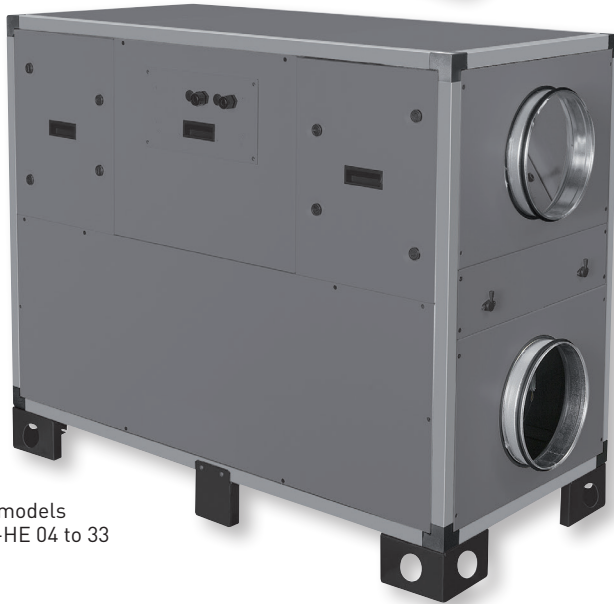


CONFIGURABLE HIGH-EFFICIENCY HEAT RECOVERY UNITS

CADB/T-HE PRO-REG Series



False-ceiling models
CADB/T-HE 04 to 33



Vertical models
CADB/T-HE 04 to 33



Vertical and
horizontal outdoor
installation models CADB/T-HE 45 to 100.
Size 100 only available in vertical configuration.



Remote control panel



Security switch
All versions include a On/Off
security device.



Heat Recovery



ErP OK



Smart
Ventilation Systems



ectechnology



F7

SUPPLY
FILTER



M5

EXTRACT
FILTER

Versions



HORIZONTAL
CONFIGURATION



VERTICAL
CONFIGURATION



WITHOUT
ADDITIONAL
HEAT



ELECTRIC
BATTERY
INCLUDED



WATER COIL
INCLUDED

Heat recovery units with high-efficiency counterflow plate heat exchanger (up to 93%), certified by Eurovent, mounted in a double wall galvanized steel enclosure with interior thermo-acoustic insulation (A1/M0) 25 mm thick mineral wool in models 04 to 33 and 47 mm with Magnelis ZM310 enclosure in models verticals 04-33 and 45 to 100.

Adjustable input and output ports, versions for horizontal and vertical installation.
Minimum outside air temperature -10°C.
For lower temperatures it is necessary to use preheating coils located in the external air inlet.

Applications

Commercial premises, offices, restaurants, public buildings, schools.

CADB/T-HE D PRO-REG

Heat recovery units without additional incorporated heater.

CADB/T-HE DC PRO-REG

Heat recovery units with built-in hot water coil.

The 3-Way valve is provided as an accessory (see accessories table for this series)

CADB/T-HE DI PRO-REG

Heat recovery units with built-in electric heater battery.

Motors

Models 04 to 33: Single phase EC motors with integrated electronic protection, 230V/I/50-60Hz IP44, Class B.

Models 33HP and 45 to 100: Three phase EC motors with integrated electronic protection, 400V/III/50-60Hz IP 54 class B.

Fans

Plug-fan with backward curved impeller.

Filters

- F7: Low pressure F7 filters (ePM1 70%) for supply air.
- M5: M5 filters (ePM10 50%) for extract air.
- Possibility of mounting a second filter inside the unit (accessory).

It is possible to complement the heat recovery unit with a specific range of water and direct expansion coils. Also available, the exclusive module IAQ with a high efficiency in the retention of pollutants associated with outdoor pollution (gases and particulate matter), providing adequate quality to the supplied air, even in polluted outdoor environments.

Control

It includes an integral operation control, from factory assembled and wired to all the components included in the unit (fans, by-pass, filter pressure switches, temperature probes, etc.).

Allows fans control in manual or automatic mode with the display of supply and extract real air volume in all the operation modes (fans pressure transmitters included): Variable airflow (VAV), constant pressure (COP) or constant airflow (CAV) (Available accessories for each mode).

Also allows the management of heating coils (DI and DC versions). Integrated air and water temperature probes.

Description of the fan control modes which can be configured:

VAV- variable air volume

Fans speed can be regulated by a 0 - 10V signal from the remote touchscreen panel (included) or an external CO₂, temperature or humidity sensor (accessories).

CAV - constant air volume

Fans speed are automatically adjusted in order to maintain a constant airflow regardless of the filters fouling. Supply and extract fans are controlled independently allowing the configuration of different airflow values for each one. No accessories are required.

COP - constant pressure

Constant pressure measured by an external pressure sensor TDP-S (accessory).

Appropriate control mode for multi-room installations with flow control dampers.

Additional information

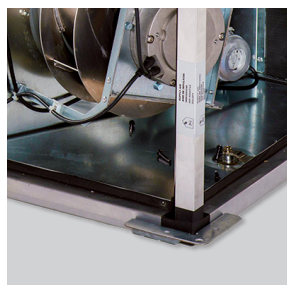
Single phase (CADB-HE PRO-REG) and three phase models (CADT-HE PRO-REG).

Airflows from 450 to 10.000 m³/h.

All versions and models include by-pass.

Mounting flexibility provided by the interchangeable side panels.

CADB/T-HE 04 TO 33 PRO-REG HORIZONTAL MODELS



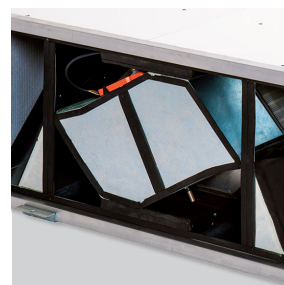
- 1 Low noise level and robust construction**
 Casing with double skinned 25mm panels with thermoacoustic flameproof insulation A1/M0, with high-quality finish and plastic corners.



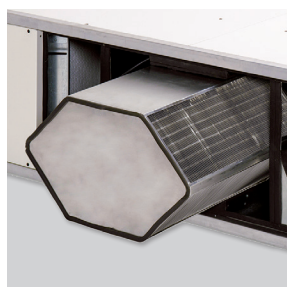
- 2 PRO-REG Controller**
 Mounted in an IP54 weatherproof electrical box.



- 3 Motors**
 Plug-fans with EC single-phase motor.



- 4 By-pass**
 All versions include internal bypass (approximately 75% over the nominal airflow).



- 5 Counterflow heat exchanger**
 high-efficiency (up to 93%), EUROVENT certified.

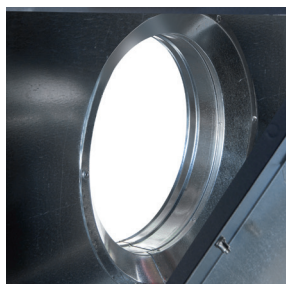
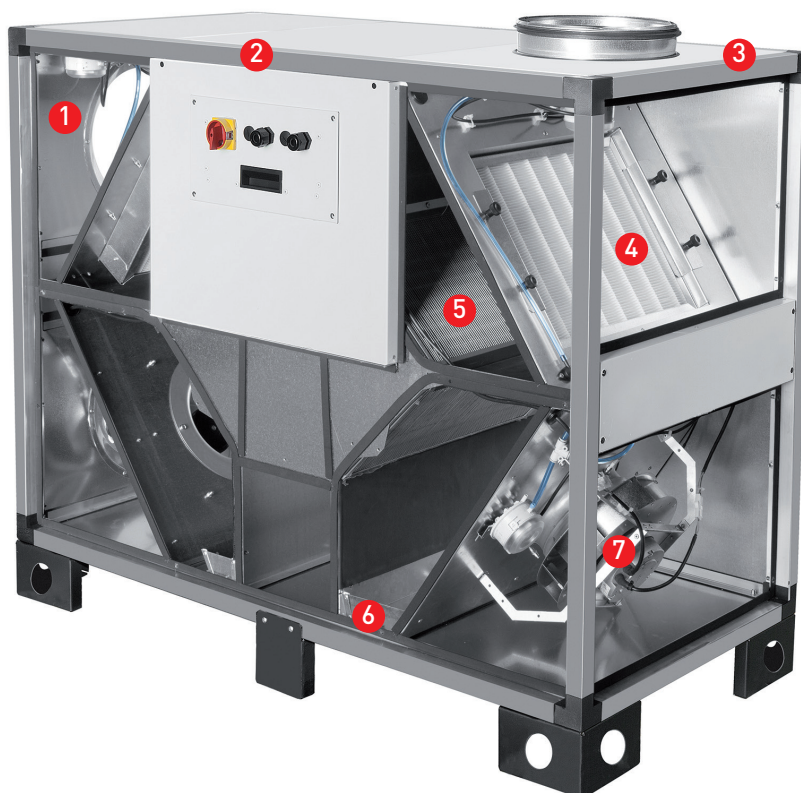


- 6 High-efficiency filters:**
 - Low pressure F7 filters (ePM1 70%) for supply air.
 - M5 filters (ePM10 50%) for extract air.
 Possibility of mounting a second filter inside the unit (accessory).

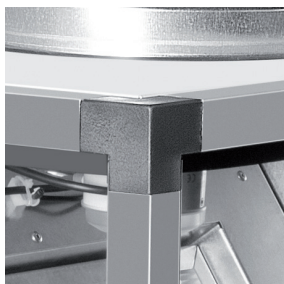


- 7 Easy installation**
 Specific supports to allow installation in false ceilings via threaded rods.

CADB/T-HE 04 TO 33 PRO-REG VERTICAL MODELS



- 1 Ecodesign**
Streamlined aerodynamic design, to reduce internal pressure drop.



- 2 Low noise level and robust construction**
Casing with double skinned 25mm panels with thermoacoustic flameproof insulation A1/M0, with high-quality finish and plastic corners.



- 3 Versatility**
Designed to allow the quickly reorientation of inputs and outputs through the exchange of two contiguous panels.



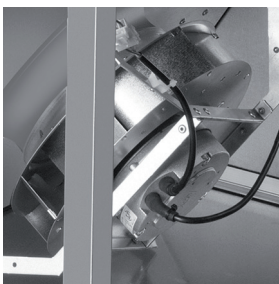
- 4 High-efficiency filters**
- Low pressure F7 filters (ePM1 70%) for supply air.
- M5 filters (ePM10 50%) for extract air.
Possibility of mounting a second filter inside the unit (accessory).



- 5 Counterflow heat exchanger**
high-efficiency (up to 93%), EUROVENT certified. All versions include internal bypass (approximately 75% over the nominal airflow).



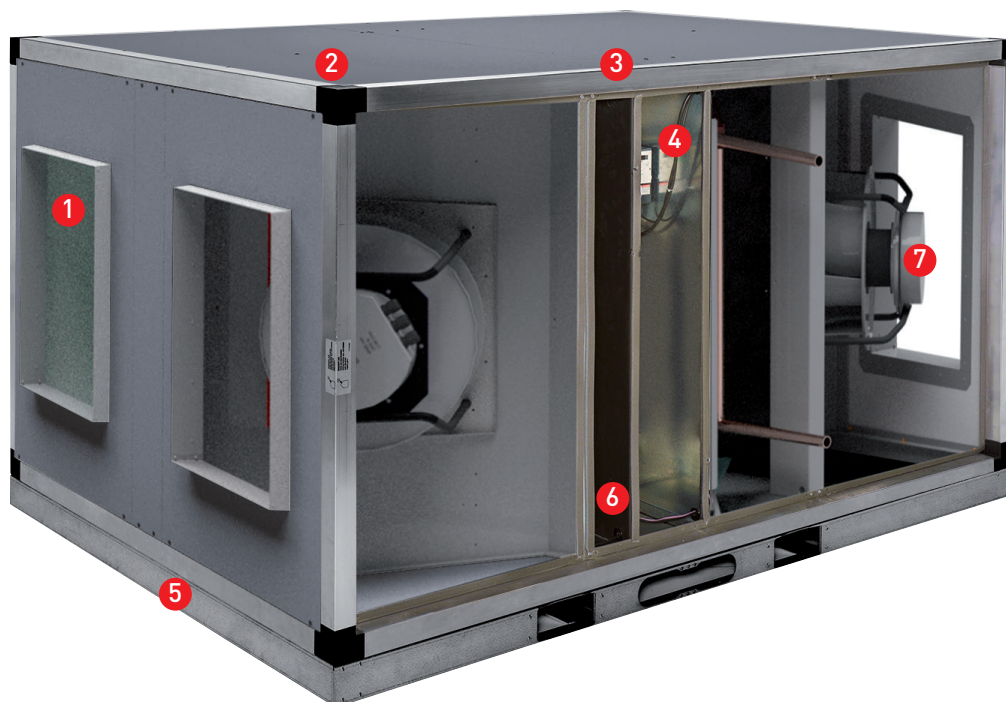
- 6 Condensate Tray**
Double tray for summer and winter, with drain outlet by the bottom.



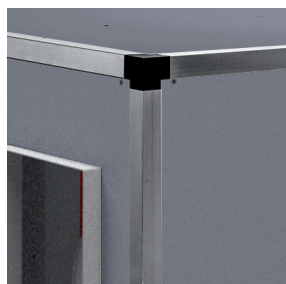
- 7 High-efficiency motors**
Plug-fans with EC single-phase motor.



CADB/T-HE 45 TO 100 PRO-REG MG MODELS



- 1 High-efficiency filters**
- Low pressure F7 filters (ePM1 70%) for supply air.
 - M5 filters (ePM10 50%) for extract air.
- Possibility of mounting a second filter inside the unit (accessory).



- 2 Low noise level and robust construction**
- Casing with 50mm aluminum profiles structure. Double skinned panels with thermoacoustic flameproof insulation A1/M0, with high-quality finish and plastic corners.



- 3 By-pass**
- All versions include internal bypass (approximately 75% over the nominal airflow).



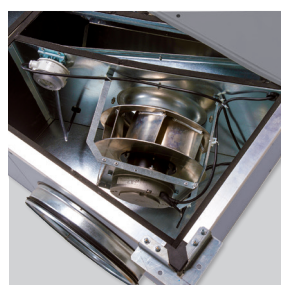
- 4 PRO-REG Controller**
- Mounted inside the unit, IP55.



- 5 Structural base**
- It provides a high rigidity and allows the easy levelling of the unit in outdoor installations.

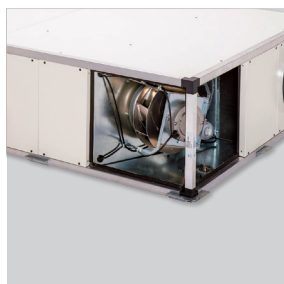


- 6 Counterflow heat exchanger** of high-efficiency (up to 93%), EUROVENT certified.



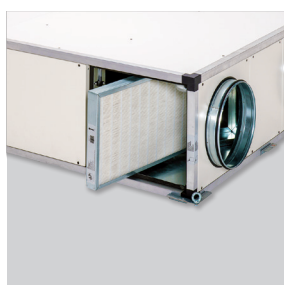
- 7 Motors**
- Plug-fans with EC three-phase motor.

HIGHEST FLEXIBILITY



Versatile assembly

The design of our heat recovery units makes it possible for the user to configure them on site. Panels are interchangeable (except the control panel), which makes it possible to change the position of inlet and outlet connections directly on site, depending on the specific requirements.

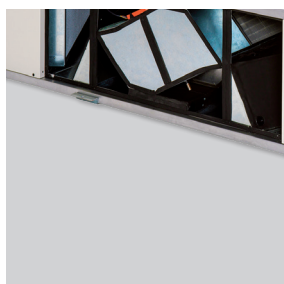


Easy maintenance

Models 04 to 100: Easy access to filters from side panels.

Easy maintenance

Models 04 to 33: Easy access to filters from bottom panels.



Models 04 to 33: Easy access for cleaning the exchanger from side and bottom panels. Disassembly required.
Models 45 to 100: Easy access for cleaning the exchanger from side panels.

REFERENCE

C	A	D	B	-	HE	D	I	16	LH	PRO-REG	MG
1						2		3	4	5	6

1 - Series:

CADB-HE: Single-phase power supply.

CADT-HE: Three-phase power supply.

2 - Heater options range:

D: Standard range (Without additional incorporated heater)

DC: Range with built-in hot water coil

DI: Range with built-in electric heater battery

3 - Size

4 - Type of configuration:

LH: Left horizontal

RH: Right horizontal

LV: Left vertical

RV: Right vertical

5 - PRO-REG: Control Plug & Play PRO-REG included

6 - MG: Magnelis ZM310 enclosure.

STANDARD VERSIONS CADB/T-HE PRO-REG

Horizontal Versions

D Models: Without heater battery

CADB-HE	-D	04	LH	PRO-REG	
CADB-HE	-D	08	LH	PRO-REG	
CADB-HE	-D	12	LH	PRO-REG	
CADB-HE	-D	16	LH	PRO-REG	
CADB-HE	-D	21	LH	PRO-REG	
CADB-HE	-D	27	LH	PRO-REG	
CADB-HE	-D	33	LH	PRO-REG	
CADT-HE	-D	33 HP	LH	PRO-REG	
CADT-HE	-D	45	LH	PRO-REG	MG
CADT-HE	-D	60	LH	PRO-REG	MG

In 04 to 21 models without batteries, the RH configuration is obtained from LH version, by inverting the by-pass position.

CADT-HE	-D	45	RH	PRO-REG	MG
CADT-HE	-D	60	RH	PRO-REG	MG

DC Models: With built-in hot water coil

CADB-HE	-DC	04	LH	PRO-REG	
CADB-HE	-DC	08	LH	PRO-REG	
CADB-HE	-DC	12	LH	PRO-REG	
CADB-HE	-DC	16	LH	PRO-REG	
CADB-HE	-DC	21	LH	PRO-REG	
CADB-HE	-DC	27	LH	PRO-REG	
CADB-HE	-DC	33	LH	PRO-REG	
CADT-HE	-DC	33 HP	LH	PRO-REG	
CADT-HE	-DC	45	LH	PRO-REG	MG
CADT-HE	-DC	60	LH	PRO-REG	MG

CADB-HE	-DC	04	RH	PRO-REG	
CADB-HE	-DC	08	RH	PRO-REG	
CADB-HE	-DC	12	RH	PRO-REG	
CADB-HE	-DC	16	RH	PRO-REG	
CADB-HE	-DC	21	RH	PRO-REG	
CADB-HE	-DC	27	RH	PRO-REG	
CADB-HE	-DC	33	RH	PRO-REG	
CADT-HE	-DC	33 HP	RH	PRO-REG	
CADT-HE	-DC	45	RH	PRO-REG	MG
CADT-HE	-DC	60	RH	PRO-REG	MG

DI Models: With built-in electric heater battery

CADB-HE	-DI	04	LH	PRO-REG	
CADB-HE	-DI	08	LH	PRO-REG	
CADB-HE	-DI	12	LH	PRO-REG	
CADB-HE	-DI	16	LH	PRO-REG	
CADT-HE	-DI	21	LH	PRO-REG	
CADT-HE	-DI	27	LH	PRO-REG	
CADT-HE	-DI	33	LH	PRO-REG	
CADT-HE	-DI	33 HP	LH	PRO-REG	
CADT-HE	-DI	45	LH	PRO-REG	MG
CADT-HE	-DI	60	LH	PRO-REG	MG

CADB-HE	-DI	04	RH	PRO-REG	
CADB-HE	-DI	08	RH	PRO-REG	
CADB-HE	-DI	12	RH	PRO-REG	
CADB-HE	-DI	16	RH	PRO-REG	
CADT-HE	-DI	21	RH	PRO-REG	
CADT-HE	-DI	27	RH	PRO-REG	
CADT-HE	-DI	33	RH	PRO-REG	
CADT-HE	-DI	33 HP	RH	PRO-REG	
CADT-HE	-DI	45	RH	PRO-REG	MG
CADT-HE	-DI	60	RH	PRO-REG	MG

STANDARD VERSIONS CADB/T-HE PRO-REG

Vertical Versions

D Models: Without heater battery

CADB-HE	-D	04	LV	PRO-REG	MG
CADB-HE	-D	08	LV	PRO-REG	MG
CADB-HE	-D	12	LV	PRO-REG	MG
CADB-HE	-D	16	LV	PRO-REG	MG
CADB-HE	-D	21	LV	PRO-REG	MG
CADB-HE	-D	27	LV	PRO-REG	MG
CADB-HE	-D	33	LV	PRO-REG	MG
CADT-HE	-D	33HP	LV	PRO-REG	MG
CADT-HE	-D	45	LV	PRO-REG	MG
CADT-HE	-D	60	LV	PRO-REG	MG
CADT-HE	-D	100	LV	PRO-REG	MG

CADB-HE	-D	04	RV	PRO-REG	MG
CADB-HE	-D	08	RV	PRO-REG	MG
CADB-HE	-D	12	RV	PRO-REG	MG
CADB-HE	-D	16	RV	PRO-REG	MG
CADB-HE	-D	21	RV	PRO-REG	MG
CADB-HE	-D	27	RV	PRO-REG	MG
CADB-HE	-D	33	RV	PRO-REG	MG
CADT-HE	-D	33HP	RV	PRO-REG	MG
CADT-HE	-D	45	RV	PRO-REG	MG
CADT-HE	-D	60	RV	PRO-REG	MG
CADT-HE	-D	100	RV	PRO-REG	MG

DC Models: With built-in hot water coil

CADB-HE	-DC	04	LV	PRO-REG	MG
CADB-HE	-DC	08	LV	PRO-REG	MG
CADB-HE	-DC	12	LV	PRO-REG	MG
CADB-HE	-DC	16	LV	PRO-REG	MG
CADB-HE	-DC	21	LV	PRO-REG	MG
CADB-HE	-DC	27	LV	PRO-REG	MG
CADB-HE	-DC	33	LV	PRO-REG	MG
CADT-HE	-DC	33HP	LV	PRO-REG	MG
CADT-HE	-DC	45	LV	PRO-REG	MG
CADT-HE	-DC	60	LV	PRO-REG	MG
CADT-HE	-DC	100	LV	PRO-REG	MG

CADB-HE	-DC	04	RV	PRO-REG	MG
CADB-HE	-DC	08	RV	PRO-REG	MG
CADB-HE	-DC	12	RV	PRO-REG	MG
CADB-HE	-DC	16	RV	PRO-REG	MG
CADB-HE	-DC	21	RV	PRO-REG	MG
CADB-HE	-DC	27	RV	PRO-REG	MG
CADB-HE	-DC	33	RV	PRO-REG	MG
CADT-HE	-DC	33HP	RV	PRO-REG	MG
CADT-HE	-DC	45	RV	PRO-REG	MG
CADT-HE	-DC	60	RV	PRO-REG	MG
CADT-HE	-DC	100	RV	PRO-REG	MG

DI Models: With built-in electric heater battery

CADB-HE	-DI	04	LV	PRO-REG	MG
CADB-HE	-DI	08	LV	PRO-REG	MG
CADB-HE	-DI	12	LV	PRO-REG	MG
CADB-HE	-DI	16	LV	PRO-REG	MG
CADT-HE	-DI	21	LV	PRO-REG	MG
CADT-HE	-DI	27	LV	PRO-REG	MG
CADT-HE	-DI	33	LV	PRO-REG	MG
CADT-HE	-DI	33HP	LV	PRO-REG	MG
CADT-HE	-DI	45	LV	PRO-REG	MG
CADT-HE	-DI	60	LV	PRO-REG	MG
CADT-HE	-DI	100	LV	PRO-REG	MG

CADB-HE	-DI	04	RV	PRO-REG	MG
CADB-HE	-DI	08	RV	PRO-REG	MG
CADB-HE	-DI	12	RV	PRO-REG	MG
CADB-HE	-DI	16	RV	PRO-REG	MG
CADT-HE	-DI	21	RV	PRO-REG	MG
CADT-HE	-DI	27	RV	PRO-REG	MG
CADT-HE	-DI	33	RV	PRO-REG	MG
CADT-HE	-DI	33HP	RV	PRO-REG	MG
CADT-HE	-DI	45	RV	PRO-REG	MG
CADT-HE	-DI	60	RV	PRO-REG	MG
CADT-HE	-DI	100	RV	PRO-REG	MG

CONFIGURABLE HIGH-EFFICIENCY HEAT RECOVERY UNITS

CADB/T-HE PRO-REG Series



TECHNICAL CHARACTERISTICS

D Models: Without heater battery

	Complete unit						Fan		Weight (kg)
	Air connections diameter (mm)	Nominal airflow at 150Pa (m³/h)	Efficiency* ¹ (%)	Electrical supply	Max. abs. power (kW)	Maximum current (A)	Speed (r.p.m.)	Maximum current (A) each fan	
CADB-HE D 04 PRO-REG	200	450	87	1/230V, 50Hz	0,35	2,2	3700	1,0	147
CADB-HE D 08 PRO-REG	250	800	86,4	1/230V, 50Hz	0,53	2,9	2650	1,3	183
CADB-HE D 12 PRO-REG	315	1.200	85,3	1/230V, 50Hz	1,10	3,5	2550	1,6	190
CADB-HE D 16 PRO-REG	315	1.600	85,5	1/230V, 50Hz	1,10	4,3	2845	2,0	235
CADB-HE D 21 PRO-REG	400	2.100	86,5	1/230V, 50Hz	1,13	4,7	1580	2,2	333
CADB-HE D 27 PRO-REG	400	2.700	83,8	1/230V, 50Hz	1,84	7,5	2450	3,6	367
CADB-HE D 33 PRO-REG	400	3.300	89,9	1/230V, 50Hz	2,32	9,6	2200	4,6	420
CADT-HE D 33HP PRO-REG	400	3.300* ²	89,9	3+N/400V, 50Hz	3,45	5,6	2600	2,8	420
CADT-HE D 45 PRO-REG	400x600	4.500* ³	88,4	3+N/400V, 50Hz	4,43	6,3	2200	3,0	597
CADT-HE D 60 PRO-REG	500x700	6.100	89	3+N/400V, 50Hz	4,43	6,3	2200	3,0	730
CADT-HE D 100 PRO-REG	1100x610	10.000* ⁴	88,9	3+N/400V, 50Hz	8,40	11,9	2160	5,8	862

*¹ Wet efficiency referring to nominal airflow, outdoor conditions [-5°C / 80% RH] and indoor [20°C / 50% RH].

*² CADT-HE 33 HP airflow referred to 550Pa.

*³ CADT-HE 45 airflow referred to 450Pa.

*⁴ CADT-HE 100 airflow referred to 300Pa.

DC Models: With built-in hot water coil

	Complete unit						Fan		Hot water coil		Weight (kg)
	Air connections diameter (mm)	Nominal airflow at 150Pa (m³/h)	Efficiency* ¹ (%)	Electrical supply	Max. abs. power (kW)	Maximum current (A)	Speed (r.p.m.)	Maximum current (A) each fan	Heat power T.water 80/60°C (kW)	Heat power T.water 50/45°C (kW)	
CADB-HE DC 04 PRO-REG	200	450	87	1/230V, 50Hz	0,35	2,2	3700	1,0	2,7	1,6	149
CADB-HE DC 08 PRO-REG	250	800	86,4	1/230V, 50Hz	0,53	2,9	2650	1,3	5,1	3,1	186
CADB-HE DC 12 PRO-REG	315	1.200	85,3	1/230V, 50Hz	1,10	3,5	2550	1,6	7,1	4,3	193
CADB-HE DC 16 PRO-REG	315	1.600	85,5	1/230V, 50Hz	1,10	4,3	2845	2,0	8,6	5,3	239
CADB-HE DC 21 PRO-REG	400	2.100	86,5	1/230V, 50Hz	1,13	4,7	1580	2,2	12,6	7,8	338
CADB-HE DC 27 PRO-REG	400	2.700	83,8	1/230V, 50Hz	1,84	7,5	2450	3,6	16,2	10,0	375
CADB-HE DC 33 PRO-REG	400	3.300	89,9	1/230V, 50Hz	2,32	9,6	2200	4,6	18,2	11,1	427
CADT-HE DC 33HP PRO-REG	400	3.300* ²	89,9	3+N/400V, 50Hz	3,45	5,6	2600	2,8	18,2	11,1	427
CADT-HE DC 45 PRO-REG	400x600	4.500* ³	88,4	3+N/400V, 50Hz	4,43	6,3	2200	3,0	25,6	15,5	606
CADT-HE DC 60 PRO-REG	500x700	6.100	89	3+N/400V, 50Hz	4,43	6,3	2200	3,0	34,7	21,1	742
CADT-HE DC 100 PRO-REG	1100x610	10.000* ⁴	88,9	3+N/400V, 50Hz	8,40	11,9	2160	5,8	58,9	35,4	882

*¹ Eficiencia húmeda referida a caudal nominal, condiciones exteriores [-5°C 80% RH] e interiores [20°C/50%RH].

*² CADT-HE 33 HP caudal referido a 550Pa.

*³ CADT-HE 45 caudal referido a 450Pa.

*⁴ CADT-HE 100 caudal referido a 300Pa.

DI Models: With built-in electric heater battery

	Complete unit						Fan		Electric battery		Weight (kg)
	Air connections diameter (mm)	Nominal airflow at 150Pa (m³/h)	Efficiency* ¹ (%)	Electrical supply	Max. abs. power (kW)	Maximum current (A)	Speed (r.p.m.)	Maximum current (A) each fan	Heating power (kW)	Maximum current (A)	
CADB-HE DI 04 PRO-REG	200	450	87	1/230V, 50Hz	1,3	6,7	3700	1,0	1	4,5	148
CADB-HE DI 08 PRO-REG	250	800	86,4	1/230V, 50Hz	2,5	12,0	2650	1,3	2	9,1	185
CADB-HE DI 12 PRO-REG	315	1.200	85,3	1/230V, 50Hz	4,1	14,9	2550	1,6	3	11,4	192
CADB-HE DI 16 PRO-REG	315	1.600	85,5	1/230V, 50Hz	4,6	20,2	2845	2,0	3,5	15,9	237
CADT-HE DI 21 PRO-REG	400	2.100	86,5	3+N/400V, 50Hz	7,1	13,8	1580	2,2	6	9,11	336
CADT-HE DI 27 PRO-REG	400	2.700	83,8	3+N/400V, 50Hz	7,8	16,6	2450	3,6	6	9,1	373
CADT-HE DI 33 PRO-REG	400	3.300	89,9	3+N/400V, 50Hz	9,8	21,0	2200	4,6	7,5	11,4	424
CADT-HE DI 33HP PRO-REG	400	3.300* ²	89,9	3+N/400V, 50Hz	11	17,8	2600	2,8	7,5	11,4	424
CADT-HE DI 45 PRO-REG	400x600	4.500* ³	88,4	3+N/400V, 50Hz	13,4	20,0	2200	3,0	9	13,7	602
CADT-HE DI 60 PRO-REG	500x700	6.100	89	3+N/400V, 50Hz	16,4	24,5	2200	3,0	12	18,2	737
CADT-HE DI 100 PRO-REG	1100x610	10.000* ⁴	88,9	3+N/400V, 50Hz	32,13	48,3	2160	6,0	24	36,4	874

*¹ Eficiencia húmeda referida a caudal nominal, condiciones exteriores [-5°C 80% RH] e interiores [20°C/50%RH].

*² CADT-HE 33 HP caudal referido a 550Pa.

*³ CADT-HE 45 caudal referido a 450Pa.

*⁴ CADT-HE 100 caudal referido a 300Pa.

ACOUSTIC CHARACTERISTICS

Model	Sound Pressure (LpA)*			Sound Power (LwA)		
	Inlet	Outlet	Radiated	Inlet	Outlet	Radiated
CADB-HE 04 PRO-REG	34	55	43	54	75	63
CADB-HE 08 PRO-REG	37	54	38	57	74	58
CADB-HE 12 PRO-REG	46	61	44	66	81	64
CADB-HE 16 PRO-REG	45	60	45	65	80	65
CADB/T-HE 21 PRO-REG	42	58	42	62	78	62
CADB/T-HE 27 PRO-REG	47	62	49	67	78	62
CADB/T-HE 33 PRO-REG	46	68	57	66	88	77
CADT-HE 33HP PRO-REG* ²	50	72	58	65	87	73
CADT-HE 45 PRO-REG	46	68	57	66	88	77
CADT-HE 60 PRO-REG	47	65	58	67	85	78
CADT-HE 100 PRO-REG	50	68	61	70	88	81

*1 Average sound pressure level, in dB(A), in free field conditions at 3m distance.

*2 Values referenced to 3.550 m³/h.

Depending on the installation conditions, type of enclosures, as well as characteristics of the materials used in walls and false ceilings, the real sound pressure levels may be very different from the values given in the table.

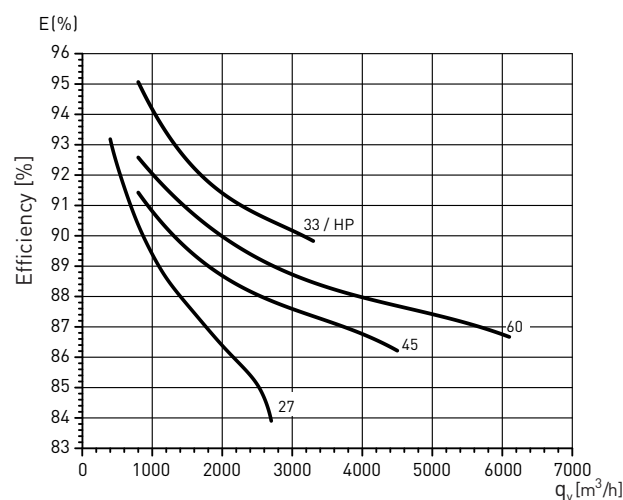
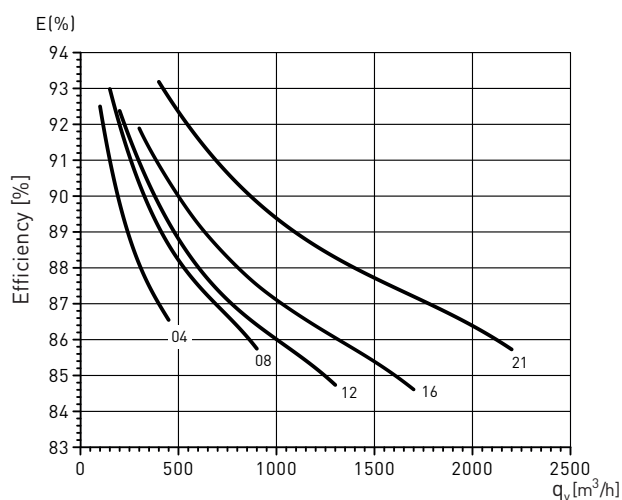
RECOVERY EFFICIENCY ACCORDING TO THE AIRFLOW

Values referring to the following conditions:

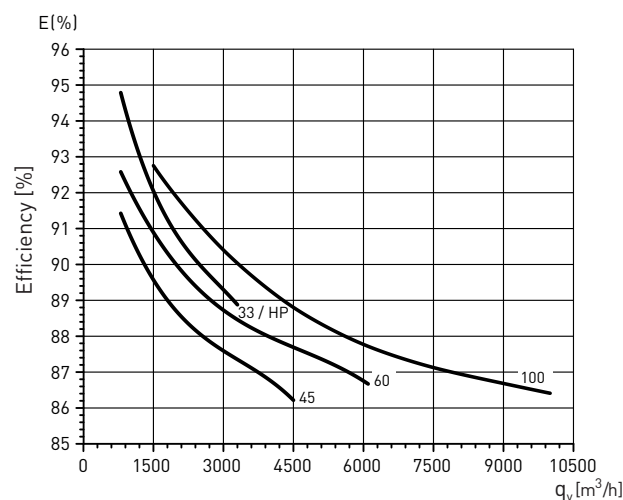
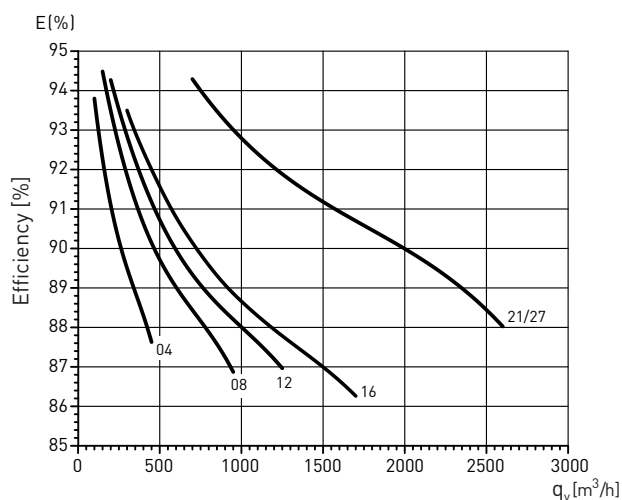
Outdoor temperature: -5°C, RH=80%

Indoor temperature: 20°C, RH=50%.

Horizontal versions



Vertical versions



RECOVERY EFFICIENCY RELATIVE TO OUTDOOR TEMPERATURE

Horizontal Versions

Model	Airflow (m³/h)	OUTDOOR AIR		SUPPLY AIR*		PERFORMANCE*	
		Temperature (°C)	RH (%)	Temperature (°C)	RH (%)	Efficiency (%)	Recovered power (kW)
CADB-HE 04	400	-10	80	17,2	10,6	90,7	3,65
		-5	80	16,7	16,9	87	2,92
		0	70	16,6	22,7	82,8	2,23
		5	70	17,1	31,3	80,9	1,63
CADB-HE 08	800	-10	80	17	10,7	90,1	7,3
		-5	80	16,6	17	86,4	5,8
		0	70	16,6	22,9	82,2	4,4
		5	70	17	31,5	80,2	3,2
CADB-HE 12	1.200	-10	80	16,7	12	89,2	10,8
		-5	80	16,3	18,2	85,3	8
		0	70	16,2	23,2	80,9	6,5
		5	70	16,8	31,8	78,9	4,8
CADB-HE 16	1.600	-10	80	16,7	10,9	89,1	14,4
		-5	80	16,3	17,3	85,3	11,5
		0	70	16,2	23,3	80,9	8,7
		5	70	16,8	31,9	78,8	6,4
CADB/T-HE 21	2.100	-10	80	17,1	10,7	90,2	19,1
		-5	80	16,6	17	86,5	15,2
		0	70	16,5	22,9	82,3	11,6
		5	70	17	31,4	80,3	8,5
CADB/T-HE 27	2700	-10	80	17	10,7	90,1	24,3
		-5	80	16,6	17,1	86,3	19,2
		0	70	16,4	23	82	14,4
		5	70	17	31,6	80	10,8
CADB/T-HE 33 / HP	3.300	-10	80	17,6	10	92,1	30,3
		-5	80	17,1	16	88,4	24,0
		0	70	16,8	22	84,2	18,0
		5	70	17,3	31	82,2	12,7
CADT-HE 45	4.500	-10	80	17,2	11,7	90,6	39,5
		-5	80	17,2	17,1	89	32,6
		0	70	17,5	21,4	87,3	25,8
		5	70	17,7	30,1	84,8	19
CADT-HE 60	6.100	-10	80	17,2	11,7	90,5	53,5
		-5	80	17,2	17,1	88,9	44,2
		0	70	17,4	21,4	87,2	34,9
		5	70	17,7	30,1	84,8	25,7

*For indoor temperature 20°C 50%

RECOVERY EFFICIENCY RELATIVE TO OUTDOOR TEMPERATURE

Vertical Versions

Model	Airflow (m³/h)	OUTDOOR AIR		SUPPLY AIR*		PERFORMANCE*	
		Temperature (°C)	RH (%)	Temperature (°C)	RH (%)	Efficiency (%)	Recovered power (kW)
CADB-HE 04	450	-10	80	17,5	10,4	91,7	3,7
		-5	80	17	16,7	87,8	3
		0	70	16,7	22,8	83,3	2,3
		5	70	17,1	31,4	80,8	1,7
CADB-HE 08	800	-10	80	17,5	10,4	91,7	6,6
		-5	80	17	16,7	87,9	5,4
		0	70	16,7	22,6	83,4	4,2
		5	70	17,1	31,4	80,9	3,1
CADB-HE 12	1.200	-10	80	17,3	10,5	91,2	9,9
		-5	80	16,8	16,9	87,2	8
		0	70	16,5	22,9	82,6	6,2
		5	70	17	31,6	80,1	4,6
CADB-HE 16	1.600	-10	80	17,2	10,6	90,8	13,1
		-5	80	16,7	17,2	86,8	10,7
		0	70	16,4	23,1	82,2	8,3
		5	70	17	31,7	79,9	6,1
CADB/T-HE 21	2100	-10	80	16,7	12	89,1	18,9
		-5	80	16,9	17,5	87,6	15,5
		0	70	17,2	21,8	85,9	12,2
		5	70	17,5	30,4	83,6	8,9
CADB/T-HE 27	2700	-10	80	16,4	12,2	88	24
		-5	80	16,6	17,8	86,4	19,6
		0	70	16,9	22,2	84,5	15,4
		5	70	17,3	31	81,8	11,2
CADB/T-HE 33 / HP	3.300	-10	80	16,7	12	88,9	28,4
		-5	80	16,8	17,6	87,1	23,4
		0	70	17	22	85,0	18,4
		5	70	17,3	30,9	82,0	13,5
CADT-HE 45	4.500	-10	80	17,2	11,7	90,6	39,5
		-5	80	17,2	17,1	89	32,6
		0	70	17,5	21,4	87,3	25,8
		5	70	17,7	30,1	84,8	19
CADT-HE 60	6.100	-10	80	17,2	11,7	90,5	53,5
		-5	80	17,2	17,1	88,9	44,2
		0	70	17,4	21,4	87,2	34,9
		5	70	17,7	30,1	84,8	25,7
CADT-HE 100	10.000	-10	80	16,4	12,2	87,9	88,7
		-5	80	16,6	17,8	86,4	72,7
		0	70	16,9	22,2	84,4	57
		5	70	17,3	31	81,7	41,5

*For indoor temperature 20°C 50%

HEATING POWER OF WATER COILS RELATIVE TO OUTDOOR TEMPERATURE AND AIRFLOW (DC MODELS)*

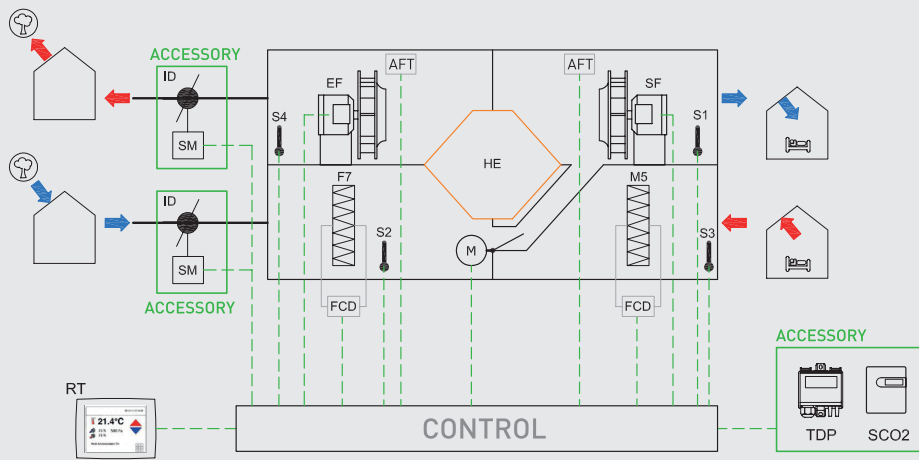
Model	Water T. In/Out (°C)	Airflow (m³/h)	AIR			WATER	
			Power (kW)	Out. T (°C)	Out. RH (%)	Water flow (l/h)	Press. Drop (KPa)
CADB-HE DC 04	80/60	400	2,7	36,7	8	115	2
		280	2,1	39,4	7	92	2
	70/60	400	2,5	35,6	8	217	6
		280	2,0	38,1	7	172	4
	50/45	400	1,6	28,8	12	277	10
		280	1,3	30,4	11	220	7
CADB-HE DC 08	80/60	800	5,1	35,7	8	218	5
		560	4,1	38,6	7	175	3
	70/60	800	4,8	34,7	9	415	14
		560	3,8	37,2	8	330	9
	50/45	800	3,1	28,3	13	530	22
		560	2,4	29,8	12	422	15
CADB-HE DC 12	80/60	1200	7,1	34,3	9	304	2
		840	5,7	36,8	8	244	2
	70/60	1200	6,7	33,5	9	581	7
		840	5,4	35,9	8	465	5
	50/45	1200	4,3	27,5	13	743	11
		840	3,4	29,0	12	594	8
CADB-HE DC16	80/60	1600	8,6	32,8	10	370	6
		1120	6,9	35,2	9	298	3
	70/60	1600	8,3	32,2	10	370	15
		1120	6,6	34,5	9	298	10
	50/45	1600	5,3	26,7	14	370	25
		1120	4,2	28,2	13	298	17
CADB-HE DC 21	80/60	2100	12,6	34,6	9	542	3
		1470	10,1	37,1	8	433	2
	70/60	2100	12,2	34,0	9	1050	11
		1470	9,7	36,4	8	837	8
	50/45	2100	7,8	27,9	13	1342	18
		1470	6,2	29,4	12	1070	12
CADB-HE DC 27	80/60	2700	15,1	33,4	9	648	14
		1890	12,1	35,9	8	522	9
	70/60	2700	14,4	32,7	10	1242	49
		1890	11,6	35,0	9	997	32
	50/45	2700	9,2	27,0	14	1587	80
		1890	7,4	28,5	12	1273	53
CADB/T-HE 33 / HP	80/60	3300	18,2	33,2	10	780	2
		2300	14,6	35,6	8	627	1
	70/60	3300	17,4	32,5	10	1496	5
		2300	14,0	34,8	9	1200	4
	50/45	3300	11,1	26,9	14	1912	9
		2300	8,9	28,4	13	1532	6
CADT-HE DC 45	80/60	4500	25,6	33,7	9	1100	6
		3150	20,6	36,2	8	886	4
	70/60	4500	24,2	32,8	10	2082	16
		3150	19,5	35,1	9	1673	12
	50/45	4500	15,5	27,1	14	2660	27
		3150	12,4	28,6	12	2135	18
CADT-HE DC 60	80/60	6100	34,7	33,7	9	1491	3
		4300	28,1	36,2	8	1206	2
	70/60	6100	33,1	32,9	10	2847	10
		4300	26,7	35,2	9	2295	7
	50/45	6100	21,1	27,2	13	3640	16
		4300	17,0	28,6	12	2932	10
CADT-HE DC 100	80/60	10000	58,9	34,3	9	1535	7
		7000	47,4	36,9	8	2037	5
	70/60	10000	55,6	33,7	9	4787	22
		7000	44,6	35,7	8	3837	15
	50/45	10000	35,4	27,4	13	6113	36
		7000	28,4	28,9	12	4896	24

* Air inlet conditions to the battery (output from the heat recovery unit) = 17°C 25% RH

SCHEMATIC DIAGRAM

CADB/T-HE **D** PRO-REG

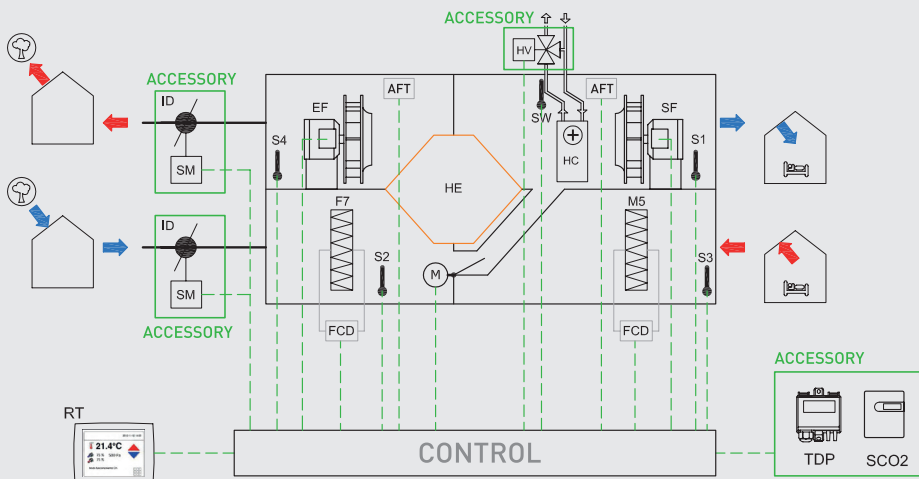
D Models: Versions without post-heating



- | | |
|------------------|---|
| SF | Supply fan |
| EF | Extract fan |
| S1 | Supply temperature probe |
| S2 | Extract temperature probe |
| S3 | Inlet temperature probe |
| S4 | Outlet temperature probe |
| FCD | Polluted filters detector (pressure switch) |
| AFT | Air flow transmitter |
| HE | High-efficiency heat exchanger |
| RT | Remote control panel |
| F7 | Supply filter |
| M5 | Extract filter |
| M | Bypass actuator |
| SCO ₂ | CO ₂ sensor (accessory) |
| TDP | Pressure sensor TDP-S (accessory for COP model) |
| ID | Isolation damper (accessory) |
| SM | Actuator damper (accessory) |

CADB/T-HE-**DC** PRO-REG

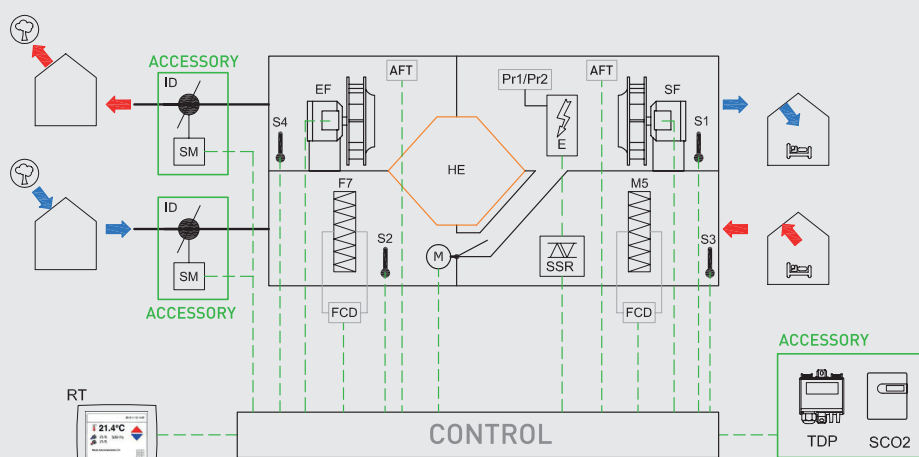
DC Models: Versions with hot water coil



- | | |
|------------------|---|
| SF | Supply fan |
| EF | Extract fan |
| S1 | Supply temperature probe |
| S2 | Extract temperature probe |
| S3 | Inlet temperature probe |
| S4 | Outlet temperature probe |
| SW | Water temperature probe |
| FCD | Polluted filters detector (pressure switch) |
| AFT | Air flow transmitter |
| HE | High-efficiency heat exchanger |
| RT | Remote control panel |
| F7 | Supply filter |
| M5 | Extract filter |
| M | Bypass actuator |
| HC | Hot water coil |
| HV | Water valve (accessory) |
| SCO ₂ | CO ₂ sensor (accessory) |
| TDP | Pressure sensor TDP-S (accessory for COP model) |
| ID | Isolation damper (accessory) |
| SM | Actuator damper (accessory) |

CADB/T-HE-**DI** PRO-REG

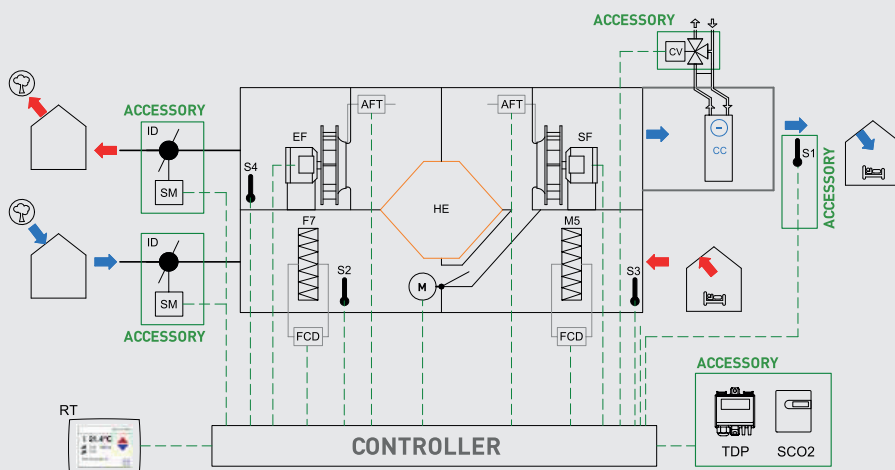
DI Models: Versions with electric heater coil



- | | |
|------------------|---|
| SF | Supply fan |
| EF | Extract fan |
| S1 | Supply temperature probe |
| S2 | Extract temperature probe |
| S3 | Inlet temperature probe |
| S4 | Outlet temperature probe |
| FCD | Polluted filters detector (pressure switch) |
| AFT | Air flow transmitter |
| HE | High-efficiency heat exchanger |
| RT | Remote control panel |
| F7 | Supply filter |
| M5 | Extract filter |
| M | Bypass actuator |
| Pr1/Pr2 | Security protectors (Manual/Auto) |
| SSR | Electric heater battery proportional regulator |
| SCO ₂ | CO ₂ sensor (accessory) |
| TDP | Pressure sensor TDP-S (accessory for COP model) |
| ID | Isolation damper (accessory) |
| SM | Actuator damper (accessory) |

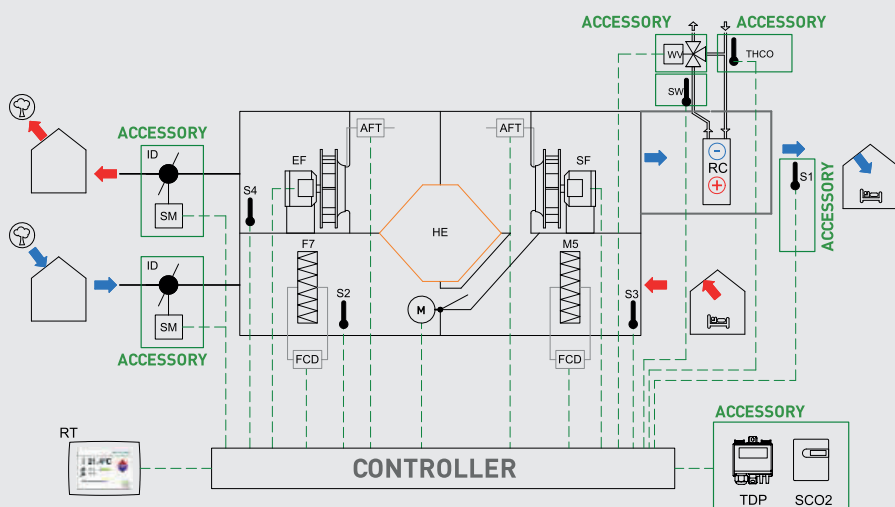
SCHEMATIC DIAGRAM

CADB/T-HE PRO-REG + BA-AF HE D Models: With external cool water coil



- SF Supply fan
- EF Extract fan
- S1 Supply temperature probe TG/K3 PT 1000 (Acces.)
- S2 Extract temperature probe
- S3 Inlet temperature probe
- S4 Outlet temperature probe
- FCD Polluted filters detector (pressure switch)
- AFT Airflow transmitter
- HE High-efficiency heat exchanger
- RT Remote control panel
- F7 Supply filter
- M5 Extract filter
- M Bypass actuator
- CC Cold water coil
- CV Water valve (accessory)
- SCO2 CO2 sensor (accessory)
- TDP Pressure sensor TDP-S (accessory)
- ID Isolation damper (accessory)
- SM Actuator damper (accessory)

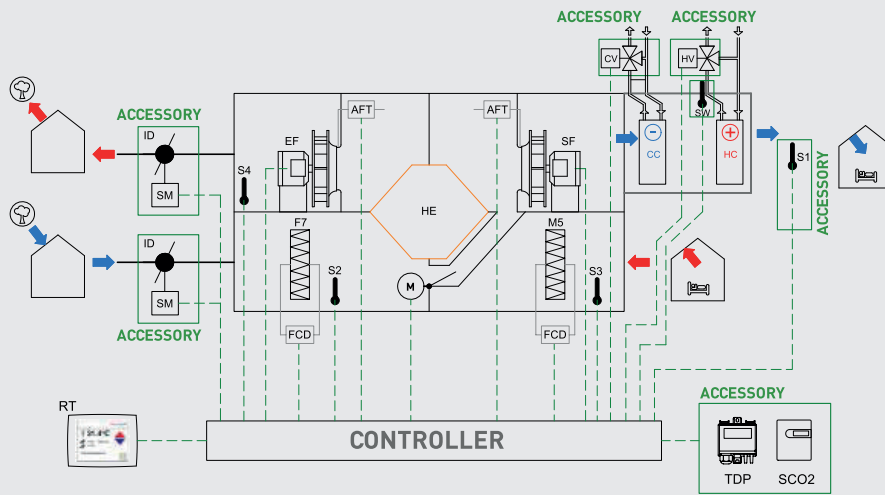
CADB/T-HE PRO-REG + BA-AF HE D Models: With reversible hot/cool water coil



- SF Supply fan
- EF Extract fan
- S1 Supply temperature probe TG/K3 PT 1000 (Acces.)
- S2 Extract temperature probe
- S3 Inlet temperature probe
- S4 Outlet temperature probe
- SW Water temperature probe PT1000 CURVA (Accesorio)
- FCD Polluted filters detector (pressure switch)
- AFT Airflow transmitter
- HE High-efficiency heat exchanger
- RT Remote control panel
- F7 Supply filter
- M5 Extract filter
- M Bypass actuator
- RC Reversible water battery (cold/hot)
- WV Water valve (accessory)
- SCO2 CO2 sensor (accessory)
- TDP Pressure sensor TDP-S (accessory)
- ID Isolation damper (accessory)
- SM Actuator damper (accessory)
- THCO Winter/Summer detection thermostat (Accessory)

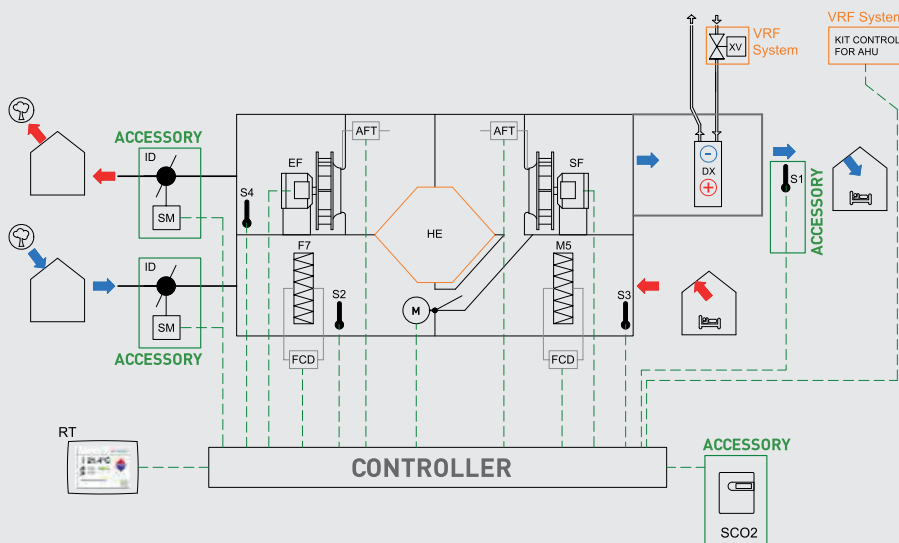
SCHEMATIC DIAGRAM

CADB/T-HE D PRO-REG + BA-AFC HE D Models: With external cold and hot water coil



- SF Supply fan
- EF Extract fan
- S1 Supply temperature probe TG/K3 PT 1000 (Acces.)
- S2 Extract temperature probe
- S3 Inlet temperature probe
- S4 Outlet temperature probe
- SW Water temperature probe PT1000 CURVA (Accesorio)
- FCD Polluted filters detector (pressure switch)
- AFT Airflow transmitter
- HE High-efficiency heat exchanger
- RT Remote control panel
- F7 Supply filter
- M5 Extract filter
- M Bypass actuator
- CC Cold water coil
- CV Water valve (accessory)
- HC Hot water coil
- HV Water valve (accessory)
- SCO2 CO2 sensor (accessory)
- TDP Pressure sensor TDP-S (accessory)
- ID Isolation damper (accessory)
- SM Actuator damper (accessory)

CADB/T-HE D PRO-REG + BA-DX HE D Models: With external direct expansion coil



- SF Supply fan
- EF Extract fan
- S1 Supply temperature probe TG/K3 PT 1000 (Acces.)
- S2 Extract temperature probe
- S3 Inlet temperature probe
- S4 Outlet temperature probe
- FCD Polluted filters detector (pressure switch)
- AFT Airflow transmitter
- HE High-efficiency heat exchanger
- RT Remote control panel
- F7 Supply filter
- M5 Extract filter
- M Bypass actuator
- DX Direct expansion battery
- XV Expansion valve (Not supplied by S&P)
- SCO2 CO2 sensor (accessory)
- ID Isolation damper (accessory)
- SM Actuator damper (accessory)

PLUG & PLAY CONTROL PRO-REG FUNCTIONS

MAIN ELEMENTS

Control panel includes:

General switch

Electric box including control and wiring components, with access from side panel.

FUNCTIONS

Airflow adjustments

Supply and Exhaust airflow values shown in the display (For all working modes VAV, COP and CAV)

Manual airflow adjustment, adjustable at any point of the fan curve.

Automatic airflow adjustment, according to a configurable time schedule (Configurable Timer).

Automatic airflow adjustment in VAV mode, according to external signal 0-10V (CO₂ accessory).

Automatic speed adjustment of the fans in Constant Arflow mode (Increase of fan speed to compensate filters fouling. Supply and extract fans independent control allowing the configuration of differents airflow values for each one. No accessoires are required).

Automatic speed adjustment of the fans in Constant Pressure mode (Increase of fan speed when pressure in the duct system decreases).

BOOST function (Forced speed preset via external free voltage contact).

ON/OFF function (Remote ON/OFF via external free voltage contact).

Temperature regulation

Temperature probes integrated within the unit (supply, extract, inlet and outlet).

Anti-frost probe water coil (DC Versions).

Thermal power regulation of hot water coil (DC Versions). 0-10V to manage 3 ways valve (accessory).

Thermal power regulation of external cooling coil BA-AF HE in cooling mode and reversible mode (cooling and heating). 0-10V to manage 3 ways valve (accessory).

Thermal power regulation of external 4-pipes coils BA-AFC HE (cooling and heating). 0-10V to manage 3 ways valve (accessory).

Integrable in VRF networks through the corresponding DX valve kit supplied by the manufacturer of the refrigeration unit. With capacity to manage the cold / heat demand of the BA-DX HE evaporator module. Allows Defrost DX function in heat pump mode.

Regulation of electric heater battery thermal power in DI versions. Proportional control via SSR.

0-10V output for the control of a preheating battery (accessory).

Bypass adjustments

Manual actuation of bypass.

Automatic actuation of bypass function free-cooling/ free-heating.

Night free-cooling functionality (Cooling of the building at night).

SECURITY FUNCTIONS

Control of polluted filters via pressure switches (included).

Alarm display in remote control.

Detailed information about alarms.

Failure in temperature probes.

Failure in fan via pressure transmitters (included).

Fire alarm indication, via activation by external contact coming from fire switchboard.

Anti-frost protection of heat exchanger via bypass activation.

COMMUNICATION

Remote wiring control.

ON/OFF remote digital input via external power free voltage contact.

Alarm digital output via power free contact.

Modbus RTU (RS-485).

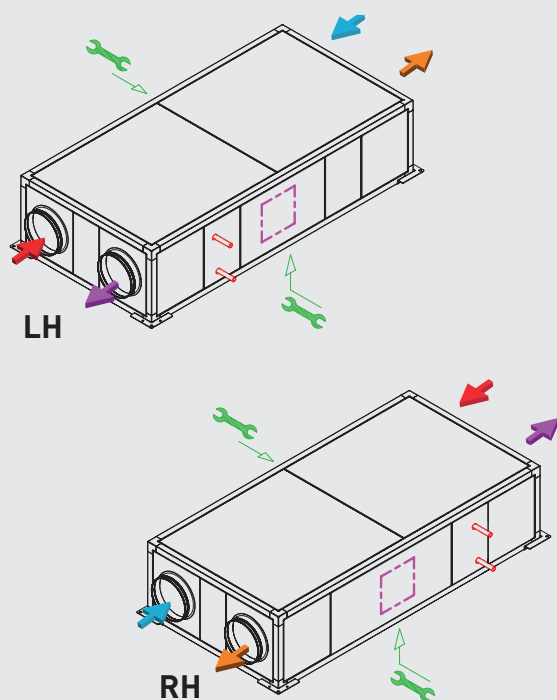
Bacnet TCP/IP.

STANDARD CONFIGURATIONS CADB/T-HE D/DC/DI PRO-REG

Based on these standard configurations other configurations can be quickly adapted by the installer.

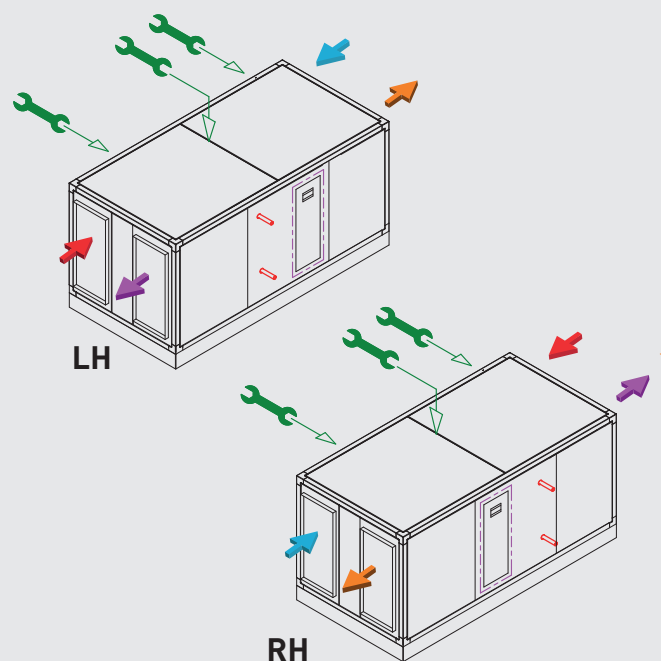
- | | | | |
|--|--------------------------|--|-----------------------------------|
| | FRESH OUTDOOR AIR | | MAINTENANCE REGISTER |
| | FRESH OUTDOOR AIR SUPPLY | | TERMINAL BOX POSITION |
| | INDOOR AIR EXTRACTION | | WATER CONNECTIONS (DC - VERSIONS) |
| | INDOOR AIR EXPULSION | | |

CADB/T-HE 04 to 33 Horizontal versions (false-ceiling)

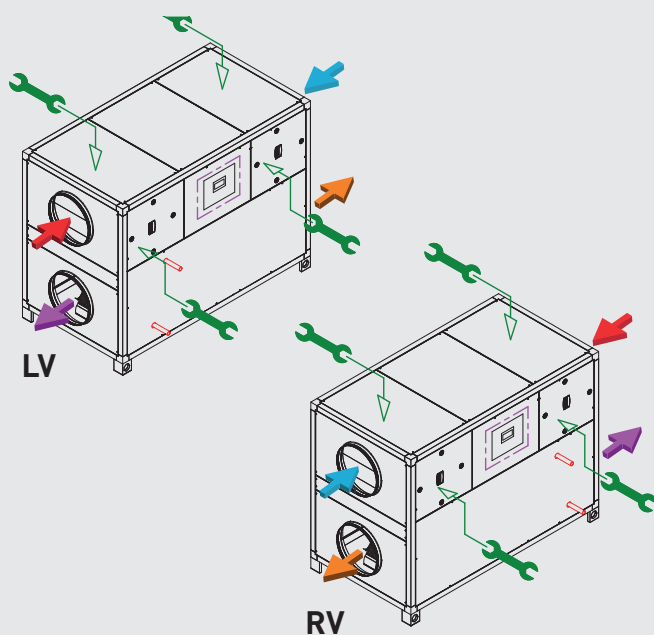


CADT-HE 33HP: Rectangular inlets

CADB/T-HE 45 and 60 Horizontal versions

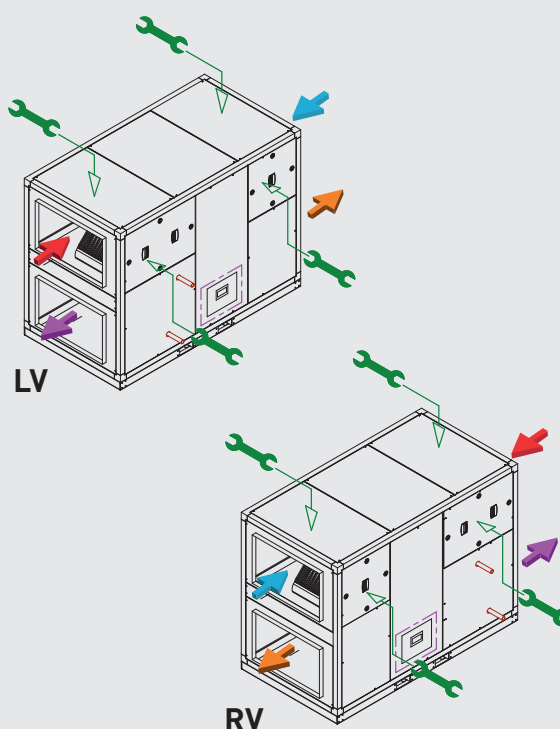


CADB/T-HE 04 to 33 Vertical versions

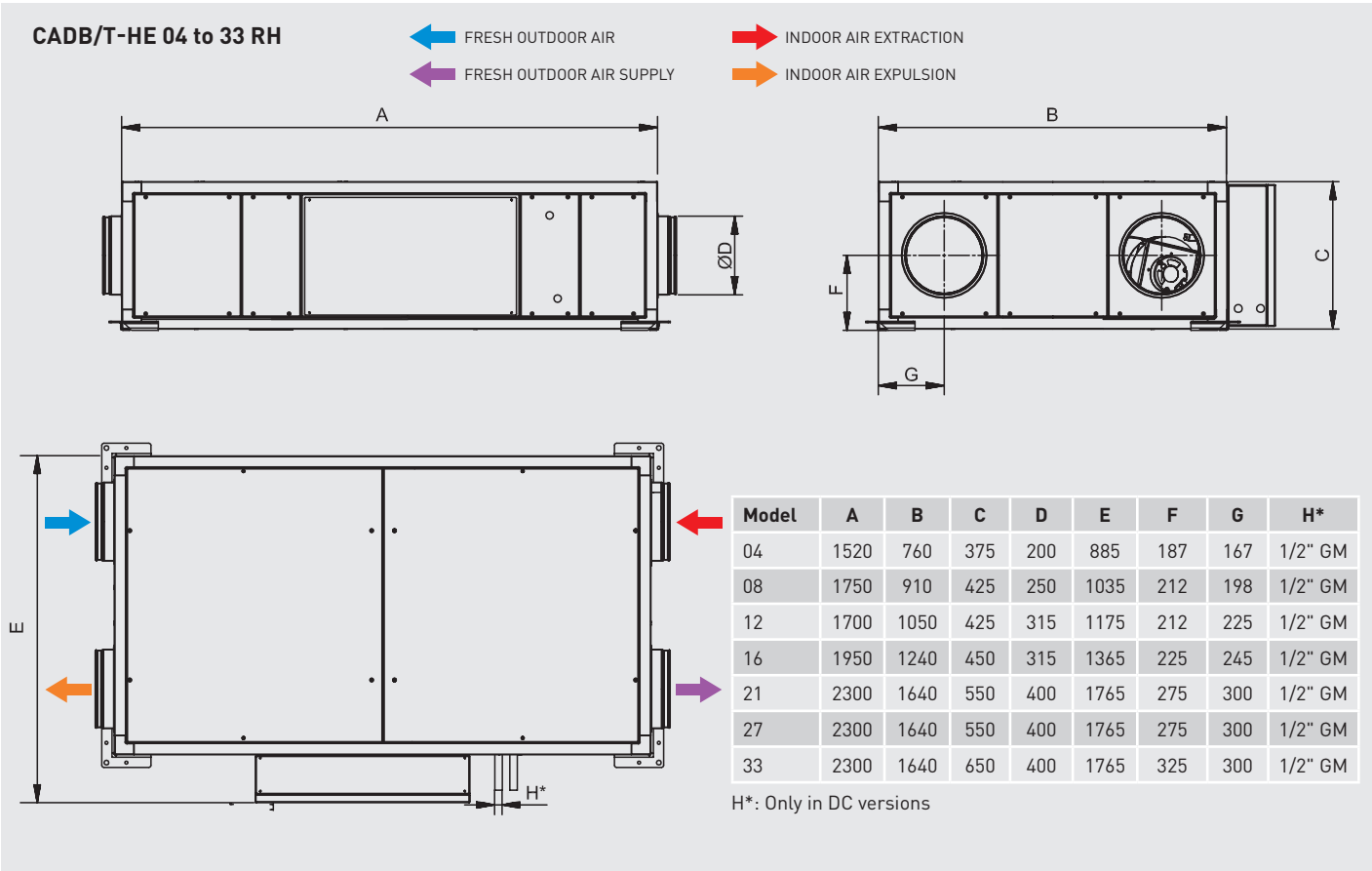
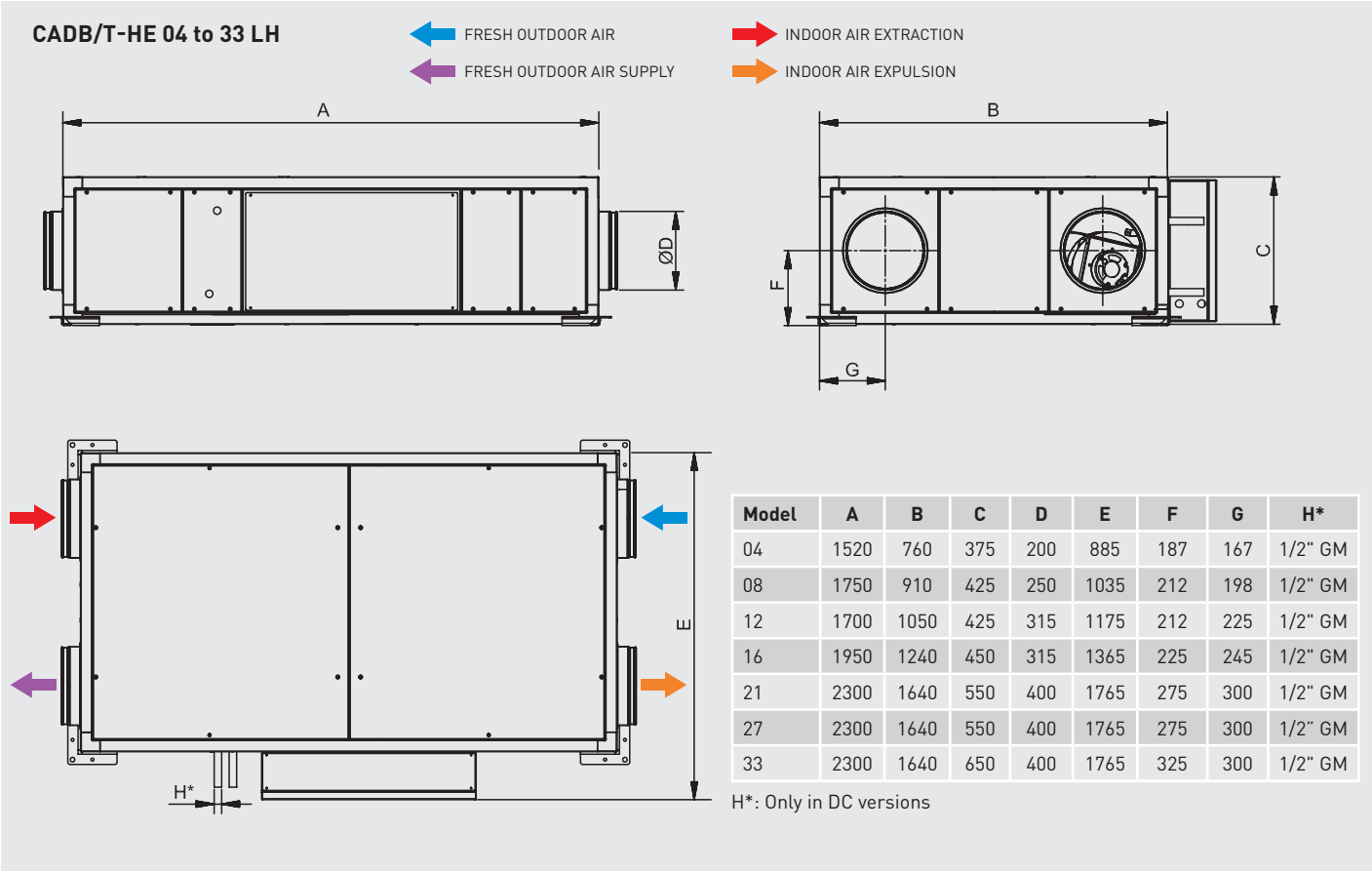


CADT-HE 33HP: Rectangular inlets

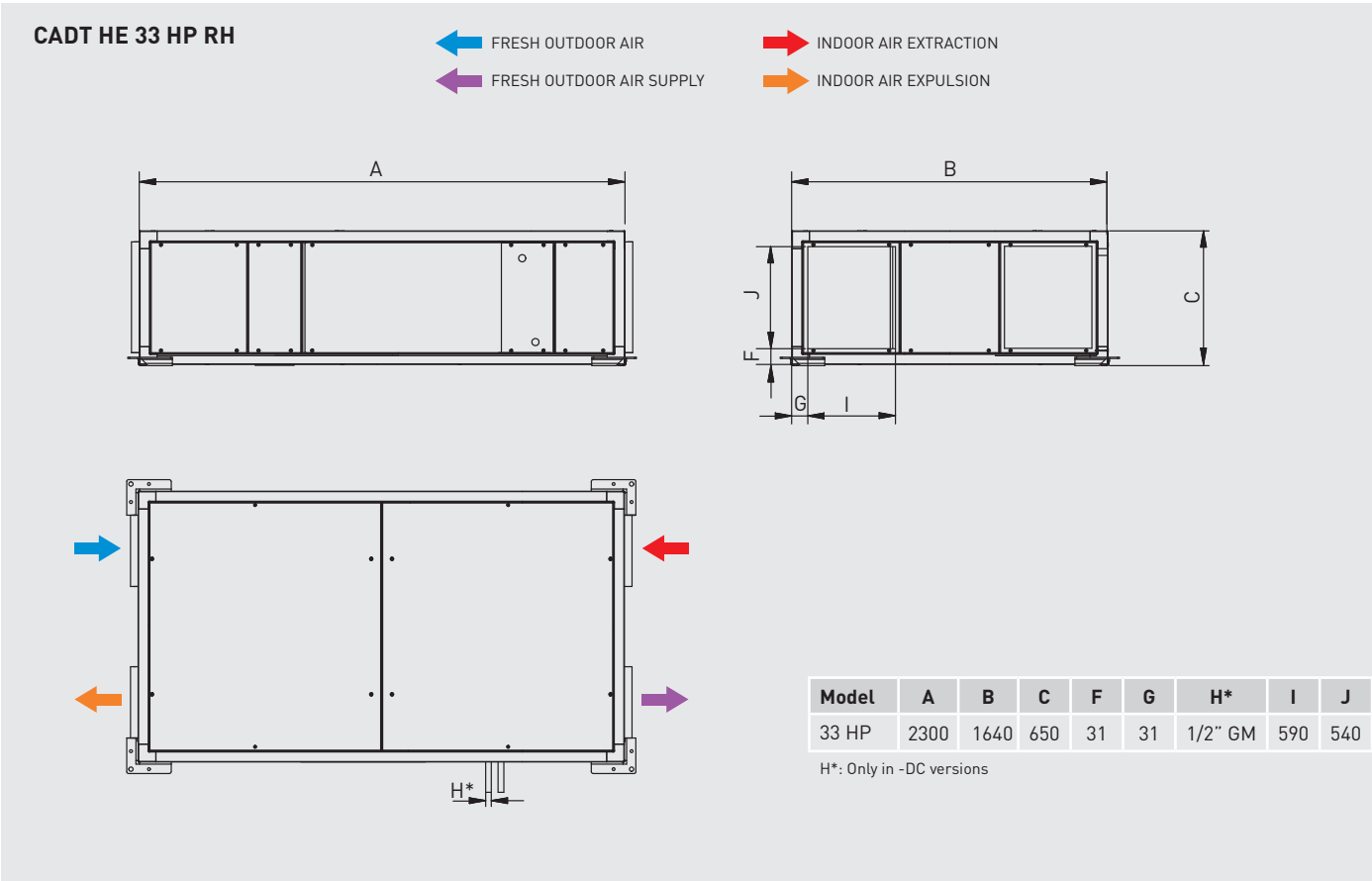
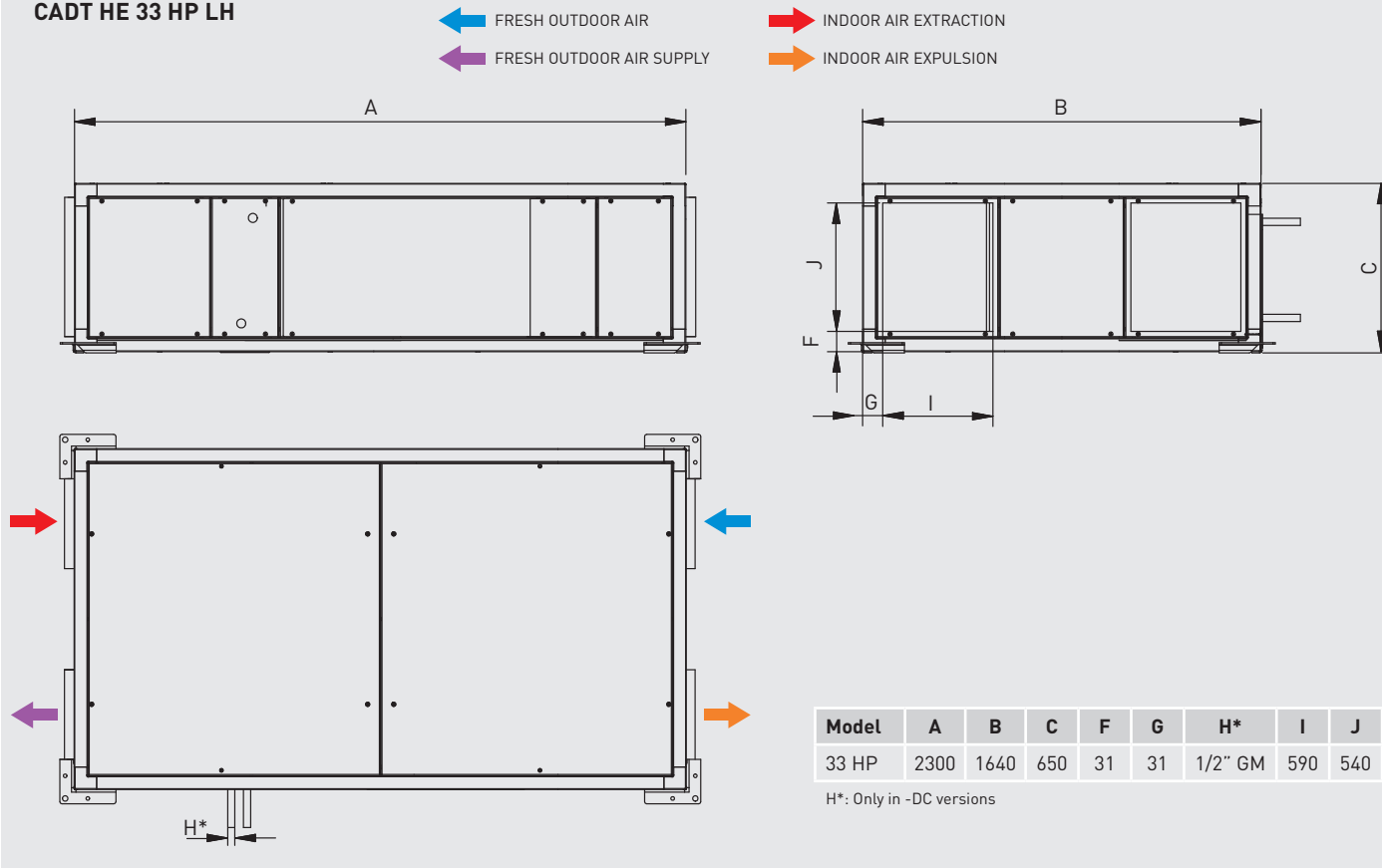
CADB/T-HE 45 to 100 Vertical versions



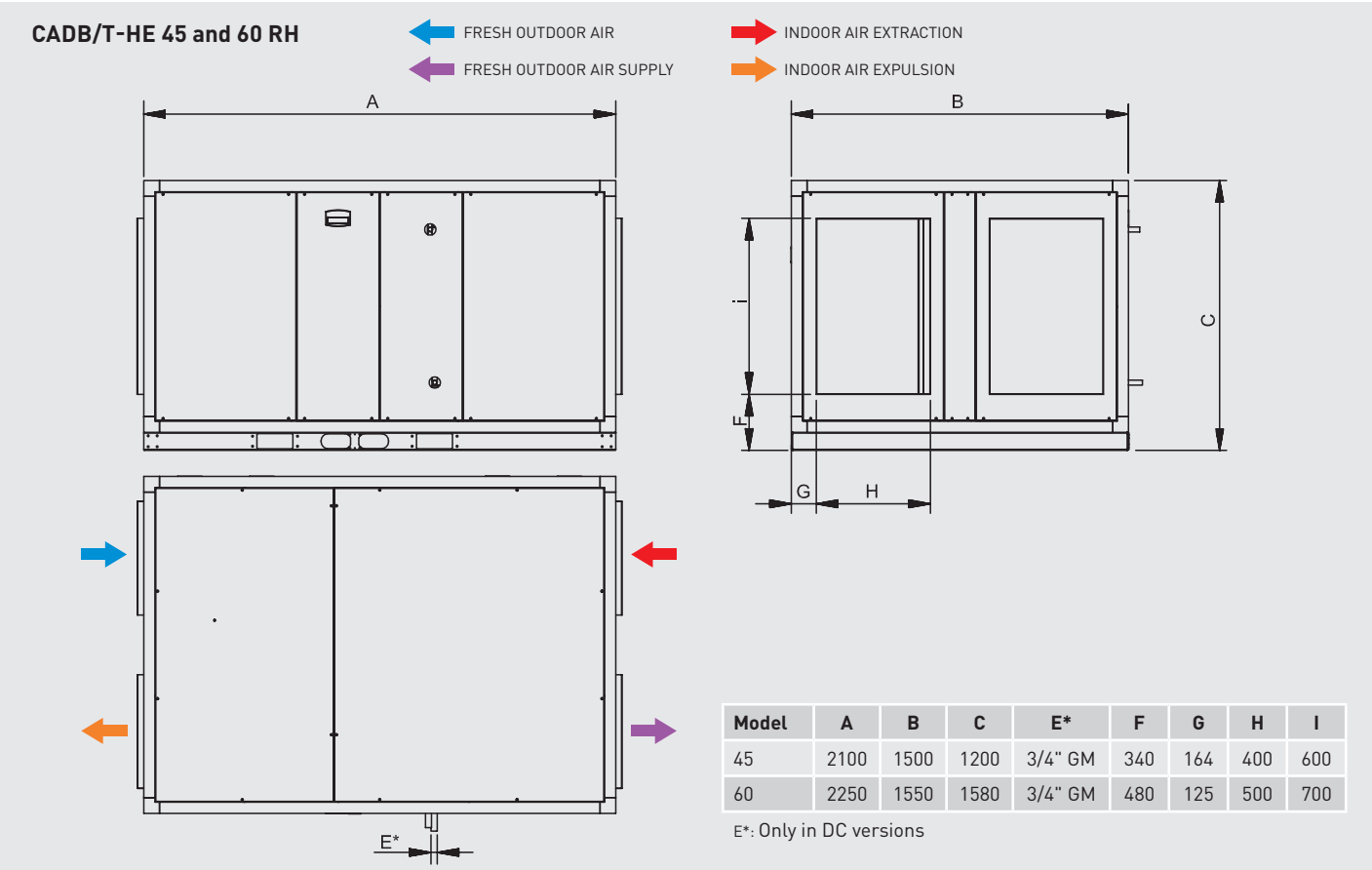
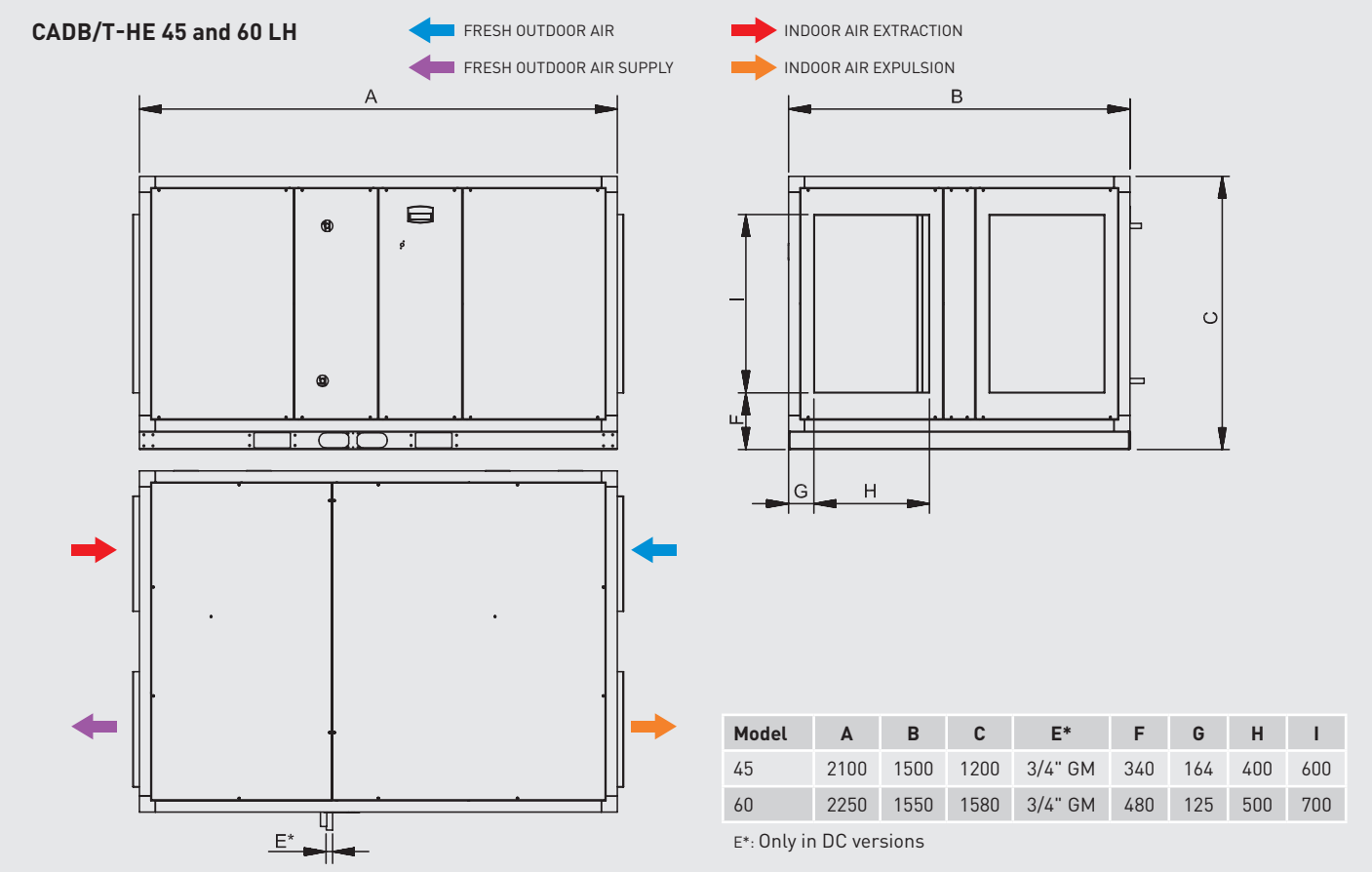
DIMENSIONS (mm)



DIMENSIONS (mm)



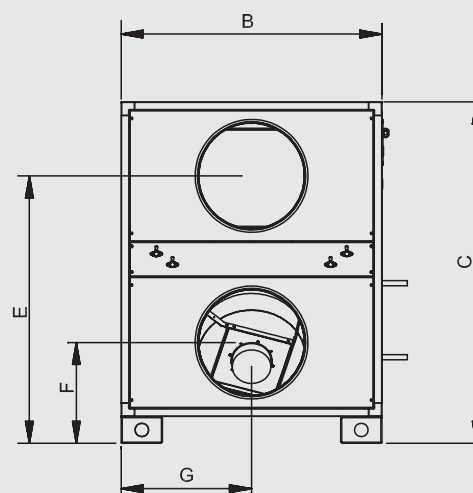
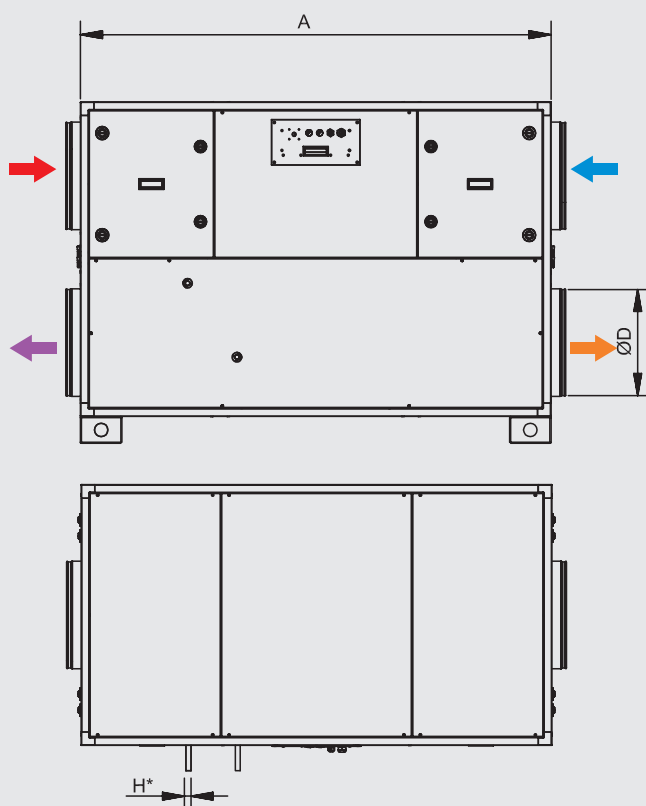
DIMENSIONS (mm)



DIMENSIONS (mm)

CADB/T-HE 04 to 33 LV

 FRESH OUTDOOR AIR
 FRESH OUTDOOR AIR SUPPLY
 INDOOR AIR EXTRACTION
 INDOOR AIR EXPULSION

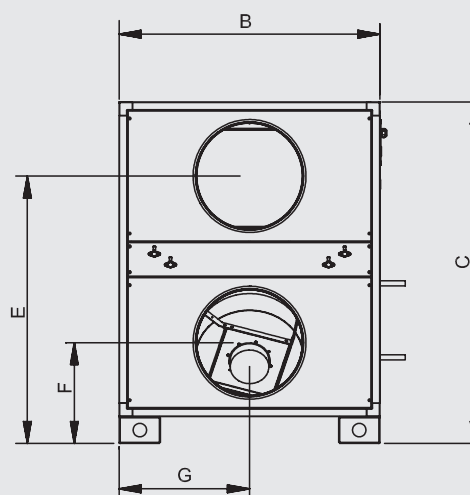
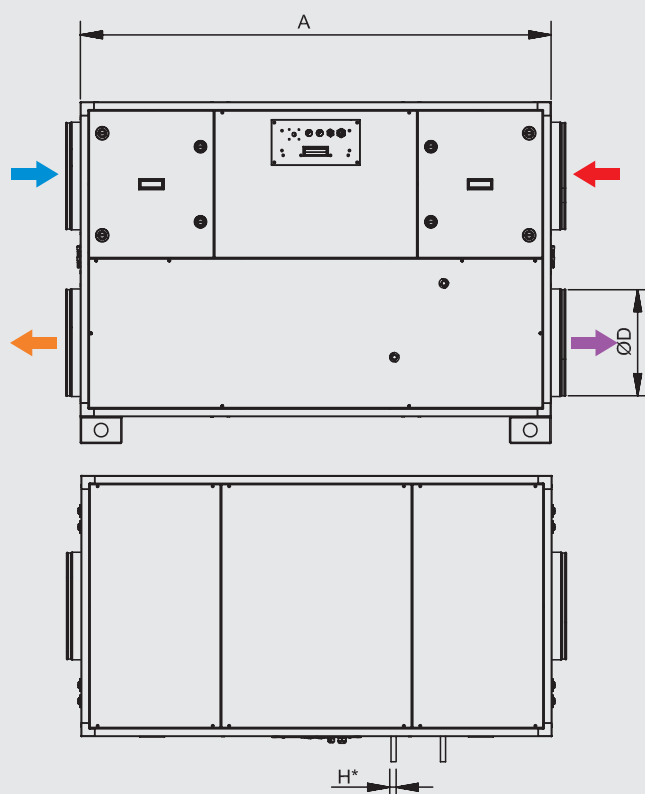


Model	A	B	C	D	E	F	G	H*
04	1125	540	920	200	732	287	270	1/2" GM
08	1275	610	1020	250	808	312	305	1/2" GM
12	1325	770	1020	315	808	312	385	1/2" GM
16	1475	770	1070	315	845	325	385	1/2" GM
21	1750	970	1270	400	995	375	485	1/2" GM
27	1750	970	1270	400	995	375	485	1/2" GM
33	1750	1170	1270	400	995	375	585	1/2" GM

H*: Only in DC versions

CADB/T-HE 04 to 33 RV

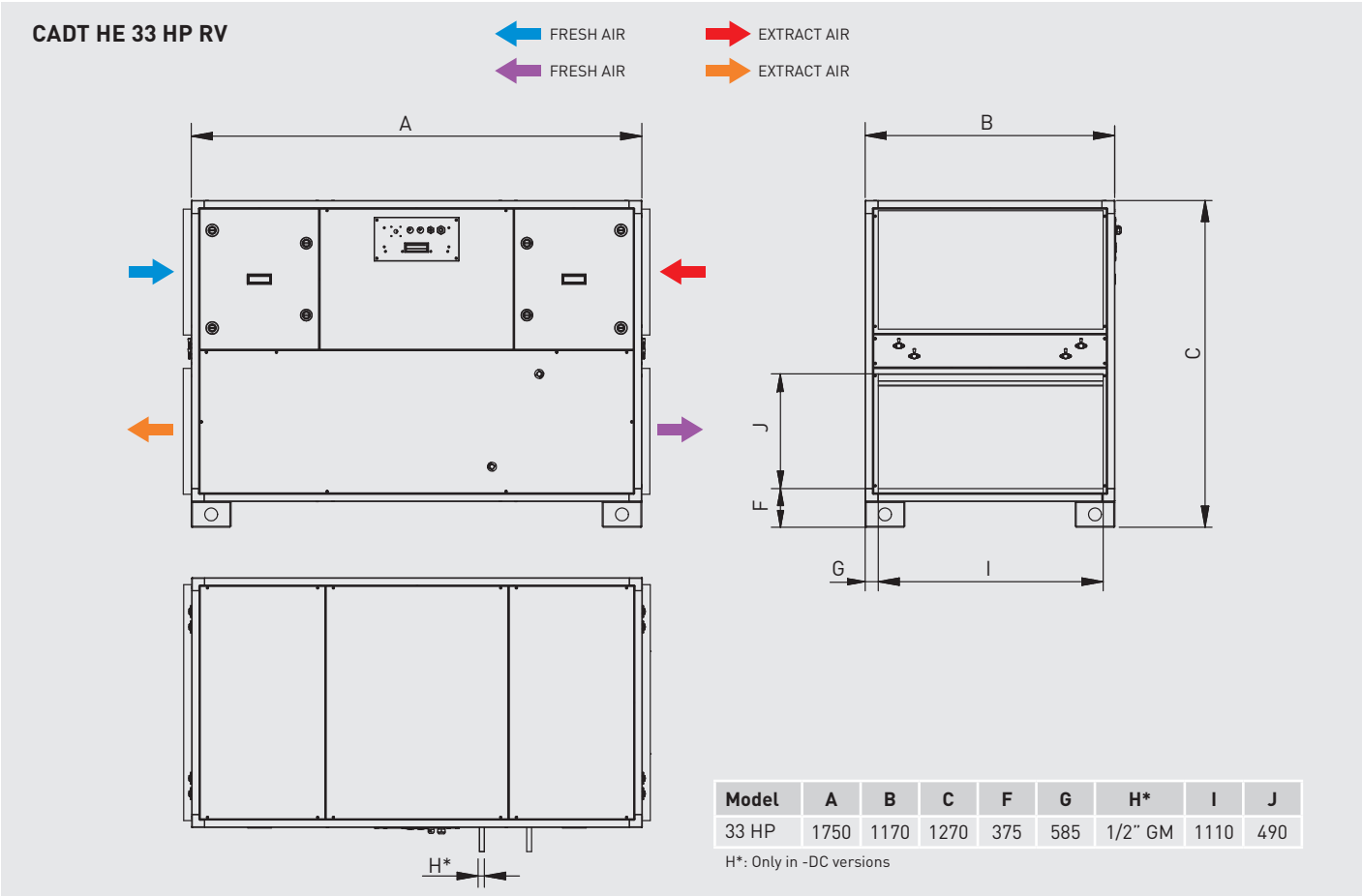
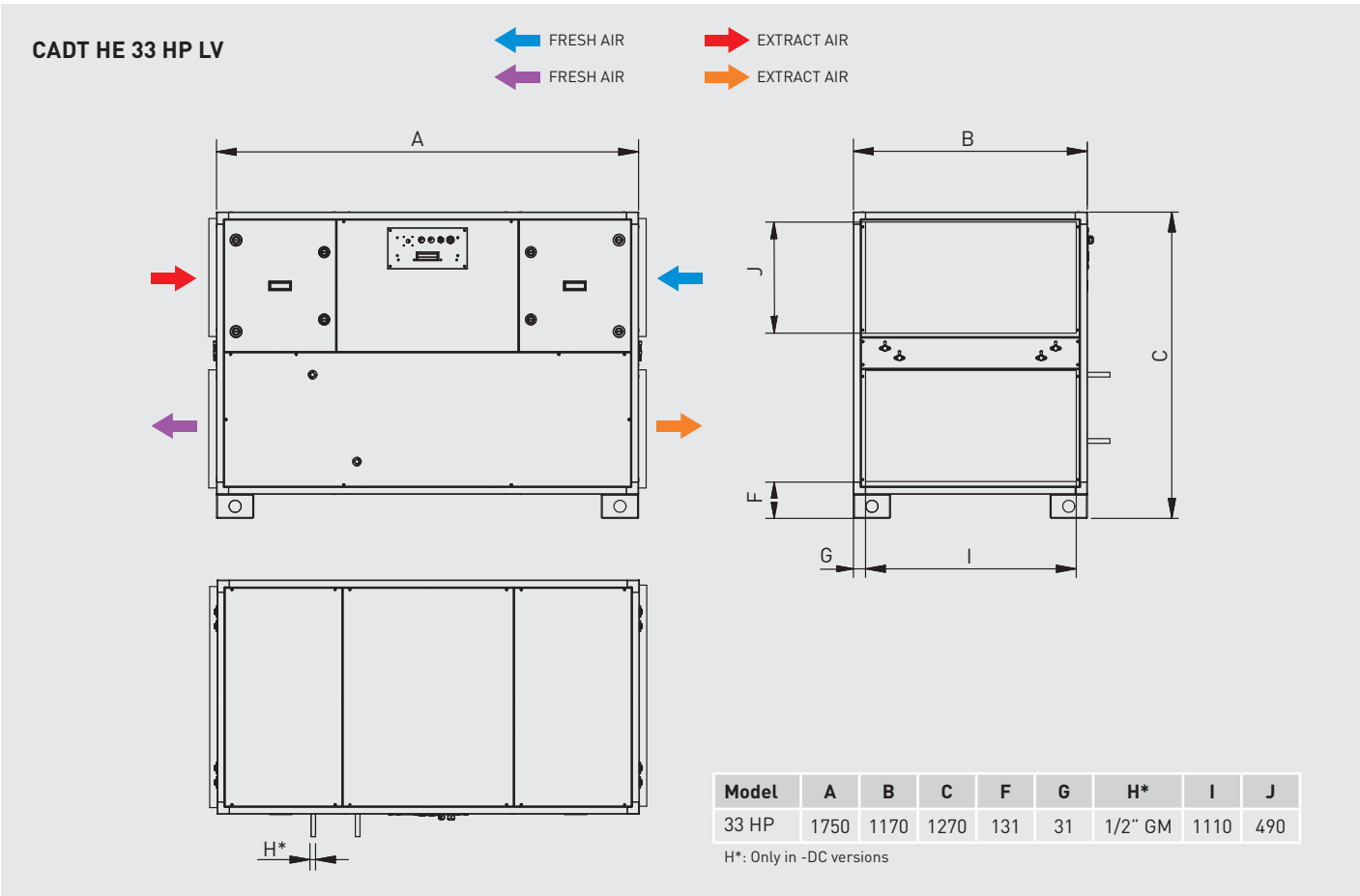
 FRESH OUTDOOR AIR
 FRESH OUTDOOR AIR SUPPLY
 INDOOR AIR EXTRACTION
 INDOOR AIR EXPULSION



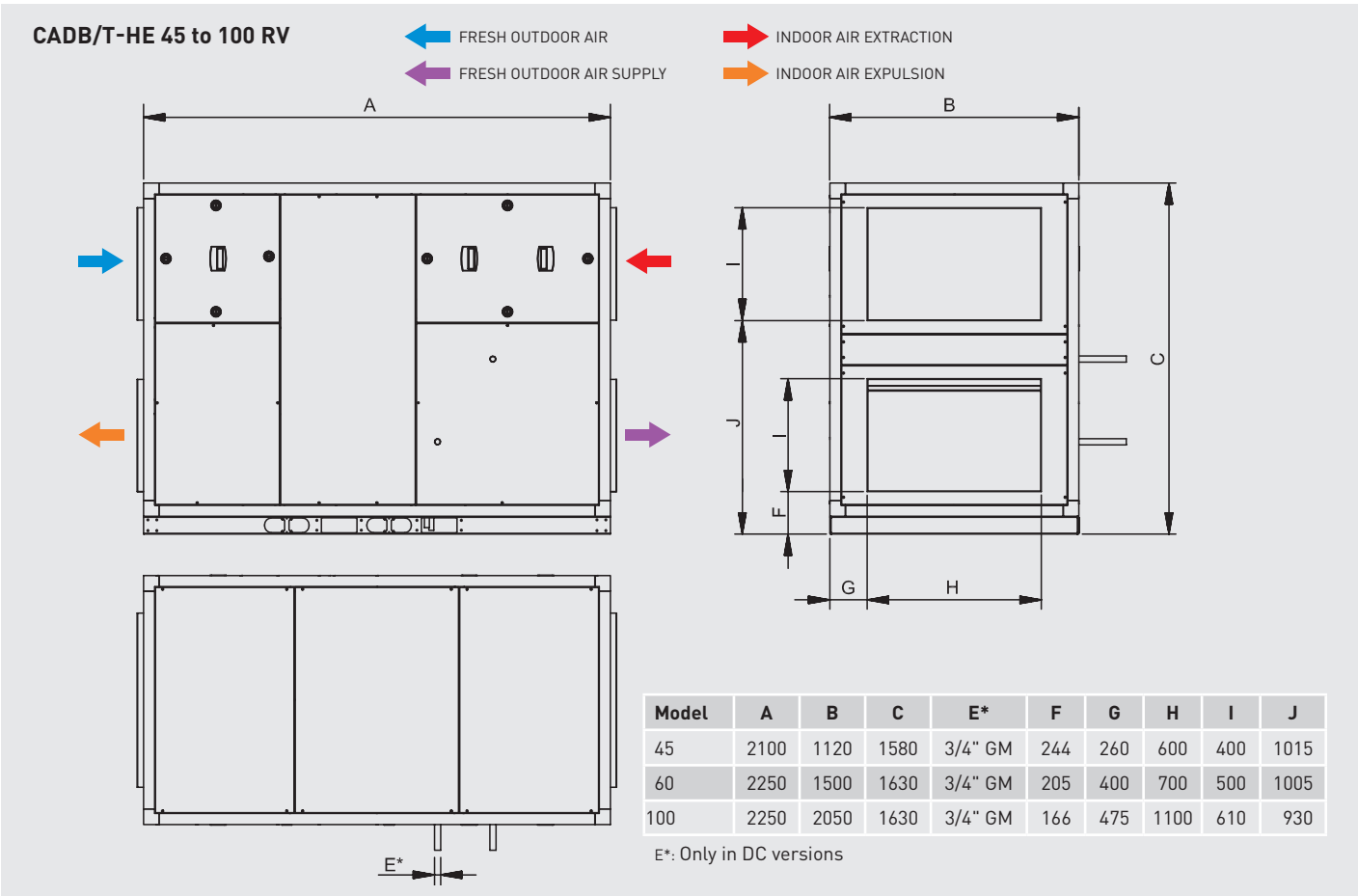
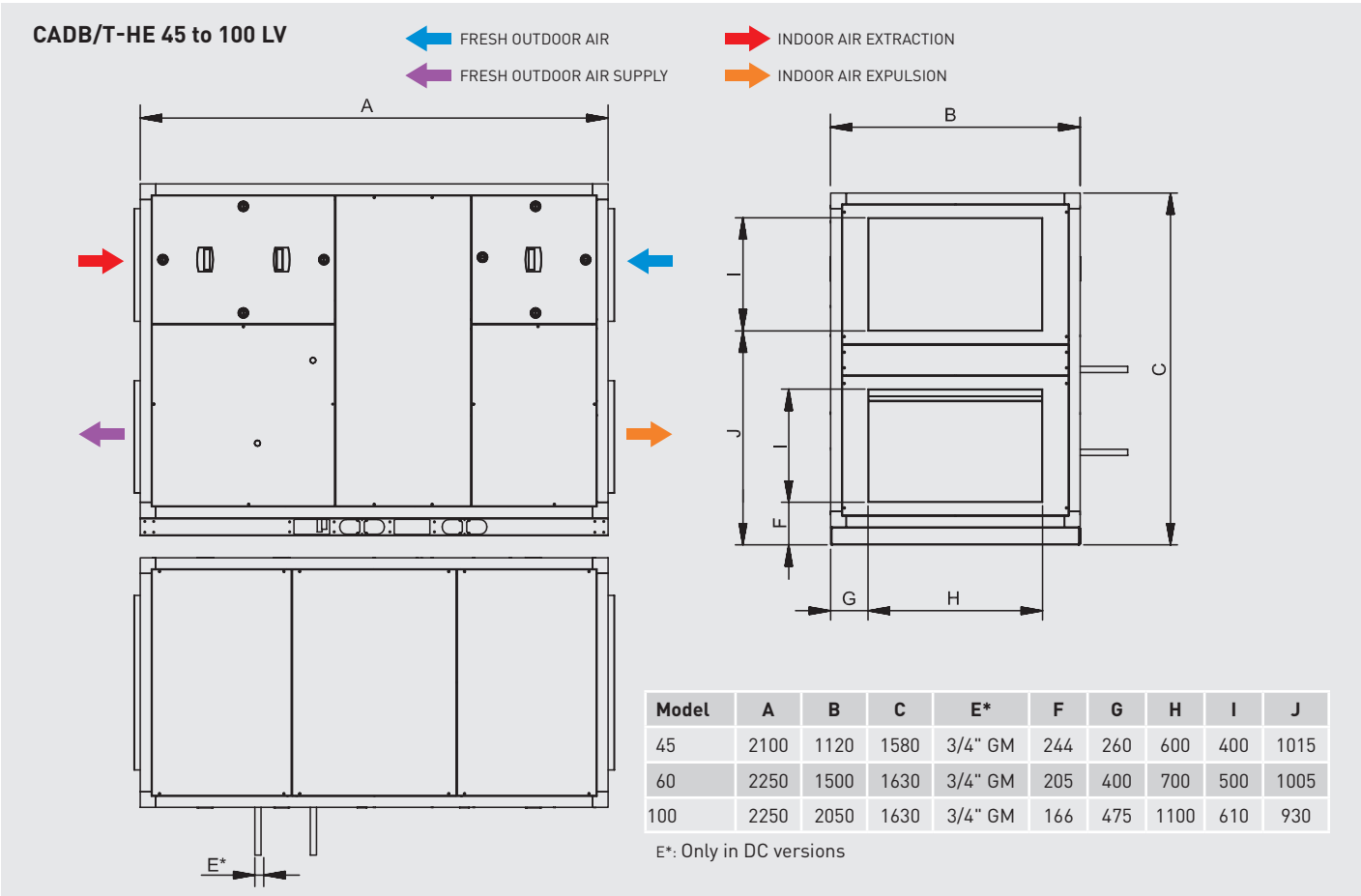
Model	A	B	C	D	E	F	G	H*
04	1125	540	920	200	732	287	270	1/2" GM
08	1275	610	1020	250	808	312	305	1/2" GM
12	1325	770	1020	315	808	312	385	1/2" GM
16	1475	770	1070	315	845	325	385	1/2" GM
21	1750	970	1270	400	995	375	485	1/2" GM
27	1750	970	1270	400	995	375	485	1/2" GM
33	1750	1170	1270	400	995	375	585	1/2" GM

H*: Only in DC versions

DIMENSIONS (mm)



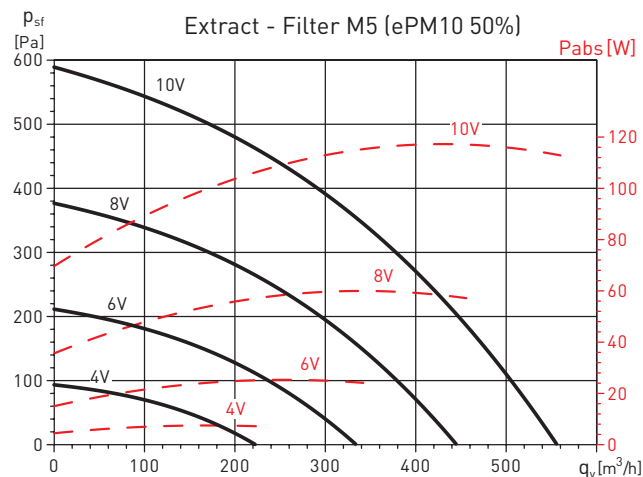
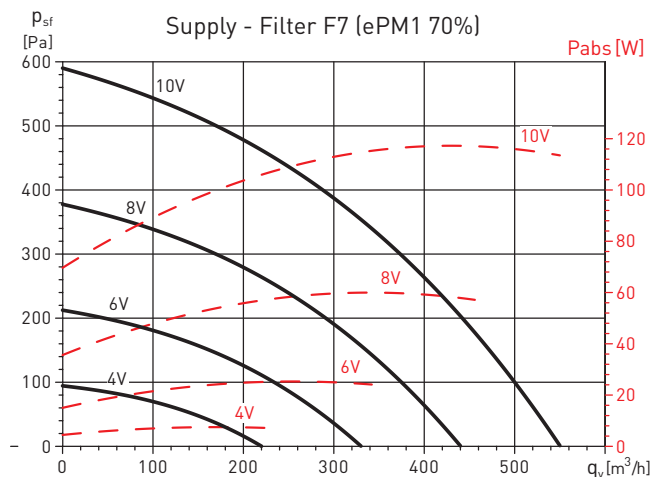
DIMENSIONS (mm)



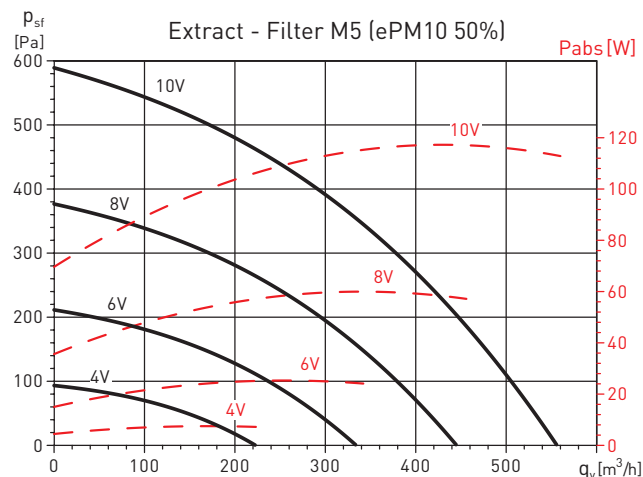
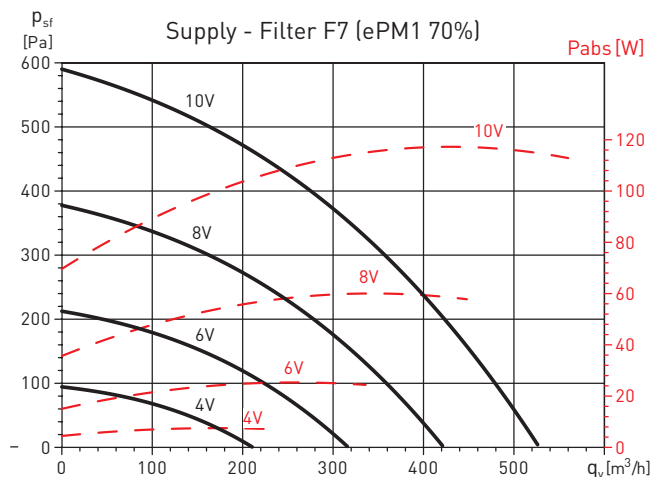
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s
- p_{sf} : Static pressure in Pa
- P_{abs} : Absorbed power at maximum speed (W)
- Dry air at 20°C and 760 mmHg
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- Absorbed power corresponding to a single circuit

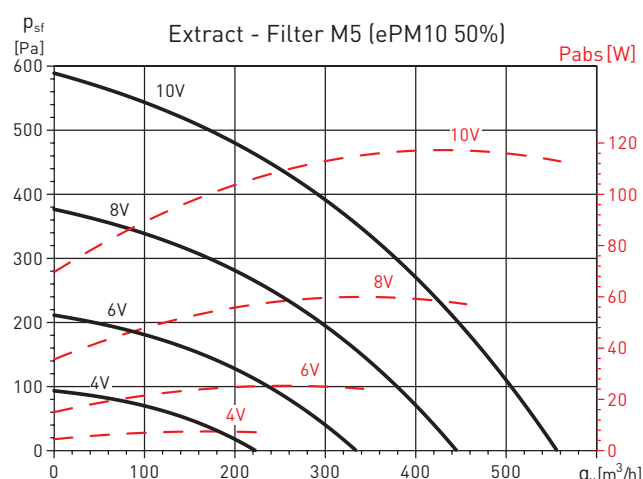
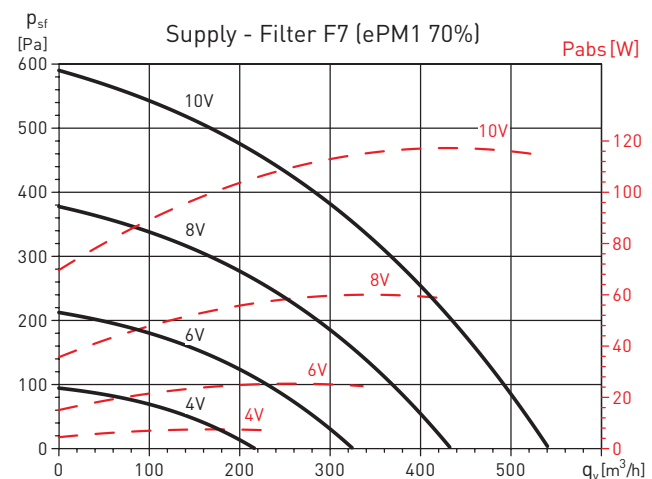
CADB-HE-D 04



CADB-HE-DC 04



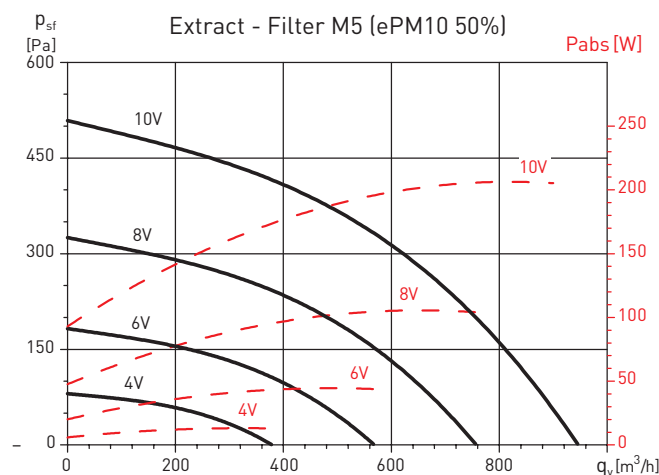
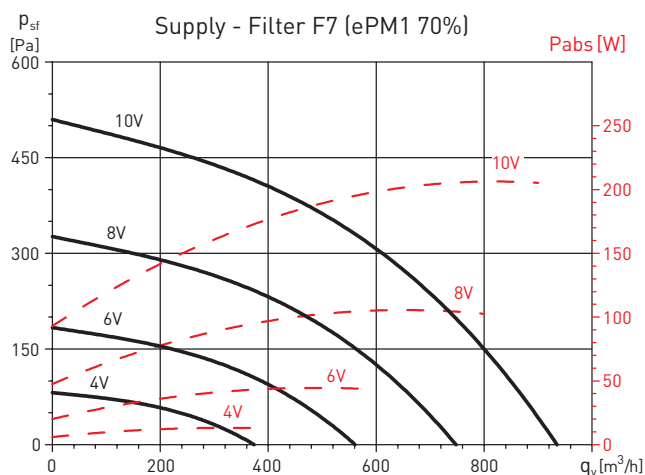
CADB-HE-DI 04



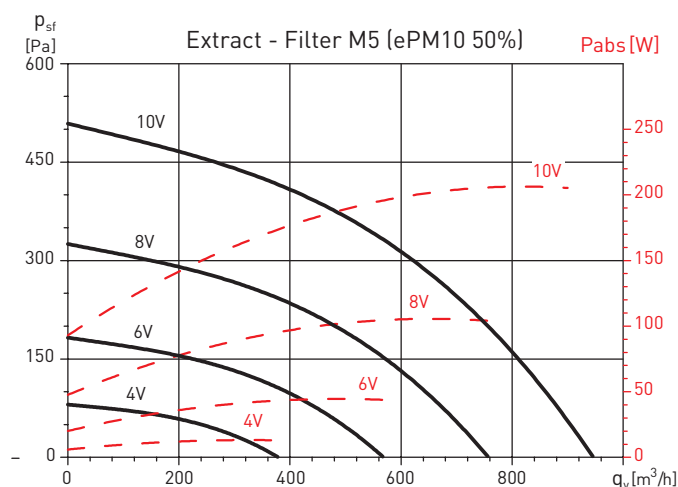
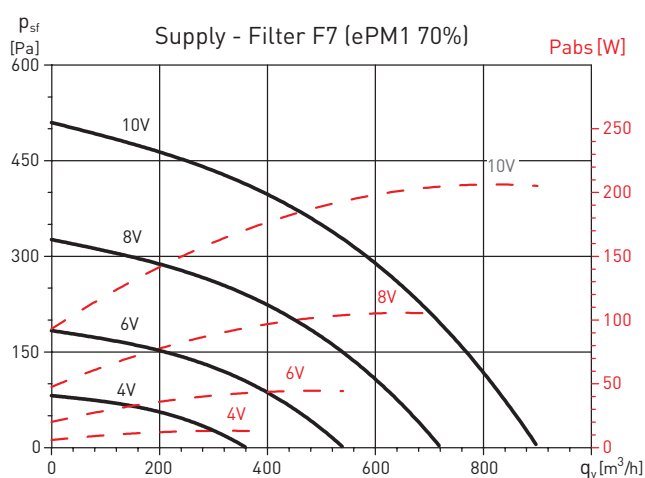
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s
- p_{sf} : Static pressure in Pa
- P_{abs} : Absorbed power at maximum speed (W)
- Dry air at 20°C and 760 mmHg
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- Absorbed power corresponding to a single circuit

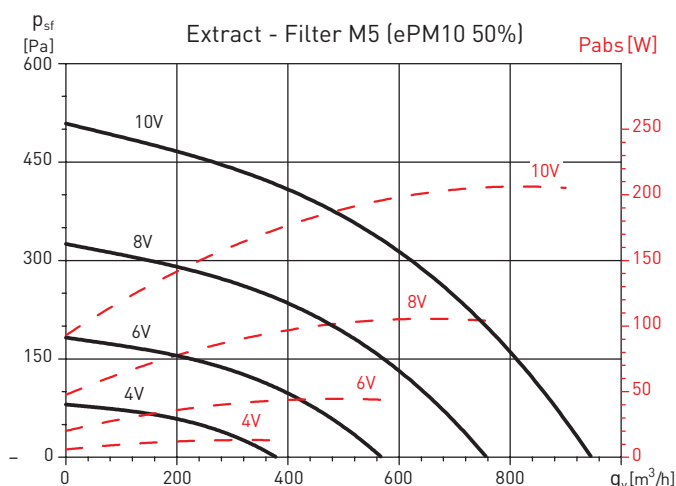
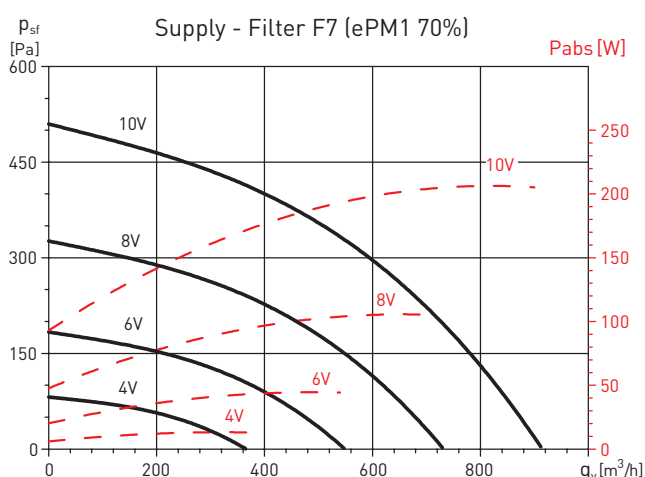
CADB-HE-D 08



CADB-HE-DC 08



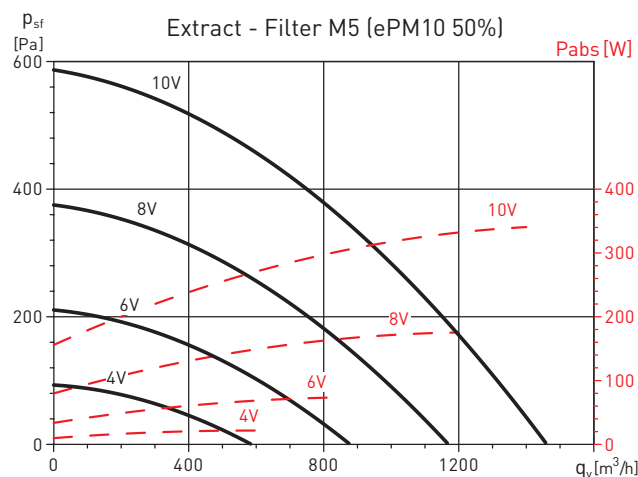
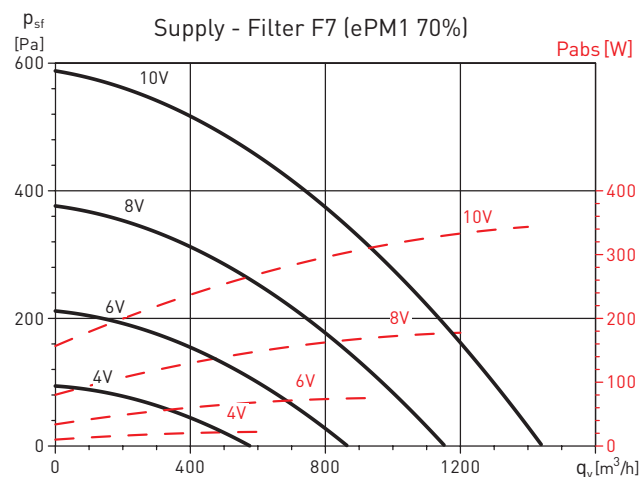
CADB-HE-DI 08



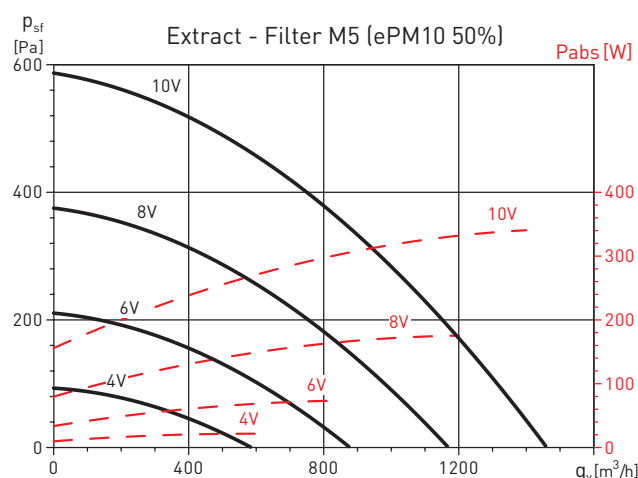
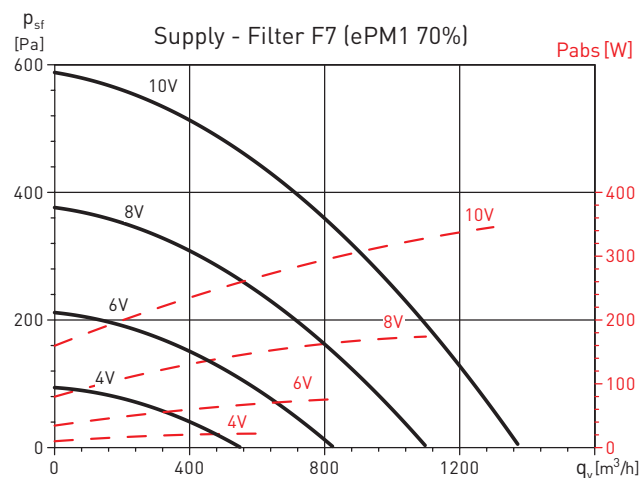
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s
- p_{sf} : Static pressure in Pa
- P_{abs} : Absorbed power at maximum speed (W)
- Dry air at 20°C and 760 mmHg
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- Absorbed power corresponding to a single circuit

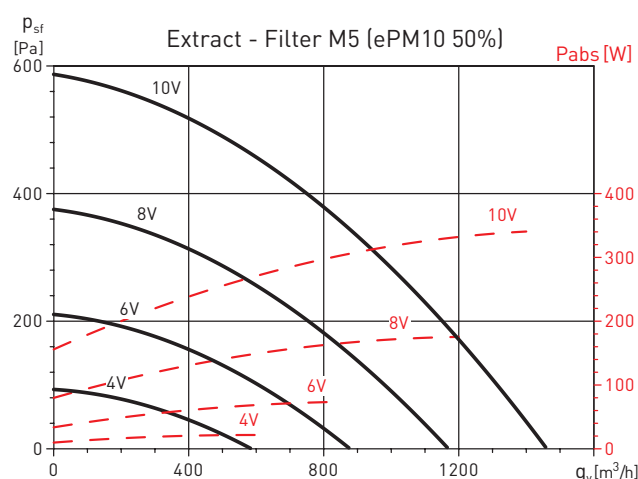
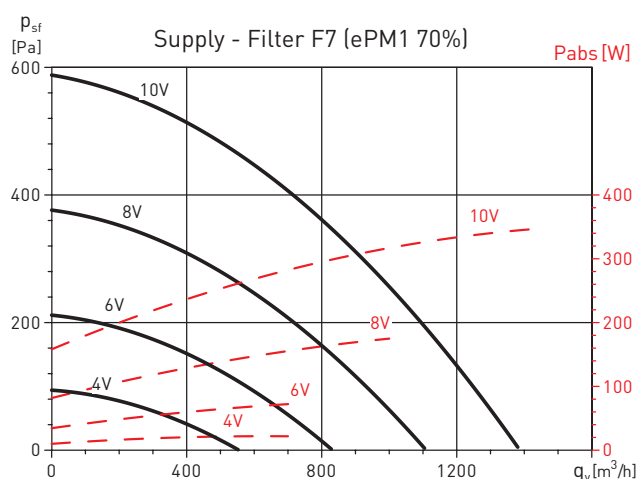
CADB-HE-D 12



CADB-HE-DC 12



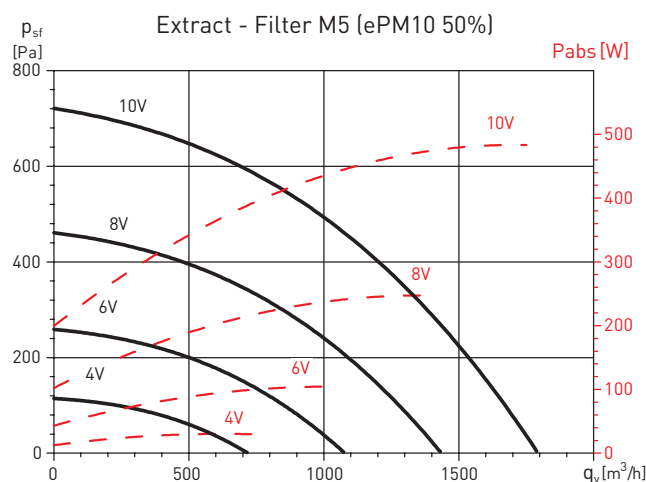
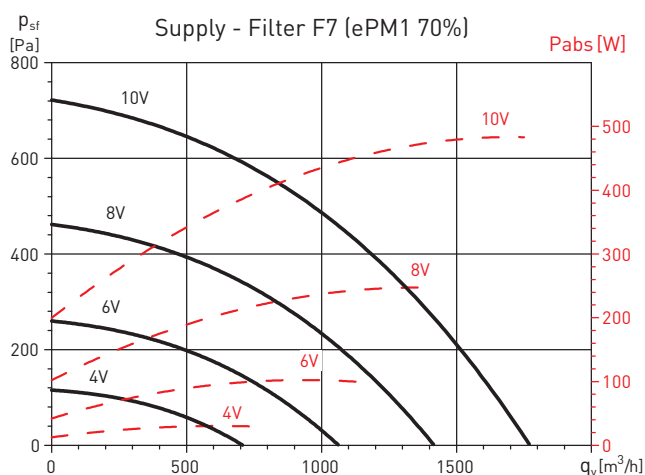
CADB-HE-DI 12



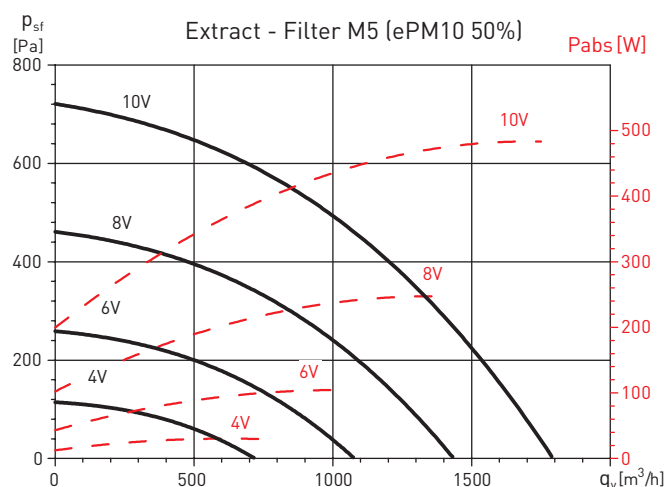
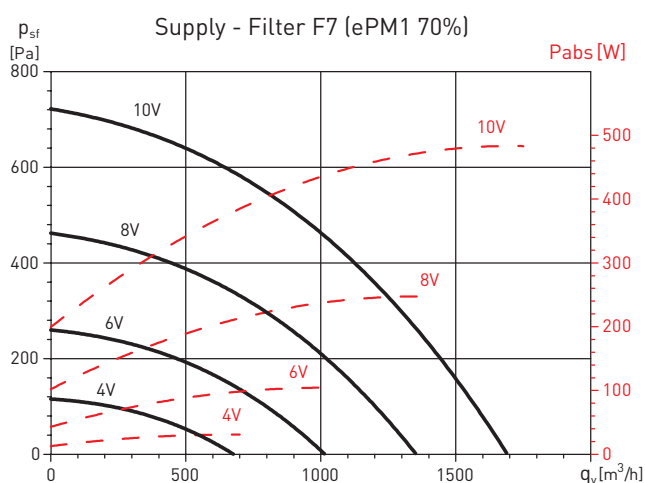
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s
- p_{sf} : Static pressure in Pa
- P_{abs} : Absorbed power at maximum speed [W]
- Dry air at 20°C and 760 mmHg
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- Absorbed power corresponding to a single circuit

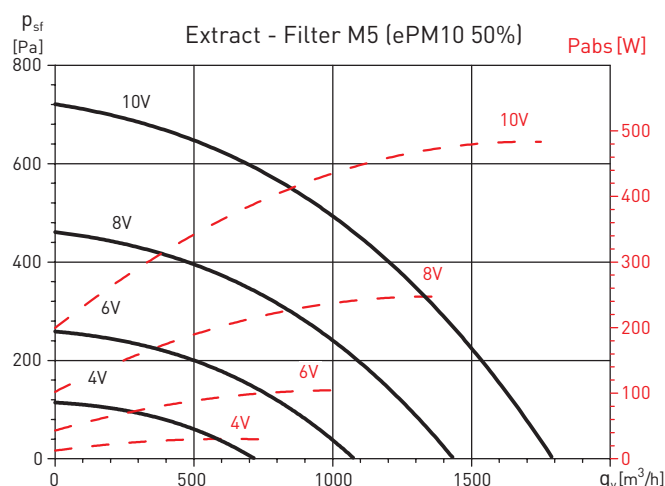
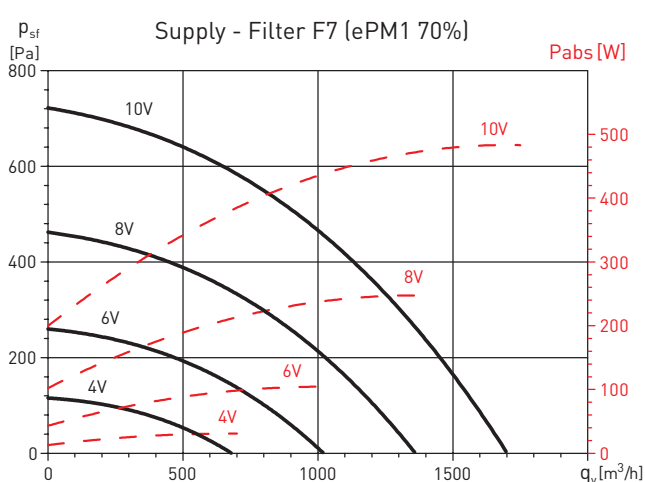
CADB-HE-D 16



CADB-HE-DC 16



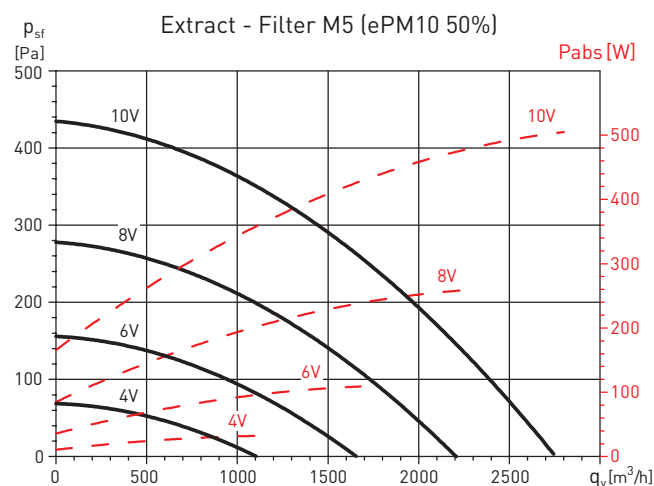
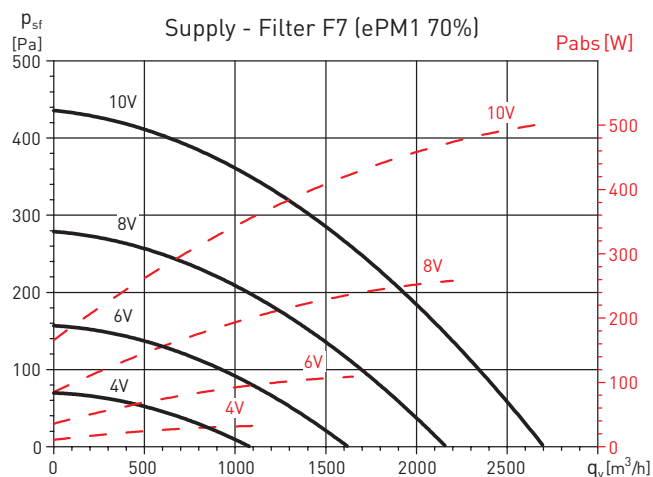
CADB-HE-DI 16



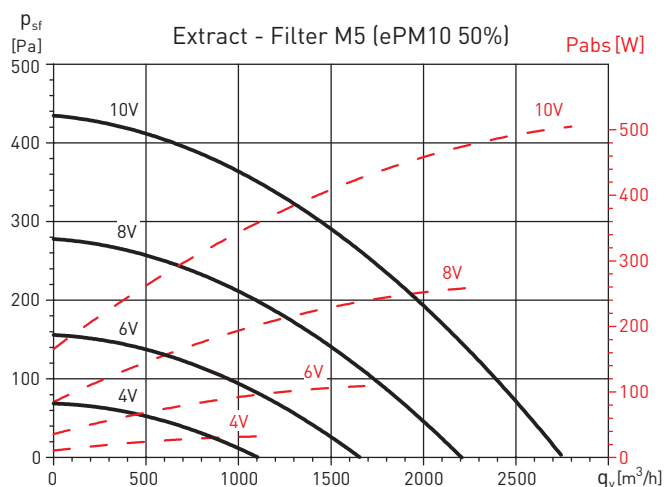
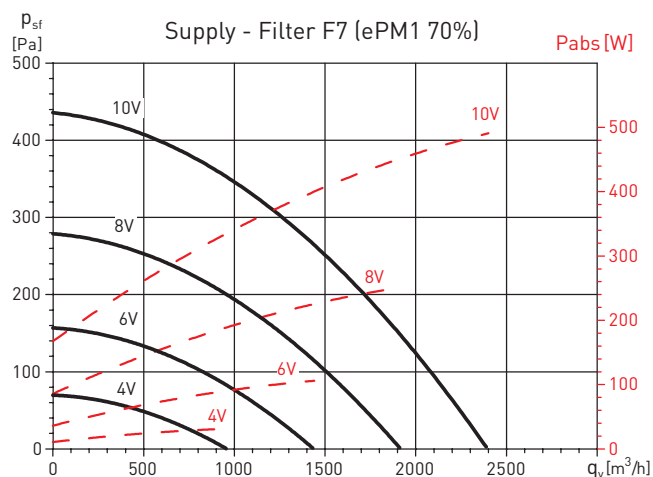
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s
- p_{sf} : Static pressure in Pa
- P_{abs} : Absorbed power at maximum speed (W)
- Dry air at 20°C and 760 mmHg
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- Absorbed power corresponding to a single circuit

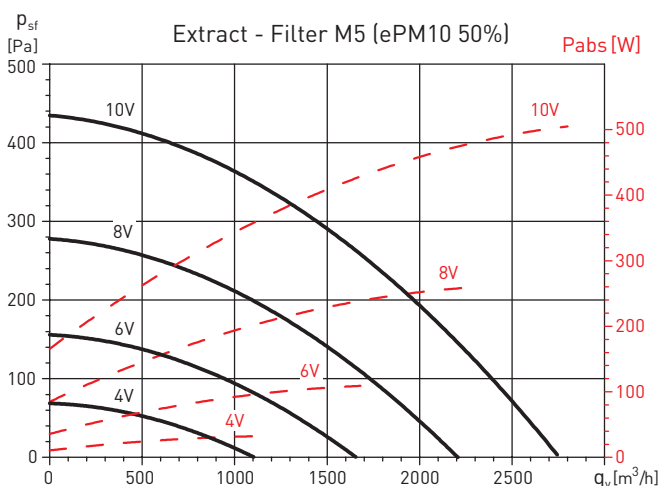
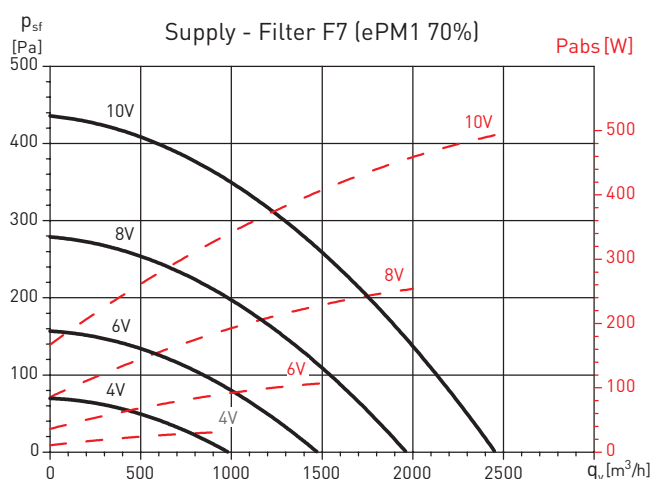
CADB-HE-D 21



CADB-HE-DC 21



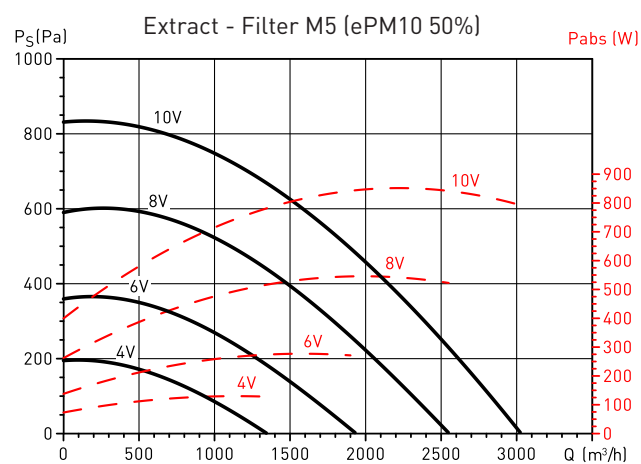
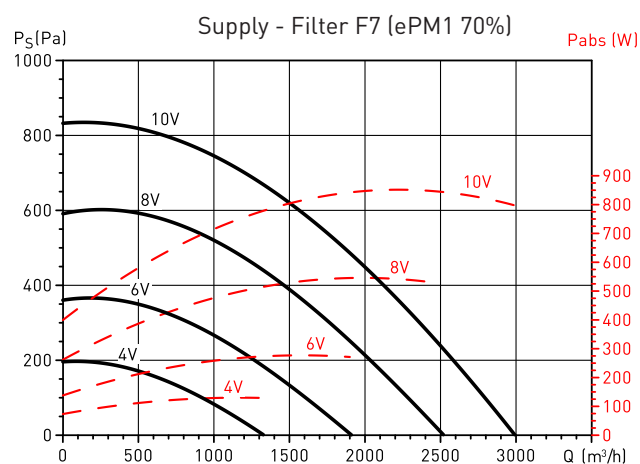
CADT-HE-DI 21



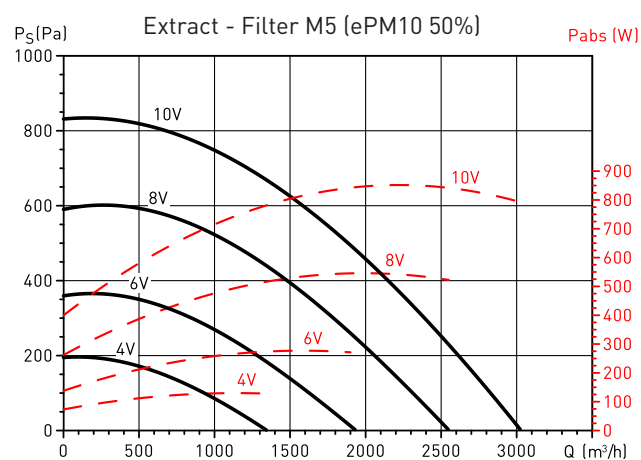
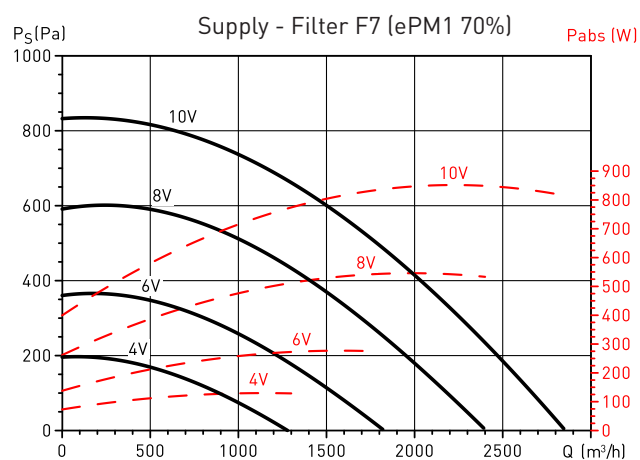
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s
- p_{st} : Static pressure in Pa
- P_{abs} : Absorbed power at maximum speed (W)
- Dry air at $20^\circ C$ and 760 mmHg
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- Absorbed power corresponding to a single circuit

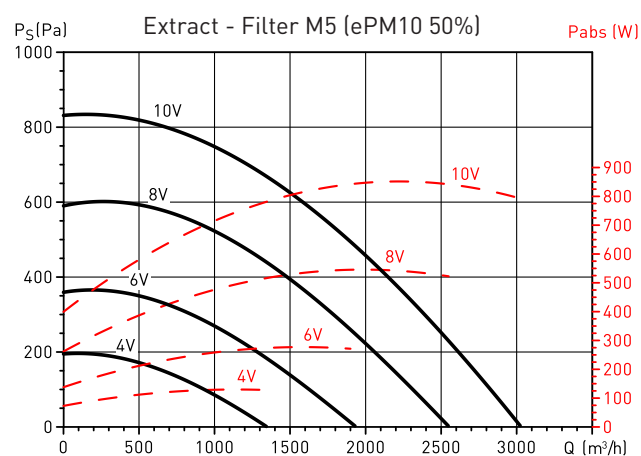
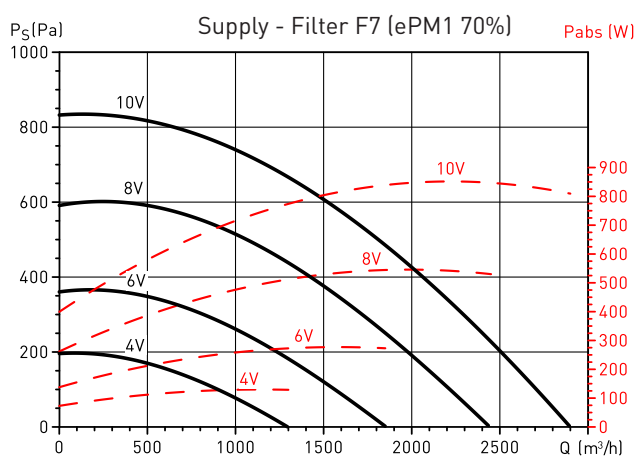
CADB-HE-D 27



CADB-HE-DC 27



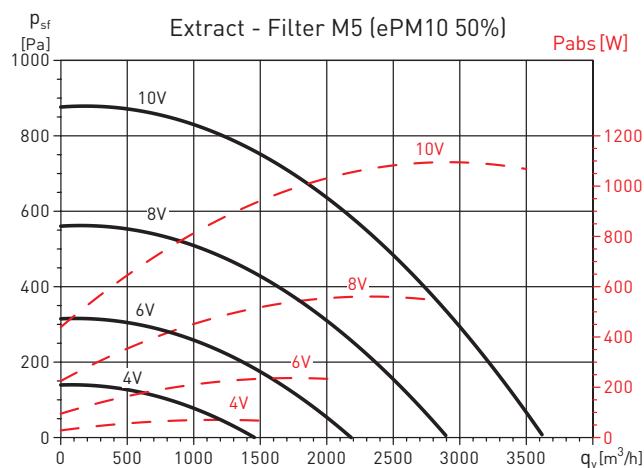
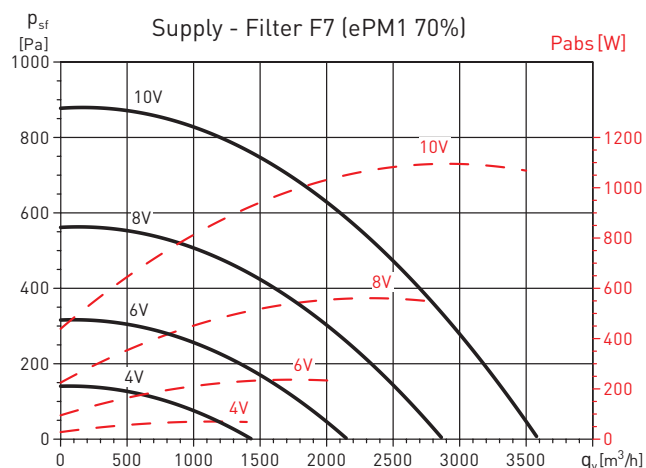
CADT-HE-DI 27



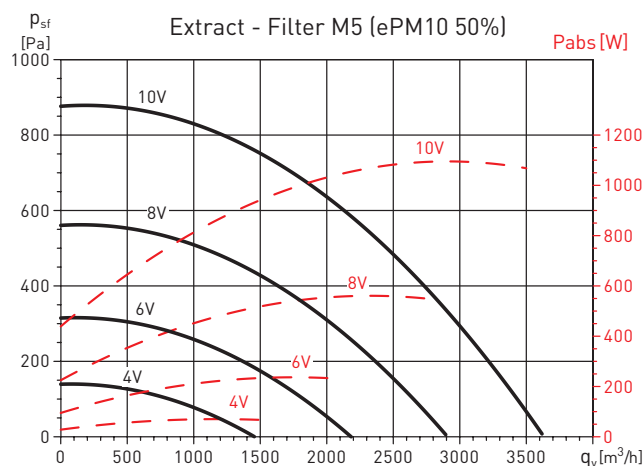
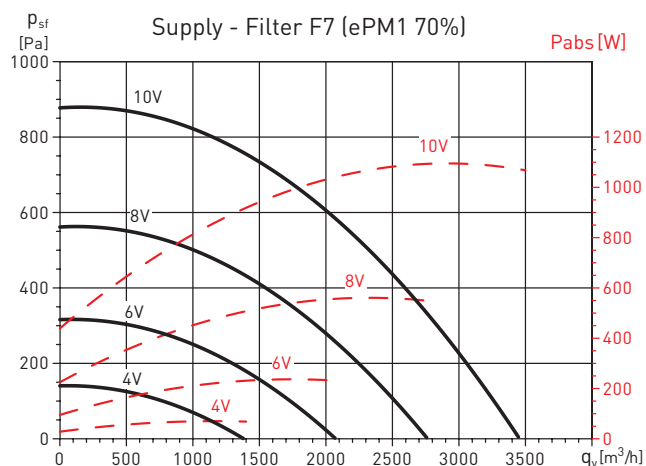
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s
- p_{sf} : Static pressure in Pa
- P_{abs} : Absorbed power at maximum speed (W)
- Dry air at 20°C and 760 mmHg
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- Absorbed power corresponding to a single circuit

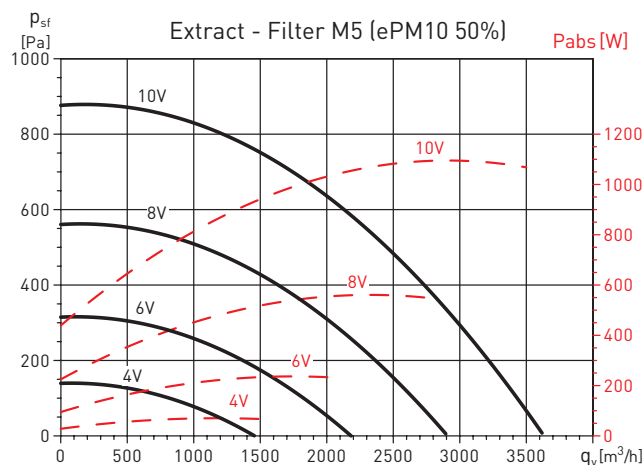
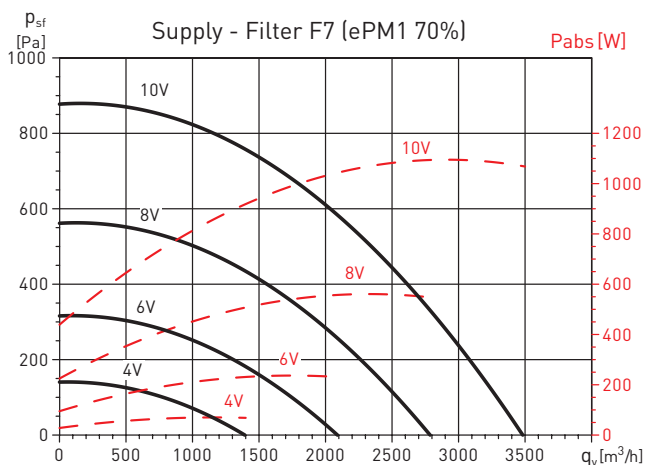
CADB-HE-D 33



CADB-HE-DC 33



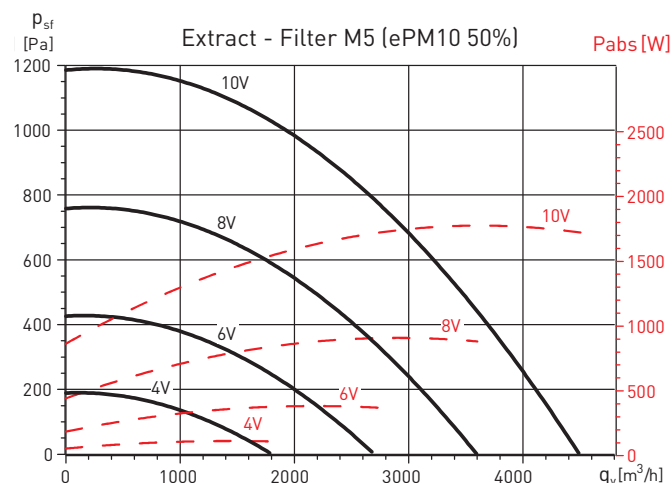
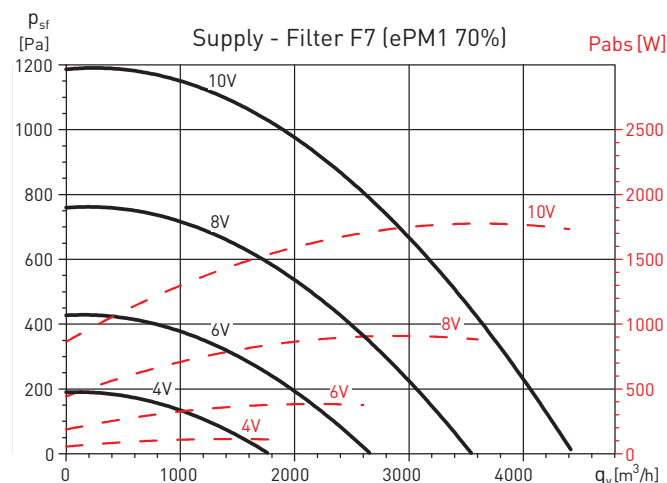
CADT-HE-DI 33



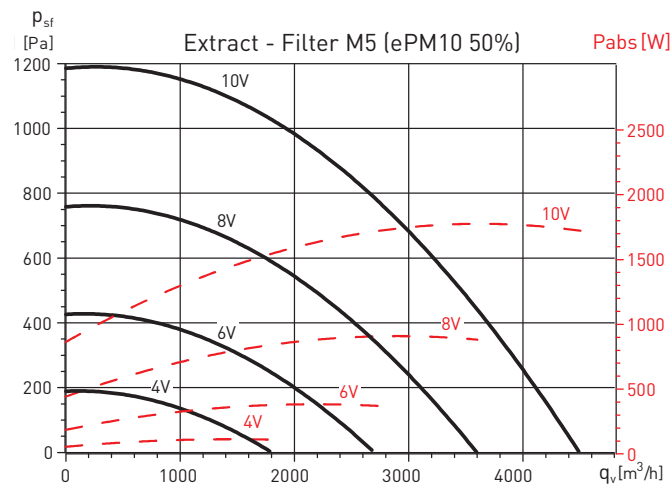
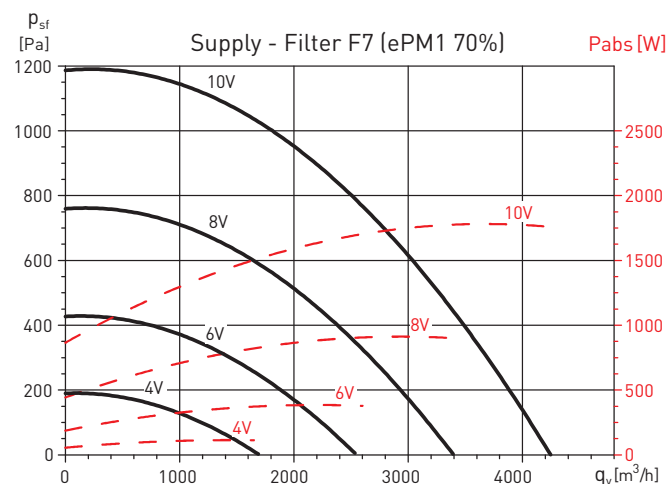
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P_{abs} : Absorbed power at maximum speed [W].
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- Absorbed power corresponding to a single circuit.

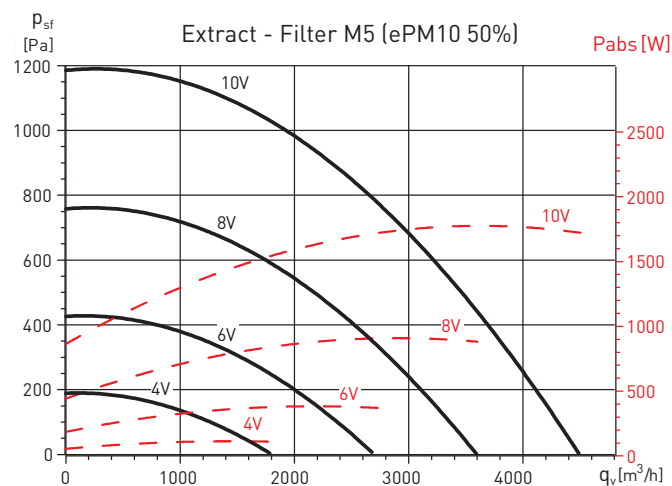
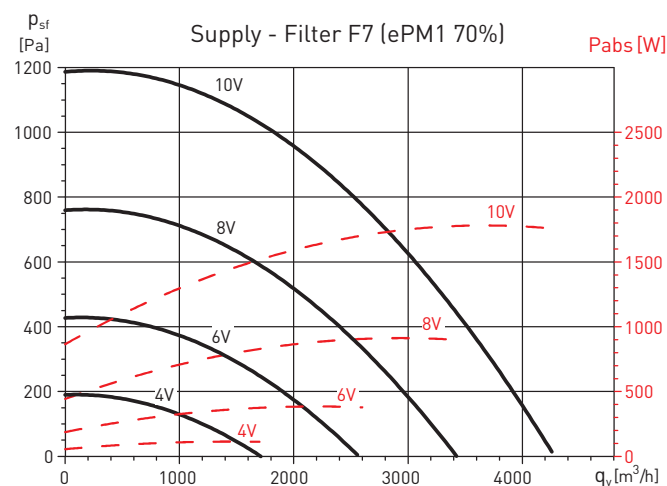
CADT-HE-D 33 HP



CADT-HE-DC 33 HP



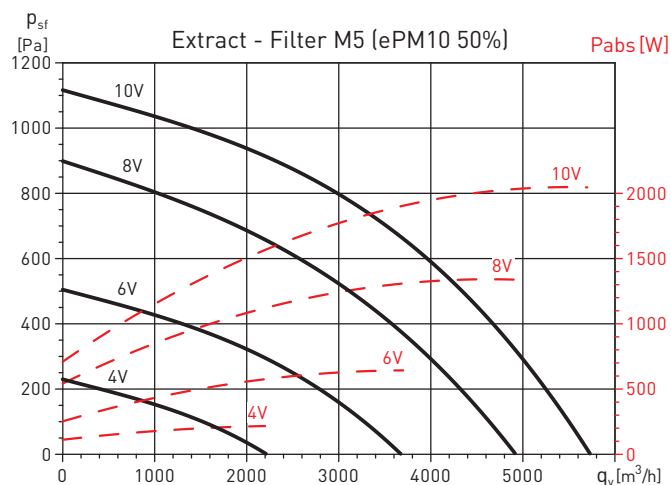
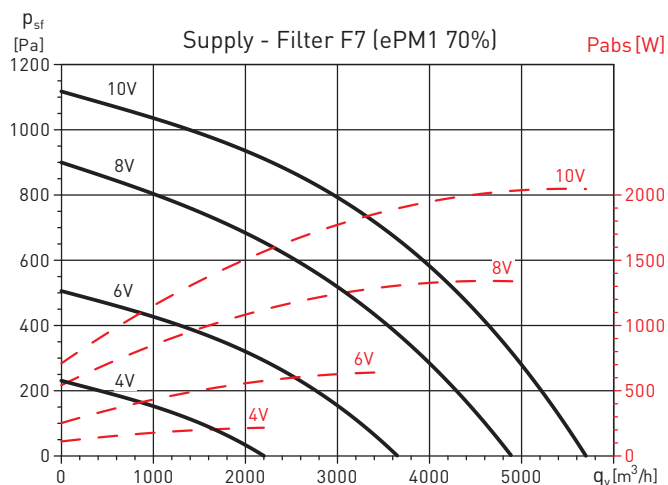
CADT-HE-DI 33 HP



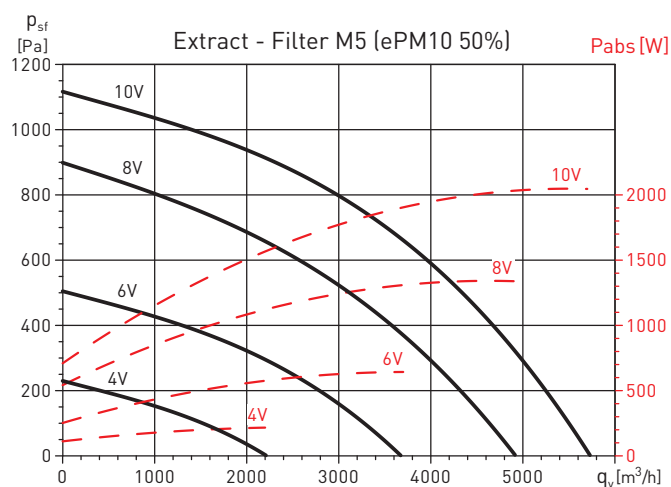
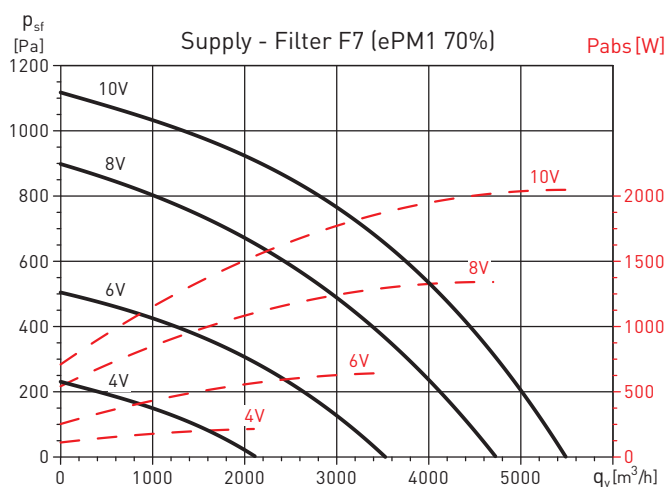
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s
- p_{sf} : Static pressure in Pa
- P_{abs} : Absorbed power at maximum speed (W)
- Dry air at 20°C and 760 mmHg
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- Absorbed power corresponding to a single circuit

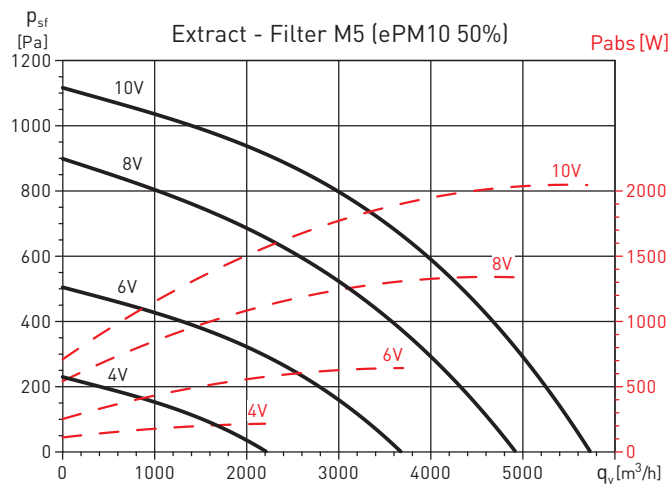
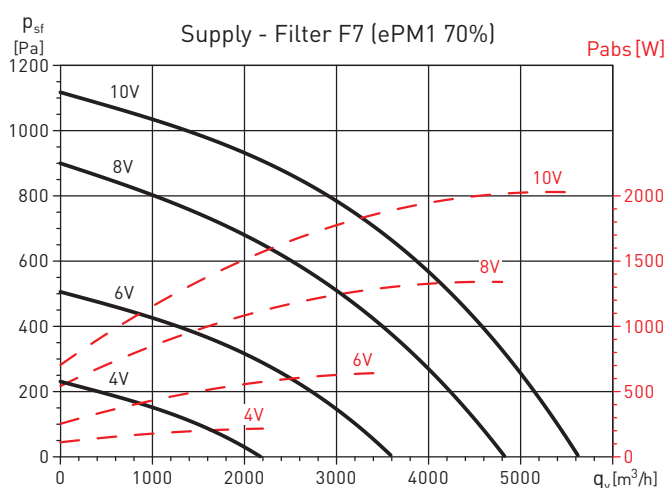
CADT-HE-D 45



CADT-HE-DC 45



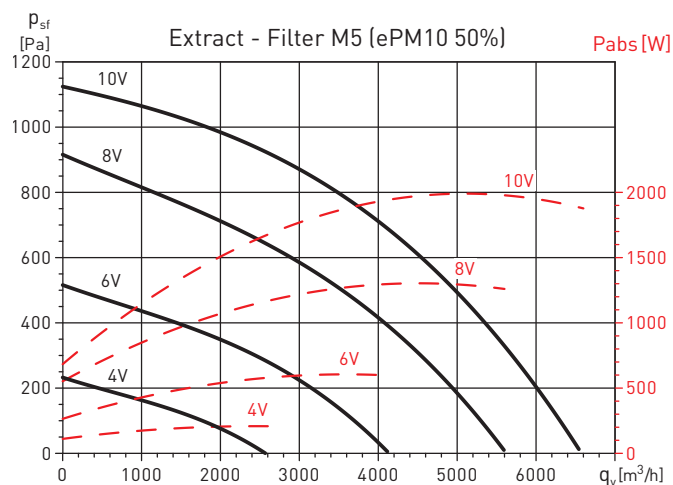
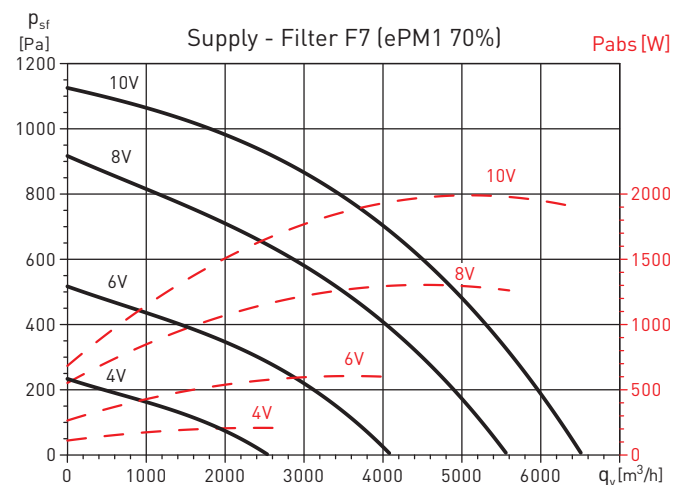
CADT-HE-DI 45



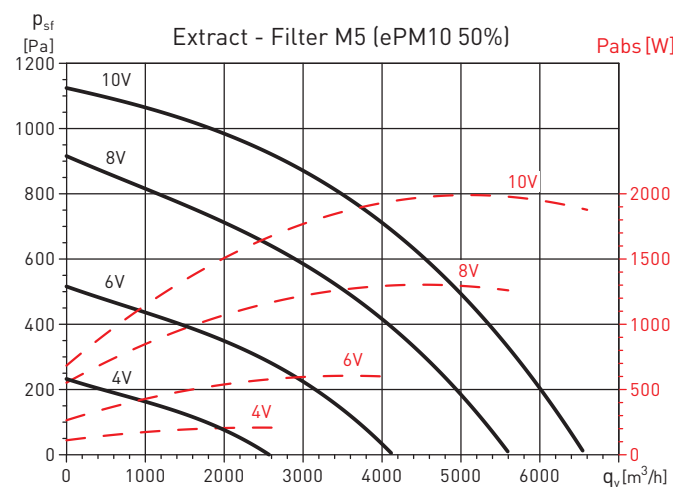
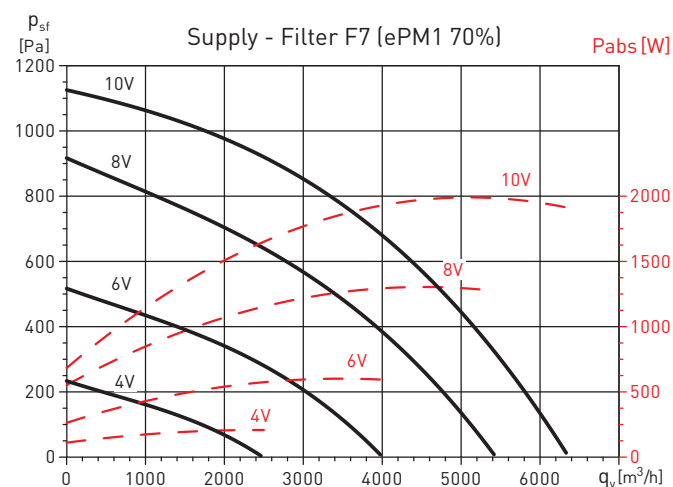
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s
- p_{sf} : Static pressure in Pa
- P_{abs} : Absorbed power at maximum speed (W)
- Dry air at 20°C and 760 mmHg
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- Absorbed power corresponding to a single circuit

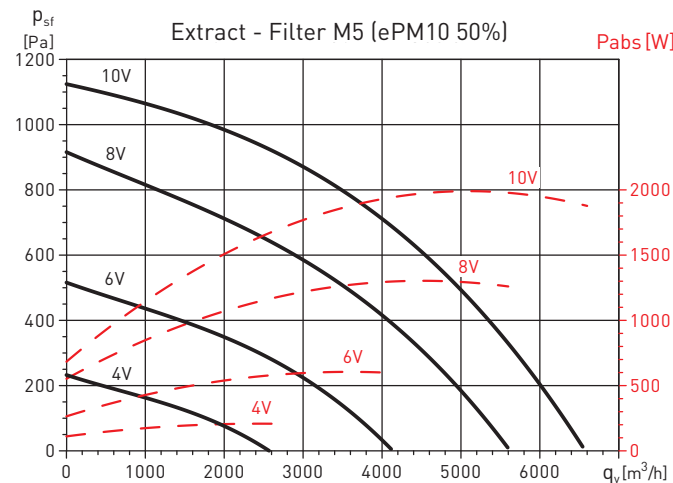
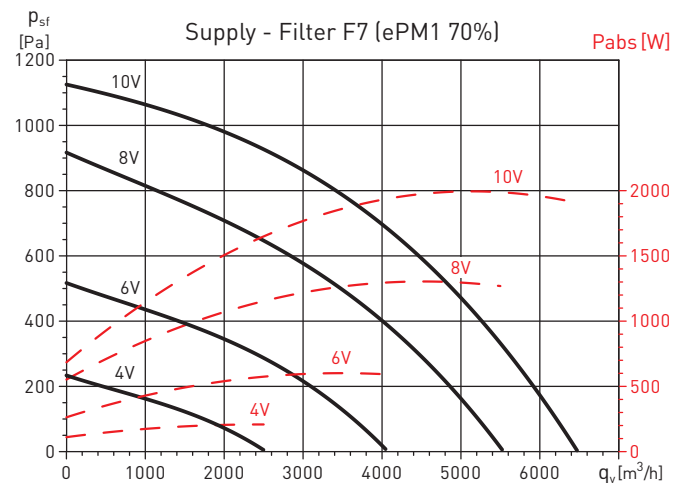
CADT-HE-D 60



CADT-HE-DC 60



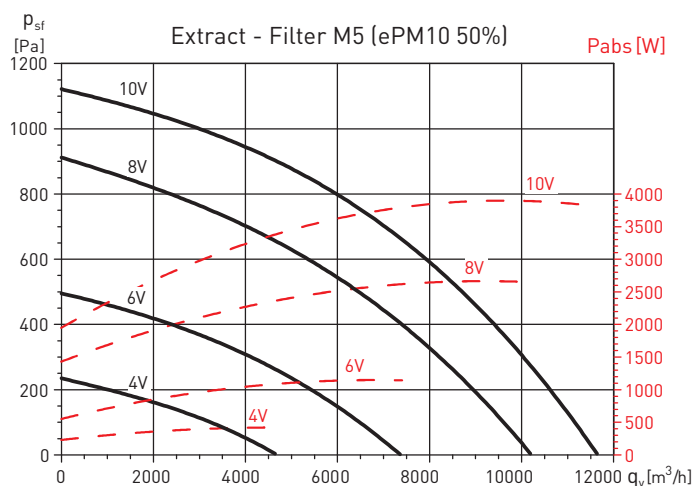
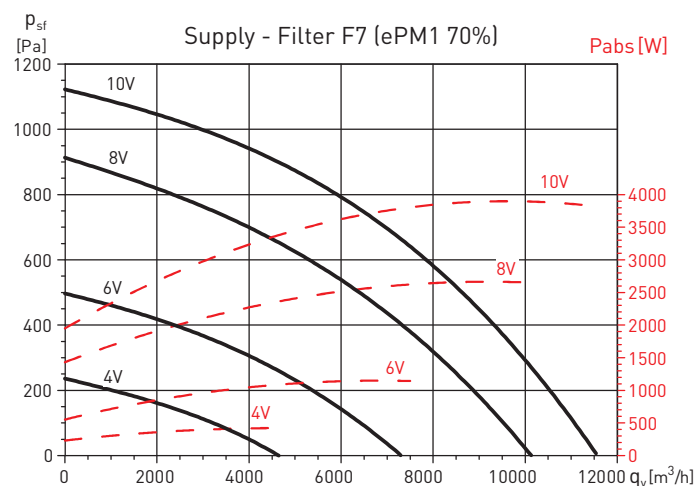
CADT-HE-DI 60



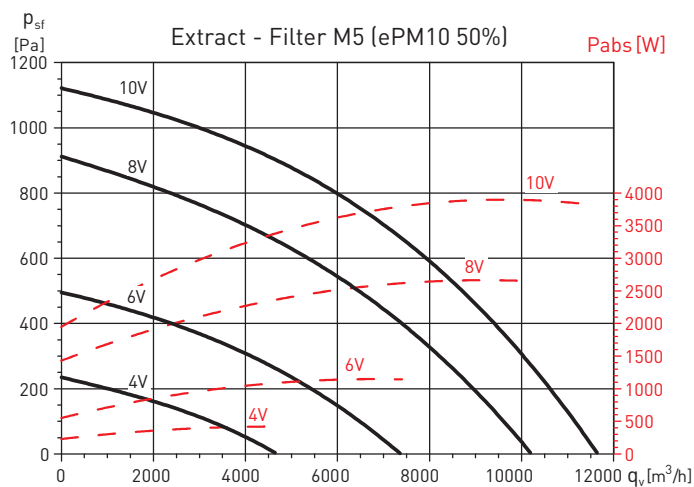
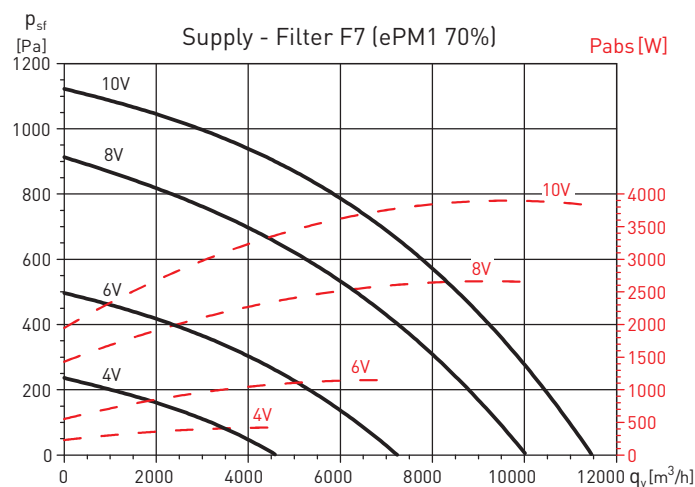
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s
- p_{sf} : Static pressure in Pa
- P_{abs} : Absorbed power at maximum speed (W)
- Dry air at 20°C and 760 mmHg
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- Absorbed power corresponding to a single circuit

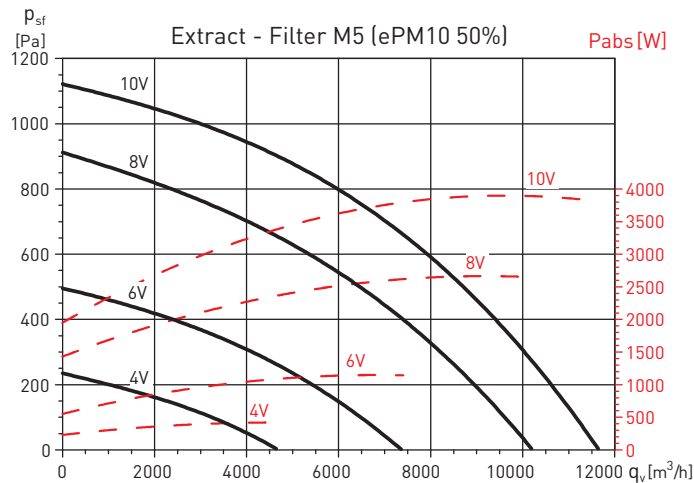
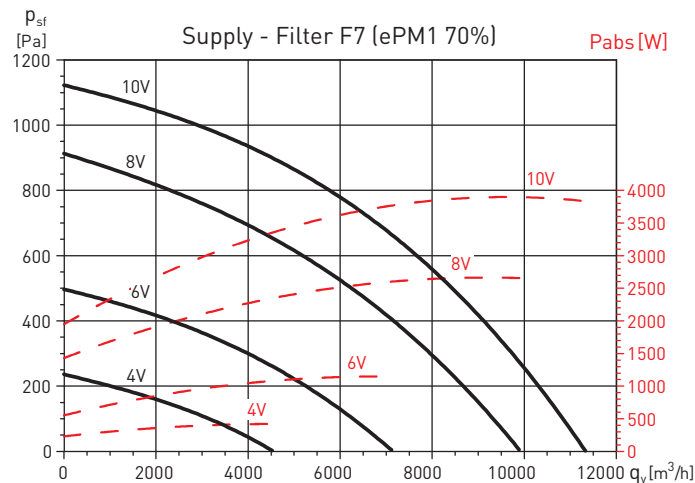
CADT-HE-D 100



CADT-HE-DC 100



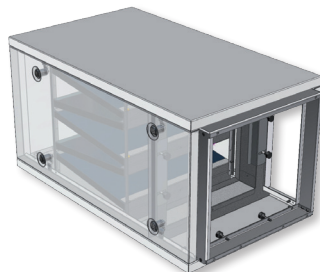
CADT-HE-DI 100



SPECIFIC ACCESSORIES FOR CADB-HE RANGE CADB-HE

Heat recovery units are complemented with a wide range of air treatment accessories, specifically design to integrate in the supply inlet. Magnelis ZM310 enclosure in models 04 to 33 (verticals) and 45 to 100.

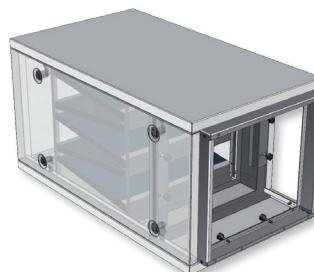
Module for air purification, specific for areas with high environmental pollution.



FB-IAQ HE

IAQ modul with a high efficiency in the retention of pollutants associated with outdoor pollution (gases and particulate matter), providing adequate quality to the supplied aire, even in polluted outdoor environments. Especially suitable for integration in ventilation installations of buildings located in urban or industrial areas with high environmental pollution.

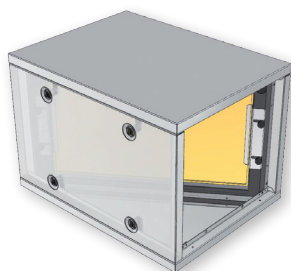
Odor removal module



FB-CA HE

Filter module, composed by an activated carbon section and a final filter F9 class. Indicated to protect the ventilation system against the entry of bad odors from outdoor air. It can also be mounted on the extract air.

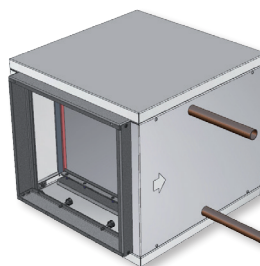
Outdoor filter module



FBL-HE

Filter modules, supplied without filter, to mount filters AFR-HE (capacity for two filters).

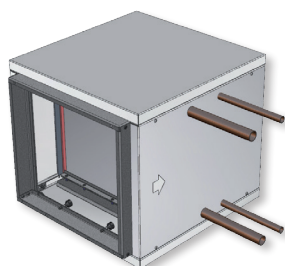
Cold water coil module



BA-AF HE

External cold water coil module, can also be used for hot water (Reversible coil).

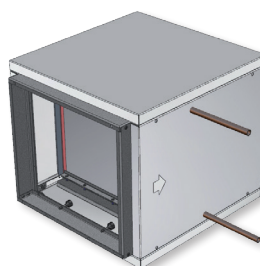
Double coil module (cold water and hot water)



BA-AFC HE

External module that includes a cold water coil and a hot water coil, suitable to be combined with 4 tube-systems.

Direct expansion coil modules



BA-DX HE

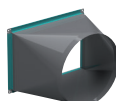
External module that includes a direct expansion coil for R-410A, this allows the integration of the unit in air conditioning systems of the main existing manufacturers.

MOUNTING ACCESSORIES TABLE

For more information see "Heat recovery accessories" and/or "Mounting accessories".
Mounting accessories supplied in unpainted galvanized sheet.

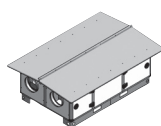


Heat recovery unit model	Ø (mm)	AFR-HE (spare filter for CADB/T-HE)			
		AFR-HE G4	AFR-HE M5	AFR-HE F7	AFR-HE F9
CADB-HE D/DI/DC 04	200	AFR-HE 200/04 G4	AFR-HE 200/04 M5	AFR-HE 200/04 F7	AFR-HE 200/04 F9
CADB-HE D/DI/DC 08	250	AFR-HE 250/08 G4	AFR-HE 250/08 M5	AFR-HE 250/08 F7	AFR-HE 250/08 F9
CADB-HE D/DI/DC 12	315	AFR-HE 315/12 G4	AFR-HE 315/12 M5	AFR-HE 315/12 F7	AFR-HE 315/12 F9
CADB-HE D/DI/DC 16	315	AFR-HE 315/16 G4	AFR-HE 315/16 M5	AFR-HE 315/16 F7	AFR-HE 315/16 F9
CADB/T-HE D/DI/DC 21	400	AFR-HE 400/21-27 G4	AFR-HE 400/21-27 M5	AFR-HE 400/21-27 F7	AFR-HE 400/21-27 F9
CADB/T-HE D/DI/DC 27	400	AFR-HE 400/21-27 G4	AFR-HE 400/21-27 M5	AFR-HE 400/21-27 F7	AFR-HE 400/21-27 F9
CADB/T-HE D/DI/DC 33 / HP	400	AFR-HE 400/33 G4	AFR-HE 400/33 M5	AFR-HE 400/33 F7	AFR-HE 400/33 F9
CADT-HE D/DI/DC 45	600x400	AFR-HE 450/40-45 G4	AFR-HE 450/40-45 M5	AFR-HE 450/40-45 F7	AFR-HE 450/40-45 F9
CADT-HE D/DI/DC 60	700x500	AFR-HE 500/54-60 G4	AFR-HE 500/54-60 M5	AFR-HE 500/54-60 F7	AFR-HE 500/54-60 F9
CADT-HE D/DI/DC 100	1100x610	AFR-HE-710/100 G4	AFR-HE-710/100 M5	AFR-HE-710/100 F7	AFR-HE-710/100 F9



Heat recovery unit model	PRRE From rectangular to circular adapter	SIL Circular sound attenuators	ACOPEL F400 Circular flexible connector	APC - APR Inlet/outlet protection guards	
				Horizontal	Vertical
CADB-HE D/DI/DC 04	-	SIL-200	ACOPEL F400-200/160N	APC-200	
CADB-HE D/DI/DC 08	-	SIL-250	ACOPEL F400-250/160N	APC-250	
CADB-HE D/DI/DC 12	-	SIL-315	ACOPEL F400-315/160N	APC-315	
CADB-HE D/DI/DC 16	-	SIL-315	ACOPEL F400-315/160N	APC-315	
CADB/T-HE D/DI/DC 21	-	SIL-400	ACOPEL F400-400/160N	APC-400	
CADB/T-HE D/DI/DC 27	-	SIL-400	ACOPEL F400-400/160N	APC-400	
CADB/T-HE D/DI/DC 33	-	SIL-400	ACOPEL F400-400/160N	APC-400	
CADT-HE D/DI/DC 33 HP	PRRE 590x540/500 PRRE 1110x490/500	SIL-500	ACOPEL F400-500/160N	APR CADT-HE HP H	APR CADT-HE HP V MG
CADT-HE D/DI/DC 45	PRRE 600x400/500	SIL-500*	ACOPEL F400-500/160N*	APR CADT-HE 45/60 H MG	APR CADT-HE 45/60 V MG
CADT-HE D/DI/DC 60	PRRE 700x500/560	SIL-560*	ACOPEL F400-560/160N*	APR CADT-HE 45/60 H MG	APR CADT-HE 45/60 V MG
CADT-HE D/DI/DC 100	PRRE 1100x610/710	SIL-710*	ACOPEL F400-710/180N*	-	APR CADT-HE 100 MG

* In order to use the circular accessories, you need to install the PRRE adapter.



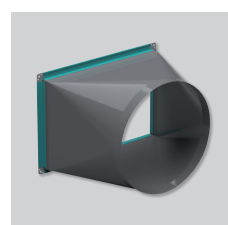
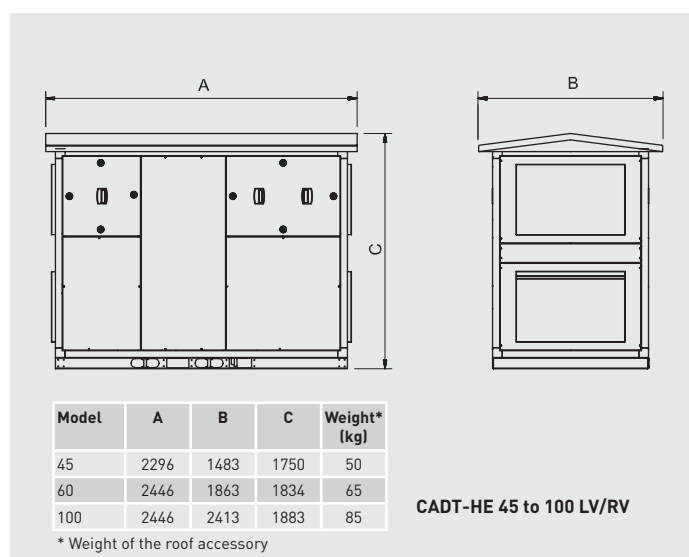
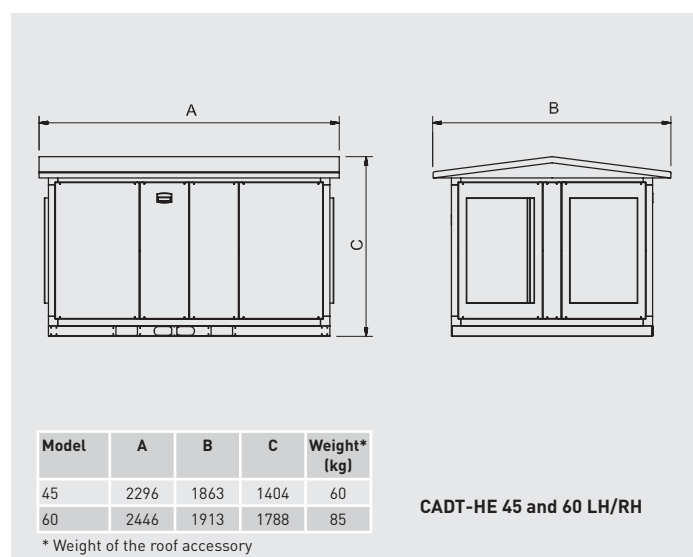
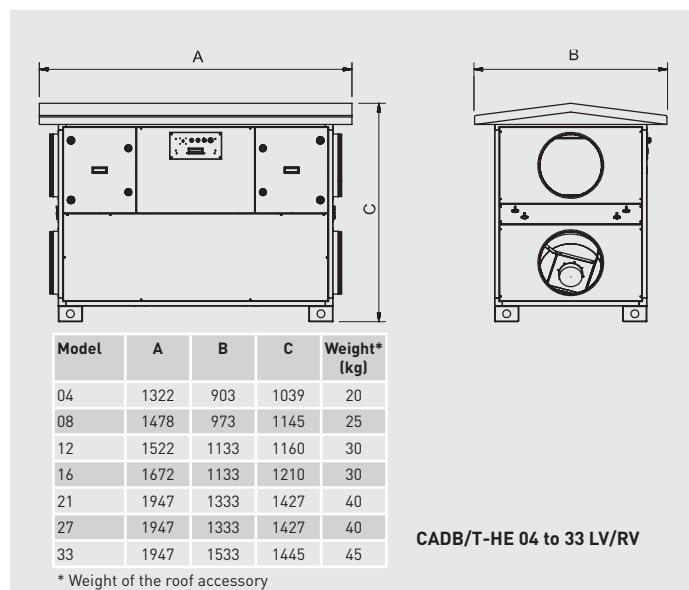
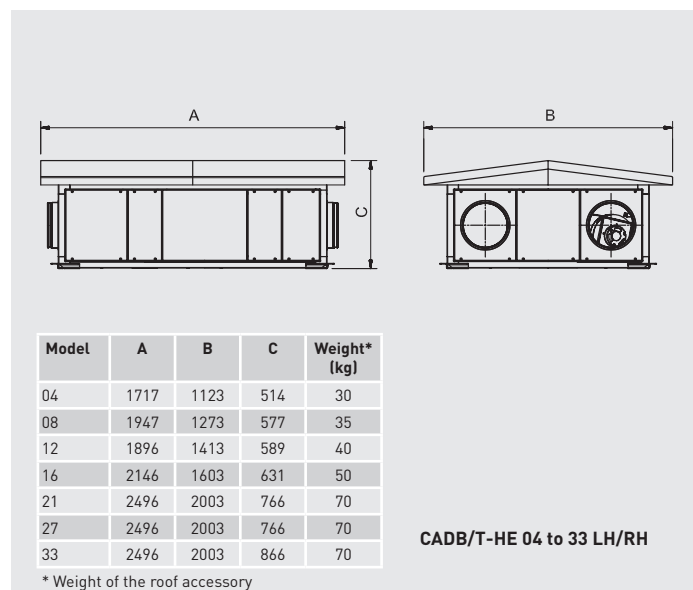
Heat recovery unit model	TPP-HE Rain protection cowl model		Accessories for battery control (DC-Versions) Valve	Insulation damper	
	Horizontal	Vertical		Damper	On-off actuator/ spring return
CADB-HE D/DI/DC 04	TPP-HE-H-04	TPP-HE-V-04 MG	3WV DN 15 KVS1 PROP 24V	REMV-200	LF-24S
CADB-HE D/DI/DC 08	TPP-HE-H-08	TPP-HE-V-08 MG	3WV DN 15 KVS1,6 PROP 24V	REMV-250	
CADB-HE D/DI/DC 12	TPP-HE-H-12	TPP-HE-V-12 MG	3WV DN 15 KVS2,5 PROP 24V	REMV-315	
CADB-HE D/DI/DC 16	TPP-HE-H-16	TPP-HE-V-16 MG	3WV DN 15 KVS2,5 PROP 24V	REMV-315	
CADB/T-HE D/DI/DC 21	TPP-HE-H-21-27-33	TPP-HE-V-21-27 MG	3WV DN 20 KVS4 PROP 24V	REMV-400	
CADB/T-HE D/DI/DC 27	TPP-HE-H-21-27-33	TPP-HE-V-21-27 MG	3WV DN 20 KVS4 PROP 24V	REMV-400	
CADB/T-HE D/DI/DC 33 / HP	TPP-HE-H-21-27-33	TPP-HE-V-33 MG	3WV DN 25 KVS6,3 PROP 24V	REMV-400	
CADT-HE D/DI/DC 45	TPP-HE-H-45 MG	TPP-HE-V-45 MG	3WV DN 25 KVS6,3 PROP 24V	-	
CADT-HE D/DI/DC 60	TPP-HE-H-60 MG	TPP-HE-V-60 MG	3WV DN 25 KVS10 PROP 24V	-	
CADT-HE D/DI/DC 100	-	TPP-HE-V-100 MG	3WV DN 32 KVS16 PROP 24V	-	

MOUNTING ACCESSORIES

TPP-HE

Rain protection cowl

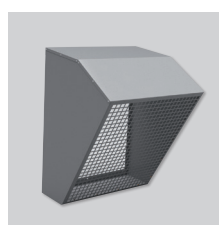
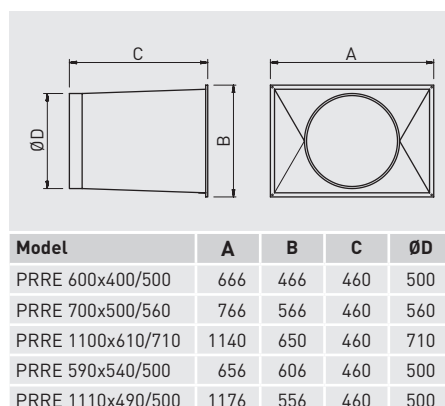
Rain protection cowls are supplied with a finish of galvanized sheet without painting.



PRRE

From rectangular to circular adapter

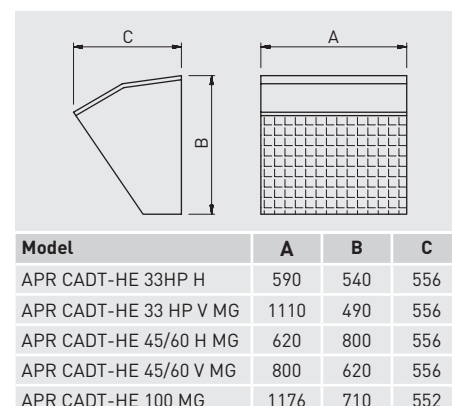
Appropriate to apply circular accessories to inlet and outlet for the models CADT-HE 45 to 100.



APR

Rectangular protective peaks

Specific accessory for models CADT-HE 45 to 100.

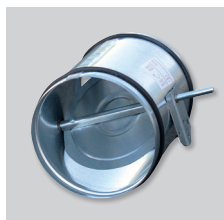




3-WAY VALVES WITH PROPORTIONAL ACTUATOR

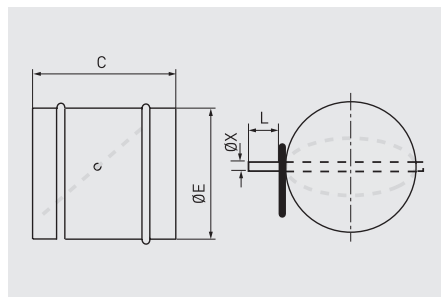
Three way motorised control valve.
Pressure 16 bar.
Rp" internal nut.
Nickel-plated forged brass casing.
Stainless steel valve cone.
Stainless steel shaft.
Average temperatures -10..+120.

5Nm mounted rotary actuator.
AC/DC 24V, proportional.
90 s/90° valve response time.
DC 2....10V working range.
IP 54.



REM

Manual motorised dampers.
Allow duct-network balancing and tight closure of branches or air inlets.
Body and damper made from galvanised steel, cadmium steel axis and bronze bearing. Tight joints in both sides.
Manual control or with support for electric actuator.



Model	ØE	C	X	L
REMV-200	200	200	8	60
REMV-250	250	200	8	60
REMV-315	315	300	12	100
REMV-355	355	300	12	100
REMV-400	400	400	12	100
REMV-450	450	400	12	100
REMV-500	500	400	12	100

Electric actuator (accessory):



LF-24S

On-Off with spring return. Power supply 24V.

ELECTRIC ACCESSORIES FOR CADB/T-HE PRO-REG SERIES



SC02-A 0/10V

Ambient CO₂ and temperature sensor without display.
Output: 0-10V
Power supply: 24VDC



SC02-G 0/10V

CO₂ sensor for the duct.
Enables control of the ventilation in sections of duct according to the CO₂ concentration of the air circulating through it.
Output: 0-10V
Power supply: 24VDC



TDP-S Probe

Pressure transmitters without display

They are used to control the pressure in constant pressure ventilation systems or constant flow. It enables to control the pressure at two points and transform it into an electrical signal suitable for the different types of control.

Accessories for the fan control depending on the control mode

Heat Recovery Model	Accessories for Variable Air Volume. VAV by CO ₂ level		Accessories for constant air flow operation CAV	Accessories for constant pressure operation COP
	Ambience	Duct		
CADB/T-HE 04 to 100	SC02-A 0/10V	SC02-G 0/10V	Airflow transmitters included in the unit (Factory mounted)	TDP-S