



Technical catalogue

We care about healthy air

Climmy ES
fan coil units



Plastic outlet grid in one single piece: extraordinary design and strenght



The descriptions and illustrations provided in this publication are not binding: we reserve the right, whilst maintaining the essential characteristics of the types described and illustrated, to make, at any time, without the requirement to promptly update this piece of literature, any changes that it considers useful for the purpose of improvement or for any other manufacturing or commercial requirements.

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INTRODUCTION

The **Climmy ES SEC/F - SEC/F-ECM** fan coils combine a beautiful design with very interesting performances in terms of sound level and energy consumption.

Designed around 5 different versions, the extensive range includes wall and ceiling mounted units, exposed or concealed with centrifugal fan, delivering one of the most versatile ranges of fan coils on the market today.

In line with innovative trends and modern industrial design, the SEC/F / SEC/F-ECM fan coil range meets today's demanding requirements of performance, size, acoustics, low energy, ease of installation and maintenance. A full range of adjustment and control devices is available for rapidly obtaining correct environmental temperature and with an investment proportional to performances, comfort and desired measurement precision.

The SEC/F / SEC/F-ECM model is complemented with a full range of accessories: various types of adjustment valves, sturdy support feet, rear covering panel for glass installation, additional electric heater, auxiliary condensate pump, fresh air intake louver, air inlet/outlet diffusers for fitted installations.

SEC/F range with centrifugal fan

Range includes 9 air flow rates (from 105 to 1500 m³/h) and 5 versions (for wall and ceiling installation, with casing and concealed), each equipped with 3 or 4 row coil and with the possibility to add a 1 or 2 row coil for 4 pipe systems.

All SEC/F fan coils with centrifugal fans are equipped with electric motors which dramatically reduce electrical consumption of up to 40% comparative to previous models, with 6 speed motors as standard offering greater flexibility in the selection of products.

New market trends have also led to an extension of the four pipe model which now has a two row LTHW coil giving improved outputs at lower flow and return temperatures.

It is the most comprehensive range, perfect to meet all of the climate control needs of work environments such as offices, shops, restaurants and hotel rooms featuring ducted installations with available pressure up to 50 Pa.

SEC/F-ECM range with centrifugal fan

Range includes 5 air flow rates (from 115 to 1395 m³/h), each equipped with 3 or 4 row coil and with the possibility to add a 1 or 2 row coil for 4 pipe systems.

The SEC/F-ECM range makes use of the excellent experience gained with the Cassette fan coils with inverter

board, first in the world in production since 2009, and which have had great success on all markets.

The innovative brushless and sensorless type synchronous electronic motor with permanent magnets, is controlled by an inverter board designed and developed in Italy.

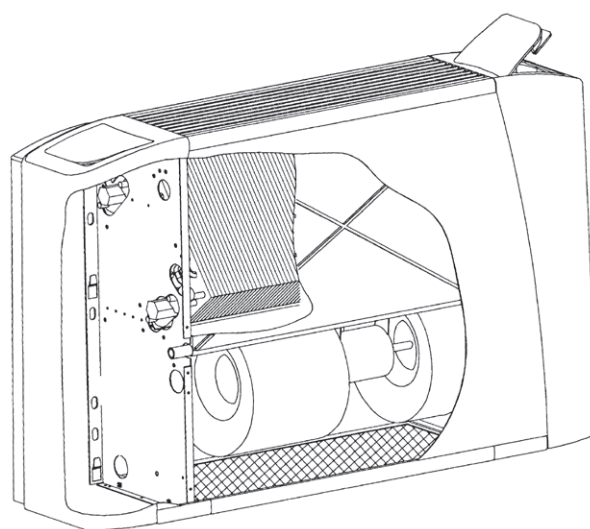
The board is mounted on the unit, closed to the motor, without the need to be cooled down by the air flow. The air flow rate can be varied in continuous by means of a 1-10 V signal generated by our controls or by independent control systems.

The continuous air flow control improves the acoustic comfort and allows a more punctual reply to the variation of the thermal loads and a greater stability of the requested ambient temperature.

The extreme efficiency, also at low speed, makes possible a great reduction in electric consumption (less than 50% in comparison to SEC/F range motor) with absorption values under normal operating conditions that do not exceed 16 Watt for SEC/F-ECM models.

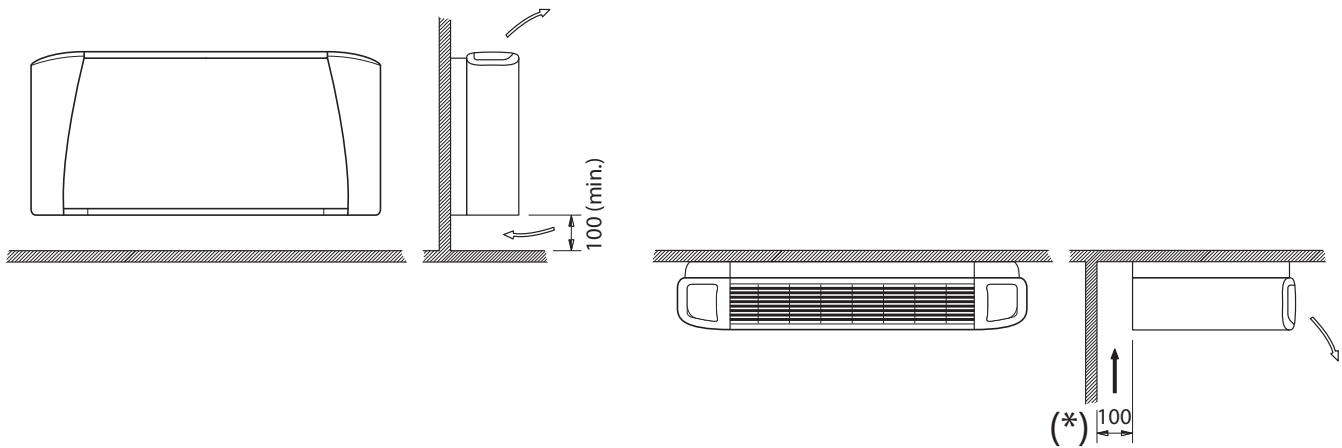
The excellent values of the SEC/F-ECM range in terms of sound levels have been maintained in all working conditions, without any resonance phenomenon at any frequency.

The full compliance with the Electromagnetic Compatibility Directive and with the other severe Standards in force is certified by an independent institute.



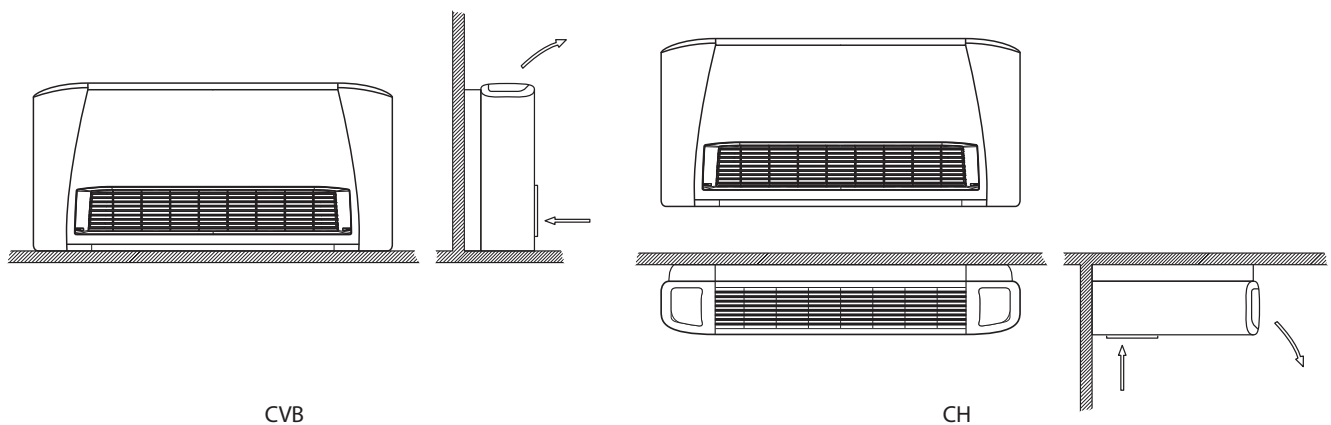
Versions

CV Vertical Casing - Wall and Ceiling Installation

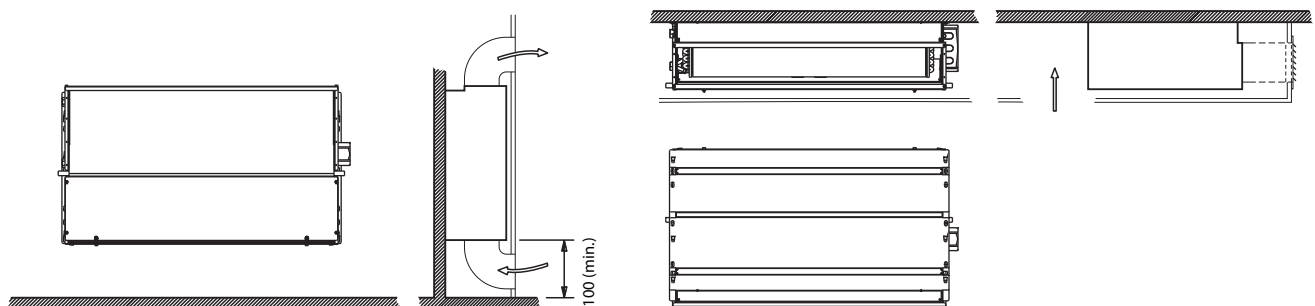


(*) the CV version can also be installed horizontally leaving behind a 100 mm gap for air intake.

CVB Vertical and CH Horizontal Casing - Floor and Horizontal Installation



NC - Vertical and Horizontal Concealed Installation



CONSTRUCTION FEATURES

Outer casing

Made with strong synthetic lateral corners and from galvanized and pre-painted front steel panel.

The plastic top grid has fixed louvres and is reversible in order to distribute the air in two different directions.

Standard colours :

- Lateral corners and top grid: **Pantone 427C (light grey)**
- Frontal panel : **RAL 9003 (white)**
- Other colours on request

Inner casing

It is made with 1 mm galvanized steel, insulated with 3 mm polyolefin (PO) foam (B-s2-d0 EN 13501-1).

Fan assembly

The fans have aluminium or plastic blades directly keyed on the motor with double aspiration and they are dynamically and statically balanced during manufacture in order to have an extremely quiet operation.

Electric motor

The motor is wired for single phase supply and has six speeds, three of which are connected, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings. Internal thermal protection with automatic reset, protection IP 20, class B.

The speeds connected in the factory are indicated by "MIN, MED and MAX" in the following tables.

Coil

It is manufactured from drawn copper tube and the aluminium fins are mechanically bonded onto the tube by an expansion process.

The coil has two Ø 1/2 inch BSP internal connections.

The coil has Ø 1/8" inch BSP air vent and drain.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

The hydraulic connections are on the left side facing the unit.

On request we can deliver the unit with the connections on the right end side. This operation can also be easily carried out on the construction site during installation.

Condensate collection tray

Made of plastic (ABS UL94 HB) with a "L"-shaped plastic fitted on the inner casing.

In the CH-CVB and NC model the tray is insulated with 3 mm polyolefin (PO) foam B-s2-d0 EN 13501-1.

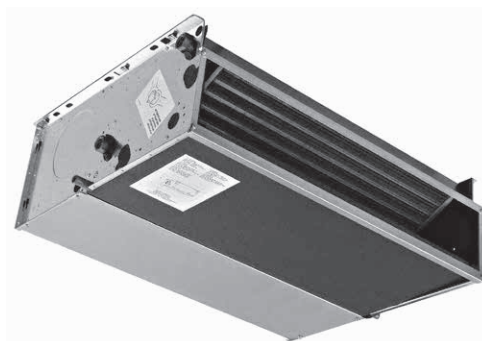
The outside diameter of the condensate discharge pipe is Ø 15 mm.

Filter

Polypropylene cellular fabric regenerating filter.

The filter frame of galvanized steel is inserted into special plastic sliding guides fastened to the internal structure for easy insertion and filter removal.

Filter presence is highlighted by a plastic front cover featuring the same colour as the top grid.



MAIN PERFORMANCES AND TECHNICAL CHARACTERISTICS

3 row coil - 2 pipe units

The following standard rating conditions are used:

COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

HEATING

Entering air temperature: + 20 °C

Water temperature: +45 °C E.W.T. +40 °C L.W.T.

MODEL Speed		SEC/F 1.3-2T						SEC/F 2.3-2T						SEC/F 3.3-2T					
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
		MIN			MED		MAX	MIN		MED		MAX		MIN		MED		MAX	
Air flow	m³/h	105	125	150	175	195	220	145	170	220	250	295	340	185	235	270	325	385	440
Cooling total emission	kW	0,57	0,66	0,75	0,84	0,91	1,00	0,90	0,99	1,23	1,35	1,53	1,70	1,27	1,55	1,76	2,04	2,35	2,61
Cooling sensible emission	kW	0,45	0,53	0,60	0,69	0,75	0,83	0,68	0,76	0,95	1,06	1,21	1,36	0,92	1,13	1,30	1,51	1,76	1,97
Heating emission	kW	0,64	0,76	0,86	0,98	1,07	1,19	0,94	1,06	1,34	1,49	1,70	1,92	1,26	1,56	1,79	2,10	2,44	2,74
Dp Cooling	kPa	2,5	3,0	3,8	4,7	5,4	6,3	2,5	3,0	4,4	5,3	6,5	7,9	6,6	9,4	11,8	15,3	19,7	23,8
Dp Heating	kPa	0,9	1,1	1,4	1,8	2,1	2,5	2,2	2,8	4,2	5,0	6,4	7,9	5,4	7,8	10,0	13,2	17,1	21,0
Fan	W	16,0	19,0	21,0	25,0	29,0	33,0	14,0	16,0	22,0	26,0	32,0	40,0	15,0	20,0	25,0	32,0	41,0	49,0
Sound power (Lw)	dB(A)	32	34	36	39	42	45	30	33	40	43	47	51	31	36	40	45	49	52
Sound pressure (Lp) ⁽¹⁾	dB(A)	23	25	27	30	33	36	21	24	31	34	38	42	22	27	31	36	40	43

MODEL Speed		SEC/F 4.3-2T						SEC/F 5.3-2T						SEC/F 6.3-2T					
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
			MIN	MED		MAX			MIN		MED		MAX	MIN		MED		MAX	
Air flow	m³/h	185	265	335	400	485	570	250	315	420	495	545	650	415	505	590	680	760	830
Cooling total emission	kW	1,25	1,71	2,11	2,43	2,83	3,19	1,66	2,01	2,55	2,90	3,13	3,58	2,50	2,94	3,32	3,70	4,01	4,26
Cooling sensible emission	kW	0,91	1,26	1,57	1,82	2,15	2,45	1,22	1,49	1,91	2,19	2,38	2,76	1,87	2,23	2,54	2,86	3,12	3,35
Heating emission	kW	1,25	1,74	2,18	2,52	2,97	3,41	1,65	2,02	2,61	3,00	3,24	3,75	2,56	3,05	3,45	3,90	4,26	4,56
Dp Cooling	kPa	6,5	11,2	16,2	20,8	27,2	33,8	4,1	5,8	8,8	11,1	12,7	16,2	8,6	11,4	14,1	17,2	19,8	22,1
Dp Heating	kPa	5,3	9,5	14,0	18,2	24,3	30,8	3,4	4,8	7,5	9,6	11,0	14,2	7,3	9,9	12,3	15,2	17,8	20,1
Fan	W	14,0	21,0	28,0	34,0	44,0	57,0	18,0	22,0	32,0	39,0	46,0	61,0	37,0	46,0	55,0	67,0	78,0	88,0
Sound power (Lw)	dB(A)	27	33	39	43	47	52	26	31	37	41	43	48	37	42	46	49	52	54
Sound pressure (Lp) ⁽¹⁾	dB(A)	18	24	30	34	38	43	17	22	28	32	34	39	28	33	37	40	43	45

MODEL Speed		SEC/F 7.3-2T						SEC/F 8.3-2T						SEC/F 9.3-2T					
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
			MIN		MED		MAX		MIN		MED		MAX		MIN		MED		MAX
Air flow	m³/h	445	535	630	735	840	925	510	655	815	1020	1100	1200	735	830	980	1210	1365	1500
Cooling total emission	kW	2,82	3,29	3,74	4,21	4,66	5,01	3,01	3,68	4,32	5,09	5,36	5,69	4,00	4,38	4,95	5,74	6,21	6,56
Cooling sensible emission	kW	2,08	2,45	2,80	3,19	3,56	3,85	2,27	2,82	3,35	4,02	4,26	4,55	3,08	3,40	3,89	4,60	5,03	5,37
Heating emission	kW	2,83	3,34	3,83	4,33	4,83	5,23	3,22	4,02	4,78	5,75	6,11	6,55	4,42	4,86	5,58	6,62	7,26	7,78
Dp Cooling	kPa	12,3	16,2	20,3	25,1	30,1	34,2	7,2	10,3	13,8	18,4	20,2	22,5	11,8	13,8	17,3	22,4	25,9	28,6
Dp Heating	kPa	10,1	13,5	17,2	21,3	25,9	29,7	5,6	8,3	11,3	15,6	17,3	19,6	12,9	16,2	21,1	27,8	33,0	37,0
Fan	W	44,0	54,0	66,0	79,0	92,0	103,0	47,0	62,0	81,0	105,0	116,0	130,0	78,0	92,0	108,0	134,0	152,0	176,0
Sound power (Lw)	dB(A)	38	42	47	51	54	56	39	45	50	56	58	60	47	50	54	58	62	64
Sound pressure (Lp) ⁽¹⁾	dB(A)	29	33	38	42	45	47	30	36	41	47	49	51	38	41	45	49	53	55

(1) The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

MIN-MED-MAX = Speeds connected in the factory

4 row coil - 2 pipe units

The following standard rating conditions are used:

COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

HEATING

Entering air temperature: + 20 °C

Water temperature: +45 °C E.W.T. +40 °C L.W.T.

MODEL		SEC/F 1.4-2T						SEC/F 2.4-2T						SEC/F 3.4-2T					
Speed		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
		MIN			MED		MAX	MIN		MED		MAX		MIN	MED		MAX		
Air flow	m³/h	105	125	150	175	195	220	145	170	220	250	295	340	185	235	270	325	385	440
Cooling total emission	kW	0,65	0,77	0,87	1,00	1,08	1,20	1,00	1,11	1,41	1,56	1,78	2,00	1,32	1,63	1,87	2,17	2,53	2,83
Cooling sensible emission	kW	0,49	0,58	0,66	0,77	0,84	0,94	0,73	0,82	1,05	1,17	1,35	1,53	0,95	1,18	1,36	1,59	1,86	2,09
Heating emission	kW	0,69	0,80	0,92	1,07	1,17	1,31	0,99	1,11	1,43	1,60	1,83	2,08	1,30	1,62	1,87	2,19	2,59	2,88
Dp Cooling	kPa	1,9	2,5	3,2	4,0	4,7	5,6	4,9	6,1	9,1	11,0	13,9	17,2	3,7	5,3	6,7	8,8	11,5	14,1
Dp Heating	kPa	1,7	2,2	2,8	3,7	4,3	5,3	4,0	4,9	7,6	9,3	11,8	14,8	2,8	4,2	5,4	7,1	9,8	11,5
Fan	W	16,0	19,0	21,0	25,0	29,0	33,0	14,0	16,0	22,0	26,0	32,0	40,0	15,0	20,0	25,0	32,0	41,0	49,0
Sound power (Lw)	dB(A)	32	34	36	39	42	45	30	33	40	43	47	51	31	36	40	45	49	52
Sound pressure (Lp) ⁽¹⁾	dB(A)	23	25	27	30	33	36	21	24	31	34	38	42	22	27	31	36	40	43

MODEL		SEC/F 4.4-2T						SEC/F 5.4-2T						SEC/F 6.4-2T					
Speed		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
			MIN	MED		MAX			MIN		MED		MAX	MIN		MED		MAX	
Air flow	m³/h	185	265	335	400	485	570	250	315	420	495	545	650	415	505	590	680	760	830
Cooling total emission	kW	1,31	1,81	2,25	2,62	3,08	3,50	1,77	2,17	2,79	3,21	3,49	4,03	2,79	3,34	3,81	4,31	4,71	5,04
Cooling sensible emission	kW	0,86	1,21	1,51	1,78	2,10	2,39	1,28	1,58	2,04	2,36	2,58	3,01	2,03	2,45	2,81	3,20	3,52	3,79
Heating emission	kW	1,28	1,80	2,27	2,64	3,14	3,62	1,71	2,10	2,74	3,16	3,46	4,01	2,82	3,39	3,90	4,46	4,92	5,31
Dp Cooling	kPa	3,4	6,1	9,0	11,7	15,5	19,6	7,3	10,4	16,3	20,8	24,2	31,3	14,4	19,7	24,8	30,9	36,2	40,9
Dp Heating	kPa	2,6	5,0	7,2	9,4	12,8	16,4	5,6	8,1	12,9	16,6	19,5	25,2	11,9	16,5	21,1	26,8	31,8	36,3
Fan	W	14,0	21,0	28,0	34,0	44,0	57,0	18,0	22,0	32,0	39,0	46,0	61,0	37,0	46,0	55,0	67,0	78,0	88,0
Sound power (Lw)	dB(A)	27	33	39	43	47	52	26	31	37	41	43	48	37	42	46	49	52	54
Sound pressure (Lp) ⁽¹⁾	dB(A)	18	24	30	34	38	43	17	22	28	32	34	39	28	33	37	40	43	45

MODEL		SEC/F 7.4-2T						SEC/F 8.4-2T						SEC/F 9.4-2T					
Speed		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
			MIN		MED		MAX		MIN		MED		MAX		MIN		MED		MAX
Air flow	m³/h	445	535	630	735	840	925	510	655	815	1020	1100	1200	735	830	980	1210	1365	1500
Cooling total emission	kW	2,99	3,51	4,01	4,56	5,08	5,48	3,22	3,97	4,72	5,63	5,94	6,34	4,34	4,79	5,45	6,41	6,98	7,42
Cooling sensible emission	kW	2,18	2,57	2,96	3,39	3,80	4,13	2,38	2,98	3,58	4,33	4,59	4,93	3,28	3,63	4,18	4,98	5,48	5,87
Heating emission	kW	2,95	3,49	4,03	4,62	5,15	5,59	3,37	4,26	5,14	6,27	6,60	7,20	4,70	5,23	6,01	7,18	7,93	8,52
Dp Cooling	kPa	9,5	12,5	15,9	20,0	24,2	27,7	9,6	14,0	19,0	26,0	28,6	32,2	8,9	10,6	13,4	17,8	20,7	23,2
Dp Heating	kPa	7,5	10,1	13,1	16,6	20,1	23,2	8,5	12,8	17,9	24,9	27,8	31,7	8,3	10,0	12,8	17,6	20,9	23,7
Fan	W	44,0	54,0	66,0	79,0	92,0	103,0	47,0	62,0	81,0	105,0	116,0	130,0	78,0	92,0	108,0	134,0	152,0	176,0
Sound power (Lw)	dB(A)	38	42	47	51	54	56	39	45	50	56	58	60	47	50	54	58	62	64
Sound pressure (Lp) ⁽¹⁾	dB(A)	29	33	38	42	45	47	30	36	41	47	49	51	38	41	45	49	53	55

(1) The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.
MIN-MED-MAX = Speeds connected in the factory

3+1 row coil - 4 pipe units

The following standard rating conditions are used:

COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

HEATING

Entering air temperature: + 20 °C

Water temperature: +65 °C E.W.T. +55 °C L.W.T.

MODEL Speed		SEC/F 1.3-4T						SEC/F 2.3-4T						SEC/F 3.3-4T					
		1 MIN	2	3	4 MED	5	6 MAX	1 MIN	2	3 MED	4	5 MAX	6	1 MIN	2 MED	3	4	5 MAX	6
Air flow	m ³ /h	105	125	150	175	195	220	145	170	220	250	295	340	185	235	270	325	385	440
Cooling total emission	kW	0,57	0,66	0,75	0,84	0,91	1,00	0,90	0,99	1,23	1,35	1,53	1,70	1,27	1,55	1,76	2,04	2,35	2,61
Cooling sensible emission	kW	0,45	0,53	0,60	0,69	0,75	0,83	0,68	0,76	0,95	1,06	1,21	1,36	0,92	1,13	1,30	1,51	1,76	1,97
Heating emission	kW	0,55	0,62	0,69	0,77	0,83	0,91	0,83	0,91	1,09	1,19	1,33	1,47	1,19	1,40	1,56	1,76	1,99	2,18
Dp Cooling	kPa	0,9	1,1	1,4	1,7	2,0	2,3	2,5	3,0	4,4	5,3	6,5	7,9	6,6	9,4	11,8	15,3	19,7	23,8
Dp Heating	kPa	0,5	0,7	0,8	1,0	1,1	1,3	1,3	1,6	2,2	2,5	3,1	3,7	3,2	4,2	5,1	6,3	7,8	9,2
Fan	W	16,0	19,0	21,0	25,0	29,0	33,0	14,0	16,0	22,0	26,0	32,0	40,0	15,0	20,0	25,0	32,0	41,0	49,0
Sound power (Lw)	dB(A)	32	34	36	39	42	45	30	33	40	43	47	51	31	36	40	45	49	52
Sound pressure (Lp) ⁽¹⁾	dB(A)	23	25	27	30	33	36	21	24	31	34	38	42	22	27	31	36	40	43

MODEL Speed		SEC/F 4.3-4T						SEC/F 5.3-4T						SEC/F 6.3-4T					
		1	2 MIN	3 MED	4	5 MAX	6	1 MIN	2	3 MED	4	5 MAX	6	1 MIN	2 MED	3	4	5 MAX	6
Air flow	m ³ /h	185	265	335	400	485	570	250	315	420	495	545	650	415	505	590	680	760	830
Cooling total emission	kW	1,25	1,71	2,11	2,43	2,83	3,19	1,66	2,01	2,55	2,90	3,13	3,58	2,50	2,94	3,32	3,70	4,01	4,26
Cooling sensible emission	kW	0,91	1,26	1,57	1,82	2,15	2,45	1,22	1,49	1,91	2,19	2,39	2,76	1,87	2,23	2,54	2,86	3,12	3,35
Heating emission	kW	1,18	1,52	1,81	2,04	2,33	2,60	1,55	1,84	2,22	2,50	2,66	3,00	2,19	2,51	2,79	3,09	3,33	3,53
Dp Cooling	kPa	6,5	11,2	16,2	20,8	27,2	33,8	5,4	7,6	11,5	14,6	16,7	21,1	8,6	11,4	14,1	17,2	19,8	22,1
Dp Heating	kPa	3,8	6,0	8,0	10,0	12,5	15,3	1,0	1,3	1,9	2,3	2,6	3,2	1,8	2,3	2,8	3,3	3,8	4,2
Fan	W	14,0	21,0	28,0	34,0	44,0	57,0	18,0	22,0	32,0	39,0	46,0	61,0	37,0	46,0	55,0	67,0	78,0	88,0
Sound power (Lw)	dB(A)	27	33	39	43	47	52	26	31	37	41	43	48	37	42	46	49	52	54
Sound pressure (Lp) ⁽¹⁾	dB(A)	18	24	30	34	38	43	17	22	28	32	34	39	28	33	37	40	43	45

MODEL Speed		SEC/F 7.3-4T						SEC/F 8.3-4T						SEC/F 9.3-4T					
		1	2 MIN	3	4 MED	5	6 MAX	1 MIN	2	3 MED	4	5 MAX	6	1 MIN	2 MED	3	4	5 MAX	6
Air flow	m ³ /h	445	535	630	735	840	925	510	655	815	1020	1100	1200	735	830	980	1210	1365	1500
Cooling total emission	kW	2,82	3,29	3,74	4,21	4,66	5,01	3,01	3,68	4,32	5,09	5,36	5,69	4,00	4,38	4,95	5,74	6,21	6,56
Cooling sensible emission	kW	2,08	2,45	2,80	3,19	3,56	3,85	2,27	2,82	3,35	4,02	4,26	4,55	3,08	3,40	3,89	4,60	5,03	5,37
Heating emission	kW	2,54	2,89	3,23	3,59	3,94	4,20	2,66	3,16	3,66	4,26	4,48	4,75	3,41	3,71	4,15	4,79	5,17	5,46
Dp Cooling	kPa	12,3	16,2	20,3	25,1	30,1	34,2	7,2	10,3	13,8	18,4	20,2	22,5	12,5	14,6	18,2	23,6	27,3	30,1
Dp Heating	kPa	2,8	3,5	4,2	5,1	6,0	6,7	3,0	4,1	5,3	6,9	7,5	8,3	4,7	5,4	6,6	8,5	9,7	10,7
Fan	W	44,0	54,0	66,0	79,0	92,0	103,0	47,0	62,0	81,0	105,0	116,0	130,0	78,0	92,0	108,0	134,0	152,0	176,0
Sound power (Lw)	dB(A)	38	42	47	51	54	56	39	45	50	56	58	60	47	50	54	58	62	64
Sound pressure (Lp) ⁽¹⁾	dB(A)	29	33	38	42	45	47	30	36	41	47	49	51	38	41	45	49	53	55

(1) The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.
MIN-MED-MAX = Speeds connected in the factory

COOLING EMISSION

3 row coil units

Entering air temperature: 27 °C – R.H.: 50%

Model		Vn	Qv m³/h	Pc kW	WT: 7 / 12 °C				WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
					Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	
SEC/F 1.3-2T	6	MAX	220	1,08	0,83	191	2,7	0,95	0,78	169	2,1	0,69	0,69	124	1,2	0,58	0,58	105	0,9	
	5		195	0,99	0,75	175	2,3	0,87	0,70	155	1,8	0,61	0,60	110	1,0	0,52	0,52	95	0,8	
	4	MED	175	0,92	0,69	162	2,0	0,81	0,64	143	1,6	0,58	0,56	103	0,9	0,48	0,48	86	0,6	
	3		150	0,81	0,60	143	1,6	0,72	0,56	127	1,3	0,51	0,48	91	0,7	0,42	0,42	76	0,5	
	2		125	0,72	0,52	127	1,3	0,64	0,49	114	1,1	0,46	0,42	83	0,6	0,37	0,37	67	0,4	
SEC/F 2.3-2T	1	MIN	105	0,62	0,45	110	1,0	0,55	0,42	98	0,8	0,40	0,36	72	0,5	0,31	0,31	57	0,3	
	6		340	1,84	1,35	323	9,0	1,63	1,27	287	7,3	1,19	1,10	212	4,2	0,96	0,96	172	2,9	
	5	MAX	295	1,66	1,20	291	7,5	1,47	1,13	258	6,1	1,08	0,98	191	3,5	0,86	0,86	153	2,3	
	4		250	1,46	1,05	256	6,0	1,30	0,98	229	4,9	0,96	0,85	170	2,9	0,75	0,75	134	1,8	
	3	MED	220	1,33	0,95	232	5,1	1,19	0,89	208	4,1	0,88	0,77	155	2,4	0,68	0,68	120	1,5	
SEC/F 3.3-2T	2		170	1,07	0,75	187	3,5	0,96	0,70	169	2,8	0,71	0,61	126	1,7	0,54	0,54	96	1,0	
	1	MIN	145	0,97	0,68	169	2,9	0,86	0,63	150	2,3	0,65	0,55	114	1,4	0,49	0,49	86	0,8	
	6		440	2,81	1,96	492	27,1	2,52	1,84	442	22,3	1,90	1,60	335	13,5	1,41	1,41	251	8,0	
	5	MAX	385	2,53	1,75	442	22,4	2,27	1,65	397	18,4	1,72	1,43	303	11,2	1,26	1,26	224	6,5	
	4		325	2,20	1,51	384	17,4	1,97	1,42	344	14,4	1,50	1,23	263	8,8	1,08	1,08	191	5,0	
SEC/F 4.3-2T	3	MED	270	1,90	1,30	330	13,4	1,70	1,22	296	11,1	1,30	1,06	227	6,8	0,94	0,94	165	3,8	
	2	MIN	235	1,66	1,13	289	10,6	1,50	1,06	261	8,8	1,14	0,92	200	5,4	0,81	0,81	143	3,0	
	1		185	1,37	0,93	237	7,5	1,23	0,87	213	6,2	0,95	0,75	165	3,9	0,66	0,66	115	2,1	
	6		570	3,43	2,44	600	38,5	3,07	2,29	538	31,5	2,30	1,99	406	19,0	1,75	1,75	311	11,7	
	5	MAX	485	3,04	2,14	530	31,0	2,73	2,01	476	25,4	2,06	1,75	361	15,4	1,54	1,54	272	9,2	
SEC/F 5.3-2T	4		400	2,62	1,82	456	23,7	2,35	1,71	409	19,5	1,78	1,49	311	11,8	1,31	1,31	230	6,9	
	3	MED	335	2,27	1,57	396	18,5	2,04	1,47	356	15,2	1,55	1,28	272	9,3	1,12	1,12	198	5,3	
	2	MIN	265	1,84	1,26	320	12,8	1,66	1,18	289	10,5	1,27	1,03	222	6,5	0,91	0,91	160	3,6	
	1		185	1,35	0,92	234	7,3	1,22	0,86	212	6,1	0,94	0,75	163	3,8	0,66	0,66	115	2,0	
	6	MAX	650	3,86	2,75	674	23,0	3,45	2,58	604	18,9	2,59	2,25	456	11,4	1,97	1,97	349	7,0	
SEC/F 6.3-2T	5		545	3,37	2,37	588	18,1	3,02	2,23	528	14,9	2,27	1,94	399	9,0	1,70	1,70	301	5,4	
	4	MED	495	3,12	2,19	544	15,8	2,80	2,05	488	12,9	2,11	1,78	370	7,9	1,57	1,57	277	4,6	
	3		420	2,75	1,91	478	12,5	2,46	1,79	428	10,3	1,87	1,56	327	6,3	1,37	1,37	241	3,6	
	2	MIN	315	2,16	1,49	375	8,3	1,95	1,40	339	6,8	1,48	1,21	258	4,1	1,07	1,07	187	2,4	
	1		250	1,78	1,22	310	5,9	1,60	1,14	279	4,9	1,22	0,99	213	3,0	0,87	0,87	153	1,6	
SEC/F 7.3-2T	6		830	4,60	3,33	807	25,2	4,10	3,13	721	20,6	3,06	2,72	542	12,3	2,39	2,39	427	7,9	
	5	MAX	760	4,32	3,11	757	22,6	3,86	2,92	678	18,5	2,89	2,55	511	11,0	2,23	2,23	397	7,0	
	4		680	3,99	2,85	698	19,6	3,57	2,68	626	16,0	2,67	2,33	471	9,6	2,04	2,04	363	6,0	
	3	MED	590	3,58	2,53	624	16,0	3,20	2,38	559	13,1	2,41	2,07	423	7,9	1,82	1,82	322	4,8	
	2		505	3,16	2,22	552	13,0	2,83	2,08	495	10,6	2,14	1,81	377	6,4	1,59	1,59	282	3,8	
SEC/F 8.3-2T	1	MIN	415	2,69	1,87	470	9,7	2,41	1,75	421	8,0	1,82	1,52	320	4,9	1,34	1,34	237	2,8	
	6	MAX	925	5,40	3,84	946	38,8	4,93	3,78	848	31,9	3,64	3,14	643	19,3	2,76	2,76	492	11,9	
	5		840	5,03	3,55	881	34,2	4,59	3,42	790	28,1	3,40	2,91	600	17,1	2,55	2,55	454	10,3	
	4	MED	735	4,54	3,18	795	28,6	4,15	3,07	713	23,5	3,08	2,60	544	14,3	2,28	2,28	406	8,5	
	3		630	4,02	2,79	703	23,1	3,68	2,69	632	19,0	2,73	2,28	482	11,6	2,00	2,00	356	6,7	
SEC/F 9.3-2T	2	MIN	535	3,54	2,45	617	18,3	3,23	2,35	556	15,1	2,42	1,99	425	9,3	1,75	1,75	310	5,3	
	1		445	3,04	2,08	530	14,0	2,77	2,00	477	11,6	2,09	1,70	366	7,2	1,50	1,50	265	4,0	
	6	MAX	1200	6,14	4,52	1078	21,7	5,46	4,25	961	17,6	4,03	3,71	716	10,3	3,23	3,23	578	7,0	
	5		1100	5,78	4,23	1015	19,5	5,15	3,97	906	15,8	3,81	3,46	676	9,3	3,02	3,02	540	6,2	
	4	MED	1020	5,50	4,00	963	17,7	4,90	3,76	860	14,4	3,63	3,27	642	8,5	2,86	2,86	509	5,6	
SEC/F 10.3-2T	3		815	4,67	3,34	817	13,3	4,17	3,14	731	10,8	3,11	2,73	549	6,5	2,39	2,39	425	4,1	
	2	MIN	655	3,97	2,81	693	9,9	3,55	2,63	621	8,1	2,66	2,29	468	4,9	2,02	2,02	358	3,0	
	1		510	3,24	2,26	566	7,0	2,91	2,12	509	5,7	2,19	1,84	385	3,5	1,62	1,62	287	2,0	
	6	MAX	1500	7,09	5,32	1250	28,1	6,30	5,01	1115	22,8	4,62	4,38	826	13,2	3,80	3,80	685	9,4	
	5		1365	6,71	5,00	1180	25,4	5,96	4,70	1051	20,6	4,39	4,10	781	12,0	3,57	3,57	640	8,4	
SEC/F 11.3-2T	4	MED	1210	6,20	4,57	1089	22,0	5,51	4,29	970	17,9	4,07	3,75	722	10,5	3,27	3,27	585	7,1	
	3		980	5,34	3,87	937	16,9	4,76	3,64	838	13,8	3,53	3,16	626	8,2	2,77	2,77	495	5,3	
	2	MIN	830	4,73	3,39	829	13,6	4,22	3,18	741	11,1	3,14	2,76	556	6,6	2,42	2,42	432	4,2	
	1		735	4,32	3,07	757	11,6	3,85	2,88	676	9,5	2,88	2,50	509	5,7	2,19	2,19	390	3,5	

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Pc: Cooling total emission
Ps: Cooling sensible emission
Qw: Water flow rate
Dp(c): Dp Cooling

Entering air temperature 26 °C – R.H.: 50%

Model		Vn	Qv m³/h	WT: 7 / 12 °C				WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
				Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
SEC/F 1.3-2T	6	MAX	220	0,95	0,78	169	2,2	0,82	0,73	146	1,7	0,64	0,64	115	1,1	0,52	0,52	95	0,8
	5		195	0,87	0,70	155	1,8	0,75	0,65	134	1,4	0,57	0,57	103	0,9	0,47	0,47	86	0,6
	4	MED	175	0,81	0,64	143	1,6	0,70	0,60	124	1,2	0,53	0,53	95	0,8	0,44	0,44	79	0,5
	3		150	0,71	0,56	126	1,3	0,62	0,52	110	1,0	0,46	0,46	83	0,6	0,38	0,38	69	0,4
	2		125	0,63	0,49	112	1,1	0,55	0,46	98	0,8	0,40	0,40	72	0,5	0,33	0,33	60	0,3
SEC/F 2.3-2T	1	MIN	105	0,55	0,42	98	0,8	0,47	0,39	84	0,6	0,35	0,35	64	0,4	0,28	0,28	52	0,3
	6		340	1,62	1,27	286	7,3	1,42	1,19	251	5,7	1,05	1,05	187	3,4	0,87	0,87	157	2,5
	5	MAX	295	1,46	1,13	256	6,0	1,28	1,06	225	4,8	0,94	0,94	167	2,8	0,78	0,78	139	2,0
	4		250	1,29	0,98	227	4,9	1,13	0,92	200	3,9	0,82	0,82	146	2,2	0,68	0,68	122	1,6
	3	MED	220	1,18	0,89	206	4,1	1,04	0,83	182	3,3	0,72	0,71	127	1,7	0,62	0,62	110	1,3
SEC/F 3.3-2T	2		170	0,95	0,70	167	2,8	0,83	0,66	146	2,2	0,59	0,56	105	1,2	0,49	0,49	88	0,9
	1	MIN	145	0,86	0,63	150	2,3	0,76	0,59	132	1,9	0,54	0,51	95	1,0	0,44	0,44	77	0,7
	6		440	2,50	1,85	439	22,2	2,21	1,72	389	17,8	1,58	1,48	280	9,9	1,28	1,28	229	6,8
	5	MAX	385	2,25	1,65	394	18,4	1,99	1,54	349	14,7	1,43	1,32	253	8,3	1,15	1,15	205	5,6
	4		325	1,96	1,42	342	14,3	1,73	1,33	303	11,5	1,25	1,14	220	6,5	0,99	0,99	175	4,3
SEC/F 4.3-2T	3	MED	270	1,69	1,22	294	11,0	1,50	1,14	261	8,9	1,09	0,98	191	5,0	0,86	0,86	151	3,3
	2	MIN	235	1,48	1,06	258	8,8	1,32	0,99	230	7,1	0,96	0,85	169	4,0	0,74	0,74	131	2,6
	1		185	1,22	0,87	212	6,2	1,09	0,81	189	5,0	0,80	0,70	139	2,9	0,61	0,61	107	1,8
	6		570	3,05	2,29	535	31,5	2,69	2,14	473	25,1	1,91	1,84	339	13,8	1,60	1,60	286	10,0
	5	MAX	485	2,71	2,02	473	25,3	2,39	1,89	418	20,3	1,71	1,62	301	11,2	1,41	1,41	249	7,9
SEC/F 5.3-2T	4		400	2,33	1,72	406	19,4	2,06	1,60	359	15,5	1,49	1,38	261	8,7	1,20	1,20	212	5,9
	3	MED	335	2,02	1,47	353	15,1	1,79	1,38	313	12,2	1,29	1,18	227	6,9	1,03	1,03	182	4,5
	2	MIN	265	1,65	1,19	287	10,5	1,46	1,11	255	8,5	1,06	0,95	186	4,8	0,83	0,83	146	3,1
	1		185	1,21	0,86	210	6,1	1,08	0,81	187	4,9	0,79	0,69	138	2,8	0,60	0,60	105	1,7
	6	MAX	650	3,43	2,59	600	18,8	3,02	2,42	530	15,0	2,14	2,08	378	8,1	1,80	1,80	320	6,0
SEC/F 6.3-2T	5		545	3,00	2,23	525	14,9	2,65	2,09	464	11,9	1,89	1,79	334	6,5	1,55	1,55	275	4,6
	4	MED	495	2,78	2,06	485	12,9	2,45	1,92	428	10,3	1,76	1,65	310	5,8	1,43	1,43	253	4,0
	3		420	2,45	1,80	427	10,3	2,16	1,68	377	8,3	1,56	1,44	273	4,6	1,25	1,25	220	3,1
	2	MIN	315	1,93	1,40	335	6,8	1,71	1,31	298	5,4	1,24	1,12	217	3,1	0,98	0,98	172	2,0
	1		250	1,59	1,14	277	4,9	1,41	1,07	246	3,9	1,03	0,91	181	2,3	0,80	0,80	141	1,4
SEC/F 7.3-2T	6		830	4,09	3,13	719	20,6	3,59	2,93	633	16,3	2,60	2,60	463	9,3	2,17	2,17	389	6,8
	5	MAX	760	3,84	2,93	674	18,4	3,38	2,74	595	14,7	2,38	2,35	423	7,9	2,03	2,02	363	6,0
	4		680	3,55	2,68	623	16,0	3,12	2,51	549	12,7	2,21	2,15	392	6,9	1,86	1,86	332	5,1
	3	MED	590	3,18	2,38	556	13,1	2,81	2,23	492	10,5	2,00	1,91	353	5,7	1,66	1,66	294	4,1
	2		505	2,82	2,09	494	10,6	2,49	1,95	437	8,5	1,77	1,67	313	4,7	1,45	1,45	258	3,3
SEC/F 8.3-2T	1	MIN	415	2,40	1,76	420	8,0	2,12	1,64	372	6,4	1,52	1,41	268	3,6	1,22	1,22	217	2,4
	6	MAX	925	4,81	3,61	845	31,8	4,24	3,38	746	25,4	3,02	2,91	537	14,0	2,16	2,16	389	6,8
	5		840	4,48	3,34	786	28,0	3,95	3,13	695	22,5	2,82	2,69	501	12,5	2,02	2,02	363	6,0
	4	MED	735	4,04	2,99	709	23,4	3,57	2,80	628	18,8	2,56	2,40	454	10,5	1,85	1,85	332	5,1
	3		630	3,58	2,63	628	18,9	3,17	2,46	557	15,2	2,28	2,11	404	8,6	1,64	1,64	294	4,1
SEC/F 9.3-2T	2	MIN	535	3,16	2,30	552	15,1	2,80	2,15	490	12,1	2,03	1,85	358	6,9	1,45	1,45	258	3,3
	1		445	2,72	1,96	475	11,5	2,41	1,83	421	9,3	1,75	1,57	308	5,3	1,22	1,22	217	2,4
	6	MAX	1200	5,44	4,26	958	17,6	4,77	3,99	843	13,9	3,53	3,53	630	8,2	2,94	2,94	528	6,0
	5		1100	5,13	3,98	903	15,8	4,49	3,72	793	12,5	3,30	3,30	588	7,3	2,75	2,75	494	5,3
	4	MED	1020	4,88	3,76	857	14,4	4,28	3,52	753	11,4	3,12	3,12	554	6,6	2,60	2,60	464	4,8
SEC/F 10.3-2T	3		815	4,14	3,15	726	10,8	3,64	2,94	640	8,6	2,56	2,52	454	4,6	2,18	2,18	389	3,5
	2	MIN	655	3,53	2,64	617	8,1	3,11	2,47	545	6,5	2,20	2,11	389	3,5	1,84	1,84	327	2,6
	1		510	2,89	2,13	506	5,7	2,55	1,99	447	4,6	1,82	1,70	322	2,5	1,48	1,48	263	1,7
	6	MAX	1500	5,39	4,21	958	17,6	5,48	4,70	974	18,0	4,16	4,16	746	11,1	3,45	3,45	624	8,0
	5		1365	5,10	3,95	903	15,8	5,20	4,41	920	16,3	3,91	3,91	698	9,9	3,25	3,25	585	7,1
SEC/F 11.3-2T	4	MED	1210	4,85	3,73	857	14,4	4,81	4,03	850	14,1	3,57	3,57	636	8,4	2,97	2,97	533	6,1
	3		980	4,11	3,12	726	10,8	4,15	3,41	733	10,9	3,02	3,02	538	6,2	2,51	2,51	451	4,5
	2	MIN	830	3,50	2,61	617	8,1	3,69	2,98	650	8,8	2,59	2,55	461	4,7	2,20	2,20	394	3,6
	1		735	2,86	2,10	506	5,7	3,37	2,70	593	7,5	2,37	2,31	421	4,1	1,99	1,99	356	3,0

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Pc: Cooling total emission
Ps: Cooling sensible emission
Qw: Water flow rate
Dp(c): Dp Cooling

Entering air temperature: 25 °C – R.H.: 50%

Model		Vn	Qv m³/h	Pc kW	WT: 7 / 12 °C				WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
					Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	
SEC/F 1.3-2T	6	MAX	220	0,82	0,73	146	1,7	0,68	0,67	122	1,2	0,58	0,58	105	0,9	0,47	0,47	86	0,6	
	5		195	0,75	0,65	134	1,4	0,62	0,60	112	1,1	0,52	0,52	95	0,8	0,42	0,42	77	0,5	
	4	MED	175	0,70	0,60	124	1,2	0,59	0,56	105	0,9	0,48	0,48	86	0,7	0,39	0,39	71	0,5	
	3		150	0,62	0,52	110	1,0	0,52	0,48	93	0,7	0,42	0,42	76	0,5	0,34	0,34	62	0,4	
	2		125	0,55	0,46	98	0,8	0,46	0,42	83	0,6	0,37	0,37	67	0,4	0,30	0,30	55	0,3	
SEC/F 2.3-2T	1	MIN	105	0,47	0,39	84	0,6	0,40	0,36	72	0,5	0,31	0,31	57	0,3	0,25	0,25	46	0,2	
	6		340	1,42	1,19	251	5,8	1,21	1,11	215	4,4	0,96	0,96	172	2,9	0,78	0,78	141	2,0	
	5	MAX	295	1,28	1,06	225	4,8	1,09	0,98	193	3,6	0,86	0,86	153	2,4	0,70	0,70	126	1,7	
	4		250	1,13	0,92	200	3,9	0,97	0,86	172	2,9	0,75	0,75	134	1,9	0,61	0,61	110	1,3	
	3	MED	220	1,03	0,84	181	3,3	0,89	0,78	157	2,5	0,68	0,68	120	1,6	0,56	0,56	100	1,1	
SEC/F 3.3-2T	2		170	0,83	0,66	146	2,2	0,72	0,61	127	1,7	0,54	0,54	96	1,0	0,44	0,44	79	0,7	
	1	MIN	145	0,75	0,59	131	1,9	0,65	0,55	114	1,4	0,49	0,49	86	0,9	0,40	0,40	71	0,6	
	6		440	2,20	1,73	387	17,8	1,91	1,61	337	13,8	1,41	1,41	251	8,1	1,16	1,16	208	5,8	
	5	MAX	385	1,98	1,55	347	14,8	1,72	1,44	303	11,5	1,26	1,26	224	6,6	1,04	1,04	186	4,7	
	4		325	1,73	1,33	303	11,5	1,50	1,24	263	9,0	1,09	1,09	193	5,1	0,90	0,90	160	3,6	
SEC/F 4.3-2T	3	MED	270	1,49	1,14	260	8,9	1,30	1,06	227	6,9	0,94	0,94	165	3,9	0,78	0,78	138	2,8	
	2	MIN	235	1,31	1,00	229	7,1	1,14	0,93	200	5,5	0,82	0,82	144	3,1	0,67	0,67	119	2,2	
	1		185	1,08	0,82	187	5,0	0,95	0,76	165	3,9	0,64	0,64	112	2,0	0,55	0,55	96	1,5	
	6		570	2,68	2,15	471	25,2	2,32	2,00	409	19,5	1,76	1,76	313	11,9	1,44	1,44	258	8,4	
	5	MAX	485	2,39	1,89	418	20,3	2,07	1,76	363	15,7	1,55	1,55	273	9,4	1,27	1,27	225	6,6	
SEC/F 5.3-2T	4		400	2,06	1,61	359	15,6	1,78	1,50	311	12,1	1,32	1,32	232	7,0	1,08	1,08	191	5,0	
	3	MED	335	1,78	1,38	311	12,2	1,55	1,28	272	9,5	1,13	1,13	200	5,4	0,93	0,93	165	3,8	
	2	MIN	265	1,45	1,11	253	8,5	1,27	1,03	222	6,6	0,91	0,91	160	3,7	0,75	0,75	132	2,6	
	1		185	1,07	0,81	186	4,9	0,94	0,75	163	3,8	0,64	0,63	112	1,9	0,55	0,55	96	1,5	
	6	MAX	650	3,02	2,42	530	15,0	2,61	2,26	459	11,6	1,98	1,98	351	7,1	1,62	1,62	289	5,0	
SEC/F 6.3-2T	5		545	2,64	2,09	463	11,9	2,28	1,95	401	9,1	1,71	1,71	303	5,5	1,40	1,40	249	3,9	
	4	MED	495	2,45	1,93	428	10,4	2,12	1,79	372	8,0	1,57	1,57	277	4,8	1,29	1,29	229	3,4	
	3		420	2,16	1,68	377	8,3	1,87	1,57	327	6,4	1,37	1,37	241	3,8	1,13	1,13	200	2,6	
	2	MIN	315	1,71	1,31	298	5,4	1,48	1,22	258	4,3	1,08	1,08	189	2,4	0,89	0,89	157	1,8	
	1		250	1,41	1,07	246	3,9	1,23	0,99	215	3,0	0,87	0,87	153	1,6	0,72	0,72	127	1,1	
SEC/F 7.3-2T	6		830	3,58	2,94	631	16,4	3,09	2,73	547	12,6	2,39	2,39	427	8,1	1,96	1,96	353	5,7	
	5	MAX	760	3,37	2,74	593	14,7	2,91	2,56	514	11,3	2,23	2,23	397	7,1	1,83	1,83	329	5,0	
	4		680	3,12	2,51	549	12,8	2,69	2,34	475	9,9	2,05	2,05	365	6,1	1,68	1,68	301	4,3	
	3	MED	590	2,80	2,23	490	10,5	2,42	2,08	425	8,1	1,82	1,82	322	4,9	1,50	1,50	267	3,5	
	2		505	2,48	1,95	435	8,5	2,14	1,82	377	6,6	1,59	1,59	282	3,9	1,31	1,31	234	2,8	
SEC/F 8.3-2T	1	MIN	415	2,11	1,64	370	6,4	1,83	1,53	322	5,0	1,34	1,34	237	2,9	1,10	1,10	196	2,0	
	6	MAX	925	4,23	3,39	745	25,5	3,66	3,16	647	19,8	2,76	2,76	492	12,1	2,27	2,27	408	8,5	
	5		840	3,94	3,14	693	22,5	3,41	2,92	602	17,5	2,56	2,56	456	10,5	2,10	2,10	377	7,4	
	4	MED	735	3,56	2,81	626	18,8	3,09	2,61	545	14,6	2,29	2,29	408	8,6	1,88	1,88	337	6,1	
	3		630	3,16	2,46	556	15,2	2,74	2,29	483	11,9	2,01	2,01	358	6,9	1,65	1,65	296	4,9	
SEC/F 9.3-2T	2	MIN	535	2,79	2,16	488	12,1	2,42	2,00	425	9,5	1,76	1,76	311	5,4	1,45	1,45	258	3,8	
	1		445	2,40	1,84	420	9,3	2,09	1,71	366	7,3	1,51	1,51	267	4,1	1,24	1,24	220	2,9	
	6	MAX	1200	4,76	3,99	841	14,0	4,08	3,72	724	10,7	3,24	3,24	580	7,1	2,64	2,64	476	5,0	
	5		1100	4,49	3,73	793	12,6	3,85	3,47	683	9,6	3,03	3,03	542	6,3	2,47	2,47	445	4,4	
	4	MED	1020	4,27	3,53	752	11,5	3,67	3,28	648	8,8	2,87	2,87	511	5,7	2,34	2,34	420	4,0	
SEC/F 10.3-2T	3		815	3,63	2,95	638	8,6	3,13	2,74	552	6,6	2,39	2,39	425	4,1	1,96	1,96	351	2,9	
	2	MIN	655	3,10	2,47	544	6,5	2,67	2,30	470	5,0	2,03	2,03	359	3,1	1,66	1,66	296	2,2	
	1		510	2,54	1,99	445	4,6	2,20	1,85	387	3,5	1,63	1,63	289	2,1	1,34	1,34	239	1,5	
	6	MAX	1500	5,49	4,71	975	18,1	4,68	4,39	836	13,7	3,81	3,81	686	9,6	3,10	3,10	564	6,7	
	5		1365	5,20	4,42	920	16,4	4,44	4,11	789	12,4	3,58	3,58	642	8,5	2,92	2,92	528	5,9	
SEC/F 11.3-2T	4	MED	1210	4,81	4,04	850	14,2	4,12	3,76	731	10,8	3,27	3,27	585	7,2	2,67	2,67	482	5,1	
	3		980	4,15	3,41	733	11,0	3,56	3,17	631	8,4	2,77	2,77	495	5,4	2,26	2,26	408	3,8	
	2	MIN	830	3,68	2,98	648	8,8	3,17	2,78	561	6,8	2,42	2,42	432	4,2	1,98	1,98	356	3,0	
	1		735	3,36	2,70	592	7,5	2,90	2,51	513	5,8	2,20	2,20	392	3,6	1,80	1,80	323	2,5	

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Pc: Cooling total emission
Ps: Cooling sensible emission
Qw: Water flow rate
Dp(c): Dp Cooling

4 row coil units

Entering air temperature: 27 °C – R.H.: 50%

			Qv	Pc	WT: 7 / 12 °C				WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
					Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	Pc	Ps	Qw	Dp(c)	
Model		Vn	m³/h	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	kW	kW	l/h	kPa	
SEC/F 1.4-2T	6	MAX	220	1,30	0,93	229	6,4	1,15	0,88	203	5,2	0,84	0,76	150	3,0	0,67	0,67	120	2,0	
	5		195	1,17	0,84	206	5,4	1,04	0,78	184	4,3	0,76	0,68	136	2,5	0,59	0,59	107	1,6	
	4	MED	175	1,08	0,77	189	4,6	0,96	0,72	169	3,7	0,71	0,62	126	2,2	0,55	0,55	98	1,4	
	3		150	0,94	0,66	165	3,6	0,84	0,62	148	2,9	0,62	0,53	110	1,7	0,47	0,47	84	1,1	
	2		125	0,83	0,58	146	2,9	0,74	0,54	131	2,4	0,55	0,46	98	1,4	0,41	0,41	74	0,9	
	1	MIN	105	0,71	0,49	126	2,2	0,63	0,45	112	1,8	0,47	0,39	84	1,1	0,35	0,35	64	0,6	
SEC/F 2.4-2T	6		340	2,16	1,52	378	19,6	1,93	1,43	339	16,0	1,45	1,24	256	9,6	1,09	1,09	194	5,9	
	5	MAX	295	1,92	1,34	335	15,9	1,72	1,26	301	13,0	1,30	1,09	229	7,8	0,96	0,96	170	4,7	
	4		250	1,68	1,16	294	12,5	1,50	1,09	263	10,3	1,13	0,94	200	6,2	0,83	0,83	148	3,6	
	3	MED	220	1,52	1,05	265	10,4	1,36	0,98	237	8,6	1,03	0,85	181	5,2	0,75	0,75	132	3,0	
	2		170	1,20	0,81	210	6,9	1,07	0,76	187	5,7	0,82	0,66	144	3,5	0,58	0,58	103	1,9	
	1	MIN	145	1,07	0,73	186	5,6	0,96	0,68	167	4,6	0,74	0,59	129	2,9	0,52	0,52	91	1,6	
SEC/F 3.4-2T	6		440	3,04	2,09	531	16,0	2,73	1,96	478	13,2	2,07	1,70	365	8,1	1,50	1,50	267	4,6	
	5	MAX	385	2,72	1,86	475	13,1	2,44	1,74	427	10,8	1,85	1,51	325	6,6	1,33	1,33	236	3,7	
	4		325	2,34	1,59	408	10,1	2,11	1,49	368	8,3	1,61	1,29	282	5,1	1,14	1,14	201	2,8	
	3	MED	270	2,01	1,36	349	7,6	1,81	1,27	315	6,3	1,38	1,10	241	3,9	0,98	0,98	172	2,1	
	2	MIN	235	1,75	1,18	304	6,0	1,57	1,10	273	5,0	1,21	0,95	212	3,1	0,84	0,84	148	1,6	
	1		185	1,42	0,96	246	4,1	1,29	0,90	224	3,4	0,99	0,78	172	2,2	0,69	0,69	120	1,1	
SEC/F 4.4-2T	6		570	3,65	2,54	638	21,2	3,27	2,38	573	17,4	2,47	2,06	435	10,5	1,82	1,82	323	6,2	
	5	MAX	485	3,31	2,29	576	17,7	2,97	2,15	518	14,5	2,25	1,86	394	8,8	1,65	1,65	291	5,1	
	4		400	2,82	1,93	490	13,3	2,53	1,81	440	10,9	1,93	1,57	337	6,7	1,39	1,39	244	3,8	
	3	MED	335	2,42	1,65	421	10,2	2,18	1,55	380	8,4	1,66	1,34	291	5,2	1,18	1,18	208	2,9	
	2	MIN	265	1,95	1,32	339	6,9	1,76	1,24	306	5,7	1,34	1,07	234	3,6	0,95	0,95	167	1,9	
	1		185	1,41	0,95	244	3,9	1,27	0,89	220	3,2	0,98	0,77	170	2,0	0,68	0,68	119	1,1	
SEC/F 5.4-2T	6	MAX	650	4,34	3,00	757	35,5	3,90	2,82	681	29,3	2,96	2,45	519	18,0	2,16	2,16	382	10,3	
	5		545	3,75	2,57	654	27,4	3,37	2,41	588	22,7	2,57	2,10	451	14,0	1,85	1,85	327	7,8	
	4	MED	495	3,45	2,36	600	23,6	3,10	2,21	540	19,5	2,37	1,92	415	12,1	1,69	1,69	298	6,7	
	3		420	3,00	2,04	521	18,5	2,71	1,92	471	15,3	2,08	1,67	363	9,5	1,47	1,47	258	5,2	
	2	MIN	315	2,33	1,57	404	11,8	2,10	1,48	365	9,8	1,62	1,28	282	6,1	1,13	1,13	198	3,2	
	1		250	1,90	1,28	330	8,3	1,72	1,20	299	6,9	1,33	1,04	232	4,3	0,87	0,87	153	2,1	
SEC/F 6.4-2T	6		830	5,43	3,77	949	46,5	4,87	3,54	853	38,3	3,69	3,08	650	23,4	2,71	2,71	482	13,6	
	5	MAX	760	5,06	3,51	884	41,1	4,55	3,29	796	33,9	3,45	2,86	607	20,8	2,52	2,52	447	12,0	
	4		680	4,63	3,19	808	35,1	4,16	2,99	728	28,9	3,17	2,60	557	17,8	2,29	2,29	406	10,1	
	3	MED	590	4,10	2,81	714	28,1	3,69	2,64	643	23,3	2,81	2,29	492	14,4	2,02	2,02	356	8,0	
	2		505	3,58	2,44	624	22,3	3,23	2,29	564	18,4	2,47	1,98	433	11,4	1,75	1,75	310	6,2	
	1	MIN	415	3,00	2,03	523	16,3	2,70	1,90	471	13,5	2,08	1,65	365	8,4	1,46	1,46	258	4,5	
SEC/F 7.4-2T	6	MAX	925	5,90	4,11	1032	31,4	5,29	3,86	927	25,9	4,01	3,36	707	15,8	2,95	2,95	525	9,3	
	5		840	5,47	3,79	956	27,5	4,91	3,56	860	22,6	3,72	3,10	655	13,9	2,72	2,72	483	8,0	
	4	MED	735	4,90	3,38	857	22,7	4,40	3,17	771	18,7	3,35	2,76	590	11,5	2,42	2,42	430	6,5	
	3		630	4,31	2,95	753	18,1	3,88	2,77	679	14,9	2,95	2,40	519	9,2	2,11	2,11	375	5,1	
	2	MIN	535	3,77	2,57	657	14,2	3,39	2,41	592	11,8	2,60	2,09	456	7,3	1,85	1,85	327	4,0	
	1		445	3,21	2,18	559	10,7	2,90	2,04	506	8,9	2,22	1,77	389	5,5	1,56	1,56	275	3,0	
SEC/F 8.4-2T	6	MAX	1200	6,85	4,91	1201	36,0	6,11	4,60	1073	29,3	4,55	4,00	805	17,5	3,50	3,50	624	11,0	
	5		1100	6,41	4,57	1123	32,0	5,72	4,29	1004	26,1	4,27	3,72	755	15,5	3,26	3,26	581	9,7	
	4	MED	1020	6,07	4,31	1061	29,0	5,42	4,04	949	23,6	4,05	3,51	714	14,0	3,08	3,08	547	8,6	
	3		815	5,09	3,57	889	21,2	4,56	3,35	798	17,3	3,42	2,91	602	10,4	2,57	2,57	456	6,3	
	2	MIN	655	4,28	2,98	746	15,7	3,84	2,79	671	12,8	2,89	2,42	507	7,7	2,13	2,13	377	4,5	
	1		510	3,46	2,38	604	10,8	3,11	2,23	544	8,8	2,35	1,93	413	5,4	1,70	1,70	301	3,1	
SEC/F 9.4-2T	6	MAX	1500	8,02	5,83	1410	26,5	7,14	5,47	1259	21,6	5,28	4,76	939	12,7	4,16	4,16	746	8,4	
	5		1365	7,54	5,45	1323	23,7	6,72	5,12	1182	19,3	4,98	4,46	882	11,4	3,89	3,89	695	7,4	
	4	MED	1210	6,92	4,96	1213	20,3	6,17	4,66	1084	16,5	4,59	4,05	812	9,8	3,54	3,54	631	6,2	
	3		980	5,89	4,17	1032	15,3	5,26	3,91	924	12,5	3,93	3,39	695	7,5	2,97	2,97	530	4,6	
	2	MIN	830	5,16	3,62	903	12,1	4,62	3,40	810	9,9	3,46	2,94	611	6,0	2,60	2,60	463	3,6	
	1		735	4,69	3,27	820	10,2	4,19	3,06	734	8,4	3,15	2,66	556	5,0	2,34	2,34	416	3,0	

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Pc: Cooling total emission
Ps: Cooling sensible emission
Qw: Water flow rate
Dp(c): Dp Cooling

Entering air temperature 26 °C – R.H.: 50%

Model		Vn	Qv m³/h	WT: 7 / 12 °C				WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
				Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
SEC/F 1.4-2T	6	MAX	220	1,14	0,88	201	5,1	1,00	0,82	177	4,0	0,73	0,73	131	2,3	0,60	0,60	108	1,7
	5		195	1,03	0,78	182	4,3	0,90	0,73	160	3,4	0,65	0,65	117	1,9	0,54	0,54	98	1,4
	4	MED	175	0,95	0,72	167	3,7	0,83	0,67	146	2,9	0,58	0,57	103	1,5	0,50	0,50	89	1,2
	3		150	0,83	0,62	146	2,9	0,73	0,58	129	2,3	0,51	0,49	91	1,2	0,43	0,43	77	0,9
	2		125	0,73	0,54	129	2,4	0,64	0,50	114	1,9	0,45	0,43	81	1,0	0,37	0,37	67	0,7
SEC/F 2.4-2T	1	MIN	105	0,63	0,46	112	1,8	0,55	0,42	98	1,4	0,39	0,36	71	0,8	0,31	0,31	57	0,5
	6		340	1,92	1,43	337	16,0	1,69	1,34	298	12,7	1,20	1,14	213	7,0	0,99	0,99	177	5,0
	5	MAX	295	1,71	1,26	299	13,0	1,51	1,18	265	10,3	1,08	1,01	191	5,7	0,88	0,88	157	4,0
	4		250	1,49	1,09	261	10,3	1,32	1,02	232	8,2	0,95	0,87	169	4,6	0,76	0,76	136	3,1
	3	MED	220	1,35	0,98	236	8,5	1,20	0,92	210	6,8	0,86	0,79	151	3,8	0,69	0,69	122	2,5
SEC/F 3.4-2T	2		170	1,07	0,77	187	5,7	0,95	0,71	167	4,6	0,68	0,61	120	2,6	0,53	0,53	95	1,7
	1	MIN	145	0,96	0,68	167	4,6	0,85	0,64	148	3,7	0,62	0,55	108	2,1	0,48	0,48	84	1,3
	6		440	2,71	1,97	475	13,1	2,40	1,83	421	10,6	1,73	1,57	306	5,9	1,37	1,37	244	3,9
	5	MAX	385	2,43	1,75	425	10,8	2,15	1,63	377	8,7	1,55	1,39	273	4,9	1,22	1,22	217	3,2
	4		325	2,09	1,50	365	8,3	1,86	1,40	325	6,7	1,35	1,19	237	3,8	1,04	1,04	184	2,4
SEC/F 4.4-2T	3	MED	270	1,79	1,28	311	6,3	1,59	1,19	277	5,1	1,16	1,02	203	2,9	0,89	0,89	157	1,8
	2	MIN	235	1,56	1,11	272	4,9	1,39	1,03	243	4,0	1,02	0,88	179	2,3	0,77	0,77	136	1,4
	1		185	1,28	0,90	222	3,4	1,14	0,84	198	2,8	0,84	0,72	146	1,6	0,63	0,63	110	1,0
	6		570	3,25	2,39	569	17,3	2,87	2,23	504	13,8	2,06	1,91	365	7,7	1,66	1,66	296	5,3
	5	MAX	485	2,96	2,16	516	14,5	2,61	2,01	456	11,6	1,88	1,72	330	6,5	1,51	1,51	267	4,4
SEC/F 5.4-2T	4		400	2,52	1,82	439	10,9	2,23	1,70	389	8,8	1,61	1,45	282	4,9	1,27	1,27	224	3,2
	3	MED	335	2,16	1,55	377	8,4	1,92	1,45	335	6,7	1,39	1,24	244	3,8	1,08	1,08	191	2,4
	2	MIN	265	1,74	1,24	303	5,7	1,55	1,16	270	4,6	1,13	0,99	198	2,6	0,87	0,87	153	1,6
	1		185	1,26	0,89	218	3,2	1,12	0,83	194	2,6	0,83	0,71	144	1,5	0,62	0,62	108	0,9
	6	MAX	650	3,87	2,83	676	29,1	3,43	2,64	600	23,5	2,49	2,27	439	13,3	1,97	1,97	349	8,8
SEC/F 6.4-2T	5		545	3,35	2,42	585	22,6	2,97	2,26	519	18,2	2,16	1,94	380	10,4	1,69	1,69	299	6,7
	4	MED	495	3,08	2,22	537	19,4	2,74	2,07	478	15,7	2,00	1,78	351	9,0	1,55	1,55	273	5,7
	3		420	2,69	1,93	468	15,2	2,39	1,80	416	12,3	1,75	1,54	306	7,1	1,35	1,35	237	4,5
	2	MIN	315	2,09	1,48	363	9,7	1,86	1,38	323	7,9	1,37	1,19	239	4,6	1,04	1,04	182	2,8
	1		250	1,70	1,20	296	6,8	1,52	1,12	265	5,6	1,12	0,96	196	3,2	0,84	0,84	148	1,9
SEC/F 7.4-2T	6		830	4,84	3,55	848	38,1	4,28	3,32	752	30,6	3,09	2,85	547	17,2	2,48	2,48	442	11,7
	5	MAX	760	4,52	3,30	791	33,8	4,00	3,09	702	27,1	2,89	2,65	511	15,4	2,30	2,30	409	10,2
	4		680	4,14	3,00	724	28,8	3,66	2,81	642	23,2	2,66	2,41	470	13,2	2,09	2,09	372	8,7
	3	MED	590	3,66	2,64	638	23,1	3,25	2,47	568	18,7	2,37	2,12	416	10,7	1,84	1,84	325	6,8
	2		505	3,20	2,29	559	18,3	2,84	2,14	497	14,8	2,08	1,84	366	8,5	1,60	1,60	284	5,4
SEC/F 8.4-2T	1	MIN	415	2,68	1,91	468	13,4	2,39	1,78	418	10,9	1,75	1,53	308	6,3	1,33	1,33	236	3,9
	6	MAX	925	5,26	3,87	922	25,8	4,65	3,62	817	20,7	3,35	3,11	593	11,6	2,70	2,70	482	7,9
	5		840	4,88	3,57	855	22,6	4,32	3,34	759	18,1	3,12	2,86	552	10,2	2,49	2,49	444	6,9
	4	MED	735	4,38	3,18	767	18,6	3,88	2,97	681	15,0	2,81	2,55	497	8,5	2,21	2,21	394	5,6
	3		630	3,85	2,78	674	14,9	3,41	2,59	599	12,0	2,48	2,22	439	6,8	1,93	1,93	344	4,4
SEC/F 9.4-2T	2	MIN	535	3,37	2,42	588	11,7	2,99	2,26	523	9,4	2,18	1,94	384	5,4	1,69	1,69	299	3,4
	1		445	2,87	2,05	501	8,8	2,56	1,91	447	7,1	1,87	1,64	329	4,1	1,43	1,43	253	2,6
	6	MAX	1200	6,08	4,61	1068	29,2	5,33	4,31	939	23,2	3,73	3,70	664	12,4	3,19	3,19	571	9,4
	5		1100	5,69	4,30	999	26,1	5,00	4,01	881	20,7	3,51	3,44	624	11,2	2,97	2,97	531	8,3
	4	MED	1020	5,39	4,05	944	23,6	4,74	3,79	832	18,7	3,34	3,24	592	10,1	2,80	2,80	499	7,4
SEC/F 9.4-2T	3		815	4,53	3,36	793	17,3	3,99	3,14	700	13,9	2,83	2,68	501	7,6	2,34	2,34	416	5,4
	2	MIN	655	3,81	2,80	666	12,8	3,36	2,61	588	10,3	2,40	2,23	423	5,6	1,95	1,95	346	3,8
	1		510	3,09	2,24	540	8,8	2,73	2,09	478	7,0	1,96	1,78	346	4,0	1,55	1,55	275	2,5
	6	MAX	1500	7,11	5,48	1254	21,5	6,22	5,13	1101	17,0	4,54	4,54	812	9,8	3,78	3,78	681	7,1
	5		1365	6,69	5,13	1176	19,3	5,86	4,80	1034	15,2	4,25	4,25	757	8,7	3,54	3,54	635	6,3
SEC/F 9.4-2T	4	MED	1210	6,14	4,67	1078	16,5	5,39	4,36	949	13,1	3,77	3,74	671	7,0	3,22	3,22	576	5,3
	3		980	5,23	3,92	918	12,5	4,60	3,66	810	9,9	3,24	3,13	576	5,4	2,70	2,70	483	3,9
	2	MIN	830	4,59	3,41	805	9,9	4,04	3,18	710	7,9	2,86	2,72	507	4,3	2,37	2,37	423	3,1
SEC/F 9.4-2T	1		735	4,17	3,07	731	8,3	3,67	2,87	645	6,6	2,61	2,45	463	3,7	2,14	2,14	382	2,6

WT: Water temperature
 Vn: Nominal speeds
 Qv: Air flow
 Pc: Cooling total emission
 Ps: Cooling sensible emission
 Qw: Water flow rate
 Dp(c): Dp Cooling

Entering air temperature: 25 °C – R.H.: 50%

Model		Vn	Qv m³/h	WT: 7 / 12 °C				WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
				Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
SEC/F 1.4-2T	6	MAX	220	1,00	0,82	177	4,1	0,85	0,76	151	3,1	0,67	0,67	120	2,0	0,54	0,54	98	1,4
	5		195	0,90	0,73	160	3,4	0,77	0,68	138	2,6	0,60	0,60	108	1,7	0,48	0,48	88	1,2
	4	MED	175	0,83	0,67	146	2,9	0,71	0,62	126	2,2	0,55	0,55	98	1,4	0,45	0,45	81	1,0
	3		150	0,73	0,58	129	2,3	0,62	0,54	110	1,8	0,47	0,47	84	1,1	0,38	0,38	69	0,8
	2		125	0,64	0,50	114	1,9	0,55	0,47	98	1,4	0,41	0,41	74	0,9	0,34	0,34	62	0,6
SEC/F 2.4-2T	1	MIN	105	0,55	0,42	98	1,4	0,47	0,39	84	1,1	0,35	0,35	64	0,7	0,28	0,28	52	0,5
	6		340	1,69	1,34	298	12,8	1,46	1,24	258	9,8	1,09	1,09	194	6,0	0,90	0,90	162	4,2
	5	MAX	295	1,51	1,18	265	10,4	1,30	1,10	229	8,0	0,97	0,97	172	4,7	0,79	0,79	141	3,4
	4		250	1,32	1,02	232	8,2	1,14	0,95	201	6,4	0,83	0,83	148	3,7	0,68	0,68	122	2,6
	3	MED	220	1,19	0,92	208	6,8	1,03	0,85	181	5,3	0,75	0,75	132	3,0	0,62	0,62	110	2,1
SEC/F 3.4-2T	2		170	0,94	0,72	165	4,6	0,82	0,66	144	3,5	0,59	0,59	105	2,0	0,48	0,48	86	1,4
	1	MIN	145	0,85	0,64	148	3,7	0,74	0,59	129	2,9	0,53	0,53	93	1,6	0,43	0,43	76	1,1
	6		440	2,39	1,84	420	10,6	2,07	1,71	365	8,2	1,50	1,50	267	4,7	1,24	1,24	222	3,3
	5	MAX	385	2,14	1,64	375	8,7	1,86	1,52	327	6,7	1,34	1,34	237	3,8	1,10	1,10	196	2,7
	4		325	1,85	1,40	323	6,7	1,61	1,30	282	5,2	1,15	1,15	203	2,9	0,95	0,95	169	2,0
SEC/F 4.4-2T	3	MED	270	1,59	1,20	277	5,1	1,38	1,11	241	4,0	0,93	0,93	163	2,0	0,81	0,81	143	1,5
	2	MIN	235	1,38	1,04	241	4,0	1,21	0,96	212	3,1	0,82	0,80	144	1,6	0,70	0,70	124	1,2
	1		185	1,13	0,84	196	2,8	0,99	0,78	172	2,2	0,68	0,66	119	1,1	0,57	0,57	100	0,8
	6		570	2,95	2,31	518	14,6	2,56	2,15	451	11,3	1,89	1,89	335	6,7	1,50	1,50	268	4,5
	5	MAX	485	2,60	2,02	454	11,6	2,26	1,87	396	9,0	1,65	1,65	291	5,2	1,36	1,36	241	3,7
SEC/F 5.4-2T	4		400	2,22	1,70	387	8,8	1,93	1,58	337	6,8	1,40	1,40	246	3,8	1,15	1,15	203	2,7
	3	MED	335	1,91	1,45	334	6,7	1,66	1,35	291	5,3	1,19	1,19	210	2,9	0,98	0,98	174	2,1
	2	MIN	265	1,54	1,16	268	4,6	1,34	1,08	234	3,6	0,91	0,90	160	1,8	0,79	0,79	139	1,4
	1		185	1,12	0,83	194	2,6	0,98	0,77	170	2,0	0,67	0,65	117	1,0	0,56	0,56	98	0,8
	6	MAX	650	3,42	2,65	599	23,5	2,97	2,46	521	18,3	2,16	2,16	382	10,5	1,78	1,78	316	7,4
SEC/F 6.4-2T	5		545	2,96	2,27	518	18,2	2,58	2,11	452	14,2	1,85	1,85	327	8,0	1,53	1,53	272	5,7
	4	MED	495	2,72	2,08	475	15,7	2,38	1,93	416	12,3	1,70	1,70	299	6,8	1,40	1,40	248	4,8
	3		420	2,38	1,80	415	12,3	2,08	1,68	363	9,7	1,48	1,48	260	5,3	1,22	1,22	215	3,8
	2	MIN	315	1,85	1,39	322	7,9	1,62	1,29	282	6,2	1,11	1,09	194	3,2	0,94	0,94	165	2,4
	1		250	1,51	1,13	263	5,5	1,32	1,05	230	4,4	0,91	0,88	160	2,3	0,76	0,76	134	1,6
SEC/F 7.4-2T	6		830	4,27	3,33	750	30,7	3,70	3,09	652	23,9	2,72	2,72	483	13,9	2,24	2,24	401	9,9
	5	MAX	760	3,99	3,09	700	27,2	3,46	2,87	609	21,2	2,53	2,53	449	12,2	2,08	2,08	372	8,6
	4		680	3,65	2,81	640	23,2	3,17	2,62	557	18,1	2,30	2,30	408	10,3	1,89	1,89	337	7,3
	3	MED	590	3,24	2,48	566	18,7	2,82	2,30	494	14,6	2,02	2,02	356	8,1	1,67	1,67	296	5,8
	2		505	2,83	2,15	495	14,8	2,47	2,00	433	11,6	1,75	1,75	310	6,4	1,45	1,45	258	4,5
SEC/F 8.4-2T	1	MIN	415	2,38	1,79	416	10,9	2,08	1,66	365	8,5	1,41	1,39	249	4,3	1,21	1,21	215	3,3
	6	MAX	925	4,64	3,63	815	20,7	4,02	3,37	709	16,1	2,96	2,96	526	9,4	2,44	2,44	437	6,7
	5		840	4,30	3,35	755	18,2	3,74	3,11	659	14,1	2,73	2,73	485	8,2	2,25	2,25	402	5,8
	4	MED	735	3,86	2,98	678	15,0	3,36	2,77	592	11,7	2,43	2,43	432	6,7	2,00	2,00	358	4,7
	3		630	3,40	2,60	597	12,0	2,96	2,42	521	9,4	2,12	2,12	377	5,2	1,75	1,75	313	3,7
SEC/F 9.4-2T	2	MIN	535	2,98	2,27	521	9,4	2,60	2,11	456	7,4	1,86	1,86	329	4,1	1,53	1,53	272	2,9
	1		445	2,54	1,92	444	7,1	2,22	1,78	389	5,6	1,51	1,50	267	2,8	1,30	1,30	230	2,2
	6	MAX	1200	5,32	4,32	937	23,2	4,58	4,02	810	17,8	3,51	3,51	626	11,2	2,87	2,87	516	7,9
	5		1100	4,99	4,02	879	20,7	4,29	3,74	759	15,8	3,27	3,27	583	9,9	2,67	2,67	480	6,8
	4	MED	1020	4,73	3,79	831	18,7	4,07	3,53	717	14,4	3,08	3,08	547	8,8	2,53	2,53	452	6,3
SEC/F 1.4-2T	3		815	3,98	3,14	698	13,9	3,43	2,92	604	10,6	2,57	2,57	456	6,5	2,11	2,11	377	4,5
	2	MIN	655	3,35	2,62	587	10,3	2,90	2,43	509	7,9	2,14	2,14	378	4,7	1,76	1,76	313	3,2
	1		510	2,72	2,09	476	7,0	2,36	1,94	415	5,4	1,70	1,70	301	3,1	1,40	1,40	249	2,2
	6	MAX	1500	6,22	5,14	1101	17,1	5,33	4,78	948	13,1	4,16	4,16	746	8,5	3,39	3,39	614	5,9
	5		1365	5,85	4,80	1032	15,3	5,02	4,47	889	11,7	3,90	3,90	697	7,5	3,18	3,18	573	5,3
SEC/F 2.4-2T	4	MED	1210	5,38	4,37	948	13,1	4,62	4,06	817	10,1	3,55	3,55	633	6,3	2,90	2,90	521	4,4
	3		980	4,58	3,67	807	9,9	3,95	3,41	698	7,6	2,98	2,98	531	4,7	2,44	2,44	439	3,3
	2	MIN	830	4,03	3,18	709	7,9	3,48	2,96	614	6,1	2,61	2,61	464	3,7	2,14	2,14	384	2,6
	1		735	3,66	2,87	643	6,7	3,16	2,67	557	5,1	2,35	2,35	418	3,1	1,93	1,93	346	2,2

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Pc: Cooling total emission
Ps: Cooling sensible emission
Qw: Water flow rate
Dp(c): Dp Cooling

HEATING EMISSION

3 row coil units

Entering air temperature: 20 °C

			WT: 70 / 60 °C				WT: 60 / 50 °C			WT: 50 / 40 °C			WT: 50 / 45 °C			WT: 45 / 40 °C		
			Qv m³/h	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa
Model		Vn																
SEC/F 1.3-2T	6	MAX	220	2,42	208	2,4	1,83	157	1,5	1,25	108	0,8	1,48	255	3,7	1,19	205	2,5
	5		195	2,18	187	2,0	1,66	143	1,3	1,13	97	0,7	1,33	229	3,1	1,07	184	2,1
	4	MED	175	1,99	171	1,7	1,51	130	1,1	1,03	89	0,6	1,21	208	2,6	0,98	169	1,8
	3		150	1,75	151	1,4	1,33	114	0,9	0,91	78	0,5	1,07	184	2,1	0,86	148	1,4
	2		125	1,53	132	1,1	1,17	101	0,7	0,80	69	0,4	0,94	162	1,6	0,76	131	1,1
SEC/F 2.3-2T	1	MIN	105	1,31	113	0,8	1,00	86	0,5	0,68	58	0,3	0,80	138	1,2	0,64	110	0,9
	6		340	3,89	335	7,5	2,97	255	4,8	2,05	176	2,6	2,38	409	11,2	1,92	330	7,9
	5	MAX	295	3,44	296	6,0	2,63	226	3,9	1,82	157	2,1	2,10	361	9,1	1,70	292	6,4
	4		250	3,00	258	4,7	2,30	198	3,0	1,59	137	1,6	1,84	316	7,1	1,49	256	5,0
	3	MED	220	2,70	232	3,9	2,07	178	2,5	1,43	123	1,4	1,65	284	5,9	1,34	230	4,2
SEC/F 3.3-2T	2		170	2,14	184	2,6	1,64	141	1,7	1,14	98	0,9	1,31	225	3,9	1,06	182	2,8
	1	MIN	145	1,90	163	2,1	1,46	126	1,4	1,01	87	0,7	1,16	200	3,2	0,94	162	2,2
	6		440	5,52	475	19,8	4,24	365	12,8	2,96	255	7,0	3,37	580	29,8	2,74	471	21,0
	5	MAX	385	4,92	423	16,1	3,78	325	10,5	2,64	227	5,8	3,00	516	24,3	2,44	420	17,1
	4		325	4,24	365	12,4	3,26	280	8,1	2,28	196	4,5	2,59	445	18,7	2,10	361	13,2
SEC/F 4.3-2T	3	MED	270	3,61	310	9,4	2,78	239	6,1	1,95	168	3,4	2,21	380	14,1	1,79	308	10,0
	2	MIN	235	3,14	270	7,3	2,42	208	4,8	1,70	146	2,6	1,92	330	11,0	1,56	268	7,8
	1		185	2,54	218	5,1	1,96	169	3,3	1,38	119	1,8	1,55	267	7,6	1,26	217	5,4
	6		570	6,87	591	29,1	5,27	453	18,8	3,67	316	10,3	4,20	722	43,8	3,41	587	30,8
	5	MAX	485	6,00	516	22,9	4,60	396	14,8	3,21	276	8,1	3,66	630	34,4	2,97	511	24,3
SEC/F 5.3-2T	4		400	5,08	437	17,1	3,90	335	11,1	2,73	235	6,1	3,10	533	25,7	2,52	433	18,2
	3	MED	335	4,36	375	13,1	3,36	289	8,5	2,36	203	4,7	2,68	461	19,9	2,18	375	14,0
	2	MIN	265	3,51	302	8,9	2,70	232	5,8	1,89	163	3,2	2,14	368	13,4	1,74	299	9,5
	1		185	2,51	216	5,0	1,94	167	3,2	1,36	117	1,8	1,54	265	7,5	1,25	215	5,3
	6	MAX	650	7,57	651	13,5	5,81	500	8,7	4,04	347	4,7	4,62	795	20,2	3,75	645	14,2
SEC/F 6.3-2T	5		545	6,54	562	10,4	5,02	432	6,7	3,49	300	3,7	3,99	686	15,6	3,24	557	11,0
	4	MED	495	6,04	519	9,0	4,64	399	5,9	3,23	278	3,2	3,69	635	13,6	3,00	516	9,6
	3		420	5,26	452	7,1	4,04	347	4,6	2,82	243	2,5	3,21	552	10,6	2,61	449	7,5
	2	MIN	315	4,07	350	4,5	3,13	269	2,9	2,19	188	1,6	2,49	428	6,8	2,02	347	4,8
	1		250	3,32	286	3,2	2,56	220	2,1	1,79	154	1,1	2,03	349	4,8	1,65	284	3,4
SEC/F 7.3-2T	6		830	9,22	793	19,0	7,06	607	12,3	4,91	422	6,7	5,63	968	28,6	4,56	784	20,1
	5	MAX	760	8,61	740	16,9	6,59	567	10,9	4,58	394	5,9	5,26	905	25,3	4,26	733	17,8
	4		680	7,87	677	14,4	6,03	519	9,3	4,20	361	5,1	4,81	827	21,7	3,90	671	15,2
	3	MED	590	6,96	599	11,6	5,34	459	7,5	3,71	319	4,1	4,25	731	17,4	3,45	593	12,3
	2		505	6,15	529	9,3	4,72	406	6,0	3,29	283	3,3	3,76	647	14,0	3,05	525	9,9
SEC/F 8.3-2T	1	MIN	415	5,17	445	6,9	3,97	341	4,4	2,77	238	2,4	3,15	542	10,3	2,56	440	7,3
	6	MAX	925	10,55	907	28,1	8,10	697	18,2	5,64	485	10,0	6,44	1108	42,2	5,23	900	29,7
	5		840	9,76	839	24,5	7,49	644	15,8	5,22	449	8,7	5,96	1025	36,8	4,83	831	25,9
	4	MED	735	8,73	751	20,1	6,71	577	13,0	4,68	402	7,2	5,33	917	30,3	4,33	745	21,3
	3		630	7,67	660	16,0	5,93	510	10,5	4,15	357	5,8	4,71	810	24,4	3,83	659	17,2
SEC/F 9.3-2T	2	MIN	535	6,72	578	12,7	5,17	445	8,3	3,62	311	4,5	4,11	707	19,1	3,34	574	13,5
	1		445	5,71	491	9,5	4,39	378	6,2	3,08	265	3,4	3,49	600	14,3	2,83	487	10,1
	6	MAX	1200	13,25	1140	18,5	10,13	871	11,9	7,01	603	6,5	8,09	1391	27,9	6,55	1127	19,6
	5		1100	12,36	1063	16,4	9,45	813	10,6	6,55	563	5,7	7,55	1299	24,7	6,11	1051	17,3
	4	MED	1020	11,63	1000	14,7	8,90	765	9,5	6,17	531	5,2	7,10	1221	22,2	5,75	989	15,6
SEC/F 10.3-2T	3		815	9,67	832	10,6	7,40	636	6,9	5,14	442	3,7	5,90	1015	16,0	4,78	822	11,3
	2	MIN	655	8,11	697	7,8	6,22	535	5,1	4,33	372	2,8	4,96	853	11,8	4,02	691	8,3
	1		510	6,49	558	5,3	4,98	428	3,4	3,47	298	1,9	3,97	683	7,9	3,22	554	5,6
	6	MAX	1500	15,74	1354	25,1	12,03	1035	16,1	8,31	715	8,7	9,61	1653	37,8	7,78	1338	37,0
	5		1365	14,70	1264	22,3	11,23	966	14,3	7,77	668	7,7	8,98	1545	33,5	7,26	1249	33,0
SEC/F 11.3-2T	4	MED	1210	13,39	1152	18,9	10,24	881	12,1	7,09	610	6,6	8,18	1407	28,4	6,62	1139	27,8
	3		980	11,29	971	14,0	8,64	743	9,0	5,99	515	4,9	6,89	1185	21,0	5,58	960	21,1
	2	MIN	830	9,82	845	11,0	7,52	647	7,1	5,22	449	3,8	6,00	1032	16,5	4,86	836	16,2
	1		735	8,87	763	9,2	6,85	589	6,0	4,76	409	3,3	5,46	939	13,9	4,42	760	12,9
	6	MAX	1500	15,74	1354	25,1	12,03	1035	16,1	8,31	715	8,7	9,61	1653	37,8	7,78	1338	37,0

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
Qw: Water flow rate
Dp(h): Dp Heating

4 row coil units

Entering air temperature: 20 °C

Model		Vn	Qv m³/h	WT: 70 / 60 °C			WT: 60 / 50 °C			WT: 50 / 40 °C			WT: 50 / 45 °C			WT: 45 / 40 °C		
				Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa
SEC/F 1.4-2T	6	MAX	220	2,63	226	4,9	2,00	172	3,1	1,38	119	1,7	1,60	275	7,3	1,30	224	5,1
	5		195	2,36	203	4,0	1,80	155	2,6	1,24	107	1,4	1,44	248	6,1	1,17	201	4,3
	4	MED	175	2,15	185	3,4	1,64	141	2,2	1,14	98	1,2	1,32	227	5,2	1,06	182	3,6
	3		150	1,86	160	2,7	1,43	123	1,7	0,99	85	0,9	1,14	196	4,0	0,92	158	2,8
	2		125	1,62	139	2,1	1,24	107	1,3	0,86	74	0,7	0,99	170	3,1	0,80	138	2,2
	1	MIN	105	1,38	119	1,6	1,06	91	1,0	0,73	63	0,5	0,84	144	2,4	0,68	117	1,7
SEC/F 2.4-2T	6		340	4,19	360	14,0	3,22	277	9,0	2,24	193	4,9	2,56	440	21,0	2,08	358	14,8
	5	MAX	295	3,69	317	11,1	2,83	243	7,2	1,97	169	3,9	2,25	387	16,7	1,83	315	11,8
	4		250	3,22	277	8,7	2,47	212	5,7	1,72	148	3,1	1,97	339	13,2	1,60	275	9,3
	3	MED	220	2,88	248	7,2	2,21	190	4,7	1,54	132	2,6	1,76	303	10,8	1,43	246	7,6
	2		170	2,24	193	4,6	1,73	149	3,0	1,21	104	1,7	1,37	236	7,0	1,11	191	4,9
	1	MIN	145	1,98	170	3,7	1,53	132	2,4	1,07	92	1,3	1,21	208	5,6	0,99	170	4,0
SEC/F 3.4-2T	6		440	5,80	499	10,8	4,46	384	7,0	3,12	268	3,9	3,55	611	16,3	2,88	495	11,5
	5	MAX	385	5,14	442	8,7	3,96	341	5,7	2,77	238	3,1	3,14	540	13,2	2,56	440	9,3
	4		325	4,40	378	6,6	3,39	292	4,3	2,38	205	2,4	2,69	463	10,0	2,19	377	7,1
	3	MED	270	3,73	321	5,0	2,87	247	3,2	2,02	174	1,8	2,28	392	7,5	1,85	318	5,3
	2		235	3,23	278	3,9	2,49	214	2,5	1,75	151	1,4	1,98	341	5,8	1,61	277	4,1
	1	MIN	185	2,60	224	2,6	2,01	173	1,7	1,41	121	1,0	1,59	273	4,0	1,30	224	2,8
SEC/F 4.4-2T	6		570	7,30	628	15,4	5,60	482	10,0	3,90	335	5,5	4,46	767	23,2	3,62	623	16,4
	5	MAX	485	6,33	544	12,0	4,86	418	7,8	3,39	292	4,3	3,87	666	18,1	3,14	540	12,8
	4		400	5,32	458	8,9	4,09	352	5,8	2,86	246	3,2	3,25	559	13,3	2,64	454	9,4
	3	MED	335	4,56	392	6,8	3,51	302	4,4	2,46	212	2,4	2,79	480	10,2	2,27	390	7,2
	2		265	3,62	311	4,5	2,79	240	2,9	1,96	169	1,6	2,21	380	6,8	1,80	310	4,8
	1	MIN	185	2,57	221	2,5	1,99	171	1,6	1,40	120	0,9	1,57	270	3,7	1,28	220	2,6
SEC/F 5.4-2T	6	MAX	650	8,07	694	23,7	6,21	534	15,4	4,34	373	8,5	4,93	848	35,7	4,01	690	25,2
	5		545	6,97	599	18,3	5,36	461	11,9	3,76	323	6,6	4,26	733	27,6	3,46	595	19,5
	4	MED	495	6,37	548	15,6	4,90	421	10,2	3,44	296	5,6	3,89	669	23,5	3,16	544	16,6
	3		420	5,51	474	12,1	4,24	365	7,9	2,97	255	4,4	3,36	578	18,2	2,74	471	12,9
	2		315	4,23	364	7,6	3,26	280	5,0	2,29	197	2,8	2,58	444	11,4	2,10	361	8,1
	1	MIN	250	3,44	296	5,3	2,65	228	3,4	1,87	161	1,9	2,10	361	7,9	1,71	294	5,6
SEC/F 6.4-2T	6		830	10,68	918	34,1	8,22	707	22,2	5,75	495	12,2	6,53	1123	51,4	5,31	913	36,3
	5	MAX	760	9,90	851	29,9	7,62	655	19,4	5,34	459	10,7	6,05	1041	44,9	4,92	846	31,8
	4		680	8,98	772	25,2	6,92	595	16,4	4,85	417	9,1	5,49	944	37,9	4,46	767	26,8
	3	MED	590	7,85	675	19,8	6,05	520	12,9	4,24	365	7,2	4,80	826	29,9	3,90	671	21,1
	2		505	6,81	586	15,5	5,25	452	10,1	3,69	317	5,6	4,17	717	23,3	3,39	583	16,5
	1	MIN	415	5,66	487	11,2	4,37	376	7,3	3,07	264	4,1	3,46	595	16,8	2,82	485	11,9
SEC/F 7.4-2T	6	MAX	925	11,26	968	21,9	8,65	744	14,2	6,05	520	7,8	6,88	1183	32,8	5,59	961	23,2
	5		840	10,38	893	18,9	7,98	686	12,3	5,58	480	6,8	6,34	1090	28,5	5,15	886	20,1
	4	MED	735	9,30	800	15,6	7,16	616	10,2	5,01	431	5,6	5,68	977	23,5	4,62	795	16,6
	3		630	8,12	698	12,3	6,25	538	8,0	4,38	377	4,4	4,96	853	18,5	4,03	693	13,1
	2	MIN	535	7,02	604	9,5	5,41	465	6,2	3,79	326	3,4	4,29	738	14,3	3,49	600	10,1
	1		445	5,93	510	7,1	4,57	393	4,6	3,21	276	2,6	3,63	624	10,6	2,95	507	7,5
SEC/F 8.4-2T	6	MAX	1200	14,36	1235	29,3	11,00	946	18,9	7,63	656	10,3	8,77	1508	44,1	7,11	1223	31,0
	5		1100	13,34	1147	25,7	10,22	879	16,6	7,10	611	9,0	8,15	1402	38,9	6,60	1135	27,4
	4	MED	1020	12,52	1077	23,0	9,60	826	14,9	6,67	574	8,1	7,65	1316	34,7	6,20	1066	24,5
	3		815	10,37	892	16,6	7,96	685	10,8	5,54	476	5,9	6,34	1090	24,8	5,14	884	17,6
	2	MIN	655	8,55	735	11,9	6,57	565	7,6	4,58	394	4,1	5,23	900	17,8	4,24	729	12,6
	1		510	6,78	583	7,9	5,22	449	5,0	3,65	314	2,9	4,15	714	11,9	3,37	580	8,3
SEC/F 9.4-2T	6	MAX	1500	17,23	1482	22,5	13,18	1133	14,5	9,13	785	7,8	10,53	1811	33,8	8,52	1465	23,7
	5		1365	16,02	1378	19,8	12,26	1054	12,7	8,50	731	6,9	9,79	1684	29,7	7,93	1364	20,9
	4	MED	1210	14,52	1249	16,6	11,12	956	10,7	7,71	663	5,8	8,87	1526	25,0	7,18	1235	17,6
	3		980	12,13	1043	12,1	9,30	800	7,8	6,46	556	4,3	7,41	1275	18,2	6,01	1034	12,8
	2	MIN	830	10,55	907	9,5	8,09	696	6,1	5,63	484	3,4	6,44	1108	14,3	5,23	900	10,0
	1		735	9,47	814	7,8	7,27	625	5,1	5,07	436	2,8	5,79	996	11,8	4,70	808	8,3

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
Qw: Water flow rate
Dp(h): Dp Heating

1 row additional coil units

For 3 or 4 row versions (3+1 or 4+1 rows)

Entering air temperature: 20 °C

Model	Vn	Qv m³/h	WT: 80 / 70 °C				WT: 75 / 65 °C				WT: 70 / 60 °C				WT: 65 / 55 °C				WT: 60 / 50 °C				WT: 55 / 45 °C			
			Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa
SEC/F 1	6	MAX	220	1,32	114	2,4	1,18	101	2,0	1,04	89	1,6	0,91	78	1,3	0,77	66	1,0	0,63	54	0,7					
	5		195	1,21	104	2,1	1,08	93	1,7	0,96	83	1,4	0,83	71	1,1	0,71	61	0,9	0,58	50	0,6					
	4	MED	175	1,12	96	1,8	1,00	86	1,5	0,89	77	1,2	0,77	66	1,0	0,65	56	0,7	0,54	46	0,5					
	3		150	1,00	86	1,5	0,90	77	1,2	0,79	68	1,0	0,69	59	0,8	0,59	51	0,6	0,48	41	0,4					
	2		125	0,90	77	1,2	0,81	70	1,0	0,71	61	0,8	0,62	53	0,7	0,53	46	0,5	0,44	38	0,4					
SEC/F 2	1	MIN	105	0,79	68	1,0	0,71	61	0,8	0,63	54	0,7	0,55	47	0,5	0,47	40	0,4	0,39	34	0,3					
	6		340	2,11	181	6,6	1,90	163	5,6	1,68	144	4,6	1,47	126	3,7	1,26	108	2,8	1,05	90	2,1					
	5	MAX	295	1,90	163	5,5	1,71	147	4,7	1,52	131	3,8	1,33	114	3,1	1,14	98	2,4	0,95	82	1,8					
	4		250	1,70	146	4,5	1,53	132	3,8	1,36	117	3,2	1,19	102	2,5	1,02	88	2,0	0,85	73	1,4					
	3	MED	220	1,56	134	3,9	1,41	121	3,3	1,25	108	2,7	1,09	94	2,2	0,94	81	1,7	0,78	67	1,2					
SEC/F 3	2		170	1,30	112	2,8	1,17	101	2,4	1,04	89	2,0	0,91	78	1,6	0,78	67	1,2	0,65	56	0,9					
	1	MIN	145	1,18	101	2,4	1,06	91	2,0	0,94	81	1,7	0,83	71	1,3	0,71	61	1,0	0,59	51	0,8					
	6		440	3,08	265	16,2	2,78	239	13,7	2,48	213	11,4	2,18	187	9,2	1,88	162	7,2	1,57	135	5,4					
	5	MAX	385	2,81	242	13,8	2,54	218	11,7	2,26	194	9,7	1,99	171	7,8	1,71	147	6,1	1,44	124	4,6					
	4		325	2,49	214	11,1	2,25	194	9,4	2,00	172	7,8	1,76	151	6,3	1,52	131	4,9	1,28	110	3,7					
SEC/F 4	3	MED	270	2,20	189	9,0	1,98	170	7,6	1,77	152	6,3	1,56	134	5,1	1,34	115	4,0	1,13	97	3,0					
	2	MIN	235	1,98	170	7,4	1,78	153	6,3	1,59	137	5,2	1,40	120	4,2	1,21	104	3,3	1,02	88	2,5					
	1		185	1,68	144	5,6	1,52	131	4,7	1,35	116	3,9	1,19	102	3,2	1,03	89	2,5	0,86	74	1,9					
	6		570	3,68	316	22,1	3,32	286	18,7	2,96	255	15,5	2,60	224	15,3	2,24	193	9,8	1,88	162	7,3					
	5	MAX	485	3,30	284	18,2	2,97	255	15,4	2,65	228	12,8	2,33	200	12,5	2,00	172	8,1	1,68	144	6,0					
SEC/F 5	4		400	2,89	249	14,4	2,60	224	12,2	2,32	200	10,1	2,04	175	10,0	1,76	151	6,4	1,47	126	4,8					
	3	MED	335	2,56	220	11,7	2,31	199	9,9	2,06	177	8,2	1,81	156	8,0	1,56	134	5,2	1,31	113	3,9					
	2	MIN	265	2,15	185	8,6	1,94	167	7,3	1,73	149	6,0	1,52	131	6,0	1,31	113	3,8	1,10	95	2,9					
	1		185	1,67	144	5,5	1,50	129	4,7	1,34	115	3,9	1,18	101	3,8	1,02	88	2,5	0,86	74	1,8					
	6	MAX	650	4,28	368	5,6	3,85	331	4,8	3,42	294	3,9	3,00	258	3,2	2,57	221	2,4	2,14	184	1,8					
SEC/F 6	5		545	3,79	326	4,6	3,41	293	3,8	3,03	261	3,2	2,66	229	2,6	2,28	196	2,0	1,90	163	1,5					
	4	MED	495	3,54	304	4,0	3,18	273	3,4	2,83	243	2,8	2,48	213	2,3	2,13	183	1,8	1,78	153	1,3					
	3		420	3,16	272	3,3	2,85	245	2,8	2,53	218	2,3	2,22	191	1,9	1,90	163	1,4	1,59	137	1,1					
	2	MIN	315	2,59	223	2,3	2,33	200	2,0	2,07	178	1,6	1,82	157	1,3	1,56	134	1,0	1,30	112	0,8					
	1		250	2,20	189	1,8	1,99	171	1,5	1,77	152	1,2	1,55	133	1,0	1,33	114	0,8	1,12	96	0,6					
SEC/F 7	6		830	5,05	434	7,5	4,54	390	6,4	4,04	347	5,3	3,53	304	4,2	3,03	261	3,3	2,53	218	2,4					
	5	MAX	760	4,77	410	6,8	4,29	369	5,8	3,81	328	4,8	3,33	286	3,8	2,86	246	2,9	2,38	205	2,2					
	4		680	4,42	380	6,0	3,98	342	5,0	3,54	304	4,1	3,09	266	3,3	2,65	228	2,6	2,21	190	1,9					
	3	MED	590	3,99	343	5,0	3,59	309	4,2	3,19	274	3,5	2,79	240	2,8	2,40	206	2,1	2,00	172	1,6					
	2		505	3,59	309	4,1	3,23	278	3,5	2,87	247	2,9	2,51	216	2,3	2,16	186	1,8	1,80	155	1,3					
SEC/F 8	1	MIN	415	3,12	268	3,2	2,81	242	2,7	2,50	215	2,3	2,19	188	1,8	1,88	162	1,4	1,57	135	1,1					
	6	MAX	925	5,97	513	11,9	5,38	463	10,1	4,79	412	8,3	3,53	304	5,9	3,61	310	5,2	3,03	261	3,9					
	5		840	5,59	481	10,6	5,04	433	9,0	4,49	386	7,4	3,33	286	5,3	3,39	292	4,7	2,84	244	3,5					
	4	MED	735	5,10	439	9,0	4,59	395	7,6	4,09	352	6,3	3,09	266	4,7	3,09	266	4,0	2,59	223	3,0					
	3		630	4,58	394	7,5	4,13	355	6,3	3,68	316	5,2	2,79	240	3,9	2,78	239	3,3	2,33	200	2,5					
SEC/F 9	2	MIN	535	4,10	353	6,1	3,69	317	5,2	3,29	283	4,3	2,51	216	3,3	2,49	214	2,7	2,09	180	2,0					
	1		445	3,60	310	4,9	3,25	280	4,1	2,89	249	3,4	2,19	188	2,5	2,19	188	2,2	1,84	158	1,6					
	6	MAX	1200	6,75	581	14,8	6,08	523	12,5	5,41	465	10,3	4,75	409	8,3	4,08	351	6,5	3,42	294	4,8					
	5		1100	6,37	548	13,3	5,74	494	11,3	5,11	439	9,3	4,48	385	7,5	3,85	331	5,9	3,23	278	4,4					
	4	MED	1020	6,05	520	12,2	5,45	469	10,3	4,86	418	8,5	4,26	366	6,9	3,66	315	5,4	3,07	264	4,0					
SEC/F 10	3		815	5,19	446	9,3	4,68	402	7,9	4,17	359	6,5	3,66	315	5,3	3,15	271	4,1	2,64	227	3,1					
	2	MIN	655	4,48	385	7,2	4,04	347	6,1	3,60	310	5,0	3,16	272	4,1	2,72	234	3,2	2,28	196	2,4					
	1		510	3,76	323	5,3	3,39	292	4,5	3,03	261	3,7	2,66	229	3,0	2,29	197	2,3	1,92	165	1,7					
	6	MAX	1500	7,77	668	18,9	7,00	1204	16,0	6,23	1072	13,2	5,46	939	10,7	4,69	807	8,3	3,93	676	6,2					
	5		1365	7,36	633	17,2	6,63	1140	14,5	5,90	1015	12,0	5,17	889	9,7	4,45	765	7,5	3,72	640	5,6					
SEC/F 11	4	MED	1210	6,81	586	15,0	6,13	527	12,7	5,46	939	10,5	4,79	824	8,5	4,12	709	6,6	3,45	593	4,9					
	3		980	5,90	507	11,7	5,32	458	9,9	4,74	815	8,2	4,15	714	6,6	3,57	614	5,1	2,99	514	3,8					
	2	MIN	830	5,26	452	9,5	4,74	408	8,1	4,22	726	6,7	3,71	638	5,4	3,19	549	4,2	2,67	459	3,1					
	1		735	4,84	416	8,2	4,37	376	7,0	3,89	669	5,8	3,41	587	4,7	2,94	506	3,6	2,46	423	2,7					

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
Qw: Water flow rate
Dp(h): Dp Heating

2 row additional coil units

For 3 row versions only (3+2 rows)

Entering air temperature: 20 °C

Model	Vn	Qv m³/h	WT: 65 / 55 °C				WT: 60 / 50 °C				WT: 55 / 45 °C				WT: 50 / 40 °C				WT: 45 / 40 °C				WT: 45 / 35 °C			
			Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa
SEC/F 1	6	MAX	220	1,67	144	7,1	1,44	124	5,5	1,20	103	4,1	0,97	83	2,9	0,93	160	9,1	0,74	64	1,8					
	5		195	1,52	131	6,0	1,31	113	4,7	1,10	95	3,5	0,89	77	2,5	0,85	146	7,8	0,68	58	1,6					
	4	MED	175	1,40	120	5,2	1,21	104	4,1	1,01	87	3,0	0,82	71	2,1	0,78	134	6,7	0,63	54	1,3					
	3		150	1,24	107	4,2	1,07	92	3,3	0,90	77	2,5	0,73	63	1,7	0,69	119	5,4	0,56	48	1,1					
	2		125	1,10	95	3,4	0,95	82	2,7	0,80	69	2,0	0,65	56	1,4	0,62	107	4,4	0,50	43	0,9					
SEC/F 2	1	MIN	105	0,97	83	2,7	0,83	71	2,1	0,70	60	1,6	0,57	49	1,1	0,54	93	3,5	0,44	38	0,7					
	6		340	2,58	222	17,9	2,23	192	14,0	1,88	162	10,6	1,53	132	7,5	1,44	248	23,1	1,18	101	4,8					
	5	MAX	295	2,32	200	14,8	2,00	172	11,6	1,69	145	8,8	1,37	118	6,2	1,30	224	19,2	1,06	91	4,0					
	4		250	2,06	177	12,0	1,78	153	9,4	1,50	129	7,1	1,22	105	5,0	1,15	198	15,5	0,94	81	3,3					
	3	MED	220	1,87	161	10,2	1,62	139	8,0	1,37	118	6,0	1,11	95	4,3	1,05	181	13,2	0,86	74	2,8					
SEC/F 3	2		170	1,52	131	7,1	1,32	114	5,6	1,11	95	4,2	0,91	78	3,0	0,85	146	9,1	0,70	60	1,9					
	1	MIN	145	1,39	120	6,0	1,20	103	4,7	1,01	87	3,6	0,83	71	2,5	0,78	134	7,7	0,64	55	1,6					
	6		440	3,52	303	6,3	3,04	261	5,0	2,56	220	3,7	2,00	172	2,6	1,97	339	8,2	1,59	137	1,7					
	5	MAX	385	3,19	274	5,3	2,76	237	4,2	2,32	200	3,1	1,88	162	2,2	1,79	308	6,9	1,45	125	1,4					
	4		325	2,80	241	4,2	2,42	208	3,3	2,04	175	2,5	1,66	143	1,8	1,57	270	5,5	1,27	109	1,1					
SEC/F 4	3	MED	270	2,45	211	3,3	2,11	181	2,6	1,78	153	2,0	1,46	126	1,4	1,38	237	4,4	1,13	97	0,9					
	2	MIN	235	2,20	189	2,8	1,90	163	2,2	1,60	138	1,6	1,30	112	1,2	1,23	212	3,6	1,00	86	0,7					
	1		185	1,82	157	2,0	1,58	136	1,6	1,33	114	1,2	1,08	93	0,8	1,02	175	2,6	0,84	72	0,5					
	6		570	4,13	355	8,4	3,56	306	6,5	2,99	257	4,9	2,42	208	3,4	2,31	397	10,8	1,86	160	2,2					
	5	MAX	485	3,78	325	7,2	3,26	280	5,6	2,74	236	4,2	2,22	191	3,0	2,11	363	9,2	1,70	146	1,9					
SEC/F 5	4		400	3,28	282	5,6	2,83	243	4,4	2,38	205	3,3	1,94	167	2,3	1,84	316	7,2	1,49	128	1,5					
	3	MED	335	2,89	249	4,5	2,49	214	3,5	2,10	181	2,6	1,70	146	1,9	1,61	277	5,8	1,31	113	1,2					
	2	MIN	265	2,41	207	3,2	2,08	179	2,6	1,76	151	1,9	1,43	123	1,4	1,35	232	4,2	1,10	95	0,9					
	1		185	1,81	156	2,0	1,56	134	1,5	1,32	114	1,2	1,07	92	0,8	1,01	174	2,5	0,83	71	0,5					
	6	MAX	650	5,23	450	15,6	4,52	389	12,3	3,82	329	9,3	3,11	267	6,6	2,93	504	20,2	2,41	207	4,3					
SEC/F 6	5		545	4,59	395	12,4	3,97	341	9,8	3,36	289	7,4	2,74	236	5,3	2,57	442	16,1	2,12	182	3,4					
	4	MED	495	4,26	366	10,9	3,68	316	8,6	3,11	267	6,5	2,54	218	4,6	2,38	409	14,1	1,97	169	3,0					
	3		420	3,76	323	8,7	3,26	280	6,9	2,75	237	5,2	2,25	194	3,7	2,11	363	11,3	1,74	150	2,4					
	2	MIN	315	3,03	261	6,0	2,62	225	4,7	2,22	191	3,6	1,82	157	2,6	1,70	292	7,7	1,41	121	1,7					
	1		250	2,52	217	4,3	2,18	187	3,4	1,85	159	2,6	1,51	130	1,8	1,41	243	5,6	1,18	101	1,2					
SEC/F 7	6		830	6,22	535	21,2	5,38	463	16,6	4,54	390	12,5	3,70	318	8,9	3,48	599	27,4	2,86	246	5,8					
	5	MAX	760	5,86	504	19,0	5,06	435	15,0	4,27	367	11,3	3,48	299	8,0	3,28	564	24,6	2,69	231	5,2					
	4		680	5,41	465	16,6	4,68	402	13,0	3,95	340	9,8	3,22	277	7,0	3,03	521	21,4	2,49	214	4,5					
	3	MED	590	4,85	417	13,7	4,20	361	10,7	3,54	304	8,1	2,89	249	5,7	2,72	468	17,7	2,24	193	3,8					
	2		505	4,32	372	11,2	3,74	322	8,8	3,16	272	6,6	2,58	222	4,8	2,42	416	14,4	2,00	172	3,1					
SEC/F 8	1	MIN	415	3,70	318	8,5	3,21	276	6,7	2,71	233	5,1	2,21	190	3,6	2,07	356	11,0	1,72	148	2,4					
	6	MAX	925	7,30	628	33,3	6,32	544	26,3	5,35	460	19,9	4,37	376	14,2	4,08	702	43,1	3,40	292	9,3					
	5		840	6,81	586	29,5	5,90	507	23,3	4,99	429	17,6	4,08	351	12,6	3,81	655	38,2	3,17	273	8,2					
	4	MED	735	6,17	531	24,8	5,34	459	19,6	4,52	389	14,8	3,70	318	10,6	3,45	593	32,1	2,88	248	6,9					
	3		630	5,49	472	20,2	4,76	409	16,0	4,03	347	12,1	3,30	284	8,7	3,07	528	26,2	2,57	221	5,7					
SEC/F 9	2	MIN	535	4,85	417	16,3	4,21	362	12,9	3,57	307	9,8	2,92	251	7,0	2,72	468	21,1	2,27	195	4,6					
	1		445	4,24	365	12,8	3,68	316	10,2	3,12	268	7,7	2,56	220	5,5	2,38	409	16,6	1,99	171	3,6					
	6	MAX	1200	8,76	753	46,0	7,58	652	36,2	6,41	551	27,4	5,24	451	19,6	4,90	843	59,5	4,07	350	12,8					
	5		1100	8,25	710	41,4	7,14	614	32,6	6,04	519	24,7	4,94	425	17,6	4,62	795	53,5	3,83	329	11,5					
	4	MED	1020	7,82	673	37,7	6,78	583	29,7	5,73	493	22,5	4,69	403	16,1	4,38	753	48,8	3,64	313	10,5					
SEC/F 10	3		815	6,65	572	28,3	5,76	495	22,3	4,87	419	16,9	3,99	343	12,1	3,72	640	36,6	3,10	267	7,9					
	2	MIN	655	5,66	487	21,3	4,91	422	16,9	4,16	358	12,8	3,40	292	9,1	3,17	545	27,6	2,65	228	6,0					
	1		510	4,66	401	15,1	4,04	347	12,0	3,42	294	9,1	2,81	242	6,5	2,61	449	19,6	2,19	188	4,3					
	6	MAX	1500	10,18	875	59,9	8,81	758	47,2	7,45	641	35,7	6,08	523	25,4	-	-	-	4,72	406	16,6					
	5		1365	9,59	825	53,9	8,30	714	42,5	7,02	604	32,1	5,73	493	22,9	-	-	-	4,45	383	14,9					
SEC/F 11	4	MED	1210	8,84	760	46,8	7,65	658	36,8	6,47	556	27,8	5,29	455	19,9	-	-	-	4,10	353	13,0					
	3		980	7,62	655	36,0	6,60	568	28,4	5,58	480	21,5	4,57	393	15,3	-	-	-	3,55	305	10,0					
	2	MIN	830	6,74	580	29,0	5,84	502	22,9	4,94	425	17,3	4,04	347	12,4	-	-	-	3,14	270	8,1					
	1		735	6,17	531	24,8	5,34	459	19,6	4,52	389	14,8	3,70	318	10,6	-	-	-	2,88	248	6,9					

WT: Water temperature

Vn: Nominal speeds

Qv: Air flow

Ph: Heating emission

Qw: Water flow rate

Dp(h): Dp Heating

AIR FLOW AND CORRECTION FACTORS

Air flow and correction factors for emission with different available pressures

Model	Speed		Qv (m³/h)						K1						K2					
			Ap (Pa)						Ap (Pa)						Ap (Pa)					
			0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50
1	6	MAX	220	199	179	154	128	100	1,00	0,92	0,84	0,75	0,66	0,53	1,00	0,91	0,83	0,73	0,64	0,51
	5		195	174	152	130	102	72	1,00	0,91	0,82	0,72	0,60	-	1,00	0,90	0,80	0,71	0,58	-
	4	MED	175	151	129	100	74	-	1,00	0,88	0,78	0,65	0,50	-	1,00	0,87	0,77	0,63	0,48	-
	3		150	123	94	69	-	-	1,00	0,85	0,69	0,54	-	-	1,00	0,84	0,67	0,52	-	-
	2		125	96	63	-	-	-	1,00	0,81	0,58	-	-	-	1,00	0,79	0,56	-	-	-
	1	MIN	105	70	43	-	-	-	1,00	0,73	0,49	-	-	-	1,00	0,71	0,47	-	-	-
2	6		340	312	287	254	218	180	1,00	0,93	0,87	0,79	0,71	0,61	1,00	0,92	0,85	0,77	0,69	0,59
	5	MAX	295	260	233	195	163	117	1,00	0,90	0,83	0,72	0,63	0,48	1,00	0,89	0,81	0,70	0,61	0,45
	4		250	218	180	145	108	-	1,00	0,89	0,77	0,65	0,51	-	1,00	0,88	0,75	0,63	0,49	-
	3	MED	220	177	135	98	-	-	1,00	0,84	0,68	0,52	-	-	1,00	0,82	0,66	0,50	-	-
	2		170	119	92	-	-	-	1,00	0,75	0,62	-	-	-	1,00	0,73	0,60	-	-	-
	1	MIN	145	83	45	-	-	-	1,00	0,64	0,37	-	-	-	1,00	0,62	0,35	-	-	-
3	6		440	413	380	348	314	270	1,00	0,95	0,88	0,83	0,76	0,68	1,00	0,94	0,87	0,81	0,75	0,66
	5	MAX	385	351	320	287	249	208	1,00	0,93	0,86	0,79	0,71	0,62	1,00	0,92	0,84	0,77	0,69	0,60
	4		325	284	244	209	179	-	1,00	0,89	0,79	0,71	0,63	-	1,00	0,88	0,78	0,69	0,61	-
	3	MED	270	212	178	141	-	-	1,00	1,17	0,72	0,60	-	-	1,00	1,20	0,70	0,58	-	-
	2	MIN	235	177	138	-	-	-	1,00	0,79	0,66	-	-	-	1,00	0,78	0,64	-	-	-
	1		185	125	75	-	-	-	1,00	0,73	0,48	-	-	-	1,00	0,72	0,46	-	-	-
4	6		570	527	472	432	381	314	1,00	0,94	0,86	0,80	0,73	0,63	1,00	0,93	0,84	0,78	0,71	0,61
	5	MAX	485	437	387	340	282	230	1,00	0,92	0,83	0,75	0,65	0,55	1,00	0,91	0,82	0,74	0,63	0,53
	4		400	343	293	238	187	-	1,00	0,88	0,78	0,67	0,55	-	1,00	0,87	0,76	0,65	0,53	-
	3	MED	335	275	215	159	-	-	1,00	0,85	0,71	0,56	-	-	1,00	0,83	0,69	0,54	-	-
	2	MIN	265	176	124	-	-	-	1,00	0,72	0,55	-	-	-	1,00	0,70	0,53	-	-	-
	1		185	78	-	-	-	-	1,00	0,50	-	-	-	-	1,00	0,48	-	-	-	-
5	6	MAX	650	590	532	472	405	341	1,00	0,92	0,85	0,77	0,69	0,60	1,00	0,91	0,83	0,76	0,67	0,58
	5		545	480	413	341	283	230	1,00	0,90	0,80	0,69	0,60	-	1,00	0,89	0,78	0,67	0,58	-
	4	MED	495	420	343	275	226	-	1,00	0,87	0,75	0,63	0,54	-	1,00	0,86	0,73	0,61	0,52	-
	3		420	333	247	192	-	-	1,00	0,83	0,66	0,54	-	-	1,00	0,81	0,64	0,52	-	-
	2	MIN	315	205	135	-	-	-	1,00	0,71	0,51	-	-	-	1,00	0,69	0,49	-	-	-
	1		250	150	-	-	-	-	1,00	0,67	-	-	-	-	1,00	0,65	-	-	-	-
6	6		830	771	719	648	585	521	1,00	0,94	0,89	0,82	0,76	0,69	1,00	0,93	0,87	0,80	0,74	0,67
	5	MAX	760	705	639	581	514	446	1,00	0,94	0,87	0,81	0,73	0,66	1,00	0,93	0,85	0,79	0,72	0,64
	4		680	592	555	503	436	360	1,00	0,89	0,85	0,79	0,70	0,61	1,00	0,88	0,83	0,77	0,69	0,59
	3	MED	590	524	466	411	347	282	1,00	0,91	0,83	0,75	0,66	0,56	1,00	0,89	0,81	0,73	0,64	0,54
	2		505	430	362	298	244	-	1,00	0,88	0,77	0,66	0,56	-	1,00	0,86	0,75	0,64	0,54	-
	1	MIN	415	332	271	-	-	-	1,00	0,83	0,71	-	-	-	1,00	0,82	0,69	-	-	-
7	6	MAX	925	873	814	748	673	593	1,00	0,95	0,90	0,84	0,78	0,70	1,00	0,95	0,89	0,83	0,76	0,69
	5		840	794	775	676	609	542	1,00	0,95	0,93	0,84	0,77	0,71	1,00	0,95	0,93	0,82	0,76	0,69
	4	MED	735	686	633	573	512	443	1,00	0,94	0,88	0,82	0,75	0,67	1,00	0,94	0,87	0,80	0,73	0,65
	3		630	580	522	470	405	352	1,00	0,93	0,86	0,79	0,71	0,63	1,00	0,92	0,84	0,77	0,69	0,61
	2	MIN	535	471	415	359	302	-	1,00	0,90	0,81	0,73	0,64	-	1,00	0,89	0,80	0,71	0,62	-
	1		445	373	318	254	-	-	1,00	0,87	0,77	0,65	-	-	1,00	0,85	0,75	0,63	-	-
8	6	MAX	1200	1138	1076	1020	952	869	1,00	0,96	0,91	0,87	0,83	0,77	1,00	0,95	0,90	0,86	0,81	0,75
	5		1100	1043	975	907	834	751	1,00	0,95	0,90	0,85	0,80	0,74	1,00	0,95	0,89	0,84	0,78	0,72
	4	MED	1020	946	885	815	736	668	1,00	0,94	0,89	0,83	0,77	0,72	1,00	0,93	0,88	0,82	0,75	0,70
	3		815	736	668	589	526	452	1,00	0,92	0,85	0,77	0,71	0,63	1,00	0,91	0,83	0,75	0,69	0,61
	2	MIN	655	556	487	385	312	-	1,00	0,87	0,79	0,66	0,56	-	1,00	0,86	0,77	0,64	0,54	-
	1		510	406	291	208	-	-	1,00	0,83	0,65	0,49	-	-	1,00	0,81	0,63	0,47	-	-
9	6	MAX	1500	1438	1387	1315	1233	1063	1,00	0,96	0,94	0,90	0,85	0,76	1,00	0,96	0,93	0,88	0,84	0,74
	5		1365	1312	1259	1190	1127	931	1,00	0,97	0,93	0,89	0,85	0,74	1,00	0,96	0,93	0,88	0,84	0,72
	4	MED	1210	1167	1114	1055	964	803	1,00	0,97	0,93	0,89	0,83	0,72	1,00	0,97	0,92	0,88	0,82	0,70
	3		980	927	873	799	724	597	1,00	0,95	0,91	0,85	0,79	0,68	1,00	0,95	0,90	0,83	0,77	0,66
	2	MIN	830	761	702	633	575	447	1,00	0,93	0,87	0,80	0,75	0,62	1,00	0,92	0,86	0,79	0,73	0,60
	1		735	662	599	525	457	-	1,00	0,91	0,85	0,77	0,69	-	1,00	0,91	0,83	0,75	0,67	-

Qv = air flow

K1 = Total cooling emission correction factors

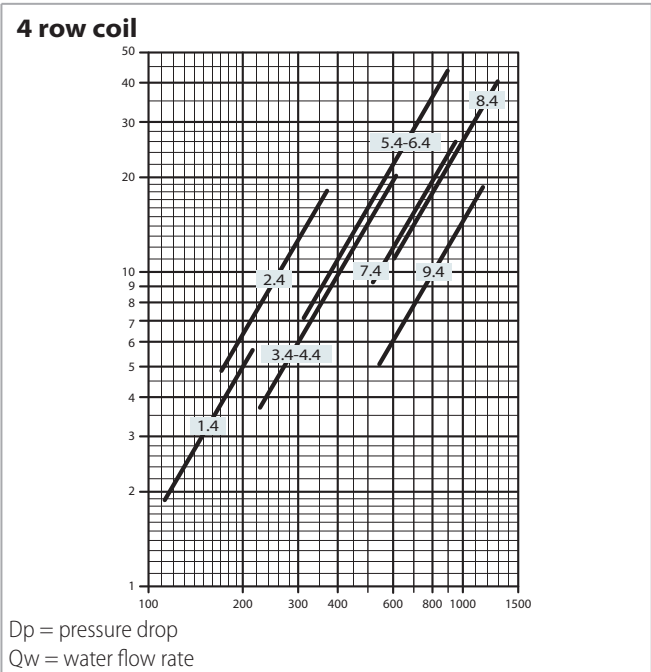
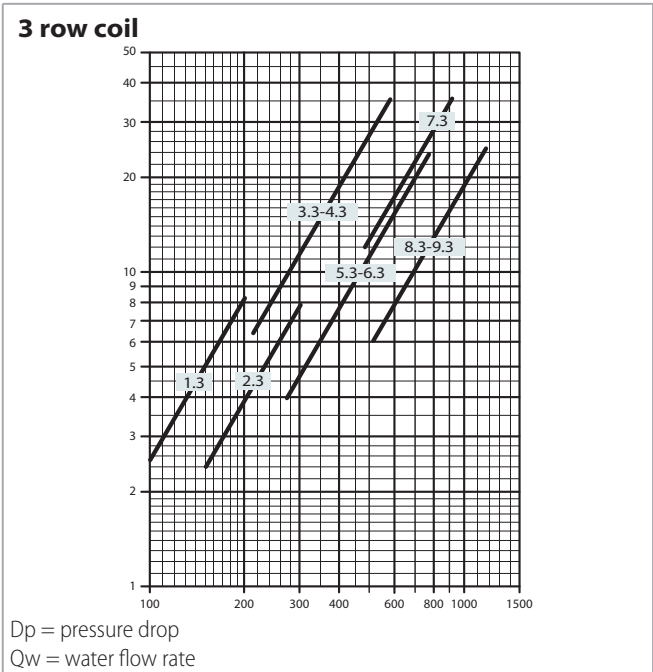
K2 = Sensible cooling emission and heating emission correction factors

Ap = Available static pressure

MAX = High speed; MED = Medium speed; MIN = Low speed

WATER SIDE PRESSURE DROP

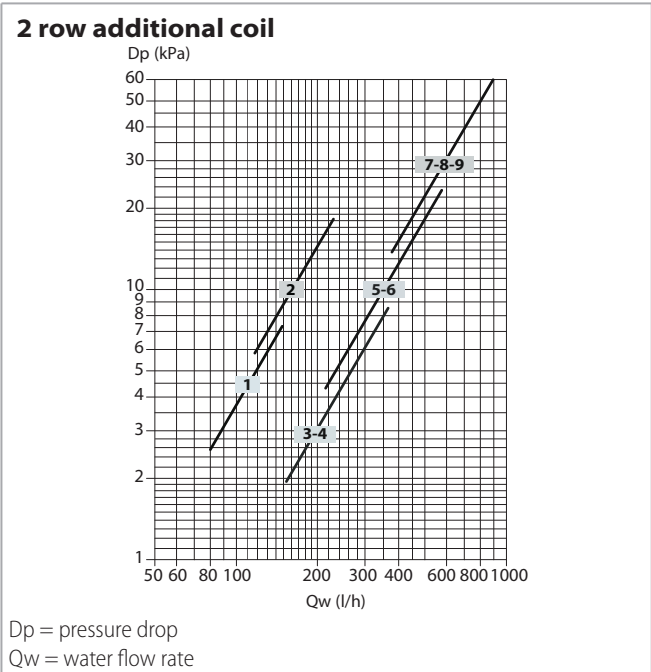
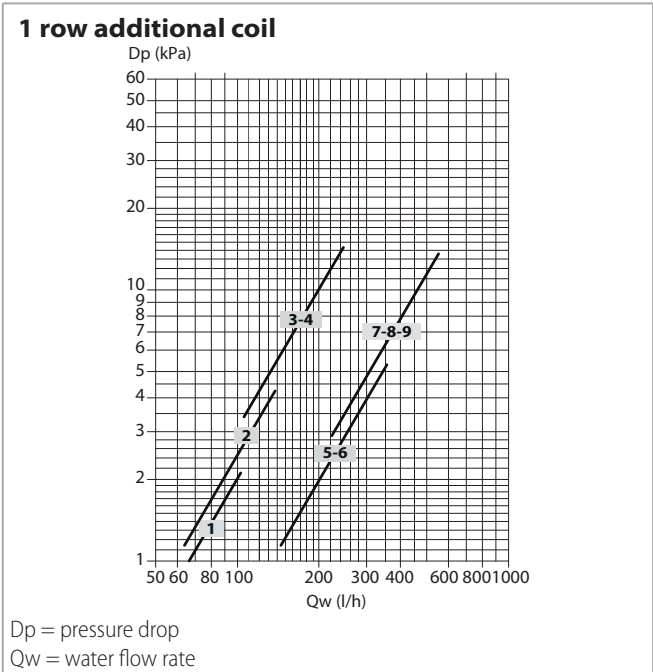
Main coil



The water pressure drop figures refer to a mean water temperature of 10 °C; for different temperatures, multiply the pressure drop figures by the correction factors K.

K correction factor	Mean water temperature (°C)						
	20	30	40	50	60	70	80
	0,94	0,90	0,86	0,82	0,78	0,74	0,70

Additional coil



The water pressure drop figures refer to a mean water temperature of 60 °C; for different temperatures, multiply the pressure drop figures by the correction factors K.

K correction factor	Mean water temperature (°C)			
	40	50	70	80
	1,12	1,06	0,94	0,88

OPERATION LIMITS

Description		UoM	Value
Water flow	Coil maximum working pressure	bars	16
		kPa	1600
	Lowest water inlet temperature	°C	+6 (*)
	Highest water inlet temperature	°C	+85
Power supply	Single-phase rated operating voltage	V/Hz	230/50

(*) for entering water temperatures below + 6 °C, contact the technical department

Attention: For the CH units the maximum installation height is 2,8 m.

Note: on heating it must be paid attention to rooms where the floor temperature is particularly low (for example less than 6 °C).

In this situation the floor can cool the lower layer of air to a level that stops the uniform diffusion of the hot air coming from the unit.

Coils water flow limits

3 row coil

Model		SEC/F 1.3-2T	SEC/F 2.3-2T	SEC/F 3.3-2T	SEC/F 4.3-2T	SEC/F 5.3-2T	SEC/F 6.3-2T	SEC/F 7.3-2T	SEC/F 8.3-2T	SEC/F 9.3-2T
Water flow rate Min.	l/h	100				150			200	
Water flow rate Max.	l/h	400	500	750		1000		1500	2000	

4 row coil

Model		SEC/F 1.4-2T	SEC/F 2.4-2T	SEC/F 3.4-2T	SEC/F 4.4-2T	SEC/F 5.4-2T	SEC/F 6.4-2T	SEC/F 7.4-2T	SEC/F 8.4-2T	SEC/F 9.4-2T
Water flow rate Min.	l/h	100		150				200	300	
Water flow rate Max.	l/h	650	750	1000			1500	2000		2250

1 row additional coil

Model		SEC/F 1.3-4T	SEC/F 2.3-4T	SEC/F 3.3-4T	SEC/F 4.3-4T	SEC/F 5.3-4T	SEC/F 6.3-4T	SEC/F 7.3-4T	SEC/F 8.3-4T	SEC/F 9.3-4T
Water flow rate Min.	l/h	50				100				
Water flow rate Max.	l/h	200	250	350		450	500	650	700	750

Model		SEC/F 1.4-4T	SEC/F 2.4-4T	SEC/F 3.4-4T	SEC/F 4.4-4T	SEC/F 5.4-4T	SEC/F 6.4-4T	SEC/F 7.4-4T	SEC/F 8.4-4T	SEC/F 9.4-4T
Water flow rate Min.	l/h	50				100				
Water flow rate Max.	l/h	200	250	350		450	500	650	700	750

2 row additional coil

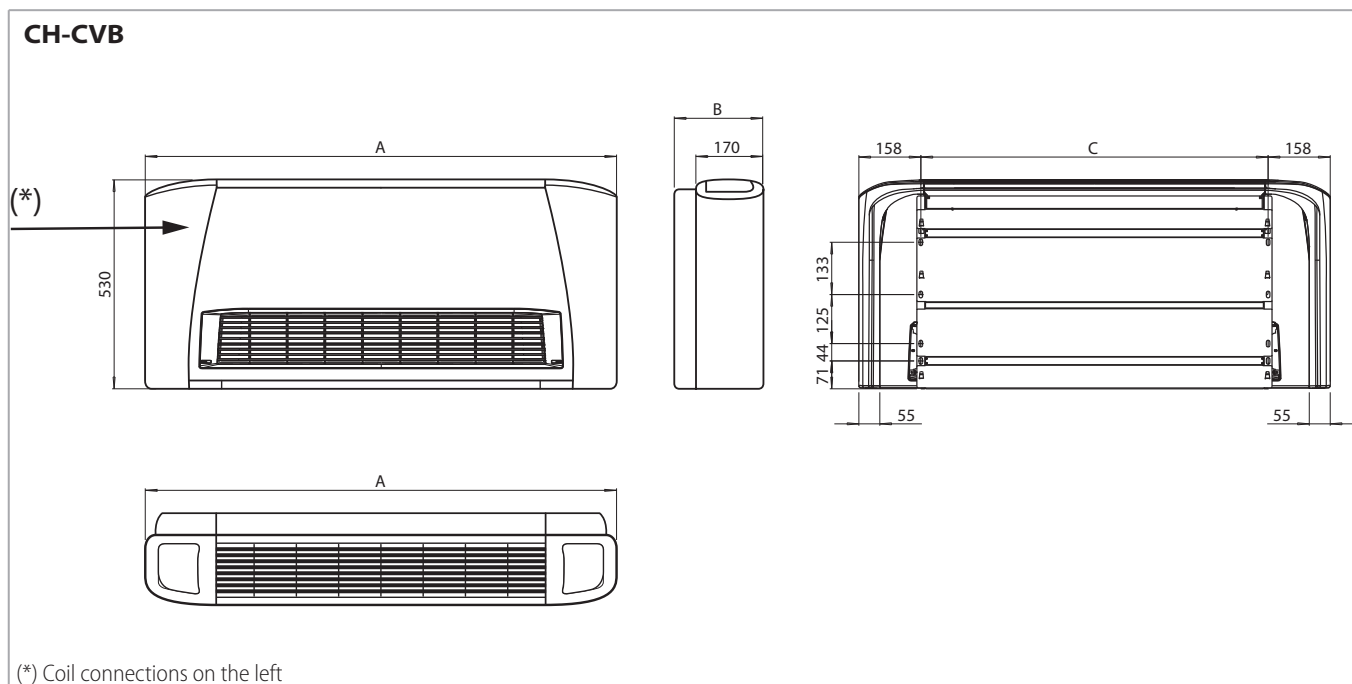
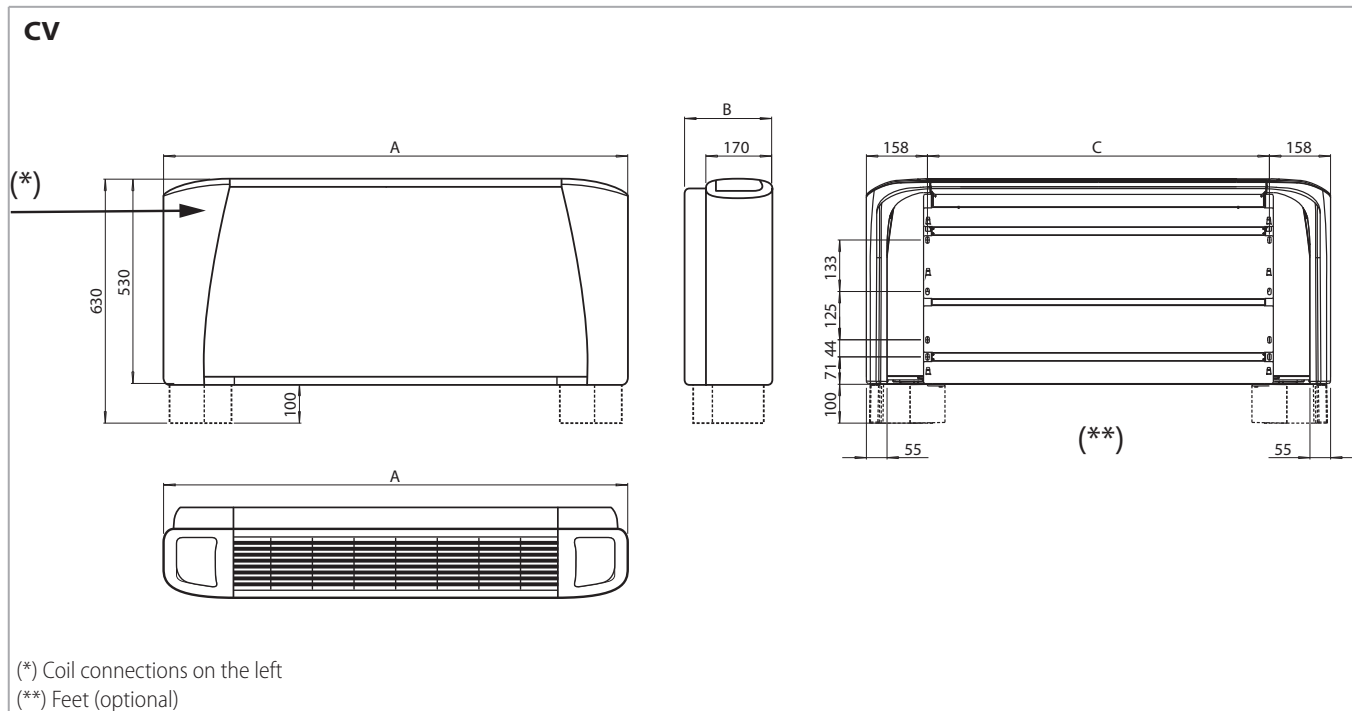
Model		SEC/F 1.3-4T/2R	SEC/F 2.3-4T/2R	SEC/F 3.3-4T/2R	SEC/F 4.3-4T/2R	SEC/F 5.3-4T/2R	SEC/F 6.3-4T/2R	SEC/F 7.3-4T/2R	SEC/F 8.3-4T/2R	SEC/F 9.3-4T/2R
Water flow rate Min.	l/h	50			100					
Water flow rate Max.	l/h	200	250	350		450	500	650	700	750

Motor electrical data - max. absorption

Model		SEC/F 1	SEC/F 2	SEC/F 3	SEC/F 4	SEC/F 5	SEC/F 6	SEC/F 7	SEC/F 8	SEC/F 9
Motor absorption	W	33	40	49	57	61	88	103	130	176
Current absorbed	A	0,16	0,18	0,23	0,26	0,27	0,39	0,47	0,58	0,78

DIMENSION, WEIGHT, WATER CONTENT - CV / CH-CVB VERSION

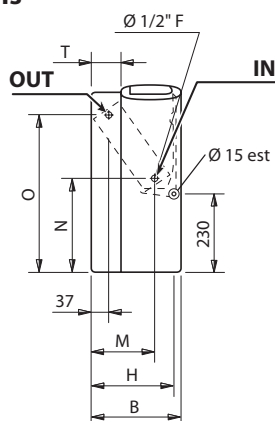
Dimensions



Model		SEC/F 1	SEC/F 2	SEC/F 3	SEC/F 4	SEC/F 5	SEC/F 6	SEC/F 7	SEC/F 8	SEC/F 9
A	mm	670	770	985		1200		1415		
B	mm	225							255	
C	mm	354	454	669		884		1099		

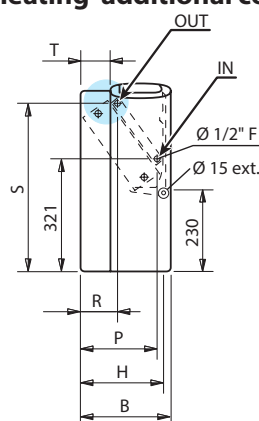
Coil connections

3 or 4 row coils

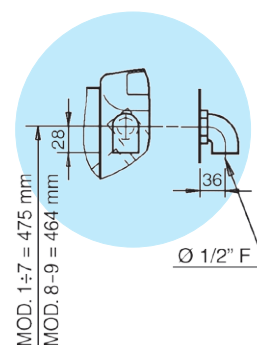


IN = Water inlet
OUT = Water outlet

Heating additional coil (1 or 2 row coil)

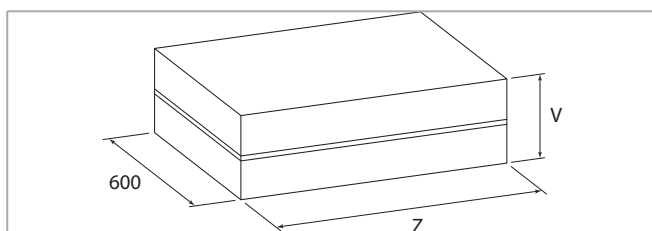


IN = Water inlet
OUT = Water outlet



Model		SEC/F 1	SEC/F 2	SEC/F 3	SEC/F 4	SEC/F 5	SEC/F 6	SEC/F 7	SEC/F 8	SEC/F 9
B	mm				225				255	
H	mm				205				235	
M	mm				145				170	
N	mm				260				270	
O	mm				460				450	
P	mm				185				210	
R	mm				105				110	
S	mm				475				465	
T	mm				55				85	

Packed unit



Model		1	2	3	4	5	6	7	8	9
V	mm				260					290
Z	mm	720	820	1035		1250			1465	

Weight (kg)

Weight with packaging

Model	1	2	3	4	5	6	7	8	9
3 rows	15,5	17,2	21,4	22,5	26,9	27,7	32,1	35,7	35,9
3+1 rows	16,2	18,0	22,6	23,7	28,4	29,2	33,9	37,5	37,7
3+2 rows	16,7	18,6	23,3	24,4	29,3	30,1	35,0	38,6	38,8
4 rows	16,0	18,0	22,4	23,5	28,1	29,0	33,6	37,2	37,4
4+1 rows	16,7	18,8	23,6	24,7	29,6	30,5	35,4	39,0	39,2

Weight without packaging

Model	1	2	3	4	5	6	7	8	9
3 rows	13,9	15,4	19,1	20,2	24,1	24,9	28,8	32,0	32,2
3+1 rows	14,6	16,2	20,3	21,4	25,6	26,4	30,6	33,8	34,0
3+2 rows	15,1	16,8	21,0	22,1	26,5	27,3	31,7	34,9	35,1
4 rows	14,4	16,2	20,1	21,2	25,3	26,2	30,3	33,5	33,7
4+1 rows	15,1	17,0	21,3	22,4	26,8	27,7	32,1	35,3	35,5

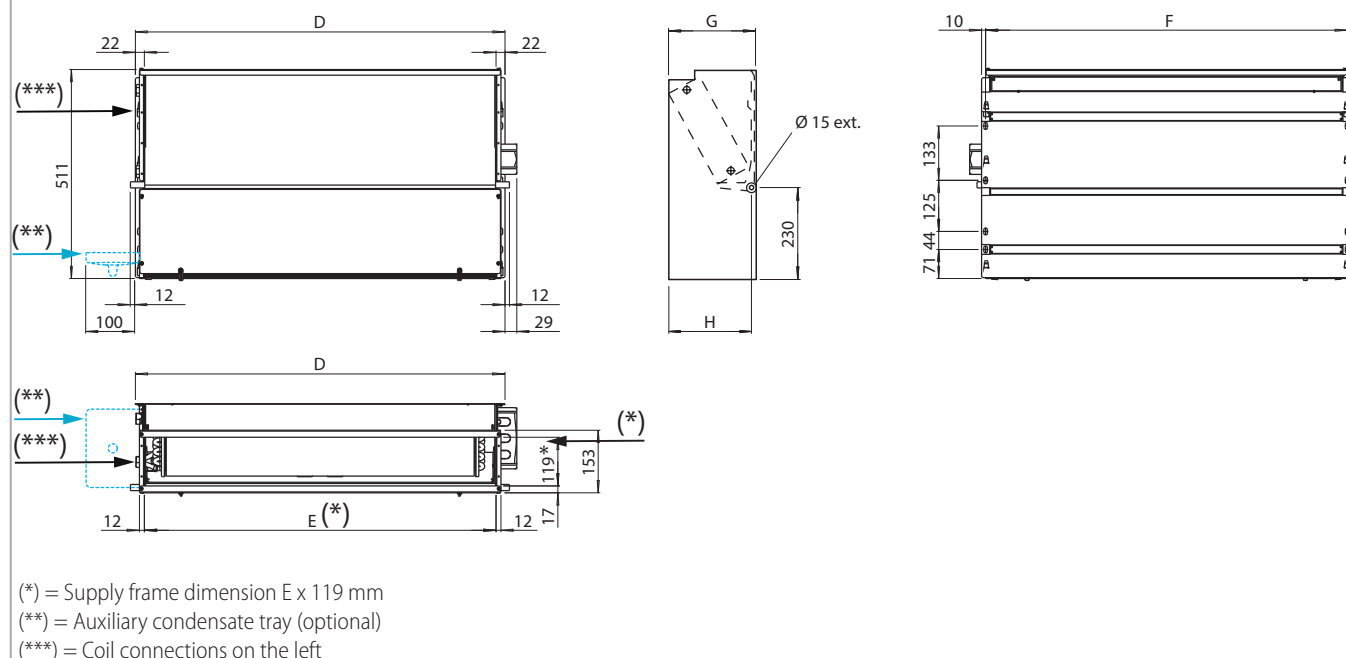
Water content (litres)

Model	SEC/F 1	SEC/F 2	SEC/F 3	SEC/F 4	SEC/F 5	SEC/F 6	SEC/F 7	SEC/F 8	SEC/F 9
3 rows	0,5	0,6	0,9	0,9	1,3	1,6	1,7	1,9	1,9
4 rows	0,7	0,8	1,3	1,3	1,7	2,2	2,4	2,8	2,8
+1 row	0,2	0,2	0,3	0,3	0,4	0,5	0,5	0,6	0,6
+2 rows	0,4	0,4	0,6	0,6	0,8	1,0	1,0	1,2	1,2

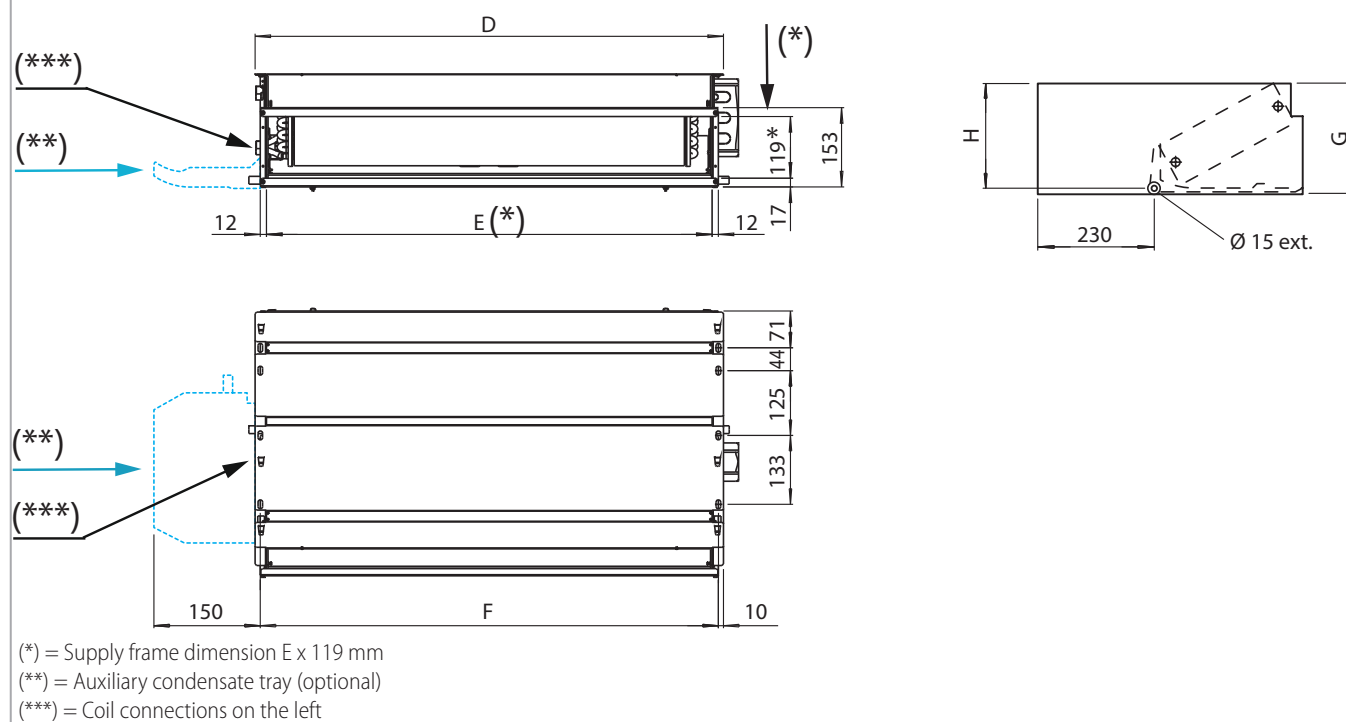
DIMENSION, WEIGHT AND WATER CONTENT - NC VERSION

Dimensions

NC Vertical Installation



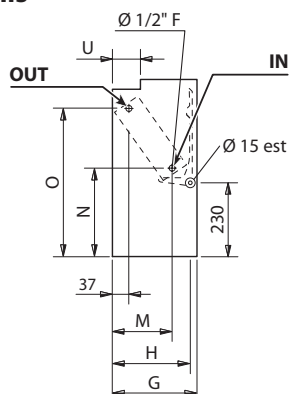
NC Horizontal Installation



Model		SEC/F 1	SEC/F 2	SEC/F 3	SEC/F 4	SEC/F 5	SEC/F 6	SEC/F 7	SEC/F 8	SEC/F 9
D	mm	374	474	689		904		1119		
E	mm	330	430	645		860		1075		
F	mm	354	454	669		884		1099		

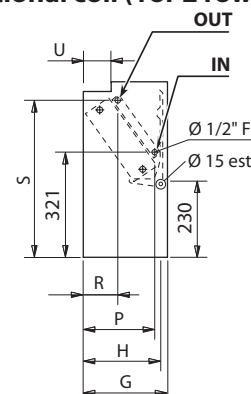
Coil connections

3 or 4 row coils



IN = Water inlet
OUT = Water outlet

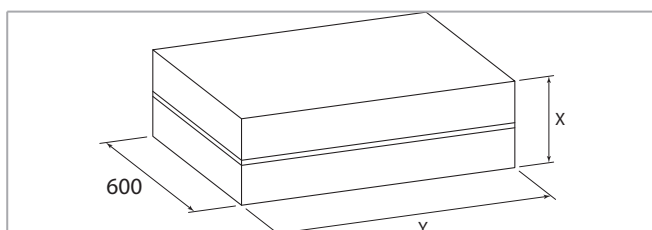
Heating additional coil (1 or 2 row coil)



IN = Water inlet
OUT = Water outlet

Model		SEC/F 1	SEC/F 2	SEC/F 3	SEC/F 4	SEC/F 5	SEC/F 6	SEC/F 7	SEC/F 8	SEC/F 9
G	mm				218					248
H	mm				205					235
M	mm				145					170
N	mm				260					270
O	mm				460					450
P	mm				185					210
R	mm				105					110
S	mm				475					465
U	mm				65					95

Packed unit



Model		1	2	3	4	5	6	7	8	9
X	mm				260					290
Y	mm	720		820		1035			1250	

Weight (kg)

Weight with packaging

Model	1	2	3	4	5	6	7	8	9
3 rows	12,2	13,6	17,1	18,1	21,9	22,8	27,0	30,2	30,4
3+1 rows	12,9	14,4	18,3	19,3	23,4	24,3	28,8	32,0	32,2
3+2 rows	13,4	15,0	19,0	20,0	24,3	25,2	29,9	33,1	33,3
4 rows	12,7	14,4	18,1	19,1	23,1	24,1	28,5	31,7	31,9
4+1 rows	13,4	15,2	19,3	20,3	24,6	25,6	30,3	33,5	33,7

Weight without packaging

Model	1	2	3	4	5	6	7	8	9
3 rows	10,6	11,8	15,3	16,3	19,6	20,5	24,2	27,1	27,3
3+1 rows	11,3	12,6	16,5	17,5	21,1	22,0	26,0	28,9	29,1
3+2 rows	11,8	13,2	17,2	18,2	22,0	22,9	27,1	30,0	30,2
4 rows	11,1	12,6	16,3	17,3	20,8	21,8	25,7	28,6	28,8
4+1 rows	11,8	13,4	17,5	18,5	22,3	23,3	27,5	30,4	30,6

Water content (litres)

Model	SEC/F 1	SEC/F 2	SEC/F 3	SEC/F 4	SEC/F 5	SEC/F 6	SEC/F 7	SEC/F 8	SEC/F 9
3 rows	0,5	0,6	0,9	0,9	1,3	1,6	1,7	1,9	1,9
4 rows	0,7	0,8	1,3	1,3	1,7	2,2	2,4	2,8	2,8
+1 row	0,2	0,2	0,3	0,3	0,4	0,5	0,5	0,6	0,6
+2 rows	0,4	0,4	0,6	0,6	0,8	1,0	1,0	1,2	1,2

CONTROLS FITTED ON THE UNIT

All the **SEC/F** units can be supplied with a wide range of electronic controls to be fitted that allows managing one single unit.

The room temperature can be controlled through electronic room thermostats fitted on the unit, with different solutions according to every ambient conditions.

The options range from the basic **MV-3V**, only for 3-speed control, to the highly sophisticated electronic

room thermostats **TMV-S** and **TMV-C**, that regulate the room temperature and are suitable when the user wants to set the fan speed.

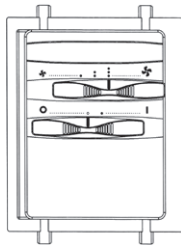
The most evolved version **TMV-AUT** allows both the manual and the automatic fan speed switch.

For the units **SEC/F** equipped with electrostatic filter or electric heater, the **TMV-R-IAQ** and **TMV-AUT-IAQ** controls are available.

Controls

MV-3V control

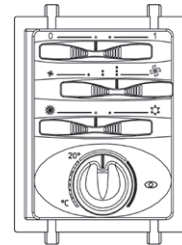
ID	Code
MV-3V	9060130



- ON/OFF switch
- Manual 3 speed switch without thermostatic control
- It allows to control the low temperature cut-out thermostat TMM

TMV-S control

ID	Code
TMV-S	9060140

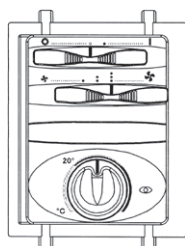


- ON/OFF switch
- Manual 3 speed switch
- Manual Summer/Winter switch
- Electronic room thermostat for fan control (ON-OFF)
- Electronic room thermostat for water valve control (ON-OFF)
- It allows to control the low temperature cut-out thermostat TMM
- It allows to control the chilled water valve (ON-OFF) and the electric heater (BEL) only in case that hot water is not used in winter (otherwise please use TMV-R-IAQ control with on/off switch for the electric heater)
- Presence of a LED signal when the thermostat is on.

Control power absorption: 1,5 VA

TMV-C control

ID	Code
TMV-C	9060133

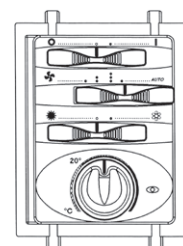


- ON/OFF switch
- Manual 3 speed switch
- It allows to control the summer or winter cycle with centralized and remote switch, or an automatic change-over fitted on the water pipe (for 2-tube installations only).
- Electronic room thermostat for fan control (ON-OFF)
- Electronic room thermostat for water valve control (ON-OFF)
- It allows to control the low temperature cut-out thermostat TME
- It allows to control the chilled water valve (ON-OFF) and the electric heater (BEL) only in case that hot water is not used in winter (otherwise please use TMV-R-IAQ control with on/off switch for the electric heater)
- Presence of a LED signal when the thermostat is on

Control power absorption: 1,5 VA

TMV-AUT control

ID	Code
TMV-AUT	9066319



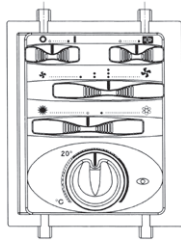
- ON/OFF switch
- Manual/automatic 3 speed switch
- Manual, automatic or centralized Summer/Winter switch
- Automatic speed switch: on Auto Mode there is the automatic speed selection in accordance to the difference between room temperature and setpoint. When the setpoint is reached the fan goes on OFF
- Electronic room thermostat for water valve control (ON-OFF)
- Simultaneous thermostatic control of the valves and fan
- It allows to control the low temperature cut-out thermostat NTC
- It allows to control the chilled water valve (ON-OFF) and the electric heater (BEL) only in case that hot water is not used in winter (otherwise please use TMV-AUT-IAQ control with on/off switch for the electric heater)
- It allows to control the summer or winter cycle with centralized and remote switch, or an automatic change-over fitted on the water pipe (for 2-tube installations only).
- Presence of a LED signal when the thermostat is on

P.N.: with 4 pipe installations and continuous chilled and hot water supply, it allows the automatic summer winter change-over in accordance to the room temperature (-1 °C = Winter, +1 °C = Summer, Neutral Zone 2 °C)

Control power absorption: 1,5 VA

TMV-R-IAQ control

ID	Code
TMV-R-IAQ	9063006

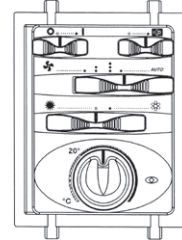


- ON/OFF switch
- Manual 3 speed switch
- Manual, automatic or centralized Summer/Winter switch
- Electric heater switch
- Electronic room thermostat for fan control (ON-OFF)
- Electronic room thermostat for water valve control (ON-OFF)
- It allows to control the low temperature cut-out thermostat TME
- It allows to control the chilled water valve (ON-OFF) and the electric heater (BEL)
- It allows to control the summer or winter cycle with centralized and remote switch, or an automatic change-over fitted on the water pipe (for 2-tube installations only).
- Presence of a LED signal when the thermostat is on

Control power absorption: 1,5 VA

TMV-AUT-IAQ control

ID	Code
TMV-AUT-IAQ	9066643



- ON/OFF switch
- Manual/automatic 3 speed switch
- Manual, automatic or centralized Summer/Winter switch
- Electric heater switch
- Automatic speed switch: on Auto Mode there is the automatic speed selection in accordance to the difference between room temperature and setpoint. When the setpoint is reached the fan goes on OFF
- Electronic room thermostat for water valve control (ON-OFF)
- It allows to control the low temperature cut-out thermostat NTC
- It allows to control the water valves (ON-OFF) and the electric heater managed as main heating element or as an integration element
- It allows to control the summer/winter cycle with a centralized and remote switch or with an automatic change-over fitted on the water pipe (for 2-tube installations only).
- Presence of a LED signal when the thermostat is on

P.N.: with 4 pipe installations and continuous chilled and hot water supply, it allows the automatic summer winter change-over in accordance to the room temperature (-1 °C = Winter, +1 °C = Summer, Neutral Zone 2 °C)

Control power absorption: 1,5 VA

ELECTRONIC WALL CONTROLS

All the **SEC/F** units can be supplied with a wide range of electronic wall controls that allows managing one single unit or several units (by using Dip-Switches or the power units).

The room temperature can be controlled through electronic room thermostats fitted on the unit, with different solutions according to every ambient conditions.

The options range from the basic **WM-3V**, only for 3-speed control, to the highly sophisticated **WM-T**, **WM-TQR** and **T2T** electronic room thermostats, that regulate the room temperature precisely and are suitable when the user wants to set the fan speed.

The most evolved **WM-AU**, **T-MB2 SW** and **WM-503-AC-EC** versions allow both the manual and the automatic speed switch.

Controls

WM-3V control

ID	Code
WM-3V	9066642



- ON/OFF switch
- Manual 3 speed switch without thermostatic control
- It does not control the valves
- It allows to control the low temperature cut-out thermostat TMM

Dimensions: 75x75x30 mm

WM-T control

ID	Code
WM-T	9066630E



- ON/OFF switch
- Manual 3 speed switch
- Manual Summer/Winter switch
- Electronic room thermostat for fan control (ON-OFF)
- Electronic room thermostat for valve control (ON-OFF) (the fan keeps working)
- It allows to control the low temperature cut-out thermostat TMM
- It allows to control the chilled water valve (ON-OFF) and the electric heater (BEL) only in case that hot water is not used in winter (otherwise please use WM-TQR control with on/off switch for the electric heater)
- Presence of a LED signal when the thermostat is on

Control power absorption: 0,25 VA

Dimensions: 135x86x31 mm

WM-TQR control

ID	Code
WM-TQR	9066631E



- ON/OFF switch
- Manual 3 speed switch
- Manual, automatic or centralized Summer/Winter switch
- Electric heater/IAQ filter activation switch
- Electronic room thermostat for fan control (ON-OFF)
- Electronic room thermostat for water valve control (ON-OFF)
- Simultaneous thermostatic control of the valves and fan
- It allows to control the low temperature cut-out thermostat NTC
- It allows to control the water valves (ON-OFF) and the electric heater managed as main heating element or as an integration element
- Energy saving function
- Presence of a LED signal when the thermostat is on

Control power absorption: 1 VA

Dimensions: 135x86x31 mm

WM-AU controls

ID	Code
WM-AU	9066632E



The control must always be connected with UPM-AU power unit (fitted on the unit) or with UP-AU power unit (with separate packaging).

- ON/OFF switch
- Manual/automatic 3 speed switch
- Manual, automatic or centralized Summer/Winter switch
- Summer/Winter/Fan/Auto mode switch
- Electric heater/IAQ filter activation switch
- Electronic room thermostat for fan and water valves control (ON-OFF)
- Simultaneous thermostatic control of the valves and fan
- It allows to use the low temperature cut-out thermostat NTC mounted on the power unit
- It allows to control the water valves (ON-OFF) and the electric heater managed as main heating element or as an integration element
- Energy saving function
- Presence of a LED signal when the thermostat is on

P.N.: with 4 pipe installations and continuous chilled and hot water supply, it allows the automatic summer winter change-over in accordance to the room temperature (-1 °C = Winter, +1 °C = Summer, Neutral Zone 2 °C)

Control power absorption: see the UP-AU power unit

Dimensions: 135x86x24 mm

T-MB2 SW control

ID	Code
T-MB2 SW	9066994ESW



The control must always be connected with UPM-AU power unit (fitted on the unit) or with UP-AU power unit (with separate packaging).

Control with TFT 2,4" coloured graphic display for wall installation.

The main characteristics are:

- Management by keyboard
- Management of one single unit or of several units in Master/Slave mode
- ON/OFF switch
- Operation mode setting
- Setpoint configuration or setpoint variation by supervisory program (+/- 3°C of the set)
- Room temperature internal sensor, which can be defined as a priority compared to the return air sensor on the fan coil
- Fan speed switch
- Advanced daily/weekly ON/OFF programming with 3 pre-settable weekly programs
- Viewing and editing of the unit operating parameters, alarm diagnostics and information about the unit (the viewable parameters depend from the control board model to which the T-MB2 SW control is connected)
- Activation/deactivation of the room temperature display
- Electrostatic filter management
- Possibility to use the T1 sensor which allows the return air control (fitted on the power unit)

Control power absorption: see the UP-AU power unit

Dimensions: 115x72x20 mm

WM-503-AC-EC control

ID	Code
WM-503-AC-EC	9066686



The control must always be connected with UP-503-AC-EC power unit (separately delivered).

WM-503-AC-EC control allows to regulate the room temperature in both, the heating and the cooling modes, it can control one or two valves and fan coil units with asynchronous motor or fan coil units with EC electronic motors.

The WM-503-AC-EC control for fan coils with valves, is designed to be installed in a 503 wall box.

Easy to use, it is equipped with a large and efficient backlit LCD screen with 4 keys.

The kit lets the thermostat be suitable for all plaques on the market and it is composed by: coloured covers (white, silver and anthracite), frames and adaptators.

- Manual or automatic 3 speed motor control for asynchronous versions
- EC motor control with 0-10V signal for the ECM versions
- Power supply by UP-503-AC-EC by means of the two-core cable
- Input for return air/water/change over probe
- ON/OFF / SET Reduction / remote SUMMER-WINTER digital input
- User interface with LCD display with adjustable back-light and 4 keys
- 2 and 4 pipe fan coil units control
- Button lock controller

Control power absorption: see the UP-503-AC-EC power unit

Dimensions: 68x52.2x(wall protrusion=12) mm

T2T control

ID	Code
T2T	9060174



Only for 2 pipe units only.

- ON/OFF switch
- Manual 3 speed switch
- Manual Summer/Winter switch
- Thermostatic control on the fan
- Thermostatic control on the valve and continuous fan operation
- Simultaneous thermostatic control of the valve and fan
- Cannot be used with speed switch (master-slave)

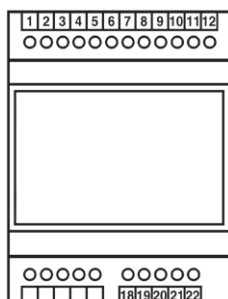
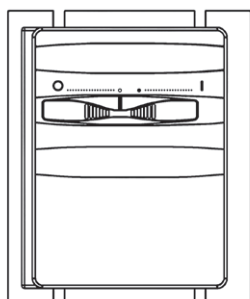
Control power absorption: 1,5 VA

Dimensions: 128x75x25 mm

SPEED SWITCHES

SEL-V

ID	Code
SEL-V	9060136



For **CV-CVB** models.

- Speed switch (Slave)
- It allows to control up to 8 units with only one centralized wall control (1 speed switch for each unit)
- For WM-T and WM-TQR controls

SEL-CR

ID	Code
SEL-CR	9066311



For **CH-NC** models.

- Speed switch (Slave)
- It allows to control up to 8 units with only one centralized wall control (1 speed switch for each unit)
- For WM-T and WM-TQR controls

POWER UNIT

UP-AU

ID	Code	Description
UPM-AU	9066641	UP-AU power unit for WM-AU and T-MB2 SW remote controls, fitted on the unit
UP-AU	9066640	UP-AU power unit for WM-AU and T-MB2 SW remote controls, not fitted on the unit



Power unit to be installed on the fan coil (fan coil interface).

- It controls the fan and the valves of the fan coil
- It is connected to the electric supply
- It receives the information required from the remote control
- Possibility to use the NTC low temperature cut-out thermostat (optional) for the T1 function which allows the return air control
- Possibility to use the NTC low temperature cut-out thermostat (optional) for the T2 function which controls the summer/winter switch.
- Possibility to use the NTC low temperature cut-out thermostat (optional) for the T3 function as low temperature cut-out thermostat.
- It allows to control up to 10 units (1 master and 9 slaves)
- Max. network length: 100 meters
- Max cable length between control and first connected power unit: 20 meters

Power unit absorption: 2,3 VA

UP-503-AC-EC

ID	Code
UP-503-AC-EC	9066687



Power unit to be installed on the fan coil (fan coil interface).

- It controls the fan and the valves of the fan coil
- It is connected to the electric supply
- It receives from the WM-503-AC-EC remote control the information required to control the valves and the motor
- It allows to control up to 5 units (1 master and 4 slaves)
- Max. Network length: 100 meters
- Max cable length between control and first connected power unit: 20 meters

Power unit absorption: 2 VA

ACCESSORIES FOR CONTROLS

TME low temperature cut-out thermostat

ID	Code
TME	3021091



For CV – CH – CVB – NC models

- To be fitted between the coil fins
- When connecting the control, the TME probe cable must be separated from the power supply wires
- It stops the fan when the water temperature is lower than 38 °C and it starts the fan when is higher than 42 °C

To be used with the following controls: TMV-C and TMV-R-IAQ.

TMM low temperature cut-out thermostat

ID	Code
TMM	9053048



For CV – CH – CVB – NC models

- To be installed in contact with the hot water circuit
- For units working on heating only
- It stops the fan when the water temperature is lower than 30 °C and it starts the fan when is higher than 38 °C

To be used with the following controls: TMV-S and WM-T.

NTC low temperature cut-out thermostat

ID	Code
NTC	3021090



For CV – CH – CVB – NC models

- To be fitted between the coil fins
- When connecting the control, the NTC probe cable must be separated from the power supply wires
- It stops the fan when the water temperature is lower than 28 °C and it starts the fan when is higher than 33 °C

To use as:

- T1 function for the return air control
- T2 function which controls the summer/winter switch
- T3 function as low temperature cut-out thermostat

To be used with TMV-AUT, TMV-AUT-IAQ, WM-TQR controls and with UP-AU and UP-503-AC-EC power units.

Change-Over CH 15-25

ID	Code
CH 15-25	9053049



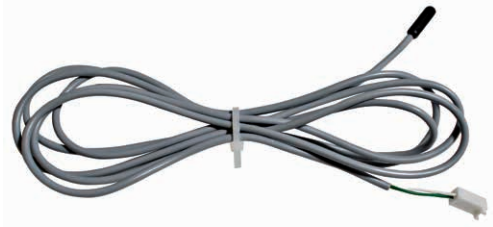
For CV – CH – CVB – NC models

- Automatic summer/winter switch to be installed in contact with the water circuit
- For 2 tube installations only (not to be used with 2 way valve)

To be used with the following controls: TMV-C, TMV-R-IAQ and WM-TQR.

T2 sensor

ID	Code
T2	9025310



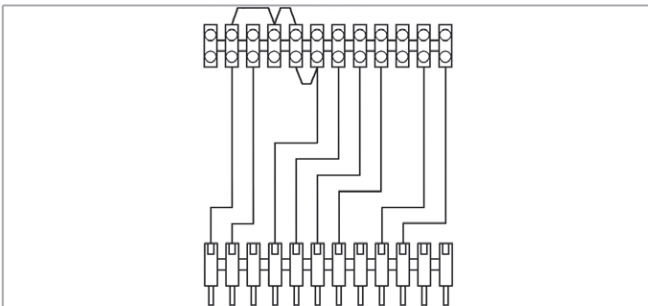
NTC probe type, to be placed on the water supply pipe upstream of the valves (not to be used with 2 way valves).

The T2 probe must be used as described below:

- Change-Over for the automatic switch of the operating mode. If water temperature is lower than 20 °C, cooling mode is set; on the other hand, if water temperature exceeds 30 °C, heating mode is set
- it can be used on units with electric heater and hot water supply. The T2 priority probe activates the electric heater or water valve, depending on the water temperature detected. If water temperature exceeds 34 °C, the water valve ON-OFF control is activated; on the other hand, if water temperature is lower than 30 °C, the electric heater is activated

Terminal board adaptor kit

ID	Code
KIT	9060103



To connect the units CV and CVB with the WM-3V, WM-T, WM-TQR or WM-AU controls, a terminal board adaptor kit is available on request.

CONSTRUCTION FEATURES

Outer casing

Made with strong synthetic lateral corners and from galvanized and pre-painted front steel panel.

The plastic top grid has fixed louvres and is reversible in order to distribute the air in two different directions.

Standard colours :

- Lateral corners and top grid: **Pantone 427C (light grey)**
- Outer casing: **RAL 9003 (bianco)**
- Other colours on request.

Inner casing

It is made with 1 mm galvanized steel, insulated with 3 mm polyolefin (PO) foam (B-s2-d0 EN 13501-1).

Fan assembly

The fans have aluminium or plastic blades directly keyed on the motor with double aspiration and they are dynamically and statically balanced during manufacture in order to have an extremely quiet operation.

Electronic motor

Three phase permanent magnet brushless electronic motor that is controlled with reconstructed current according to a BLAC sinusoidal wave.

The inverter board that controls the motor operation is powered by 230 Volt, single-phase and, with a switching system, it generates a three-phase frequency modulated, wave form power supply.

The electric power supply required for the machine is therefore single-phase with voltage of 230 V and frequency of 50-60 Hz.

Coil

It is manufactured from drawn copper tube and the aluminium fins are mechanically bonded onto the tube by an expansion process.

The coil has two Ø 1/2 inch BSP internal connections.

The coil has Ø 1/8" inch BSP air vent and drain.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

The hydraulic connections are on the left side facing the unit.

On request we can deliver the unit with the connections on the right end side. This operation can also be easily carried out on site during installation.

Condensate collection tray

Made of plastic (ABS UL94 HB) with a "L"-shaped plastic fitted on the inner casing.

In the CH-CVB and NC model the tray is insulated with 3 mm polyolefin (PO) foam B-s2-d0 EN 13501-1.

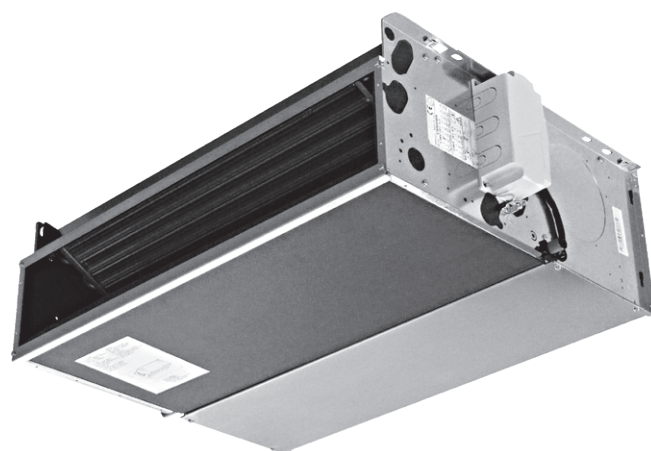
The outside diameter of the condensate discharge pipe is Ø 15 mm.

Filter

Polypropylene cellular fabric regenerating filter.

The filter frame of galvanized steel is inserted into special plastic sliding guides fastened to the internal structure for easy insertion and filter removal.

Filter presence is highlighted by a plastic front cover featuring the same colour as the top grid.



MAIN PERFORMANCES AND TECHNICAL CHARACTERISTICS

3 row coil - 2 pipe units

The following standard rating conditions are used:

COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

HEATING

Entering air temperature: + 20 °C

Water temperature: +45 °C E.W.T. +40 °C L.W.T.

MODEL		SEC/F-ECM 2.3-2T					SEC/F-ECM 4.3-2T					SEC/F-ECM 6.3-2T				
		1	3	5	7,5	10	1	3	5	7,5	10	1	3	5	7,5	10
Inverter power		MIN		MED		MAX	MIN		MED		MAX	MIN		MED		MAX
Air flow	m³/h	120	170	220	270	330	210	280	350	430	515	305	395	495	610	735
Cooling total emission	kW	0,73	0,97	1,18	1,37	1,59	1,41	1,80	2,18	2,57	2,95	1,96	2,44	2,93	3,44	3,96
Cooling sensible emission	kW	0,55	0,74	0,92	1,09	1,28	1,03	1,33	1,64	1,95	2,26	1,46	1,83	2,22	2,64	3,08
Heating emission	kW	0,77	1,04	1,29	1,52	1,80	1,42	1,84	2,26	2,69	3,14	1,96	2,46	3,00	3,55	4,14
Dp Cooling	kPa	2,2	3,6	5,1	6,7	8,6	7,9	12,0	17,0	22,6	28,9	5,5	8,0	11,1	14,8	19,0
Dp Heating	kPa	1,6	2,7	3,9	5,2	7,0	6,6	10,4	14,9	20,4	26,7	4,5	6,8	9,6	12,9	17,0
Fan	W	7,0	9,0	11,0	15,0	21,0	6,0	9,0	12,0	17,0	25,0	7,0	10,0	15,0	22,0	32,0
Sound power (Lw)	dB(A)	30	36	41	47	51	30	36	42	47	51	33	38	44	49	54
Sound pressure (Lp) ⁽¹⁾	dB(A)	21	27	32	38	42	21	27	33	38	42	24	29	35	40	45

MODEL		SEC/F-ECM 7.3-2T					SEC/F-ECM 9.3-2T				
		1	3	5	7,5	10	1	3	5	7,5	10
Inverter power		MIN		MED		MAX	MIN		MED		MAX
Air flow	m³/h	400	500	610	755	890	605	785	945	1175	1395
Cooling total emission	kW	2,60	3,13	3,68	4,36	4,94	3,45	4,22	4,82	5,60	6,26
Cooling sensible emission	kW	1,92	2,33	2,77	3,32	3,80	2,63	3,28	3,79	4,49	5,10
Heating emission	kW	2,56	3,13	3,72	4,43	5,08	3,74	4,65	5,41	6,46	7,38
Dp Cooling	kPa	10,5	14,5	19,4	26,1	32,6	8,9	12,7	16,1	21,1	25,9
Dp Heating	kPa	8,5	12,1	16,4	22,2	28,3	7,3	10,7	14,0	19,1	24,2
Fan	W	9,0	13,0	18,5	28,5	41,0	16,0	25,0	41,0	65,0	99,0
Sound power (Lw)	dB(A)	37	43	48	53	57	44	50	55	60	64
Sound pressure (Lp) ⁽¹⁾	dB(A)	28	34	39	44	48	35	41	46	51	55

(1) The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

4 row coil - 2 pipe units

The following standard rating conditions are used:

COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

HEATING

Entering air temperature: + 20 °C

Water temperature: +45 °C E.W.T. +40 °C L.W.T.

MODEL		SEC/F-ECM 2.4-2T					SEC/F-ECM 4.4-2T					SEC/F-ECM 6.4-2T				
Inverter power		1	3	5	7,5	10	1	3	5	7,5	10	1	3	5	7,5	10
		MIN		MED		MAX	MIN		MED		MAX	MIN		MED		MAX
Air flow	m ³ /h	115	160	210	260	325	200	265	340	415	505	290	375	475	590	720
Cooling total emission	kW	0,77	1,06	1,32	1,57	1,86	1,43	1,83	2,27	2,71	3,17	2,05	2,59	3,19	3,84	4,51
Cooling sensible emission	kW	0,56	0,78	0,98	1,19	1,42	1,03	1,34	1,67	2,02	2,39	1,48	1,89	2,34	2,84	3,38
Heating emission	kW	0,78	1,08	1,37	1,65	1,98	1,42	1,83	2,30	2,77	3,32	2,02	2,59	3,23	3,93	4,68
Dp Cooling	kPa	3,2	5,5	8,0	11,0	14,8	4,0	6,1	8,9	12,3	16,1	8,2	12,4	17,8	24,8	33,0
Dp Heating	kPa	2,6	4,7	7,1	9,9	13,6	3,1	4,9	7,3	10,2	13,7	6,6	10,3	15,1	21,4	29,1
Fan	W	7,0	8,8	11,0	14,6	21,0	6,0	9,0	12,0	17,0	25,0	7,0	10,0	15,0	22,0	32,0
Sound power (Lw)	dB(A)	30	36	41	47	51	30	36	42	47	51	33	38	44	49	54
Sound pressure (Lp) ⁽¹⁾	dB(A)	21	27	32	38	42	21	27	33	38	42	24	29	35	40	45

MODEL		SEC/F-ECM 7.4-2T					SEC/F-ECM 9.4-2T				
Inverter power		1	3	5	7,5	10	1	3	5	7,5	10
		MIN		MED		MAX	MIN		MED		MAX
Air flow	m ³ /h	380	475	585	735	875	575	755	910	1145	1365
Cooling total emission	kW	2,61	3,20	3,82	4,61	5,30	3,59	4,49	5,21	6,18	7,04
Cooling sensible emission	kW	1,90	2,34	2,82	3,44	3,99	2,69	3,40	3,99	4,81	5,53
Heating emission	kW	2,57	3,17	3,84	4,66	5,43	3,76	4,81	5,63	6,84	7,93
Dp Cooling	kPa	7,3	10,5	14,3	20,0	25,6	6,3	9,3	12,1	16,4	20,8
Dp Heating	kPa	5,9	8,6	12,0	16,9	22,0	5,6	8,7	11,4	16,1	20,9
Fan	W	9,0	13,0	18,5	28,5	41,0	16,0	25,0	41,0	65,0	99,0
Sound power (Lw)	dB(A)	37	43	48	53	57	44	50	55	60	64
Sound pressure (Lp) ⁽¹⁾	dB(A)	28	34	39	44	48	35	41	46	51	55

(1) The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

3+1 row coil - 4 pipe units

The following standard rating conditions are used:

COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

HEATING

Entering air temperature: + 20 °C

Water temperature: +65 °C E.W.T. +55 °C L.W.T.

MODEL		SEC/F-ECM 2.3-4T					SEC/F-ECM 4.3-4T					SEC/F-ECM 6.3-4T				
Inverter power		1	3	5	7,5	10	1	3	5	7,5	10	1	3	5	7,5	10
		MIN		MED		MAX	MIN		MED		MAX	MIN		MED		MAX
Air flow	m ³ /h	120	170	220	270	330	210	280	350	430	515	305	395	495	610	735
Cooling total emission	kW	0,73	0,97	1,18	1,37	1,59	1,41	1,80	2,18	2,57	2,95	1,96	2,44	2,93	3,44	3,96
Cooling sensible emission	kW	0,55	0,74	0,92	1,09	1,28	1,03	1,33	1,64	1,95	2,26	1,46	1,83	2,22	2,64	3,08
Heating emission	kW	0,71	0,91	1,08	1,24	1,43	1,29	1,57	1,85	2,13	2,41	1,76	2,10	2,45	2,83	3,22
Dp Cooling	kPa	2,3	3,8	5,4	7,2	9,4	7,3	11,5	16,0	21,6	28,1	6,4	9,6	13,2	17,7	23,3
Dp Heating	kPa	1,0	1,6	2,1	2,7	3,5	3,6	5,2	6,9	8,8	11,0	1,2	1,7	2,2	2,9	3,6
Fan	W	7,0	9,0	11,0	14,5	21,0	6,0	9,0	12,0	17,0	25,0	7,0	10,0	15,0	22,0	32,0
Sound power (Lw)	dB(A)	30	36	41	47	51	30	36	42	47	51	33	38	44	49	54
Sound pressure (Lp) ⁽¹⁾	dB(A)	21	27	32	38	42	21	27	33	38	42	24	29	35	40	45

MODEL		SEC/F-ECM 7.3-4T					SEC/F-ECM 9.3-4T				
Inverter power		1	3	5	7,5	10	1	3	5	7,5	10
		MIN		MED		MAX	MIN		MED		MAX
Air flow	m ³ /h	400	500	610	755	890	605	785	945	1175	1395
Cooling total emission	kW	2,60	3,13	3,68	4,36	4,94	3,45	4,22	4,82	5,60	6,26
Cooling sensible emission	kW	1,92	2,33	2,77	3,32	3,80	2,63	3,28	3,79	4,49	5,10
Heating emission	kW	2,33	2,72	3,12	3,63	4,06	2,99	3,58	4,05	4,69	5,24
Dp Cooling	kPa	9,7	13,8	18,4	24,8	31,8	8,9	12,7	16,1	21,1	25,9
Dp Heating	kPa	2,4	3,1	4,0	5,2	6,3	3,7	5,1	6,3	8,2	9,9
Fan	W	9,0	13,0	18,5	28,5	41,0	16,0 ⁽²⁾	25,0	41,0 ⁽²⁾	65,0	99,0 ⁽²⁾
Sound power (Lw)	dB(A)	37	43	48	53	57	44	50	55	60	64
Sound pressure (Lp) ⁽¹⁾	dB(A)	28	34	39	44	48	35	41	46	51	55

(1) The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

(2) Motor absorption in Heating mode: MIN: 18 W / MED: 46 W / MAX: 111 W

COOLING EMISSION

3 row coil units

Entering air temperature: 27 °C – R.H.: 50%

Model	Vdc	Qv m³/h	WT: 7 / 12 °C				WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
			Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
SEC/F-ECM 2.3-2T	10	330	1,72	1,27	299	7,9	1,53	1,19	266	6,4	1,12	1,04	196	3,7	0,90	0,90	159	2,5
	7,5	270	1,49	1,08	258	6,1	1,32	1,02	230	4,9	0,98	0,88	171	2,9	0,77	0,77	135	1,9
	5	220	1,27	0,91	220	4,6	1,13	0,86	196	3,7	0,84	0,74	147	2,2	0,66	0,66	115	1,4
	3	170	1,04	0,74	181	3,3	0,93	0,69	162	2,7	0,70	0,60	121	1,6	0,53	0,53	93	1,0
	1	120	0,79	0,55	137	2,0	0,71	0,52	123	1,6	0,53	0,45	93	1,0	0,39	0,39	69	0,6
SEC/F-ECM 4.3-2T	10	515	3,17	2,25	550	32,9	2,84	2,11	493	27,0	2,14	1,84	373	16,3	1,62	1,62	283	9,9
	7,5	430	2,76	1,94	478	25,8	2,48	1,82	429	21,2	1,88	1,59	326	12,8	1,40	1,40	243	7,6
	5	350	2,35	1,63	406	19,3	2,11	1,53	365	15,9	1,60	1,33	278	9,7	1,18	1,18	204	5,6
	3	280	1,93	1,33	334	13,7	1,74	1,25	300	11,3	1,33	1,08	229	6,9	0,96	0,96	167	3,9
	1	210	1,52	1,03	262	8,9	1,37	0,97	236	7,4	1,05	0,84	181	4,6	0,74	0,74	129	2,5
SEC/F-ECM 6.3-2T	10	735	4,26	3,07	738	21,6	3,81	2,89	661	17,6	2,86	2,52	498	10,6	2,21	2,21	386	6,7
	7,5	610	3,70	2,63	641	16,8	3,32	2,48	574	13,8	2,50	2,16	434	8,3	1,90	1,90	331	5,1
	5	495	3,15	2,21	544	12,6	2,82	2,08	488	10,3	2,14	1,81	370	6,3	1,59	1,59	277	3,7
	3	395	2,62	1,83	453	9,1	2,36	1,71	407	7,5	1,79	1,49	310	4,6	1,32	1,32	229	2,7
	1	305	2,12	1,46	365	6,3	1,90	1,37	329	5,2	1,45	1,19	251	3,2	1,05	1,05	182	1,8
SEC/F-ECM 7.3-2T	10	890	5,31	3,79	921	37,1	4,04	3,56	702	30,4	3,60	3,11	627	18,5	2,74	2,74	478	11,3
	7,5	755	4,69	3,31	812	29,7	4,21	3,11	729	24,4	3,20	2,71	555	14,9	2,39	2,39	416	8,8
	5	610	3,96	2,76	684	22,0	3,56	2,60	615	18,1	2,71	2,26	470	11,1	1,99	1,99	346	6,4
	3	500	3,37	2,33	581	16,5	3,03	2,19	523	13,6	2,32	1,90	400	8,4	1,69	1,69	292	4,8
	1	400	2,79	1,92	482	11,9	2,52	1,80	434	9,8	1,93	1,57	333	6,1	1,38	1,38	240	3,4
SEC/F-ECM 9.3-2T	10	1395	6,76	5,06	1180	30,3	6,01	4,76	1051	24,7	4,43	4,17	780	14,6	3,63	3,63	642	10,4
	7,5	1175	6,05	4,46	1051	24,7	5,39	4,20	938	20,2	3,99	3,67	698	12,0	3,21	3,21	563	8,2
	5	945	5,19	3,77	900	18,8	4,64	3,55	804	15,4	3,46	3,10	602	9,3	2,71	2,71	474	6,1
	3	785	4,55	3,27	787	14,8	4,07	3,07	704	12,2	3,05	2,68	529	7,4	2,35	2,35	409	4,6
	1	605	3,72	2,63	642	10,4	3,33	2,47	575	8,6	2,51	2,15	434	5,2	1,90	1,90	330	3,1

WT: Water temperature
Vdc: Inverter power
Qv: Air flow
Pc: Cooling total emission
Ps: Cooling sensible emission
Qw: Water flow rate
Dp(c): Dp Cooling

Entering air temperature 26 °C – R.H.: 50%

Model	Vdc	Qv m³/h	WT: 7 / 12 °C				WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
			Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
SEC/F-ECM 2.3-2T	10	330	1,52	1,19	265	6,4	1,33	1,12	232	5,0	0,99	0,99	173	3,0	0,82	0,82	145	2,1
	7,5	270	1,32	1,02	229	4,9	1,15	0,95	201	3,9	0,84	0,84	147	2,2	0,70	0,70	123	1,6
	5	220	1,13	0,86	195	3,7	0,99	0,80	172	3,0	0,69	0,69	121	1,6	0,60	0,60	105	1,2
	3	170	0,93	0,70	161	2,7	0,82	0,65	142	2,1	0,57	0,56	100	1,1	0,48	0,48	85	0,8
	1	120	0,70	0,52	122	1,6	0,62	0,48	108	1,3	0,44	0,41	77	0,7	0,36	0,36	63	0,5
SEC/F-ECM 4.3-2T	10	515	2,82	2,12	490	26,9	2,49	1,98	433	21,5	1,78	1,70	311	11,8	1,48	1,48	259	8,5
	7,5	430	2,46	1,83	426	21,1	2,18	1,71	377	16,9	1,57	1,47	272	9,4	1,28	1,28	223	6,5
	5	350	2,10	1,54	362	15,8	1,86	1,44	323	12,7	1,34	1,24	233	7,1	1,08	1,08	187	4,8
	3	280	1,73	1,25	298	11,2	1,53	1,17	265	9,0	1,11	1,01	193	5,1	0,88	0,88	153	3,3
	1	210	1,36	0,97	234	7,3	1,20	0,91	208	5,9	0,88	0,78	153	3,4	0,68	0,68	118	2,1
SEC/F-ECM 6.3-2T	10	735	3,79	2,89	658	17,6	3,34	2,71	580	14,0	2,37	2,33	413	7,6	2,02	2,02	353	5,7
	7,5	610	3,30	2,48	571	13,7	2,91	2,32	504	11,0	2,08	2,00	361	6,0	1,74	1,74	302	4,3
	5	495	2,81	2,08	485	10,3	2,48	1,95	429	8,2	1,78	1,68	309	4,6	1,46	1,46	253	3,2
	3	395	2,34	1,72	404	7,5	2,07	1,61	358	6,0	1,50	1,38	260	3,4	1,21	1,21	209	2,3
	1	305	1,89	1,37	326	5,1	1,68	1,28	289	4,1	1,22	1,10	211	2,3	0,96	0,96	167	1,5
SEC/F-ECM 7.3-2T	10	890	4,74	3,57	822	30,4	4,19	3,34	727	24,3	3,00	2,88	523	13,4	2,50	2,50	437	9,7
	7,5	755	4,19	3,12	725	24,3	3,70	2,92	642	19,5	2,67	2,51	464	10,9	2,18	2,18	381	7,6
	5	610	3,54	2,60	611	18,0	3,13	2,53	542	14,5	2,27	2,10	394	8,2	1,82	1,82	317	5,5
	3	500	3,01	2,19	520	13,6	2,67	2,05	462	10,9	1,95	1,77	337	6,2	1,54	1,54	268	4,1
	1	400	2,50	1,80	431	9,8	2,22	1,69	383	7,9	1,63	1,45	281	4,5	1,27	1,27	220	2,9
SEC/F-ECM 9.3-2T	10	1395	6,00	4,77	1048	24,5	5,25	4,47	920	19,5	3,96	3,96	699	12,0	3,30	3,30	585	8,8
	7,5	1175	5,37	4,21	934	20,0	4,71	3,94	821	16,0	3,50	3,50	613	9,6	2,92	2,92	513	7,0
	5	945	4,61	3,56	801	15,3	4,06	3,33	705	12,2	2,96	2,96	515	7,0	2,47	2,47	432	5,1
	3	785	4,05	3,08	700	12,1	3,56	2,88	617	9,7	2,52	2,48	438	5,3	2,15	2,15	373	3,9
	1	605	3,31	2,48	572	8,5	2,92	2,32	505	6,8	2,08	1,99	361	3,7	1,74	1,74	302	2,6

WT: Water temperature
 Vdc: Inverter power
 Qv: Air flow
 Pc: Cooling total emission
 Ps: Cooling sensible emission
 Qw: Water flow rate
 Dp(c): Dp Cooling

Entering air temperature: 25 °C – R.H.: 50%

Model	Vdc	WT: 7 / 12 °C					WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
		Qv m³/h	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
SEC/F-ECM 2.3-2T	10	330	1,33	1,12	232	5,0	1,13	1,04	198	3,8	0,90	0,90	159	2,5	0,74	0,74	131	1,8
	7,5	270	1,15	0,96	200	3,9	0,99	0,89	172	3,0	0,77	0,78	135	1,9	0,63	0,63	111	1,3
	5	220	0,99	0,80	171	3,0	0,85	0,75	147	2,3	0,66	0,66	115	1,4	0,54	0,54	94	1,0
	3	170	0,81	0,65	141	2,1	0,70	0,60	122	1,6	0,53	0,53	93	1,0	0,44	0,44	77	0,7
	1	120	0,62	0,48	108	1,3	0,53	0,45	93	1,0	0,39	0,39	69	0,6	0,32	0,32	57	0,4
SEC/F-ECM 4.3-2T	10	515	2,49	1,99	432	21,6	2,15	1,85	375	16,7	1,63	1,63	284	10,1	1,34	1,34	235	7,1
	7,5	430	2,17	1,71	376	16,9	1,88	1,59	327	13,1	1,40	1,40	244	7,7	1,16	1,16	202	5,5
	5	350	1,85	1,44	320	12,7	1,61	1,34	278	9,9	1,18	1,18	205	5,7	0,97	0,97	170	4,0
	3	280	1,52	1,17	264	9,0	1,33	1,09	230	7,1	0,97	0,97	168	4,0	0,80	0,80	139	2,8
	1	210	1,20	0,91	207	5,9	1,05	0,84	181	4,6	0,75	0,74	130	2,5	0,62	0,62	108	1,8
SEC/F-ECM 6.3-2T	10	735	3,34	2,71	579	14,1	2,88	2,53	501	10,8	2,22	2,22	387	6,8	1,82	1,82	319	4,8
	7,5	610	2,90	2,33	503	11,0	2,51	2,17	436	8,5	1,90	1,91	331	5,2	1,57	1,57	274	3,6
	5	495	2,47	1,96	428	8,3	2,14	1,82	371	6,4	1,60	1,60	277	3,8	1,32	1,32	229	2,7
	3	395	2,07	1,61	357	6,0	1,80	1,50	310	4,7	1,33	1,33	230	2,7	1,10	1,10	190	1,9
	1	305	1,67	1,28	288	4,1	1,45	1,19	251	3,2	1,06	1,05	183	1,8	0,87	0,87	151	1,3
SEC/F-ECM 7.3-2T	10	890	4,18	3,35	726	24,4	3,63	3,12	631	18,9	2,74	2,74	479	11,5	2,26	2,26	396	8,1
	7,5	755	3,69	2,93	640	19,6	3,21	2,73	557	15,2	2,40	2,40	417	9,0	1,98	1,98	345	6,4
	5	610	3,12	2,44	541	14,5	2,72	2,27	471	11,3	2,00	2,00	347	6,5	1,65	1,65	287	4,6
	3	500	2,66	2,06	460	10,9	2,32	1,92	401	8,5	1,69	1,70	293	4,9	1,40	1,40	243	3,4
	1	400	2,21	1,69	382	7,9	1,93	1,57	334	6,2	1,33	1,39	230	3,4	1,15	1,15	200	2,4
SEC/F-ECM 9.3-2T	10	1395	5,25	4,48	920	19,5	4,49	4,18	789	14,9	3,63	3,63	642	10,4	2,97	2,97	528	7,4
	7,5	1175	4,70	3,95	820	15,9	4,04	3,68	706	12,2	3,21	3,22	563	8,2	2,63	2,63	464	5,8
	5	945	4,05	3,33	703	12,2	3,49	3,11	607	9,4	2,72	2,72	474	6,1	2,23	2,23	391	4,3
	3	785	3,56	2,89	616	9,6	3,07	2,69	532	7,5	2,36	2,36	409	4,7	1,94	1,94	337	3,2
	1	605	2,91	2,32	503	6,8	2,52	2,16	436	5,2	1,91	1,90	331	3,1	1,57	1,57	273	2,1

WT: Water temperature
Vdc: Inverter power
Qv: Air flow
Pc: Cooling total emission
Ps: Cooling sensible emission
Qw: Water flow rate
Dp(c): Dp Cooling

4 row coil units

Entering air temperature: 27 °C – R.H.: 50%

Model	Vdc	Qv m³/h	WT: 7 / 12 °C				WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
			Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
SEC/F-ECM 2.4-2T	10	325	2,00	1,42	348	16,9	1,79	1,33	312	13,8	1,35	1,16	235	8,3	1,02	1,02	179	5,0
	7,5	260	1,69	1,18	294	12,5	1,52	1,11	264	10,3	1,15	0,97	200	6,2	0,85	0,85	149	3,7
	5	210	1,42	0,98	245	9,1	1,27	0,92	220	7,5	0,96	0,80	168	4,6	0,71	0,71	123	2,6
	3	160	1,14	0,78	197	6,2	1,02	0,73	178	5,1	0,78	0,64	136	3,1	0,56	0,56	98	1,8
	1	115	0,84	0,57	145	3,6	0,75	0,53	131	3,0	0,58	0,46	100	1,9	0,41	0,41	71	1,0
SEC/F-ECM 4.4-2T	10	505	3,42	2,38	592	18,5	3,06	2,23	531	15,2	2,32	1,94	403	9,2	1,71	1,71	299	5,4
	7,5	415	2,92	2,02	506	14,0	2,63	1,89	454	11,5	2,00	1,64	346	7,0	1,45	1,45	253	4,0
	5	340	2,44	1,67	421	10,1	2,19	1,56	379	8,4	1,67	1,36	290	5,1	1,20	1,20	208	2,8
	3	265	1,97	1,34	340	7,0	1,77	1,25	307	5,8	1,36	1,09	235	3,6	0,96	0,96	167	1,9
	1	200	1,54	1,04	266	4,5	1,39	0,97	240	3,7	1,07	0,84	185	2,3	0,75	0,75	129	1,2
SEC/F-ECM 6.4-2T	10	720	4,85	3,36	839	37,4	4,36	3,16	755	30,9	3,32	2,75	577	19,0	2,43	2,43	423	10,8
	7,5	590	4,12	2,84	713	28,1	3,71	2,67	642	23,2	2,84	2,32	492	14,3	2,05	2,05	356	8,0
	5	475	3,42	2,33	590	20,2	3,08	2,19	533	16,7	2,37	1,91	409	10,4	1,69	1,69	293	5,7
	3	375	2,79	1,89	481	14,1	2,52	1,78	434	11,7	1,94	1,54	335	7,3	1,36	1,36	236	3,9
	1	290	2,20	1,48	379	9,2	1,99	1,39	343	7,7	1,54	1,21	265	4,8	1,07	1,07	184	2,5
SEC/F-ECM 7.4-2T	10	875	5,70	3,98	987	29,1	5,12	3,74	888	24,0	3,90	3,26	677	14,7	2,87	2,87	501	8,5
	7,5	735	4,95	3,43	857	22,7	4,46	3,23	771	18,7	3,40	2,81	590	11,5	2,47	2,47	431	6,5
	5	585	4,11	2,82	710	16,3	3,70	2,65	639	13,5	2,83	2,30	491	8,3	2,04	2,04	354	4,6
	3	475	3,43	2,34	593	11,9	3,10	2,20	535	9,8	2,38	1,91	412	6,1	1,69	1,69	293	3,3
	1	380	2,81	1,90	484	8,3	2,53	1,79	437	6,9	1,95	1,55	337	4,3	1,37	1,37	237	2,3
SEC/F-ECM 9.4-2T	10	1365	7,60	5,50	1324	23,7	6,77	5,17	1182	19,3	5,04	4,51	883	11,4	3,94	3,94	695	7,4
	7,5	1145	6,68	4,79	1160	18,8	5,96	4,50	1037	15,3	4,46	3,91	778	9,1	3,43	3,43	602	5,7
	5	910	5,61	3,97	972	13,8	5,02	3,73	871	11,3	3,77	3,24	656	6,8	2,85	2,85	497	4,1
	3	755	4,84	3,40	837	10,6	4,34	3,19	750	8,7	3,27	2,77	567	5,2	2,45	2,45	426	3,1
	1	575	3,87	2,69	669	7,1	3,48	2,52	601	5,9	2,64	2,19	456	3,6	1,93	1,93	335	2,0

WT: Water temperature
Vdc: Inverter power
Qv: Air flow
Pc: Cooling total emission
Ps: Cooling sensible emission
Qw: Water flow rate
Dp(c): Dp Cooling

Entering air temperature 26 °C – R.H.: 50%

Model	Vdc	WT: 7 / 12 °C					WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
		Qv m³/h	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
SEC/F-ECM 2.4-2T	10	325	1,78	1,33	310	13,8	1,57	1,25	273	11,0	1,12	1,07	195	6,0	0,93	0,93	163	4,3
	7,5	260	1,51	1,12	262	10,2	1,33	1,04	232	8,2	0,95	0,89	166	4,5	0,78	0,78	136	3,1
	5	210	1,26	0,92	219	7,5	1,12	0,86	194	6,0	0,81	0,74	140	3,3	0,65	0,65	113	2,3
	3	160	1,02	0,74	176	5,1	0,90	0,69	157	4,1	0,65	0,59	114	2,3	0,51	0,51	90	1,5
	1	115	0,75	0,53	130	3,0	0,66	0,50	115	2,4	0,49	0,43	85	1,4	0,37	0,37	65	0,9
SEC/F-ECM 4.4-2T	10	505	3,05	2,24	528	15,1	2,69	2,09	467	12,1	1,94	1,79	338	6,8	1,57	1,57	274	4,6
	7,5	415	2,61	1,90	452	11,5	2,31	1,77	400	9,2	1,67	1,52	291	5,2	1,33	1,33	232	3,4
	5	340	2,18	1,57	376	8,3	1,93	1,47	334	6,7	1,41	1,26	244	3,8	1,10	1,10	191	2,4
	3	265	1,76	1,26	304	5,7	1,56	1,17	271	4,6	1,14	1,01	198	2,6	0,88	0,88	153	1,7
	1	200	1,38	0,98	238	3,7	1,23	0,91	212	3,0	0,90	0,78	156	1,7	0,68	0,68	119	1,1
SEC/F-ECM 6.4-2T	10	720	4,33	3,17	750	30,8	3,84	2,96	666	24,7	2,79	2,55	486	14,0	2,22	2,22	388	9,3
	7,5	590	3,69	2,67	638	23,1	3,27	2,50	567	18,6	2,39	2,15	415	10,6	1,87	1,87	326	6,9
	5	475	3,06	2,20	529	16,6	2,72	2,06	470	13,4	2,00	1,77	346	7,7	1,55	1,55	268	4,9
	3	375	2,50	1,78	431	11,6	2,22	1,66	384	9,4	1,64	1,43	283	5,4	1,25	1,25	217	3,3
	1	290	1,97	1,40	340	7,6	1,76	1,30	304	6,2	1,30	1,12	225	3,6	0,98	0,98	169	2,2
SEC/F-ECM 7.4-2T	10	875	5,09	3,75	883	23,9	4,51	3,51	782	19,2	3,27	3,02	569	10,8	2,63	2,63	459	7,3
	7,5	735	4,43	3,23	766	18,6	3,93	3,02	680	15,0	2,86	2,60	497	8,5	2,26	2,26	394	5,6
	5	585	3,67	2,66	635	13,4	3,26	2,48	565	10,8	2,39	2,13	414	6,2	1,87	1,87	325	4,0
	3	475	3,08	2,21	531	9,8	2,74	2,06	473	7,9	2,01	1,77	348	4,5	1,55	1,55	269	2,8
	1	380	2,51	1,79	434	6,8	2,24	1,67	387	5,6	1,65	1,44	286	3,2	1,26	1,26	217	2,0
SEC/F-ECM 9.4-2T	10	1365	6,74	5,18	1177	19,3	5,92	4,85	1035	15,3	4,30	4,30	757	8,7	3,59	3,59	635	6,3
	7,5	1145	5,93	4,50	1031	15,3	5,22	4,21	908	12,1	3,67	3,62	643	6,5	3,13	3,13	549	4,9
	5	910	4,99	3,74	866	11,2	4,40	3,50	764	8,9	3,12	3,00	544	4,9	2,60	2,60	454	3,5
	3	755	4,31	3,98	745	8,6	3,80	2,99	659	6,9	2,72	2,56	472	3,8	2,24	2,24	390	2,7
	1	575	3,45	2,53	597	5,8	3,05	2,36	528	4,7	2,20	2,02	382	2,6	1,77	1,77	307	1,7

WT: Water temperature
 Vdc: Inverter power
 Qv: Air flow
 Pc: Cooling total emission
 Ps: Cooling sensible emission
 Qw: Water flow rate
 Dp(c): Dp Cooling

Entering air temperature: 25 °C – R.H.: 50%

Model	Vdc	Qv m³/h	WT: 7 / 12 °C				WT: 8 / 13 °C				WT: 10 / 15 °C				WT: 12 / 17 °C			
			Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa	Pc kW	Ps kW	Qw l/h	Dp(c) kPa
SEC/F-ECM 2.4-2T	10	325	1,57	1,25	273	11,0	1,35	1,16	236	8,5	1,02	1,02	179	5,1	0,84	0,84	148	3,6
	7,5	260	1,33	1,04	231	8,2	1,15	0,97	200	6,3	0,85	0,85	149	3,7	0,70	0,70	123	2,6
	5	210	1,11	0,86	193	6,0	0,97	0,80	168	4,6	0,71	0,71	124	2,7	0,59	0,59	103	1,9
	3	160	0,90	0,69	156	4,1	0,78	0,64	136	3,2	0,56	0,56	99	1,8	0,47	0,47	82	1,3
	1	115	0,66	0,50	115	2,4	0,58	0,46	100	1,9	0,39	0,39	68	0,9	0,34	0,34	59	0,7
SEC/F-ECM 4.4-2T	10	505	2,68	2,10	466	12,1	2,33	1,95	405	9,4	1,72	1,72	300	5,5	1,41	1,42	246	3,9
	7,5	415	2,30	1,78	399	9,2	2,00	1,65	347	7,2	1,46	1,46	254	4,1	1,21	1,21	210	2,9
	5	340	1,92	1,47	333	6,7	1,68	1,37	290	5,2	1,21	1,21	209	2,9	1,00	1,00	174	2,1
	3	265	1,56	1,18	269	4,6	1,36	1,09	235	3,6	0,92	0,92	160	1,8	0,80	0,80	139	1,4
	1	200	1,22	0,92	211	3,0	1,07	0,85	185	2,4	0,73	0,71	127	1,2	0,62	0,62	108	0,9
SEC/F-ECM 6.4-2T	10	720	3,83	2,97	664	24,8	3,33	2,77	578	19,3	2,44	2,44	424	11,1	2,01	2,01	352	7,8
	7,5	590	3,26	2,51	565	18,6	2,84	2,33	493	14,6	2,05	2,05	357	8,1	1,70	1,70	296	5,8
	5	475	2,71	2,06	469	13,4	2,37	1,92	410	10,5	1,69	1,69	294	5,8	1,40	1,40	244	4,1
	3	375	2,21	1,67	382	9,4	1,94	1,55	335	7,4	1,33	1,31	230	3,8	1,13	1,14	196	2,8
	1	290	1,75	1,31	302	6,2	1,53	1,12	265	4,9	1,06	1,03	184	2,5	0,89	0,89	154	1,8
SEC/F-ECM 7.4-2T	10	875	4,50	3,52	780	19,2	3,91	3,27	679	15,0	2,88	2,88	502	8,7	2,38	2,38	416	6,1
	7,5	735	3,91	3,03	678	15,0	3,41	2,82	591	11,7	2,48	2,48	432	6,7	2,05	2,05	358	4,7
	5	585	3,25	2,49	562	10,8	2,84	2,32	491	8,5	2,05	2,05	356	4,7	1,70	1,70	295	3,4
	3	475	2,72	2,07	471	7,9	2,38	1,92	412	6,2	1,62	1,62	281	3,1	1,41	1,41	244	2,4
	1	380	2,23	1,68	385	5,5	1,95	1,56	337	4,4	1,34	1,32	232	2,2	1,14	1,14	198	1,7
SEC/F-ECM 9.4-2T	10	1365	5,91	4,86	1033	15,3	5,08	4,52	891	11,7	3,95	3,95	696	7,5	3,23	3,23	573	5,3
	7,5	1145	5,20	4,22	906	12,2	4,49	3,93	783	9,3	3,44	3,44	603	5,8	2,82	2,82	497	4,1
	5	910	4,39	3,50	762	9,0	3,79	3,26	659	6,9	2,86	2,86	498	4,2	2,35	2,35	411	2,9
	3	755	3,79	2,99	657	6,9	3,28	2,78	569	5,3	2,46	2,46	427	3,2	2,03	2,03	353	2,2
	1	575	3,04	2,37	526	4,7	2,64	2,20	457	3,6	1,94	1,94	336	2,1	1,60	1,60	278	1,5

WT: Water temperature
Vdc: Inverter power
Qv: Air flow
Pc: Cooling total emission
Ps: Cooling sensible emission
Qw: Water flow rate
Dp(c): Dp Cooling

HEATING EMISSION

3 row coil units

Entering air temperature: 20 °C

Model	Vdc	Qv m³/h	WT: 70 / 60 °C			WT: 60 / 50 °C			WT: 50 / 40 °C			WT: 50 / 45 °C			WT: 45 / 40 °C		
			Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa
SEC/F-ECM 2.3-2T	10	330	3,64	313	6,7	2,78	239	4,3	1,92	165	2,3	2,22	383	10,0	1,80	309	7,0
	7,5	270	3,09	265	5,0	2,36	203	3,2	1,63	140	1,7	1,89	324	7,5	1,52	262	5,2
	5	220	2,61	224	3,7	1,99	171	2,4	1,38	119	1,3	1,59	274	5,6	1,29	222	3,9
	3	170	2,10	181	2,5	1,61	138	1,6	1,12	96	0,9	1,28	221	3,8	1,04	179	2,7
	1	120	1,55	133	1,5	1,19	102	1,0	0,83	71	0,5	0,95	163	2,2	0,77	132	1,6
SEC/F-ECM 4.3-2T	10	515	6,33	544	25,2	4,86	418	16,3	3,39	291	8,9	3,87	665	37,9	3,14	540	26,7
	7,5	430	5,43	467	19,2	4,17	359	12,5	2,91	250	6,8	3,32	571	28,9	2,69	463	20,4
	5	350	4,55	391	14,1	3,50	301	9,1	2,44	210	5,0	2,78	478	21,2	2,26	388	14,9
	3	280	3,70	318	9,8	2,85	245	6,4	1,99	171	3,5	2,26	389	14,7	1,84	316	10,4
	1	210	2,85	245	6,2	2,20	189	4,0	1,54	133	2,2	1,74	300	9,3	1,42	244	6,6
SEC/F-ECM 6.3-2T	10	735	8,37	719	16,0	6,41	551	10,3	4,45	383	5,6	5,11	879	24,1	4,14	712	17,0
	7,5	610	7,17	616	12,2	5,50	473	7,9	3,82	329	4,3	4,38	753	18,4	3,55	610	12,9
	5	495	6,04	520	9,0	4,64	399	5,9	3,23	278	3,2	3,69	635	13,6	3,00	515	9,6
	3	395	4,97	427	6,4	3,82	328	4,2	2,66	229	2,3	3,03	522	9,6	2,46	424	6,8
	1	305	3,95	339	4,3	3,04	261	2,8	2,12	182	1,5	2,41	415	6,4	1,96	337	4,5
SEC/F-ECM 7.3-2T	10	890	10,25	882	26,7	7,87	677	17,3	5,49	472	9,5	6,26	1077	40,1	5,08	874	28,3
	7,5	755	8,94	769	21,0	6,87	591	13,6	4,79	412	7,5	5,46	939	31,5	4,43	762	22,2
	5	610	7,50	645	15,4	5,77	496	10,0	4,03	347	5,5	4,58	788	23,2	3,72	640	16,4
	3	500	6,30	542	11,3	4,85	417	7,4	3,93	338	4,1	3,85	662	17,0	3,13	538	12,1
	1	400	5,16	444	8,0	3,98	342	5,2	2,79	240	2,9	3,15	542	12,0	2,56	441	8,5
SEC/F-ECM 9.3-2T	10	1395	14,95	1285	22,9	11,42	982	14,7	7,90	679	8,0	9,13	1570	34,5	7,38	1270	24,2
	7,5	1175	13,06	1123	18,1	9,99	859	11,6	6,92	595	6,3	7,98	1372	27,2	6,46	1111	19,1
	5	945	10,94	941	13,2	8,38	720	8,5	5,81	500	4,6	6,68	1149	19,9	5,41	931	14,0
	3	785	9,40	809	10,1	7,21	620	6,5	5,00	430	3,6	5,74	988	15,3	4,66	801	10,7
	1	605	7,55	649	6,9	5,79	498	4,5	4,03	347	2,4	4,61		10,4	3,74	643	7,3

WT: Water temperature
Vdc: Inverter power
Qv: Air flow
Ph: Heating emission
Qw: Water flow rate
Dp(h): Dp Heating

4 row coil units

Entering air temperature: 20 °C

Model	Vdc	Qv m³/h	WT: 70 / 60 °C			WT: 60 / 50 °C			WT: 50 / 40 °C			WT: 50 / 45 °C			WT: 45 / 40 °C		
			Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa
SEC/F-ECM 2.4-2T	10	325	4,01	344	12,9	3,07	264	8,3	2,14	184	4,5	2,45	421	19,4	1,98	341	13,6
	7,5	260	3,33	286	9,3	2,56	220	6,0	1,78	153	3,3	2,03	350	14,0	1,65	284	9,9
	5	210	2,75	237	6,7	2,12	182	4,3	1,48	127	2,4	1,68	289	10,0	1,37	235	7,1
	3	160	2,18	187	4,4	1,68	144	2,9	1,17	101	1,6	1,33	229	6,6	1,08	186	4,7
	1	115	1,57	135	2,5	1,21	104	1,6	0,85	73	0,9	0,96	165	3,7	0,78	134	2,6
SEC/F-ECM 4.4-2T	10	505	6,60	568	12,9	5,07	436	8,4	3,54	304	4,6	4,04	694	19,5	3,28	563	13,7
	7,5	415	5,57	479	9,6	4,29	369	6,2	3,00	258	3,4	3,41	586	14,5	2,77	476	10,2
	5	340	4,59	394	6,8	3,53	304	4,4	2,48	213	2,5	2,81	484	10,3	2,29	394	7,3
	3	265	3,67	316	4,6	2,83	243	3,0	1,99	171	1,7	2,24	386	6,9	1,83	314	4,9
	1	200	2,83	244	2,9	2,19	188	1,9	1,54	132	1,1	1,73	298	4,4	1,41	243	3,1
SEC/F-ECM 6.4-2T	10	720	9,43	811	27,4	7,26	624	17,8	5,08	437	9,8	5,76	991	41,2	4,68	805	29,1
	7,5	590	7,90	679	20,1	6,09	523	13,1	4,27	367	7,2	4,83	830	30,2	3,93	675	21,4
	5	475	6,48	557	14,2	5,00	430	9,2	3,51	302	5,1	3,96	681	21,3	3,23	555	15,1
	3	375	5,21	448	9,6	4,02	346	6,3	2,83	243	3,5	3,19	548	14,5	2,59	446	10,3
	1	290	4,05	348	6,2	3,13	269	4,1	2,21	190	2,3	2,48	426	9,3	2,02	347	6,6
SEC/F-ECM 7.4-2T	10	875	10,93	940	20,7	8,41	723	13,5	5,88	505	7,4	6,68	1149	31,2	5,43	933	22,0
	7,5	735	9,39	808	15,9	7,23	622	10,3	5,06	435	5,7	5,74	987	23,9	4,66	802	16,9
	5	585	7,73	664	11,3	5,95	512	7,3	4,17	359	4,1	4,72	812	16,9	3,84	660	12,0
	3	475	6,38	549	8,0	4,92	423	5,2	3,45	297	2,9	3,90	671	12,1	3,17	546	8,6
	1	380	5,16	444	5,5	3,98	342	3,6	2,80	241	2,0	3,15	542	8,3	2,57	442	5,9
SEC/F-ECM 9.4-2T	10	1365	16,03	1379	19,8	12,27	1055	12,8	8,50	731	6,9	9,79	1685	29,8	7,93	1364	20,9
	7,5	1145	13,82	1188	15,2	10,58	910	9,8	7,35	632	5,3	8,44	1452	22,9	6,84	1176	16,1
	5	910	11,37	978	10,8	8,72	750	7,0	6,06	521	3,8	6,94	1194	16,3	5,63	969	11,4
	3	755	9,69	834	8,2	7,44	640	5,3	5,18	446	2,9	5,92	1019	12,3	4,81	826	8,7
	1	575	7,58	652	5,3	5,82	501	3,4	4,07	350	1,9	4,63	796	8,0	3,76	647	5,6

WT: Water temperature
Vdc: Inverter power
Qv: Air flow
Ph: Heating emission
Qw: Water flow rate
Dp(h): Dp Heating

1 row additional coil units

For 3 or 4 row versions (3+1 or 4+1 rows)

Entering air temperature: 20 °C

Model	Vdc	Qv m³/h	WT: 80 / 70 °C			WT: 75 / 65 °C			WT: 70 / 60 °C			WT: 65 / 55 °C			WT: 60 / 50 °C			WT: 55 / 45 °C		
			Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa
SEC/F-ECM 2	10	330	2,04	176	6,3	1,84	158	5,3	1,63	140	4,3	1,43	123	3,5	1,22	105	2,7	1,02	88	2,0
	7,5	270	1,78	153	4,9	1,60	138	4,1	1,42	122	3,4	1,24	107	2,7	1,07	92	2,1	0,89	76	1,6
	5	220	1,54	132	3,8	1,38	119	3,2	1,23	106	2,6	1,08	93	2,1	0,92	79	1,6	0,77	66	1,2
	3	170	1,29	111	2,8	1,16	100	2,4	1,04	89	1,9	0,91	78	1,6	0,78	67	1,2	0,65	56	0,9
	1	120	1,02	87	1,8	0,92	79	1,5	0,81	70	1,3	0,71	61	1,0	0,61	53	0,8	0,51	44	0,6
SEC/F-ECM 4	10	515	3,41	293	19,4	3,08	264	16,4	2,74	236	13,6	2,41	207	11,0	2,07	178	8,6	1,74	150	6,4
	7,5	430	3,01	259	15,6	2,72	234	13,2	2,42	208	10,9	2,13	183	8,8	1,83	158	6,9	1,54	132	5,2
	5	350	2,62	225	12,2	2,36	203	10,3	2,11	181	8,5	1,85	159	6,9	1,60	137	5,4	1,34	115	4,0
	3	280	2,22	191	9,1	2,01	172	7,7	1,79	154	6,4	1,57	135	5,2	1,36	117	4,1	1,14	98	3,0
	1	210	1,82	157	6,4	1,64	141	5,4	1,47	126	4,5	1,29	111	3,6	1,11	96	2,9	0,94	80	2,1
SEC/F-ECM 6	10	735	4,61	396	6,4	4,14	356	5,4	3,68	317	4,5	3,22	277	3,6	2,76	238	2,8	2,30	198	2,0
	7,5	610	4,05	348	5,1	3,64	313	4,3	3,24	278	3,6	2,83	244	2,9	2,43	209	2,2	2,03	174	1,6
	5	495	3,50	301	4,0	3,15	271	3,3	2,80	241	2,8	2,45	211	2,2	2,11	181	1,7	1,76	151	1,3
	3	395	3,00	258	3,0	2,70	232	2,5	2,40	206	2,1	2,10	181	1,7	1,81	155	1,3	1,51	130	1,0
	1	305	2,50	215	2,2	2,25	194	1,9	2,00	172	1,5	1,76	151	1,2	1,51	130	1,0	1,26	109	0,7
SEC/F-ECM 7	10	890	5,77	496	11,2	5,20	447	9,5	4,63	398	7,8	4,06	349	6,3	3,50	301	4,9	2,93	252	3,7
	7,5	755	5,15	443	9,2	4,64	399	7,8	4,13	355	6,4	3,63	312	5,2	3,12	268	4,0	2,62	225	3,0
	5	610	4,43	381	7,1	4,00	344	6,0	3,56	306	4,9	3,13	269	4,0	2,69	231	3,1	2,26	194	2,3
	3	500	3,86	332	5,5	3,48	299	4,7	3,10	267	3,9	2,72	234	3,1	2,35	202	2,4	1,97	169	1,8
	1	400	3,30	284	4,2	2,97	256	3,5	2,65	228	2,9	2,33	200	2,4	2,01	173	1,9	1,69	145	1,4
SEC/F-ECM 9	10	1395	7,46	641	17,6	6,72	578	14,9	5,98	514	12,3	5,24	451	9,9	4,51	388	7,7	3,77	324	5,7
	7,5	1175	6,67	574	14,5	6,01	517	12,2	5,35	460	10,1	4,69	404	8,2	4,04	347	6,4	3,38	291	4,7
	5	945	5,75	495	11,2	5,18	446	9,4	4,62	397	7,8	4,05	348	6,3	3,48	300	4,9	2,92	251	3,7
	3	785	5,08	437	9,0	4,58	394	7,6	4,08	351	6,3	3,58	308	5,1	3,08	265	3,9	2,58	222	2,9
	1	605	4,23	364	6,5	3,82	328	5,5	3,40	292	4,6	2,99	257	3,7	2,57	221	2,9	2,16	186	2,1

WT: Water temperature
Vdc: Inverter power
Qv: Air flow
Ph: Heating emission
Qw: Water flow rate
Dp(h): Dp Heating

2 row additional coil units

For 3 row versions only (3+2 rows)

Entering air temperature: 20 °C

Model	Vdc	Qv m³/h	WT: 65 / 55 °C			WT: 60 / 50 °C			WT: 55 / 45 °C			WT: 50 / 40 °C			WT: 45 / 40 °C			WT: 45 / 35 °C		
			Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa	Ph kW	Qw l/h	Dp(h) kPa
SEC/F-ECM 2	10	330	2,48	214	16,7	2,15	184	13,1	1,81	155	9,9	1,47	126	7,0	1,39	239	21,6	1,13	97	4,5
	7,5	270	2,13	183	12,7	1,84	158	10,0	1,55	133	7,5	1,26	109	5,3	1,19	205	16,5	0,97	84	3,4
	5	220	1,81	155	9,6	1,56	134	7,5	1,32	113	5,7	1,07	92	4,0	1,01	174	12,4	0,83	71	2,6
	3	170	1,49	128	6,8	1,29	111	5,3	1,10	94	4,1	0,89	77	2,9	0,84	144	8,9	0,69	59	1,9
	1	120	1,13	97	4,2	0,98	84	3,3	0,83	71	2,5	0,68	58	1,8	0,63	109	5,4	0,52	45	1,2
SEC/F-ECM 4	10	515	3,90	335	7,6	3,36	289	5,9	2,82	243	4,4	2,29	197	3,1	2,18	375	9,8	1,76	151	2,0
	7,5	430	3,40	292	5,9	2,93	252	4,7	2,47	212	3,5	2,00	172	2,5	1,90	327	7,7	1,54	132	1,6
	5	350	2,90	249	4,5	2,50	215	3,5	2,11	181	2,6	1,71	147	1,9	1,62	279	5,8	1,32	113	1,2
	3	280	2,43	209	3,3	2,10	181	2,6	1,77	152	1,9	1,44	124	1,4	1,36	234	4,3	1,11	95	0,9
	1	210	1,94	166	2,2	1,67	144	1,7	1,41	121	1,3	1,15	99	0,9	1,08	186	2,8	0,89	76	0,6
SEC/F-ECM 6	10	735	5,63	484	17,8	4,87	419	14,0	4,11	353	10,5	3,35	288	7,5	3,15	542	23,0	2,59	223	4,9
	7,5	610	4,88	419	13,8	4,22	363	10,9	3,56	306	8,2	2,91	250	5,8	2,73	470	17,9	2,25	194	3,8
	5	495	4,14	356	10,3	3,58	308	8,1	3,03	260	6,2	2,47	213	4,4	2,32	398	13,4	1,92	165	2,9
	3	395	3,46	297	7,5	3,00	258	5,9	2,53	218	4,5	2,09	180	3,3	1,96	336	9,9	1,62	139	2,1
	1	305	2,83	243	5,3	2,45	211	4,2	2,08	178	3,2	1,70	146	2,3	1,58	272	6,9	1,32	113	1,5
SEC/F-ECM 7	10	890	7,01	603	31,1	6,07	522	24,5	5,14	442	18,6	4,20	361	13,3	3,93	675	40,2	3,27	281	8,7
	7,5	755	6,17	530	24,8	5,34	460	19,6	4,52	389	14,8	3,70	318	10,6	3,45	594	32,1	2,88	248	6,9
	5	610	5,20	447	18,4	4,51	388	14,5	3,82	328	11,0	3,13	269	7,9	2,91	501	23,8	2,44	209	5,2
	3	500	4,47	384	14,1	3,88	333	11,1	3,28	282	8,4	2,69	232	6,1	2,50	431	18,2	2,10	180	4,0
	1	400	3,72	320	10,2	3,23	277	8,1	2,74	235	6,1	2,24	193	4,4	2,08	358	13,2	1,75	151	2,9
SEC/F-ECM 9	10	1395	9,60	825	54,0	8,31	714	42,6	7,02	604	32,2	5,74	493	22,9	-	-	-	4,45	383	15,0
	7,5	1175	8,49	730	43,5	7,35	632	34,3	6,22	535	26,0	5,08	437	18,5	-	-	-	3,94	339	12,1
	5	945	7,22	621	32,7	6,25	538	25,8	5,29	455	19,5	4,33	372	14,0	-	-	-	3,36	289	9,1
	3	785	6,28	540	25,6	5,45	468	20,2	4,61	396	15,3	3,77	324	11,0	-	-	-	2,93	252	7,2
	1	605	5,12	440	17,8	4,44	381	14,1	3,76	323	10,7	3,08	265	7,7	-	-	-	2,40	206	5,0

WT: Water temperature
Vdc: Inverter power
Qv: Air flow
Ph: Heating emission
Qw: Water flow rate
Dp(h): Dp Heating

AIR FLOW AND CORRECTION FACTORS

Air flow and correction factors for emission with different available pressures

Mod.	Vdc	Qv (m³/h)									K1									K2								
		Ap (Pa)									Ap (Pa)									Ap (Pa)								
		0	5	10	15	20	25	30	35	40	0	5	10	15	20	25	30	35	40	0	5	10	15	20	25	30	35	40
2	10	330	312	288	257	223	171	88	-	-	1,00	0,95	0,89	0,82	0,73	0,60	0,32	-	-	1,00	0,95	0,88	0,80	0,72	0,58	0,29	-	-
	8,5	307	276	251	213	162	92	29	-	-	1,00	0,91	0,85	0,75	0,61	0,36	0,06	-	-	1,00	0,90	0,83	0,73	0,59	0,34	0,03	-	-
	7,5	270	252	219	178	103	-	-	-	-	1,00	0,94	0,84	0,72	0,46	-	-	-	-	1,00	0,94	0,83	0,70	0,44	-	-	-	-
	6,5	248	227	187	130	56	-	-	-	-	1,00	0,93	0,80	0,60	0,26	-	-	-	-	1,00	0,92	0,78	0,58	0,24	-	-	-	-
	5	220	187	126	55	-	-	-	-	-	1,00	0,88	0,65	0,30	-	-	-	-	-	1,00	0,86	0,63	0,27	-	-	-	-	-
	3	170	122	45	-	-	-	-	-	-	1,00	0,77	0,32	-	-	-	-	-	-	1,00	0,75	0,29	-	-	-	-	-	-
	2	144	82	-	-	-	-	-	-	-	1,00	0,65	-	-	-	-	-	-	-	1,00	0,63	-	-	-	-	-	-	-
	1	120	68	-	-	-	-	-	-	-	1,00	0,64	-	-	-	-	-	-	-	1,00	0,62	-	-	-	-	-	-	-
4	10	515	499	477	448	401	332	247	100	-	1,00	0,97	0,94	0,89	0,82	0,71	0,56	0,22	-	1,00	0,97	0,93	0,88	0,80	0,69	0,54	0,19	-
	8,5	459	444	419	377	323	229	54	-	-	1,00	0,97	0,93	0,85	0,76	0,58	0,10	-	-	1,00	0,97	0,92	0,84	0,74	0,56	0,07	-	-
	7,5	430	396	363	320	240	89	-	-	-	1,00	0,93	0,87	0,79	0,63	0,24	-	-	-	1,00	0,92	0,86	0,77	0,61	0,21	-	-	-
	6,5	394	374	333	272	135	-	-	-	-	1,00	0,95	0,87	0,74	0,41	-	-	-	-	1,00	0,95	0,86	0,73	0,39	-	-	-	-
	5	350	308	255	107	-	-	-	-	-	1,00	0,90	0,78	0,37	-	-	-	-	-	1,00	0,89	0,76	0,35	-	-	-	-	-
	3	280	227	99	-	-	-	-	-	-	1,00	0,84	0,43	-	-	-	-	-	-	1,00	0,83	0,41	-	-	-	-	-	-
	2	233	170	-	-	-	-	-	-	-	1,00	0,78	-	-	-	-	-	-	-	1,00	0,76	-	-	-	-	-	-	-
	1	210	126	-	-	-	-	-	-	-	1,00	0,67	-	-	-	-	-	-	-	1,00	0,65	-	-	-	-	-	-	-
6	10	735	696	673	622	558	431	286	168	-	1,00	0,95	0,93	0,87	0,80	0,66	0,47	0,27	-	1,00	0,95	0,92	0,86	0,78	0,64	0,45	0,24	-
	8,5	650	628	583	525	421	269	110	-	-	1,00	0,97	0,91	0,84	0,71	0,49	0,18	-	-	1,00	0,97	0,90	0,82	0,69	0,47	0,15	-	-
	7,5	610	564	528	437	284	129	-	-	-	1,00	0,94	0,89	0,77	0,55	0,25	-	-	-	1,00	0,93	0,87	0,75	0,53	0,22	-	-	-
	6,5	558	510	457	340	189	-	-	-	-	1,00	0,93	0,85	0,68	0,41	-	-	-	-	1,00	0,92	0,83	0,66	0,39	-	-	-	-
	5	495	432	352	154	-	-	-	-	-	1,00	0,89	0,76	0,38	-	-	-	-	-	1,00	0,88	0,74	0,36	-	-	-	-	-
	3	395	319	151	82	-	-	-	-	-	1,00	0,84	0,46	0,24	-	-	-	-	-	1,00	0,82	0,44	0,21	-	-	-	-	-
	2	351	221	-	-	-	-	-	-	-	1,00	0,70	-	-	-	-	-	-	-	1,00	0,68	-	-	-	-	-	-	-
	1	305	177	-	-	-	-	-	-	-	1,00	0,65	-	-	-	-	-	-	-	1,00	0,63	-	-	-	-	-	-	-
7	10	890	846	815	756	699	590	486	341	191	1,00	0,96	0,93	0,87	0,82	0,72	0,62	0,46	0,25	1,00	0,95	0,92	0,86	0,81	0,70	0,60	0,44	0,22
	8,5	805	756	703	652	560	437	279	114	-	1,00	0,95	0,89	0,84	0,75	0,62	0,42	0,14	-	1,00	0,94	0,88	0,83	0,73	0,60	0,40	0,11	-
	7,5	755	696	637	558	459	300	140	-	-	1,00	0,93	0,87	0,79	0,68	0,48	0,21	-	-	1,00	0,93	0,86	0,77	0,66	0,46	0,18	-	-
	6,5	703	637	560	449	336	175	-	-	-	1,00	0,92	0,83	0,70	0,56	0,30	-	-	-	1,00	0,91	0,82	0,68	0,54	0,27	-	-	-
	5	610	532	443	313	133	-	-	-	-	1,00	0,89	0,78	0,59	0,26	-	-	-	-	1,00	0,88	0,76	0,57	0,23	-	-	-	-
	3	500	398	255	83	-	-	-	-	-	1,00	0,83	0,59	0,18	-	-	-	-	-	1,00	0,81	0,57	0,15	-	-	-	-	-
	2	452	348	178	-	-	-	-	-	-	1,00	0,81	0,47	-	-	-	-	-	-	1,00	0,79	0,45	-	-	-	-	-	-
	1	400	279	-	-	-	-	-	-	-	1,00	0,75	-	-	-	-	-	-	-	1,00	0,73	-	-	-	-	-	-	-
9	10	1395	1310	1225	1180	1125	1060	1000	930	860	1,00	0,95	0,90	0,87	0,84	0,80	0,77	0,73	0,68	1,00	0,94	0,89	0,86	0,82	0,78	0,75	0,71	0,66
	8,5	1265	1175	1080	1020	960	880	800	720	640	1,00	0,94	0,88	0,84	0,80	0,75	0,70	0,64	0,59	1,00	0,93	0,86	0,82	0,78	0,73	0,68	0,62	0,57
	7,5	1175	1075	970	910	840	750	650	545	450	1,00	0,93	0,85	0,81	0,77	0,70	0,63	0,54	0,46	1,00	0,92	0,84	0,80	0,75	0,68	0,61	0,52	0,44
	6,5	1085	980	865	790	700	605	500	350	200	1,00	0,92	0,83	0,78	0,71	0,63	0,54	0,39	0,21	1,00	0,91	0,82	0,76	0,69	0,61	0,52	0,37	0,18
	5	945	835	680	580	460	315	160	-	-	1,00	0,90	0,77	0,68	0,57	0,40	0,18	-	-	1,00	0,89	0,75	0,66	0,55	0,38	0,15	-	-
	3	785	620	400	230	50	-	-	-	-	1,00	0,83	0,59	0,35	0,01	-	-	-	-	1,00	0,81	0,57	0,33	-	-	-	-	-
	2	700	500	200	-	-	-	-	-	-	1,00	0,77	0,34	-	-	-	-	-	-	1,00	0,75	0,32	-	-	-	-	-	-
	1	605	390	-	-	-	-	-	-	-	1,00	0,71	-	-	-	-	-	-	-	1,00	0,69	-	-	-	-	-	-	-

Qv = air flow

K1 = Total cooling emission correction factors

K2 = Sensible cooling emission and heating emission correction factors

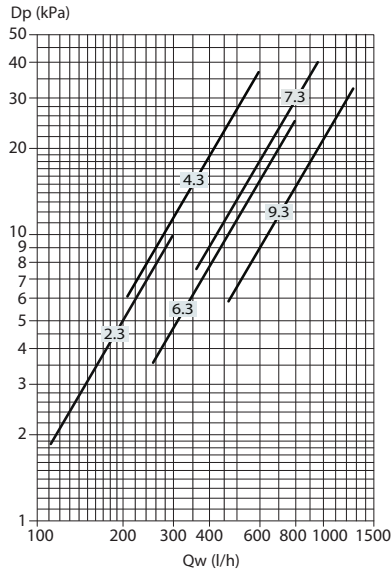
Ap = Available static pressure

Vdc = Inverter power

WATER SIDE PRESSURE DROP

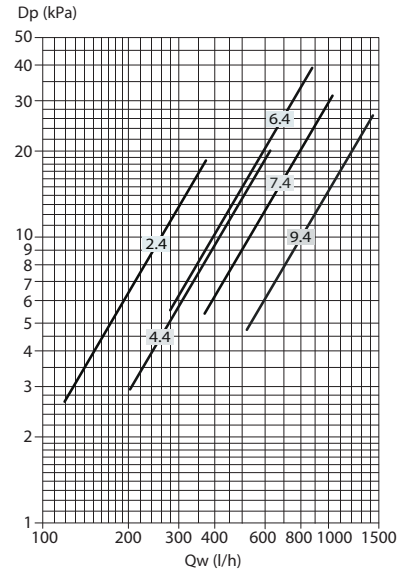
Main coil

3 row coil



Dp = pressure drop
Qw = water flow rate

4 row coil



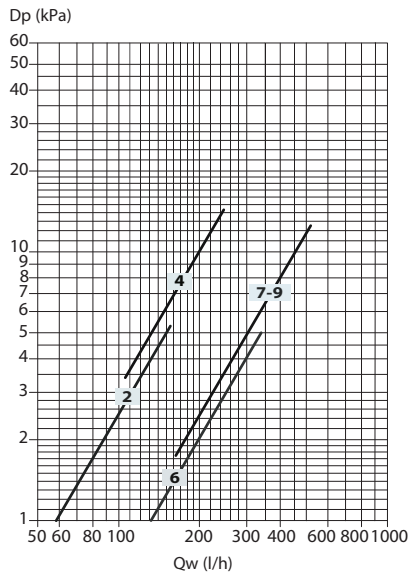
Dp = pressure drop
Qw = water flow rate

The water pressure drop figures refer to a mean water temperature of 10 °C; for different temperatures, multiply the pressure drop figures by the correction factors K.

K correction factor	Mean water temperature (°C)						
	20	30	40	50	60	70	80
	0,94	0,90	0,86	0,82	0,78	0,74	0,70

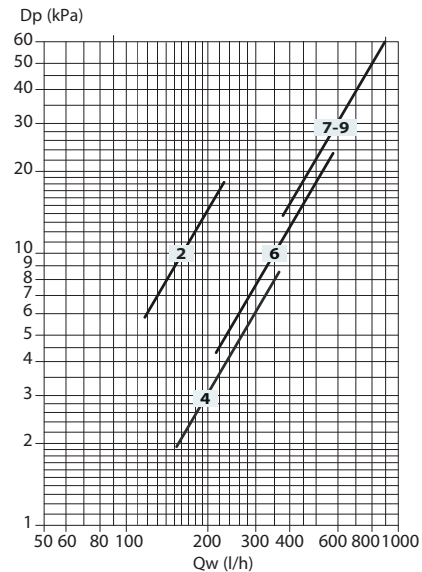
Additional coil

1 row additional coil



Dp = pressure drop
Qw = water flow rate

2 row additional coil



Dp = pressure drop
Qw = water flow rate

The water pressure drop figures refer to a mean water temperature of 60 °C; for different temperatures, multiply the pressure drop figures by the correction factors K.

K correction factor	Mean water temperature (°C)			
	40	50	70	80
	1,12	1,06	0,94	0,88

OPERATION LIMITS

Description		UoM	Value
Water flow	Coil maximum working pressure	bars	16
		kPa	1600
	Lowest water inlet temperature	°C	+6 (*)
	Highest water inlet temperature	°C	+85
Power supply	Single-phase rated operating voltage	V/Hz	230/50

(*) for entering water temperatures below + 6 °C, contact the technical department

Attention: For the CH units the maximum installation height is 2,8 m.

Note: on heating it must be paid attention to rooms where the floor temperature is particularly low (for example less than 6 °C).

In this situation the floor can cool the lower layer of air to a level that stops the uniform diffusion of the hot air coming from the unit.

Coils water flow limits

3 row coil

Model		SEC/F-ECM 2.3-2T	SEC/F-ECM 4.3-2T	SEC/F-ECM 6.3-2T	SEC/F-ECM 7.3-2T	SEC/F-ECM 9.3-2T
Water flow rate Min.	l/h	100		150		200
Water flow rate Max.	l/h	500	750	1000	1500	2000

4 row coil

Model		SEC/F-ECM 2.4-2T	SEC/F-ECM 4.4-2T	SEC/F-ECM 6.4-2T	SEC/F-ECM 7.4-2T	SEC/F-ECM 9.4-2T
Water flow rate Min.	l/h	100	150		200	300
Water flow rate Max.	l/h	750	1000	1500	2000	2250

1 row additional coil

Model		SEC/F-ECM 2.3-4T	SEC/F-ECM 4.3-4T	SEC/F-ECM 6.3-4T	SEC/F-ECM 7.3-4T	SEC/F-ECM 9.3-4T
Water flow rate Min.	l/h	50		100		
Water flow rate Max.	l/h	250	350	500	650	750

Model		SEC/F-ECM 2.4-4T	SEC/F-ECM 4.4-4T	SEC/F-ECM 6.4-4T	SEC/F-ECM 7.4-4T	SEC/F-ECM 9.4-4T
Water flow rate Min.	l/h	50		100		
Water flow rate Max.	l/h	250	350	500	650	750

2 row additional coil

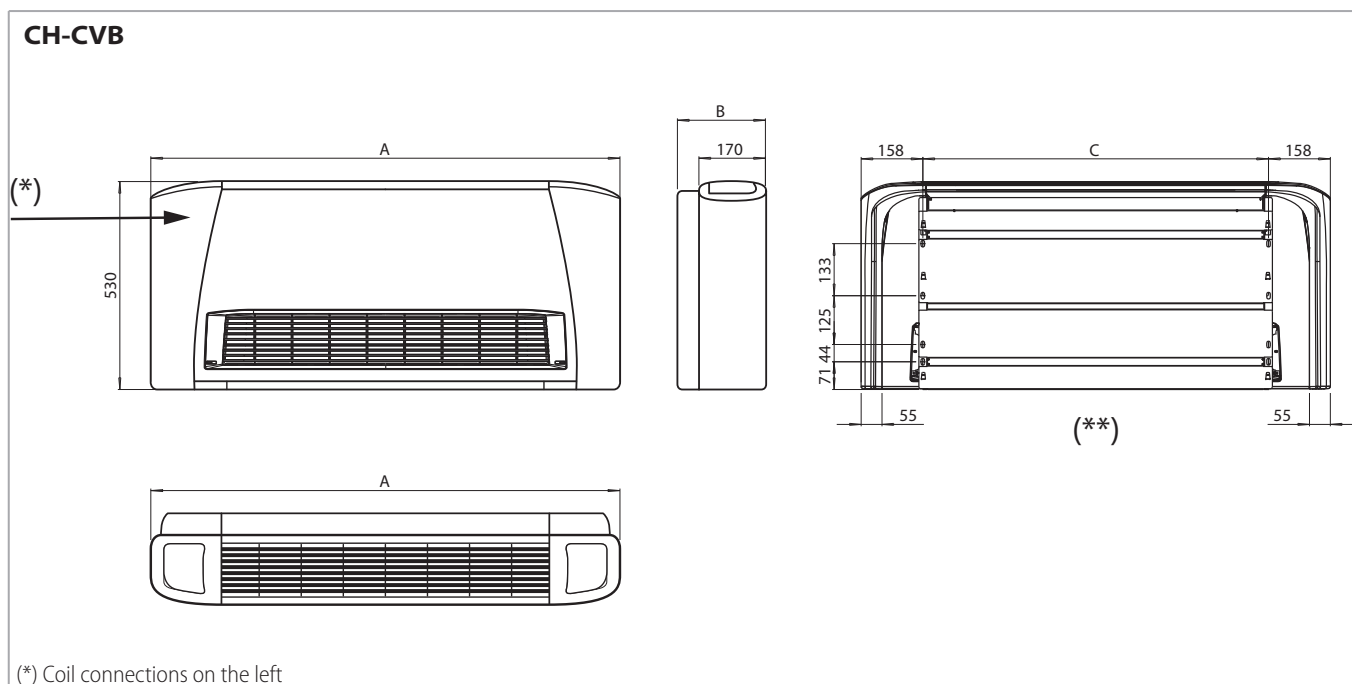
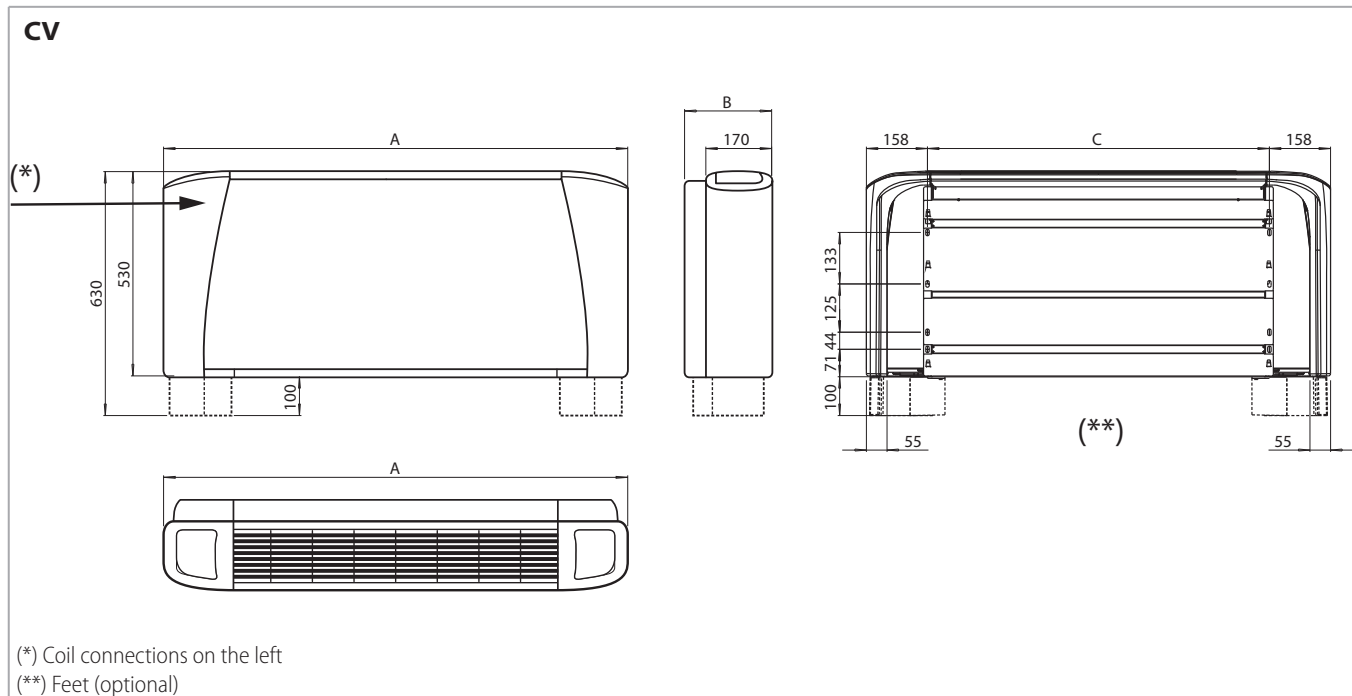
Model		SEC/F-ECM 2.3-4T/2R	SEC/F-ECM 4.3-4T/2R	SEC/F-ECM 6.3-4T/2R	SEC/F-ECM 7.3-4T/2R	SEC/F-ECM 9.3-4T/2R
Water flow rate Min.	l/h	50	100			
Water flow rate Max.	l/h	250	350	500	650	750

Motor electrical data - max. absorption

Model		SEC/F-ECM 2	SEC/F-ECM 4	SEC/F-ECM 6	SEC/F-ECM 7	SEC/F-ECM 9
Motor absorption	W	21	25	32	41	99
Current absorbed	A	0,18	0,22	0,28	0,34	0,81

DIMENSION, WEIGHT, WATER CONTENT - CV / CH-CVB VERSION

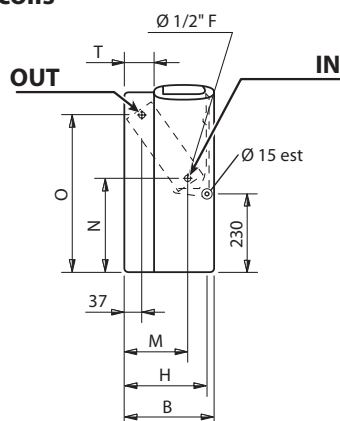
Dimensions



Model		SEC/F-ECM 2	SEC/F-ECM 4	SEC/F-ECM 6	SEC/F-ECM 7	SEC/F-ECM 9
A	mm	770	985	1200	1415	
B	mm		225			255
C	mm	454	669	884	1099	

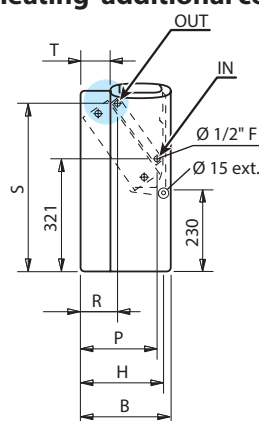
Coil connections

3 or 4 row coils

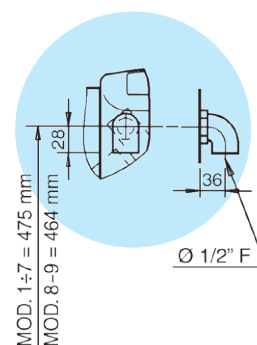


IN = Water inlet
OUT = Water outlet

Heating additional coil (1 or 2 row coil)

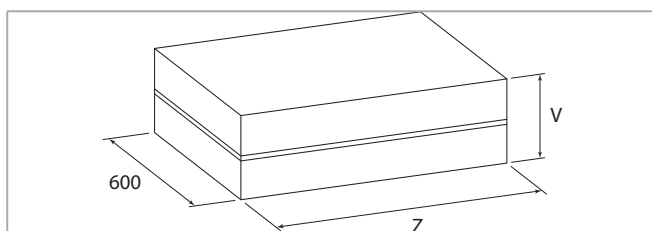


IN = Water inlet
OUT = Water outlet



Model		SEC/F-ECM 2	SEC/F-ECM 4	SEC/F-ECM 6	SEC/F-ECM 7	SEC/F-ECM 9
B	mm		225			255
H	mm		205			235
M	mm		145			170
N	mm		260			270
O	mm		460			450
P	mm		185			210
R	mm		105			110
S	mm		475			465
T	mm		55			85

Packed unit



Model		2	4	6	7	9
V	mm			260		290
Z	mm	820	1035	1250		1465

Weight (kg)

Weight with packaging

Model	2	4	6	7	9
3 rows	17,2	22,5	27,7	32,1	35,9
3+1 rows	18,0	23,7	29,2	33,9	37,7
3+2 rows	18,6	24,4	30,1	35,0	38,8
4 rows	18,0	23,5	29,0	33,6	37,4
4+1 rows	18,8	24,7	30,5	35,4	39,2

Weight without packaging

Model	2	4	6	7	9
3 rows	15,4	20,2	24,9	28,8	32,2
3+1 rows	16,2	21,4	26,4	30,6	34,0
3+2 rows	16,8	22,1	27,3	31,7	35,1
4 rows	16,2	21,2	26,2	30,3	33,7
4+1 rows	17,0	22,4	27,7	32,1	35,5

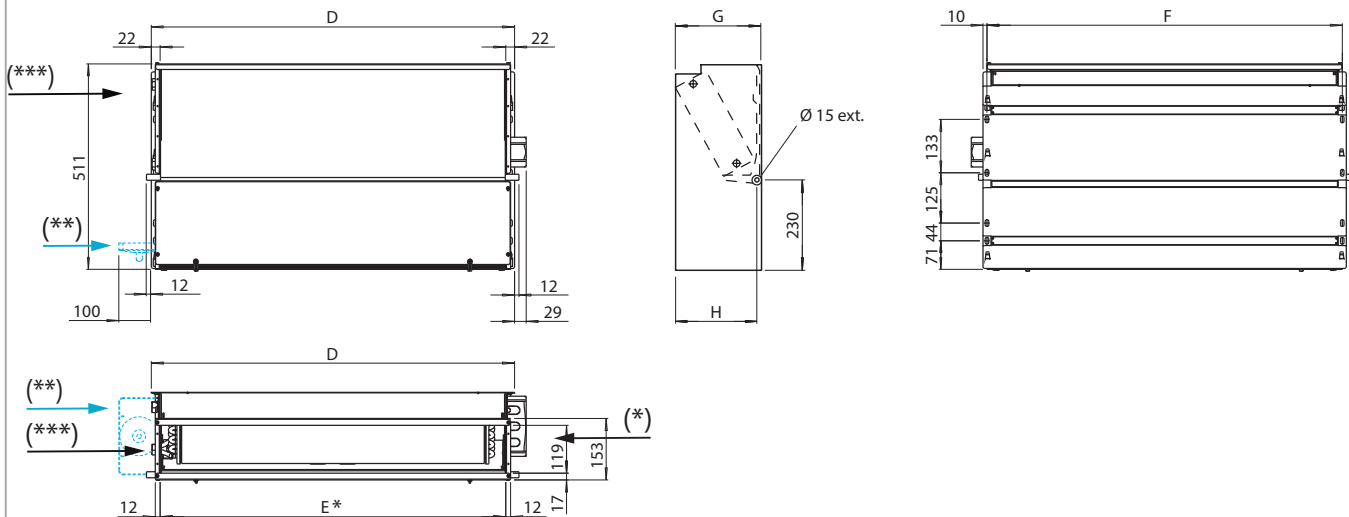
Water content (litres)

Model	SEC/F-ECM 2	SEC/F-ECM 4	SEC/F-ECM 6	SEC/F-ECM 7	SEC/F-ECM 9
3 rows	0,6	0,9	1,6	1,7	1,9
4 rows	0,8	1,3	2,2	2,4	2,8
+1 row	0,2	0,3	0,5	0,5	0,6
+2 rows	0,4	0,6	1,0	1,0	1,2

DIMENSION, WEIGHT AND WATER CONTENT - NC VERSION

Dimensions

NC Vertical Installation

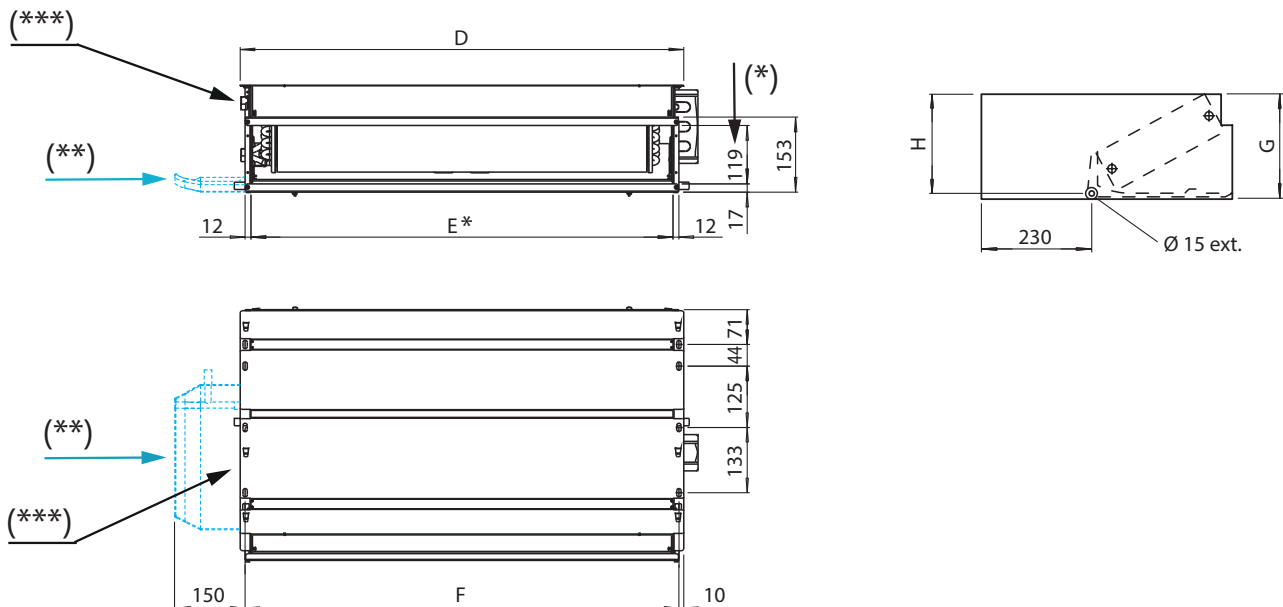


(*) = Supply frame dimension E x 119 mm

(**) = Auxiliary condensate tray (optional)

(***) = Coil connections on the left

NC Horizontal Installation



(*) = Supply frame dimension E x 119 mm

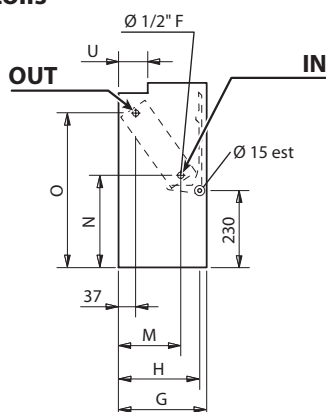
(**) = Auxiliary condensate tray (optional)

(***) = Coil connections on the left

Model		SEC/F-ECM 2	SEC/F-ECM 4	SEC/F-ECM 6	SEC/F-ECM 7	SEC/F-ECM 9
D	mm	474	689	904	1119	
E	mm	430	645	860	1075	
F	mm	454	669	884	1099	

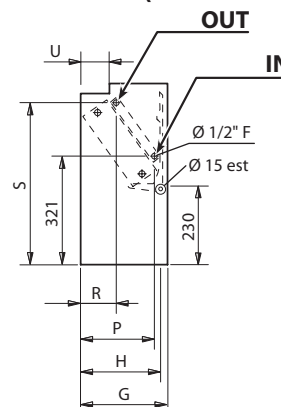
Coil connections

3 or 4 row coils



IN = Water inlet
OUT = Water outlet

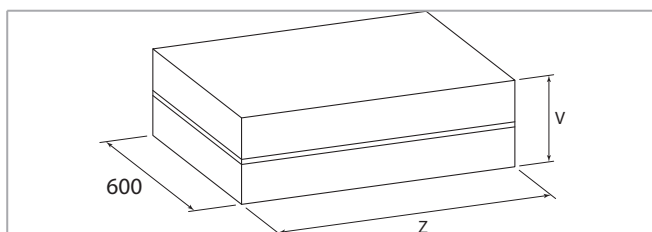
Heating additional coil (1 or 2 row coil)



IN = Water inlet
OUT = Water outlet

Model		SEC/F-ECM 2	SEC/F-ECM 4	SEC/F-ECM 6	SEC/F-ECM 7	SEC/F-ECM 9
G	mm		218			248
H	mm		205			235
M	mm		145			170
N	mm		260			270
O	mm		460			450
P	mm		185			210
R	mm		105			110
S	mm		475			465
U	mm		65			95

Packed unit



Model		2	4	6	7	9
V	mm		260			290
Z	mm	820		1035	1250	

Weight (kg)

Weight with packaging

Model	2	4	6	7	9
3 rows	13,6	18,1	22,8	27,0	30,4
3+1 rows	14,4	19,3	24,3	28,8	32,2
3+2 rows	15,0	20,0	25,2	29,9	33,3
4 rows	14,4	19,1	24,1	28,5	31,9
4+1 rows	15,2	20,3	25,6	30,3	33,7

Weight without packaging

Model	2	4	6	7	9
3 rows	11,8	16,3	20,5	24,2	27,3
3+1 rows	12,6	17,5	22,0	26,0	29,1
3+2 rows	13,2	18,2	22,9	27,1	30,2
4 rows	12,6	17,3	21,8	25,7	28,8
4+1 rows	13,4	18,5	23,3	27,5	30,6

Water content (litres)

Model	SEC/F-ECM 2	SEC/F-ECM 4	SEC/F-ECM 6	SEC/F-ECM 7	SEC/F-ECM 9
3 rows	0,6	0,9	1,6	1,7	1,9
4 rows	0,8	1,3	2,2	2,4	2,8
+1 row	0,2	0,3	0,5	0,5	0,6
+2 rows	0,4	0,6	1,0	1,0	1,2

CONTROLS FITTED ON THE UNIT

All the **SEC/F-ECM** units can be supplied with the **TMV-T-ECM** electronic control to be fitted that allows managing one single unit.

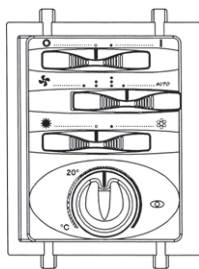
The **TMV-T-ECM** electronic thermostat allow the control of the room temperature precisely and are suitable when the user wants to set the fan speed.

The **TMV-T-ECM** allows the manual and the automatic speed switch or the continuous variation of the fan speed.

Controls

TMV-T-ECM control

ID	Code
TMV-T-ECM	9060141



- ON/OFF switch
- Manual 3 speed switch or automatic continuous speed control
- Manual Summer/Winter switch
- Continuous speed control based on the difference between ambient temperature and Set temperature (speed switch in Auto position)
- Electronic room thermostat for fan control (ON-OFF)
- Electronic room thermostat for water valve control (ON-OFF)
- Simultaneous thermostatic control of the valves and fan
- It allows to control the low temperature cut-out thermostat NTC
- Presence of a LED signal when the thermostat is on

Control power absorption: 1,5 VA

CONFIGURATION AND ELECTRONIC WALL CONTROLS

All the **SEC/F-ECM** units can be supplied with a wide range of electronic wall controls that allows managing one single unit or several units (by using the power units).

The room temperature can be controlled through wall electronic room thermostats, with different solutions according to every ambient conditions.

The **WM-AU**, **T-MB2 SW**, **WM-503-AC-EC** and **WM-S-ECM** electronic thermostats regulate the room temperature precisely and are suitable when the user wants to set the fan speed.

Configuration

For this fan coil configuration, the 1-10 Vdc signal, which controls the inverter, must be supplied by a controller with the following signal specifications:

Fan drive signal

- Fan OFF = 0 Vdc

- Fan ON > 1 Vdc
- Max. speed = 10 Vdc

ECM Blac inverter board

- 0÷10 Vdc Circuit Input Impedance Value = 68 kOhm

Controls

WM-AU controls

ID	Code
WM-AU	9066632E



Control power absorption: see the UP-AU power unit

Dimensions: 135x86x24 mm

The control must always be connected with UPM-AU power unit (fitted on the unit) or with UP-AU power unit (with separate packaging).

- ON/OFF switch
- Manual/automatic 3 speed switch
- Manual, automatic or centralized Summer/Winter switch
- Summer/Winter/Fan/Auto mode switch
- Electric heater/IAQ filter activation switch
- Electronic room thermostat for fan and water valves control (ON-OFF)
- Simultaneous thermostatic control of the valves and fan
- It allows to use the low temperature cut-out thermostat NTC mounted on the power unit
- It allows to control the water valves (ON-OFF) and the electric heater managed as main heating element or as an integration element
- Energy saving function
- Presence of a LED signal when the thermostat is on

P.N.: with 4 pipe installations and continuous chilled and hot water supply, it allows the automatic summer winter change-over in accordance to the room temperature (-1 °C = Winter, +1 °C = Summer, Neutral Zone 2 °C)

T-MB2 SW control

ID	Code
T-MB2 SW	9066994ESW



The control must always be connected with UPM-AU power unit (fitted on the unit) or with UP-AU power unit (with separate packaging).

Control with TFT 2,4" coloured graphic display for wall installation.

The main characteristics are:

- Management by keyboard
- Management of one single unit or of several units in Master/Slave mode
- ON/OFF switch
- Operation mode setting
- Setpoint configuration or setpoint variation by supervisory program (+/- 3°C of the set)
- Room temperature internal sensor, which can be defined as a priority compared to the return air sensor on the fan coil
- Fan speed switch
- Advanced daily/weekly ON/OFF programming with 3 pre-settable weekly programs
- Viewing and editing of the unit operating parameters, alarm diagnostics and information about the unit (the viewable parameters depend from the control board model to which the T-MB2 SW control is connected)
- Activation/deactivation of the room temperature display
- Electrostatic filter management
- Possibility to use the T1 sensor which allows the return air control (fitted on the power unit)

Control power absorption: see the UP-AU power unit

Dimensions: 115x72x20 mm

WM-503-AC-EC control

ID	Code
WM-503-AC-EC	9066686



The control must always be connected with UP-503-AC-EC power unit (separately delivered).

WM-503-AC-EC control allows to regulate the room temperature in both, the heating and the cooling modes, it can control one or two valves and fan coil units with asynchronous motor or fan coil units with EC electronic motors.

The WM-503-AC-EC control for fan coils with valves, is designed to be installed in a 503 wall box.

Easy to use, it is equipped with a large and efficient backlit LCD screen with 4 keys.

The kit lets the thermostat be suitable for all plaques on the market and it is composed by: coloured covers (white, silver and anthracite), frames and adaptators.

- Manual or automatic 3 speed motor control for asynchronous versions
- EC motor control with 0-10V signal for the ECM versions
- Power supply by UP-503-AC-EC by means of the two-core cable
- Input for return air/water/change over probe
- ON/OFF / SET Reduction / remote SUMMER-WINTER digital input
- User interface with LCD display with adjustable backlight and 4 keys
- 2 and 4 pipe fan coil units control
- Button lock controller

Control power absorption: see the UP-503-AC-EC power unit

Dimensions: 68x52.2x(wall protrusion=12) mm

WM-S-ECM control

ID	Code
WM-S-ECM	9066644



0-10V control with display designed to be mounted on the wall or to be installed on a 503 wall box.

- ON/OFF switch
- Manual 3 speed switch or automatic continuous speed control
- Manual Summer/Winter switch
- Summer/Winter/Fan/Auto mode switch
- Electronic room thermostat for fan control (ON-OFF)
- Electronic room thermostat for water valve control (ON-OFF)
- Simultaneous thermostatic control of the valves and fan
- It allows to control the low temperature cut-out thermostat NTC

Control power absorption: 1,2 VA

Dimensions: 132x87x23,6 mm

Power unit

UP-AU

ID	Code	Description
UPM-AU	9066641	UP-AU power unit for WM-AU and T-MB2 SW remote controls, fitted on the unit
UP-AU	9066640	UP-AU power unit for WM-AU and T-MB2 SW remote controls, not fitted on the unit



Power unit to be installed on the fan coil (fan coil interface).

- It controls the fan and the valves of the fan coil
- It is connected to the electric supply
- It receives the information required from the remote control
- Possibility to use the NTC low temperature cut-out thermostat (optional) for the T1 function which allows the return air control
- Possibility to use the NTC low temperature cut-out thermostat (optional) for the T2 function which controls the summer/winter switch.
- Possibility to use the NTC low temperature cut-out thermostat (optional) for the T3 function as low temperature cut-out thermostat.
- It allows to control up to 10 units (1 master and 9 slaves)
- Max. network length: 100 meters
- Max cable length between control and first connected power unit: 20 meters

Power unit absorption: 2,3 VA

UP-503-AC-EC

ID	Code
UP-503-AC-EC	9066687



Power unit to be installed on the fan coil (fan coil interface).

- It controls the fan and the valves of the fan coil
- It is connected to the electric supply

- It receives from the WM-503-AC-EC remote control the information required to control the valves and the motor
 - It allows to control up to 5 units (1 master and 4 slaves)
 - Max. Network length: 100 meters
 - Max cable length between control and first connected power unit: 20 meters
- Power unit absorption: 2 VA

Accessories for controls

NTC low temperature cut-out thermostat

ID	Code
NTC	3021090



For CV – CH – CVB – NC models

- To be fitted between the coil fins
- When connecting the control, the NTC probe cable must be separated from the power supply wires
- It stops the fan when the water temperature is lower than 28 °C and it starts the fan when is higher than 33 °C

To use as:

- T1 function for the return air control
- T2 function which controls the summer/winter switch
- T3 function as low temperature cut-out thermostat

To be used with TMV-T-ECM, WM-S-ECM controls and with UP-AU power unit.

T2 sensor

ID	Code
T2	9025310



NTC probe type, to be placed on the water supply pipe upstream of the valves (not to be used with 2 way valves).

The T2 probe must be used as described below:

- Change-Over for the automatic switch of the operating mode. If water temperature is lower than 20 °C, cooling mode is set; on the other hand, if water temperature exceeds 30 °C, heating mode is set
- it can be used on units with electric heater and hot water supply. The T2 priority probe activates the electric heater or water valve, depending on the water temperature detected. If water temperature exceeds 34 °C, the water valve ON-OFF control is activated; on the other hand, if water temperature is lower than 30 °C, the electric heater is activated

To be used with the UP-AU power unit.

CONTROLS AND UNITS MB VERSION

All the **SEC/F** and **SEC/F-ECM** units can be supplied with a wide range of controls, which allows managing one single unit or one or more groups of units by using the Modbus RTU - RS 485 communication protocol.

The groups of units can be managed according to the Master/Slave logic (up to 20 units) or by supervisory components.

The system consists in a MB board and a series of controls, such as the **T-MB2 SW** wall control, the **infra-red remote control**, the **PSM-DI** multifunction control panel, the **NET** supervisory program, the **T-DI** Touch screen multifunction control panel and the **Web Gateway for Cloud**.

MB electronic board

ID		Code	
MB-M	mounted	9066332	with electric asynchronous motor
MB-S	not mounted	9066333	
MB-ECM-M	mounted	9066334	with electronic motor and inverter board
MB-ECM-S	not mounted	9066335	



The MB electronic board is set to carry out different functions and adjustment modes, in order to meet the installation requirements. These modes are selected by setting the configuration dip switches on the board.

- 2/4 pipe system
- Electronic room thermostat for fan control (ON-OFF)
- Valve ON/OFF thermostatic control and continuous ventilation
- Valve and simultaneous ventilation ON/OFF thermostatic control
- Fan operation control depending on the coil temperature (T3 probe fitted), which can be activated only in heating mode or heating and cooling mode
- Automatic switch of the operating mode by means of T2 water probe (optional) applied on the 2 pipe system
- Seasonal switch by means of remote contact
- Forced fan coil switching off by remote contact (window contact or contact by clock)
- Electric heater or electronic filter control (the simultaneous control of the heater and of the filter is not possible)

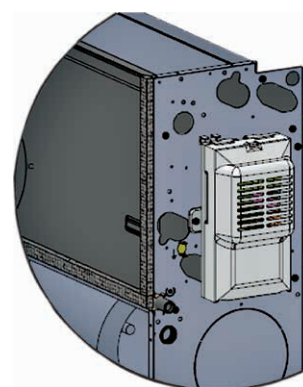
By activating the T3 probe function, the fan is stopped in winter when the coil temperature is lower than 32 °C and started when the temperature reaches 36 °C. In summer mode, the fan stops when the temperature inside the coil exceeds 22 °C and starts when it drops below 18 °C.

The following connections are located on the power board:

- receiver for infra-red remote control
- T-MB2 SW wall control
- RS 485 serial connection to manage several fan coils in Master/Slave configuration or to create a supervisory network

NTC probe included for T1 function (return air control).
NTC probe included for T3 function (low temperature cut-out thermostat).

Possibility to use the NTC low temperature cut-out thermostat (optional) for the T2 function which controls the summer/winter switch.



Note: MB electronic board has to be mounted on the fan coil internal unit.

T-MB2 SW control

To be used with MB electronic board.

ID	Code
T-MB2 SW	9066994ESW



Control with TFT 2,4" coloured graphic display for wall installation.

The main characteristics are:

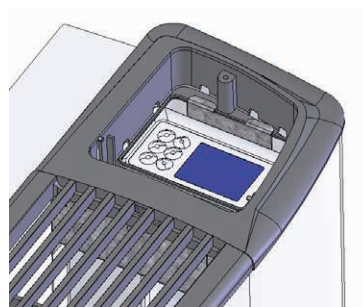
- Management by keyboard
- Management of one single unit or of several units in Master/Slave mode
- ON/OFF switch
- Operation mode setting
- Setpoint configuration or setpoint variation by supervisory program (+/- 3°C of the set)
- Room temperature internal sensor, which can be defined as a priority compared to the return air sensor on the fan coil
- Fan speed switch
- Advanced daily/weekly ON/OFF programming with 3 pre-settable weekly programs
- Viewing and editing of the unit operating parameters, alarm diagnostics and information about the unit (the viewable parameters depend from the control board model to which the T-MB2 SW control is connected)
- Activation/deactivation of the room temperature display
- Electrostatic filter management
- Possibility to use the T1 sensor which allows the return air control (fitted on the MB electronic board)

Dimensions: 115x72x20 mm

T-MB2 SW control fitted on the unit

To be used with MB electronic board only.

ID	Code	
T-MB2-LM	9066997	Control fitted on the unit, for CV / CVB models
T-MB2-LS	9066998	Control fitted on the unit, supplied with separate packaging, for CV / CVB models



T-MB2-LM / T-MB2-LS version fitted on the unit

For fan coil with casing only.

The control is equipped with internal probe to detect the room temperature, which can be defined as a priority compared to the return air probe on the fan coil.

Control functions are:

- ON/OFF switch
- temperature set
- modify the set point (when used as a +/- 3° variation of the set point configured from NET supervisory program or PSM-DI)
- set the fan speed (low, medium, high or auto fan)
- set the operation mode (fan only, cooling, heating; auto for 4 pipe systems with mode selection depending on the air temperature)
- time setting
- weekly ON/OFF program
- display and change of the fan coil operation parameters

Infra-red remote control

To be used with MB electronic board only.

ID	Code	
RS-RT03	9066337	Infra-red remote control with receiver supplied with separate packaging (to be used with MB board only)
RT03 / RR03	3021203	Infra-red remote control supplied with separate packaging (to be used with MB board only)
RS	9066338	Receiver for infra-red remote control supplied with separate packaging (to be used with MB board only)

The infra-red remote control allows setting by a remote position the fan coil operation parameters.

The remote control features the following functions:

- switch the unit ON and OFF
- temperature set
- set the fan speed (low, medium, high or auto fan)
- set the operation mode (fan only, cooling, heating; auto for 4 pipe systems with mode selection depending on the air temperature)
- time setting
- 24 hours ON/OFF program

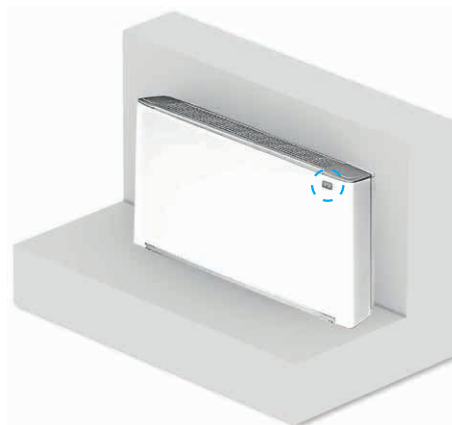


Installation examples with infra-red remote control

Concealed SEC/F - SEC/F-ECM Fan Coil Units



SEC/F - SEC/F-ECM CV-CH-CVB



More fan coils with MB board can be connected with the Bus communication protocol and can be managed at the same time by a T-MB2 SW single control or by only one infra-red remote control.

Using the special jumper present on the MB board, one unit must be configured as the master, and all the others as slaves.

It is clear that the remote control must be pointed at the receiver on the master unit.

To avoid problems, it is recommended to install and connect the receiver only on the master unit.

with T-MB2 SW control

One control for each unit
(Maximum length of the connection cable = 20 m)



One control for more units (20 units max.)
(Maximum total length of the connection cable = 800 m)



with infra-red remote control

One control for each unit

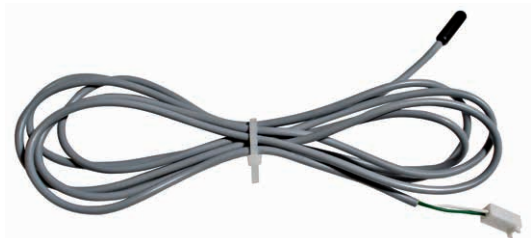


One control for more units (20 units max.)
(Maximum total length of the connection cable = 800 m)



T2 accessory for units with MB electronic board

ID	Code
T2	9025310



NTC probe type, to be placed on the water supply pipe upstream of the valves (not to be used with 2 way valves).

The T2 probe must be used as described below:

- Change-Over for 2 pipe systems, for the automatic switch of the operating mode. If water temperature is lower than 20 °C, cooling mode is set; on the other hand, if water temperature exceeds 30 °C, heating mode is set
- it can be used on units with electric heater and hot water supply. The T2 priority probe activates the electric heater or water valve, depending on the water temperature detected. If water temperature exceeds 34°C, the water valve ON-OFF control is activated; on the other hand, if water temperature is lower than 30°C, the electric heater is activated

PSM-DI multifunction control panel

ID	Code	
PSM-DI	3021293	Multifunction control panel (to be used with MB board or MB versions only)



Another option available for the serial communication between the units is the possibility to connect up to 60 double insulated panel fan coils in series and manage them with just one multifunction control panel.

The wall mounted controller can be used to set the operating mode for each individual unit connected, display the operating conditions of each individual unit, and set the ON/OFF time sets for each day of the week (the program can be set for all the units and for a maximum of ten groups of units).

If more than 60 units need to be connected, two or more PSM-DI control panels must be used.

Each unit must have a MB board.

The PSM-DI control is used to manage a series of fan coils, up to a maximum of 60 units (the maximum length of the RS 485 connection cable must not exceed 800 m), from one single control point.

The PSM-DI control communicates via a serial line with all the units connected, with the possibility of controlling them all together or individually.

In fact, the unique address of each individual fan coil means that all the units can be called at the same time, or the individual unit called, to perform the following functions:

- display the current operating mode, the fan speed, the set point
- display the room temperature measured on the individual unit
- turn all the units ON and OFF at the same time or alternatively each unit individually
- change the operating mode (fan only, heating, cooling, automatic change-over)
- change the set point and modify the values and operation parameters of the fan speed

Each function can then be sent to all the units connected, or alternatively to each individual unit.

Different set points or operating modes can be set for each individual unit.

The PSM-DI panel can also be used for the time management of the units over the week.

Four ON times and four OFF times can be set on the units for each day of the week.

A different temperature set that will be considered as Operation set for all connected appliances, can be set for each event.

If the temperature set is not entered for the individual event, it must be set during programming for each individual unit or for the entire network.

Units without receiver or with receiver can be connected within the network: the former can receive instructions only from the PSM-DI wall mounted panel; while the latter can receive information from both the wall mounted panel (PSM-DI) and infra-red remote control. Use the infra-red remote control to force ON mode of the individual unit, if ON/OFF daily time programming has been set.

The unit will regain the settings from the PSM-DI panel during execution of successive start-up program.

The PSM-DI panel cannot be used together with the management program NET.

Notes:

- set the Dip Switches of each fan coil as illustrated in the remote control installation manual, based on the required solutions
- only one SIOS board is allowed to be used per each PSM-DI control panel
- about "Priority pump function": when just one unit calls for, the relay RL1 on the SIOS board is automatically activated to connect a hot water pump
- the RS 485 network's overall length must not exceed 700/800 metres

T-DI Touch screen multifunction control panel

ID	Code
T-DI	9066685



The T-DI multifunction control panel lets supervise and control more units with MB or SIOS boards; the panel is equipped with a 7 inches touch screen display and a serie of graphical pages that allows an easy reading of the data sent by the fan coils and the management of up to 60 units (max. 60 units: SIOS + MB).

With the multifunction control panel T-DI it is also possible to control the units from a distance with the specific Cloud App for Android and iOS.

The Cloud APP is simple to use and lets have complete control of all the connected units.

Web gateway for Cloud

ID	Code
Web gateway	9066892



With the Web gateway for "Cloud" it is possible to control remotely up to 60 units, equipped with MB or SIOS boards (max. 60 units: SIOS + MB).

The "Cloud" APP is simple to use and lets have complete control of all the connected units.

NET program for managing a network of MB fan coils

Hardware/software supervisory system (to be used with MB board and MB versions only)

ID	Code
NET	9079118



NET is a centralised control system for networks of MB fan coils, based on software that runs on LINUX™ operating system (the program is provided pre-installed on a PC) and it works in a "stand alone" way, as an ordinary computer, so that it can be connected to a monitor, to a mouse and to a keyboard.

By connecting an Ethernet cable is instead possible to work at a distance and visualize the entire program setting-up through whatever browsers.

The NET software offers a practical and economical solution for managing the units, with the simple click of the mouse.

The main characteristics are:

- simplicity of use
- an extremely complete and functional weekly program
- possibility to access the historical operating data for each individual unit connected
- possibility of data saving on USB key
- visualization of the saved configuration on a new ASUS PC

The program takes advantage from all features of our units with fitted MB board.

The program can be used to:

- create uniform groups (groups of units on individual floors, in offices or rooms)
- save weekly programs configured for different types of operation (summer, winter, mid seasons, closing periods etc.); these can then be recalled and activated with a simple click of the mouse. Weekly on/off cycles can be set for individual units or groups of units
- set the operating conditions for each individual unit or groups of units (operating mode, fan speed, temperature setting)
- set the set point limits for each individual unit or groups of units

- switch each individual unit or groups of units ON or OFF

With the NET multifunction control panel it is also possible to control the units from a distance with the specific APP Cloud for Android and iOS.

The Cloud APP is simple to use and lets have complete control of all the connected units.

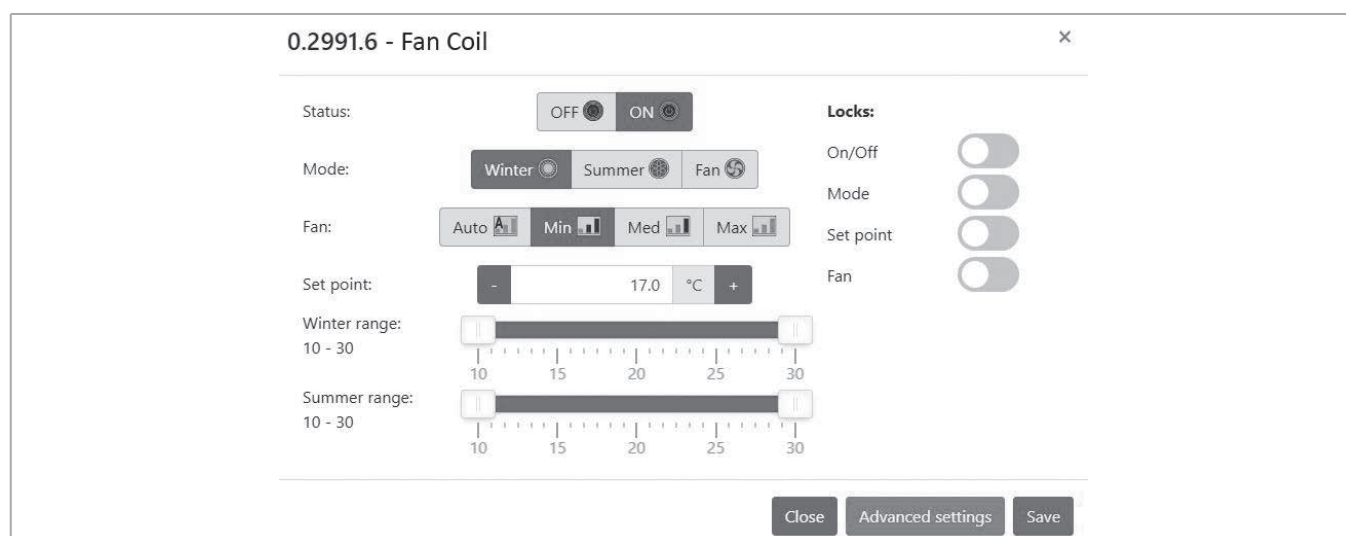
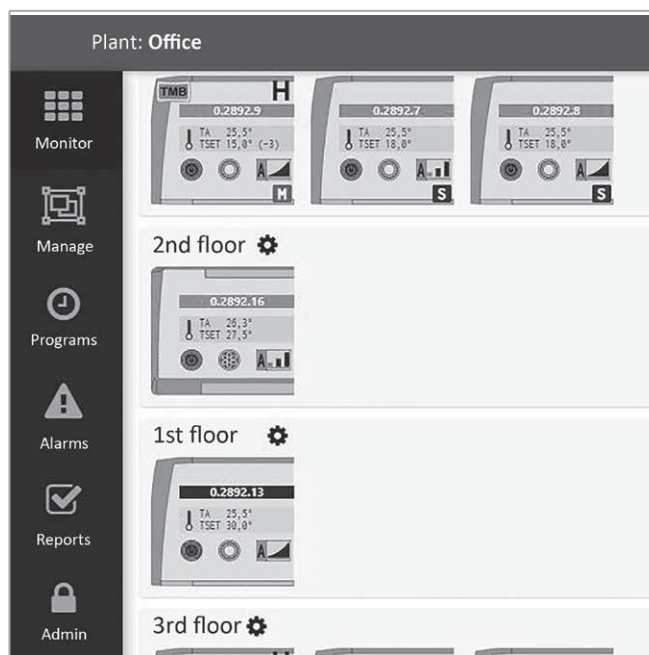
Graphical pages

The main program screen can display and interact with the entire network of units.

An individual unit, a group of units or the entire network can be called so as to make modifications to the operating mode and the set point.

The user can then check the operating status of each individual unit, read the room temperature, the coil temperature and the operating status of the condensate drain pump or any alarms.

The **"Monitoring"** Screen shows the units that are connected to the network and scanned by the program.



The icon of the terminal unit provides the following information:

- unit name (0.2766.8)
- set temperature (SETP)
- room temperature (AT)
- unit status:



ON (GREEN)



OFF (RED)

- mode:



Summer



Winter



Auto



Fan only

- fan speed:



Low



Medium



High



Auto Fan

The **“Programs”** Screen, can be used to set the unit operating parameters for each day of the week. Several weekly programs can be set.

Time bands are available for each day of the week. The time and the type of operation to be performed by the unit can be set for each band.

The time and the operating parameters can then be displayed before being sent to the unit and implemented.

Programs / Edit

Program name: **prova 12** Program type: **Weekly** Unit type: **Units**

Edit program name Copy day

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
0:00							
1:00							
2:00							
3:00							
4:00	 17°C	 17°C	 17°C	 17°C	 17°C		
5:00							
6:00							
7:00							
8:00							
9:00							
10:00							

Every time that the reading of the set up Dip Switches results not easy (as for example by the false ceiling installations), it is always possible to display them directly through the NET program.

0.2991.6 - Fan Coil

Unit status Configuration Parameters

ON

Dip	OFF option	ON option
1: OFF	2 pipe units	4 pipe units
2: OFF	Thermal power station with valves	Thermal power station with fan
3: OFF	T3 disabled	T3 enabled
4: OFF	T3 only Winter when enabled	T3 Winter and Summer when enabled
5: OFF	Continuous ventilation	Simultaneous ventilation of valves
6: OFF	Unit without electrical heater	Resistance-coils Management
7: OFF	T2 as CH Change-Over (resistance phase II)	Resistance-coils with T2
8: OFF	RL7 (D0-D0) according to the state of the controller	RL7 (D0-D0) according to the pump
9: OFF	CA = Remote ON/OFF	CA = Remote Summer/Winter
10: OFF	Master	Slave

0.2991.6 - Fan Coil

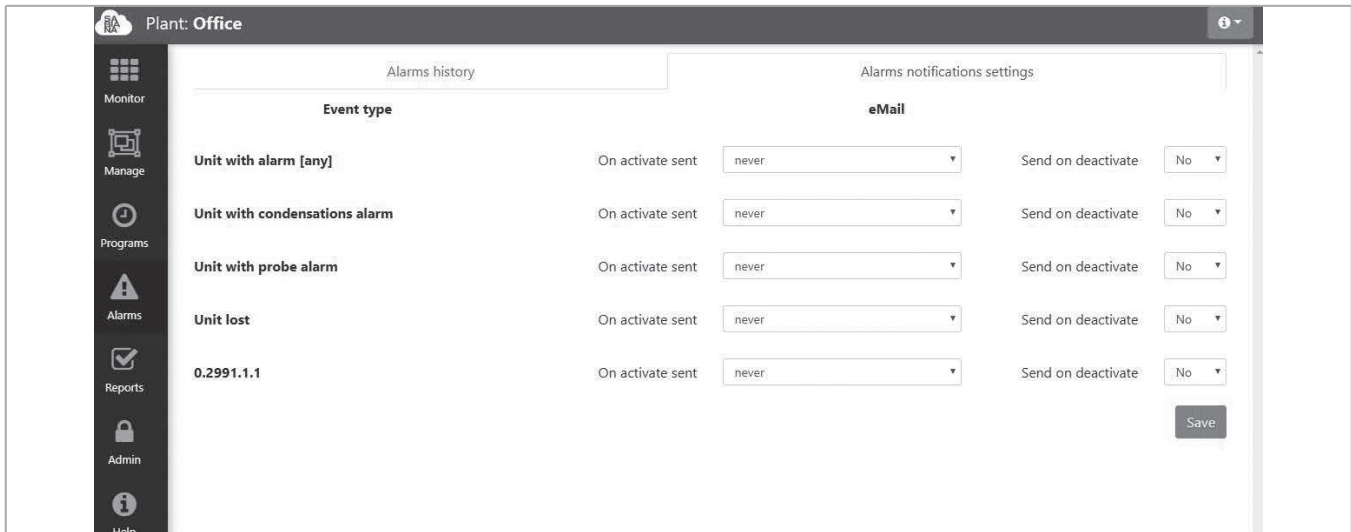
Unit status Configuration Parameters

T3 fan on heating	- 34.0 °C +	T3 fan on cooling	- 22.0 °C +
T3 fan control hysteresis	- 5.0 °C +	Fan maximum off time for antistratification	- 10 min. +
Antistratification on time	- 60 sec. +	Post-ventilation time	- 180 sec. +
ECM voltage MIN speed	- 1.0 V +	ECM voltage MED speed	- 5.0 V +
ECM voltage MAX speed	- 10.0 V +	Pump, delay time	- 150 sec. +

« 1 2 3 4 »

Close Set TMB time Save

In addition to the alarm set on the **"Alarms"** Screen, it is possible to send the ON-OFF alarm notification via E-mail and sms.



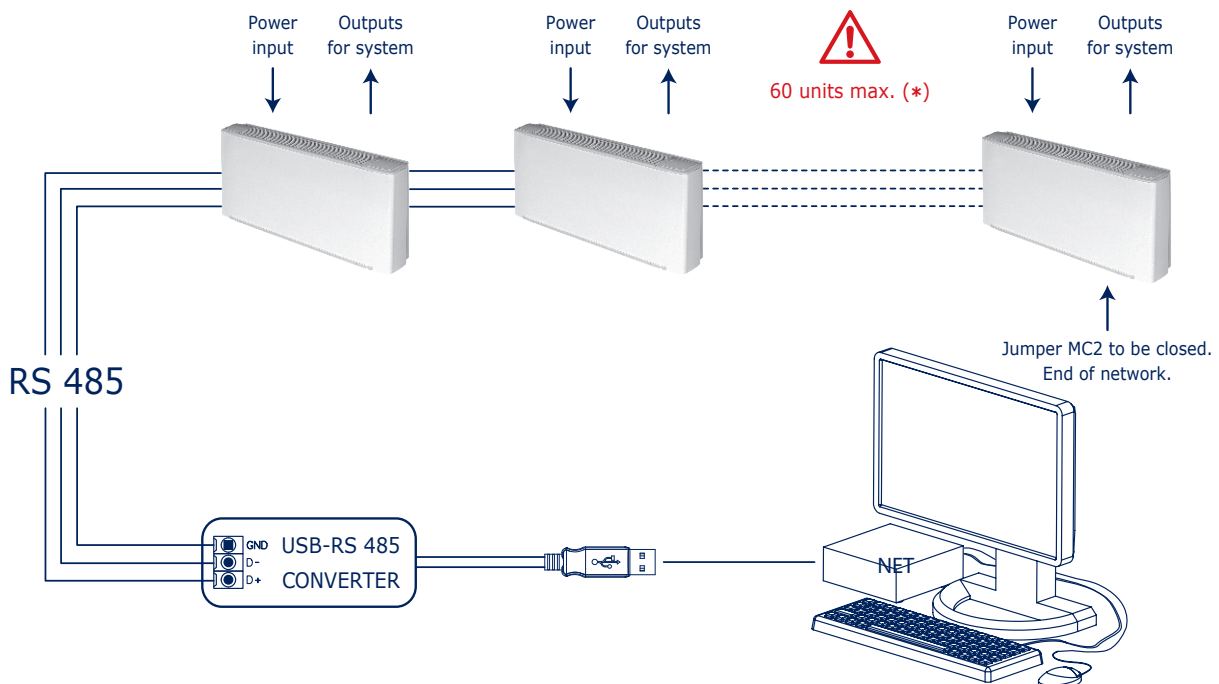
RS 485 serial connection cable

Shielded cable to be used: RS-485, 1x2x24 AWG SFTP, 120 Ohm.



PC NET Software

Installation example with a network with MB board.



(*) In the event of more than 60 units, add one or more Router-S (see next page).

MB and NET accessories

SIOS board

ID	Code
SIOS	3021292



SIOS is a board equipped with 8 relays with potential free contact to control the activation or deactivation of remote electric utilities.

Moreover, the board has 8 digital inlets to display the actuators or external consents, such as motor or other.

The SIOS boards can be connected:

- inside a network managed by NET
- inside a network managed by T-DI
- inside a network managed by Web gateway
- to a PSM-DI panel (one SIOS for each PSM-DI panel)

Router-S

ID	Code
Router-S	3021290



The Router-S is an electronic board that allows to control several units inside a network managed by NET(default) or within a sub-network managed by BMS systems, that are not provided (it is necessary to operate on a Dip Switch on the board).

Managed by NET

The Router-S in the standard version is an electronic board that:

- allows creating networks with more than 60 units (minimum 2 Router-S are required) or to divide the network (per floor, building, ecc.).
- allows creating a Master/Slave sub-network to be controlled as an independent group

The number of Router-S to be used is:

- up to 60 units: no Router-S
- from 61 to 120 units: 2 Router-S
- every 60 subsequent units: 1 additional Router-S

Managed by BMS systems which are not provided

The Router-S becomes an electronic board to use with BMS systems not supplied, only after having set the Dip Switch on the board and so creating a Master/Slave sub-network to be controlled as an independent group.

The number of Router-S to be used is:

- max 14 Router-S
- maximum 15 Fan Coils per Router-S

ACCESSORIES

BREEZE frame kit for wall concealed installation

The Breeze kit is available in 3 sizes and allows the wall installation of the recessed SEC/F - SEC/F-ECM fan coil units.

The kit includes a top closing panel that prevents the access to technical spaces and coil ensuring the safety of the end user.

When the Fan Coil is equipped with the Recessed box kit, it must be connected to a remote control and it is not possible to use the built-in electronic controls.

The simplified valve kit can not be used with the Kit Breeze.



The **Aesthetic frame kit** and the **Recessed box kit** have different codes as they are separately delivered with their own packaging and they must be assembled together.



These items are suitable for the SEC/F and the SEC/F-ECM models NC horizontal version, sizes 2÷6.

Technical characteristics of the main components

The aesthetic frame includes:

- the closing frame;
- the air supply louvre;
- the front panel;
- the air intake grid.

Perimeter frame, front panel and air intake grid

made of steel painted with epoxy polyester coat, dried in a furnace at 180 °C, colour RAL 9003.

It is possible to repaint the entire frame of the same color as the wall.



The recessed box is made of galvanized steel with openings for the electrical and hydraulic connections. To fit in the unit easily, there are 4 grub screws.

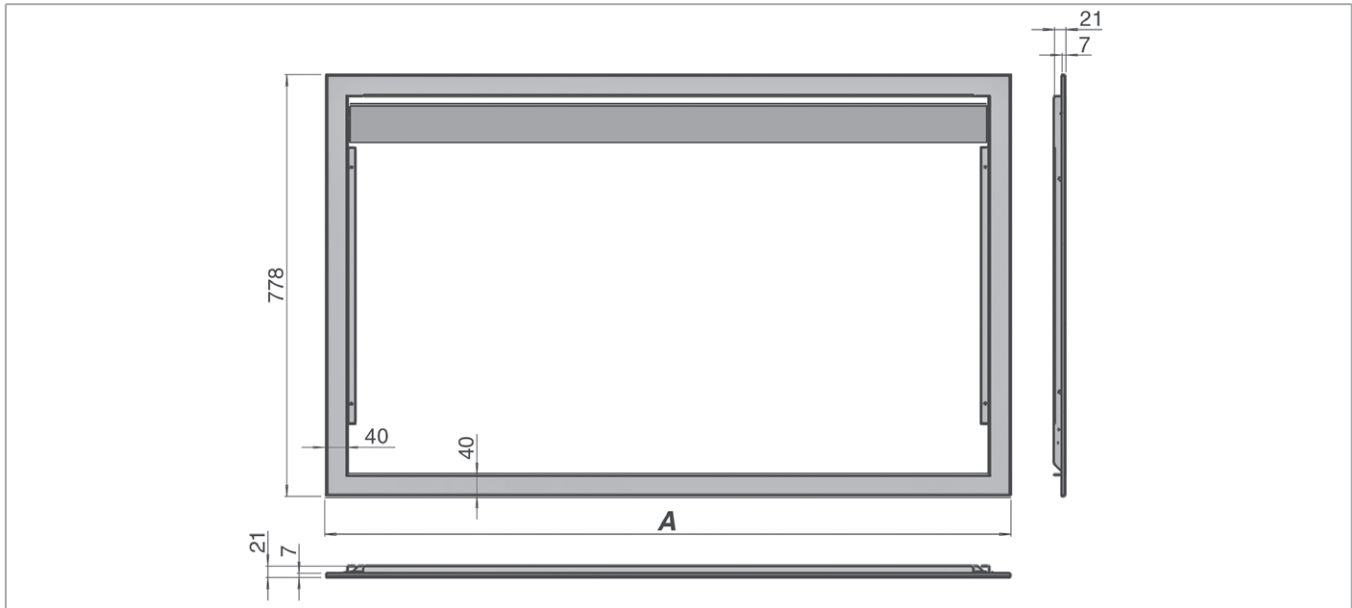


The air supply louvre is made of extruded aluminum with satin finish.



The air intake grid is fixed to the frame by using a simple and fast connecting system and it can be easily removed to clean the filter and the inner casing. The grid can be easily removed to clean the filter and the inner casing.

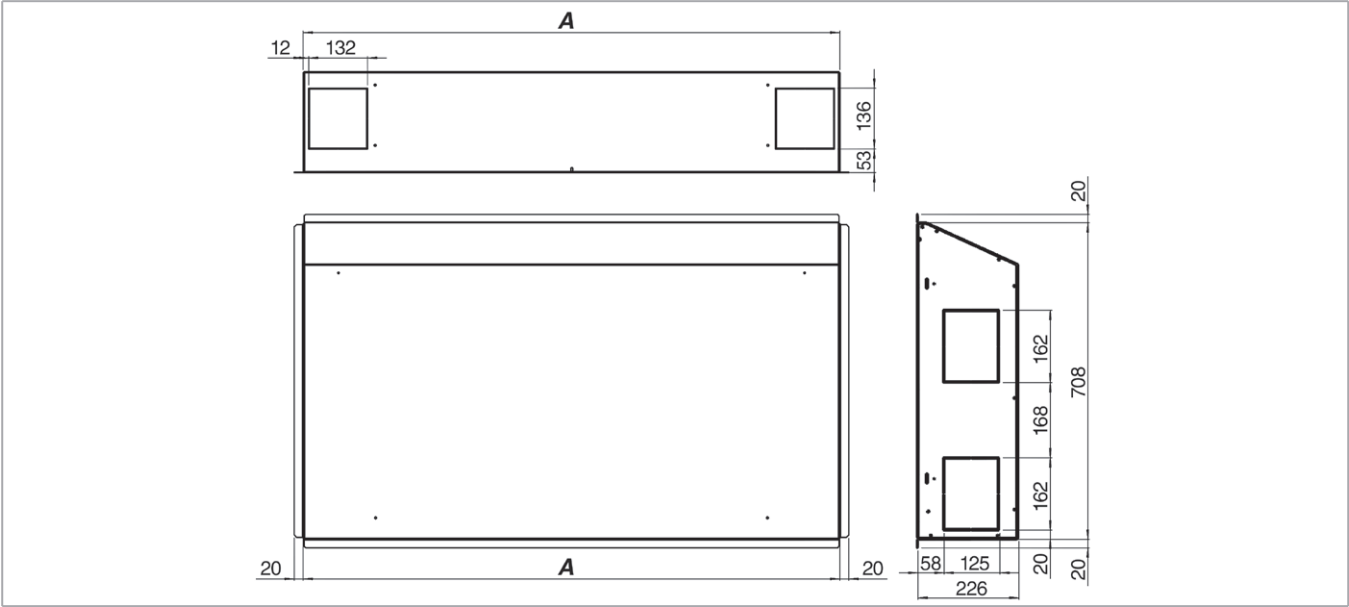
Aesthetic frame dimensions



Model	ID	Code	A mm	Aesthetic Frame Kit Weight (kg)
2	CBR-A	9076452	837	10,5
3 - 4	CBR-B	9076453	1052	12,5
5 - 6	CBR-C	9076455	1267	14,5



Recessed box dimensions

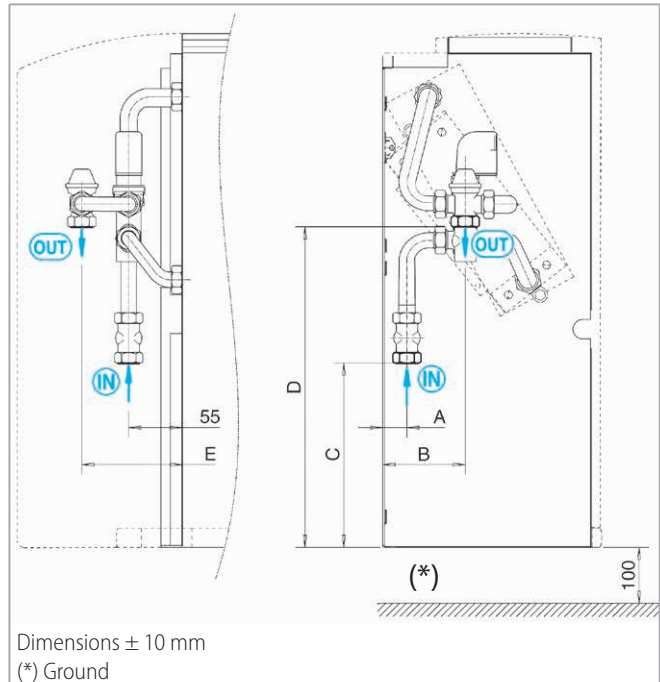
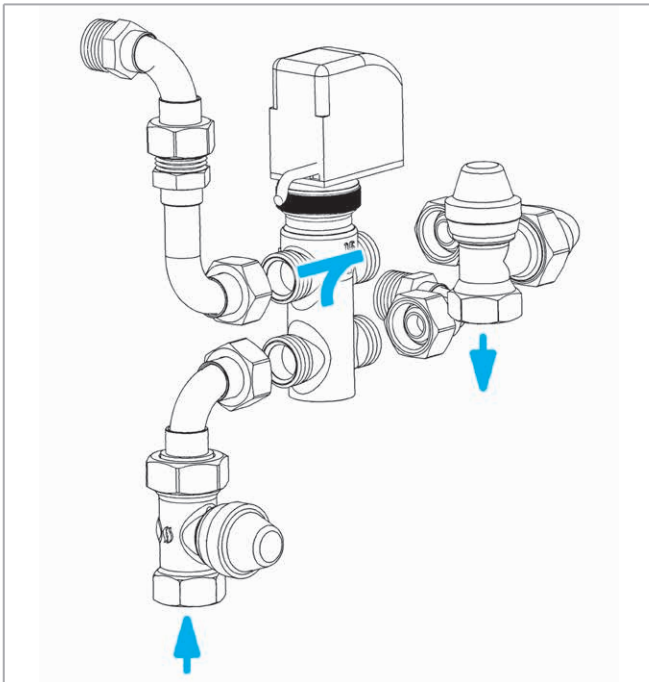


Model	ID	Code	A mm	Recessed Box Kit Weight (kg)
2	IBR-2	9076462	771	13
3-4	IBR 3-4	9076463	986	16
5-6	IBR 5-6	9076465	1201	18



VBP main coil 3 way valve

Control valve kit: 3 way valve, ON-OFF 230 V, with electric motor and mounting kit with micrometric lockshield valve.



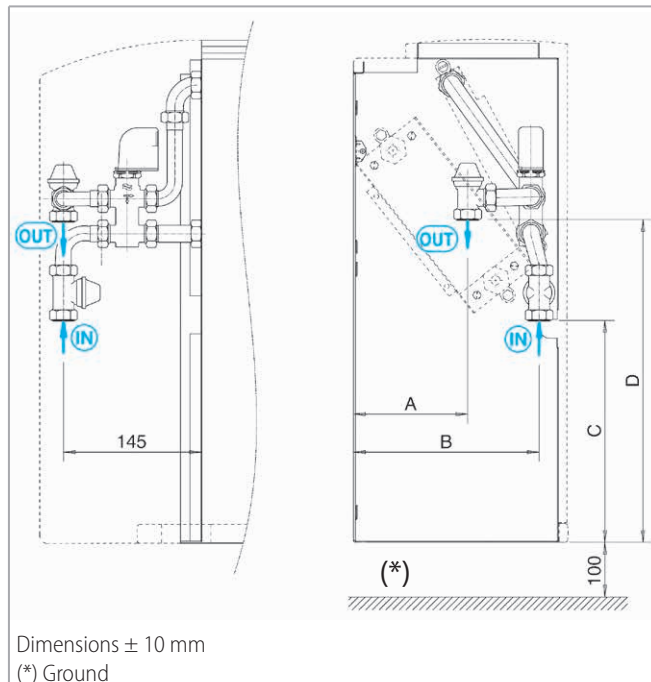
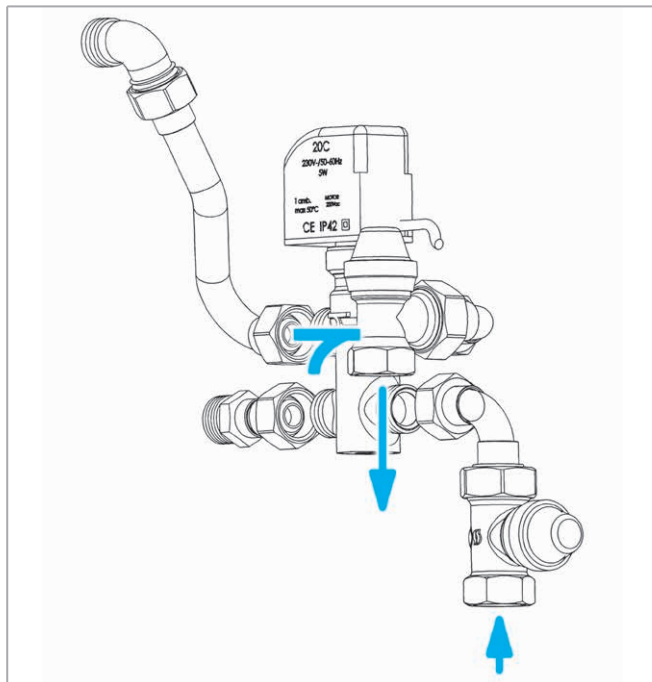
Model	FITTED		NOT FITTED		Valve			Micrometric lockshield valve		
	ID	Code	ID	Code	DN	(Ø)	Kvs	DN	(Ø)	Kvs
1 ÷ 5	VBPM-C G1-5	9066561	VBPS-C G1-5	9066560	15	1/2"	1,6	15	1/2" F	2,0
6 - 7	VBPM-C G6-9	9060471	VBPS-C G6-9	9060474	20	3/4"	2,5	15	1/2" F	2,0
8 - 9	VBPM-C G6-9	9060471	VBPS-C G6-9	9060474	20	3/4"	2,5	15	1/2" F	2,0

Model	Dimensions (mm)				
	A	B	C	D	E
1 ÷ 5	25	85	190	290	105
6 - 7	25	85	190	290	105
8 - 9	50	120	185	290	105

Water side pressure drop (Kvs) diagrams to p. 83

VBA additional coil 3 way valve

Control valve kit: 3 way valve, ON-OFF 230 V, with electric motor and mounting kit with micrometric lockshield valve.



Model	FITTED		NOT FITTED		Valve			Micrometric lockshield valve		
	ID	Code	ID	Code	DN	(Ø)	Kvs	DN	(Ø)	Kvs
1 ÷ 7	VBAM-C G1-9	9060472	VBAS-C G1-9	9060475	15	1/2"	1,6	15	1/2" F	2,0
8 - 9	VBAM-C G1-9	9060472	VBAS-C G1-9	9060475	15	1/2"	1,6	15	1/2" F	2,0

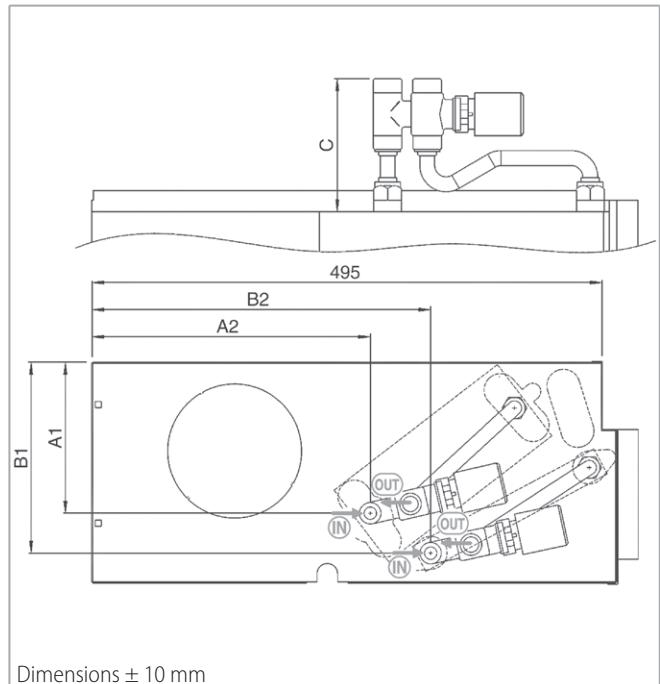
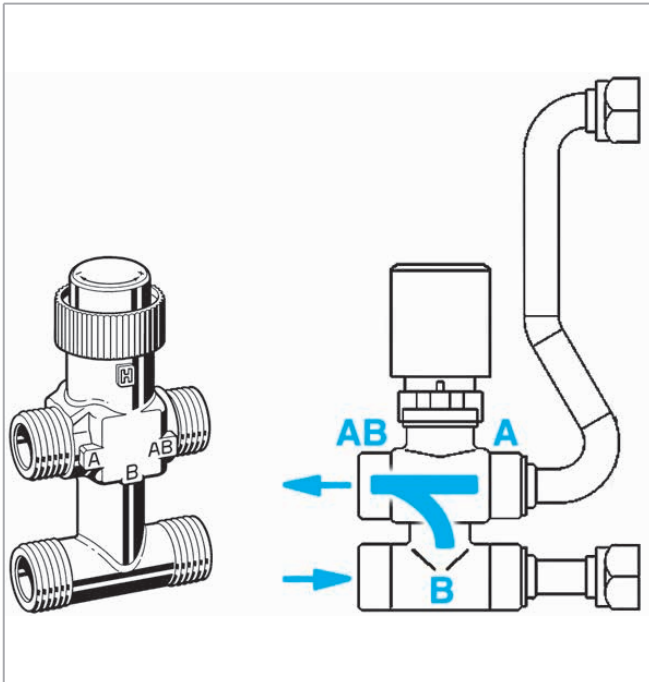
Model	Dimensions (mm)			
	A	B	C	D
1 ÷ 7	120	195	240	340
8 - 9	135	200	235	330

Water side pressure drop (Kvs) diagrams to p. 83

VS simplified kit for 3 way valve for main and additional coil (concealed models only)

3 way valve, ON-OFF 230 V with electric motor and mounting kit without micrometric lockshield valve.

Valve with flat connection.



Dimensions ± 10 mm

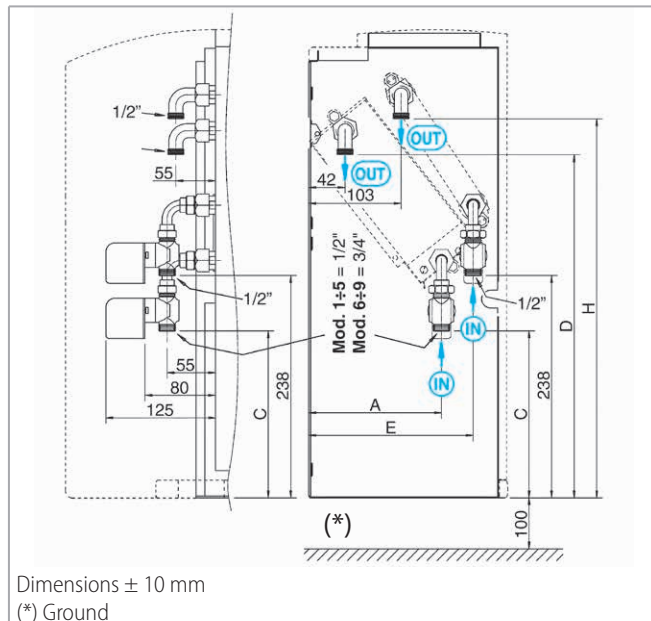
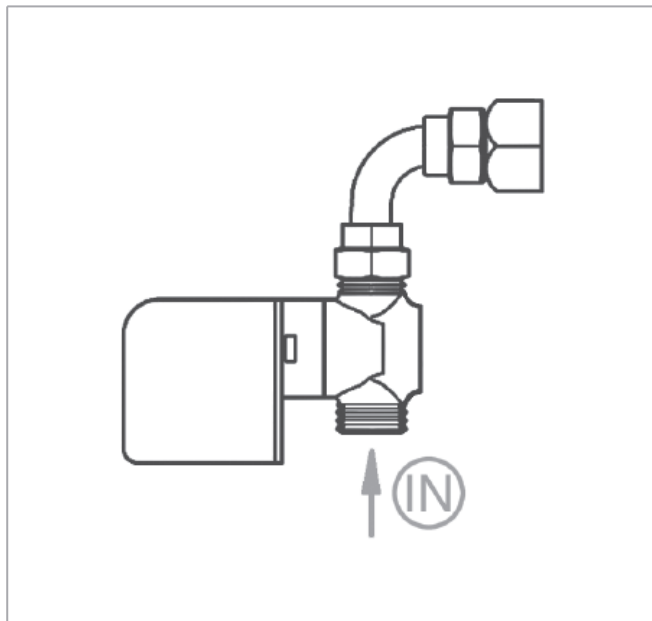
Model	MAIN COIL				DN	(Ø)	Kvs
	FITTED		NOT FITTED				
	ID	Code	ID	Code			
1 ÷ 5	VSPM-C G1-5	9066571	VSPS-C G1-5	9066570	15	1/2"	1,6
6 - 7	VSPM-C G6-9	9060484	VSPS-C G6-9	9060481	20	3/4"	2,5
8 - 9	VSPM-C G6-9	9060484	VSPS-C G6-9	9060481	20	3/4"	2,5
	ADDITIONAL COIL						
1 ÷ 9	VSAM-C G1-9	9060483	VSAS-C G1-9	9060480	15	1/2"	1,6

Model	Dimensions (mm)				
	Main		Additional		C
	A1	A2	B1	B2	
1 ÷ 5	152	270	185	330	116
6 - 7	152	268	185	330	124
8 - 9	177	270	210	327	124

Water side pressure drop (Kvs) diagrams to p. 83

V2 2 way valve for main and additional coil

2 way water valve ON-OFF 230 V with electric motor and mounting kit.

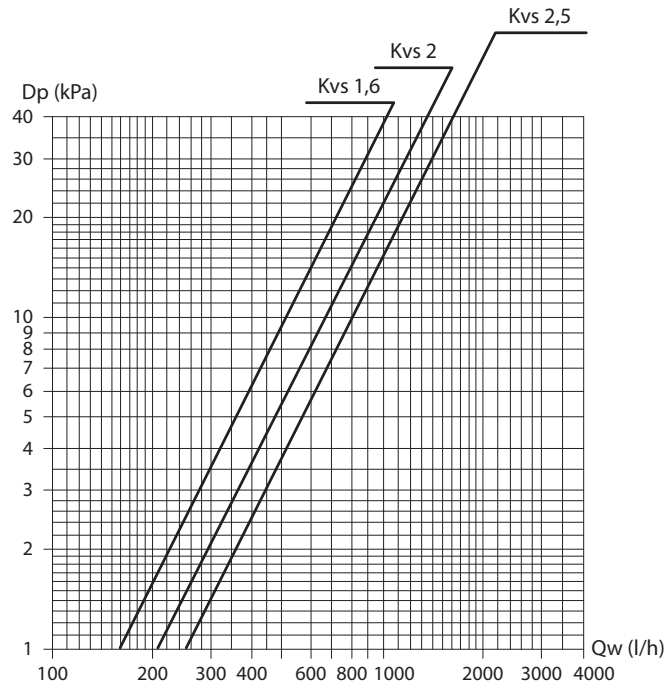


Model	MAIN COIL				DN	(Ø)	Kvs
	FITTED		NOT FITTED				
	ID	Code	ID	Code			
1 ÷ 5	V2M-C G1-5	9060476	V2S-C G1-5	9060478	15	1/2"	1,7
6 - 7	V2M-C G6-9	9060477	V2S-C G6-9	9060479	20	3/4"	2,8
8 - 9	V2M-C G6-9	9060477	V2S-C G6-9	9060479	20	3/4"	2,8
	ADDITIONAL COIL						
1 ÷ 9	V2M-C G1-5	9060476	V2S-C G1-5	9060478	15	1/2"	1,7

Model	Dimensions (mm)				
	A	Main C	D	Additional E	H
1 ÷ 5	149	180	438	186	456
6 - 7	150	181	438	186	456
8 - 9	176	175	422	210	440

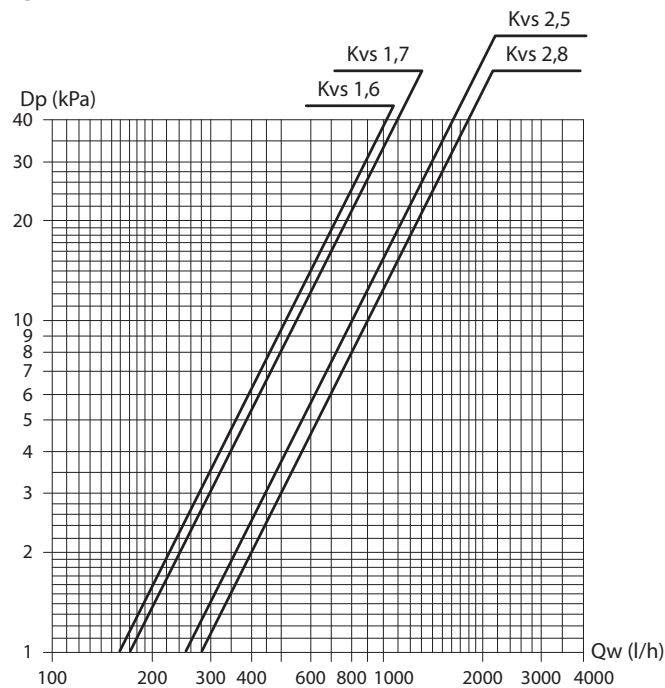
Water side pressure drop (Kvs) diagrams to p. 83

Water side pressure drop VBP - VBA



Dp = pressure drop
Qw = water flow rate

Water side pressure drop VS - V2



Dp = pressure drop
Qw = water flow rate

3 way double valve kit for 4 tube installation and single coil

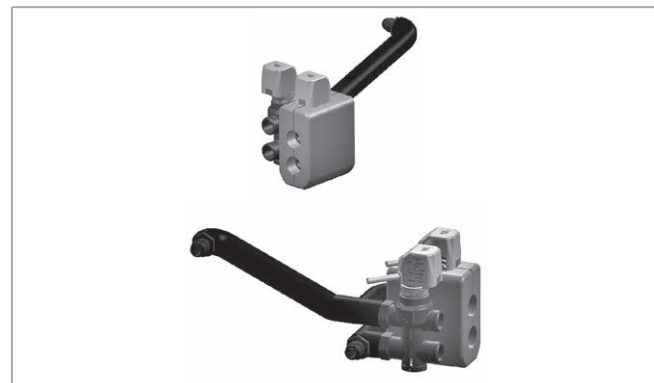
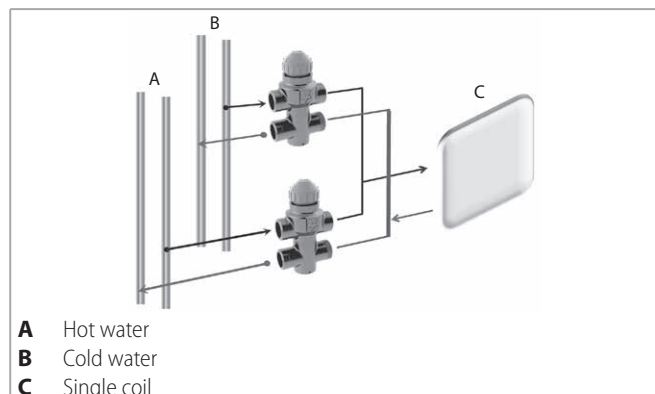
The kit consists of:

- Nr 2 special 3 way valves.
- Nr 2 actuators, 230 Volt ON-OFF, with internal safety micro switch.
- Insulated pipe kit.
- External valve insulation sleeve.

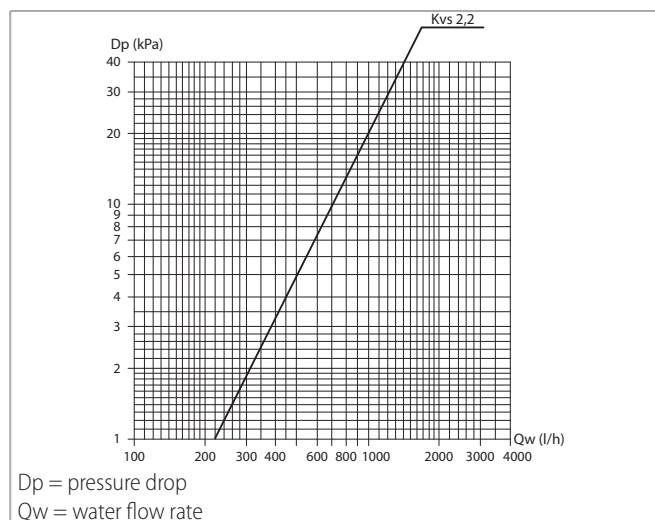
The kit uses a special 3 way valve which allows the transformation of the fan coil, equipped with one single coil, into a 4 tube installation.

The new **4x2**, valve has been designed to keep the water flow between flow and return perfectly separated, allowing its use in parallel.

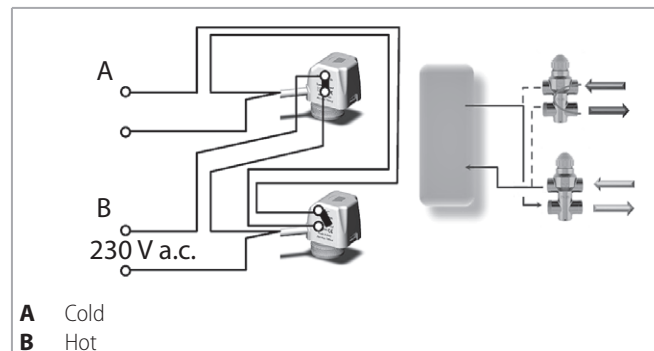
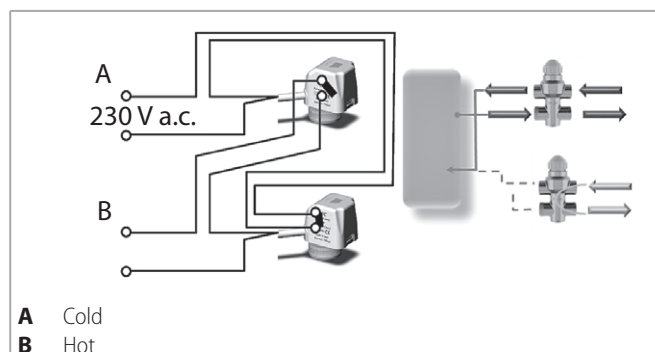
Therefore, it can be used on 4 pipe fan coil systems with one single heat-exchange coil on board the fan coil.



Model	FITTED		NOT FITTED		(Ø)	Kvs
	ID	Code	ID	Code		
1 ÷ 9	V3M4X2	9066572W	V3S4X2	9066562W	3/4"	2,2



Double actuator electrical connections

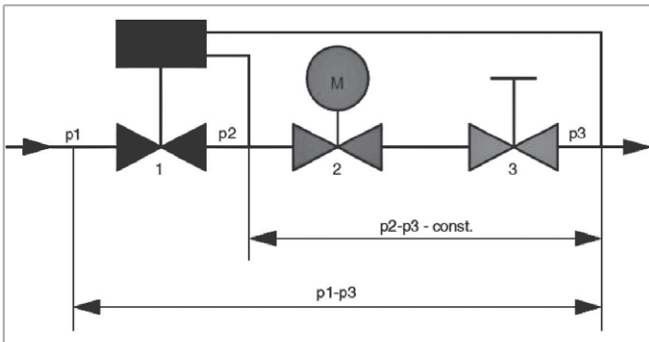


Balancing valves independent from the system pressure

- The balancing valve and a combined 2 way valve allow the regulation of the water flow value autonomously, regardless of the system pressure, and the control of the flow by using an ON/OFF electro-thermal actuator.
- The balancing valve allows you to balance the hydraulic system by supplying the required water flow, for each fan-coil, and to maintain it even under partial load conditions.

Valve operation logic

- "p1" the valve inlet pressure.
- "p3" the outlet pressure.
- "p2" the diaphragm activation pressure, which allows differential pressure "p2" – "p3" to be maintained at a constant value, in order to guarantee the water to flow at the set value.



The minimum differential pressure "p1" – "p3", required to guarantee the correct value of the set water flow rate, is indicated in the diagrams and in the related tables. This is an essential factor to size the system pressure drop and pump pressure head. The flow rate is kept at a constant value only if the valve pressure drop is higher than the indicated value.

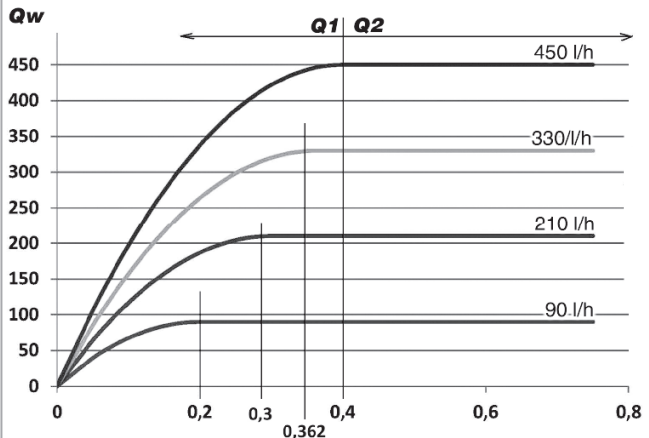
Minimum operating differential pressure

The minimum differential pressure and the balancing valve pressure drop must be considered to size the system pumps.

Flow rate is constant if the pressure drop is higher than that indicated in the diagrams and into the related tables.

The following diagram shows an example of the flow rate trend according to the pressure drop and calibration required.

Example



Qw = Water flow rate

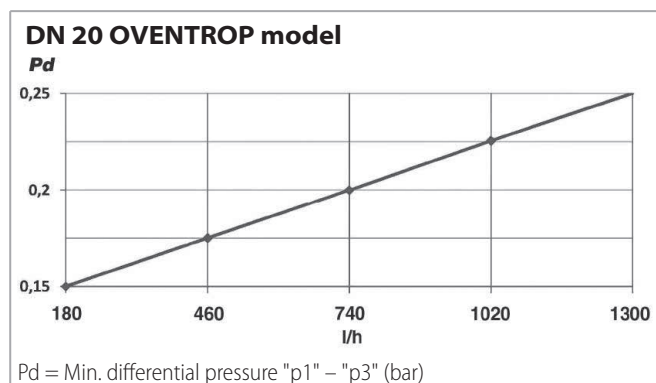
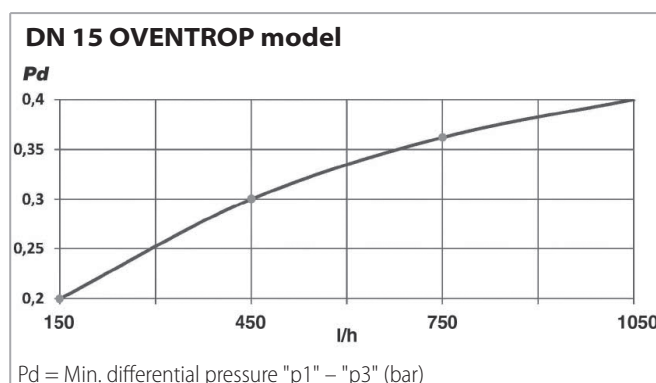
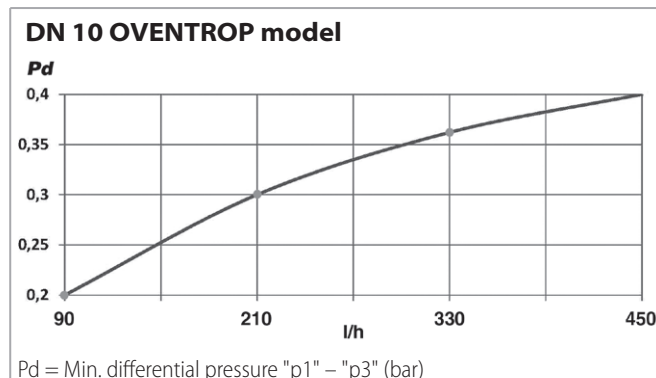
Pd = Min. differential pressure "p1" - "p3" (bar)

Q1 = Area with inconstant water flow

Q2 = Area with constant water flow

Kit with OVENTROP valve

In case of Oventrop valves, the valve upstream-downstream minimum differential pressure ("p1" – "p3"), which depends on the valve calibration value, must be exceeded to access the constant flow rate field.



E.g., when sizing the system pump, in which the DN 10 valves will be installed and in which 210 l/h are constantly required for each device, consider a useful pressure of 0.3 bar (to compensate the pressure drop of the valve) for each balancing valve. Therefore, the pressure drop values produced by the system balancing valves must be summed and the pump must be sized to produce a pressure equal to or greater than the value obtained previously.

OVENTROP technical characteristics

Model	DN 10	DN 15	DN 20
Flow rate range (l/h)	90 - 450	150 - 1050	180 - 1300
Kvs	1,1	1,8	2,5

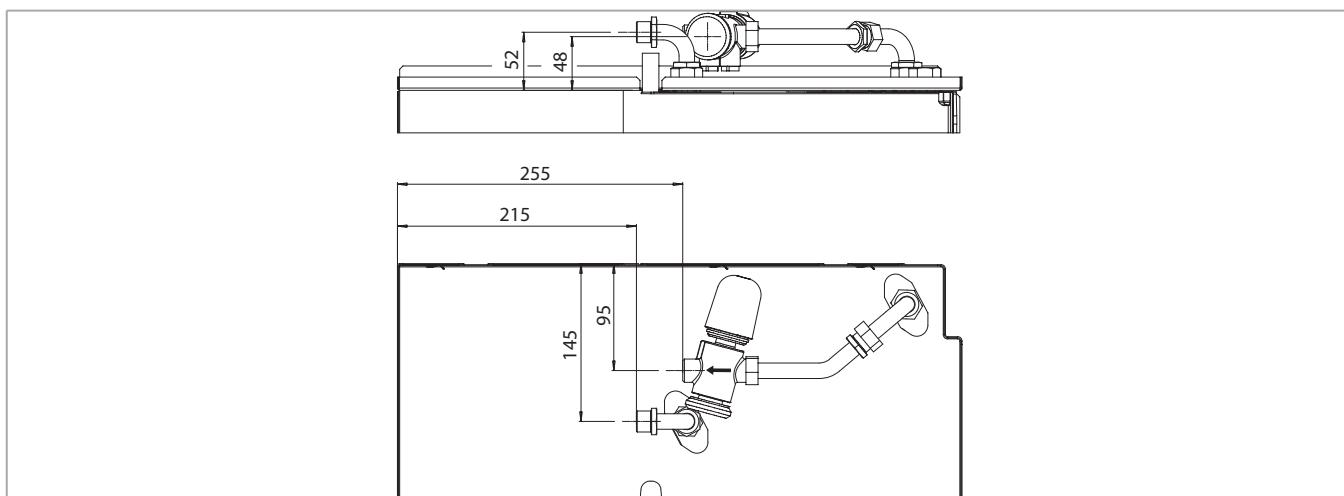
Operation limits of the balancing valves

- Maximum operating temperature: 120 °C
- Highest working pressure: 16 bar
- Maximum % of water/glycol mixture: 50%
- Minimum operating temperature: -10 °C
- Maximum differential pressure: 4 bar

Balancing valves for OVENTROP main coil

2 way valve for main coil and assembly kit.

The valve is supplied equipped with 230 Volt electro-thermal actuator for the ON/OFF control.

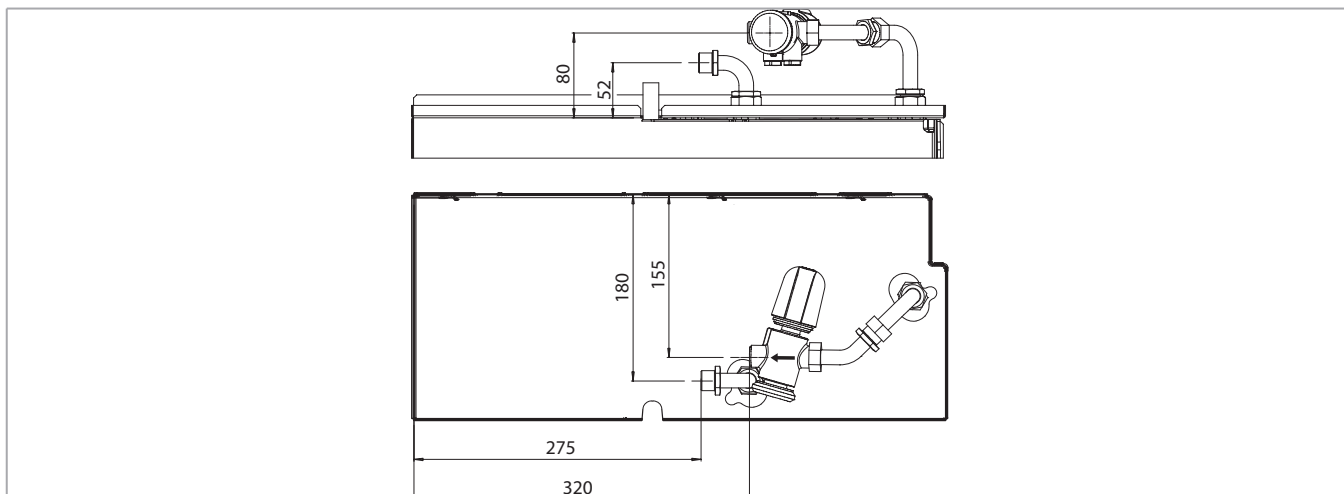


Model	FITTED		NOT FITTED		DN	(Ø)	Range (l/h)
	ID	Code	ID	Code			
1 ÷ 3	V20VBPM 90-450	9066660	V20VBPS 90-450	9066650	10	1/2"	90-450
4 ÷ 7	V20VBPM 150-1050	9066661	V20VBPS 150-1050	9066651	15	3/4"	150-1050
8 - 9	V20VBPM 180-1300	9066662	V20VBPS 180-1300	9066652	20	1"	180-1300

Balancing valves for OVENTROP additional coil

2 way valve for additional coil and assembly kit.

The valve is supplied equipped with 230 Volt electro-thermal actuator for the ON/OFF control.



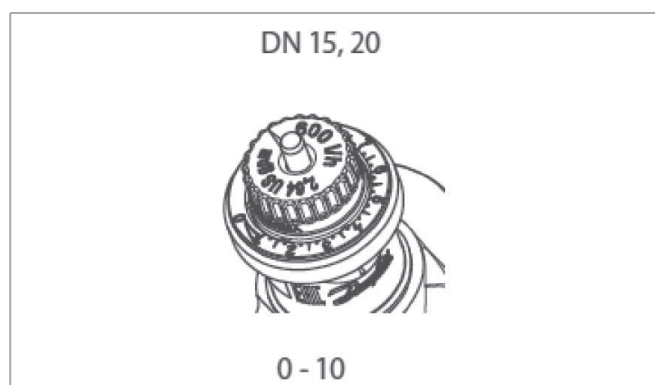
Model	FITTED		NOT FITTED		DN	(Ø)	Range (l/h)
	ID	Code	ID	Code			
1 ÷ 5	V20VBAM 90-450	9066663	V20VBAS 90-450	9066653	10	1/2"	90-450
6 ÷ 9	V20VBAM 150-1050	9066664	V20VBAS 150-1050	9066654	15	3/4"	150-1050

Kit with DANFOSS valve

The flow rate can be calculated without any special tools. In order to modify the presetting (the factory value is 100%), go ahead as follow:

1. Remove the blue protective cover or the actuator fitted on the unit
2. Lift up the indicator (DN 25-32)
3. Turn (clockwise to decrease) on the new value
4. Set off the grey indicator again into the closed position (DN 25-32)

The presetting range shows flow rate values between 10-0 (DN 15-20). The clockwise rotation reduces the requested flow rate value whereas the counterclockwise rotation increases it.



DANFOSS technical characteristics

Nominal diameter		DN	15	15HF	20HF
Type		-	90-450	150-1050	190-1300
Flow rate range		l/h	650	1200	1900
Adjustment range		%	10-100		
Differential pressure	Dp min.	kPa	16	25	25
	Dp max.		600		
Nominal pressure		PN	25		

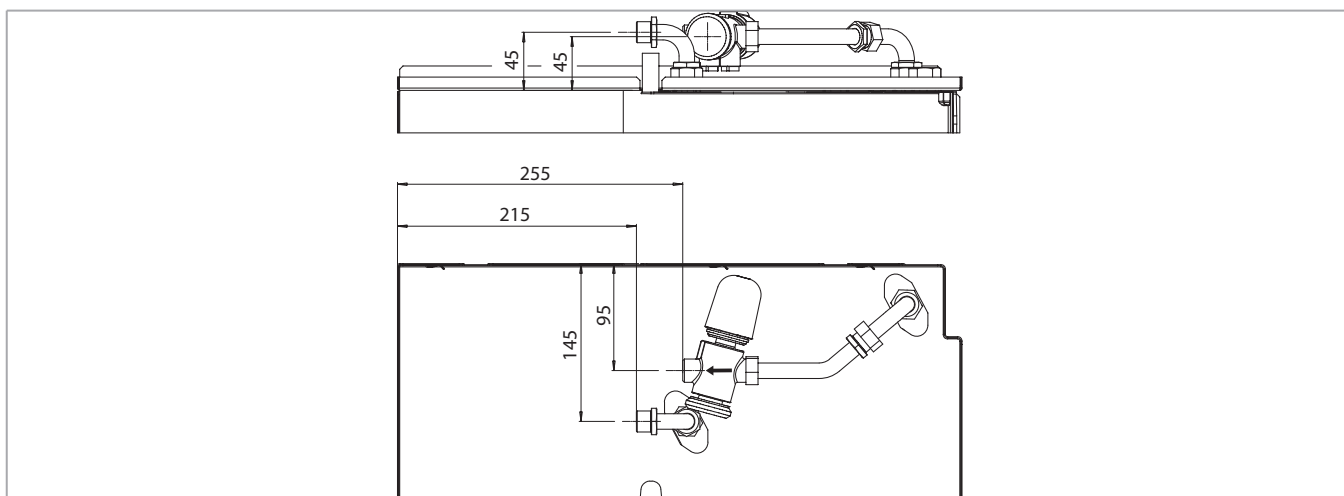
Operation limits of the DANFOSS balancing valves

- Maximum operating temperature: 120 °C
- Maximum % of water/glycol mixture: 50%
- Minimum operating temperature: -10 °C

Balancing valves for DANFOSS main coil

2 way valve for main coil and assembly kit.

The valve is supplied equipped with 230 Volt electro-thermal actuator for the ON/OFF control.



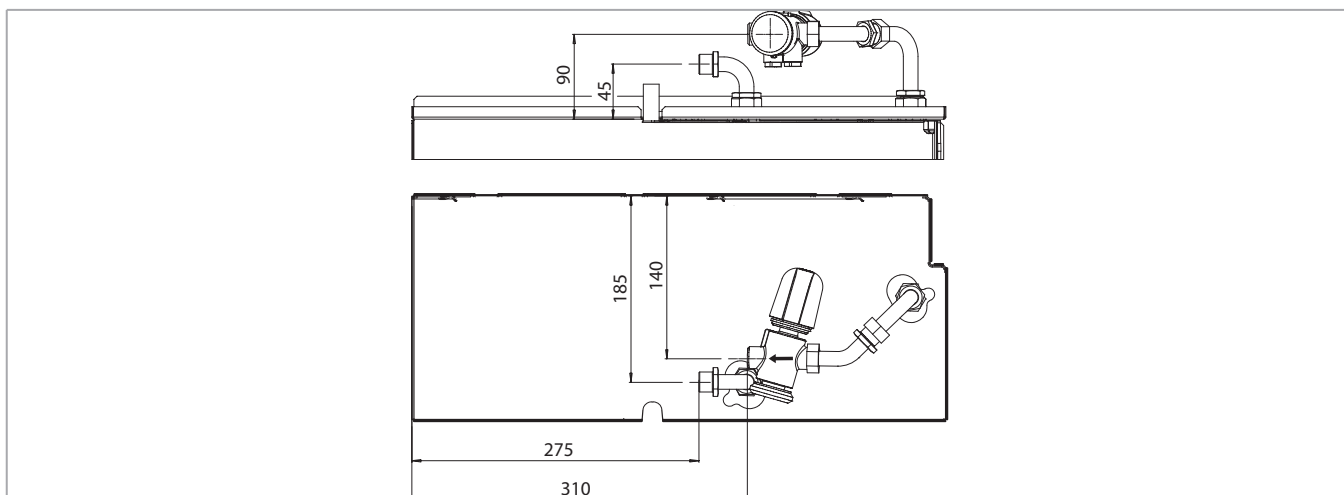
Model	FITTED		NOT FITTED		DN	(Ø)	Range (l/h)
	ID	Code	ID	Code			
1 ÷ 3	V2DFBPM 90-450	9066665	V2DFBPS 90-450	9066655	15	3/4"	90-450
4 ÷ 7	V2DFBPM 150-1050	9066666	V2DFBPS 150-1050	9066656	15	3/4"	150-1050
8 - 9	V2DFBPM 190-1300	9066667	V2DFBPS 190-1300	9066657	20	1"	190-1300

Attention: the DN 15 valve diameter, unlike the Oventrop model, is of 3/4

Balancing valves for DANFOSS additional coil

2 way valve for additional coil and assembly kit.

The valve is supplied equipped with 230 Volt electro-thermal actuator for the ON/OFF control.



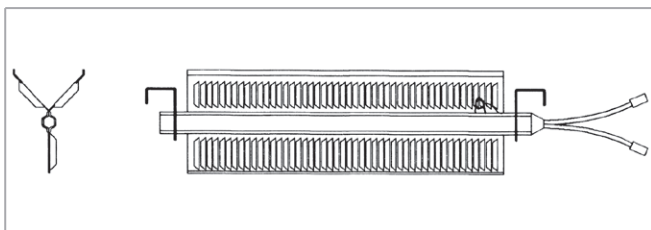
Model	FITTED		NOT FITTED		DN	(Ø)	Range (l/h)
	ID	Code	ID	Code			
1 ÷ 5	V2DFBAM 90-450	9066668	V2DFBAS 90-450	9066658	15	3/4"	90-450
6 ÷ 9	V2DFBAM 150-1050	9066669	V2DFBAS 150-1050	9066659	15	3/4"	150-1050

BEL electric heater

1 PHASE 230 V.

Safety thermostat and relay control integrated.

The electric heater must be fitted in the factory during the production of the fan coil and cannot be added later.



CV-CH-CVB version

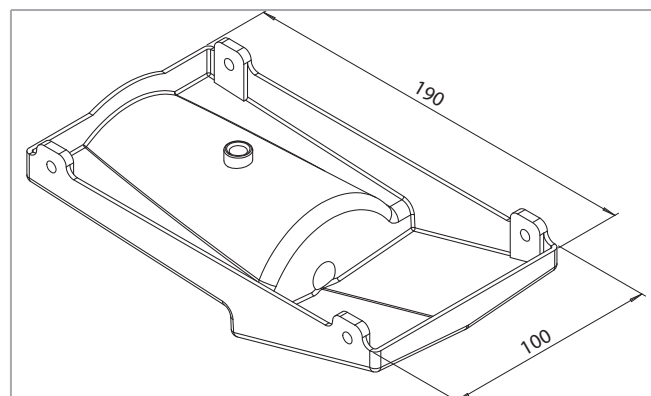
Model	ID	Code	Watt (W)
1	BEL-L G1 / 07	9066491E	650
	BEL-L G2 / 10	9066492E	1000
2	BEL-L G2 / 06	9066482E	600
	BEL-L G2 / 04	9066472E	400
3 - 4	BEL-L G3-4 / 15	9066493E	1500
	BEL-L G3-4 / 09	9066483E	900
	BEL-L G3-4 / 06	9066473E	600
5 - 6	BEL-L G5-6 / 20	9066495E	2000
	BEL-L G5-6 / 12	9066485E	1250
	BEL-L G5-6 / 07	9066475E	750
7 ÷ 9	BEL-L G7-9 / 25	9066497E	2500
	BEL-L G7-9 / 15	9066487E	1500
	BEL-L G7-9 / 10	9066477E	1000

NC version

Model	ID	Code	Watt (W)
1	BEL-I G1 / 07	9066611	650
2	BEL-I G2 / 10	9066612	1000
	BEL-I G2 / 06	9066602	600
	BEL-I G2 / 04	9066592	400
3 - 4	BEL-I G3-4 / 15	9066613	1500
	BEL-I G3-4 / 09	9066603	900
	BEL-I G3-4 / 06	9066593	600
5 - 6	BEL-I G5-6 / 20	9066615	2000
	BEL-I G5-6 / 12	9066605	1250
	BEL-I G5-6 / 07	9066595	750
7 ÷ 9	BEL-I G7-9 / 25	9066617	2500
	BEL-I G7-9 / 15	9066607	1500
	BEL-I G7-9 / 10	9066597	1000

BSV extension condensate collection tray to cover valve assembly

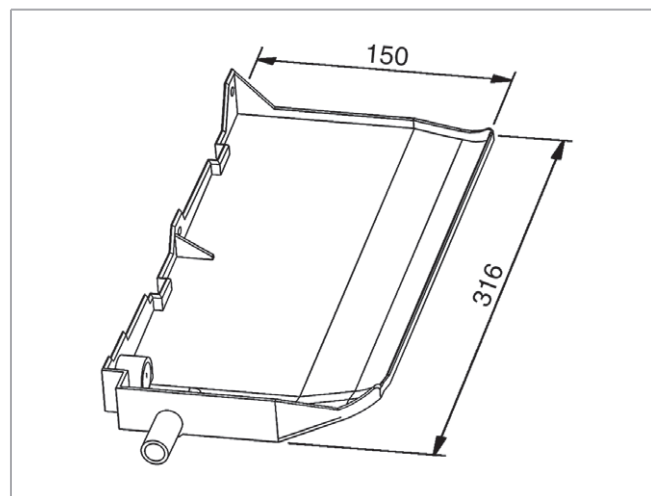
for vertical versions **CV - CVB - NC**.



Model	ID	Code
1 ÷ 9	BSV-C	6060400

BSO-C extension condensate collection tray to cover valve assembly

For **CH** horizontal versions with casing.

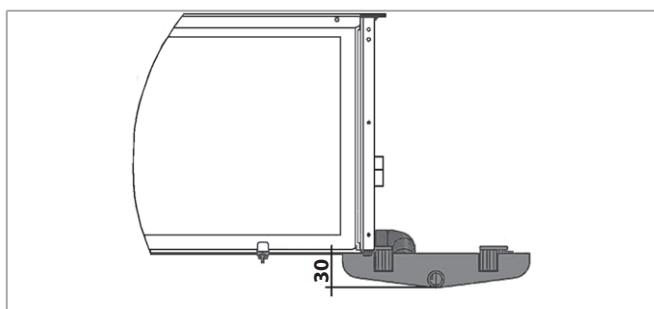
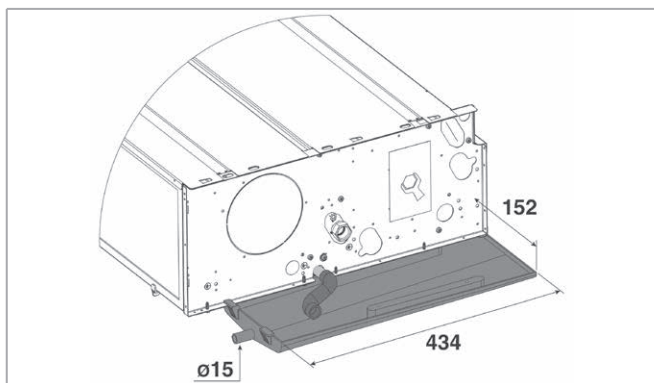


Model	LEFT		RIGHT	
	ID	Code	ID	Code
1 ÷ 9	BSO-C-SX	6060402	BSO-C-DX	6060403

BSI-C extension condensate collection tray to cover valve assembly

For **NC** horizontal versions without casing.

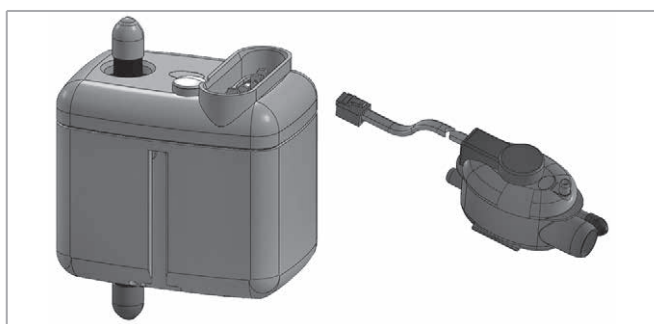
Not be used with KAF accessory.



Model	ID	Code
1 ÷ 9	BSI-C	6066039

DRPV-C condensate pump

For **CV - CVB - NC** vertical versions.

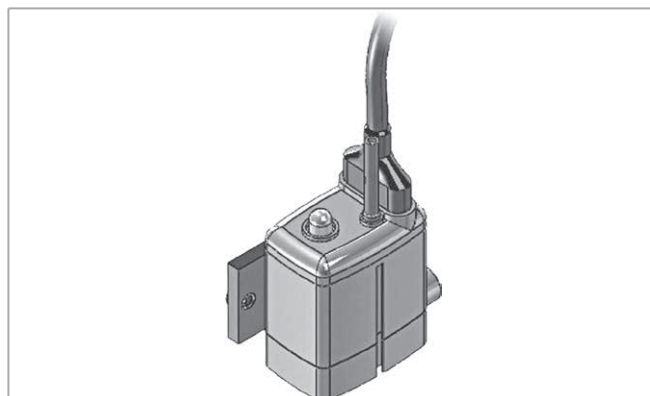


Model	FITTED		NOT FITTED	
	ID	Code	ID	Code
1 ÷ 9	DRPV-C-M	9066297	DRPV-C-S	9066296

Height for vertical flow (m)	Water flow (l/h) depending on the length of horizontal flow	
	5 m	10 m
1	7,6	7,2
2	5,6	5,2
3	4,0	3,7
4	3,2	2,9

DRPO-C condensate pump

For **CH** horizontal versions.

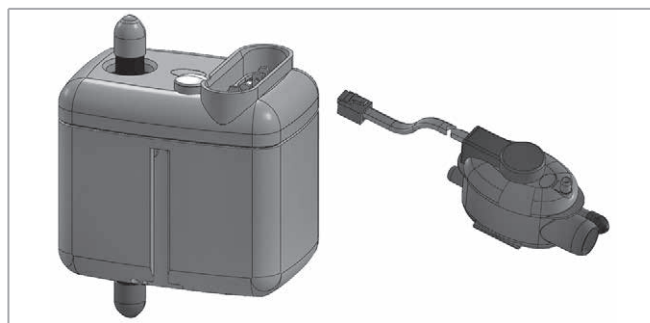


Model	FITTED		NOT FITTED	
	ID	Code	ID	Code
1 ÷ 9	DRPO-C-M	9066295	DRPO-C-S	9066294

Height for vertical flow (m)	Water flow (l/h) depending on the length of horizontal flow	
	5 m	10 m
1	7,6	7,2
2	5,6	5,2
3	4,0	3,7
4	3,2	2,9

DRPI-C condensate pump

For **NC** horizontal versions.



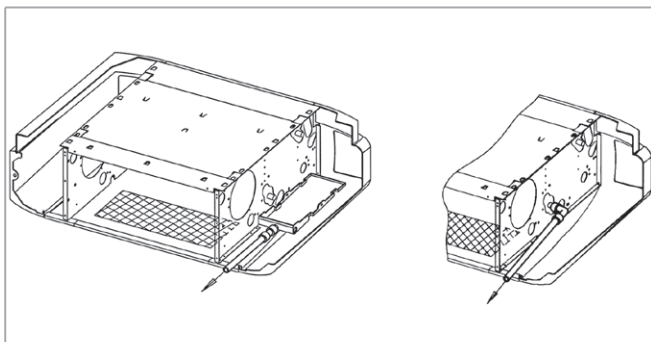
Model	FITTED		NOT FITTED	
	ID	Code	ID	Code
1 ÷ 9	DRPI-C-M	9066298	DRPI-C-S	9066180

Height for vertical flow (m)	Water flow (l/h) depending on the length of horizontal flow	
	5 m	10 m
1	7,6	7,2
2	5,6	5,2
3	4,0	3,7
4	3,2	2,9

SCR plastic condensate drain pipe with fast connection

For **CH-NC** versions.

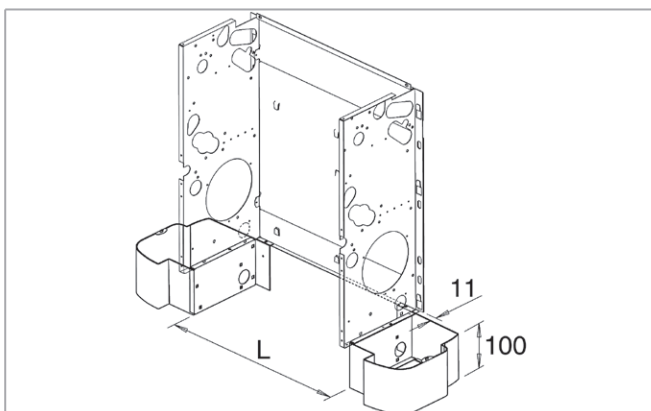
It helps regular drainage of condensate thereby preventing the formation of bends.



Model	ID	Code
1 ÷ 9	SCR-C	6060420

PAP feet

For **CV** versions.

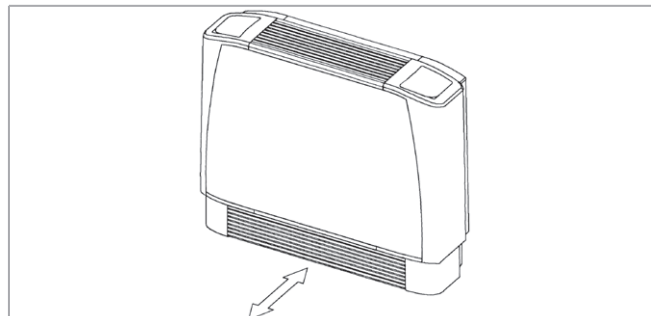


Model	ID	Code	L mm
1	PAP-L G1-7	9060150	330
2	PAP-L G1-7	9060150	430
3 - 4	PAP-L G1-7	9060150	645
5 - 6	PAP-L G1-7	9060150	860
7	PAP-L G1-7	9060150	1119
8 - 9	PAP-L G8-9	9060151	1119

GAP Aluminium low air inlet grid

For **CV** versions.

Removable, made of aluminium, to be installed with PAP feet.



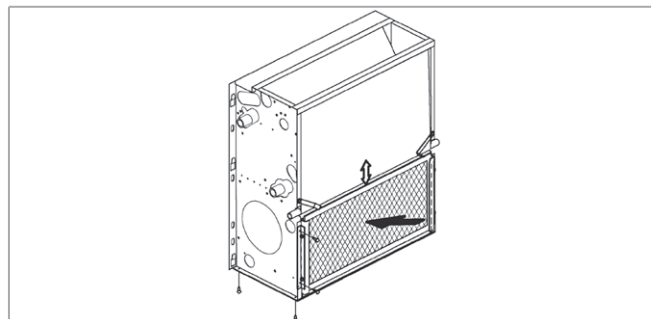
Model	ID	Code
1	GAP-C G1	9066541
2	GAP-C G2	9066542
3 - 4	GAP-C G3-4	9066543
5 - 6	GAP-C G5-6	9066545
7 ÷ 9	GAP-C G7-9	9066547

KAF frontal air inlet kit

For **NC** versions.

Bottom closing panel and filter sliding guides.

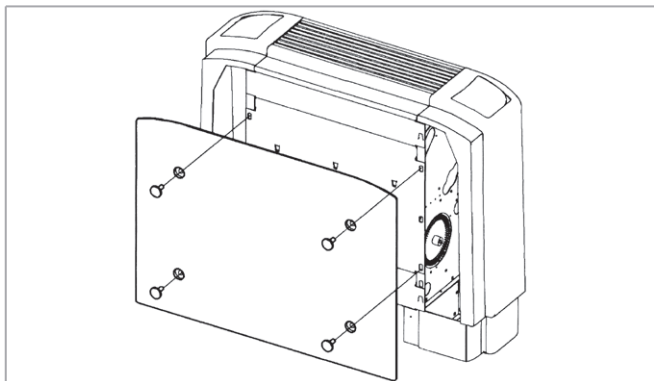
Not be used with accessory BSI-C.



Model	ID	Code
1	KAF-C G1	9066501
2	KAF-C G2	9066502
3 - 4	KAF-C G3-4	9066503
5 - 6	KAF-C G5-6	9066505
7	KAF-C G7	9066507
8 - 9	KAF-C G8-9	9066508

PCV-F rear closing panel

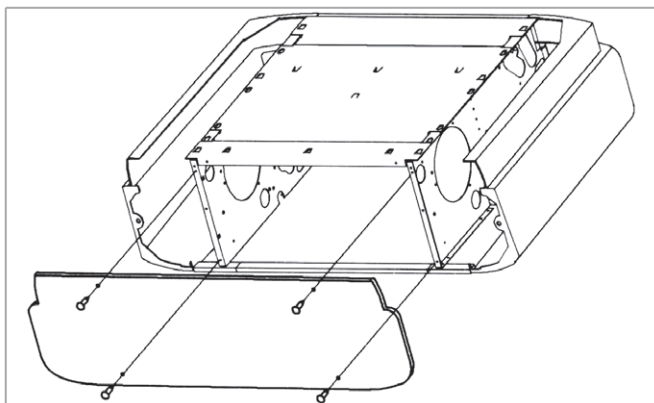
For **CV** - **CVB** vertical versions.



Model	ID	Code
1	PCV-F G1	9062005
2	PCV-F G2	9060180
3-4	PCV-F G3-4	9060181
5-6	PCV-F G5-6	9060182
7 ÷ 9	PCV-F G7-9	9060183

PCO-F bottom closing panel

for **CH** horizontal versions.

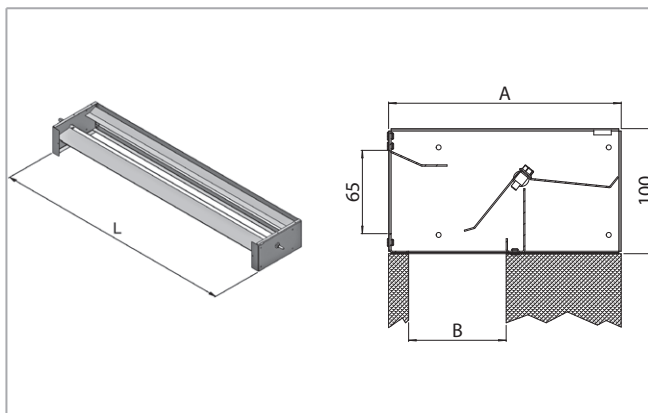


Model	ID	Code
1	PCO-F G1	9060187
2	PCO-F G2	9060190
3-4	PCO-F G3-4	9060191
5-6	PCO-F G5-6	9060192
7	PCO-F G7	9060193
8-9	PCO-F G8-9	9060194

SAE fresh air mixing damper

For **NC** versions, not fitted.

(can be motorized on request only for the SEC/F range).



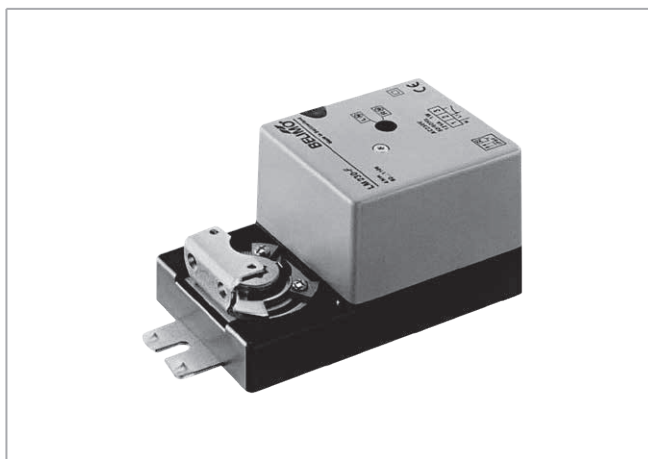
Model	ID	Code	A mm	B mm	L mm
1	SAE-C G1	9066531	186	78	354
2	SAE-C G2	9066532	186	78	454
3-4	SAE-C G3-4	9066533	186	78	669
5-6	SAE-C G5-6	9066535	186	78	884
7	SAE-C G7	9066537	186	78	1099
8-9	SAE-C G8-9	9066538	216	108	1099

Belimo BESAE motor

Only for the **SEC/F** range.

For **CV** - **NC** versions.

Fitted on the unit for motorized version of the SAE damper. Available with "IAQ" control only.



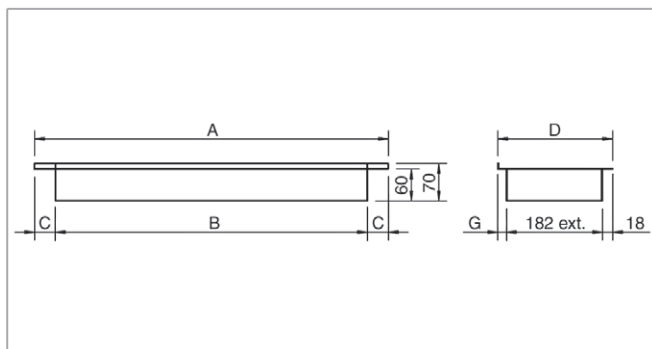
Model	ID	Code
1 ÷ 9	BESAE-C	9066620

FRD straight inlet flange

For **NC** versions.

Can be used together with GRAG air inlet grid.

Made of galvanized steel.



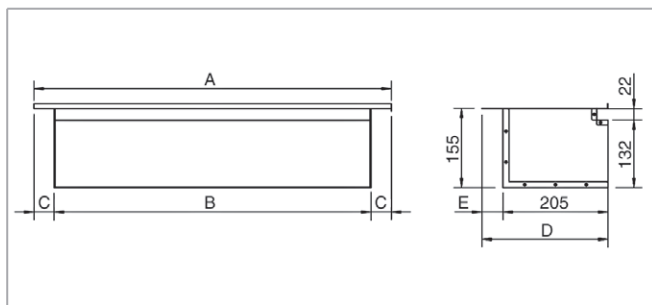
Model	ID	Code	A mm	B mm	C mm	D mm	G mm
1	FRD-C-1	9066451	354	290	32,0	216	16
2	FRD-C-2	9060720	454	390	32,0	216	16
3-4	FRD-C-3-4	9060721	669	590	39,5	216	16
5-6	FRD-C-5-6	9060722	884	790	47,0	216	16
7	FRD-C-7	9060723	1099	990	54,5	216	16
8-9	FRD-C-8-9	9060724	1099	990	54,5	246	46

FR 90 90° inlet flange

For **NC** versions.

Can be used together with GRAG air inlet grid.

Made of galvanized steel.



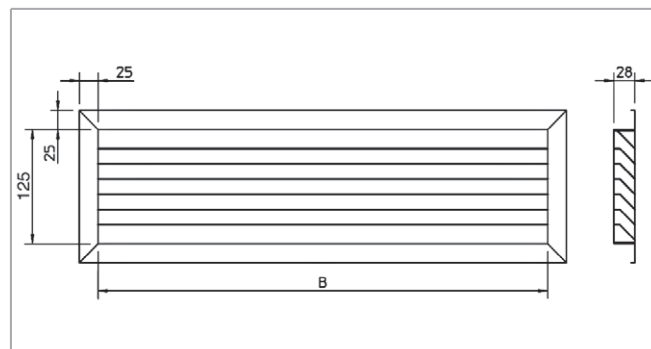
Model	ID	Code	A mm	B mm	C mm	D mm	E mm
1	FR90-C-1	9066441	354	290	32,0	216	11
2	FR90-C-2	9060710	454	390	32,0	216	11
3-4	FR90-C-3-4	9060711	669	590	39,5	216	11
5-6	FR90-C-5-6	9060712	884	790	47,0	216	11
7	FR90-C-7	9060713	1099	990	54,5	216	11
8-9	FR90-C-8-9	9060714	1099	990	54,5	246	41

GRAP air inlet grid

For **NC** versions.

To be fitted to the FR 90 90° inlet flange.

Made of anodized aluminium.



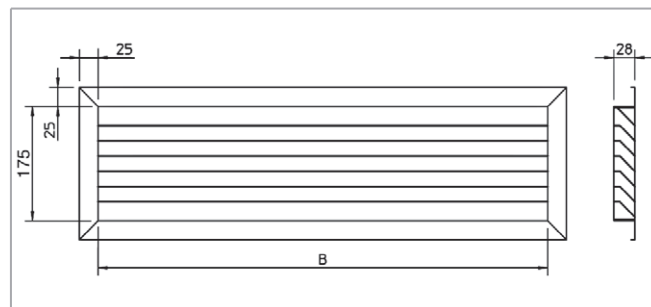
Model	ID	Code	Description	B mm
1	GRAP-C-1	9066421	Grid 300x150	275
2	GRAP-C-2	9060760	Grid 400x150	375
3-4	GRAP-C-3-4	9060761	Grid 600x150	575
5-6	GRAP-C-5-6	9060762	Grid 800x150	775
7 ÷ 9	GRAP-C-7-9	9060763	Grid 1000x150	975

GRAG air inlet grid

For **NC** versions.

To be fitted to the FRD straight inlet flange.

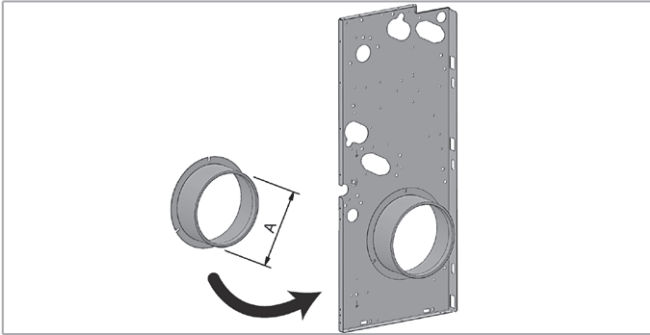
Made of anodized aluminium.



Model	ID	Code	Description	B mm
1	GRAG-C-1	9066431	Grid 300x200	275
2	GRAG-C-2	9060764	Grid 400x200	375
3-4	GRAG-C-3-4	9060765	Grid 600x200	575
5-6	GRAG-C-5-6	9060766	Grid 800x200	775
7 ÷ 9	GRAG-C-7-9	9060767	Grid 1000x200	975

FRC fresh air connection

(not fitted)

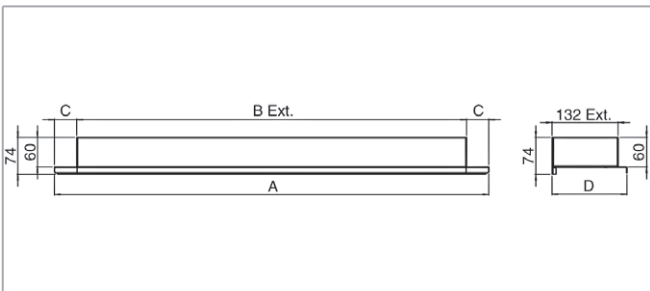


Model	ID	Code	A mm
1 ÷ 7	FRC 100	6064191	98
1 ÷ 7	FRC 120	6064192	122

FMD straight outlet flange

For **NC** versions.

Made of galvanized steel.

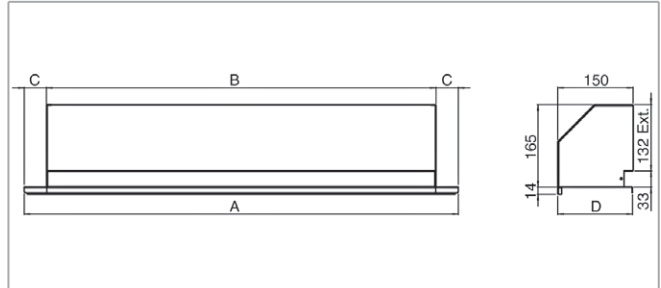


Model	ID	Code	A mm	B mm	C mm	D mm
1	FMD-C-1	9066371	352	290	31	152
2	FMD-C-2	9066372	452	390	31	152
3 - 4	FMD-C-3-4	9066373	667	590	38,5	152
5 - 6	FMD-C-5-6	9066375	882	790	46	152
7	FMD-C-7	9066377	1097	990	53,5	152
8 - 9	FMD-C-8-9	9066378	1097	990	53,5	179

FM 90 90° outlet flange

For **NC** versions.

Made of galvanized steel insulated with polyethylene lining.

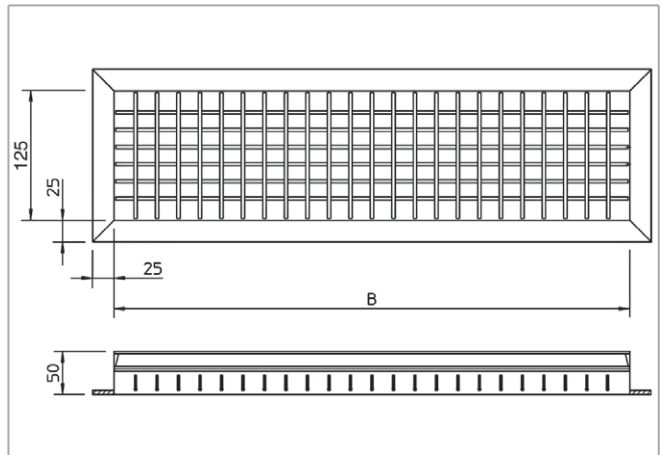


Model	ID	Code	A mm	B mm	C mm	D mm
1	FM90-C-1	9066381	352	290	31	152
2	FM90-C-2	9066382	452	390	31	152
3 - 4	FM90-C-3-4	9066383	667	590	38,5	152
5 - 6	FM90-C-5-6	9066385	882	790	46	152
7	FM90-C-7	9066387	1097	990	53,5	152
8 - 9	FM90-C-8-9	9066388	1097	990	53,5	179

BMA air outlet grid

For **NC** versions.

Double louvre grid to be fitted to the duct, to the FMD straight outlet flange or to the FM 90 90° outlet flange. Made of anodized aluminium.



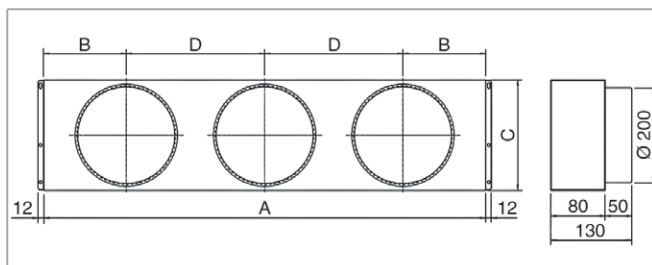
Model	ID	Code	B mm
1	BMA-C-1	9066411	275
2	BMA-C-2	9060750	375
3 - 4	BMA-C-3-4	9060751	575
5 - 6	BMA-C-5-6	9060752	775
7 ÷ 9	BMA-C-7-9	9060753	975

PRC air inlet spigot plenum

For **NC** versions.

Made of galvanized steel insulated with polyethylene lining.

All the plenums are supplied with spigots for the connection of flexible ducts.



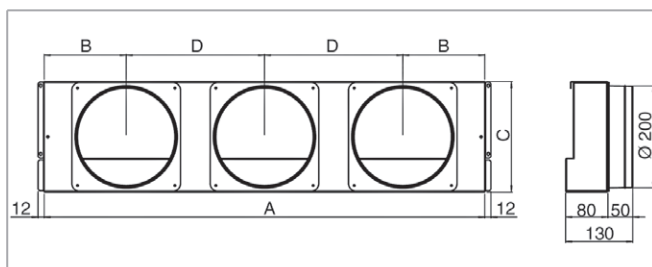
Model	ID	Code	A mm	B mm	C mm	D mm	Spigots
1	PRC-C-1	9066461	330	165	218	/	N° 1
2	PRC-C-2	9066462	430	107	218	216	N° 2
3-4	PRC-C-3-4	9066463	645	166	218	313	N° 2
5-6	PRC-C-5-6	9066465	860	160	218	270	N° 3
7	PRC-C-7	9066467	1075	190	218	347,5	N° 3
8-9	PRC-C-8-9	9066468	1075	190	248	347,5	N° 3

PMC spigot diffuser

For **NC** versions.

Made of galvanized steel insulated with polyethylene lining.

All the plenums are supplied with spigots for the connection of flexible ducts.



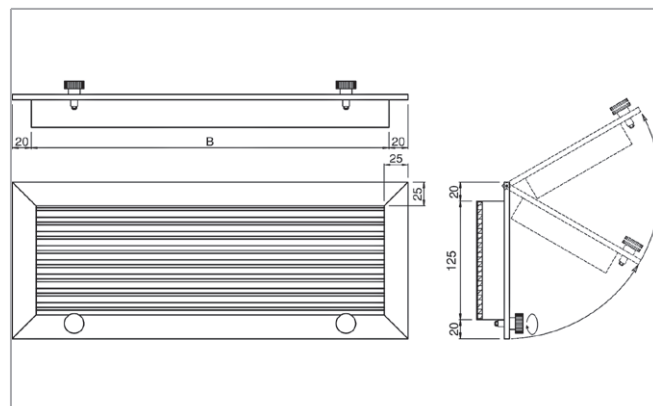
Model	ID	Code	A mm	B mm	C mm	D mm	Spigots
1	PMC-C-1	9066361	330	165	218	/	N° 1
2	PMC-C-2	9066362	430	107	218	216	N° 2
3-4	PMC-C-3-4	9066363	645	166	218	313	N° 2
5-6	PMC-C-5-6	9066365	860	160	218	270	N° 3
7	PMC-C-7	9066367	1075	190	218	347,5	N° 3
8-9	PMC-C-8-9	9066368	1075	190	248	347,5	N° 3

GRAFP air inlet grid with filter

For **NC** versions.

To be fitted to the FR 90 90° inlet flange.

Made of anodized aluminium.



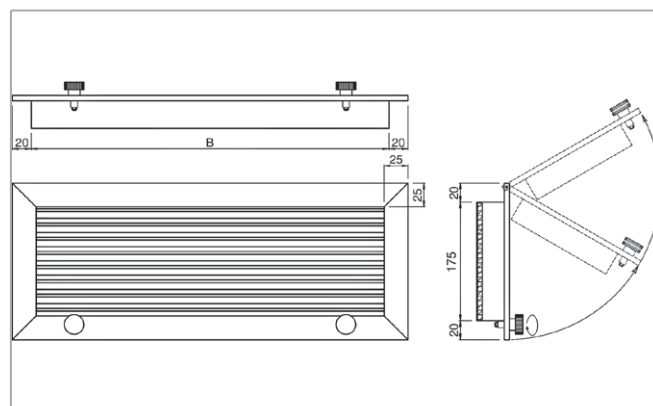
Model	ID	Code	B mm
1	GRAFP-C-1	9066391	275
2	GRAFP-C-2	9060770	375
3-4	GRAFP-C-3-4	9060771	575
5-6	GRAFP-C-5-6	9060772	775
7 ÷ 9	GRAFP-C-7-9	9060773	975

GRAFG air inlet grid with filter

For **NC** versions.

To be fitted to the FRD straight inlet flange.

Made of anodized aluminium.



Model	ID	Code	B mm
1	GRAFG-C-1	9066401	275
2	GRAFG-C-2	9060774	375
3-4	GRAFG-C-3-4	9060775	575
5-6	GRAFG-C-5-6	9060776	775
7 ÷ 9	GRAFG-C-7-9	9060777	975

CHK Hotel fan kit

Hotel box for concealed installation for **SEC/F** and **SEC/F-ECM**, **NC** horizontal installation (frontal return and supply).

The new CHK kit is the best solution for all installations requiring a built-in fan coil where there is no other possibility of accessing the unit except from the air outlet side.

The unit is particularly suitable for installation in hotel rooms, offices and homes.

The Kit consists of a box that can easily be installed in a false ceiling, inside which the fan coil is fitted using the special guides.

For any kind of ordinary or extraordinary maintenance operation (once the wall and the ceiling construction is completed) simply remove the front outlet and have access the air filter as well as the electrical and hydraulic parts of the unit.

The air grid is divided into two zones, one for the air intake with horizontally adjustable fins and the other one for the air outlet with horizontally and vertically adjustable fins to ensure better air distribution and diffusion in the room.

The box structure is made of thick galvanised metal sheet. The internal hot or cold air flow sections are insulated with expanded polyethylene that prevents both condensation and energy loss towards the inside of the false ceiling.

The accessory includes the air filter, an anodised aluminium outlet with adjustable fins and a front wall frame.

The box structure is designed so that fan coils with hydraulic connections facing left or right can be installed. According to the configuration, it is in fact sufficient to secure the sliding guides on the panel that will be the upper one.

Only the following accessories can be used with the CHK Kit :

- VS simplified kit for 3 way valve for main and additional coil
- BSI-C extension condensate collection tray

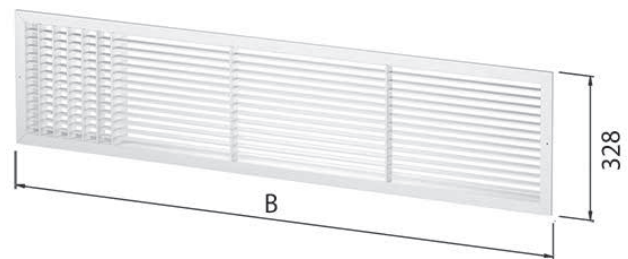
For the CHK Kit installation it is mandatory to use the Kit for hydraulic and electrical connections on the same side (Code 9066805).

When ordering, it must be specified that the fan coil hydraulic and electrical connections must be on the same side.

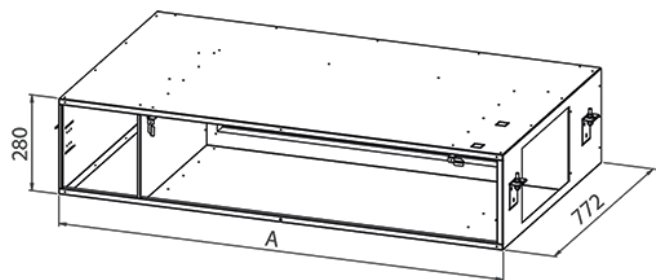
Note: with the CHK Kit consider 20 Pa pressure drop.



GRID



RECESSED PLENUM



Model	ID	Code	A mm	B mm
2	CHK 2	9066782	845	880
3 - 4	CHK 3 - 4	9066783	1060	1095
5 - 6	CHK 5 - 6	9066785	1318	1357
7	CHK 7	9066787	1610	1649

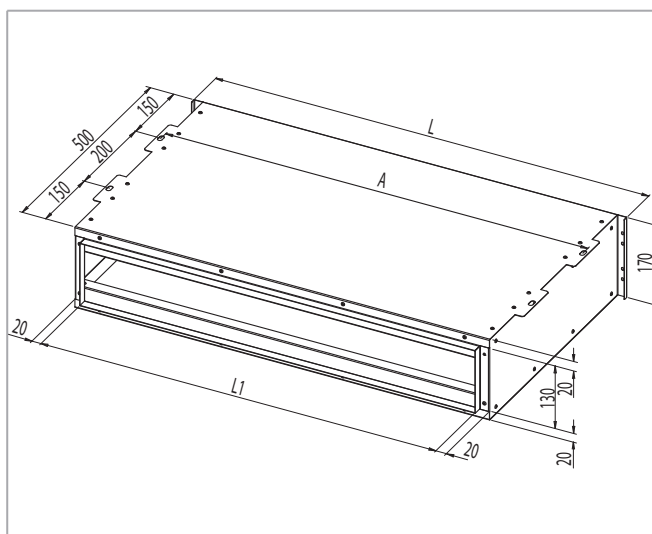
BXS air outlet silencer plenum

For **NC** versions.

Sound attenuator module made of galvanised steel metal sheet, lined internally with a reinforced glass wool mat on both sides with a black glass coating; the 50 mm and 30 kg/m³ density lining ensures high noise reduction with very low pressure drops.

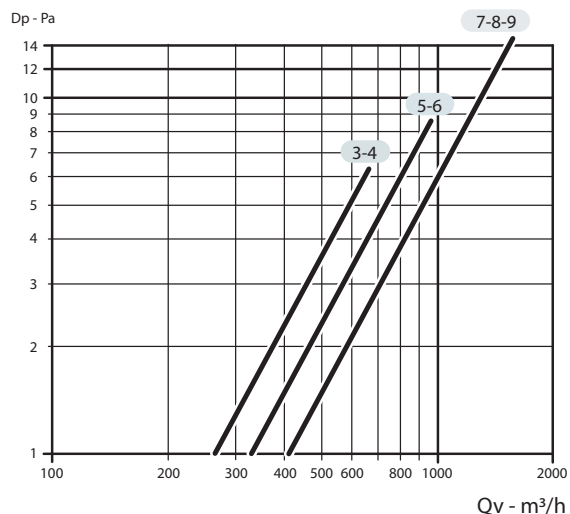
Frequency	Hz	125	250	500	1000	2000	4000	8000
Sound attenuation	dB	2,5	5,0	11,5	14,0	13,5	12,0	11,0

NOTE: the silencer plenum reduces the sound levels only on the supply side; the sound levels on the return side are not affected by the silencer.



Model	ID	Code	A mm	L mm	L1 mm
3 - 4	BXS-A	9069081	653	675	597
5 - 6	BXS-B	9069082	868	890	812
7 - 9	BXS-C	9069083	1083	1105	1027

Silencer plenum pressure drop



Dp = pressure drop
Qv = air flow

ELECTROSTATIC FILTER



Introduction

The SEC/F - SEC/F-ECM Fan Coils range equipped with the plate type electrostatic filter is the result of an extremely innovative project combining air treatment and purifying in a single product.

The fan coil unit is enriched with an electrostatic filter that is patented and certified (EN ISO 16890:2016), mounted on site, whose concept is total new and able to answer to the increasing need of better air handling and wellness within the working and residential ambients. 80% of the human life is spent within the closed environments. The ("IAQ") Indoor Air Quality is the human-kind's continuous challenge of improving the own wellness during the next years and we join it with the steady product innovation.

Technical characteristics

The active electrostatic filter allows a consistent reduction of the fine particles existing in the environment thanks to the high efficiency filtration, performance certified in accordance to the Standard in force EN ISO 16890:2016.

It is also recalled that the WHO (World Health Organization) classified the PM (Particulate Matter) as certainly carcinogenic of group 1 as well as a vector of biological substances pathogenic to humans.

The particulate matters can be both solid and liquid : above all the liquid aerosols (droplets), like the ones produced during breathing and during other anthropomorphic activities, are the main vector of pathogenic Viruses and Bacteria and in some cases lethal to humans. It is now recognised by the world scientific community that all biological contaminants such as viruses and bacteria are mainly spread by the aerosol produced in the environment by infected people through breathing, coughing, sneezing or even simply speaking, with greater risk of spread indoors where we normally spend more than 80% of our time.

The most recent recommendations from WHO (Roadmap to improve and ensure good indoor ventilation in the

con-text of COVID-19, March 1st, 2021) and the Prime Ministerial Decrees issued by the Italian Government (Guide Lines on Re-Opening Manufacturing) require, where possible, increasing the filtering efficiency of the equipment that handles indoor air and especially on air conditioning units in order to remove the smallest potentially infected particles from the air (containing pathogenic agents).

It is therefore suitable for different types of buildings, for example schools, hospitals and care homes, (hallways, waiting rooms, hospital ward rooms), doctor's offices, hotels and everywhere it is necessary to improve the quality of the indoor air.

Tests and Certifications

The solution has gone through numerous tests and efficiency and efficacy testing to assess its function and performance level in real conditions of use.

At various accredited agencies, efficiency and pressure drop tests were conducted, according to product standards EN ISO 16890:2016 and that are able to classify performance.

The active electrostatic filter is able to guarantee a Most Penetrating Particle Size filtering efficiency level (MPPS - i.e. with an aeraulic diameter between 0.2 and 0.4 μm) equal to semi-absolute filter E11 (MPPS $\geq 95\%$ - E11 @ EN 1822-1).

Also, the University of Ancona (the online scientific publication "Bacteria Removal and Viability Attenuation by Means of an Electrostatic Barrier" can be consulted by purchasing the Indoor and Built Environment magazine from the web-site) conducted more than 180 laboratory tests on microbiological substances (total airborne microbiological load), which include bacteria, mould, fungi, etc. and that confirmed, through the statistical processing of the data carried out with the specific Fischer test, the efficacy of the active electrostatic filter in reducing the bacterial load.

Benefits

- No impact over the thermal and aeraulic balance system
- Negligible pressure drop (also with dirty filter)
- Demonstrated bactericidal action (sustainable IAQ)
- Easy and chip maintenance
- Very low power consumption
- Efficiency performances certified according to the Product Standard EN ISO 16890:2016
- In accordance with the Standards in force for electromagnetic compatibility and safety (by accredited institutions)
- Solution technologically sustainable and patented

Main components of the filtering assembly

The first element is the active electrostatic assembly with aluminium modular cells which is composed of two separate and distinct sections, one of which is active (polarisation section) attached to the load-bearing structure and the other is passive, with induced anode (collection or header section) that can be removed for maintenance.

The first section composed of electrodes and insulating parts does not require maintenance, while the second section, intended for the collection of organic and inorganic particulate, requires periodic cleaning.

Its extremely contained depth (just 50 mm) combined with its great dimensional flexibility, makes it suitable for satisfying the most diverse construction requirements, that have the aim of obtaining a high filtering level of the recirculation/secondary air (according to the definition provided by standard EN 16798.3).

The second component is the wired control and power box, available "fitted on the unit" or at a distance, that allows the management and the inspection of the filtering assembly operating status.

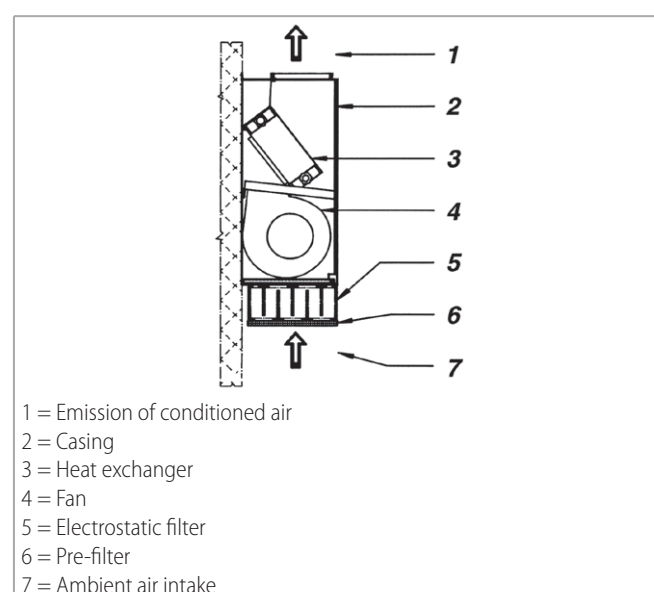
Operating principle of the electrostatic filter

The air is aspirated and first passes a mechanical prefilter, which stops away particles of more than 50 µm (dust, insects, etc.).

Then the smallest particles ($50 \pm 0.01 \mu\text{m}$) are exposed to an intensive ionic field and are polarized (Phase 1).

The charged particles passing through the second filter section, are pushed back by the anode and attracted to the collection surfaces by a strong, induced magnetic field (Phase 2).

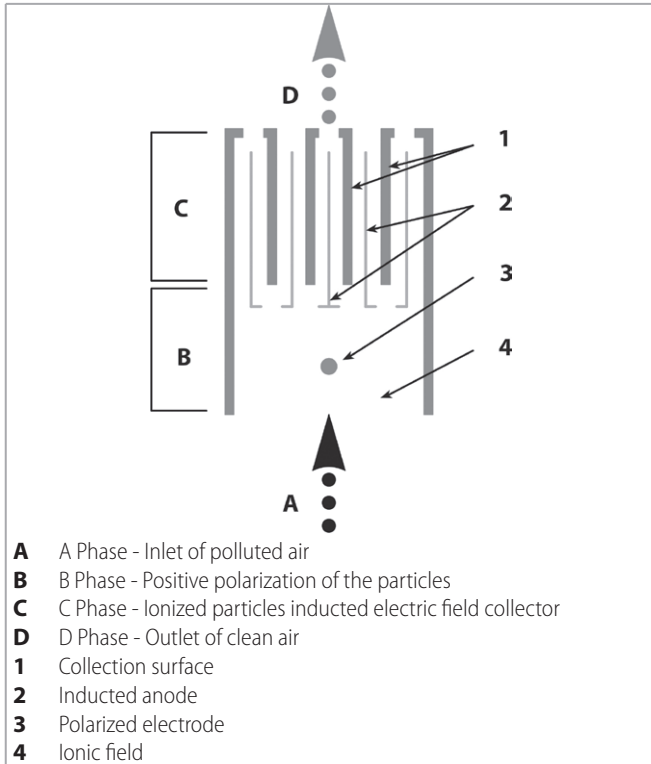
The air which leaves the unit is free from polluting particles.



Active plate electrostatic filter of Femec type

The active electrostatic filter is based on the principle of separation of the particles contained in the air through electrical polarisation and their subsequent treatment on counterposed metal surfaces, with opposite polarity. It is built with thin metal blades tapered together, forming numerous and intense electrical fields. The polluting particles that transit there, charged by a special electrode, are attracted and captured, as though by small magnets, on the counterposed surfaces of the blades. The power required for this process is low, approximately 4/7 W for every 1000 m³/h of handled air.

The patented solution makes it possible to achieve electrical fields on opposing surfaces without the need for additional electrical power supply, making every zone of the header (collection section) independent, thereby preventing the accidental short circuit of one section from compromising the operation of the entire filter.



Wired control and power box

The main element is the high voltage electronic power board required to feed the active electrostatic filter, an on/off disconnecting switch and a LED light to locally monitor the correct operating status.

The correct operation is possible at a distance also with a SPDT relay contact. The power supply is 230 Vca 50/60 Hz.

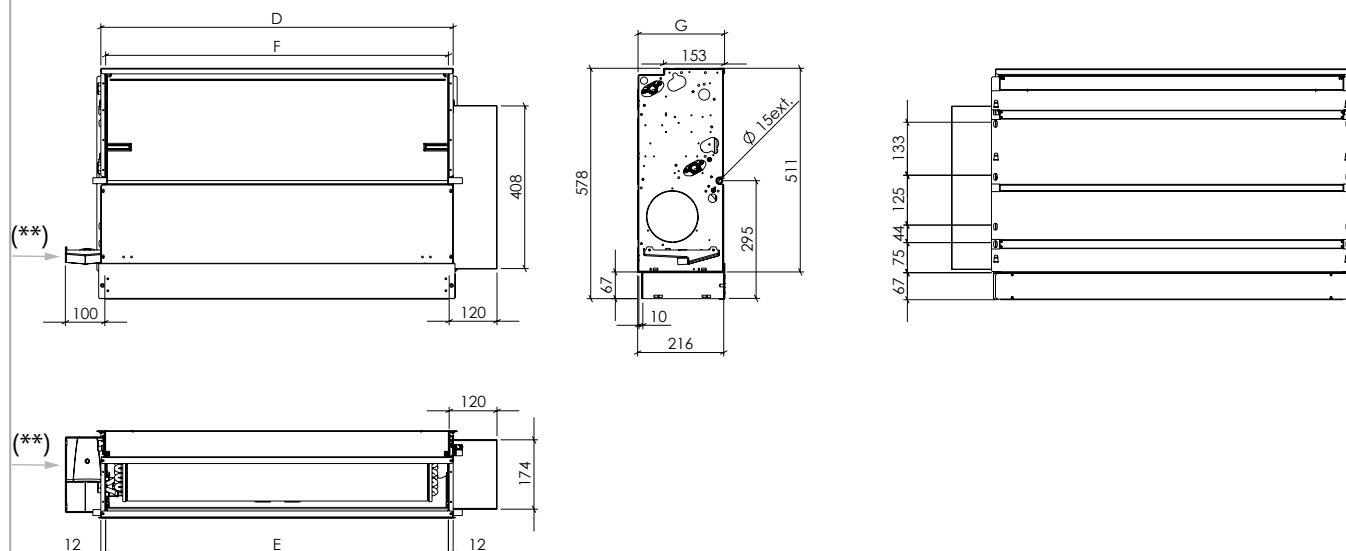
	Flow rate (m ³ /h)	Δpi Filter Electrostatic (**) (Pa)	Efficiency class (*)
SEC/F Size 1	215	3	ePM1 95% - ePM2,5 95% - ePM10 95% - MPPS 96% (E11 @ UNI EN 1822-1)
	280	4	ePM1 90% - ePM2,5 90% - ePM10 90% - MPPS 85% (E10 @ UNI EN 1822-1)
SEC/F Size 2 SEC/F-ECM Size 2	285	3	ePM1 95% - ePM2,5 95% - ePM10 95% - MPPS 96% (E11 @ UNI EN 1822-1)
	370	4	ePM1 90% - ePM2,5 90% - ePM10 90% - MPPS 85% (E10 @ UNI EN 1822-1)
SEC/F Sizes 3-4 SEC/F-ECM Size 4	435	3	ePM1 95% - ePM2,5 95% - ePM10 95% - MPPS 96% (E11 @ UNI EN 1822-1)
	565	4	ePM1 90% - ePM2,5 90% - ePM10 90% - MPPS 85% (E10 @ UNI EN 1822-1)
SEC/F Size 5-6 SEC/F-ECM Size 6	580	3	ePM1 95% - ePM2,5 95% - ePM10 95% - MPPS 96% (E11 @ UNI EN 1822-1)
	760	4	ePM1 90% - ePM2,5 90% - ePM10 90% - MPPS 85% (E10 @ UNI EN 1822-1)
SEC/F Size 7 SEC/F-ECM Size 7	730	3	ePM1 95% - ePM2,5 95% - ePM10 95% - MPPS 96% (E11 @ UNI EN 1822-1)
	955	4	ePM1 90% - ePM2,5 90% - ePM10 90% - MPPS 85% (E10 @ UNI EN 1822-1)
SEC/F Size 8-9 SEC/F-ECM Size 9	820	3	ePM1 95% - ePM2,5 95% - ePM10 95% - MPPS 96% (E11 @ UNI EN 1822-1)
	1075	4	ePM1 90% - ePM2,5 90% - ePM10 90% - MPPS 85% (E10 @ UNI EN 1822-1)
	1420	6	ePM1 80% - ePM2,5 85% - ePM10 85% - MPPS 69%
	1610	7	ePM1 80% - ePM2,5 80% - ePM10 85% - MPPS 63%

(*) Performant test according to EN ISO 16890:2016

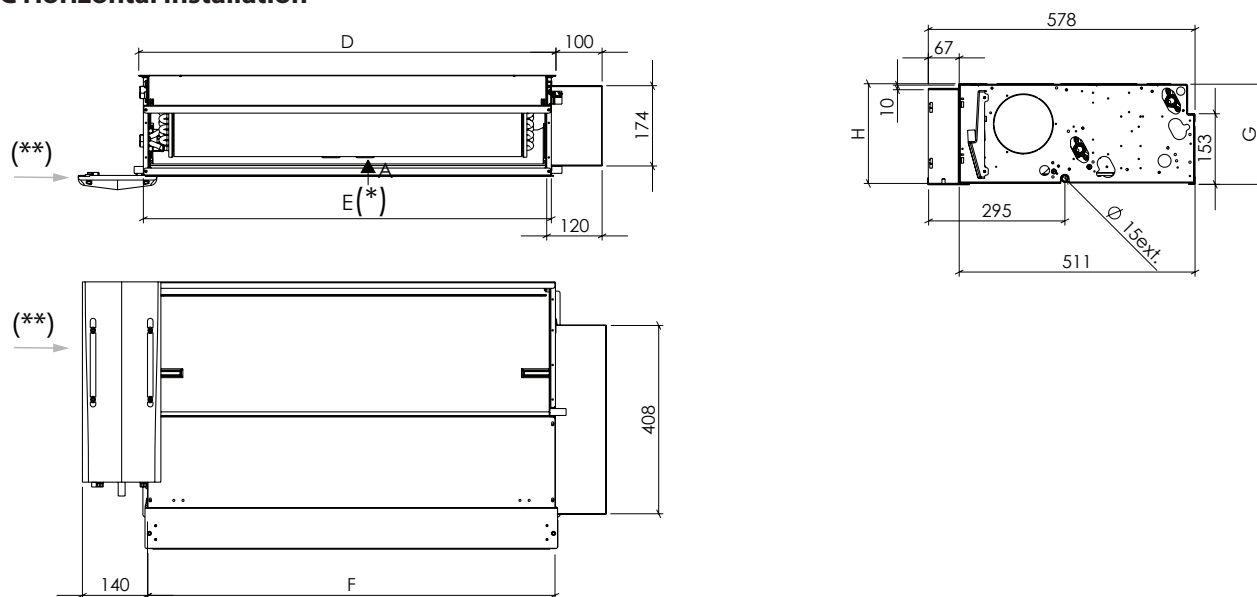
(**) Pressure drop evaluated on the basis of the efficiency performant test according to EN ISO 16890:2016

NC version dimensions

NC Vertical Installation



NC Horizontal Installation



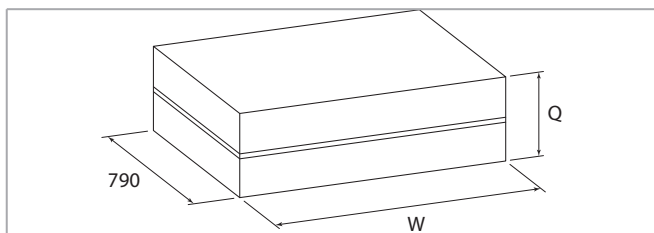
(*) = Supply frame dimension (E x 119)

(**) = Auxiliary condensate tray (optional)

Dimensions (mm) - NC version

Model		1	2	3	4	5	6	7	8	9
D	mm	374	474	689	689	904	904	1119	1119	1119
E	mm	330	430	645	645	860	860	1075	1075	1075
F	mm	354	454	669	669	884	884	1099	1099	1099
G	mm	218	218	218	218	218	218	218	248	248
H	mm	205	205	205	205	205	205	205	235	235

Packed NC unit



Model		1	2	3	4	5	6	7	8	9
Q	mm	280	280	280	280	280	280	280	310	310
W	mm	690	790	1005	1005	1220	1220	1435	1435	1435

Weight NC version (kg)

Weight with packaging

Model	1	2	3	4	5	6	7	8	9
3 rows	15	20	27	28	33	34	38	41	41
3+1 rows	16	23	32	33	38	39	44	48	49
3+2 rows	17	26	37	38	43	44	50	55	57
4 rows	16	22	29	30	35	36	41	46	47
4+1 rows	17	25	34	35	40	41	47	53	55

Weight without packaging

Model	1	2	3	4	5	6	7	8	9
3 rows	13	18	24	25	30	31	34	36	36
3+1 rows	14	21	29	30	35	36	40	43	44
3+2 rows	15	24	34	35	40	41	46	50	52
4 rows	14	20	26	27	32	33	37	41	42
4+1 rows	15	23	31	32	37	38	43	48	50



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