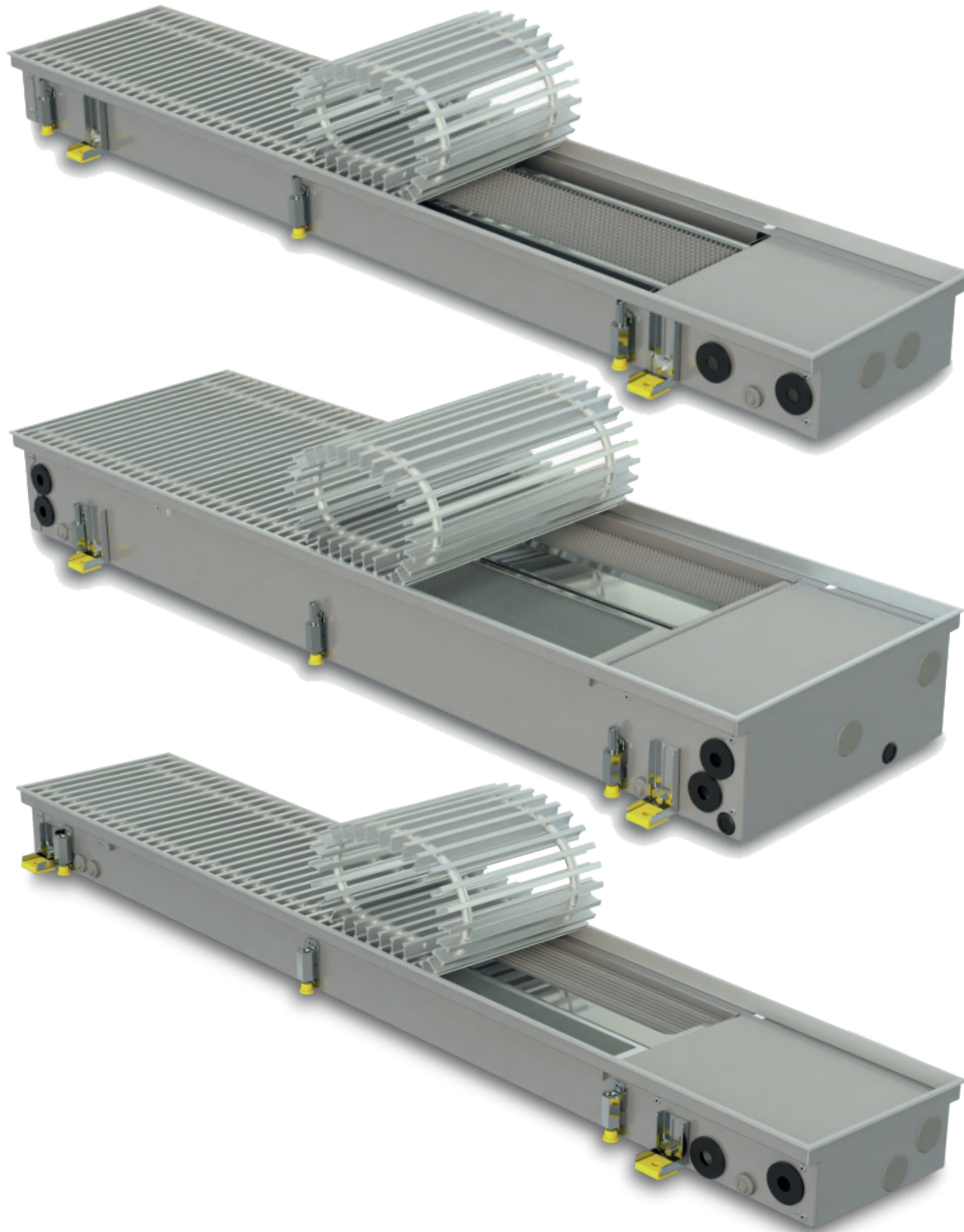




IMAS GROUP
REAL QUALITY MADE IN ITALY



FC - PRATICO
FH - ATTIVO
FCH-DINAMICO
FLOOR CONVECTORS





10-year warranty for the casings and heat exchangers

We are confident in the longevity of our housings and heat exchangers; therefore, we provide them with a 10-year guarantee.



Tested according to EN16430

The outputs of all products have been tested by independent accredited laboratories according to the latest standards.

With us, 1 kW means 1 kW.



Fans with EC technology

Our forced convection devices are equipped with fans that employ **EC technology**. This is far superior to AC technology, as the fans:

1. Are **7 times more economical**.
2. Brushless motors are more durable and are **maintenance-free**.
3. Speed is **adjustable stepless**, using only as much power as required.
4. Starting currents do not exceed the operating currents.
5. Minimum rotation speed is 10% (out of max.)



Work perfectly with low-temperature energy carriers

Due to their high efficiency, FCH are very **suitable for** operating with low-temperature energy carriers, such as **heat pumps** and **condensing boilers**.



Sound insulation

All the supporting parts have sound-insulating elements, to prevent the spread of sound to the premises below.



Especially quiet operation

We have achieved exceptionally low noise levels using **extremely quiet EC fans** and by the **optimisation** of their **rotational speed** and **design** of the devices.



All body parts are made of stainless steel

Stainless steel provides **100% corrosion protection** for an indefinite time. It is also **54% stronger** and **45% harder** than carbon steel, so it can withstand loads during transportation, installation, and operation.



Reinforced casings

As a standard, the FCH convector casings are equipped with:

1. **Stiffening elements** to maintain the pressure of the concrete – from 2 to 3 pcs, depending on the length of the casing.
2. **M10 support screws** to withstand the vertical load – from 4 to 12 pcs.
3. Mounting **brackets** for attaching the casing to the floor – 4 pcs.

These structural elements, together with the strong casing material, ensure their stable shape during installation, transportation and operation.



Maximum operating pressure – 25 bar

All the devices are **factory-tested** for leaks at a pressure of **30 bar**. The maximum maintained pressure (strength limit) is **110 bar**. Our devices easily withstand hydraulic tests, hydraulic shocks and can be installed in extremely tall buildings.



Safe operating voltage of fans

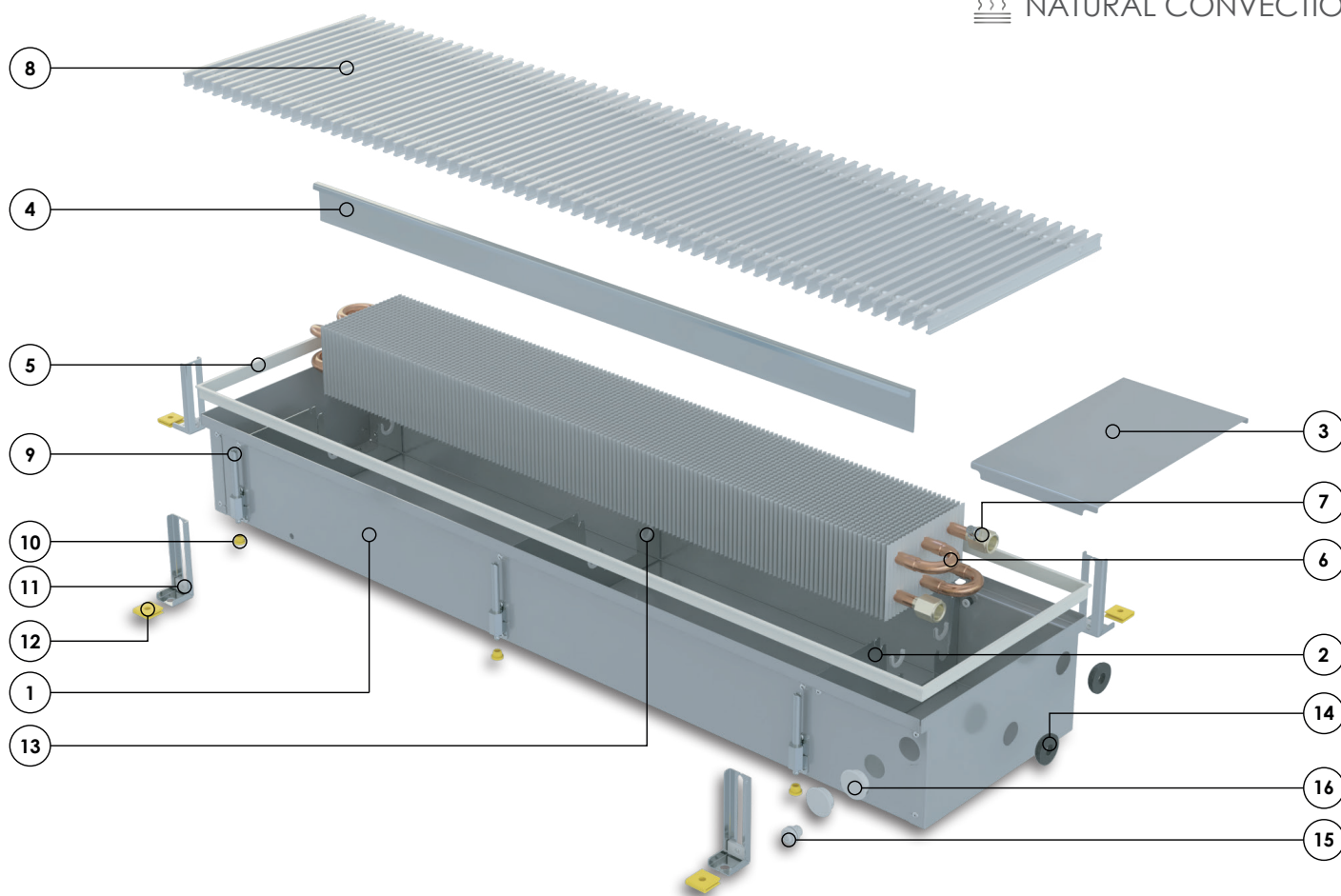
The operating voltage of all fans is 24V DC. This voltage is safe for humans.

FC-PRATICO

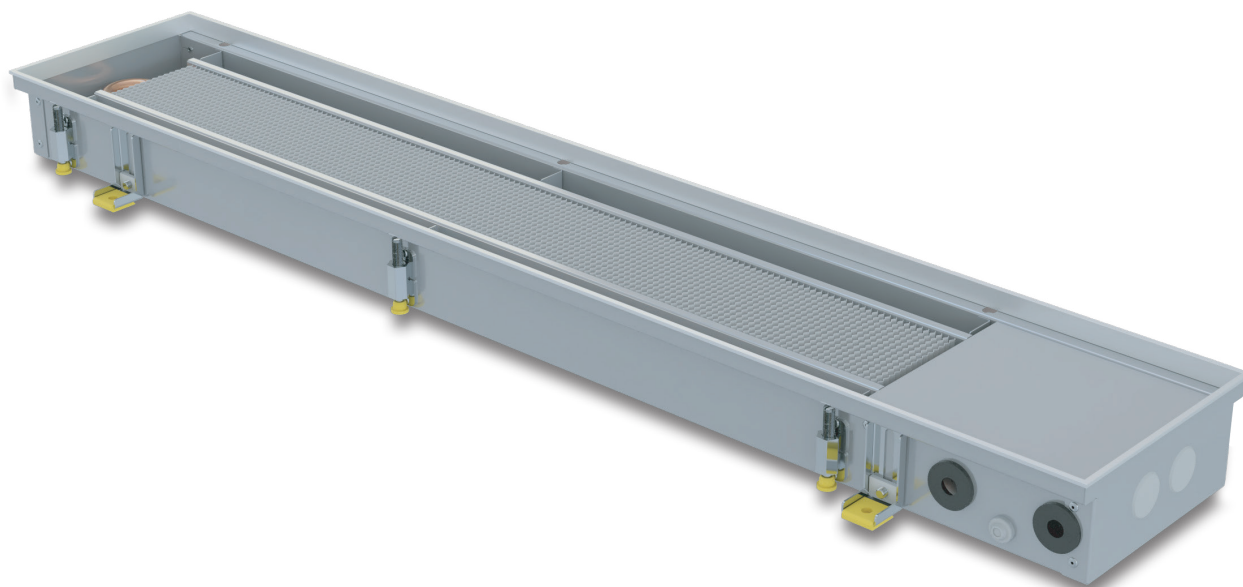
STANDARD SET

TRENCH HEATERS FC

 FOR HEATING

 NATURAL CONVECTION


- | | | | |
|---|---|---|--|
| ① | Stainless steel casing | ⑪ | Casing fixing to floor brackets |
| ② | Casing stiffening elements | ⑫ | Noise isolating elements for floor brackets |
| ③ | Cover for hydraulic connections | ⑬ | Heat exchanger fixing and protection elements |
| ④ | Air guiding element | ⑭ | Pipe sealing and protection elements |
| ⑤ | Anodized aluminium frame; colour match the colour of grille | ⑮ | Cable sealing and protection elements |
| ⑥ | Copper - aluminium heat exchanger | ⑯ | Plugs for unused holes |
| ⑦ | Air vent | | All fasteners required for installation |
| ⑧ | Protective - decorative grille (optional) | | Installation manual |
| ⑨ | Height adjustment and vertical load supporting bolts | | 5-layer, 2 parts cardboard box, additionally used for device protecting during installation and construction works |
| ⑩ | Noise isolating elements for adjusting bolts | | |



Dimensions

Length	80 - 500 cm
Width	22, 32 and 42 cm
Height = installation height	9, 11, 15, 30 and 45 cm

Materials

Housing	stainless steel
Frame	anodized aluminium
Heat exchanger pipes	copper
Heat exchanger fins	aluminium

Connections to the heating system

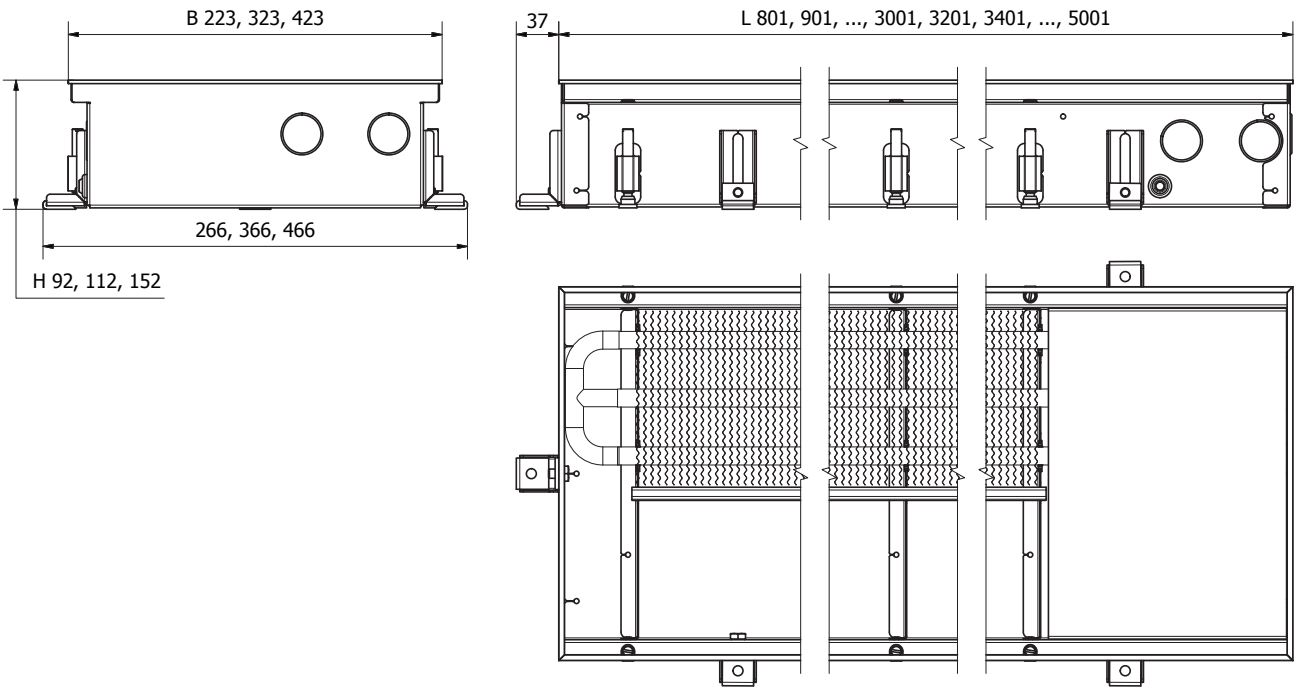
Heat exchanger thread	G 1/2" (inner)
Standart conection side	right
Optional conection side	left

Max operating pressure	25 bar
Max operating temperature	2 - 120°C

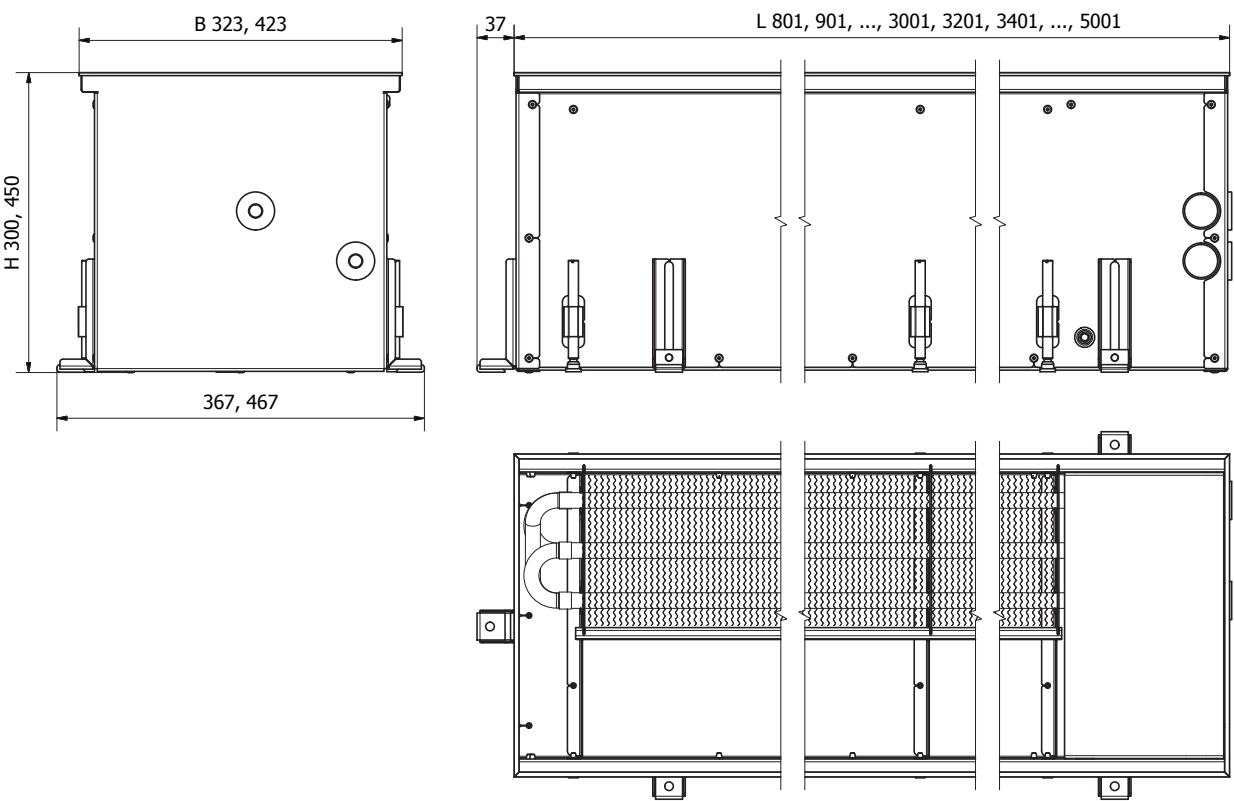
EN16430 certified outputs, W (75/65/20°C)

Width, cm	Height, cm	Length, cm																																
		80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	320	340	360	380	400	420	440	460	480	500
22	9	179	211	242	274	305	336	368	399	430	462	493	524	556	587	619	650	681	713	744	775	807	838	870	932	995	1 058	1 120	1 183	1 246	1 309	1 371	1 434	1 497
	15	256	301	347	392	437	482	528	573	618	663	709	754	799	844	890	935	980	1 025	1 071	1 116	1 161	1 206	1 252	1 342	1 433	1 523	1 614	1 704	1 795	1 885	1 976	2 066	2 157
32	9	243	289	335	381	427	473	519	565	611	657	703	749	795	841	887	933	979	1 025	1 071	1 118	1 164	1 210	1 256	1 348	1 440	1 532	1 624	1 716	1 808	1 900	1 992	2 085	2 177
	11	252	300	347	394	442	489	537	584	632	679	727	774	822	869	917	964	1 012	1 059	1 106	1 154	1 201	1 249	1 296	1 391	1 486	1 581	1 676	1 771	1 866	1 961	2 056	2 151	2 246
	15	383	451	518	586	653	721	788	855	923	990	1 058	1 125	1 193	1 260	1 328	1 395	1 463	1 530	1 598	1 665	1 733	1 800	1 868	2 002	2 137	2 272	2 407	2 542	2 677	2 812	2 947	3 082	3 217
	30	566	665	764	863	963	1 062	1 161	1 260	1 360	1 459	1 558	1 657	1 756	1 856	1 955	2 054	2 153	2 253	2 352	2 451	2 550	2 650	2 749	2 947	3 146	3 344	3 543	3 741	3 940	4 138	4 337	4 535	4 734
	45	730	857	983	1 110	1 237	1 364	1 491	1 618	1 745	1 872	1 999	2 125	2 252	2 379	2 506	2 633	2 760	2 887	3 014	3 141	3 267	3 394	3 521	3 775	4 029	4 283	4 536	4 790	5 044	5 298	5 551	5 805	6 059
42	9	292	343	393	444	495	546	596	647	698	749	800	850	901	952	1 003	1 053	1 104	1 155	1 206	1 256	1 307	1 358	1 409	1 510	1 612	1 713	1 815	1 916	2 018	2 119	2 221	2 322	2 424
	11	353	415	477	539	601	663	725	787	849	911	973	1 035	1 097	1 159	1 221	1 283	1 345	1 407	1 469	1 531	1 593	1 655	1 717	1 841	1 965	2 089	2 213	2 337	2 461	2 585	2 709	2 833	2 957
	15	497	585	672	760	848	935	1 023	1 110	1 198	1 285	1 373	1 460	1 548	1 636	1 723	1 811	1 898	1 986	2 073	2 161	2 248	2 336	2 424	2 599	2 774	2 949	3 124	3 299	3 474	3 649	3 824	4 000	4 175
	30	737	867	996	1 125	1 255	1 384	1 514	1 643	1 772	1 902	2 031	2 160	2 290	2 419	2 548	2 678	2 807	2 937	3 066	3 195	3 325	3 454	3 583	3 842	4 101	4 360	4 618	4 877	5 136	5 394	5 653	5 912	6 171
	45	875	1 028	1 182	1 335	1 489	1 642	1 796	1 949	2 103	2 256	2 410	2 563	2 717	2 870	3 024	3 177	3 331	3 484	3 638	3 791	3 945	4 098	4 252	4 559	4 866	5 173	5 480	5 787	6 094	6 401	6 708	7 015	7 322

HEIGHT 9-15 CM



HEIGHT 30-45 CM



ORDER CODE

Type	Length, cm	Width, cm	Height, cm	Example
FC	100	32	11	FC 100-32-11

ACCESSORIES

THERMOSTATIC VALVE **TVS15**

Controls flow of energy carrier. Controlled by thermal actuator TA24



Controls flow with thermoelectric actuator

Provides possibility to close flow and disconnect heat exchanger from heating system without draining

DN15 Kvs = 2,00

LOCKSHIELD VALVE (STRAIGHT) **LS15**

Opens, closes or limits flow of energy carrier



For energy carrier opening, closing and presetting of maximal flow

Provides possibility to close flow and disconnect heat exchanger from heating system without draining

DN15 Kvs = 1,74

DN20 Kvs = 1,93

LOCKSHIELD VALVE (ANGLE) **LA15**

Opens, closes or limits flow of energy carrier



For energy carrier opening, closing and presetting of maximal flow

Provides possibility to close flow and disconnect heat exchanger from heating system without draining

DN15 Kvs = 1,74

DN20 Kvs = 1,93

THERMOSTATIC VALVE ACTUATOR **TA24**

Opens / closes thermostatic valve. Controlled by room thermostat RTB24



Opening/closing of thermostatic valves (ON/OFF)

Thermoelectric

Opened/Closed indicator

Voltage 24V DC

ROOM THERMOSTAT **RTB24**

Controls thermal actuator TA24 and fans according to preset room temperature



For maintaining the set room temperature

Day/night and weekly temperature programmes

Accuracy of temperature control $\pm 0,5^{\circ}\text{C}$

Power supply of 24V DC

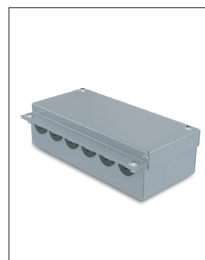
Stepless fan rotating speed control, 0–10 V

Valve actuator control (ON/OFF)

Backlit LED display

ELECTRIC CONTROL BOX **CB20**

For power supply of fans, actuators TA24 and room thermostat RTB24



Can be installed inside convector's casing

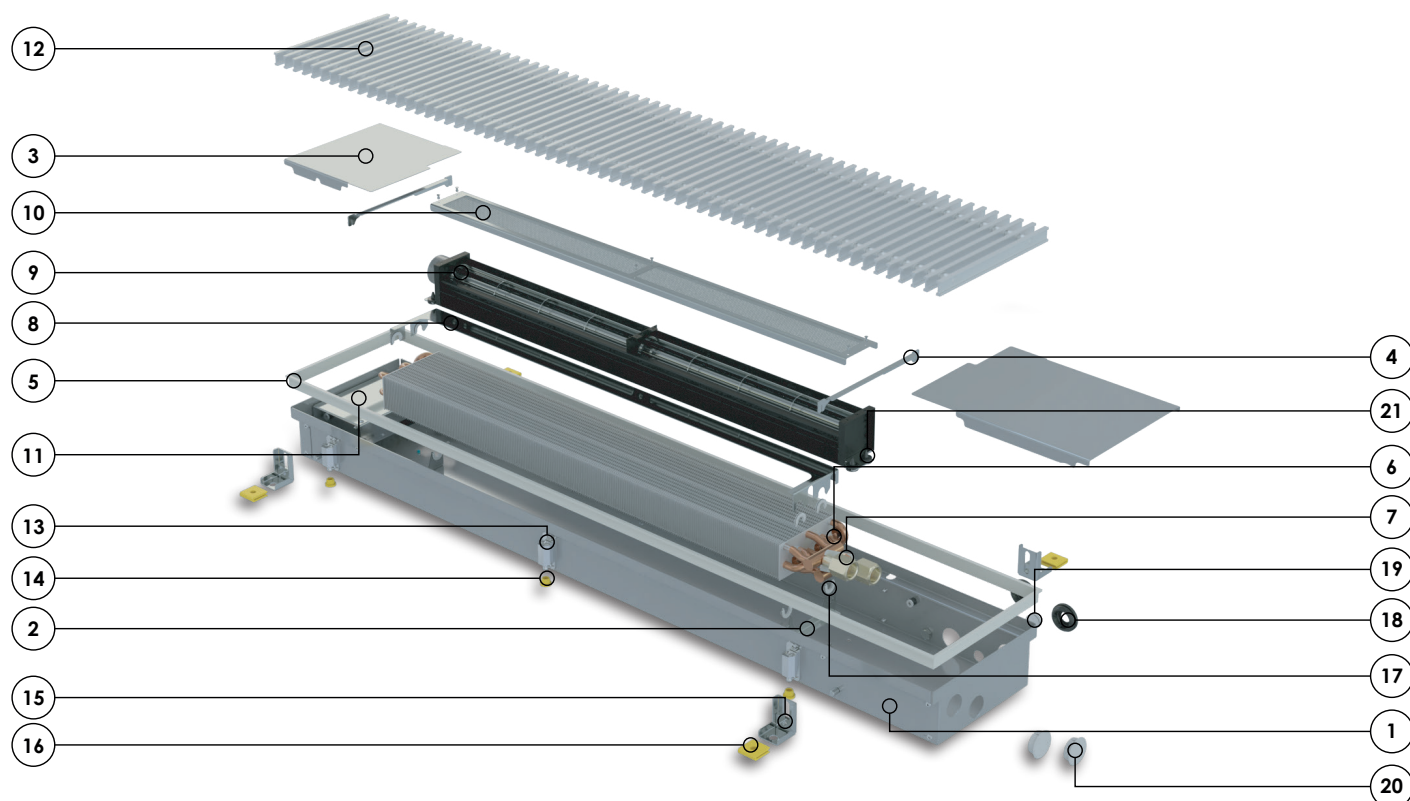
Ensures easy and fast connection between convector and room thermostat

24V DC power supply included

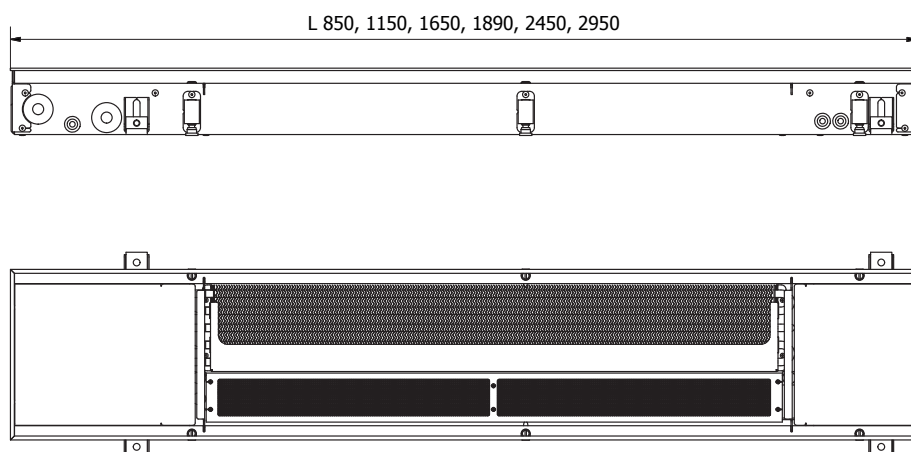
El. connectors for fast connection of the cables included

ORDER CODES

Accessory	Order code
Thermostatic valve	TVS15
Thermostatic valve actuator	TA24
Lockshield valve (angle)	LA15
Lockshield valve (straight)	LS15
Room thermostat	RTB24
Electric control box	CB20



- | | |
|---|--|
| ① Stainless steel casing | ⑭ Noise isolating elements for adjusting screws |
| ② Brackets for heat exchanger | ⑮ Casing fixing to the floor brackets |
| ③ Hydraulic connections cover | ⑯ Noise isolation elements for floor brackets |
| ④ Casing's stiffening elements | ⑰ Heat exchanger fixing - protecting elements |
| ⑤ Anodized aluminium frame; colour matches the colour of grille | ⑱ Pipe sealing and protection elements |
| ⑥ Copper - aluminium heat exchanger | ⑲ Cable sealing and protection elements |
| ⑦ Air vent | ⑳ Plugs for unused casing holes |
| ⑧ Air guiding element | ㉑ Vibration dampers for fan |
| ⑨ Fan with EC motor | |
| ⑩ Air filter | All fasteners required for installation |
| ⑪ Control box (optional) | Installation manual |
| ⑫ Protective - decorative grille (optional) | 5-layer, 2 parts cardboard box, additionally used for device protecting during installation and construction works |
| ⑬ Height adjustment and vertical load supporting bolts | |



TECHNICAL DATA

Length	850-2950 mm	Thread of hydr. connections	G 1/2"
Width	216 mm	Thread type of hydr. connections	inner
Height = installation height	85 mm	Side of the hydr. connections	left
Type of fan motors	EC	Operating pressure	25 bar
Fan operating voltage	24V DC	Operating temperature	2 - 120°C
Fan speed control voltage	0 - 10V		

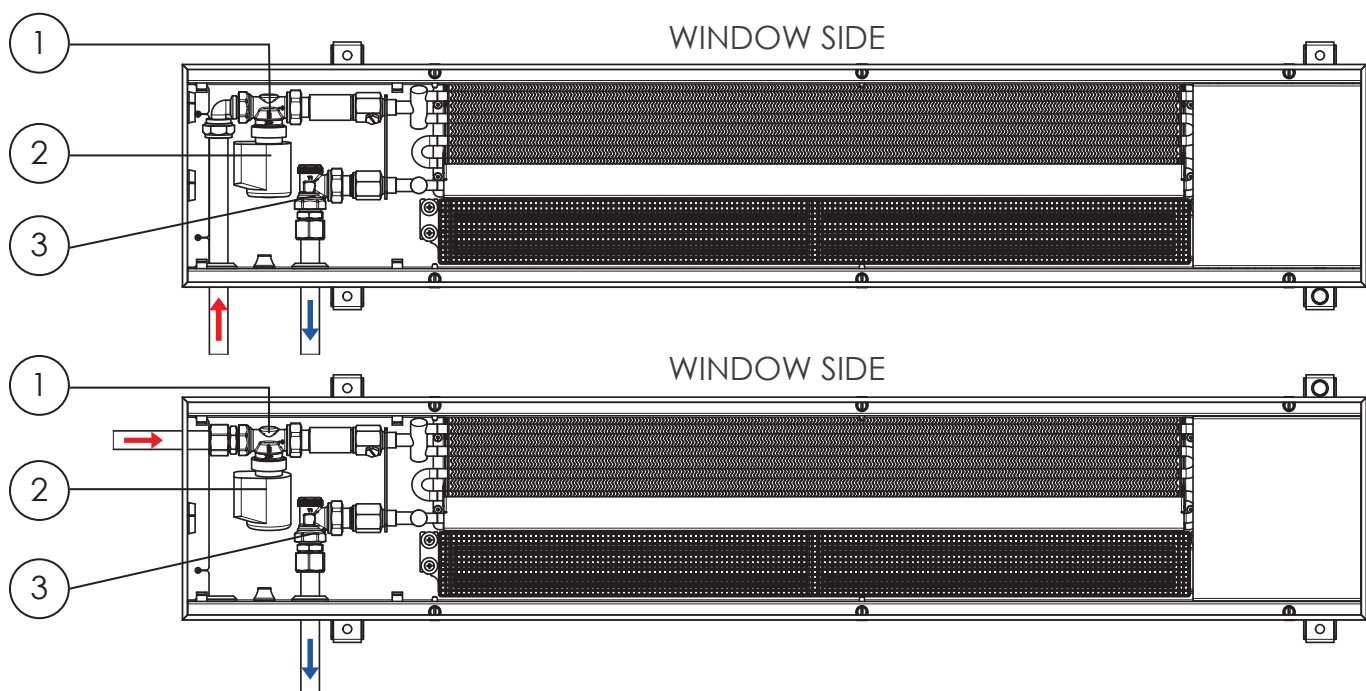
EN16430 certified outputs

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH4-H 85									
100%	1 372	1 148	698	35	162	1	0.16	3.8	101
80%	1 144	957	582	24	126		0.13	3.1	
60%	887	742	451	19	96		0.10	2.3	
40%	601	503	306	17	66		0.06	1.5	
20%	286	240	146	-	30		0.03	0.8	
FH4-H 115									
100%	2 375	1 988	1 208	36	276	1	0.25	6.0	175
80%	1 980	1 658	1 007	26	216		0.20	4.8	
60%	1 536	1 285	781	20	162		0.15	3.6	
40%	1 041	871	529	18	108		0.10	2.4	
20%	496	415	252	-	52		0.05	1.2	
FH4-H 165									
100%	4 095	3 428	2 083	37	474	1	0.38	9.1	301
80%	3 414	2 858	1 737	27	372		0.30	7.3	
60%	2 647	2 216	1 346	21	288		0.23	5.5	
40%	1 794	1 502	912	19	198		0.15	3.6	
20%	855	715	435	-	97		0.08	1.8	
FH4-H 189									
100%	4 958	4 150	2 522	38	552	2	0.50	12.0	365
80%	4 134	3 460	2 103	28	432		0.40	9.6	
60%	3 205	2 683	1 630	21	324		0.30	7.2	
40%	2 172	1 818	1 105	19	216		0.20	4.8	
20%	1 035	866	526	-	104		0.10	2.4	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH4-H 245									
100%	6 678	5 590	3 397	40	750	2	0.63	15.1	491
80%	5 568	4 661	2 832	30	588		0.50	12.1	
60%	4 317	3 614	2 196	23	450		0.38	9.1	
40%	2 962	2 449	1 488	20	306		0.25	6.0	
20%	1 394	1 167	709	18	149		0.13	3.0	
FH4-H 295									
100%	8 417	7 046	4 281	41	948	2	0.76	18.2	619
80%	7 018	5 875	3 570	31	744		0.61	14.6	
60%	5 441	4 555	2 768	24	576		0.46	10.9	
40%	3 688	3 087	1 876	21	396		0.30	7.3	
20%	1 757	1 471	894	19	194		0.15	3.6	

FH4-H

EXAMPLE OF CONNECTIONS



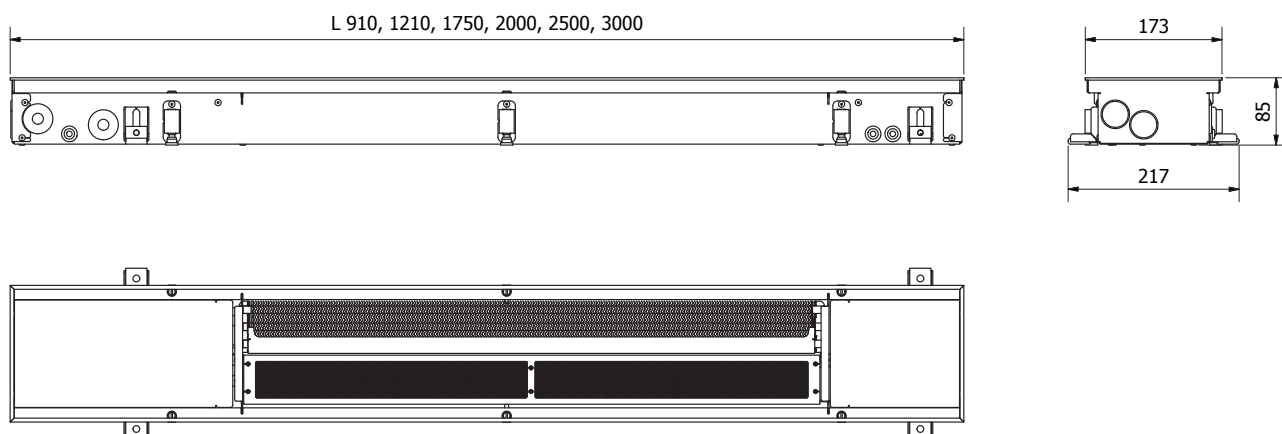
- 1 Thermostatic valve, straight 2 Thermostatic valve actuator 3 Angle lockshield valve

INSTALLATION FEATURES

- Side with heat exchanger is always mounted closer to the window (wall)
- Energy carrier supply pipes has to be connected to heat exchangers connectors which are further from the fans
- Energy carrier outlet pipes has to be connected to heat exchangers connectors which are closer to the fans
- Height of the device can be adjusted at any time of exploitation (when installed in raised floor)

ORDER CODE

Type	Length, cm	Example
FH4-H	115	FH4-H 115



TECHNICAL DATA

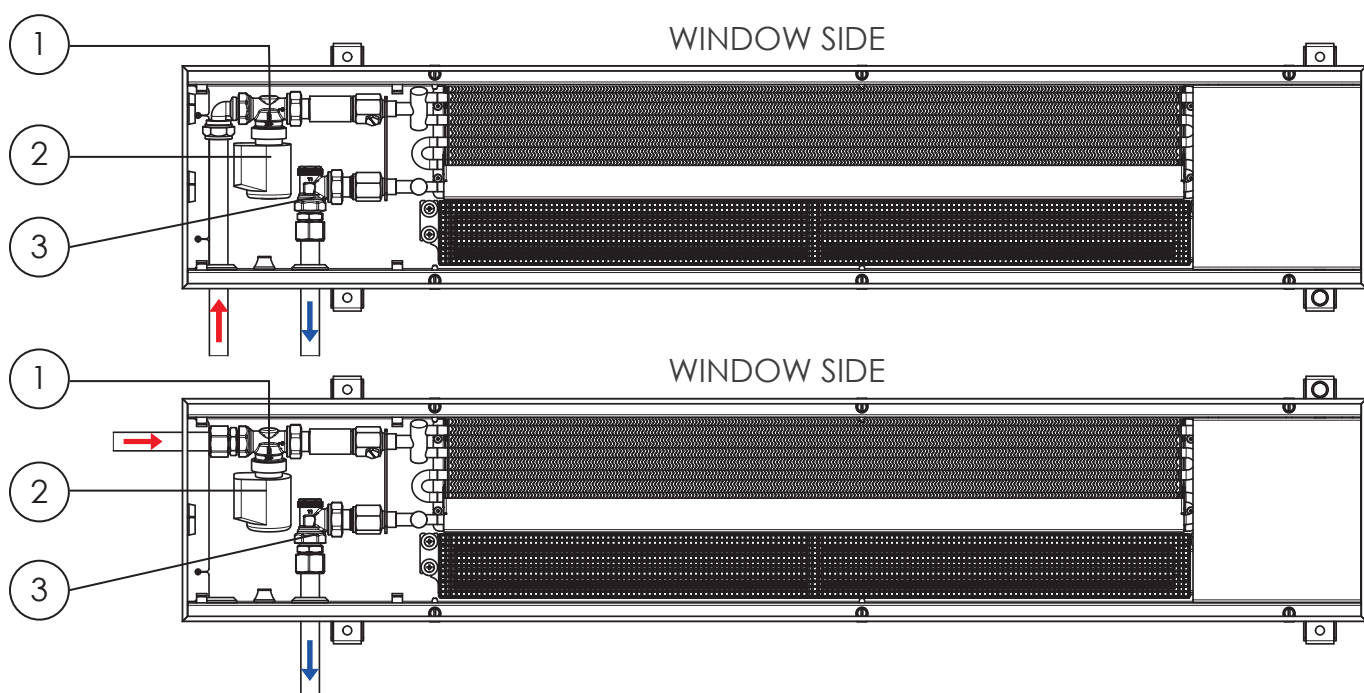
Length	910-3000 mm	Thread of hydr. connections	G 1/2"
Width	173 mm	Thread type of hydr. connections	inner
Height = installation height	85 mm	Side of the hydr. connections	left
Type of fan motors	EC	Operating pressure	25 bar
Fan operating voltage	24V DC	Operating temperature	2 - 120°C
Fan speed control voltage	0 - 10V		

EN16430 certified outputs

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH4-M 91									
100%	1 172	979	592	35	162	1	0.16	3.8	86
80%	976	815	493	24	126		0.13	3.1	
60%	771	644	389	19	96		0.10	2.3	
40%	553	462	279	17	66		0.06	1.5	
20%	314	262	158	-	30		0.03	0.8	
FH4-M 121									
100%	2 029	1 695	1 025	36	276	1	0.25	6.0	149
80%	1 690	1 412	854	26	216		0.20	4.8	
60%	1 336	1 116	674	20	162		0.15	3.6	
40%	958	801	484	18	108		0.10	2.4	
20%	543	454	274	-	52		0.05	1.2	
FH4-M 175									
100%	3 498	2 922	1 766	37	474	1	0.38	9.1	257
80%	2 914	2 434	1 471	27	372		0.30	7.3	
60%	2 302	1 924	1 163	21	288		0.23	5.5	
40%	1 652	1 380	834	19	198		0.15	3.6	
20%	937	783	473	-	97		0.08	1.8	
FH4-M 200									
100%	4 235	3 538	2 139	38	552	2	0.50	12.0	311
80%	3 528	2 948	1 782	28	432		0.40	9.6	
60%	2 788	2 329	1 408	21	324		0.30	7.2	
40%	2 000	1 671	1 010	19	216		0.20	4.8	
20%	1 134	948	573	-	104		0.10	2.4	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH4-M 250									
100%	5 704	4 765	2 880	40	750	2	0.63	15.1	419
80%	4 751	3 970	2 400	30	588		0.50	12.1	
60%	3 755	3 137	1 896	23	450		0.38	9.1	
40%	2 694	2 251	1 361	20	306		0.25	6.0	
20%	1 528	1 276	772	18	149		0.13	3.0	
FH4-M 300									
100%	7 189	6 007	3 631	41	948	2	0.76	18.2	528
80%	5 989	5 004	3 025	31	744		0.61	14.6	
60%	4 733	3 954	2 390	24	576		0.46	10.9	
40%	3 396	2 838	1 715	21	396		0.30	7.3	
20%	1 926	1 609	973	19	194		0.15	3.6	

EXAMPLE OF CONNECTIONS



- 1 Thermostatic valve, straight 2 Thermostatic valve actuator 3 Angle lockshield valve

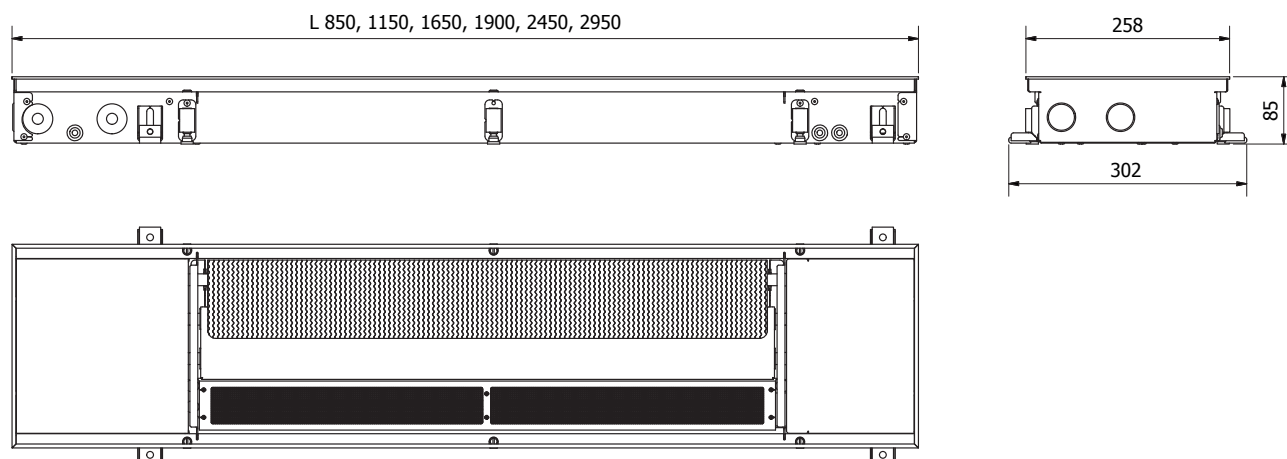
INSTALLATION FEATURES

- Side with heat exchanger is always mounted closer to the window (wall)
- Energy carrier supply pipes has to be connected to heat exchangers connectors which are further from the fans
- Energy carrier outlet pipes has to be connected to heat exchangers connectors which are closer to the fans
- Height of the device can be adjusted at any time of exploitation (when installed in raised floor)

ORDER CODE

Type	Length, cm	Example
FH4-M	121	FH4-M 121

FH4-L3



TECHNICAL DATA

Length	850-2950 mm	Thread of hydr. connections	G 1/2"
Width	258 mm	Thread type of hydr. connections	inner
Height = installation height	85 mm	Side of the hydr. connections	left
Type of fan motors	EC	Operating pressure	25 bar
Fan operating voltage	24V DC	Operating temperature	2 - 120°C
Fan speed control voltage	0 - 10V		

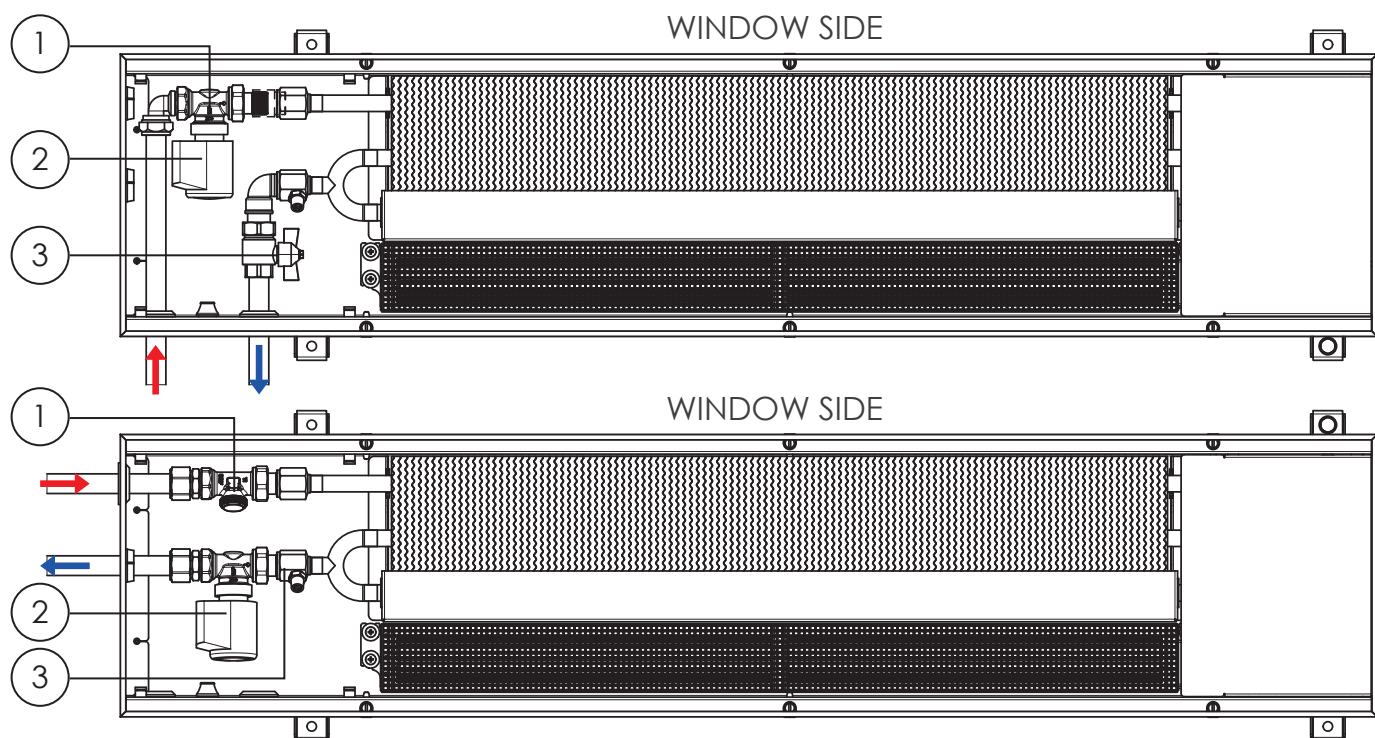
EN16430 certified outputs

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH4-L3 85									
100%	1 095	901	521	35	162	1	0.16	3.8	79
80%	987	812	470	24	126		0.13	3.1	
60%	820	674	390	19	96		0.10	2.3	
40%	592	487	282	17	66		0.06	1.5	
20%	305	251	145	-	30		0.03	0.8	
FH4-L3 115									
100%	1 896	1 560	902	36	276	1	0.25	6.0	137
80%	1 709	1 406	813	26	216		0.20	4.8	
60%	1 419	1 167	675	20	162		0.15	3.6	
40%	1 025	843	488	18	108		0.10	2.4	
20%	528	434	251	-	52		0.05	1.2	
FH4-L3 165									
100%	3 269	2 689	1 556	37	474	1	0.38	9.1	236
80%	2 947	2 424	1 402	27	372		0.30	7.3	
60%	2 447	2 012	1 164	21	288		0.23	5.5	
40%	1 768	1 454	841	19	198		0.15	3.6	
20%	910	749	433	-	97		0.08	1.8	
FH4-L3 190									
100%	3 958	3 255	1 883	38	552	2	0.50	12.0	286
80%	3 568	2 935	1 698	28	432		0.40	9.6	
60%	2 962	2 437	1 410	21	324		0.30	7.2	
40%	2 140	1 761	1 019	19	216		0.20	4.8	
20%	1 102	907	525	-	104		0.10	2.4	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH4-L3 245									
100%	5 330	4 385	2 537	40	750	2	0.63	15.1	385
80%	4 805	3 953	2 287	30	588		0.50	12.1	
60%	3 990	3 282	1 899	23	450		0.38	9.1	
40%	2 883	2 371	1 372	20	306		0.25	6.0	
20%	1 485	1 221	707	18	149		0.13	3.0	
FH4-L3 295									
100%	6 719	5 527	3 197	41	948	2	0.76	18.2	486
80%	6 057	4 983	2 883	31	744		0.61	14.6	
60%	5 029	4 137	2 393	24	576		0.46	10.9	
40%	3 634	2 989	1 729	21	396		0.30	7.3	
20%	1 871	1 539	891	19	194		0.15	3.6	

FH4-L3

EXAMPLE OF CONNECTIONS



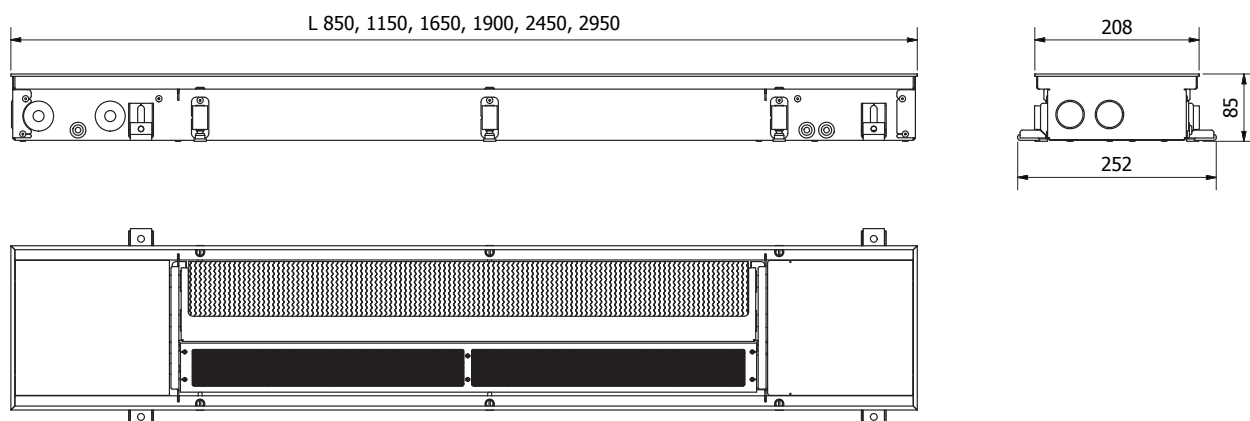
- 1 Thermostatic valve, straight 2 Thermostatic valve actuator 3 Straight lockshield valve

INSTALLATION FEATURES

- Side with heat exchanger is always mounted closer to the window (wall)
- Energy carrier supply pipes has to be connected to heat exchangers connectors which are further from the fans
- Energy carrier outlet pipes has to be connected to heat exchangers connectors which are closer to the fans
- Height of the device can be adjusted at any time of exploitation (when installed in raised floor)

ORDER CODE

Type	Length, cm	Example
FH4-L3	115	FH4-L3 115



TECHNICAL DATA

Length	850-2950 mm	Thread of hydr. connections	G 1/2"
Width	208 mm	Thread type of hydr. connections	inner
Height = installation height	85 mm	Side of the hydr. connections	left
Type of fan motors	EC	Operating pressure	25 bar
Fan operating voltage	24V DC	Operating temperature	2 - 120°C
Fan speed control voltage	0 - 10V		

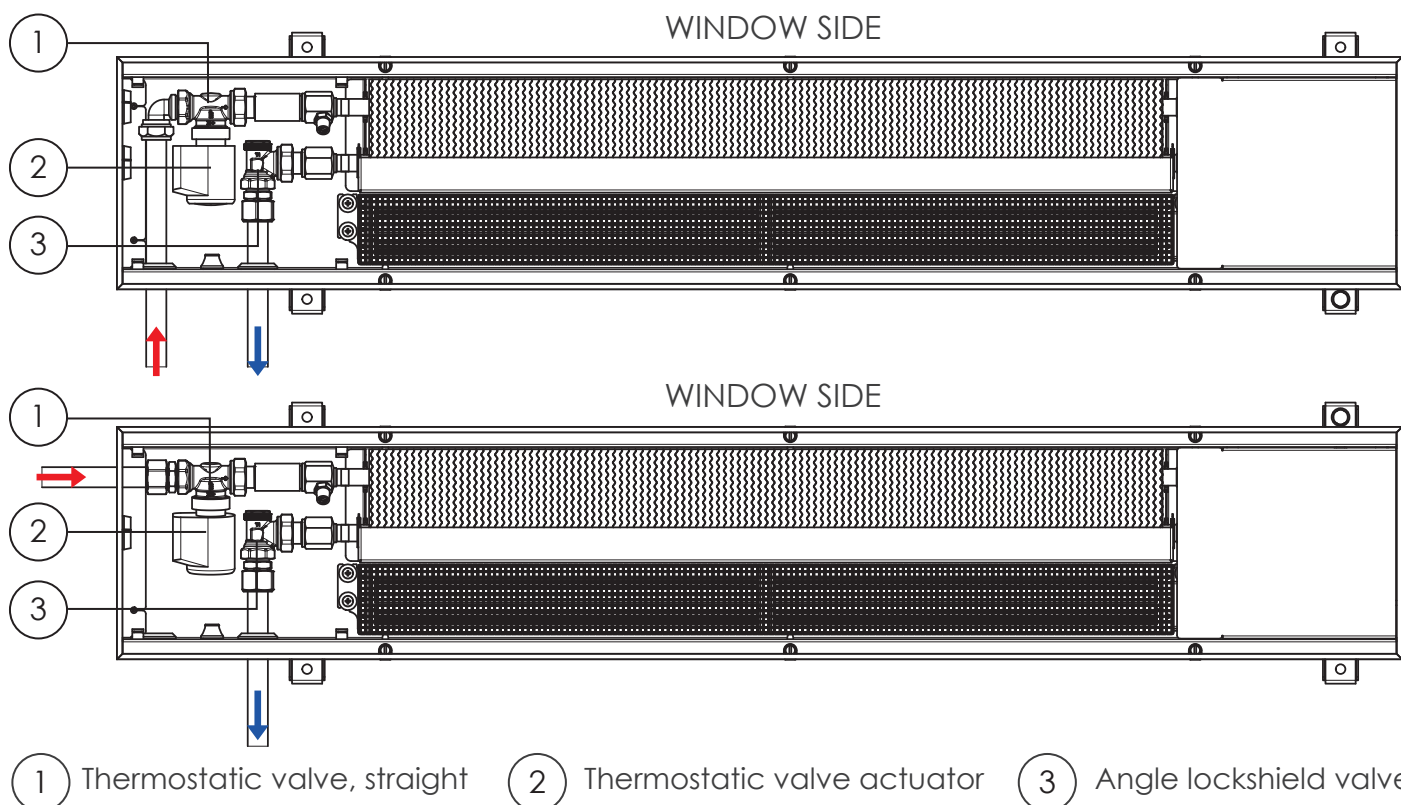
EN16430 certified outputs

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH4-L2 85									
100%	933	773	457	35	162	1	0.16	3.8	68
80%	847	702	415	24	126		0.13	3.1	
60%	721	598	353	19	96		0.10	2.3	
40%	557	462	273	17	66		0.06	1.5	
20%	355	294	174	-	30		0.03	0.8	
FH4-L2 115									
100%	1 616	1 339	791	36	276	1	0.25	6.0	118
80%	1 466	1 215	718	26	216		0.20	4.8	
60%	1 249	1 035	612	20	162		0.15	3.6	
40%	965	800	473	18	108		0.10	2.4	
20%	614	509	301	-	52		0.05	1.2	
FH4-L2 165									
100%	2 785	2 308	1 364	37	474	1	0.38	9.1	203
80%	2 527	2 095	1 238	27	372		0.30	7.3	
60%	2 154	1 785	1 055	21	288		0.23	5.5	
40%	1 664	1 379	815	19	198		0.15	3.6	
20%	1 059	878	518	-	97		0.08	1.8	
FH4-L2 190									
100%	3 372	2 795	1 651	38	552	2	0.50	12.0	246
80%	3 060	2 536	1 498	28	432		0.40	9.6	
60%	2 608	2 161	1 277	21	324		0.30	7.2	
40%	2 015	1 670	987	19	216		0.20	4.8	
20%	1 282	1 062	628	-	104		0.10	2.4	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH4-L2 245									
100%	4 542	3 764	2 224	40	750	2	0.63	15.1	331
80%	4 121	3 416	2 018	30	588		0.50	12.1	
60%	3 512	2 911	1 720	23	450		0.38	9.1	
40%	2 714	2 249	1 329	20	306		0.25	6.0	
20%	1 727	1 431	845	18	149		0.13	3.0	
FH4-L2 295									
100%	5 725	4 745	2 803	41	948	2	0.76	18.2	417
80%	5 195	4 306	2 544	31	744		0.61	14.6	
60%	4 427	3 669	2 168	24	576		0.46	10.9	
40%	3 421	2 835	1 675	21	396		0.30	7.3	
20%	2 176	1 804	1 066	19	194		0.15	3.6	

FH4-L2

EXAMPLE OF CONNECTIONS

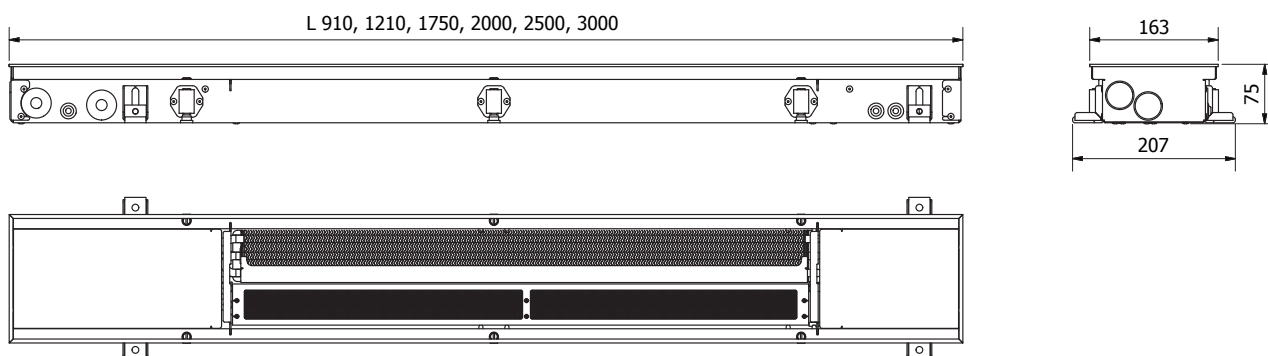


INSTALLATION FEATURES

- Side with heat exchanger is always mounted closer to the window (wall)
- Energy carrier supply pipes has to be connected to heat exchangers connectors which are further from the fans
- Energy carrier outlet pipes has to be connected to heat exchangers connectors which are closer to the fans
- Height of the device can be adjusted at any time of exploitation (when installed in raised floor)

ORDER CODE

Type	Length, cm	Example
FH4-L2	115	FH4-L2 115



TECHNICAL DATA

Length	910-3000 mm	Thread of hydr. connections	G 1/2"
Width	163 mm	Thread type of hydr. connections	inner
Height = installation height	75 mm	Side of the hydr. connections	left
Type of fan motors	EC	Operating pressure	25 bar
Fan operating voltage	24V DC	Operating temperature	2 - 120°C
Fan speed control voltage	0 - 10V		

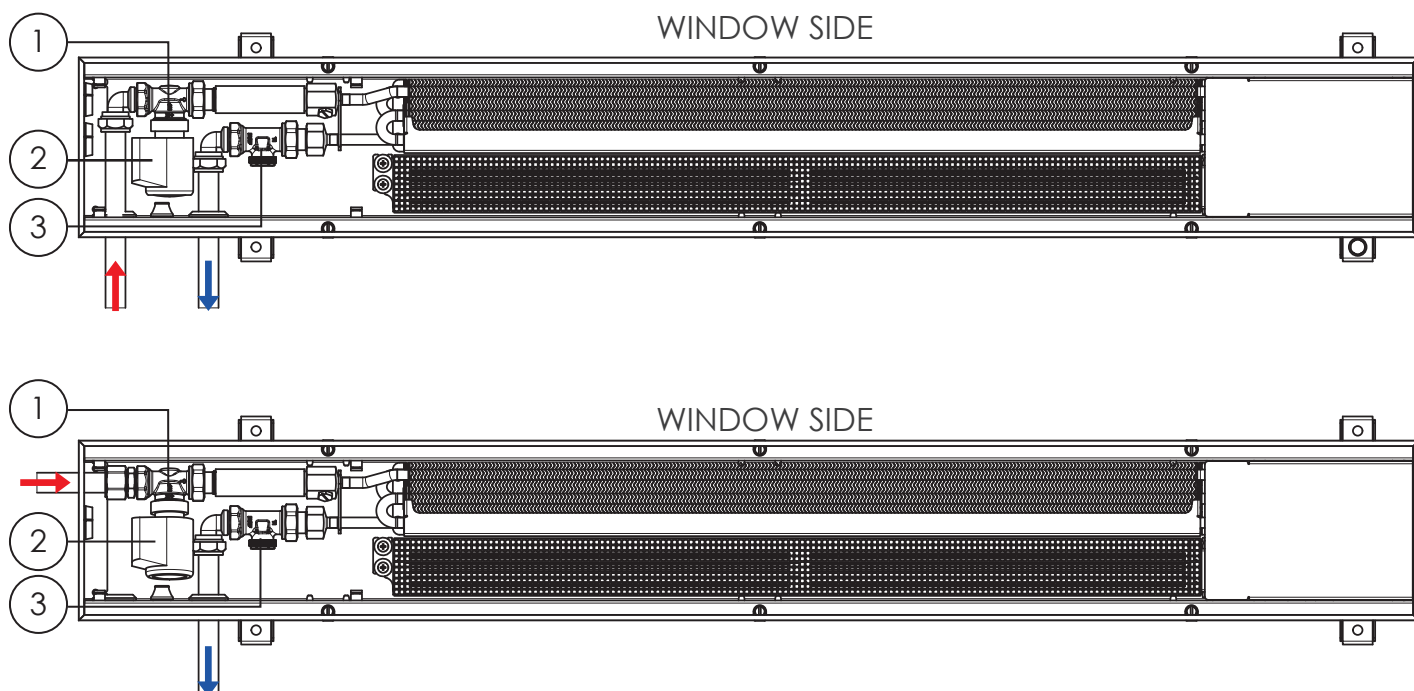
EN16430 certified outputs

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH3-H 91									
100%	733	617	381	33	84	1	0.08	1.9	54
80%	607	511	316	24	66		0.06	1.5	
60%	454	382	236	18	54		0.05	1.2	
40%	273	230	142	-	30		0.03	0.8	
20%	64	54	33	-	18		0.02	0.4	
FH3-H 121									
100%	1 269	1 069	660	34	144	1	0.10	2.4	94
80%	1 051	885	547	25	108		0.08	1.9	
60%	786	661	408	19	90		0.06	1.4	
40%	472	398	246	17	48		0.04	1.0	
20%	111	94	58	-	24		0.02	0.5	
FH3-H 175									
100%	2 188	1 842	1 137	35	252	1	0.18	4.3	162
80%	1 812	1 526	942	26	204		0.14	3.5	
60%	1 354	1 140	704	20	162		0.11	2.6	
40%	814	685	423	18	108		0.07	1.7	
20%	192	161	100	-	48		0.04	0.9	
FH3-H 200									
100%	2 649	2 230	1 377	36	288	2	0.20	4.8	196
80%	2 194	1 847	1 141	27	216		0.16	3.8	
60%	1 640	1 381	852	20	180		0.12	2.9	
40%	986	830	512	18	96		0.08	1.9	
20%	232	195	121	-	48		0.04	1.0	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH3-H 250									
100%	3 568	3 004	1 855	38	396	2	0.28	6.7	264
80%	2 955	2 488	1 536	29	312		0.22	5.4	
60%	2 208	1 859	1 148	22	252		0.17	4.0	
40%	1 328	1 118	690	19	156		0.11	2.7	
20%	313	263	163	17	72		0.06	1.3	
FH3-H 300									
100%	4 497	3 786	2 338	39	504	2	0.36	8.6	333
80%	3 725	3 136	1 937	30	408		0.29	6.9	
60%	2 784	2 344	1 447	23	324		0.22	5.2	
40%	1 673	1 409	870	20	216		0.14	3.5	
20%	394	332	205	18	96		0.07	1.7	

FH3-H

EXAMPLE OF CONNECTIONS



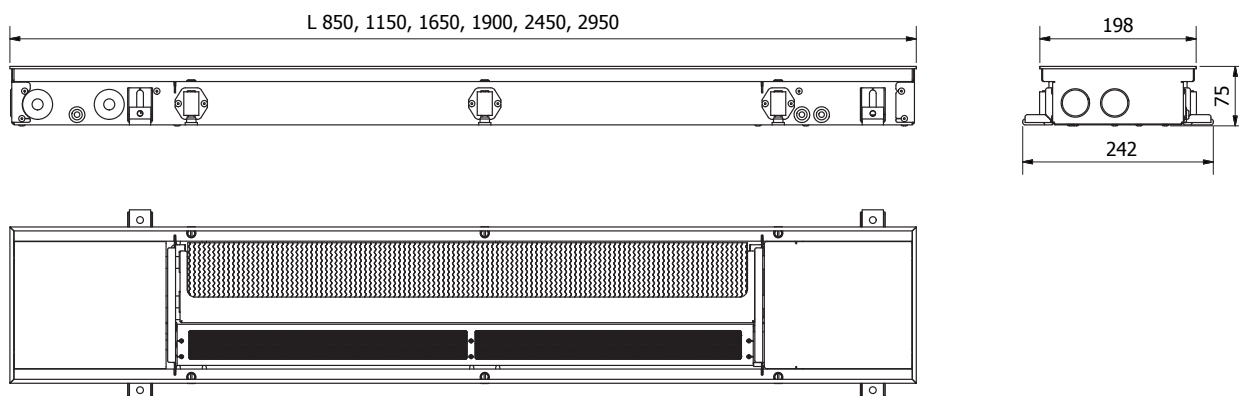
- ① Thermostatic valve, straight ② Thermostatic valve actuator ③ Straight lockshield valve

INSTALLATION FEATURES

- Side with heat exchanger is always mounted closer to the window (wall)
- Energy carrier supply pipes has to be connected to heat exchangers connectors which are further from the fans
- Energy carrier outlet pipes has to be connected to heat exchangers connectors which are closer to the fans
- Height of the device can be adjusted at any time of exploitation (when installed in raised floor)

ORDER CODE

Type	Length, cm	Example
FH3-H	121	FH3-H 121



TECHNICAL DATA

Length	850-2950 mm	Thread of hydr. connections	G 1/2"
Width	198 mm	Thread type of hydr. connections	inner
Height = installation height	75 mm	Side of the hydr. connections	left
Type of fan motors	EC	Operating pressure	25 bar
Fan operating voltage	24V DC	Operating temperature	2 - 120°C
Fan speed control voltage	0 - 10V		

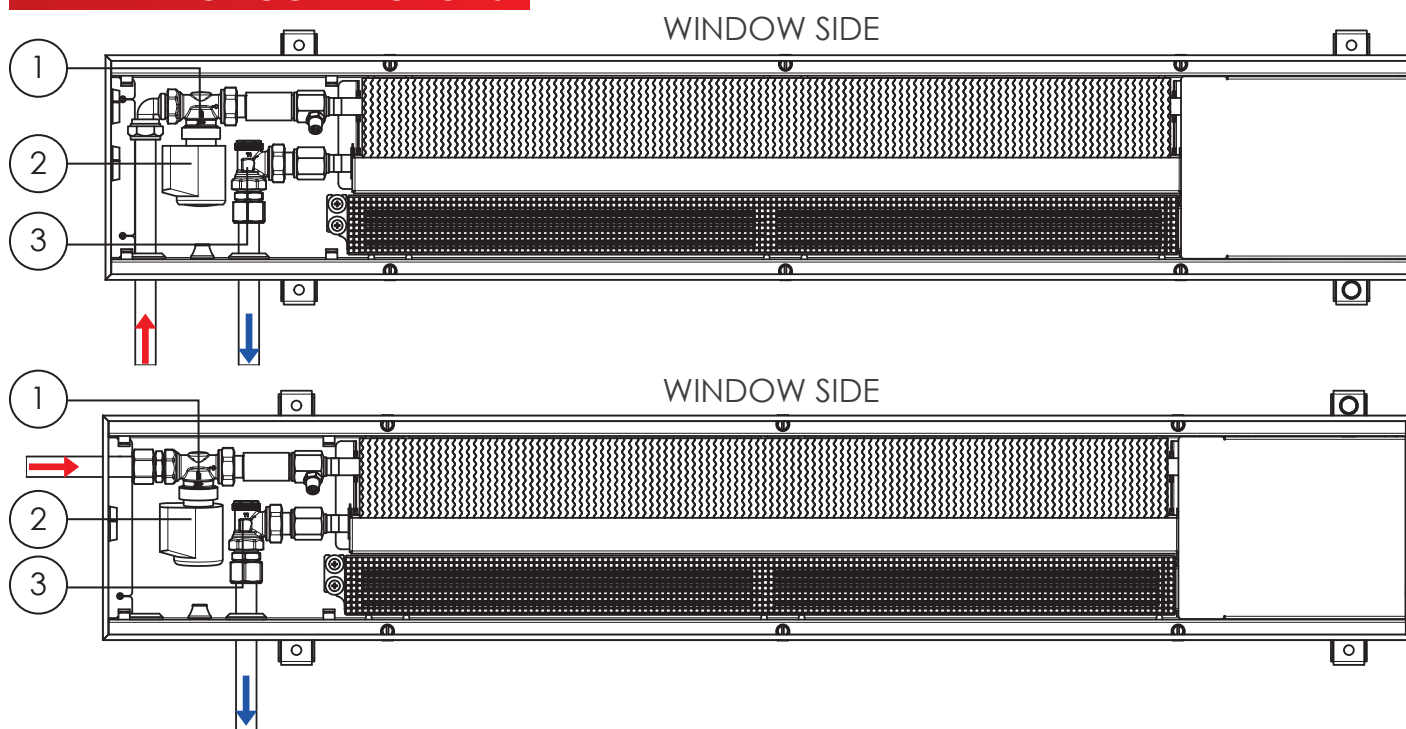
EN16430 certified outputs

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH3-L 85									
100%	700	577	335	33	84	1	0.08	1.9	51
80%	625	515	300	24	66		0.06	1.5	
60%	503	414	241	18	54		0.05	1.2	
40%	331	273	159	-	30		0.03	0.8	
20%	111	91	53	-	18		0.02	0.4	
FH3-L 115									
100%	1 212	998	581	34	144	1	0.10	2.4	88
80%	1 083	893	519	25	108		0.08	1.9	
60%	870	717	417	19	90		0.06	1.4	
40%	573	472	275	17	48		0.04	1.0	
20%	192	158	92	-	24		0.02	0.5	
FH3-L 165									
100%	2 089	1 721	1 001	35	252	1	0.18	4.3	151
80%	1 867	1 539	895	26	204		0.14	3.5	
60%	1 500	1 236	719	20	162		0.11	2.6	
40%	988	814	473	18	108		0.07	1.7	
20%	330	272	158	-	48		0.04	0.9	
FH3-L 190									
100%	2 529	2 084	1 212	36	288	2	0.20	4.8	183
80%	2 261	1 863	1 083	27	216		0.16	3.8	
60%	1 817	1 497	871	20	180		0.12	2.9	
40%	1 196	986	573	18	96		0.08	1.9	
20%	400	329	192	-	48		0.04	1.0	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m³/h	No. of fans, pcs.	Max el. current, A	Max power consumption, W	Water flow, l/h
	90/70/20°C Δt = 60°C	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C						
FH3-L 245									
100%	3 406	2 807	1 632	38	396	2	0.28	6.7	247
80%	3 045	2 509	1 459	29	312		0.22	5.4	
60%	2 447	2 016	1 173	22	252		0.17	4.0	
40%	1 611	1 328	772	19	156		0.11	2.7	
20%	538	444	258	17	72		0.06	1.3	
FH3-L 295									
100%	4 293	3 538	2 057	39	504	2	0.36	8.6	311
80%	3 838	3 163	1 839	30	408		0.29	6.9	
60%	3 084	2 542	1 478	23	324		0.22	5.2	
40%	2 031	1 674	973	20	216		0.14	3.5	
20%	679	559	325	18	96		0.07	1.7	

FH3-L

EXAMPLE OF CONNECTIONS



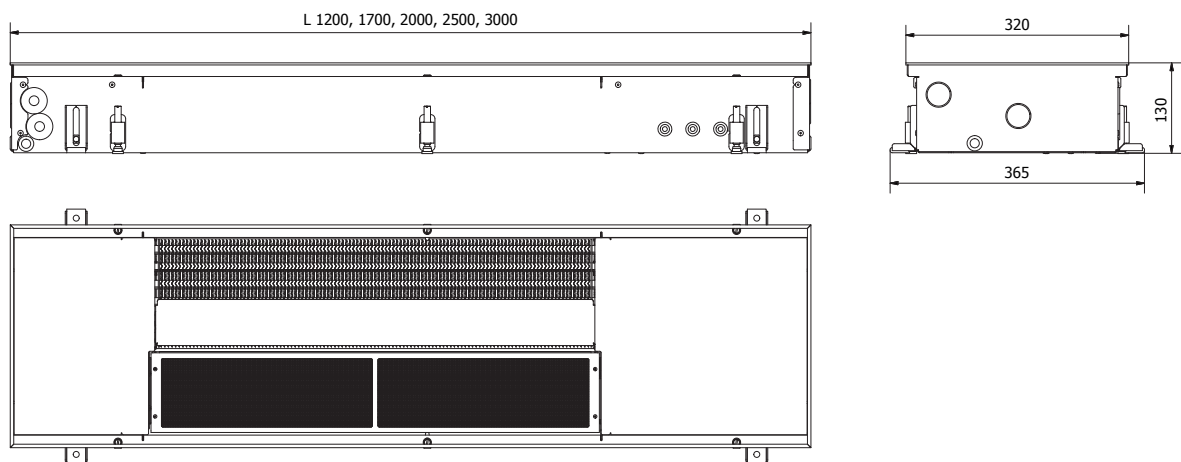
- ① Thermostatic valve, straight ② Thermostatic valve actuator ③ Angle lockshield valve

INSTALLATION FEATURES

- Side with heat exchanger is always mounted closer to the window (wall)
- Energy carrier supply pipes has to be connected to heat exchangers connectors which are further from the fans
- Energy carrier outlet pipes has to be connected to heat exchangers connectors which are closer to the fans
- Height of the device can be adjusted at any time of exploitation (when installed in raised floor)

ORDER CODE

Type	Length, cm	Example
FH3-L	115	FH3-L 115



TECHNICAL DATA

Length	1200-3000 mm	Thread of hydr. connections	G 1/2"
Width	320 mm	Thread type of hydr. connections	inner
Height = installation height	130 mm	Position of the hydr. connections	1 side
Type of fan motors	EC	Operating pressure	25 bar
Fan operating voltage	24V DC	Operating temperature	2 - 120°C
Fan speed control voltage	0 - 10V		

EN16430 certified outputs

Fan speed	Heat outputs, W			Sensible cooling capacity, W			Sound levels		Air flow m³/h
	75/65/20°C Δt = 60°C	55/45/20°C Δt = 50°C	35/30/20°C Δt = 30°C	7/12/27°C Δt = 17,5°C	7/12/25°C Δt = 15,5°C	14/17/25°C Δt = 9,5°C	Sound pressure level, dB(A)	Sound power level, dB(A)	
FCH2 115									
100%	3 326	1 975	809	974	870	552	41	49	0 - 383
80%	2 962	1 759	720	815	728	462	36	45	
60%	2 487	1 477	605	652	582	369	28	37	
40%	1 912	1 135	465	475	424	269	23	32	
20%	1 132	672	275	277	248	157	20	29	
FCH2 160									
100%	5 781	3 433	1 405	1 755	1 568	994	42	51	0 - 520
80%	5 264	3 126	1 280	1 473	1 316	835	41	50	
60%	4 427	2 629	1 076	1 174	1 049	665	34	44	
40%	3 399	2 019	826	856	765	485	29	38	
20%	2 014	1 196	490	500	446	283	25	35	
FCH2 180									
100%	6 653	3 951	1 617	1 949	1 741	1 104	44	53	0 - 766
80%	5 924	3 518	1 440	1 630	1 456	924	39	48	
60%	4 975	2 954	1 210	1 303	1 164	738	31	41	
40%	3 824	2 271	930	949	848	538	24	34	
20%	2 264	1 345	551	554	495	314	22	32	
FCH2 230									
100%	9 107	5 408	2 214	2 730	2 438	1 546	43	54	0 - 903
80%	8 226	4 885	2 000	2 289	2 044	1 296	40	50	
60%	6 914	4 106	1 681	1 826	1 631	1 034	33	43	
40%	5 311	3 154	1 291	1 331	1 188	754	26	37	
20%	3 146	1 868	765	777	694	440	24	33	

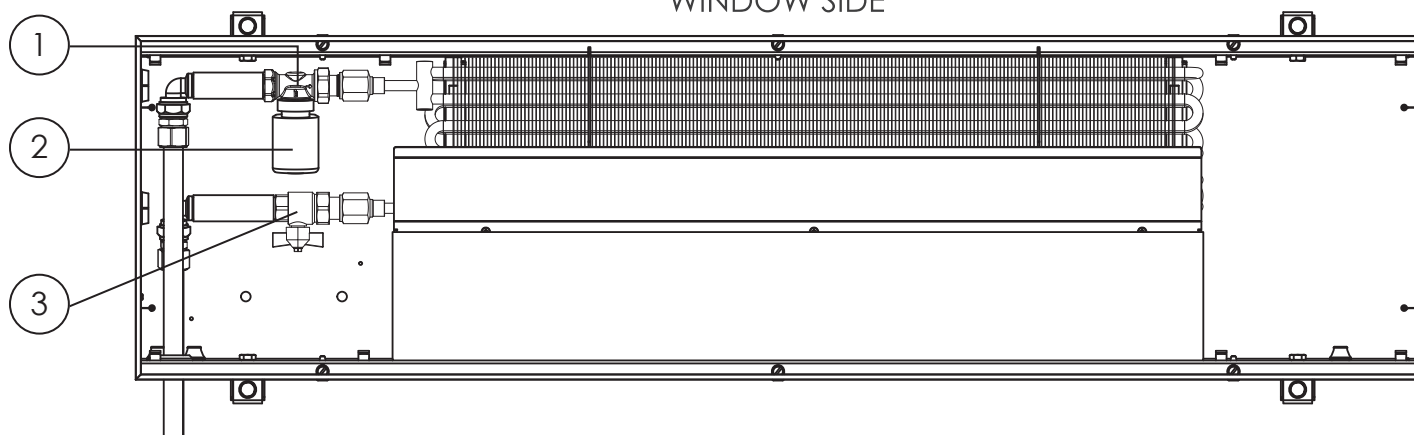
Fan speed	Heat outputs, W			Sensible cooling capacity, W			Sound levels		Air flow m³/h
	75/65/20°C Δt = 60°C	55/45/20°C Δt = 50°C	35/30/20°C Δt = 30°C	7/12/27°C Δt = 17,5°C	7/12/25°C Δt = 15,5°C	14/17/25°C Δt = 9,5°C	Sound pressure level, dB(A)	Sound power level, dB(A)	
FCH2 275									
100%	11 561	6 866	2 811	3 511	3 136	1 989	43	54	0 - 1 040
80%	10 529	6 253	2 560	2 947	2 632	1 669	42	53	
60%	8 853	5 258	2 153	2 348	2 097	1 330	33	44	
40%	6 798	4 037	1 653	1 712	1 529	970	27	38	
20%	4 027	2 392	979	999	893	566	24	35	

Model	Length, mm	No. of fans, pc	Max el. power, A	Max el. power, W	Length of heat exchanger, mm	Weight, kg	Water volume, l
FCH2 115	1 200	1	0,63	15	675	21,2	0,77
FCH2 160	1 700	1	0,75	18	1 189	28,9	1,35
FCH2 180	2 000	2	1,25	30	1 431	33,9	1,62
FCH2 230	2 500	2	1,38	33	1 945	42,2	2,21
FCH2 275	3 000	2	1,50	36	2 458	51,5	2,79

FCH2

EXAMPLE OF CONNECTIONS

WINDOW SIDE



- ① Thermostatic valve, straight ② Thermostatic valve actuator ③ Straight lockshield valve

INSTALLATION FEATURES

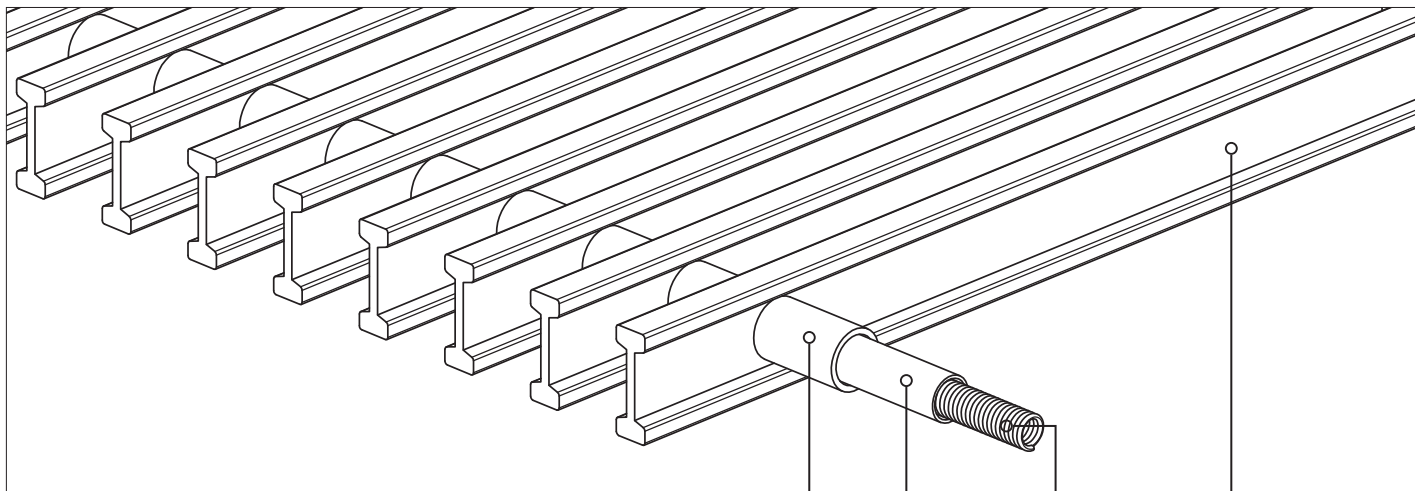
- Side with heat exchanger is always mounted closer to the window (wall)
- Energy carrier supply pipes has to be connected to heat exchangers connectors which are further from the fans
- Energy carrier outlet pipes has to be connected to heat exchangers connectors which are closer to the fans
- Height of the device can be adjusted at any time of exploitation (when installed in raised floor)

ORDER CODES

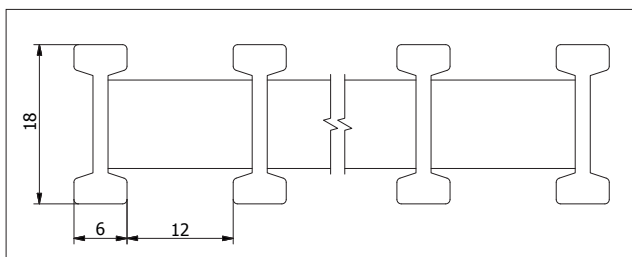
Type	Length, cm	Width, cm	Height, cm	Example
FCH2	250	32	13	FCH2 250

GRILLES

ALUMINIUM ROLL-UP GRILLES



GRILLE PROFILE



2 4 3 1

① Aluminium profile

- made of anodized aluminium
- reinforced reversible double T profile

② Spacers

- made of anodized aluminium
- does not shrink or crack when exposed on UV or heat
- the colour is exactly the same as colour of profiles

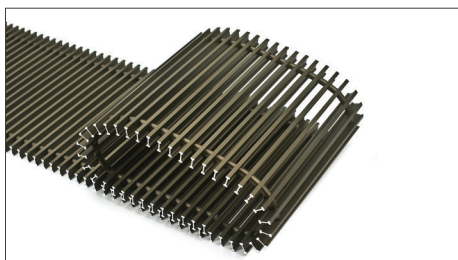
③ Spring

④ Flexible protective pipe

SILVER (ALS)



BROWN (AL 10)



BLACK (AL 50)

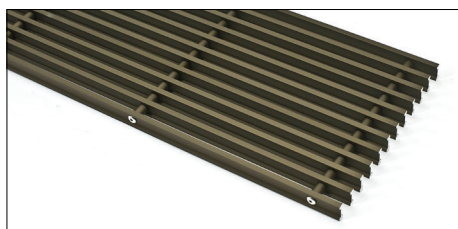


ALUMINIUM LINEAR GRILLES

SILVER (ALS)



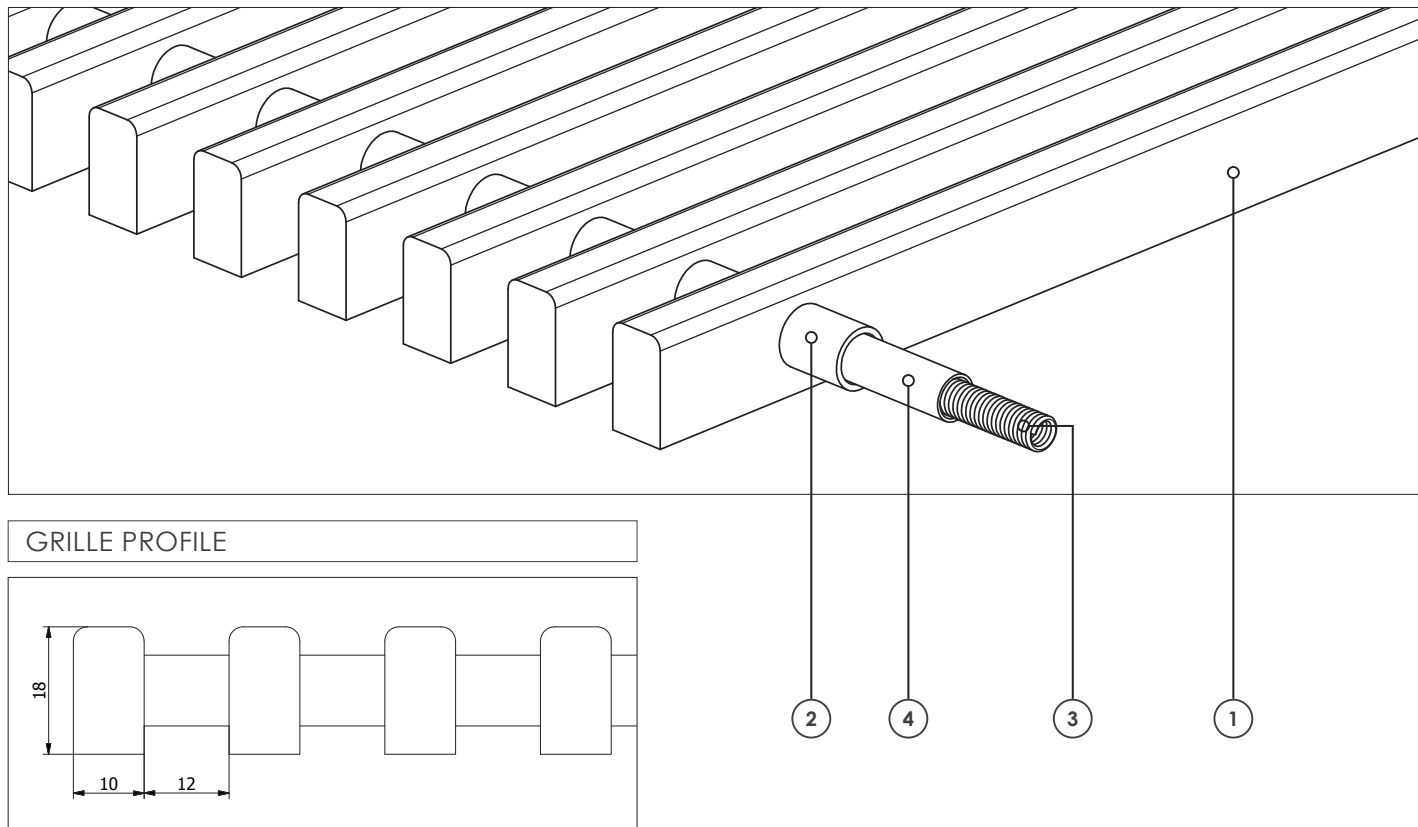
BROWN (AL 10)



BLACK (AL 50)



WOODEN ROLL-UP GRILLES

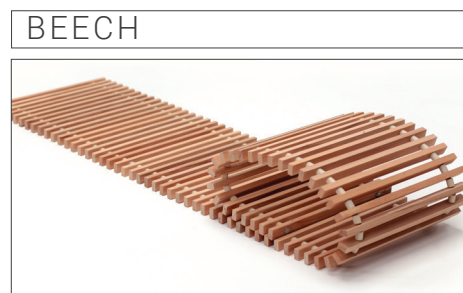
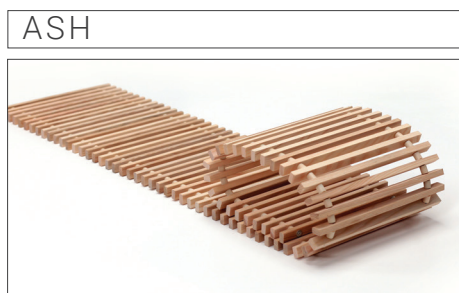


GRILLES

- ① Wooden profile**
- made of solid wood

- ② Spacers**
- made of anodized aluminium
- does not shrink or crack when exposed on UV or heat

- ③ Spring**
④ Flexible protective pipe



ORDER CODE FOR GRILLES

Type	Length, cm	Width, cm	Material	Example
GR	200	32	ALS	GR 200-32 ALS



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