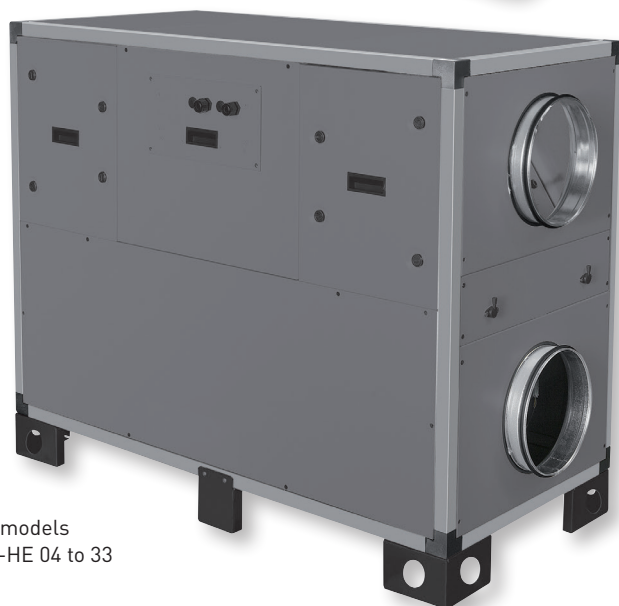




False-ceiling models
CADB/T-HE 04 to 33



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.

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 04-33 verticals 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 ECOWATT

Heat recovery units without additional incorporated heater.

CADB/T-HE DC ECOWATT

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 ECOWATT

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, 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).

Two pressure switches DPS 2.30 to control the filter pollution are provided with the unit.

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.

Additional information

By-pass electrical supply (1/230V 50Hz). Electrical battery supply (1/230V 50Hz) for models 04 to 16, three phase (3/400V 50Hz) for sizes 21 to 100.

Nominal airflows from 450 to 10.000 m³/h. All versions and models include by-pass. Mounting flexibility provided by the interchangeable side panels.



Heat recovery



SUPPLY
FILTER



EXTRACT
FILTER

Versions



HORIZONTAL
CONFIGURATION



VERTICAL
CONFIGURATION



WITHOUT
ADDITIONAL
HEAT

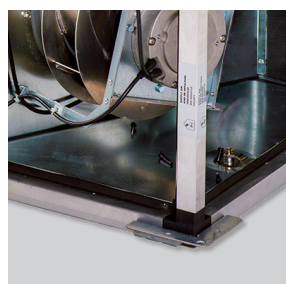


ELECTRIC
BATTERY
INCLUDED



WATER COIL
INCLUDED

CADB/T-HE 04 TO 33 ECOWATT HORIZONTAL MODELS



1 Low noise level and robust construction

Casing with double skinned 25 mm panels with thermoacoustic flameproof insulation A1/M0, with high-quality finish and plastic corners.



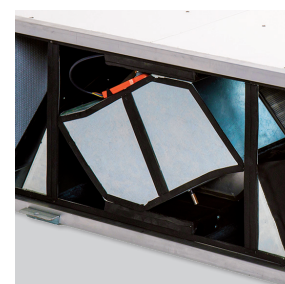
2 Pressure Taps

Before and after the filters, to control the souling.



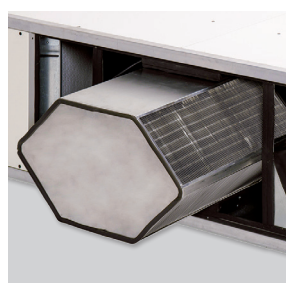
3 High-efficiency motors

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 made of aluminium (up to 93%), EUROVENT certified.



6 High-efficiency filters:

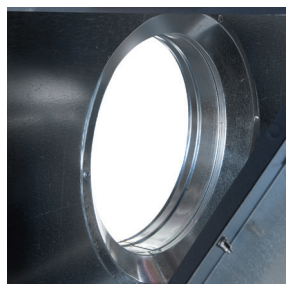
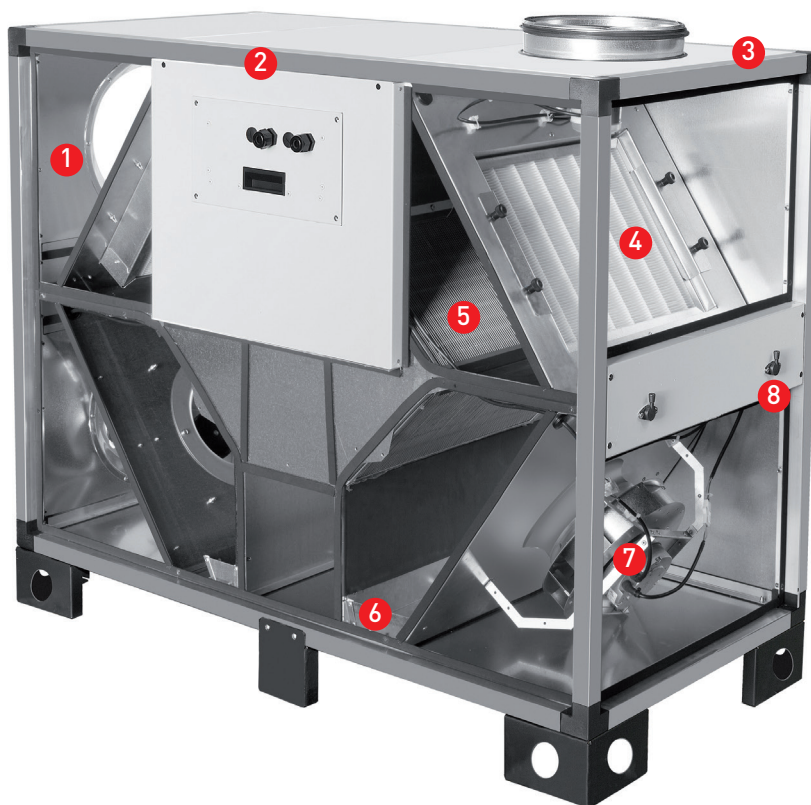
- Low pressure F7 filters (ePM1 70%) for supply air.
 - M5 filters (ePM10 50%) for extract air.
- Possibility of mounting a second filter inside the unit (accessory).



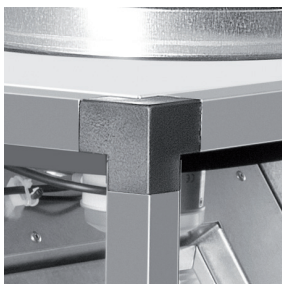
7 Easy installation

Specific supports to allow installation in false ceilings via threaded rods.

CADB/T-HE 04 TO 33 ECOWATT VERTICAL MODELS



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



- 2 Low noise level and robust construction**
Casing with double skinned 25 mm 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.



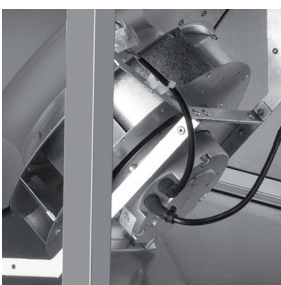
- 4 High-efficiency filters:**
- Low pressure F7 filters (ePM1 70%) for supply air.
- M5 filters (ePM10 50%) for extract air. Possibility of mounting a second filter inside the unit (accessory).
Included pressure switch.



- 5 Counterflow heat exchanger**
high-efficiency made of aluminium (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.

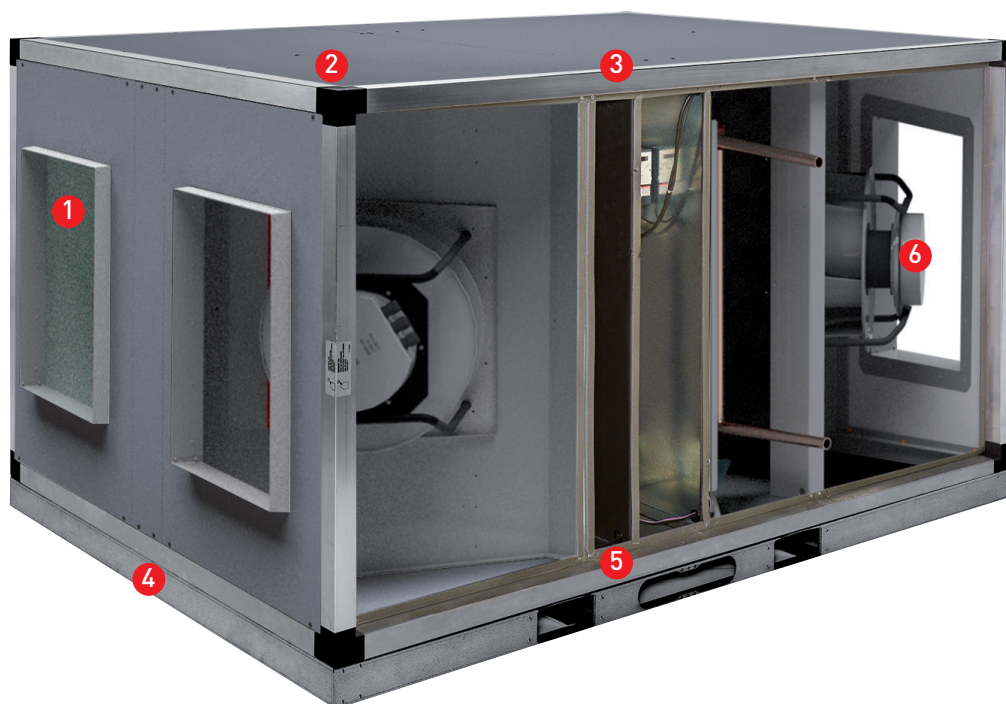


- 7 High-efficiency motors**
Plug-fans with EC single-phase motor.

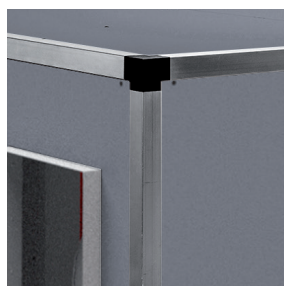


- 8 Pressure Taps**
Before and after the filters, to control the fouling.

CADB/T-HE 45 TO 100 ECOWATT MG MODELS



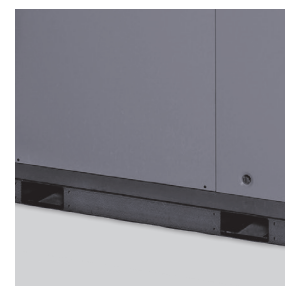
- 1 High-efficiency filters:**
- Low pressure F7 filters (ePM1 70%) for supply air.
 - M5 filters (ePM10 50%) for extract air. Possibility of mounting a second filter inside the unit (accessory).
- Included pressure switch.



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



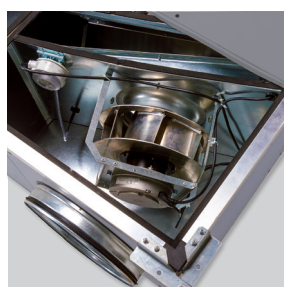
- 3 By-pass**
- All versions include internal bypass (approximately 75% over the nominal airflow).



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



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



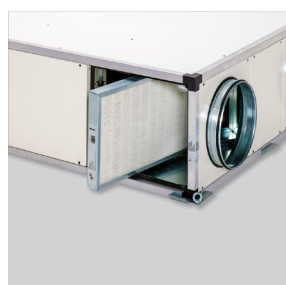
- 6 Motors**
- Plug-fans with three phase EC motors.

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.

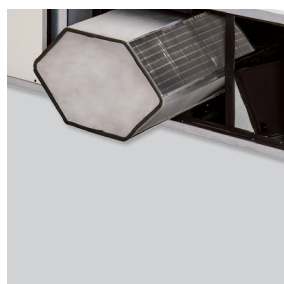
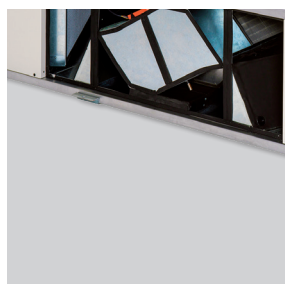


Easy maintenance

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	ECOWATT	MG
1						2		3	4	5	6

1 - Series:

CADB-HE: Single-phase power supply. Both fans and electric battery (if available).

CADT-HE: Three-phase power supply for both fans and electric coil (if available).

Exception: Models CADT-HE-DI 21, 27 and 33 single-phase motors and three-phase electric coil.

Modelo CADT-HE-DI 33HP three-phase motors and three phase electric coil.

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 - ECOWATT: High efficiency fans EC-Technology.

6 - MG: Magnelis ZM310®

STANDARD VERSIONS CADB/T-HE ECOWATT

Horizontal versions

D Models: Without heater battery

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

CADT-HE	-D	45	RH	ECOWATT	MG
CADT-HE	-D	60	RH	ECOWATT	MG

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

DC Models: With built-in hot water coil

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

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

DI Models: With built-in electric heater battery

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

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

STANDARD VERSIONS CADB/T-HE ECOWATT

Vertical versions

D Models: Without heater battery

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

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

DC Models: With built-in hot water coil

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

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

DI Models: With built-in electric heater battery

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

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

CONFIGURABLE HIGH-EFFICIENCY HEAT RECOVERY UNITS

CADB/T-HE ECOWATT 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	Speed (r.p.m.)	Maximum absorbed power (kW) each fan	Maximum current (A) each fan	
CADB-HE D 04 ECOWATT	200	450	87	1/230V, 50Hz	3700	0,17	1,0	137
CADB-HE D 08 ECOWATT	250	800	86,4	1/230V, 50Hz	2650	0,26	1,3	173
CADB-HE D 12 ECOWATT	315	1.200	85,3	1/230V, 50Hz	2550	0,54	1,6	180
CADB-HE D 16 ECOWATT	315	1.600	85,5	1/230V, 50Hz	2845	0,54	2,0	225
CADB-HE D 21 ECOWATT	400	2.100	86,5	1/230V, 50Hz	1580	0,56	2,2	323
CADB-HE D 27 ECOWATT	400	2.700	83,8	1/230V, 50Hz	2450	0,91	3,6	360
CADB-HE D 33 ECOWATT	400	3.300	89,9	1/230V, 50Hz	2200	1,15	4,6	410
CADT-HE D 33HP ECOWATT	590x540 1110x490	3.300*2	89,9	3+N/400V, 50Hz	2600	1,72	2,8	410
CADT-HE D 45 ECOWATT	400x600	4.500*3	88,4	3+N/400V, 50Hz	2200	2,21	3,2	577
CADT-HE D 60 ECOWATT	500x700	6.100	89	3+N/400V, 50Hz	2200	2,21	3,0	710
CADT-HE D 100 ECOWATT	1100x610	10.000*4	88,9	3+N/400V, 50Hz	2160	4,06	6,0	842

*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	Speed (r.p.m.)	Maximum absorbed power (kW) each fan	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 ECOWATT	200	450	87	1/230V, 50Hz	3700	0,17	1,0	2,7	1,6	139
CADB-HE DC 08 ECOWATT	250	800	86,4	1/230V, 50Hz	2650	0,26	1,3	5,1	3,1	176
CADB-HE DC 12 ECOWATT	315	1.200	85,3	1/230V, 50Hz	2550	0,54	1,6	7,1	4,3	183
CADB-HE DC 16 ECOWATT	315	1.600	85,5	1/230V, 50Hz	2845	0,54	2,0	8,6	5,3	229
CADB-HE DC 21 ECOWATT	400	2.100	86,5	1/230V, 50Hz	1580	0,56	2,2	12,6	7,8	328
CADB-HE DC 27 ECOWATT	400	2.700	83,8	1/230V, 50Hz	2450	0,91	3,6	16,2	10,0	365
CADB-HE DC 33 ECOWATT	400	3.300	89,9	1/230V, 50Hz	2200	1,15	4,6	18,2	11,1	416
CADT-HE DC 33HP ECOWATT	590x540 1110x490	3.300*2	89,9	3+N/400V, 50Hz	2600	1,72	2,8	18,2	11,1	416
CADT-HE DC 45 ECOWATT	400x600	4.500*3	88,4	3+N/400V, 50Hz	2200	2,00	3,0	25,6	15,5	586
CADT-HE DC 60 ECOWATT	500x700	6.100	89	3+N/400V, 50Hz	2200	2,00	3,0	34,7	21,1	722
CADT-HE DC 100 ECOWATT	1100x610	10.000*4	88,9	3+N/400V, 50Hz	2160	4,20	5,8	58,9	35,4	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.

DI Models: With built-in electric heater battery

	Complete unit			Fan				Electric heater battery			Weight (kg)
	Air connections diameter (mm)	Nominal airflow at 150Pa (m³/h)	Efficiency*1 (%)	Electrical supply	Speed (r.p.m.)	Maximum absorbed power (kW) each fan	Maximum current (A) each fan	Electrical supply	Power (kW)	Maximum current (A)	
CADB-HE DI 04 ECOWATT	200	450	87	1/230V, 50Hz	3700	0,17	1,0	1/230V, 50Hz	1	4,5	138
CADB-HE DI 08 ECOWATT	250	800	86,4	1/230V, 50Hz	2650	0,26	1,3	1/230V, 50Hz	2	9,1	175
CADB-HE DI 12 ECOWATT	315	1.200	85,3	1/230V, 50Hz	2550	0,54	1,7	1/230V, 50Hz	3	11,4	182
CADB-HE DI 16 ECOWATT	315	1.600	85,5	1/230V, 50Hz	2845	0,54	2,0	1/230V, 50Hz	3,5	15,9	227
CADT-HE DI 21 ECOWATT	400	2.100	86,5	1/230V, 50Hz	1580	0,56	2,2	3/400V, 50Hz	6	9,1	326
CADT-HE DI 27 ECOWATT	400	2.700	83,8	1/230V, 50Hz	2450	0,91	3,6	3/400V, 50Hz	6	9,1	363
CADT-HE DI 33 ECOWATT	400	3.300	89,9	1/230V, 50Hz	2200	1,15	4,6	3/400V, 50Hz	7,5	11,4	414
CADT-HE DI 33HP ECOWATT	590x540 1110x490	3.300*2	89,9	3+N/400V, 50Hz	2600	1,72	2,8	3/400V, 50Hz	7,5	11,4	414
CADT-HE DI 45 ECOWATT	400x600	4.500*3	88,4	3+N/400V, 50Hz	2200	2,00	3,0	3/400V, 50Hz	9	13,7	582
CADT-HE DI 60 ECOWATT	500x700	6.100	89	3+N/400V, 50Hz	2200	2,00	3,0	3/400V, 50Hz	12	18,2	717
CADT-HE DI 100 ECOWATT	1100x610	10.000*4	88,9	3+N/400V, 50Hz	2160	4,20	5,8	3/400V, 50Hz	24	36,4	854

*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.

ACOUSTIC CHARACTERISTICS

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

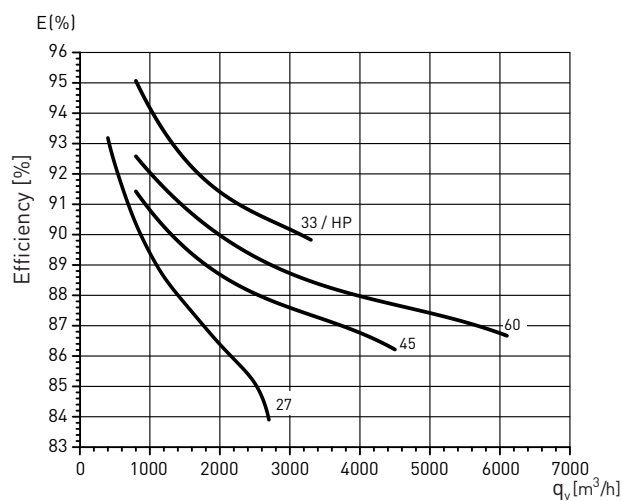
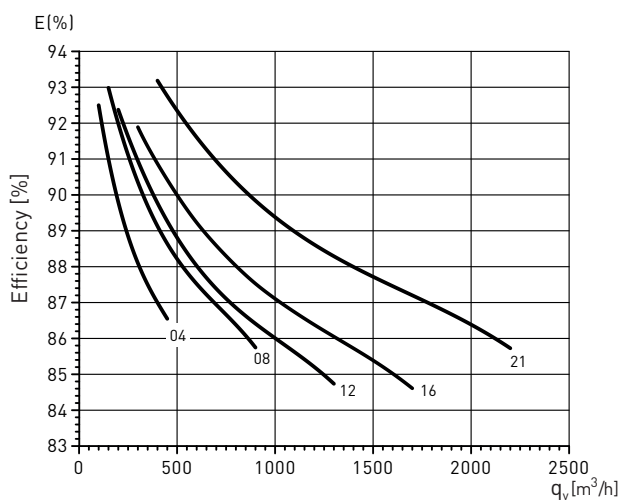
RECOVERY EFFICIENCY ACCORDING TO THE AIRFLOW

Values referring to the following conditions:

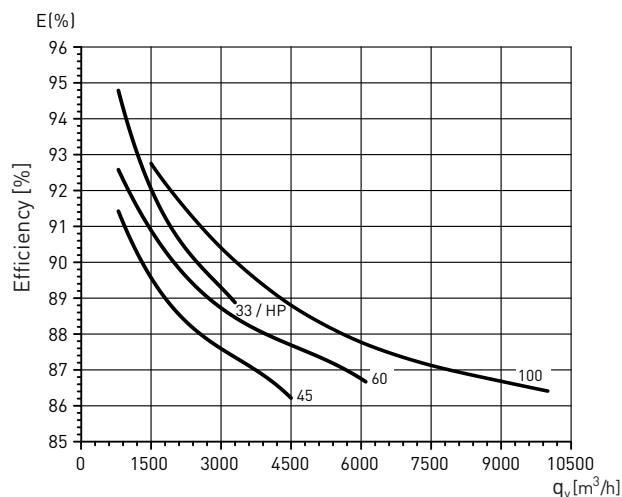
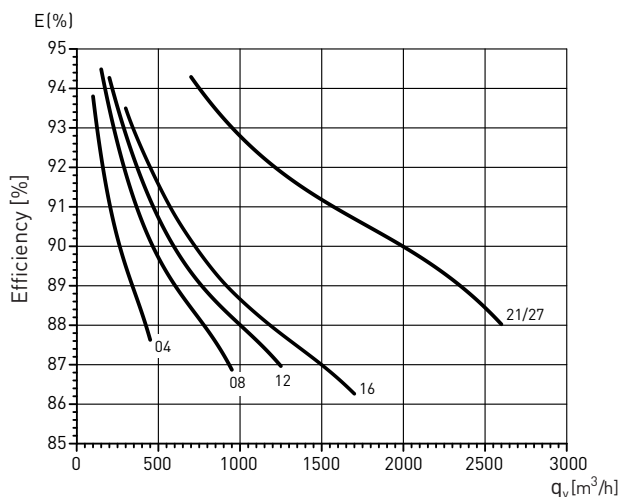
Outdoor temperature: -5°C, RH=80%

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	2.700	-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	4.000	-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	5.400	-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	2.100	-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	2.700	-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	18,4
		5	70	17,3	30,9	82	13,5
CADT-HE 45	4.000	-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	5.400	-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)*

Vertical Versions

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 DC 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

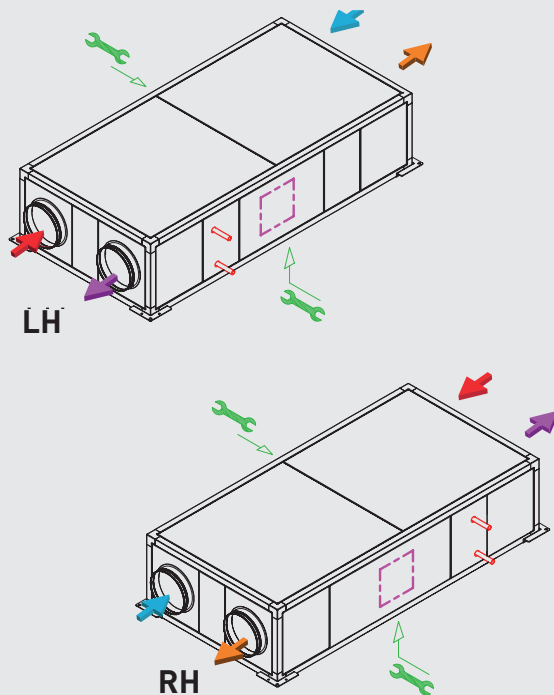
* Air inlet conditions to the battery (output from the heat recovery unit) = 17°C 25% RH

STANDARD CONFIGURATIONS CADB/T-HE D/DC/DI ECOWATT

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

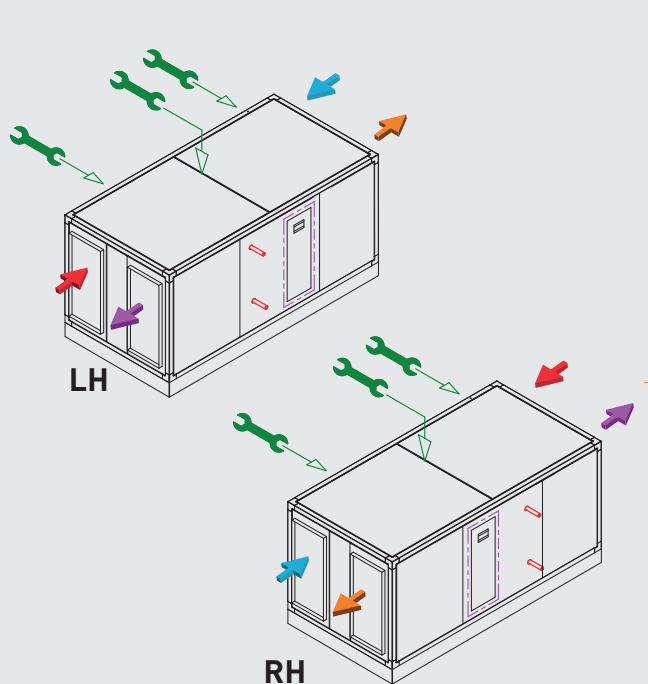


CADB/T-HE 04 to 33
Horizontal versions (false-ceiling)

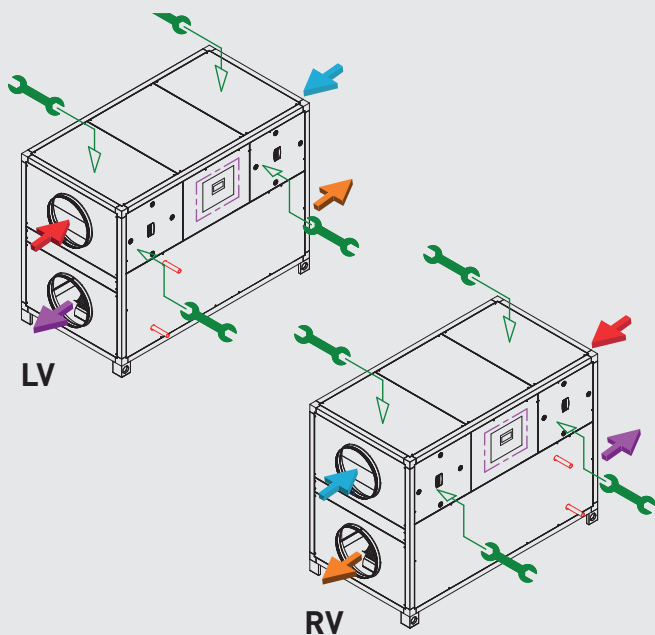


CADT-HE 33HP: Rectangular inlets

CADT-HE 45 and 60
Horizontal versions

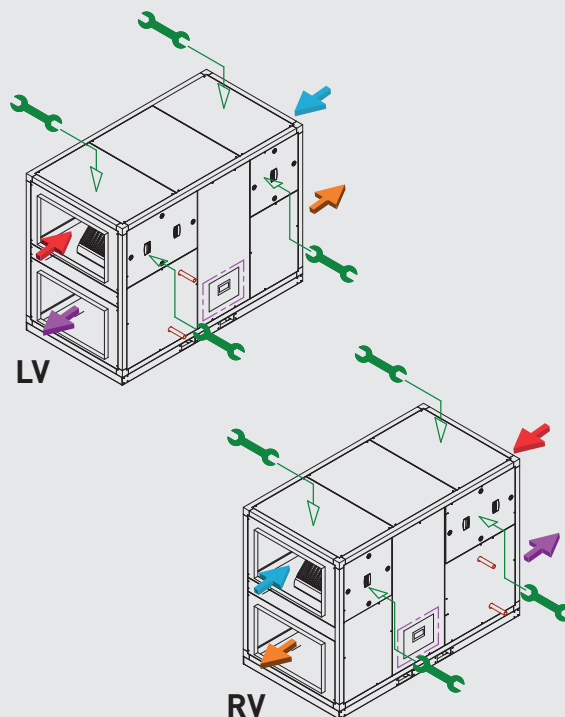


CADB/T-HE 04 to 33
Vertical versions

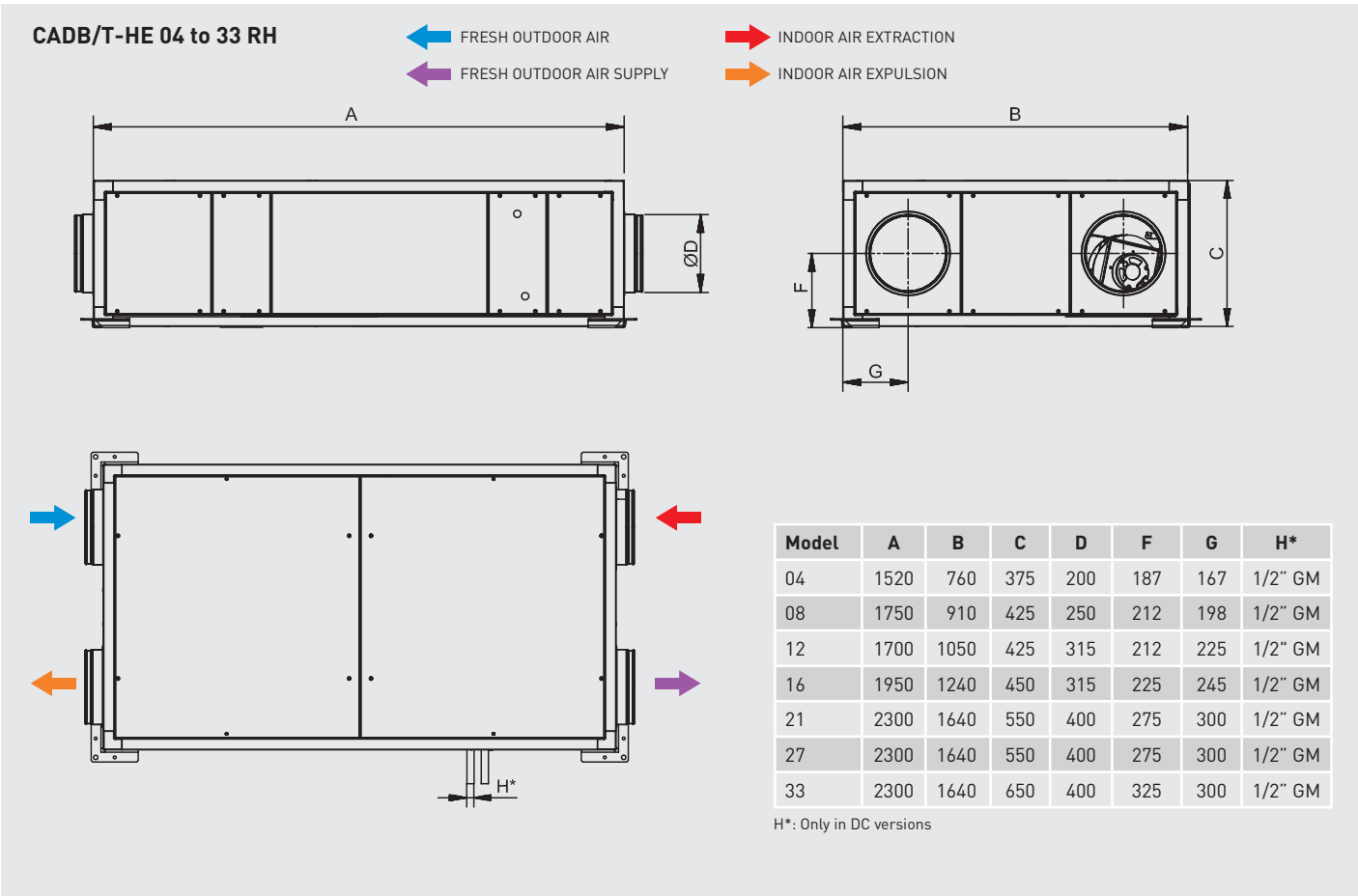
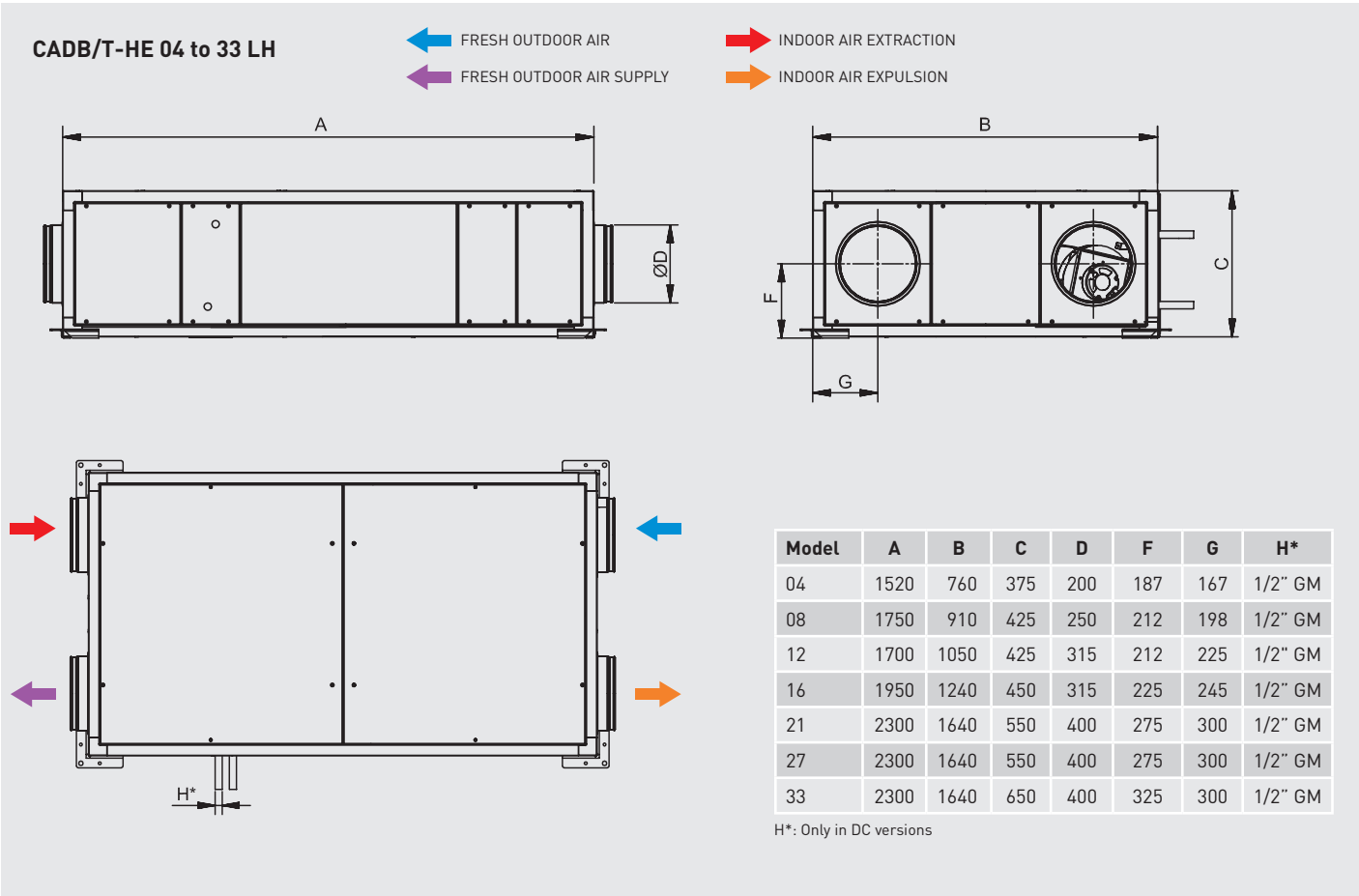


CADT-HE 33HP: Rectangular inlets

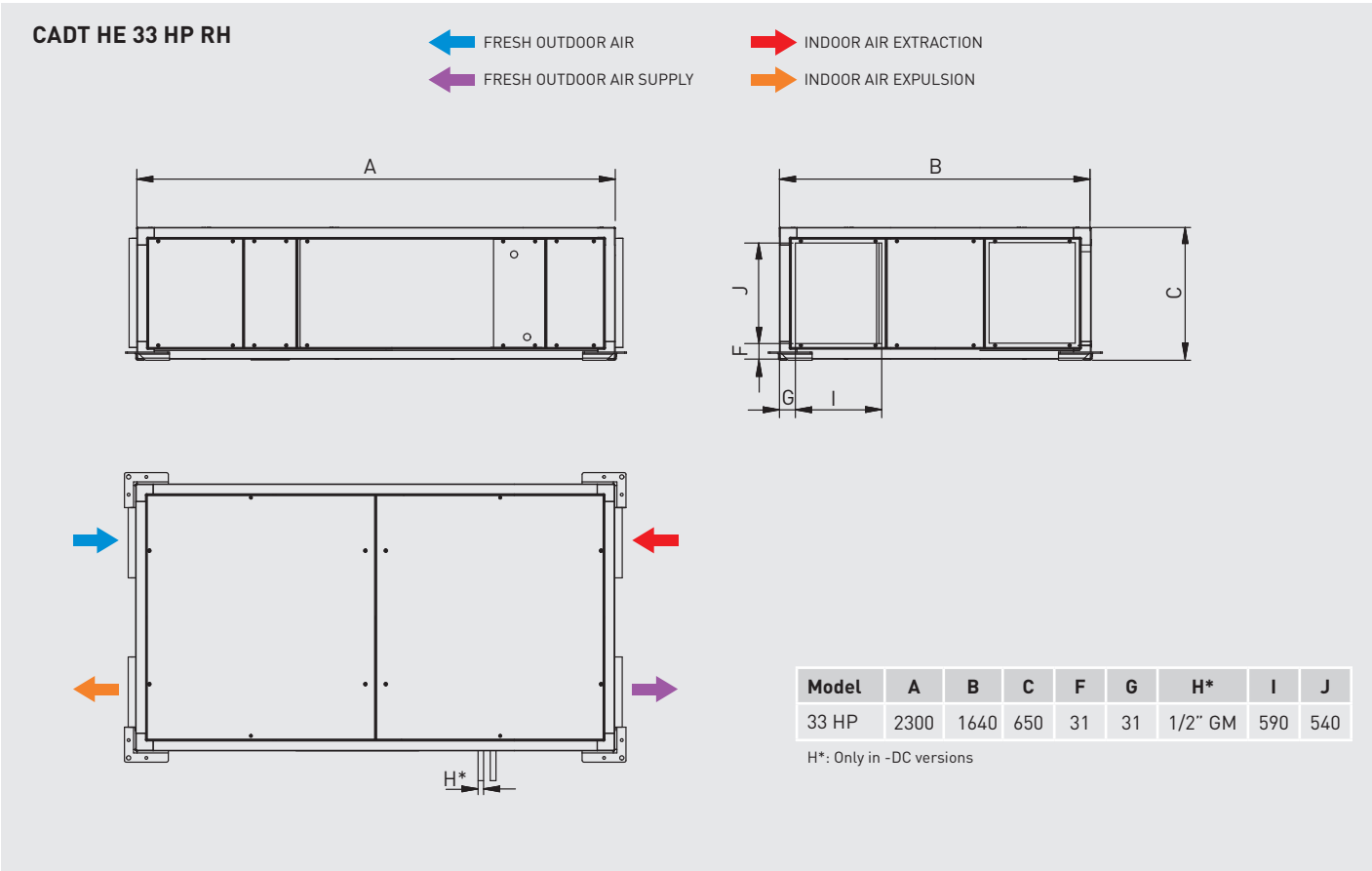
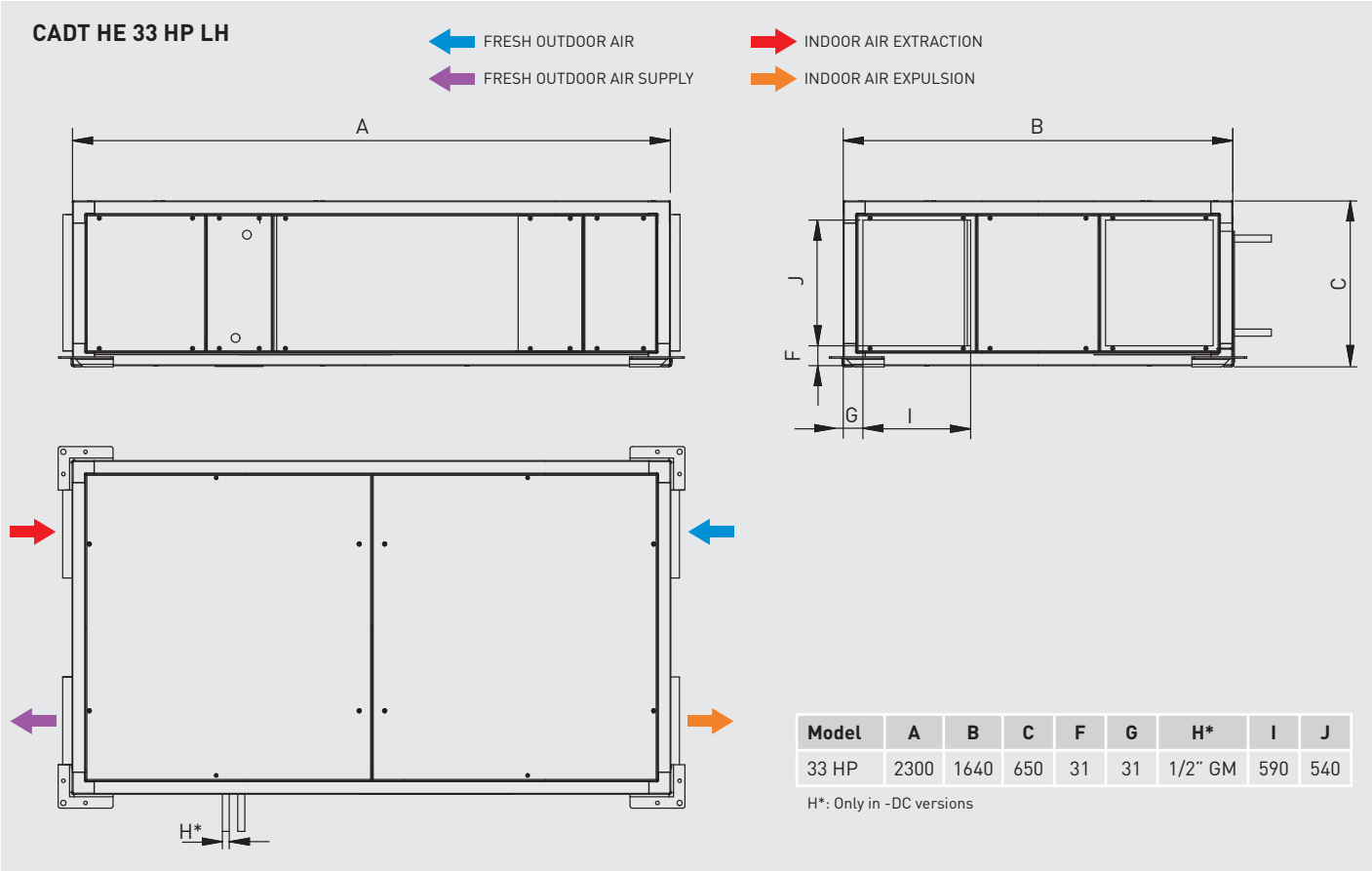
CADT-HE 45 to 100
Vertical versions



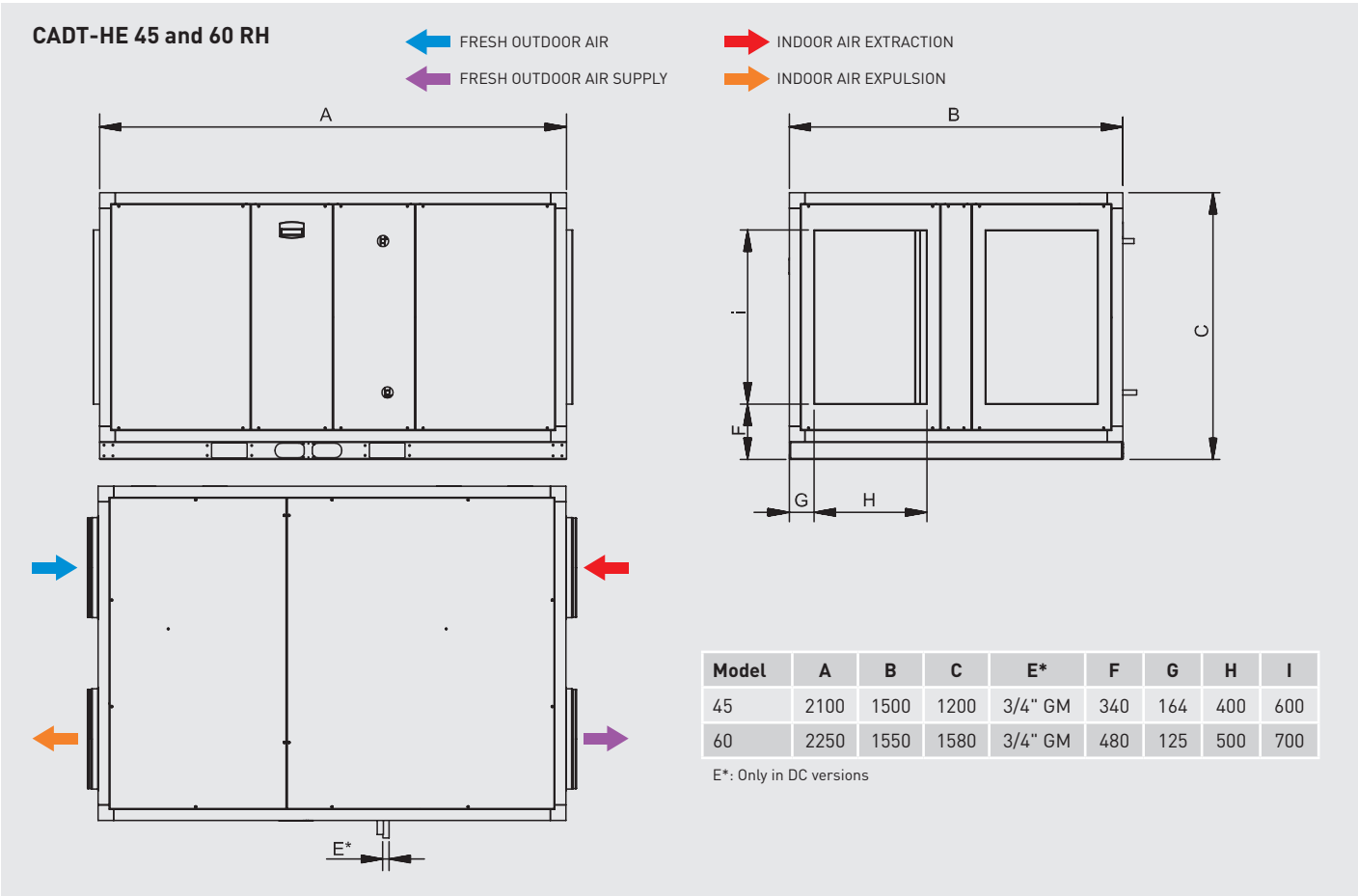
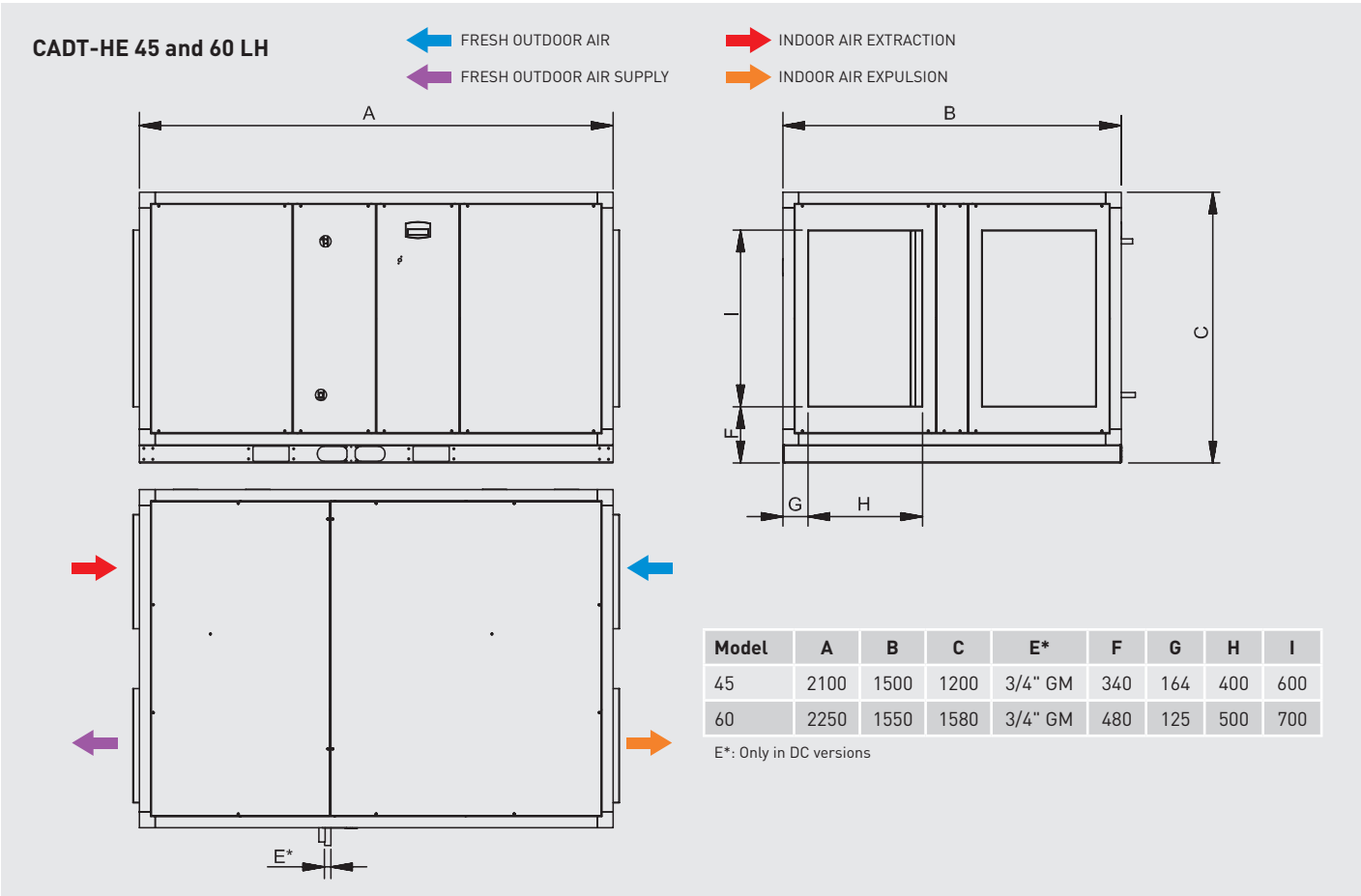
DIMENSIONS (mm)



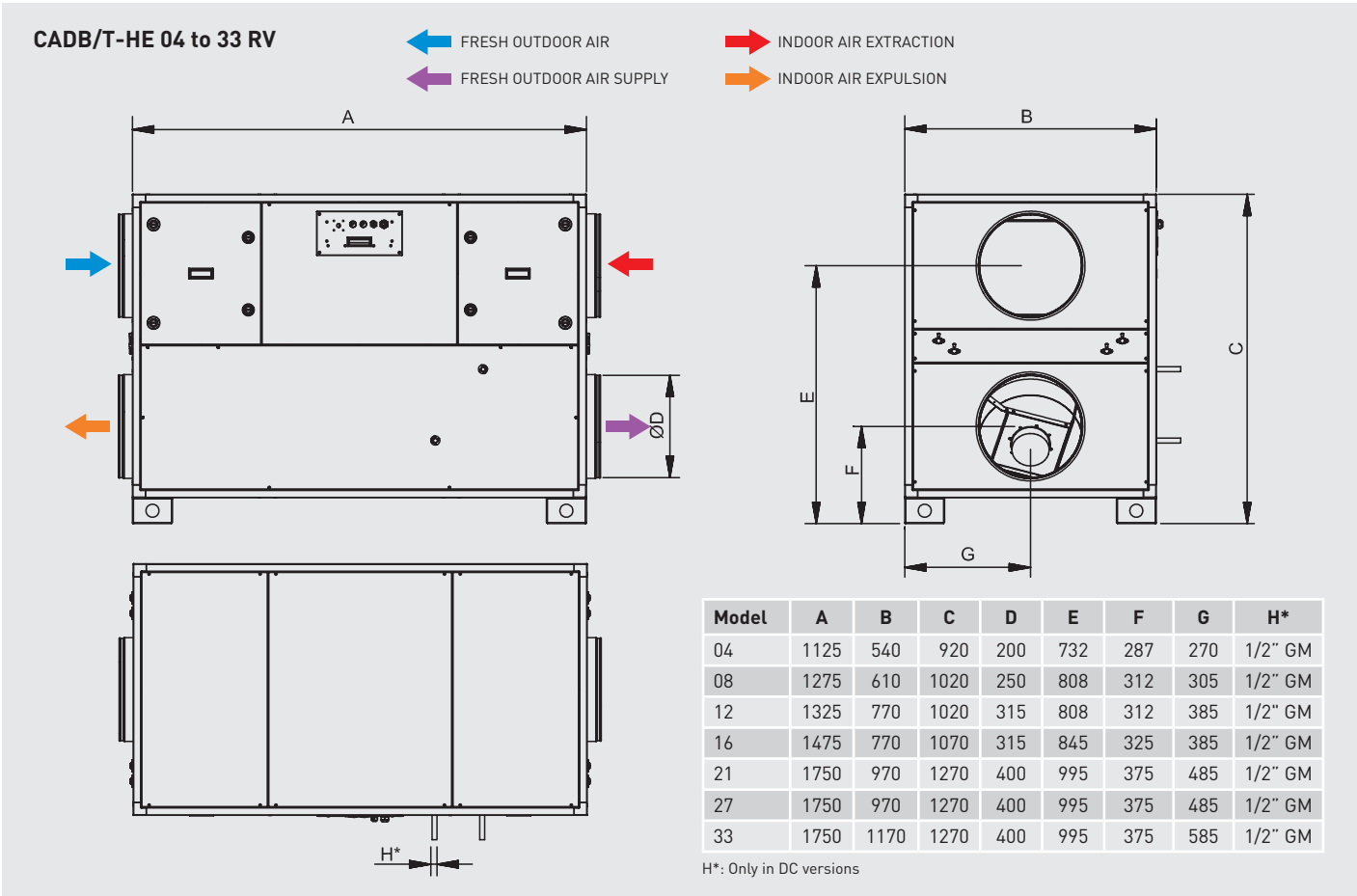
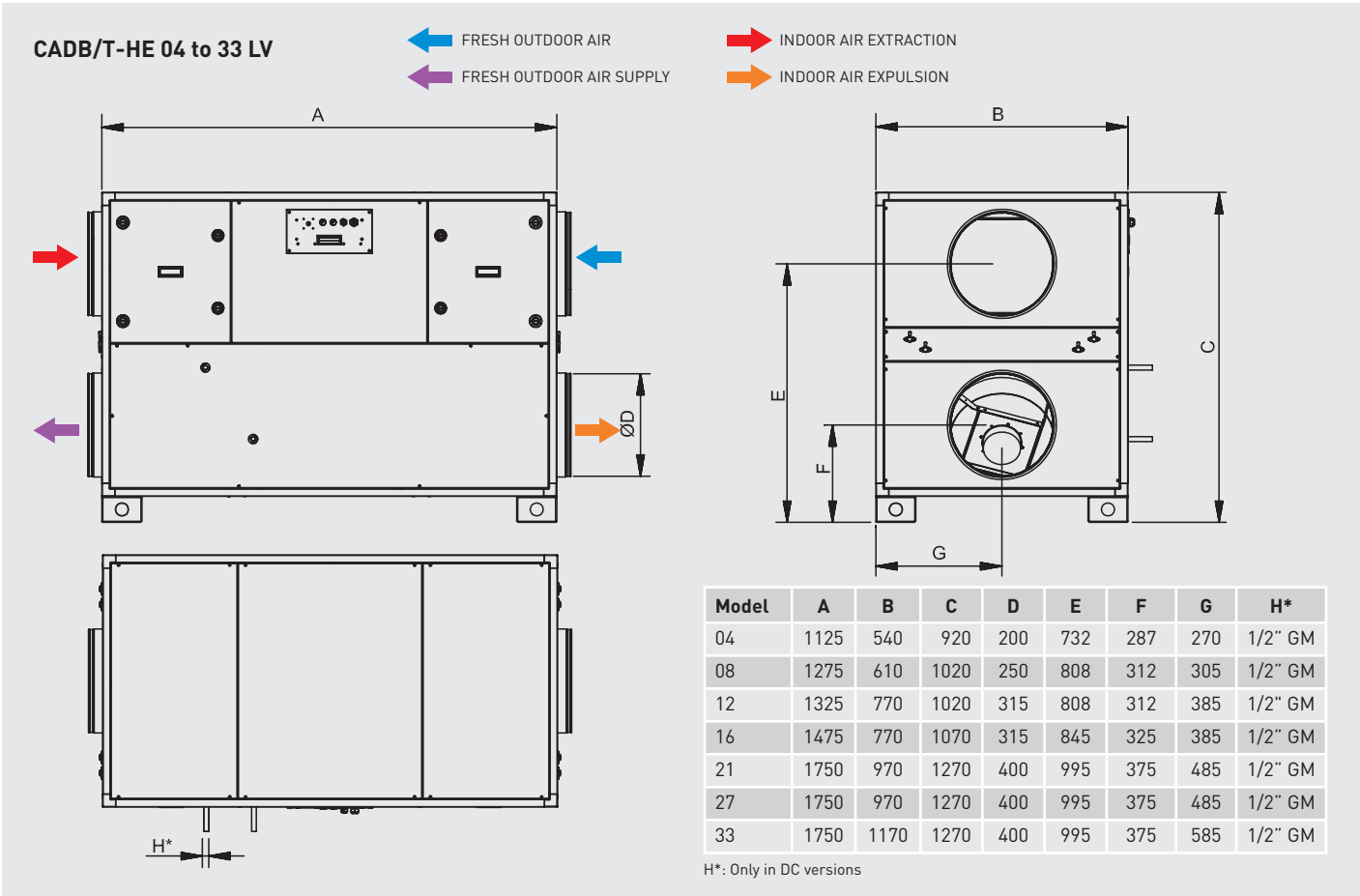
DIMENSIONS (mm)



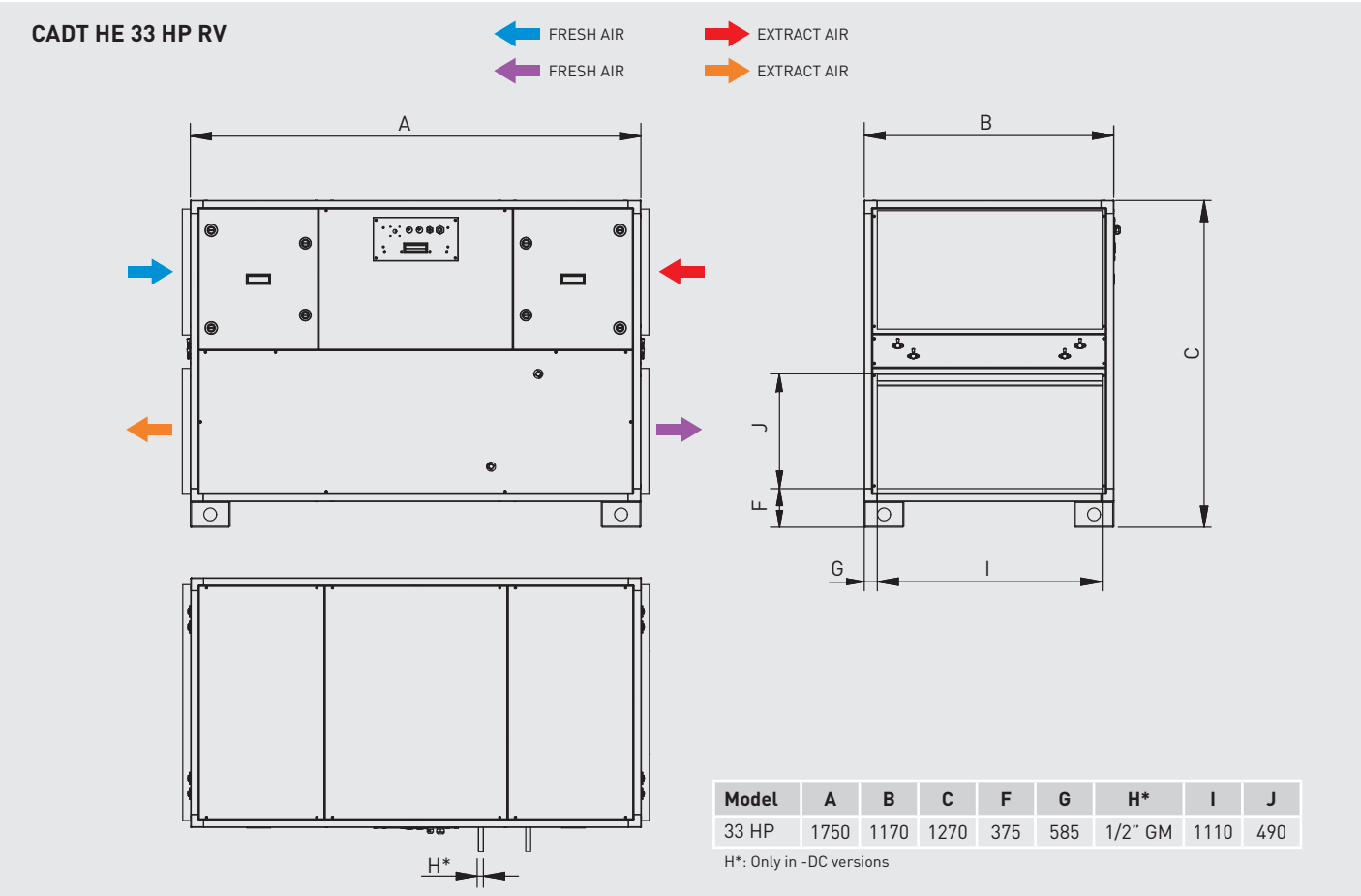
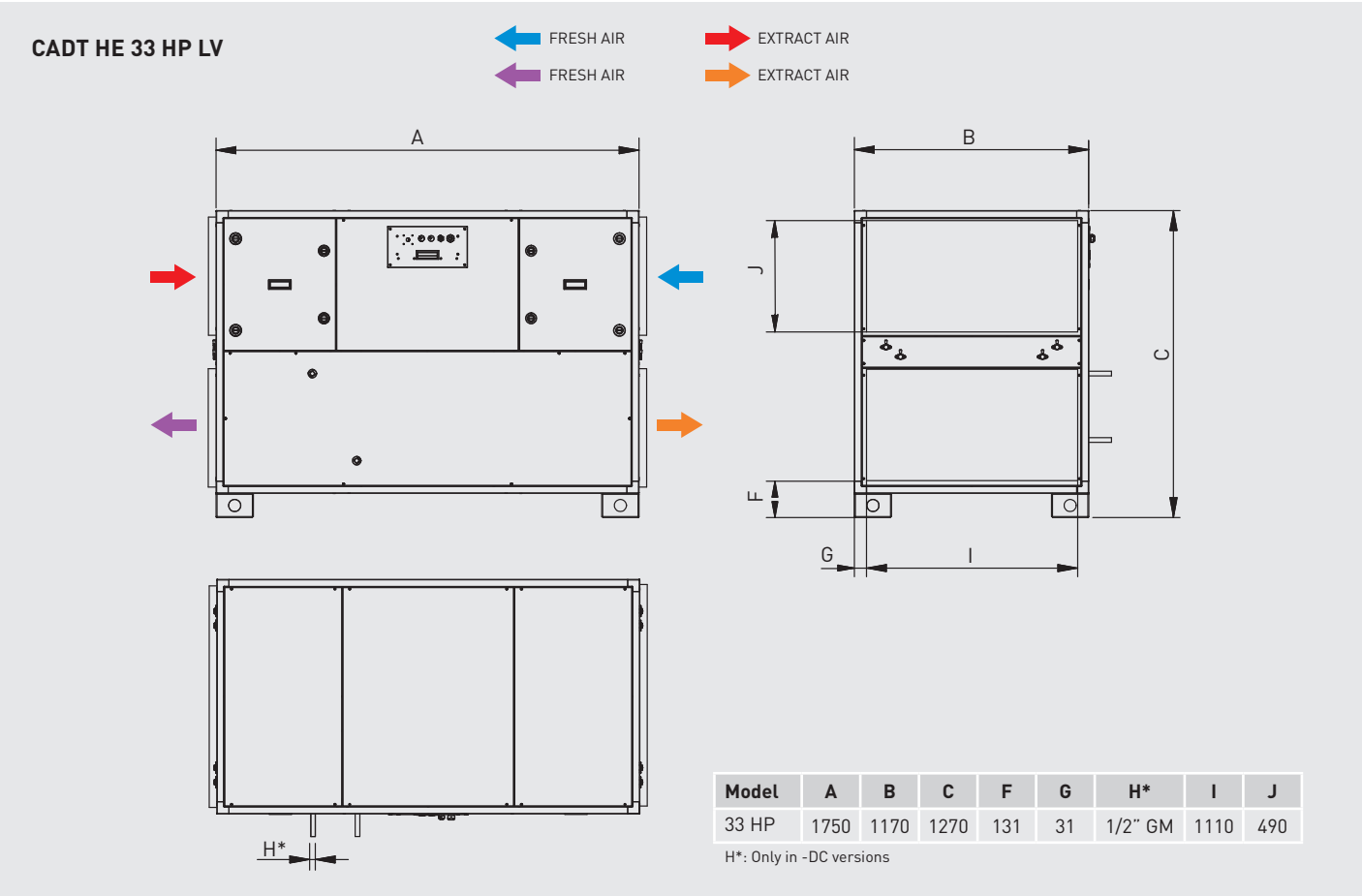
DIMENSIONS (mm)



DIMENSIONS (mm)

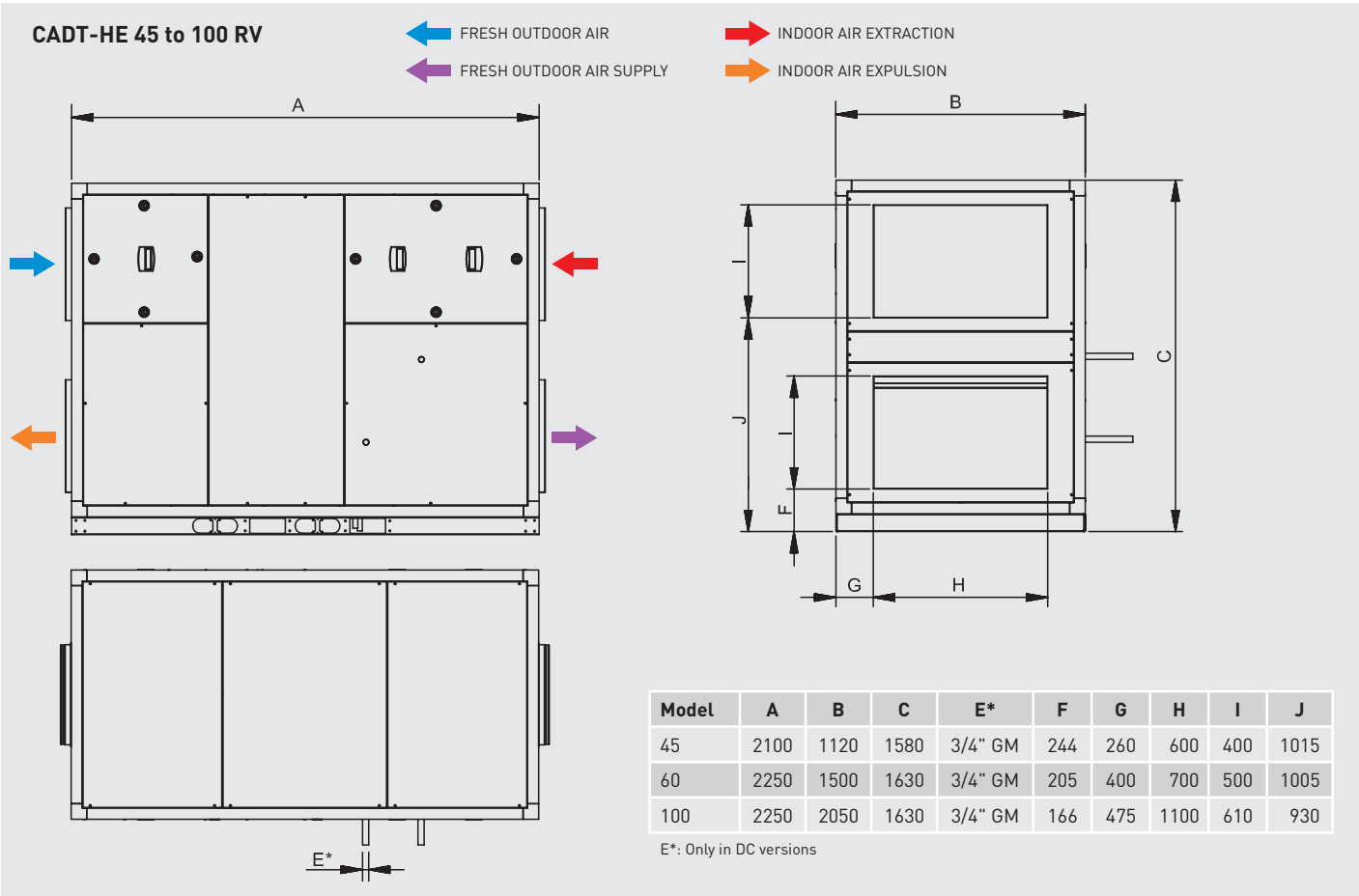
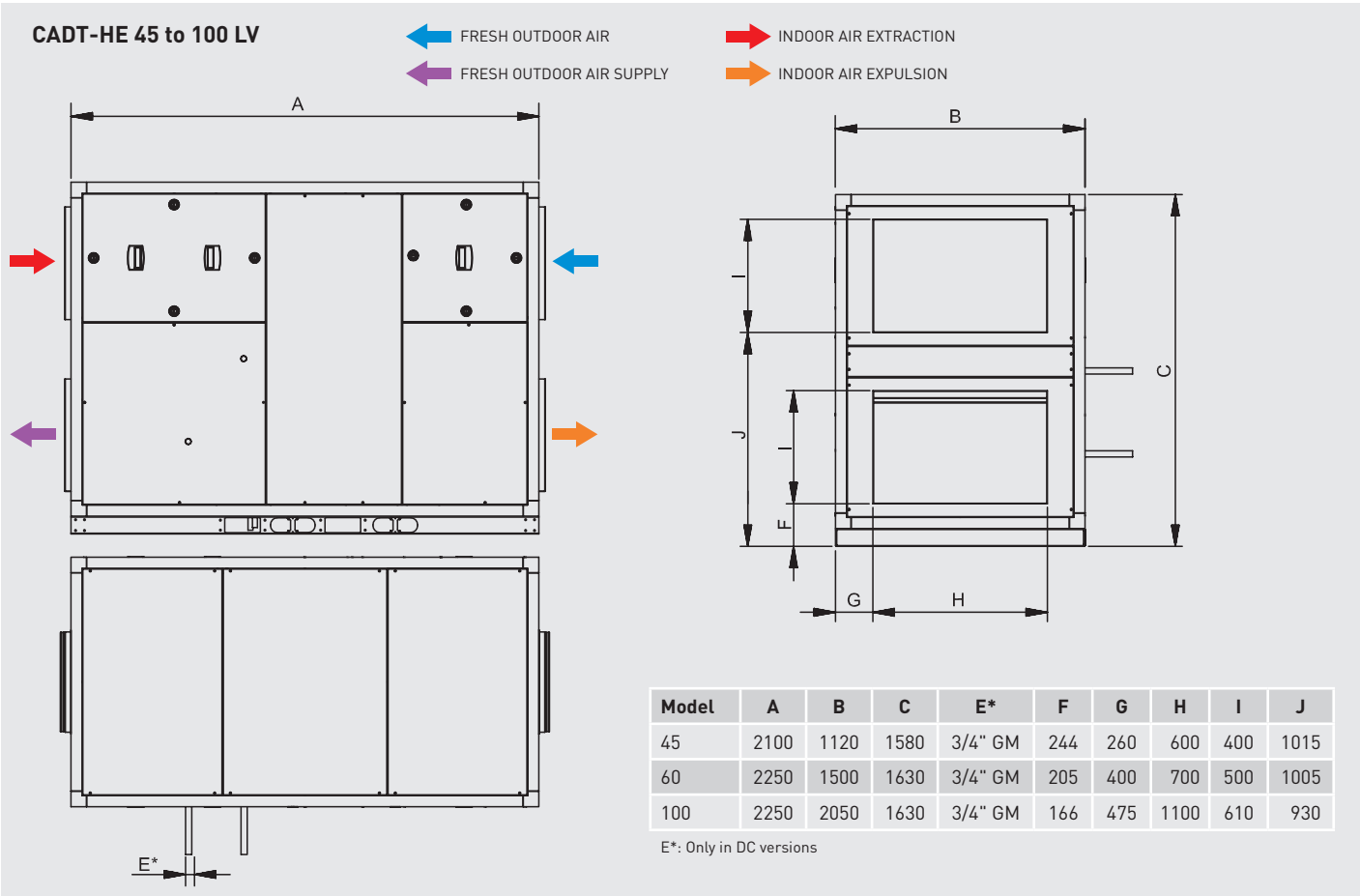


DIMENSIONS (mm)





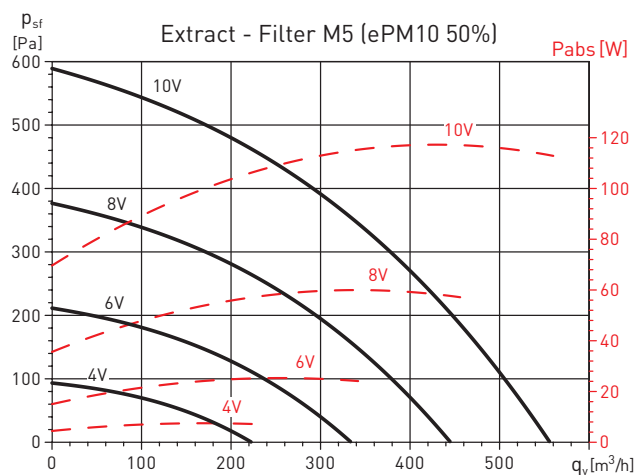
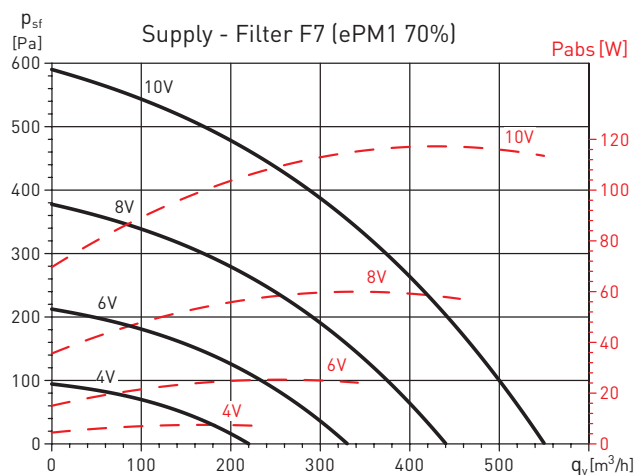
DIMENSIONS (mm)



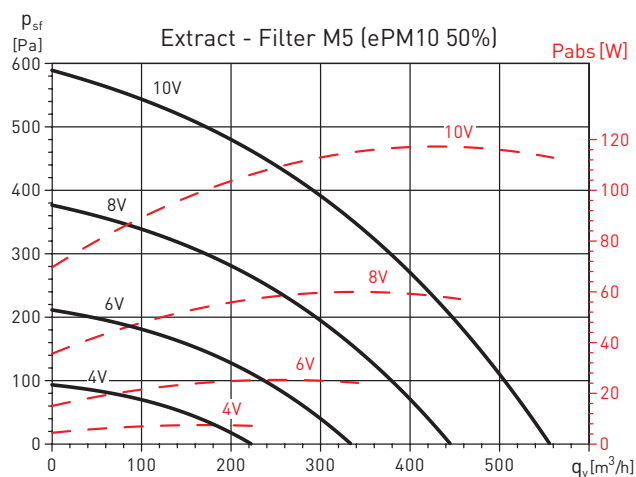
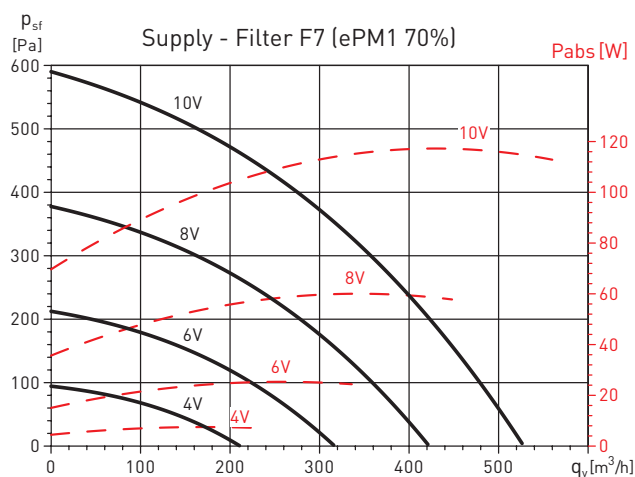
PERFORMANCE CURVES

- 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.

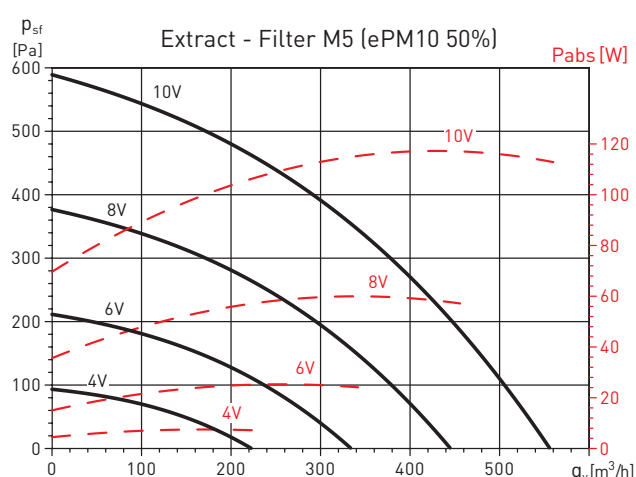
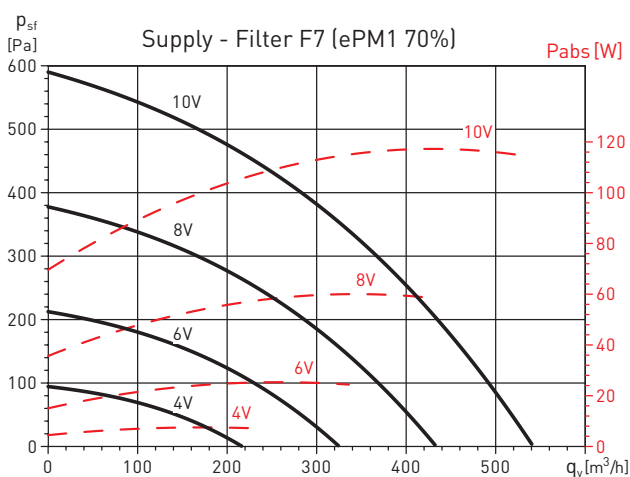
CADB-HE-D 04



CADB-HE-DC 04



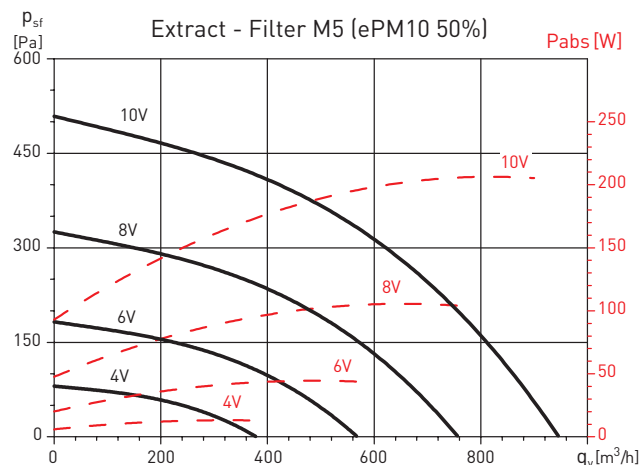
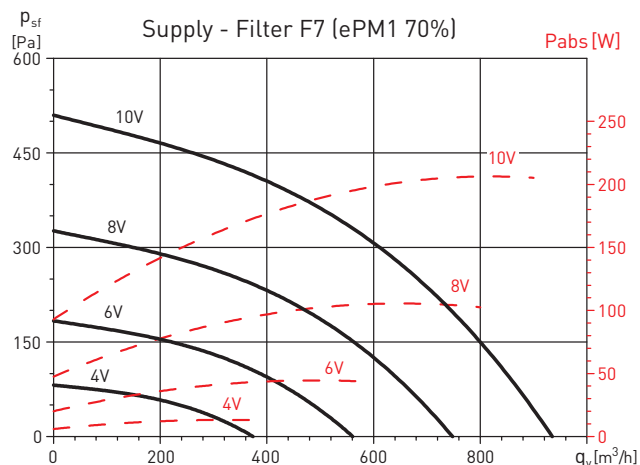
CADB-HE-DI 04



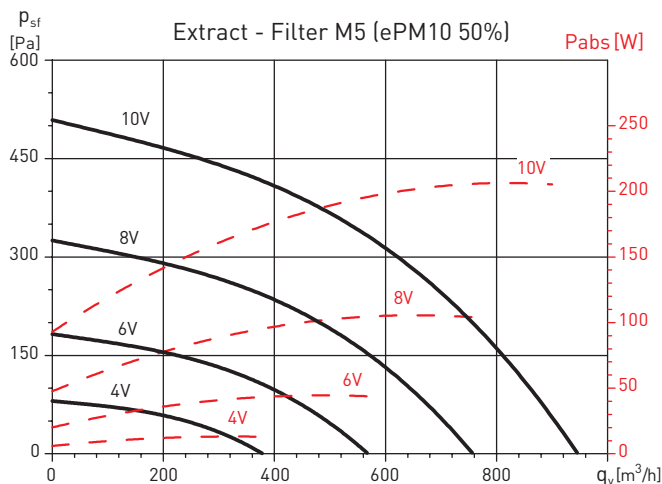
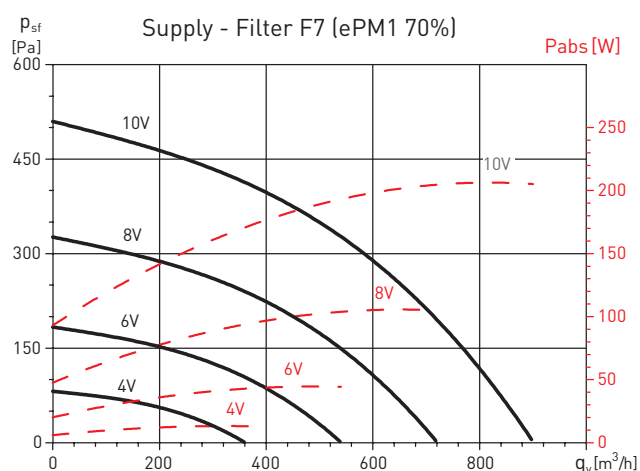
PERFORMANCE CURVES

- 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.

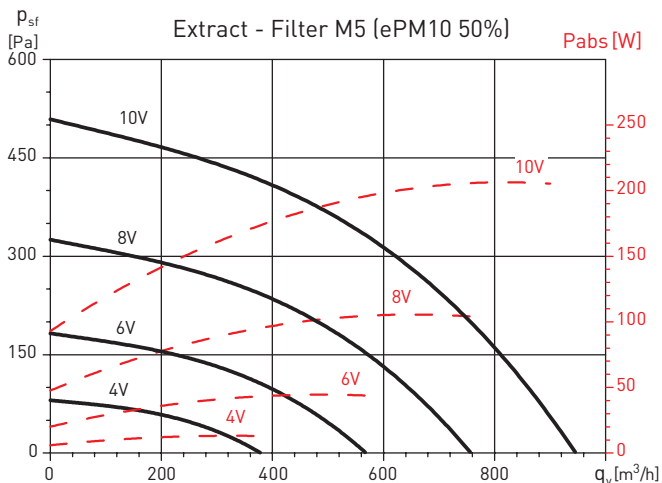
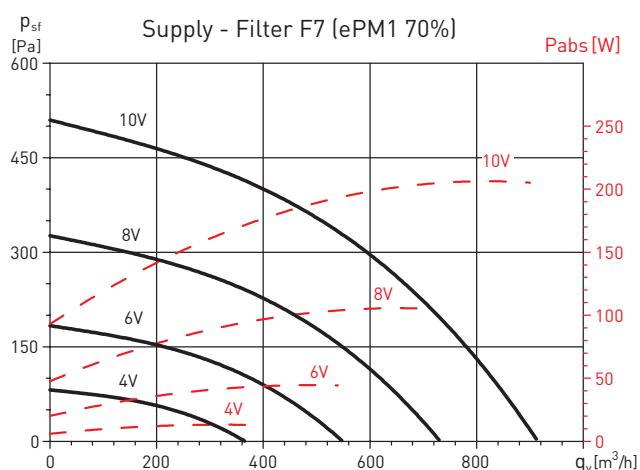
CADB-HE-D 08



CADB-HE-DC 08



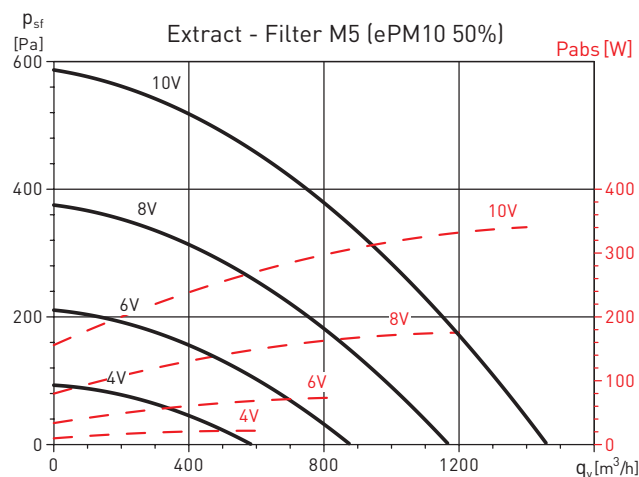
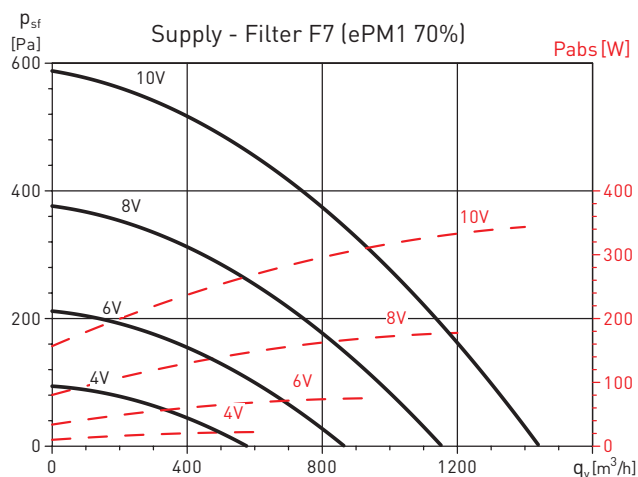
CADB-HE-DI 08



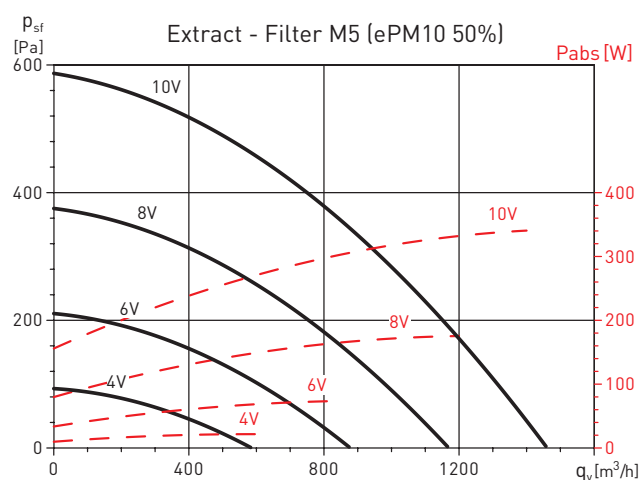
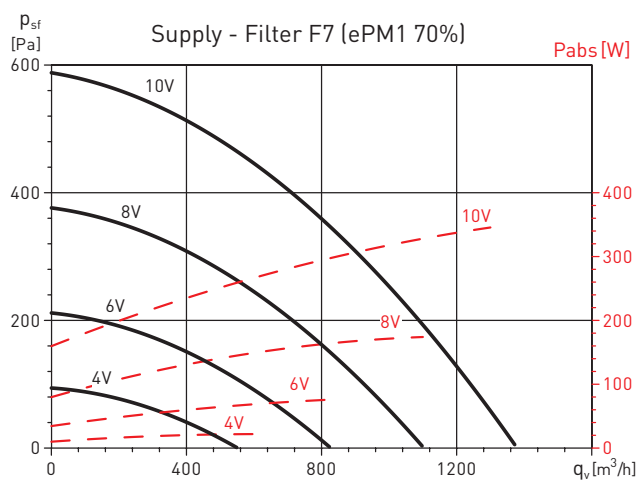
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- Pabs: 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.

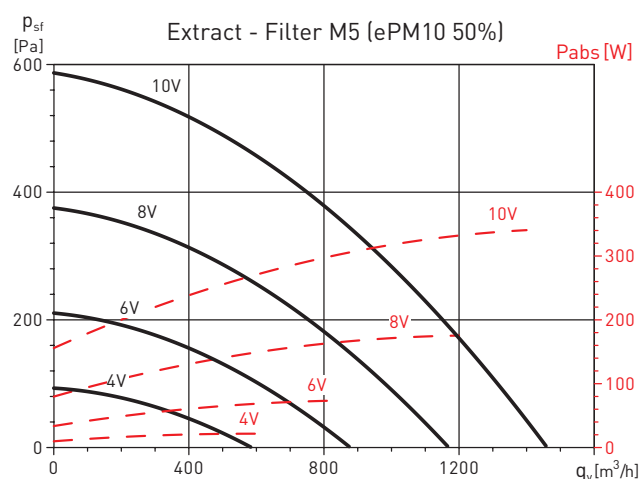
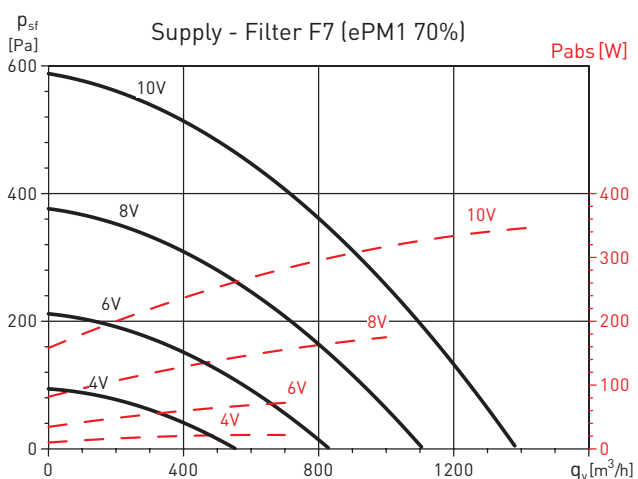
CADB-HE-D 12



CADB-HE-DC 12



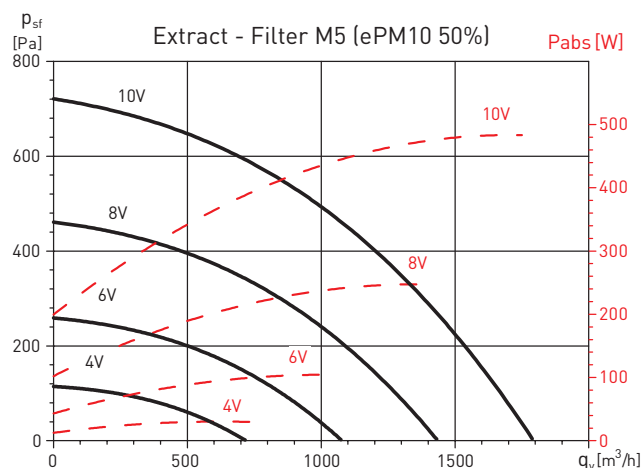
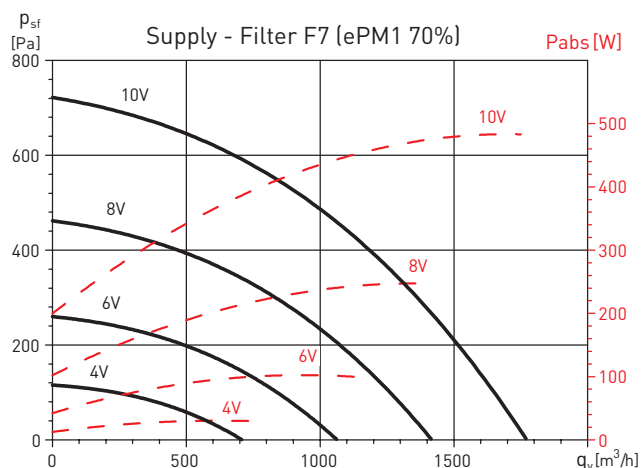
CADB-HE-DI 12



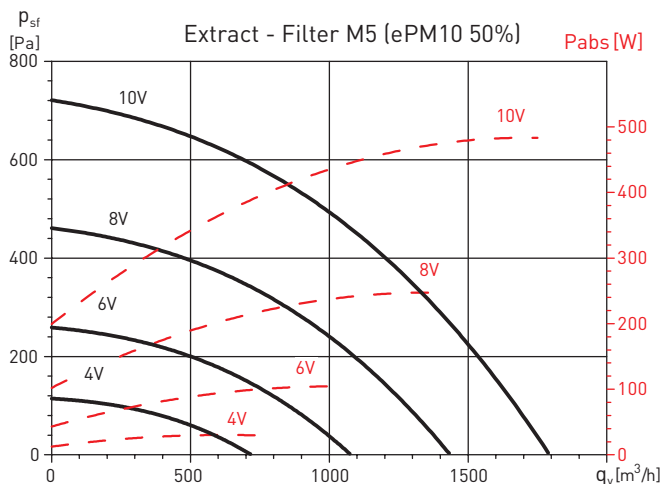
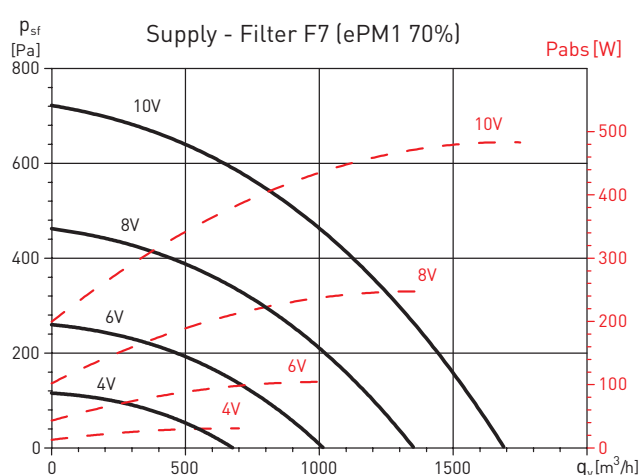
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- 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.

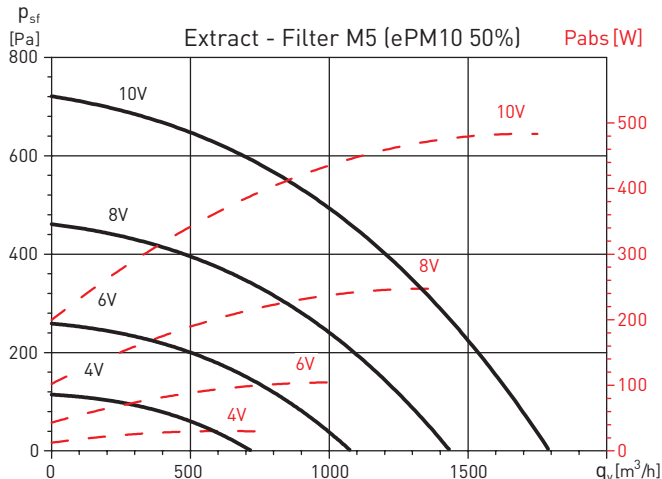
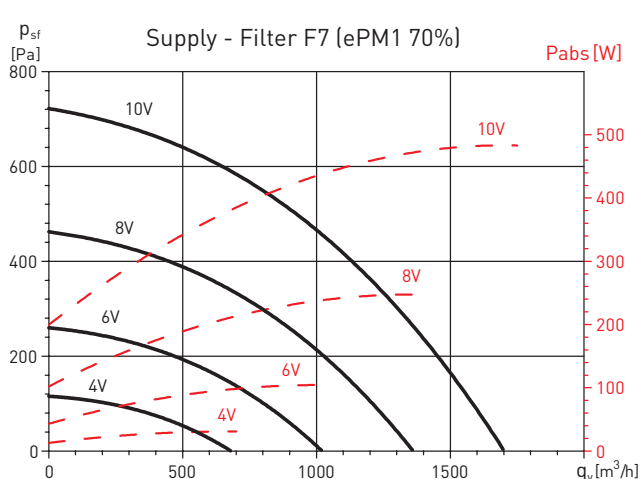
CADB-HE-D 16



CADB-HE-DC 16



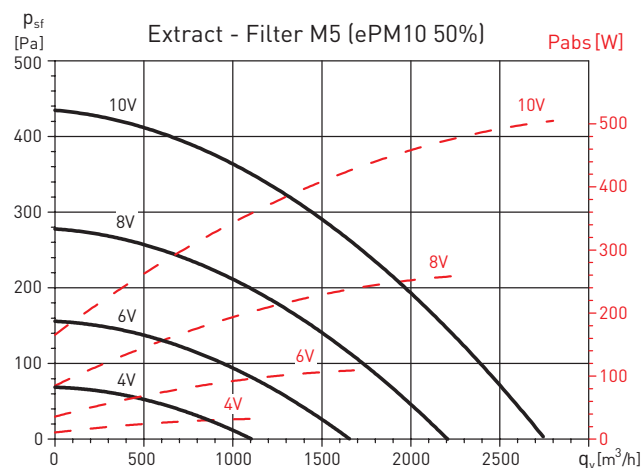
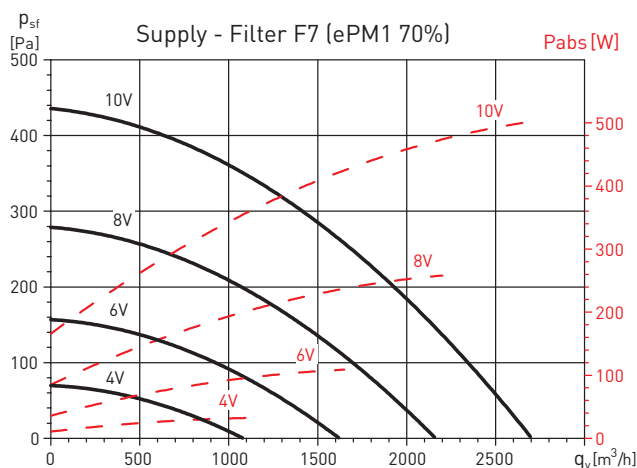
CADB-HE-DI 16



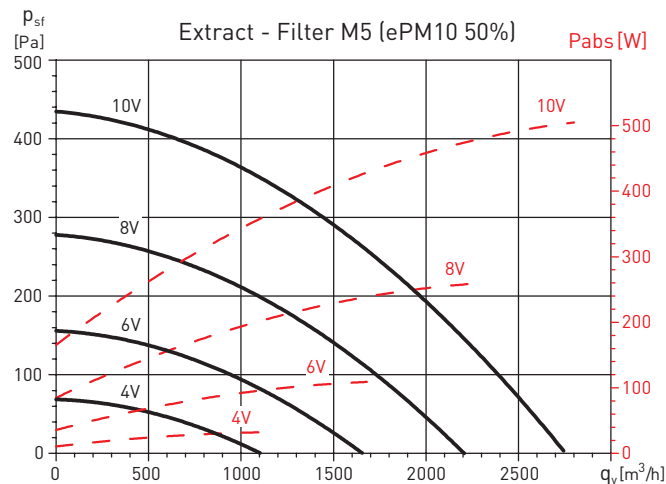
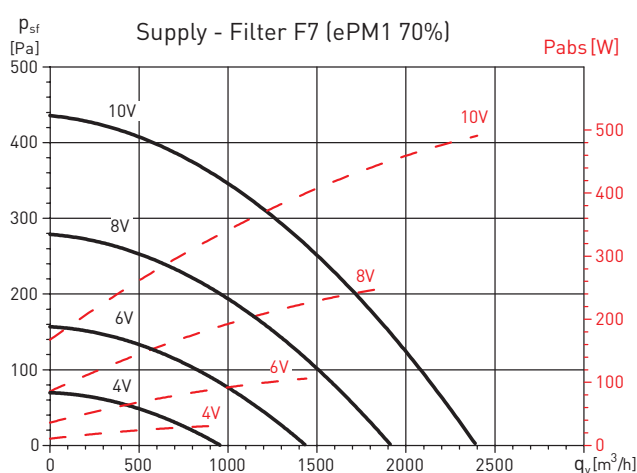
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- 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.

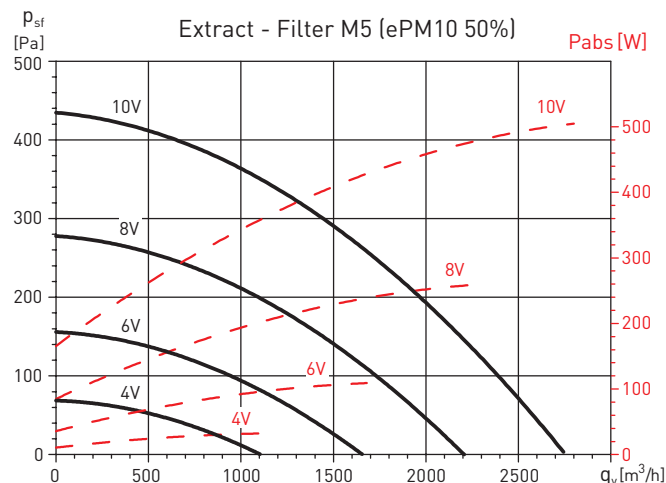
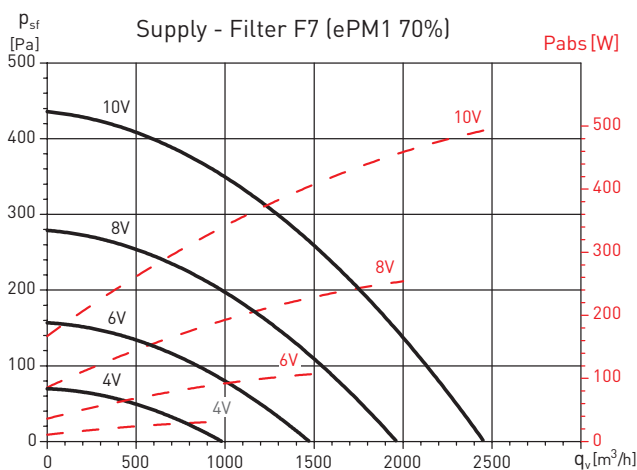
CADB-HE-D 21



CADB-HE-DC 21



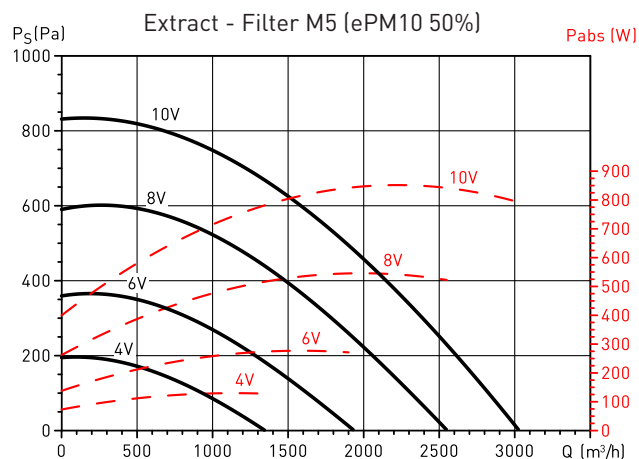
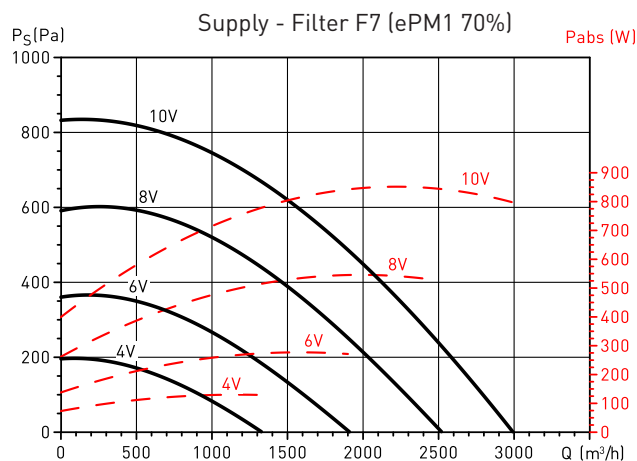
CADT-HE-DI 21



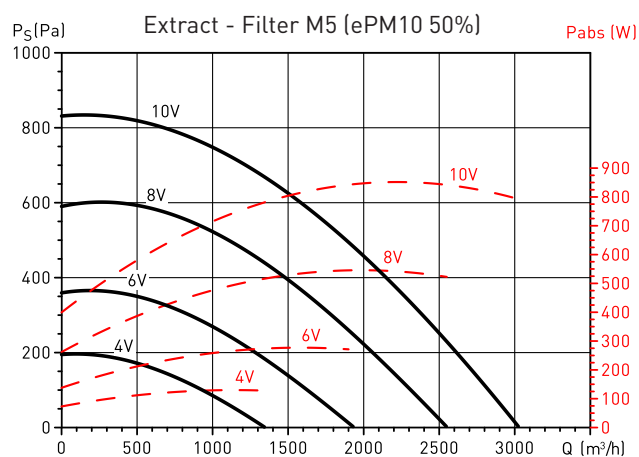
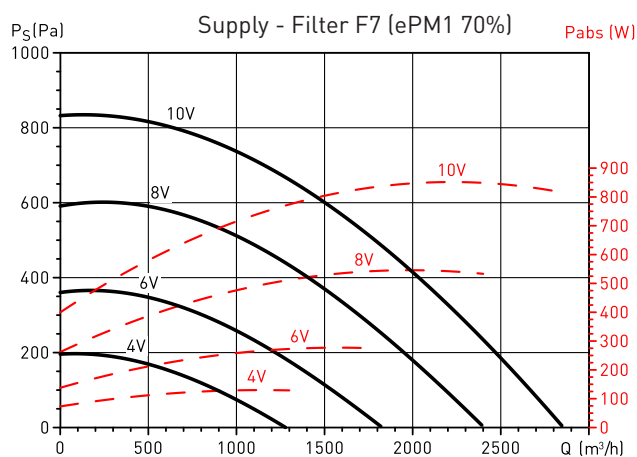
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- 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.

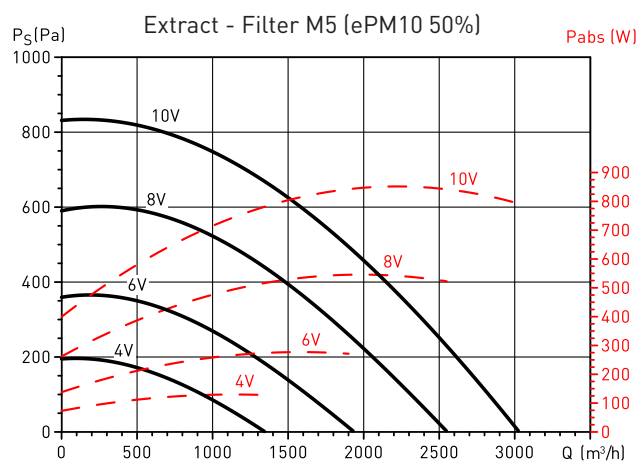
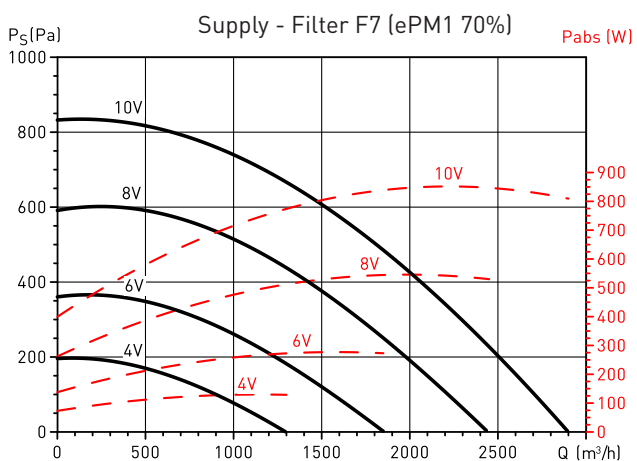
CADB-HE-D 27



CADB-HE-DC 27



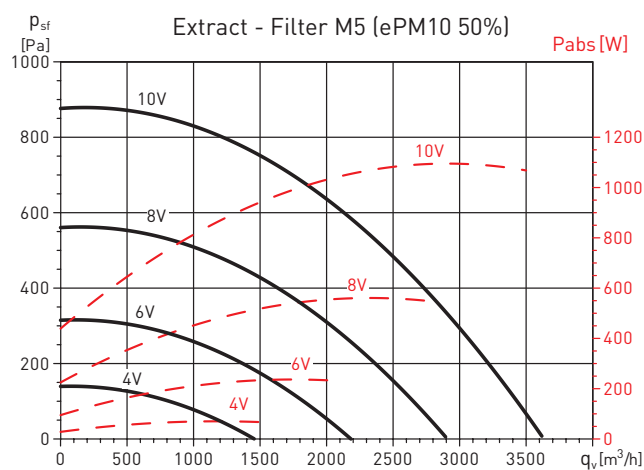
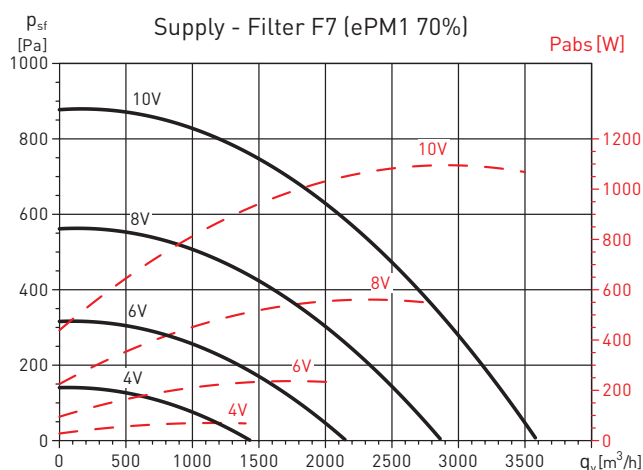
CADT-HE-DI 27



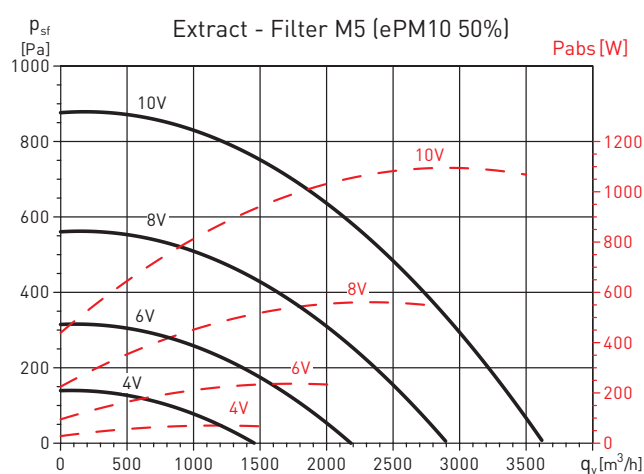
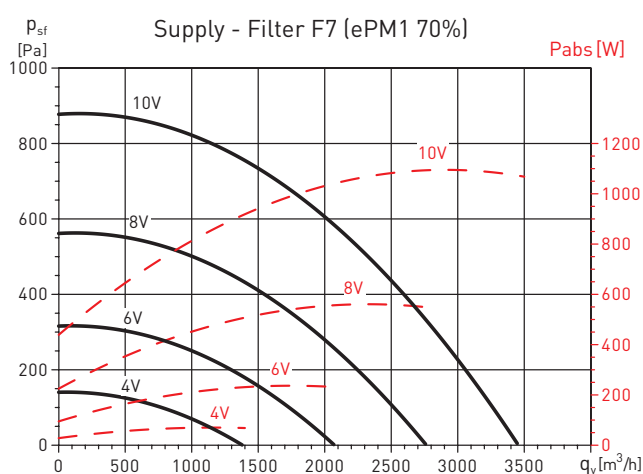
PERFORMANCE CURVES

- 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.

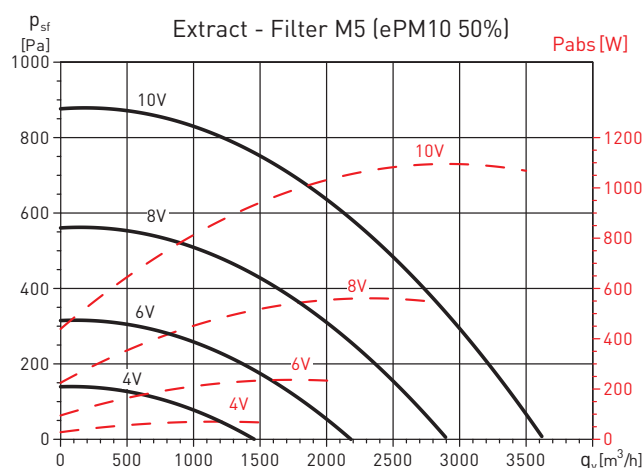
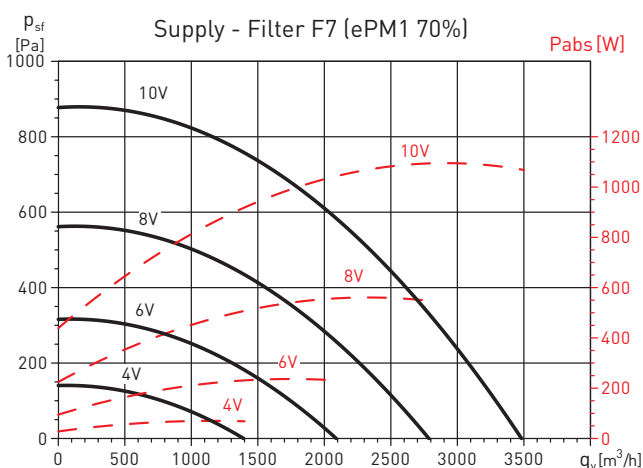
CADB-HE-D 33



CADB-HE-DC 33



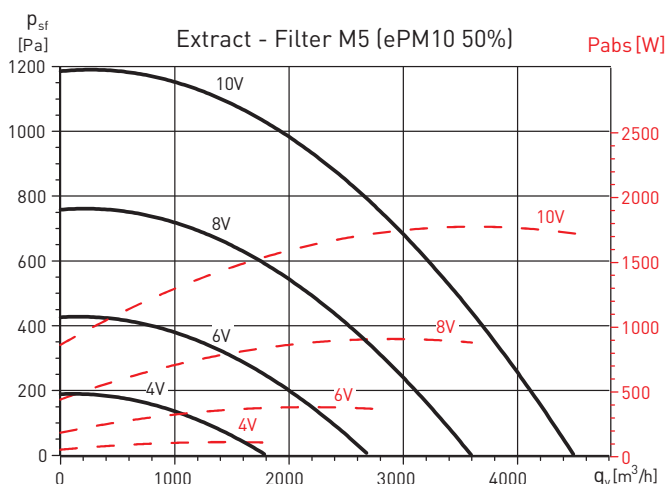
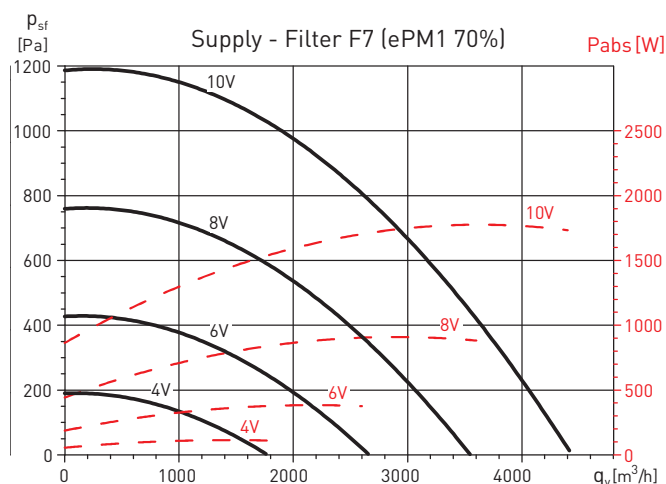
CADT-HE-DI 33



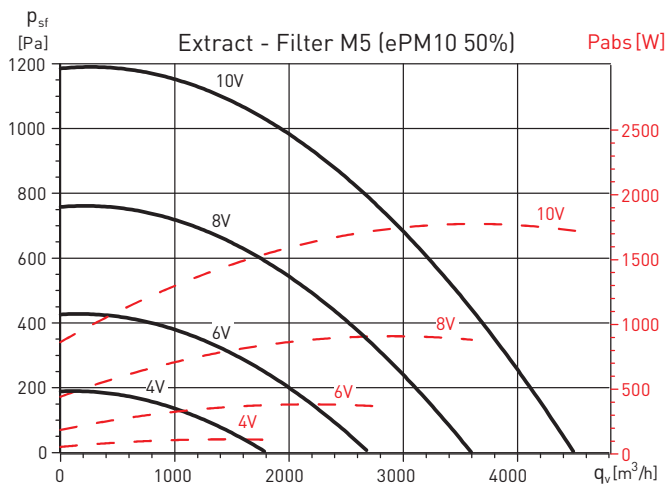
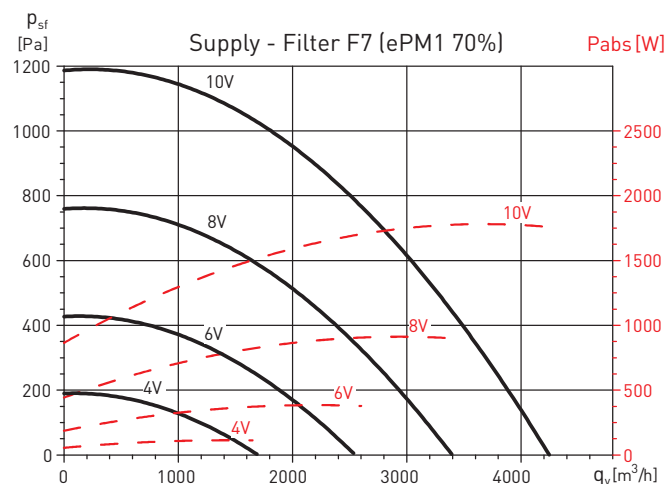
PERFORMANCE CURVES

- 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.

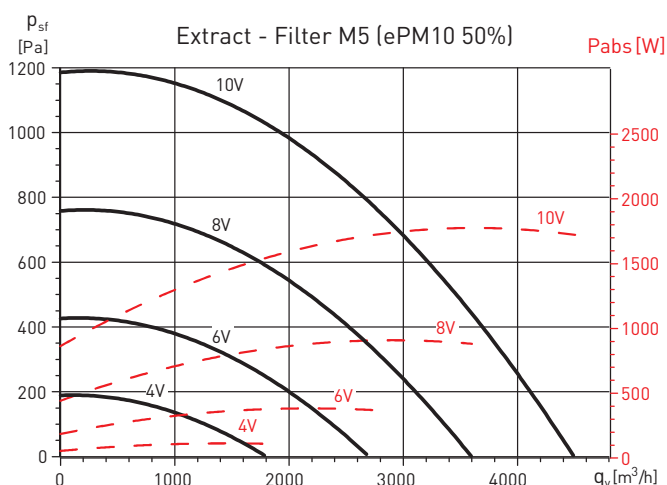
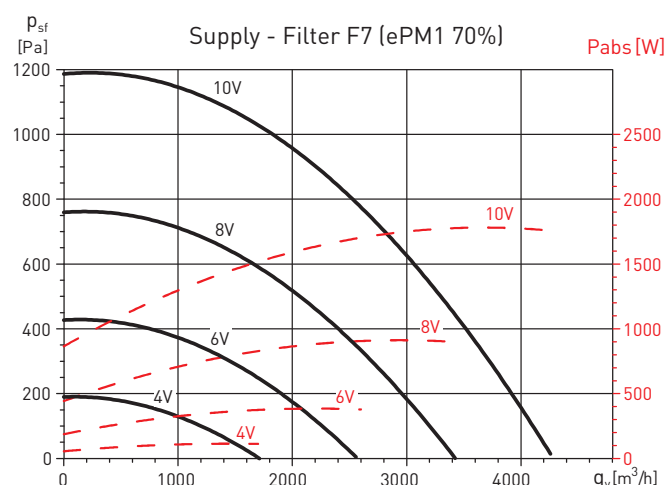
CADT-HE-D 33 HP



CADT-HE-DC 33 HP



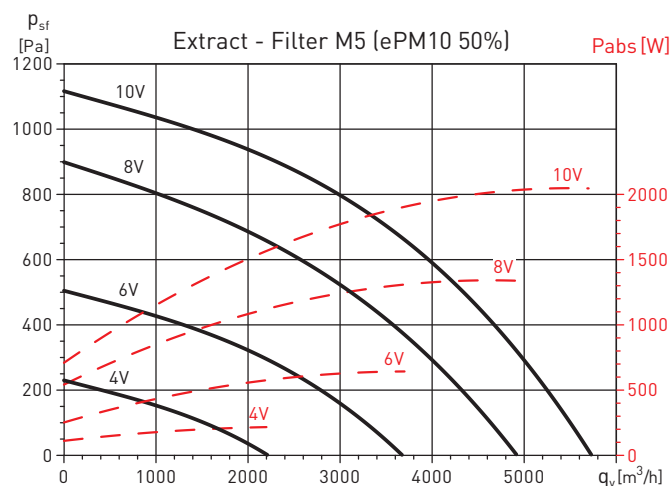
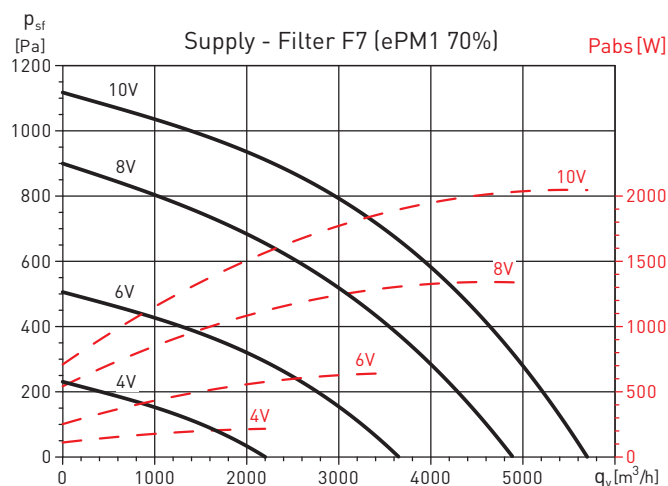
CADT-HE-DI 33 HP



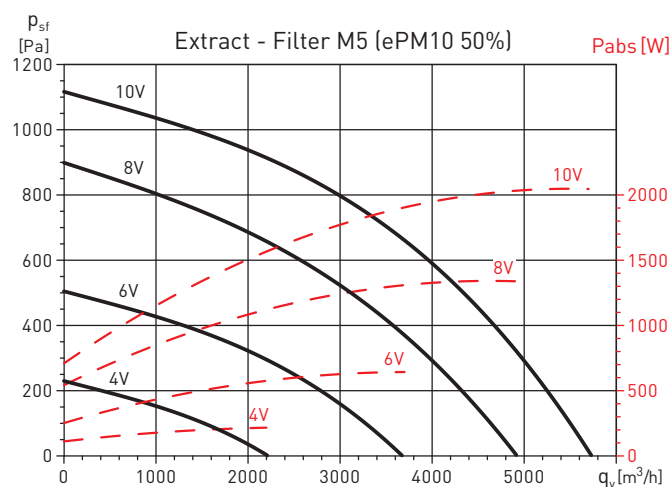
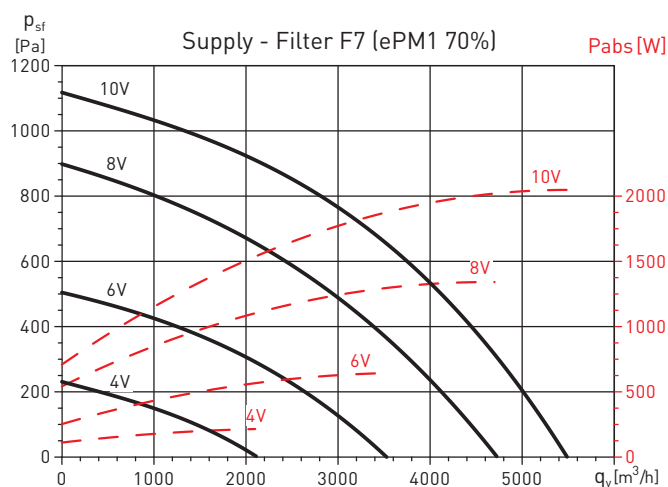
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- 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.

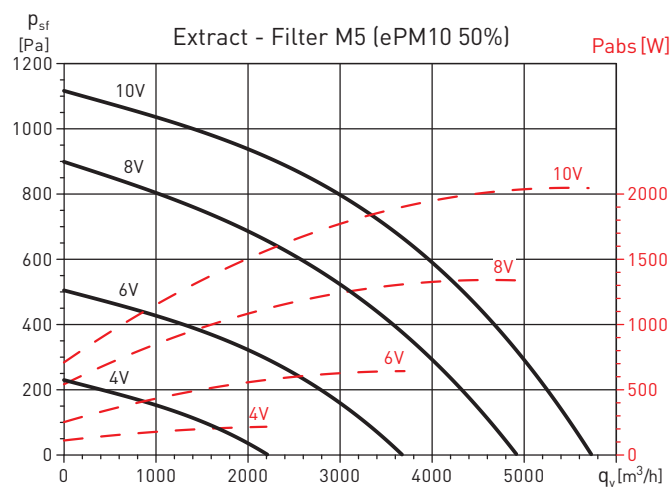
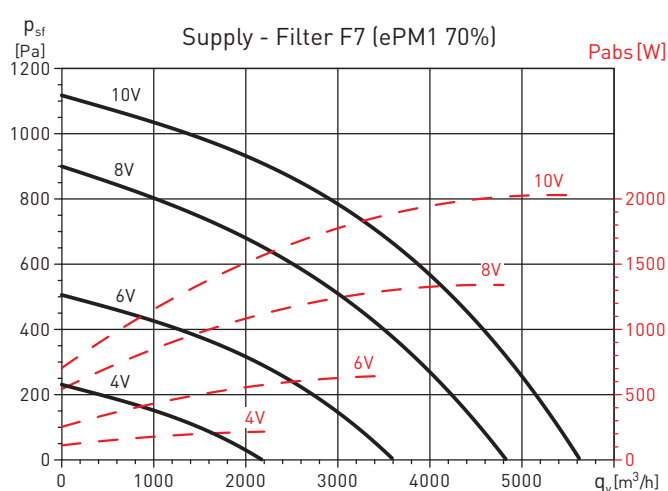
CADT-HE-D 45



CADT-HE-DC 45



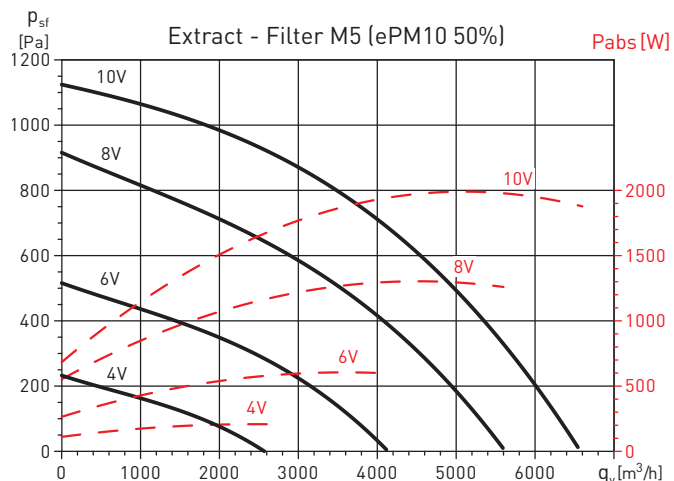
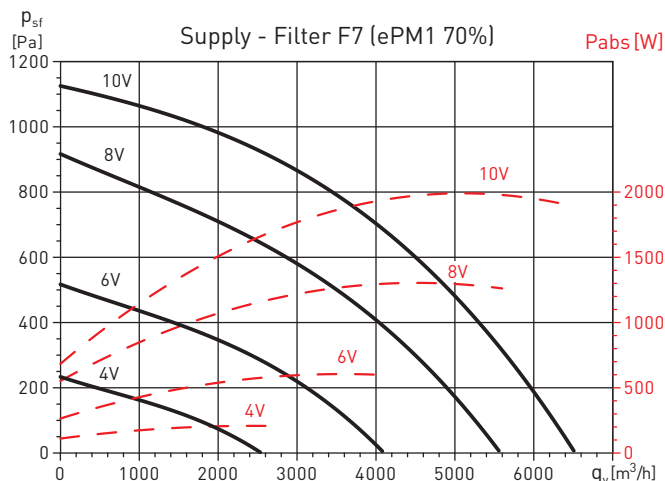
CADT-HE-DI 45



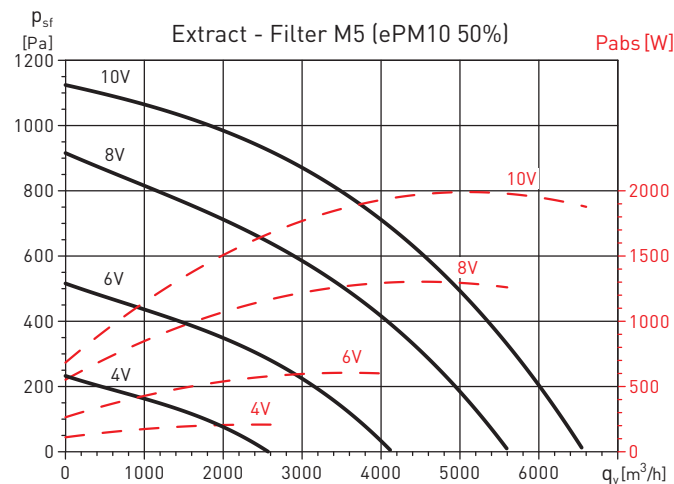
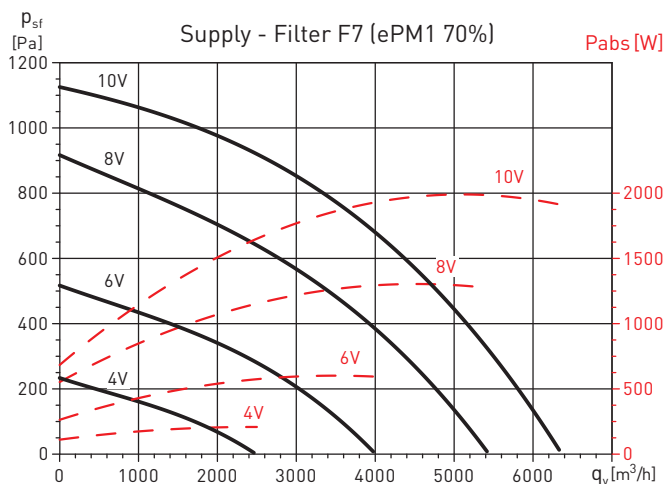
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- 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.

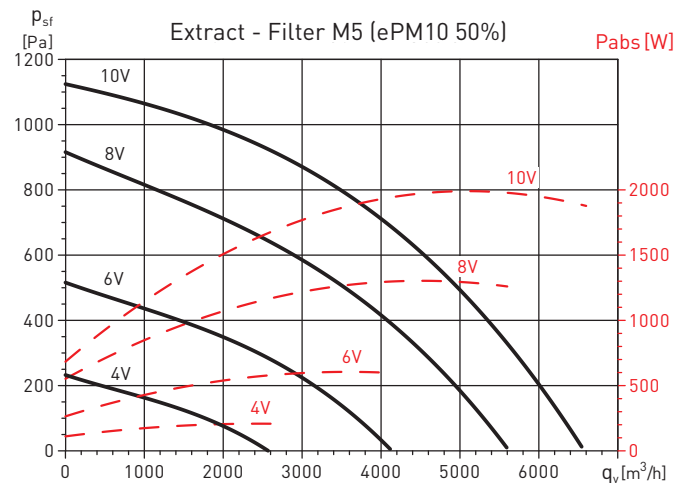
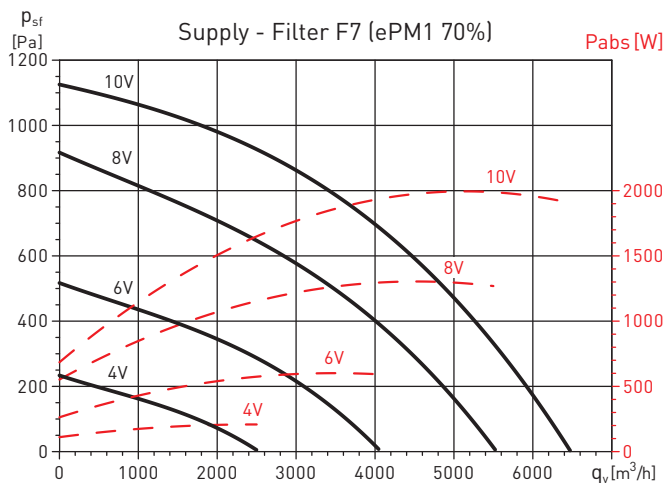
CADT-HE-D 60



CADT-HE-DC 60



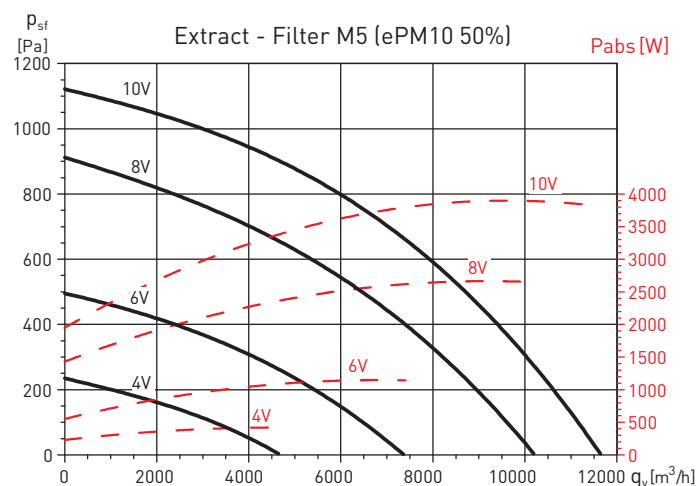
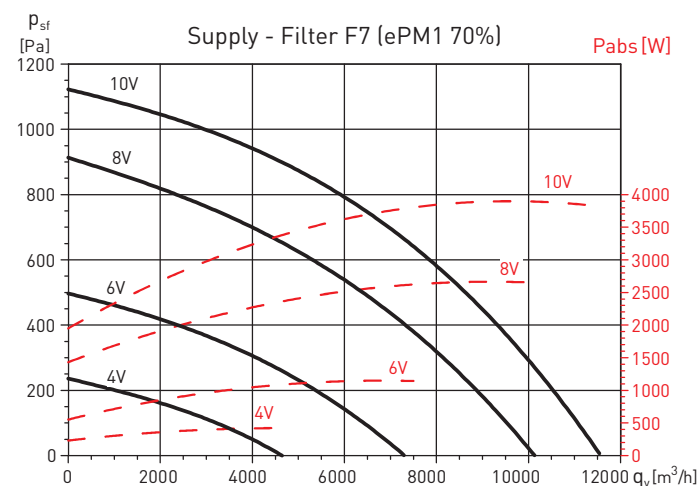
CADT-HE-DI 60



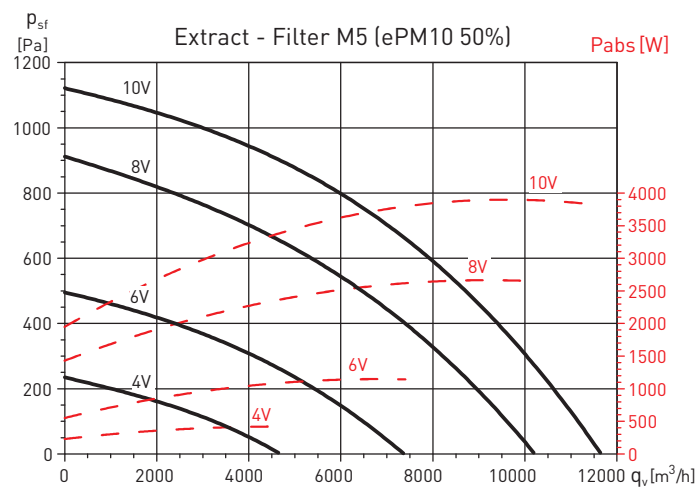
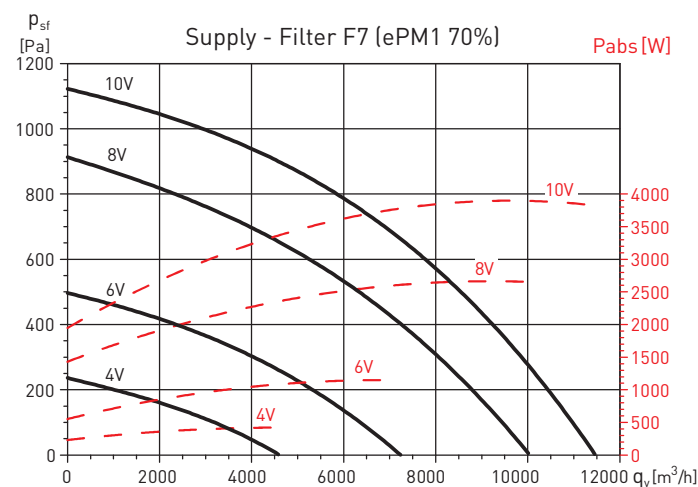
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- 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.

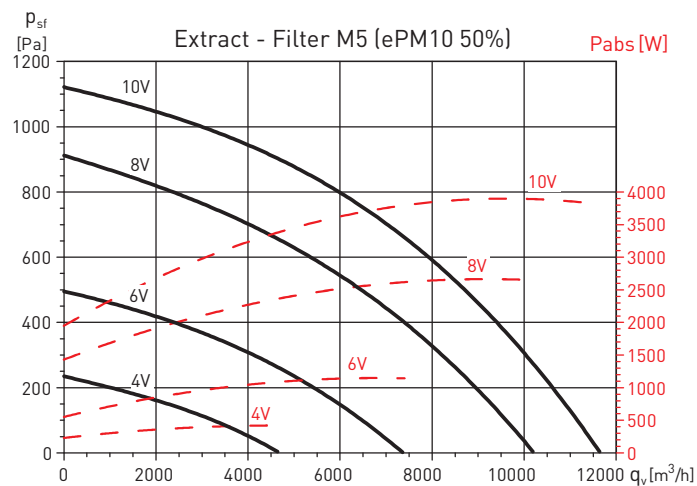
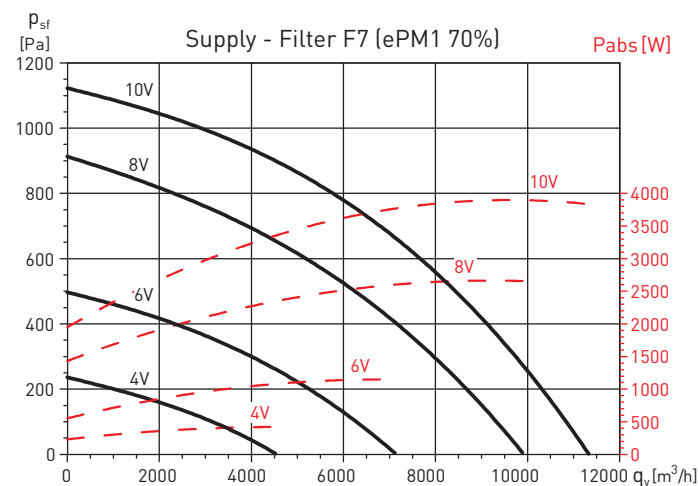
CADT-HE-D 100



CADT-HE-DC 100



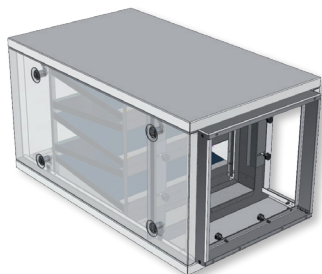
CADT-HE-DI 100



SPECIFIC ACCESSORIES FOR CADB-HE RANGE CADB-HE

Heat recovery unit 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.

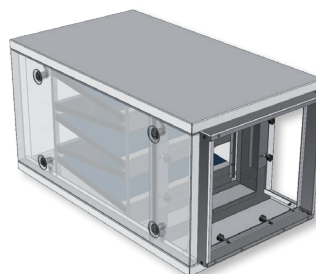
Module for air purification, specific for areas with high environmental pollution.



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.

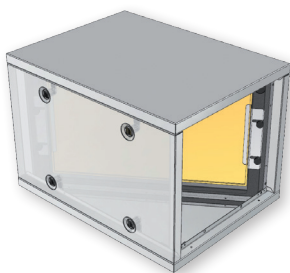
Odor removal module



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.

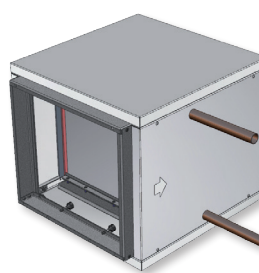
Outdoor filter module



FBL-HE

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

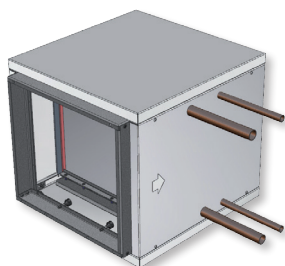
Cold water coil module



BA-AF HE

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

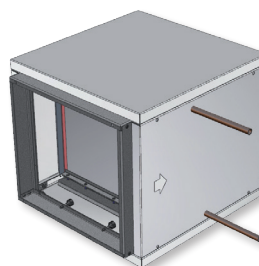
Double coil module (cold water and hot water)



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

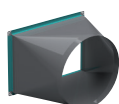
External module that includes a direct expansion coil for R-410A, this allows the integration of the unit in air conditioning systems.

MOUNTING ACCESSORIES TABLE

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

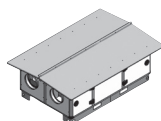


Heat recovery unit model	Ø (mm)	AFR-HE (spare filter for CADB/T-HE)			
		AFR-HE G4	AFR-HE M5	AFR-HE F7	AFR-HE F9
CADB-HE D/DI/DC 04	200	AFR-HE 200/04 G4	AFR-HE 200/04 M5	AFR-HE 200/04 F7	AFR-HE 200/04 F9
CADB-HE D/DI/DC 08	250	AFR-HE 250/08 G4	AFR-HE 250/08 M5	AFR-HE 250/08 F7	AFR-HE 250/08 F9
CADB-HE 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.



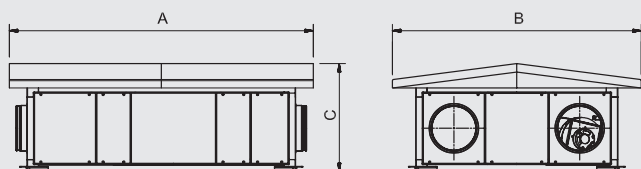
Heat recovery unit model	TPP-HE Rain protection cowl model	
	Horizontal	Vertical
CADB-HE D/DI/DC 04	TPP-HE-H-04	TPP-HE-V-04 MG
CADB-HE D/DI/DC 08	TPP-HE-H-08	TPP-HE-V-08 MG
CADB-HE D/DI/DC 12	TPP-HE-H-12	TPP-HE-V-12 MG
CADB-HE D/DI/DC 16	TPP-HE-H-16	TPP-HE-V-16 MG
CADB/T-HE D/DI/DC 21	TPP-HE-H-21-27-33	TPP-HE-V-21-27 MG
CADB/T-HE D/DI/DC 27	TPP-HE-H-21-27-33	TPP-HE-V-21-27 MG
CADB/T-HE D/DI/DC 33 / HP	TPP-HE-H-21-27-33	TPP-HE-V-33 MG
CADT-HE D/DI/DC 45	TPP-HE-H-45 MG	TPP-HE-V-45 MG
CADT-HE D/DI/DC 60	TPP-HE-H-60 MG	TPP-HE-V-60 MG
CADT-HE D/DI/DC 100	-	TPP-HE-V-100 MG

MOUNTING ACCESSORIES

TPP-HE

Rain protection cowl

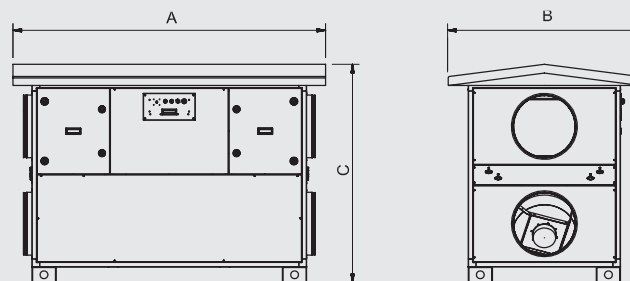
Rain protection cowls are supplied with a finish of galvanized sheet without painting.



Model	A	B	C	Weight* (kg)
04	1717	1123	514	30
08	1947	1273	577	35
12	1896	1413	589	40
16	2146	1603	631	50
21	2496	2003	766	70
27	2496	2003	766	70
33	2496	2003	866	70

CADB/T-HE 04 to 33 LH/RH

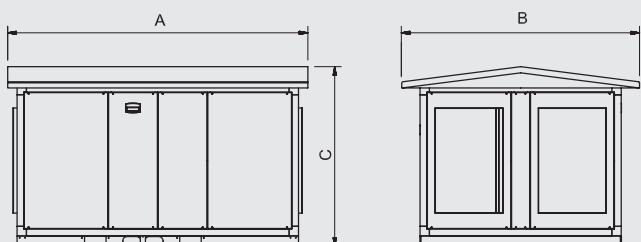
* Weight of the roof accessory



Model	A	B	C	Weight* (kg)
04	1322	903	1039	20
08	1478	973	1145	25
12	1522	1133	1160	30
16	1672	1133	1210	30
21	1947	1333	1427	40
27	1947	1333	1427	40
33	1947	1533	1445	45

CADB/T-HE 04 to 33 LV/RV

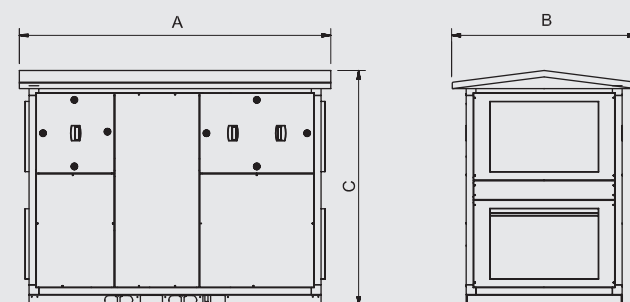
* Weight of the roof accessory



Model	A	B	C	Weight* (kg)
45	2296	1863	1404	60
60	2446	1913	1788	85

CADT-HE 45 and 60 LH/RH

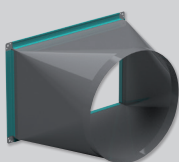
* Weight of the roof accessory



Model	A	B	C	Weight* (kg)
45	2296	1483	1750	50
60	2446	1863	1834	65
100	2446	2413	1883	85

CADT-HE 45 to 100 LV/RV

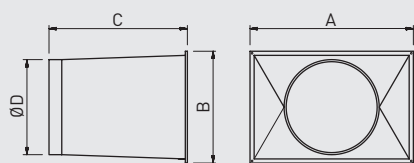
* Weight of the roof accessory



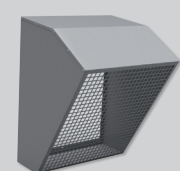
PRRE

From rectangular to circular adapter

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



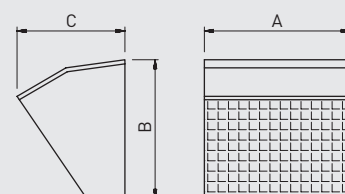
Model	A	B	C	ØD
PRRE 600x400/500	666	466	460	500
PRRE 700x500/560	766	566	460	560
PRRE 1100x610/710	1140	650	460	710
PRRE 590x540/500	656	606	460	500
PRRE 1110x490/500	1176	556	460	500



APR

Rectangular protective peaks

Specific accessory for models CADT-HE 45 to 100.



Model	A	B	C
APR CADT-HE 33HP H	590	540	556
APR CADT-HE 33 HP V MG	1110	490	556
APR CADT-HE 45/60 H MG	620	800	556
APR CADT-HE 45/60 V MG	800	620	556
APR CADT-HE 100 MG	1176	710	552

ELECTRICAL ACCESSORIES TABLE

Control elements needed to regulate the fan-speed (for -D, -DC, -DI versions)

Heat recovery unit model	Accessories for Variable Air Volume. VAV by CO2 level.		Accessories for constant pressure operation COP		Accessories for manual speed control
	Controller	CO2 Sensor	Controller	Pressure sensor	Potentiometer
CADB-HE D/DI/DC 04	CONTROL AERO-REG	AIRSENS CO2 / SC02-AD 0-10V / SC02-G 0-10V	CONTROL CAD-REG**	TDP-PI*	REB-ECOWATT
CADB-HE D/DI/DC 08	CONTROL AERO-REG	AIRSENS CO2 / SC02-AD 0-10V / SC02-G 0-10V	CONTROL CAD-REG**	TDP-PI*	REB-ECOWATT
CADB-HE D/DI/DC 12	CONTROL AERO-REG	AIRSENS CO2 / SC02-AD 0-10V / SC02-G 0-10V	CONTROL CAD-REG**	TDP-PI*	REB-ECOWATT
CADB-HE D/DI/DC 16	CONTROL AERO-REG	AIRSENS CO2 / SC02-AD 0-10V / SC02-G 0-10V	CONTROL CAD-REG**	TDP-PI*	REB-ECOWATT
CADB/T-HE D/DI/DC 21	CONTROL AERO-REG	AIRSENS CO2 / SC02-AD 0-10V / SC02-G 0-10V	CONTROL CAD-REG**	TDP-PI*	REB-ECOWATT
CADB/T-HE D/DI/DC 27	CONTROL AERO-REG	AIRSENS CO2 / SC02-AD 0-10V / SC02-G 0-10V	CONTROL CAD-REG**	TDP-PI*	REB-ECOWATT
CADB/T-HE D/DI/DC 33**	CONTROL AERO-REG	AIRSENS CO2 / SC02-AD 0-10V / SC02-G 0-10V	CONTROL CAD-REG**	TDP-PI*	REB-ECOWATT
CADT-HE D/DI/DC 45**	CONTROL AERO-REG	AIRSENS CO2 / SC02-AD 0-10V / SC02-G 0-10V	CONTROL CAD-REG**	TDP-PI*	REB-ECOWATT
CADT-HE D/DI/DC 60**	CONTROL AERO-REG	AIRSENS CO2 / SC02-AD 0-10V / SC02-G 0-10V	CONTROL CAD-REG**	TDP-PI*	REB-ECOWATT
CADT-HE D/DI/DC 100**	CONTROL AERO-REG	AIRSENS CO2 / SC02-AD 0-10V / SC02-G 0-10V	CONTROL CAD-REG**	TDP-PI*	REB-ECOWATT

* To independently control the workpoint of each circuit, the supply and extract fans should be controlled by a separate controller and pressure sensor.

** To independently control the workpoint of each circuit, the supply and extract fans should be controlled by a separate controller.

Specific control elements for DC versions

Model	Accessories for coil control		
	Valve	Thermostat	Transformer 230V/24V
CADB-HE-DC 04	3WV DN 15 KVS1 PROP 24V	WCT	TRAFO 15-D
CADB-HE-DC 08	3WV DN 15 KVS1,6 PROP 24V	WCT	TRAFO 15-D
CADB-HE-DC 12	3WV DN 15 KVS2,5 PROP 24V	WCT	TRAFO 15-D
CADB-HE-DC 16	3WV DN 15 KVS2,5 PROP 24V	WCT	TRAFO 15-D
CADB-HE-DC 21	3WV DN 20 KVS4 PROP 24V	WCT	TRAFO 15-D
CADB-HE-DC 27	3WV DN20 KVS4 PROP 24V	WCT	TRAFO 15-D
CADB/T-HE-DC 33 / HP	3WV DN 25 KVS6,3 PROP 24V	WCT	TRAFO 15-D
CADT-HE-DC 45	3WV DN 25 KVS6,3 PROP 24V	WCT	TRAFO 15-D
CADT-HE-DC 60	3WV DN 25 KVS10 PROP 24V	WCT	TRAFO 15-D
CADT-HE-DC 100	3WV DN32 KVS16 PROP 24V	WCT	TRAFO 15-D

Specific control elements for DI versions

Model	Supply power	Power (kW)	Stages	Current (A)	Regulator	Temperature probe		External potentiometer	Pressure switch	Timer
						Duct	Ambient			
CADB-HE-DI 04	Mono 230V	1	2	4,5	Pulser M	TG-K330	TG-R530	TBI-30	DPS 2.30	MCR-1
CADB-HE-DI 08	Mono 230V	2	2	9,1	Pulser M	TG-K330	TG-R530	TBI-30	DPS 2.30	MCR-1
CADB-HE-DI 12	Mono 230V	3	2	11,4	Pulser M	TG-K330	TG-R530	TBI-30	DPS 2.30	MCR-1
CADB-HE-DI 16	Mono 230V	3,5	2	15,9	Pulser M	TG-K330	TG-R530	TBI-30	DPS 2.30	MCR-1
CADT-HE-DI 21	Tri 400V	6	2	9,1	TTC-25	TG-K330	TG-R530	TBI-30	DPS 2.30	MCR-1
CADT-HE-DI 27	Tri 400V	6	2	9,1	TTC-25	TG-K330	TG-R530	TBI-30	DPS 2.30	MCR-1
CADB/T-HE-DC 33 / HP	Tri 400V	7,5	2	11,5	TTC-25	TG-K330	TG-R530	TBI-30	DPS 2.30	MCR-1
CADT-HE-DI 45	Tri 400V	9	2	13,7	TTC-25	TG-K330	TG-R530	TBI-30	DPS 2.30	MCR-1
CADT-HE-DI 60	Tri 400V	12	2	18,2	TTC-25	TG-K330	TG-R530	TBI-30	DPS 2.30	MCR-1
CADT-HE-DI 100	Tri 400V	24	2	36,4	TTC-40F	TG-K330	TG-R530	TBI-30	DPS 2.30	MCR-1

ELECTRIC ACCESSORIES FOR CADB/T-HE ECOWATT SERIES

Integral VAV recovery control with bypass



CONTROL CAD-REG

Accessory used to control ECOWATT heat recovery units without post-heating/post-cooling.

Functions:

Manual proportional control of the fans using push buttons.
Automatic proportional control of the

fans using AIRSENS or CO₂ sensor (Accessory).
7-day programmer. Control of clogged filters via pressure switches included in the CAD-COMPACT ECOWATT and CADB-HE ECOWATT ranges.
Display of indoor and outdoor air temperature.

Bypass control in free-cooling mode. It includes two temperature probes each with a 4 m cable.
Alarm output signal.
It is recommended to install it near the equipment (< 3 m).
Maximum distance 10 m.
Modbus communication.

Model	Electrical supply	Frequency	Maximum consumption (mA)	Maximum relay load (A)	IP Protection	Work temperature	Dimensions LxAxH (mm)
CONTROL CAD-REG	230 VAC	50 -60 Hz	10	5	IP20	0°C a 50°C	101x93x24

To make a COP control independently of the CAD-REG CONTROL accessory, it will be necessary to install a TDP-PI pressure transmitter (Accessory).

Independent



FC-REG

Comparative thermostat that allows the management of the by-pass of a heat recovery unit in free-cooling mode.
(Applicable to the CADB/T-N range without integrated control and equipped with by-pass.)
It allows opening/closing of the bypass valve of the heat recovery

unit on the basis of the temperatures measured by the indoor and outdoors temperature probes.
Limitation of the minimum inlet air temperature adjustable to 8°C or 12°C.
Outlet via potential free-contact.
It includes two temperature probes, each one with a cable of 4m length.

Model	Supply		IP Protection	Power (VA)	Current (A)	Setpoint range (°C)	Maximum ambient temperature (°C)	Dimensions LxWxH (mm)
	Frequency (Hz)	Voltage (V)						
FC-REG	50	220-240	IP20	6	2	15-30	50	110x74x26

ELECTRIC ACCESSORIES FOR CADB/T- HE SERIES



AIRSENS CO2

Intelligent IAQ device available in three different versions: CO2 or VOC or RH.
Specially designed to create DCV systems directly linked with AC or ECOWATT fans depending on relay or analog controlled output selected.

Main features:

- 4 working modes:
 - Relay output and Modbus (reading)
 - 0-10V output and Modbus (reading)
 - 2-10V output and Modbus (reading)
 - Full Modbus control
- Adjustable set point
- IAQ level indicator (3-LED light diffuser).
- Adjustable 3-LED light diffuser intensity.

Model	Electrical Supply	Power (W)	Relay	Analog output	Lecture range	IP Protection	Dimensions LxWxH (mm)
AIRSENS-CO2	100-240 VAC 50/60Hz	0,7W	3A 250 VAC	0-10 V 2-10 V	450-2000 ppm	IP30	122x23x89



SCO₂-A 0/10V

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



SCO₂-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-D

Pressure sensor.
Enables you to control the pressure in the fan inlet.

TDP-PI

Pressure sensor with display and proportional integral control by setpoint.



REB-ECOWATT

Speed controller for fans fitted with EC motor.



WCT

Thermostat to control the thermal power of hot water coils included in CADB-HE heat recovery units.

It allows to maintain constant supply air temperature. Compatible with proportional actuators (0-10V).

It includes temperature probe to install in the duct (4 m. length). It can work in heat or chilling mode, in combination with external.

	Voltage (V)	Frequency (Hz)	IP Protection	IP Probe Power	Power (VA)	Output signal	Setpoint range (°C)	Maximum ambient temperature (°C)	Dimensions LxWxH (mm)
WCT	24	50	IP-20	IP-68	6	0-10VDC	15-30	50	110x74x26



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.