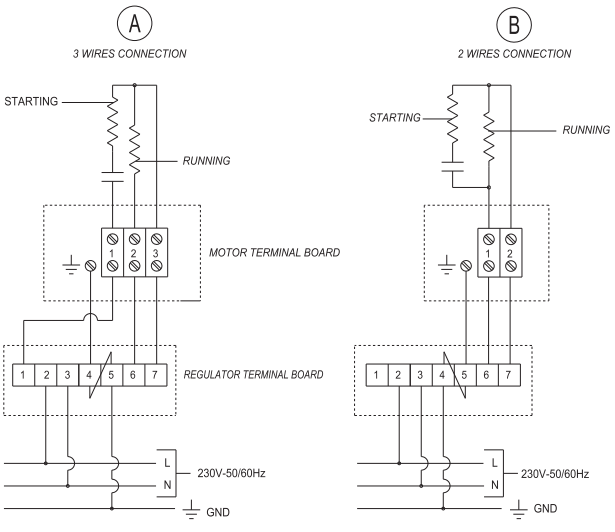
CONSTRUCTION

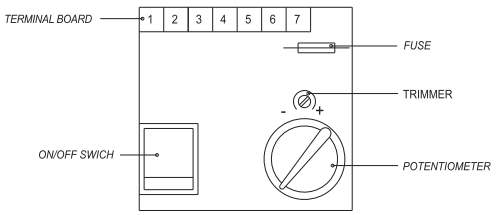
- Supply 230V-1Ph-50/60Hz.
- Nominal current max 4 A.
- Timed protection fuse 4A/250V.
- Minimum speed setting tuner.
- Radio noise filter EMC.
- Pilot light.
- Housing in techno-polymer RAL 9016 (white).
- Protection IP 42.
- Weight Kg 0,5.

Note: *to obtain an aptimal regulation it's better to utilize the connection (A).*

DIMENSIONS AND WIRING DIAGRAM







Dimensions in mm

RV/2

Single-phase electronic speed regulator 7 A

DESCRIPTION

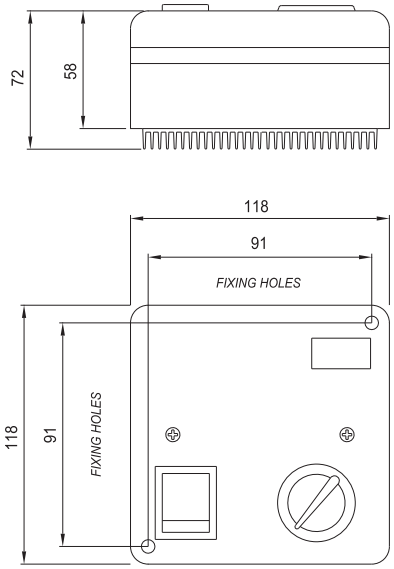
Manual voltage converter with continuous regulation by potentiometer. Electronic tuning by triac phase control closed loop type. Suitable for single-phase asynchronous adjustable motor.
Note: all regulators by triac control can cause electric hum in the motor at low speed. We advise against reducing under 50% the nominal speed of the electric motor. Motor electric hum can be minimized by using 3 wire capacitor/star winding.

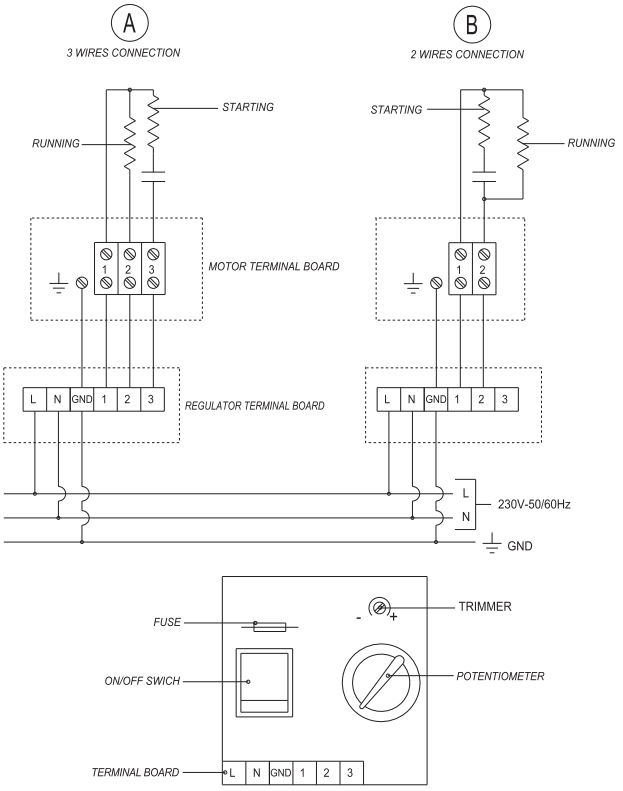
CONSTRUCTION

- Supply 230V-1Ph-50/60Hz.
- Nominal current max 7 A (min. 4 A).
- Timed protection fuse 8A/250V.
- Minimum speed setting tuner.
- Radio noise filter EMC.
- Pilot light.
- Housing in techno-polymer RAL 9016 (white).
- Cooling fin in extruded aluminium.
- Protection IP 42.
- Weight Kg 0,7.

Note: *to obtain an aptimal regulation it's better to utilize the connection (A).*

DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

RVS

Single-phase self-transformer speed regulator 0,5 A

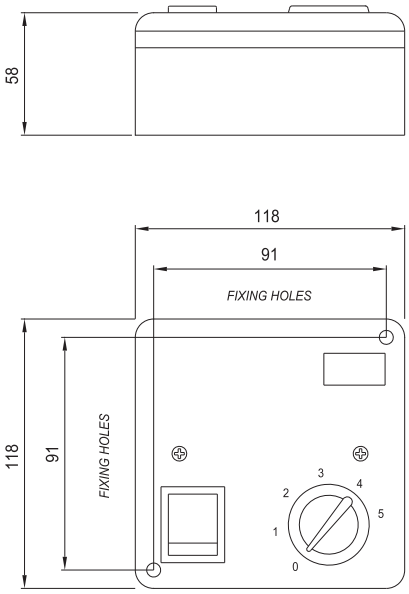
DESCRIPTION

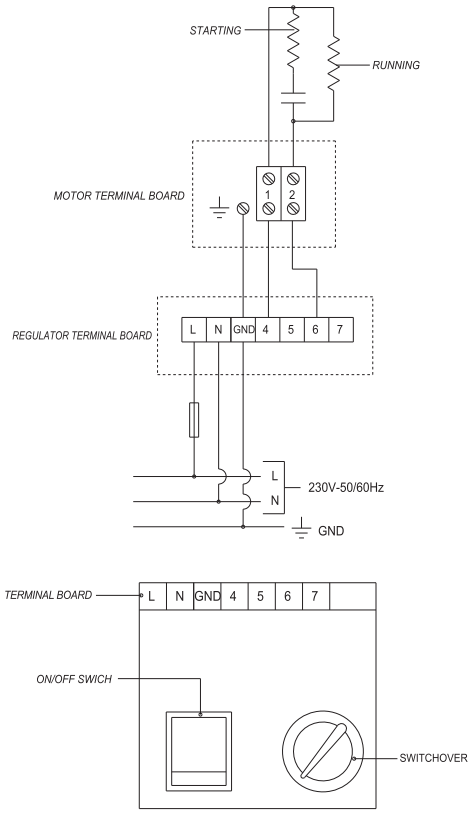
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for single-phase asynchronous adjustable motors.

CONSTRUCTION

- Supply 230V-1Ph-50/60Hz.
- Nominal current max 0.5A .
- Output voltage 1(125V)-2(140V)-3(160V)-4(200V)-5(230V).
- Protection IP 42.
- Housing in techno-polymer RAL9016 (white).
- Weight Kg.0,7.

DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

RVS 1

Single-phase self-transformer speed regulator 1,5 A

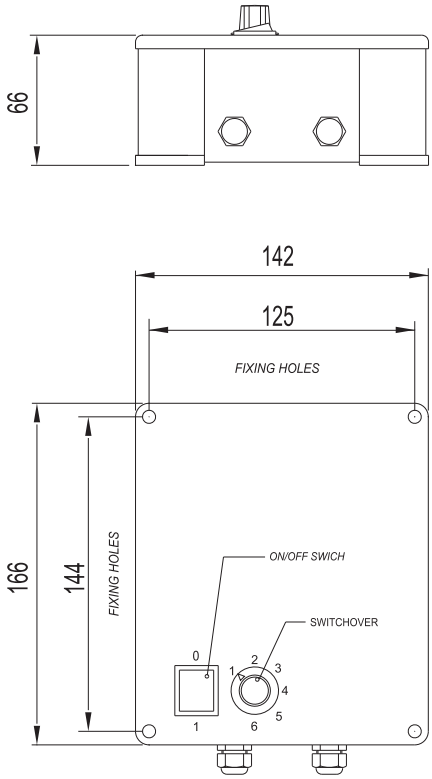
DESCRIPTION

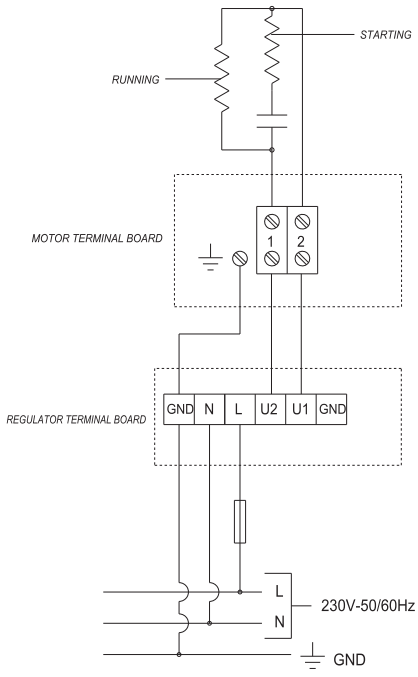
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for single-phase asynchronous adjustable motors.

CONSTRUCTION

- Supply 230V-1Ph-50/60Hz.
- Nominal current max 1,5 A.
- Output voltage 1(60V)-2(100V)-3(135V)-4(160V)-5(185V)-6(230V).
- Protection IP 55.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey).
- Weight Kg 2,5.

DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

RVS 2

Single-phase self-transformer speed regulator 4 A

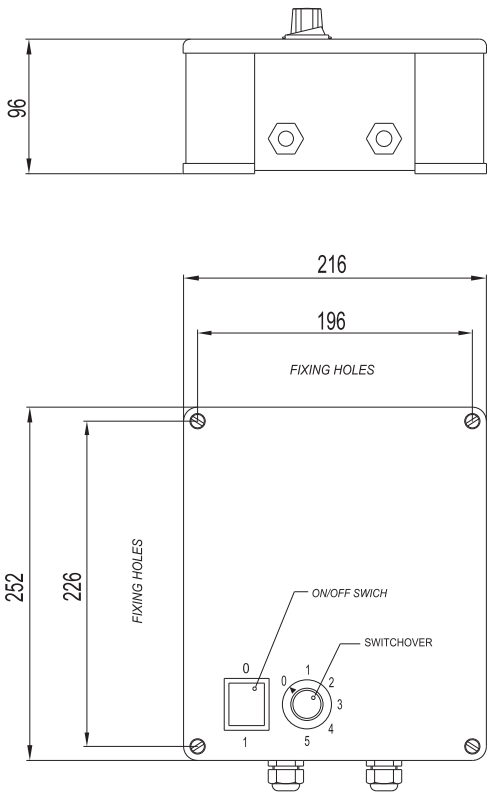
DESCRIPTION

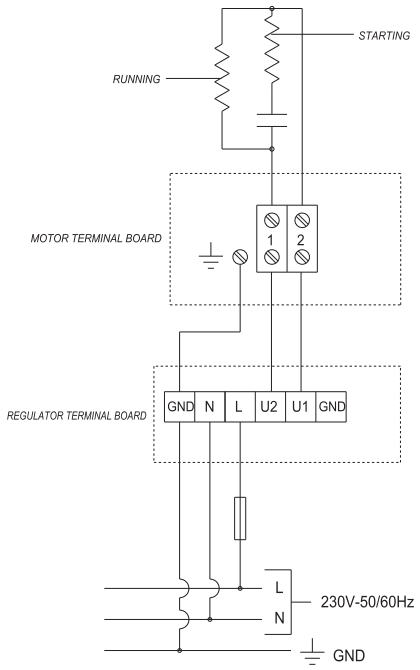
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for single-phase asynchronous adjustable motors.

CONSTRUCTION

- Supply 220/240V-1Ph-50/60Hz.
- Nominal current max 4 A.
- Output voltage 1(60V)-2(105V)-3(130V)-4(160V)-5(230V)
- Protection IP 55.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey).
- Weight Kg 5.

DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

RVS 3

Single-phase self-transformer speed regulator 7 A

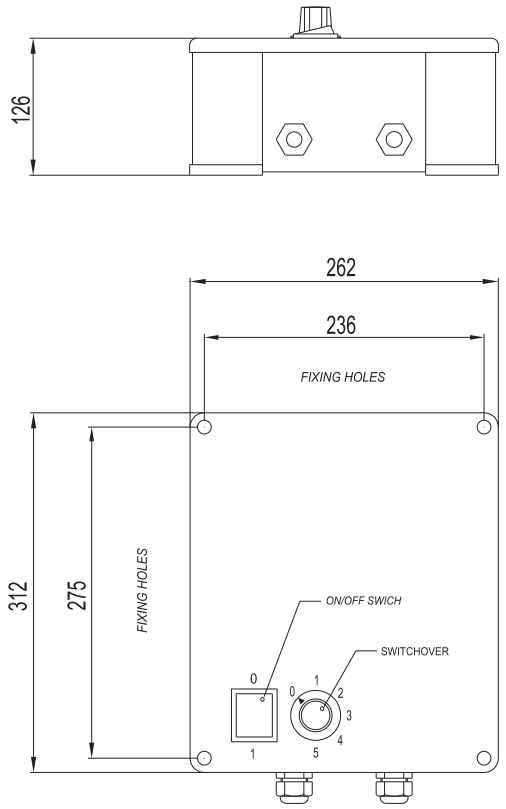
DESCRIPTION

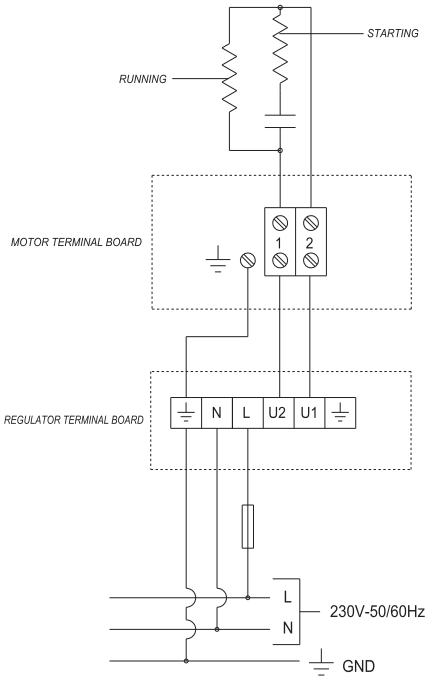
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for single-phase asynchronous adjustable motors.

CONSTRUCTION

- Supply 220/240V-1Ph-50/60Hz.
- Nominal current max 7 A.
- Output voltage 1(60V)-2(105V)-3(130V)-4(160V)-5(230V).
- Protection IP 55.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey).
- Weight Kg 8,3.

DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

6

RVST

Three-phase self-transformer speed regulator 2 A

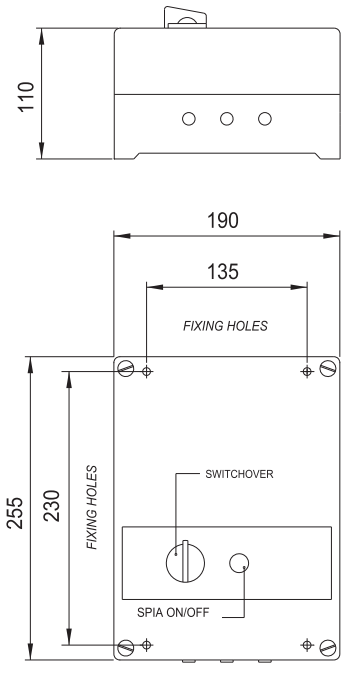
DESCRIPTION

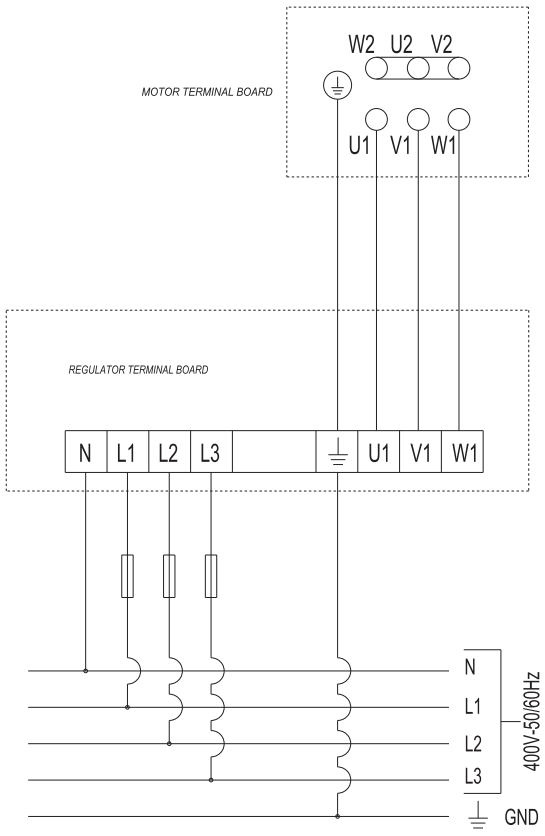
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for three-phase asynchronous adjustable motors.

CONSTRUCTION

- Supply 400V-3Ph-50/60Hz.
- Nominal current max 2 A.
- Output voltage 1(90V)-2(140V)-3(180V)-4(230V)-5(400V).
- Protection IP 54.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey) with cover in plastic material RAL7035 (light grey).
- Weight Kg 7,5.

DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

RVST-1

Three-phase self-transformer speed regulator 4 A

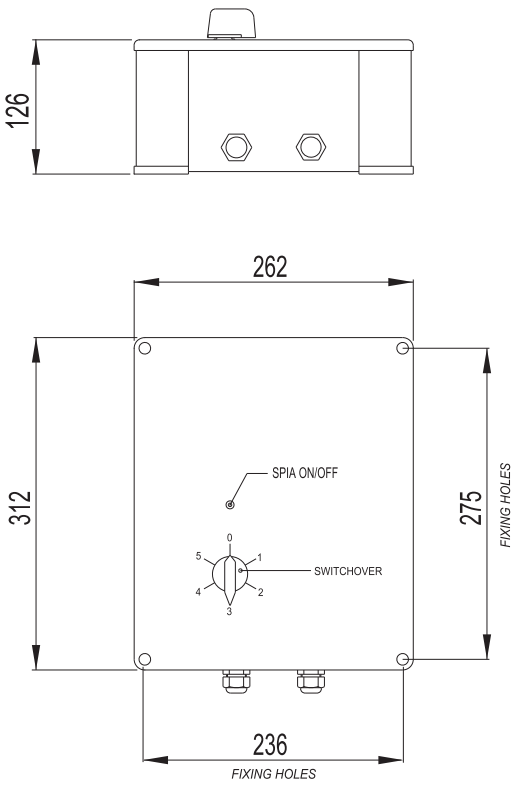
DESCRIPTION

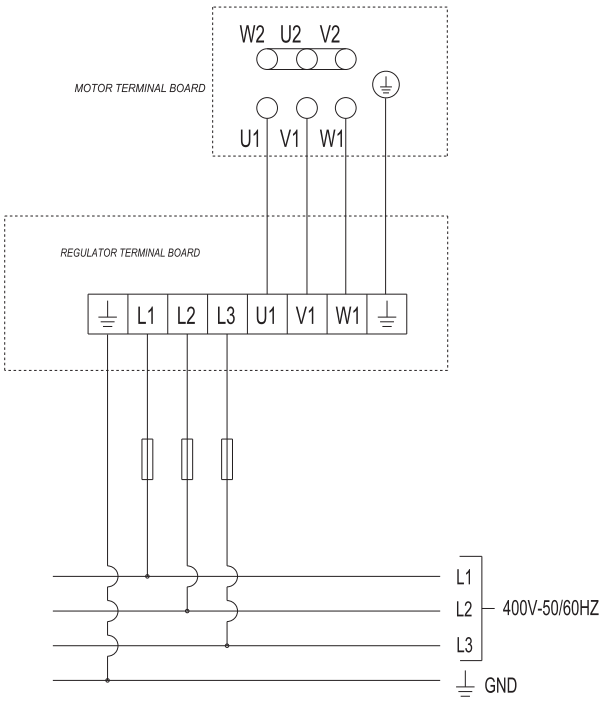
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for three-phase asynchronous adjustable motors.

CONSTRUCTION

- Supply 400V-3Ph-50/60Hz.
- Nominal current max 4 A.
- Output voltage 1(95V)-2(145V)-3(190V)-4(240V)-5(400V).
- Protection IP 55.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey).
- Weight Kg 11

DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

RVST-2

Three-phase self-transformer speed regulator 7 A

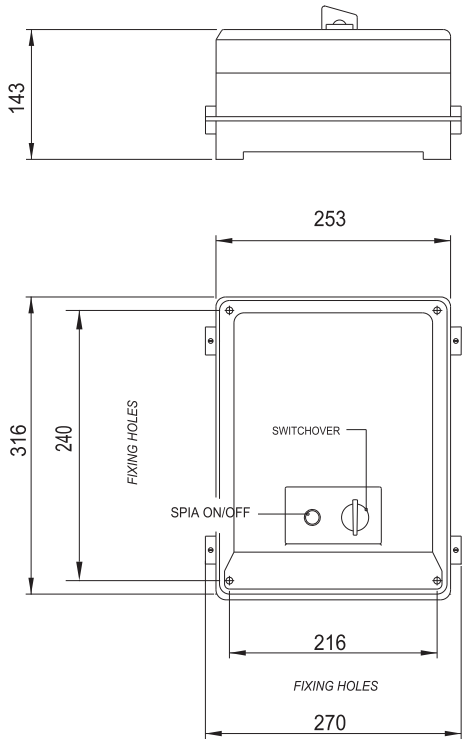
DESCRIPTION

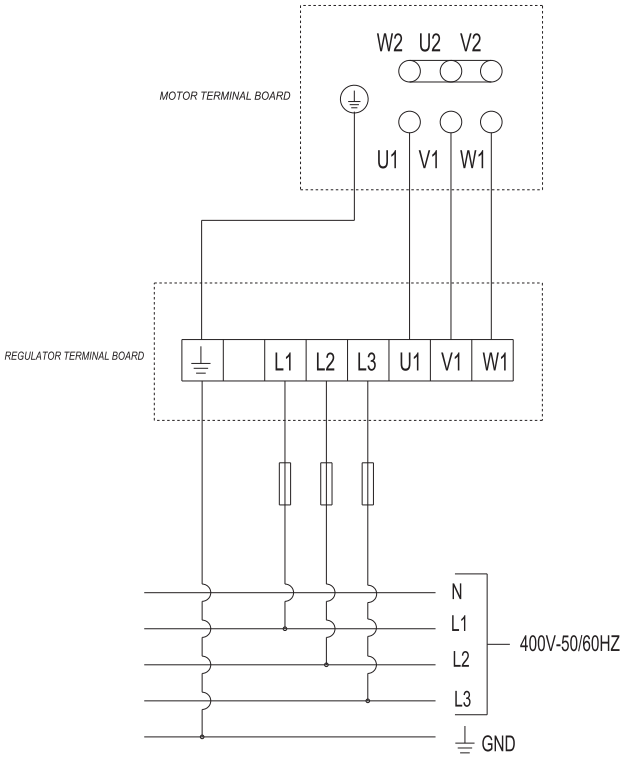
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for three-phase asynchronous adjustable motors.

CONSTRUCTION

- Supply 400V-3Ph-50/60Hz.
- Nominal current max 7 A.
- Output voltage 1(90V)-2(140V)-3(180V)-4(230V)-5(400V).
- Protection IP 21.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey) with cover in coated steel sheet RAL 7035 (light grey).
- Weight Kg 20.

DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

RVST-3

Three-phase self-transformer speed regulator 14 A

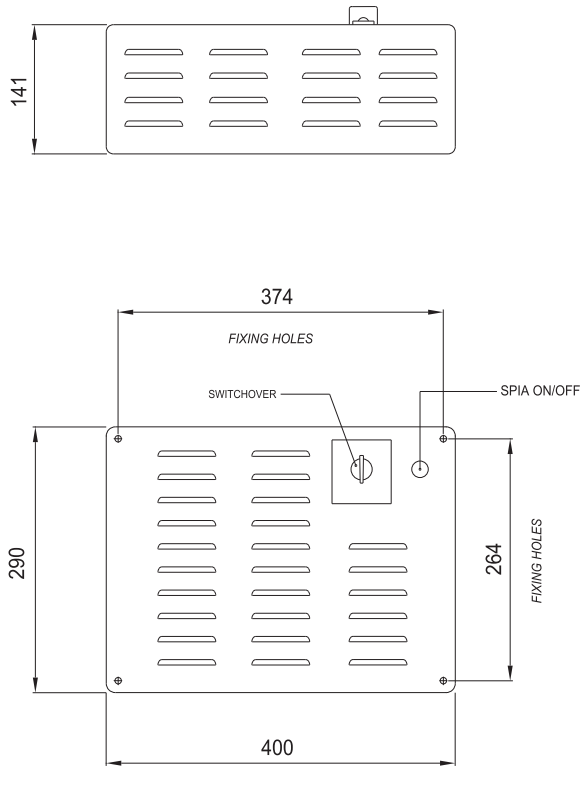
DESCRIPTION

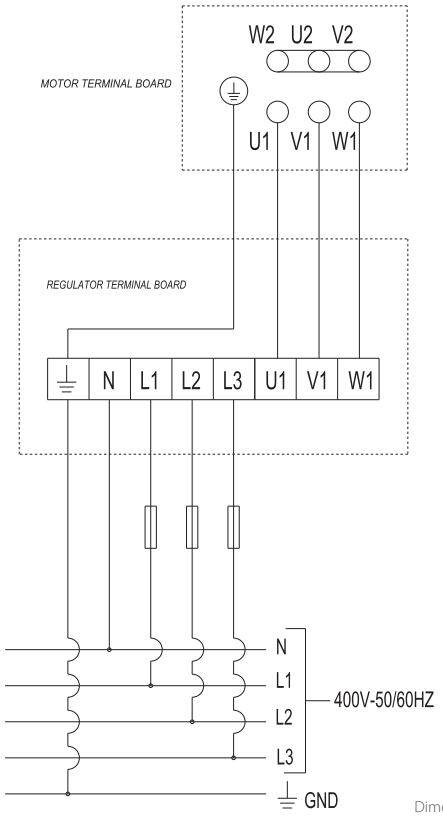
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for three-phase asynchronous adjustable motors.

CONSTRUCTION

- Supply 400V-3Ph-50/60Hz.
- Nominal current max 14 A.
- Output voltage 1(90V)-2(140V)-3(180V)-4(230V)-5(400V).
- Protection IP 21.
- Pilot light
- Housing in epoxy painted steel sheet RAL 7035 (light grey).
- Weight Kg 24.

DIMENSIONS AND WIRING DIAGRAM





Dimensions in mm

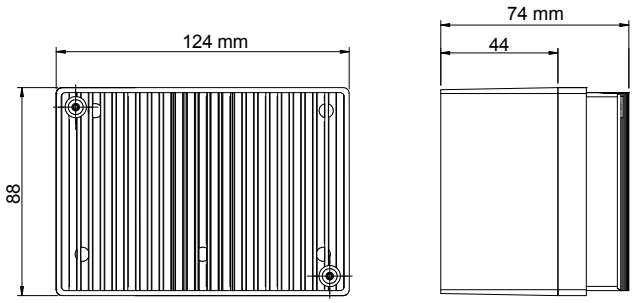
E-VSD

VARIABLE SPEED DRIVE

Controller that continuously adapts the electrical power supplied to the motor in order to regulate the ow rate through the control panel interface **CP-RH** or **CP-AQS**

CHARACTERISTICS

Supply: 220 - 240 Vac ; 50/60Hz.
Maxim un Power: 300 W
W a terproof: IPX4
Main materials: Aluminium cover
Selfestinguishing casing (UL - 5VA) for surface mounting installation



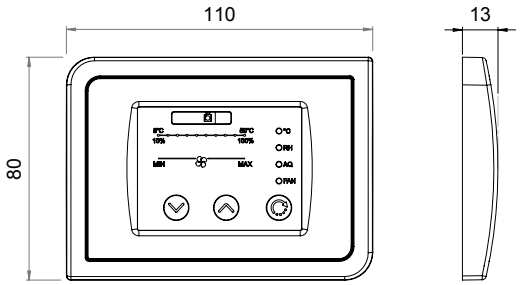
CONTROL PANEL

CP-RH

CP-AQS

CHARACTERISTICS

Control panel:
Measures a set of (control) parameters representative of the ventilation demand / quality of the indoor air.
Interface with E-VSD controller.



FUNCTIONS:	CP-RH	CP-AQS
Temperature control	●	●
Relative humidity detection	●	●
Air quality control		●
Continuous Speed Regulation	●	●

INVERTERS and line filters

DESCRIPTION

- VSD - Variable Speed Drive.
- SPWM Control
- Integrated EMI filter
- Settable operation functions
- Interface MODBAS RS485. Upon request DeviceNet, Profi bus, Lon Works, CANopen protocols
- Wall installation, optional DIN bar

VFD "EL": Keypad with incorporated fixed potentiometer.

VFD "E": Integrated PLC. Keypad with removable potentiometer, ideal for multiple installations with a unique and remote-manageable programmation (a cable of 5 mt max. length is available upon request). Mounting port for extension card available.

CODE	MODEL
Input SINGLE-PHASE (230V-1Ph-50/60Hz) / Output THREE-PHASE (230V-3Ph)	
1IN1670	VFD-EL M 0,4KW 2,7A
1IN1671	VFD-EL M 0,7KW 4,9A
1IN1672	VFD-EL M 1,5KW 9A
1IN1673	VFD-EL M 2,2KW 15A
Input THREE-PHASE (400V-3Ph-50/60Hz) / Output THREE-PHASE (400V-3Ph)	
1IN1674	VFD-EL T 0,4KW 1,5A
1IN1675	VFD-EL T 0,7KW 2,5A
1IN1676	VFD-EL T 1,5KW 4,2A
1IN1677	VFD-EL T 2,2KW 5,5A
1IN1678	VFD-EL T 3,7KW 8,2A

CODE	MODEL
Input SINGLE-PHASE (230V-1Ph-50/60Hz) / Output THREE-PHASE (230V-3Ph)	
1IN1679	VFD-E M 0,4KW 2,7A
1IN1680	VFD-E M 0,7KW 4,9A
1IN1681	VFD-E M 1,5KW 9A
1IN1682	VFD-E M 2,2KW 15A
Input THREE-PHASE (400V-3Ph-50/60Hz) / Output THREE-PHASE (400V-3Ph)	
1IN1683	VFD-E T 0,4KW 1,5A
1IN1684	VFD-E T 0,7KW 2,5A
1IN1685	VFD-E T 1,5KW 4,2A
1IN1686	VFD-E T 2,2KW 5,5A
1IN1687	VFD-E T 3,7KW 8,5A
1IN1688	VFD-E T 5,5KW 13A
1IN1689	VFD-E T 7,5KW 18A
1IN1690	VFD-E T 11KW 24A
1IN1691	VFD-E T 15KW 32A
1IN1692	VFD-E T 18,5KW 38A
1IN1693	VFD-E T 22KW 45A

MODEL	CODE	MOTOR CURRENT A	kW	ELECTRONIC				SELF-TRANSFORMER							
				SINGLE-PHASE				SINGLE-PHASE				THREE-PHASES			
				R10	R15	RV-1	RV-2	RVS	RVS1	RVS2	RVS3	RVST	RVST1	RVST2	RVST3
				1.0 A	1.5 A	4.0 A	7.0 A	0.5 A	1.5 A	4.0 A	7.0 A	1.8 A	4.0 A	7.0 A	14.0 A
				2RV4110	2RV4111	1RV2007	2RV2000	2RV4042	2RV4059	2RV4058	2RV4061	2RV4085	2RV4062	2RV4086	2RV4087
CMP 312 T 3H-4-25	1CM3123	0,63	0,25									•			
CMP 314 M DY-6-45	1CM3144	1,3	0,12		•				•						
CMP 314 T DY-6-45	1CM3145	0,4	0,12									•			
CMP 352 T DY-6-30	1CM3546	1,27	0,55									•			
CMP 354 M DY-6-45	1CM3544	1,3	0,12		•				•						
CMP 354 T DY-6-45	1CM3545	0,4	0,12									•			
CMP 402 T DY-6-30	1CM4053	2,36	0,55										•		
CMP 404 M DY-6-30	1CM4049	1,3	0,12		•				•						
CMP 404 T DY-6-30	1CM4050	0,56	0,12									•			
CMP 404 T DY-6-30	1CM4050	0,4	0,12									•			
CMP 452 T DY-6-30	1CM4549	3,17	0,55										•		
CMP 454 T DY-6-45	1CM4542	1,04	0,37									•			
CMP 454 T DY-6-45	1CM4542	0,69	0,37									•			
CMP 504 T VS-8-30	1CM5044	1,47	0,55									•			
CMP 504 T VS-8-35	1CM5047	1,99	0,75										•		
CMP 504 T VS-8-40	1CM5048	2,5	1,1										•		
CMP 506 T VS-8-30	1CM5049	0,66	0,55									•			
CMP 508 T VS-8-35	1CM5050	0,71	0,75									•			
CMP 564 T VS-8-30	1CM5642	1,99	0,75										•		
CMP 564 T VS-8-35	1CM5644	2,5	0,75										•		
CMP 564 T VS-8-45	1CM5645	3,54	1,5										•		
CMP 566 T 3H-6-40	1CM5646	0,66	0,18									•			
CMP 566 T 3H-6-45	1CM5647	0,87	0,25									•			
CMP 566 T 3H-6-50	1CM5648	1,2	0,37									•			
CMP 568 T VS-8-35	1CM5649	0,71	0,75									•			
CMP 634 T VS-8-30	1CM6341	2,5	1,1										•		
CMP 634 T VS-8-35	1CM6342	3,54	0,75										•		
CMP 634 T VS-8-45	1CM6343	4,8	1,5											•	
CMP 636 T 3H-8-35	1CM6344	0,87	0,25									•			
CMP 636 T VS-8-35	1CM6345	1,2	0,75									•			
CMP 636 T VS-8-45	1CM6346	1,71	1,5									•			
CMP 638 T 3H-10-40	1CM6347	0,83	0,18									•			
CMP 638 T 3H-10-45	1CM6348	1,1	0,25									•			
CMP 714 T VS-8-30	1CM7143	3,54	0,55										•		
CMP 714 T VS-8-35	1CM7141	4,8	2,2											•	
CMP 714 T VS-8-40	1CM7144	6,39	1,1											•	
CMP 716 T 3H-6-40	1CM7145	1,2	0,18									•			
CMP 716 T VS-8-35	1CM7146	1,71	0,75									•			
CMP 716 T VS-8-40	1CM7147	2,01	1,1										•		
CMP 718 T 3H-6-45	1CM7148	1,1	0,25									•			
CMP 718 T 3H-12-45	1CM7149	1,41	0,37									•			
CMP 804 T VS-5-19	1CM8042	4,8	2,2											•	
CMP 804 T VS-10-19	1CM8043	6,39	3											•	
CMP 804 T VS-5-23	1CM8044	6,39	3											•	
CMP 804 T VS-10-23	1CM8045	7,75	4												•
CMP 804 T VS-5-30	1CM8046	7,75	4												•
CMP 804T VS-10-27	1CM8041	10,74	5,5												•
CMP 806 T 4Z-6-28,5	1CM8047	1,71	0,55									•			
CMP 806 T VS-10-15	1CM8048	2,01	0,75										•		
CMP 806 T VS-10-23	1CM8049	2,74	4										•		
CMP 806 T VS-5-30	1CM8050	2,74	4										•		
CMP 806 T VS-10-27	1CM8051	3,91	5,5										•		
CMP 808 T 4Z-6-38,5	1CM8052	2,04	0,55										•		
CMP 808 T 4Z-6-45	1CM8053	2,24	0,75										•		
CMP 808 T 4Z-6-48,5	1CM8054	3,38	1,1										•		
CMP 904 T VS-5-19	1CM9042	6,39	2,2											•	
CMP 904 T VS-5-23	1CM9043	7,75	3												•
CMP 904 T VS-10-19	1CM9044	10,74	3												•
CMP 904 T VS-5-27	1CM9045	10,74	5,5												•
CMP 904 T VS-10-23	1CM9046	14,38	4												
CMP 904 T VS-10-30	1CM9041	16,71	9,2												
CMP 906 T VS-5-19	1CM9047	2,01	2,2										•		
CMP 906 T VS-5-23	1CM9048	2,74	3										•		
CMP 906 T VS-10-23	1CM9049	3,91	4										•		
CMP 906 T VS-5-27	1CM9050	3,91	5,5										•		
CMP 906 T VS-10-27	1CM9051	5,45	5,5											•	
CMP 906 T VS-10-30	1CM9052	6,95	9,2											•	
CMP 908 T 5Z-9-41,5	1CM9053	3,38	1,1										•		
CMP 908 T 5Z-9-46,5	1CM9054	4,21	1,5											•	
CMP 1004 T VS-10-27	1CM1042	21,67	5,5												
CMP 1004T VS-10-33	1CM1041	28,12	15												
CMP 1004 T VS-5-19	1CM1043	7,75	2,2												•
CMP 1004 T VS-5-23	1CM1044	10,74	3												•
CMP 1004 T VS-10-19	1CM1045	14,38	3												
CMP 1004 T VS-5-30	1CM1046	14,38	4												
CMP 1004 T VS-10-23	1CM1047	16,71	4												
CMP 1006 T VS-5-19	1CM1048	2,74	2,2										•		
CMP 1006 T VS-5-23	1CM1049	3,91	3										•		
CMP 1006 T VS-5-30	1CM1050	5,45	4											•	
CMP 1006 T VS-10-19	1CM1051	6,95	3											•	
CMP 1006 T VS-10-23	1CM1052	8,85	4												•

INVERTER														
SINGLE-PHASE (INPUT 230/1/50, OUTPUT 400/3/50)				THREE-PHASES (INPUT 400/1/50, OUTPUT 400/3/50)										
VFDEL M 0.4	VFDEL M 0.75	VFDEL M 1.5	VFDEL M 2.2	VFDEL T 0.4	VFDEL T 0.75	VFDEL T 1.5	VFDEL T 2.2	VFDEL T 3.7	VFDE T 5.5	VDFE T 7.5	VDFE T 11	VDFE T 15	VDFE T 18.5	VDFE T 22
2.5 A	4.2 A	7.5 A	11 A	1.5 A	2.5 A	4.2 A	5.5 A	8.2 A	13 A	18 A	24 A	32 A	38 A	45 A
1IN1670	1IN1671	1IN1672	1IN1673	1IN1674	1IN1675	1IN1676	1IN1677	1IN1678	1IN1688	1IN1689	1IN1690	1IN1691	1IN1692	1IN1693
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Fans / Controllers - Inverters Pairing

MODEL	CODE	MOTOR CURRENT A	kW	ELECTRONIC				SELF-TRANSFORMER							
				SINGLE-PHASE				SINGLE-PHASE				THREE-PHASES			
				R10	R15	RV-1	RV-2	RVS	RVS1	RVS2	RVS3	RVST	RVST1	RVST2	RVST3
				1.0 A	1.5 A	4.0 A	7.0 A	0.5 A	1.5 A	4.0 A	7.0 A	1.8 A	4.0 A	7.0 A	14.0 A
				2RV4110	2RV4111	1RV2007	2RV2000	2RV4042	2RV4059	2RV4058	2RV4061	2RV4085	2RV4062	2RV4086	2RV4087
CMP 1006 T VS-10-33	1CM1053	12,38	15												•
CMP 1008 T VS-10-19	1CM1054	3,38	3										•		
CMP 1008 T VS-10-23	1CM1055	4,21	4											•	
CMP 1008 T VS-10-33	1CM1056	5,54	15											•	
CMP 1126 T 5Z-8-33,5	1CM1120	8,85	4												•
CMP 1126 T 5Z-8-38,5	1CM1121	12,38	5,5												•
CMP 1126 T 5Z-8-45	1CM1122	16,97	7,5												
CMP 1128 T 5Z-8-36	1CM1123	5,54	2,2											•	
CMP 1128 T 5Z-8-41,5	1CM1124	7,25	3												•
CMP 1256 T 6W-4-36	1CM1250	22,87	11												
CMP 1256 T 6W-4-29	1CM1251	12,38	5,5												•
CMP 1256 T 6W-4-33	1CM1252	16,97	7,5												
CMP 1258 T 6W-4-27	1CM1253	5,54	2,2											•	
CMP 1258 T 6W-4-31	1CM1254	7,25	3												•
CMP 1258 T 6W-4-36	1CM1255	9,32	11												•
CMP 1406 T 6W-5-28	1CM1400	22,87	11												
CMP 1406 T 6W-5-32	1CM1401	30,51	15												
CMP 1408 T 6W-5-29	1CM1402	12,22	5,5												•
CMP 1408 T 6W-5-35	1CM1403	16,33	7,5												
CMP 1606 T 9W-5-26	1CM1600	30,51	15												
CMP 1606 T 9W-5-31	1CM1601	42,51	22												
CMP 1608 T 9W-5-33	1CM1602	23,48	11												
CMP 1608 T 9W-5-27	1CM1603	16,33	7,5												
CMZ 314 M	1CM0030	0,42	0,1	•				•							
CMZ 354 M	1CM0035	0,56	0,12	•					•						
CMZ 404 M	1CM0040	1,05	0,24		•				•						
CMZ 404 T	1CM0041	0.46/0.27	0.23/0.17									•			
CMZ 454 M	1CM0045	2,9	0,6			•				•					
CMZ 454 T	1CM0046	1.10/0.66	0.54/0.36									•			
CMZ 504 M	1CM0050	3,2	0,72			•				•					
CMZ 504 T	1CM0051	1.45/0.96	0.84/0.54									•			
CMZ 564 T	1CM0056	2.20/1.10	1.05/0.58										•		
E-CUBE 254 M	1SC2509	1	0,09	•					•						
E-CUBE 254 T	1SC2512	0,6	0,09									•			
E-CUBE 314 M	1SC3109	1,3	0,12		•				•						
E-CUBE 314 T	1SC3112	0,7	0,12									•			
E-CUBE 354 M	1SC3506	2,2	0,25			•				•					
E-CUBE 354 T	1SC3507	0,8	0,25									•			
E-CUBE 404 M	1SC4012	4,3	0,55				•				•				
E-CUBE 404 T	1SC4013	1,6	0,55									•			
E-CUBE 454 M	1SC4518	5,5	0,75				•				•				
E-CUBE 454 T	1SC4519	2,2	0,75										•		
E-CUBE 456 T	1SC4520	1,2	0,37									•			
E-CUBE 504 T	1SC5012	2,5	1,1										•		
E-CUBE 506 T	1SC5013	1,2	0,37									•			
E-CUBE 566 T	1SC5606	1,8	0,55									•			
E-CUBE 636 T	1SC6306	2,74	1,1										•		
E-CUBE 716 T	-	5,45	2,2											•	
E-CUBE/BT 254 M	1SC2513	1	0,09	•					•						
E-CUBE/BT 254 T	1SC2514	0,6	0,09									•			
E-CUBE/BT 314 M	1SC3113	1,3	0,12		•				•						
E-CUBE/BT 314 T	1SC3114	0,7	0,12									•			
E-CUBE/BT 354 M	1SC3512	2,2	0,25			•				•					
E-CUBE/BT 354 T	1SC3513	0,8	0,25									•			
E-CUBE/BT 404 M	1SC4008	4,3	0,55				•				•				
E-CUBE/BT 404 T	1SC4014	1,6	0,55									•			
E-CUBE/BT 454 M	1SC4521	5,5	0,75				•				•				
E-CUBE/BT 454 T	1SC4522	2,2	0,75										•		
E-CUBE/BT 456 T	1SC4523	1,2	0,37									•			
E-CUBE/BT 504 T	1SC5014	2,5	1,1										•		
E-CUBE/BT 506 T	1SC5015	1,2	0,37									•			
E-CUBE/BT 566 T	1SC5607	1,8	0,55									•			
E-CUBE/BT 636 T	1SC6307	2,74	1,1										•		
E-CUBE/BT 716 T	-	5,45	2,2											•	
E-CUBE PLUS 254 M	1SK2507	1	0,09	•					•						
E-CUBE PLUS 254 T	1SK2508	0,6	0,09									•			
E-CUBE PLUS 314 M	1SK3108	1,3	0,12		•				•						
E-CUBE PLUS 314 T	1SK3109	0,7	0,12									•			
E-CUBE PLUS 354 M	1SK3512	2,2	0,25			•				•					
E-CUBE PLUS 354 T	1SK3513	0,8	0,25									•			
E-CUBE PLUS 404 M	1SK4014	4,3	0,55				•				•				
E-CUBE PLUS 404 T	1SK4016	1,6	0,55									•			
E-CUBE PLUS 454 M	1SK4515	5,5	0,75				•				•				
E-CUBE PLUS 454 T	1SK4516	2,2	0,75										•		
E-CUBE PLUS 456 T	1SK4517	1,2	0,37									•			
E-CUBE PLUS 504 T	1SK5014	2,5	1,1										•		
E-CUBE PLUS 506 T	1SK5015	1,2	0,37									•			
E-CUBE PLUS 566 T	1SK5602	1,8	0,55									•			
E-CUBE PLUS 636 T	1SK6305	2,74	1,1										•		
E-CUBE PLUS 716 T	1SK7004	5,45	2,2											•	
ELIBOX 3/8 M	-	0,3	0,08	•				•							

Fans / Controllers - Inverters Pairing

INVERTER													
SINGLE-PHASE (INPUT 230/1/50, OUTPUT 400/3/50)				THREE-PHASES (INPUT 400/1/50, OUTPUT 400/3/50)									
VFDEL M 0.4	VFDEL M 0.75	VFDEL M 1.5	VFDEL M 2.2	VFDEL T 0.4	VFDEL T 0.75	VFDEL T 1.5	VFDEL T 2.2	VFDEL T 3.7	VFDE T 5.5	VDFE T 7.5	VDFE T 11	VDFE T 15	VDFE T 18.5	VDFE T 22
2.5 A	4.2 A	7.5 A	11 A	1.5 A	2.5 A	4.2 A	5.5 A	8.2 A	13 A	18 A	24 A	32 A	38 A	45 A
1IN1670	1IN1671	1IN1672	1IN1673	1IN1674	1IN1675	1IN1676	1IN1677	1IN1678	1IN1688	1IN1689	1IN1690	1IN1691	1IN1692	1IN1693

Fans / Controllers - Inverters Pairing

MODEL	CODE	MOTOR CURRENT A	kW	ELECTRONIC				SELF-TRANSFORMER							
				SINGLE-PHASE				SINGLE-PHASE				THREE-PHASES			
				R10	R15	RV-1	RV-2	RVS	RVS1	RVS2	RVS3	RVST	RVST1	RVST2	RVST3
				1.0 A	1.5 A	4.0 A	7.0 A	0.5 A	1.5 A	4.0 A	7.0 A	1.8 A	4.0 A	7.0 A	14.0 A
				2RV4110	2RV4111	1RV2007	2RV2000	2RV4042	2RV4059	2RV4058	2RV4061	2RV4085	2RV4062	2RV4086	2RV4087
ELIBOX 7/7 AM	1EB1000	0,6	0,072	•					•						
ELIBOX 7/7 BM	1EB1002	1,2	0,147		•				•						
ELIBOX 9/7 AM	1EB1502	1,5	0,2		•				•						
ELIBOX 9/7 BM	1EB1501	3,6	0,373			•				•					
ELIBOX 9/9 AM	1EB1703	1,8	0,2			•				•					
ELIBOX 9/9 BM	1EB1704	4,4	0,55				•				•				
ELIBOX 10/8 AM	1EB1904	3,6	0,373			•				•					
ELIBOX 10/8 BM	1EB1901	3,6	0,373			•				•					
ELIBOX 10/10 AM	1EB1905	3,1	0,245			•				•					
ELIBOX 10/10 BM	1EB1903	4,6	0,55				•				•				
ELIBOX 12/9 AM	1EB2003	7,6	0,736												
ELIBOX 12/9T	1EB2002	7/4.1	1,1											•	
ELIBOX 12/12 AM	1EB2004	6	0,736				•				•				
ELIBOX 12/12T	1EB2001	8.25/4.75	1,1												•
HT 352 T	7HT3511	2,5	1,1										•		
HT 402 T	7HT4016	4,9	2,2											•	
HT 452 T	7HT4510	6,4	3											•	
HT 502 T	7HT5027	8	4												•
HT 502 T	7HT5026	10,8	5,5												•
HT 552 T	7HT5524	14,1	7,5												
HT 562 T	7HT5606	20,6	11												
HT 632 T	7HT6303	27,5	15												
IC 100 M	1IC0000	0,36	0,09	•				•							
IC 100 T	1IC0001	0,17	0,09									•			
IC 120 M	1IC0200	1,75	0,37			•				•					
IC 120 T	1IC0201	0,9	0,25									•			
IC 140 M	1IC0400	2,8	0,37			•				•					
IC 140 T	1IC0401	1,1	0,37									•			
IC 160 M	1IC0601	5,2	0,75				•				•				
IC 160 T	1IC0600	1,9	0,75										•		
IC 180 M	1IC0801	6,7	1,1				•				•				
IC 180 T	1IC0800	2,3	1,1										•		
IC 100 T AT	1IC1031	0,2	0,09									•			
IC 120 T AT	1IC1281	0,8	0,25									•			
IC 140 T AT	1IC1495	1	0,37									•			
IC 160 T AT	1IC1672	1,8	0,75									•			
IC 180 T AT	1IC1842	2,4	1,1										•		
ICA-D 202 M	7PA2095	1,4	0,18		•				•						
ICA-D 252 M	7PA2622	2,2	0,37			•				•					
ICA-D 254 M	7PA2623	1,3	0,11		•				•						
ICA-D 282 M	7PA2884	4,4	0,75				•				•				
ICA-D 284 M	7PA2887	1,5	0,18		•				•						
ICA-D 312 M	7PA3100	8,5	1,5												
ICA-D 314 M	7PA3101	2	0,24			•				•					
ICA-D 354 M	7PA3619	2,7	0,37			•				•					
ICA-D 404 M	7PA4091	3,7	0,55			•				•					
ICA-D 202 T	7PA2088	0,55	0,18									•			
ICA-D 252 T	7PA2610	1,05	0,37									•			
ICA-D 254 T	7PA2624	0,55	0,11									•			
ICA-D 282 T	7PA2888	1,75	0,75									•			
ICA-D 284 T	7PA2889	0,7	0,18									•			
ICA-D 312 T	7PA3216	3,2	1,5										•		
ICA-D 314 T	7PA3217	0,85	0,24									•			
ICA-D 316 T	7PA3218	0,7	0,18									•			
ICA-D 352 T	7PA3611	4,54	2,2											•	
ICA-D 354 T	7PA3620	1,11	0,37									•			
ICA-D 356 T	7PA3621	0,7	0,18									•			
ICA-D 404 T	7PA4092	1,6	0,55									•			
ICA-D 406 T	7PA4093	0,87	0,25									•			
ICA-D 454 T	7PA4598	2,5	1,1										•		
ICA-D 456 T	7PA4599	1,23	0,37									•			
ICA-D 504 T	7PA5054	4,83	2,2											•	
ICA-D 506 T	7PA5055	1,65	0,55									•			
ICA-D 564 T	7PA5657	8,23	4												•
ICA-D 566 T	7PA5659	2,82	1,1										•		
ICA-D 634 T	7PA6352	10,9	5,5												•
ICA-D 636 T	7PA6373	5,17	2,2											•	
ICS 200/2 T	1IS0200	2,36	1,1										•		
ICS 200/4 T	1IS0201	0,85	0,25									•			
ICS 225/2 T	1IS0222	4,51	2,2											•	
ICS 225/4 T	1IS0223	1,5	0,55									•			
ICS 250/4 T	1IS0250	1,9	0,75										•		
ICS 250/6 T	1IS0251	1,25	0,37									•			
ICS 280/4 T	1IS0281	3,54	1,5										•		
ICS 280/6 T	1IS0282	2,01	0,75										•		
ICS 315/4 T	1IS0302	6,39	3											•	
ICS 315/6 T	1IS0303	2,74	1,1										•		
ICS 355/4 T	1IS0350	7,75	4												•
ICS 355/6 T	1IS0351	3,91	1,5										•		
ICS 400/4 A T	1IS0401	14,38	7,5												
ICS 400/4 B T	1IS0400	10,74	5,5												•

Fans / Controllers - Inverters Pairing

INVERTER														
SINGLE-PHASE (INPUT 230/1/50, OUTPUT 400/3/50)				THREE-PHASES (INPUT 400/1/50, OUTPUT 400/3/50)										
VFDEL M 0.4	VFDEL M 0.75	VFDEL M 1.5	VFDEL M 2.2	VFDEL T 0.4	VFDEL T 0.75	VFDEL T 1.5	VFDEL T 2.2	VFDEL T 3.7	VFDE T 5.5	VDFE T 7.5	VDFE T 11	VDFE T 15	VDFE T 18.5	VDFE T 22
2.5 A	4.2 A	7.5 A	11 A	1.5 A	2.5 A	4.2 A	5.5 A	8.2 A	13 A	18 A	24 A	32 A	38 A	45 A
1IN1670	1IN1671	1IN1672	1IN1673	1IN1674	1IN1675	1IN1676	1IN1677	1IN1678	1IN1688	1IN1689	1IN1690	1IN1691	1IN1692	1IN1693
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Fans / Controllers - Inverters Pairing

MODEL	CODE	MOTOR CURRENT A	kW	ELECTRONIC				SELF-TRANSFORMER							
				SINGLE-PHASE				SINGLE-PHASE				THREE-PHASES			
				R10	R15	RV-1	RV-2	RVS	RVS1	RVS2	RVS3	RVST	RVST1	RVST2	RVST3
				1.0 A	1.5 A	4.0 A	7.0 A	0.5 A	1.5 A	4.0 A	7.0 A	1.8 A	4.0 A	7.0 A	14.0 A
				2RV4110	2RV4111	1RV2007	2RV2000	2RV4042	2RV4059	2RV4058	2RV4061	2RV4085	2RV4062	2RV4086	2RV4087
ICS 400/6 T	1IS0402	4,8	2,2											•	
ICS 400/8 T	1IS0403	3,4	1,1										•		
ICS 450/4 A T	1IS0450	21,96	11												
ICS 450/4 B T	1IS0451	16,71	9,2												
ICS 450/6 T	1IS0452	8,6	4												•
ICS 450/8 T	1IS0453	5,5	2,2											•	
IEL 202 M	1IE0019	0,38	0,08	•				•							
IEL 254 M	1IE0020	0,24	0,05	•				•							
IEL 314 M	1IE0021	0,42	0,1	•				•							
IEL 354 M	1IE0022	0,56	0,12	•					•						
IEL 404 M	1IE0023	1,05	0,24		•				•						
IEL 404 T	1IE0024	0.46/0.27	0.23/0.17									•			
IEL 454 M	1IE0031	2,9	0,6			•				•					
IEL 454 T	1IE0030	1.10/0.66	0.54/0.36									•			
IEL 504 M	1IE0027	3,2	0,72			•				•					
IEL 504 T	1IE0028	1.45/0.96	0.84/0.54									•			
IEL 564 T	1IE0029	2.20/1.10	1.05/0.58										•		
IEL 636 T	1IE0016	1.25/0.72	0.62/0.44									•			
IEL 716 T	1IE0017	1.75/1.10	0.94/0.64									•			
IEM 202 M	1IE0210	0,52	0,09	•					•						
IEM 202 T	1IE0211	0,23	0,05									•			
IEM 204 M	1IE0212	0,38	0,09	•				•							
IEM 204 T	1IE0213	0,16	0,03									•			
IEM 252 M	1IE0260	1,2	0,12		•				•						
IEM 252 T	1IE0261	0,5	0,12									•			
IEM 254 M	1IE0262	0,43	0,09	•				•							
IEM 254 T	1IE0263	0,16	0,09									•			
IEM 312 M	1IE0310	2,1	0,25			•				•					
IEM 312 T	1IE0311	0,9	0,25									•			
IEM 314 M	1IE0312	1	0,09	•					•						
IEM 314 T	1IE0313	0,6	0,09									•			
IEM 354 M	1IE0360	1,1	0,12		•				•						
IEM 354 T	1IE0361	0,6	0,12									•			
IEM 404 M	1IE0410	1,1	0,12		•				•						
IEM 404 T	1IE0411	0,6	0,12									•			
IEM 454 M	1IE0456	3,2	0,37			•				•					
IEM 454 T	1IE0457	1,1	0,37									•			
IEM 504 T	1IE0504	1,6	0,55									•			
IEM 506 T	1IE0506	0,66	0,18									•			
IEM 508 T	1IE0505	0,71	0,12									•			
IEM 564 T	1IE0563	1,9	0,75										•		
IEM 566 T	1IE0564	0,87	0,25									•			
IEM 568 T	1IE0565	0,71	0,12									•			
IEM 634 T	1IE0604	2,5	1,1										•		
IEM 636 T	1IE0605	1,2	0,37									•			
IEM 638 T	1IE0606	1,1	0,25									•			
IEM 714 T	1IE0705	4,8	2,2											•	
IEM 716 T	1IE0706	2,01	0,75										•		
IEM 718 T	1IE0707	1,41	0,37									•			
IES 202 M	1EL0202	0,25	0,036	•				•							
IES 252 M	1EL0251	0,42	0,06	•				•							
IES 314 M	1EL0302	0,42	0,06	•				•							
IES 354 M	1EL0351	0,76	0,12	•					•						
MBX 100	1MB4101	0,23	0,05	•				•							
MBX 125	1MB4126	0,23	0,05	•				•							
MBX 150	1MB4151	0,23	0,05	•				•							
MBX 200	1MB4201	0,49	0,11	•				•							
MBX 250	1MB4251	0,65	0,15	•					•						
MBX 315	1MB4316	1,14	0,26		•				•						
PDL 312 T	7PD0312	4,9	2,2											•	
PDL 314 T	7PD0313	0,6	0,18									•			
PDL 352 T	7PD0352	6,4	3											•	
PDL 354 T	7PD0353	1,18	0,37									•			
PDL 402 T	7PD0402	10,6	5,5												•
PDL 404 T	7PD0403	1,6	0,55									•			
PDL 452 T	7PD0452	20,4	11												
PDL 454 T	7PD0453	2,7	1,1										•		
PDL 502 T	7PD0503	33,5	18,5												
PDL 504 T	7PD0504	5,4	2,2											•	
PDL 506 T	7PD0505	1,8	0,55									•			
PDL 564 T	7PD0562	8,5	4												•
PDL 566 T	7PD0563	3,5	1,1										•		
PDL 634 T	7PD0632	14,7	7,5												
PDL 636 T	7PD0633	5,3	2,2											•	
PDL 714 T	7PD0712	29	15												
PDL 716 T	7PD0713	9,1	4												•
PDL 804 T	7PD0802	41	22												
PDL 806 T	7PD0803	15,2	7,5												
PDL 904 T	7PD0902	80,5	45												
PDL 906 T	7PD0903	29	15												
PDL 1004 T	7PD1002	134	75												

INVERTER														
SINGLE-PHASE (INPUT 230/1/50, OUTPUT 400/3/50)				THREE-PHASES (INPUT 400/1/50, OUTPUT 400/3/50)										
VFDEL M 0.4	VFDEL M 0.75	VFDEL M 1.5	VFDEL M 2.2	VFDEL T 0.4	VFDEL T 0.75	VFDEL T 1.5	VFDEL T 2.2	VFDEL T 3.7	VFDE T 5.5	VDFE T 7.5	VDFE T 11	VDFE T 15	VDFE T 18.5	VDFE T 22
2.5 A	4.2 A	7.5 A	11 A	1.5 A	2.5 A	4.2 A	5.5 A	8.2 A	13 A	18 A	24 A	32 A	38 A	45 A
1IN1670	1IN1671	1IN1672	1IN1673	1IN1674	1IN1675	1IN1676	1IN1677	1IN1678	1IN1688	1IN1689	1IN1690	1IN1691	1IN1692	1IN1693

Fans / Controllers - Inverters Pairing

MODEL	CODE	MOTOR CURRENT A	kW	ELECTRONIC				SELF-TRANSFORMER							
				SINGLE-PHASE				SINGLE-PHASE				THREE-PHASES			
				R10	R15	RV-1	RV-2	RVS	RVS1	RVS2	RVS3	RVST	RVST1	RVST2	RVST3
				1.0 A	1.5 A	4.0 A	7.0 A	0.5 A	1.5 A	4.0 A	7.0 A	1.8 A	4.0 A	7.0 A	14.0 A
				2RV4110	2RV4111	1RV2007	2RV2000	2RV4042	2RV4059	2RV4058	2RV4061	2RV4085	2RV4062	2RV4086	2RV4087
PDL 1006 T	7PD1003	42,5	22												
PF 222 T	7PF2211	0,6	0,18									•			
PF 252 T	7PF2514	1,1	0,37									•			
PF 282 T	7PF2820	1,9	0,75										•		
PF 312 T	7PF3115	3,4	1,5										•		
PF 352 T	7PF3524	4,9	2,2											•	
PF 402 T	7PF4031	8	4												•
PF 452 T	7PF4521	14,1	7,5												
PF 502 T	7PF5021	27,5	15												
PF 504 T	7PF5023	3,6	1,5										•		
PF 562 T	7PF5622	39,5	22												
PF 564 T	7PF5623	6,8	3											•	
PF 634 T	7PF6341	11,3	5,5												•
PF 714 T	7PF7141	22	11												
PF 804 T	7PF8041	35	18,5												
PF 806 T	7PF8042	12,3	5,5												•
PF 904 T	7PF9041	68	37												
PF 906 T	7PF9042	22	11												
PMP 314 M	1PM0030	0,42	0,1	•				•							
PMP 354 M	1PM0035	0,56	0,12	•					•						
PMP 404 M	1PM0040	1,05	0,24		•				•						
PMP 404 T	1PM0041	0.46/0.27	0.23/0.17									•			
PMP 454 M	1PM0045	2,9	0,6			•				•					
PMP 454 T	1PM0047	1.10/0.66	0.54/0.36									•			
PMP 504 M	1PM0050	3,2	0,72			•				•					
PMP 504 T	1PM0051	1.45/0.96	0.84/0.54									•			
PMP 564 T	1PM0056	2.20/1.10	1.05/0.58										•		
TAC-N 404 T	1TA0407	0,56	0,18									•			
TAC-N 454 T	1TA0458	0,25	0,25									•			
TAC-N 504 T	1TA0512	1,47	0,55									•			
TAC-N 506 T	1TA0513	0,66	0,18									•			
TAC-N 564 T	1TA0569	1,99	0,75										•		
TAC-N 566 T	1TA0570	0,87	0,18									•			
TAC-N 634 T	1TA0645	2,5	1,1										•		
TAC-N 636 T	1TA0646	0,87	0,25									•			
TAC-N 714 T	1TA0722	3,54	1,5										•		
TAC-N 716 T	1TA0723	1,2	0,37									•			
TAC-N 804 T	1TA0814	7,75	4												•
TAC-N 806 T	1TA0815	2,74	1,1										•		
TAC-N 904 T	1TA0916	16,71	9,2												
TAC-N 906 T	1TA0917	6,95	3											•	
TCF 254 M	1TF2520	1	0,09	•					•						
TCF 254 T	1TF2521	0,6	0,09									•			
TCF 314 M	1TF3020	1,3	0,12		•				•						
TCF 314 T	1TF3021	0,7	0,12									•			
TCF 316 M	1TF3022	1,4	0,15		•				•						
TCF 316 T	1TF3023	0,6	0,09									•			
TCF 354 M	1TF3520	2,2	0,25			•				•					
TCF 354 T	1TF3521	0,8	0,25									•			
TCF 356 M	1TF3522	1,8	0,18			•				•					
TCF 356 T	1TF3523	0,8	0,18									•			
TCF 404 M	1TF4020	4,3	0,55				•				•				
TCF 404 T	1TF4021	1,6	0,55									•			
TCF 406 M	1TF4022	1,8	0,18			•				•					
TCF 406 T	1TF4023	0,8	0,18									•			
TCF 408 T	1TF4024	0,71	0,12									•			
TCF 454 M	1TF4520	5,5	0,75				•				•				
TCF 454 T	1TF4521	2,2	0,75										•		
TCF 456 T	1TF4522	1,2	0,37									•			
TCF 458 T	1TF4523	1,2	0,25									•			
TCF 504 T	1TF5020	2,5	1,1										•		
TCF 506 T	1TF5021	1,2	0,37									•			
TCF 508 T	1TF5022	1,2	0,25									•			
TCF 566 T	1TF5520	1,8	0,55									•			
TCF 568 T	1TF5521	1,8	0,25									•			
TCF 636 T	1TF6020	2,74	1,1										•		
TCF 638 T	1TF6021	2,04	0,55										•		
TCF 756 T	1TF7520	5,45	2,2											•	
TCF 758 T	1TF7521	3,38	1,1										•		
TCF 806 T	1TF8020	6,6	3											•	
TCF 808 T	1TF8021	4,21	1,5											•	
TCV 254 M	1TF2522	1	0,09	•					•						
TCV 254 T	1TF2523	0,6	0,09									•			
TCV 314 M	1TF3025	1,3	0,12		•				•						
TCV 314 T	1TF3026	0,7	0,12									•			
TCV 316 M	1TF3027	1,4	0,15		•				•						
TCV 316 T	1TF3028	0,6	0,09									•			
TCV 354 M	1TF3525	2,2	0,25			•				•					
TCV 354 T	1TF3526	0,8	0,25									•			
TCV 356 M	1TF3527	1,8	0,18			•				•					
TCV 356 T	1TF3528	0,8	0,18									•			

INVERTER														
SINGLE-PHASE (INPUT 230/1/50, OUTPUT 400/3/50)				**THREE-PHASES** (INPUT 400/1/50, OUTPUT 400/3/50)										
VFDEL M 0.4	VFDEL M 0.75	VFDEL M 1.5	VFDEL M 2.2	VFDEL T 0.4	VFDEL T 0.75	VFDEL T 1.5	VFDEL T 2.2	VFDEL T 3.7	VFDE T 5.5	VDFE T 7.5	VDFE T 11	VDFE T 15	VDFE T 18.5	VDFE T 22
2.5 A	4.2 A	7.5 A	11 A	1.5 A	2.5 A	4.2 A	5.5 A	8.2 A	13 A	18 A	24 A	32 A	38 A	45 A
1IN1670	1IN1671	1IN1672	1IN1673	1IN1674	1IN1675	1IN1676	1IN1677	1IN1678	1IN1688	1IN1689	1IN1690	1IN1691	1IN1692	1IN1693
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Fans / Controllers - Inverters Pairing

MODEL	CODE	MOTOR CURRENT A	kW	ELECTRONIC				SELF-TRANSFORMER							
				SINGLE-PHASE				SINGLE-PHASE				THREE-PHASES			
				R10	R15	RV-1	RV-2	RVS	RVS1	RVS2	RVS3	RVST	RVST1	RVST2	RVST3
				1.0 A	1.5 A	4.0 A	7.0 A	0.5 A	1.5 A	4.0 A	7.0 A	1.8 A	4.0 A	7.0 A	14.0 A
				2RV4110	2RV4111	1RV2007	2RV2000	2RV4042	2RV4059	2RV4058	2RV4061	2RV4085	2RV4062	2RV4086	2RV4087
TCV 404 M	1TF4026	4,3	0,55				•				•				
TCV 404 T	1TF4027	1,6	0,55									•			
TCV 406 M	1TF4028	1,8	0,18			•				•					
TCV 406 T	1TF4029	0,8	0,18									•			
TCV 408 T	1TF4030	0,71	0,12									•			
TCV 454 M	1TF4525	5,5	0,75				•				•				
TCV 454 T	1TF4526	2,2	0,75										•		
TCV 456 T	1TF4527	1,2	0,37									•			
TCV 458 T	1TF4528	1,2	0,25									•			
TCV 504 T	1TF5024	2,5	1,1										•		
TCV 506 T	1TF5025	1,2	0,37									•			
TCV 508 T	1TF5026	1,2	0,25									•			
TCV 566 T	1TF5523	1,8	0,55									•			
TCV 568 T	1TF5524	1,8	0,25									•			
TCV 636 T	1TF6023	2,74	1,1										•		
TCV 638 T	1TF6024	2,04	0,55										•		
TCV 756 T	1TF7523	5,45	2,2											•	
TCV 758 T	1TF7524	3,38	1,1										•		
TCV 806 T	1TF8023	6,6	3											•	
TCV 808 T	1TF8024	4,21	1,5											•	
TCF-AT 354 T	1TF3529	0,8	0,25									•			
TCF-AT 404 T	1TF4031	1,6	0,55									•			
TCF-AT 454 T	1TF4529	2,2	0,75										•		
TCF-AT 504 T	1TF5027	2,5	1,1										•		
TCF-AT 566 T	1TF5525	1,8	0,55									•			
TCF-AT 636 T	1TF6025	2,74	1,1										•		
TCF-AT 756 T	1TF7526	5,45	2,2											•	
TCF-AT 806 T	1TF8026	6,6	3											•	
TCF-AT 2V 354/6 T	1TF3530	0.9/0.31	0.29/0.09									•			
TCF-AT 2V 404/6 T	1TF4032	1.57/0.76	0.55/0.2									•			
TCF-AT 2V 454/6 T	1TF4530	2.05/0.95	0.75/0.27										•		
TCF-AT 2V 504/6 T	1TF5028	3.4/1.43	1.4/0.45										•		
TCF-AT 2V 566/8 T	1TF5526	2.24/1.22	0.65/0.25										•		
TCF-AT 2V 636/8 T	1TF6026	4.07/2.23	1.3/0.55											•	
TCF-AT 2V 756/8 T	1TF7527	6/3.32	2.2/0.9											•	
TCF-AT 2V 806/8 T	1TF8027	9.32/8.43	3.7/2.6												•
TCF-2V 314/6 T	1TF3024	0.55/0.18	0.18/0.06									•			
TCF-2V 354/6 T	1TF3524	0.9/0.31	0.29/0.09									•			
TCF-2V 404/6 T	1TF4025	1.57/0.76	0.55/0.2									•			
TCF-2V 454/6 T	1TF4524	2.05/0.95	0.75/0.27										•		
TCF-2V 504/6 T	1TF5023	3.4/1.43	1.4/0.45										•		
TCF-2V 566/8 T	1TF5522	2.24/1.22	0.65/0.25										•		
TCF-2V 636/8 T	1TF6022	4.07/2.23	1.3/0.55											•	
TCF-2V 756/8 T	1TF7522	6/3.32	2.2/0.9											•	
TCF-2V 806/8 T	1TF8022	9.32/8.43	3.7/2.6												•
TCR 202 M	1TR2002	0,3	0,06	•				•							
TCR 252 M	1TR2502	0,9	0,2	•					•						
TCR 254 M	1TR2503	0,8	0,12	•					•						
TCR 314 M	1TR3002	0,7	0,17	•					•						
TCR 314 T	1TR3003	0,35	0,18									•			
TCR 354 M	1TR3503	1,8	0,4			•				•					
TCR 354 T	1TR3504	0,7	0,4									•			
TCR 404 T	1TR4001	1,3	0,7									•			
TCV-2V 314/6 T	1TF3016	0.55/0.18	0.18/0.06									•			
TCV-2V 354/6 T	1TF3515	0.9/0.31	0.29/0.09									•			
TCV-2V 404/6 T	1TF4006	1.57/0.76	0.55/0.2									•			
TCV-2V 454/6 T	1TF4507	2.05/0.95	0.75/0.27										•		
TCV-2V 504/6 T	1TF5004	3.4/1.43	1.4/0.45										•		
TCV-2V 566/8 T	1TF5510	2.24/1.22	0.65/0.25										•		
TCV-2V 636/8 T	1TF6013	4.07/2.23	1.3/0.55											•	
TCV-2V 756/8 T	1TF7525	6/3.32	2.2/0.9											•	
TCV-2V 806/8 T	1TF8025	9.32/8.43	3.7/2.6												•
ZOO 63 R	7ZO1000	1,2	0,37									•			
ZOO 63 S	7ZO1001	1,2	0,37									•			
ZOO 75 R	7ZO1100	1,5	0,55									•			
ZOO 75 S	7ZO1150	1,5	0,55									•			
ZOO 95 R	7ZO1200	1,5	0,55									•			
ZOO 95 S	7ZO1201	1,5	0,55									•			
ZOO 125 S POTENZIATO	7ZO1250	1,1	1,1									•			
ZOO 125 S	7ZO1251	2,2	0,75										•		
ZOO 125 R POTENZIATO	7ZO1270	3	1,1										•		
ZOO 125 R	7ZO1271	2,2	0,75										•		

Fans / Controllers - Inverters Pairing

INVERTER														
SINGLE-PHASE (INPUT 230/1/50, OUTPUT 400/3/50)				THREE-PHASES (INPUT 400/1/50, OUTPUT 400/3/50)										
VFDEL M 0.4	VFDEL M 0.75	VFDEL M 1.5	VFDEL M 2.2	VFDEL T 0.4	VFDEL T 0.75	VFDEL T 1.5	VFDEL T 2.2	VFDEL T 3.7	VFDE T 5.5	VDFE T 7.5	VDFE T 11	VDFE T 15	VDFE T 18.5	VDFE T 22
2.5 A	4.2 A	7.5 A	11 A	1.5 A	2.5 A	4.2 A	5.5 A	8.2 A	13 A	18 A	24 A	32 A	38 A	45 A
1IN1670	1IN1671	1IN1672	1IN1673	1IN1674	1IN1675	1IN1676	1IN1677	1IN1678	1IN1688	1IN1689	1IN1690	1IN1691	1IN1692	1IN1693
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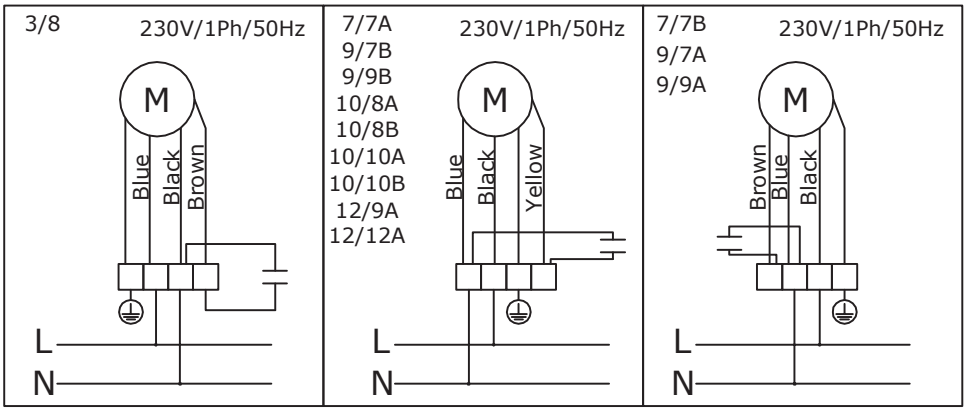
	THREE-PHASE		SINGLE-PHASE	
	DIAGRAM N°	PAGE	DIAGRAM N°	PAGE
CMP	SE06	231	SE12	336
CMP ATEX	SE06	231	SE12	336
CMP-JC HT	SE04	229		
CMP-JD HT	SE04	229		
CMP-JD LP HT	SE04	229		
CMP-S HT	SE06	231		
CMZ	SE05T	230	SE05M	230
E-CUBE	SE06	231	SE11	235
E-CUBE PLUS	SE06	231	SE11	235
ELIBOX	SE02T	227	SE02M	227
HT	SE06	231		
HT ATEX	SE06	231		
IC	SE06	231	SE11	235
ICA-D	SE06	231	SE11	235
ICA-D ATEX	SE06	231		
IC ATEX	SE06	231	SE12	336
ICS	SE06	231		
ICS ATEX	SE06	231		
IEL	SE10T	234	SE10M	234
IEM	SE06	231	SE11	235
IES			SE09	233
MBX	SE03	228		
PDL	SE06	231		
PDL ATEX	SE06	231		
PF	SE06	231		
PF ATEX	SE06	231		
PMP	SE05T	230	SE05M	230
TCF	SE06	231	SE11	235
TCF 2V	SE04	229		
TCF AT	SE06	231		
TCF AT 2V	SE04	229		
TCF ATEX	SE06	231	SE12	336
TCF HT	SE06	231		
TCV	SE06	231	SE11	235
TCV 2V	SE04	229		
TCV ATEX	SE06	231	SE12	336
TCR	SE08T	232	SE08M	232
TCF HT	SE06	231		
ZOO	SE06	231		

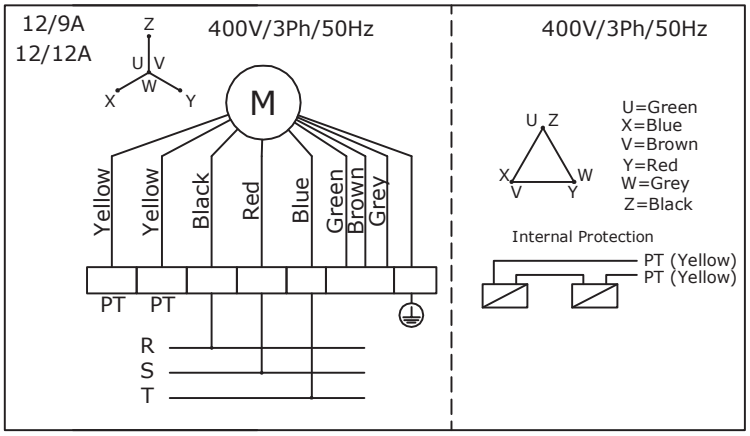
Always check the correct connection according to the data reported on the motor.

SE02

SE02 M

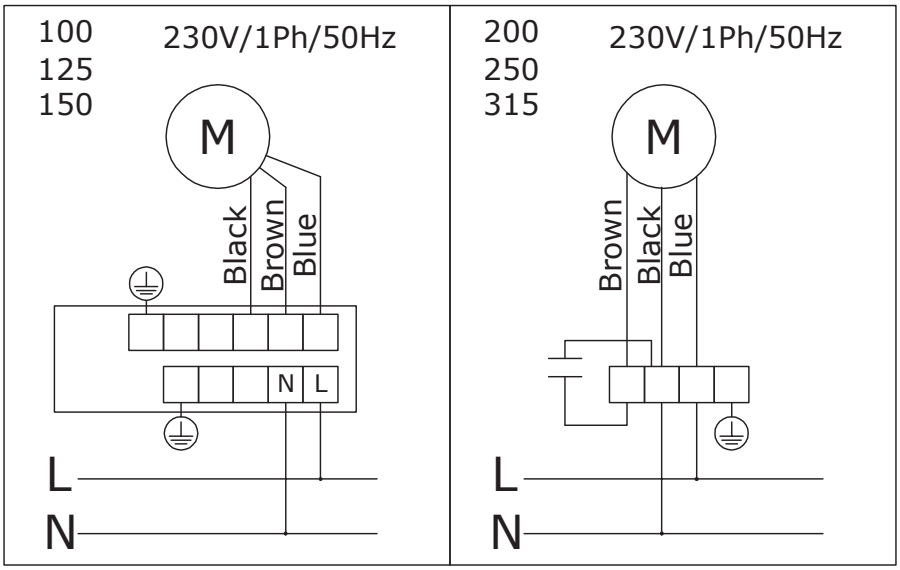


SE02 T



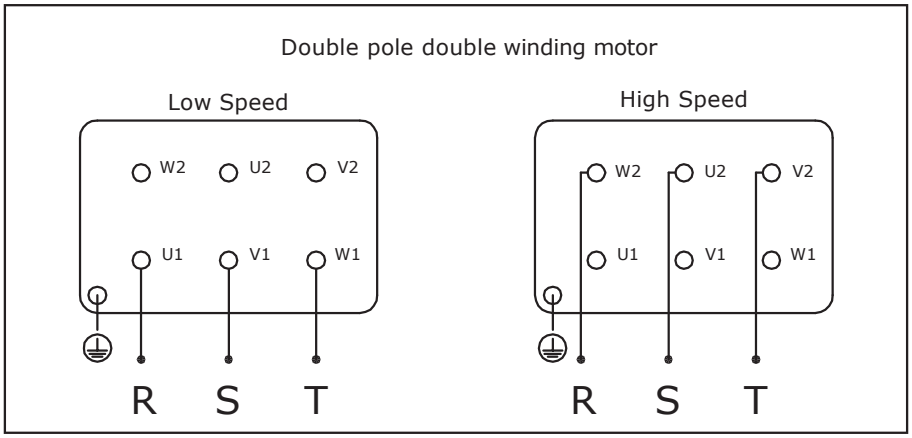
Always check the correct connection according to the data reported on the motor.

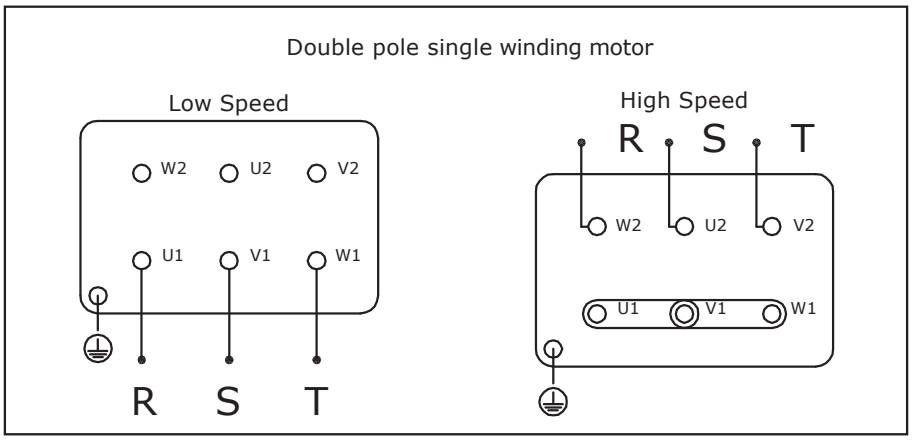
SE03



Always check the correct connection according to the data reported on the motor.

SE04

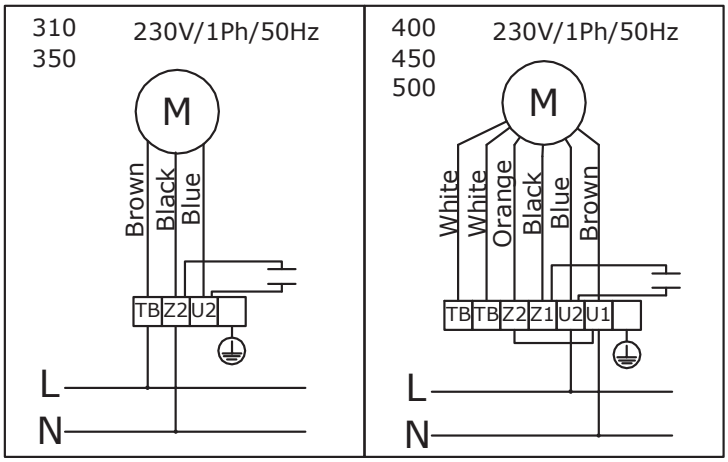




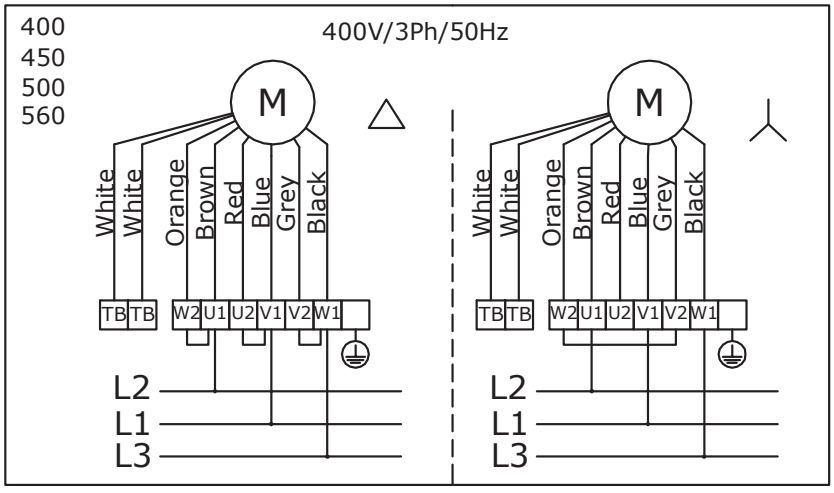
Always check the correct connection according to the data reported on the motor.

SE05

SE05 M



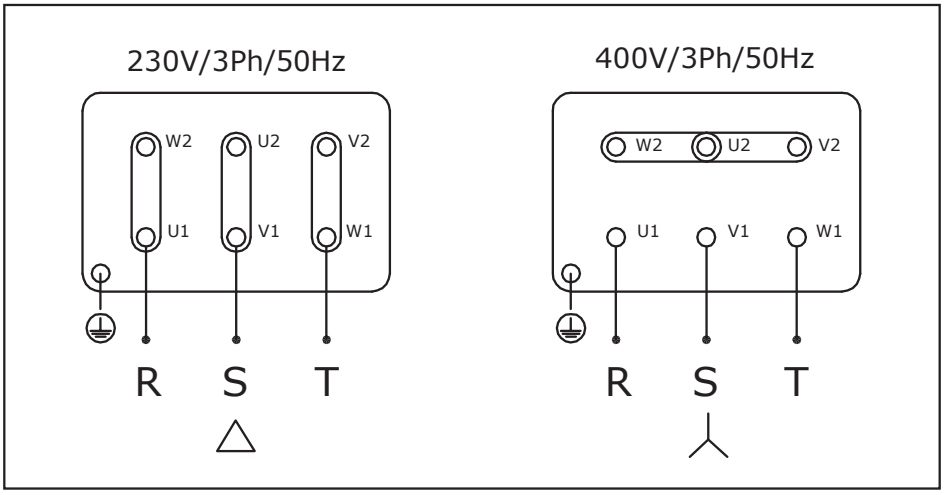
SE05 T

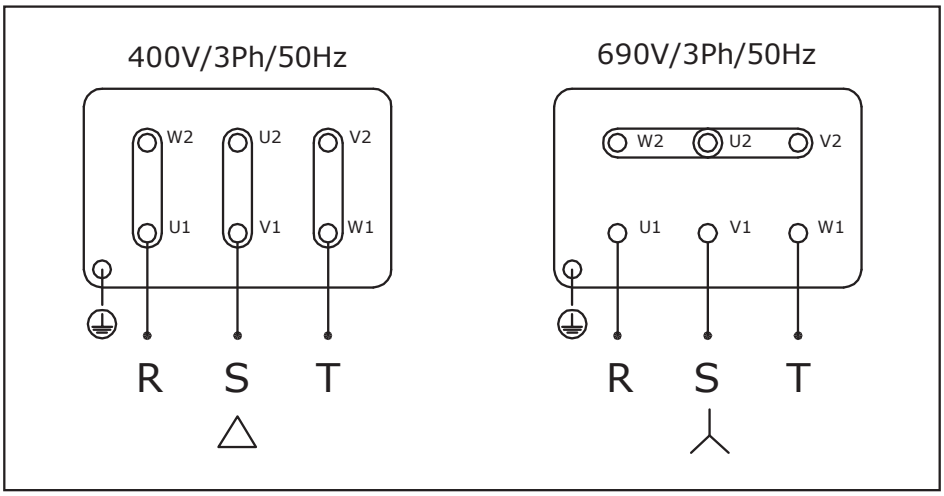


6

Always check the correct connection according to the data reported on the motor.

SE06

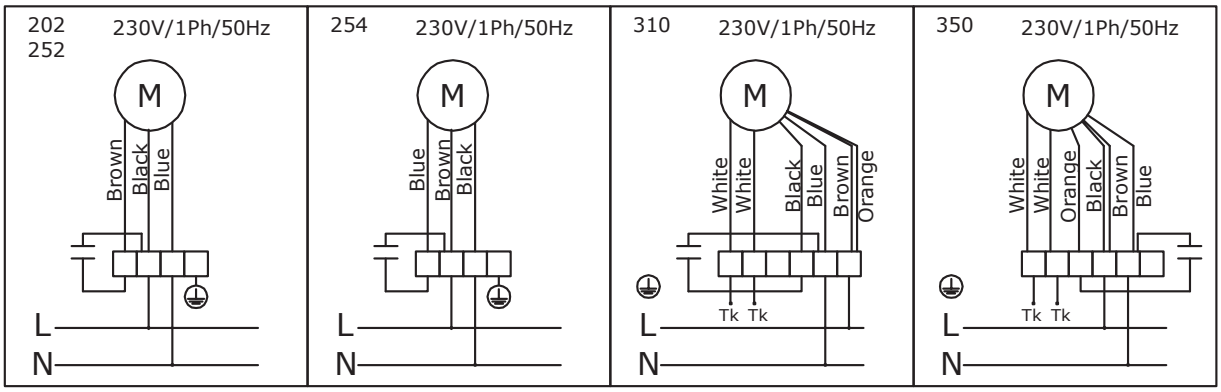




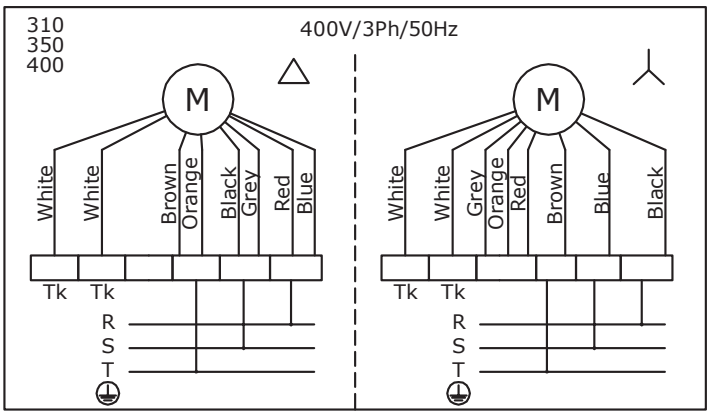
Always check the correct connection according to the data reported on the motor.

SE08

SE08 M

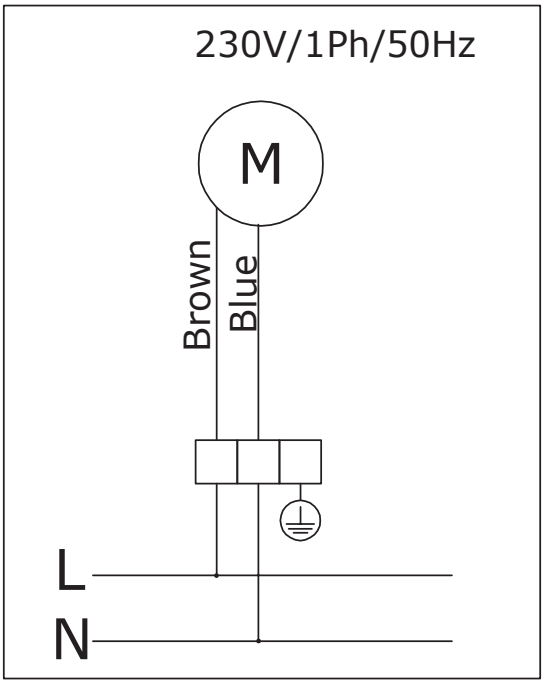


SE08 T



Always check the correct connection according to the data reported on the motor.

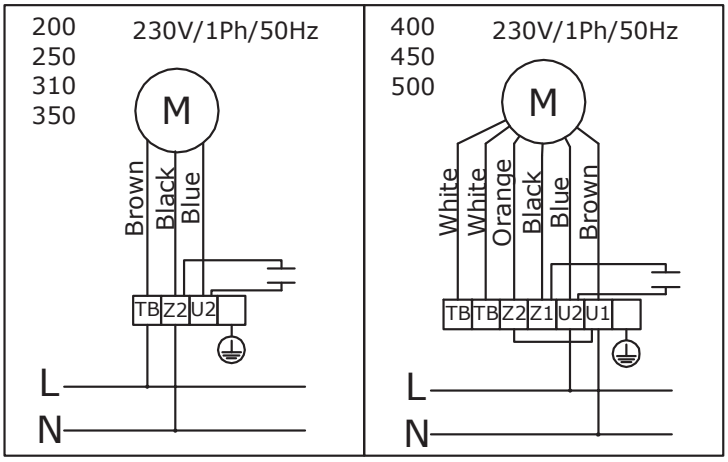
SE09



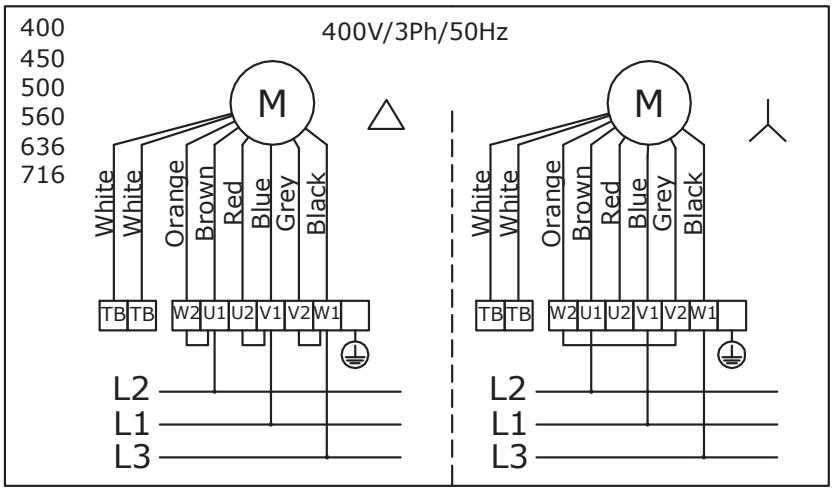
Always check the correct connection according to the data reported on the motor.

SE10

SE10 M

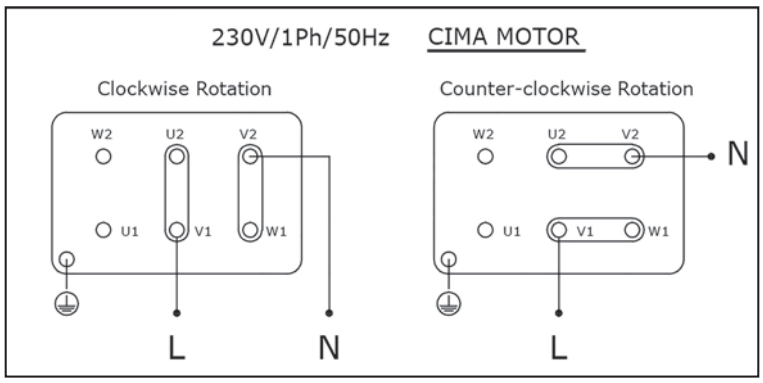


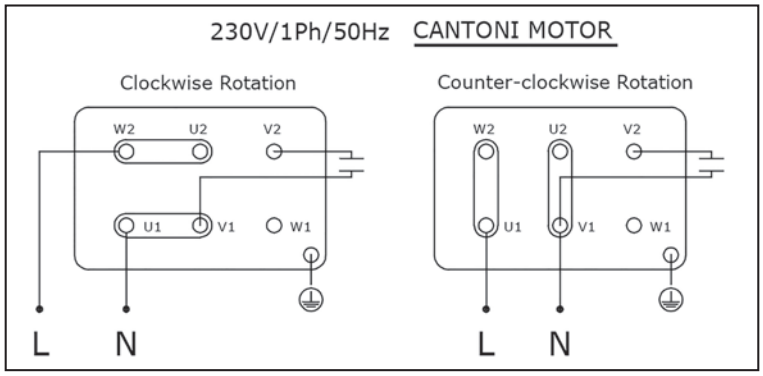
SE10 T

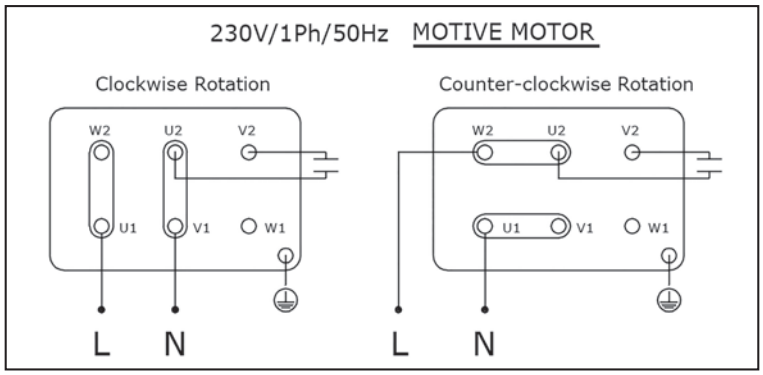


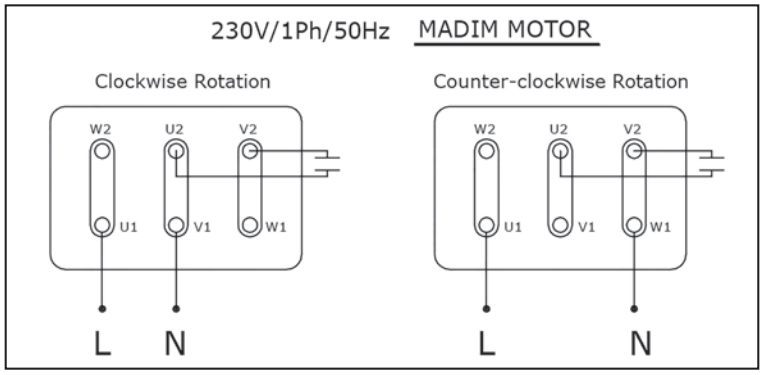
Always check the correct connection according to the data reported on the motor.

SE11





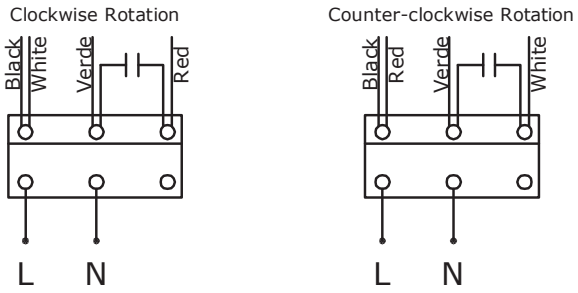




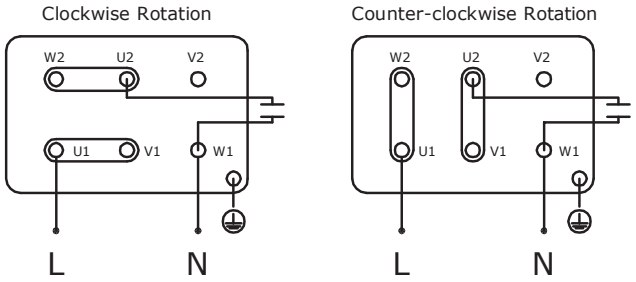
Always check the correct connection according to the data reported on the motor.

SE12

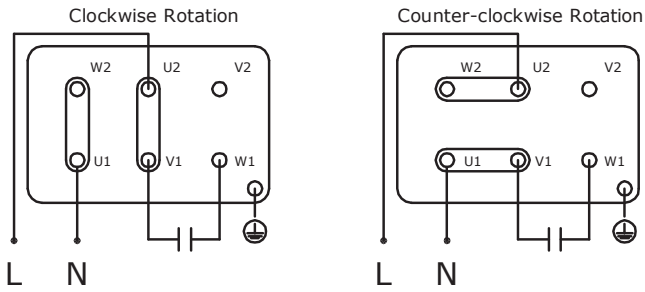
230V/1Ph/50Hz IIC - RAEL MOTOR



230V/1Ph/50Hz IIB - RAEL MOTOR



230V/1Ph/50Hz CEMP MOTOR



Always check the correct connection according to the data reported on the motor.

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Membro di:

We reserve the right to modify any technical data without notice.
Different voltage and frequency upon request.

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