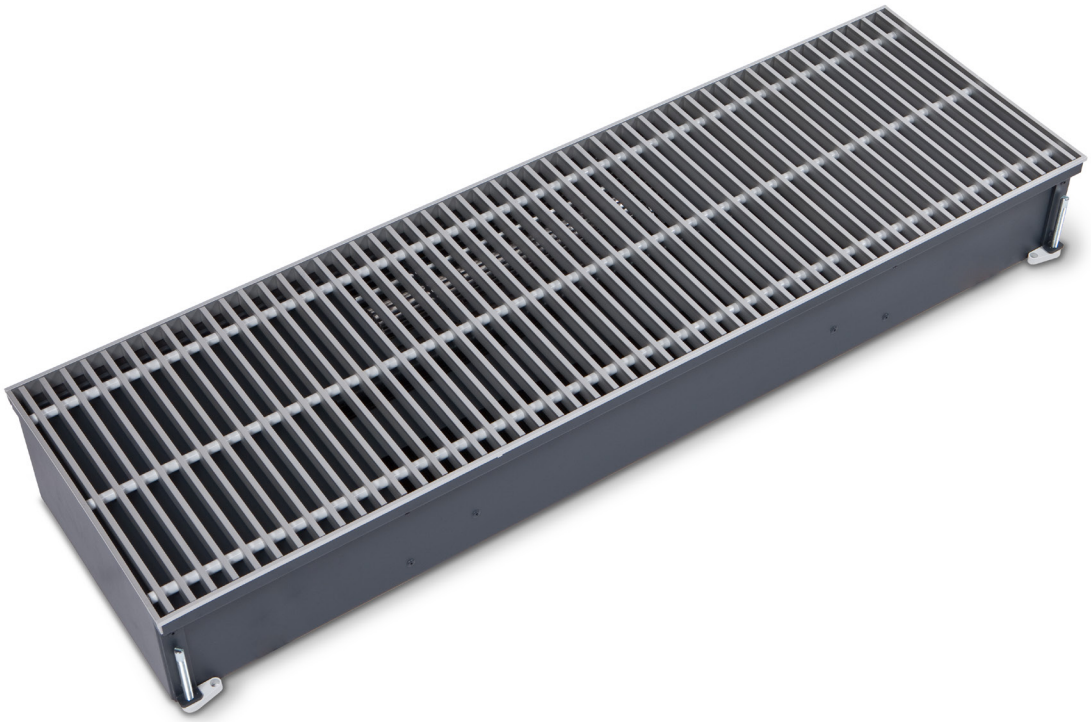


Cert. no. 0545

Fan coil units Carisma Floor CSP-ECM

(HEATING ONLY)

TECHNICAL MANUAL

Carisma Floor CSP-ECM series fan coil units represent an innovative combination of aesthetics and functionality in a heating system.

The airflow towards the window allows them to be positioned close to spaces occupied by people, thus increasing the design flexibility of spaces.

The wide range of models includes solutions which can be customised depending on architectural requirements with diffusion grids in a variety of materials and colours.

All the units are supplied with low energy consumption electronic motors.

A large variety of control and regulation accessories is available.

Fan coil units are used inside private homes, on verandas, in public offices and buildings and in exhibition and commercial areas.

The choice of **Carisma Floor** units has a host of advantages:

- **Low energy consumption ECM motor**
- **Low noise**
- **Flexibility**
- **Advanced design**
- **Easy to install**

CONTENTS

Construction features

CSP-ECM Series

Walkable **floor casing** made of galvanised sheet steel, powder-coated in Anthracite grey (RAL 7016), with external height adjustment system preassembled with an antivibrating device.

Coil, consisting of copper pipes and aluminium fins, painted in anthracite grey (RAL 7016) and housed, acoustically decoupled, in galvanised and painted steel transverse structures. Front Euroconus connection with connection nut (int. thread ¾") and air venting.

Tangential fan, with protective cover, 24V EC motors freely adjustable (0 - 10 V) pre-wired and ready for connection.

Aluminium roll-up grid consisting of stable profiles, anodised in natural colours, with 20 x 6 mm slats. Grid with overall height of 20 mm and free 70% transversal section, inserted in floor casing and acoustically insulated by rubber gaskets. Perimeter listel with finish of cover grid.

Mounting cover with a black plastic **protective profile** of the perimeter listels to protect the fan coils during installation.

Carisma CSP-ECM units are delivered with terminal board and 24 V power supply included but without regulation board (accessory available on the "Controls and Accessories" pages).

Construction features

Standard versions

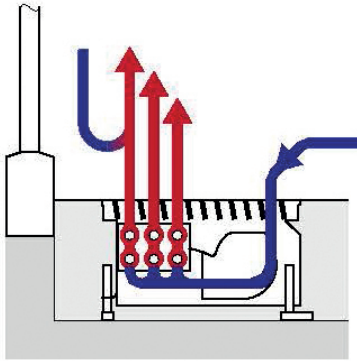
2 versions: 110 x 192 mm and 130 x 217 mm (Height H x Width T)
11 Lengths L: 1000, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800 and 3000 mm.
Aluminium roll-up grid.

Identifications and Models

Casing Length L *(mm)*	**Casing Height *H*** *(mm)* x **Casing Width *T*** *(mm)*	
	110 x 192	**130 x 217**
1000	CSP-ECM 1000-110-192	CSP-ECM 1000-130-217
1200	CSP-ECM 1200-110-192	CSP-ECM 1200-130-217
1400	CSP-ECM 1400-110-192	CSP-ECM 1400-130-217
1600	CSP-ECM 1600-110-192	CSP-ECM 1600-130-217
1800	CSP-ECM 1800-110-192	CSP-ECM 1800-130-217
2000	CSP-ECM 2000-110-192	CSP-ECM 2000-130-217
2200	CSP-ECM 2200-110-192	CSP-ECM 2200-130-217
2400	CSP-ECM 2400-110-192	CSP-ECM 2400-130-217
2600	CSP-ECM 2600-110-192	CSP-ECM 2600-130-217
2800	CSP-ECM 2800-110-192	CSP-ECM 2800-130-217
3000	CSP-ECM 3000-110-192	CSP-ECM 3000-130-217

Operating principle

Forced heating convection
Cold air is drawn in from the room and heated through the coil.
The heated air rises upwards, creating a shield between the window and the room itself.

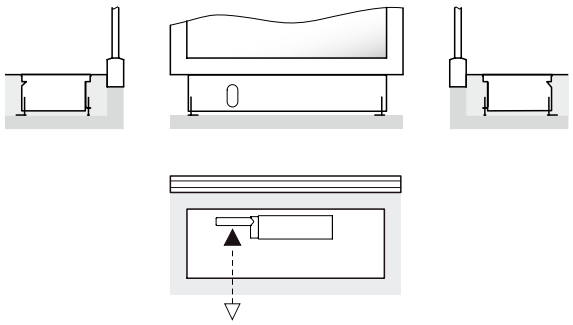


Operation limits

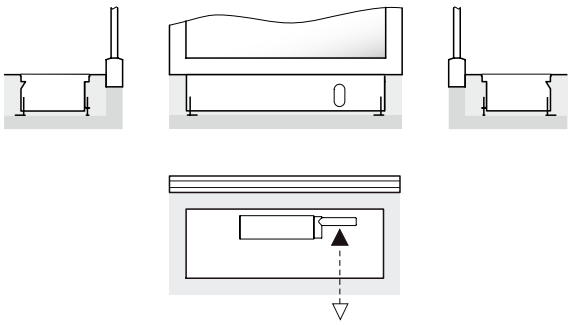
Maximum water inlet temperature: 90 °C
Maximum operating pressure: 10 bar (optional high pressure model, 16 bar).
Test pressure: 13 bar (optional high pressure model, 21 bar).

Front connections without integrated valve

A1 - ***Front left*** *connections with respect to environment side*



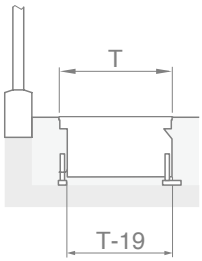
A2 - ***Front right*** *connections with respect to environment side*



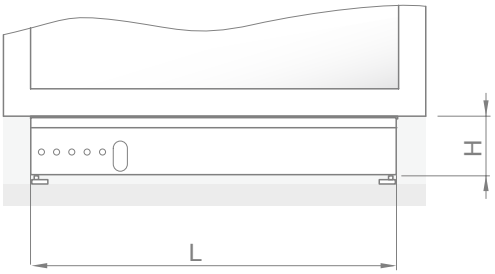
Coil connection measurement: *euroconus with connection nut (int. thread IG ¾")*

Dimensions - Front connection diagram *(Position **A1**)*

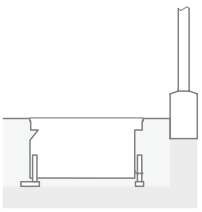
Left side view



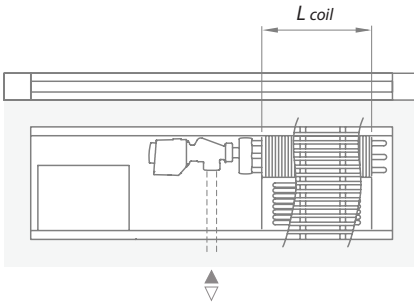
Front view



Right side view



View from above



Position A2 specular with respect to Position A1

Dimensions

L *(mm)*	**L_{coil}** *(mm)*	**T** *(mm)*	**H** *(mm)*	**H1** *(mm)*
See page 7	L - 390	192	110	10 - 65
		217	130	10 - 65

Fan specifications

Technical data tangential fans, casing Height H = 110 mm, casing Width T = 192 mm (with 24 V actuator)

Length *(mm)*	**Number of EC motors**	**Number of fans**	**Maximum absorbed power** *(W)*	**Maximum absorbed current** *(mA)*	**Maximum air flow rate** *(m^3/h)*
1000	1	2	7	265	220
1200	1	2	8	315	295
1400	1	3	9	350	365
1600	1	3	9	365	430
1800	2	4	14	585	515
2000	2	4	15	630	590
2200	2	5	16	665	660
2400	2	5	17	680	730
2600	2	6	17	715	795
2800	2	6	18	720	855
3000	2	6	18	750	895

Technical data tangential fans, casing Height H = 130 mm, casing Width T = 217 mm (with 24 V actuator)

Length *(mm)*	**Number of EC motors**	**Number of fans**	**Maximum absorbed power** *(W)*	**Maximum absorbed current** *(mA)*	**Maximum air flow rate** *(m^3/h)*
1000	1	2	17	730	315
1200	1	2	19	810	385
1400	1	3	20	860	435
1600	1	3	22	900	485
1800	2	4	36	1520	710
2000	2	4	39	1620	770
2200	2	5	39	1630	820
2400	2	5	41	1710	885
2600	2	6	42	1760	920
2800	2	6	43	1800	965
3000	2	6	44	1840	995

Technical data

2-pipe system

Performance refers to the following operating condition: air temperature + 20 °C

Casing length 1000 mm

Model		CSP-ECM 1000-110-192					CSP-ECM 1000-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	79	129	180	220	-	113	185	258	315
Heating ΔTm 50.0 K - 75/65 °C	W	125	477	786	1065	1441	144	811	1195	1559	2049
Heating ΔTm 30.0 K - 55/45 °C	W	59	284	469	635	859	68	484	713	930	1222
Heating ΔTm 25.0 K - 50/40 °C	W	45	236	389	527	713	52	401	591	772	1014
Sound power **Lw**	db(A)	-	< 28	29	38	50	-	< 28	33	44	53
Sound pressure **Lp (*)**	db(A)	-	< 19	20	29	41	-	< 19	24	35	44
Weight **M**	kg	14,78					16,67				

Casing length 1200 mm

Model		CSP-ECM 1200-110-192					CSP-ECM 1200-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	105	174	242	295	-	138	226	316	385
Heating ΔTm 50.0 K - 75/65 °C	W	162	625	1035	1395	1889	186	1132	1668	2145	2678
Heating ΔTm 30.0 K - 55/45 °C	W	77	373	617	832	1127	88	675	995	1279	1597
Heating ΔTm 25.0 K - 50/40 °C	W	58	309	512	690	935	67	560	826	1062	1325
Sound power **Lw**	db(A)	-	< 28	32	40	52	-	< 28	35	46	55
Sound pressure **Lp (*)**	db(A)	-	< 19	23	31	43	-	< 19	26	37	46
Weight **M**	kg	17.24					19,40				

Casing length 1400 mm

Model		CSP-ECM 1400-110-192					CSP-ECM 1400-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	130	215	299	365	-	155	256	357	435
Heating ΔTm 50.0 K - 75/65 °C	W	200	848	1391	1901	2574	230	1456	2148	2798	3119
Heating ΔTm 30.0 K - 55/45 °C	W	95	506	830	1134	1535	109	868	1281	1669	1860
Heating ΔTm 25.0 K - 50/40 °C	W	72	420	688	941	1274	83	721	1063	1385	1544
Sound power **Lw**	db(A)	-	< 28	32	41	53	-	< 28	36	46	55
Sound pressure **Lp (*)**	db(A)	-	< 19	23	32	44	-	< 19	27	37	46
Weight **M**	kg	20,08					22,61				

(*) = The sound pressure levels are 9 dB(A) below power levels for a 100 m³ environment and a reverberation time of 0.5 sec.

Technical data

2-pipe system

Performance refers to the following operating condition: air temperature + 20 °C

Casing length 1600 mm

Model		CSP-ECM 1600-110-192					CSP-ECM 1600-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	154	253	352	430	-	173	285	398	485
Heating ΔTm 50.0 K - 75/65 °C	W	237	979	1597	2217	2935	273	1794	2647	3398	3761
Heating ΔTm 30.0 K - 55/45 °C	W	112	584	952	1322	1750	129	1070	1579	2027	2243
Heating ΔTm 25.0 K - 50/40 °C	W	85	485	790	1097	1453	98	888	1310	1682	1861
Sound power **Lw**	db(A)	-	< 28	33	42	53	-	< 28	37	47	55
Sound pressure **Lp (*)**	db(A)	-	< 19	24	33	44	-	< 19	28	38	46
Weight **M**	kg	22,71					25,62				

Casing length 1800 mm

Model		CSP-ECM 1800-110-192					CSP-ECM 1800-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	184	303	422	515	-	254	418	582	710
Heating ΔTm 50.0 K - 75/65 °C	W	260	1198	1941	2627	3557	299	2045	3047	3961	5094
Heating ΔTm 30.0 K - 55/45 °C	W	123	714	1158	1567	2121	141	1220	1817	2362	3038
Heating ΔTm 25.0 K - 50/40 °C	W	94	593	961	1300	1760	108	1012	1508	1960	2521
Sound power **Lw**	db(A)	-	< 28	34	44	54	-	< 28	37	48	56
Sound pressure **Lp (*)**	db(A)	-	< 19	25	35	45	-	< 19	28	39	47
Weight **M**	kg	25,88					29,18				

Casing length 2000 mm

Model		CSP-ECM 2000-110-192					CSP-ECM 2000-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	211	347	484	590	-	275	453	631	770
Heating ΔTm 50.0 K - 75/65 °C	W	290	1327	2159	2909	3941	334	2332	3475	4486	5619
Heating ΔTm 30.0 K - 55/45 °C	W	137	791	1288	1735	2350	158	1391	2072	2675	3351
Heating ΔTm 25.0 K - 50/40 °C	W	105	657	1069	1440	1950	120	1154	1720	2220	2781
Sound power **Lw**	db(A)	-	< 28	34	44	55	-	< 28	38	49	56
Sound pressure **Lp (*)**	db(A)	-	< 19	25	35	46	-	< 19	29	40	47
Weight **M**	kg	28,33					32,00				

(*) = The sound pressure levels are 9 dB(A) below power levels for a 100 m³ environment and a reverberation time of 0.5 sec.

Technical data

2-pipe system

Performance refers to the following operating condition: air temperature + 20 °C

Casing length 2200 mm

Model		CSP-ECM 2200-110-192					CSP-ECM 2200-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	236	388	541	660	-	293	482	672	820
Heating ΔTm 50.0 K - 75/65 °C	W	318	1544	2567	3462	4679	366	2579	3834	4984	5966
Heating ΔTm 30.0 K - 55/45 °C	W	150	921	1531	2065	2791	173	1538	2287	2972	3558
Heating ΔTm 25.0 K - 50/40 °C	W	115	764	1270	1713	2316	132	1276	1898	2467	2953
Sound power **Lw**	db(A)	-	< 28	35	44	55	-	28	38	49	56
Sound pressure **Lp (*)**	db(A)	-	< 19	26	35	46	-	19	29	40	47
Weight **M**	kg	31,25					35,30				

Casing length 2400 mm

Model		CSP-ECM 2400-110-192					CSP-ECM 2400-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	261	429	598	730	-	316	521	725	885
Heating ΔTm 50.0 K - 75/65 °C	W	342	1669	2771	3743	5030	393	2802	4165	5375	6365
Heating ΔTm 30.0 K - 55/45 °C	W	162	995	1653	2232	3000	186	1671	2484	3206	3796
Heating ΔTm 25.0 K - 50/40 °C	W	123	826	1371	1852	2489	142	1387	2061	2660	3150
Sound power **Lw**	db(A)	-	< 28	35	44	55	-	28	38	49	57
Sound pressure **Lp (*)**	db(A)	-	< 19	26	35	46	-	19	29	40	48
Weight **M**	kg	33,75					38,17				

Casing length 2600 mm

Model		CSP-ECM 2600-110-192					CSP-ECM 2600-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	284	468	652	795	-	329	541	754	920
Heating ΔTm 50.0 K - 75/65 °C	W	363	1877	3072	4177	5530	417	3016	4462	5771	6447
Heating ΔTm 30.0 K - 55/45 °C	W	172	1119	1832	2491	3298	197	1799	2661	3442	3845
Heating ΔTm 25.0 K - 50/40 °C	W	131	929	1520	2067	2737	150	1493	2208	2856	3191
Sound power **Lw**	db(A)	-	28	36	45	56	-	28	39	49	57
Sound pressure **Lp (*)**	db(A)	-	19	27	36	47	-	19	30	40	48
Weight **M**	kg	36,55					41,34				

(*) = The sound pressure levels are 9 dB(A) below power levels for a 100 m³ environment and a reverberation time of 0.5 sec.

Technical data

2-pipe system

Performance refers to the following operating condition: air temperature + 20 °C

Casing length 2800 mm

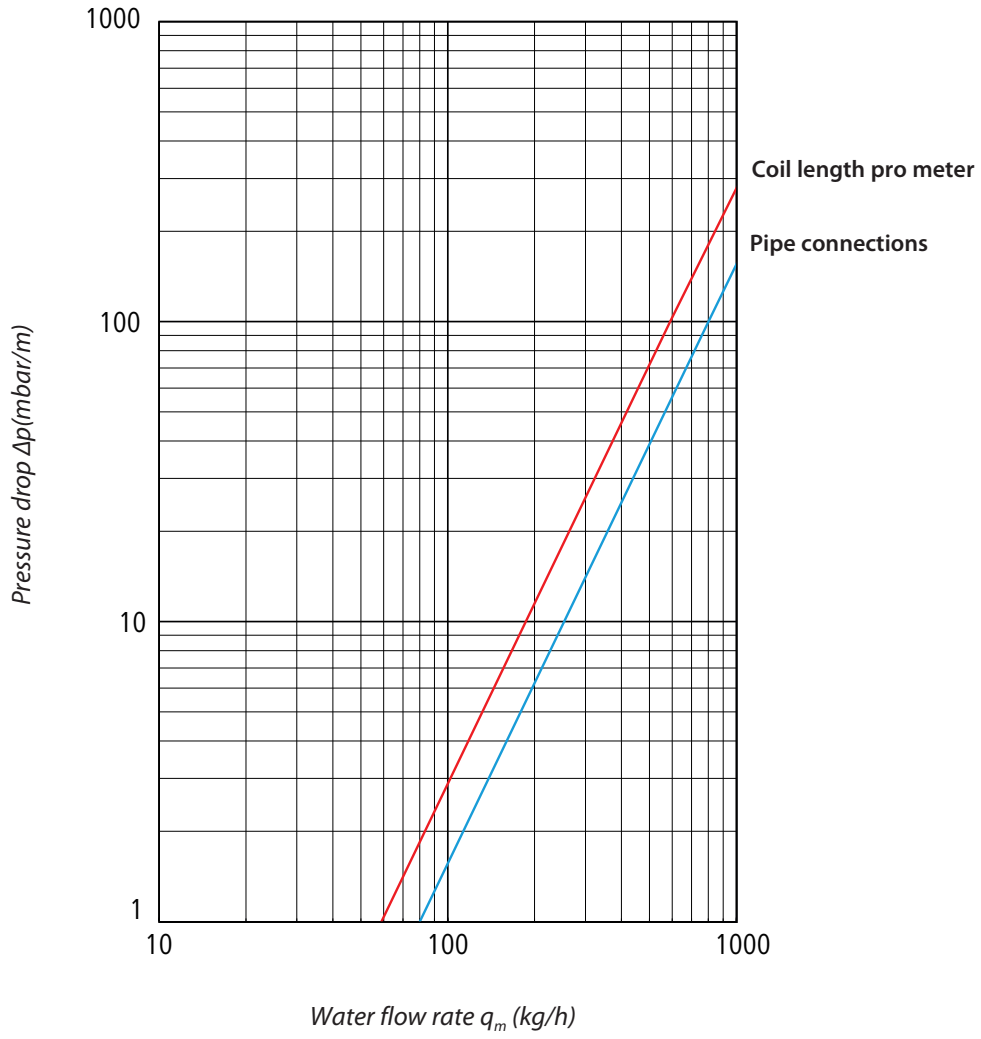
Model		CSP-ECM 2800-110-192					CSP-ECM 2800-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	305	503	701	855	-	345	568	791	965
Heating ΔTm 50.0 K - 75/65 °C	W	378	1978	3226	4444	5788	435	3209	4747	6095	6784
Heating ΔTm 30.0 K - 55/45 °C	W	179	1180	1924	2650	3452	206	1914	2831	3635	4046
Heating ΔTm 25.0 K - 50/40 °C	W	136	979	1597	2199	2865	157	1588	2349	3017	3358
Sound power **Lw**	db(A)	-	28	37	45	56	-	29	39	50	57
Sound pressure **Lp (*)**	db(A)	-	19	28	36	47	-	20	30	41	48
Weight **M**	kg	39,06					44,22				

Casing length 3000 mm

Model		CSP-ECM 3000-110-192					CSP-ECM 3000-130-217				
Casing height **H**	mm	110					130				
Casing width **T**	mm	192					217				
EC inverter power	V	0	3	5	8	10	0	3	5	8	10
Air flow **Qv**	m³/h	-	320	526	734	895	-	355	585	816	995
Heating ΔTm 50.0 K - 75/65 °C	W	387	2051	3346	4586	5936	445	3328	4923	6320	7008
Heating ΔTm 30.0 K - 55/45 °C	W	183	1223	1996	2735	3540	210	1985	2936	3769	4180
Heating ΔTm 25.0 K - 50/40 °C	W	140	1015	1656	2270	2938	160	1647	2436	3128	3468
Sound power **Lw**	db(A)	-	28	37	46	56	-	29	39	50	57
Sound pressure **Lp (*)**	db(A)	-	19	28	37	47	-	20	30	41	48
Weight **M**	kg	41,37					47,87				

(*) = The sound pressure levels are 9 dB(A) below power levels for a 100 m³ environment and a reverberation time of 0.5 sec.

Pressure drops



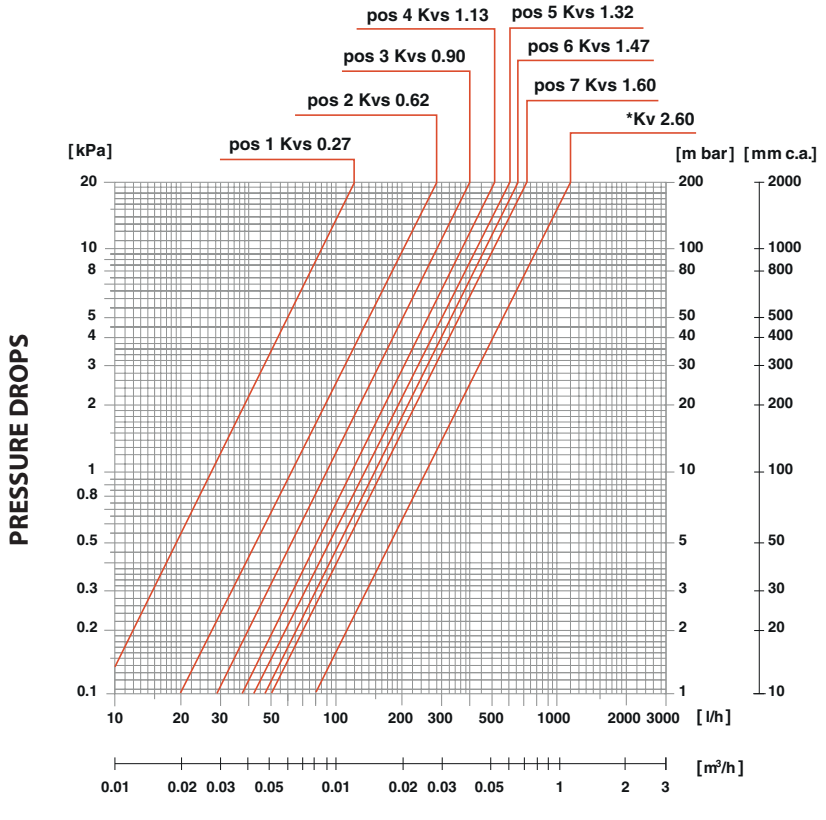
ON-OFF 2-way valve not fitted, with 230V actuator (can only be used with MB-CFP-ECM-B20 and KNX-CFP-ECM-B20 boards)

Valve for A1-A2 front connections

Composed of:

- 2-way angle valve and lockshield valve
  - Euroconus Connections ¾"
  - Brass body.
- Thermoelectric actuator 230 V
  - Power supply: 230 V AC.
  - Absorption: 1,8 W.
  - Protection rating: IP 54.
  - Adjustment stroke: 2,5 mm
  - Connecting cable: 3 m.
  - Normally closed in absence of current.

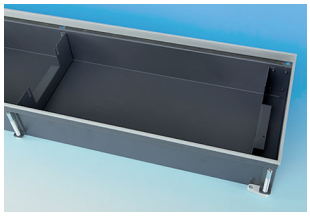
Series	*Type of connections*	*NOT MOUNTED*	
		Identification	*Code*
CSP-ECM	A1-A2	VS-A1-A2-OF	9065118



* Pre-setting excluded

Empty casing

The supply program and minimum and special lengths of the casings vary for the individual models.



Dimensions:

- Height (H) x Width (T) = 110 x 192 mm and 130 x 217 mm
- Variable lengths: 200-3000 mm

Material:

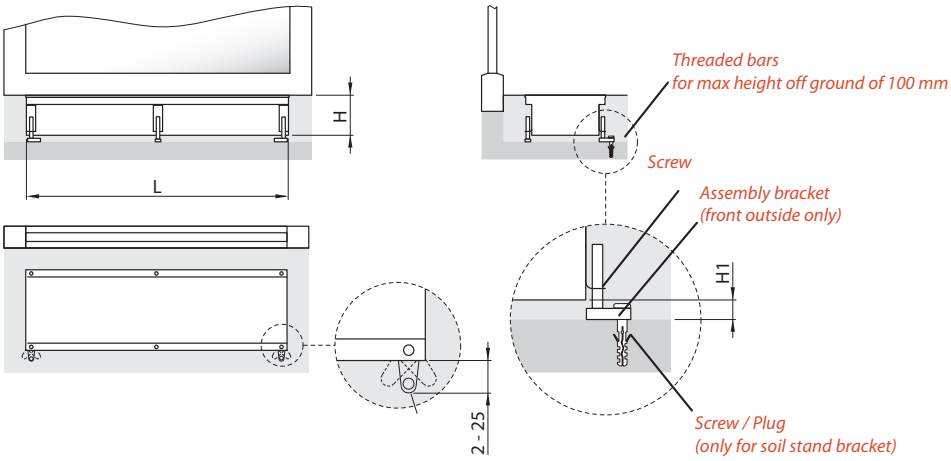
- Galvanised steel painted Anthracite grey (RAL 7016 opaque) with natural anodised aluminium casing.

You must specify the length of the casing when placing the order.

Height H *(mm)*	***Width T*** *(mm)*	***Identification***	***Code***
110	192	CVSG 192	9065321
130	217	CVSG 217	9065322

Casing fastening and installation

Fastening with **adjustable feet**.



Version	***Height H*** *(mm)*	***H1*** *(mm)*
CSP-ECM	110	10 - 65
	130	10 - 65

Number of feet
depending on length

Length L *(mm)*	***Number of assembly brackets***
1000	3
1200	3
1400	3
1600	3
1800	4
2000	4
2200	4
2400	4
2600	5
2800	5
3000	5

Cover grid

Aluminium roll-up grid

Elegant, stable and sturdy, it can fit into the architectural design with great versatility.
To facilitate maintenance, the grid is easy to remove and then to be put back in place.

Dimensions:

- Length up to 3000 mm
- Height: 20 mm
- Slat width: 6 mm
- Slat distance: 14 mm
  - other distances on demand
- Free section: 70%

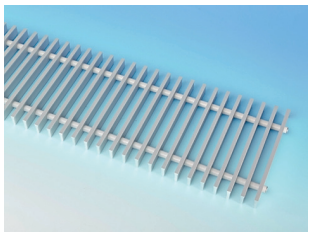
Treatment:

- Natural anodising, anodising in various colours or powder coating in RAL colours.
- Colours for anodisation:
  - Natural
  - Bronze
  - Dark silver
  - Brass
  - Black
- Cutting surfaces in aluminium colour with grid in two blocks.

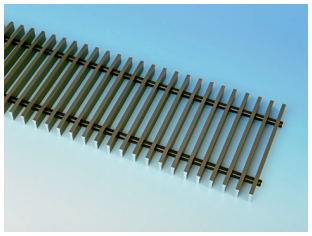
Material:

- Aluminium profiles.

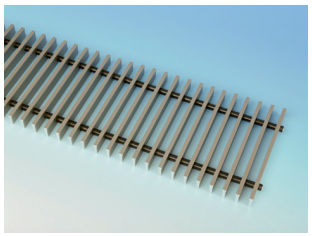
Width T *(mm)*	***Description***	***Identification***	***Code***
192	Natural anodised - standard	GAA 192-NAT	9065331
	Bronze colour anodised	GAA 192-BRO	9065341
	Dark silver colour anodised	GAA 192-ARG	9065332
	Brass colour anodised	GAA 192-OTT	9065342
	Black colour anodised	GAA 192-NER	9065333
	Painted in a colour of your choice	GAA 192-COL	9065343
217	Natural anodised - standard	GAA 217-NAT	9065334
	Bronze colour anodised	GAA 217-BRO	9065344
	Dark silver colour anodised	GAA 217-ARG	9065335
	Brass colour anodised	GAA 217-OTT	9065345
	Black colour anodised	GAA 217-NER	9065336
	Painted in a colour of your choice	GAA 217-COL	9065346



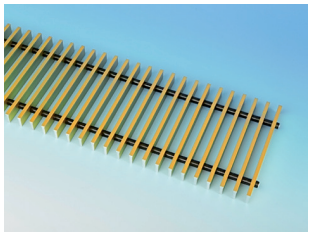
Natural anodised (standard)



Bronze

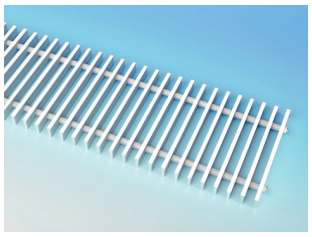


Dark silver



Brass

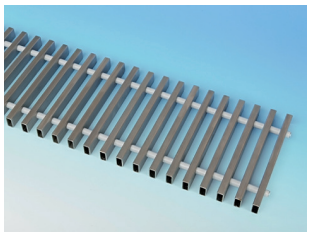
Black



Painting in RAL colour

Cover grid

Stainless steel roll-up grid



Stainless steel

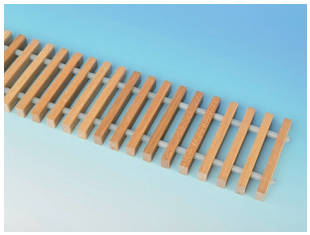
Elegant, stable and sturdy, it can fit into the architectural design with great versatility.
To facilitate maintenance, the grid is easy to remove and then to be put back in place.

Dimensions:

- Length up to 3000 mm
- Height: 20 mm
- Slat width: 10 mm
- Slat distance: 16 mm
- Free section: 60%

***Width T** (mm)*	***Identification***	***Code***
192	GAI 192	9065323
217	GAI 217	9065324

Wooden roll-up grid



Elegant, stable and sturdy, it can fit into the architectural design with great versatility.
To facilitate maintenance, the grid is easy to remove and then to be put back in place.

Dimensions:

- Length up to 3000 mm
- Height: 20 mm
- Slat width: 12 mm
- Slat distance: 16 mm
- Free section: 55%

***Width T** (mm)*	***Description***	***Identification***	***Code***
192	oak	GLE 192-QUE	9065351
	ash	GLE 192-FRA	9065352
	beech	GLE 192-FAG	9065353
217	oak	GLE 217-QUE	9065354
	ash	GLE 217-FRA	9065355
	beech	GLE 217-FAG	9065356

Cover grid

Aluminium linear grid

Elegant, stable and sturdy, it can fit into the architectural design with great versatility.
To facilitate maintenance, the grid is easy to remove and then to be put back in place.

Dimensions:

- Length up to 3000 mm
- Height: 20 mm
- Slat width: 6 mm
- Slat distance: 10 mm
- Free section: 60%

Treatment:

- Anodisation, natural or colour, powder painting in RAL colours.
- Colours for anodisation:
  - Natural
  - Bronze
  - Dark silver
  - Brass
  - Black
- Cutting surfaces in aluminium colour with grid in two blocks.

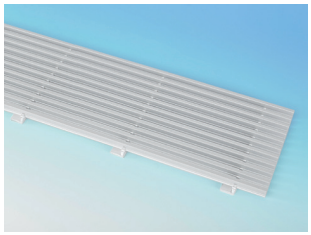
Construction:

- Vertical profile slats, very rigid thanks to press-forming on angular aluminium profiles connected at a distance of 200-300 mm.

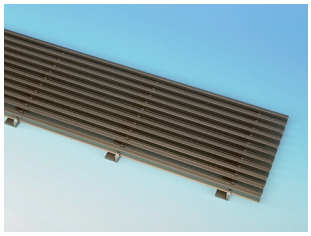
Material:

- Aluminium profiles.

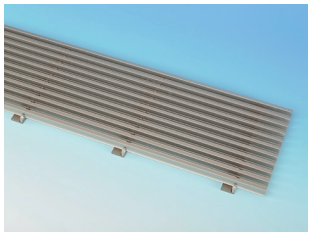
Width T *(mm)*	***Description***	***Identification***	***Code***
192	Natural anodised - standard	GLA 192-NAT	9065361
	Bronze colour anodised	GLA 192-BRO	9065362
	Dark silver colour anodised	GLA 192-ARG	9065363
	Brass colour anodised	GLA 192-OTT	9065364
	Black colour anodised	GLA 192-NER	9065365
	Painted in a colour of your choice	GLA 192-COL	9065366
217	Natural anodised - standard	GLA 217-NAT	9065371
	Bronze colour anodised	GLA 217-BRO	9065372
	Dark silver colour anodised	GLA 217-ARG	9065373
	Brass colour anodised	GLA 217-OTT	9065374
	Black colour anodised	GLA 217-NER	9065375
	Painted in a colour of your choice	GLA 217-COL	9065376



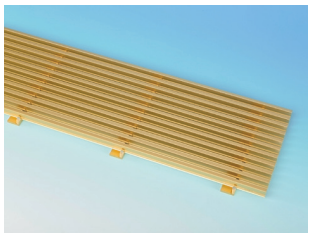
Natural anodised (standard)



Bronze

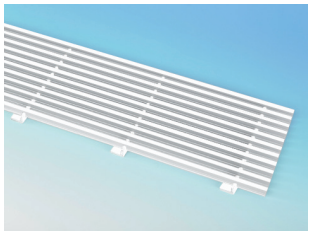


Dark silver



Brass

Black



Painting in RAL colour

Accessories and auxiliary products for assembly

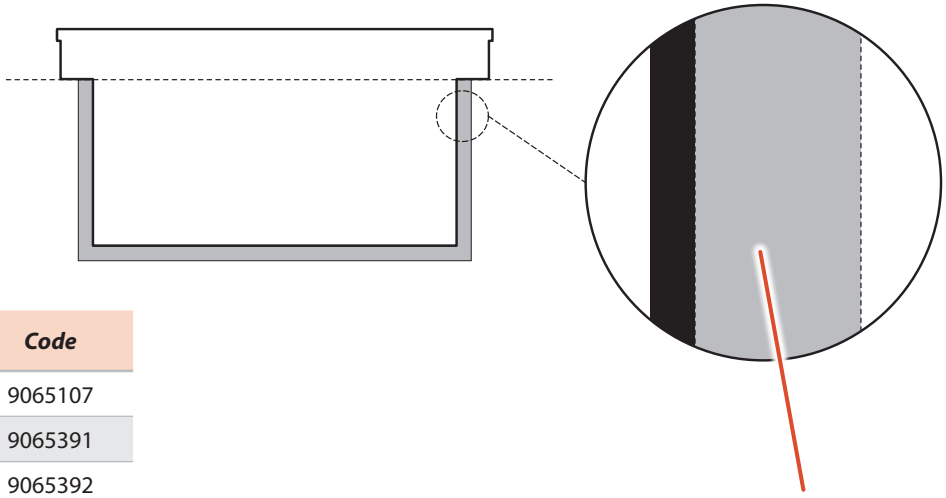
Air intake filter

Intake filter PPI 30 dark 80 x 3 mm.

Casing length ***L*** *(mm)*	*Identification*	*Code*
1000	FVM-S-100	9065380
1200	FVM-S-120	9065381
1400	FVM-S-140	9065382
1600	FVM-S-160	9065383
1800	FVM-S-180	9065384
2000	FVM-S-200	9065385
2200	FVM-S-220	9065386
2400	FVM-S-240	9065387
2600	FVM-S-260	9065388
2800	FVM-S-280	9065389
3000	FVM-S-300	9065390

Casing sound absorption lining

4 mm sound proofing lining installed in the factory on the outer surface of the casing.



***Length L** (mm)*	***Identification***	***Code***
1000	TS-100	9065107
1200	TS-120	9065391
1400	TS-140	9065392
1600	TS-160	9065393
1800	TS-180	9065394
2000	TS-200	9065242
2200	TS-220	9065395
2400	TS-240	9065396
2600	TS-260	9065397
2800	TS-280	9065398
3000	TS-300	9065246

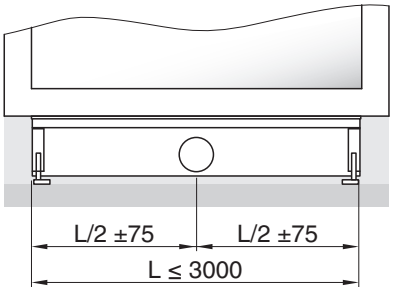
Air connections

Connection dimensions	***Identification***	***Code***
63	LAG 63	9065108
80	LAG 80	9065109

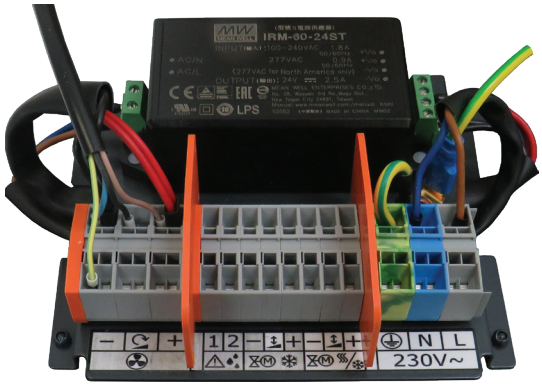
The fittings can only be supplied on empty casings.
Their position can be defined on demand.

(1) = The positioning of air connections is only affected minimally by the arrangement of the transversal ribs of the floor casing, For example: connection F (in the middle of the environment side) = 'about halfway' The exact position/size can be taken from the drawing and is approved by the customer.

Number and position of air connections



Carisma CSP-ECM units are delivered with the 24V power supply and the terminal board to which the MB-CFP-ECM-B20 Power Board can be connected, pre-wired.



CSP-ECM units can be supplied with a wide range of controls that allow managing an individual unit or one or more groups of units by using the **Modbus RTU - RS 485** communication protocol.

Units can be managed according to the Slave/Mater logic (up to 20 units) or by supervision components.

The system consists of an MB-CFP-ECM-B20 power board and a set of devices including the T-MB wall control, the PSM-DI multipurpose panel, the Sabianet supervision program, the T-DI touch screen multipurpose panel and the Sabiana Cloud SabWeb Gateway.

Note:

- The MB-CFP-ECM-B20 power board is available only not fitted on the unit.
- Only for remote installation for versions with Height H = 110 mm

Power Board MB-CFP-ECM-B20

***Length L** (mm)*	***Identification***	***Code***
MB board, not fitted	MB-CFP-ECM-B20	9065314

The MB-CFP-ECM-B20 power circuit board is designed to be able to perform various functions and control modes in order to better meet installation requirements.

These modes are selected by setting the configuration dip switches on the board.

- 2-pipe system.
- Fan on-off thermostatic control.
- Valve and continuous ventilation on-off thermostatic control.
- Valve and simultaneous ventilation on-off thermostatic control.
- Control of fan operation depending on the coil temperature (Minimum T3 probe already included) can be activated in heating-only mode or heating and cooling mode.
- Automatic switching of operating mode by water probe T2 (accessory) in 2-pipe system application.
- Activation/deactivation of the fan coil by means of the remote contact (window or clock contact).

By activating the function of probe T3, the fan operation can be stopped in winter when the temperature of the coil is below 32 °C, and started when the temperature reaches 36 °C. In summer operation the fan stops when the temperature in the coil is above 22 °C and starts when it is below 18 °C.

The following connections are located on the power board:
- T-MB wall-mounted control.
- RS 485 serial connection for managing several fan coil units in Master/Slave configuration or for the creation of a network set up for supervision.

NTC probe included for T1 function (intake air temperature control).
NTC probe included for T3 function (coil water temperature control).
Possible application of NTC probe (accessory) for T2 function (seasonal-change-over).

T-MB wall-mounted control

Description	Identification	Code
Wall control (can only be used with MB-CFP-ECM-B20 board)	T-MB	9066331E

Wall-mounted control with display, which allows you to control one or more units in Master/Slave mode. The control is equipped with internal sensor to detect the room temperature value, which can be defined as a priority compared to the sensor on the fan coil.

Dimensions: 110x72x25 mm

The functions carried out by the T-MB wall-mounted control are:
- Activation/deactivation.
- Set point configuration.
- Set point variation (when used as a +/- 3° variation potentiometer of the set point configured from PSM-DI).
- Setting the fan speed (low, medium, high or automatic).
- Operating mode setting (ventilation, heating).
- Time setting.
- Activation and deactivation weekly programming.
- Display and modification of the fan coil operation parameters.

Several CSP-ECM fan coils with MB-CFP-ECM-B20 board can be connected serially and can therefore be controlled simultaneously by one T-MB wall control. By using the specific jumpers on the board, one appliance must be configured as master and all the others as slave.

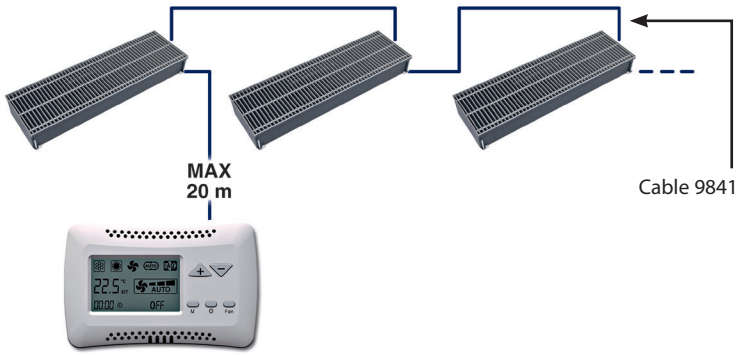
With wall-mounted control T-MB

One control for each unit

(Maximum length of connecting cables = 20 m)

Once control for several units (maximum 20 units)

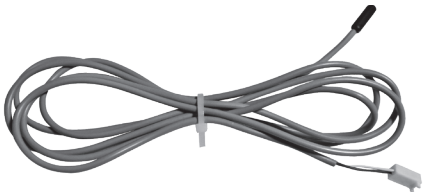
(Overall maximum length of connecting cables = 800 m)



Accessory T2 (Change-Over)

Accessory T2 for units with MB-CFP-ECM-B20 boards and without valves.
NTC-type probe (to be used as change-over) that can be combined with MB-CFP-ECM-B20 boards and placed in contact on the supply pipe.

The T2 (Change-Over) probe is to be used with 2-pipe units for automatic switching of the operation 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.



Identification	Code
T2	9025310

Multifunction control panel PSM-DI

Description	*Identification*	*Code*
PSM-DI multifunction control panel (can only be used with MB-CFP-ECM-B20 board)	PSM-DI	3021293

Another option available for the serial communication between the units is the possibility to connect up to 60 CFP-ECM units in series and manage them with just one wall mounted PSM-DI control.

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 ambient temperature detected 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 changeover);
- modify the operation set point;
- 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.

Note:

- It is possible to connect only one single SIOS board per each PSM-DI control panel.
- the RS 485 network's overall length must not exceed 700/800 metres.

T-DI Touch screen multifunction control panel

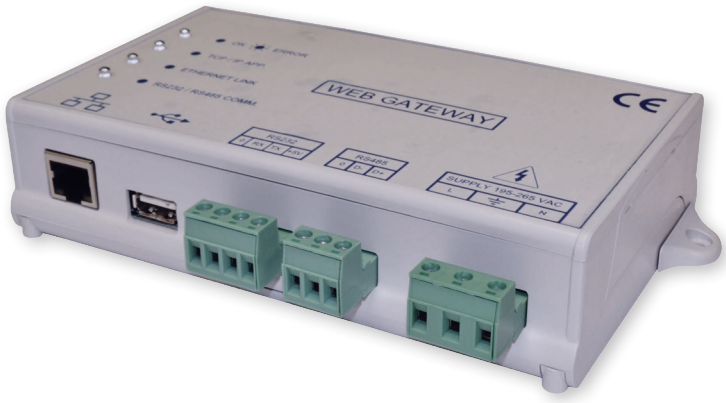
The **T-DI** multifunction control panel allows the supervision and control of several MB- or SIOS board devices; the panel is equipped with a 7-inch touch screen and a series of graphic pages that allow easy reading of information from the fan coils and management of up to 60 units: SIOS + MB).

The **T-DI** multifunction control panel can also be controlled remotely with the **Sabiana Cloud** App for Android and iOS. The **Sabiana Cloud** app is simple and intuitive to use and gives you complete control of the connected devices.

Web gateway for Sabiana Cloud SabWeb

With the Web gateway for 'Sabiana Cloud', up to 60 units equipped with MB or SIOS boards can be controlled remotely using the specific APP for Android and iOS (maximum 60 units: SIOS + MB).

The 'Sabiana Cloud' APP is simple and intuitive to use and gives you complete control of the connected devices.



Sabianet management program of an MB Sabiana hydronic terminal network

Description	Identification	Code
Hardware/software supervision system (can only be used with MB-CFP-ECM-B20 board)	Sabianet	9079118

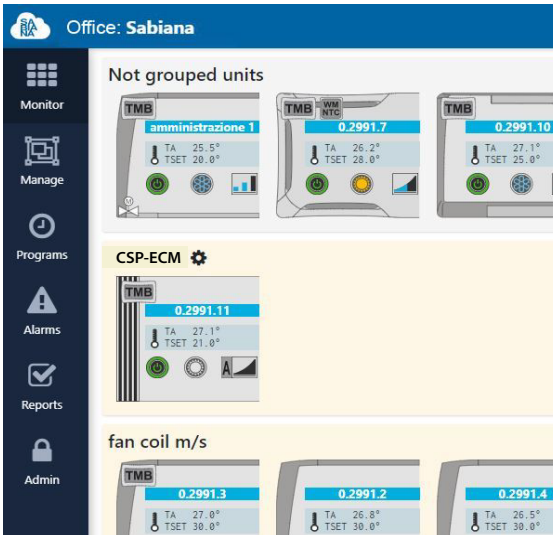
Sabianet is a centralised control system for a network of hydronic terminals Sabiana MB based on software that runs in a LINUX™ environment (the program is already installed on the PC) and works in stand-alone mode, like a classic computer, and can therefore be connected to a monitor, mouse and keyboard. By connecting an Ethernet cable, however, it is possible to work remotely and view the full functionality of the program through any browser. The Sabianet software provides a practical and economic solution for managing terminals by means of a simple click on the mouse.
The main features are:
- simplicity of use;
- extremely comprehensive and functional weekly program;
- possibility of accessing the historical operating data of each connected unit;
- possibility of saving data on a USB flash drive;
- displaying the saved configuration on a new ASUS PC.

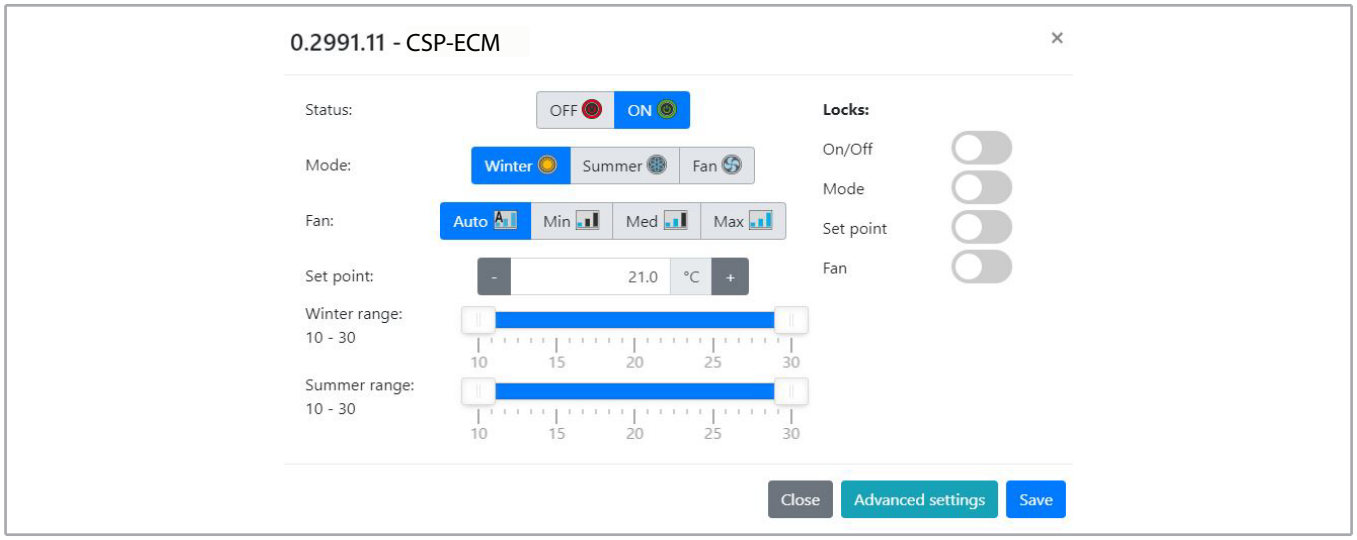
The program utilises the full potential of our units with an on-board MB card.
By using this program you can:
- Create homogeneous logical blocks (several appliances are gathered per single surface, office or room).
- Save weekly programs suitable for the different operation modes (summer, winter, between seasons, closing periods, etc.), recall and activate them by using the mouse. On a weekly basis, activation and deactivation cycles can be defined for individual unit or groups.
- Set the operation conditions for every single appliance or units (operating mode, fan speed, temperature set point).
- Configure the set point limits for each appliance or units.
- Activate or deactivate every single appliance or units.

The Sabianet can also be controlled remotely with the Sabiana Cloud App for Android and iOS. The Sabiana Cloud app is simple and intuitive to use and gives you complete control of the connected devices.

Graphic pages

From the program main screen, the entire terminal appliance network can be displayed and interaction is also possible.
A single unit , a single group or the entire network can be recalled; therefore, modifications on the operation modes and configured set point can be applied.
Therefore, the operating state of each unit can be verified, together with the detected room temperature, temperature in the coil and disposal pump operation mode or any alarm.
The **'Monitor**' screen shows the units that have been connected to the network and scanned by the program.





The icon of the terminal unit provides the following information:
- Unit name (0.2991.11)
- Set temperature (TSET)
- Ambient temperature detected (TA)
- Unit state:

 ON  OFF

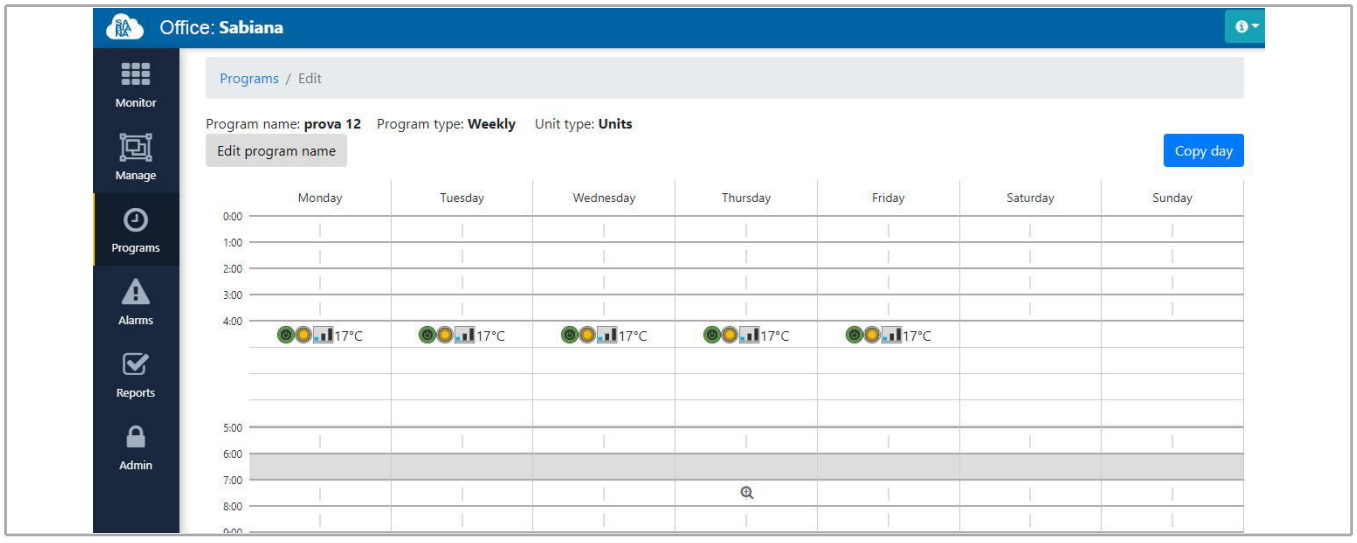
- Operation mode:

 Summer  Winter  Automatic  Ventilation

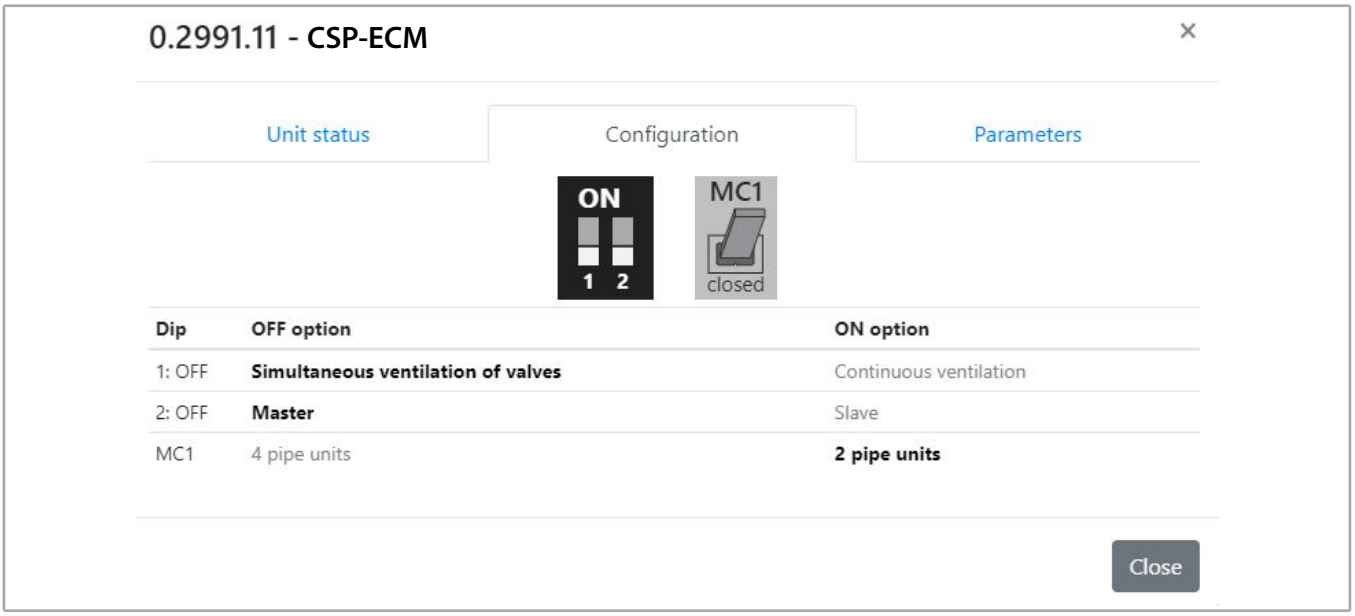
- Fan speed:

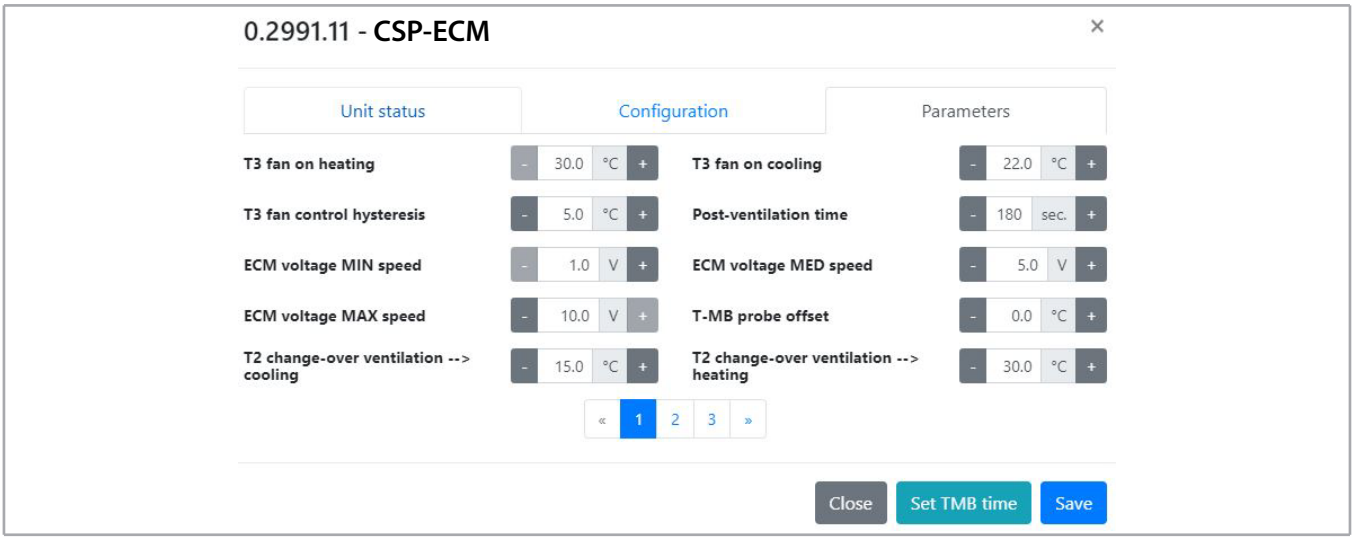
 Low  Medium  High  Automatic

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.

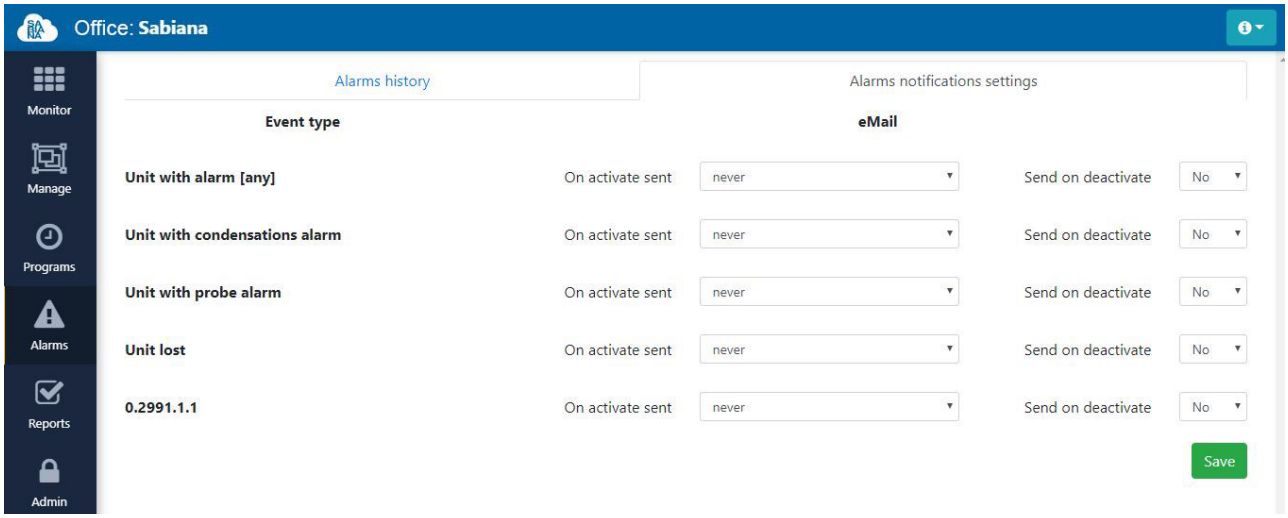


In all those situations where it may be difficult to read the set Dip Switches (e.g. in false ceiling installations), it is always possible to display them directly with the Sabianet program.





In addition to displaying the alarm on the **'Alarms'** screen, it is possible to send the alarm notification and the end of the alarm by e-mail.

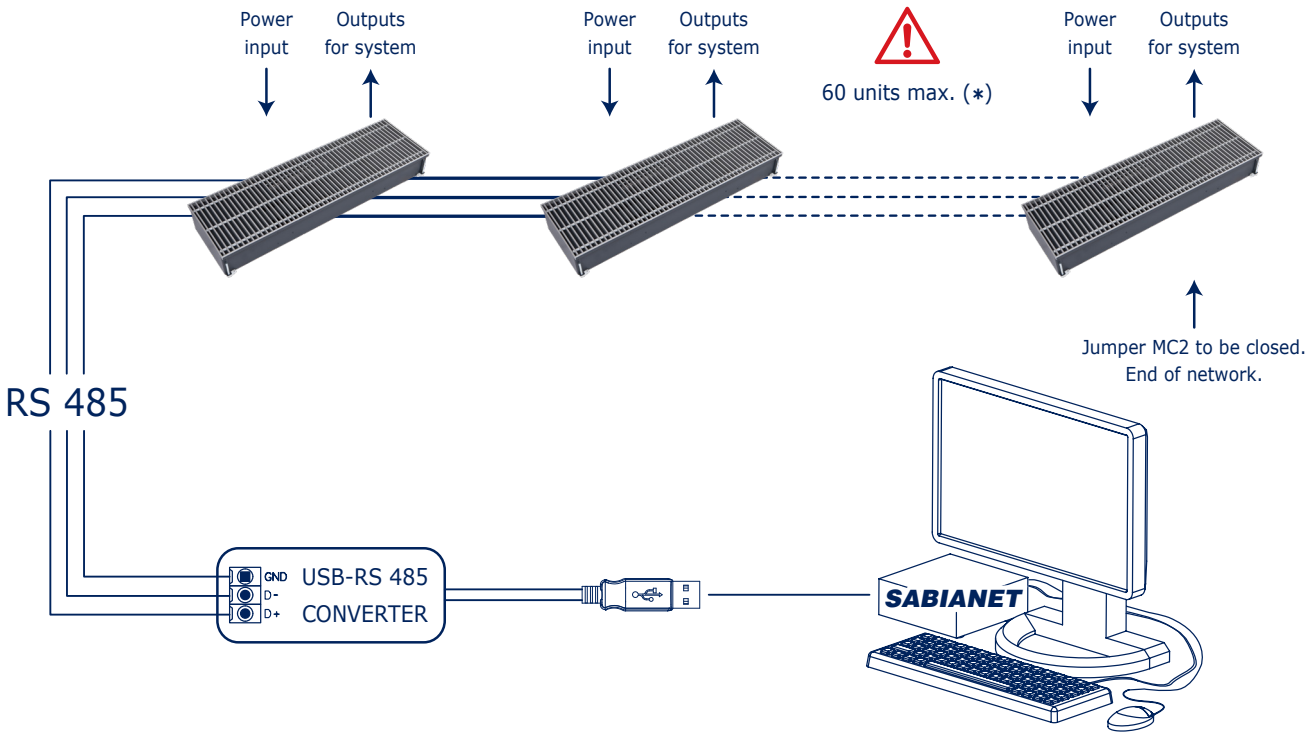


Cable for RS 485 serial connection

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

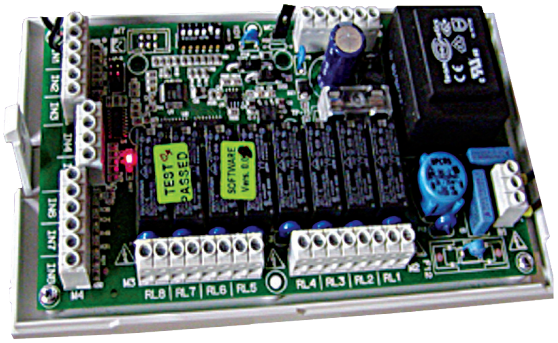
Management logic with Sabianet

Example of connection of a CSP-ECM network with MB board.
(*) If there are more than 60 units, two or more S-routers must be added (see next page).



SIOS accessory

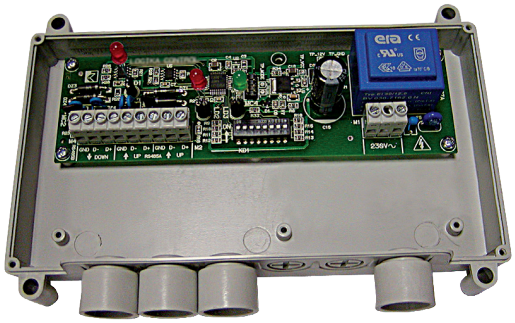
SIOS is a board equipped with 8 relays with potential free contact to control the activation or deactivation of remote electric utilities. Moreover, the board has 8 digital inlets to display the actuator state or external consents, such as motor circuit breakers or other. SIOS boards can be connected to a PSM-DI panel (one SIOS for each PSM-DI panel).



Identification	*Code*
SIOS	3021292

Router-S

The Router-S is a circuit board that allows multiple units to be controlled within a network managed by SABIANET (default) or within a sub-network managed by a BMS system not supplied by SABIANA (it is necessary to reposition a Dip Switch on the board).



Managed by SABIANET

The Router-S in the default version is a circuit board that:
- allows creating networks with more than 60 units (minimum 2 Router-S are required) or to divide the network (per floor, building, etc.);
- it allows creating a Master/Slave sub-network to be controlled as an independent block.

The number of Router-S devices to be used is:
- up to 60 units: no S-router
- from 61 to 120 units: 2 Router-S
- every subsequent 60 units: 1 additional Router-S.

Managed by BMS systems not supplied by Sabiana

The Router-S, after repositioning a Dip Switch on the board, becomes a circuit board for use with third-party (non-Sabiana) BMS, thus enabling the creation of a Master/Slave subnetwork that can be controlled as an independent block.

The number of Router-S devices to be used is:
- maximum14 Router-S
- maximum 15 Fan Coils per Router-S.

Identification	*Code*
Router-S	3021290

The KNX bus system is a building automation standard for controlling, managing and monitoring a wide range of products for:

- heating, cooling, ventilation
- lighting
- alarm systems
- audio and video systems
- electricity and gas

Since 2016, Sabiana is a certified member of the KNX association and the certified products can be added to this system in compliance with the tests carried out at KNX laboratories.

KNX DEVICES

The Sabiana ***WM-KNX*** environment thermostat controls and adjusts the temperature of a room or area in a building. In combination with one or more ***KNX-CFP-ECM-B20*** power unit kits, the thermostat is able to control the operation of terminal units such as fan coils. The unit consists of an LCD display with adjustable backlight and a sensor for measuring the room temperature.

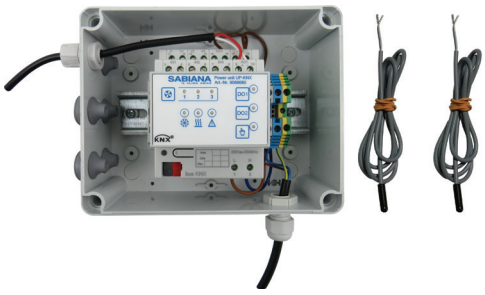
WM-KNX, which can only be used with ***KNX-CFP-ECM-B20*** and ***PL***-series plate, is suitable for mounting on a recessed wall box.

The KNX-CFP-ECM-B20 power unit kit can be connected directly to the included, pre-wired 24 V terminal block and power supply unit on the CSP-ECM units.

Recessed thermostat
WM-KNX

WM-KNX
with rectangular plate

WM-KNX
with square plate



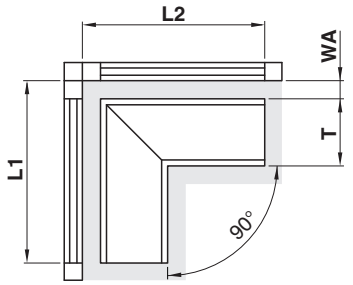
Power unit kit
KNX-CFP-ECM-B20

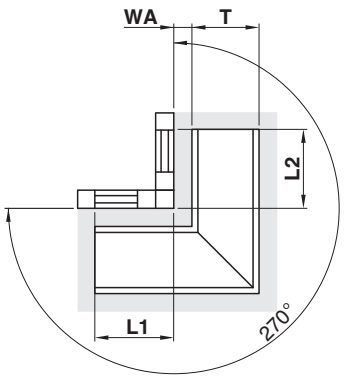
Angle models

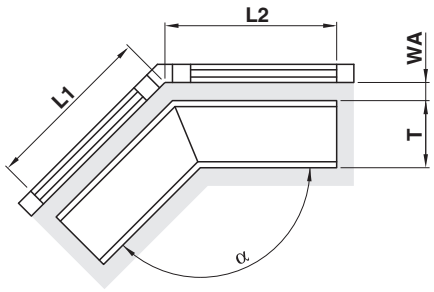
- Available with all models and all casing sizes.
- The angle α can vary from 50° to 320°.
- When ordering, please provide a detailed drawing or a template.
- Feasibility only after technical inspection.
- The fan coil must be transportable.

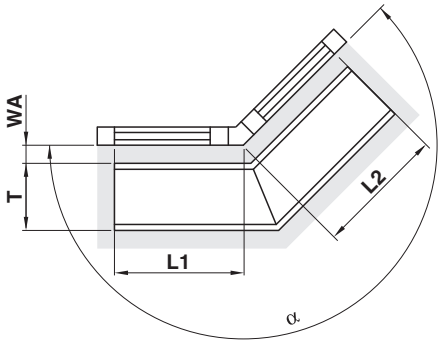
Drawing with dimensions

Cut









LEGEND:

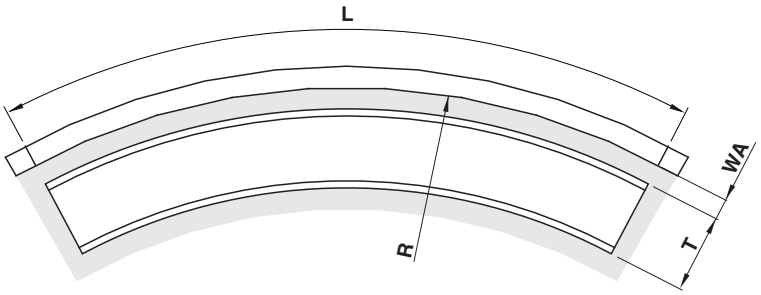
L1/L2 = *Leg length, measured at wall* **a** = *Angle*

T = *Casing width* **WA** = *Distance from wall*

Curved models

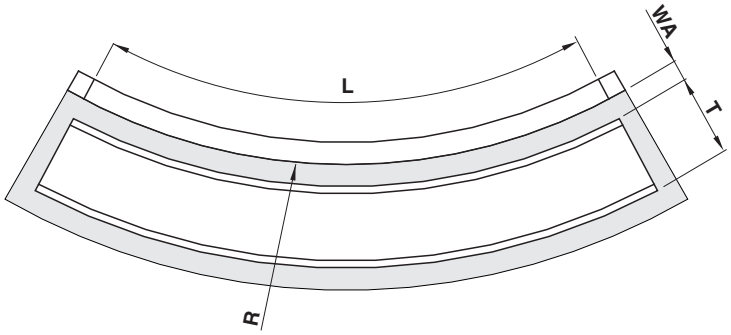
- Minimum curvature radius R: 1000 mm.
- When ordering, please provide a detailed drawing or a template.
- Feasibility only after technical inspection.
- The fan coil must be transportable.

Drawing with dimensions



Inside radius

Outside radius



LEGEND:

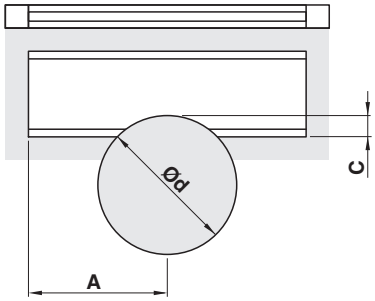
L = *Extended length* **R** = *Wall curvature radius*

T = *Casing width* **WA** = *Distance from wall*

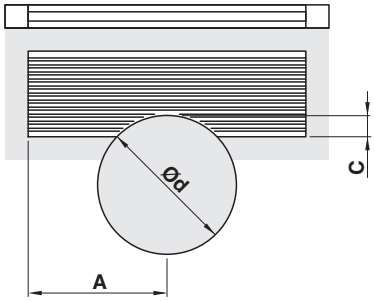
Models with column

- Available with all models and all casing sizes.
- When placing the order, you must supply a detailed drawing or a shape.
- Feasibility only after technical inspection.
- The fan coil must be transportable.

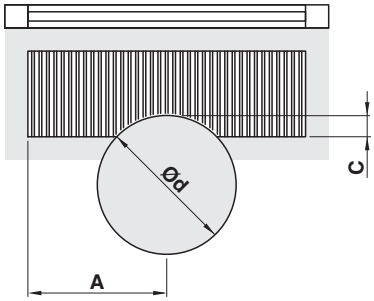
Drawing with dimensions



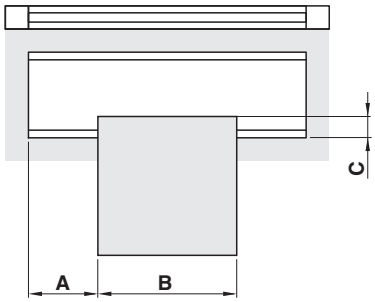
Casing column cut

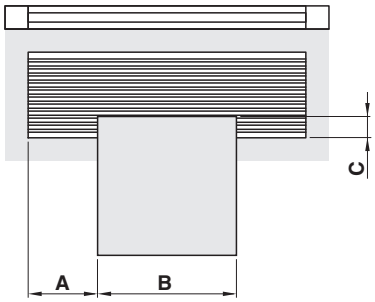


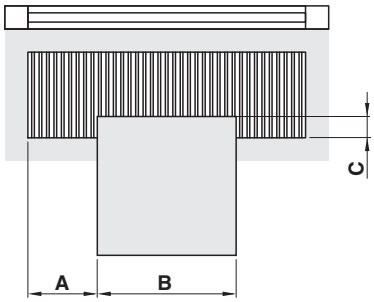
Linear grid column cut



Roll-up grid column cut







LEGEND:

d = *Diameter* **A** = *Cutting length*

B = *Cutting width* **C** = *Cutting depth*

Further special models

Type	Description	Type	Code
Special pressure	High pressure 16 bar (1600 kPa)	DRU	16
	Lengths lower than minimum foreseen 750 mm - < 1000 mm on-demand (1)	BES	SBL
	Special custom-designed widths (2)	BES	SBT
	Special custom-designed heights (3)	BES	SBH
Fastening	Fastening with special brackets	-	-
Special painting	Painting in different RAL colours Linear grid / Aluminium roll-up grid Casing and thermal exchange coil	AUS FAR1	SF 99
	Painting in other RAL colours (RAL 7016 standard) Casing and thermal exchange coil	FAR1	SF

(1) = *specify the exact length.*
(2) = *specify the exact width.*
(3) = *specify the exact height.*

Availability on demand

Type Perimeter slat	Description	Type	Code
Natural anodised	Natural anodised	RDL	ELO
Colour anodised	Bronze anodised	RDL	BRO
	Brass anodised	RDL	MES
	Dark silver anodised	RDL	DKS
	Black anodised	RDL	SWZ
	Steel anodised	RDL	EDS
Painting	Perimeter slat painted like floor casing/coil	RDL	FAR1
	Perimeter slat painted like cover grid	RDL	FAR2

Assembly and installation advice

Preliminary warnings

Technical information

The technical information refers to the standard version of the products, with the reservation of usual variations and tolerances for the sector.

Operating conditions

- Suitable for use in heating systems with hot water according to standards DIN 18380 and water quality pursuant to directive VDI 2035.
- Sabiana recessed floor trench convector are not suitable to be used in steam heating systems.

Operating features	*Standard version*	*High pressure version*
Operating pressure [bar (kPa)]	10,0 (1000)	16,0 (1600)
Test pressure [bar (kPa)]	13,0 (1300)	20,8 (2080)
Maximum temperature [°C]	110	110

If there is no indication regarding operating pressure, the standard version is supplied.

Water quality

The operational requirements of the directive VDI 2035 regarding water quality and the assembly directives in use in the industry must be complied with. Warranty obligations, agreed based on our General Sales, Supply and Payment Terms and Conditions, become null and void in case of:

- emptying the plant periodically or for long periods;
- operating with steam;
- introducing additives to the water of the heating system (e.g. chemical substances, antifreeze) with aggressive action on copper and gaskets;
- excess sedimentation inside the fan coils;
- periodical or constant infiltration of oxygen into the system (e.g. through non-hermetic pipes);
- non-hermetic heating system;
- system not protected against freezing.

Special versions with drawing

If necessary, the customer is presented with a drawing with the dimensions of the special version, to be checked and approved. The order will be fulfilled when the approved drawings are returned. Should the order be cancelled, the customer must reimburse any expenses sustained and services provided up until that moment.

Painting

Powder painting (complete) in all RAL tones according to the customer's specifications, possibility making chromatic changes normally accepted in the industry. Only use original RAL samples to make sure the colour is compatible.
For technical production purposes, slight chromatic variations between the coats can be detected, even based on different lighting conditions. Deformities can also be detected by comparing the painting of surfaces and ceramic products. For technical printing purposes, the colours represented could be slightly different than the real colours. Floor casings and aluminium grids are painted in compliance with standard DIN 55900. Therefore they must be transported with the utmost caution and protected from any risk of damage in the worksite.

Assembly and installation instructions

Supply features

- Height adjustable, external and acoustically decoupled (pre-assembled) devices.
- For ***CSP-ECM*** aluminium roll-up grid (on demand, it also be supplied at the end of the installation phase).
- Rubber elements for acoustic decoupling.
- Assembly cover and perimeter slat protection (such as protections during installation).

Design indications

- To compensate the diffusion of cold air through windows with large surfaces, the floor trench convectors must be installed along the entire length of the windows.
- Due to thermal conditions, the screed and floor could compress the casing of the recessed floor trench convector. Appropriate expansion joints must be provided to avoid this problem.
- A conduit must be installed when using electric lines or thermostatic head with a remote sensor.
- The assembly cover supplied is to protect the fan coils while being installed and must be replaced with the linear or roll-up grid when assembly has finished. The assembly cover can bear limited loads and must not be used to support scaffolding, cables, etc.
- The fan coil must always be easily accessible to be able to perform maintenance.

Assembly and installation instructions

Assembly indications

Positioning and alignment

- Before starting assembly, remove the film and packaging of the fan coil.
  If a cover grid has also been supplied, keep it in a safe place until the assembly operations are over.
- Bring the fan coil in place and align it using external adjustment devices.
  They can be positioned correctly using a screwdriver.
- Fasten the casing to the floor with the assembly wedges.
- If needed, apply insulating material underneath and to the sides of the casing.

Connecting the floor trench convector

- The water connection must normally be made on the front or ambient side, through the specific openings for passage of the pipes (on demand, possibility of different connection solutions).
- Fasten with screws and connect the pipes.
- To keep floor material from invading the casing, seal the openings with suitable material (e.g. membrane from Accessories catalogue).
- Bleed air from the coil through the specific vents.
- Perform a pressurised test.
- Cover the fan coil with the supplied assembly cover.
- If using components of other manufacturers (e.g. connection kit, actuators etc.) not included in the Sabiana accessories catalogue, pay attention to the overall dimensions.

Intended use

CSP-ECM fan coils are only intended for indoor use (e.g. verandas, living quarters, exhibition halls, etc.).
The fan coils cannot be used in swimming pools, moist rooms or outdoors.
If in doubt, consult the manufacturer. Any other use is considered nonconforming to the intended use.

Safety warnings

- Electrical interventions can only be carried out by an authorised electrician.
  The electrical connections must be made respecting VDE requirements and EVU directives in force.
- To install the fan coils, an appropriate residual current device(RCD) / circuit breaker switch FI (less than 30 mA) must be used.
- It is recommended to implement an electric line exclusively for the fan coils.
- Failure to comply with the requirements and directives can lead to functional failures with relative harmful consequences and place personal safety in danger.
  RISK OF DEATH in case of accidental exchange of cables or incorrect electrical connection!
- Carefully read the safety warnings in the installation manual as well.

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

CISQ/ICIM SPA has issued an IQNet recognized certificate that the organization:

SABIANA S.p.A.

Head Office and Operative Unit
Via Piave, 53 - I-20011 Corbetta (MI)
Operative Units
Via Virgilio, 2 - I-20013 Magenta (MI)
Via Zanella, 27 - I-20011 Corbetta (MI)

has implemented and maintains a

Quality Management System

for the following scope:

Design, production and service of heating and air conditioning equipment (unit heaters, radiant panels, fan coil units and air handling units) and chimneys.

which fulfils the requirements of the following standard:

ISO 9001:2015

Issued on: **2022-05-13**
First issued on: **1996-06-10**
Expires on: **2024-04-09**

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document.

Registration Number: IT-4000

Alex Stoichitoiu
President of IQNet

Ing. Mario Romersi
President of ICISQ

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IQNet Partners*:
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CQC *China* CQM *China* CQS *Czech Republic* Cro Cert *Croatia* DQS Holding GmbH *Germany* EAGLE Certification Group *USA*
FCAV *Brazil* FONDONORMA *Venezuela* ICONTEC *Colombia* Inspecta Sertifiointi Oy *Finland* INTECO *Costa Rica*
IRAM *Argentina* JQA *Japan* KFQ *Korea* MIRTEC *Greece* MSZT *Hungary* Nemko AS *Norway* NSAI *Ireland*
NYCE-SIGE *México* PCBC *Poland* Quality Austria *Austria* RR *Russia* SII *Israel* SIQ *Slovenia*
SIRIM QAS International *Malaysia* SQS *Switzerland* SRAC *Romania* TEST St Petersburg *Russia* TSE *Turkey* YUQS *Serbia*

* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

Il presente documento annulla e sostituisce il certificato di pari numero emesso in data 06/05/2022.

ICIM

CISQ is a member of IQNet
THE INTERNATIONAL CERTIFICATION NETWORK
www.iqnet-certification.com
IQNet, the association of the world's first class certification bodies, is the largest provider of management System Certification in the world. IQNet is composed of more than 30 bodies and counts over 150 subsidiaries all over the globe.

CERTIFICATO N. / *CERTIFICATE No.* **0545/8**

SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITÀ DI
WE HEREBY CERTIFY THAT THE QUALITY MANAGEMENT SYSTEM OPERATED BY

SABIANA S.P.A.

Sede e Unità Operativa
Via Piave, 53 - 20011 Corbetta (MI) – Italia
Processi direzionali, primari e di supporto relativamente a Progettazione, produzione e assistenza di apparecchiature per il riscaldamento e il condizionamento dell'aria (aerotermi, termostrisce radianti, ventilconvettori e unità trattamento aria) e canne fumarie.

Unità Operative
Via Virgilio, 2 - 20013 Magenta (MI) – Italia
Produzione di ventilconvettori. Magazzino Logistica.
(Presente solo reparto produttivo, magazzino componenti e logistica: Magazzino P.F. e spedizione).
Via Zanella, 27 - 20011 Corbetta (MI) – Italia
Assemblaggio unità trattamento aria, lavorazioni meccaniche, saldatura, magazzino, assemblaggio recuperatori.

È CONFORME ALLA NORMA / *IS IN COMPLIANCE WITH THE STANDARD*

UNI EN ISO 9001:2015

Sistema di Gestione per la Qualità / *Quality Management System*

PER LE SEGUENTI ATTIVITÀ / *FOR THE FOLLOWING ACTIVITIES*

EA: 18

Progettazione, produzione e assistenza di apparecchiature per il riscaldamento e il condizionamento dell'aria (aerotermi, termostrisce radianti, ventilconvettori e unità trattamento aria) e canne fumarie.

Design, production and service of heating and air conditioning equipment (unit heaters, radiant panels, fan coil units and air handling units) and chimneys.

Riferirsi alla documentazione del Sistema di Gestione per la Qualità aziendale per l'applicabilità dei requisiti della norma di riferimento.
Refer to the documentation of the Quality Management System for details of application to reference standard requirements.

Il presente certificato è soggetto al rispetto del documento ICIM "Regolamento per la certificazione dei sistemi di gestione" e al relativo Schema specifico.
The use and the validity of this certificate shall satisfy the requirements of the ICIM document "Rules for the certification of company management systems" and specific Scheme.

Per informazioni puntuali e aggiornate circa eventuali variazioni intervenute nello stato della certificazione di cui al presente certificato, si prega di contattare il n° telefonico +39 02 725341 o indirizzo e-mail info@icim.it.
For timely and updated information about any changes in the certification status referred to in this certificate, please contact the number +39 02 725341 or email address info@icim.it.

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Vincenzo Delacqua
Rappresentante Direzione / Management Representative
ICIM S.p.A.
Piazza Don Enrico Mapelli, 75 – 20099 Sesto San Giovanni (MI)
www.icim.it

ACCREDIA L'ENTE ITALIANO DI ACCREDITAMENTO
SGQ N° 004 A

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CISQ is the Italian Federation of management system Certification Bodies.

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SABIANA
IL CLIMA AMICO

A company of Arbonia Group
ARBONIA

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Sabiana app

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