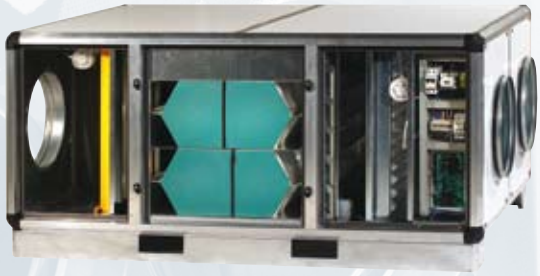
COUNTER FLOW HIGH PERFOMANCE HEAT RECOVERY UNITS

CADT-D HE
CADT-DI HE
CADT-DC HE

ENERGY EFFICIENT VENTILATION SYSTEM



High efficiency heat recovery units, up to 93%, with counter-flow type heat exchanges, within galvanised steel boxes, with 40 mm casing. Fireproof, thermal and acoustic insulation (M0) for horizontal installation. Intakes with a hermetic seal, F7 filter for inlet (Filter efficiency >93%) and G4 filter for extract air (Filter efficiency >90%). Motorised by-pass for 100% of air flow. Control panel with pre-wired microprocessor (Plug & Play system) and anti-freezing system for heat recovery.
Includes two double inlet centrifugal fans with built-in motor and variable frequency drive.

Product range according to additional heating selected.

- **CADT-D HE** series
  Heat recovery unit without additional heating.
- **CADT-DI HE** series
  Heat recovery unit with built-in electric heating element, and a temperature control system for indoor air, comprising duct mounted temperature probe, electronic temperature control that supplies digital signal to activate a water heater (not included with product).
- **CADT-DC HE** series
  Heat recovery unit with a built-in hot water coil and a temperature control system for the indoor air, comprising duct mounted temperature probe, electronic temperature control and a 3-way valve with actuator.

Ranges of product according to the type of operating control

- **CADT-D / DI/ DC HE VAV** series
  Heat recovery unit for variable airflow systems, controlled with humidity or CO2 probes (As accessories, not included with the product). The built-in variable frequency drive varies fan speed according to the probe.
- **CADT-D / DI/ DC HE CAV** series
  Heat recovery for constant airflow systems, controlled by built-in airflow probes.
  The built-in variable frequency drive varies fan speed to maintain a constant airflow in ductwork.
- **CADT-D / DI/ DC HE COP** series
  Heat recovery unit for constant pressure systems, controlled by built-in pressure probes. The built-in variable frequency drive varies fan speed to maintain a constant pressure in ductwork.

A P P L I C A T I O N S


Stores


Offices


Hotels


Collective ventilation dwellings

Robust construction

High quality finishing with **aluminium profile structure,** providing a robust assembly.

Secure installation

Integrated hanging supports to install the heat recovery unit.

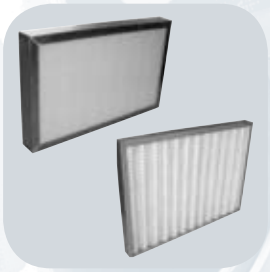
By-Pass

By-pass damper enables 100% of air to by-pass the heat exchanger.

On-off switch

Built-in exterior on-off switch.

2 high-efficiency filters



F7 filter for inlet air (Filtration efficiency: >93%). G4 filter for extracted air (Efficiency:>90%).

Pressure switch

Enables the degree of dirtiness of the filters to be known.

Reference

C	A	D	T	-	D	C		H	E		1	0	0	0		D	P		D	O	M	O		V	A	V
			1			2			3				4				5				6				7		

1 - CADT: Series

2 - D: Standard range
DI: Range with resistance incorporated
DC: Range with water battery incorporated

3 - HE: High efficiency

4 - Size

5 - DP: Range with double wall insulation

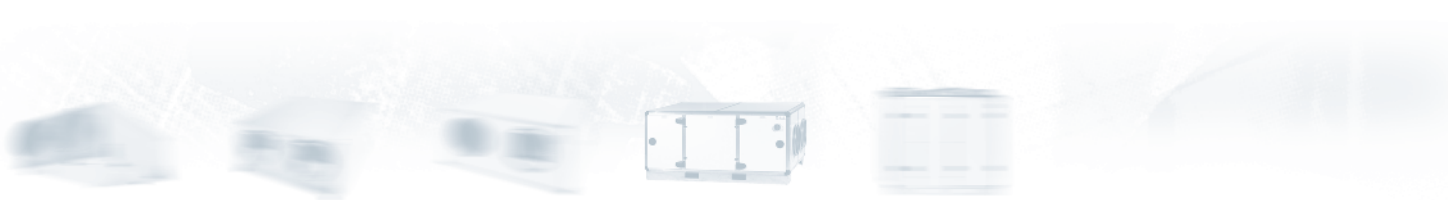
6 - Control: PROGRAM, ADVANZ, DOMO

7 - VAV: Variable airflow
CAV: Constant airfflow
COP: Constant pressure

Versions with an electronic microprocesor: Models and functions



	PROGRAM	ADVANZ	DOMO
① Manual fan speed selection: OFF + 3 speed	✓	✓	✓
② Manual fan speed selection: OFF + control of speed range [MIN-MAX] (alternative to ①)	✓	✓	✓
③ Imbalance between impulsion and extraction flow only for VAV versions with double inverter (does not apply to 3 speed versions)	✓	✓	✓
④ Automatic control of fan speed: CO_2, CO_2/VOC and HR sensors with programmable PPM or HR range (by the installer); available for 3 speed versions and variable speed versions	✓	✓	✓
⑤ Remote function of the fan speed signal is 0-10V (alternative to ④)	⊘	✓	✓
⑥ Booster via remote NC contact at a pre-set time. Time can be altered by software	⊘	✓	✓
⑦ Remote "Boost" management by NC contact or proximity sensor (alternative to ⑥ and ⑧)	⊘	✓	✓
⑧ Unit can be switched ON/OFF via remote switch (alternative to ⑥ or ⑦)	⊘	✓	✓
⑨ Weekly programs	✓	✓	✓
⑩ Prevention of icing of the heat exchanger (simple strategy): blower fan moves to low/off; Setting the extractor fan to maximum speed.	✓	✓	✓
⑪ Prevention of build-up of frost in the heat exchanger: proportional mode management with pre-heating coils (alternative to ⑩ or ⑫)	⊘	✓	✓
⑫ Exchanger frost prevention: Personalized funcions (through a switch NO-NC (alternative to ⑩ and ⑪)	⊘	✓	✓
⑬ Management of electric post-heating (simple or double stage) in ON/OFF mode. The objective is to attain the average internal temperature value (Tr)	✓	⊘	⊘
⑭ Management of electric post-heating in proportional mode. The objective is to attain the average internal temperature value (Tr) and to keep the impelled air within a set range (Ti)	⊘	✓	✓
⑮ Management of water coil post-heating in ON/OFF mode. The objective is to attain the average internal temperature value (Tr)	✓	⊘	⊘
⑯ Management of water coil post-heating. The objective is to attain the average internal temperature value (Tr) and to keep the impelled air within a set range (Ti)	⊘	✓	✓
⑰ Management of post-cooling in proportional mode. The objective is to attain the average internal temperature value (Tr) and to keep the impelled air within a set range (Ti)	⊘	✓	✓
⑱ Remote signalling of the status of the unit via a volt free contact: closed contact=the unit is operating; open contact=the unit is stopped (alternative to ⑫)	⊘	✓	✓
⑲ Monitoring of the state of the filters via period of operation of the equipment or via differential pressure sensors	✓	✓	✓
⑳ Monitoring of the state of the fans via a tachometric signal (if supported by the fan) or via differential pressure sensors	✓	✓	✓



Electronic microprocessors - PROGRAM model - Features and functions

PROGRAM CONTROL	CADT-D
PRINCIPAL FEATURES	
Terminal cabinet includes:	
• Proximity sensor	●
• Integrated circuit card and terminal box	●
Remote control unit (100 m max.)	●
Ready-mounted, ready-wired temperature sensors:	
• Discharge temperature sensor (Tx)	●
• New air intake temperature sensor (Te)	●
• Ambient air return temperature sensor (Tr)	●
Vacuum regulator valve, ready-mounted and wired:	
• Filter clogging	●
• Security (operation of fans)	●
Frequency regulator on three phase models	●
OPTIONAL FEATURES	
CO2 sensor:	
• SCO2-010A ambient sensor with display / SCO2-010G in-duct measurement	◎
Self-regulating antifreeze battery:	
• ABE-SCT circular battery	◎
• Differential pressure switch	◎
• Timer	◎
• TG-K310 duct-mountable temperature sensor -20 to + 10°C	◎
• TI-10 potentiometer -20 to + 10°C for panel mounting	◎
FUNCTIONS	
Flow rate adjustment:	
• Manual fan speed selection (single phase models) or variable (three phase models). Timer boost function	●
• Automatic modulation via built-in clock: daily and weekly programs	●
• Automatic speed settings (single phase models) or automatic speed variation (Three phase models) based on air quality sensor readings (sensor optional)	●
• Operates at constant pressure	*
Free cooling function on models equipped with by-pass	●
Safety functions:	
• Heat exchanger antifreeze protection (blower fan moves to low/off)	●
• Filter clogging / vacuum regulator valve failure alarm	●
• Temperature sensor fault alarm (wire severed, connection fault,...)	●
• Console-control cabinet connection fault alarm	●

● Included, ◎ Unmounted option

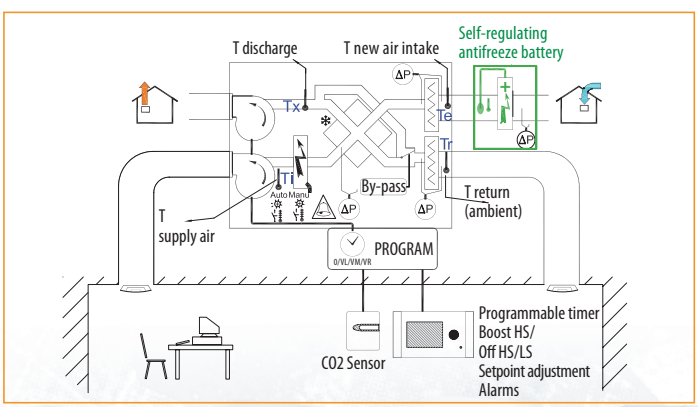
* Optional and on request

PROGRAM CONTROL	CADT-DI	CADT-DC
PRINCIPAL FEATURES		
Terminal cabinet includes:		
• Proximity sensor	●	●
• Integrated circuit card and terminal box	●	●
Remote control unit (100 m max.)	●	●
Ready-mounted, ready-wired temperature sensors:		
• Discharge temperature sensor (Tx)	●	●
• New air intake temperature sensor (Te)	●	●
• Ambient air return temperature sensor (Tr)	●	●
• Supply air temperature sensor (Ti)	●	●
Vacuum regulator valve, ready-mounted and wired:		
• Filter clogging	●	●
• Security (operation of fans)	●	●
Frequency regulator on three phase models	●	●
OPTIONAL FEATURES		
Motorized 3-way control valve + 230V/24V transformer for hot water coil	-	◎
CO2 sensor:		
• SCO2-010A ambient sensor with display / SCO2-010G in-duct measurement	◎	◎
Self-regulating antifreeze battery:		
• ABE-SCT circular battery	◎	◎
• Differential pressure switch	◎	◎
• Timer	◎	◎
• TG-K310 duct-mountable temperature sensor -20 to + 10°C	◎	◎
• TI-10 potentiometer -20 to + 10°C for panel mounting	◎	◎
FUNCTIONS		
Flow rate adjustment:		
• Manual fan speed selection (single phase models) or variable (three phase models). Timer boost function	●	●
• Automatic modulation via built-in clock: daily and weekly programs	●	●
• Automatic speed settings (single phase models) or automatic speed variation (Three phase models) based on air quality sensor readings (sensor optional)	●	●
• Operates at constant pressure	*	*
Post heating battery regulation		
• Battery power regulation as per temperature setting and blower sensor reading	●	●
Free cooling function on models equipped with by-pass	●	●
Safety functions:		
• Heat exchanger antifreeze protection (blower fan moves to low/off)	●	●
• Fan shutdown timer setting for cooling electric battery (postventilation)	●	-
• Water coil antifreeze protection antigel de la batterie eau in each sensor (opens 3-way control valve then stops power unit)	-	●
• Filter clogging / vacuum regulator valve failure alarm	●	●
• Temperature sensor fault alarm (wire severed, connection fault,...)	●	●
• Ventilation fault alarm	●	●
• Console-control cabinet connection fault alarm	●	●

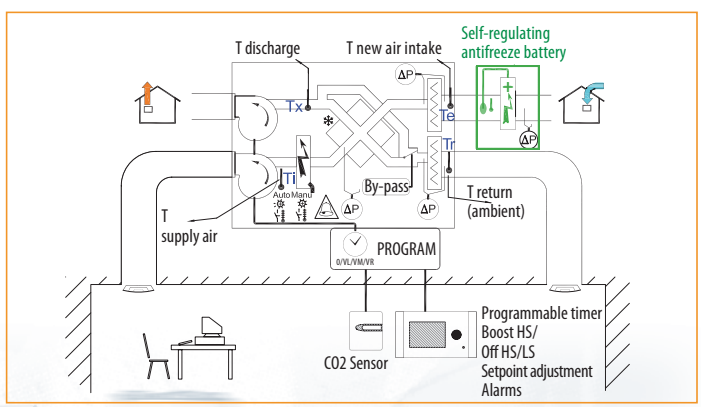
● Included, - Not included, ◎ Unmounted option

* Optional and on request

Schematic diagram



CADT-DI HE with PROGRAM control
The battery is regulated **independently**. The PROGRAM can not control it.
HS: High speed LS: Low speed



CADT-DC HE with PROGRAM control
The battery is regulated **independently**. The PROGRAM can not control it.
HS: High speed LS: Low speed

Electronic microprocessors - ADVANZ and DOMO models - Features and functions

ADVANZ AND DOMO CONTROLS	CADT-D
PRINCIPAL FEATURES	
Terminal cabinet includes:	
• Proximity sensor	●
• Integrated circuit card and terminal box	●
Remote control unit (100 m max.) (Only ADVANZ)	●
Ready-mounted, ready-wired temperature sensors:	
• Discharge temperature sensor (Tx)	●
• New air intake temperature sensor (Te)	●
• Ambient air return temperature sensor (Tr)	●
Vacuum regulator valve, ready-mounted and wired:	
• Filter clogging	●
• Security (operation of fans)	●
Frequency regulator on three phase models	●
OPTIONAL FEATURES	
CO2 sensor:	
• SCO2-010A ambient sensor with display / SCO2-010G in-duct measurement	◎
Self-regulating antifreeze battery:	
• ABE-SCT circular battery	◎
• Differential pressure switch	◎
• Timer	◎
• TG-K310 duct-mountable temperature sensor -20 to + 10°C	◎
• TI-10 potentiometer -20 to + 10°C for panel mounting	◎
FUNCTIONS	
Flow rate adjustment:	
• Manual fan speed selection (single phase models) or variable (three phase models). Timer boost function	●
• Automatic modulation via built-in clock: daily and weekly programs	●
• Automatic speed settings (single phase models) or automatic speed variation (Three phase models) based on air quality sensor readings (sensor optional)	●
• Remote function of the fan speed signal is 0-10V	●
• Operates at constant pressure	*
Free cooling function on models equipped with by-pass	●
Remote "Boost" management by NC contact or proximity sensor	●
Remote indication of unit status	●
Exchanger frost prevention:	
• Heat exchanger antifreeze protection (blower fan moves to low/off)	●
• Proportional management using an antifreeze battery (pre-heating))	●
• Personalized funcions (through a switch NO-NC)	●
Remote signaling of unit status	●
Panel language configuration (ES/EN/DE/IT/FR)	●
Safety functions:	
• Filter clogging / vacuum regulator valve failure alarm	●
• Temperature sensor fault alarm (wire severed, connection fault,...)	●
• Console-control cabinet connection fault alarm	●
• Communicator regulation [adjustment] (Only DOMO)	●

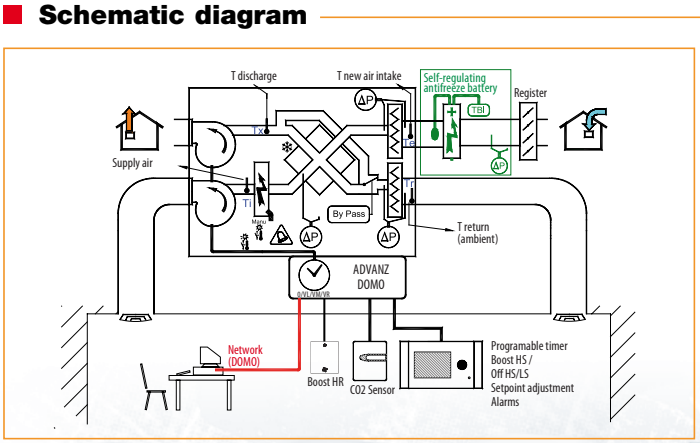
● Included, ◎ Unmounted option

* Optional and on request

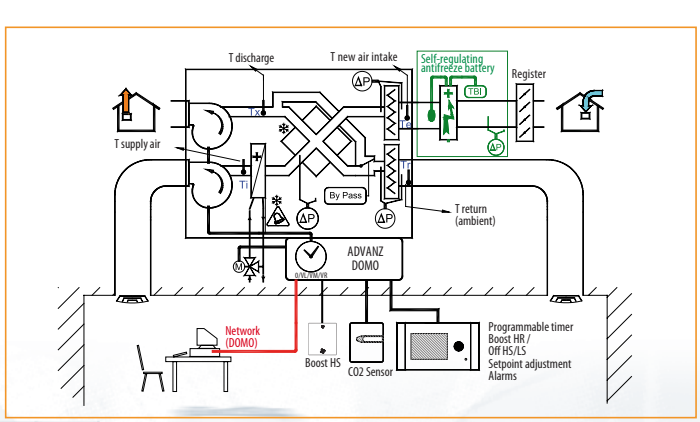
ADVANZ AND DOMO CONTROLS	CADT-DI	CADT-DC
PRINCIPAL FEATURES		
Terminal cabinet includes:		
• Proximity sensor	●	●
• Integrated circuit card and terminal box	●	●
Remote control unit (100 m max.) (Only ADVANZ)	●	●
Ready-mounted, ready-wired temperature sensors:		
• Discharge temperature sensor (Tx)	●	●
• New air intake temperature sensor (Te)	●	●
• Ambient air return temperature sensor (Tr)	●	●
• Supply air temperature sensor (Ti)	●	●
Vacuum regulator valve, ready-mounted and wired:		
• Filter clogging	●	●
• Security (operation of fans)	●	●
Solid-state relay on electrical battery	●	-
No-frost safety sensor on hot water battery	-	●
Frequency regulator on three phase models	●	●
OPTIONAL FEATURES		
Motorized 3-way control valve + 230V/24V transformer for hot water coil	-	◎
CO2 sensor:		
• SCO2-010A ambient sensor with display / SCO2-010G in-duct measurement	◎	◎
Self-regulating antifreeze battery:		
• ABE-SCT circular battery	◎	◎
• Differential pressure switch	◎	◎
• Timer	◎	◎
• TG-K310 duct-mountable temperature sensor -20 to + 10°C	◎	◎
• TI-10 potentiometer -20 to + 10°C for panel mounting	◎	◎
FUNCTIONS		
Flow rate adjustment:		
• Manual fan speed selection (single phase models) or variable (three phase models). Timer boost function	●	●
• Automatic modulation via built-in clock: daily and weekly programs	●	●
• Automatic speed settings (single phase models) or automatic speed variation (Three phase models) based on air quality sensor readings (sensor optional)	●	●
• Remote function of the fan speed signal is 0-10V	●	●
• Operates at constant pressure	*	*
Post heating battery regulation		
• Battery power regulation as per temperature setting and blower sensor reading	●	●
Free cooling function on models equipped with by-pass	●	●
Remote "Boost" management by NC contact or proximity sensor	●	-
Remote indication of unit status	●	●
Exchanger frost prevention:		
• Heat exchanger antifreeze protection (blower fan moves to low/off)	●	●
• Proportional management using an antifreeze battery (pre-heating)	●	●
• Personalized funcions (through a switch NO-NC)	●	●
Proportional function of post-heating or post-cooling	●	●
Remote signaling of unit status	●	●
Panel language configuration (ES/EN/DE/IT/FR)	●	●
Safety functions:		
• Fan shutdown timer setting for cooling electric battery (postventilation)	●	●
• Water coil antifreeze protection antigel de la batterie eau in each sensor (opens 3-way control valve then stops power unit)	-	●
• Filter clogging / vacuum regulator valve failure alarm	●	●
• Temperature sensor fault alarm (wire severed, connection fault,...)	●	●
• Console-control cabinet connection fault alarm	●	●
• Communicator regulation [adjustment] (Only DOMO)	●	●

* Optional and on request

Schematic diagram



CADT-DI HE with ADVANZ / DOMO control
HS: High speed LS: Low speed



CADT-DC HE with ADVANZ / DOMO control
HS: High speed LS: Low speed

Technical Characteristics

VAV, CAV and COP models without additional heating

Model	Dimensions (mm)	Volume (m^3)	Weight (Kg)	Fan type	Speed (r.p.m.)	Electrical supply V (III)	Motor power (kW)	Maximum absorbed current (A)	Maximum volume (m^3/h)	Protection (IP)	Efficiency * (%)
CADT-D HE 1000 DP	1680x600x1080	1,089	165	9/7	1400	230	2x300	5	1200	20	93
CADT-D HE 2000 DP	1680x800x1205	1,620	220	10/8	1400	230	2x550	9	2400	20	93
CADT-D HE 3000 DP	1680x1080x1205	2,186	280	10/10	1400	400	2x750	7	3200	20	93
CADT-D HE 4500 DP	1850x1080x1580	3,157	355	12/9	1400	400	2x1500	11	4700	20	93
CADT-D HE 6000 DP	1850x1310x1580	3,829	415	12/9	1400	400	2x1500	11	6200	20	93

* Values referring to the following conditions: T ext = -5ºC, T exh = 20ºC, RH exhaust air = 50% / Maximum airflow.

VAV, CAV and COP models with integrated electric heater

Model	Dimensions (mm)	Volume (m^3)	Weight (Kg)	Fan type	Fan type. (r.p.m.)	Elec. supply. V (III)	Motor power	Max. abs. current to 230V (A)	Max. volume (m^3/h)	Prot. (IP)	Effic. * (%)	Resist. power (kW)	Resist. voltage. (V)	Resist. current abs. (A)	Total maximum current (A)
CADT-DI HE 1000 DP	1680x600x1080	1,089	165	9/7	1400	230	2x300	5	1200	20	93	4	230	17,50	22,50
CADT-DI HE 2000 DP	1680x800x1205	1,620	220	10/8	1400	230	2x550	9	2400	20	93	6	230	26,00	35,00
CADT-DI HE 3000 DP	1680x1080x1205	2,186	280	10/10	1400	400	2x750	7	3200	20	93	8	400	12,17	19,17
CADT-DI HE 4500 DP	1850x1080x1580	3,157	355	12/9	1400	400	2x1500	11	4700	20	93	12	400	31,60	42,60
CADT-DI HE 6000 DP	1850x1310x1580	3,829	415	12/9	1400	400	2x1500	11	6200	20	93	16	400	36,06	47,06

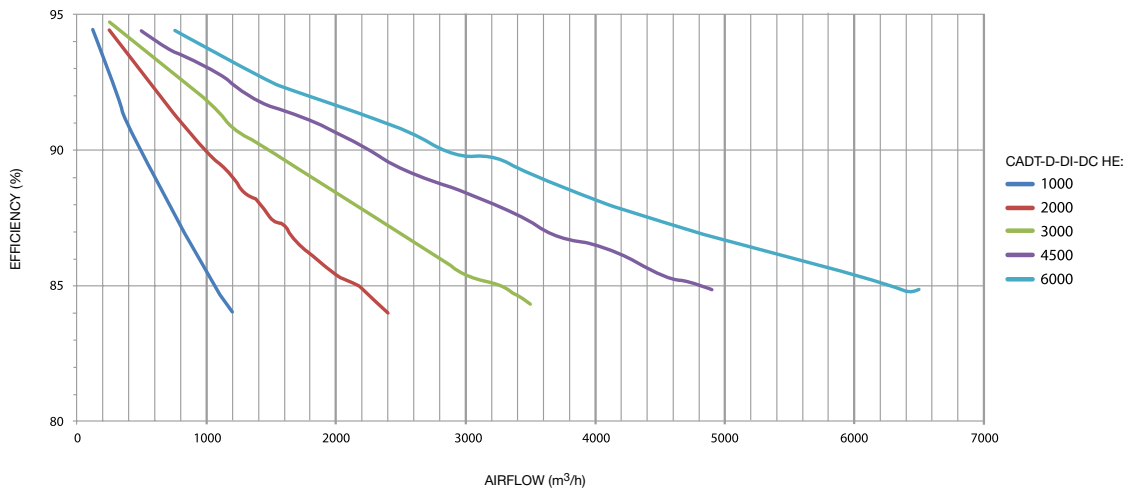
* Values referring to the following conditions: T ext = -5ºC, T exh = 20ºC, RH exhaust air = 50% / Maximum airflow.

VAV, CAV and COP models with integrated water coil

Model	Dimensions (mm)	Fan type (m^3)	Weight (Kg)	Fan type	Speed (r.p.m.)	Elec. supply V (III)	Motor power (kW)	Max. abs. current to 230V (A)	Max. volume (m^3/h)	Protection (IP)	Efficiency * (%)	Resist. power (kW)
CADT-DC HE 1000 DP	1680x600x1080	1,089	165	9/7	1400	230	2x300	5	1200	20	93	6
CADT-DC HE 2000 DP	1680x800x1205	1,620	220	10/8	1400	230	2x550	9	2400	20	93	10
CADT-DC HE 3000 DP	1680x1080x1205	2,186	280	10/10	1400	400	2x750	7	3200	20	93	15
CADT-DC HE 4500 DP	1850x1080x1580	3,157	355	12/9	1400	400	2x1500	11	4700	20	93	24
CADT-DC HE 6000 DP	1850x1310x1580	3,829	415	12/9	1400	400	2x1500	11	6200	20	93	31

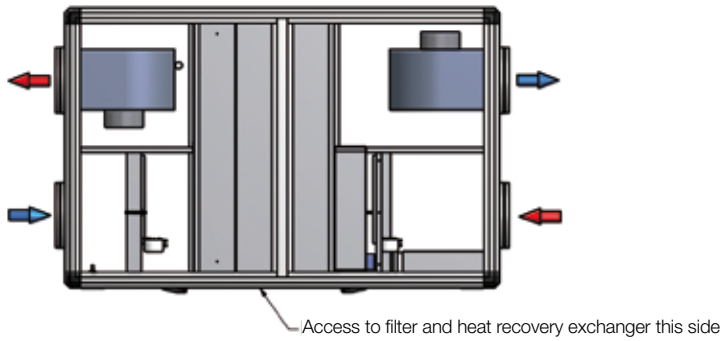
* Values referring to the following conditions: T ext = -5ºC, T exh = 20ºC, RH exhaust air = 50% / Maximum airflow.

Evolution of the efficiency of recovery according to the flow



Values with the following conditions:
External air (T ext) = -5ºC, exhaust air (T exh) = +20ºC with interior RH of 50%.

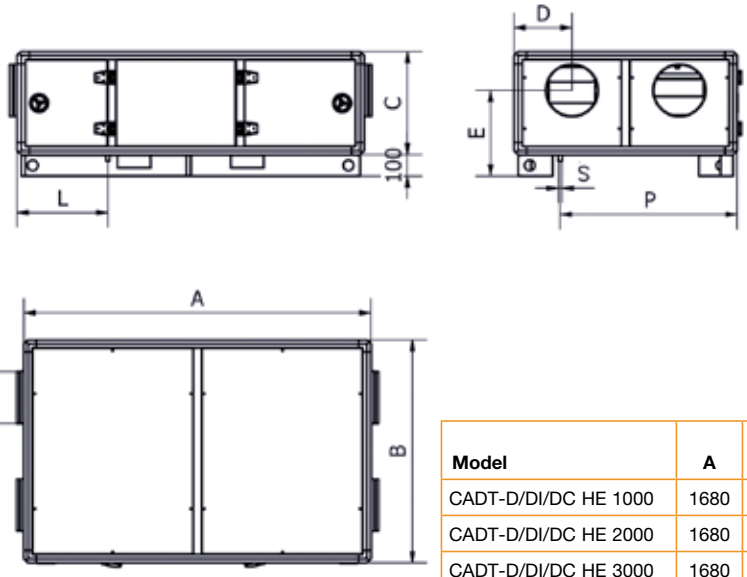
Configuration CADT-D/DI/DC HE



INLET FRESH AIR

EXTRACTED AIR

Dimensions (mm)



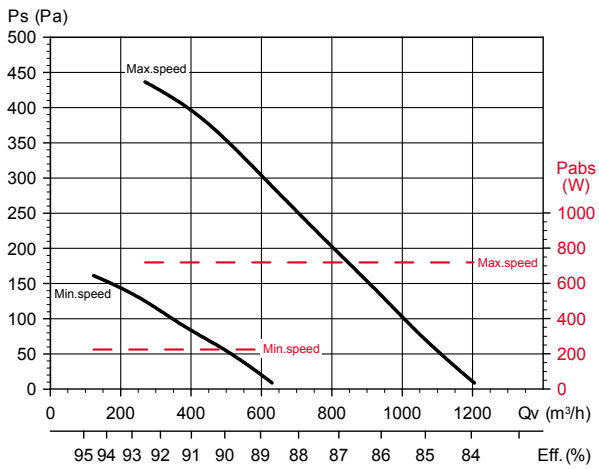
Model	A	B	C	D	E	L	P	S	Ø	Weight (Kg)
CADT-D/DI/DC HE 1000	1680	1080	500	280	410	400	980	1/2”	250	165
CADT-D/DI/DC HE 2000	1680	1205	700	310	480	400	1105	1/2”	315	220
CADT-D/DI/DC HE 3000	1680	1205	980	310	590	400	1105	1/2”	400	280
CADT-D/DI/DC HE 4500	1850	1580	980	405	590	500	1480	1/2”	450	355
CADT-D/DI/DC HE 6000	1850	1580	1210	405	705	500	1480	1/2”	500	415

Performance curves

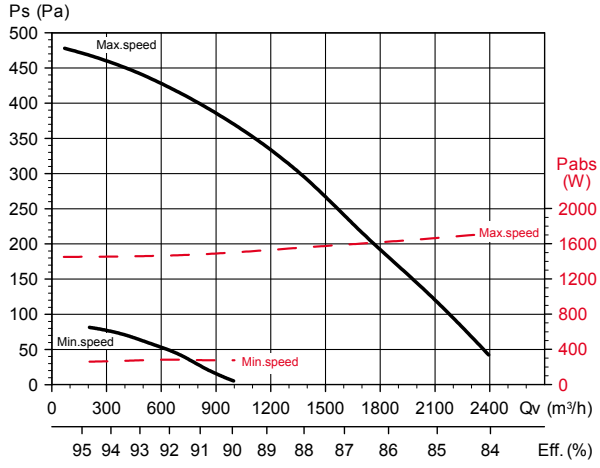
– Qv = Volume in m^3/h.
– Ps = Static pressure in Pa.
– Pabs = Power absorbed (W).
– Normal dry air at 20°C and 760 mmHg.
– Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

Additional pressure drop.
Resistances: All 10 Pa models.
Batteries: 1000 range 35 Pa, 2000 range 32 Pa, 3000 range 37 Pa, 4500 range 48 Pa, 6000 range 48 Pa.

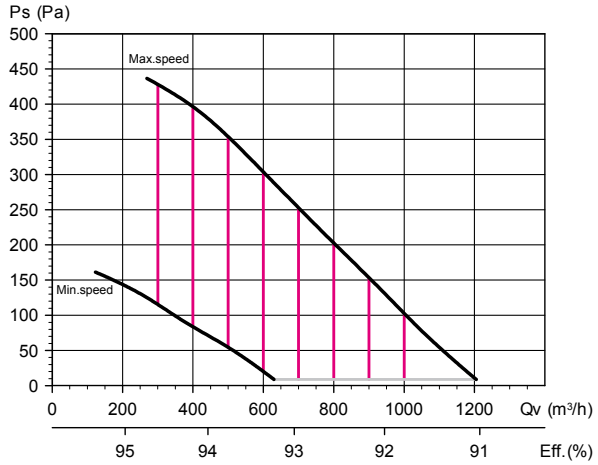
CADT-D/DI/DC HE 1000 VAV



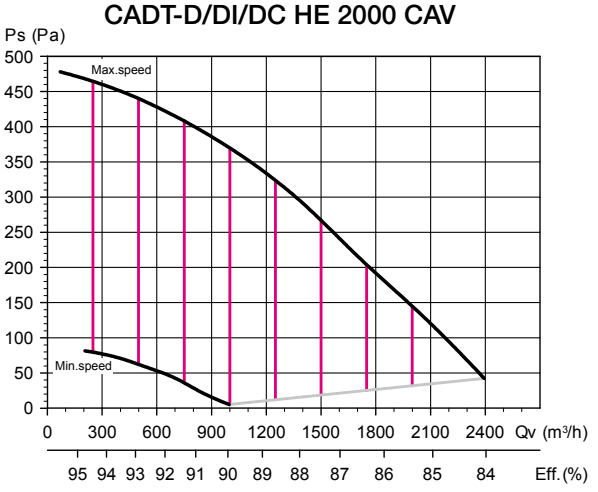
CADT-D/DI/DC HE 2000 VAV



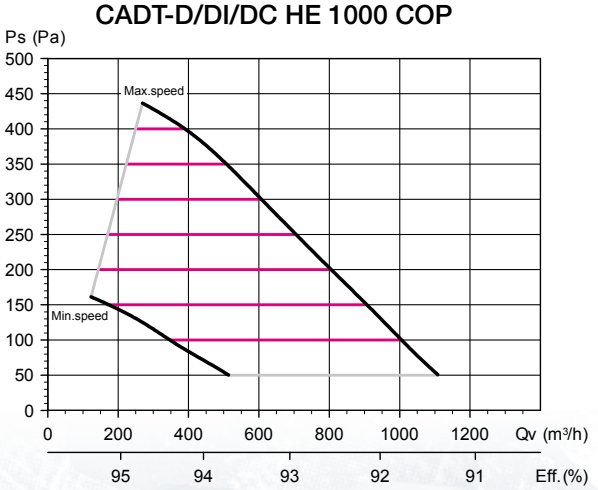
CADT-D/DI/DC HE 1000 CAV



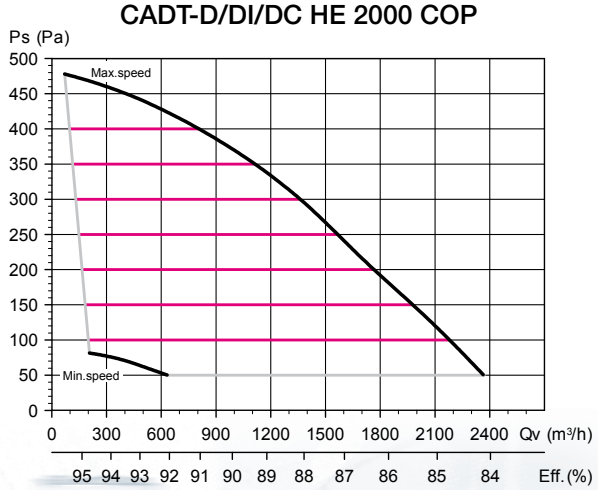
CADT-D/DI/DC HE 2000 CAV



CADT-D/DI/DC HE 1000 COP



CADT-D/DI/DC HE 2000 COP

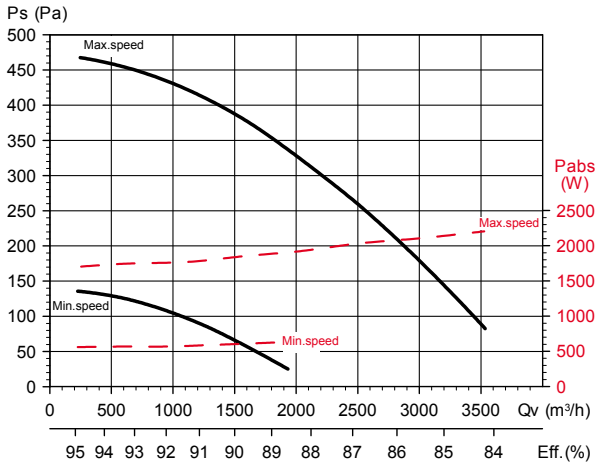


Performance curves

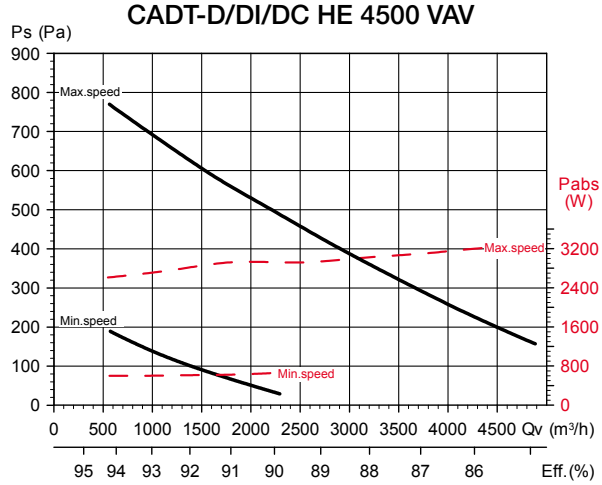
– Qv = Volume in m^3/h.
– Ps = Static pressure in Pa.
– Pabs = Power absorbed (W).
– Normal dry air at 20°C and 760 mmHg.
– Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

Additional pressure drop.
Resistances: All 10 Pa models.
Batteries: 1000 range 35 Pa, 2000 range 32 Pa, 3000 range 37 Pa, 4500 range 48 Pa, 6000 range 48 Pa.

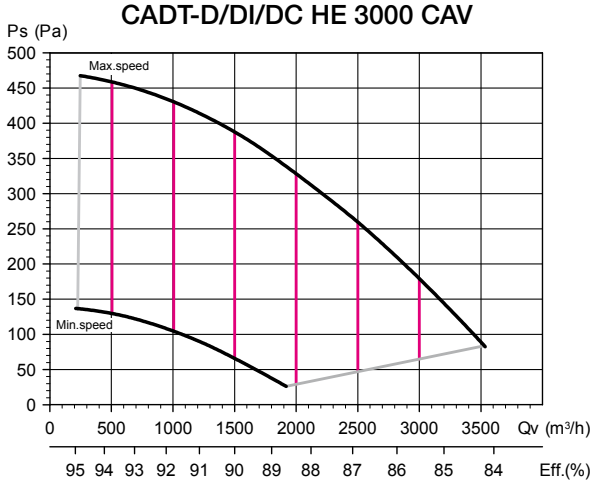
CADT-D/DI/DC HE 3000 VAV



CADT-D/DI/DC HE 4500 VAV



CADT-D/DI/DC HE 3000 CAV



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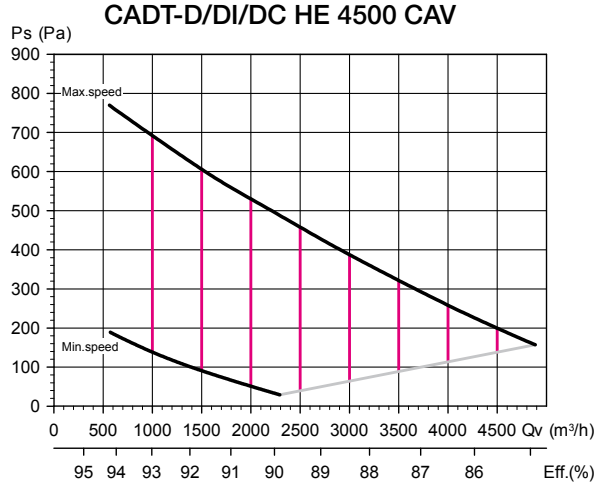

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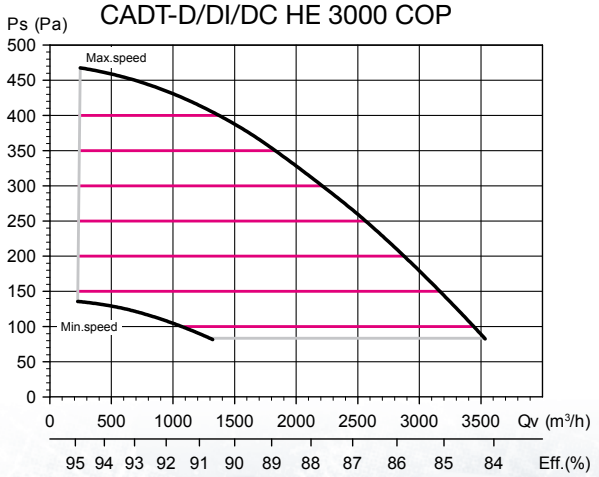

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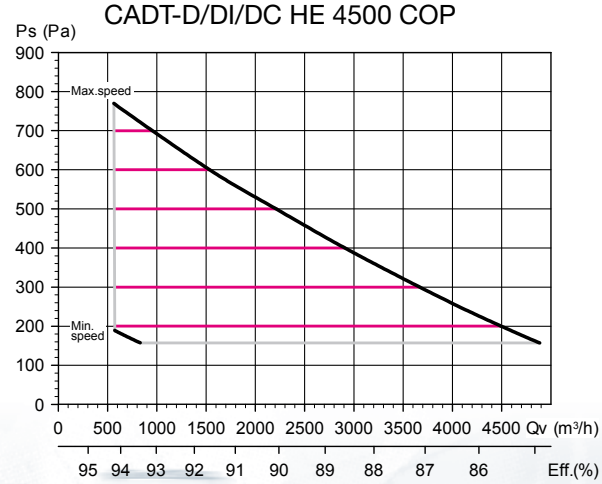
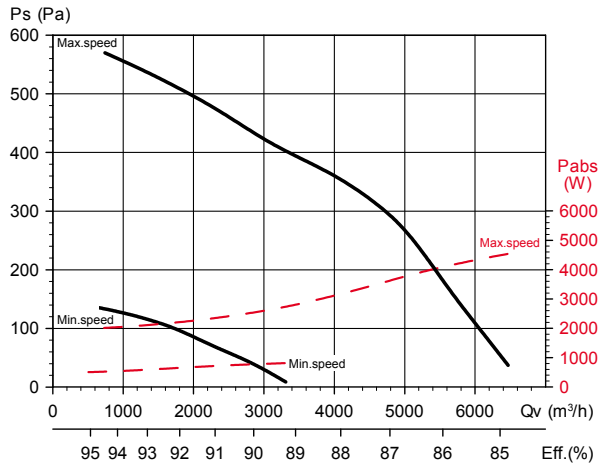


Performance curves

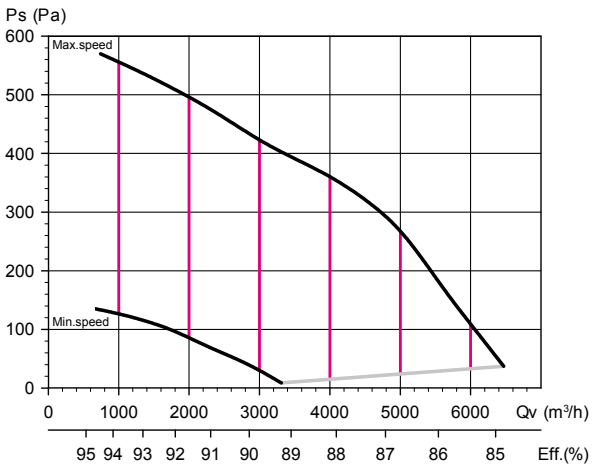
– Qv = Volume in m^3/h.
– Ps = Static pressure in Pa.
– Pabs = Power absorbed (W).
– Normal dry air at 20°C and 760 mmHg.
– Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

Additional pressure drop.
Resistances: All 10 Pa models.
Batteries: 1000 range 35 Pa, 2000 range 32 Pa, 3000 range 37 Pa, 4500 range 48 Pa, 6000 range 48 Pa.

CADT-D/DI/DC HE 6000 VAV



CADT-D/DI/DC HE 6000 CAV



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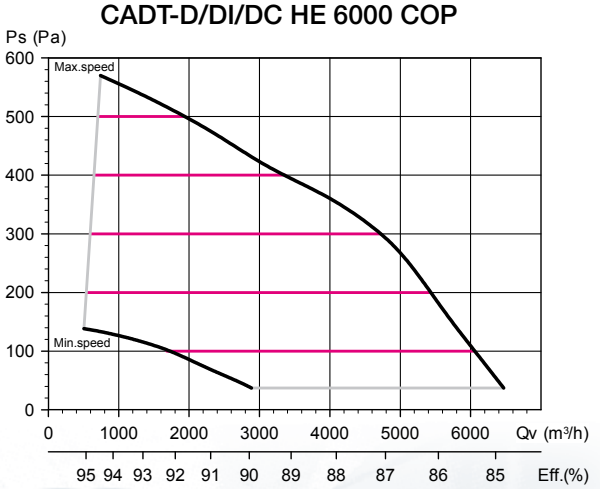


Acoustic characteristics

Lw, levels of sound transmitted in the "inlet" and "outlet" sound levels in accordance with regulation EN ISO 3747 regulation.

	Sound transmitted							
CADT-D/DI/DC HE 1000	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dB(A)**
L_W V_{MAX}	77	66	60	60	54	53	45	66
L_W V_{MIN}	62	52	49	47	39	35	26	52

	Sound radiated							
CADT-D/DI/DC HE 1000	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dB(A)**
L_W V_{MAX}	74	62	60	57	50	44	32	63
L_W V_{MIN}	60	50	43	42	34	26	17	48

	Sound transmitted							
CADT-D/DI/DC HE 2000	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dB(A)**
L_W V_{MAX}	70	63	62	63	58	54	44	66
L_W V_{MIN}	53	45	46	40	33	33	34	47

	Sound radiated							
CADT-D/DI/DC HE 2000	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dB(A)**
L_W V_{MAX}	66	59	58	58	52	46	32	62
L_W V_{MIN}	51	42	43	37	29	28	25	44

	Sound transmitted							
CADT-D/DI/DC HE 3000	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dB(A)**
L_W V_{MAX}	87	76	70	67	61	61	54	75
L_W V_{MIN}	72	61	57	55	49	46	39	61

	Sound radiated							
CADT-D/DI/DC HE 3000	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dB(A)**
L_W V_{MAX}	82	71	63	62	55	52	40	69
L_W V_{MIN}	68	57	51	49	42	37	24	56

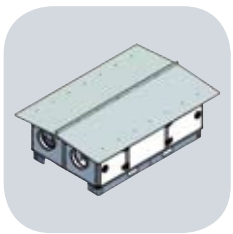
	Sound transmitted							
CADT-D/DI/DC HE 4500	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dB(A)**
L_W V_{MAX}	82	76	70	69	63	64	55	75
L_W V_{MIN}	67	59	57	51	47	45	50	59

	Sound radiated							
CADT-D/DI/DC HE 4500	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dB(A)**
L_W V_{MAX}	78	70	64	63	57	56	42	69
L_W V_{MIN}	63	53	49	46	41	37	38	53

	Sound transmitted							
CADT-D/DI/DC HE 6000	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dB(A)**
L_W V_{MAX}	82	76	72	72	68	68	60	77
L_W V_{MIN}	67	61	59	53	50	47	45	60

	Sound radiated							
CADT-D/DI/DC HE 6000	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dB(A)**
L_W V_{MAX}	78	72	66	66	60	57	45	71
L_W V_{MIN}	62	54	50	47	44	37	33	54

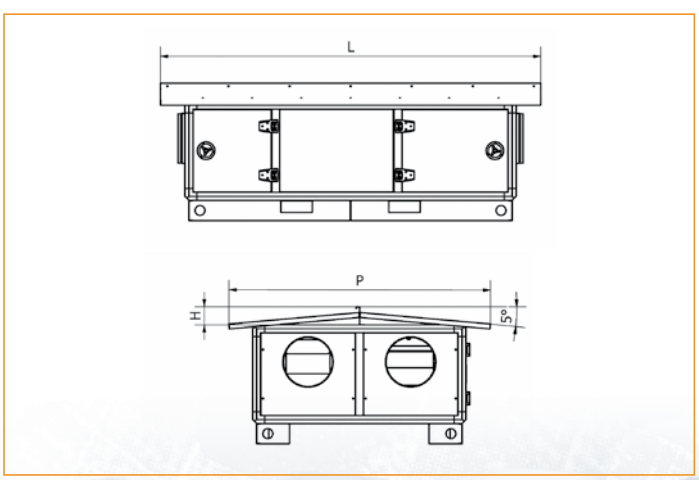
Mounting accessories



TPP-D HE

External rain protection canopy

Model	External rain protection canopy
CADT-D/DI/DC HE 1000	TPP-D HE 1000
CADT-D/DI/DC HE 2000	TPP-D HE 2000
CADT-D/DI/DC HE 3000	TPP-D HE 3000
CADT-D/DI/DC HE 4500	TPP-D HE 4500
CADT-D/DI/DC HE 6000	TPP-D HE 6000



Model	L	P	H
CADT-D/DI/DC HE 1000	2170	1170	95
CADT-D/DI/DC HE 2000	2170	1370	95
CADT-D/DI/DC HE 3000	2280	1680	110
CADT-D/DI/DC HE 4500	2530	1830	115
CADT-D/DI/DC HE 6000	2680	1980	125

Mounting accessories

AFR
Spare filter.

Model	Spare filter		
	Spare filter G4	Spare filter F7	Spare filter F9
CADT-D/DI/DC HE 1000	AFR CADT HE 1000 G4	AFR CADT HE 1000 F7	AFR CADT HE 1000 F9
CADT-D/DI/DC HE 2000	AFR CADT HE 2000 G4	AFR CADT HE 2000 F7	AFR CADT HE 2000 F9
CADT-D/DI/DC HE 3000	AFR CADT HE 3000 G4	AFR CADT HE 3000 F7	AFR CADT HE 3000 F9
CADT-D/DI/DC HE 4500	AFR CADT HE 4500 G4	AFR CADT HE 4500 F7	AFR CADT HE 4500 F9
CADT-D/DI/DC HE 6000	AFR CADT HE 6000 G4	AFR CADT HE 6000 F7	AFR CADT HE 6000 F9

APC
Inlet/discharge protection guards.

Model	Inlet/discharge protection guards
CADT-D/DI/DC HE 1000	APC-250
CADT-D/DI/DC HE 2000	APC-315
CADT-D/DI/DC HE 3000	APC-400
CADT-D/DI/DC HE 4500	APC-450
CADT-D/DI/DC HE 6000	APC-450

ACOPEL F400
Circular flexible connector

Model	Flexible connector
CADT-D/DI/DC HE 1000	ACOPEL F400-250/160
	ACOPEL F400-250/300
CADT-D/DI/DC HE 2000	ACOPEL F400-315/160
	ACOPEL F400-315/300
CADT-D/DI/DC HE 3000	ACOPEL F400-400/160
	ACOPEL F400-400/300
CADT-D/DI/DC HE 4500	ACOPEL F400-450/160
	ACOPEL F400-450/300
CADT-D/DI/DC HE 6000	ACOPEL F400-450/160
	ACOPEL F400-450/300

SIL
Sound attenuators to mount at the inlet and/or discharge of the heat recovery units.

Model	Sound attenuator
CADT-D/DI/DC HE 1000	SIL-250
CADT-D/DI/DC HE 2000	SIL-315
CADT-D/DI/DC HE 3000	SIL-400
CADT-D/DI/DC HE 4500	SIL-450
CADT-D/DI/DC HE 6000	SIL-450

Electrical accessories

SCO2-G 0/10V
CO_2 sensor probe for duct mounting
Enable control of the ventilation in ductwork according to the CO_2 concentration of the air circulating through it.

SHT-G
Temperature and relative humidity sensor for duct mounting
Enable control of the ventilation in ductwork according to the temperature and relative humidity of the air circulating through it.

SCO2-A 0/10V
Ambient CO_2 and temperature sensor
Enable control of the ventilation in ductwork according to the temperature and relative humidity of the air circulating through it or to the temperature.

SCHT-AD
Ambient CO_2 sensor, temperature and relative humidity with display
Enable control of the ventilation ductwork according to the temperature and relative humidity of the air circulating through it or to the temperature.

Model	Electrical supply	Power (W)	Voltage (V)	IP	CO_2 range (pm)	HR (%)	Dimensions LxAxH (mm)
SCO2-G 0/10V	24VDC-24VAC	5	0-10	Box IP65 Sensor IP20	0-2000	–	80x238x80
SHT-G						0-100	

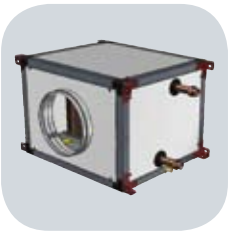
Model	Electrical supply	Power (W)	Voltage	Height inst. (m)	IP	CO_2 range (pm)	Tempe-rature range (ºC)	HR (%)	Dimensions LxAxH (mm)
SCO2-A 0/10V	24VDC-24VAC	5	0-10	1,5-3,5	IP20	0-2000	0-50	–	85x26x100
SCHT-AD								0-100	

Accessories for air treatment

BA-AC*
External coil module for hot water.

Model	External coil module
CADT-D/DI/DC HE 1000	BA-AC 08
CADT-D/DI/DC HE 2000	BA-AC 18
CADT-D/DI/DC HE 3000	BA-AC 30*
CADT-D/DI/DC HE 4500	BA-AC 45
CADT-D/DI/DC HE 6000	BA-AC 56*

* The diameters do not match, you will need to apply a reduction in the duct.



BA-AF*
External coil module for cold water.

Model	External coil module
CADT-D/DI/DC HE 1000	BA-AF 08
CADT-D/DI/DC HE 2000	BA-AF 18
CADT-D/DI/DC HE 3000	BA-AF 30*
CADT-D/DI/DC HE 4500	BA-AF 45
CADT-D/DI/DC HE 6000	BA-AF 56*

* The diameters do not match, you will need to apply a reduction in the duct.

* See complete information on the **HEAT RECOVERY ACCESSORIES**.