CJPF
CJPF/ATEX

HIGH AIRFLOW VENTILATION UNITS
WITH HIGH EFFICIENCY PLUG FANS

- ALUMINIUM PROFILE STRUCTURE
- PREFINISHED SHEET CONSTRUCTION
- ACOUSTIC CASING WITH A THICKNESS OF 25 MM
- HIGH ENERGY EFFICIENCY
- EASY CHANGE OF AIR DIRECTION
- LOW NOISE LEVEL

LOM

SODECA®

CE ACCORDING ErP 2018
CJPF

CJPF/ATEX

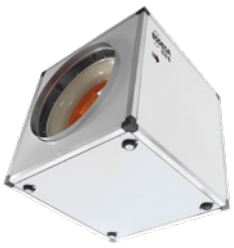
VENTILATION UNITS WITH
HIGH FLOWS

CJPF

CJPF series fans **are especially recommended for extracting and supplying air in areas with stringent soundproofing requirements**, thanks to their acoustic casing made with high quality materials.

Its cubic design facilitates adapting to the installation by modifying the fan air outlet as needed.

Interchangeable covers to supply air on either side.

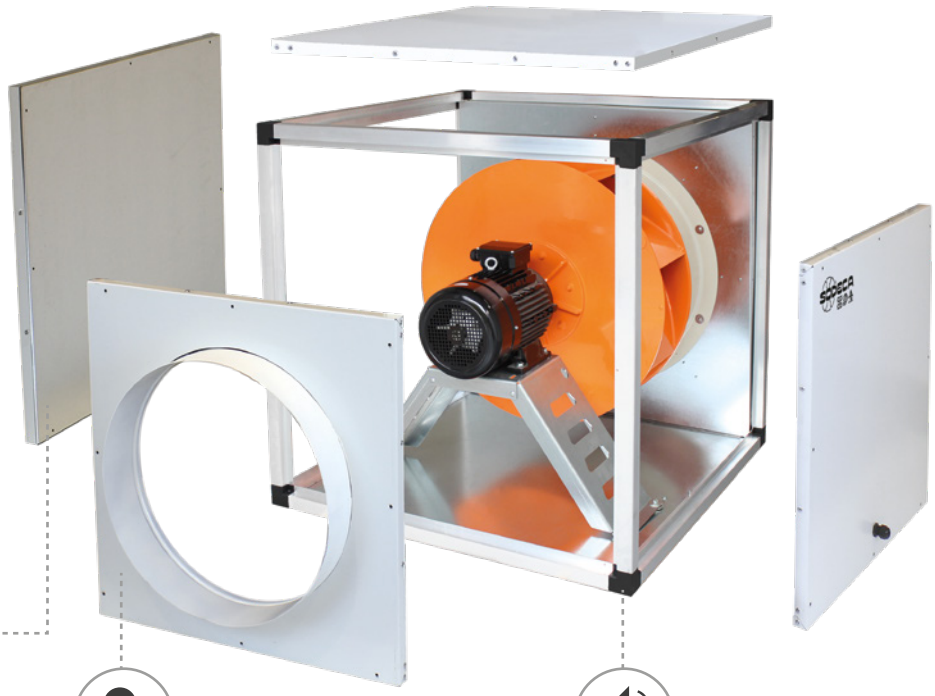


Silentblocks to prevent transmitting vibrations and for properly anchoring the unit.

ENERGY SAVINGS

The inlet is equipped with guide vanes to prevent the air flow from swirling, which, together with a dynamic pressure balance chamber, optimise the efficiency of the unit.

Guide vanes that prevent the air flow from swirling and increase efficiency.



EASY INSTALLATION AND MAINTENANCE

All the covers are interchangeable, which provides this unit with exceptional versatility, allowing to supply air in any direction. Also, the covers can be easily removed to access the inside for cleaning the impeller and conducting maintenance.

DURABILITY

The covers of this unit are made of prefinished sheet and the structural profiles are made of aluminium, which increase the service life of the fan and allows them to be installed outdoors in high corrosion areas. We recommend installing the unit under a canopy roof to prevent water from entering the unit.

LOW NOISE LEVEL

The 25 mm thick acoustic casing, which reduces noise through the use of high-quality insulation materials designed for these applications, makes it the perfect fan for installation in applications that require low noise levels.

SOLUTIONS COMPLIANT WITH THE ATEX DIRECTIVE: MAXIMUM SAFETY AND QUALITY

An ATEX zone is an area containing a mixture of air and flammable gas, flammable liquid vapour, combustible liquid mist or combustible dust, which if ignited, will cause an explosion. Many situations exist that may require specific types of fans that are suitable to operate in these explosive atmospheres. The construction of SODECA's equipment for ATEX is based on a non-sparking fan, powered by an electric motor that is compliant with the requirements of the most stringent standards. SODECA guarantees the quality of its products in order to maximise the safety of personnel and facilities.

In order to adapt its products to specific industrial applications, SODECA has standard production lines as well as a production line for building specials to the client's requirements. Its standard production line meets the most stringent standards of the European ATEX directive 2014/34/EU. The units are designed in accordance with standard EN 14986 to prevent sparks from being generated as a result of friction or impact between the moving and static parts of the fan. They are made using materials which can be combined to prevent the generation of sparks. They also include a copper inlet ring.

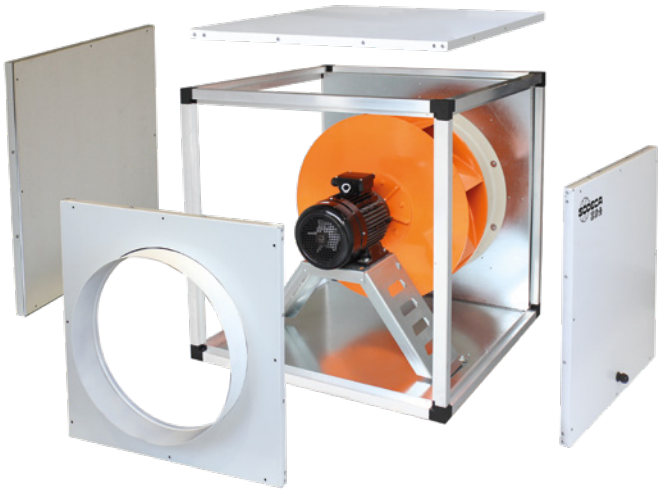
To prevent the risk of explosion in facilities with explosive atmospheres, it is essential to have certified equipment manufactured for this purpose. To comply with the standard, all painted parts of the fan are connected with earth cables to prevent sparks being generated by static electricity.

Any device installed in an explosive atmosphere must be designed and manufactured to prevent ignition and, consequently, prevent an explosion. This can lead to a considerable increase in the cost of equipment, maintenance and safety procedures in facilities with explosive atmospheres. For this reason, in most industries, there is a tendency to declassify the number of explosion risk zones where ever possible.

To fully or partially declassify an area, the area must be vented with air, free of explosive gases or dusts, in order to reduce the concentration of those gases or dusts to below the lower explosive limits. This venting process reduces the level of risk in the area or minimises the size of the classified zone, thus reducing the anti-explosive requirements of the equipment that is to be installed.

EASY TO INSTALL

All the covers are interchangeable, allowing to supply air in any direction



IN-LINE VENTILATION UNITS WITH A HIGH EFFICIENCY PLUG FAN

EFFICIENCY OF THE UNIT
Its inlet and dynamic pressure balance chamber optimise the efficiency of the unit

CJPF

Large airflow ventilation units with high efficiency Plug Fan

Large airflow ventilation units equipped with Plug Fan type fan and acoustic casing with interchangeable covers for easy installation.

Fan:
- Aluminium profile structure.
- Covers with a high quality, 25 mm thick acoustic casing made of prefinished sheet.
- Backward curved impeller.
- Standardised inlet and outlet flanges allowing for easy installation in ducts.
- Interchangeable covers to supply air on either side.
- Air inlet nozzle with diffusers that increase the efficiency of the fan.
- Silentblocks to avoid the transmission of vibrations and a correct anchoring of the equipment.

Motor:
- IE3 efficiency AC motors.
- Class F motors with ball bearings and IP55 protection.
- Three-phase 230/400 V 50 Hz.
- Working temperature: -25 ºC +60 ºC.

Finish:
- Anti-corrosive in pre-lacquered steel sheet and aluminum profiles.

On request:
- With two speed motors.
- Complete with a pressure measurement connection point for optional automatic flow and pressure control.
- ATEX certification.

Order code

CJPF — 2180 — 6T — 5.5

- CJPF: Large airflow ventilation units with high efficiency Plug Fan
- Impeller size
- Number of motor poles
  4=1400 r/min 50 Hz
  6=900 r/min 50 Hz
- T = Three-phase
- Motor power (HP)

Technical characteristics

Model	Speed	Maximum admissible current (A)		Installed power	Maximum flow rate	Sound pressure level[1]	Approx. weight	According ErP
	(r/min)	230V	400V	(kW)	(m^3/h)	dB (A)	(Kg)	
CJPF-1240-4T-1 IE3	1420	2.82	1.62	0.75	4185	30	70	2018
CJPF-1650-4T-2 IE3	1440	5.41	3.11	1.50	8740	40	110	2018
CJPF-1856-4T-4 IE3	1440	10.70	6.15	3.00	12070	40	125	2018
CJPF-1856-6T-1 IE3	940	3.36	1.93	0.75	7995	30	110	2018
CJPF-1663-4T-5.5 IE3	1450	13.90	8.00	4.00	16400	42	140	2018
CJPF-1663-6T-1.5 IE3	945	4.68	2.69	1.10	9870	33	120	2018
CJPF-1871-6T-3 IE3	950	9.08	5.22	2.20	15700	34	180	2018
CJPF-2180-6T-5.5 IE3	960	15.60	8.99	4.00	21500	42	230	2018

[1] Radiated sound pressure level in dB(A) at 1,5 m distance at 50% of full speed.

Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

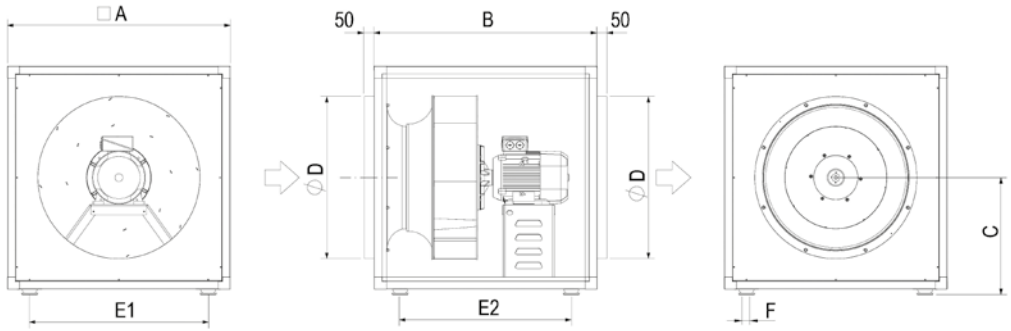
Acoustic characteristics

The indicated values are determined by measuring the sound pressure level and sound power in dB(A) obtained in a free field at a distance equivalent to twice the size of the fan plus the impeller diameter, with a minimum of 1.5 m.

Sound power spectrum Lw(A) in dB(A) per Hz frequency band

	63	125	250	500	1000	2000	4000	8000
CJPF-1240-4T-1 IE3	53	60	60	59	57	56	64	45
CJPF-1650-4T-2 IE3	61	66	74	66	75	67	64	61
CJPF-1856-4T-4 IE3	65	71	76	66	70	68	65	53
CJPF-1856-6T-1 IE3	58	63	62	58	60	58	54	47
CJPF-1663-4T-5.5 IE3	71	68	77	71	71	69	68	53
CJPF-1663-6T-1.5 IE3	57	63	60	69	63	59	53	44
CJPF-1871-6T-3 IE3	58	65	61	67	66	65	61	45
CJPF-2180-6T-5.5 IE3	64	69	66	78	70	66	61	56

Dimensions mm



	A	B	C	ØD	E1	E2	F
CJPF-1240-4T-1 IE3	700	700	375	450	480	470	M6
CJPF-1650-4T-2 IE3	900	900	475	630	686	665	M6
CJPF-1856-4T-4 IE3	900	900	475	630	686	665	M6
CJPF-1856-6T-1 IE3	900	900	475	630	686	665	M6
CJPF-1663-4T-5.5 IE3	900	900	475	630	686	665	M6
CJPF-1663-6T-1.5 IE3	900	900	475	630	686	665	M6
CJPF-1871-6T-3 IE3	1100	1100	577	800	881	845	M8
CJPF-2180-6T-5.5 IE3	1100	1100	577	800	881	845	M8

Accessories

INT

SI-PRESIÓN

PT

TEJ

VIS

VSD3/A-RFT
- VSD1/A-RFM

AET

RPA

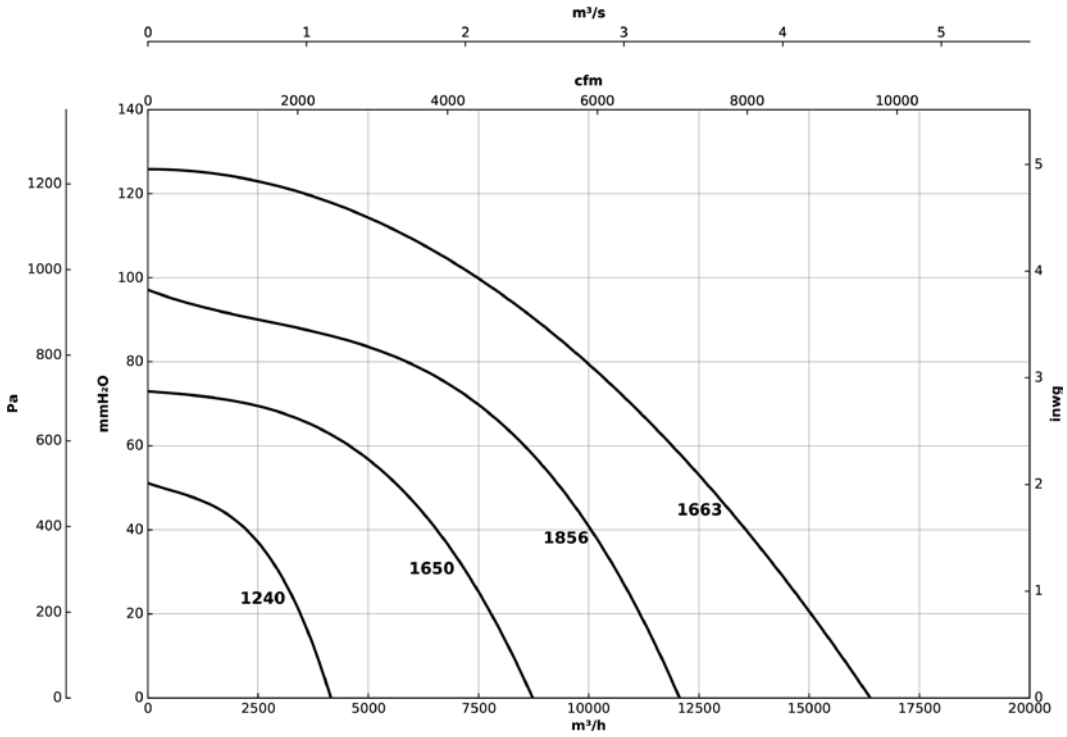
B

BD

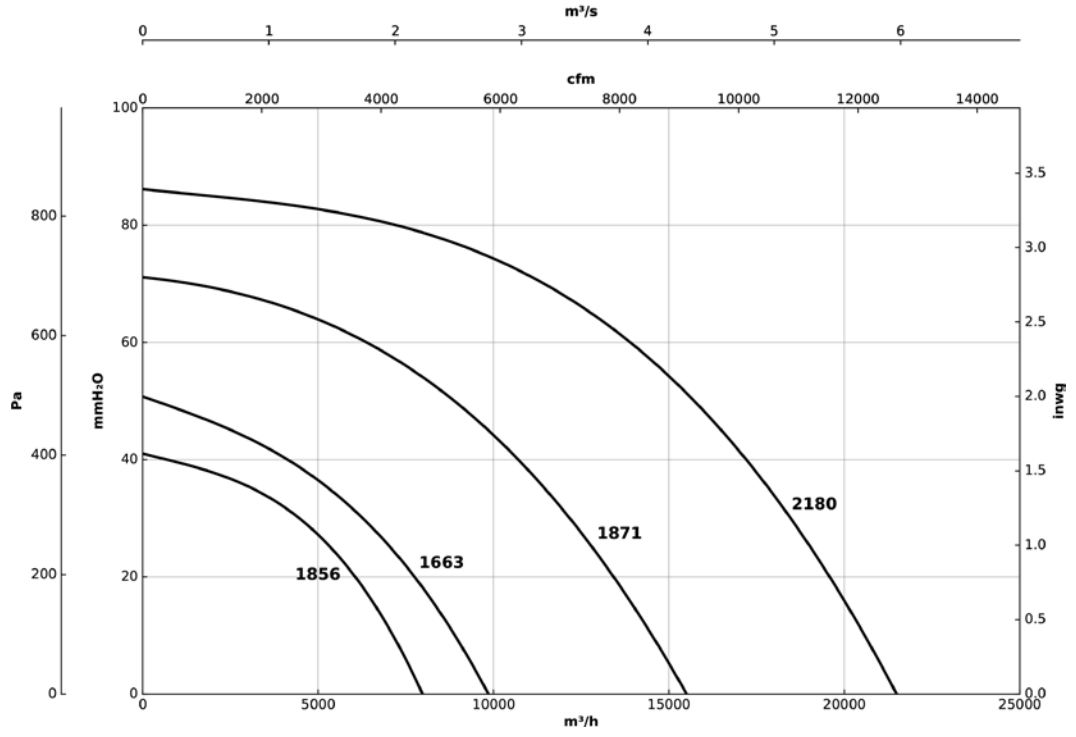
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

4T=1500 r/min



6T=1000 r/min



CJPF/ATEX

Large airflow ventilation units with high efficiency Plug Fan, with ATEX certification

Marking:
Ex eb: II 2G Ex eb IIB T3 Gb
Ex db: II 2G Ex db IIB T4 Gb
Ex tb: II 2D Ex tb IIIC T135 °C Db
Ex tc: II 3D Ex tc IIIB T135 °C Dc

Large airflow ventilation units equipped with Plug Fan type fan, acoustic casing with interchangeable covers for easy installation and ATEX certification.

Fan:
- Aluminium profile structure.
- Covers with a high quality, 25 mm thick acoustic casing made of prefinished sheet.
- Backward curved impeller.
- Standardised inlet and outlet flanges allowing for easy installation in ducts.
- Interchangeable covers to supply air on either side.
- Air inlet nozzle with diffusers that increase the efficiency of the fan.
- Silentblocks to avoid the transmission of vibrations and a correct anchoring of the equipment.
- Non-sparking inlet ring made of copper.
- Aluminum corner protectors to prevent the accumulation of static electricity.

Motor:
- Class F motors with ball bearings and with ATEX certification, increased safety Ex eb or flameproof Ex db or dust ignition proof Ex tb or Ex tc.
- Motors with built-in PTC.
- Three-phase 230/400 V 50 Hz.
- Working temperature: -25 ºC +60 ºC.

Finish:
- Anti-corrosive in pre-lacquered steel sheet and aluminum profiles.

On request:
- Special windings for different voltages and frequencies.
- ATEX construction for different categories.
- Complete with a pressure measurement connection point for optional automatic flow and pressure control.

Order code

CJPF/ATEX — 2180 — 6T — 5.5 — Ex eb

CJPF/ATEX: Large airflow ventilation units with high efficiency Plug Fan, with ATEX certification

Marking:
II 2G Ex h IIB T3 Gb
II 2G Ex h IIB T4 Gb
II 2D Ex h IIIC T135 ºC Db
II 3D Ex h IIB T135 ºC Dc

Impeller size

Number of motor poles
4=1400 r/min 50 Hz
6=900 r/min 50 Hz

T = Three-phase

Motor power (HP)

Ex eb: increased safety for zone 1 and 2
Ex db: non-sparking for zone 1 and 2
Ex tb: for zone 21 and 22
Ex tc: for zone 22

Technical characteristics

Model	Speed	Maximum admissible current (A)		Installed power	Maximum flow rate	Sound pressure level[1]	Approx. weight (Kg)	
	(r/min)	230V	400V	(kW)	(m^3/h)	dB (A)	Ex eb	Ex db
CJPF/ATEX-1240-4T-1	1420	2.82	1.62	0.75	4185	30	69	71
CJPF/ATEX-1650-4T-2	1440	5.41	3.11	1.50	8740	40	106	109
CJPF/ATEX-1856-4T-4	1440	10.70	6.15	3.00	12070	40	120	121
CJPF/ATEX-1856-6T-1	940	3.36	1.93	0.75	7995	30	107	111
CJPF/ATEX-1663-4T-5.5	1450	13.90	8.00	4.00	16400	42	130	134
CJPF/ATEX-1663-6T-1.5	945	4.68	2.69	1.10	9870	33	118	121
CJPF/ATEX-1871-6T-3	950	9.08	5.22	2.20	15700	34	174	184
CJPF/ATEX-2180-6T-5.5	960	15.60	8.99	4.00	21500	42	221	241

[1] Radiated sound pressure level in dB(A) at 1,5 m distance at 50% of full speed.

Acoustic characteristics

The indicated values are determined by measuring the sound pressure level and sound power in dB(A) obtained in a free field at a distance equivalent to twice the size of the fan plus the impeller diameter, with a minimum of 1.5 m.

Sound power spectrum Lw(A) in dB(A) per Hz frequency band

	63	125	250	500	1000	2000	4000	8000
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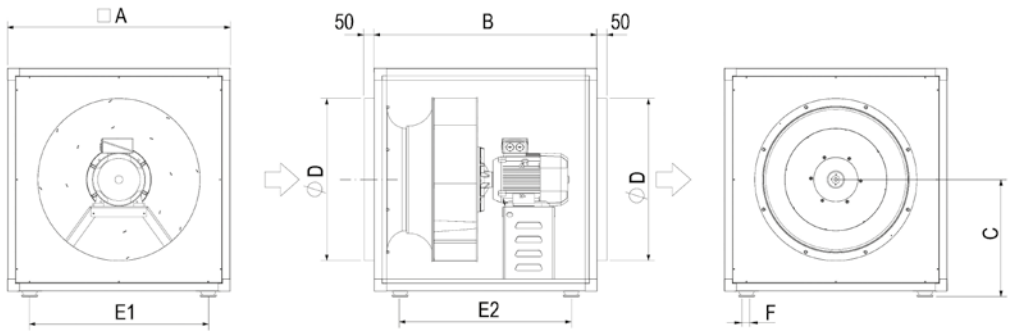
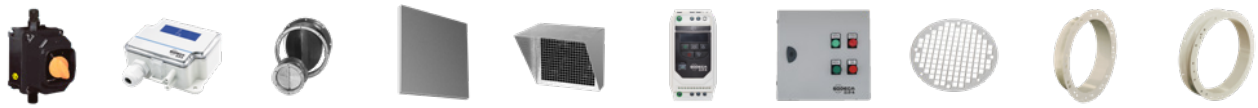
CJPF/ATEX-1856-4T-4	65	71	76	66	70	68	65	53
CJPF/ATEX-1856-6T-1	58	63	62	58	60	58	54	47
CJPF/ATEX-1663-4T-5.5	71	68	77	71	71	69	68	53
CJPF/ATEX-1663-6T-1.5	57	63	60	69	63	59	53	44
CJPF/ATEX-1871-6T-3	58	65	61	67	66	65	61	45
CJPF/ATEX-2180-6T-5.5	64	69	66	78	70	66	61	56

Dimensions mm



	A	B	C	ØD	E1	E2	F
CJPF/ATEX-1240-4T-1	700	700	375	450	480	470	M6
CJPF/ATEX-1650-4T-2	900	900	475	630	686	665	M6
CJPF/ATEX-1856-4T-4	900	900	475	630	686	665	M6
CJPF/ATEX-1856-6T-1	900	900	475	630	686	665	M6
CJPF/ATEX-1663-4T-5.5	900	900	475	630	686	665	M6
CJPF/ATEX-1663-6T-1.5	900	900	475	630	686	665	M6
CJPF/ATEX-1871-6T-3	1100	1100	577	800	881	845	M8
CJPF/ATEX-2180-6T-5.5	1100	1100	577	800	881	845	M8

Accessories

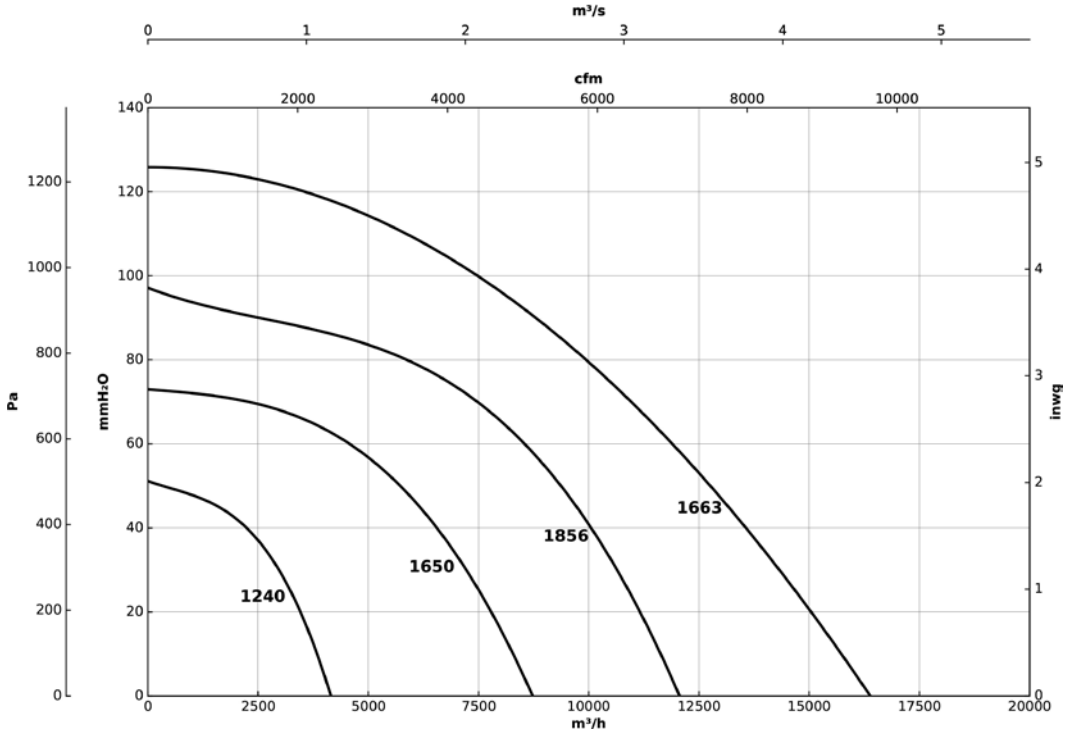


INT/ATEX · SI-PRESIÓN · PT · TEJ · VIS · VSD3/A-RFT - VSD1/A-RFM · AET · RPA · B · BD

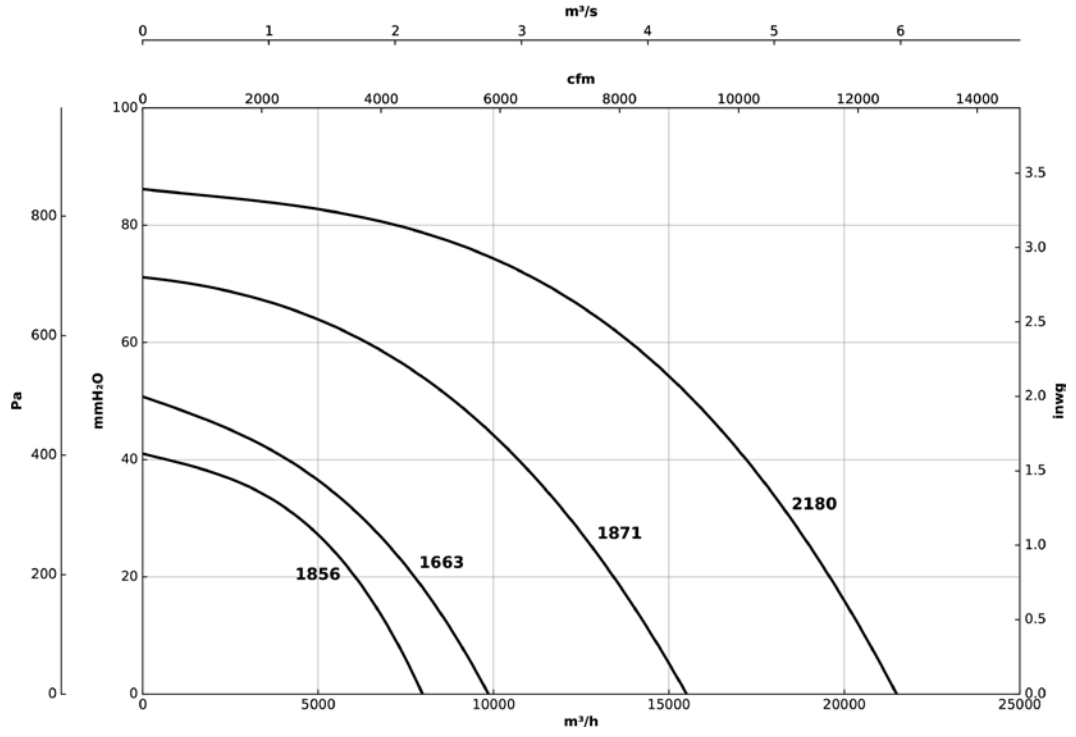
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

4T=1500 r/min



6T=1000 r/min



10/2022

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ISO 9001 BUREAU VERITAS Certification

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