



improve your life



Fan Coil Units

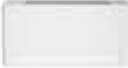
catalogue

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FAN COIL

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UNIT RANGE

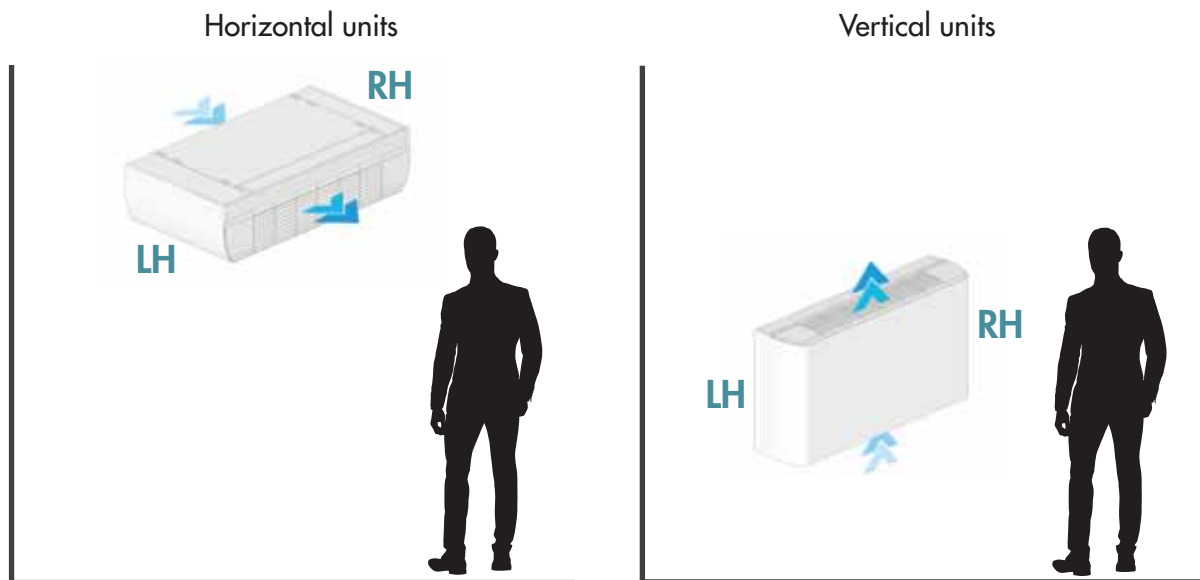
	Model	 2 pipes	 4 pipes	 3-speed	 Brushless	Cooling capacity range W (1)	Heating capacity range W (2)
	FCTS	●		●	●	830 - 3.800	1.090 - 8.300
	FCT-CV	●		●		1.500 - 6.420	3.740 - 13.300
	FCTE-CV	●			●		
	FCT-CA	●		●			
	FCTE-CA	●			●		
	FCT-CH	●		●			
	FCTE-CH	●			●		
	FCT-NV	●		●			
	FCTE-NV	●			●		
	FCT-NH	●		●			
	FCTE-NH	●			●		
  	FCC	●		●		2.950 - 10.530	7.010 - 23.870
	FCCE	●			●	5.020 - 15.190	12.350 - 30.680
	FCCX		●	●		3.070 - 8.540	4.590 - 13.100
	DT-NH	●		●		6.820 - 17.800	15.200 - 37.200
	DT-NV	●		●			
	FCW	●		●		2.100 - 4.200	4.264 - 8.642

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C

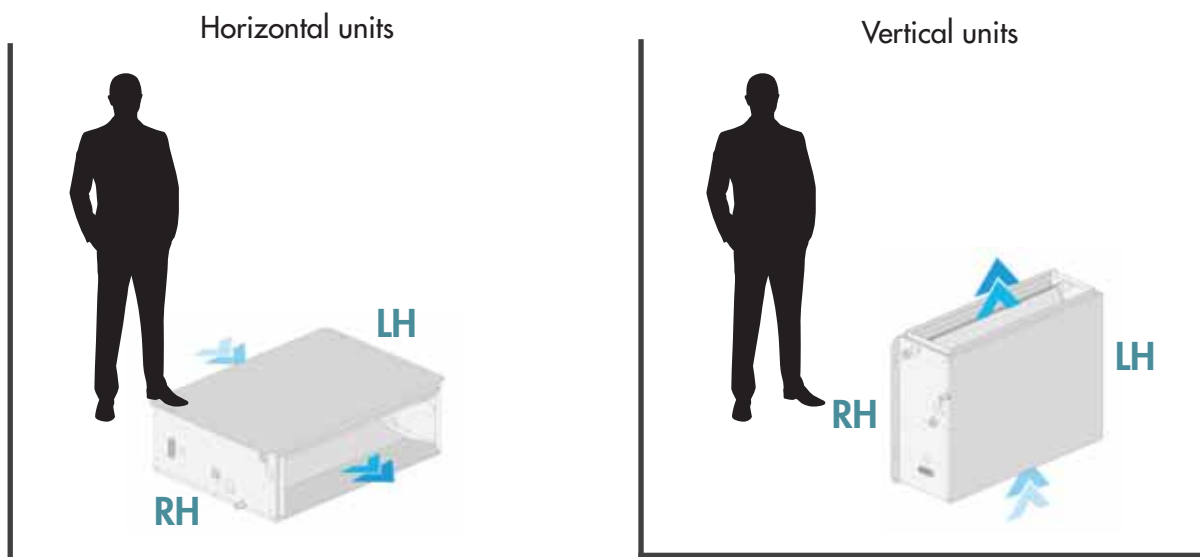
(2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C

FITTING CONVENTIONS

Battery fitting conventions for ffloat/ceiling-mounted fan coil units (FCT - FCTE)



Battery fitting conventions for ductable fan coil units (DT)



Our fan coil units have the fittings mounted on the left-hand side as a standard feature (unless expressly specified).



FLOOR | CEILING

Slim - Model: FCTS

FLOOR/CEILING SLIM FAN COILS

MAIN FEATURES FCTS RANGE

The slim fan coils can be installed on the floor or ceiling in any room thanks to its particularly small size and elegant design. They quickly reach the selected temperature and keep it constant in maximum silence, thanks to the fan in continuous modulation.

The exchange coil in copper-aluminum is suitable for operation with:

- high temperature water (boiler)
- low temperature water (condensing boiler, heat pump, etc.)
- water supplemented with glycol

RANGE

A range of 5 different capacities (with 2-pipe) is available to always find the perfect product for every need, in white RAL 9003 color.

THIN AND SILENT

With only 129 mm thickness, these fan coils can be installed in any ambient. Moreover, with the fan in continuous modulation that progressively reduces the speed as the room temperature approaches the set one, they guarantee maximum silence. When heating, the limits develop an effective natural convection motion, similar to that of a radiator. This greatly reduces the need for ventilation.

MODULATED AIRFLOW AND LOW CONSUMPTION

The fan is tangential with asymmetrical blades and the exchanger has a large frontal surface. In this way, efficient, silent and imperceptible air flows are obtained with low pressure drops. Moreover, the efficiency is very high with low energy consumption thanks to DC inverter technology.

CONTROLS

FCTS fan coils can be combined with a full range of electronic controls, PI modulating type and more traditional type with three or four fan speeds.

Both on-board controllers, recommended for vertical installations, and remote wired-controllers, recommended for ceiling-mounted installations, are available. It is always necessary to match one of the options to each unit.

VALVES

Both a 2-way valve assembly with electrothermal actuator and a 3-way diverting valve assembly with electrothermal actuator are available.

OTHER ACCESSORIES

To complete the installation, several accessories are available: aesthetic feet to hide the hydraulic connection pipes coming from the floor, aesthetic feet for floor fixing, condensate collection trays for horizontal ceiling installation and aesthetic back panels for installations with the rear part of the unit in sight.

FLOOR/CEILING SLIM FANCOILS

MODELS

FAN COIL SLIM MOD. FCTS

Vertical (floor) or horizontal (ceiling) installation.

Code	Model	Cooling capacity (W)*	Heating capacity (W)*
387030666	FCTS-CA 01 L	830	1890
387030710	FCTS-CA 01 R		
387030667	FCTS-CA 02 L	1760	3990
387030711	FCTS-CA 02 R		
387030668	FCTS-CA 03 L	2650	5470
387030712	FCTS-CA 03 R		
387030669	FCTS-CA 04 L	3340	6980
387030713	FCTS-CA 04 R		
387030670	FCTS-CA 05 L	3800	8300
387030714	FCTS-CA 05 R		

*maximum fan speed



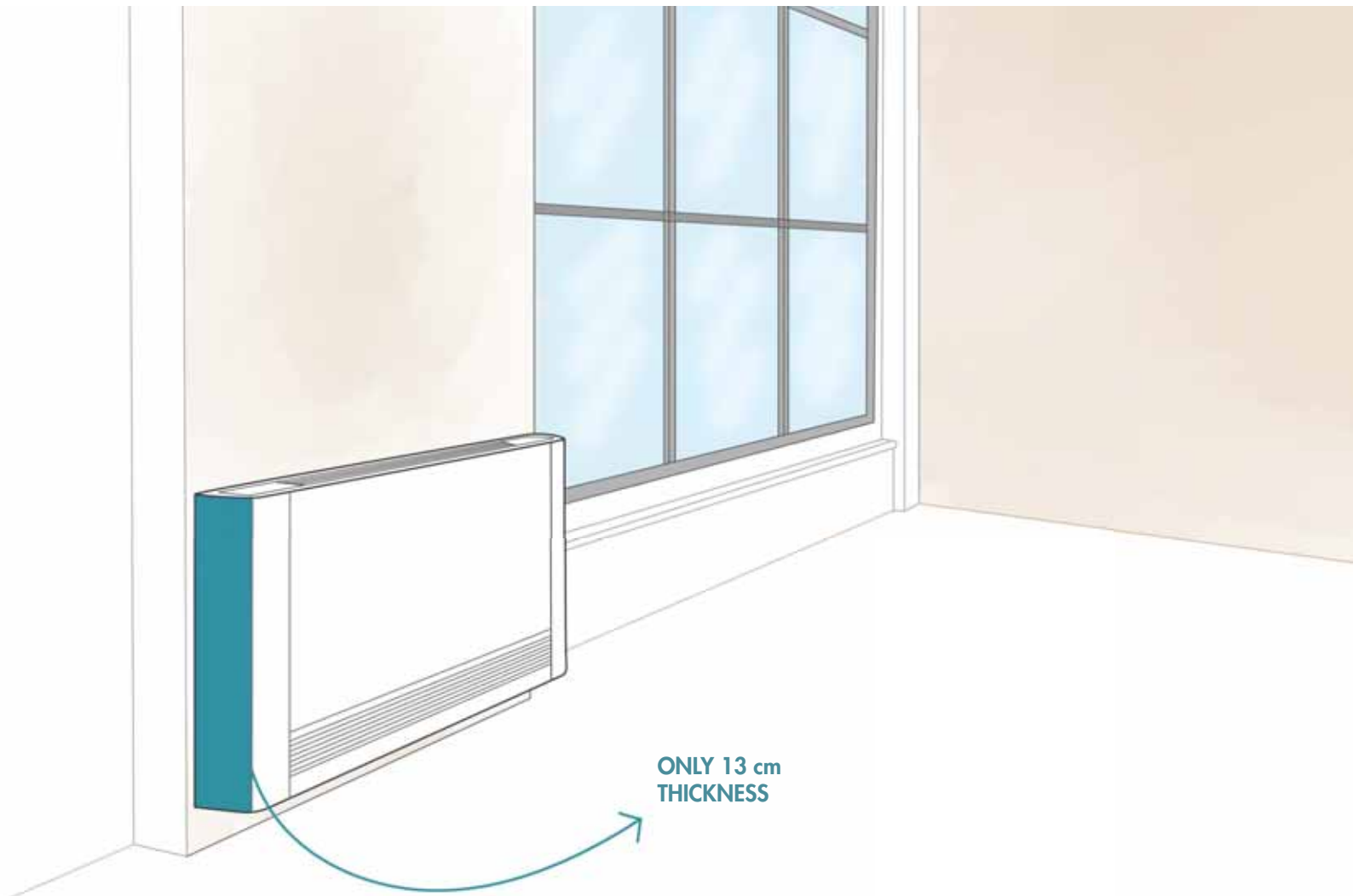
FCTS-CA	01	L
-	(1)	(2)

FCTS-CA = fan coil model

(1) Capacity = 01

(2) L = left battery connection / R = right battery connection

NB: Units are supplied without controllers it's always necessary to select a controller among the available options to be matched with the units



RATED TECHNICAL DATA

TWO-PIPE UNIT - ONE COIL

Model			01	02	03	04	05
Total cooling capacity (1)		W	830	1760	2650	3340	3800
Sensible cooling capacity (1)		W	620	1270	1960	2650	3010
Heating capacity (2a)		W	1090	2350	3190	4100	4860
Heating capacity (2b)		W	1890	3990	5470	6980	8300
Rated air flow		m³/h	162	320	461	576	648
Coil water content		l	0,47	0,8	1,13	1,46	1,8
Water flow rate (4)	Cooling	l/h	143	303	456	574	654
	Heating (2a)	l/h	143	303	456	574	654
	Heating (2b)	l/h	162	343	471	600	714
Pressure drops (5)	Cooling	kPa	7,2	8,4	22,5	18,6	24,9
	Heating (2a)	kPa	5,7	6,6	16,3	14	18,3
	Heating (2b)	kPa	6,7	7,6	16,1	14	19,8
Sound pressure (ls.-ms.-hs.) (3)		dB(A)	24,2-33,2-39,4	25,3-34,1-40,2	25,6-34,4-42,2	26,3-35,0-42,5	27,6-37,6-43,9
Motors/Fans		N/N	1/1				
Rated power input		W	11,9	17,6	19,8	26,5	29,7
		A	0,11	0,16	0,18	0,26	0,28
Electrical power supply		V/Hz	230/50				
Cold/hot coil rows		N	2				
Hydraulic fittings		DN	Eurokonus 3/4"				
Condensate drainage outlet		mm	16				
Net weight		kg	17	20	23	26	29

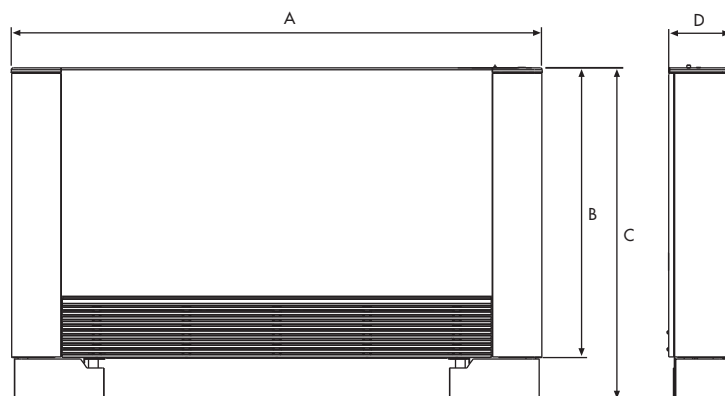
(1) Water temperature at coil inlet 7 °C, water temperature at coil outlet 12 °C, ambient air temperature 27 °C d.b. and 19 °C w.b. (UNI EN 1397 standard)

(2a) Coil inlet water temperature 50 °C, water flow rate as in cooling mode, ambient air temperature 20 °C (UNI EN 1397 standard)

(2b) Water temperature at coil inlet 70 °C, water temperature at coil outlet 60 °C, ambient air temperature 20 °C

(3) Sound pressure measured in a semi-anechoic chamber according to ISO 7779 standard

DIMENSIONAL DRAWINGS

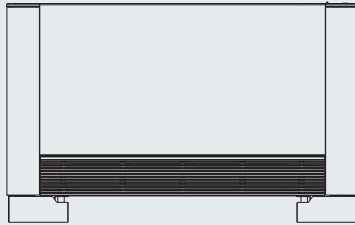


MODEL FCTS		01	02	03	04	05
A	mm	735	935	1135	1335	1535
B	mm	579	579	579	579	579
C	mm	659	659	659	659	659
D	mm	129	129	129	129	129

MATCHABLE CONTROLLERS

OPTIONAL OR ACCESSORIES TO BE ORDERED SEPARATELY

ONLY PCB

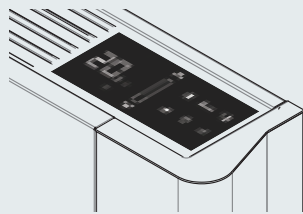


PCB

EIX03 for third-party 3-speed electromechanical wall thermostats

EIX04 for control from third party 0-10V analog output systems

ON-BOARD CONTROLLERS



OBC28 PCB included

OBC30 PCB included

REMOTE WIRED CONTROLLERS



PCB EIX02

CONTROLLERS

SWC31

SWC33

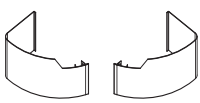
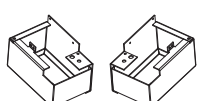
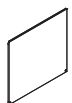
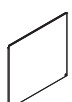
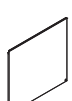
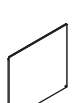
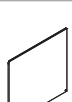
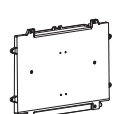
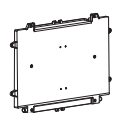
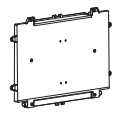
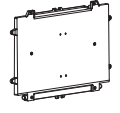
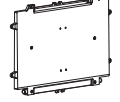
ACCESSORIES

CONTROLS

		Code	Model	Description	Applicability
ON BOARD CONTROLLERS		387030671	OBC28	Electronic controller SMART TOUCH LCD with continuous modulation thermostat	All
		387030673	OBC30	Electronic controller SMART TOUCH LCD e with 4 fixed speeds and thermostat	All
REMOTE WIRED CONTROLLERS		387030675	EIX02	PCB on the unit with continuous modulation for connection to wall controller SWC31 - SWC33	All, to be matched with a wall control
		387030676	SWC31	SMART TOUCH electronic wall controller panel with thermostat and ambient probe (to be coupled from 1 to max 30 EIX02), white color	All, to be matched with PCB EIX02
		387030678	SWC33	Wall electronic controller panel TOUCH LCD with thermostat and temperature probe, relative humidity and air quality in the room. White color	All, to be matched with PCB EIX02
		387030680	EMZS	MZS, Single Zone Module	All
ONLY PCB		387030681	EIX03	Electronic board on the unit or connection to 3-speed electromechanical wall thermostats (third party)	All
		387030682	EIX04	Electronic board on the unit for control from systems with 0-10V analog output (third party)	All

VALVES

Code	Model	Description	Applicability
387030684	2WV08	2-way valve group (inlet valve and lockshield) with thermoelectric motor	All
387030685	3WV08	3-way diverting valve unit with thermoelectric motor (complete with 3-way inlet valve and lockshield)	All

VARIOUS				
	Code	Model	Description	Applicability
	387030686	FE02	Feet for floor pipes hiding in white color	All
	387030687	FE03	Feet to anchor the unit to the floor, white color	All
	387030688	CPBS 01	Back cover in white color - Mod. 01	01
	387030689	CPBS 02	Back cover in white color - Mod. 02	02
	387030690	CPBS 03	Back cover in white color - Mod. 03	03
	387030691	CPBS 04	Back cover in white color - Mod. 04	04
	387030692	CPBS 05	Back cover in white color - Mod. 05	05
	387030694	HB03	Condensate collection tray for horizontal ceiling installation - Mod. 01	01
	387030695	HB04	Condensate collection tray for horizontal ceiling installation - Mod. 02	02
	387030696	HB05	Condensate collection tray for horizontal ceiling installation - Mod. 03	03
	387030697	HB06	Condensate for horizontal ceiling installation - Mod. 04	04
	387030798	HB07	Condensate for horizontal ceiling installation - Mod. 05	05



FLOOR | CEILING

AC - Model: FCT

AC FLOOR/CEILING

MAIN FEATURES MOD. FCT

CONVERGING CABINET

(only for the CV – CA – CH versions)

Standard white finish (RAL 9010). Made of high-thickness galvanised plate pre-coated with a polyvinyl chloride film, it can withstand rust, corrosion, chemicals, solvents, aliphatic compounds and alcohols. Internal thermo-acoustic insulation (Class M1). Compact dimensions: a mere 220 mm thickness. Air supply grid made of white ABS (RAL 9002), with openable side panels for accessing the control panel (accessory).

The double row of manual flaps, each adjustable, allows for directing the air flow in any direction. The flaps can be adjusted in opposite directions to enhance the induction effect. The flow can be directed to graze the ceiling/wall to exploit the Coanda effect.

LOAD-BEARING STRUCTURE

Load-bearing structure made of high-thickness galvanised plate with holes (slots) for wall/ceiling mounting, made directly on the structure.

DRAIN PAN

Drain pan equipped with a drainage outlet and thermal insulation. A condensation drain funnel with Ø 20 mm fitting, made of plastic, is mounted only on vertical versions (standard on the same side of the water connections).

HEAT EXCHANGER

High-efficiency heat exchange coil with copper pipe and aluminium flaps locked by means of mechanical expansion. Coil fittings equipped with anti-torsion system, manual air relief valves and manual water drainage valves. Fittings on the left as a standard feature; on request they can be mounted on the right and are easily reversible on-site. 1 coil for 2-pipe system; 2 coils for 4-pipe system.

Coils tested at 30 bar operating pressure, suitable for working with water up to a maximum pressure of 15 bar.

The coils are suitable for operating with:

- high-temperature water (boiler)
- low-temperature water (condensing boiler, heat pump, etc.)
- cold water (chiller and/or industrial processes)
- water supplemented with glycol.

VENTILATION UNIT

Ventilation unit consisting of 1, 2 or 3 double-intake centrifugal fans directly coupled with the electric motor with a useful static pressure of up to 75 Pa. Mounted on elastic and elastic supports and shock absorbers. Statically and dynamically balanced fan. Asynchronous electric motor equipped with thermal protection device (Klixon), run capacitor always engaged, IP42, Class B, power cables protected with double insulation. Built according to international standards, 230 VAC–1 Ph–50 Hz.

Standard unit with single-speed motor + 6-output auto-transformer ensuring up to 6 speeds (with performances ranging from max=100% to min=40–50%). Standard electrical pre-wiring in the factory of the 3 intermediate speeds nos. 2-3-5.

AIR FILTER

Easily removable air filter, built with a metal frame containing the filtration septum. Can be regenerated by washing it with water, blowing, vacuuming. Standard: filtering medium made of polyester acrylic fabric, high-efficiency, resin-coated and needle-punched. Recommended against dust and pollen. Class M1, filtration grade EU3 (EUROVENT 4/5).

AC FLOOR/CEILING

MODELS

AC FLOOR/CEILING-MOUNTED FAN COIL MOD. FCT-CV

Visible wall-mounted vertical installation, covering cabinet with vertical air outflow and intake from the bottom part.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030239	FCT-CV 01 L	1.500	3.740
387030240	FCT-CV 01 R		
387030241	FCT-CV 02 L	2.000	4.910
387030242	FCT-CV 02 R		
387030243	FCT-CV 03 L	2.530	5.980
387030244	FCT-CV 03 R		
387030245	FCT-CV 04 L	3.020	6.710
387030246	FCT-CV 04 R		
387030247	FCT-CV 05 L	3.750	8.160
387030248	FCT-CV 05 R		
387030249	FCT-CV 06 L	4.250	9.440
387030250	FCT-CV 06 R		
387030251	FCT-CV 07 L	5.520	12.000
387030252	FCT-CV 07 R		
387030253	FCT-CV 08 L	6.420	13.300
387030254	FCT-CV 08 R		
387030255	FCT-CV 09 L	7.530	15.500
387030256	FCT-CV 09 R		



FCT-CV	01	L
-	(1)	(2)

FCT-CV = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left battery connection / R = right battery connection

AC FLOOR FAN COIL MOD. FCT-CA

Visible wall-mounted vertical installation, covering cabinet with vertical air outflow and intake from the front part.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030257	FCT-CA 01 L	1.500	3.740
387030258	FCT-CA 01 R		
387030259	FCT-CA 02 L	2.000	4.910
387030260	FCT-CA 02 R		
387030261	FCT-CA 03 L	2.530	5.980
387030262	FCT-CA 03 R		
387030263	FCT-CA 04 L	3.020	6.710
387030264	FCT-CA 04 R		
387030265	FCT-CA 05 L	3.750	8.160
387030266	FCT-CA 05 R		
387030267	FCT-CA 06 L	4.250	9.440
387030268	FCT-CA 06 R		
387030269	FCT-CA 07 L	5.520	12.000
387030270	FCT-CA 07 R		
387030271	FCT-CA 08 L	6.420	13.300
387030272	FCT-CA 08 R		
387030273	FCT-CA 09 L	7.530	15.500
387030274	FCT-CA 09 R		



FCT-CA	01	L
-	(1)	(2)

FCT-CA = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left battery connection / R = right battery connection

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C
(2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C

AC FLOOR/CEILING MODELS

AC CEILING FAN COIL MOD. FCT-CH

Visible ceiling-mounted horizontal installation, covering cabinet with air outflow from the front and intake from the bottom.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030275	FCT-CH 01 L	1.500	3.740
387030276	FCT-CH 01 R		
387030277	FCT-CH 02 L	2.000	4.910
387030278	FCT-CH 02 R		
387030279	FCT-CH 03 L	2.530	5.980
387030280	FCT-CH 03 R		
387030281	FCT-CH 04 L	3.020	6.710
387030282	FCT-CH 04 R		
387030283	FCT-CH 05 L	3.750	8.160
387030284	FCT-CH 05 R		
387030285	FCT-CH 06 L	4.250	9.440
387030286	FCT-CH 06 R		
387030287	FCT-CH 07 L	5.520	12.000
387030288	FCT-CH 07 R		
387030289	FCT-CH 08 L	6.420	13.300
387030290	FCT-CH 08 R		
387030291	FCT-CH 09 L	7.530	15.500
387030292	FCT-CH 09 R		



FCT-CH	01	L
-	(1)	(2)

FCT-CH = fan coil model
 (1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09
 (2) L = left battery connection / R = right battery connection

AC CONCEALED FAN COIL MOD. FCT-NV

Concealed vertical installation, with vertical air outflow and intake from the front part.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030293	FCT-NV 01 L	1.500	3.740
387030294	FCT-NV 01 R		
387030295	FCT-NV 02 L	2.000	4.910
387030296	FCT-NV 02 R		
387030297	FCT-NV 03 L	2.530	5.980
387030298	FCT-NV 03 R		
387030299	FCT-NV 04 L	3.020	6.710
387030300	FCT-NV 04 R		
387030301	FCT-NV 05 L	3.750	8.160
387030302	FCT-NV 05 R		
387030303	FCT-NV 06 L	4.250	9.440
387030304	FCT-NV 06 R		
387030305	FCT-NV 07 L	5.520	12.000
387030306	FCT-NV 07 R		
387030307	FCT-NV 08 L	6.420	13.300
387030308	FCT-NV 08 R		
387030309	FCT-NV 09 L	7.530	15.500
387030310	FCT-NV 09 R		



FCT-NV	01	L
-	(1)	(2)

FCT-NV = fan coil model
 (1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09
 (2) L = left battery connection / R = right battery connection

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C
 (2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C

AC CONCEALED FAN COIL MOD. FCT-NH

Concealed horizontal installation, with horizontal air outflow and intake from the rear part.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030311	FCT-NH 01 L	1.500	3.740
387030312	FCT-NH 01 R		
387030313	FCT-NH 02 L	2.000	4.910
387030314	FCT-NH 02 R		
387030315	FCT-NH 03 L	2.530	5.980
387030316	FCT-NH 03 R		
387030317	FCT-NH 04 L	3.020	6.710
387030318	FCT-NH 04 R		
387030319	FCT-NH 05 L	3.750	8.160
387030320	FCT-NH 05 R		
387030321	FCT-NH 06 L	4.250	9.440
387030322	FCT-NH 06 R		
387030323	FCT-NH 07 L	5.520	12.000
387030324	FCT-NH 07 R		
387030325	FCT-NH 08 L	6.420	13.300
387030326	FCT-NH 08 R		
387030327	FCT-NH 09 L	7.530	15.500
387030328	FCT-NH 09 R		



FCT-NH	01	L
-	(1)	(2)

FCT-NH = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left battery connection / R = right battery connection

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C
(2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C

RATED TECHNICAL DATA

TWO-PIPE UNIT - ONE COIL

Models			01	02	03	04
Total cooling capacity (1)		W	1.500	2.000	2.530	3.020
Sensible cooling capacity (1)		W	1.290	1.620	2.070	2.310
Heating capacity (2a)		W	3.740	4.910	5.980	6.710
Heating capacity (2b)		W	1.870	2.455	2.990	3.355
Rated air flow (3)		m³/h	370	400	500	550
Water flow rate (4)	Cooling	l/h	258	344	436	520
	Heating	l/h	322	423	515	578
Water head losses (5)	Cooling	kPa	13,1	16,3	18,5	20,8
	Heating	kPa	15,9	19,2	20,1	20
Sound pressure (ls.-ms.-hs.) (6)		dB(A)	24-31-38	25-31-38	30-38-44	31-38-45
Motors/Fans		N/N	1/1		1/1	
Rated power absorption (7)		W	55		85	
		A	0,25		0,40	
Electrical power supply			230 Vac – 1 Ph – 50 Hz			
Cold/hot coil rows		N	3R		3R	
Hydraulic fittings		DN	1/2" F		1/2" F	
Condensate drainage outlet		mm	20		20	

Models			05	06	07	08	09
Total cooling capacity (1)		W	3.750	4.250	5.520	6.420	7.530
Sensible cooling capacity (1)		W	2.870	3.230	4.330	4.800	5.670
Heating capacity (2a)		W	8.160	9.440	12.000	13.300	15.500
Heating capacity (2b)			4.080	4.720	6.000	6.650	7.750
Rated air flow (3)		m³/h	670	720	1.000	1.050	1.280
Water flow rate (4)	Cooling	l/h	645	731	950	1.105	1.296
	Heating	l/h	702	812	1.032	1.144	1.333
Water head losses (5)	Cooling	kPa	22,6	24,1	24,5	27,1	28,8
	Heating	kPa	20,9	23,2	22,6	22,7	23,8
Sound pressure (ls.-ms.-hs.) (6)		dB(A)	26-33-37	27-34-37	34-41-43	35-41-45	39-46-48
Motors/Fans		N/N	1/2		1/2		1/2
Rated power absorption (7)	W		75		145		175
	A		0,35		0,65		0,77
Electrical power supply			230 Vac – 1 Ph – 50 Hz				
Cold/hot coil rows		N	3R		3R		3R
Hydraulic fittings		DN	1/2" F		1/2" F		1/2" F
Condensate drainage outlet		mm	20		20		20

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19°C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741 - ISO 3742 standards.

(7) **Electrical data**: values measured with Jokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

REDUCTION OF THE COOLING/HEATING CAPACITY (IN RELATION TO THE AIR FLOW REDUCTION)

Air flow rate	1,00	0,95	0,90	0,85	0,80	0,75	0,70	0,65	0,60
Total cooling capacity	1,00	0,97	0,95	0,92	0,89	0,87	0,84	0,81	0,77
Sensible cooling capacity	1,00	0,97	0,93	0,90	0,86	0,83	0,79	0,76	0,72
Heating capacity	1,00	0,97	0,94	0,91	0,87	0,84	0,81	0,77	0,74

Air flow rate	0,55	0,50	0,45	0,40	0,35	0,30	0,25	0,20	0,15
Total cooling capacity	0,74	0,71	0,67	0,63	0,59	0,55	0,50	0,45	0,39
Sensible cooling capacity	0,68	0,64	0,60	0,55	0,51	0,46	0,41	0,35	0,29
Heating capacity	0,70	0,66	0,62	0,58	0,53	0,49	0,44	0,38	0,32

TABLE OF NET WEIGHTS MOD. FCT (TWO-PIPE UNIT - ONE COIL) IN KG

Products / Models	01	02	03	04	05	06	07	08	09
FCT-CV	13,5	14,0	16,4	17,2	22,5	23,5	26,5	27,5	30,0
FCT-CA	13,8	14,3	16,9	17,7	23,2	24,2	26,9	28,4	31,1
FCT-CH	15,0	15,5	18,5	19,3	25,2	26,2	29,3	30,8	33,9
FCT-NV	10,6	11,1	13,4	14,2	19,4	20,4	22,7	24,2	26,6
FCT-NH	11,2	11,7	14,0	14,8	20,0	21,0	23,4	24,9	27,3

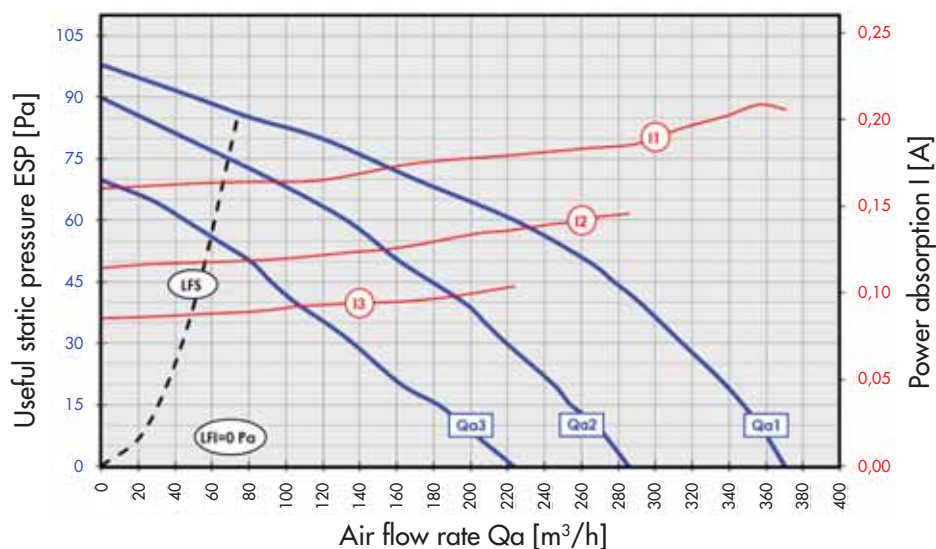
USEFUL STATIC PRESSURE/ WATER FLOW RATE DIAGRAMS

Key

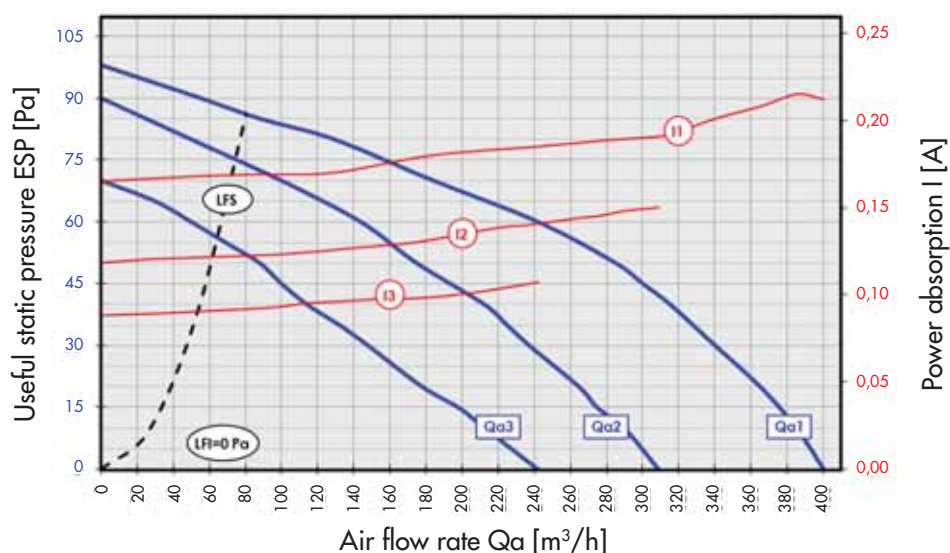
LFS Upper operating limit
LFI Lower operating limit
Qa1 ESP/Qa curve at the maximum speed
Qa2 ESP/Qa curve at the average speed

Qa3 ESP/Qa curve at the minimum speed
I1 I/Qa curve at the maximum speed
I2 I/Qa curve at the average speed
I3 I/Qa curve at the minimum speed

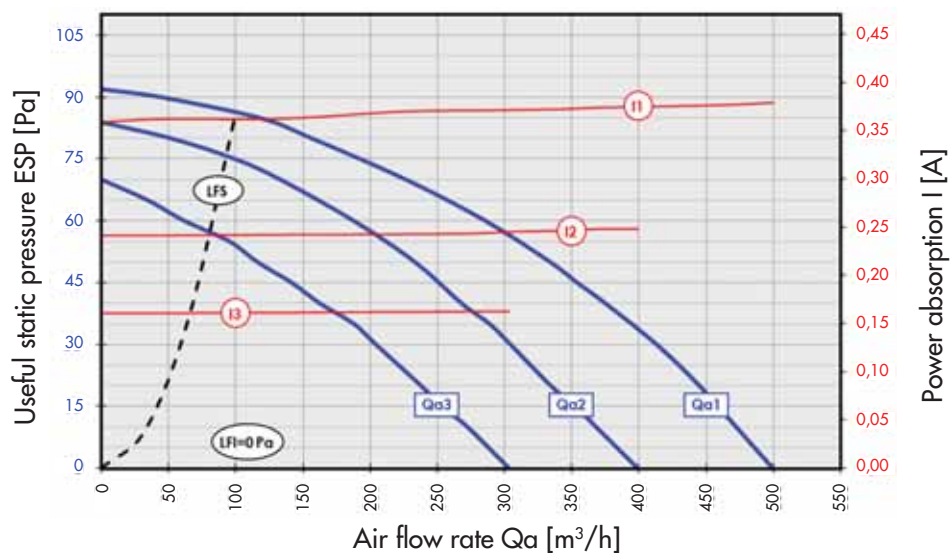
Model FCT 01



Model FCT 02



Model FCT 03

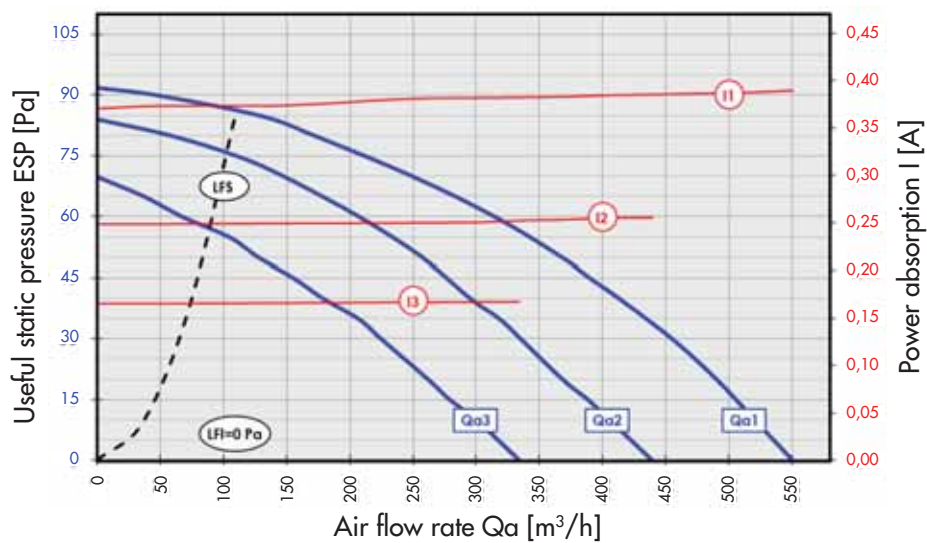


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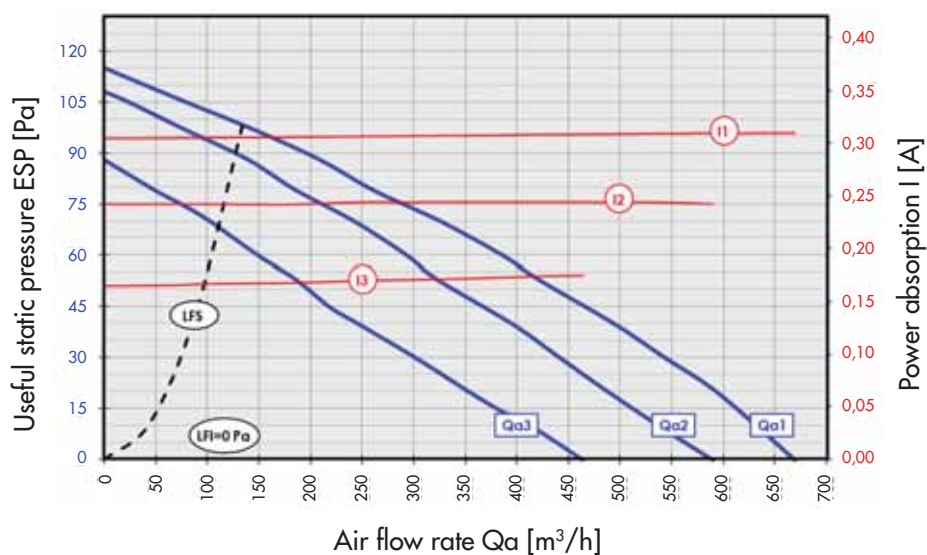
LFS Upper operating limit
LFI Lower operating limit
Qa1 ESP/Qa curve at the maximum speed
Qa2 ESP/Qa curve at the average speed

Qa3 ESP/Qa curve at the minimum speed
I1 I/Qa curve at the maximum speed
I2 I/Qa curve at the average speed
I3 I/Qa curve at the minimum speed

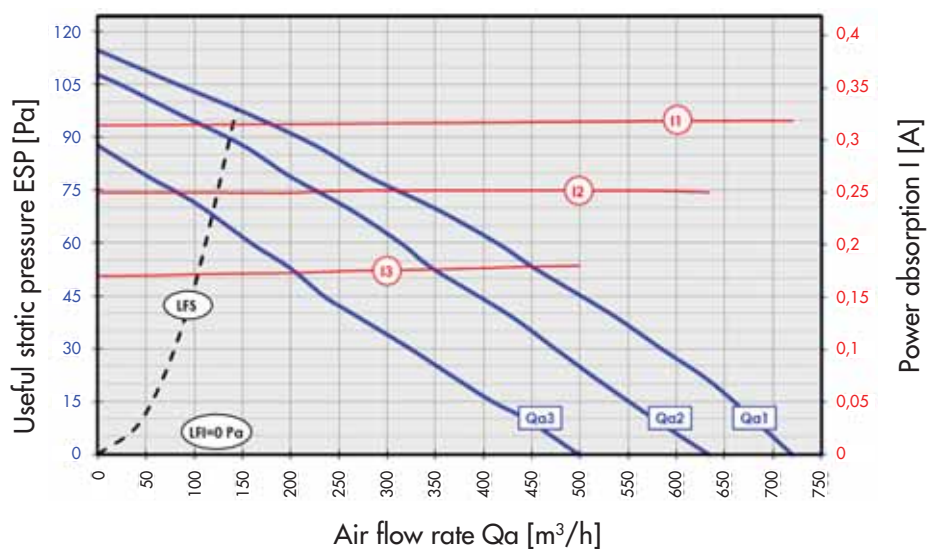
Model FCT 04



Model FCT 05



Model FCT 06



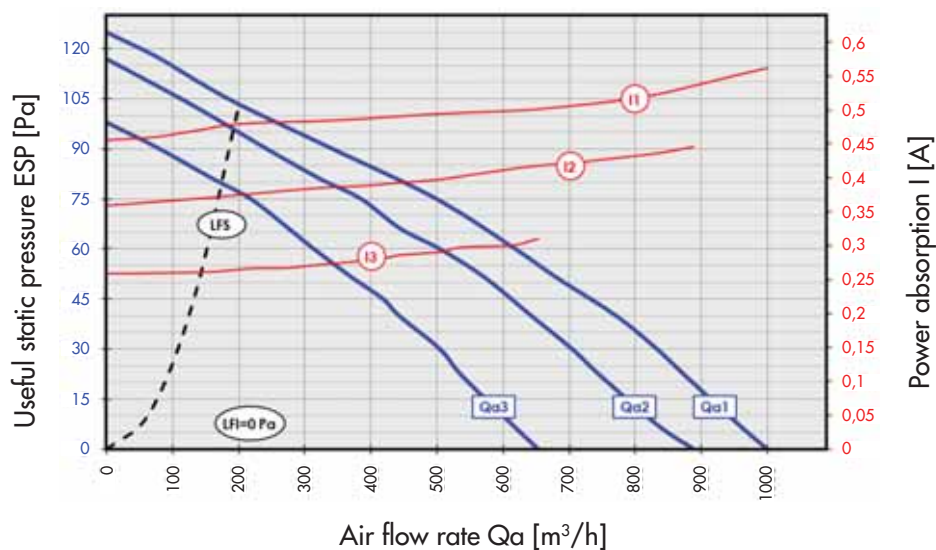
USEFUL STATIC PRESSURE/ WATER FLOW RATE DIAGRAMS

Key

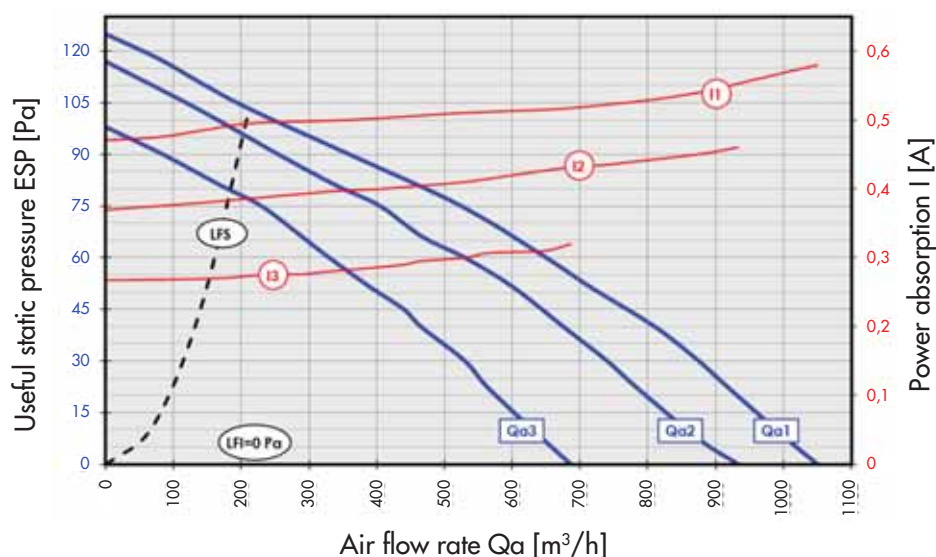
LFS Upper operating limit
LFI Lower operating limit
Qa1 ESP/Qa curve at the maximum speed
Qa2 ESP/Qa curve at the average speed

Qa3 ESP/Qa curve at the minimum speed
I1 I/Qa curve at the maximum speed
I2 I/Qa curve at the average speed
I3 I/Qa curve at the minimum speed

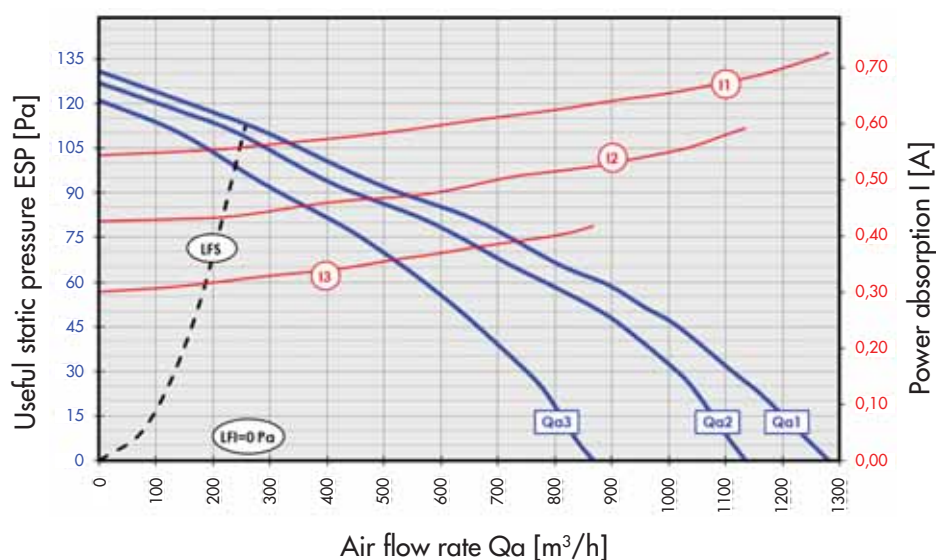
Model FCT 07



Model FCT 08

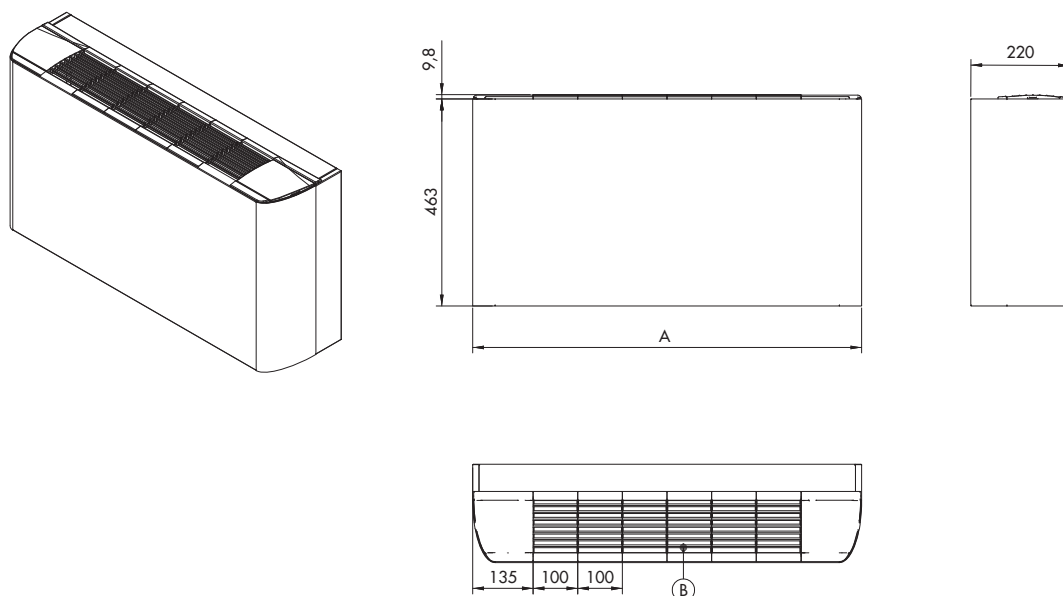


Model FCT 09



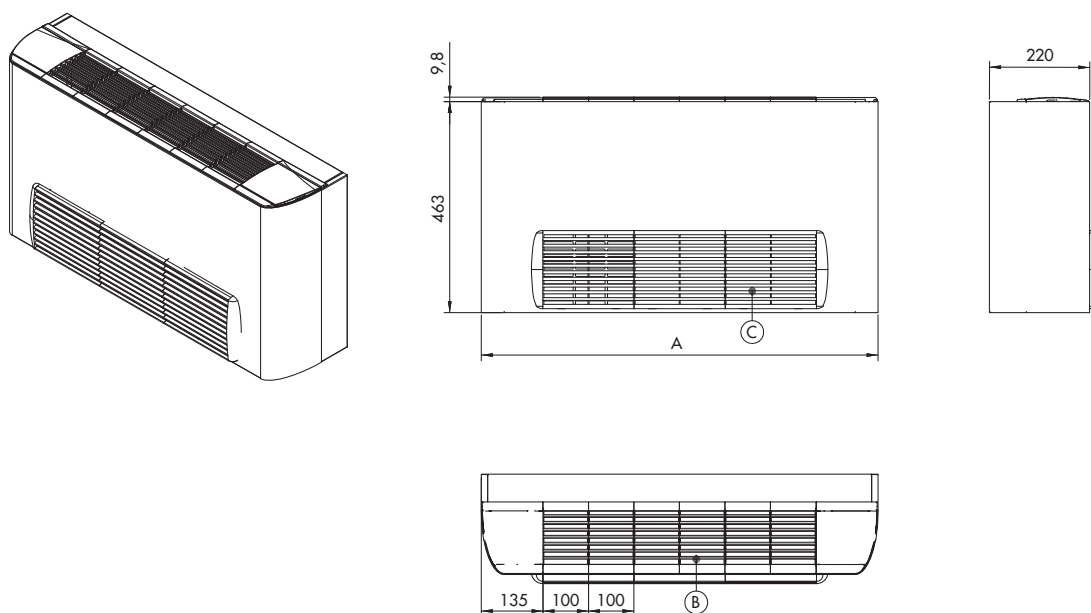
DIMENSIONAL DRAWINGS

Model FCT-CV



MODEL FCT-CV	01	02	03	04	05	06	07	08	09
A	670	670	870	870	1070	1070	1270	1270	1470
B = N° grids	4	4	6	6	8	8	10	10	12

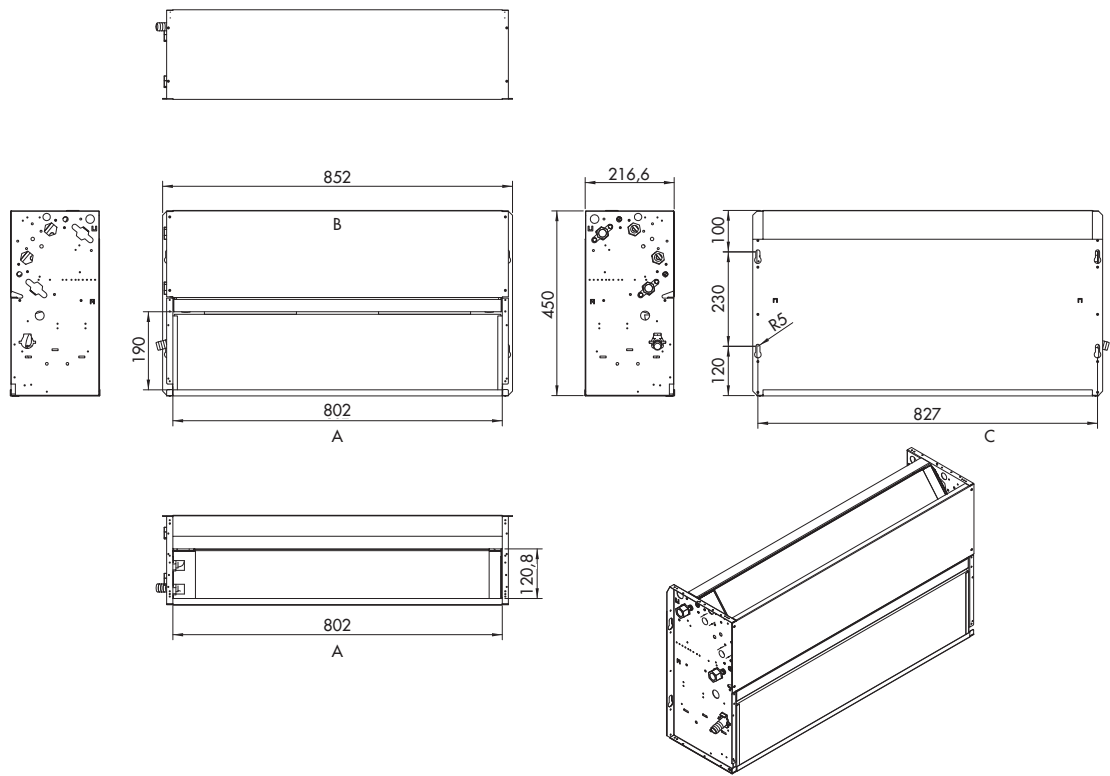
Model FCT-CA / FCT-CH



MODEL FCT-CA / FCT-CH	01	02	03	04	05	06	07	08	09
A	670	670	870	870	1070	1070	1270	1270	1470
B = N° grids	4	4	6	6	8	8	10	10	12
C = N° grids	2	2	3	3	4	4	5	5	6

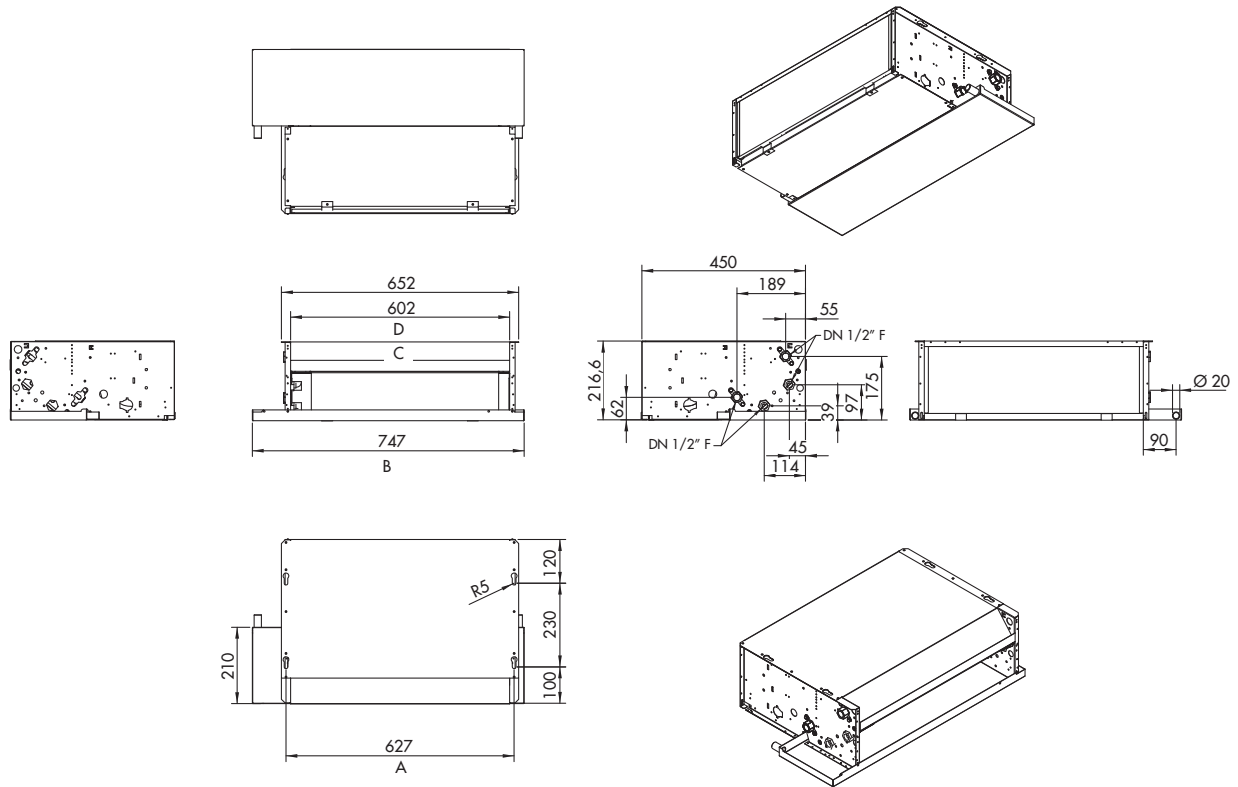
DIMENSIONAL DRAWINGS

Model FCT-NV



MODEL FCT-NV	01	02	03	04	05	06	07	08	09
A	402	402	602	602	802	802	1002	1002	1202
B	452	452	652	652	852	852	1052	1052	1252
C	427	427	627	627	827	827	1027	1027	1227

Model FCT-NH



MODEL FCT-NH	01	02	03	04	05	06	07	08	09
A	427	427	627	627	827	827	1027	1027	1227
B	547	547	747	747	947	947	1147	1147	1347
C	402	402	602	602	802	802	1002	1002	1202
D	452	452	652	652	852	852	1052	1052	1252

ACCESSORIES

CONTROL UNITS INSTALLED				
	Code	Model	Description	Applicability
	387030464	OBC22	Control unit mounted on the machine for units with 2/4 pipes, with ATS4 air sensor	FCT-CV FCT-CA
	387030465	OBC25	Control unit mounted on the machine for units with 2/4 pipes, with display and ATS4 air sensor	FCT-CV FCT-CA
	387030466	MTT32	Minimum hot water temperature thermostat (calibrated to 32°C)	All
	387030467	WTS4	Water temperature sensor (type NTC 4,700 ohm @25°C with cable L=1 m)	For OBC25 control unit as an alternative to MTT32

WIRED CONTROL UNITS AND REMOTE CONTROLS				
	Code	Model	Description	Applicability
	387030468	CL01	IP20 terminal block (mandatory when installing wired control unit)	All
	387030469	SWC22	Simplified thermostat for 2/4-pipe fan coil units	All
	387030470	SWC25	Simplified thermostat for 2/4-pipe fan coil units with display and with advanced functions	All
	387030471	EIX01	Electronic interface for fan coil unit thermostats: enables a single thermostat to control up to 4 fan coil units. Housed in a 6-module container for DIN rail	All
	387030472	IRC01	IR remote control. Kit inclusive of motherboard, air sensor, water sensor and IR receiver	All

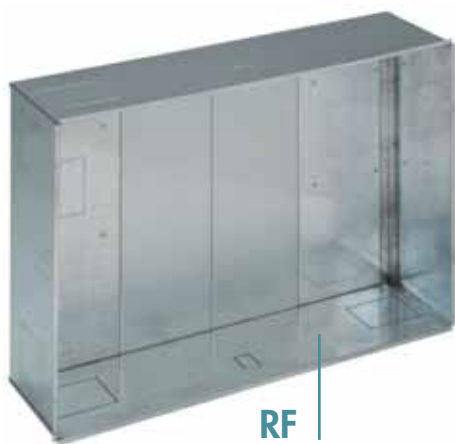
KIT CONTAINING VALVES, PANS, CONDENSATE DISCHARGE PUMPS AND FEET

	Code	Model	Description	Applicability
	387030473	3WV01	3/4" M three-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	All
	387030474	3WV02	Three-way valve with PWM-ON/OFF actuator, 230 V, 1/2" ball valve and 1/2" retainer (2 pipes)	All
	387030475	2WV01	3/4" M two-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	All
	387030476	2WV02	Two-way valve with PWM-ON/OFF actuator, 230 V, 1/2" ball valve and 1/2" retainer (2 pipes)	All
	387030477	VB01	Auxiliary drain pan made of plastic, for two-way or three-way valves	FCT-CV FCT-CA FCT-NV
	387030478	HB01	Auxiliary drain pan with thermal insulation, for two-way or three-way valves	FCT-CH FCT-NH
	387030479	CP01	Condensate discharge pump equipped with alarm contact	FCT-CV FCT-CA FCT-NV
	387030480	CP02	Condensate discharge pump equipped with alarm contact	FCT-CH FCT-NH
	387030481	FE01	Pair of pre-coated feet H=90 mm	FCT-CV

ACCESSORIES

PANELS				
Code		Model	Description	Applicability
387030482	01/02	CPB 01-02	Lower rear closing panel made of pre-painted plate	FCT-CV FCT-CA
387030483	03/04	CPB 03-04		
387030484	05/06	CPB 05-06		
387030485	01/02	CPC 01-02	Lower closing panel without grid made of pre-painted plate	FCT-CA FCT-CH
387030486	03/04	CPC 03-04		
387030487	05/06	CPC 05-06		
387030488	01/02	CPD 01-02	Lower closing panel made of pre-painted plate with removable ABS grid and flat air filter with grade EU3 filtration (EUROVENT 4/5)	FCT-CV
387030489	03/04	CPD 03-04		
387030490	05/06	CPD 05-06		
387030491	01/02	RF 01-02	Frame for concealed wall-mounted installation	FCT-NV
387030492	03/04	RF 03-04		
387030493	05/06	RF 05-06		
387030494	01/02	FP 01-02	Front panel made of pre-painted plate equipped with air return and supply grid, for fan coil units with remote control	FCT-NV
387030495	03/04	FP 03-04		
387030496	05/06	FP 05-06		

PANELS				
Code		Model	Description	Applicability
387030497	07/08	CPB 07-08	Lower rear closing panel made of pre-painted plate	FCT-CV FCT-CA
387030498	09	CPB 09		
387030499	07/08	CPC 07-08	Lower closing panel without grid made of pre-painted plate	FCT-CA FCT-CH
387030500	09	CPC 09		
387030501	07/08	CPD 07-08	Lower closing panel made of pre-painted plate with removable ABS grid and flat air filter with grade EU3 filtration (EUROVENT 4/5)	FCT-CV
387030502	09	CPD 09		
387030503	07/08	RF 07-08	Frame for concealed wall-mounted installation	FCT-NV
387030504	09	RF 09		
387030505	07/08	FP 07-08	Front panel made of pre-painted plate equipped with air return and supply grid, for fan coil units with remote control	FCT-NV
387030506	09	FP 09		

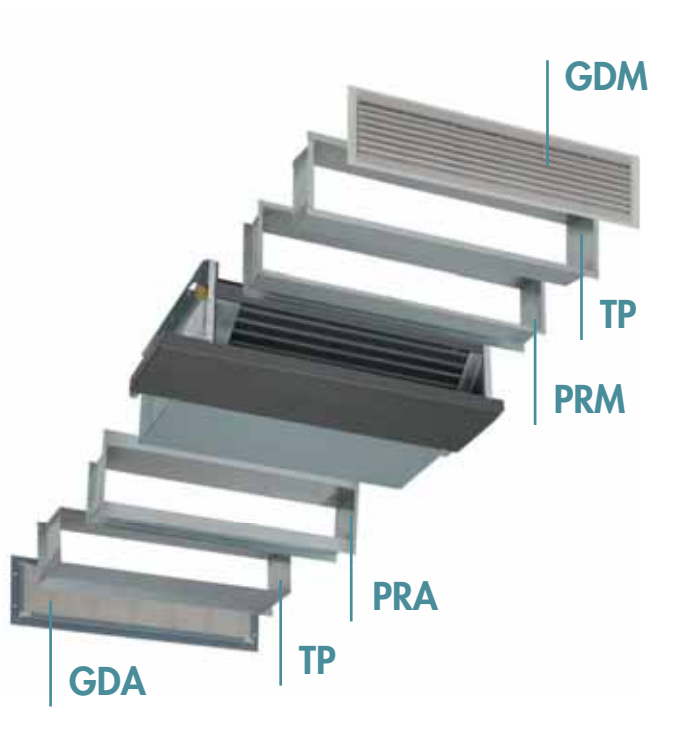
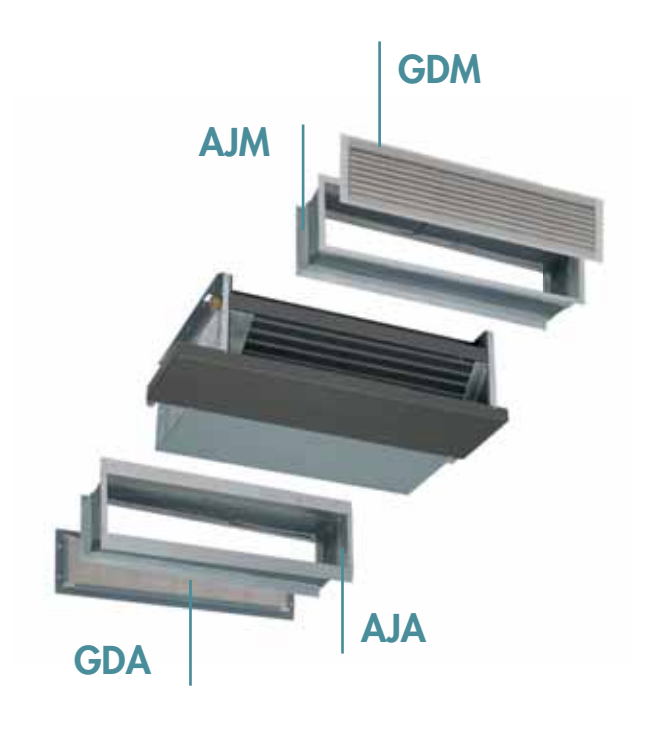
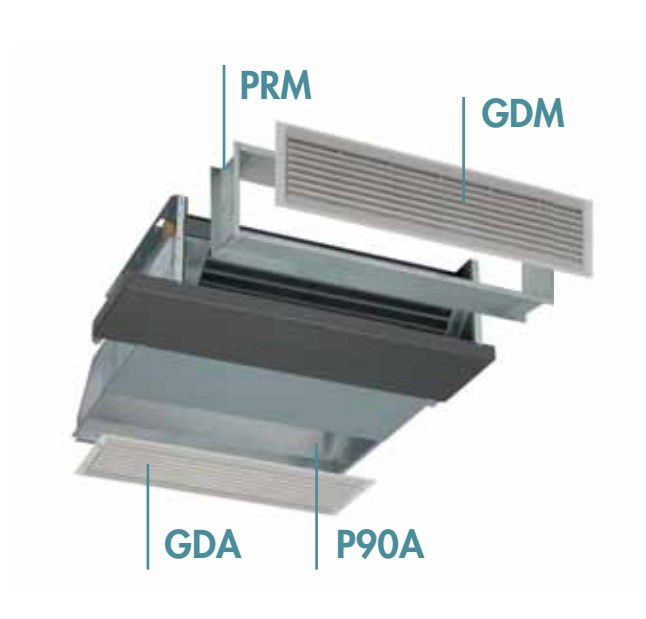
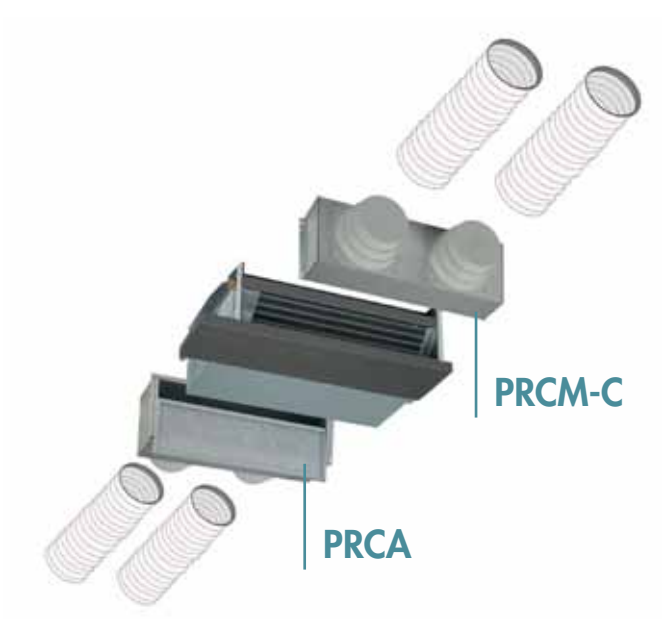


ACCESSORIES

PLENUM				
Code		Model	Description	Applicability
387030507	01/02	AJA 01-02	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Intake side	FCT-NH
387030508	03/04	AJA 03-04		
387030509	05/06	AJA 05-06		
387030510	01/02	AJM 01-02	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Supply side	FCT-NH
387030511	03/04	AJM 03-04		
387030512	05/06	AJM 05-06		
387030513	01/02	GDA 01-02	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJA, P90A plenum - Intake side	FCT-NH
387030514	03/04	GDA 03-04		
387030515	05/06	GDA 05-06		
387030516	01/02	GDM 01-02	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJM plenum - Supply side	FCT-NH
387030517	03/04	GDM 03-04		
387030518	05/06	GDM 05-06		
387030519	01/02	P90A 01-02	90° plenum - Intake side	FCT-NH
387030520	03/04	P90A 03-04		
387030521	05/06	P90A 05-06		
387030522	01/02	P90M-C 01-02	90° plenum - Supply side	FCT-NV
387030523	03/04	P90M-C 03-04		
387030524	05/06	P90M-C 05-06		
387030525	01/02	PRM 01-02	Straight plenum L=100 mm - Supply side	FCT-NH
387030526	03/04	PRM 03-04		
387030527	05/06	PRM 05-06		
387030528	01/02	PRA 01-02	Straight plenum L=100 mm - Intake side	FCT-NH
387030529	03/04	PRA 03-04		
387030530	05/06	PRA 05-06		
387030531	01/02	TP 01-02	Telescopic extension L=0–100 mm, suitable for connection with PRA, PRM, P290A plenum	FCT-NH
387030532	03/04	TP 03-04		
387030533	05/06	TP 05-06		
387030534	01/02	PRCA 01-02	Air intake plenum with round fittings and filter	FCT-NH
387030535	03/04	PRCA 03-04		
387030536	05/06	PRCA 05-06		
387030537	01/02	PRCM 01-02	Air supply plenum with round fittings, insulated	FCT-NH
387030538	03/04	PRCM 03-04		
387030539	05/06	PRCM 05-06		

PLENUM				
Code		Model	Description	Applicability
387030540	07/08	AJA 07-08	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Intake side	FCT-NH
387030541	09	AJA 09		
387030542	07/08	AJM 07-08	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Supply side	FCT-NH
387030543	09	AJM 09		
387030544	07/08	GDA 07-08	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJA, P90A plenum - Intake side	FCT-NH
387030545	09	GDA 09		
387030546	07/08	GDM 07-08	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJM plenum - Supply side	FCT-NH
387030547	09	GDM 09		
387030548	07/08	P90A 07-08	90° plenum - Intake side	FCT-NH
387030549	09	P90A 09		
387030550	07/08	P90M-C 07-08	90° plenum - Supply side	FCT-NV
387030551	09	P90M-C 09		
387030552	07/08	PRM 07-08	Straight plenum L=100 mm - Supply side	FCT-NH
387030553	09	PRM 09		
387030554	07/08	PRA 07-08	Straight plenum L=100 mm - Intake side	FCT-NH
387030555	09	PRA 09		
387030556	07/08	TP 07-08	Telescopic extension L=0–100 mm, suitable for connection with PRA, PRM, P290A plenum	FCT-NH
387030557	09	TP 09		
387030558	07/08	PRCA 07-08	Air intake plenum with round fittings and filter	FCT-NH
387030559	09	PRCA 09		
387030560	07/08	PRCM-C 07-08	Air supply plenum with round fittings, insulated	FCT-NH
387030561	09	PRCM-C 09		

ACCESSORIES







FLOOR | CEILING

EC Brushless - Model: FCTE

EC BRUSHLESS FLOOR/CEILING

MAIN FEATURES MOD. FCTE

COVERING CABINET

(only for the CV – CA – CH versions)

Standard white finish (RAL 9010). Made of high-thickness galvanised plate prelined with a polyvinyl chloride film, it can withstand rust, corrosion, chemicals, solvents, aliphatic compounds and alcohols. Internal thermo-acoustic insulation (Class M1). Compact dimensions: a mere 220 mm thickness.

Air supply grid made of white ABS (RAL 9002), with openable side panels for accessing the control panel (accessory).

The double row of manual flaps, each adjustable, allows for directing the air flow in any direction. The flaps can be adjusted in opposite directions to enhance the induction effect. The flow can be directed to graze the ceiling/wall to exploit the Coanda effect.

LOAD-BEARING STRUCTURE

Load-bearing structure made of high-thickness galvanised plate with holes (slots) for wall/ceiling mounting, made directly on the structure.

DRAIN PAN

Drain pan equipped with a drainage outlet and thermal insulation. A condensation drain funnel with Ø 20 mm fitting, made of plastic, is mounted only on vertical versions (standard on the same side of the water connections).

HEAT EXCHANGER

High-efficiency heat exchange coil with copper pipe and aluminium flaps locked by means of mechanical expansion. Coil fittings equipped with anti-torsion system, manual air relief valves and manual water drainage valves. Fittings on the left as a standard feature; on request they can be mounted on the right and are easily reversible on-site. 1 coil for 2-pipe system; 2 coils for 4-pipe system.

Coils tested at 30 bar operating pressure, suitable for working with water up to a maximum pressure of 15 bar.

The coils are suitable for operating with:

- high-temperature water (boiler)
- low-temperature water (condensing boiler, heat pump, etc.)
- cold water (chiller and/or industrial processes)
- water supplemented with glycol.

VENTILATION UNIT

Ventilation unit consisting of 1 or 2 double-intake centrifugal fans directly coupled with the electric motor with a useful static pressure of up to 75 Pa. Mounted on elastic and elastic supports and shock absorbers. Statically and dynamically balanced fan. Large-diameter fans (high air volume and high static pressure) with low number of revolutions (low noise).

Latest generation EC brushless motor with permanent magnets, direct current, equipped with control electronics (inverter). IP 40, Class B, power cables protected with double insulation.

Built according to international standards, 230 VAC–1 Ph–50/60 Hz. Continuous adjustment 0–100% of the number of revolutions (and hence of the air volume and consequently the cooling/heating capacity) by means of a 0... 10 VDC modulating control signal.

Inverter with dip-switches for setting the various types of motor control software programmes + dip-switches for redistributing the work range on a new more limited range (from 0...10 VDC up to 0...6.5 VDC).

AIR FILTER

Easily removable air filter, built with a metal frame containing the filtration septum. Can be regenerated by washing it with water, blowing, vacuuming. Standard: filtering medium made of polyester acrylic fabric, high-efficiency, resin-coated and needle-punched. Recommended against dust and pollen. Class M1, filtration grade EU3 (EUROVENT 4/5).

EC BRUSHLESS FLOOR/CEILING MODELS

EC BRUSHLESS FLOOR/CEILING-MOUNTED FAN COIL MOD. FCTE-CV

Visible wall-mounted vertical installation, covering cabinet with vertical air outflow and intake from the bottom part.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030329	FCTE-CV 01 L	1.500	3.740
387030330	FCTE-CV 01 R		
387030331	FCTE-CV 02 L	2.000	4.910
387030332	FCTE-CV 02 R		
387030333	FCTE-CV 03 L	2.530	5.980
387030334	FCTE-CV 03 R		
387030335	FCTE-CV 04 L	3.020	6.710
387030336	FCTE-CV 04 R		
387030337	FCTE-CV 05 L	3.750	8.160
387030338	FCTE-CV 05 R		
387030339	FCTE-CV 06 L	4.250	9.440
387030340	FCTE-CV 06 R		
387030341	FCTE-CV 07 L	5.520	12.000
387030342	FCTE-CV 07 R		
387030343	FCTE-CV 08 L	6.420	13.300
387030344	FCTE-CV 08 R		
387030345	FCTE-CV 09 L	7.530	15.500
387030346	FCTE-CV 09 R		



FCTE-CV	01	L
-	(1)	(2)

FCTE-CV = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left battery connection / R = right battery connection

EC BRUSHLESS FLOOR FAN COIL MOD. FCTE-CA

Visible wall-mounted vertical installation, covering cabinet with vertical air outflow and intake from the front part.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030347	FCTE-CA 01 L	1.500	3.740
387030348	FCTE-CA 01 R		
387030349	FCTE-CA 02 L	2.000	4.910
387030350	FCTE-CA 02 R		
387030351	FCTE-CA 03 L	2.530	5.980
387030352	FCTE-CA 03 R		
387030353	FCTE-CA 04 L	3.020	6.710
387030354	FCTE-CA 04 R		
387030355	FCTE-CA 05 L	3.750	8.160
387030356	FCTE-CA 05 R		
387030357	FCTE-CA 06 L	4.250	9.440
387030358	FCTE-CA 06 R		
387030359	FCTE-CA 07 L	5.520	12.000
387030360	FCTE-CA 07 R		
387030361	FCTE-CA 08 L	6.420	13.300
387030362	FCTE-CA 08 R		
387030363	FCTE-CA 09 L	7.530	15.500
387030364	FCTE-CA 09 R		



FCTE-CA	01	L
-	(1)	(2)

FCTE-CA = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left battery connection / R = right battery connection

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C

(2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C

EC BRUSHLESS FLOOR/CEILING MODELS

EC BRUSHLESS CEILING FAN COIL MOD. FCTE-CH

Visible ceiling-mounted horizontal installation, covering cabinet with air outflow from the front and intake from the bottom.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030365	FCTE-CH 01 L	1.500	3.740
387030366	FCTE-CH 01 R		
387030367	FCTE-CH 02 L	2.000	4.910
387030368	FCTE-CH 02 R		
387030369	FCTE-CH 03 L	2.530	5.980
387030370	FCTE-CH 03 R		
387030371	FCTE-CH 04 L	3.020	6.710
387030372	FCTE-CH 04 R		
387030373	FCTE-CH 05 L	3.750	8.160
387030374	FCTE-CH 05 R		
387030375	FCTE-CH 06 L	4.250	9.440
387030376	FCTE-CH 06 R		
387030377	FCTE-CH 07 L	5.520	12.000
387030378	FCTE-CH 07 R		
387030379	FCTE-CH 08 L	6.420	13.300
387030380	FCTE-CH 08 R		
387030381	FCTE-CH 09 L	7.530	15.500
387030382	FCTE-CH 09 R		



FCTE-CH	01	L
-	(1)	(2)

FCTE-CH = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left battery connection / R = right battery connection

EC BRUSHLESS CONCEALED FAN COIL MOD. FCTE-NV

Concealed vertical installation, with vertical air outflow and intake from the front part.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030383	FCTE-NV 01 L	1.500	3.740
387030384	FCTE-NV 01 R		
387030385	FCTE-NV 02 L	2.000	4.910
387030386	FCTE-NV 02 R		
387030387	FCTE-NV 03 L	2.530	5.980
387030388	FCTE-NV 03 R		
387030389	FCTE-NV 04 L	3.020	6.710
387030390	FCTE-NV 04 R		
387030391	FCTE-NV 05 L	3.750	8.160
387030392	FCTE-NV 05 R		
387030393	FCTE-NV 06 L	4.250	9.440
387030394	FCTE-NV 06 R		
387030395	FCTE-NV 07 L	5.520	12.000
387030396	FCTE-NV 07 R		
387030397	FCTE-NV 08 L	6.420	13.300
387030398	FCTE-NV 08 R		
387030399	FCTE-NV 09 L	7.530	15.500
387030400	FCTE-NV 09 R		



FCTE-NV	01	L
-	(1)	(2)

FCTE-NV = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left battery connection / R = right battery connection

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C

(2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C

EC BRUSHLESS CONCEALED FAN COIL MOD. FCTE-NH

Concealed horizontal installation, with horizontal air outflow and intake from the rear part.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030401	FCTE-NH 01 L	1.500	3.740
387030402	FCTE-NH 01 R		
387030403	FCTE-NH 02 L	2.000	4.910
387030404	FCTE-NH 02 R		
387030405	FCTE-NH 03 L	2.530	5.980
387030406	FCTE-NH 03 R		
387030407	FCTE-NH 04 L	3.020	6.710
387030408	FCTE-NH 04 R		
387030409	FCTE-NH 05 L	3.750	8.160
387030410	FCTE-NH 05 R		
387030411	FCTE-NH 06 L	4.250	9.440
387030412	FCTE-NH 06 R		
387030413	FCTE-NH 07 L	5.520	12.000
387030414	FCTE-NH 07 R		
387030415	FCTE-NH 08 L	6.420	13.300
387030416	FCTE-NH 08 R		
387030417	FCTE-NH 09 L	7.530	15.500
387030418	FCTE-NH 09 R		



FCTE-NH	01	L
-	(1)	(2)

FCTE-NH = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08, 09

(2) L = left battery connection / R = right battery connection

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C

(2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C

RATED TECHNICAL DATA

TWO-PIPE UNIT - ONE COIL

MODELS			01	02	03	04
RATED		Rated performances (ref. Modulation signal guaranteeing “FCTE Brushless air flow rate = corresponding FCT air flow rate”)				
Total cooling capacity (1)		W	1.500	2.000	2.530	3.020
Sensible cooling capacity (1)		W	1.290	1.620	2.070	2.310
Heating capacity (2a)		W	3.740	4.910	5.980	6.710
Heating capacity (2b)		W	1.936	2.535	3.068	3.435
Rated air flow (3)		m³/h	370	400	500	550
Water flow rate (4)	Cooling	l/h	258	344	436	520
	Heating	l/h	322	423	515	578
Water head losses (5)	Cooling	kPa	13,1	16,3	18,5	20,8
	Heating	kPa	15,9	19,2	20,1	20
Sound pressure (6)		dB(A)	36	39	41	43
Rated power absorption (7)		W	19	25	27	34
		A	0,15	0,19	0,20	0,25
Reference control signal		Vdc	5,80	6,80	7,10	8,00
Electrical power supply		230 Vac – 1 Ph – 50 Hz / Segnale 0...10 Vdc				
ECO (3 vdc)		Expected operating performances ("Unit performances=requested performances" balance)				
Air flow rate		m³/h	240		285	
Sound pressure		dB(A)	23		26	
Rated power absorption		W	9		9	
		A	0,09		0,10	
RANGE 10–1 vdc		MAX performances ref. 10 VDC signal; MIN ref. 1 VDC (for signals < 1 VDC the unit remains off)				
Total cooling capacity range		W	1.810-880	2.320-1.130	2.830-1.400	3.220-1.600
Heating capacity range		W	4.680-1.970	5.860-2.470	6.840-2.940	7.250-3.120
Air flow rate range		m³/h	537-127		625-153	
Sound pressure range		dB(A)	45-10		47-10	
Rated power absorption		W	48-6		54-6	
		A	0,32-0,07		0,36-0,07	
Cold/hot coil rows		N	3R		3R	
Hydraulic fittings		DN	1/2" F		1/2" F	
Condensate drainage outlet		mm	20		20	
Motors/Fans		N/N	1/1		1/1	
Rated power absorption (7)		W	70		70	
		A	0,50		0,50	

MODELS			05	06	07	08	09
RATED		Rated performances (ref. Modulation signal guaranteeing “FCTE Brushless air flow rate = corresponding FCT air flow rate”)					
Total cooling capacity (1)		W	3.750	4.250	5.520	6.420	7.440
Sensible cooling capacity (1)		W	2.870	3.230	4.330	4.800	5.600
Heating capacity (2a)		W	8.160	9.440	12.000	13.300	15.300
Heating capacity (2b)		W	4.376	5.059	6.196	6.857	7.909
Rated air flow (3)		m³/h	670	720	1.000	1.050	1.255
Water flow rate (4)	Cooling	l/h	645	731	950	1.105	1.260
	Heating	l/h	702	812	1.032	1.144	1.316
Water head losses (5)	Cooling	kPa	22,6	24,1	24,5	27,1	28,1
	Heating	kPa	20,9	23,2	22,6	22,7	23,2
Sound pressure (6)		dB(A)	24	36	42	43	46
Rated power absorption (7)		W	23	26	46	53	73
		A	0,16	0,20	0,31	0,35	0,48
Reference control signal		Vdc	5,70	6,20	8,00	8,50	10,00
Electrical power supply		230 Vac – 1 Ph – 50 Hz / Segnale 0...10 Vdc					
ECO (3 vdc)		Expected operating performances ("Unit performances=requested performances" balance)					
Air flow rate		m³/h	424		515		536
Sound pressure		dB(A)	22		24		25
Rated power absorption		W	10		11		11
		A	0,09		0,10		0,09
RANGE 10–1 vdc		MAX performances ref. 10 VDC signal; MIN ref. 1 VDC (for signals < 1 VDC the unit remains off)					
Total cooling capacity range		W	4.630-2.130	5.070-2.330	6.010-3.060	6.820-3.470	7.440-3.780
Heating capacity range		W	10.510-4.130	11.650-4.580	13.280-5.900	14.300-6.350	15.300-6.780
Air flow rate range		m³/h	1.021-215		1.184-306		1.255-323
Sound pressure range		dB(A)	45-12		46-9		46-11
Rated power absorption		W	65-6		74-6		73-6
		A	0,44-0,07		0,49-0,08		0,48-0,07
Cold/hot coil rows		N	3R				
Hydraulic fittings		DN	1/2" F				
Condensate drainage outlet		mm	20				
Motors/Fans		N/N	1/2				
Rated power absorption (7)		W	75				
		A	0,60				

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741 - ISO 3742 standards.

(7) **Electrical data**: values measured with Jokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

TECHNICAL DATA

REDUCTION OF THE COOLING/HEATING CAPACITY (in relation to the air flow reduction)

Air flow rate	1,50	1,40	1,30	1,20	1,10	1,00	0,95	0,90	0,85	0,80	0,75
Total cooling capacity	1,22	1,18	1,14	1,10	1,05	1,00	0,97	0,95	0,92	0,89	0,87
Sensible cooling capacity	1,30	1,24	1,19	1,13	1,06	1,00	0,97	0,93	0,90	0,86	0,83
Heat capacity	1,28	1,22	1,17	1,12	1,06	1,00	0,97	0,94	0,91	0,87	0,84

Air flow rate	0,70	0,65	0,60	0,55	0,50	0,45	0,40	0,35	0,30	0,25	0,20
Total cooling capacity	0,84	0,81	0,77	0,74	0,71	0,67	0,63	0,59	0,55	0,50	0,45
Sensible cooling capacity	0,79	0,76	0,72	0,68	0,64	0,60	0,55	0,51	0,46	0,41	0,35
Heat capacity	0,81	0,77	0,74	0,70	0,66	0,62	0,58	0,53	0,49	0,44	0,38

TABLE OF NET WEIGHTS MOD. FCTE (TWO-PIPE UNIT - ONE COIL) IN KG

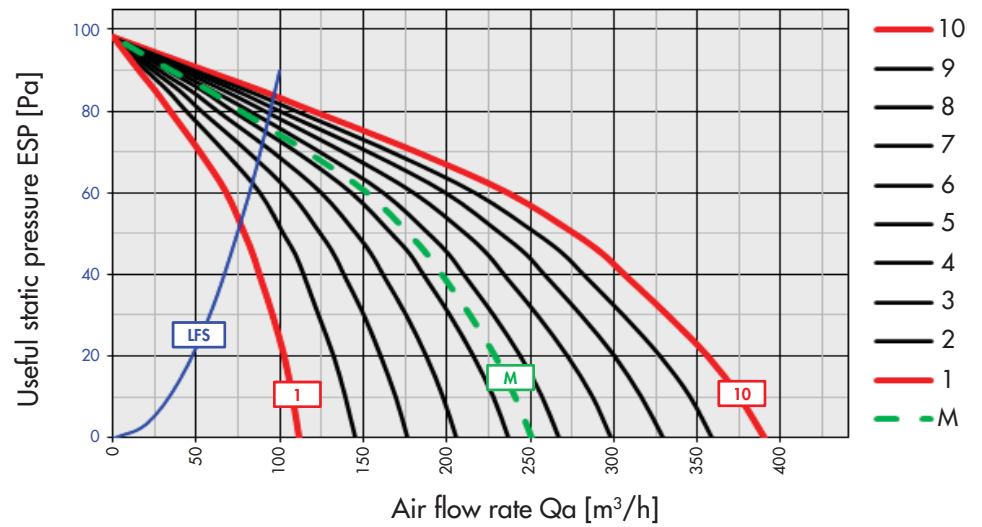
Products / Models	01	02	03	04	05	06	07	08	09
FCTE-CV	14,7	15,2	17,7	18,5	23,9	24,9	27,5	29,0	31,6
FCTE-CA	15,0	15,5	18,2	19,0	24,6	25,6	28,4	29,9	32,7
FCTE-CH	16,2	16,7	19,8	20,6	26,6	27,6	30,8	32,3	35,5
FCTE-NV	11,8	12,3	14,7	15,5	20,8	21,8	24,2	25,7	28,2
FCTE-NH	12,4	12,9	15,3	16,1	21,4	22,4	24,9	26,4	28,9

USEFUL STATIC PRESSURE/ WATER FLOW RATE DIAGRAMS

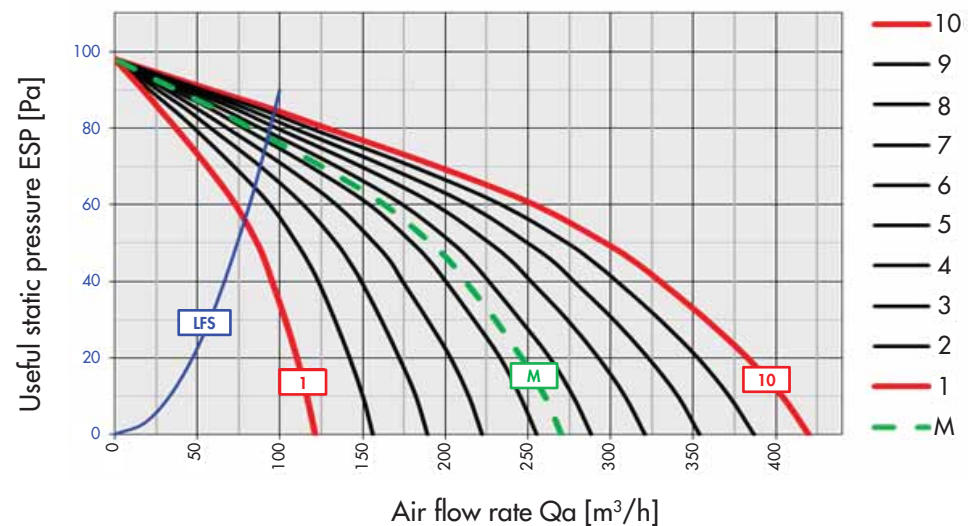
KEY

LFS: Upper operating limit
10: EC unit curve with 10 VDC signal
(maximum of the working range)
1: Minimum curve of the EC unit's
working range (1 VDC @0 Pa)
M: Average curve of the EC unit's
working range

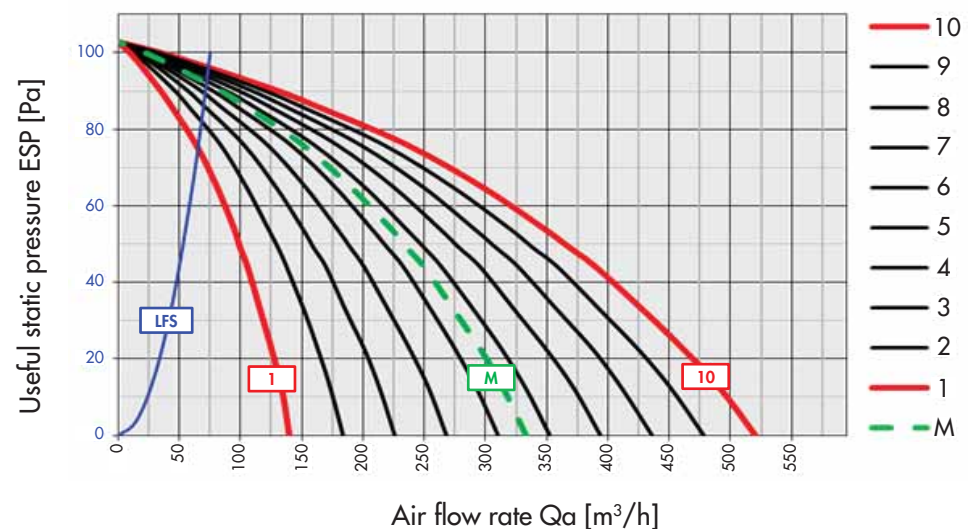
Model FCTE 01



Model FCTE 02



Model FCTE 03

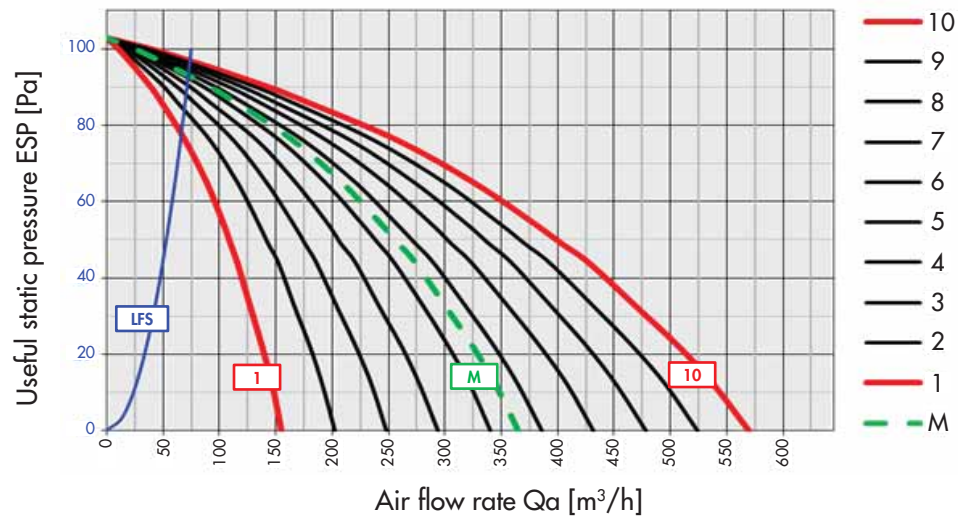


USEFUL STATIC PRESSURE/ WATER FLOW RATE DIAGRAMS

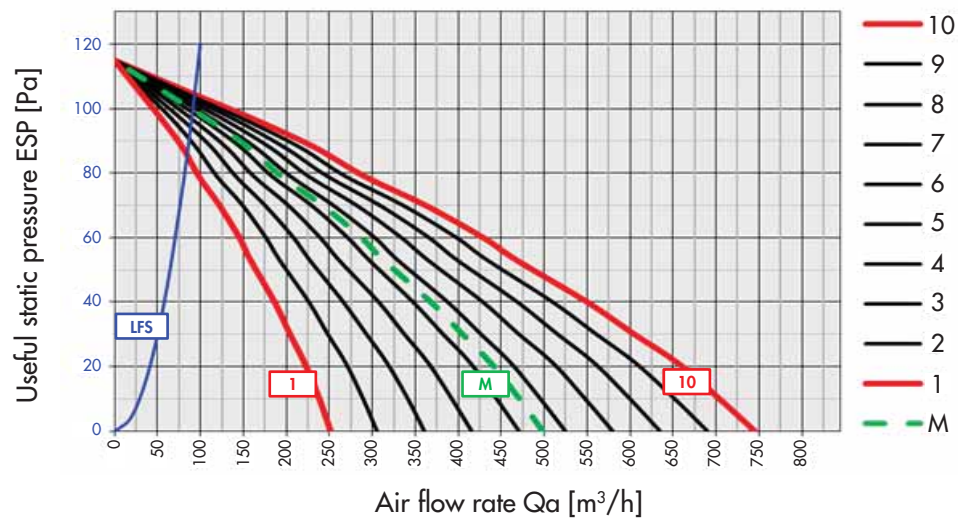
KEY

LFS: Upper operating limit
 10: EC unit curve with 10 VDC signal
 (maximum of the working range)
 1: Minimum curve of the EC unit's
 working range (1 VDC @0 Pa)
 M: Average curve of the EC unit's
 working range

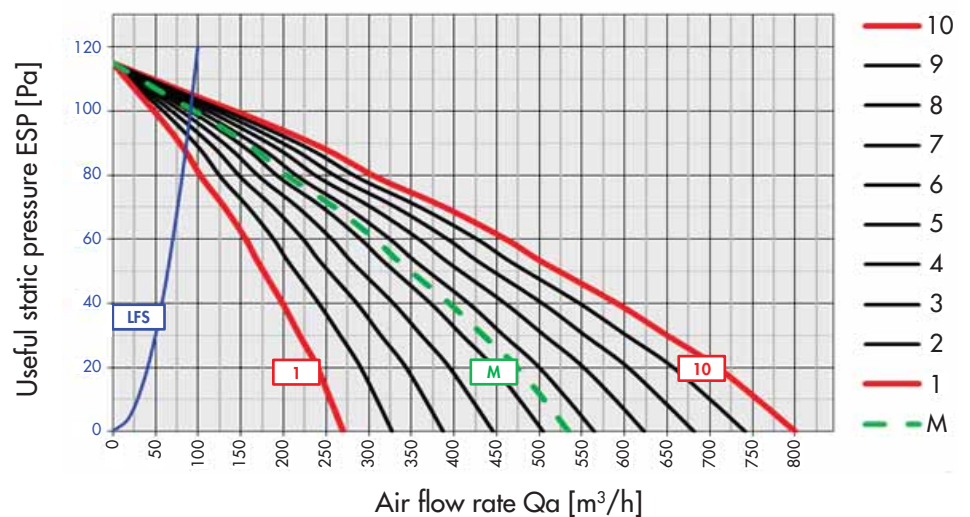
Model FCTE 04



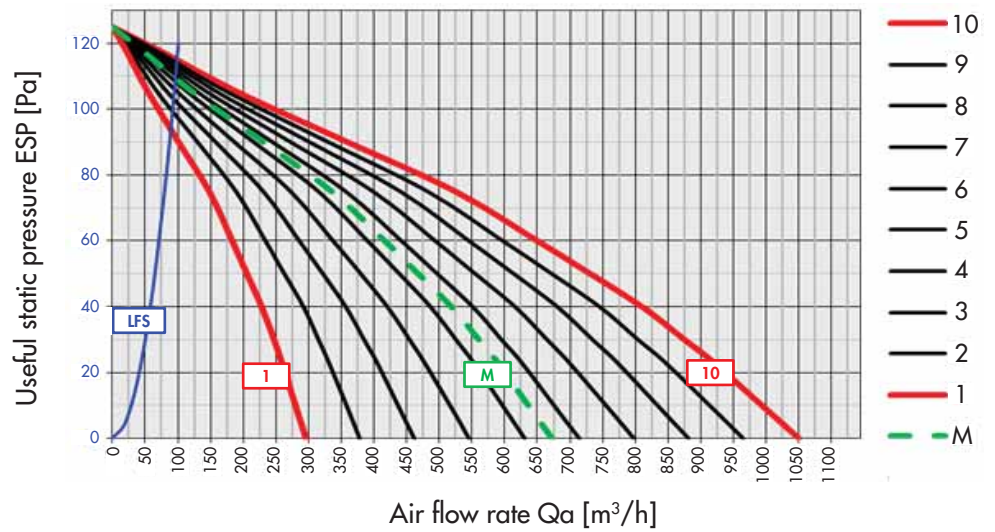
Model FCTE 05



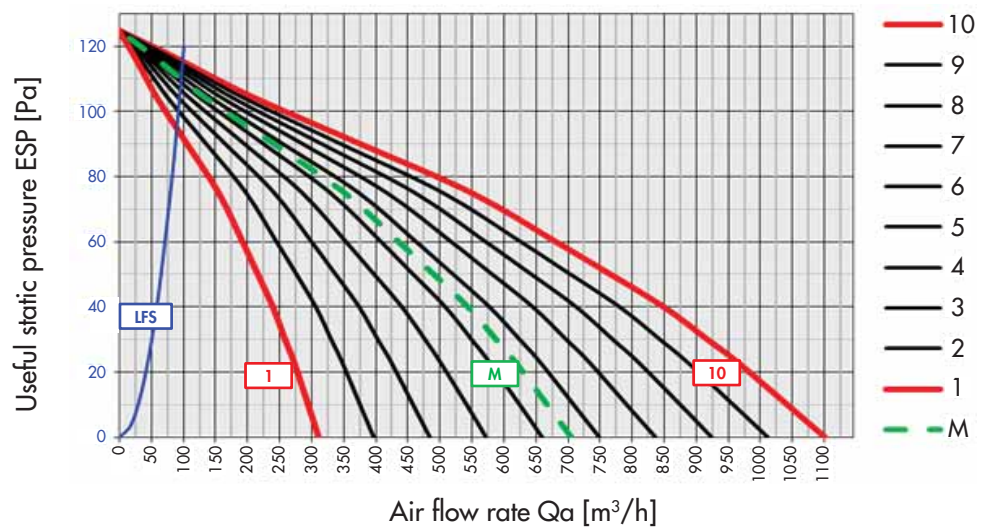
Model FCTE 06



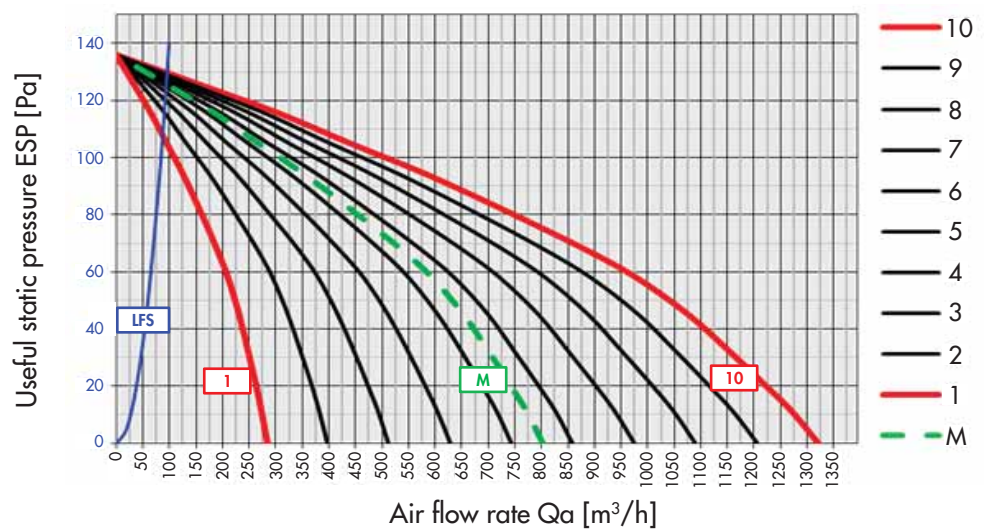
Model FCTE 07



Model FCTE 08

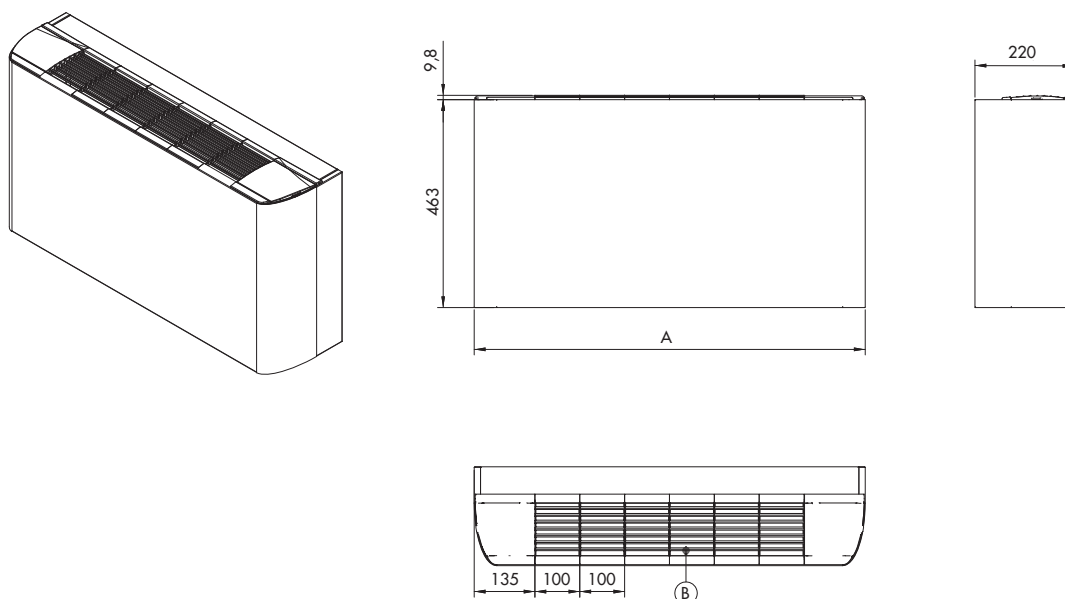


Model FCTE 09



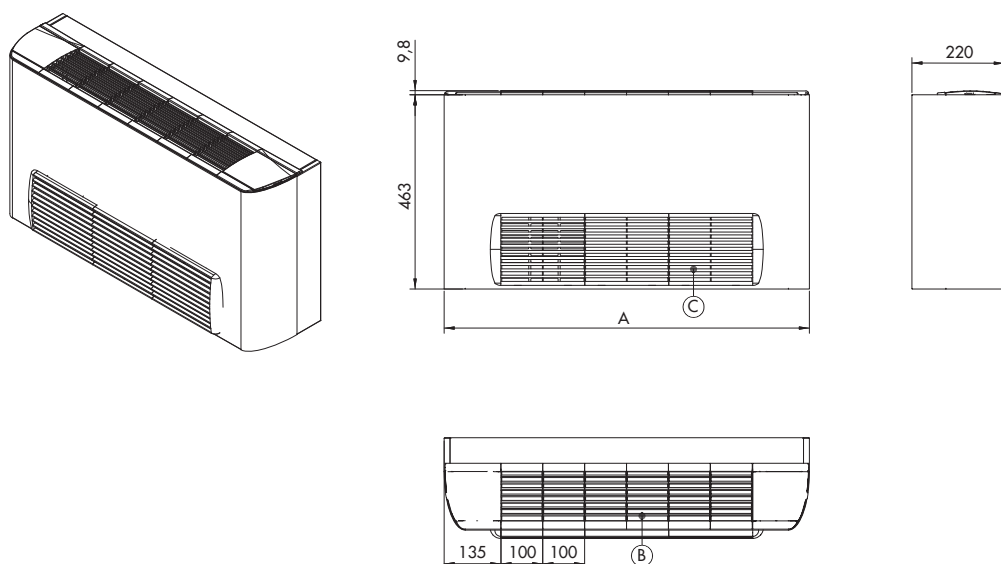
DIMENSIONAL DRAWING

Model FCTE-CV



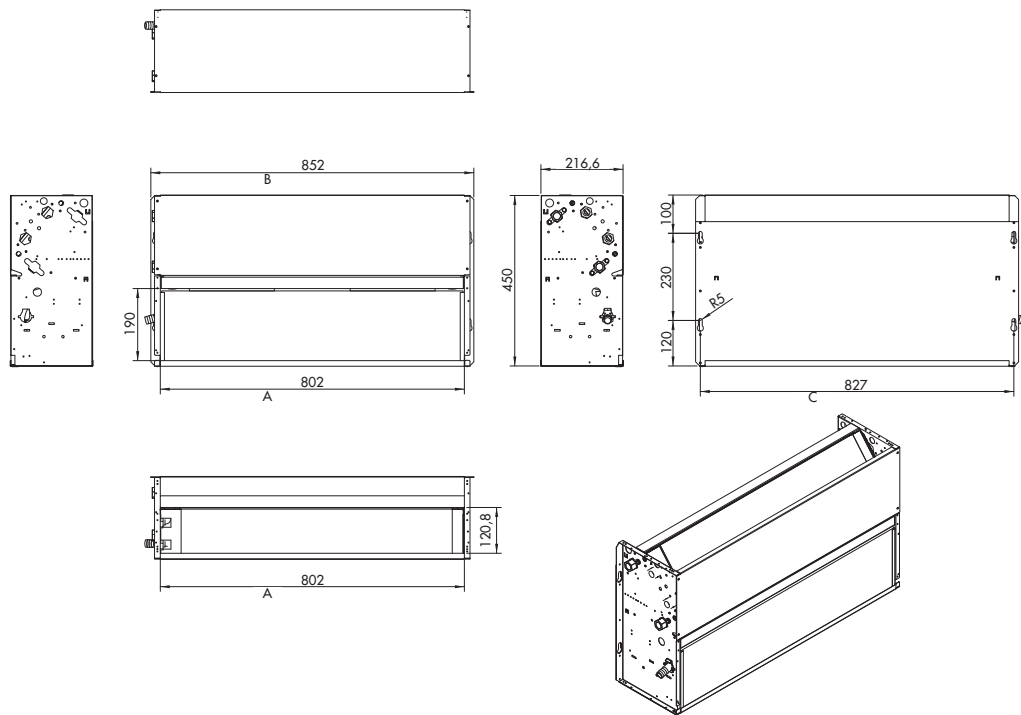
MODEL FCTE-CV	01	02	03	04	05	06	07	08	09
A	670	670	870	870	1070	1070	1270	1270	1470
B = N° grids	4	4	6	6	8	8	10	10	12

Model FCTE-CA / FCTE-CH



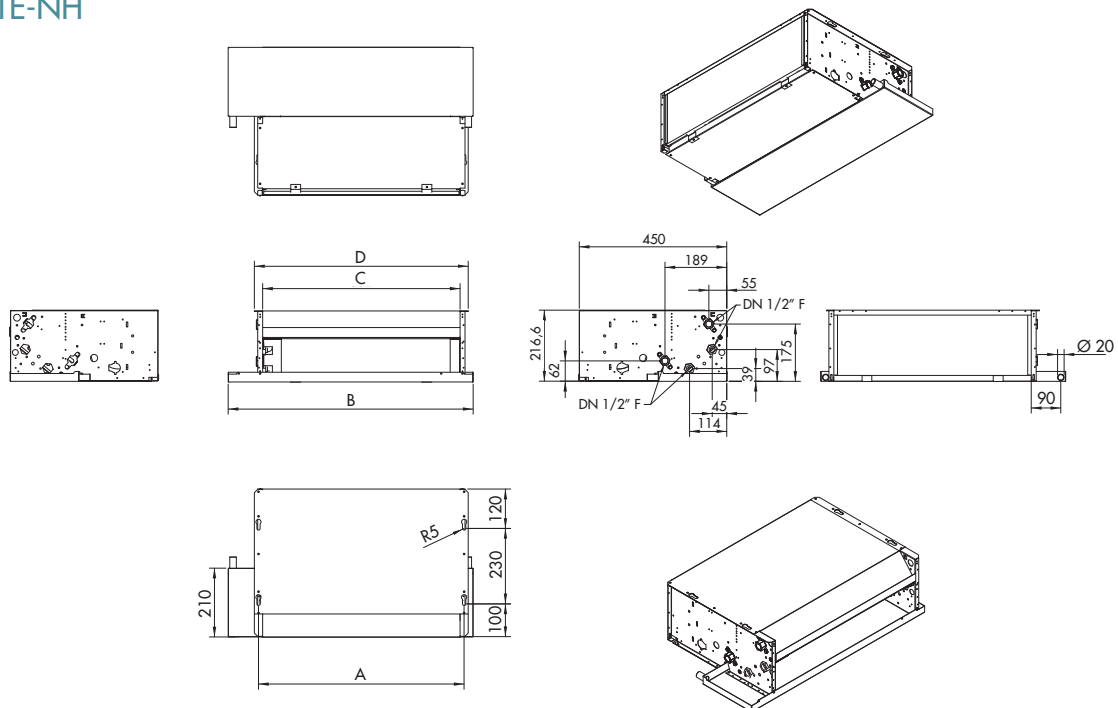
MODEL FCTE-CA / FCTE-CH	01	02	03	04	05	06	07	08	09
A	670	670	870	870	1070	1070	1270	1270	1470
B = N° grids	4	4	6	6	8	8	10	10	12
C = N° grids	2	2	3	3	4	4	5	5	6

Model FCTE-NV



MODEL FCTE-NV	01	02	03	04	05	06	07	08	09
A	402	402	602	602	802	802	1002	1002	1202
B	452	452	652	652	852	852	1052	1052	1252
C	427	427	627	627	827	827	1027	1027	1227

Model FCTE-NH



MODEL FCTE-NH	01	02	03	04	05	06	07	08	09
A	427	427	627	627	827	827	1027	1027	1227
B	547	547	747	747	947	947	1147	1147	1347
C	402	402	602	602	802	802	1002	1002	1202
D	452	452	652	652	852	852	1052	1052	1252

ACCESSORIES

CONTROL UNITS INSTALLED				
	Code	Model	Description	Applicability
	387030562	OBC27	Control unit mounted on the machine for units with 2/4 pipes, simplified and with ATS4 air sensor	FCTE-CV FCTE-CA
	387030563	OBC26	Control unit mounted on the machine for units with 2/4 pipes, with display and ATS4 air sensor	FCTE-CV FCTE-CA
	387030466	MTT32	Termostato di minima temperatura acqua calda (taratura 32 °C)	All
	387030467	WTS4	Water temperature sensor (type NTC 4,700 ohm @25°C ±2 with cable L=1 m)	For OBC26 control unit as an alternative to MTT32

WIRED CONTROL UNITS				
	Code	Model	Description	Applicability
	387030468	CL01	IP20 terminal block (only if a wired control unit is necessary)	All
	387030564	SWC26	Thermostat for 2/4-pipe fan coil units, programmable, with display and 0...10 VDC or three-speed output	All

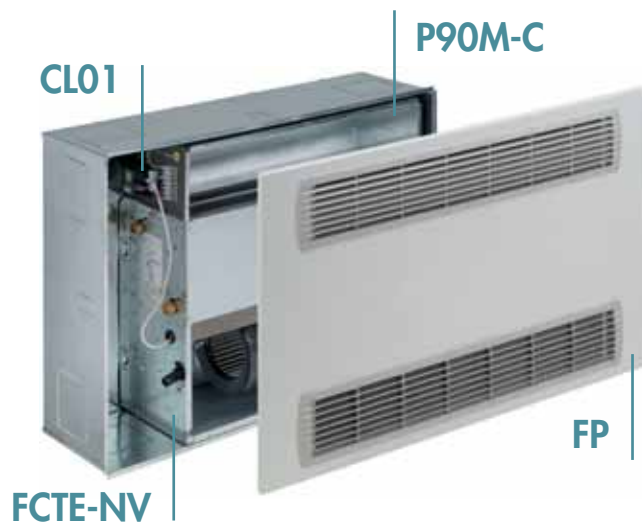
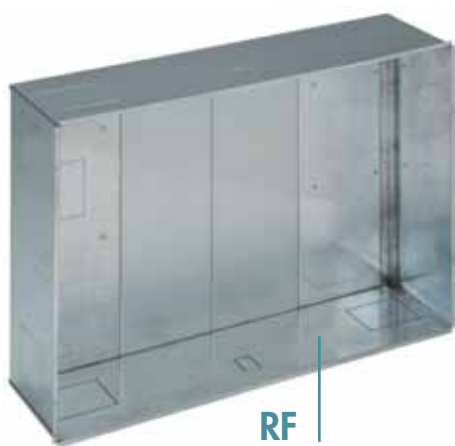
KIT CONTAINING VALVES, PANS, CONDENSATE DISCHARGE PUMPS AND FEET

	Code	Model	Description	Applicability
	387030473	3WV01	3/4" M three-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	All
	387030474	3WV02	Three-way valve with PWM-ON/OFF actuator, 230 V, 1/2" ball valve and 1/2" retainer (2 pipes)	All
	387030475	2WV01	3/4" M two-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	All
	387030476	2WV02	Two-way valve with PWM-ON/OFF actuator, 230 V, 1/2" ball valve and 1/2" retainer (2 pipes)	All
	387030477	VB01	Auxiliary drain pan made of plastic, for two-way or three-way valves	FC TE-CV FC TE-CA FC TE-NV
	387030478	HB01	Auxiliary drain pan with thermal insulation, for two-way or three-way valves	FC TE-CH FC TE-NH
	387030479	CP01	Condensate discharge pump equipped with alarm contact	FC TE-CV FC TE-CA FC TE-NV
	387030480	CP02	Condensate discharge pump equipped with alarm contact	FC TE-CH FC TE-NH
	387030481	FE01	Pair of pre-coated feet H=90 mm	FC TE-CV

ACCESSORIES

PANELS				
Code		Model	Description	Applicability
387030482	01/02	CPB 01-02	Lower rear closing panel made of pre-painted plate	FCTE-CV FCTE-CA
387030483	03/04	CPB 03-04		
387030484	05/06	CPB 05-06		
387030485	01/02	CPC 01-02	Lower closing panel without grid made of pre-painted plate	FCTE-CA FCTE-CH
387030486	03/04	CPC 03-04		
387030487	05/06	CPC 05-06		
387030488	01/02	CPD 01-02	Lower closing panel made of pre-painted plate with removable ABS grid and flat air filter with grade EU3 filtration (EUROVENT 4/5)	FCTE-CV
387030489	03/04	CPD 03-04		
387030490	05/06	CPD 05-06		
387030491	01/02	RF 01-02	Frame for concealed wall-mounted installation	FCTE-NV
387030492	03/04	RF 03-04		
387030493	05/06	RF 05-06		
387030494	01/02	FP 01-02	Front panel made of pre-painted plate equipped with air return and supply grid, for fan coil units with remote control	FCTE-NV
387030495	03/04	FP 03-04		
387030496	05/06	FP 05-06		

PANELS				
Code		Model	Description	Applicability
387030497	07/08	CPB 07-08	Lower rear closing panel made of pre-painted plate	FCTE-CV FCTE-CA
387030498	09	CPB 09		
387030499	07/08	CPC 07-08	Lower closing panel without grid made of pre-painted plate	FCTE-CA FCTE-CH
387030500	09	CPC 09		
387030501	07/08	CPD 07-08	Lower closing panel made of pre-painted plate with removable ABS grid and flat air filter with grade EU3 filtration (EUROVENT 4/5)	FCTE-CV
387030502	09	CPD 09		
387030503	07/08	RF 07-08	Frame for concealed wall-mounted installation	FCTE-NV
387030504	09	RF 09		
387030505	07/08	FP 07-08	Front panel made of pre-painted plate equipped with air return and supply grid, for fan coil units with remote control	FCTE-NV
387030506	09	FP 09		

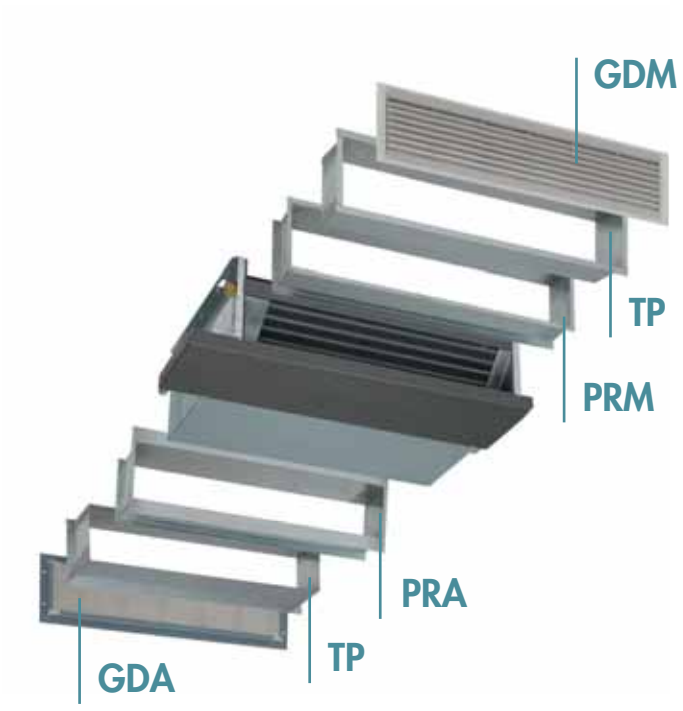
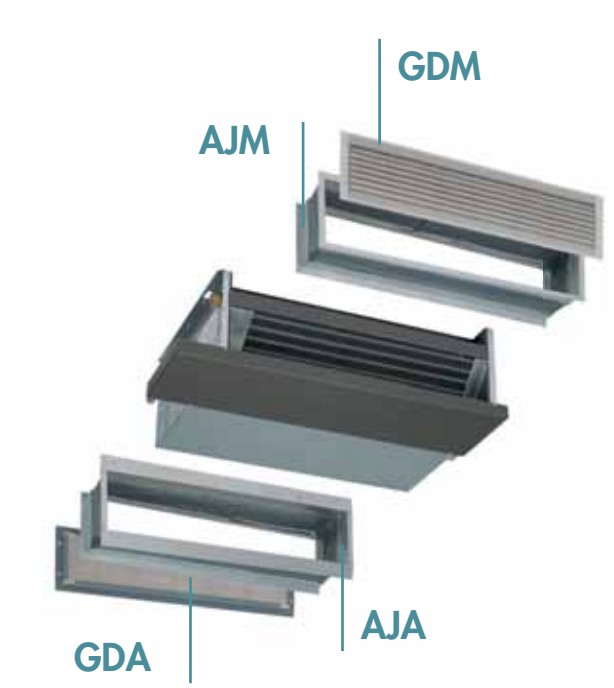
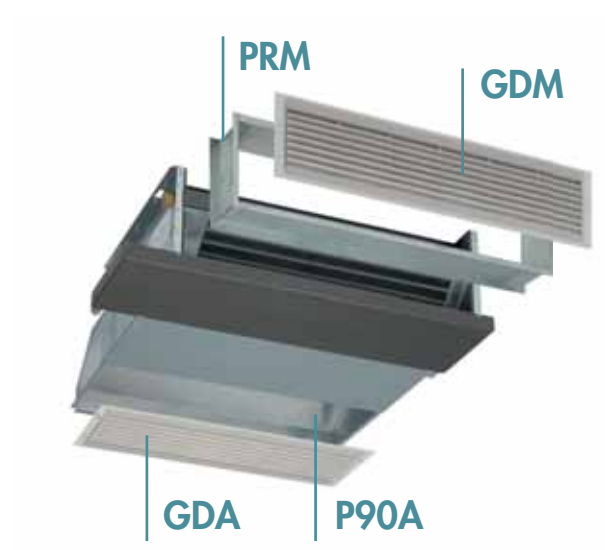
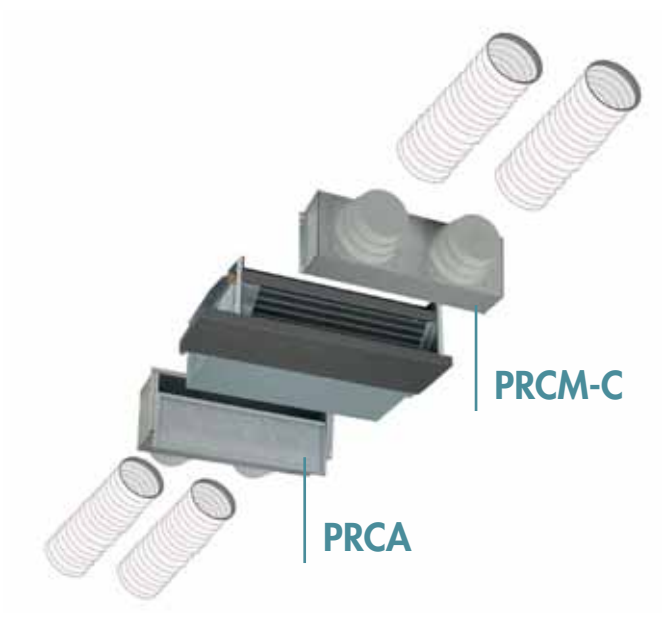


ACCESSORIES

PLENUM				
Code		Model	Description	Applicability
387030507	01/02	AJA 01-02	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Intake side	FCTE-NH
387030508	03/04	AJA 03-04		
387030509	05/06	AJA 05-06		
387030510	01/02	AJM 01-02	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Supply side	FCTE-NH
387030511	03/04	AJM 03-04		
387030512	05/06	AJM 05-06		
387030513	01/02	GDA 01-02	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJA, P90A plenum - Intake side	FCTE-NH
387030514	03/04	GDA 03-04		
387030515	05/06	GDA 05-06		
387030516	01/02	GDM 01-02	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJM plenum - Supply side	FCTE-NH
387030517	03/04	GDM 03-04		
387030518	05/06	GDM 05-06		
387030519	01/02	P90A 01-02	90° plenum - Intake side	FCTE-NH
387030520	03/04	P90A 03-04		
387030521	05/06	P90A 05-06		
387030522	01/02	P90M-C 01-02	90° plenum - Supply side	FCTE-NV
387030523	03/04	P90M-C 03-04		
387030524	05/06	P90M-C 05-06		
387030525	01/02	PRM 01-02	Straight plenum L=100 mm - Supply side	FCTE-NH
387030526	03/04	PRM 03-04		
387030527	05/06	PRM 05-06		
387030528	01/02	PRA 01-02	Straight plenum L=100 mm - Intake side	FCTE-NH
387030529	03/04	PRA 03-04		
387030530	05/06	PRA 05-06		
387030531	01/02	TP 01-02	Telescopic extension L=0-100 mm, suitable for connection with PRA, PRM, P290A plenum	FCTE-NH
387030532	03/04	TP 03-04		
387030533	05/06	TP 05-06		
387030534	01/02	PRCA 01-02	Air intake plenum with round fittings and filter	FCTE-NH
387030535	03/04	PRCA 03-04		
387030536	05/06	PRCA 05-06		
387030537	01/02	PRCM 01-02	Air supply plenum with round fittings, insulated	FCTE-NH
387030538	03/04	PRCM 03-04		
387030539	05/06	PRCM 05-06		

PLENUM				
Code		Model	Description	Applicability
387030540	07/08	AJA 07-08	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Intake side	FCTE-NH
387030541	09	AJA 09		
387030542	07/08	AJM 07-08	Vibration-damping joint with fan coil unit attachment flange and channel attachment flange, L=150 mm - Supply side	FCTE-NH
387030543	09	AJM 09		
387030544	07/08	GDA 07-08	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJA, P90A plenum - Intake side	FCTE-NH
387030545	09	GDA 09		
387030546	07/08	GDM 07-08	Air grid with simple row or fixed ABS flaps, suitable for connection on the TP, AJM plenum - Supply side	FCTE-NH
387030547	09	GDM 09		
387030548	07/08	P90A 07-08	90° plenum - Intake side	FCTE-NH
387030549	09	P90A 09		
387030550	07/08	P90M-C 07-08	90° plenum - Supply side	FCTE-NV
387030551	09	P90M-C 09		
387030552	07/08	PRM 07-08	Straight plenum L=100 mm - Supply side	FCTE-NH
387030553	09	PRM 09		
387030554	07/08	PRA 07-08	Straight plenum L=100 mm - Intake side	FCTE-NH
387030555	09	PRA 09		
387030556	07/08	TP 07-08	Telescopic extension L=0–100 mm, suitable for connection with PRA, PRM, P290A plenum	FCTE-NH
387030557	09	TP 09		
387030558	07/08	PRCA 07-08	Air intake plenum with round fittings and filter	FCTE-NH
387030559	09	PRCA 09		
387030560	07/08	PRCM-C 07-08	Air supply plenum with round fittings, insulated	FCTE-NH
387030561	09	PRCM-C 09		

ACCESSORIES







CASSETTE

Models: FCC/FCCX/FCCE

CASSETTE

MAIN FEATURES MOD. FCC/FCCX/FCCE

COVERING PANEL WITH AIR RETURN GRID AND AIR SUPPLY DEFLECTORS (ABS)

Innovative design. Built with injected ABS, it can withstand rust, corrosion and atmospheric agents. White finish RAL 9003. The "Hook & Fix" attachment system facilitates installation, removal and maintenance operations, by eliminating positioning-related inconveniences typically associated with these systems (suspended units/components difficult to handle). The central intake grid and 4 manually adjustable side supply flaps guarantee optimal air diffusion in all 4 directions. Friction-snap flaps for stable and uniform positioning.

LOAD-BEARING STRUCTURE SUITABLE FOR USE ON 600 X 600 MM SUSPENDED CEILINGS

High-thickness galvanised plate load-bearing structure with Class M1 internal thermo-acoustic insulation, reinforced thickness for improved acoustic and thermal performances. Outer brackets on the 4 corners for easy fastening to the ceiling. A mere 250 mm height. Includes 1 hole with Ø 72 mm for possible external air intake through round conduit and 1 hole with Ø 155 mm for possible ducting of treated air supply to adjacent rooms.

- Models FCC 01...06, FCCX 01...06, FCCE 01...03: overall dimensions 570 x 570 mm, ideal for installation on 1 module size 600 x 600 mm in suspended ceilings.
- Models FCC 07...08, FCCX 07...08, FCCE 04...05: overall dimensions 570 x 1,160 mm, ideal for installation on 2 modules size 600 x 600 mm in suspended ceilings.

AIR CONVEYOR AND DRAIN PAN

Air conveyor and pan made of ABS through injection. High-thickness material for sturdiness and long-lasting operation. RoHS & REACH compliant. Conveyor with optimised profiles that faithfully replicate the aerodynamic profiles of the air flow. Drain pan obtained from a single piece equipped with an outlet and plug.

CONDENSATE DISCHARGE PUMP

Centrifugal condensate discharge pump, complete with non-return valve on the supply side to avoid continuous switching on/off, Ø 16 mm drainage fitting.

Float with 2 levels: the first for controlling the condensate level and the second for activating the alarm.

Head = 1.00 m from the unit's lower edge; 230 VAC-1 Ph-50/60 Hz.

HEAT EXCHANGE COIL

Heat exchange coil with copper pipe and aluminium flaps locked by means of mechanical expansion.

Square-shaped coil with rounded corners for guaranteeing a broader exchange surface, thus enhanced performances compared to traditional round coils. Hydrophilic aluminium flaps for improved condensate discharge, resulting in improved air conditioning performances. Coil fittings equipped with manual air relief valve.

For units with 2 pipes: 1 coil with 2 water connections (1 inlet + 1 outlet)

For units with 4 pipes: 1 coil with 4 water connections (2 inlets + 2 outlets)

Mixed circulation on a single coil guarantees improved performances for both heating and air conditioning. Coils tested at 30 bar operating pressure, suitable for working with water up to a maximum pressure of 15 bar.

The coils are suitable for operating with:

- high-temperature water (boiler)
- low-temperature water (condensing boiler, solar panels, heat pump, etc.)
- cold water (chiller and/or industrial processes)
- water supplemented with glycol.

Min/max incoming water temperature limits: 3...75 °C.

AIR FILTER

Easily removable air filter, built with a metal frame containing the filtration septum. Can be regenerated by washing it with water, blowing, vacuuming. Made of NAN honeycomb polypropylene mesh, high efficiency. Recommended against dust and pollen. Class M1; grade EU3 filtration (EUROVENT 4/5), Group ISO COARSE ePM1=4%, ePM2.5=13%, ePM10=49% (EN ISO 16890:2016).

ELECTRICAL EQUIPMENT

Terminal block for connection to the remote control (the remote control is an accessory) installed in a corner of the galvanised plate structure.

VENTILATION UNIT

Radial fan with aerofoil blades and incorporated electric motor. Built according to international standards, mounted on elastic supports and shock absorbers. Statically and dynamically balanced fan. Ventilating unit removable with extreme ease (fastened with 4 screws only).

Several different motors available:

- Models FCC and FCCX: AC electric motor, asynchronous single-phase squirrel-cage version with 3 speeds, equipped with TH thermal protection device, run capacitor always engaged, 4 poles, IP44, Class B double insulation, 230 VAC-1 Ph-50/60 Hz.
- Models FCCE: motor with BLAC (Brushless Alternating Current) technology and permanent magnets, sensorless, 2 thermal protection devices (TP-thermal/Klixon + EP-electronic/SW), IP54, Class B double insulation, 230 VAC-1 Ph-50/60 Hz.

Modulating regulation with 0...10 VDC signal through our control units or independent regulation systems. The 0-100% modulation of the air flow (and hence of the heating and cooling capacities) allows for adapting the performances to the actual needs of the room to be climatized.

CASSETTE

MODELS

CASSETTE FAN COIL MOD. FCC

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030419	FCC 01	2.950	7.010
387030420	FCC 02	3.570	8.590
387030421	FCC 03	4.980	11.220
387030422	FCC 04	5.540	12.560
387030423	FCC 05	6.220	12.380
387030424	FCC 06	6.930	13.870
387030425	FCC 07	9.460	21.300
387030426	FCC 08	10.530	23.870

FCC	01
-	(1)

FCC = fan coil model
(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08



CASSETTE FAN COIL MOD. FCCX

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030427	FCCX 01	3.070	4.590
387030428	FCCX 02	3.720	5.640
387030429	FCCX 03	4.040	6.160
387030430	FCCX 04	4.490	6.890
387030431	FCCX 05	5.150	6.100
387030432	FCCX 06	5.740	6.840
387030433	FCCX 07	7.670	11.690
387030434	FCCX 08	8.540	13.100

FCCX	01
-	(1)

FCCX = fan coil model
(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08



CASSETTE FAN COIL MOD. FCCE

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030435	FCCE 01	5.020	12.350
387030436	FCCE 02	6.460	14.780
387030437	FCCE 03	8.010	16.170
387030438	FCCE 04	12.260	28.060
387030439	FCCE 05	15.190	30.680

FCCE	01
-	(1)

FCCE = fan coil model
(1) Capacity = 01, 02, 03, 04, 05, 06, 07, 08



(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C
(2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C



RATED TECHNICAL DATA MOD. FCC

TWO-PIPE UNIT - ONE COIL - THREE SPEEDS

MODELS				01	02	03	04
Dimension			mm	600 x 600			
Total cooling capacity (1)			W	2.950	3.570	4.980	5.540
Sensible cooling capacity (1)			W	2.390	2.980	3.800	4.300
Heating capacity (2a)			W	7.010	8.590	11.220	12.560
Heating capacity (2b)			W	3.505	4.295	5.610	6.280
Rated air flow (3)			m³/h	530	720	810	960
Water flow rate (4)	Cooling	l/h	507	614	857	953	
	Heating	l/h	603	739	965	1.080	
Water head losses (5)	Cooling	kPa	7,0	10,2	12,4	15,3	
	Heating	kPa	7,7	11,5	12,2	15,3	
Sound pressure (ls.-ms.-hs.) (6)			dB(A)	12-17-25	16-24-34	22-32-36	25-36-38
Ref. Fan-deck				1x R282x146-3 V 50 W-C1 [P=N1-2-3]	1x R282x146-3 V 50 W-C1,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C3 [P=N1-2-3]
Motors/Fans			N/N	1/1		1/1	
Rated power absorption (7)			W	1x 50 W		1x 88 W	
			A	1x 0,22 A		1x 0,39 A	
Electrical power supply				230 Vac – 1 Ph – 50/60 Hz			
Cold/hot coil	Water content	l	0,95			1,5	
	Rows	N	2R			3R	
	Hydraulic fittings	DN	3/4" F			3/4" F	
	Condensate drainage outlet	mm	16			16	
Air flow reduction (8)	0 Pa	MAX	1,00	1,00	1,00	1,00	
		MED	0,7	0,71	0,84	0,84	
		MIN	0,49	0,49	0,56	0,55	

REDUCTION OF THE COOLING/HEATING CAPACITY (in relation to the air flow reduction)

Air flow rate	1,00	0,95	0,90	0,85	0,80	0,75	0,70	0,65	0,60	0,55
Total cooling capacity	1,00	0,97	0,95	0,92	0,89	0,87	0,84	0,81	0,77	0,74
Cooling capacity	1,00	0,97	0,93	0,90	0,86	0,83	0,79	0,76	0,72	0,68
Heat capacity	1,00	0,97	0,94	0,91	0,87	0,84	0,81	0,77	0,74	0,70

Air flow rate	0,50	0,45	0,40	0,35	0,30	0,25	0,20	0,15	0,10
Total cooling capacity	0,71	0,67	0,63	0,59	0,55	0,50	0,45	0,39	0,32
Cooling capacity	0,64	0,60	0,55	0,51	0,46	0,41	0,35	0,29	0,22
Heat capacity	0,66	0,62	0,58	0,53	0,49	0,44	0,38	0,32	0,25

MODELS				05	06	07	08
Dimension			mm	600 x 600		600 x 1.200	
Total cooling capacity (1)			W	6.220	6.930	9.460	10.530
Sensible cooling capacity (1)			W	4.400	4.980	7.220	8.170
Heating capacity (2a)			W	12.380	13.870	21.300	23.870
Heating capacity (2b)			W	6.190	6.935	10.650	11.935
Rated air flow (3)			m³/h	800	950	1.540	1.830
Water flow rate (4)	Cooling	l/h	1.070	1.192	1.627	1.811	
	Heating	l/h	1.065	1.193	1.832	2.053	
Water head losses (5)	Cooling	kPa	16,1	20,0	16,2	18,8	
	Heating	kPa	12,4	15,6	16,0	18,9	
Sound pressure (ls.-ms.-hs.) (6)			dB(A)	22-32-36	25-36-38	25-35-39	28-39-41
Ref. Fan-deck				1x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C3 [P=N1-2-3]	2x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	2x R282x146-3 V 88 W-C3 [P=N1-2-3]
Motors/Fans			N/N	1/1		2/2	
Rated power absorption (7)			W	1x 88 W		2x 88 W	
			A	1x 0,39 A		2x 0,39 A	
Electrical power supply				230 Vac – 1 Ph – 50/60 Hz		230 Vac – 1 Ph – 50/60 Hz	
Cold/hot coil	Water content	l	2,1		3,1		
	Rows	N	4R		3R		
	Hydraulic fittings	DN	3/4" F		3/4" F		
	Condensate drainage outlet	mm	16		16		
Air flow reduction (8)	0 Pa	MAX	1	1	1	1	
		MED	0,84	0,84	0,84	0,84	
		MIN	0,55	0,56	0,55	0,55	

Technical data referred to the following conditions:

standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth [external static pressure ESP=0 Pa].

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741 - ISO 3742 standards.

(7) **Electrical data**: values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

TABLE OF NET WEIGHTS MOD. FCC IN KG

Products / Models		01	02	03	04	05	06	07	08
FCC	Unit	17,2	17,2	18,0	18,0	18,9	18,9	35,0	35,0
	Grid	2,1	2,1	2,1	2,1	2,1	2,1	4,1	4,1

RATED TECHNICAL DATA MOD. FCCX

FOUR-PIPE UNIT - TWO COIL - THREE SPEEDS

MODELS				01	02	03	04
Dimension			mm	600 x 600			
Total cooling capacity (1)			W	3.070	3.720	4.040	4.490
Sensible cooling capacity (1)			W	2.350	2.940	3.230	3.650
Heating capacity (2a)			W	4.590	5.640	6.160	6.890
Heating capacity (2b)			W	2.295	2.820	3.080	3.445
Rated air flow (3)			m³/h	520	710	810	960
Water flow rate (4)	Cooling	l/h	528	640	695	772	
	Heating	l/h	395	485	530	593	
Water head losses (5)	Cooling	kPa	7,5	11,1	13,1	16,1	
	Heating	kPa	12,2	18,5	22,1	27,6	
Sound pressure (ls.-ms.-hs.) (6)			dB(A)	12-17-25	16-24-34	22-32-36	25-36-38
Ref. Fan-deck				1x R282x146-3 V 50 W-C1 [P=N1-2-3]	1x R282x146-3 V 50 W-C1,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C3 [P=N1-2-3]
Motors/Fans			N/N	1/1		1/1	
Rated power absorption (7)			W	1x 50 W		1x 88 W	
			A	1x 0,22 A		1x 0,39 A	
Electrical power supply				230 Vac – 1 Ph – 50/60 Hz			
Cold/hot coil	Water content	l	0,95		0,95		
	Rows	N	2R		2R		
	Hydraulic fittings	DN	3/4”F		3/4”F		
	Condensate drainage outlet	mm	16		16		
Hot coil	Water content	l	0,60		0,60		
	Rows	N	1R		1R		
	Hydraulic fittings	DN	3/4”F		3/4”F		
	Condensate drainage outlet	mm	16		16		
Air flow reduction (8)	0 Pa	MAX	1,00	1,00	1,00	1,00	
		MED	0,71	0,70	0,84	0,84	
		MIN	0,50	0,49	0,56	0,55	

REDUCTION OF THE COOLING/HEATING CAPACITY (in relation to the air flow reduction)

Air flow rate	1,00	0,95	0,90	0,85	0,80	0,75	0,70	0,65	0,60	0,55
Total cooling capacity	1,00	0,97	0,95	0,92	0,89	0,87	0,84	0,81	0,77	0,74
Cooling capacity	1,00	0,97	0,93	0,90	0,86	0,83	0,79	0,76	0,72	0,68
Heat capacity	1,00	0,97	0,94	0,91	0,87	0,84	0,81	0,77	0,74	0,70

Air flow rate	0,50	0,45	0,40	0,35	0,30	0,25	0,20	0,15	0,10
Total cooling capacity	0,71	0,67	0,63	0,59	0,55	0,50	0,45	0,39	0,32
Cooling capacity	0,64	0,60	0,55	0,51	0,46	0,41	0,35	0,29	0,22
Heat capacity	0,66	0,62	0,58	0,53	0,49	0,44	0,38	0,32	0,25

MODELS				05	06	07	08
Dimension			mm	600 x 600		600 x 1.200	
Total cooling capacity (1)			W	5.150	5.740	7.670	8.540
Sensible cooling capacity (1)			W	3.930	4.450	6.130	6.940
Heating capacity (2a)			W	6.100	6.840	11.690	13.100
Heating capacity (2b)			W	3.050	3.420	5.845	6.550
Rated air flow (3)			m³/h	800	950	1.540	1.830
Water flow rate (4)	Cooling	l/h	886	987	1.319	1.469	
	Heating	l/h	525	588	1.005	1.127	
Water head losses (5)	Cooling	kPa	13,2	16,4	16,8	19,6	
	Heating	kPa	12,3	15,5	24,9	29,9	
Sound pressure (ls.-ms.-hs.) (6)			dB(A)	22-32-36	25-36-38	25-35-39	28-39-41
Ref. Fan-deck				1x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	1x R282x146-3 V 88 W-C3 [P=N1-2-3]	2x R282x146-3 V 88 W-C2,5 [P=N1-2-3]	2x R282x146-3 V 88 W-C3 [P=N1-2-3]
Motors/Fans			N/N	1/1		2/2	
Rated power absorption (7)			W	1x 88 W		2x 88 W	
			A	1x 0,39 A		2x 0,39 A	
Electrical power supply				230 Vac – 1 Ph – 50/60 Hz		230 Vac – 1 Ph – 50/60 Hz	
Cold/hot coil	Water content	l	1,50		2,00		
	Rows	N	3R		2R		
	Hydraulic fittings	DN	3/4°F		3/4°F		
	Condensate drainage outlet	mm	16		16		
Hot coil	Water content	l	0,65		1,30		
	Rows	N	1R		1R		
	Hydraulic fittings	DN	3/4°F		3/4°F		
	Condensate drainage outlet	mm	16		16		
Air flow reduction (8)	0 Pa	MAX	1,00	1,00	1,00	1,00	
		MED	0,84	0,84	0,84	0,84	
		MIN	0,55	0,56	0,55	0,55	

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating:** air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating:** air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) **Air flow rate and static pressure:** rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure:** sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741 - ISO 3742 standards.

(7) **Electrical data:** values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

TABLE OF NET WEIGHTS MOD. FCCX IN KG

Products / Models		01	02	03	04	05	06	07	08
FCCX	Unit	18,3	18,3	18,4	18,4	19,3	19,3	36,0	36,0
	Grid	2,1	2,1	2,1	2,1	2,1	2,1	4,1	4,1

RATED TECHNICAL DATA MOD. FCCE

TWO-PIPE UNIT - ONE COIL - EC BRUSHLESS

MODELS			01	02	03
Dimension		mm	600 x 600		
Total cooling capacity (1)		W	5.020	6.460	8.010
Sensible cooling capacity (1)		W	4.420	5.130	5.880
Heating capacity (2a)		W	12.350	14.780	16.170
Heating capacity (2b)		W	6.178	7.394	8.089
Rated air flow (3)		m ³ /h	1.250	1.230	1.200
Water flow rate (4)	Cooling	l/h	863	1.111	1.378
	Heating	l/h	1.062	1.271	1.391
Water head losses (5)	Cooling	kPa	20,2	20,8	26,7
	Heating	kPa	23,8	21,2	21,2
Sound pressure (1 V-M-10 V) (6)		dB(A)	<10-32-43	<10-32-43	<10-31-42
Ref. Fan-deck			1x R282x146, 74 V [SWP=N/ FIX.1/10]	1x R282x146, 74 V [SWP=N/ FIX.1/10]	1x R282x146, 74 V [SWP=N/ FIX.1/10]
Motors/Fans		N/N	1/1	1/1	1/1
Rated power absorption (7)		W	1x 74 W	1x 74 W	1x 74 W
		A	1x 0,64 A	1x 0,64 A	1x 0,64 A
Electrical power supply			230 Vac – 1 Ph – 50/60 Hz		
Cold/hot coil	Water content	l	0,95	1,50	2,10
	Rows	N	2R	3R	4R
	Hydraulic fittings	DN	3/4" F	3/4" F	3/4" F
	Condensate drainage outlet	mm	16	16	16
Air flow reduction (8)	0 Pa	10V (MAX)	1,00	1,00	1,00
		5,5 V (MED)	0,55	0,55	0,55
		1 V (MIN)	0,10	0,10	0,10

REDUCTION OF THE COOLING/HEATING CAPACITY (in relation to the air flow reduction)

Air flow rate	1,00	0,95	0,90	0,85	0,80	0,75	0,70	0,65	0,60	0,55
Total cooling capacity	1,00	0,97	0,95	0,92	0,89	0,87	0,84	0,81	0,77	0,74
Cooling capacity	1,00	0,97	0,93	0,90	0,86	0,83	0,79	0,76	0,72	0,68
Heat capacity	1,00	0,97	0,94	0,91	0,87	0,84	0,81	0,77	0,74	0,70

Air flow rate	0,50	0,45	0,40	0,35	0,30	0,25	0,20	0,15	0,10
Total cooling capacity	0,71	0,67	0,63	0,59	0,55	0,50	0,45	0,39	0,32
Cooling capacity	0,64	0,60	0,55	0,51	0,46	0,41	0,35	0,29	0,22
Heat capacity	0,66	0,62	0,58	0,53	0,49	0,44	0,38	0,32	0,25

MODELS			04	05
Dimension		mm	600 x 1.200	
Total cooling capacity (1)		W	12.260	15.190
Sensible cooling capacity (1)		W	9.740	11.170
Heating capacity (2a)		W	28.060	30.680
Heating capacity (2b)		W	14.034	15.346
Rated air flow (3)		m ³ /h	2.340	2.280
Water flow rate (4)	Cooling	l/h	2.109	2.613
	Heating	l/h	2.413	2.639
Water head losses (5)	Cooling	kPa	25,5	30,7
	Heating	kPa	26,1	24,4
Sound pressure (1 V-M-10 V) (6)		dB(A)	<10-35-46	<10-34-45
Ref. Fan-deck			1x R282x146, 74 V [SWP=N/ FIX.1/10]	1x R282x146, 74 V [SWP=N/ FIX.1/10]
Motors/Fans		N/N	2/2	2/2
Rated power absorption (7)		W	2x 74 W	2x 74 W
		A	2x 0,64 A	2x 0,64 A
Electrical power supply			230 Vac – 1 Ph – 50/60 Hz	
Cold/hot coil	Water content	l	3,10	4,30
	Rows	N	3R	4R
	Hydraulic fittings	DN	3/4"F	3/4"F
	Condensate drainage outlet	mm	16	16
Air flow reduction (8)	0 Pa	10V (MAX)	1,00	1,00
		5,5 V (MED)	0,55	0,55
		1 V (MIN)	0,10	0,10

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741 - ISO 3742 standards.

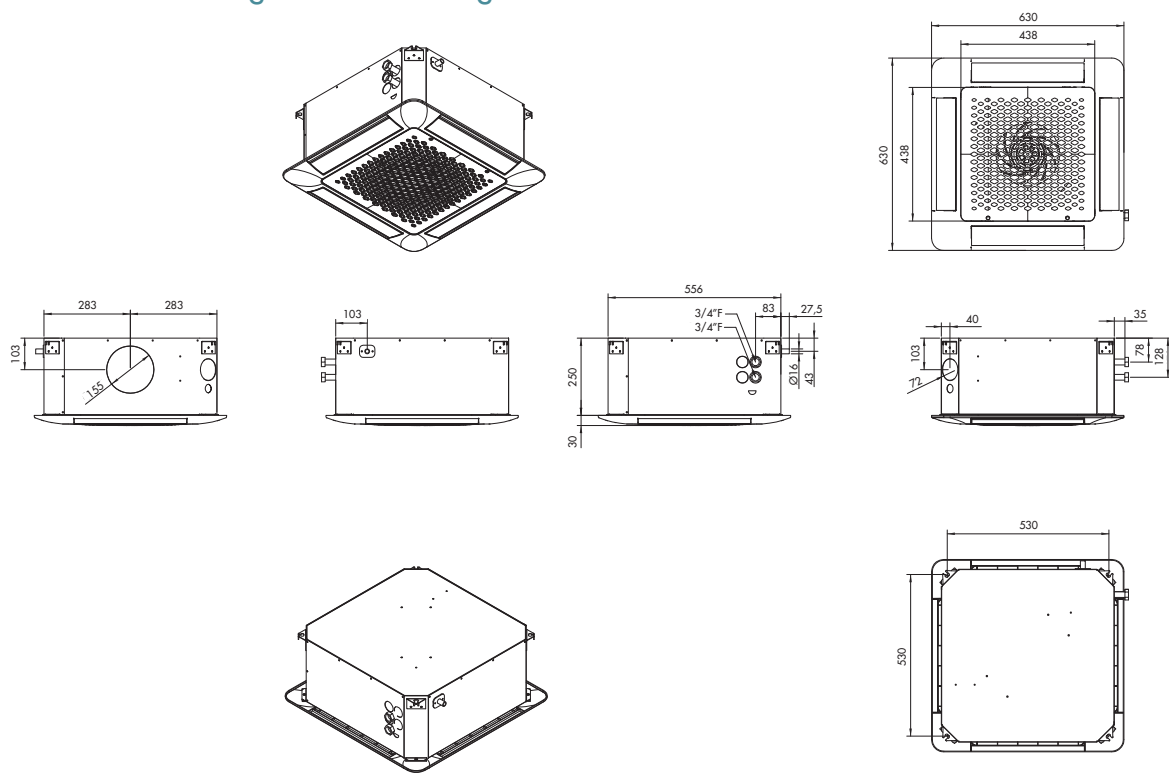
(7) **Electrical data**: values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

TABLE OF NET WEIGHTS MOD. FCCE IN KG

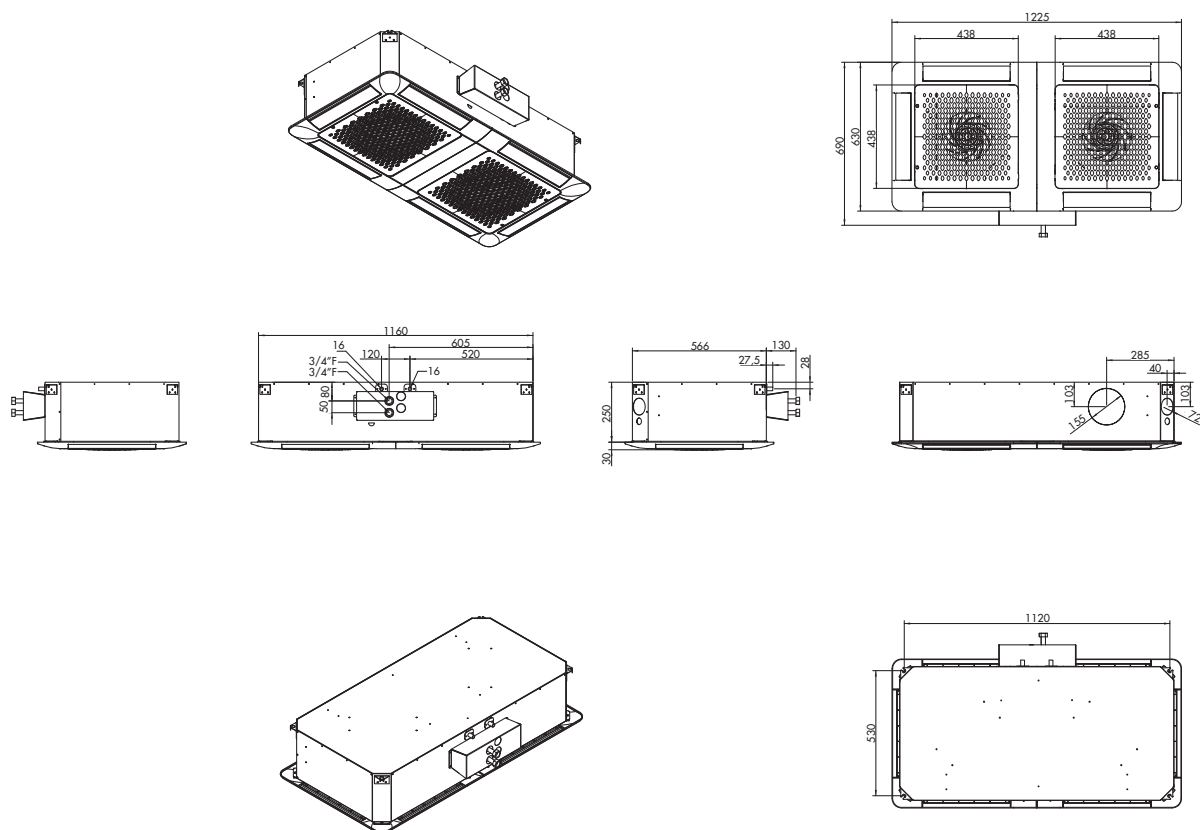
Products / Models		01	02	03	04	05
FCCE	Unti	17,3	18,1	19,0	35,2	37,0
	Grid	2,1	2,1	2,1	4,1	4,1

DIMENSIONAL DRAWINGS

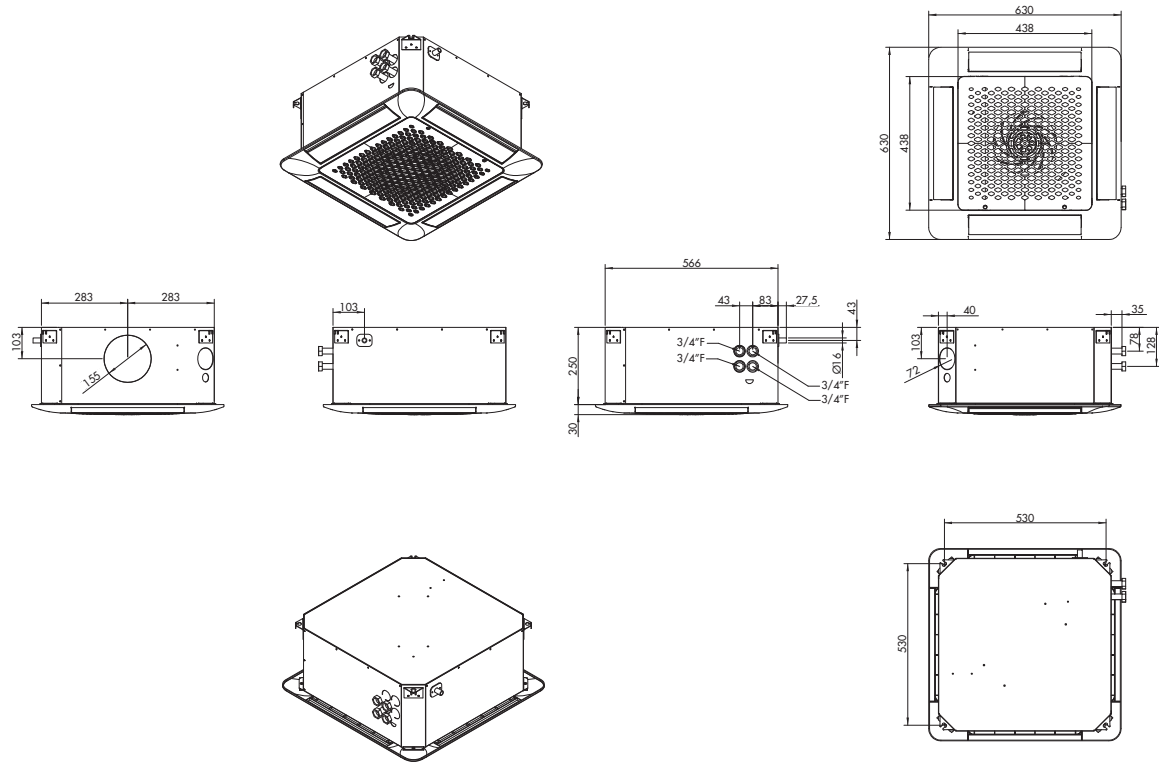
Model FCC e FCCE single-cassette configuration



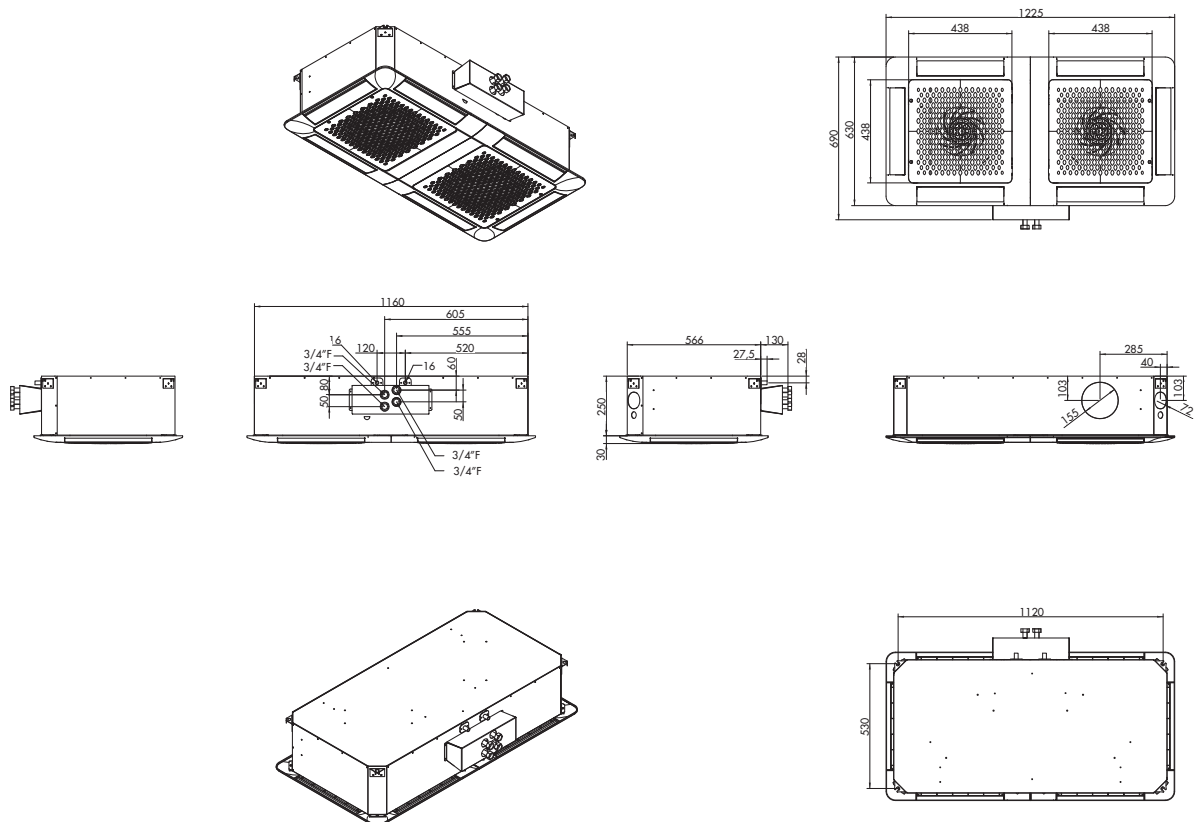
Model FCC e FCCE double-cassette configuration



Model FCCX single-cassette configuration



Model FCCX double-cassette configuration



ACCESSORIES

CONTROLS UNITS INSTALLED				
	Code	Model	Description	Applicability
	387030468	CL01	IP20 terminal block (only if a wired control unit is necessary) - INCLUDED	All
	387030469	SWC22	Simplified thermostat for 2/4-pipe fan coil units	FCC FCCX
	387030470	SWC25	Programmable thermostat for 2/4-pipe fan coil units with display and with advanced functions	FCC FCCX
	387030564	SWC26	Thermostat for 2/4-pipe fan coil units, programmable, with display and 0...10 VDC output	FCCE
	387030602	IRC02	IR remote control. Kit inclusive of motherboard, air sensor, water sensor and IR receiver	FCC FCCX
	387030471	EIX01	Electronic interface for fan coil unit thermostats: enables a single thermostat to control up to 4 fan coil units. Housed in a 6-module container for DIN rail	FCC FCCX
	387030466	MTT32	Minimum hot water temperature thermostat (calibrated to 32°C)	SWC22
	387030467	WTS4	Water temperature sensor (type NTC 4,700 ohm @25°C ±2 with cable L=1 m)	SWC25 SWC26

VARIOUS				
	Code	Model	Description	Applicability
	387030565	CC63	Covering panel with air return grid and air supply deflectors, air filter. Dimensions 630 x 630 mm	Single boxes
	387030566	CC64	Covering panel with air return grid and air supply deflectors, air filter. Dimensions 630 x 1225 mm	Double boxes
	387030567	VB63	Auxiliary drain pan made of plastic, for two-way or three-way valves	Single boxes
	387030568	VB64	Auxiliary drain pan made of plastic, for two-way or three-way valves	Double boxes
	387030569	REA01	Galvanised plate ring for outdoor air intake Ø=72 mm L=100 mm	All
	387030570	RIA01	Galvanised plate ring for air entry into adjacent room Ø=155 mm L=100 mm	All

VALVE KIT				
	Code	Model	Description	Applicability
	387030571	3WV03	3/4" M three-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	FCC, FCCE
	387030572	2WV03	3/4" M two-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	FCC, FCCE
	387030573	3WV03-C	2 x 3/4" M three-way valves with PWM-ON/OFF actuator, 230 V (4 pipes)	FCCX
	387030574	2WV03-C	2 x 3/4" M two-way valves with PWM-ON/OFF actuator, 230 V (4 pipes)	FCCX



DUCTABLE

Model: DT

DUCTABLE

MAIN FEATURES MOD. DT

COVERING BOX

Covering box (load-bearing structure) made of high-thickness plate resistant to rust, corrosion, chemicals, solvents, aliphatic compounds, alcohols. Pre-cut pieces and holes for configuring the unit as requested, for installing the relevant accessories, for the left-hand or right-hand arrangement of the water connection outlets, for the unit's reversibility on the installation site. Assembled using self-tapping screws for quick, thorough and easy inspection/maintenance. Compact dimensions, optimised overall dimensions. Covering boxes with galvanised plate panel and internal thermo-acoustic insulation (Class M1) of the parts in contact with the coil.

DRAIN PAN (WITH DOUBLE INCLINATION)

Drain pan with double inclination for optimal condensate discharge, equipped with outlet (standard on the same side of the water connections) + outer thermal insulation.

HEAT EXCHANGER

High-efficiency heat exchange coil with copper pipe and aluminium flaps locked by means of mechanical expansion.

Coil fittings equipped with anti-torsion system, manual air relief valves and manual water drainage valves. Fittings on the left as a standard feature; on request they can be mounted on the right and are easily reversible on-site. 1 coil for 2-pipe system; 2 coils for 4-pipe system. Coils tested at 30 bar operating pressure, suitable for working with water up to a maximum pressure of 15 bar.

The coils are suitable for operating with:

- high-temperature water (boiler)
- low-temperature water (condensing boiler, heat pump, etc.)
- cold water (chiller and/or industrial processes)
- water supplemented with glycol

Sizes with 3-row (3R) coil, normally used for cooling with treatment of all the internal recirculation air.

Sizes with 4-row (4R) coil, normally used for cooling with treatment of all (or part) of the outdoor renewal air, whenever a high dehumidification action is required.

VENTILATION UNIT (3-SPEED CENTRIFUGAL FAN)

Ventilation unit consisting of 1, 2 or 3 double-intake centrifugal fans with aluminium fans (with forward-curved blades) directly coupled with the electric motor with a useful static pressure of up to 150 Pa.

Mounted on elastic and elastic supports and shock absorbers. Statically and dynamically balanced fan. Large-diameter fans (with high air volume and high static pressure) with low number of revolutions (= low noise). Electric motor with at least 3 speeds, equipped with thermal protection device (Klixon), run capacitor always engaged, IP42, Class B, power cables protected with double insulation.

ELECTRICAL EQUIPMENT (TERMINAL BLOCK WITH MINIMUM 7 PINS)

"Mammut"-type terminal block IP20 (minimum 7 pins: 1 earth + 3 speeds + 1 common + 2 with jumper) mounted outside of the unit (for horizontal units, on the same side of the water connections; for vertical units, on the opposite side).

AIR FILTER

The standard unit is supplied without air filter. In this way the customer can choose whether to use an air filter section among those available as accessories, or adopt an air recovery grid with air filter, or insert an air filter along the intake ducting.

AIR INTAKES AND SUPPLY OUTLETS

All standard versions are supplied with free air intake and supply outlets, without any grid/protection.

WARNING: it is forbidden to start the machine unless both the unit's intake and outlet have been ducted or protected with grids or a safety mesh (the following items are available as accessories on request: grids, panels, plenums, etc.).

DUCTABLE

MODELS

DUCTABLE FAN COIL MOD. DT-NH

Concealed horizontal installation, with horizontal air outflow and intake from the rear part.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030440	DT-NH 01 L	6.820	15.200
387030441	DT-NH 01 R		
387030442	DT-NH 02 L	8.650	18.900
387030443	DT-NH 02 R		
387030444	DT-NH 03 L	10.100	20.000
387030445	DT-NH 03 R		
387030446	DT-NH 04 L	12.000	28.400
387030447	DT-NH 04 R		
387030448	DT-NH 05 L	15.200	35.200
387030449	DT-NH 05 R		
387030450	DT-NH 06 L	17.800	37.200
387030451	DT-NH 06 R		



DT-NH	01	L
-	(1)	(2)

DT-NH = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06

(2) L = left battery connection / R = right battery connection

DUCTABLE FAN COIL MOD. DT-NV

Concealed vertical installation, with vertical air outflow and intake from the front part.

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030452	DT-NV 01 L	6.820	15.200
387030453	DT-NV 01 R		
387030454	DT-NV 02 L	8.650	18.900
387030455	DT-NV 02 R		
387030456	DT-NV 03 L	10.100	20.000
387030457	DT-NV 03 R		
387030458	DT-NV 04 L	12.000	28.400
387030459	DT-NV 04 R		
387030460	DT-NV 05 L	15.200	35.200
387030461	DT-NV 05 R		
387030462	DT-NV 06 L	17.800	37.200
387030463	DT-NV 06 R		



DT-NV	01	L
-	(1)	(2)

DT-NV = fan coil model

(1) Capacity = 01, 02, 03, 04, 05, 06

(2) L = left battery connection / R = right battery connection

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - temp. - input/output water temp. 7/12 °C

(2) **Heating:** air temp. 20 °C - input/output water temp. 70/60 °C

RATED TECHNICAL DATA

TWO-PIPE UNIT - ONE COIL

MODELS			01	02	03
Total cooling capacity (1)		W	6.820	8.650	10.100
Sensible cooling capacity (1)		W	5.300	6.580	7.380
Heating capacity (2a)		W	15.200	18.900	20.000
Heating capacity (2b)		W	7.600	9.450	10.000
Rated air flow (3)		m ³ /h	1.350	1.500	1.450
Water flow rate (4)	Cooling	l/h	1.173	1.488	1.737
	Heating	l/h	1.307	1.625	1.720
Water head losses (5)	Cooling	kPa	35,7	39,4	38,4
	Heating	kPa	34,6	36,6	29,4
Sound pressure (ls.-ms.-hs.) (6)		dB(A)	34-43-49	35-44-50	35-44-50
Motors/Fans		N/N	1/1		
Rated power absorption (7)		W	290		
		A	1,3		
Electrical power supply			230 Vac – 1 Ph – 50 Hz		
Cold/hot coil rows		N	3R	4R	
Hydraulic fittings		DN	3/4" F	3/4" F	
Condensate drainage outlet		mm	20	20	

MODELS			04	05	06
Total cooling capacity (1)		W	12.000	15.200	17.800
Sensible cooling capacity (1)		W	9.780	12.100	13.500
Heating capacity (2a)		W	28.400	35.200	37.200
Heating capacity (2b)		W	14.200	17.600	18.600
Rated air flow (3)		m ³ /h	2.750	3.000	2.850
Water flow rate (4)	Cooling	l/h	2.064	2.614	3.062
	Heating	l/h	2.442	3.027	3.199
Water head losses (5)	Cooling	kPa	28,0	38,3	30,6
	Heating	kPa	30,6	40,0	26,1
Sound pressure (ls.-ms.-hs.) (6)		dB(A)	37-48-51	38-49-52	38-49-52
Motors/Fans		N/N	1/2		
Rated power absorption (7)		W	560		
		A	2,6		
Electrical power supply			230 Vac – 1 Ph – 50 Hz		
Cold/hot coil rows		N	3R	3R	4R
Hydraulic fittings		DN	3/4" F		
Condensate drainage outlet		mm	20		

Technical data referred to the following conditions:

standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling:** air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating:** air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating:** air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) (8) **Air flow rate and static pressure:** rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

(6) **Sound pressure:** sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741 - ISO 3742 standards.

(7) **Electrical data:** values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

REDUCTION OF THE COOLING/HEATING CAPACITY (in relation to the air flow reduction)

Air flow rate	1,00	0,95	0,90	0,85	0,80	0,75	0,70	0,65
Total cooling capacity	1,00	0,97	0,95	0,92	0,89	0,87	0,84	0,81
Sensible cooling capacity	1,00	0,97	0,93	0,90	0,86	0,83	0,79	0,76
Heat capacity	1,00	0,97	0,94	0,91	0,87	0,84	0,81	0,77

Air flow rate	0,60	0,55	0,50	0,45	0,40	0,35	0,30	0,25
Total cooling capacity	0,77	0,74	0,71	0,67	0,63	0,59	0,55	0,50
Sensible cooling capacity	0,72	0,68	0,64	0,60	0,55	0,51	0,46	0,41
Heat capacity	0,74	0,70	0,66	0,62	0,58	0,53	0,49	0,44

TABLE OF NET WEIGHTS MOD. DT (TWO-PIPE UNIT - ONE COIL) IN KG

Products / Models	01	02	03	04	05	06
DT-NH	37,0	38,0	40,0	52,0	54,0	57,0
DT-NV	37,0	38,0	40,0	52,0	54,0	57,0

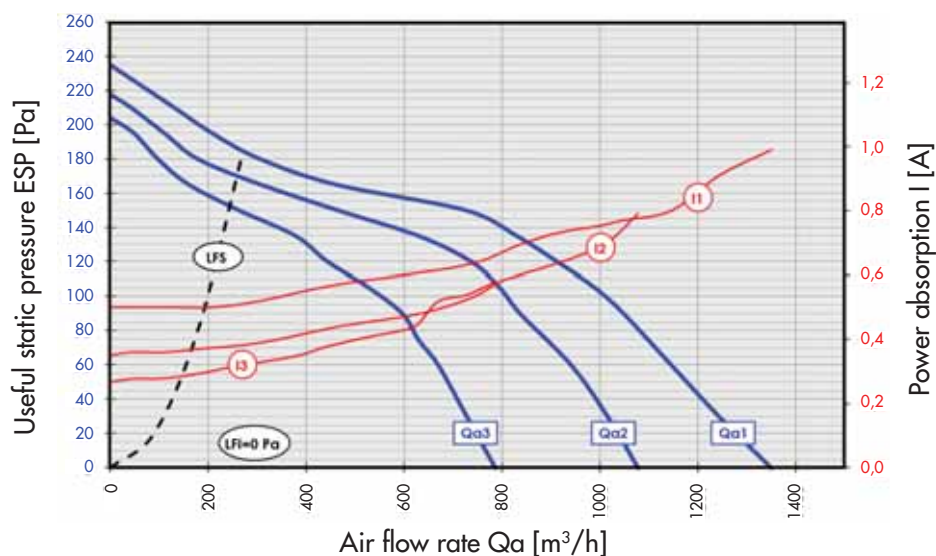
USEFUL STATIC PRESSURE/ WATER FLOW RATE DIAGRAMS

Key

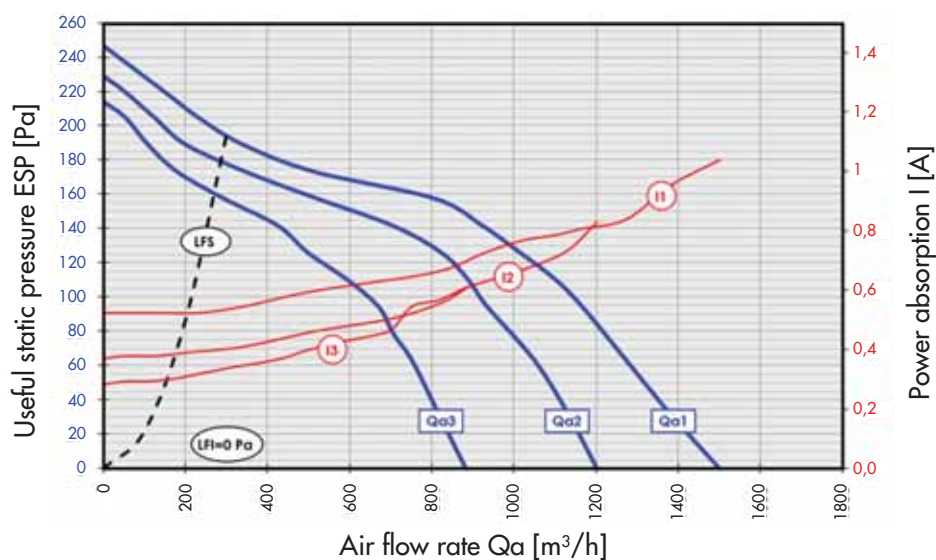
LFS Upper operating limit
LFI Lower operating limit
Qa1 ESP/Qa curve at the maximum speed
Qa2 ESP/Qa curve at the average speed

Qa3 ESP/Qa curve at the minimum speed
I1 I/Qa curve at the maximum speed
I2 I/Qa curve at the average speed
I3 I/Qa curve at the minimum speed

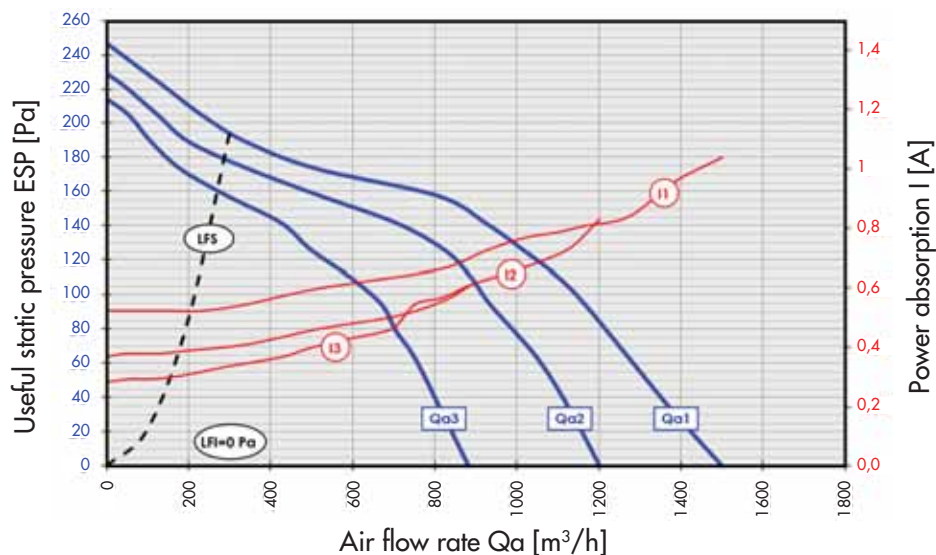
Model DT 01



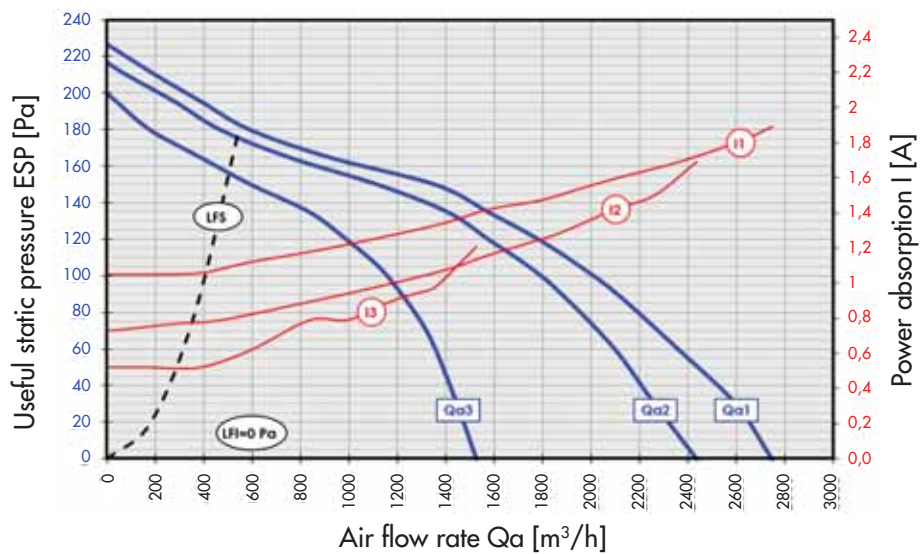
Model DT 02



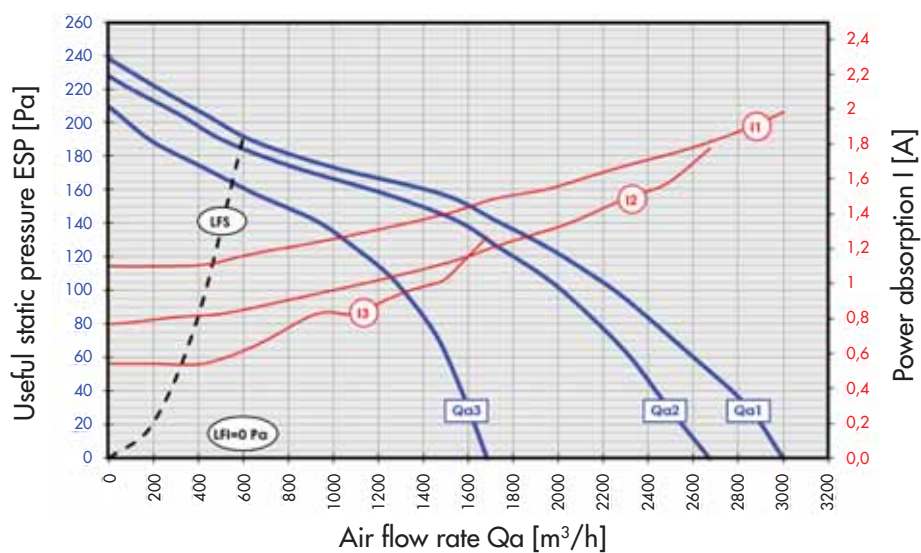
Model DT 03



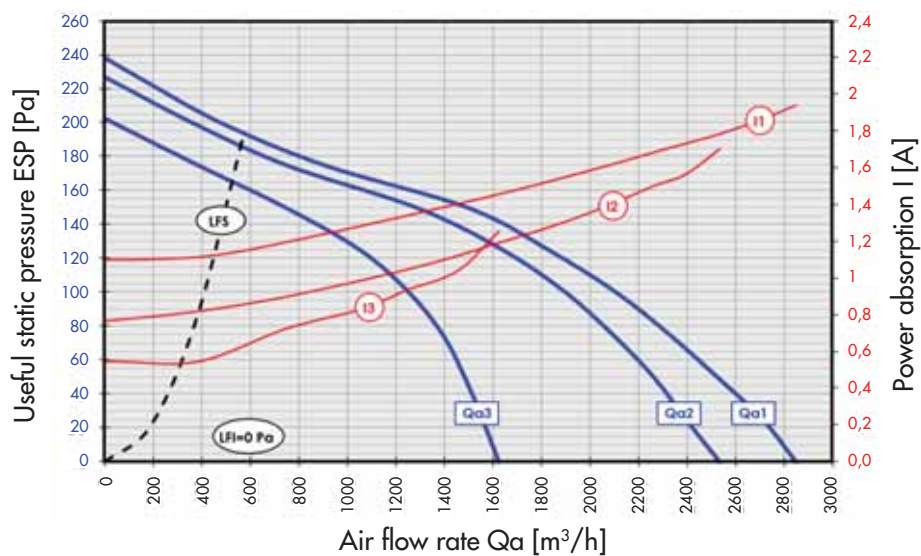
Model DT 04



Model DT 05

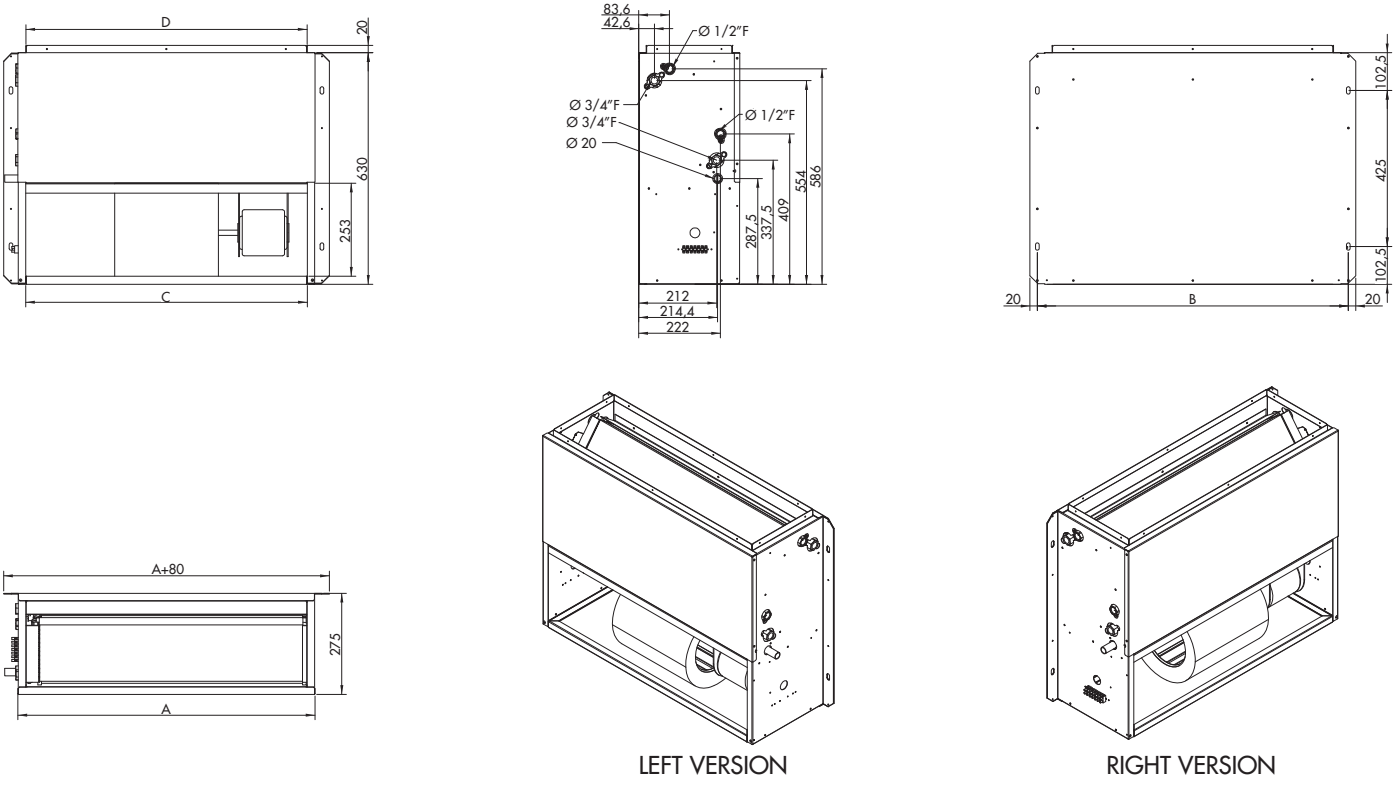


Model DT 06



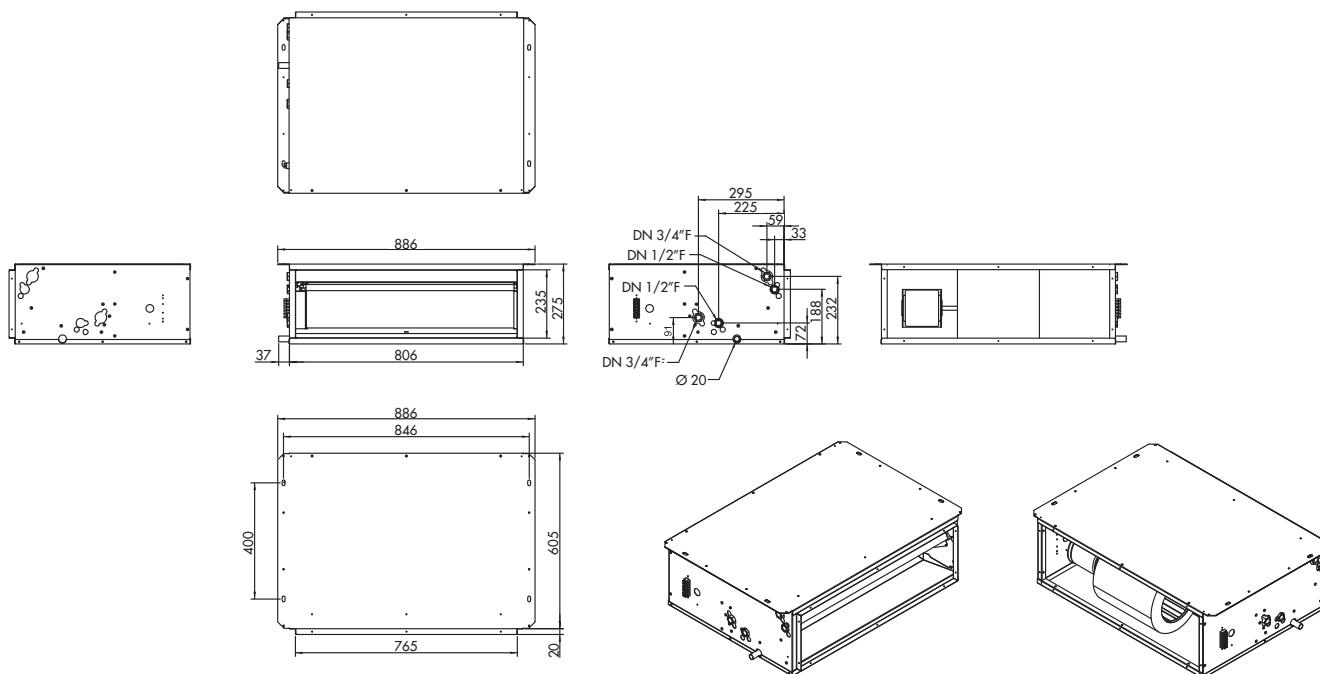
DIMENSIONAL DRAWING

Model DT-NV

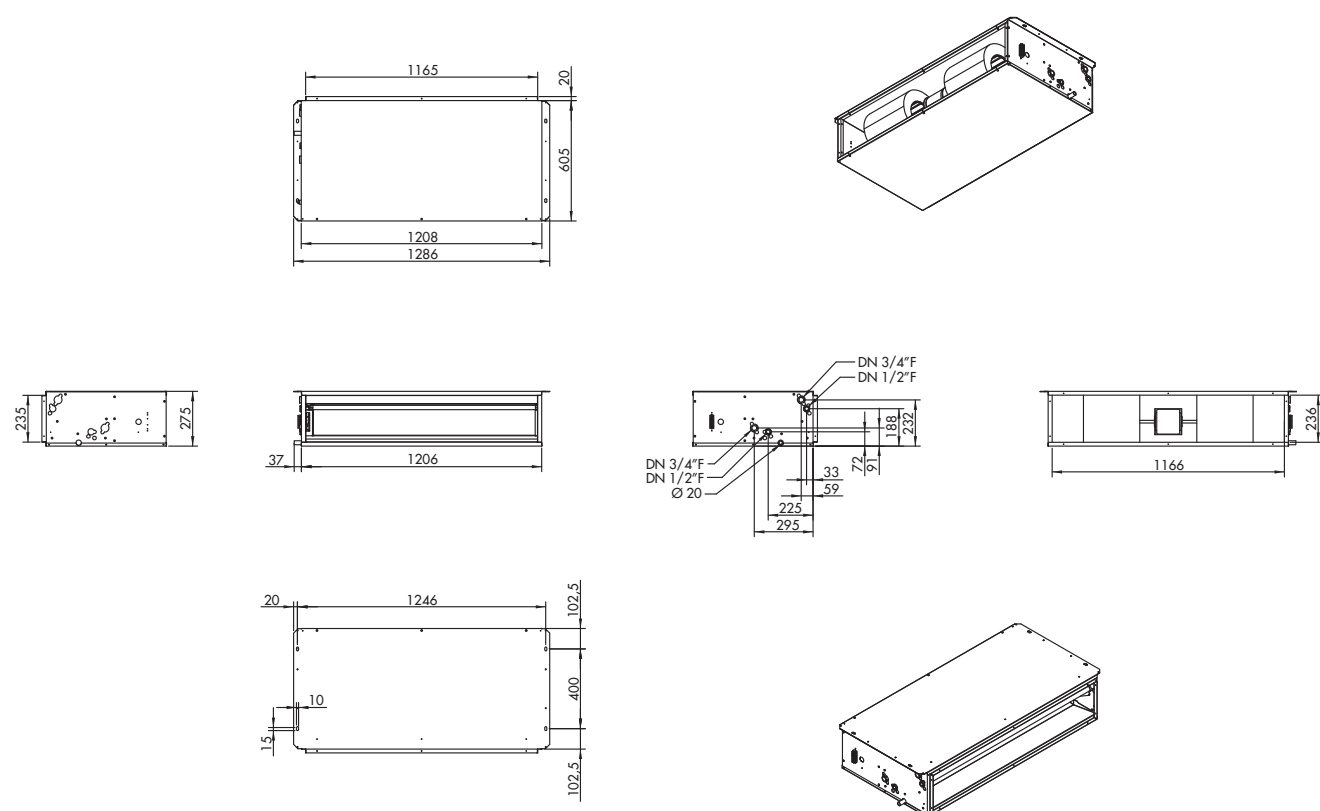


MODEL DT-NV	01	02	03	04	05	06
A		806			1206	
B		846			1246	
C		766			1166	
D		765			1165	

Model DT-NH 01...03



Model DT-NH 04...06



ACCESSORIES

WIRED CONTROL UNITS AND REMOTE CONTROLS				
	Code	Model	Description	Applicability
	387030468	CL01	IP20 terminal block (only if a wired control unit is necessary) - INCLUDED	All
	387030469	SWC22	Simplified thermostat for 2/4-pipe fan coil units	All
	387030470	SWC25	Programmable thermostat for 2/4-pipe fan coil units with display and with advanced functions	All
	387030471	EIX01	Electronic interface for fan coil unit thermostats: enables a single thermostat to control up to 4 fan coil units. Housed in a 6-module container for DIN rail	All
	387030472	IRC01	IR remote control. Kit inclusive of motherboard, air sensor, water sensor and IR receiver	All
	387030466	MTT32	Minimum hot water temperature thermostat (calibrated to 32°C)	SWC22 SWC25
	387030467	WTS4	Water temperature sensor (type NTC 4,700 ohm @25°C ±2 with cable L=1 m)	SWC25

ADDITIONAL SECTIONS

	Code	Model	Description	Applicability
	387030575	FSC-Z1	Ductable air filter section with flat air filter and frame in 4 parts, removable from all directions – grade EU3 filtration (Eurovent)	DT-NH 01...03
	387030576	FSC-Z2		DT-NH 04...06
	387030577	FSD-Z1	Ductable air filter section with high-efficiency undulated air filter and frame in 4 parts, removable from all directions – grade EU5 filtration (Eurovent)	DT-NH 01...03
	387030578	FSD-Z2		DT-NH 04...06
	387030579	FSM-Z1	Outdoor/indoor air mixing section (outdoor air 0–33% - indoor air 100–67% or inversely). Shutters paired with manual controls and configured for being operated with a motor	DT-NH 01...03
	387030580	FSM-Z2		DT-NH 04...06
	387030581	SM01	ON/OFF 230 V servo motor for shutter	DT-NH
	387030582	JS-Z1-M	Vibration damping joint, without flanges	DT-NH 01...03
	387030583	JS-Z2-M		DT-NH 04...06
	387030584	FSM-Z1-M	Plenum with round conduits 3x200/180/160 mm	DT-NH 01...03
	387030585	FSM-Z2-M	Plenum with round conduits 5x200/180/160 mm	DT-NH 04...06

ACCESSORIES

VARIOUS				
	Code	Model	Description	Applicability
	387030586	3WV05	3/4" M three-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	DT-NH 01...03
	387030587	3WV06		DT-NH 04...06
	387030588	KCP-05	Kit with 90° copper pipes, 3/4" F ball valve and 3/4" F retainer, solution for three-way valves	All
	387030589	2WV05	3/4" M two-way valve with PWM-ON/OFF actuator, 230 V (2 pipes)	DT-NH 01...03
	387030590	2WV06		DT-NH 04...06
	387030591	KCP-08	Kit with 90° copper pipes, 3/4" F ball valve and 3/4" F retainer, solution for two-way valves	All
	387030592	HB02	Auxiliary drain pan with thermal insulation, made of galvanised plate	DT-NH
	387030593	VB02	Auxiliary drain pan made of plastic	DT-NV
	387030594	CP05	Condensate discharge pump with alarm contact	DT-NH
	387030595	CP06		DT-NV

ACCESSORIES FOR INTEGRATION WITH BMS SYSTEMS

E SANITISATION DEVICE

Components for BMS			
	Code	Model	Description
	387030596	PCB-U1.V	Universal circuit board for AC units (asincrona 230 V asynchronus - 3 speeds) or ECMs (electronic/ brushless 230 VAC 0-10 VDC signal). MODBUS+TCP-IP/WEB/03 communication protocol. Without air temperature sensor
	387030597	ATS2	Air temperature sensor (mandatory)
	387030598	WTS2	Water temperature sensor for SUMMER/WINTER changeover (only for two-pipw units)
	387030599	WTS3	Water temperature sensor for measuring minimum hot water temperature
	387030600	SWC06	Simplified wall-mounted digital control unit for exteriors

Accessories for BMS system should not be used with FCW models where the Modbus communication port is already positioned inside the optional wired control.

BIOXIGEN® SANITISATION DEVICE				
	Code	Model	Description	Applicability
	387030601	KSB	Bioxigen® kit equipped with plastic box, power cable, external electrode, 3 self-tapping screws 3,9 x 13,3 "Mammut" terminals with 2 self-tapping screws 3,5 x 19 + L/N/PE label. Supplied installed on the unit.	All



WALL-MOUNTED

Model FCW

WALL-MOUNTED

MAIN FEATURES MOD. FCW



IRC03

Infrared remote control supplied with the unit

COVERING BOX

Covering boxes with new and visually appealing design, equipped with LCD. Automatic distribution of the air diversified into cooling and heating for the utmost comfort. The shape of the fan ensures a highly efficient, low-noise air flow.

HEAT EXCHANGER

High-efficiency heat exchange coil with copper pipe and aluminium flaps locked by means of mechanical expansion.

One coil for 2-pipe system. Coils tested at 30 bar operating pressure, suitable for working with water up to a maximum pressure of 1.5 bar.

The coils are suitable for operating with:

- high-temperature water (boiler)
- low-temperature water (condensing boiler, heat pump, etc.)
- cold water (chiller and/or industrial processes)
- water supplemented with glycol

Blue hydrophilic flaps and copper pipes equipped with special ridges that increase the fluid's turbulence and sensibly increase the heat exchange.

CONTROL UNITS AND CONTROLS

Remote control supplied as a standard feature with the unit. Wired control unit available as an optional accessory and equipped with an ON/OFF control and MODBUS protocol for communication with the BMS. Programming of the unit switching on and off. A single wired control unit can manage up to 10 fan coil units. Equipped with a sensor for pairing with a remote control.

VALVES

Two-way or three-way valves are available as accessories, NOT installable on the unit.

WALL-MOUNTED FAN COIL MOD. FCW

Code	Model	Cooling capacity (W)	Heating capacity (W)
387030228	FCW 01	2.100	4.264
387030229	FCW 02	2.600	5.914
387030230	FCW 03	3.500	7.807
387030231	FCW 04	4.200	8.642

FCW	01
-	(1)

FCW = fan coil model
(1) Capacità = 01, 02, 03, 04

RATED TECHNICAL DATA MOD. FCW

TWO-PIPE UNIT - ONE COIL

MODELS			01	02	03	04
Total cooling capacity (1)		W	2.100	2.600	3.500	4.200
Sensible cooling capacity (1)		W	1.600	2.000	2.400	3.000
Heating capacity (2a)		W	4.264	5.914	7.807	8.642
Heating capacity (2b)		W	2.132	2.957	3.903	4.321
Rated air flow (3)		m³/h	340	510	680	850
Water flow rate (4)	Cooling	l/h	360	432	612	720
	Heating	l/h	360	504	684	756
Water head losses (5)	Cooling	kPa	18,0	26,0	38,0	46,0
	Heating	kPa	5,0	9,0	16,0	13,0
Sound pressure (ls.-ms.-hs.) (6)		dB(A)	21-22-27-31	21-28-35-36	26-34-42-43	30-39-46-48
Motors/Fans		N/N	1/1	1/1	1/1	1/1
Rated power absorption (7)		W	10	20	30	40
		A	0,052	0,078	0,126	0,187
Electrical power supply			230 Vac – 1 Ph – 50 Hz			
Cold/hot coil rows		N	2	2	2	2
Hydraulic fittings		DN	1/2"	1/2"	1/2"	1/2"
Condensate drainage outlet		mm	15,6			

Technical data referred to the following conditions:
standard unit - atmospheric pressure 1013 mbar - electrical power supply 230 VAC/1 Ph/50 Hz.

(1) (2) (3) (4) (5): Rated technical data, ref. air flow rate (3) at maximum speed and with unit with open mouth (external static pressure ESP=0 Pa).

(1) **Cooling**: air temp. 27 °C dry bulb, 19 °C wet bulb - input/output water temp. 7/12 °C - Maximum speed.

(2a) **Heating**: air temp. 20 °C - Input/output water temp. 70/60 °C - Maximum speed.

(2b) **Heating**: air temp. 20 °C - Input/output water temp. 45/40 °C - Maximum speed.

(3) (8) **Air flow rate and static pressure**: rated values measured with casing ref. AMCA210-74 standard Fig.12 and conduit + diaphragm ref. CNR-UNI10023 standard.

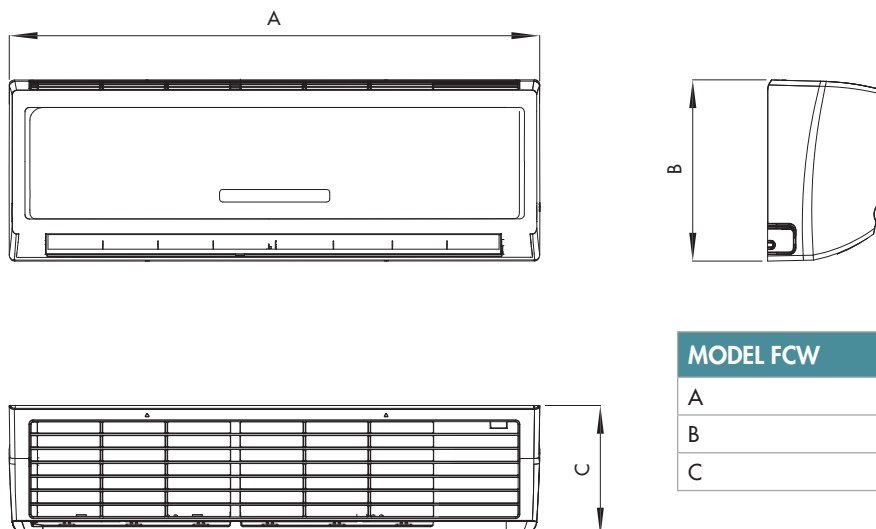
(6) **Sound pressure**: sound pressure in free field environment, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. ISO 3741 - ISO 3742 standards.

(7) **Electrical data**: values measured with Yokogawa WT110 wattmeter (nominal value = reference value for the design of the electrical system).

TABLE OF NET WEIGHTS MOD. FCW (TWO-PIPE UNIT - ONE COIL) IN KG

Products / Models	01	02	03	04
FCW	10,5	10,5	10,5	12,5

DIMENSIONAL DRAWING MOD. FCW 01-02-03 AND MOD. FCW 04



MODEL FCW	01	02	03	04
A		845		970
B		289		360
C		209		280

ACCESSORIES

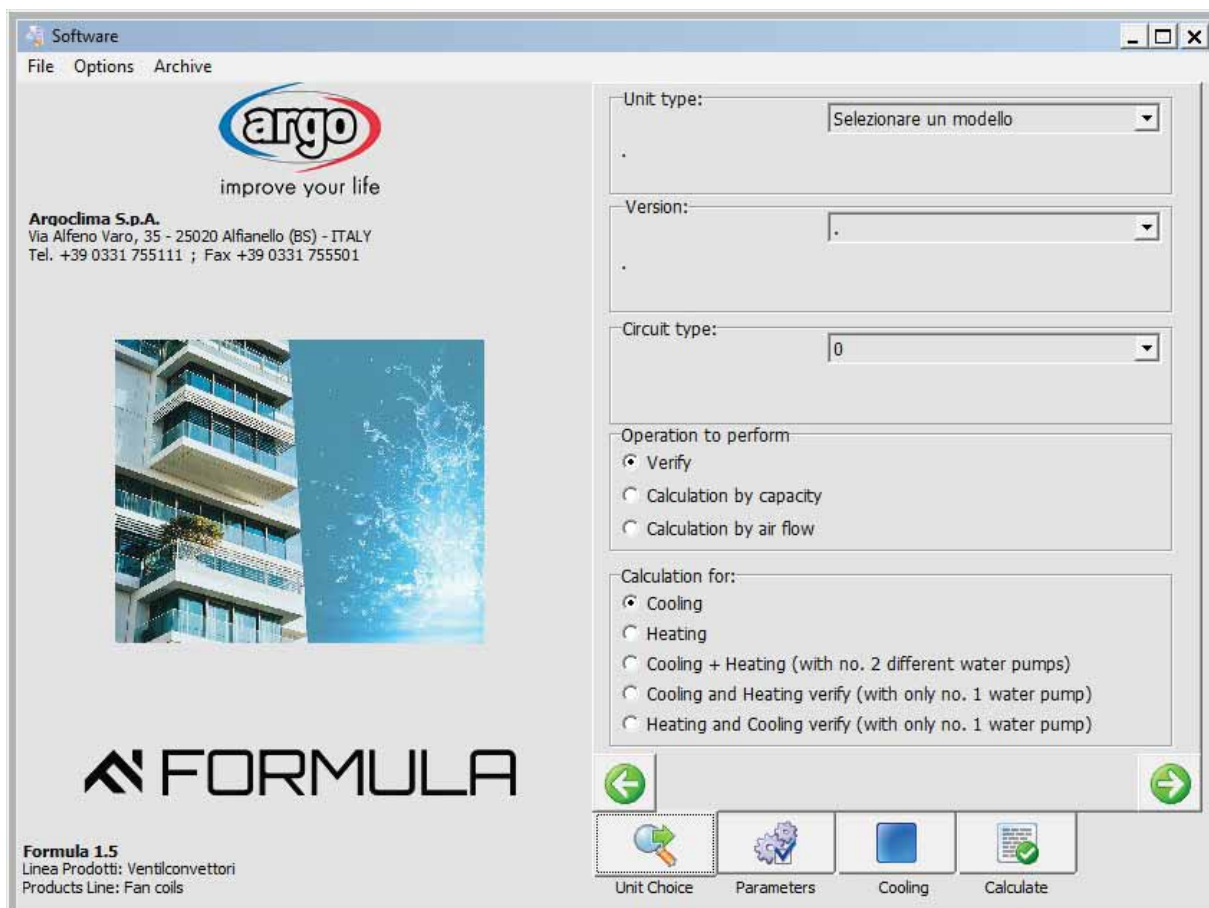
WIRED CONTROL UNIT				
	Code	Model	Description	Applicability
	387030232	SWC17	Wired control unit for wall-mounted fan coil units	All

VALVE KIT				
	Code	Model	Description	Applicability
	387030236	HL-G2-1/2-S2	Two-way valve for wall mounted type	All
	387030237	HL-G3-1/2-S2	Three-way valve for wall mounted type	All
	387030233	KIT VALV 4V: VTX13+ MVX22R+ 54304-04	VTX13 = four-way valves 1/2" M, Kvs=1.6 (2 pipes) MVX22R = electro-thermal ON/OFF actuator, 230 V, 140 N 54304-04 = casing for VTX13	All
	387030234	KIT VALV 2V: VSX13+ MVX22R+ 54304-01	VSX13 = two-way valves 1/2" M, Kvs=1.6 (2 pipes) MVX22R = electro-thermal ON/OFF actuator, 230 V, 140 N 54304-01 = casing for VSX13	All



SELECTION SOFTWARE:

 The FORMULA software programme helps to select the most suitable hydronic terminal units for the various types of systems (residential, tertiary, etc.).



 It enables subjects operating in the thermotechnical and plant engineering sector to verify the operating conditions of a specific model or search for the most functional units on the basis of personalised parameters.



 The results can then be easily exported and shared.

 Argoclima S.p.A. Via Alfeno Varo, 35 - 25020 Alfianello (BS) - ITALY Tel. +39 0331 755111 ; Fax +39 0331 755501									
 Formula 1.5 Linea Prodotti: Ventilconvettori Products Line: Fan coils									
Type: FCT	Centrifugal Fan Coils							Circuit type: 2 Pipes	
Model	FCT 01	FCT 02	FCT 03	FCT 04	FCT 05	FCT 06	FCT 07	FCT 08	FCT 09
Fan Speed	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX
Cooling									
Air temperature with D.B.	°C	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0
Air temperature with W.B.	°C	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
Relative humidity	%	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4
Input Water Temp.	°C	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Output Water Temp.	°C	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Water flow	l/h	259	344	435	519	645	731	949	1.104
Water pressure drop	kPa	13.1	16.3	18.5	20.8	22.6	24.1	24.5	27.1
Total cooling capacity	W	1.500	2.000	2.530	3.020	3.750	4.250	5.520	6.420
	Frig./h	1.290	1.720	2.176	2.597	3.225	3.655	4.747	5.521
Sensible cooling capacity	W	1.290	1.620	2.070	2.310	2.870	3.230	4.330	4.800
	Frig./h	1.109	1.393	1.780	1.987	2.468	2.778	3.724	4.128
General characteristics									
Glycol in weight	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Altitude a.s.l.	m	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air flow	m³/h	370	400	500	550	670	720	1.000	1.050
Air pressure drops	Pa	0	0	0	0	0	0	0	0
	dBA	38	38	44	45	37	37	43	45
Sound levels	NC	32	33	38	38	32	33	38	38
	NR	33	34	40	40	32	34	40	44
Max input power	W	55	55	80	80	80	80	145	145
Max input current	A	0.25	0.25	0.35	0.35	0.35	0.35	0.65	0.65
Version	General Report (versions / dimensions / weights not indicated)								
Length	mm	0	0	0	0	0	0	0	0
Width	mm	0	0	0	0	0	0	0	0
Depth	mm	0	0	0	0	0	0	0	0
Weight	Kg	0	0	0	0	0	0	0	0

 The software programme is available in several languages to further facilitate its use.





improve your life

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argoclima.com

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Argo is a brand of Argoclima S.p.A., a leading European company in climate control, heating and air treatment.