HEAT RECOVERY VENTILATORS AIR TREATMENT AND FILTRATION UNITS

SODECA®

CE ACCORDING ErP 2018

CE ACCORDING ErP

MOTOR TYPE		ENERGY REQUIRED	ENERGY SAVE
EC BRUSHLESS	IE4+VSD	+++	45%
AC	IE3+VSD	++	35%
AC	IE3	+	5%
AC	IE2		0%

SODECA

EFFICIENT WORK

SODECA focuses its business activity on the manufacture of industrial fans, ventilation systems and smoke extractor fans for fire protection since it was set up in 1983.

The fans and extractor fans manufactured by SODECA are present in Europe and in many other parts of the world due to their quality and the research and development methods used. Our quality procedures, certified by BUREAU VERITAS in accordance with ISO 9001:2015, are another reason why SODECA is positioned as one of the best and most recognised fan manufacturer in Europe.

There is no doubt that the most important element in achieving our objectives is the human factor and the professionals who work in the company and offer not only ventilation equipment, but solutions to all the needs of our customers in the ventilation sector. We offer them the option of visiting our facilities in Sant Quirze de Besora, with a developed surface area of more than 16,000 m2, to see our fan production plant, which complies with the highest quality requirements and with the ISO and AMCA standards.

This catalogue contains just a few of all the options we offer. Please contact us and we will place all our experience and staff at your disposal.

Our environmental commitment

Sodeca has embarked on a new phase of studying and designing new ventilation trends to help protect the environment and save energy, both matters of great concern for modern society.

SODECA presents its new "Efficient Work" high performance fans, fitted with next-generation motors to obtain higher energy savings. These new products exceed the requirements of the ErP 2009/125/CE Ecodesign Directive and its regulating provisions (EU) 327/2011 for fans, and 1253/2014 for ventilation units, collaborating with the EU KYOTO Protocol objective of reducing carbon emissions.

EFFICIENT WORK

HEAT RECOVERY VENTILATORS, AIR TREATMENT AND FILTRATION UNITS

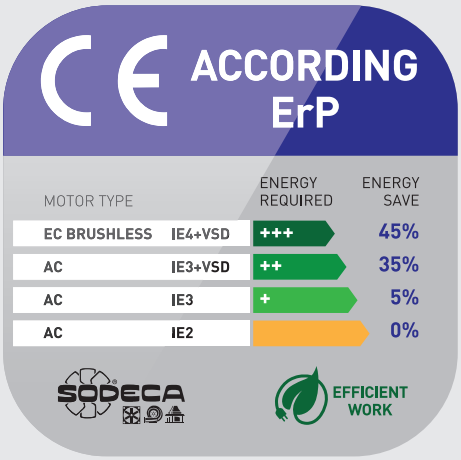
Since improving the energy efficiency of buildings is an international goal – and specifically a goal of the European Union– SODECA presents this new catalogue of Heat Recovery Ventilators and filtration units that meet the most demanding European regulations, in order to provide solutions for the new requirements defined and achieve the desired level of efficiency in each building.

Teamwork in our engineering department, our work with universities and technological centres, as well as the close collaboration with our clients, have made it possible to achieve innovative solutions for the current needs of those markets that are committed to making a significant improvement in energy efficiency.

The combination of our experience - acquired over decades of working with fans - and the technological contributions of our various engineering departments has made it possible for Sodeca to become one of the largest manufacturers of ventilation in the world.

OUR AIMS

- Energy savings and, as a consequence, savings in natural resources.
- Improvements in Energy Efficiency.
- Reduced noise pollution.
- Environmental protection.
- Reduction in CO2 emissions.

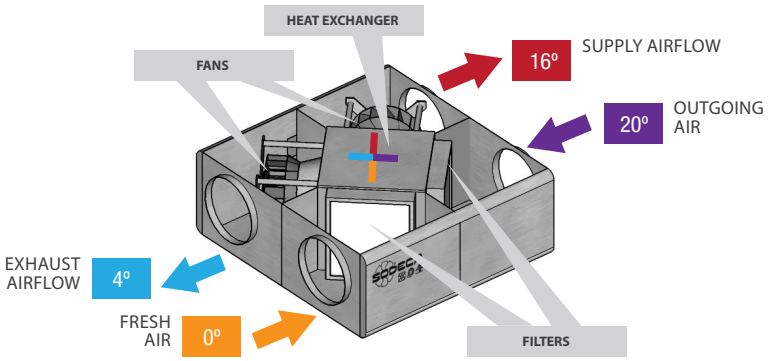


For European Union Member States, air treatment units will have to comply with new energy efficiency requirements.

HEAT RECOVERY VENTILATORS

A heat recovery ventilator operates by means of the combination of two centrifugal fans with a low sound level, one of which extracts the stale air from the interior of the premises to the outside, and the other drives fresh air from outside into the premises.

The two circuits cross, without mixing, in a heat exchanger, in which the heat from the outgoing air is transferred to the fresh air from the outside, heating it up.

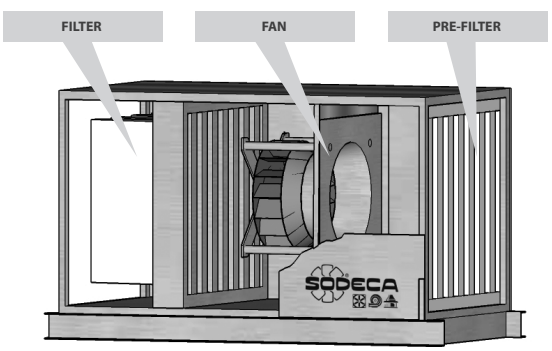


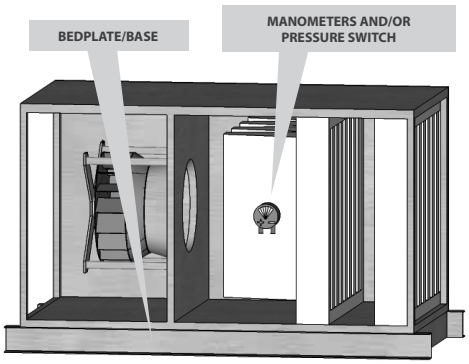
FILTRATION UNITS

Filtration units remove particles from the air, ensuring good air quality.

Components of filtration units:

- Centrifugal fan in a closed box.
- Pre-filtration and filtration stages.
- Components to check filter condition: Manometers and pressure switches.
- Components to check flow is constant.





R.I.T.E.

Regulation on Thermal Installations in Buildings

HEAT RECOVERY AND AIR FILTERING UNITS

To fulfil its objectives, SODECA presents its new products in this catalogue, in accordance with the R.I.T.E. requirements and directives (Regulation on Thermal Installations in Buildings) and, through this series, achieve real energy savings in HVAC installations:

HEAT RECOVERY UNITS

Residential domestic

Commercial

Commercial high efficiency

FILTER UNITS

Industrial

R.I.T.E. The Regulation on Thermal Installations in Buildings (R.I.T.E. in Spanish) applies to non-residential installations, and its objectives are energy efficiency and air quality.

INDOOR AIR QUALITY (IDA)

Buildings will have a ventilation system for contributing a flow of outdoor air to prevent the formation of high concentrations of contaminants in the different premises. The external air will be duly filtered.

IDA 1 **Good quality air**
Application: hospitals, clinics, laboratories and nurseries.

IDA 2 **Aire de buena calidad**
Application: offices, residences, common areas in hotels, classrooms, pools, museums and similar premises.

IDA 3 **Intermediate quality air**
Application: stores, cinema theatres, theatres, auditoriums, hotel rooms, restaurants, cafeterias, bars, gyms and similar premises.

IDA 4 **Low quality air**

OUTDOOR AIR QUALITY (ODA)

LThe quality of the outdoor air used to bring air into the building will be classified in accordance with the levels related to contamination.

ODA 1
Pure air that may temporarily contain solid particles.

ODA 2
Air with high particle concentrations.

ODA 3
Air with high concentrations of gaseous contaminants.

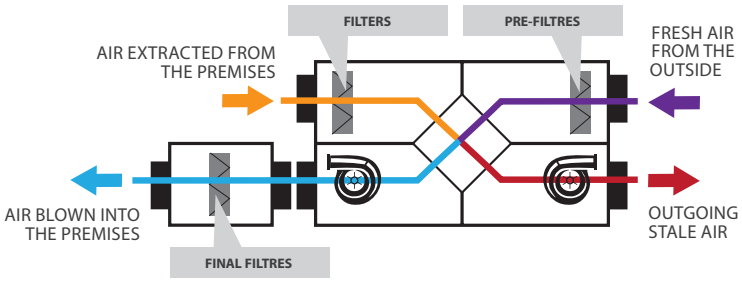
Outdoor air quality	*Indoor air quality* IDA 1	IDA 2	IDA 3	IDA 4
ODA 1	F9	F8	F7	F5
ODA 2	F7+F9	F6+F8	F5+F7	F5+F6
ODA 3	F7+GF*+F9	F7+GF*+F9	F5+F7	F5+F6

(*) GF: Gas filter (carbon filter) and/or chemical or physical-chemical filter (photocatalytic) and only necessary if reaching ODA 3 due to excess gases

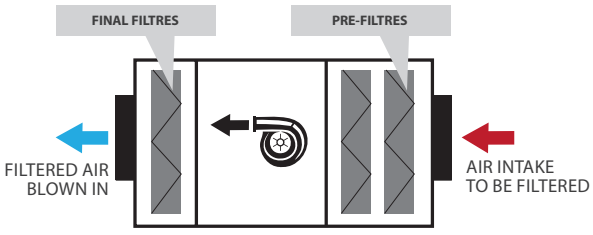
In heat recovery devices, in addition to the prefilter protecting the equipment which is present in all SODECA equipment, one or more end filters must always be installed to comply with the table combinations.

POSITION OF FILTER STAGES

HEAT RECOVERY VENTILATORS



FILTRATION UNITS



HEAT EXCHANGER

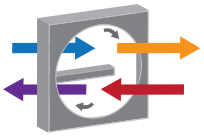
The heat exchanger is the part of the heat recovery ventilator that transfers heat from the circuit for extracting the stale air from the premises to the circuit for bringing in clean air from the outside. The more efficient the heat exchanger is, the less additional heating will be required. Principal types of heat exchangers, by structure type:

Cross flow plate heat exchangers

. Thermal efficiency of 50-70%.
. No leaks between the air streams.
. Compact and economical.

Counterflow plate heat exchangers

. Thermal efficiency of 80-95%.
. No leaks between the air streams.
. Require larger machines.



Rotating heat exchangers

. Thermal efficiency of 70-85%.
. Compact.
. Can operate in BY-PASS mode.

These heat exchangers may be either the sensible heat type or the enthalpy type. The enthalpy exchangers recover sensible heat as well as latent heat (moisture), and consequently are more efficient, but require regular cleaning for safe operation.

Energy efficiency

Heat recovery devices must be installed in all HVAC installations treating flows over 1,800 m^3/h.

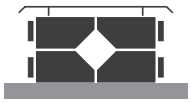
TYPES OF INSTALLATION

Wall-mounted

Domestic machines for heat recovery from small rooms.

In a false ceiling

Low-profile machines with access to components from the sides or underneath.



Roof-mounted

Equipment that can work outside, with access to components from the sides. They may require accessories, such as covers or hoods for protection against rain and other weather elements.

In the technical room

Compact machines with side access to components. These machines usually have inlets and outlets on the top.

MOTORS

Types of motor that may be used for the fans in these ventilators:

AC

Conventional high-efficiency motors. They may have several speeds or speed control, depending on the model or accessories.

EC

More efficient motors with proportional speed control.

THERMAL BY-PASS

A BY-PASS is a device that deviates the air stream, preventing it passing through the heat recovery system, i.e. the heat exchanger.

The advantages are:

- Fast cooling of air for the premises (free cooling). Can quickly cool the premises when the temperature inside is too high and the temperature outside is more suitable.
- Frost protection (only for plate exchangers). Reduces the risk of freezing in winter.
- In ventilators with rotating exchangers, the BY-PASS function is achieved by stopping the rotor turning.
- In ventilators with plate exchangers, the BY-PASS is an alternative circuit to passing through the circuit.

CLIMATE CONTROL OPTIONS

Some ventilators have versions or accessories with heating or cooling coils to heat or cool the air supply. This is very common in heat recovery ventilators, although it may also be applied to filtration units. The commonest options are as follows:

Environmental version
No heating/cooling.

Version with water coils
Provides climate control by coils containing hot or cold water.

Electric battery cooling
Supply of heating by electrically heated coils.

AUTOMATIC CONTROL

For heat recovery ventilators, automatic control may provide a wide variety of functions, depending on the equipment series or models. The most significant functions are:

. Scheduling (timed programming).
. Number of speeds and option of regulating the variable speed drive (VSD).
. Flow control depending on CO2 levels or air pressure in the duct.
. Connecting the ventilator to a centralised building management system (BMS), usually through the MODBUS RTU protocol.

For filtration units, the following are available:

. Manometers and pressure switches that detect the need to replace the filters
. Accessories that control the fan, in order to stabilize the flow and extend filter life.

FILTERS

F6 F6 + F8 F7 F7 + F9 G4 + F6

The filters retain particles that affect air quality, and must be replaced after a period of use. Filter head loss increases progressively over time.

Some units have components to check on head loss, in order to optimise filter replacement.

. Pressure inlets: Small air inlets that allow head loss of filter stages to be detected.
. Differential manometer: Visual detection of head loss per filter stage.
. Pressure switch: Pressure switch that switches an electrical circuit on of off on the basis of the filter head loss.

Each filtration stage has one or more filters of the same efficiency, as required for each application. Depending on their configuration, the units may incorporate:

. Stage with pre-filters that ensure correct operation of the equipment, depending on the requirements of the installation, the efficiencies may be: G4, F6, F7.
. Stages with final filters that guarantee the quality of the air supplied to the premises; the efficiencies are usually of the following types: F6, F7, F8, F9, CA (active carbon gas filters) or even HEPA filters, depending on the IDA/ODA category.

HEAT RECOVERY VENTILATORS

DOMESTIC RESIDENTIAL

	UNIREC	VENUS	REB
			
Installation type			
BY-PASS	N	N	Y
Standard version coils			
Monitoring			
Heat efficiency (%)	90	93	80
Auto Scheduling	N	Y	N
Speeds	3	3	3
CO2/Pressure	N	depending on model	N
Modbus RTU	N	N	N
Pre-filters	Y	Y	Y
Final filters	Y	Option CJFILTER/REC	Option CJFILTER/REC

HIGH EFFICIENCY COMMERCIAL VENTILATORS

	RIS P EKO	RIS H EKO	RIRS H EKO	RIRS V EKO
				
Installation type				
BY-PASS	Y	Y	Y	Y
Standard version coils				
Monitoring				
Heat efficiency (%)	90	90	80	80
Auto Scheduling	Y	Y	Y	Y
Speeds	3 VSD	3 VSD	3 VSD	3 VSD
CO2/Pressure	Y	Y	Y	Y
Modbus RTU	Y	Y	Y	Y
Pre-filters	Y	Y	Y	Y
Final filters	Option CJFILTER/REC	Option CJFILTER/REC	Option CJFILTER/REC	Option CJFILTER/REC

HEAT RECOVERY VENTILATORS

DOMESTIC/RESIDENTIAL

HIGH EFFICIENCY COMMERCIAL VENTILATORS

AIR TREATMENT AND FILTRATION UNITS

DOMESTIC/RESIDENTIAL

COMMERCIAL/RESIDENTIAL

COMMERCIAL/INDUSTRIAL

UNIREC

High-efficiency single-zone heat recovery ventilators for domestic installations

Remote Control

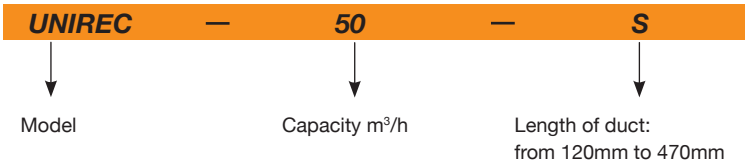
Designed to renew the air inside the home while minimising energy loss, and to supply clean air, due to their filters, which prevent particles entering from outside.

Features:
- Reversible EC fan.
- Thermal efficiency of 90%.
- Equipped with G3 Filters.
- Compact ceramic heat exchanger.
- Easily-installed, the telescopic duct means that they are suitable for several wall thicknesses.
- Automatic air intake grille; in the OFF position it remains closed to prevent air leakages.
- In heat recovery mode, the supply and extraction cycle takes 70 seconds.
- Duct length from 120mm to 470mm.

Control:
- Control panel built into the system.
- Remote control.
- Extract, blow o heat recovery.
- Two speeds.
- Humidity control.
- Natural mode, air intake grille open and fan stopped.
- Option of connecting several machines in a network.

Motor:
- Supply voltage of 100V to 230V, 50/60Hz.
- Built-in power cable.

Order code

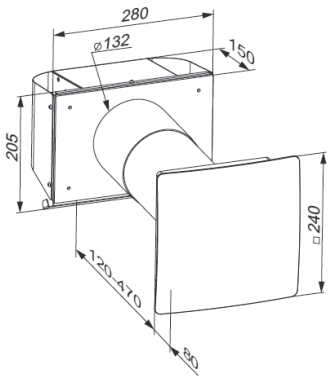


Technical characteristics

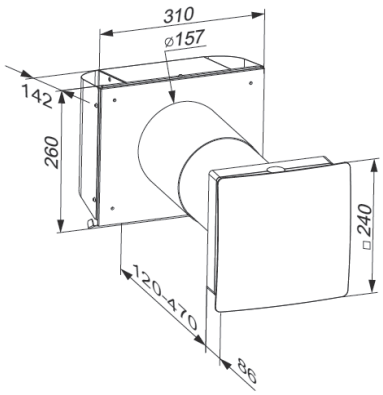
Model	Fans			Input Voltage (V)	Frequency (Hz)	Maximum airflow (m3/h)	Thermal efficiency (%)	LpA radiated 3m dB(A)	Temperature of air transported (ºC)	Diameter of duct (mm)	Length of duct (mm)
	Speed (r/min)	Current (A)	Power (W)								
UNIREC-35-S	1670	0.032	5.10	1x100-230	50/60	30	90	28	-20 a +50	125	120-470
UNIREC-50-S	1450	0.039	5.61	1x100-230	50/60	54	90	23	-20 a +50	150	120-470

Dimensions in mm

UNIREC-35-S



UNIREC-50-S



Working cycles in recovery mode

EXTRACTION (70 seconds)

During this cycle, the ceramic heat exchanger absorbs heat from the extracted air.

SUPPLY (70 seconds)

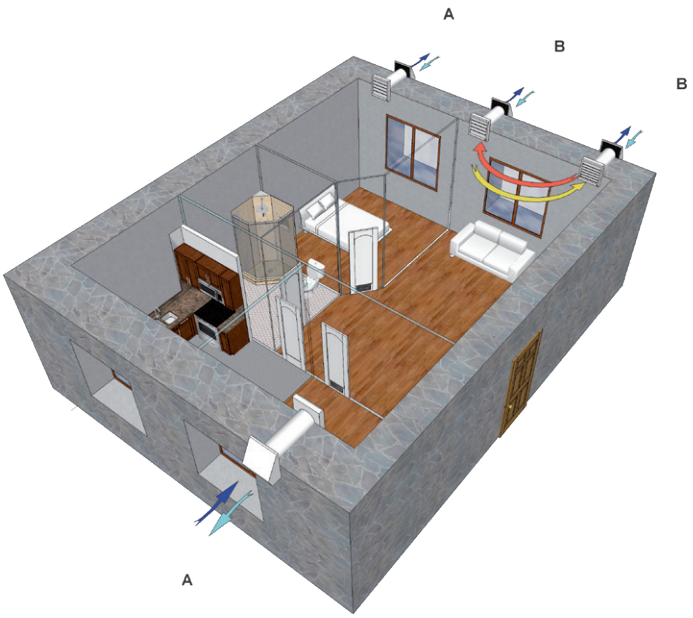
During this cycle, the heat exchanger provides heat to the air coming in from the outside.

Once this cycle has finished, the process of extraction starts again, and so on.

Example of equipment installation

A: Machines working individually in heat recovery mode for a single room.

B: Machines working in a network, synchronised; while one performs the supply cycle, the other performs the extraction cycle, and so on.



VENUS

High-efficiency single-zone heat recovery ventilators for residential installations

EC Version Control

High performance heat recovery ventilators to be installed inside residential buildings. With a low power consumption and heat recovery efficiency of up to 93%. For technical ceiling installation.

Finish:
- Light expanded polypropylene body for low noise emission levels.
- Low-profile for fitting in false ceiling.
- 160 mm inlets/outlets (models 150 and 300) and 250 mm inlets/outlets (models 500 and 700).

Characteristics of all versions:
- Counterflow heat exchanger.
- Can adjust flow via external control signal.
- Condensate drainage with built-in siphon.
- Access to filters and condensate drainage from above and below.

Additional Characteristics of the EC version:
- Operation compatible 50/60 Hz.
- Air supply filters with F7 efficiency level.
- High-efficiency EC fans.
- Digital remote control panel included.
- Frost protection and free cooling.
- Multizone control by optionally connecting CO2, PIR (presence) and RH (relative humidity) sensors. ALL/NOTHING signal type.

Version	AC	EC
Motor type	AC	EC (high efficiency)
Control panel	Manual selector CP-SM-V-4 (accessory not included)	Digital (included)
Control panel cable	4-wire, 230V (not included)	4-wire PTPM-RJ12 10m Included/Maximum 30m
No. of fan speeds	3	3
Supply/Extraction filter efficiency	F5/G4	F7/G4
Alarm management	YES	YES
Flow control via external control	YES	YES
Each fan adjusted precisely	-	YES
Control of closing hatches	-	YES (hatches not supplied)
Connections to 5 optional sensors	-	Types: CO2/PIR/HR
Sensor power supply	-	15V DC
External control to force maximum flow	-	YES
Free cooling by stopping 1 fan	-	YES (with timer setting)
Frost protection	-	YES
Adjustable filter change alarm	-	YES
LED filter state control	YES	YES

Order code

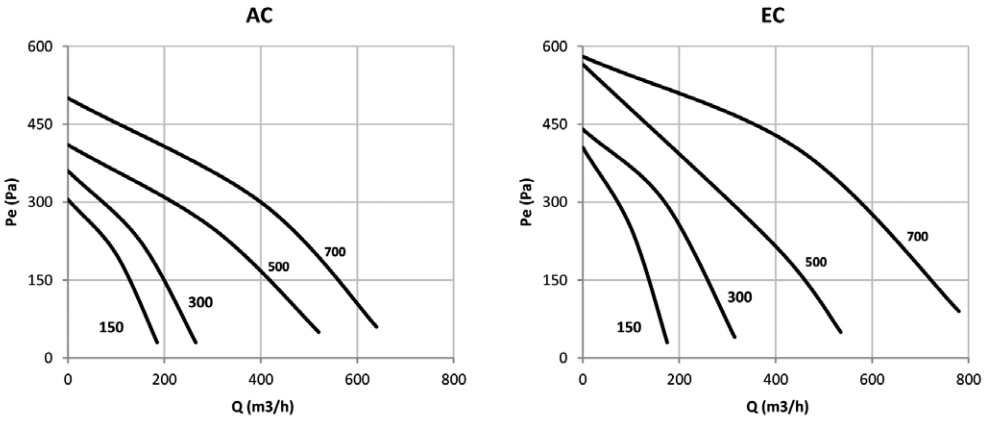
VENUS — ***300*** — ***EC***

Model	150 m3/h 300 m3/h 500 m3/h 700 m3/h	EC: High-efficiency fan AC: Standard fan

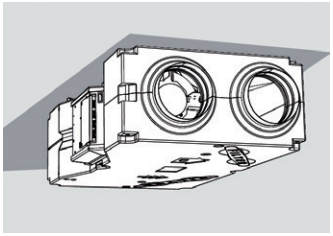
Technical characteristics

Modelo	Maximum airflow (m3/h)	Total Power (W)	Heat recovery efficiency (%)	Maximum admissible current 220-240V (A)	Irradiated sound level at 3m dB(A)	Weight (Kg)	According ErP
VENUS-150-AC	185	105	93	2 x 0,23	37,3	17,4	2018
VENUS-150-EC	175	65	93	2 x 0,14	37,7	17,2	2018
VENUS-300-AC	265	145	93	2 x 0,32	38,9	19,5	2018
VENUS-300-EC	315	170	93	2 x 0,37	43,5	19,3	2018
VENUS-500-AC	515	230	93	2 x 0,50	47,1	35	2018
VENUS-500-EC	535	220	93	2 x 0,48	45,8	35,5	2018
VENUS-700-AC	650	270	93	2 x 0,59	42,9	40	2018
VENUS-700-EC	785	430	93	2 x 0,93	53,6	40,7	2018

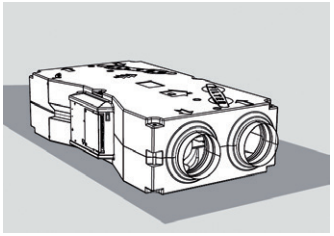
Characteristic Curves



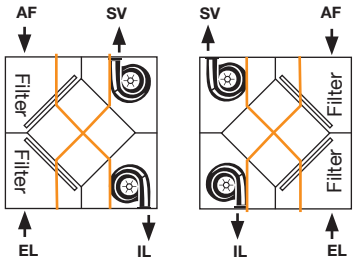
Installation



In a false ceiling



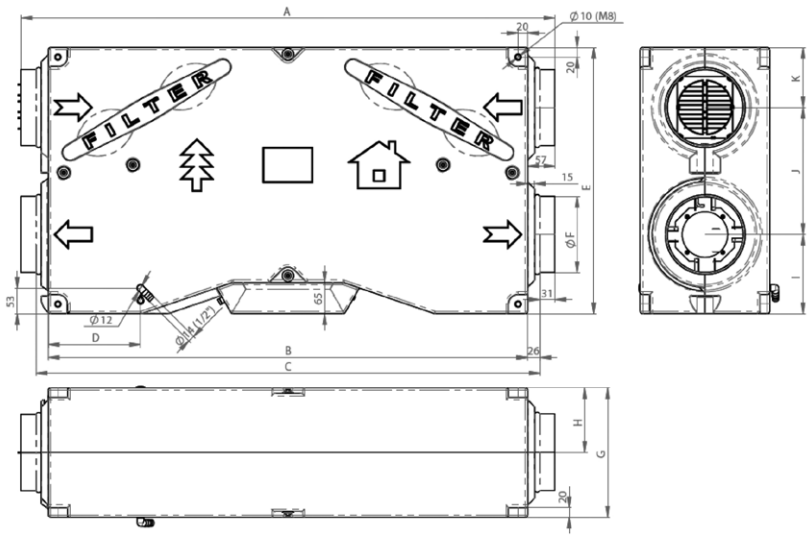
Floor-mounted



Configuration may be chosen by turning the machine through 180º. Access to filters and drainage from above and below.

AF: Fresh air from outside/**IL:** Air blown into the premises
SV: Stale air outlet/**EL:** Air extracted from the premises

Dimensions in mm



Model	A	B	C	D	E	F	G	H	I	J	K
VENUS 150 / 300	1114	1000	1051	193	555	159	270	135	165	265	125
VENUS 500 / 700	1505	1391	1441	248	846	249	360	180	235	420	190

Accessories


CP-SM-V-4


RH SENSOR


PIR SENSOR


CO2 SENSOR


CLOSING HATCH


HATCH SERVO


FILTERS


PTPM-RJ12 CABLE

REB

Heat recovery ventilators with BY-PASS for false ceilings

BY-PASS

Low-profile heat recovery ventilators for fitting in false ceiling. Incorporate BY-PASS. Energy efficient, with heat recovery efficiency of up to 82%.

Finish:
- Galvanised steel structure.
- Anti-condensation foam coating.
- Interior in light expanded polypropylene for low noise emission levels.
- Low-profile for fitting in false ceiling.

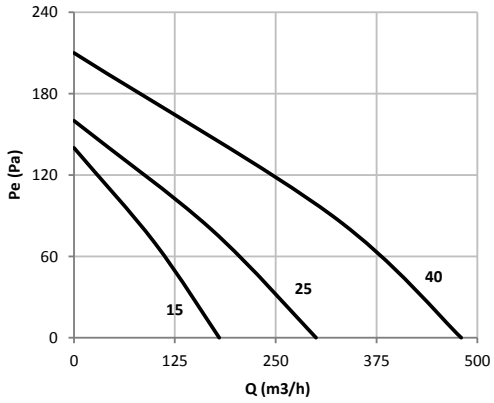
Features:
- Counterflow heat exchanger.
- Incorporate 100% automatic BY-PASS, except REB-15.
- Three-speed energy efficient EC fans.
- Side access for maintenance.
- Operation compatible 50/60 Hz.
- G4 filters.
- 3-speed SI-VOC+HUMEDAD selector switch supplied as an accessory.

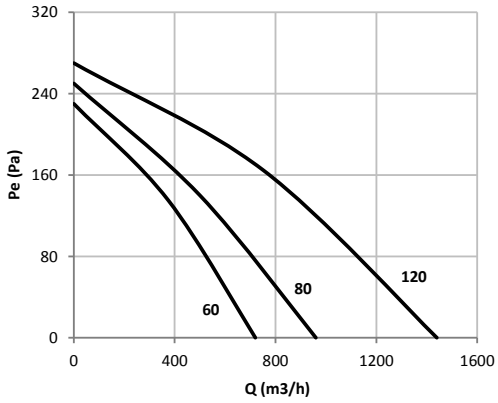
Order code

Technical characteristics

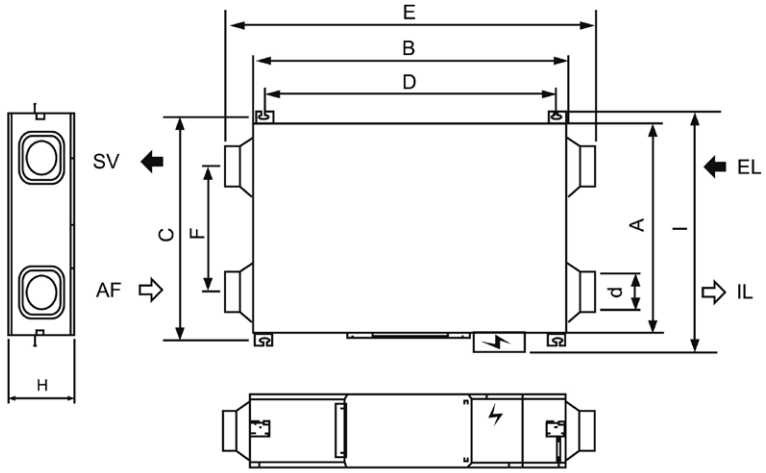
Model	Maximum airflow (m3/h)	Total Power (W)	Max. Admissible Current 220-240V (A)	Heat recovery efficiency (%)	Radiated sound level at 3m dB(A)	Weight (kg)	According ErP
REB-15	150	60	0,26	72	38	18	Excluded
REB-25	250	70	0,3	81	35	31	2018
REB-40	400	90	0,39	82	37	39	2018
REB-60	600	140	0,61	80	39	55	2018
REB-80	800	300	1,3	82	41	72	2018
REB-120	1200	325	1,41	79	42	91	2018

Characteristic Curves





Dimensions in mm



Model	A	B	C	D	E	F	H	I	d
REB-15	510	883	560	813	1043	345	272	620	97
REB-25	675	890	735	820	1070	335	280	790	146
REB-40	813	888	863	818	1068	480	280	930	146
REB-60	995	970	1055	910	1130	728	313	1065	197
REB-80	883	1325	953	1255	1485	429	390	1000	247
REB-120	1132	1328	1202	1258	1488	680	395	1250	247

AF: *Fresh air from outside/****IL:*** *Air blown into the premises/****SV:*** *Stale air outlet/****EL:*** *Air extracted from the premises*

RIS P EKO

Heat recovery ventilators with crossed flow plates, automatic control and EC motor, designed for horizontal ducts and installation in false ceilings

FLEX panel included in all models

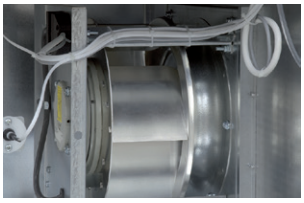
Common characteristics:
- Efficient low-noise EC adjustable fans.
- Maintenance switch – disconnector incorporated.
- Thermal efficiency of up to 90%.
- Sound insulation up to 50mm thick for low noise level.
- Broad access for maintenance from underneath the machine.
- Tray for collecting condensation with drainage.

PRV 3.0 control functions incorporated:
- Free cooling function with motorised BY-PASS.
- Fan speed control by manual selection or optional external sensors (CO2 or pressure).
- Frost protection built-in.
- Built-in control system with FLEX remote control panel (including 13 m cable).
- Control of external closing hatch (hatches included).
- ON/OFF and speed control available through panel or external switches.
- Control of external DX coolers.
- Built-in temperature and humidity sensors.
- Filter condition control through built-in pressure switches (for some models).
- Management of fire alarms and equipment failure alarms.
- Compatible with MODBUS RTU.

Finish:
- RAL 7040 or 9016 (400,700) paint.

Versions:
- Environmental: Renewal of air without supplying heat (S).
- Electric: With heating supplied by single-stage electrically heated coils (E).
- Water battery: With heating supplied by water coils external to the machine (W).

On request:
- Boxes with special filters.
- Adiabatic module.



Order code

RIS — 1900 — P-EKO — E — F7

RIS	1900	P-EKO	E	F7
Model	Size	Highly efficient, for horizontal ducts and installing in false ceilings	S: No battery or water coils E: Electrical battery W: External water coils	F7 filter (air supply filter)

Characteristics, depending on size

	RIS-400	RIS-700	RIS-1200	RIS-1900	RIS-2500
Standard filters (supply/extraction)	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5
Free cooling function with motorised BY-PASS	YES	YES	YES	YES	YES
Soundproofing thickness	30mm	30mm	50mm	50mm	50mm
Built-in pressure switch for filter condition control	-	-	YES	YES	YES

Technical characteristics

Model	Double-inlet			Maximum flow F7 (m3/h)	Thermal efficiency (%)	LpA radiated 3m dB(A)	Total voltage (V)	Total current (A)	Total power (kW)	Weight (Kg)	According ErP
	Speed (r/min)	Current (A)	Power (kW)								
RIS-400-P-EKO-S	3490	2x1.17	2x0.12	500	90	51	1x230	2.39	0.26	74	2018
RIS-400-P-EKO-E	3490	2x1.17	2x0.12	500	90	51	1x230	9.39	1.86	74	2018
RIS-400-P-EKO-W	3490	2x1.17	2x0.12	500	90	51	1x230	2.39	0.26	82	2018
RIS-700-P-EKO-S	3380	2x2.05	2x0.23	850	90	56	1x230	4.00	0.46	106	2018
RIS-700-P-EKO-E	3380	2x2.05	2x0.23	850	90	56	1x230	17.01	3.46	106	2018
RIS-700-P-EKO-W	3380	2x2.05	2x0.23	850	90	56	1x230	4.00	0.46	118.5	2018
RIS-1200-P-EKO-S	3400	2x2.95	2x0.45	1300	90	56	1x230	5.40	0.82	170	2018
RIS-1200-P-EKO-E	3400	2x2.95	2x0.45	1300	90	56	3x400	14.50	6.80	170	2018
RIS-1200-P-EKO-W	3400	2x2.95	2x0.45	1300	90	56	1x230	5.40	0.82	178	2018
RIS-1900-P-EKO-S	2540	2x3.15	2x0.48	2100	90	60	1x230	6.32	1.00	269	2018
RIS-1900-P-EKO-E	2540	2x3.15	2x0.48	2100	90	60	3x400	15.00	7.00	270	2018
RIS-1900-P-EKO-W	2540	2x3.15	2x0.48	2100	90	60	1x230	6.32	1.00	282	2018
RIS-2500-P-EKO-S	2800	2x3.00	2x0.67	2800	90	62	1x230	6.20	1.40	313	2018
RIS-2500-P-EKO-E	2800	2x3.00	2x0.67	2800	90	62	3x400	19.20	10.40	320	2018
RIS-2500-P-EKO-W	2800	2x3.00	2x0.67	2800	90	62	1x230	6.20	1.40	326	2018

Technical characteristics of models with electrically heated coil

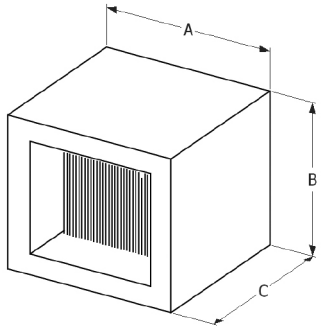
Model	Voltage (V)	Power (kW)
RIS-400-P-EKO-E	1x230	1.6
RIS-700-P-EKO-E	1x230	3
RIS-1200-P-EKO-E	3x400	6
RIS-1900-P-EKO-E	3x400	6
RIS-2500-P-EKO-E	3x400	9

Technical characteristics of models with water coil at 80/60 ºC

Model	Heat power (kW)	Water flow (l/s)	Head loss (kPa)	Air speed (m/s)	Max. temperature difference (ºC)	Coil thread diam
RIS-400-P-EKO-W	6.25	0.08	15.24	3.4	33.5	1/2”
RIS-700-P-EKO-W	10.6	0.13	9.32	3.37	31	1/2”
RIS-1200-P-EKO-W	15.5	0.19	3.56	3.11	33	3/4”
RIS-1900-P-EKO-W	25.6	0.31	3.62	2.08	36	1”
RIS-2500-P-EKO-W	30.1	0.37	4.85	2.68	33	1”

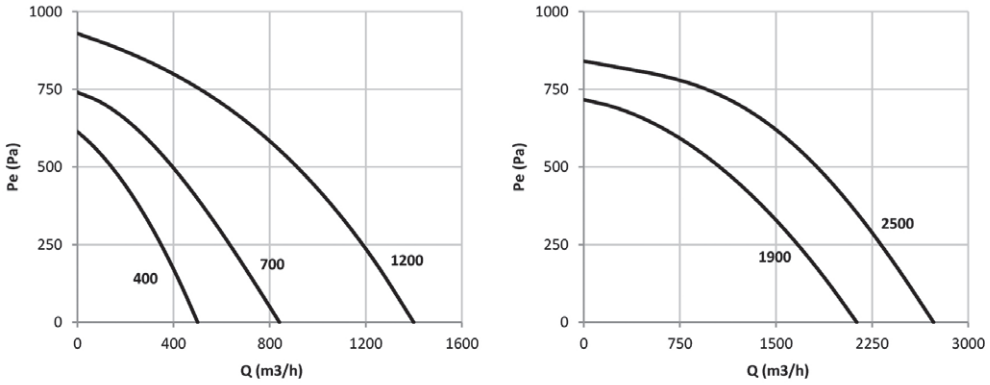
** Data at 80/60ºC, machine's maximum flow and outside temperature = 0ºC*

Model	A	B	C
RIS-400-P-EKO-W	289	265	304
RIS-700-P-EKO-W	364	395	342
RIS-1200-P-EKO-W	500	250	250
RIS-1900-P-EKO-W	700	400	720
RIS-2500-P-EKO-W	700	400	720



External water coils

Characteristic Curves



Acoustic features

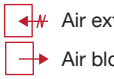
The values specified are determined according to free field measurements of sound levels in dB(A) at a distance of no less than 3 m from the equipment.

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

Model	63	125	250	500	1000	2000	4000	8000
RIS-400	39	40	43	46	45	40	39	36
RIS-700	46	45	47	50	50	47	43	42
RIS-1200	43	42	48	50	49	48	46	40
RIS-1900	49	50	52	54	54	50	48	41
RIS-2500	43	46	54	56	57	54	50	45

Configurations

Plan view of equipment (opposite side to maintenance access)


Air extracted from the premises

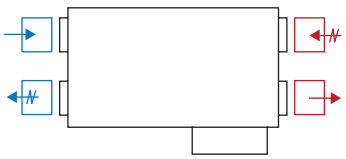
Air blown into the premises


Stale air exiting

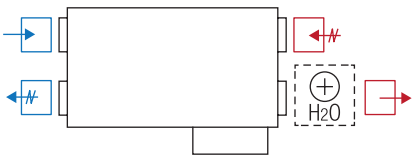

Clean air entering

External water coils

S/E Versions

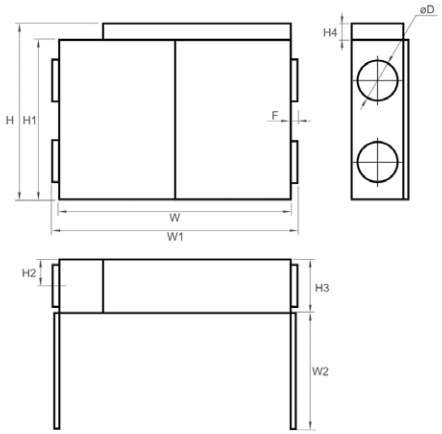


W Versions

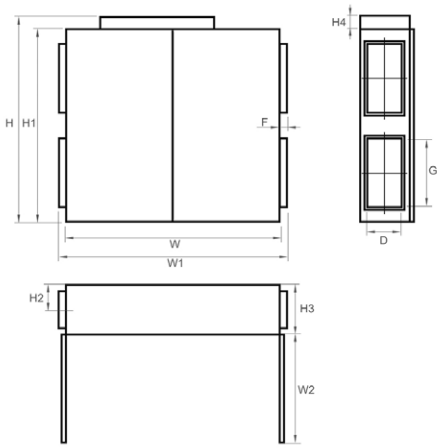


Dimensions in mm

RIS-400/700



RIS-1200/1900/2500



Model	W	W1	W2	H	H1	H2	H3	H4	øD	G	D	F
RIS-400-P-EKO-S/E	1300	1361	650	768	670	158	330	98	200	-	-	31
RIS-400-P-EKO-W	1300	1361	650	768	670	158	330	98	200	-	-	31
RIS-700-P-EKO-S/E	1380	1461	695	1069	970	160	350	99	250	-	-	40
RIS-700-P-EKO-W	1380	1461	695	1069	970	160	350	99	250	-	-	40
RIS-1200-P-EKO-S/E	1550	1655	780	1497	1397	172	390	100	-	500	250	52
RIS-1200-P-EKO-W	1550	1655	780	1497	1397	172	390	100	-	500	250	52
RIS-1900-P-EKO-S/E	1750	1870	710	1955	1850	194	399	105	-	700	300	60
RIS-1900-P-EKO-W	1750	1870	710	1955	1850	194	399	105	-	700	300	60
RIS-2500-P-EKO-S/E	1850	1970	720	2055	1950	244	499	105	-	700	400	60
RIS-2500-P-EKO-W	1850	1970	720	2055	1950	244	499	105	-	700	400	60

CJFILTER/REC filter box configurations

CJFILTER/REC — 300x600-250 — CA

Model

Box size

Filters available
F7
F9
CA (Active Carbon)
H10
H13

For more information, see CJFILTER/REC section.

Filter box part numbers according to machine size and inlet/outlet cross-section

Model	Box size
RIS-400-P-EKO	300x600-200
RIS-700-P-EKO	300x600-250
RIS-1200-P-EKO	300x600-250x500
RIS-1900-P-EKO	500x700-300x700
RIS-2500-P-EKO	500x700-400x700

Accessories

See accessories section


FILTERS


CJFILTER/REC


ADIABATIC BOX


PRESSURE SWITCH


CO2 PROBE

RIS H EKO

Heat recovery ventilators with counterflow plate exchanger, automatic control and EC motor, designed for horizontal ducts and installation on roof or in technical room

FLEX panel included in all models

Common characteristics:
- Efficient low-noise EC adjustable fans.
- Maintenance switch – disconnector incorporated.
- Thermal efficiency of up to 90%.
- Sound insulation up to 50mm thick for low noise level.
- Large access doors for maintenance.
- Tray for collecting condensation with drainage.

PRV 3.0 control functions incorporated:
- Free cooling function with motorised BY-PASS.
- Fan speed control by manual selection or optional external sensors (CO2 or pressure).
- Frost protection built-in.
- Built-in control system with FLEX remote control panel (including 13 m cable).
- Control of external closing hatch (hatches included), for some models.
- ON/OFF and speed control available through panel or external switches.
- Control of external DX coolers.
- Built-in temperature and humidity sensors (for some models).
- Filter condition control through built-in pressure switches.
- Management of fire alarms and equipment failure alarms.
- Compatible with MODBUS RTU.

Finish:
- Silver/Ral 7040 paint.

Versions:
- Environmental: Renewal of air without supplying heat (S).
- Electric: With heating supplied by single-stage electrically heated coils (E).
- Water battery: With heating supplied by water coils external to the machine (W).

On request:
- Boxes with special filters.
- Adiabatic module.
- Cover for roof installation.

Order code

RIS	—	2500	—	H-EKO	—	E	—	D	—	F7
Model		Size		Horizontal ducts		S: No battery or water coils E: Electrical battery W: External water coil		Side on which the air supply to the premises is located, seen from the maintenance access. D: Right-hand side (standard) K: left-hand side		F7 filter (air supply filter)

Accessories

See accessories section


FILTERS


CJFILTER/REC


ADIABATIC BOX


PRESSURE SWITCH


CO2 PROBE


TEJ

Characteristics, depending on size

	RIS-700	RIS-1200	RIS-1900	RIS-2500	RIS-3500	RIS-5500
Standard filters (supply/extraction)	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5
Free cooling function with motorised BY-PASS 100% of flow	YES	YES	YES	YES	YES	YES
Control of external closing hatches	-	-	-	YES	YES	YES
Side for maintenance access can be changed (D↔K)	YES	YES	YES	-	-	-
Version availability according to maintenance access side (versions D or K)	D/K	D/K	D/K	D	K	D
Built-in pressure switches for filter condition control	-	YES	YES	YES	YES	YES

Technical characteristics

	Double-inlet										
Model	**Speed (r/min)**	**Current (A)**	**Power (kW)**	**Maximum flow F7 (m3/h)**	**Thermal efficiency (%)**	**LpA radiated 3m dB(A)**	**Total voltage (V)**	**Total current (A)**	**Total power (kW)**	**Weight (Kg)**	**According ErP**
RIS-700-H-EKO-S	2930	2x1.7	2x0.23	850	90	56	1x230	3.3	0.4	105	2018
RIS-700-H-EKO-E	2930	2x1.7	2x0.23	850	90	56	1x230	8.5	1.6	105	2018
RIS-700-H-EKO-W	2930	2x1.7	2x0.23	850	90	56	1x230	3.3	0.4	117.5	2018
RIS-1200-H-EKO-S	3400	2x2.7	2x0.42	1350	90	53	1x230	5.3	0.8	184	2018
RIS-1200-H-EKO-E	3400	2x2.7	2x0.42	1350	90	53	1x230	14	2.8	184	2018
RIS-1200-H-EKO-W	3400	2x2.7	2x0.42	1350	90	53	1x230	5.3	0.8	200	2018
RIS-1900-H-EKO-S	2600	2x3.2	2x0.50	2000	90	60	1x230	6.3	0.9	260	2018
RIS-1900-H-EKO-E	2600	2x3.2	2x0.50	2000	90	60	1x230	19.3	3.9	260	2018
RIS-1900-H-EKO-W	2600	2x3.2	2x0.50	2000	90	60	1x230	6.3	0.9	276	2018
RIS-2500-H-EKO-S	2200	2x4.4	2x1.00	3300	90	62	3x400	8.4	1.8	390	2018
RIS-2500-H-EKO-E	2200	2x4.4	2x1.00	3300	90	62	3x400	13.6	5.5	390	2018
RIS-2500-H-EKO-W	2200	2x4.4	2x1.00	3300	90	62	3x400	8.4	1.8	408	2018
RIS-3500-H-EKO-S	2390	2x5.4	2x1.60	4100	90	69	3x400	10.9	2.3	627	2018
RIS-3500-H-EKO-E	2390	2x5.4	2x1.60	4100	90	69	3x400	19.5	8.3	627	2018
RIS-3500-H-EKO-W	2390	2x5.4	2x1.60	4100	90	69	3x400	10.9	2.3	649	2018
RIS-5500-H-EKO-S	2180	2x3.6	2x1.80	6100	90	77	3x400	6	3.7	768	2018
RIS-5500-H-EKO-E	2180	2x3.6	2x1.80	6100	90	77	3x400	23.3	15.7	768	2018
RIS-5500-H-EKO-W	2180	2x3.6	2x1.80	6100	90	77	3x400	6	3.7	790	2018

Technical characteristics of models with electrically heated coil

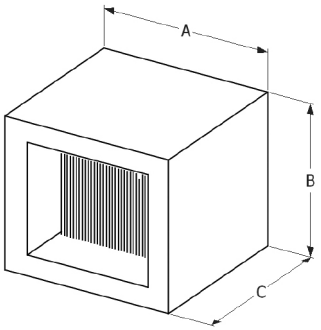
Model	**Voltage (V)**	**Power (kW)**
RIS-700-H-EKO-E	1x230	1.2
RIS-1200-H-EKO-E	1x230	2
RIS-1900-H-EKO-E	1x230	3
RIS-2500-H-EKO-E	3x400	3.6
RIS-3500-H-EKO-E	3x400	6
RIS-5500-H-EKO-E	3x400	12

Technical characteristics of models with water coil at 80/60 ºC

Model	Heat power (kW)	Water flow (l/s)	Head loss (kPa)	Air speed (m/s)	Max. temperature difference (ºC)	Coil thread diam
RIS-700-H-EKO-W	10.6	0.13	9.32	3.37	31.3	1/2”
RIS-1200-H-EKO-W	15.6	0.19	9.5	3	33	1/2”
RIS-1900-H-EKO-W	10.6	0.13	9.5	2.06	21	1/2”
RIS-2500-H-EKO-W	20	0.24	15.6	2.44	20	1/2”
RIS-3500-H-EKO-W	33	0.4	23	2.57	20	3/4”
RIS-5500-H-EKO-W	33	0.4	23	2.57	20	3/4”

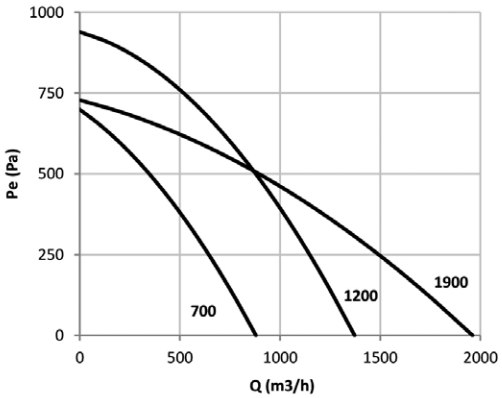
** Data at 80/60ºC, machine's maximum flow and outside temperature = 0ºC*

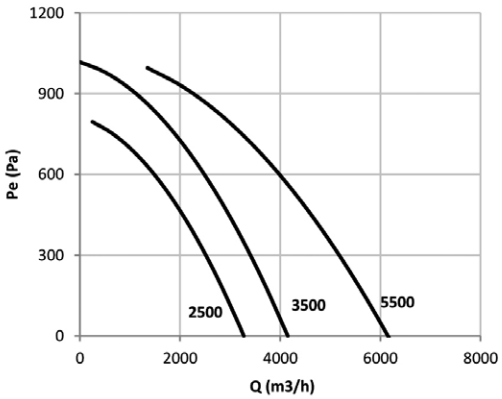
Model	A	B	C
RIS-700- H-EKO-W	364	395	342
RIS-1200- H-EKO-W	439	460	342
RIS-1900- H-EKO-W	679	813	791
RIS-2500- H-EKO-W	880	838	756
RIS-3500- H-EKO-W	1150	944	795
RIS-5500- H-EKO-W	1150	944	795



External water coils

Characteristic Curves





Acoustic features

The values specified are determined according to free field measurements of sound levels in dB(A) at a distance of no less than 3 m from the equipment.

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

Model	63	125	250	500	1000	2000	4000	8000
RIS-700	42	45	49	54	45	43	40	37
RIS-1200	41	44	43	48	47	43	40	33
RIS-1900	40	41	51	55	53	52	49	42
RIS-2500	42	45	57	58	55	52	44	36
RIS-3500	53	59	65	62	62	59	52	58
RIS-5500	51	54	71	72	71	68	65	58

Configurations

View of machine from the maintenance access side

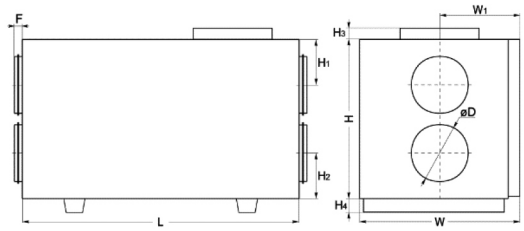
Air extracted from the premises
Air blown into the premises

Stale air exiting
Clean air entering
External water coils

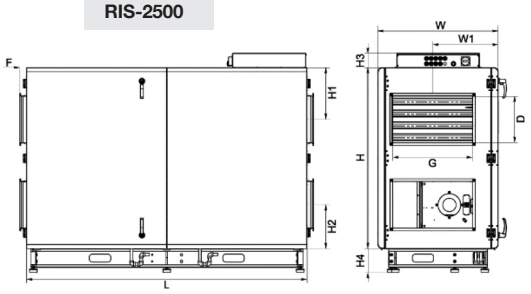
	Configuration D	Configuration K
RIS 700/1200/1900 S / E Versions		
RIS 2500 S / E Versions		
RIS 3500 S / E Versions		
RIS 5500 S / E Versions		
RIS 700/1200/1900 W Versions		
RIS 2500/5500 W Versions		
RIS 3500 W Versions		
RIS 5500 W Versions		

Dimensions in mm

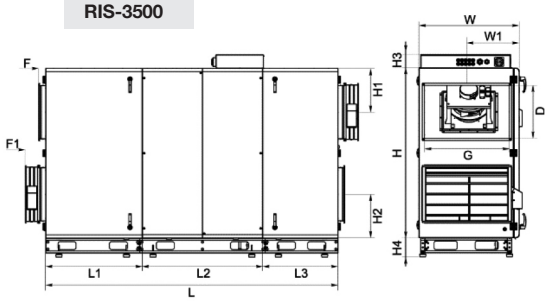
RIS-700/1200/1900



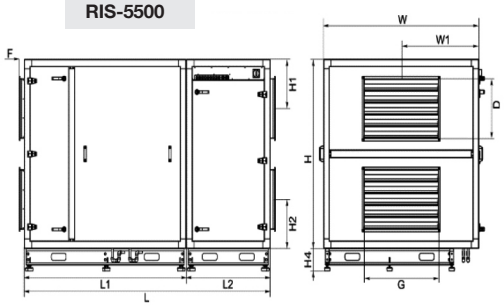
RIS-2500



RIS-3500



RIS-5500



Model	L	L1	L2	L3	W	W1	H	H1	H2	H3	H4	F	F1	øD	G	D
RIS-700- H-EKO-S/E	1200	-	-	-	670	335	780	210	210	65	126	40	-	250	-	-
RIS-700- H-EKO-W	1200	-	-	-	670	335	780	210	210	65	126	40	-	250	-	-
RIS-1200-H-EKO-S/E	1500	-	-	-	760	380	1000	269	269	70	141	40	-	315	-	-
RIS-1200- H-EKO-W	1500	-	-	-	760	380	1000	269	269	70	141	40	-	315	-	-
RIS-1900- H-EKO-S/E	1800	-	-	-	800	400	1245	331	331	106	141	70	-	400	-	-
RIS-1900- H-EKO-W	1800	-	-	-	800	400	1245	331	331	106	141	70	-	400	-	-
RIS-2500- H-EKO-S/E	2100	-	-	-	900	490	1355	387	327	108	180	50	-	-	600	350
RIS-2500- H-EKO-W	2100	-	-	-	900	490	1355	387	327	108	180	50	-	-	600	350
RIS-3500- H-EKO-S/E	2756	909	1132	709	946	494	1600	413	413	129	180	65	192	-	800	500
RIS-3500- H-EKO-W	2756	909	1132	709	946	494	1600	413	413	129	180	65	192	-	800	500
RIS-5500- H-EKO-S/E	2644	1740	900	-	1670	835	1600	415	415	-	180	55	-	-	800	500
RIS-5500- H-EKO-W	2644	1740	900	-	1670	835	1600	415	415	-	180	55	-	-	800	500

CJFILTER/REC filter box configurations

CJFILTER/REC — 300x600-250 — CA

Model

Box size

Filters available
F7
F9
CA (Active Carbon)
H10
H13

For more information, see CJFILTER/REC section.

Filter box part numbers according to machine size and inlet/outlet cross-section

Model	Box size
RIS-700-H-EKO	300x600-250
RIS-1200-H-EKO	600x600-315
RIS-1900-H-EKO	600x600-400
RIS-2500-H-EKO	600x900-350x600
RIS-3500-H-EKO	600x900-500x800
RIS-5500-H-EKO	600x1200-500x800

RIRS H EKO

Heat recovery ventilators with rotating exchanger, automatic control and EC motor, designed for horizontal ducts and installation on roof or in technical room

F7

FLEX panel included in all models

Common characteristics:
- Efficient low-noise EC adjustable fans.
- Maintenance switch – disconnector incorporated.
- Thermal efficiency of up to 80%.
- Sound insulation 50mm thick for low noise level.
- Large access doors for correct maintenance.
- Tray for collecting condensation with drainage.

PRV 3.0 control functions incorporated:
- Free cooling function.
- Fan speed control by manual selection or optional external sensors (CO2 or pressure).
- Frost protection built-in.
- Built-in control system with FLEX remote control panel (including 13 m cable).
- ON/OFF and speed control available through panel or external switches.
- Control of external DX coolers.
- Built-in temperature and humidity sensors.
- Filter condition control through built-in pressure switches (for some models).
- Management of fire alarms and equipment failure alarms.
- Compatible with MODBUS RTU.
- Models 400 and 700 have additional extraction without recovery, for kitchen fumes.

Finish:
- Silver/Ral 7040 paint.

Versions:
- Environmental: Renewal of air without supplying heat (S).
- Electric: With heating supplied by single-stage electrically heated coils (E).
- Water battery: With heating supplied by water coils external to the machine (W).

On request:
- Boxes with special filters.
- Adiabatic module.
- Cover for roof installation.

Order code

RIRS — 3500 — H-EKO — E — D — F7

RIRS	3500	H-EKO	E	D	F7
Model	Size	Horizontal ducts and high efficiency	S: No battery or water coils E: Electrical battery W: External water coil	Side on which the air supply to the premises is located, seen from the maintenance access. D: Right-hand side (standard) K: left-hand side	F7 filter (air supply filter)

	RIRS-400	RIRS-700	RIRS-1200	RIRS-1900	RIRS-2500	RIRS-3500	RIRS-5500
Standard filters (supply/extraction)	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5
Free cooling function 100% of flow	YES	YES	YES	YES	YES	YES	YES
Side for maintenance access can be changed (D↔K)	YES	YES	YES	YES	YES	YES	NO
Version availability according to maintenance access side (versions D or K)	D/K	D/K	D/K	D/K	D/K	D/K	D
Built-in pressure switches for filter condition control	-	-	YES	YES	YES	YES	YES

Technical characteristics

Model	Double-inlet			Maximum flow F7 (m3/h)	Thermal efficiency (%)	LpA radiated 3m dB(A)	Total voltage (V)	Total current (A)	Total power (kW)	Weight (Kg)	According ErP
	Speed (r/min)	Current (A)	Power (kW)								
RIRS-400-H-EKO S	3490	2x1.20	2x0,132	540	75	55	1x230	2.46	0.3	72	2018
RIRS-400-H-EKO E	3490	2x1.20	2x0,132	540	75	55	1x230	7.66	1.5	72	2018
RIRS-400-H-EKO W	3490	2x1.20	2x0,132	540	75	55	1x230	2.46	0.3	80.5	2018
RIRS-700-H-EKO S	3380	2x1.80	2x0,210	750	75	55	1x230	3.74	0.4	96	2018
RIRS-700-H-EKO E	3380	2x1.80	2x0,210	750	75	55	1x230	12.44	2.4	96	2018
RIRS-700-H-EKO W	3380	2x1.80	2x0,210	750	75	55	1x230	3.74	0.4	108.5	2018
RIRS-1200-H-EKO S	3400	2x2.80	2x0,430	1400	80	57	1x230	5.87	0.9	160	2018
RIRS-1200-H-EKO E	3400	2x2.80	2x0,430	1400	80	57	2x400	15.87	4.9	162	2018
RIRS-1200-H-EKO W	3400	2x2.80	2x0,430	1400	80	57	1x230	5.87	0.9	176	2018
RIRS-1900-H-EKO S	2600	2x3.20	2x0,500	2150	74	61	1x230	6.62	1.0	160	2018
RIRS-1900-H-EKO E	2600	2x3.20	2x0,500	2150	74	61	3x400	19.62	10.0	162	2018
RIRS-1900-H-EKO W	2600	2x3.20	2x0,500	2150	74	61	1x230	6.62	1.0	176	2018
RIRS-2500-H-EKO S	2800	2x3.35	2x0,750	2900	80	62	1x230	6.95	1.5	348	2018
RIRS-2500-H-EKO E	2800	2x3.35	2x0,750	2900	80	62	3x400	19.95	10.5	350	2018
RIRS-2500-H-EKO W	2800	2x3.50	2x0,750	2900	80	62	1x230	6.95	1.5	366	2018
RIRS-3500-H-EKO S	2390	2x5.75	2x1,300	4500	80	66	1x230	12.13	2.7	490	2018
RIRS-3500-H-EKO E	2390	2x5.75	2x1,300	4500	80	66	3x400	29.43	14.7	492	2018
RIRS-3500-H-EKO W	2390	2x5.75	2x1,300	4500	80	66	1x230	12.13	2.7	514	2018
RIRS-5500-H-EKO S	2180	2x3.20	2x2,000	6900	80	78	3x400	6.65	4.2	623	2018
RIRS-5500-H-EKO E	2180	2x3.20	2x2,000	6900	80	78	3x400	28.35	19	625	2018
RIRS-5500-H-EKO W	2180	2x3.20	2x2,000	6900	80	78	3x400	6.65	4.2	647	2018

Technical characteristics of models with electrically heated coil

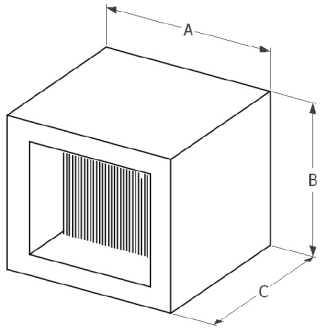
Model	Voltage (V)	Power (kW)
RIRS-400-H-EKO-E	1X230	1.2
RIRS-700-H-EKO-E	1X230	2
RIRS-1200-H-EKO-E	2X400	4
RIRS-1900-H-EKO-E	3X400	9
RIRS-2500-H-EKO-E	3X400	9
RIRS-3500-H-EKO-E	3X400	12
RIRS-5500-H-EKO-E	3X400	14.8

Technical characteristics of models with water coil at 80/60 ºC

Model	Heat power (kW)	Water flow (l/s)	Head loss (kPa)	Air speed (m/s)	Max. temperature difference (ºC)	Coil thread diam
RIRS-400-H-EKO-W	6.25	0.08	15.24	3.4	33.5	1/2”
RIRS-700-H-EKO-W	10.6	0.13	9.32	3.37	31.38	1/2”
RIRS-1200-H-EKO-W	15.6	0.19	9.49	2.9	33	1/2”
RIRS-1900-H-EKO-W	18.2	0.22	12.5	3.83	30	1/2”
RIRS-2500-H-EKO-W	20	0.24	15,62	2,44	20	1/2”
RIRS-3500-H-EKO-W	18.25	0.35	18.25	2.06	21.5	3/4”
RIRS-5500-H-EKO-W	33	0.4	22,97	2,57	20	3/4”

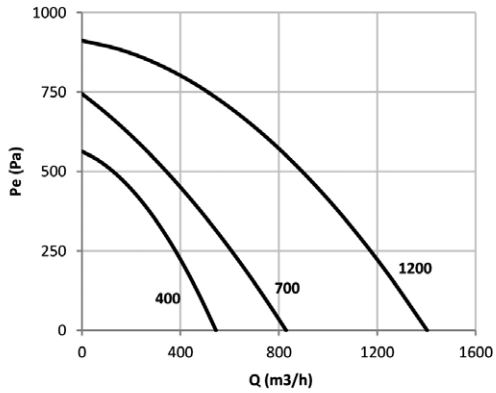
** Data at 80/60ºC, machine's maximum flow and outside temperature = 0ºC*

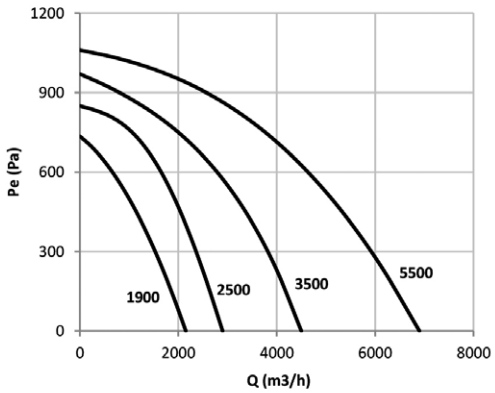
Model	A	B	C
RIRS-400-H-EKO-W	289	265	304
RIRS-700-H-EKO-W	364	395	342
RIRS-1200-H-EKO-W	439	460	342
RIRS-1900-H-EKO-W	439	460	342
RIRS-2500-H-EKO-W	880	838	756
RIRS-3500-H-EKO-W	880	838	756
RIRS-5500-H-EKO-W	1150	944	795



External water coils

Characteristic Curves





Acoustic features

The values specified are determined according to free field measurements of sound levels in dB(A) at a distance of no less than 3 m from the equipment.

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

Model	63	125	250	500	1000	2000	4000	8000
RIRS-400	41	43	44	53	48	45	44	41
RIRS-700	44	48	48	51	49	46	44	43
RIRS-1200	51	52	53	47	44	41	35	33
RIRS-1900	42	44	58	53	51	53	50	48
RIRS-2500	44	45	52	60	54	52	48	43
RIRS-3500	52	55	60	61	58	56	50	48
RIRS-5500	58	60	71	73	72	69	64	57

Configurations

View of machine from the maintenance access side

Air extracted from the premises

Air blown into the premises

Stale air exiting

Clean air entering

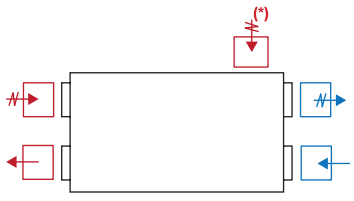
External water coils

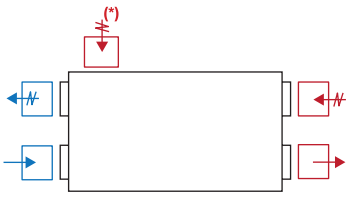
(*) Extraction of air from the premises without recovery, only for models 400 and 700.

Configuration D

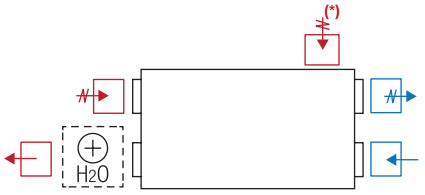
Configuration K

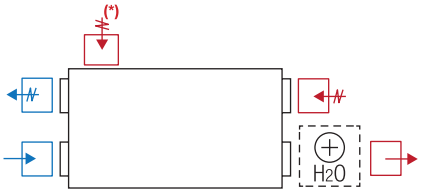
S / E Versions





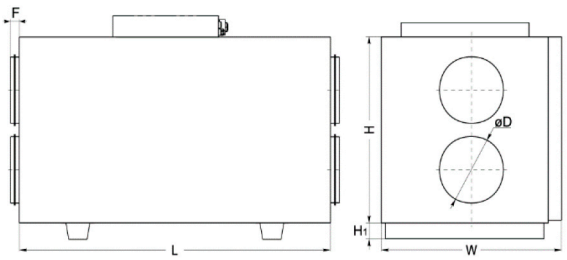
W Versiones



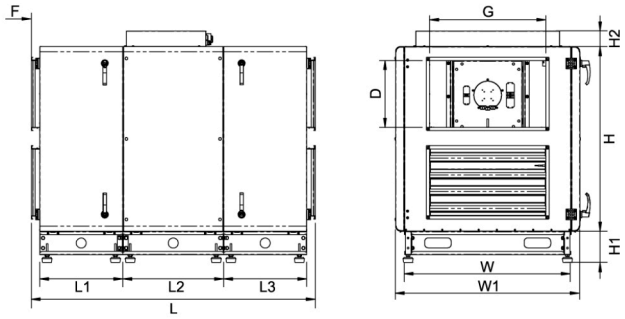


Dimensions in mm

RIRS-400/700/1200/1900



RIRS-2500/3500/5500



Modelo	L	L1	L2	L3	W	W1	H	H1	H2	øD	G	D	F
RIRS-400-H-EKO-S/E	1000	-	-	-	560	-	610	40	-	200	-	-	30
RIRS-400-H-EKO-W	1000	-	-	-	560	-	610	40	-	200	-	-	30
RIRS-700-H-EKO-S/E	1100	-	-	-	653	-	700	40	-	250	-	-	40
RIRS-700-H-EKO-W	1100	-	-	-	653	-	700	40	-	250	-	-	40
RIRS-1200-H-EKO-S/E	1350	-	-	-	853	-	900	70	-	315	-	-	40
RIRS-1200-H-EKO-W	1350	-	-	-	853	-	900	70	-	315	-	-	40
RIRS-1900-H-EKO-S/E	1350	-	-	-	853	-	900	70	-	315	-	-	40
RIRS-1900-H-EKO-W	1350	-	-	-	853	-	900	70	-	315	-	-	40
RIRS-2500-H-EKO-S/E	1608	500	606	500	1000	1110	1105	180	96	-	700	400	50
RIRS-2500-H-EKO-W	1608	500	606	500	1000	1110	1105	180	96	-	700	400	50
RIRS-3500-H-EKO-S/E	1901	630	628	630	1032	1205	1302	194	131	-	700	400	50
RIRS-3500-H-EKO-W	1901	630	628	630	1032	1205	1302	194	131	-	700	400	50
RIRS-5500-H-EKO-S/E	1908	600	700	600	1394	1408	1485	192	103	-	800	500	50
RIRS-5500-H-EKO-W	1908	600	700	600	1394	1408	1485	192	103	-	800	500	50

CJFILTER/REC filter box configurations

CJFILTER/REC — 300x600-250 — CA

Model

Box size

Filters available
F7
F9
CA (Active Carbon)
H10
H13

For more information, see CJFILTER/REC section.

Filter box part numbers according to machine size and inlet/outlet cross-section

Model	Box size
RIRS-400-H-EKO	300x600-200
RIRS-700-H-EKO	300x600-250
RIRS-1200-H-EKO	600x600-315
RIRS-1900-H-EKO	600x600-315
RIRS-2500-H-EKO	600x900-400x700
RIRS-3500-H-EKO	600x900-400x700
RIRS-5500-H-EKO	600x1200-500x800

Accessories

See accessories section


FILTERS


CJFILTER/REC


ADIABATIC BOX


PRESSURE SWITCH


CO2 PROBE


TEJ

RIRS V EKO

Heat recovery ventilators with rotating exchanger, automatic control and EC motor, designed for vertical ducts and installation in technical room

BY-PASS F7

FLEX panel included in all models

Common characteristics:
- Efficient low-noise EC adjustable fans.
- Maintenance switch – disconnector incorporated.
- Thermal efficiency of up to 80%.
- Sound insulation 50mm thick for low noise level.
- Large access doors for correct maintenance.
- Tray for collecting condensation with drainage.

PRV 3.0 control functions incorporated:
- Free cooling function.
- Fan speed control by manual selection or optional external sensors (CO2 or pressure).
- Frost protection built-in.
- Built-in control system with FLEX remote control panel (including 13 m cable).
- ON/OFF and speed control available through panel or external switches.
- Control of external DX coolers.
- Built-in temperature and humidity sensors.
- Filter condition control through built-in pressure switches.
- Management of fire alarms and equipment failure alarms.
- Compatible with MODBUS RTU.

Finish:
- Silver/Ral 7040 paint.

Versions:
- Environmental: Renewal of air without supplying heat (S).
- Electric: With heating supplied by single-stage electrically heated coils (E).
- Water battery: With heating supplied by water coils external to the machine (W).

On request:
- Boxes with special filters.
- Adiabatic module.

Order code

RIRS — 3500 — V-EKO — E — D — F7

RIRS	3500	V-EKO	E	D	F7
Model	Size	Vertical ducts and high efficiency	S: No battery or water coils E: Electrical battery W: External water coil	Side on which the fresh air enters the machine, as seen from the maintenance access. D: Right-hand side (standard) K: left-hand side	F7 filter (air supply filter)

Characteristics, depending on size

	RIRS-400	RIRS-700	RIRS-1200	RIRS-1900	RIRS-2500	RIRS-3500	RIRS-5500
Standard filters (supply/extraction)	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5
Free cooling function 100% of flow	YES	YES	YES	YES	YES	YES	YES
Side for maintenance access can be changed (D↔K)	-	-	-	-	YES	YES	YES
Version availability according to maintenance access side (versions D or K)	D/K	D/K	D/K	D/K	D/K	D/K	D/K

Technical characteristics

Model	Fans			Maximum flow F7 (m3/h)	Thermal efficiency (%)	LpA radiated 3m dB(A)	Total voltage (V)	Total current (A)	Total power (kW)	Weight (Kg)	According ErP
	Speed (r/min)	Current (A)	Power (kW)								
RIRS-400-V-EKO-S	3490	2x1.20	2x0.13	500	75	54	1X230	2.66	0.35	79	2018
RIRS-400-V-EKO-E	3490	2x1.20	2x0.13	500	75	54	1X230	6.84	1.50	79	2018
RIRS-400-V-EKO-W	3490	2x1.20	2x0.13	500	75	54	1X230	2.66	0.35	87	2018
RIRS-700-V-EKO-S	3380	2x1.80	2x0.22	900	74	55	1X230	3.60	0.45	104	2018
RIRS-700-V-EKO-E	3380	2x1.80	2x0.22	900	74	55	1X230	12.30	2.45	104	2018
RIRS-700-V-EKO-W	3380	2x1.80	2x0.22	900	74	55	1X230	3.60	0.45	116	2018
RIRS-1200-V-EKO-S	3400	2x2.80	2x0.41	1550	74	57	2X400	5.70	0.84	180	2018
RIRS-1200-V-EKO-E	3400	2x2.80	2x0.41	1550	74	57	2X400	15.70	4.84	180	2018
RIRS-1200-V-EKO-W	3400	2x2.80	2x0.41	1550	74	57	2X400	5.70	0.84	196	2018
RIRS-1900-V-EKO-S	2600	2x3.15	2x0.50	2000	74	60	3X400	6.50	1.00	178	2018
RIRS-1900-V-EKO-E	2600	2x3.15	2x0.50	2000	74	60	3X400	19.50	10.00	180	2018
RIRS-1900-V-EKO-W	2600	2x3.15	2x0.50	2000	74	60	3X400	6.50	1.00	194	2018
RIRS-2500-V-EKO-S	2800	2x3.30	2x0.75	2800	80	62	3X400	7.00	1.55	270	2018
RIRS-2500-V-EKO-E	2800	2x3.30	2x0.75	2800	80	62	3X400	20.00	10.50	280	2018
RIRS-2500-V-EKO-W	2800	2x3.30	2x0.75	2800	80	62	3X400	7.00	1.55	278	2018
RIRS-3500-V-EKO-S	2390	2x6.00	2x1.35	4300	80	64	3X400	12.00	2.70	370	2018
RIRS-3500-V-EKO-E	2390	2x6.00	2x1.35	4300	80	64	3X400	29.30	14.70	380	2018
RIRS-3500-V-EKO-W	2390	2x6.00	2x1.35	4300	80	64	3X400	12.00	2.70	380	2018
RIRS-5500-V-EKO-S	2180	2x3.10	2x1.90	6300	80	74	3X400	6.55	3.84	565	2018
RIRS-5500-V-EKO-E	2180	2x3.10	2x1.90	6300	80	74	3X400	32.55	21.84	580	2018
RIRS-5500-V-EKO-W	2180	2x3.10	2x1.90	6300	80	74	3X400	6.55	3.84	583	2018

Technical characteristics of models with electrically heated coil

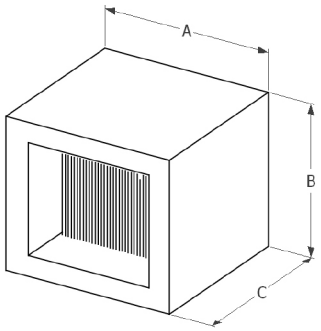
Model	Voltage (V)	Power (kW)
RIRS-400-V-EKO-E	1X230	1.2
RIRS-700-V-EKO-E	1X230	2
RIRS-1200-V-EKO-E	2X400	4
RIRS-1900-V-EKO-E	3X400	9
RIRS-2500-V-EKO-E	3X400	9
RIRS-3500-V-EKO-E	3X400	12
RIRS-5500-V-EKO-E	3X400	18

Technical characteristics of models with water coil at 80/60 ºC

Model	Heat power (kW)	Water flow (l/s)	Head loss (kPa)	Air speed (m/s)	Max. temperature difference (ºC)	Coil thread diam
RIRS-400-V-EKO-W	6.25	0.08	15.24	3.4	33.5	1/2”
RIRS-700-V-EKO-W	10.6	0.13	9.3	3.3	31.3	1/2”
RIRS-1200-V-EKO-W	15.6	0.20	9.5	3.0	33	1/2”
RIRS-1900-V-EKO-W	18.2	0.22	12.5	3.8	30	1/2”
RIRS-2500-V-EKO-W	25	0.31	5.8	5	27.5	3/4”
RIRS-3500-V-EKO-W	31.9	0.39	9.86	5.5	26.25	3/4”
RIRS-5500-V-EKO-W	61	0.76	7.35	4.5	28	1”

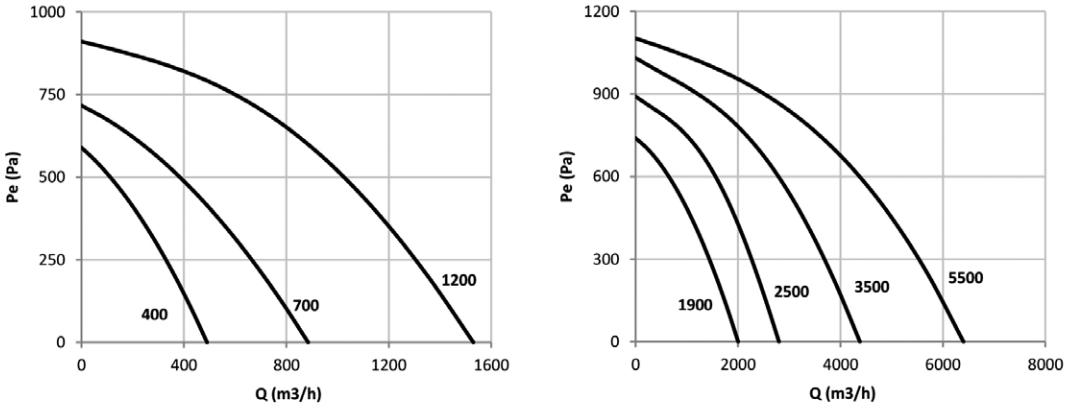
** Data at 80/60ºC, machine's maximum flow and outside temperature = 0ºC*

Model	A	B	C
RIRS-400-V-EKO-W	289	265	304
RIRS-700-V-EKO-W	364	395	342
RIRS-1200-V-EKO-W	439	460	342
RIRS-1900-V-EKO-W	439	460	342
RIRS-2500-V-EKO-W	540	290	300
RIRS-3500-V-EKO-W	640	340	300
RIRS-5500-V-EKO-W	840	540	300



External water coils

Characteristic Curves



Acoustic features

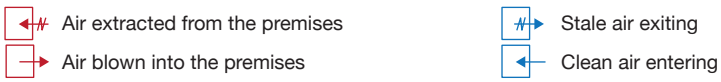
The values specified are determined according to free field measurements of sound levels in dB(A) at a distance of no less than 3 m from the equipment.

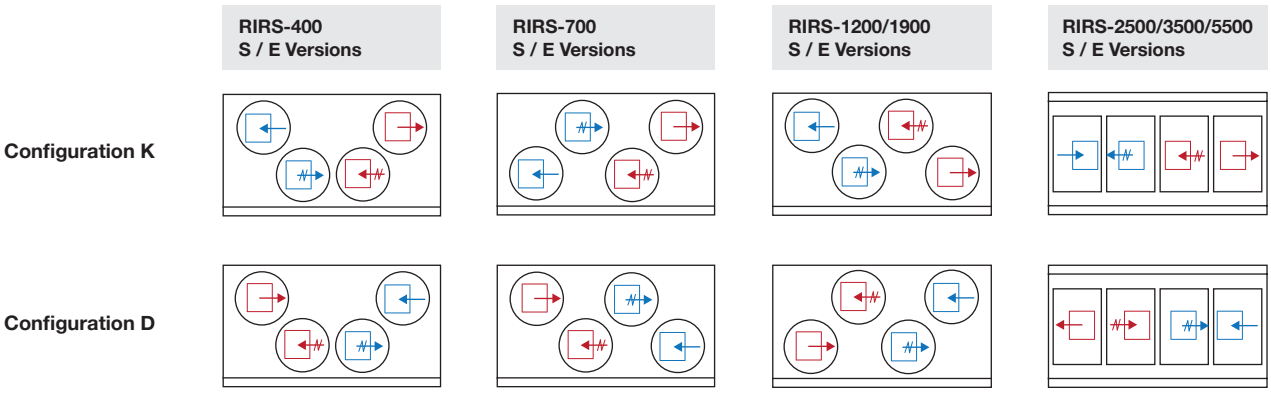
Sound power Lw(A) spectrum in dB(A) via frequency band in Hz

Model	63	125	250	500	1000	2000	4000	8000
RIRS-400	47	51	48	41	42	43	33	28
RIRS-700	44	47	50	49	44	43	39	39
RIRS-1200	44	47	54	49	47	49	46	36
RIRS-1900	41	44	57	51	49	53	52	45
RIRS-2500	44	45	54	59	52	52	49	46
RIRS-3500	50	55	58	59	57	53	49	45
RIRS-5500	57	58	66	69	68	65	51	54

Configurations

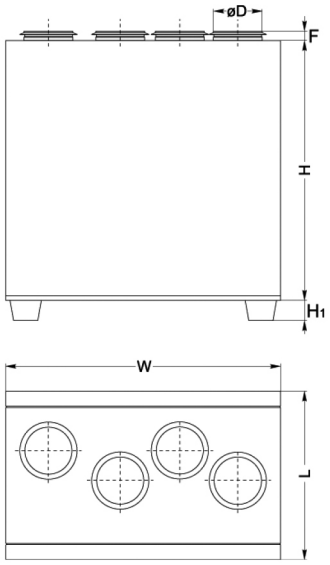
View of machine from the maintenance access side



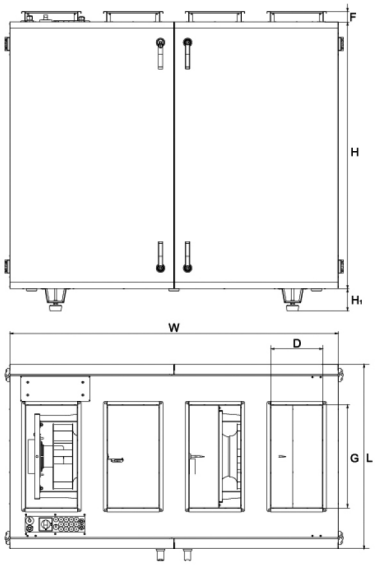


Dimensions in mm

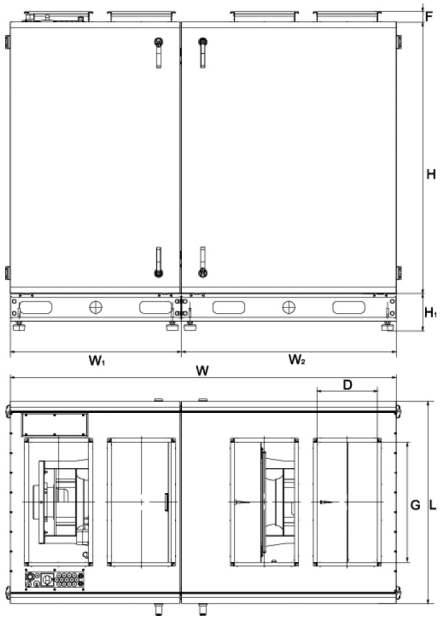
RIRS-400/700/1200/1900



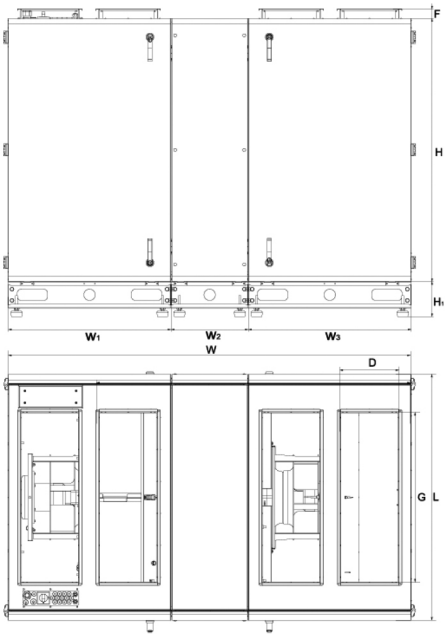
RIRS-2500



RIRS-3500



RIRS-5500



Model	L	W	W1	W2	W3	H	H1	øD	G	D	F
RIRS-400-V-EKO-S/E	553	900	-	-	-	850	40	160	-	-	30
RIRS-400-V-EKO-W	553	900	-	-	-	850	40	160	-	-	30
RIRS-700-V-EKO-S/E	655	1100	-	-	-	980	40	250	-	-	40
RIRS-700-V-EKO-W	655	1100	-	-	-	980	40	250	-	-	40
RIRS-1200-V-EKO-S/E	855	1500	-	-	-	1150	70	315	-	-	40
RIRS-1200-V-EKO-W	855	1500	-	-	-	1150	70	315	-	-	40
RIRS-1900-V-EKO-S/E	855	1500	-	-	-	1150	70	315	-	-	40
RIRS-1900-V-EKO-W	855	1500	-	-	-	1150	70	315	-	-	40
RIRS-2500-V-EKO-S/E	900	1600	-	-	-	1300	110	-	500	250	50
RIRS-2500-V-EKO-W	900	1600	-	-	-	1300	110	-	500	250	50
RIRS-3500-V-EKO-S/E	1010	1930	850	1075	-	1355	190	-	600	300	50
RIRS-3500-V-EKO-W	1010	1930	850	1075	-	1355	190	-	600	300	50
RIRS-5500-V-EKO-S/E	1310	2120	855	400	855	1400	190	-	900	300	50
RIRS-5500-V-EKO-W	1310	2120	855	400	855	1400	190	-	900	300	50

CJFILTER/REC filter box configurations

CJFILTER/REC — 300x600-250 — CA

Model

Box size

Filters available
F7
F9
CA (Active Carbon)
H10
H13

For more information, see CJFILTER/REC section.

Filter box part numbers according to machine size and inlet/outlet cross-section

Model	Box size
RIRS-400-V-EKO	300x600-200
RIRS-700-V-EKO	300x600-250
RIRS-1200-V-EKO	600x600-315
RIRS-1900-V-EKO	600x600-315
RIRS-2500-V-EKO	600x900-400x700
RIRS-3500-V-EKO	600x900-400x700
RIRS-5500-V-EKO	600x1200-500x800

Accessories

See accessories section


FILTERS


CJFILTER/REC


ADIABATIC BOX


PRESSURE SWITCH


CO2 PROBE

CJFILTER/REC

Air filter boxes for circular ducts equipped with different types of filter, depending on model

Principal characteristics:

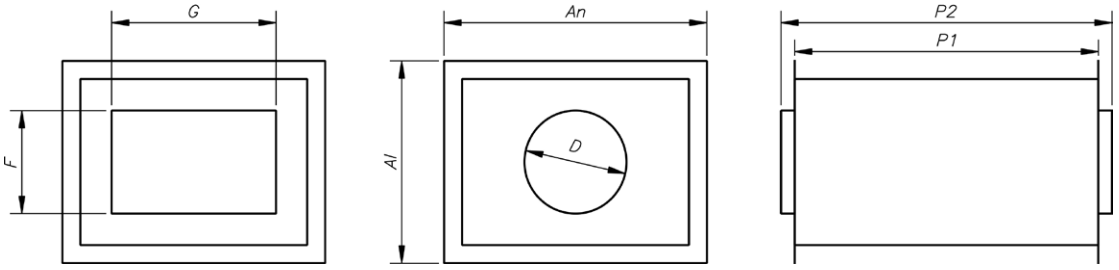
- Side access panel for maintenance.
- Easy to install.
- Quick and easy filter replacement using rails.
- 5mm-thick sound insulation.
- Low-profile models for fitting in false ceiling.
- Compact F7 and F9 filters for mounting on 98mm rail.
- Polyhedral filters 292mm deep with efficiency levels E10, H13 and CA (Active Carbon) for mounting on 25mm rail.

Order code

CJFILTER/REC — 300x600-250 — F9

- Model
- Box size - inlet/outlet cross-section
- Filters available
  - F7
  - F9
  - CA (Active Carbon)
  - E10
  - H13

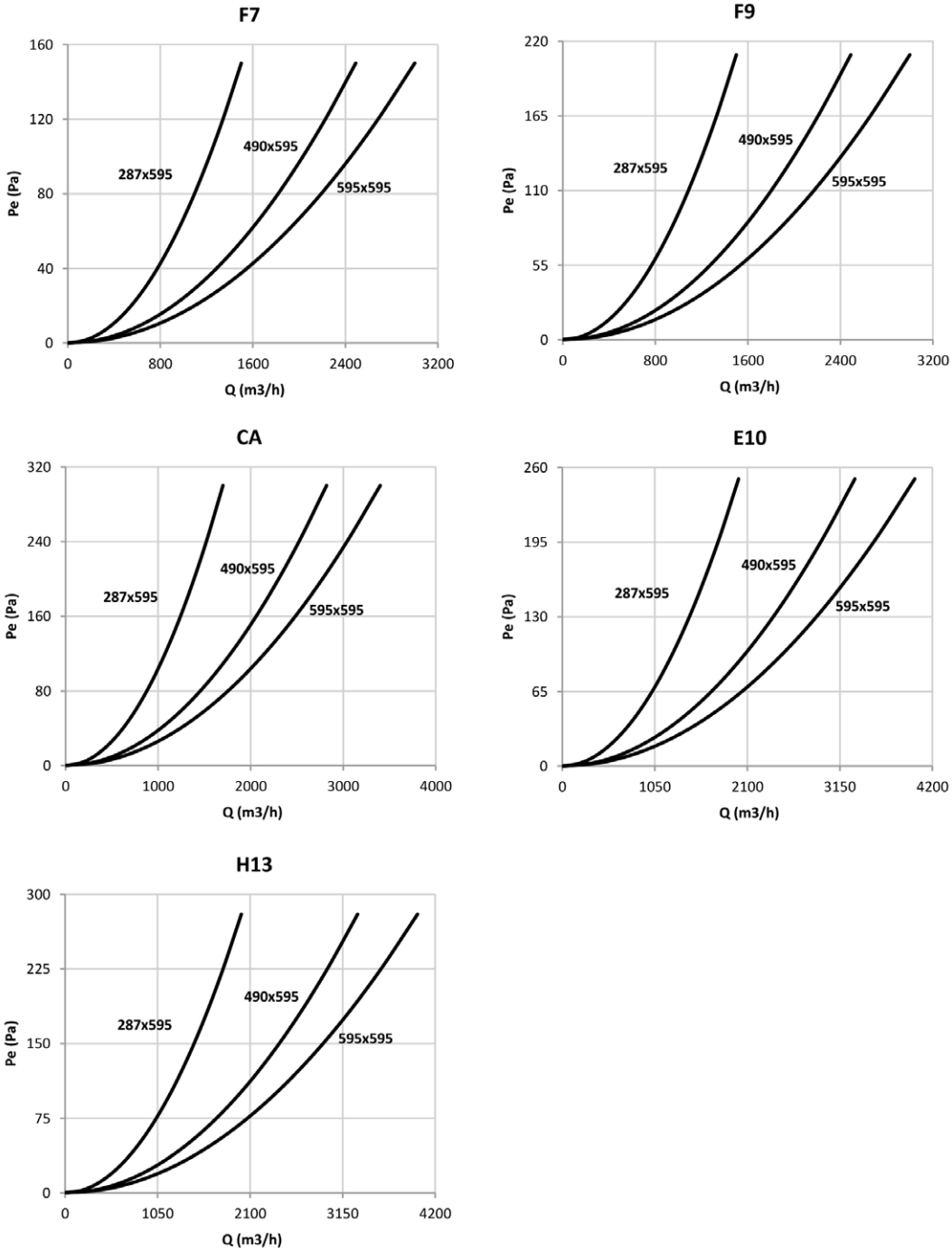
Dimensions in mm



Model	Al	An	P1	P2	F	G	D
CJFILTER/REC-300x600-150	370	640	450	530	-	-	150
CJFILTER/REC-300x600-160	370	640	450	530	-	-	160
CJFILTER/REC-300x600-200	370	640	450	530	-	-	200
CJFILTER/REC-300x600-250	370	640	450	530	-	-	250
CJFILTER/REC-300x600-250x500	370	640	450	530	250	500	-
CJFILTER/REC-500x700-250x500	570	740	450	530	250	500	-
CJFILTER/REC-500x700-300x700	570	740	450	530	300	700	-
CJFILTER/REC-500x700-315	570	740	450	530	-	-	315
CJFILTER/REC-500x700-355	570	740	450	530	-	-	355
CJFILTER/REC-500x700-400x700	570	740	450	530	400	700	-

Model	Al	An	P1	P2	F	G	D
CJFILTER/REC-600X1200-450	670	1240	450	530	-	-	450
CJFILTER/REC-600x1200-500x800	670	1240	450	530	500	800	-
CJFILTER/REC-600x600-315	670	640	450	530	-	-	315
CJFILTER/REC-600x600-400	670	640	450	530	-	-	400
CJFILTER/REC-600x900-315	670	940	450	530	-	-	315
CJFILTER/REC-600x900-350x600	670	940	450	530	350	600	-
CJFILTER/REC-600x900-355	670	940	450	530	-	-	355
CJFILTER/REC-600x900-400x700	670	940	450	530	400	700	-
CJFILTER/REC-600X900-450	670	940	450	530	-	-	450
CJFILTER/REC-600x900-500x800	670	940	450	530	500	800	-

Characteristic curves (head losses)



Codes of available filters and filter combinations according to box sizes

No OF FILTERS ACCORDING TO BOX SIZE

BOX SIZE	FILTER SIZE		
(Height x Width)	287x592	490x592	592x592
300x600	1	-	-
500x700	-	1	-
600x600	-	-	1
900x600	1	-	1
1200X600	-	-	2

FILTER SIZE	FILTER CODE ACCORDING TO SIZE AND EFFICIENCY				
	F7	F9	CA	E10	H13
287x595	1104804	1104833	1082526	1104852	1104857
490x595	1104832	1104846	1104849	1104855	1104858
595x595	1082426	1104847	1082525	1104856	1104859

SV/FILTER

Low noise in-line duct extractors with different stages of filtration

G4 + F6

F6 + F8

F7 + F9

Features:
- Acoustic casing covered with sound absorbing material.
- Standard flanged inlet and outlet to aid in duct installation.
- G4 + F6, F6 + F8 and F7 + F9 filters, according to model.
- Easy access inspection and cleaning cover.

Construction:
- Galvanized sheet steel casing.
- Backward-curved turbine, except models 125 and 150, which have multi-blade impellers. Supplied with four mounting brackets, to make installation easier.
- Access doors to facilitate maintenance and cleaning.

Motor:
- Class F motors with external rotor, ball bearings, IP-54 protection, and built-in thermal protector.
- 230V single-phase. -50/60Hz. Adjustable.
- Max. temperature of air for transport +50ºC.

Finish:
- Anticorrosive finish in polyester resin polymerised at 190ºC, after degreasing with phosphate-free nanotechnology treatment.

Order code

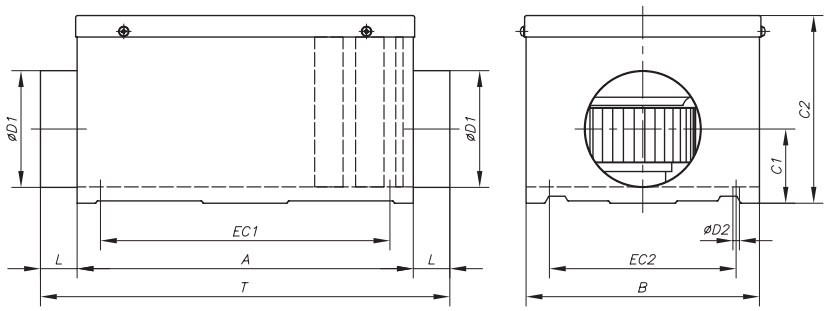
SV/FILTER — 200/H — F7+F9

- SV/FILTER: Model
- 200/H: Size
- F7+F9: Combination of filters

Technical characteristics

Model	Speed	Max. admissible current (A)	Installed power	Maximum airflow (m³/h)			No. pre-filters	No. Filters	Filter Dimensions (mm)		Weight	According ErP
	(r/min)	230V	(kW)	Filters (G4+F6)	Filters (F6+F8)	Filters (F7+F9)			Filters (G4)	Filters (F)	(Kg)	
SV/FILTER-125/H	2220	0,65	0,08	300	255	240	1	1	282x194x48	282x194x98	9,1	2018
SV/FILTER-150/H	2200	1,25	0,17	445	385	360	1	1	334x216x48	334x216x98	12,3	2018
SV/FILTER-200/H	1240	0,85	0,12	590	430	375	1	1	389x248x48	389x248x98	15,1	2018
SV/FILTER-250/H	2380	0,95	0,14	660	560	525	1	1	414x267x48	414x267x98	17,8	2018
SV/FILTER-315/H	1330	0,75	0,12	1035	850	790	1	1	513x344x48	513x344x98	26,4	2018
SV/FILTER-350/H	1280	0,95	0,14	1550	1270	1180	1	1	602x385x48	602x385x98	36,3	2018
SV/FILTER-400/H	1330	1,80	0,30	2050	1720	1600	1	1	660x405x48	660x405x98	46,4	2018

Dimensions in mm

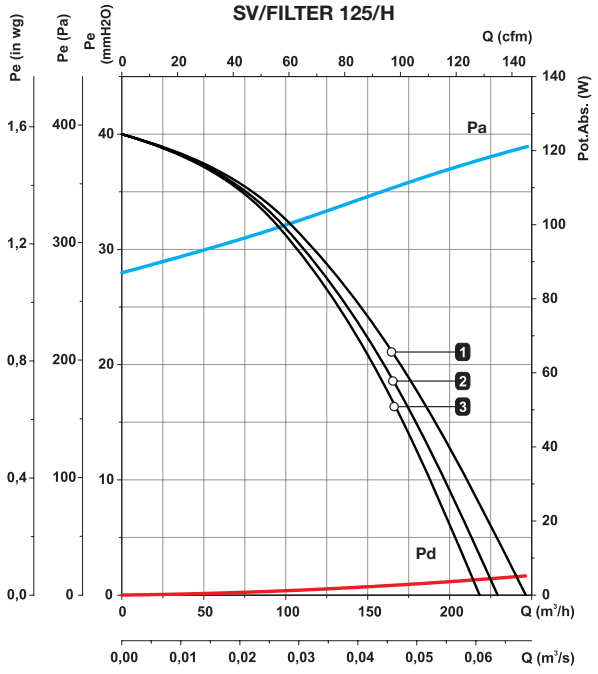


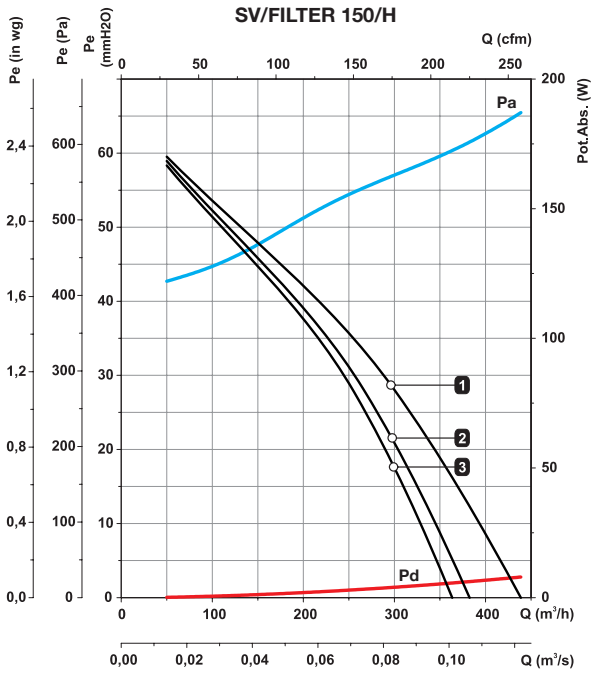
Model	A	B	C1	C2	Ø D1	L	Ø D2	EC1	EC2	T
SV/FILTER-125/H	657	290	80	222	125	36.5	7	607	240	730
SV/FILTER-150/H	700	340	92	244	150	36.5	7	650	290	773
SV/FILTER-200/H	775	395	117	273	200	36	7	725	345	847
SV/FILTER-250/H	775	395	140	293	250	50	7	725	345	875
SV/FILTER-315/H	860	520	175	371	315	48	8.5	809	469	956
SV/FILTER-350/H	960	610	200	410	355	48	8.5	909	564	1056
SV/FILTER-400/H	1035	670	219	455	400	38	8.5	984	624	1111

Characteristic Curves

Equipment curve according to built-in filters **1** G4+F6 **2** F6+F8 **3** F7+F9

Static pressure — Dynamic pressure — Absorbed power

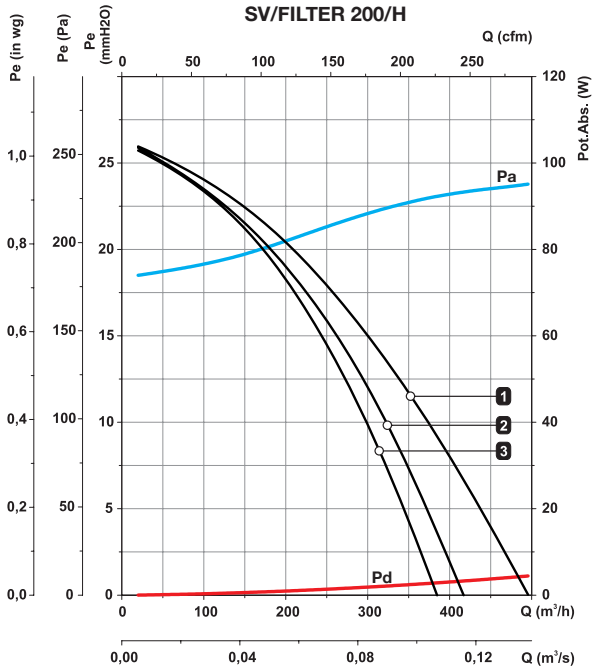


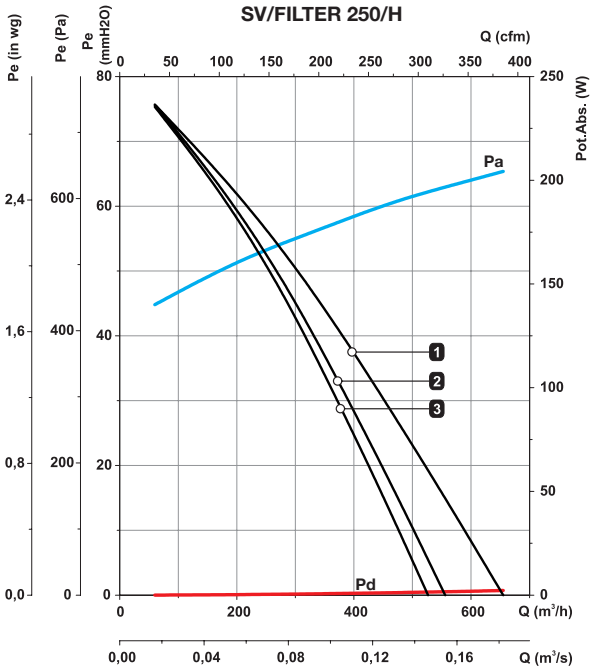


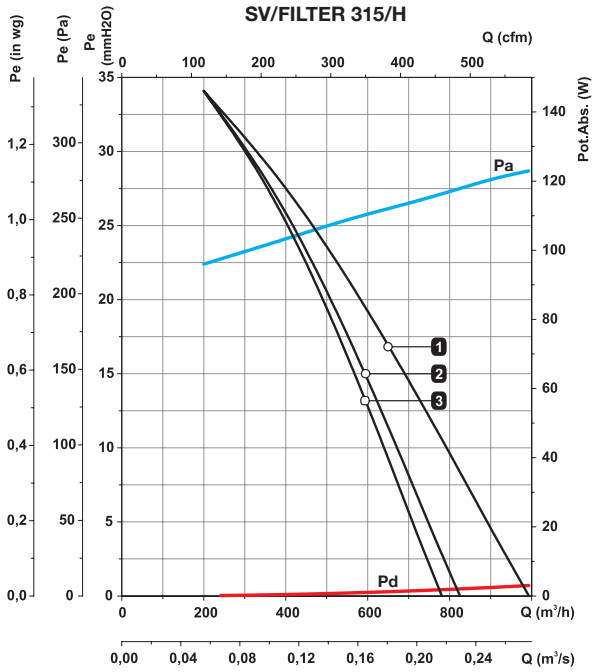
Characteristic Curves

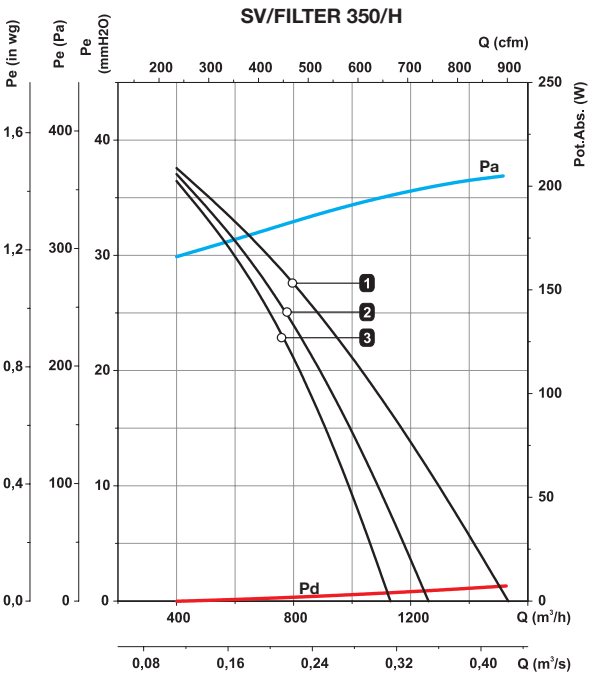
Equipment curve according to built-in filters **1** G4+F6 **2** F6+F8 **3** F7+F9

Static pressure — Dynamic pressure — Absorbed power





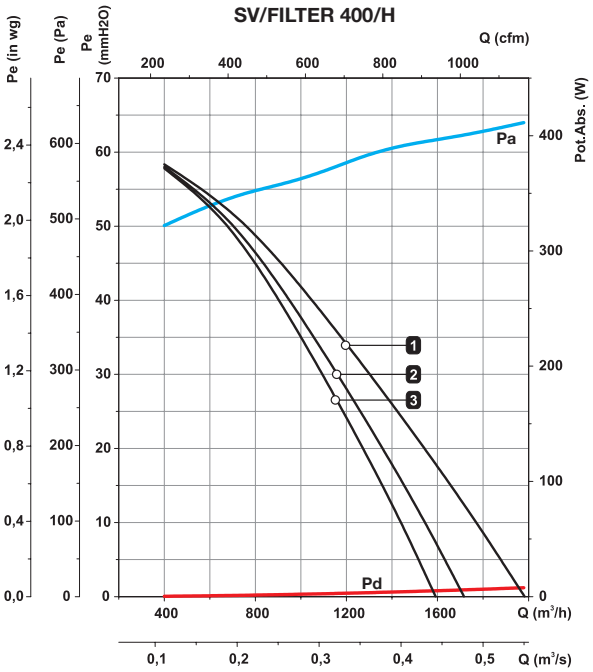




Characteristic Curves

Equipment curve according to built-in filters 1 G4+F6 2 F6+F8 3 F7+F9

Static pressure Dynamic pressure Absorbed power



Accessories

See accessories section


FILTERS

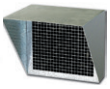

CJFILTER


PRESSURE SWITCH


SI-PRESSURE


PRESSURE PROBE


INT


VIS


TEJ

UFR

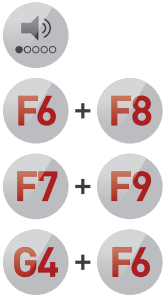
Soundproofed filtration units with sandwich panel, equipped with high-performance fans with backward-curved impeller and different stages of filtration depending on model

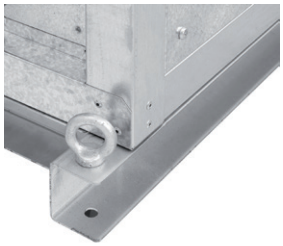
Features:
- Soundproofed structure.
- Direct operation.
- Air outlet, configurable for 4 sides.
- F6 + F8, F7 + F9 and G4 + F6 filters, depending on model selected.
- Possibility of pre-filter plus two stages of filtration.
- Easy access inspection and cleaning covers.
- Pressure inlets and pressure probe for filter control.

Construction:
- Galvanised sheet steel structure with soundproofing.
- High-performance impeller with backward-curved blades made from sheet steel.
- Built-in base.

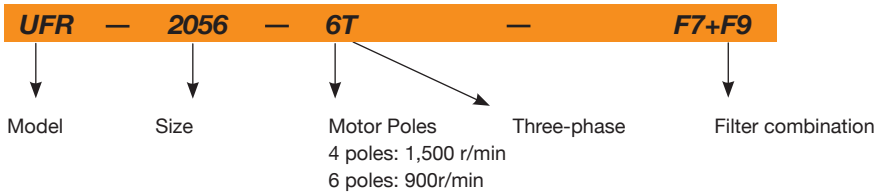
Motor:
- Class F motors, with ball bearings, IP55 protection.
- Three-phase 230/400V-50Hz (up to 4kW) and 400/690V -50Hz (power over 4kW).
- Temperature of the air to transport: -20ºC +60ºC.

Finish:
- Anticorrosive galvanized sheet steel.





Order code

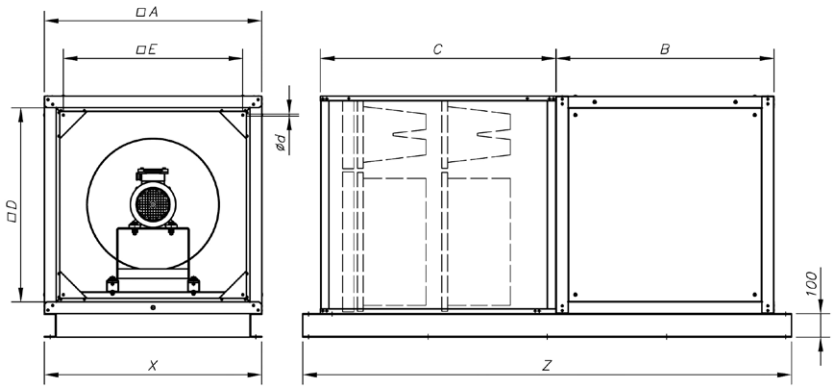


Technical characteristics

Model	Speed	Max. admissible current (A)			Installed power	Max. airflow (m^3/h)			Number of pre-filters		Number of filters		Weight	According ErP
	(r/min)	230V	400V	690V	(kW)	filters (F6+F8)	filters (F7+F9)	filters (G4+F6)	Whole*	Medium*	Whole*	Medium*	(Kg)	
UFR-1240-4T IE3	1430	3,34	1,93		0,75	3.245	3.185	3.005	1	0	1	0	107,5	2018
UFR-1850-4T IE3	1420	5,97	3,45		1,50	4.705	4.620	4.350	1	0	1	0	110	2018
UFR-2056-4T IE3	1430	8,38	4,84		2,20	7.680	7.580	7.235	1	2	1	2	168,5	2018
UFR-2056-6T IE3	935	3,77	2,18		0,75	5.325	5.250	5.010	1	2	1	2	163	2018
UFR-2263-4T IE3	1460		11,03	6,37	5,50	11.995	11.680	11.375	1	2	1	2	221,5	2018
UFR-2263-6T IE3	950	5,23	3,02		1,10	7.200	7.100	7.000	1	2	1	2	177,5	2018
UFR-2071-4T IE3	1460		20,64	11,92	11,00	15.045	14.535	14.060	1	2	1	2	265	2018
UFR-2071-6T-3 IE3	940	9,28	5,36		2,20	9.175	8.990	8.810	1	2	1	2	195	2018
UFR-2071-6T-5.5 IE3	970	16,35	9,44		4,00	10.130	9.770	9.440	1	2	1	2	241,5	2018
UFR-2880-6T IE3	970	16,35	9,44		4,00	11.500	11.165	10.845	1	2	1	2	242	2018

*Pre-filter dimensions: Whole: 585x585x48. Medium: 290x585x48
*Filter dimensions: Whole: 593x593x292. Medium: 288x593x292

Dimensions in mm

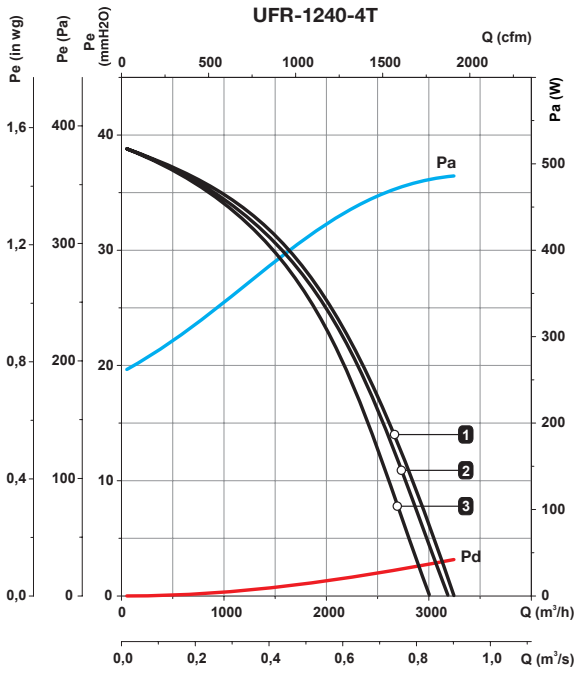


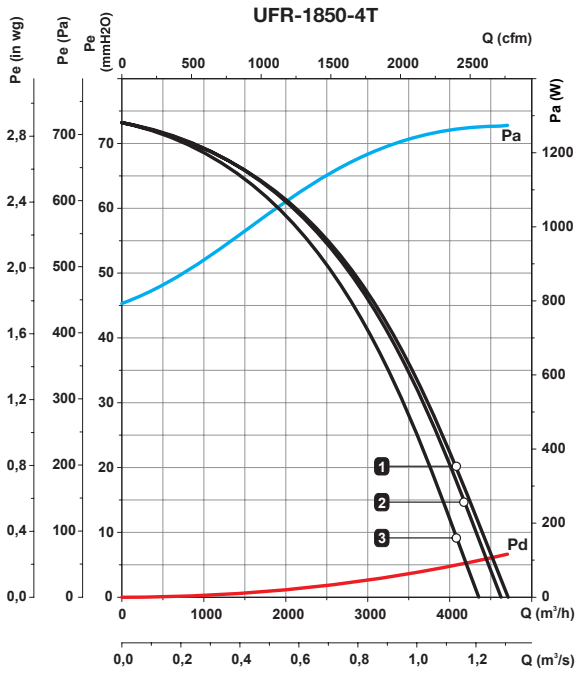
Model	A	B	C	D	E	Ø d	X	Z
UFR-1240-4T	800	800	950	700	640	M6	800	1906
UFR-1850-4T	800	800	950	700	640	M6	800	1906
UFR-2056-4T	925	925	1000	823	763	M6	925	2081
UFR-2056-6T	925	925	1000	823	763	M6	925	2081
UFR-2263-4T	1000	1000	1000	960	838	M6	1000	2156
UFR-2263-6T	925	925	1000	960	763	M6	925	2081
UFR-2071-4T	1060	1060	1000	960	900	M6	1060	2216
UFR-2071-6T	1000	1000	1000	960	838	M6	1000	2156
UFR-2071-6T-5,5	1060	1060	1000	960	900	M6	1060	2216
UFR-2880-6T	1060	1060	1000	960	900	M6	1060	2216

Characteristic Curves

Equipment curve according to built-in filters **1** F6+F8 **2** F7+F9 **3** G4+F6

Static pressure — Dynamic pressure — Absorbed power

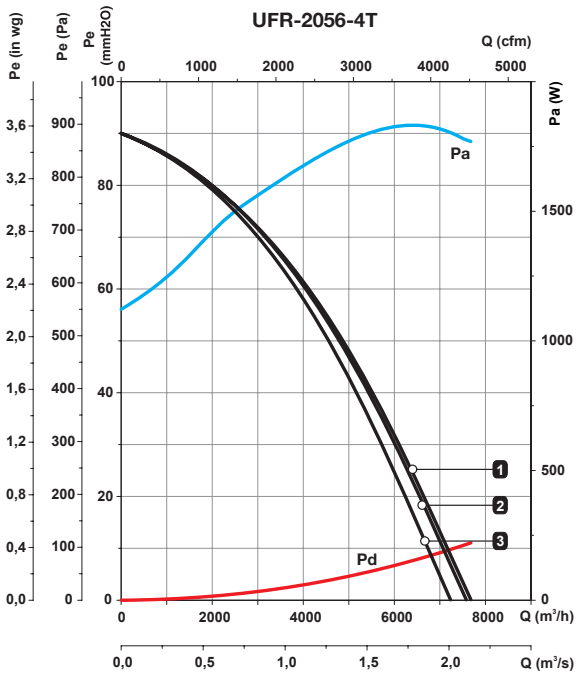


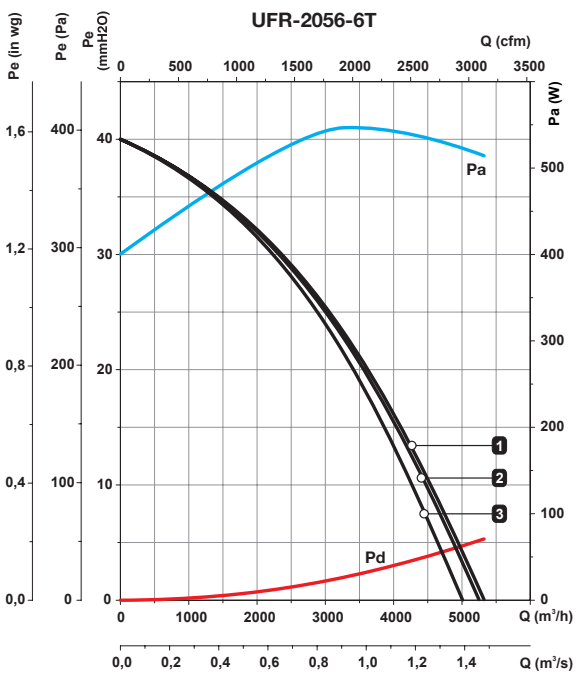


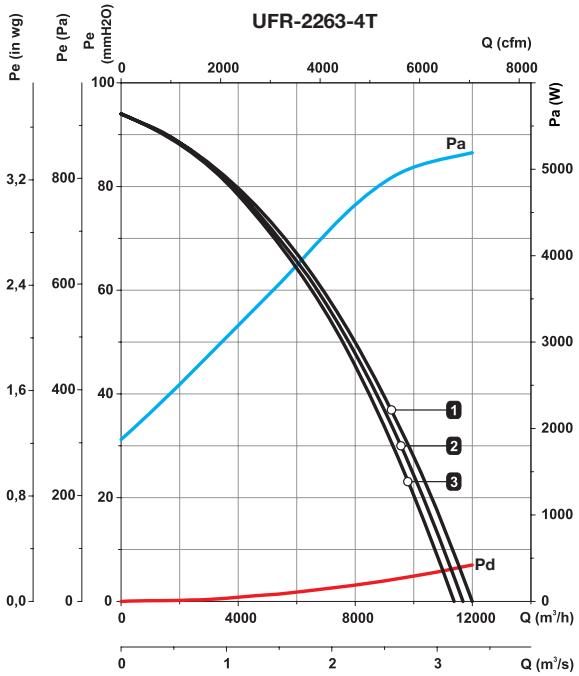
Characteristic Curves

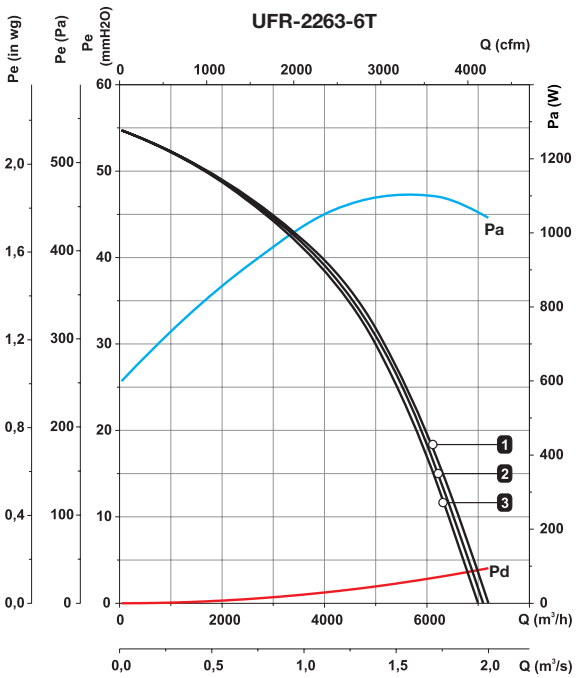
Equipment curve according to built-in filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure | Dynamic pressure | Absorbed power









Accessories

See accessories section


FILTERS


CJFILTER

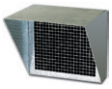

PRESSURE SWITCH


SI-PRESSURE


CONSTANT FLOW KIT


PRESSURE PROBE

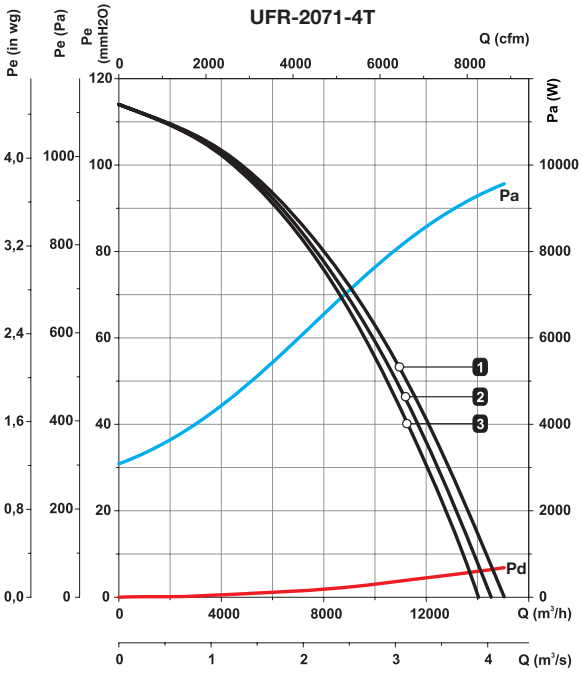

INT

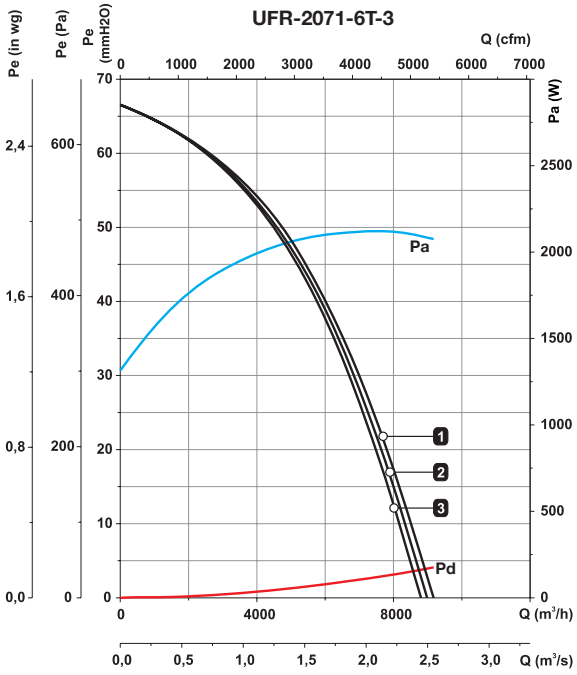

VIS

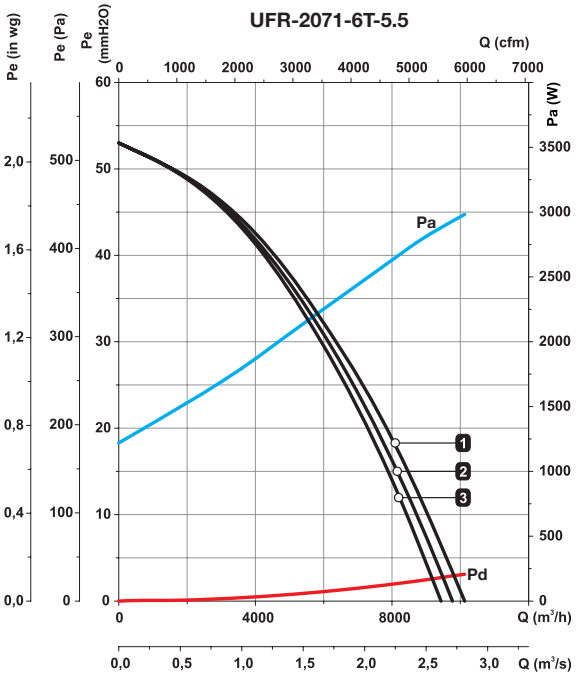
Characteristic Curves

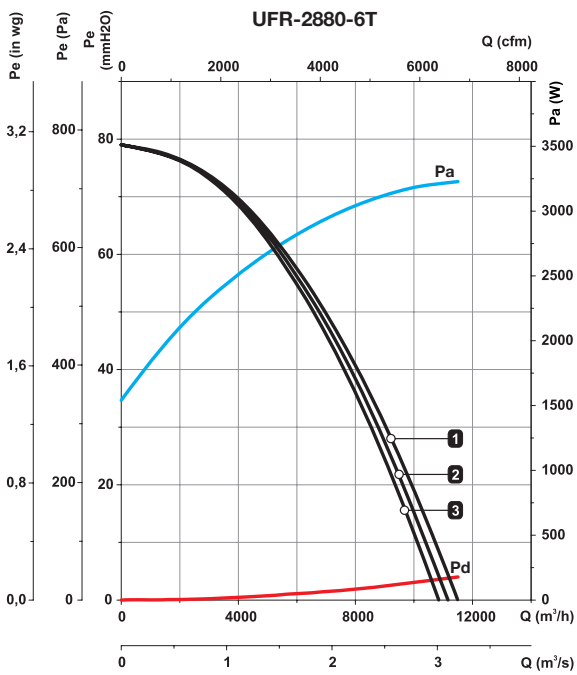
Equipment curve according to built-in filters **1** F6+F8 **2** F7+F9 **3** G4+F6

Static pressure — Dynamic pressure — Absorbed power





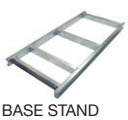




Accessories

See accessories section


TEJ


BASE STAND


SILENT-BLOCKS

UDT

Soundproofed air treatment units with direct drive motors, fitted with double-inlet fans and optional modules for filtration, electrical or hot-water heating

Box:
- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Stuffing-box for cable inlet.

Fan:
- Ventilation units, equipped with CBD series fans.
- Impellers with forward-facing blades made from galvanised sheet steel.

Motor:
- High efficiency (HE) motors in compliance with ErP 2015.
- Class F motors, with ball bearings, IP54 protection.
- Single-phase 220-240V 50Hz and Three-phase 220-240/380-415V 50Hz.
- Max. air temperature to transport: -20ºC.+ 60ºC.

Versions:
- MF: Filtration Module. Standard version F6+F8 and optionally F7+F9.
- ME: Module with electrically heated coil. Standard version G4 and optionally with F6+F8 or F7+F9 filters.
- MA: Module with water coil. Standard version G4 and optionally with F6+F8 or F7+F9 filters.

On request:
- Vertical outlet.
- Module installed as blower.

Order code

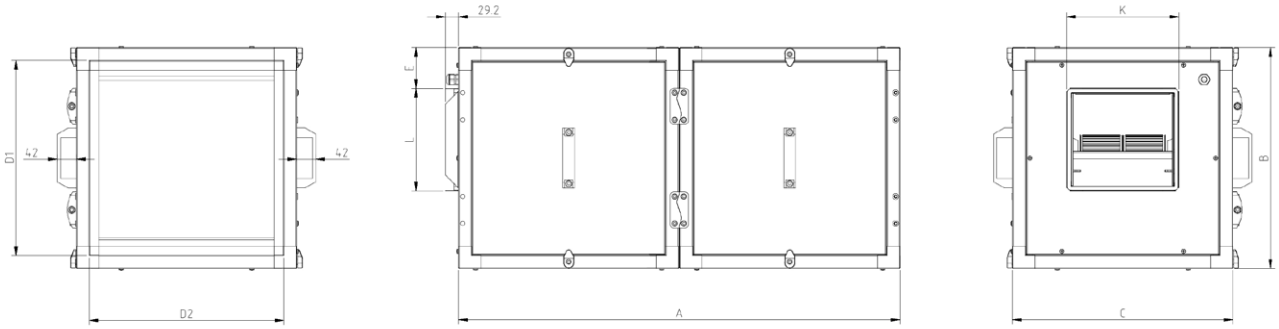
UDT — 7/7 — 4M — 1/5 — MF — F6+F8

- **UDT** — Fan units with air treatment
- **7/7** — Turbine size in inches
- **4M** — Number of motor poles: 4=1400 r/min. 50 Hz; 6=900 r/min. 50 Hz
- **T** — T=Three-phase; M=Single-phase
- **1/5** — Motor power (HP)
- **MF** — Air treatment modules
  - MF: filtration module (standard version)
  - ME: module with electrically heated coil (G4 filter included)
  - MA: module with water coil (G4 filter included)
- **F6+F8** — Filter options for MF modules
  - Standard version F6+F8
  - Option: G4+F7, F7+F9

Technical characteristics

Model	Speed	Maximum admissible current (A)		Installed power	Maximum airflow	Sound Level	Approx. weight
	(r/min)	230 V	400 V	(kW)	(m3/h)	dB(A)	(Kg)
UDT-7/7-4M 1/5	1230	1.4		0.15	1520	58	22.5
UDT-9/9-4M 1/2	1320	3.3		0.37	2800	66	31.8
UDT-9/9-4M 3/4	1310	4.5		0.55	3600	70	32.6
UDT-10/10-4M 1/2	1320	3.3		0.37	2800	65	37.3
UDT-10/10-4M 3/4	1310	4.5		0.55	3950	70	38.1
UDT-12/12-6T 1 1/2	850	6.6	3.8	1.1	7800	74	53.8
UDT-12/12-6M 3/4	850	5		0.55	4900	63	52.3
UDT-12/12-6M 1	850	6		0.75	6000	70	53.3
UDT-15/15-6T 3	890	10.9	6.3	2.2	11900	74	80

Dimensions in mm



Model	A	B	C	D1	D2	E	L	K
UDT-7/7	980	490	490	428	428	91	226	247
UDT-9/9	1100	550	550	488	488	86	279	317
UDT-10/10	1210	605	605	543	543	88	306	343
UDT-12/12	1360	680	680	618	618	84	360	404
UDT-15/15	1710	855	855	793	793	119	423	490

Acoustic features

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

Model	63	125	250	500	1000	2000	4000	8000
7/7-4M 1/5	43	54	58	62	64	63	62	53
9/9-4M 1/2	51	62	66	70	72	71	70	61
9/9-4M 3/4	55	66	70	74	76	75	74	65
10/10-4M 1/2	50	61	65	69	71	70	69	60
10/10-4M 3/4	55	66	70	74	76	75	74	65
12/12-6T 1 1/2	59	70	74	78	80	79	78	69
12/12-6M 3/4	48	59	63	67	69	68	67	58
12/12-6M 1	55	66	70	74	76	75	74	65
15/15-6T 3	61	72	77	81	83	81	80	71

Air treatment module options

MF: Filtration Modules

- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Standard version module F6+F8 and optionally F7+F9.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

ME: Modules with electrically heated coils

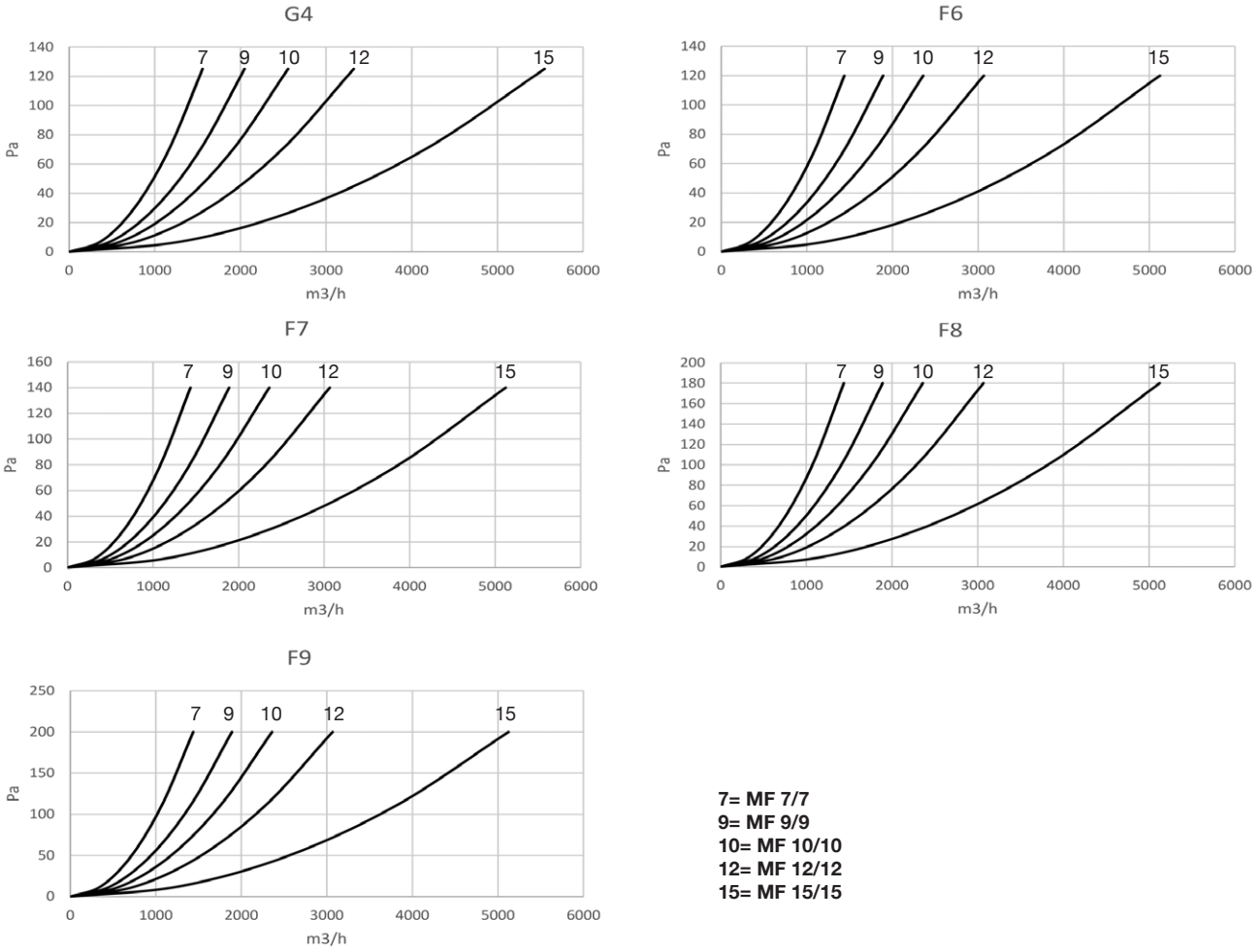
- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Stuffing-box for cable inlet.
- Standard version module G4 and optionally with F6+F8 or F7+F9 filters.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

MA: Modules with water coils

- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Standard version module G4 and optionally with F6+F8 or F7+F9 filters.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

MF: Filtration module characteristics

Head loss - filters



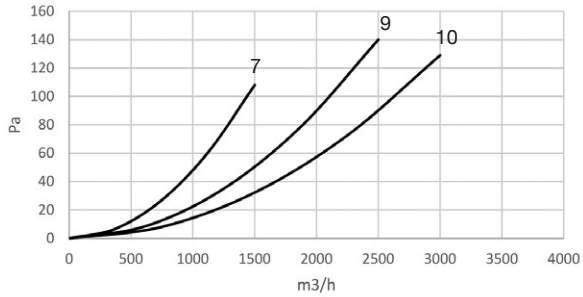
7= MF 7/7
9= MF 9/9
10= MF 10/10
12= MF 12/12
15= MF 15/15

ME: Technical characteristics of electrically heated coil

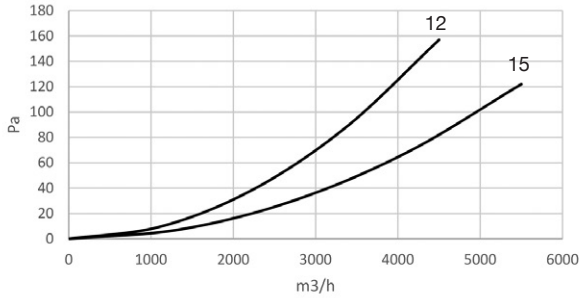
Model	Current (A)	Installed power (kW)			Maximum airflow	Approx. weight
	400V	Stage 1	Stage 2	Stage 3	(m3/h)	(Kg)
ME-7/7	13	3	3	3	1500	23
ME-9/9	23	5.4	5.4	5.4	3300	33
ME-10/10	33	7.7	7.7	7.7	4500	44
ME-12/12	52	12	12	12	6000	61
ME-15/15	81	18.8	18.8	18.8	10000	96

Head loss - electrical coil heaters

ME



ME



MA: Characteristics of 90/70ºC water coil for air at 0ºC

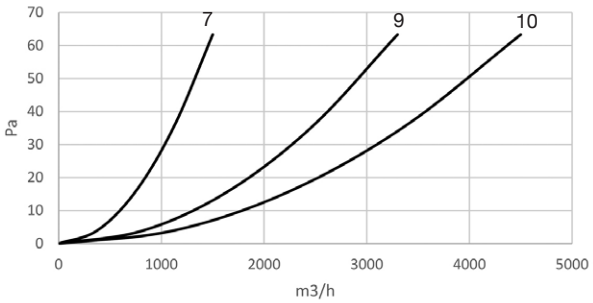
Model	Installed (kW)	Maximum airflow (m3/h)	Water flow (m3/h)	Water head loss (kPa)	Connection (in)	Approx. weight (Kg)
MA-7/7	23	1500	1.0	16.3	1/2”	18
MA-9/9	37	2500	1.7	26.6	1/2”	25
MA-10/10	46	3000	2.0	17.6	3/4”	31
MA-12/12	66	4500	2.9	29.8	3/4”	39
MA-15/15	108	5500	4.8	21.4	1”	63

MA: Characteristics of 80/60ºC water coil for air at 0ºC

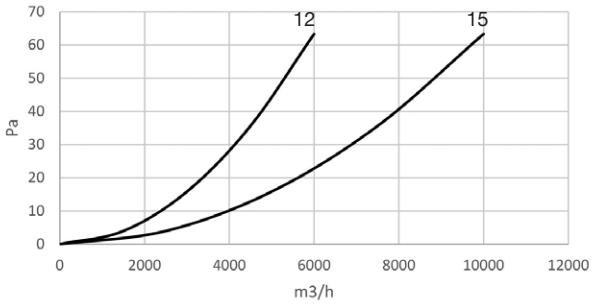
Model	Installed (kW)	Maximum airflow (m3/h)	Water flow (m3/h)	Water head loss (kPa)	Connection (in)	Approx. weight (Kg)
MA-7/7	20	1500	0.9	13.0	1/2”	18
MA-9/9	33	2500	1.4	21.3	1/2”	25
MA-10/10	40	3000	1.7	14.0	3/4”	31
MA-12/12	58	4500	2.5	23.8	3/4”	39
MA-15/15	100	5500	4.2	17.5	1”	63

Head loss - water coil heaters

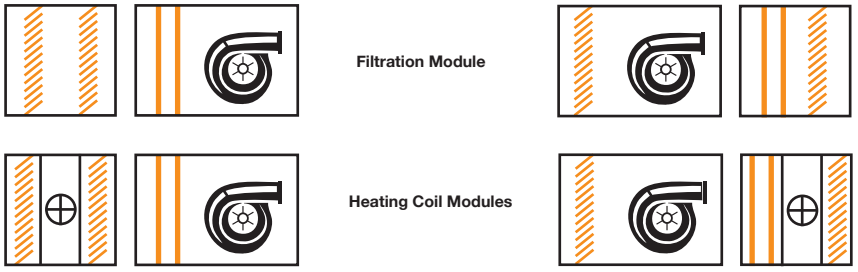
MA



MA



Installation and filter position diagrams



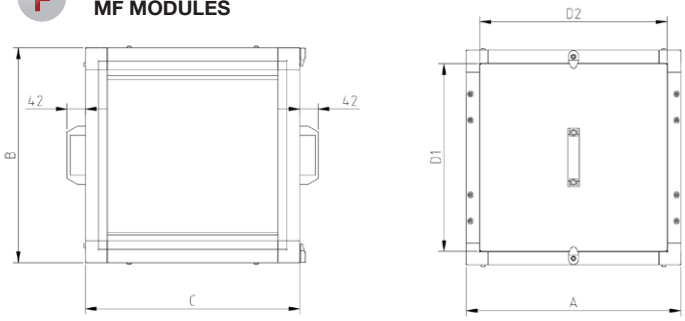
Module installed as extractor

Module installed as blower

Module Dimensions mm

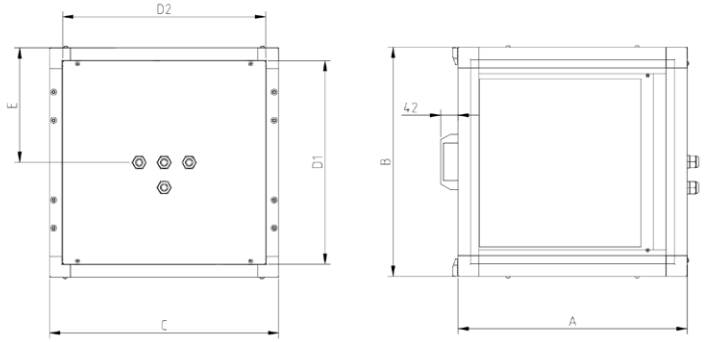
Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS

MF MODULES



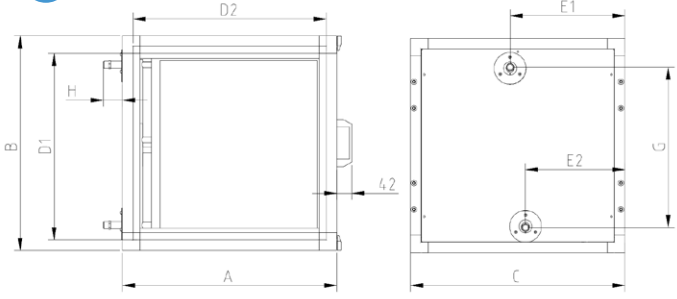
Model	A	B	C	D1	D2
MF-7/7	490	490	490	428	428
MF-9/9	550	550	550	488	488
MF-10/10	605	605	605	543	543
MF-12/12	680	680	680	618	618
MF-15/15	855	855	855	793	793

ME MODULES



Model	A	B	C	D1	D2	E
ME-7/7	490	490	490	428	428	245
ME-9/9	550	550	550	488	488	275
ME-10/10	605	605	605	543	543	302,5
ME-12/12	680	680	680	618	618	340
ME-15/15	855	855	855	793	793	427,5

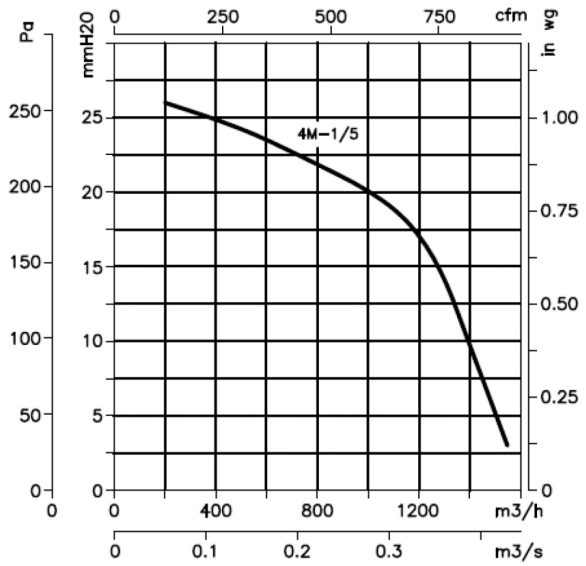
MA MODULES



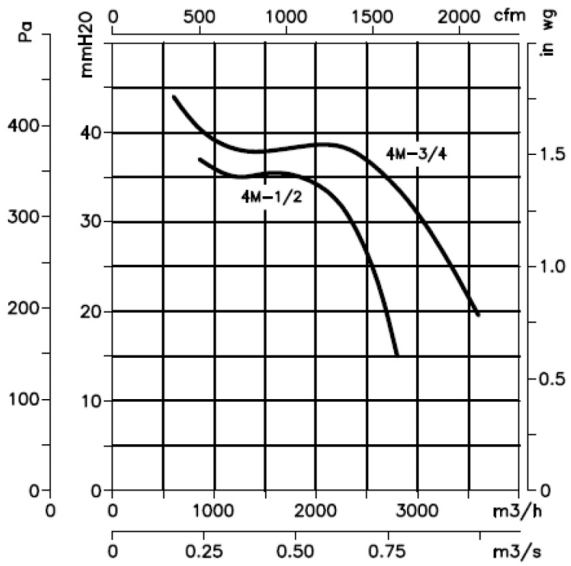
Model	A	B	C	D1	D2	E1	E2	G	H
MA 7/7	490	490	490	428	428	266,5	223,5	334	59,5
MA 9/9	550	550	550	488	488	296,5	253,5	410	57,2
MA 10/10	605	605	605	543	543	324	281	452	54
MA 12/12	680	680	680	618	618	361,5	318,5	527	79,5
MA 15/15	855	855	855	793	793	460	395	671	42,2
MA 18/18	1000	1000	1000	938	938	521,5	478,5	814	47,2

Characteristic curves - fans

(7/7)



(9/9)



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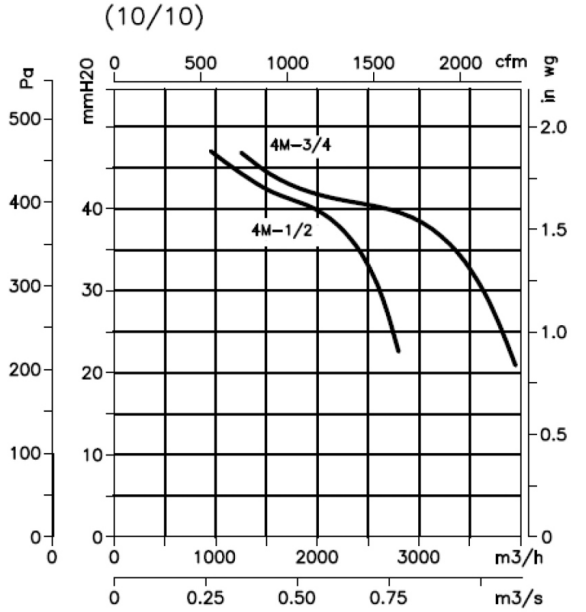

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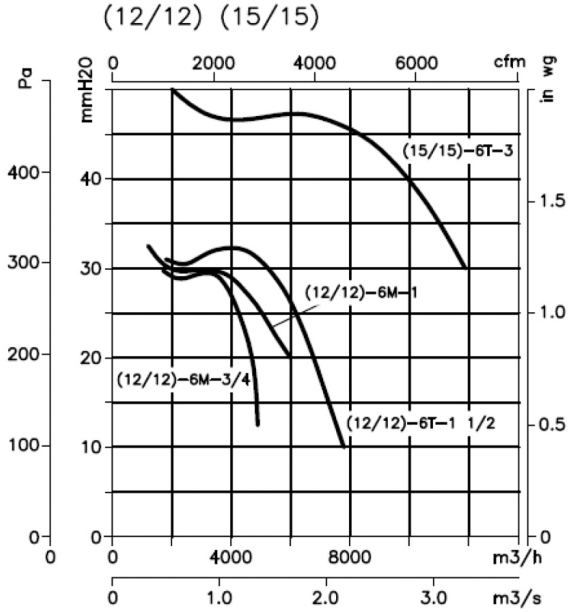


MODULAR KIT AIR TREATMENT UNITS

CJBD/AL: Soundproofed ventilation units with profiles in aluminium and pre-lacquered sheet
CJBD/ALS: Ventilation units with double wall of insulation, pre-lacquered sheet and profiles in aluminium

Filtration Modules

Modules with electrical coils

Modules with water coils

Fan:
- CBD series double-inlet fans.
- Aluminium profile structure with thermal insulation and soundproofing.
- Impeller with forward-facing blades made from galvanised sheet steel.
- Stuffing-box for cable inlet.

Motor:
- Class F closed motors with incorporated thermal protector, ball bearings and IP-54 protection.
- Single-phase 220-240V.-50Hz. and three-phase 220-240/380-415V.-50Hz.
- Max. air temperature to transport: -20ºC+ 60ºC

Finish:
- Anticorrosive pre-lacquered sheet steel and aluminium.

On request:
- With circular inlet.

Order code

CJBD/AL — 2525 — 6M — 1/3

CJBD/AL: With aluminium profiles and soundproofed pre-lacquered sheet.
CJBD/ALS: With double wall of insulation, pre-lacquered sheet and aluminium profiles

Impeller size in mm

mm	inches
1919	7/7
2525	9/9
2828	10/10
3333	12/12
3939	15/15

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

T=Three-phase
M=Single-phase

Installed motor (HP)

Technical characteristics

Model			Speed	Maximum admissible current (A)		Installed power	Maximum airflow	Sound level	Weight approx.
			(r/min)	230V	400 V	(kW)	(m3/h)	dB(A)	(Kg)
CJBD/AL	CJBD/ALS	1919-4M 1/5	1230	1.40		0.15	1520	58	22.5
CJBD/AL	CJBD/ALS	1919-6M 1/10	820	0.85		0.08	1230	53	22.5
CJBD/AL	CJBD/ALS	2525-4M 1/2	1320	3.30		0.37	2800	66	31.8
CJBD/AL	CJBD/ALS	2525-4M 3/4	1310	4.50		0.55	3600	70	32.6
CJBD/AL	CJBD/ALS	2525-6M 1/5	850	1.50		0.15	2200	59	30.1
CJBD/AL	CJBD/ALS	2525-6M 1/3	830	2.20		0.25	2700	61	31.3
CJBD/AL	CJBD/ALS	2828-4M 1/2	1320	3.30		0.37	2800	65	37.3
CJBD/AL	CJBD/ALS	2828-4M 3/4	1310	4.50		0.55	3950	70	38.1
CJBD/AL	CJBD/ALS	2828-6M 1/3	830	2.20		0.25	3200	61	36.8
CJBD/AL	CJBD/ALS	3333-6T 1 1/2	850	6.60	3.80	1.10	7800	74	53.8
CJBD/AL	CJBD/ALS	3333-6M 3/4	850	5.00		0.55	4900	63	52.3
CJBD/AL	CJBD/ALS	3333-6M 1	850	6.00		0.75	6000	70	53.3
CJBD/AL	CJBD/ALS	3939-6T 3	890	10.90	6.30	2.20	11900	74	80.0

Acoustic features

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

Model	63	125	250	500	1000	2000	4000	8000
1919-4M 1/5	43	54	58	62	64	63	62	53
1919-6M 1/10	38	49	53	57	59	58	57	48
2525-4M 1/2	51	62	66	70	72	71	70	61
2525-4M 3/4	55	66	70	74	76	75	74	65
2525-6M 1/5	44	55	59	63	65	64	63	54
2525-6M 1/3	46	57	61	65	67	66	65	56
2828-4M 1/2	50	61	65	69	71	70	69	60

Model	63	125	250	500	1000	2000	4000	8000
2828-4M 3/4	55	66	70	74	76	75	74	65
2828-6M 1/3	46	57	61	65	67	66	65	56
3333-6T 1 1/2	59	70	74	78	80	79	78	69
3333-6M 3/4	48	59	63	67	69	68	67	58
3333-6M 1	55	66	70	74	76	75	74	65
3939-6T 3	61	72	77	81	83	81	80	71

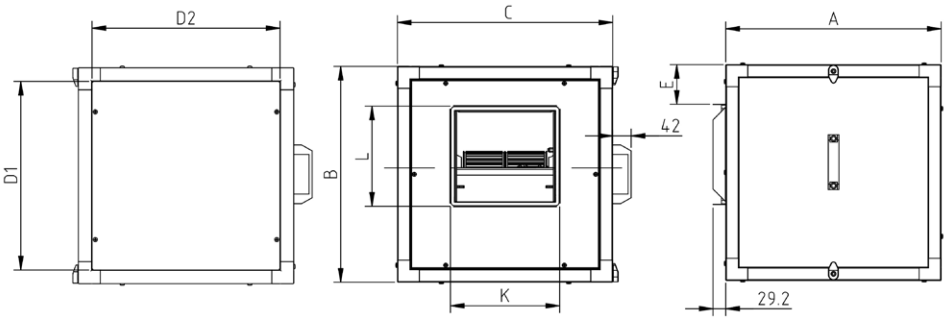
CE ACCORDING ErP

Erp. (Energy Related Products)

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

Dimensions in mm

CJBD/AL
CJBD/ALS



Model	Equiv. Inches	A	B	C	D1	D2	E	L	K
CJBD-AL / CJBD-ALS 1919	7/7	490	490	490	428	428	91	226	247
CJBD-AL / CJBD-ALS 2525	9/9	550	550	550	488	488	86	279	317
CJBD-AL / CJBD-ALS 2828	10/10	605	605	605	543	543	88	306	343
CJBD-AL / CJBD-ALS 3333	12/12	680	680	680	618	618	84	360	404
CJBD-AL / CJBD-ALS 3939	15/15	855	855	855	793	793	119	423	490

Air treatment module options

MF: Filtration Modules

- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Standard version module F6+F8 and optionally F7+F9.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

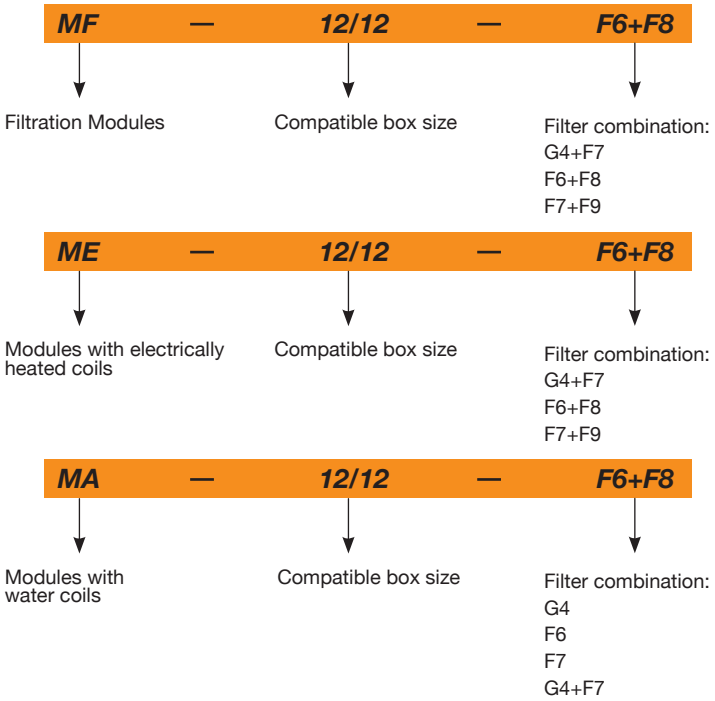
ME: Modules with electrically heated coils

- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Stuffing-box for cable inlet.
- Standard version module G4 and optionally with F6+F8 or F7+F9 filters.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

MA: Modules with water coils

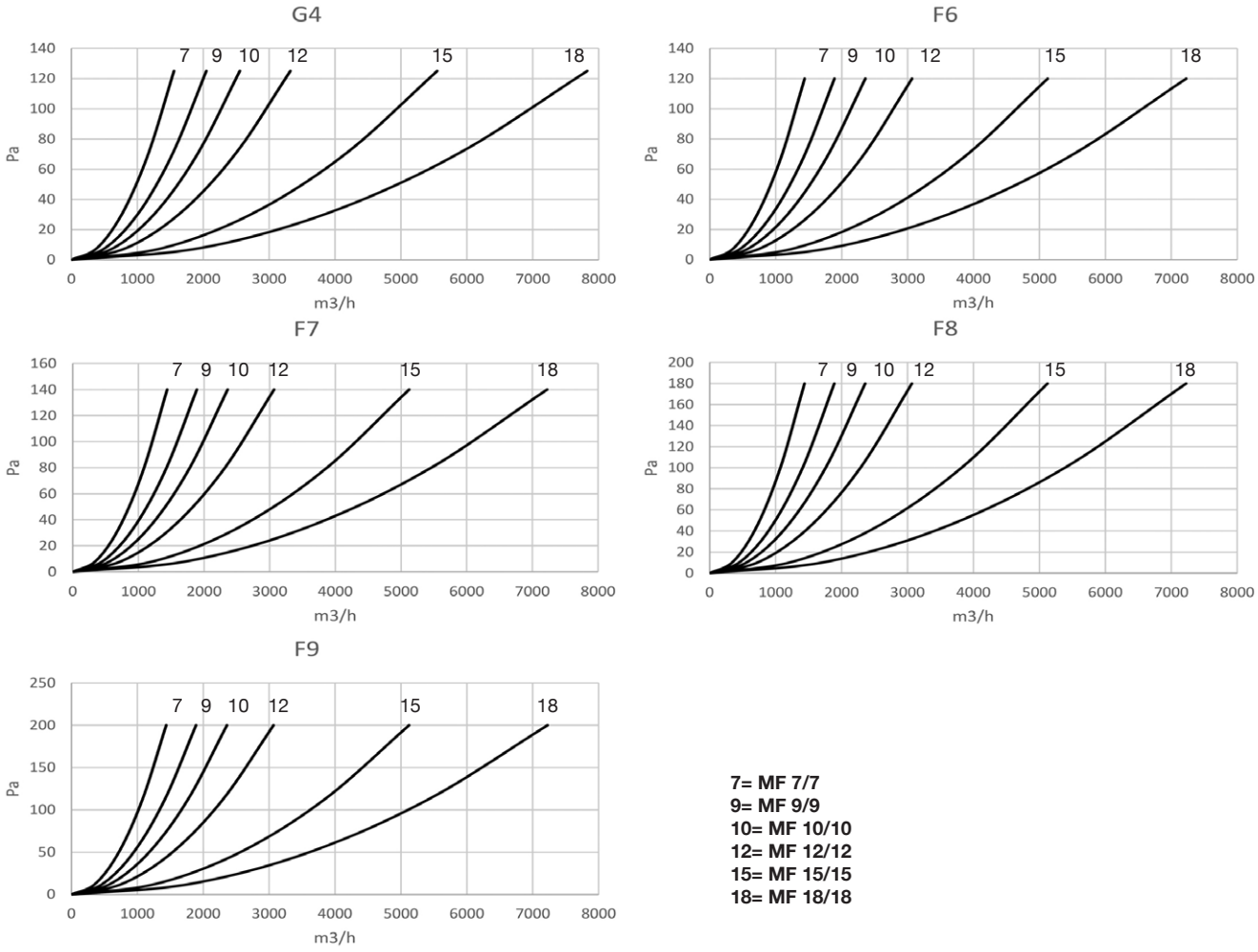
- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Standard version module G4 and optionally with F6+F8 or F7+F9 filters.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

Order code



MF: Filtration module characteristics

Head loss - filters

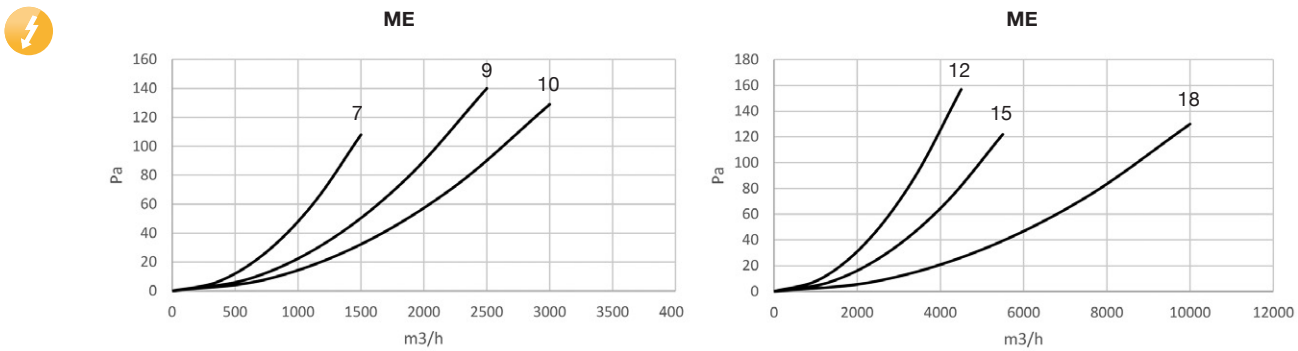


7= MF 7/7
9= MF 9/9
10= MF 10/10
12= MF 12/12
15= MF 15/15
18= MF 18/18

ME: Technical characteristics of electrically heated coil

Model	Current (A)	Installed power (kW)			Maximum airflow	Approx. weight
	400V	Stage 1	Stage 2	Stage 3	(m3/h)	(Kg)
ME-7/7	13	3	3	3	1500	23
ME-9/9	23	5.4	5.4	5.4	3300	33
ME-10/10	33	7.7	7.7	7.7	4500	44
ME-12/12	52	12	12	12	6000	61
ME-15/15	81	18.8	18.8	18.8	10000	96
ME-18/18	97	22.5	22.5	22.5	13000	123

Head loss - electrical coil heaters



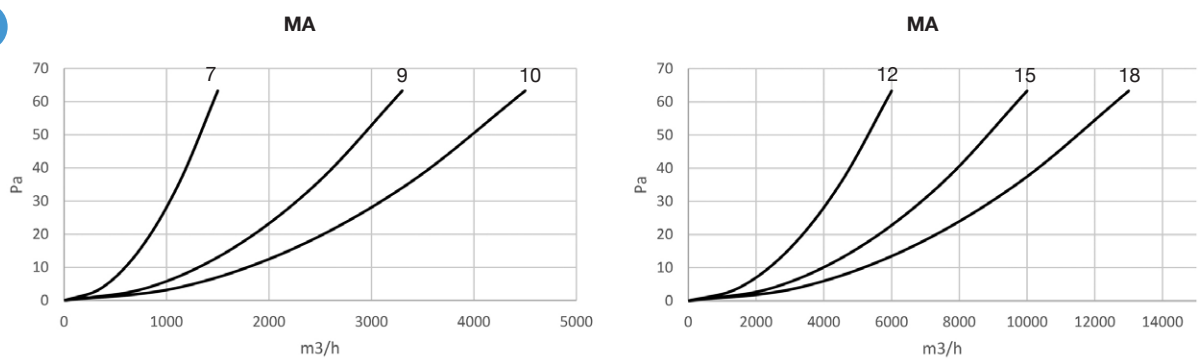
MA: Characteristics of 90/70ºC water coil for air at 0ºC

Model	Installed	Maximum airflow	Water flow	Water head loss	Connection	Approx. weight
	(kW)	(m3/h)	(m3/h)	(kPa)	(in)	(Kg)
MA-7/7	23	1500	1.0	16.3	1/2”	18
MA-9/9	37	2500	1.7	26.6	1/2”	25
MA-10/10	46	3000	2.0	17.6	3/4”	31
MA-12/12	66	4500	2.9	29.8	3/4”	39
MA-15/15	108	5500	4.8	21.4	1”	63
MA-18/18	153	10000	6.8	21.9	1 1/4”	87

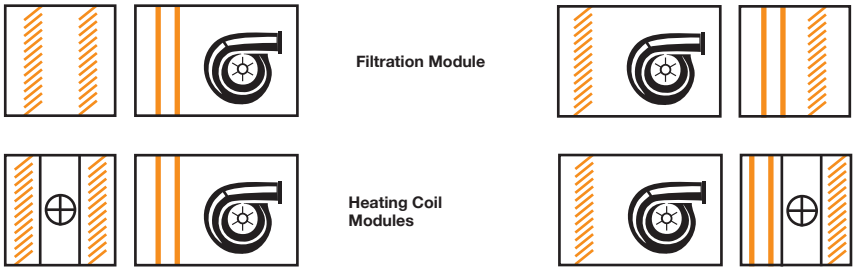
MA: Characteristics of 80/60ºC water coil for air at 0ºC

Model	Installed	Maximum airflow	Water flow	Water head loss	Connection	Approx. weight
	(kW)	(m3/h)	(m3/h)	(kPa)	(in)	(Kg)
MA-7/7	20	1500	0.9	13.0	1/2”	18
MA-9/9	33	2500	1.4	21.3	1/2”	25
MA-10/10	40	3000	1.7	14.0	3/4”	31
MA-12/12	58	4500	2.5	23.8	3/4”	39
MA-15/15	100	5500	4.2	17.5	1”	63
MA-18/18	133	10000	5.8	17.5	1 1/4”	87

Head loss - water coil heaters



Installation and filter position diagrams



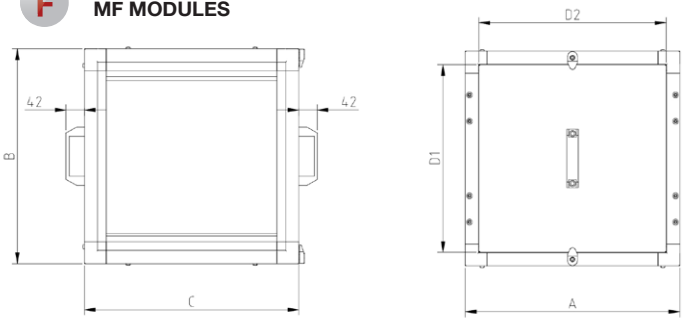
Module installed as extractor

Module installed as blower

Module Dimensions mm

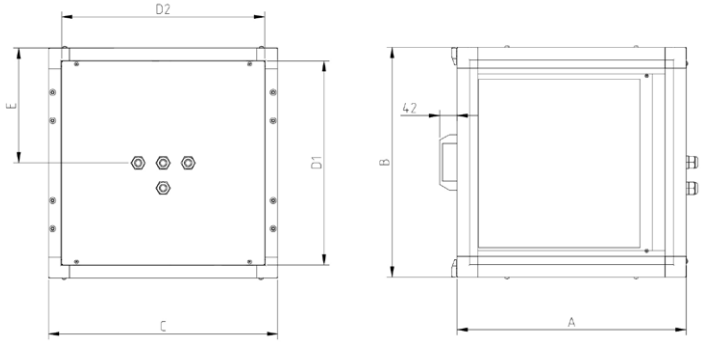
Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS

MF MODULES



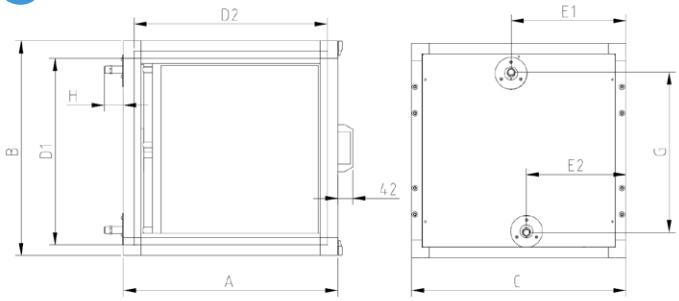
Model	A	B	C	D1	D2
MF-7/7	490	490	490	428	428
MF-9/9	550	550	550	488	488
MF-10/10	605	605	605	543	543
MF-12/12	680	680	680	618	618
MF-15/15	855	855	855	793	793
MF-18/18	1000	1000	1000	938	938

ME MODULES



Model	A	B	C	D1	D2	E
ME-7/7	490	490	490	428	428	245
ME-9/9	550	550	550	488	488	275
ME-10/10	605	605	605	543	543	302.5
ME-12/12	680	680	680	618	618	340
ME-15/15	855	855	855	793	793	427.5
ME-18/18	1000	1000	1000	938	938	500

MA MODULES

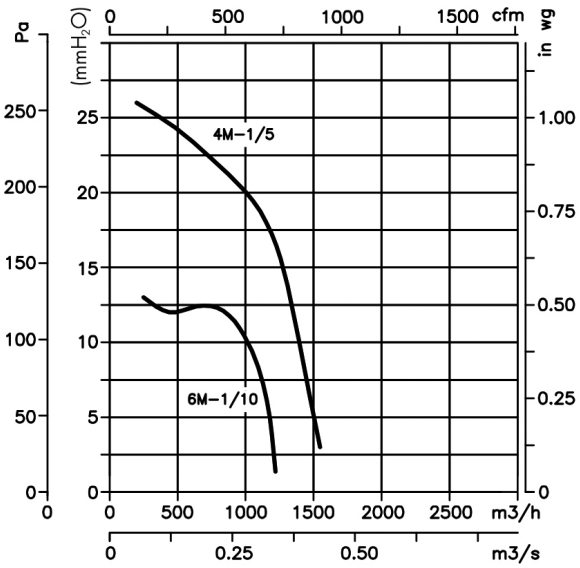


Model	A	B	C	D1	D2	E1	E2	G	H
MA 7/7	490	490	490	428	428	266,5	223,5	334	59,5
MA 9/9	550	550	550	488	488	296,5	253,5	410	57,2
MA 10/10	605	605	605	543	543	324	281	452	54
MA 12/12	680	680	680	618	618	361,5	318,5	527	79,5
MA 15/15	855	855	855	793	793	460	395	671	42,2
MA 18/18	1000	1000	1000	938	938	521,5	478,5	814	47,2

Characteristic curves - fans

Q= Airflow in m^3/h, m^3/s and cfm Pe= Static pressure in mmH2O, Pa and inwg

1919



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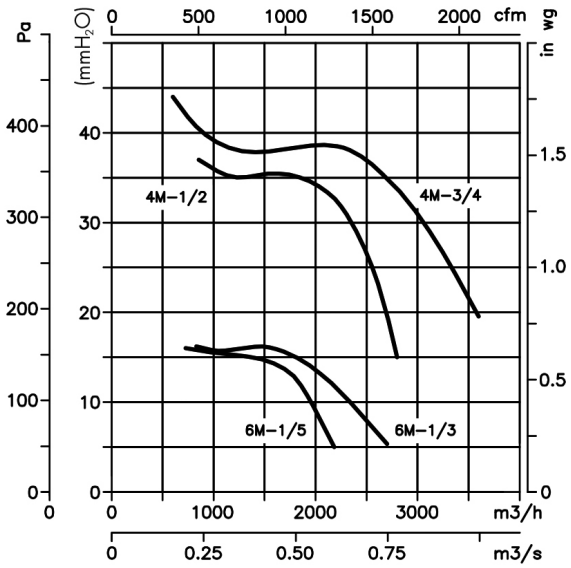
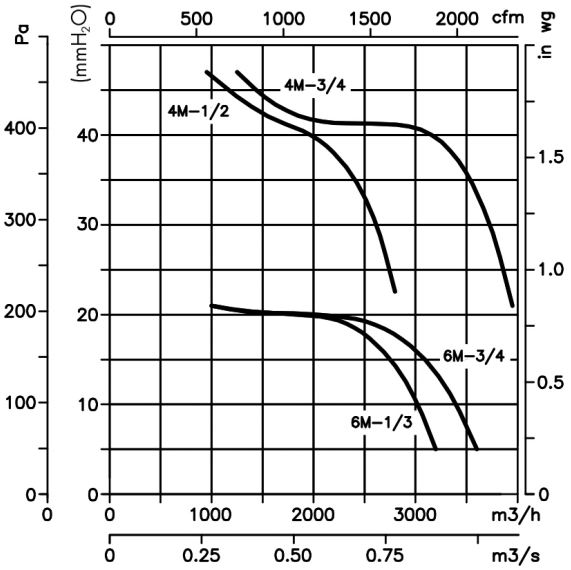
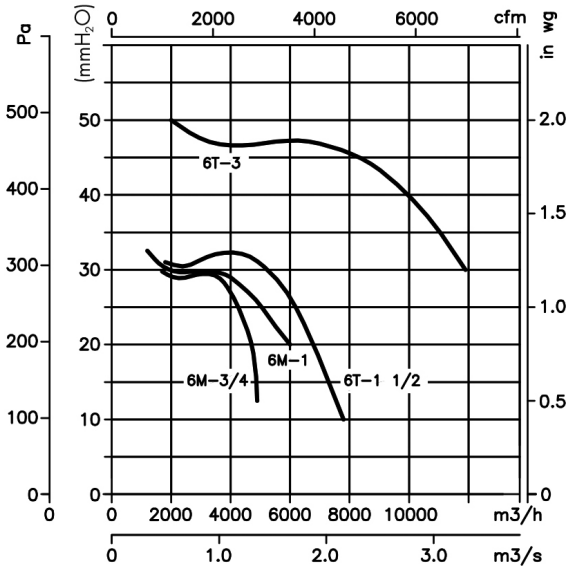


2828



3333/3939



INT

Accessories

RM

VSD1/A-RFM
VSD3/A-RFT

AET

TEJ

VIS

UFX

Soundproofed filtration units equipped with double inlet fans and different stages of filtration, depending on model

F6 + F8

F7 + F9

G4 + F6

Features:
- Soundproofed structure.
- Belt-driven.
- F6 + F8, F7 + F9 and G4 + F6 filters, depending on model selected.
- Possibility of pre-filter plus two stages of filtration.
- Easy access inspection and cleaning covers.
- Pressure inlets for filter control.

Construction:
- Galvanised sheet steel structure with soundproofing.
- Impeller with forward-facing blades made from galvanised sheet steel.
- Stuffing-box for cable inlet.
- Built-in base.

Motor:
- Class F motors, with ball bearings, IP55 protection.
- Three-phase 230/400V-50Hz (up to 4kW) and 400/690V -50Hz (power over 4kW).
- Temperature of the air to transport: -20ºC +60ºC.
- IE3 efficiency motors for powers equal to or greater than 0.75kW except single-phase, 2-speed and 8-pole.

Finish:
- Anticorrosive in galvanized sheet steel.

Order code

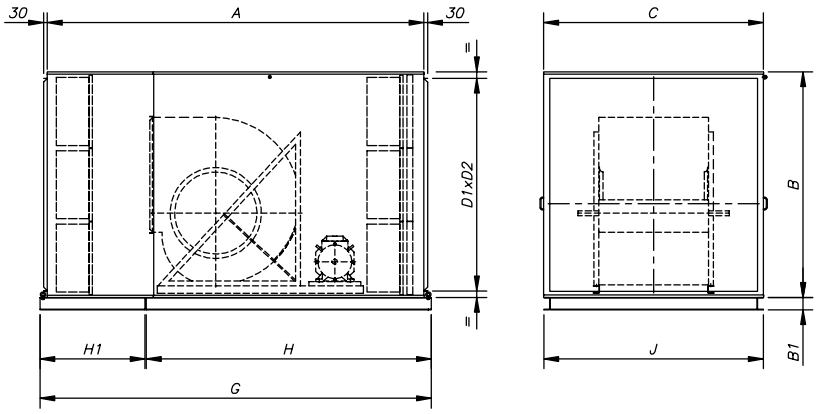
UFX	—	22/22	—	7,5	—	G4+F6	—	700
Model		Size		Installed motor		Combination filters		Speed (rpm)

Technical characteristics

Model	Max. Installed power (kW)	Maximum airflow (m³/h) Filters (F6+F8)	Filters (F7+F9)	Filters (G4+F6)	Number of pre-filters Whole*	Medium*	Number of filters Whole*	Medium*	Weight (Kg)	According ErP
UFX-12/12	2,20	5.250	5.100	4.650	1	0	1	0	112	2018
UFX-15/15	3,00	9.050	8.870	8.225	1	2	1	2	148	2018
UFX-18/18	4,00	10.735	10.370	9.320	1	2	1	2	195,5	2018
UFX-20/20	7,50	16.805	16.510	15.575	4	0	4	0	351,5	2018
UFX-22/22	11,00	21.100	20.610	19.110	4	0	4	0	401	2018
UFX-25/25	11,00	26.760	26.190	24.355	4	4	4	4	457	2018
UFX-30/28	15,00	41.060	40.310	37.840	9	0	9	0	575	2018

*Pre-filter dimensions: Whole: 585x585x48. Medium: 290x585x48
*Filter dimensions: Whole: 593x593x292. Medium: 288x593x292

Dimensions in mm



Model	A	B	C	D1	D2	B1	H	H1	G	J
UFX-12/12	1782	650	700	556	606	60	-	-	1902	698
UFX-15/15	2157.5	932.5	888	826	794	80	1610	657.5	2277.5	886
UFX-18/18	2272.5	932.5	888	826	794	80	1725	657.5	2392.5	886
UFX-20/20	2515	1236.5	1192	1123	1095	80	1855	770	2635	1194
UFX-22/22	2630	1236.5	1192	1123	1095	80	1970	770	2750	1194
UFX-25/25	2827	1524.5	1480	1422	1386	100	2083	854	2947	1478
UFX-30/38	3060	1832.5	1786	1727	1690	100	2316	854	3180	1784

Accessories

See accessories section


FILTERS


CJFILTER

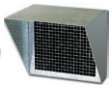

PRESSURE SWITCH


SI-PRESSURE

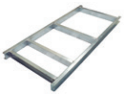

CONSTANT FLOW KIT


PRESSURE PROBE


INT


VIS


TEJ


BASE STAND


SILENT-BLOCKS

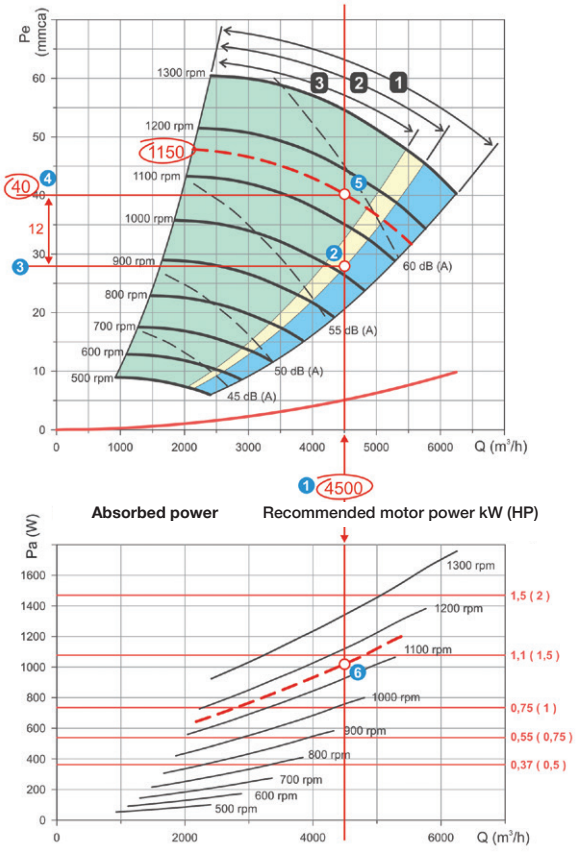
EXAMPLE OF SELECTION OF FILTRATION UNIT UFX

Useful areas according to filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A)

Initial data:

- Working flow with clean filters. It is advised to increase the required flow by 10%. In total, 4500 m³/h.
- Loss of load from the installation 12 mm.w.c.
- Desired filter combination. F7+F9.



Procedure:

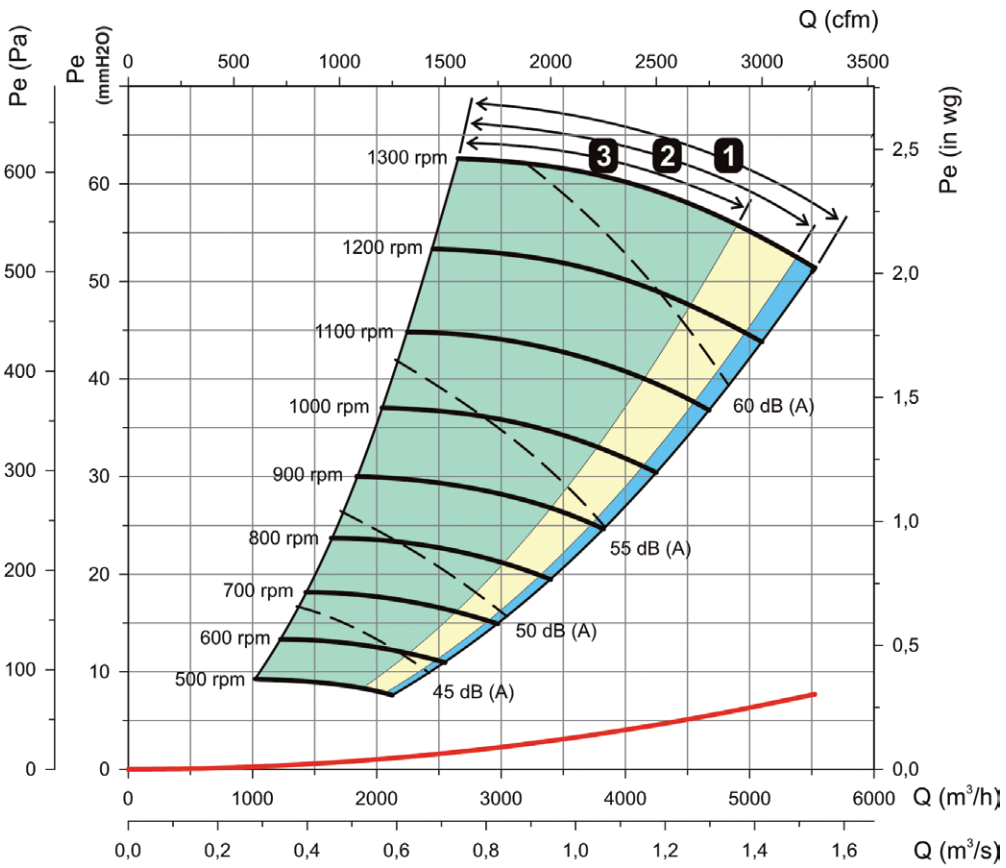
- On the flow-pressure graph, trace a vertical line from the point of 4500 m³/h on the flow (1) axis, through the entire graph, to the point of least pressure of the working area of F7 + F9 (2).
- Trace a horizontal line to the pressure scale (3). The value on the Pe scale is the resistance of the 100% clean filters. In this case, 28 mm.w.c.
- Trace a line parallel to the horizontal line, by adding on the installation's head loss of 12 mm.w.c. (4).
- Point (5) is the service point of the equipment, under operating conditions: 4500 m³/h at 40 mm.w.c. It must be checked that the service point is within the useful area of F7+F9. If this is not the case, another piece of equipment must be found.
- The speed of transmission is determined by the position of the service point, between two curves at a known speed . In this case, the result is 1150 rpm.
- As the filters get dirty, the pressure will increase and the flow will diminish following the curve of 1150 rpm. The dirty filter must be replaced by a clean one when the flow is reduced to below the acceptable level, or the pressure rises above the maximum indicated on the RITE.
- In the graph of absorbed power, it is possible to find the appropriate motor, tracing a curve of 1150 rpm, between the curves drawn. In the intersection with the flow line, the service point is obtained (6).
- The power immediately above the operating point is 1.5 HP

Characteristic Curves

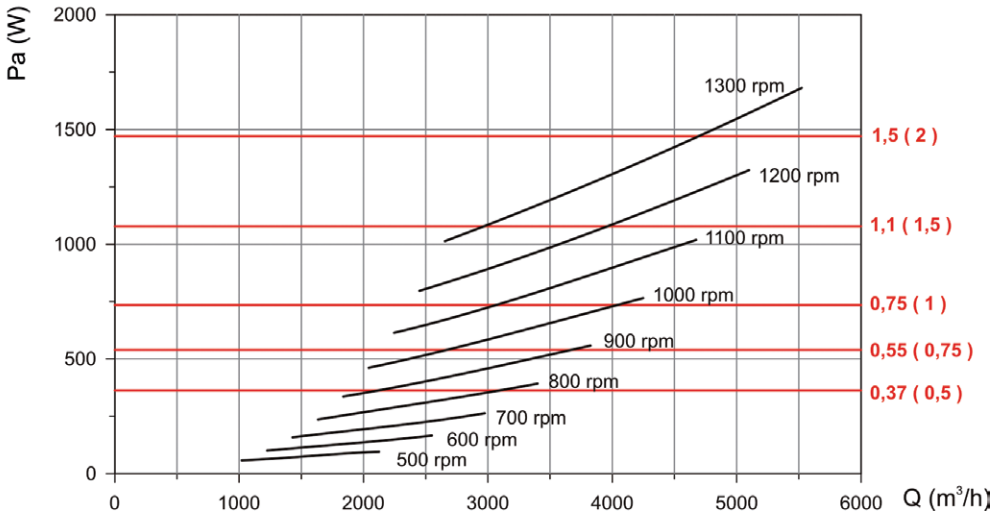
Useful areas depending on filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A)

UFX-12/12



Absorbed power Recommended motor power kW (HP)

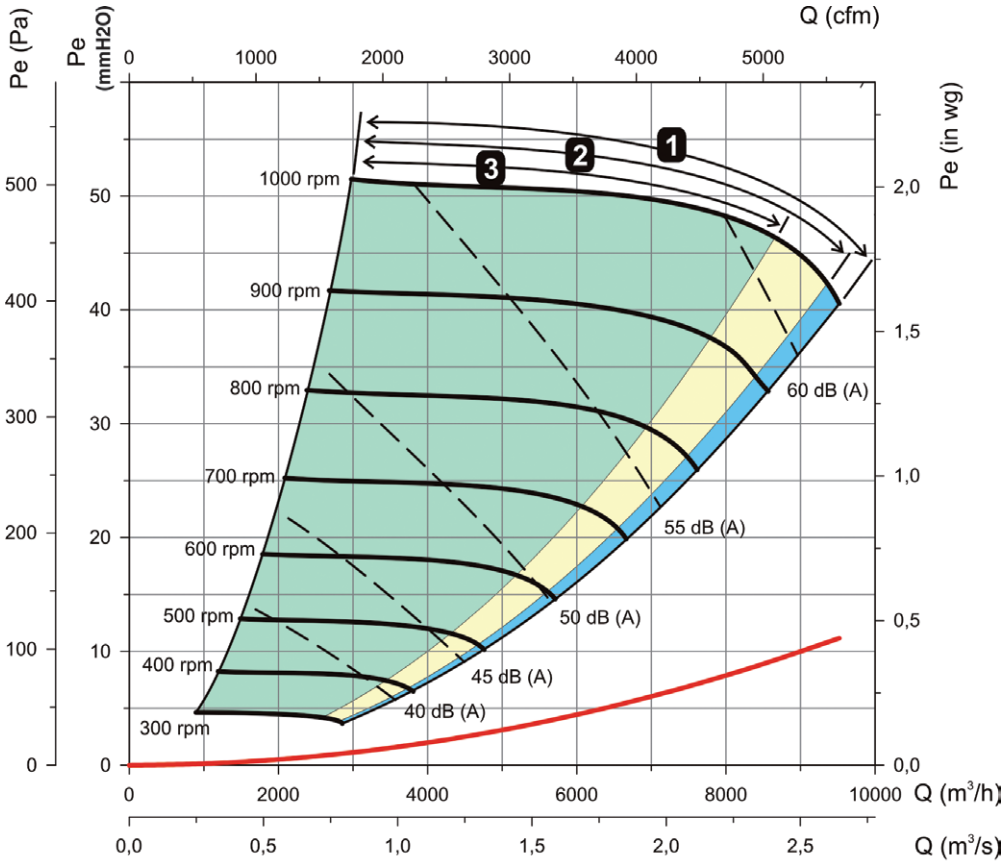


Characteristic Curves

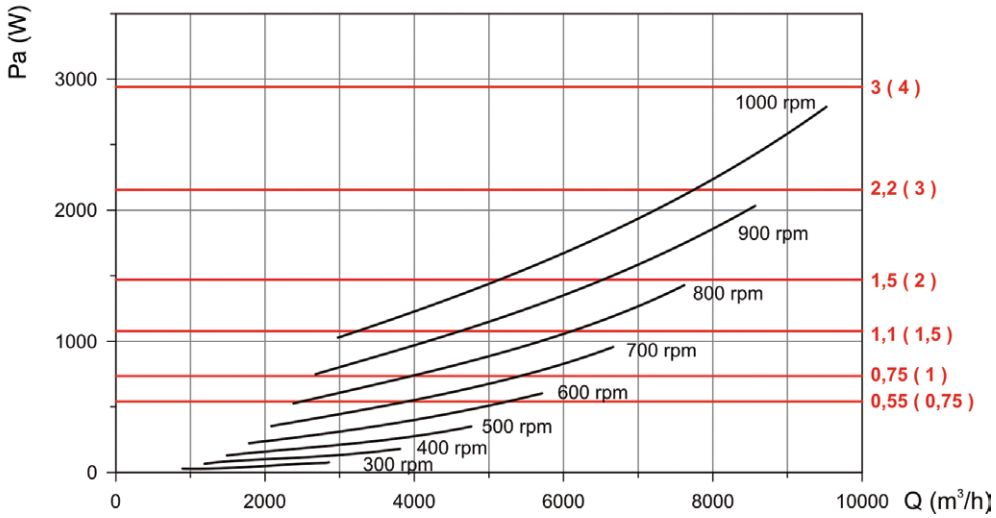
Useful areas depending on filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFX-15/15



Absorbed power Recommended motor power kW (HP)

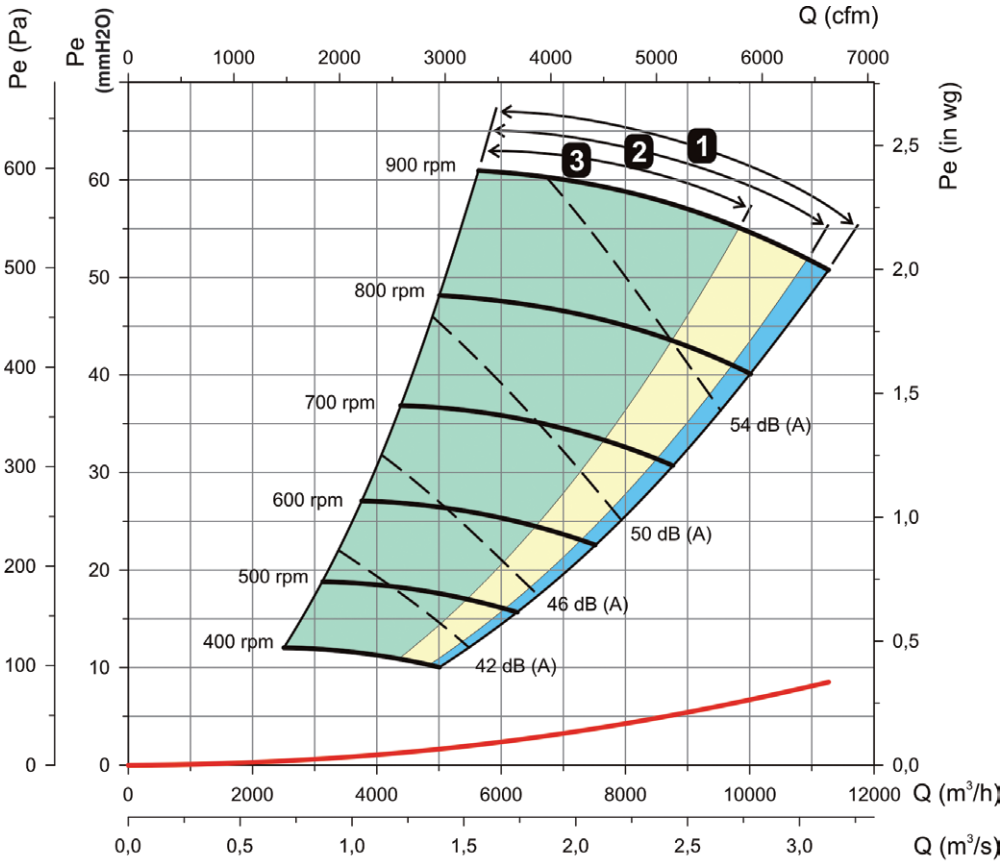


Characteristic Curves

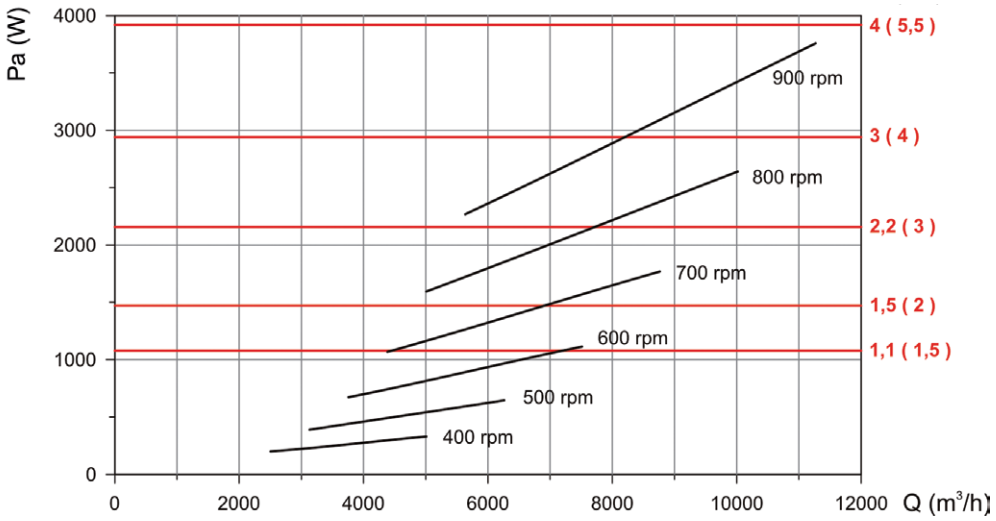
Useful areas depending on filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFX-18/18



Absorbed power Recommended motor power kW (HP)

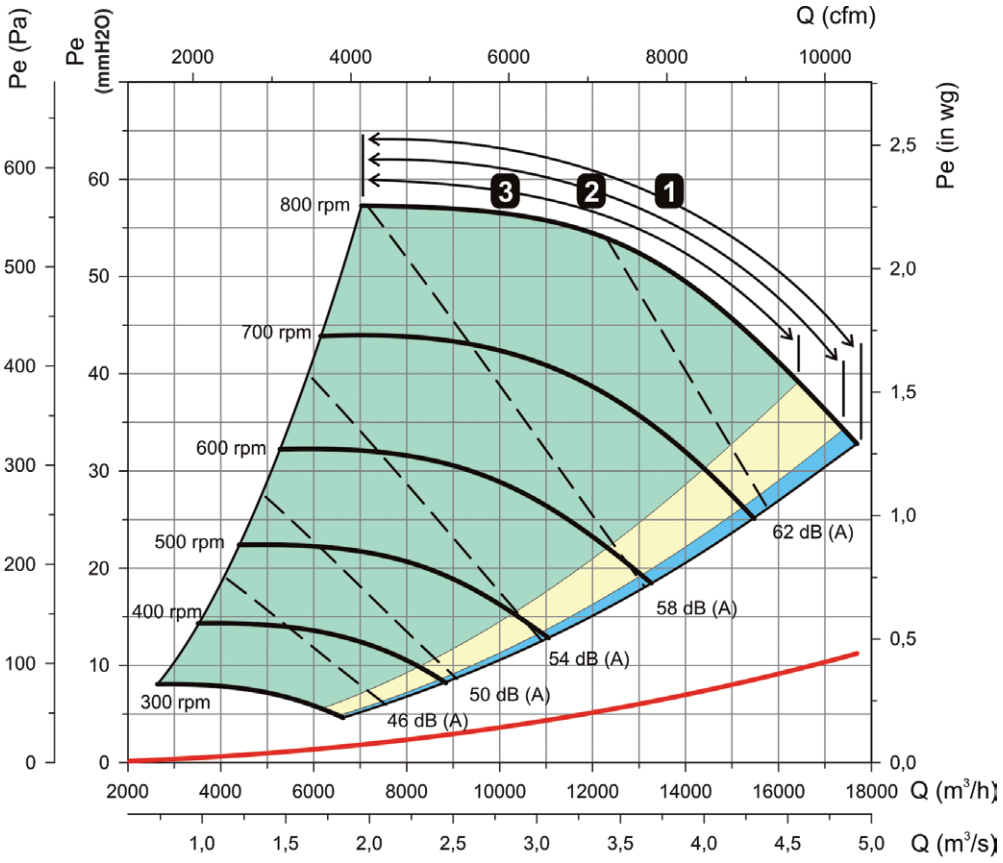


Characteristic Curves

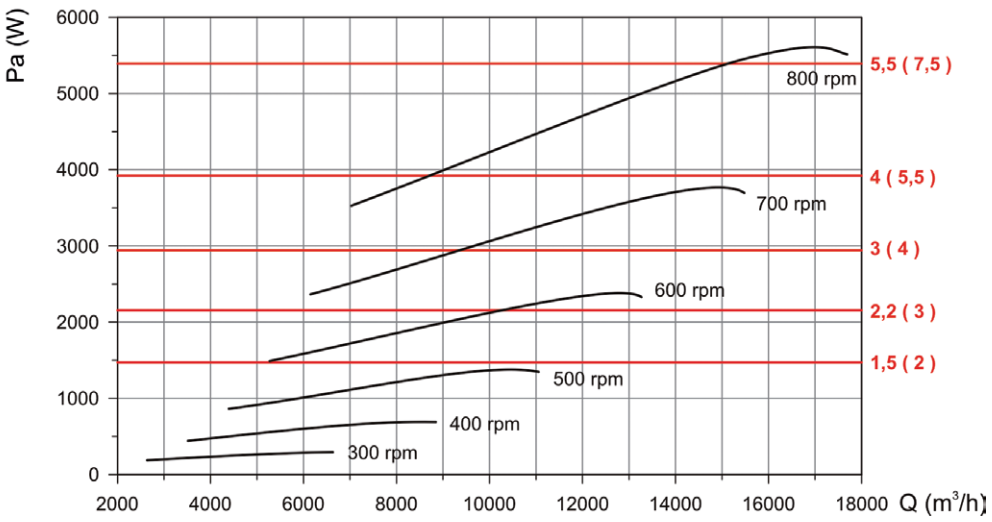
Useful areas depending on filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFX-20/20



Absorbed power **Recommended motor power kW (HP)**

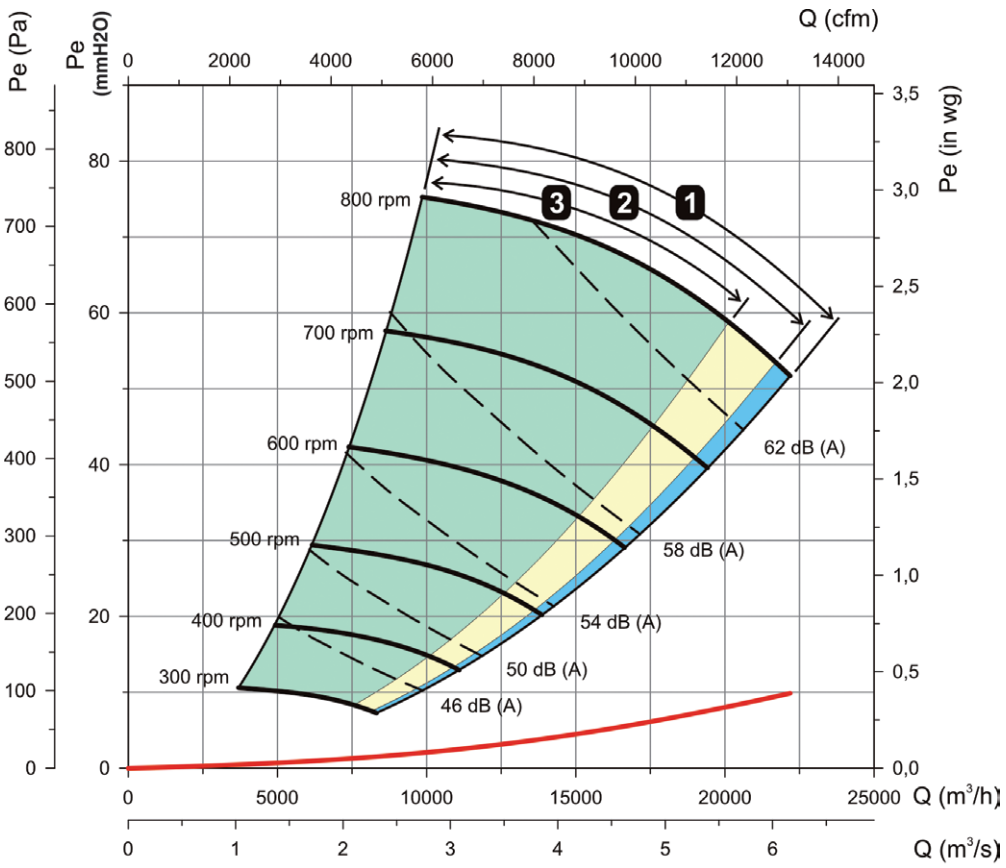


Characteristic Curves

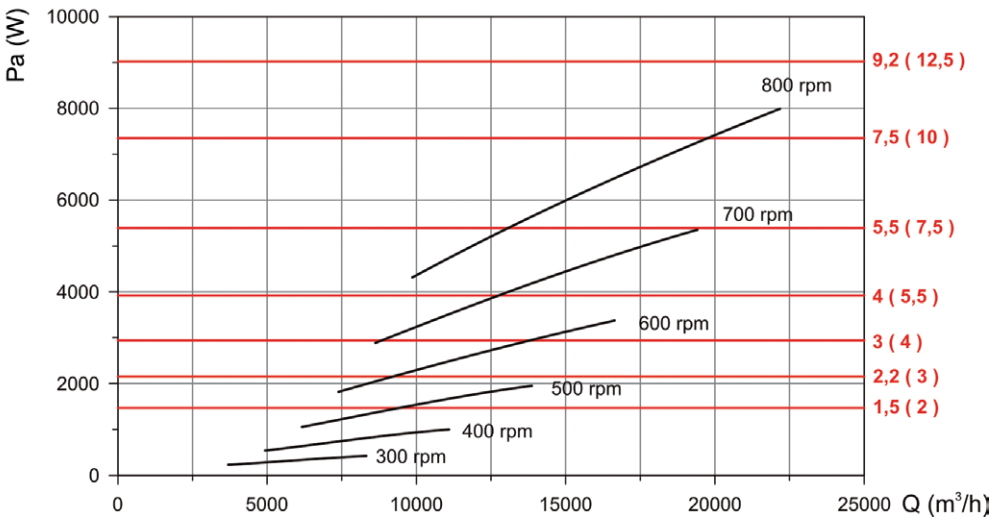
Useful areas depending on filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFX-22/22



Absorbed power Recommended motor power kW (HP)

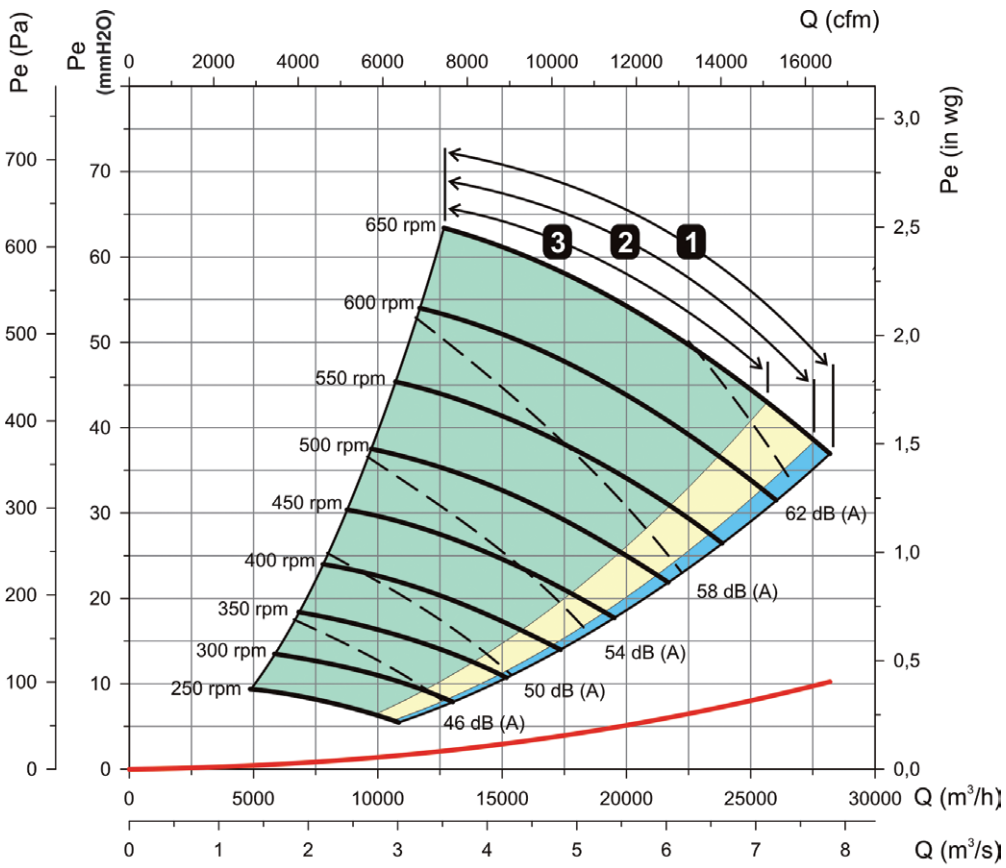


Characteristic Curves

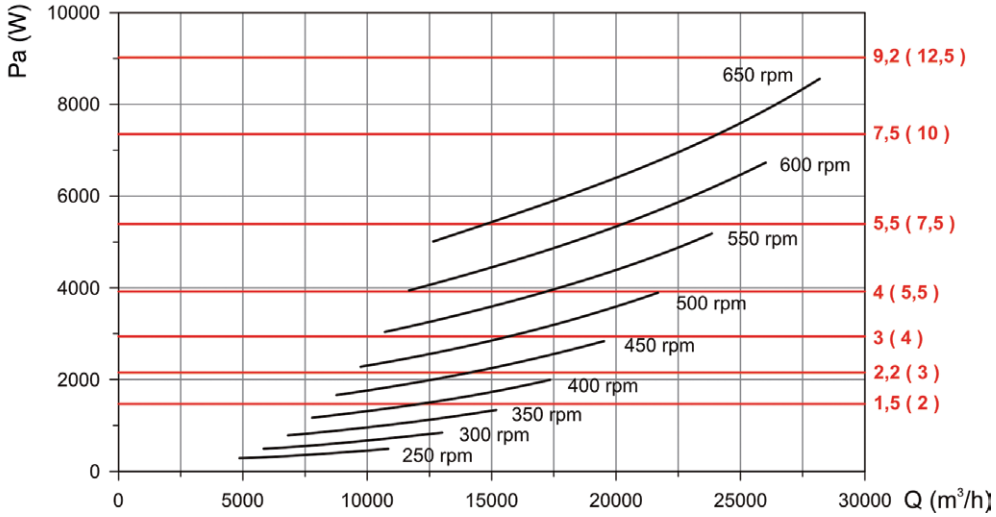
Useful areas depending on filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFX-25/25



Absorbed power Recommended motor power kW (HP)

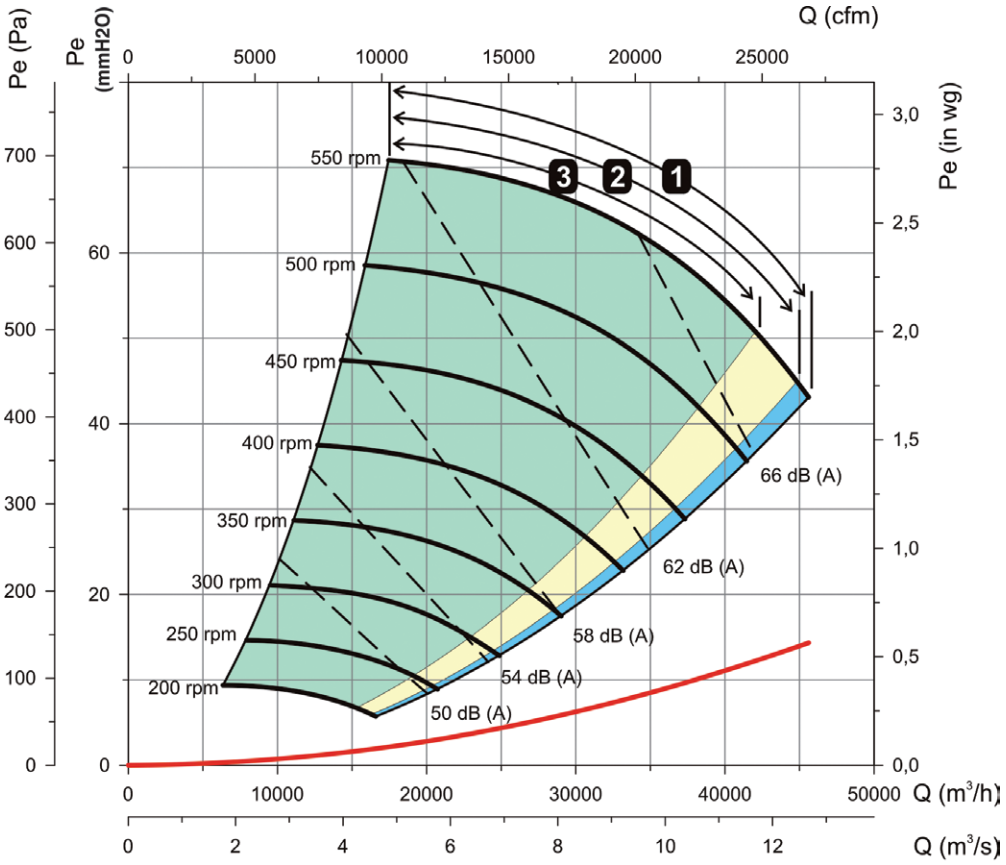


Characteristic Curves

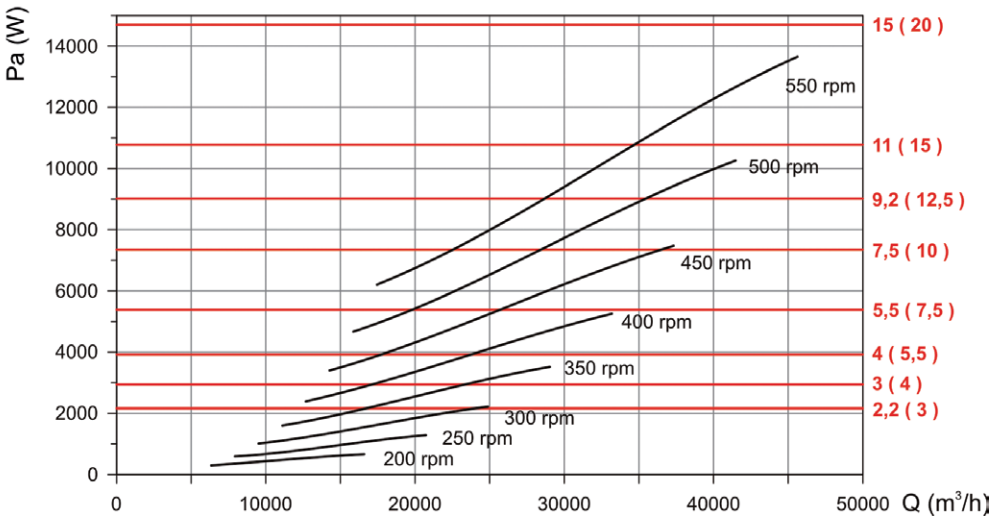
Useful areas depending on filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFX-30/28



Absorbed power Recommended motor power kW (HP)



UFRX

Soundproofed filtration units equipped with double inlet fans, with very robust backward-curved impeller and different stages of filtration depending on model

Features:
- Belt-driven.
- Built-in base.
- Filters F6 + F8, F7 + F9 and G4 + F6.
- Optionally pre-filter plus three stages of filtration
- Easy access inspection and cleaning covers.
- Pressure inlets and pressure switches for filter control.

Construction:
- Galvanised sheet steel structure with soundproofing.
- Impeller with backward-curved blades made from sheet steel.
- Built-in base.

Motor:
- Class F motors, with ball bearings, IP55 protection.
- Three-phase 230/400V-50Hz (up to 4kW) and 400/690V -50Hz (power over 4kW).
- Temperature of the air to transport: -20ºC +60ºC.
- IE3 efficiency motors for powers equal to or greater than 0.75kW except single-phase, 2-speed and 8-pole.

Finish:
- Anticorrosive pre-lacquered sheet steel

Order code

UFRX — 355 — 5,5 — G4+F6 — 2.700

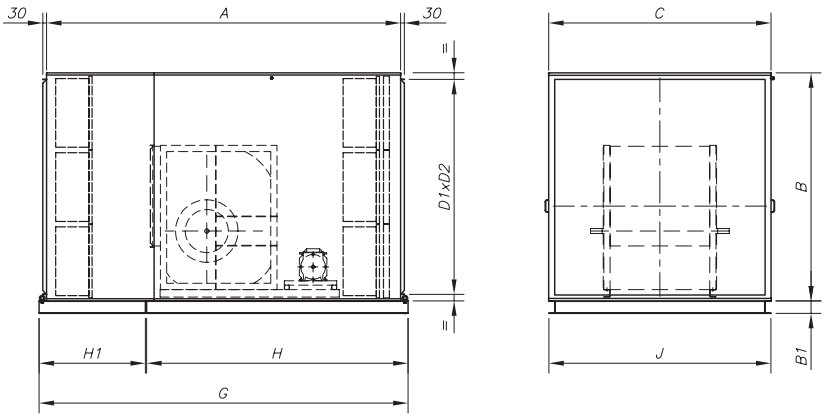
Model	Size	Motor power	Combination of filters	Speed (rpm)

Technical characteristics

Model	Max. Installed power (kW)	Maximum airflow (m³/h) Filters (F6+F8)	Filters (F7+F9)	Filters (G4+F6)	Number of pre-filters Whole*	Medium*	Number of filters Whole*	Medium*	Weight (Kg)	According ErP
UFRX-315	3,0	8.550	8.075	7.600	1	2	1	2	117	2018
UFRX-355	5,5	12.330	11.645	10.960	4	0	4	0	155,5	2018
UFRX-400	7,5	16.470	15.555	14.640	4	0	4	0	204	2018
UFRX-450	11,0	20.700	19.550	18.400	4	4	4	4	364,5	2018
UFRX-500	15,0	28.800	27.200	25.600	4	4	4	4	415	2018
UFRX-560	18,5	36.360	34.340	32.320	9	0	9	0	478	2018
UFRX-630	18,5	43.000	42.000	41.000	9	0	9	0	594	2018

*Pre-filter dimensions: Whole: 585x585x48. Medium: 290x585x48
*Filter dimensions: Whole: 593x593x292. Medium: 288x593x292

Dimensions in mm



				Height	Width					
Model	**A**	**B**	**C**	**D1**	**D2**	**B1**	**H**	**H1**	**G**	**J**
UFRX-315	1987.5	932.5	888	826	794	80	1440	657.5	2107.5	886
UFRX-355	2401	1236.5	1192	1123	1095	80	1741	770.5	2521.5	1194
UFRX-400	2401	1236.5	1192	1123	1095	80	1741	770.5	2521.5	1194
UFRX-450	2485	1551.5	1480	1422	1386	100	1741	854	2605.5	1478
UFRX-500	2725	1551.5	1480	1422	1386	100	1981	854	2845.5	1478
UFRX-560	2844	1855.5	1786	1727	1690	100	2100	854	2964.5	1784
UFRX-630	2844	1855.5	1786	1727	1690	100	2100	854	2964.5	1784

Accessories

See accessories section


FILTERS


CJFILTER

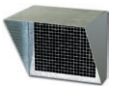

PRESSURE SWITCH


SI-PRESSURE

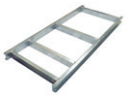

CONSTANT FLOW KIT


PRESSURE PROBE


INT


VIS


TEJ


BASE STAND


SILENT-BLOCKS

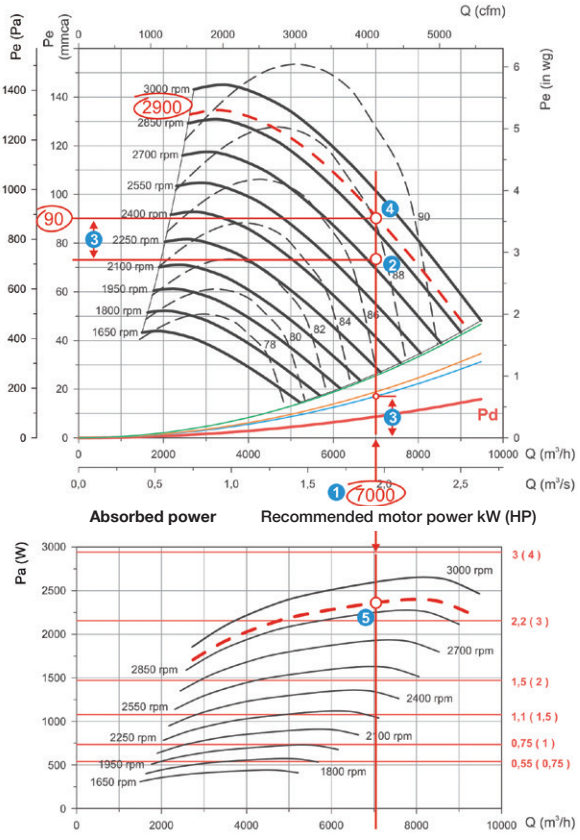
EXAMPLE OF SELECTING FILTRATION UNIT UFRX

Useful areas according to filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure Dynamic pressure Sound level dB(A)

Initial data:

- Working flow with clean filters. It is advised to increase the required flow by 10%. In total, 7000 m³/h.
- Head loss from the installation 72 mm.w.c.
- Desired combination of filters: F6+F8.



Procedure:

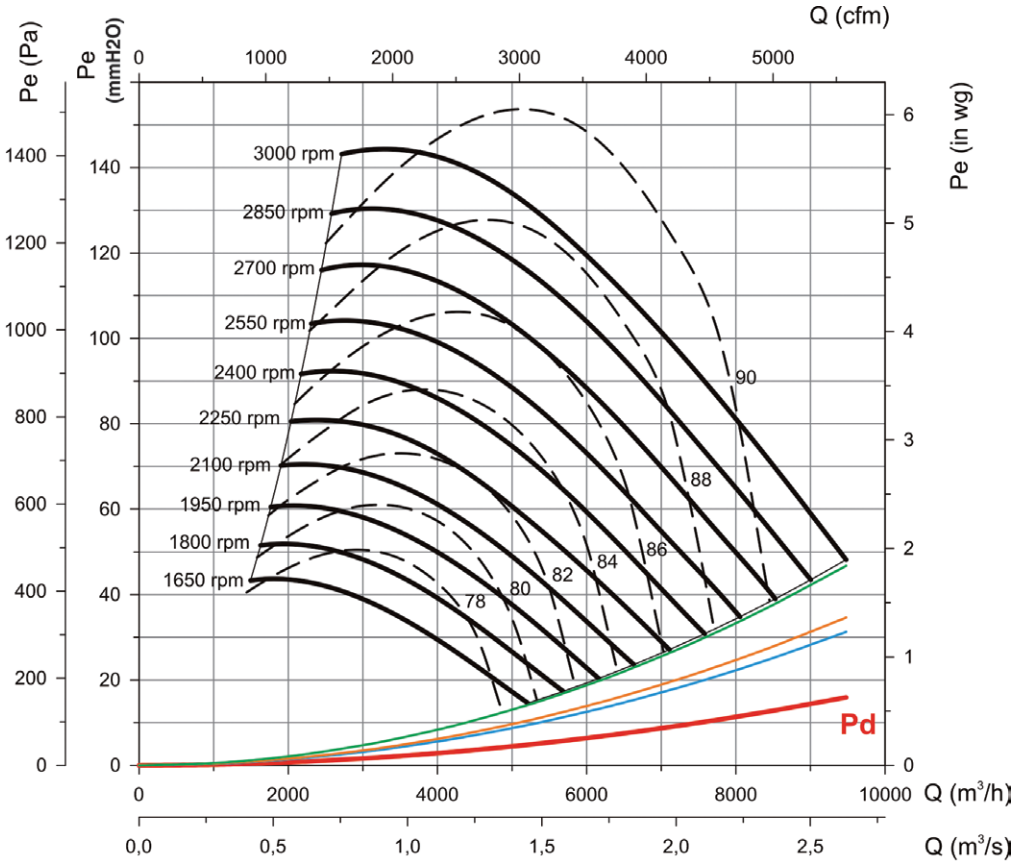
- On the flow-pressure graph, trace a vertical line from the point of 7000 m³/h on the flow (1) axis, through the entire graph, to the working pressure of the installation (2)
- At point (2) add the head loss from the F6+F8 filters, in this case 18 mm.w.c. (3), obtaining point (4). The head loss from the 100% clean filters is taken into account.
- The resulting Point (4) is the service point of the equipment, under operating conditions: 7000 m³/h at 90 mm.w.c. Check that the service point is within the useful area of F7+F9. If this is not the case, another piece of equipment must be found.
- The speed of transmission is determined by the position of the service point, between two curves at a known speed . In this case, the result is 2900 rpm.
- As the filters get dirty, the pressure will increase and the flow will diminish following the curve of 2900 rpm. The dirty filter must be replaced by a clean one when the flow is reduced to below the acceptable level, or the pressure rises above the maximum indicated on the RITE.
- In the graph of absorbed power, it is possible to find the appropriate motor, tracing a curve of 2900 rpm, between the curves drawn. In the intersection with the flow line, the service point is obtained (5) The recommended power is immediately above the operating point, 4 HP in the example.

Characteristic Curves

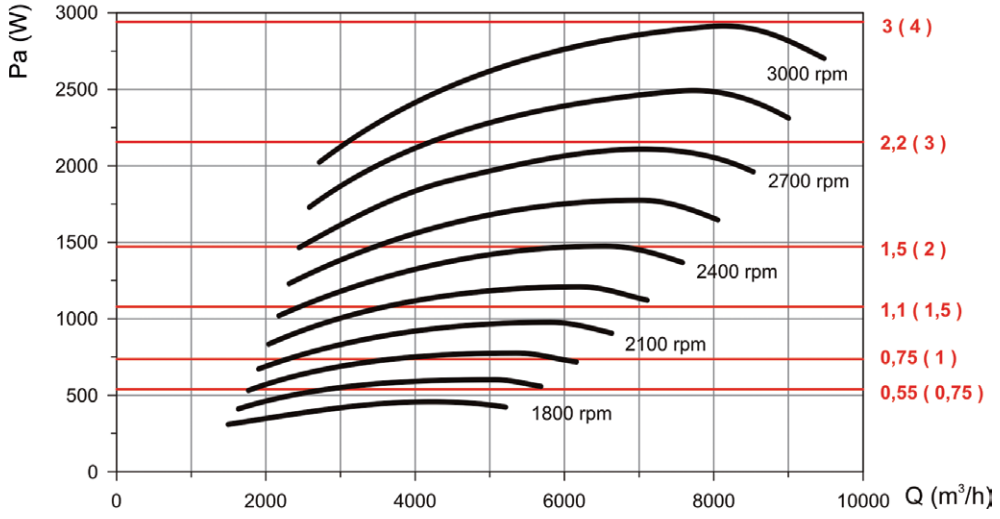
Useful areas according to filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - - -

UFRX-315



Absorbed power Recommended motor power kW (HP)

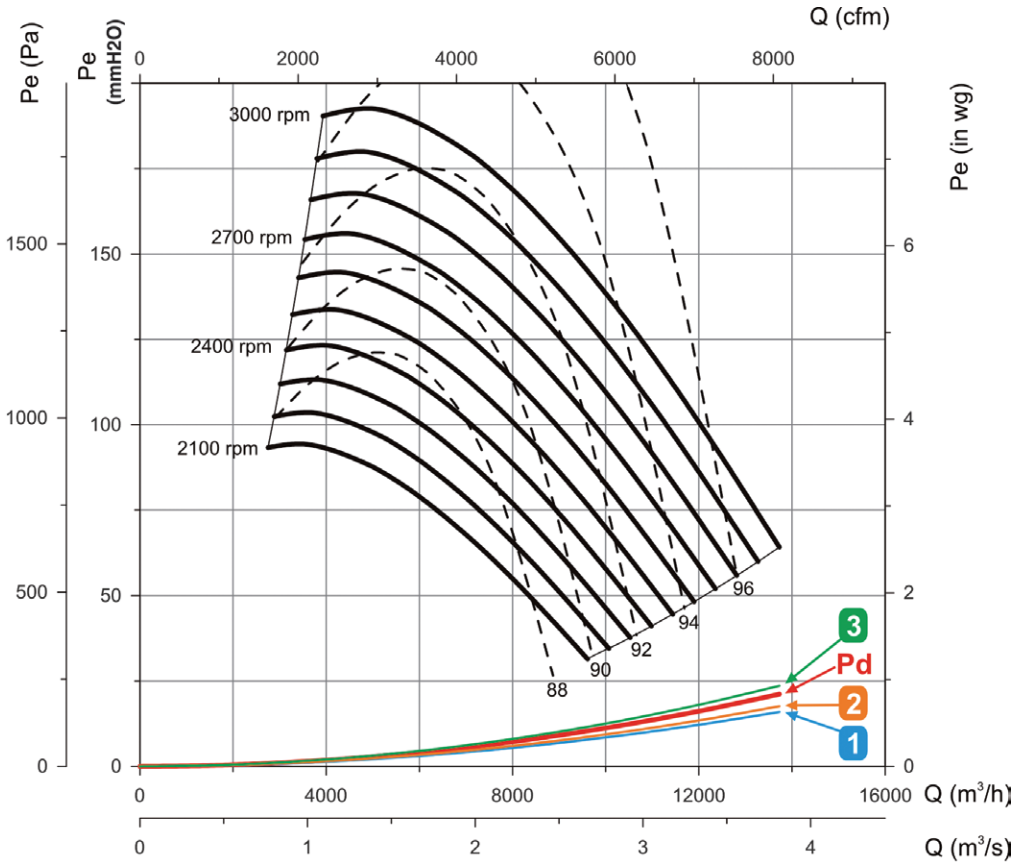


Characteristic Curves

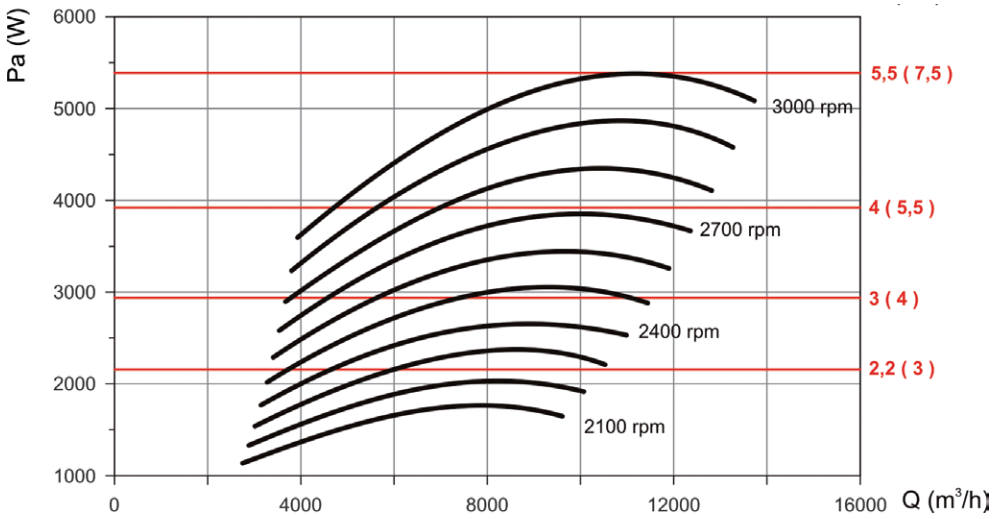
Useful areas according to filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFRX-355



Absorbed power Recommended motor power kW (HP)

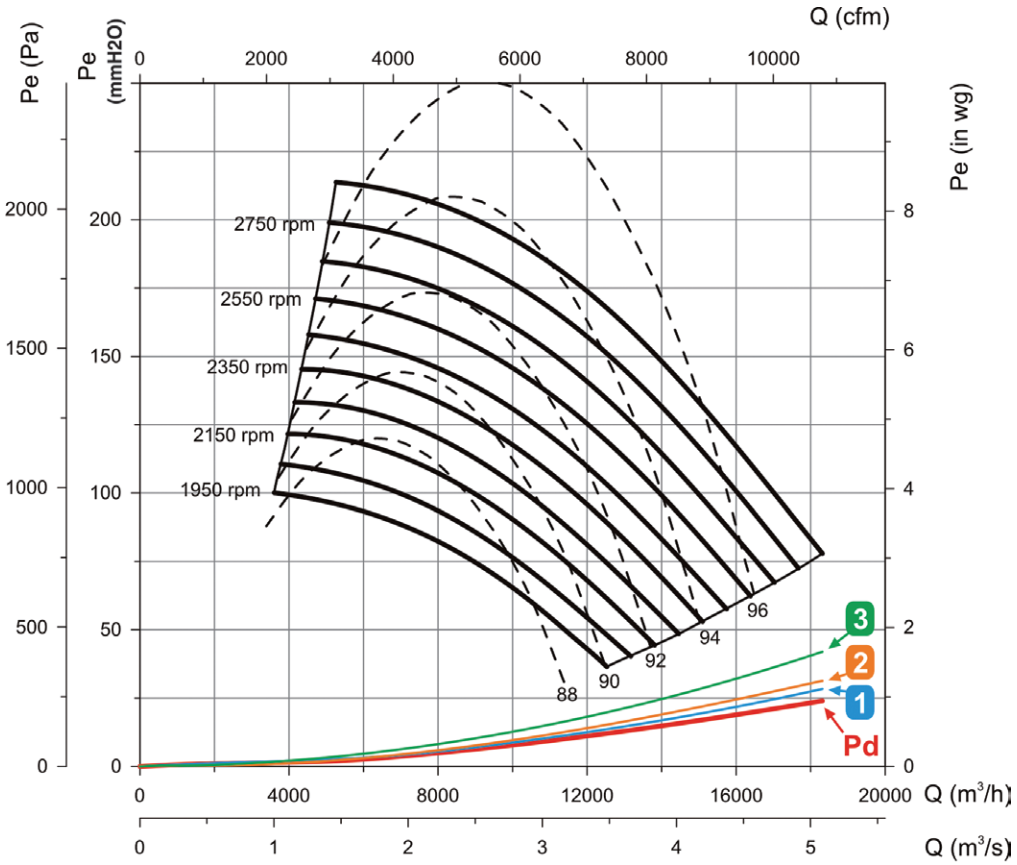


Characteristic Curves

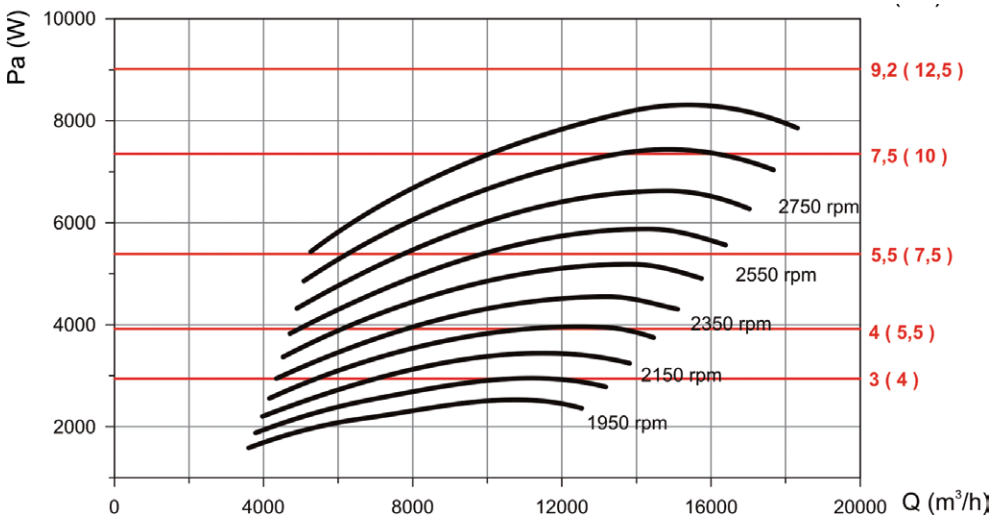
Useful areas according to filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFRX-400



Absorbed power Recommended motor power kW (HP)

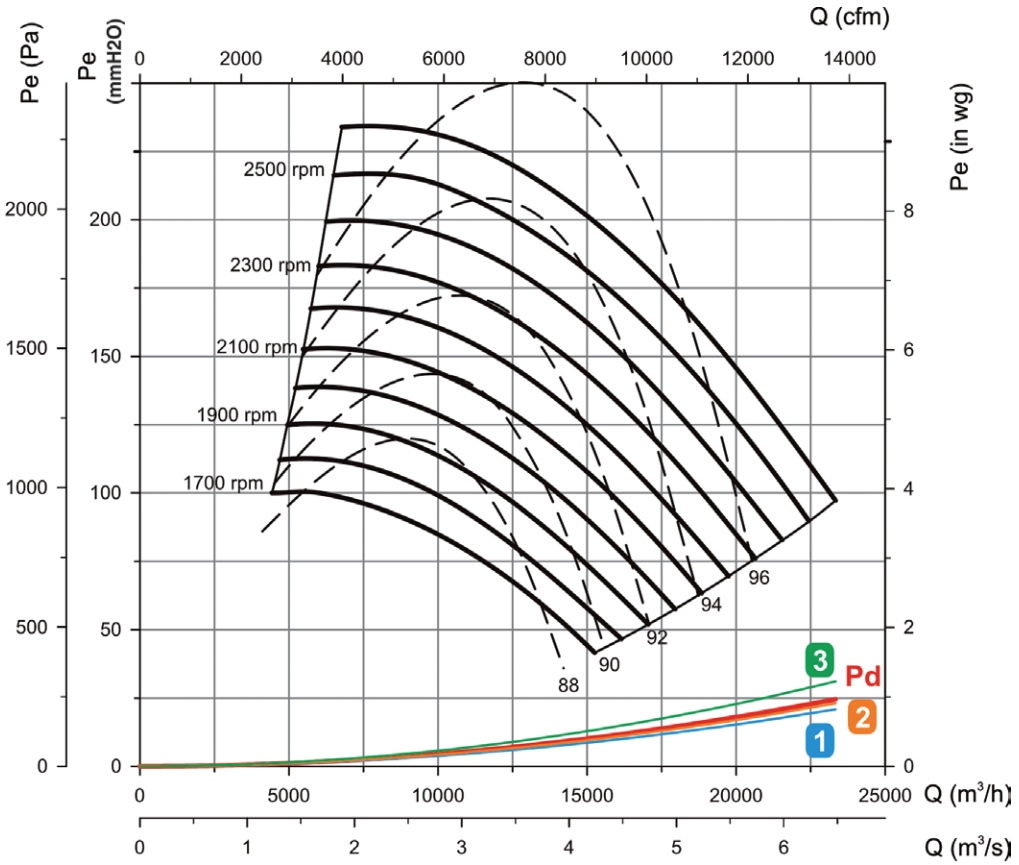


Characteristic Curves

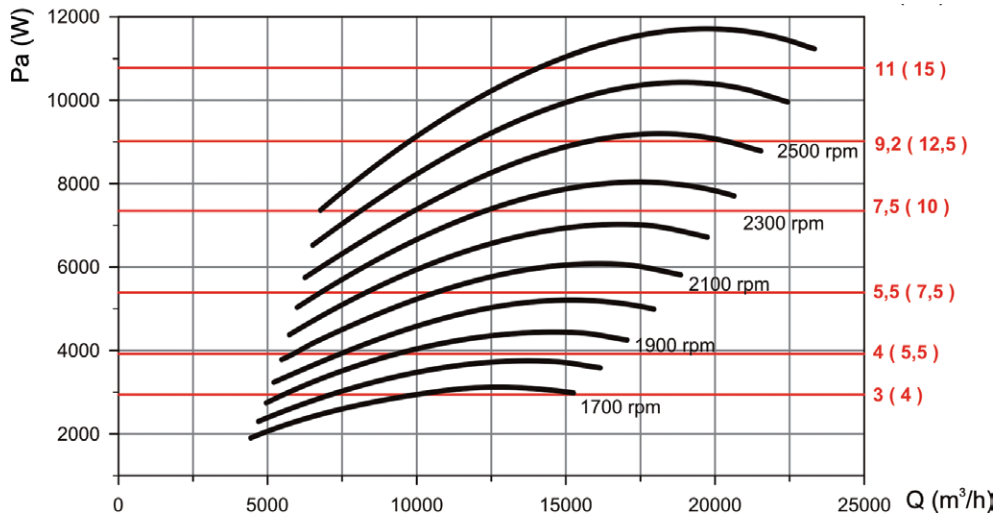
Useful areas according to filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFRX-450



Absorbed power Recommended motor power kW (HP)

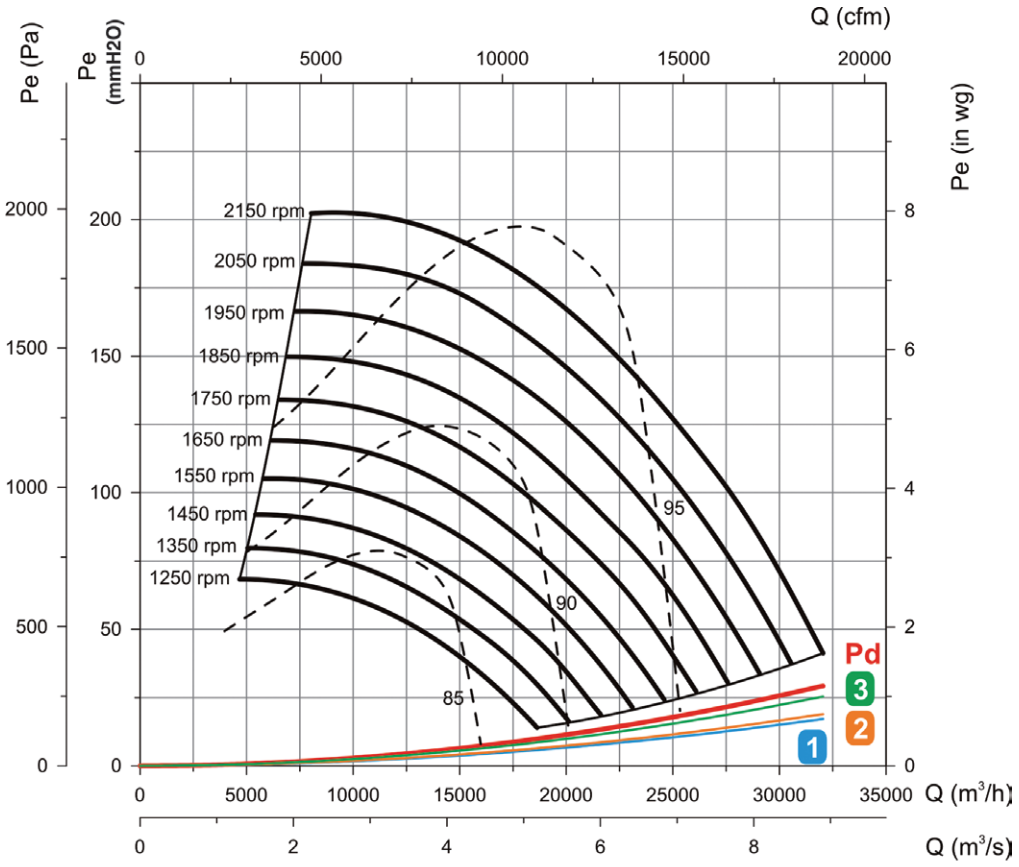


Characteristic Curves

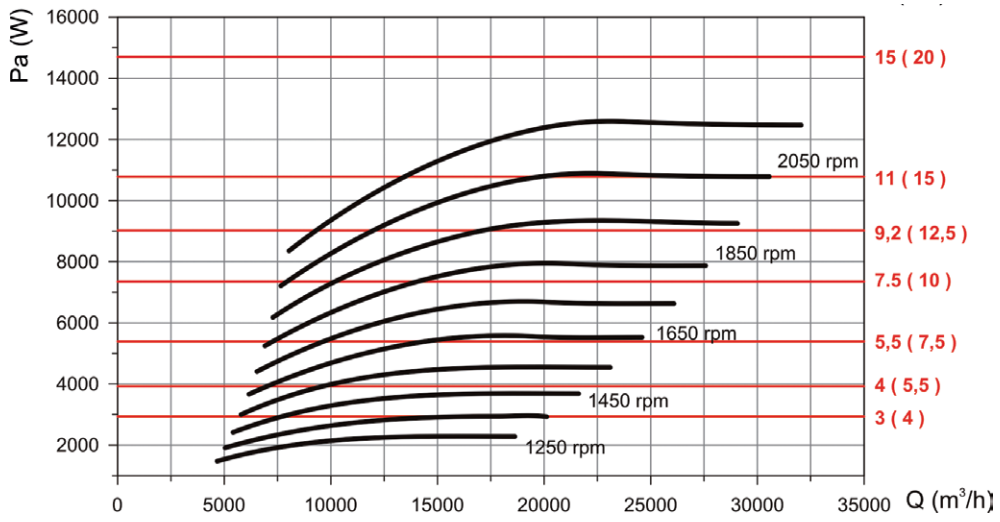
Useful areas according to filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFRX-500



Absorbed power Recommended motor power kW (HP)

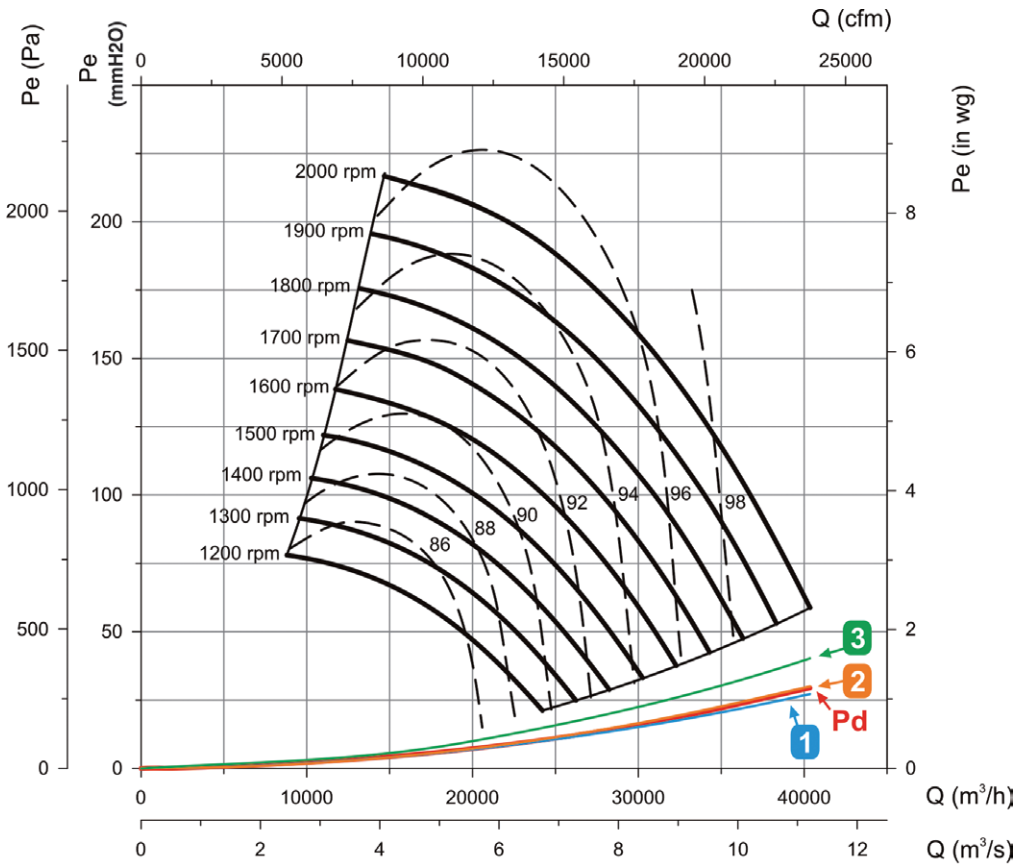


Characteristic Curves

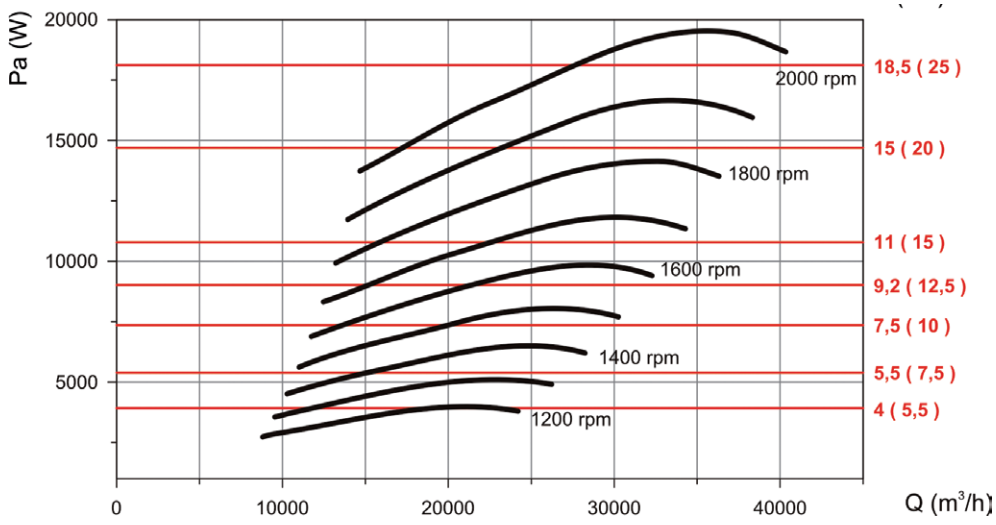
Useful areas according to filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFRX-560



Absorbed power Recommended motor power kW (HP)

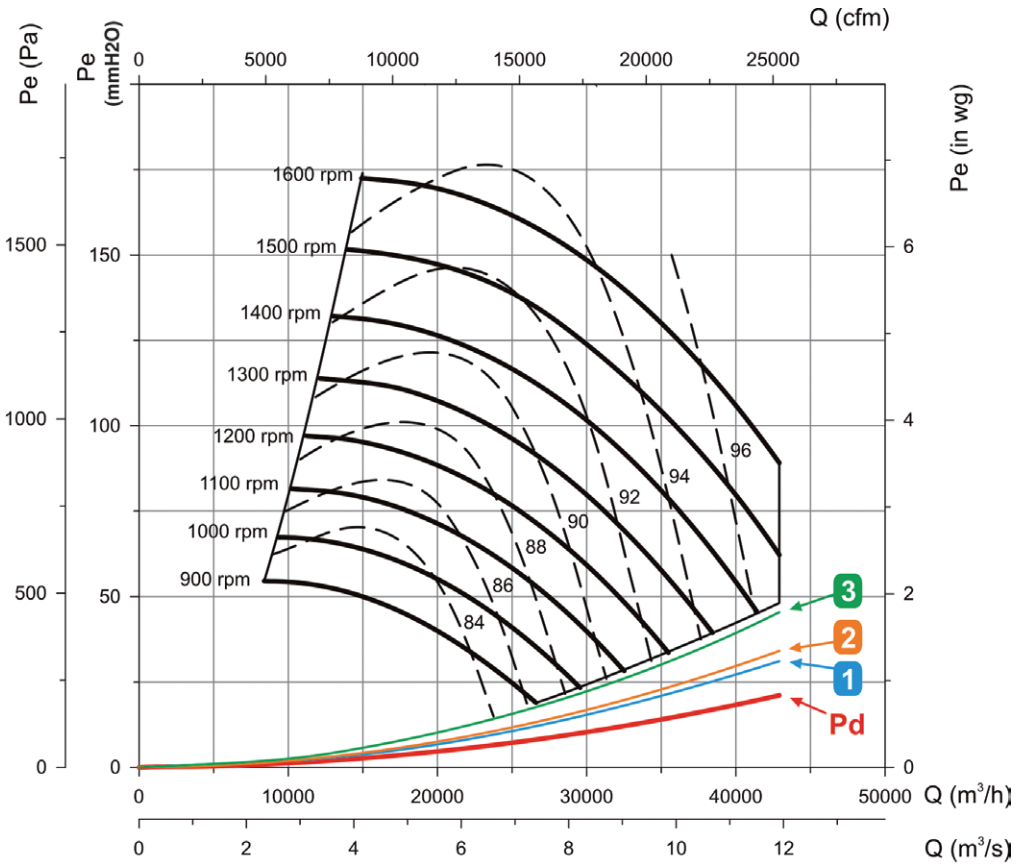


Characteristic Curves

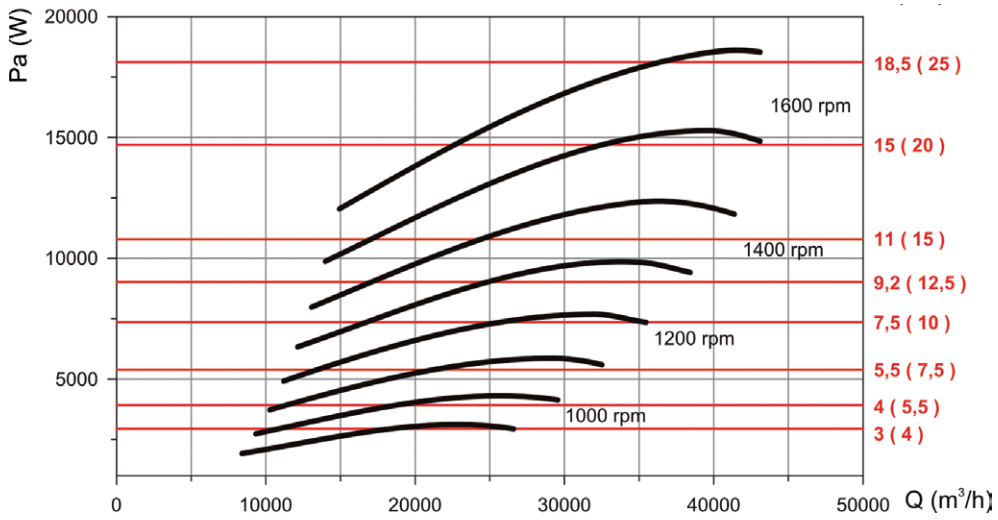
Useful areas according to filters 1 F6+F8 2 F7+F9 3 G4+F6

Static pressure — Dynamic pressure — Sound level dB(A) - - -

UFRX-630



Absorbed power Recommended motor power kW (HP)



UDTX

Soundproofed belt-driven air treatment units, fitted with double-inlet fans and optional modules for filtration, electrical or hot-water heating

Box:
- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Stuffing-box for cable inlet.

Fan:
- Ventilation units, equipped with fans from the CBX, CBXC or CBXR series
- Impellers with forward-facing blades made from galvanised sheet steel.

Motor:
- IE3 efficiency motors for powers equal to or greater than 0.75kW except single-phase, 2-speed and 8-pole.
- Class F motors, with ball bearings, IP54 protection.
- Three-phase 230/400V -50Hz. (up to 4kW) and 400/690V -50Hz (capacity over 4kW).

- Max. air temperature to transport: -20ºC+ 60ºC

Versions:
- MF: Filtration Module. Standard version F6+F8 and optionally F7+F9.
- ME: Module with electrically heated coil. Standard version G4 and optionally with F6+F8 or F7+F9 filters.
- MA: Module with water coil. Standard version G4 and optionally with F6+F8 or F7+F9 filters.

On request:
- Vertical outlet.
- Belt drive on left.
- Module installed as blower.

Order code

UDTX — 15/15 — 2 — MF — F6+F8

- ***UDTX***: Fan units with air treatment
- ***15/15***: Turbine size in inches
- ***2***: Motor power (HP)
- ***MF***: Air treatment modules
  - MF: filtration module (standard version)
  - ME: module with electrically heated coil (G4 filter included)
  - MA: module with water coil (G4 filter included)
- ***F6+F8***: Filter options for MF modules
  - Standard version F6+F8
  - Option: G4+F7, F7+F9

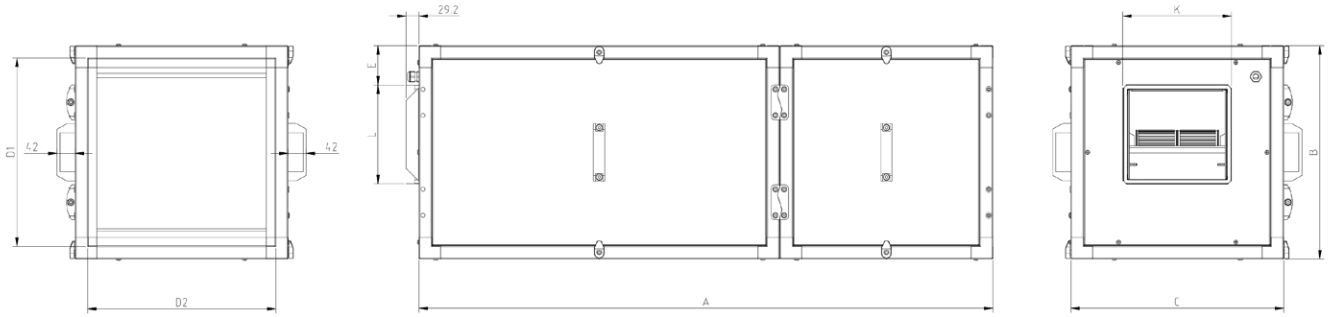
Technical characteristics

Model	Speed	Maximum admissible current (A)			Installed power	Maximum airflow	Sound Level	Approx. weight	Assembly version
	(r/min)	230 V	400 V	690V	(kW)	(m3/h)	dB(A)	(Kg)	
UDTX-7/7-0.25	1090	1.23	0.71		0.18	1050	48	37	A
UDTX-7/7-0.33	1220	1.66	0.96		0.25	1100	50	37.8	A
UDTX-7/7-0.5	1420	2.02	1.17		0.37	1250	53	39	A
UDTX-7/7-0.75	1600	2.92	1.69		0.55	1450	56	41	A
UDTX-7/7-1	1790	3.1	1.79		0.75	1500	58	42.5	A
UDTX-9/9-0.25	825	1.23	0.71		0.18	1700	45	48	A
UDTX-9/9-0.33	920	1.66	0.96		0.25	1800	48	50	A
UDTX-9/9-0.5	1020	2.02	1.17		0.37	2200	51	51.5	A
UDTX-9/9-0.75	1050	2.92	1.69		0.55	2900	55	54.5	A
UDTX-9/9-1	1070	3.1	1.79		0.75	3200	56	56	A
UDTX-9/9-1.5	1260	4.03	2.32		1.1	3750	60	59	A
UDTX-10/10-0.5	845	2.02	1.17		0.37	2950	52	55	A

Technical characteristics

Model	Speed	Maximum admissible current (A)			Installed power	Maximum airflow	Sound Level	Approx. weight	Assembly version
	(r/min)	230 V	400 V	690V	(kW)	(m3/h)	dB(A)	(Kg)	
UDTX-10/10-0.75	845	2.92	1.69		0.55	3800	56	57	A
UDTX-10/10-1	960	3.1	1.79		0.75	4175	58	58.5	A
UDTX-10/10-1.5	1070	4.03	2.32		1.1	4800	61	61.3	A
UDTX-10/10-2	1140	5.96	3.44		1.5	5400	63	64.6	A
UDTX-12/12-0.5	595	2.02	1.17		0.37	4200	52	69	A
UDTX-12/12-0.75	675	2.92	1.69		0.55	4800	54	71	A
UDTX-12/12-1	765	3.1	1.79		0.75	5400	57	72.4	A
UDTX-12/12-1.5	855	4.03	2.32		1.1	5800	59	75.3	A
UDTX-12/12-2	965	5.96	3.44		1.5	6500	62	78.6	A
UDTX-12/12-3	1180	8.36	4.83		2.2	7400	65	87	A
UDTX-15/15-0.75	525	2.92	1.69		0.55	5900	49	85	B
UDTX-15/15-1	595	3.1	1.79		0.75	6500	52	86.4	B
UDTX-15/15-1.5	635	4.03	2.32		1.1	7500	54	89.3	B
UDTX-15/15-2	670	5.96	3.44		1.5	8200	56	92.6	B
UDTX-15/15-3	740	8.36	4.83		2.2	9500	59	101	B
UDTX-15/15-4	805	10.96	6.33		3	10600	61	103	B
UDTX-15/15-5.5	965	14.1	8.12		4	12000	63	108	B
UDTX-18/18-1.5	480	4.03	2.32		1.1	9000	48	122	B
UDTX-18/18-2	605	5.96	3.44		1.5	9250	51	125.3	B
UDTX-18/18-3	590	8.36	4.83		2.2	11500	54	133.7	B
UDTX-18/18-4	640	10.96	6.33		3	13200	56	135.7	B
UDTX-18/18-5.5	675	14.1	8.12		4	15000	58	141	B
UDTX-18/18-7.5	760		11.6	6.72	5.5	17000	60	154.5	B

Dimensions in mm



Model	A	B	C	D1	D2	E	L	K
UDTX-7/7	1320	490	490	428	428	91	226	247
UDTX-9/9	1470	550	550	488	488	86	279	317
UDTX-10/10	1575	605	605	543	543	88	306	343
UDTX-12/12	1730	680	680	618	618	84	360	404
UDTX-15/15	2075	855	855	793	793	119	423	490
UDTX-18/18	2356	1000	1000	938	938	137	498	554

Air treatment module options

MF: Filtration Modules

- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Standard version module F6+F8 and optionally F7+F9.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

ME: Modules with electrically heated coils

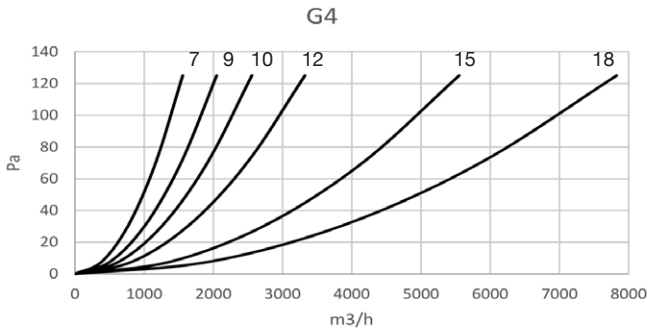
- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Stuffing-box for cable inlet.
- Standard version module G4 and optionally with F6+F8 or F7+F9 filters.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

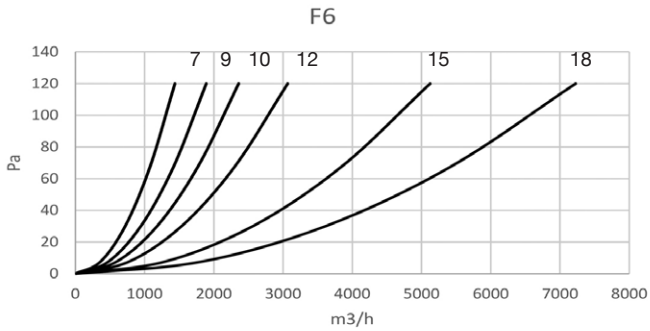
MA: Modules with water coils

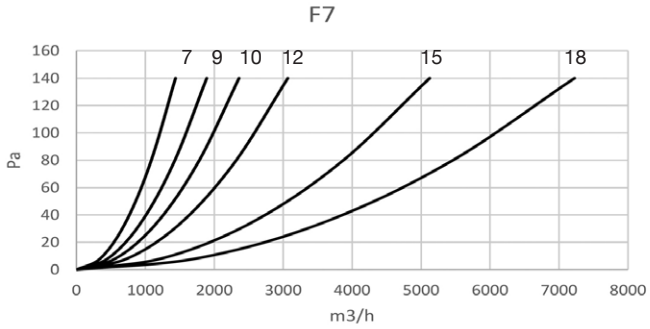
- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Standard version module G4 and optionally with F6+F8 or F7+F9 filters.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

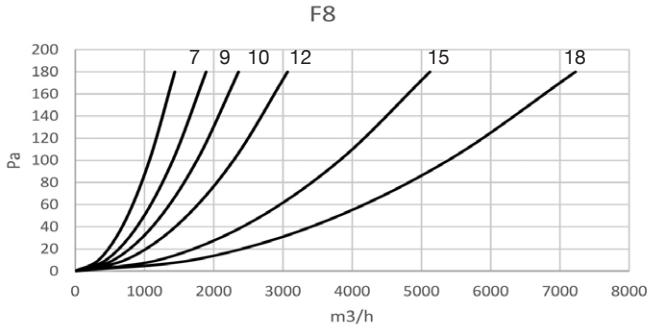
MF: Filtration module characteristics

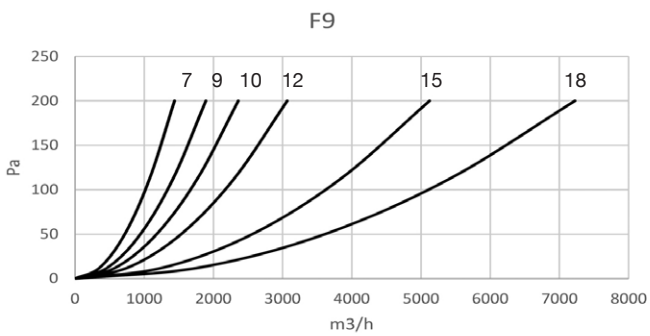
Head loss - filters









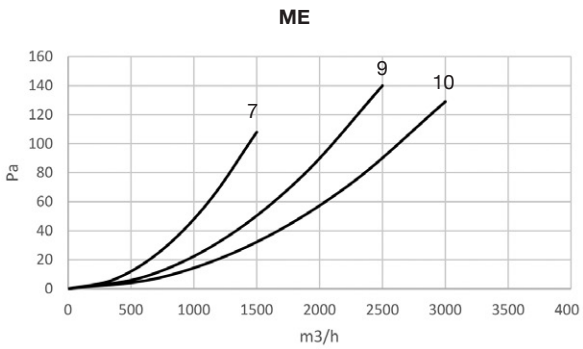


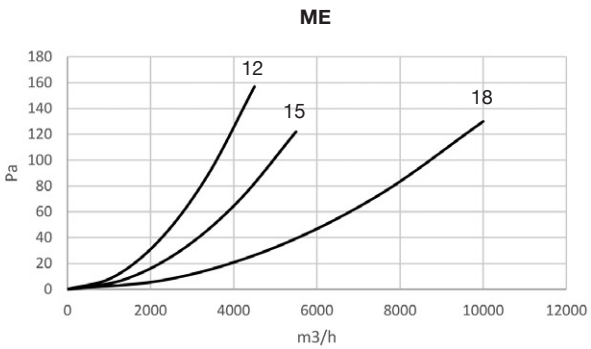
7= MF 7/7
9= MF 9/9
10= MF 10/10
12= MF 12/12
15= MF 15/15
18= MF 18/18

ME: Technical characteristics of electrically heated coil

Model	Current (A)	Installed power (kW)			Maximum airflow	Approx. weight
	400V	Stage 1	Stage 2	Stage 3	(m3/h)	(Kg)
ME-7/7	13	3	3	3	1500	23
ME-9/9	23	5.4	5.4	5.4	3300	33
ME-10/10	33	7.7	7.7	7.7	4500	44
ME-12/12	52	12	12	12	6000	61
ME-15/15	81	18.8	18.8	18.8	10000	96
ME-18/18	97	22.5	22.5	22.5	13000	123

Head loss - electrical coil heaters





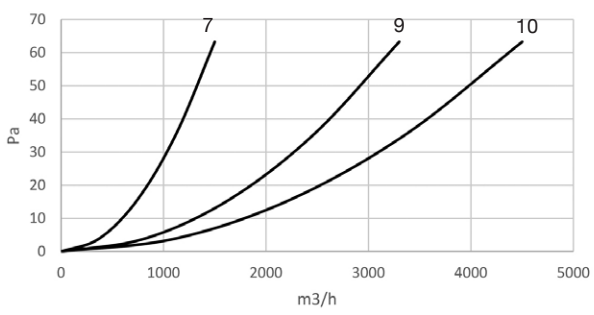
MA: Characteristics of 90/70ºC water coil for air at 0ºC

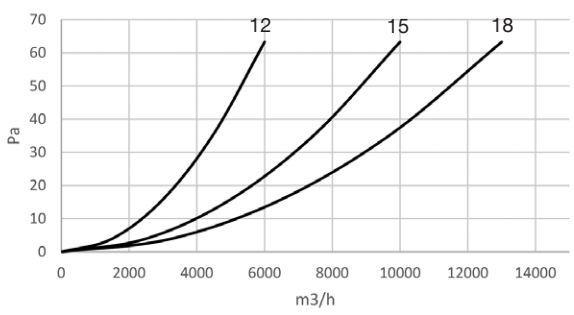
Model	Power	Maximum airflow	Water flow	Water head loss	Connection	Approx. weight
	(kW)	(m3/h)	(m3/h)	(kPa)	(in)	(Kg)
MA-7/7	23	1500	1.0	16.3	1/2”	18
MA-9/9	37	2500	1.7	26.6	1/2”	25
MA-10/10	46	3000	2.0	17.6	3/4”	31
MA-12/12	66	4500	2.9	29.8	3/4”	39
MA-15/15	108	5500	4.8	21.4	1”	63
MA-18/18	153	10000	6.8	21.9	1 1/4”	87

MA: Characteristics of 80/60ºC water coil for air at 0ºC

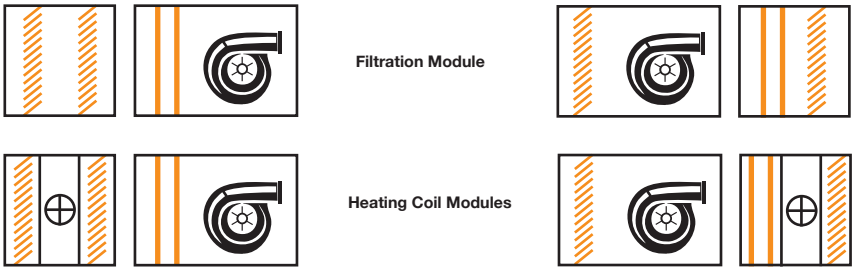
Model	Power	Maximum airflow	Water flow	Water head loss	Connection	Approx. weight
	(kW)	(m3/h)	(m3/h)	(kPa)	(in)	(Kg)
MA-7/7	20	1500	0.9	13.0	1/2”	18
MA-9/9	33	2500	1.4	21.3	1/2”	25
MA-10/10	40	3000	1.7	14.0	3/4”	31
MA-12/12	58	4500	2.5	23.8	3/4”	39
MA-15/15	100	5500	4.2	17.5	1”	63
MA-18/18	133	10000	5.8	17.5	1 1/4”	87

Head loss - water coil heaters





Installation and filter position diagrams



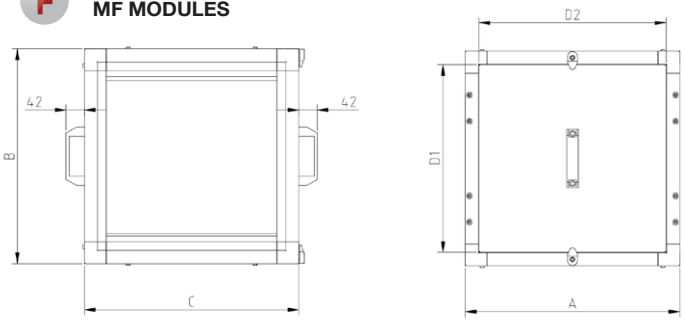
Module installed as extractor

Module installed as blower

Module Dimensions mm

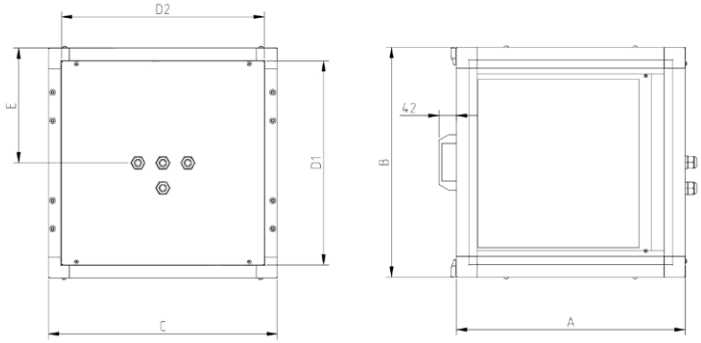
Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS

MF MODULES



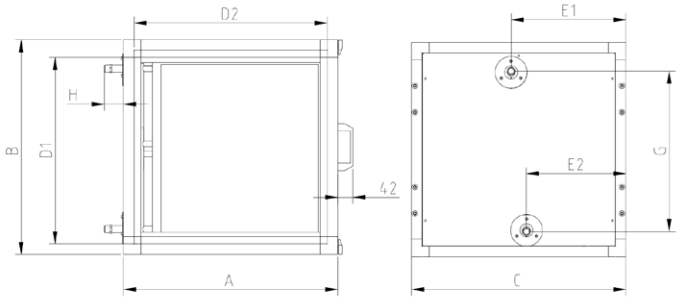
Model	A	B	C	D1	D2
MF-7/7	490	490	490	428	428
MF-9/9	550	550	550	488	488
MF-10/10	605	605	605	543	543
MF-12/12	680	680	680	618	618
MF-15/15	855	855	855	793	793
MF-18/18	1000	1000	1000	938	938

ME MODULES



Model	A	B	C	D1	D2	E
ME-7/7	490	490	490	428	428	245
ME-9/9	550	550	550	488	488	275
ME-10/10	605	605	605	543	543	302.5
ME-12/12	680	680	680	618	618	340
ME-15/15	855	855	855	793	793	427.5
ME-18/18	1000	1000	1000	938	938	500

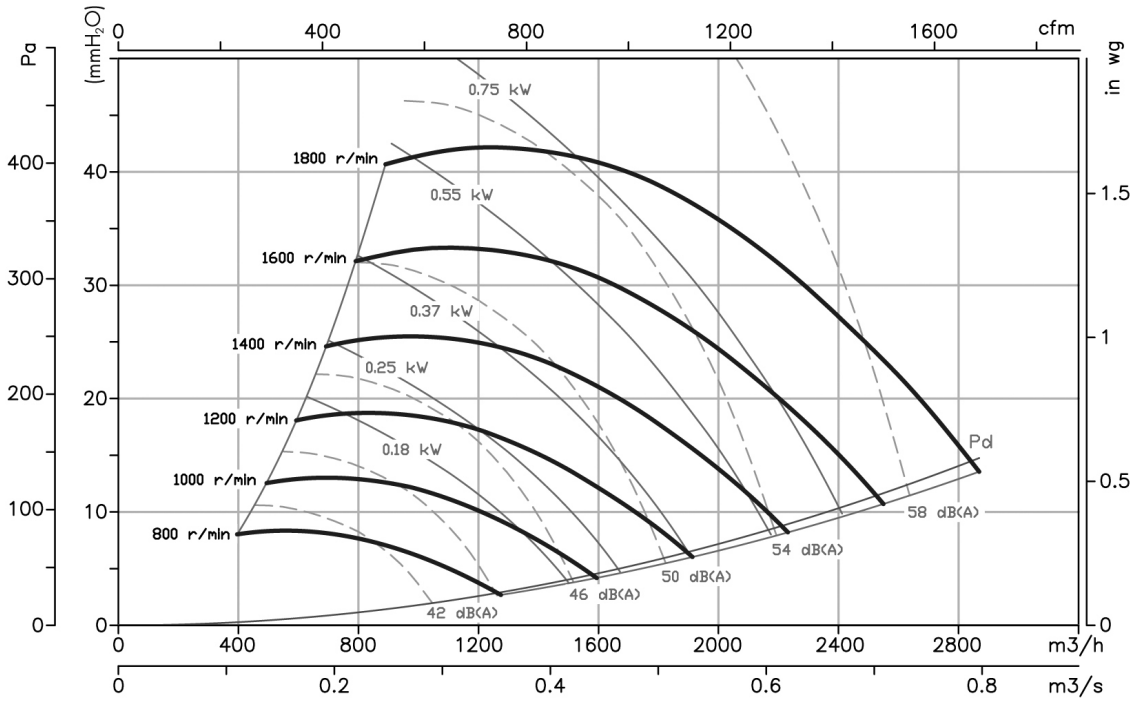
MA MODULES



Model	A	B	C	D1	D2	E1	E2	G	H
MA 7/7	490	490	490	428	428	266,5	223,5	334	59,5
MA 9/9	550	550	550	488	488	296,5	253,5	410	57,2
MA 10/10	605	605	605	543	543	324	281	452	54
MA 12/12	680	680	680	618	618	361,5	318,5	527	79,5
MA 15/15	855	855	855	793	793	460	395	671	42,2
MA 18/18	1000	1000	1000	938	938	521,5	478,5	814	47,2

Characteristic curves - fans

7/7



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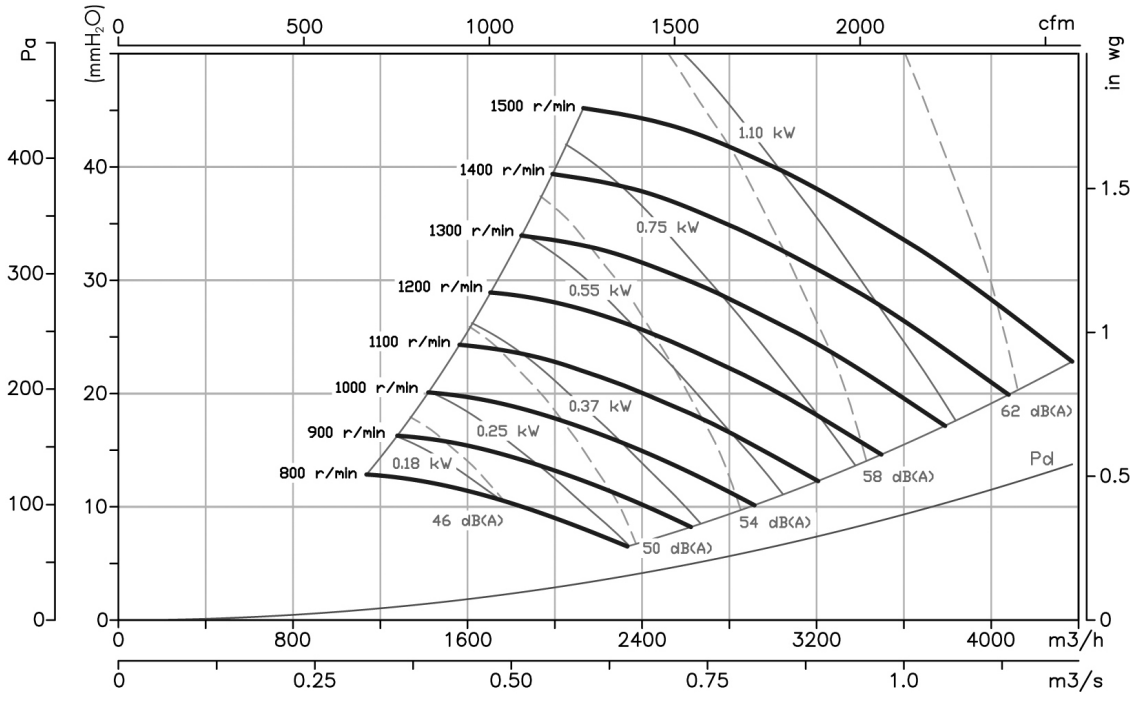
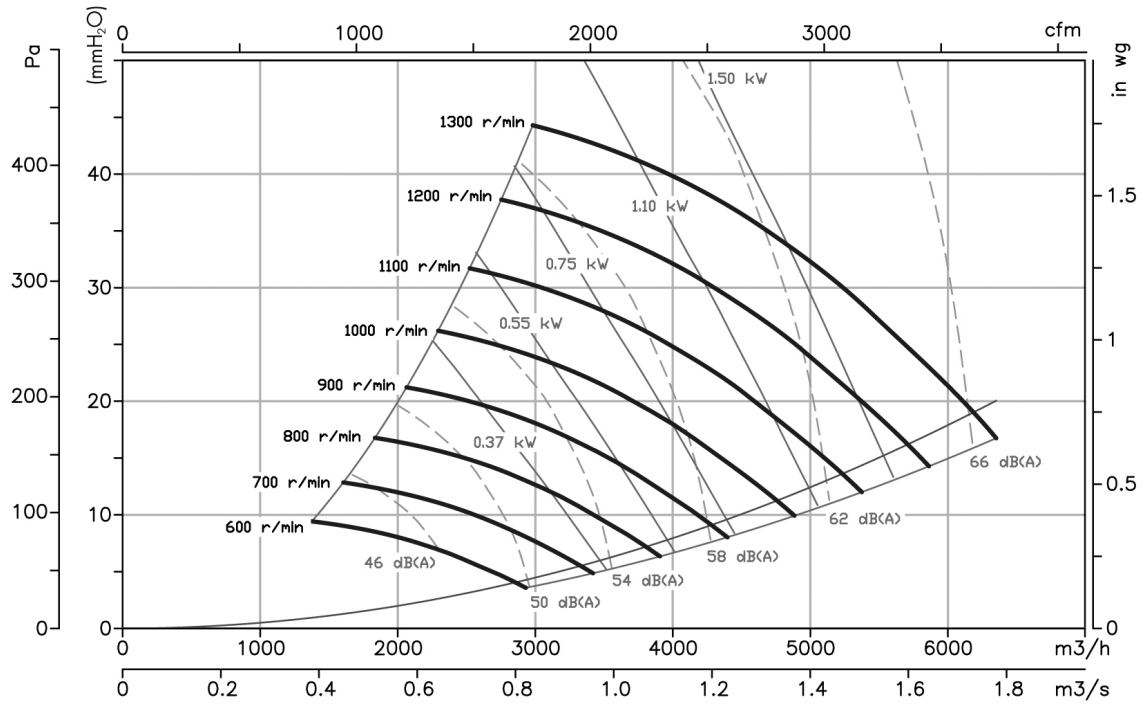


Characteristic curves - fans

10/10



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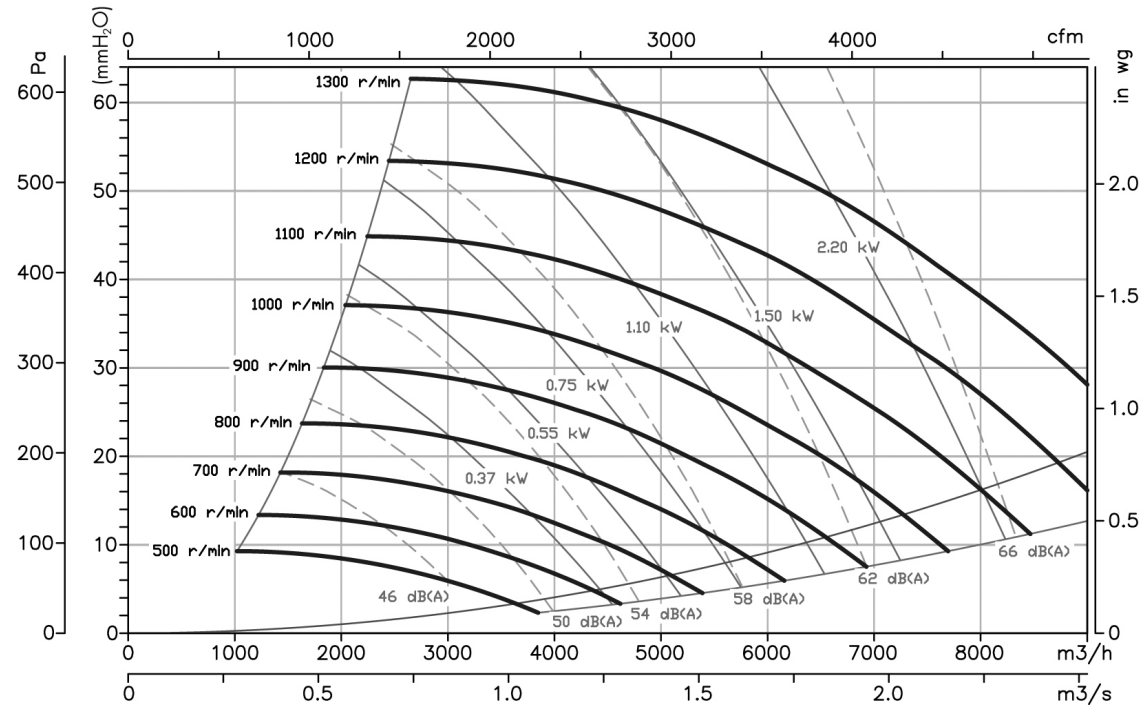
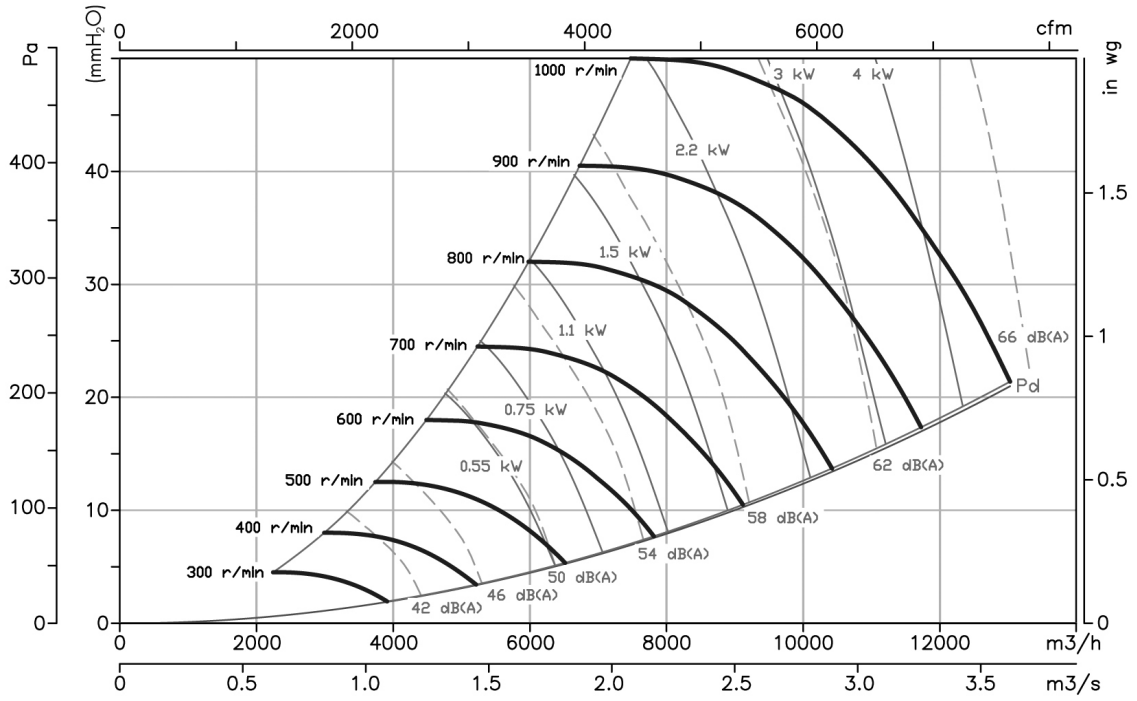


Characteristic curves - fans

15/15



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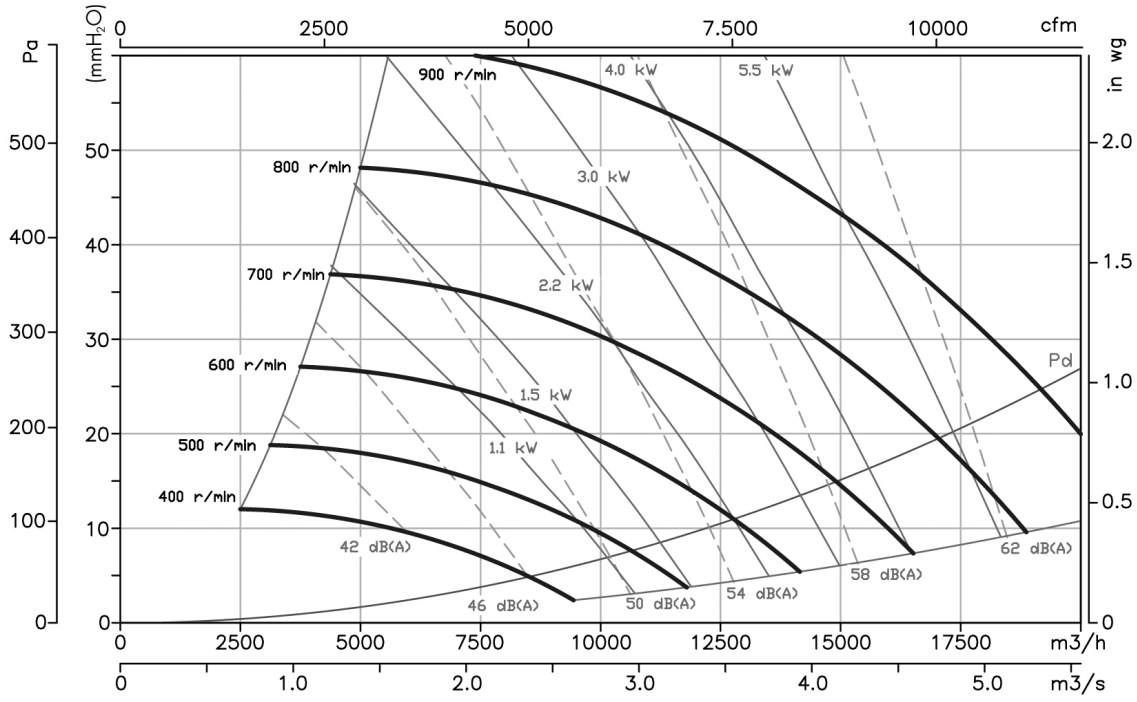


FLEX REMOTE CONTROL PANEL

External control designed for operating the energy recovery ventilator automatically, according to the variables entered. For use with all RIS and RIRS series models. Standard control for RIS/RIRS EC and EKO series.

Features:

- Adjusts and displays the temperature of air entering the premises
- Adjusts and displays fan speed
- Controls temperature of air entering, external temperature, temperature of the premises and temperature of the extracted air
- Displays alarm signals
- Timer with weekly programme (start-up time, temperature of the premises, etc.)
- RS-485 communications cable for remote control, length 13m.
- It is possible to configure the constant flow control to be by CO2 sensor or pressure sensor. Only for RIS/RIRS of the EC or EKO series.

FILTERS

Air filters, for replacement in the filtration units and heat recovery ventilators.

ADIABATIC BOX

Box incorporating an adiabatic module. Contributes to cooling the air supplied to the premises. Installed in the extraction circuit between the pre-filter and the exchanger.

SI-PRESOSTATO

Pressure sensor

Controls the pressure difference between filters, once it reaches the selected value it triggers a contact to activate an alarm relay.

SI-PRESIÓN

Pressure transmitter

Controls the pressure differential in ventilation installations that transform pressure changes into an electrical signal

Model	Power supply	Output	Max. consumption (VA)	∅ Connectors	Pressure range
SI-PRESIÓN TPDA	24V AC/24V DC	0-10V/4-20mA	4	6.2 mm	0-2500 Pa
SI-PRESIÓN TPDA c/DISPLAY	24V AC/24V DC	0-10V/4-20mA	4	6.2 mm	0-2500 Pa

CONSTANT FLOW KIT

A set made up of a pressure transmitter and frequency converter, designed to increase the speed of the fan as the filter gets dirtier, and to maintain a constant flow in the installation.

SI-VOC+HUMEDAD

Air quality, humidity and temperature sensor for 3-speed motor control

Model	Power supply	Outlet	Maximum consumption (A)	Relative humidity range	Concentration range VOC	Temperature of use
SI-VOC+HUMEDAD	230 V AC	230 V AC (V1, V2, V3)	2	5% RH - 95% RH	0-999 ppm	-10 +50 °C

DIFFERENTIAL PRESSURE PROBE

Controls the difference in pressure between filters, to detect when the filters are dirty and need to be replaced.

MF

Filtration Modules

See page on air treatment modules

- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Standard version module F6+F8 and optionally F7+F9.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

ME

Modules with electrically heated coils

See page on air treatment modules

- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Stuffing-box for cable inlet.
- Standard version module G4 and optionally with F6+F8 or F7+F9 filters.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

MA

Modules with water coils

See page on air treatment modules

- Aluminium profile structure with thermal insulation and soundproofing.
- Side access panel for correct maintenance.
- Modular construction, for adding filter or air treatment modules.
- Standard version module G4 and optionally with F6+F8 or F7+F9 filters.
- Compatible with series UDT, UDTX, CJBD/AL, CJBD/ALS, CJBX/AL and CJBX/ALS.

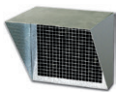
INT

Stop-start safety switches in accordance with Standard UNE-EN 60204-1.

Features:

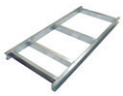
- Switches to install beside the fan, so that the mains current can be cut off before handling the fan.
- IP65 protection.
- Three-phase fans or two speed fans, use a 6-pole switch.
- For single-phase fans, use a 3-pole switch

Model	Current (A)	(kW)	Cable input (mm)
INT-KG 20/3CA	16	7,5	29
INT-KG 41/3CA	32	15	37,5
INT-KG 64/3CA	63	22	37,5
INT-KG 80/3CA	80	30	37,5
INT-KG 100/3CA	100	37	37,5
INT-KG 20/6CA	16	7,5	29
INT-KG 41/6CA	32	15	37,5
INT-KG 64/6CA	63	22	37,5
INT-KG 80/6CA	80	30	37,5
INT-KG 100/6CA	100	37	37,5



VIS

Outlet hoods and inlet with protective grille.
Prevents objects and water from entering the interior of the filtration units.



BS

Base stand
Base for the support of the filtration units on the ground.

TEJ

Outside covers
Prevents water entering filtration units installed outside.

SB

Vibration dampers
Spring dampers to prevent transmitting vibrations

ALPHABETICAL INDEX OF REFERENCES

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