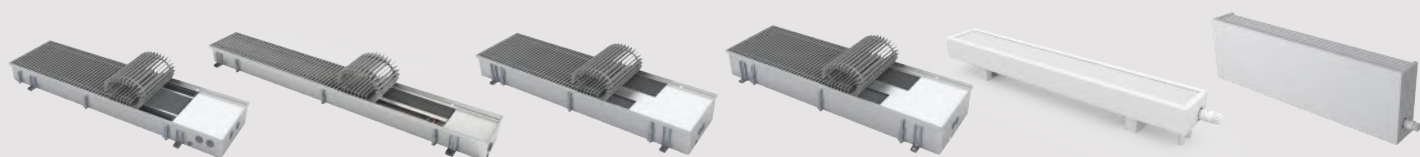


 konveka

2025



ABOUT KONVEKA

Konveka is a **full production cycle convector manufacturing company** engaged in this activity **since 2005**. The range of products we develop and manufacture is wide: from simple natural convection convectors to complex devices with fans for heating, cooling and ventilation.

Konveka is a manufacturer of high-quality and reliable convectors:

- We provide a **5 - 10 year warranty for all our products** (except their electrical part) without any additional warranty extension fees.
- **The capacities of all our products are determined by independent accredited laboratories** according to current standards. With us, 1kW means 1kW.
- We **do not use cheap, unapproved solutions or use unreliable materials** when designing and manufacturing our devices.

Although we operate in a highly competitive international market, **we are at the forefront where quality, durability and reliability are valued.**

We are well known in **Eastern and Western Europe, Scandinavia, North America and Central Asia**. Konveka products can be seen in many prestigious buildings around the world: administrative buildings, shopping malls, airports, restaurants, theaters, universities, hotels, apartment buildings and individual homes. Visit our website www.konveka.com for more information.

Konveka consistently wins **national awards** (see below) for **reliability, consistency and business growth**.

Our slogan - **“More than you expected”** reflects the quality of our products and technical solutions, which often exceed customer expectations. We value our customers and are happy to be a part of their successful business.



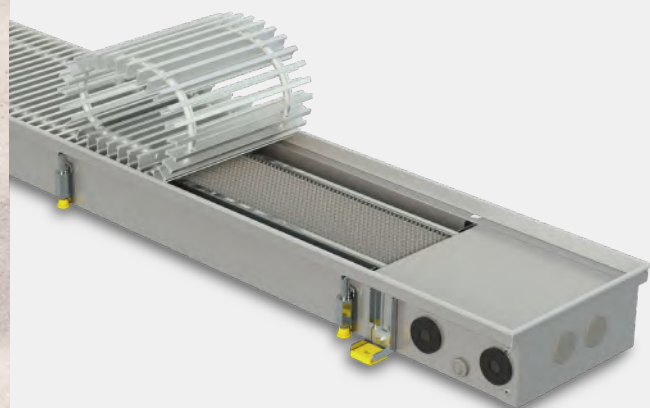


TRENCH HEATERS FC

 FOR HEATING

 NATURAL CONVECTION

- 396 models
- Stainless steel casings
- Tested according to EN 16430 in independent accredited laboratory
- 10 year warranty
- One of the highest heat output on the market
- Exceptional rigidity of casings
- Max operating pressure 25 bar
- Highly efficient, rapid and economic copper - aluminium heat exchangers
- Good compatibility with heat pumps
- All fixing brackets and bolts have sound proofing elements
- Reversible reinforced profile grille
- Possibility to change level of casing at any time during exploitation (when installed in raised floors)



2024

10
YEAR
WARRANTY
★★★★★

TRENCH HEATERS FC

These simple floor-mounted trench heaters FC operate on the principle of natural convection.

Optimal sized and located heat exchangers and specially designed air flow separation/guiding elements result a **considerable capacity** even without the use of a fan, thereby allowing these convectors to operate as the **main heating appliance in high energy performance buildings**.

Due to **low inertia**, can quickly increase and maintain the set room temperature, **providing the room with exactly as much heat as you require just when it is required**.

Create an effective warm air curtain for large windows, without allowing cold to penetrate the premises. The **heat is perfectly distributed** throughout the room.

Fully floor-mounted, and therefore **do not impede free passage**.

Perfect for any interior, as the only visible element is the grill, the material and colour of which matches floor covering.

May be walked on and can easily **withstand the weight of a number of adults**.

The convectors are supplied with a **stainless steel casings** and **copper-aluminium heat exchangers**, to ensure they remain extremely reliable over the long-term.



10-year warranty

We are confident in the longevity of our trench heaters; therefore, we provide them with a 10-year guarantee.



Tested according to EN16430

The outputs of trench heaters FC have been tested by independent accredited laboratories according to the current standards.

With us, 1 kW means 1 kW.



Work perfectly with low-temperature energy carriers

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



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**. Konveka devices easily withstand hydraulic tests, hydraulic shocks and can be installed in extremely tall buildings.



Noiseless

Completely noiseless operation



Sound insulation

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



All casing parts are made of stainless steel Stainless steel provides **100% corrosion protection**, is **54% stronger** and **45% harder** than carbon steel.



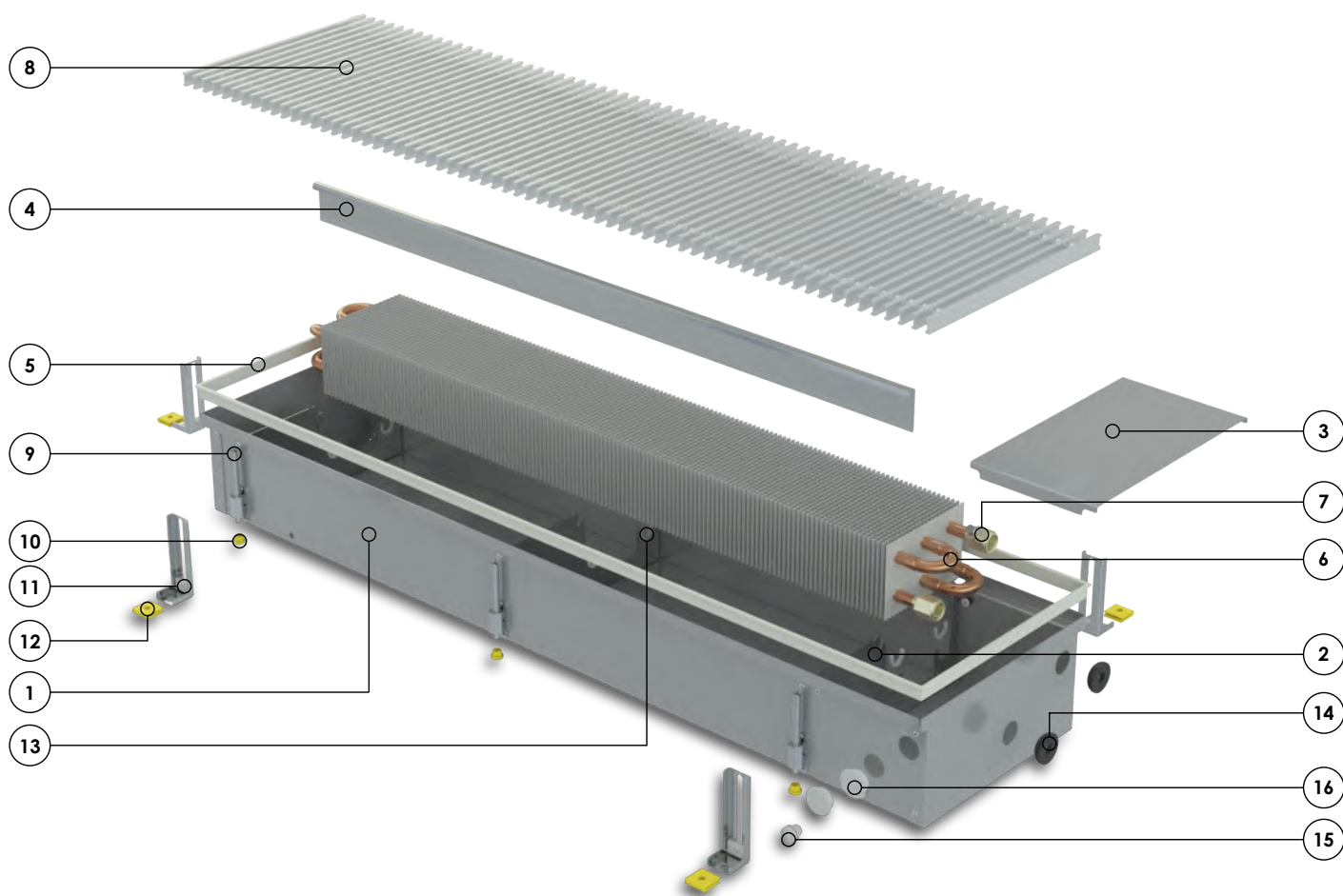
Reinforced casings

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

1. **Stiffening elements** to maintain the pressure of the concrete – from 2 to 7 pcs, depending on the length of the casing.
2. M10 **support screws** to withstand the vertical load – from 4 to 20 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.

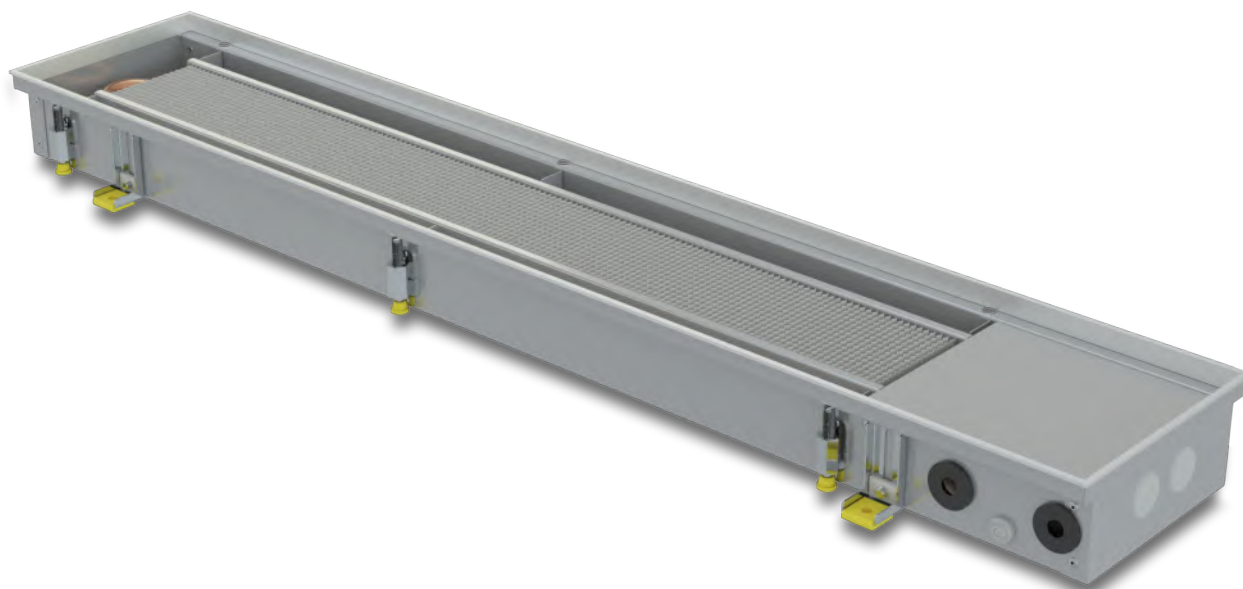
STANDARD SET



- | | | | |
|---|---|---|--|
| 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 | | |

OVERVIEW

FC	6
396 models	
Length	from 80 to 500 cm
Width	22, 32 and 42 cm
Height	9, 11, 15, 30 and 45 cm
ACCESORIES	9
GRILLES	10
ABOUT KONVEKA	12



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	1058	1120	1183	1246	1309	1371	1434	1497
	15	256	301	347	392	437	482	528	573	618	663	709	754	799	844	890	935	980	1025	1071	1116	1161	1206	1252	1342	1433	1523	1614	1704	1795	1885	1976	2066	2157
32	9	243	289	335	381	427	473	519	565	611	657	703	749	795	841	887	933	979	1025	1071	1118	1164	1210	1256	1348	1440	1532	1624	1716	1808	1900	1992	2085	2177
	11	252	300	347	394	442	489	537	584	632	679	727	774	822	869	917	964	1012	1059	1106	1154	1201	1249	1296	1391	1486	1581	1676	1771	1866	1961	2056	2151	2246
	15	383	451	518	586	653	721	788	855	923	990	1058	1125	1193	1260	1328	1395	1463	1530	1598	1665	1733	1800	1868	2002	2137	2272	2407	2542	2677	2812	2947	3082	3217
	30	566	665	764	863	963	1062	1161	1260	1360	1459	1558	1657	1756	1856	1955	2054	2153	2253	2352	2451	2550	2650	2749	2947	3146	3344	3543	3741	3940	4138	4337	4535	4734
	45	730	857	983	1110	1237	1364	1491	1618	1745	1872	1999	2125	2252	2379	2506	2633	2760	2887	3014	3141	3267	3394	3521	3775	4029	4283	4536	4790	5044	5298	5551	5805	6059
42	9	292	343	393	444	495	546	596	647	698	749	800	850	901	952	1003	1053	1104	1155	1206	1256	1307	1358	1409	1510	1612	1713	1815	1916	2018	2119	2221	2322	2424
	11	353	415	477	539	601	663	725	787	849	911	973	1035	1097	1159	1221	1283	1345	1407	1469	1531	1593	1655	1717	1841	1965	2089	2213	2337	2461	2585	2709	2833	2957
	15	497	585	672	760	848	935	1023	1110	1198	1285	1373	1460	1548	1636	1723	1811	1898	1986	2073	2161	2248	2336	2424	2599	2774	2949	3124	3299	3474	3649	3824	4000	4175
	30	737	867	996	1125	1255	1384	1514	1643	1772	1902	2031	2160	2290	2419	2548	2678	2807	2937	3066	3195	3325	3454	3583	3842	4101	4360	4618	4877	5136	5394	5653	5912	6171
	45	875	1028	1182	1335	1489	1642	1796	1949	2103	2256	2410	2563	2717	2870	3024	3177	3331	3484	3638	3791	3945	4098	4252	4559	4866	5173	5480	5787	6094	6401	6708	7015	7322

Heat outputs at specific temperatures are available at www.konveka.com

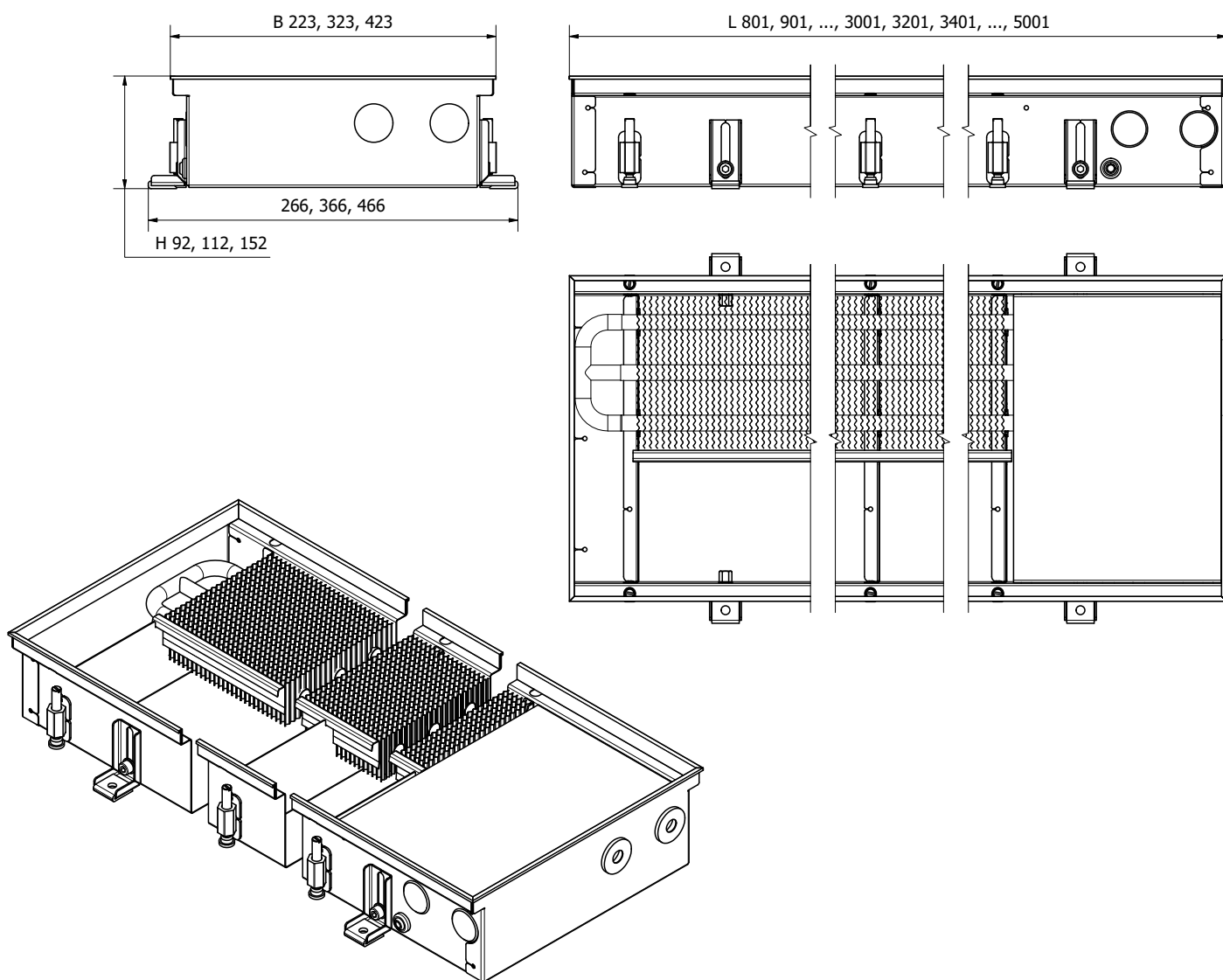
Pressure losses

Width, cm	Height, cm	MAX flow, l/h	MAX power, W	Formulas for pressure losses, Pa
22	9	133	1 550	$(L-0,29) \times (0,0074 \times q^2 - 0,0501 \times q + 0,0796)$
	15	197	2 295	$(L - 0,245) \times (0,0078 \times q^2 + 1,309 \times q - 20,44)$
32	9	176	2 044	$(L-0,29) \times (0,0022 \times q^2 + 0,304 \times q + 4,12)$
	11	207	2 407	$(L-0,29) \times (0,0022 \times q^2 + 0,304 \times q + 4,12)$
	15	317	3 686	$(L - 0,245) \times (0,0111 \times q^2 + 2,2429 \times q - 58,22)$
	30	368	4 278	$(L - 0,245) \times (0,0111 \times q^2 + 2,2429 \times q - 58,22)$
	45	645	7 500	$(L - 0,245) \times (0,0111 \times q^2 + 2,2429 \times q - 58,22)$
42	9	245	2 852	$(L - 0,245) \times (0,0078 \times q^2 + 1,309 \times q - 20,44)$
	11	293	3 408	$(L - 0,245) \times (0,0078 \times q^2 + 1,309 \times q - 20,44)$
	15	398	4 631	$(L-0,245) \times (0,0157 \times q^2 + 2,6179 \times q - 40,88)$
	30	645	7 500	$(L-0,245) \times (0,0157 \times q^2 + 2,6179 \times q - 40,88)$
	45	896	10 425	$(L-0,245) \times (0,0157 \times q^2 + 2,6179 \times q - 40,88)$

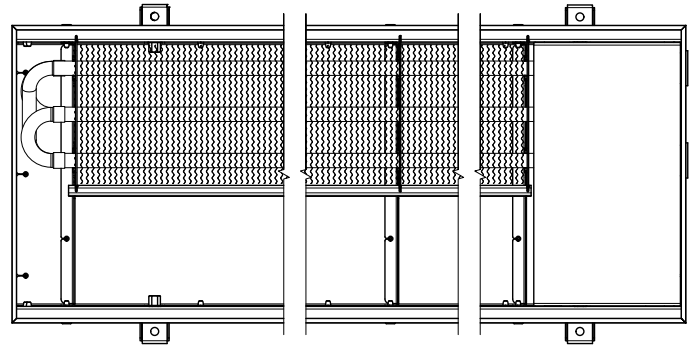
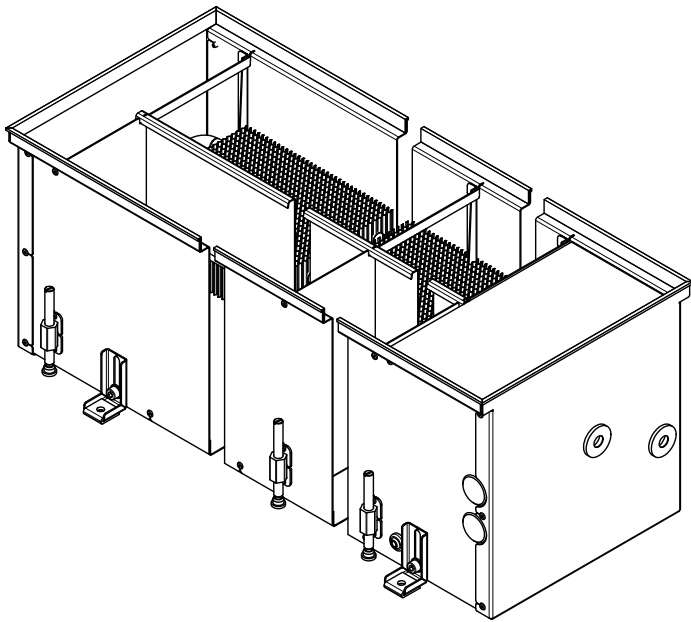
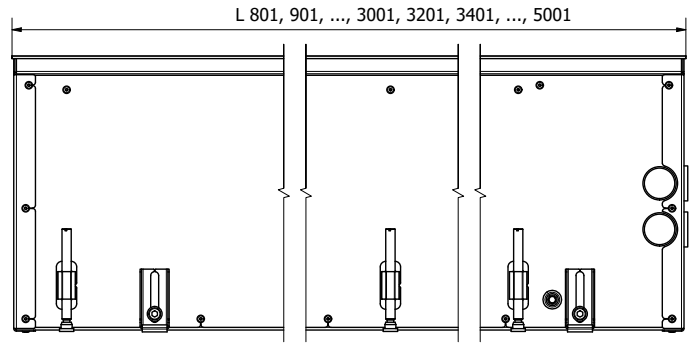
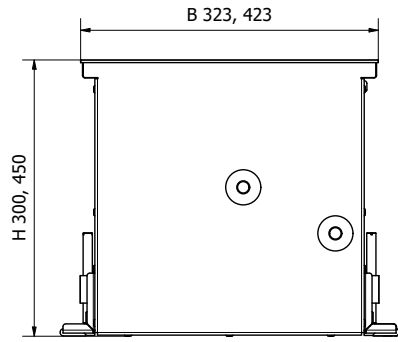
L – Length of trench heater (m) q – Flow of energy carrier (l/h)

DIMENSIONS

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 A230NC or capillary thermostatic head THC



Controls flow with thermostatic head or 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 **A230NC**

Opens / closes thermostatic valve. Controlled by room thermostat TW230



Opening/closing of thermostatic valves (ON/OFF)

Thermoelectric

Opened/Closed indicator

Voltage 230V AC

ROOM THERMOSTAT **TW230**

Controls thermal actuator A230NC 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 230V AC

Valve actuator control (ON/OFF)

Backlit LED display

CAPILLARY THERMOSTATIC HEAD **THC**

Controls preset room temperature



Temperature range $0^{\circ}\text{C} - 27^{\circ}\text{C}$

Protection against freezing

Length of capillary pipe - 1,2 m

Thread - M30 x 1,5 mm

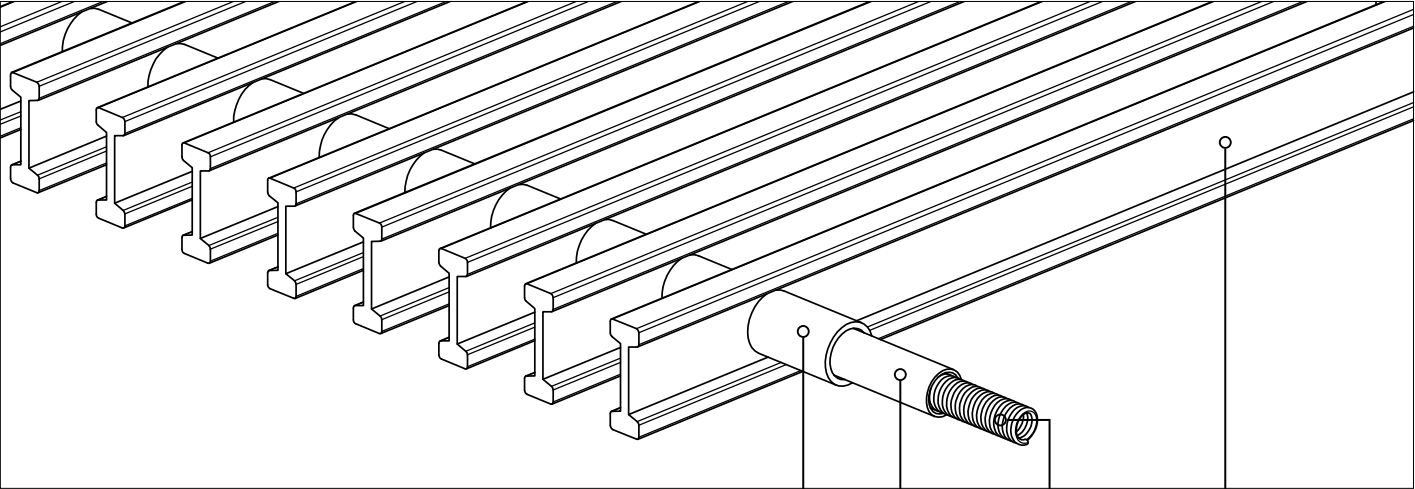
Body material - ABS

ORDER CODES

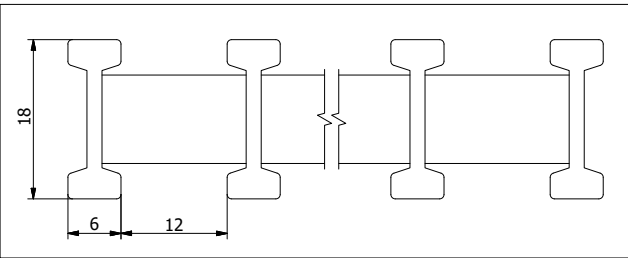
Accessory	Order code
Thermostatic valve	TVS15
Thermostatic valve actuator	A230NC
Lockshield valve (angle)	LA15
Lockshield valve (straight)	LS15
Room thermostat	TW230
Capillary thermostatic head	THC

GRILLES

ALUMINIUM ROLL-UP GRILLES



GRILLE PROFILE



1 Aluminium profile

- made of anodized aluminium
- reinforced reversable 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

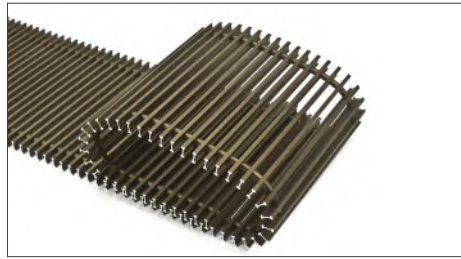
3 Spring

4 Flexible protective pipe

SILVER (ALS)



BROWN (AL 10)



BLACK (AL 50)



ALUMINIUM LINEAR GRILLES

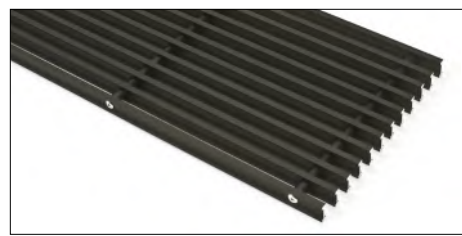
SILVER (ALS)



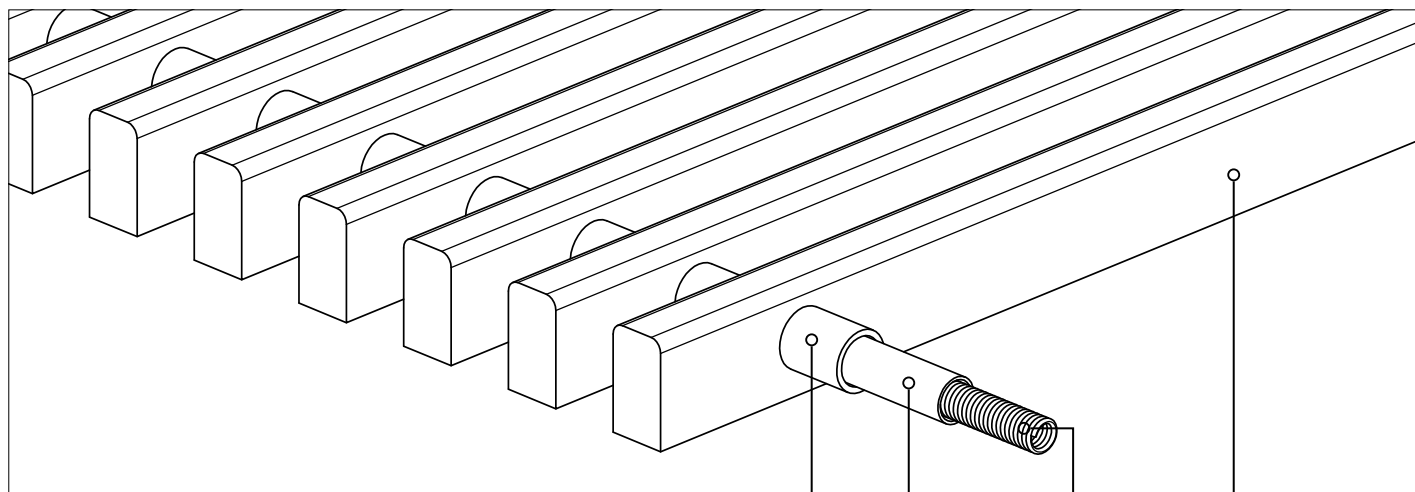
BROWN (AL 10)



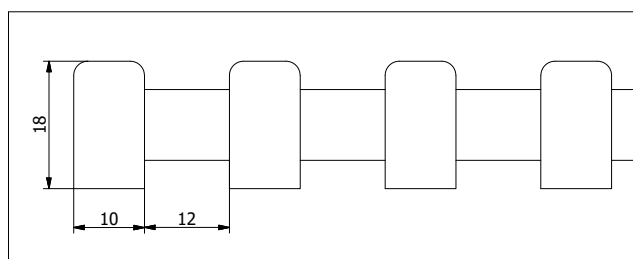
BLACK (AL 50)



WOODEN ROLL-UP GRILLES



GRILLE PROFILE



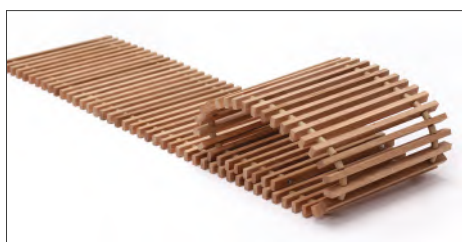
② ④ ③ ①

- 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**

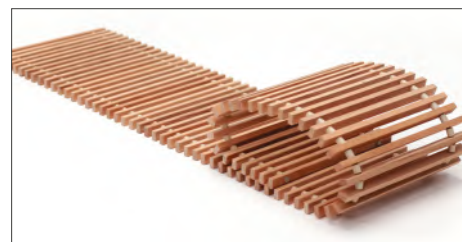
OAK



ASH



BEECH



ORDER CODE FOR GRILLES

Type	Length, cm	Width, cm	Material	Example
GR	120	32	ALS	GR 120-32 ALS

TRENCH HEATERS FCH

 FOR HEATING

 FOR COOLING

 FAN ASSISTED

- 10 models
- Stainless steel casings
- 2 and 4 pipes versions
- Wet cooling and dry cooling ready
- Remarkably low noise level
- Tested according to EN16430 in independent accredited laboratory
- 10 year warranty for casings and heat exchangers
- Fans with most economical and quiet EC type motors
- High rise of cooled air
- Excellent compatibility with heat pumps and condensate boilers
- Max operating pressure 25 bar
- Possibility to control up to 30 units with 1 room thermostat
- Highly efficient and economic copper-aluminium heat exchangers
- Safe voltage of fans – 24V (DC)
- Supply air filters are in standard set
- Reversible reinforced profile grilles
- All fixing brackets and bolts have sound proofing elements
- Possibility to change level of casing at any time during exploitation (when installed in raised floors)



2023



TRENCH HEATERS FCH

FCH are among the most powerful trench heaters designed for **heating and cooling**.

Both heated and cooled air is raised right up the ceiling to result in an **even distribution** throughout the room.

4 and 2 pipe connection versions are available. The 4 pipe connection guarantees maximum flexibility, whereas the 2 pipe connection will ensure the maximum capacity.

The air flow passing through the appliance is **continuously filtered** to trap a considerable part of the dust and dirt in the room and protect the heater from contamination.

Include **drain pans** that allow the device to operate both above and below the dew point.

Quiet and extremely economical EC fans increase the convection efficiency more than 4 times, almost without any sound.

Due to **extremely low inertia**, can quickly increase and precisely maintain the set room temperature, **providing the room with exactly as much heat as you require just when it is required.**

Create an effective warm air curtain for large windows, without allowing cold to penetrate the premises. The **heat is perfectly distributed** throughout the room.

Operates very well with **low-temperature heat sources**, such as heat pumps or condensing boilers.

Fully integrated into the floor, and therefore **do not impede free passage.**

Perfect for any interior, as the only visible element is the grill, the material and colour of which matches floor covering.

May be walked on and can easily **withstand the weight of a number of adults.**

Supplied with a **stainless steel casings** and **copper-aluminium heat exchangers**, to ensure they remain extremely reliable over the long-term.



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 manufactured by Konveka have been tested by independent accredited laboratories according to the latest standards.

With us, 1 kW means 1 kW.



Fans with EC technology

All Konveka 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

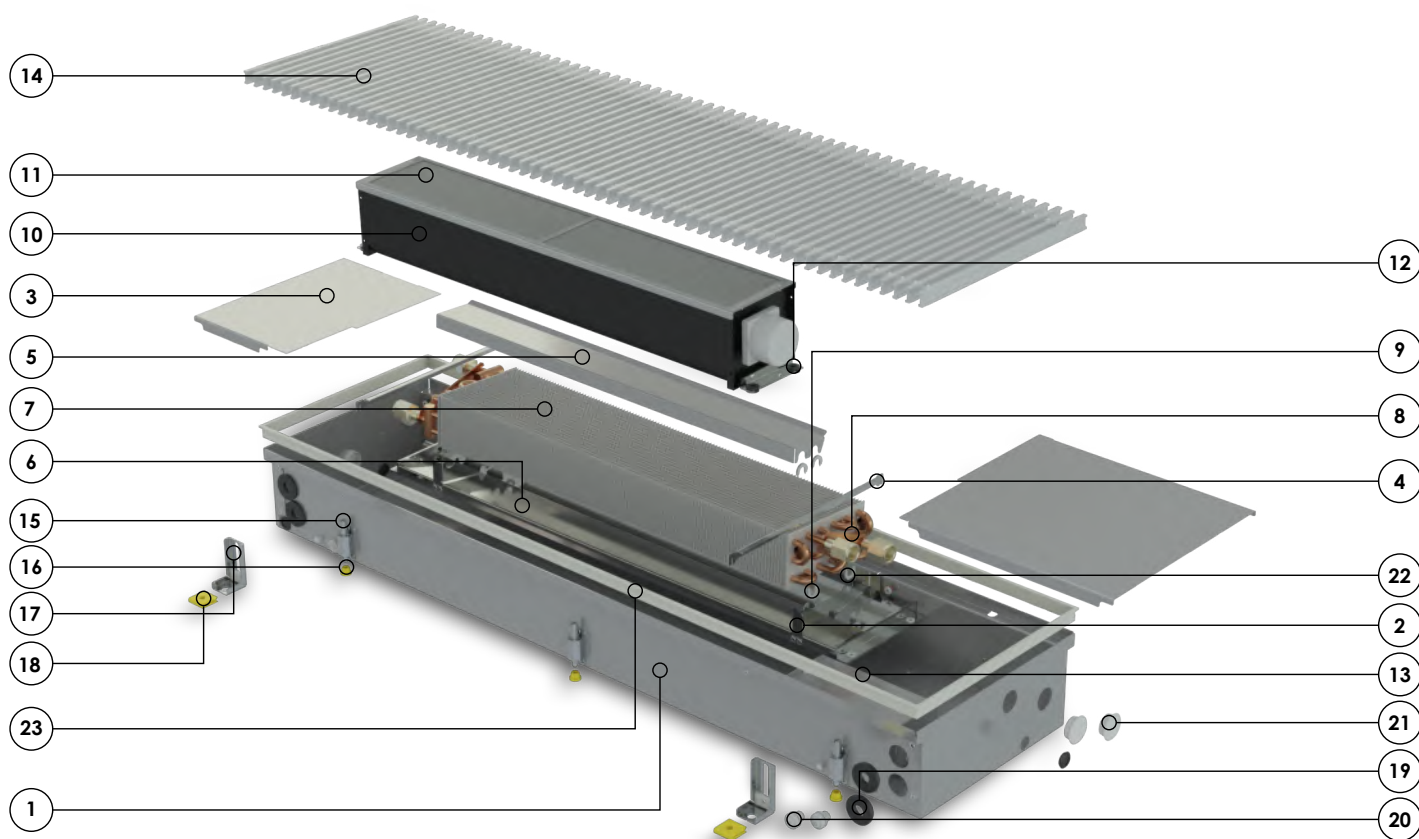
All the devices are **factory-tested** for leaks at a pressure of **30 bar**. The maximum maintained pressure (strength limit) is **110 bar**. Konveka devices easily withstand hydraulic tests, hydraulic shocks and can be installed in extremely tall buildings.



Safe operating voltage of fans

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

STANDARD SET



FCH

- ① Stainless steel casing
- ② Brackets for heat exchanger
- ③ Hydraulic connections cover
- ④ Casing's stiffening elements
- ⑤ Air guiding element
- ⑥ Drain pan
- ⑦ Copper - aluminium heat exchanger
- ⑧ Air vent
- ⑨ Heat exchanger fixing - protecting elements
- ⑩ Fan with EC motor
- ⑪ Air filter
- ⑫ Vibration dampers for fan
- ⑬ Control box (optional)
- ⑭ Protective - decorative grille (optional)
- ⑮ Height adjustment and vertical load supporting bolts
- ⑯ Noise isolating elements for adjusting screws
- ⑰ Casing fixing to the floor brackets
- ⑱ Noise isolation elements for floor brackets
- ⑲ Pipe sealing and protection elements
- ⑳ Cable sealing and protection elements
- ㉑ Plugs for unused casing holes
- ㉒ Anodized aluminium frame; colour matches the colour of grille

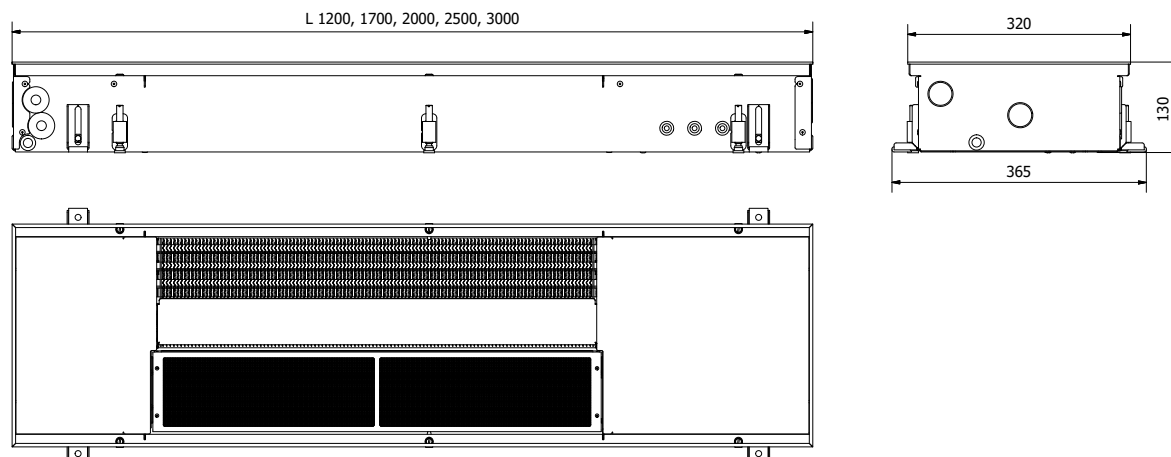
All fasteners required for installation

Installation manual

5-layer, 2 parts cardboard box, additionally used for device protecting during installation and construction works

OVERVIEW

FCH2 (2-pipe version)	6
5 models	
Lengths	120, 170, 200, 250, 300 cm
Width	32 cm
Height	13 cm
FCH4 (4-pipe version)	9
5 models	
Lengths	120, 170, 200, 250, 300 cm
Width	32 cm
Height	13 cm
ACCESORIES.....	12
ELECTRICAL CONNECTION DIAGRAMS.....	13
GRILLES.....	14
ABOUT KONVEKA	16



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 m ³ /h
	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C	35/30/20°C Δt = 12,5°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 120									
100%	3 418	2 072	879	1 014	905	574	41	49	0 - 383
80%	3 052	1 851	785	837	748	474	36	45	
60%	2 523	1 530	649	654	584	371	28	37	
40%	1 830	1 110	471	462	413	262	23	32	
20%	973	590	250	255	228	145	20	29	
FCH2 170									
100%	6 152	3 730	1 582	1 824	1 630	1 033	42	51	0 - 520
80%	5 494	3 332	1 413	1 507	1 346	854	41	50	
60%	4 542	2 754	1 168	1 178	1 052	667	34	44	
40%	3 294	1 997	847	832	743	471	29	38	
20%	1 751	1 061	450	459	410	260	25	35	
FCH2 200									
100%	6 835	4 144	1 758	2 027	1 811	1 148	44	53	0 - 766
80%	6 105	3 702	1 570	1 674	1 495	948	39	48	
60%	5 047	3 060	1 298	1 308	1 169	741	31	41	
40%	3 660	2 219	941	924	826	524	24	34	
20%	1 945	1 179	500	510	456	289	22	32	

Fan speed	Heat outputs, W			Sensible cooling capacity, W			Sound levels		Air flow m ³ /h
	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C	35/30/20°C Δt = 12,5°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 250									
100%	9 569	5 802	2 462	2 838	2 535	1 608	43	54	0 - 903
80%	8 547	5 182	2 199	2 344	2 094	1 328	40	50	
60%	7 065	4 284	1 817	1 832	1 636	1 038	33	43	
40%	5 124	3 107	1 318	1 294	1 156	733	26	37	
20%	2 723	1 651	700	714	638	405	24	33	
FCH2 300									
100%	12 303	7 460	3 165	3 649	3 259	2 067	43	54	0 - 1 040
80%	10 989	6 663	2 827	3 014	2 692	1 707	42	53	
60%	9 084	5 508	2 337	2 355	2 104	1 334	33	44	
40%	6 588	3 995	1 695	1 664	1 486	942	27	38	
20%	3 501	2 123	901	918	820	520	24	35	

Heat outputs at specific temperatures are available at www.konveka.it

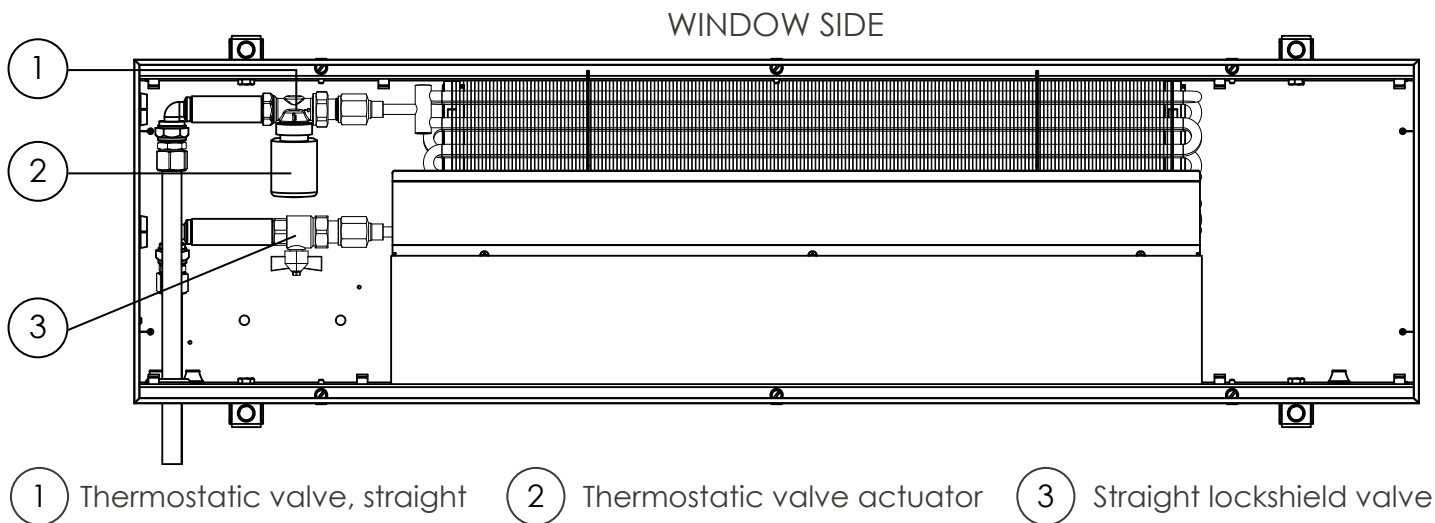
Model	Length, mm	No. of fans, pc	Max el. power, A	Max el. power, W	Length of heat exchanger, mm	Weight, kg	Water volume, l
FCH2 120	1 200	1	0,63	15	675	21,2	0,77
FCH2 170	1 700	1	0,75	18	1 189	28,9	1,35
FCH2 200	2 000	2	1,25	30	1 431	33,9	1,62
FCH2 250	2 500	2	1,38	33	1 945	42,2	2,21
FCH2 300	3 000	2	1,50	36	2 458	51,5	2,79

Pressure losses

Length, cm	MAX flow	MAX power	Formulas for pressure losses, Pa
120	294	3 418	$0,60 \times (0,084965151641 \times q^2 - 2,734953599329 \times q + 220,629894249638)$
170	529	6 152	$1,08 \times (0,084965151641 \times q^2 - 2,734953599329 \times q + 220,629894249638)$
200	588	6 835	$1,20 \times (0,084965151641 \times q^2 - 2,734953599329 \times q + 220,629894249638)$
250	823	9 569	$1,68 \times (0,084965151641 \times q^2 - 2,734953599329 \times q + 220,629894249638)$
300	1058	12 303	$2,16 \times (0,084965151641 \times q^2 - 2,734953599329 \times q + 220,629894249638)$

q – Flow of energy carrier (l/h)

EXAMPLE OF CONNECTIONS

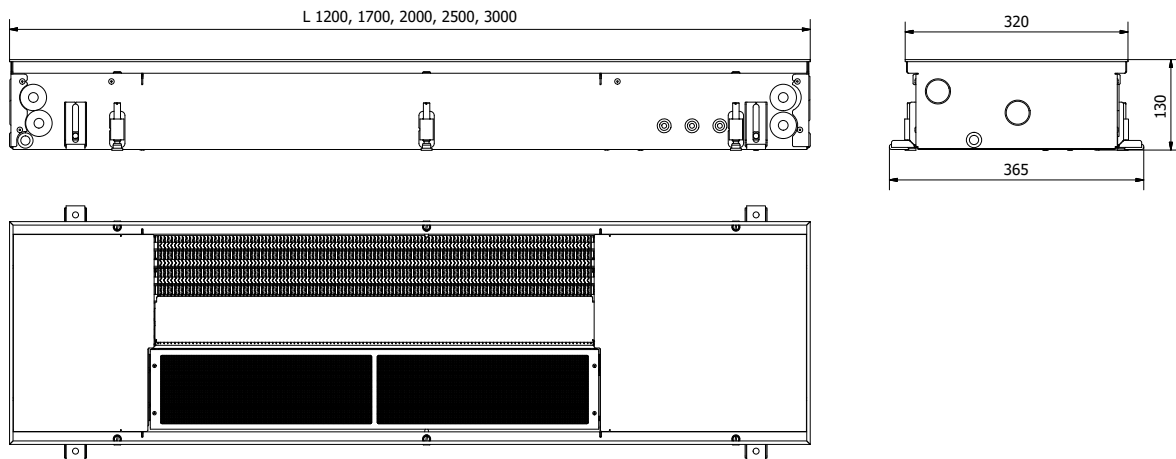


INSTALLATION FEATURES

- 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 CODES

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



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 = 50°C	55/45/20°C Δt = 30°C	35/30/20°C Δt = 12,5°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)	
FCH4 120									
100%	2 013	1 196	490	960	857	544	41	49	0 - 383
80%	1 859	1 104	452	808	722	458	36	45	
60%	1 661	986	404	647	578	367	28	37	
40%	1 380	820	336	473	423	268	23	32	
20%	901	535	219	277	247	157	20	29	
FCH4 170									
100%	3 624	2 152	881	1 728	1 542	979	42	51	0 - 520
80%	3 347	1 988	814	1 454	1 299	824	41	50	
60%	2 989	1 775	727	1 165	1 040	660	34	44	
40%	2 485	1 476	604	852	761	482	29	38	
20%	1 623	964	395	499	445	283	25	35	
FCH4 200									
100%	4 026	2 392	980	1 920	1 714	1 088	44	53	0 - 766
80%	3 718	2 208	904	1 616	1 444	916	39	48	
60%	3 322	1 972	808	1 294	1 156	734	31	41	
40%	2 760	1 640	672	946	846	536	24	34	
20%	1 802	1 070	438	554	494	314	22	32	

Fan speed	Heat outputs, W			Sensible cooling capacity, W			Sound levels		Air flow m ³ /h
	75/65/20°C Δt = 50°C	55/45/20°C Δt = 30°C	35/30/20°C Δt = 12,5°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)	
FCH4 250									
100%	5 637	3 348	1 371	2 688	2 399	1 523	43	54	0 - 903
80%	5 206	3 092	1 266	2 262	2 021	1 282	40	50	
60%	4 650	2 761	1 131	1 812	1 618	1 027	33	43	
40%	3 865	2 296	940	1 325	1 184	750	26	37	
20%	2 524	1 499	614	776	692	440	24	33	
FCH4 300									
100%	7 248	4 304	1 762	3 456	3 084	1 958	43	54	0 - 1 040
80%	6 694	3 976	1 628	2 908	2 598	1 648	42	53	
60%	5 978	3 550	1 454	2 330	2 080	1 320	33	44	
40%	4 970	2 952	1 208	1 704	1 522	964	27	38	
20%	3 246	1 928	790	998	890	566	24	35	

Heat outputs at specific temperatures are available at www.konveka.lt

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	
							Heating	Cooling
FCH4 120	1 200	1	0,63	15	675	21,2	0,17	0,60
FCH4 170	1 700	1	0,75	18	1 189	28,9	0,30	1,05
FCH4 200	2 000	2	1,25	30	1 431	33,9	0,36	1,26
FCH4 250	2 500	2	1,38	33	1 945	42,2	0,49	1,72
FCH4 300	3 000	2	1,50	36	2 458	51,5	0,62	2,17

Pressure losses (heating)

Length, cm	MAX flow	MAX power	Formulas for pressure losses, Pa
120	173	2 013	$(L - 0,60) \times (0,077284346706 \times q^2 + 10,657268943232 \times q - 756,077513728194)$
170	312	3 624	$(L - 0,62) \times (0,077284346706 \times q^2 + 10,657268943232 \times q - 756,077513728194)$
200	346	4 027	$(L - 0,80) \times (0,077284346706 \times q^2 + 10,657268943232 \times q - 756,077513728194)$
250	485	5 638	$(L - 0,82) \times (0,077284346706 \times q^2 + 10,657268943232 \times q - 756,077513728194)$
300	623	7 249	$(L - 0,84) \times (0,077284346706 \times q^2 + 10,657268943232 \times q - 756,077513728194)$

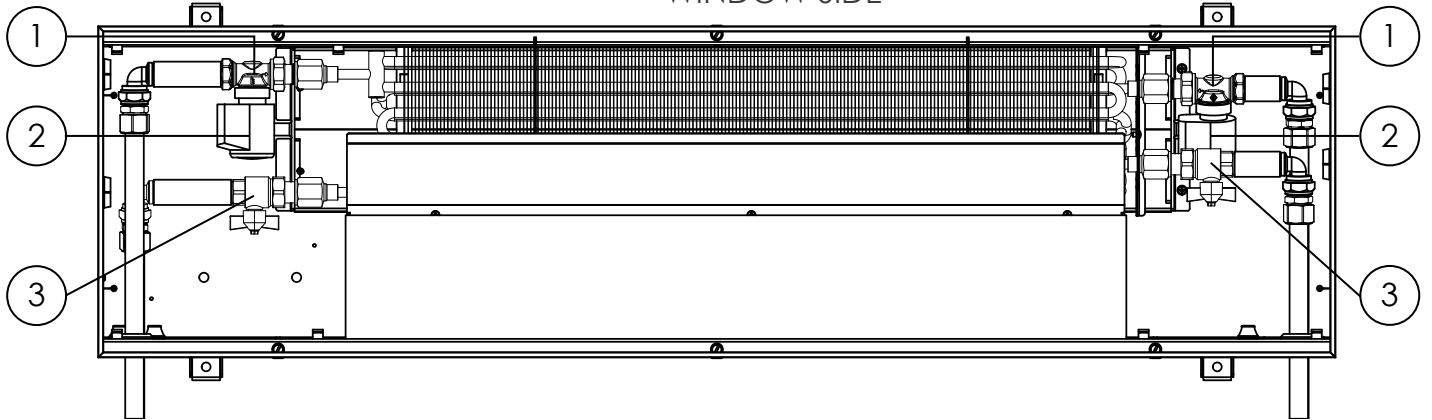
Pressure losses (cooling)

Length, cm	MAX flow	MAX power	Formulas for pressure losses, Pa
120	147	857	$(L - 0,60) \times (0,03410567137 \times q^2 + 6,253189479095 \times q - 425,969877062125)$
170	265	1 543	$(L - 0,62) \times (0,03410567137 \times q^2 + 6,253189479095 \times q - 425,969877062125)$
200	295	1 715	$(L - 0,80) \times (0,03410567137 \times q^2 + 6,253189479095 \times q - 425,969877062125)$
250	413	2 401	$(L - 0,82) \times (-0,009104212051 \times q^2 + 11,06155128551 \times q - 916,512265061525)$
300	531	3 087	$(L - 0,84) \times (-0,009104212051 \times q^2 + 11,06155128551 \times q - 916,512265061525)$

L – Length of trench heater (m) q – Flow of energy carrier (l/h)

EXAMPLE OF CONNECTIONS

WINDOW SIDE



① Thermostatic valve, straight

② Thermostatic valve actuator

③ Straight lockshield valve

INSTALLATION FEATURES

- The side with the heat exchanger is always mounted closer to the window (wall)
- Possibility to connect pipes through the side or end of the convector
- The 4-pipe heat exchanger has two independent circuits. They are connected to the heating and cooling systems on both sides of the device as follows:
 - To a heating system – on a side of the control box;
 - To a cooling system – on a side of condensate water outlet.
- Energy carrier supply have to be connected to heat exchanger connection which is further from fans
- Outgoing pipes of both circuits have to be connected to the heat exchanger's connections which is closer to fans
- All fasteners required for mounting are included in the standard kit
- The possibility of adjusting the height of the device after mounting (when mounting into raised floor)

FCH4

ORDER CODES

Type	Length, cm	Width, cm	Height, cm	Example
FCH4	250	32	13	FCH4 250

ACCESSORIES

THERMOSTATIC VALVE **TVS15**

Controls flow of energy carrier. Controlled by thermal actuator A24NC



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 **A24NC**

Opens / closes thermostatic valve. Controlled by room thermostat TW24



Opening/closing of thermostatic valves (ON/OFF)

Thermoelectric

Opened/Closed indicator

Voltage 24V DC

ROOM THERMOSTAT **TW24**

Controls thermal actuator A24NC 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 **CB60**

For power supply of fans, actuators A24NC and room thermostat TW24



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

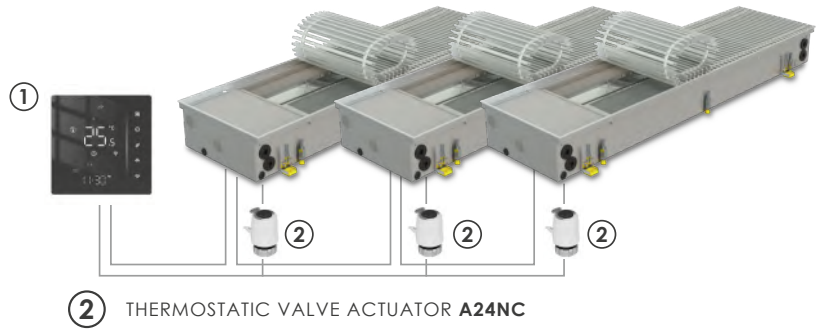
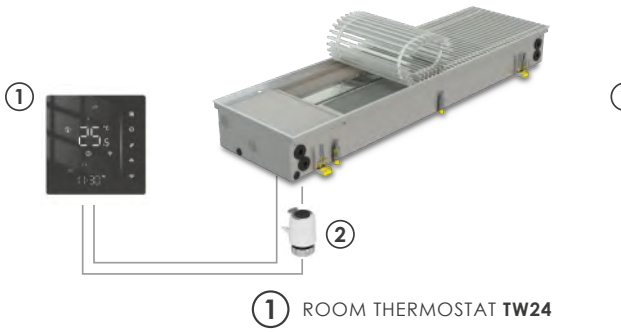
ORDER CODES

Accessory	Order code
Thermostatic valve	TVS15
Thermostatic valve actuator	A24NC
Lockshield valve (angle)	LA15
Lockshield valve (straight)	LS15
Room thermostat	TW24
Electric control box	CB60

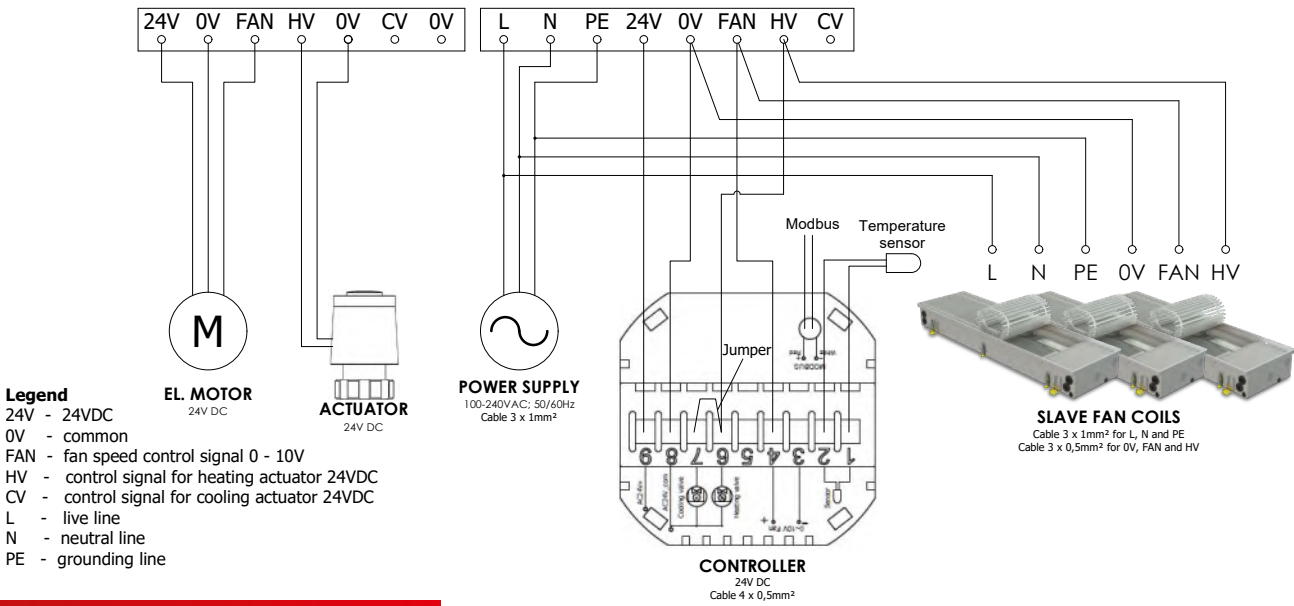
CONNECTION DIAGRAMS

CONNECTION OF ONE FCH TO ROOM THERMOSTAT

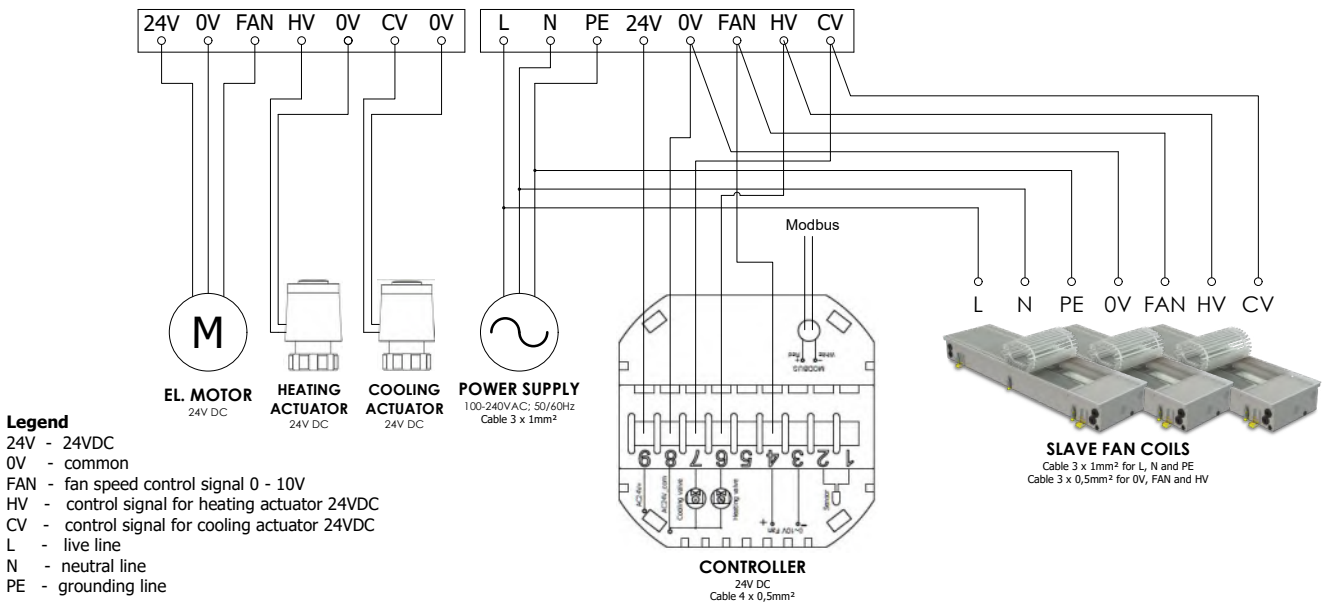
CONNECTION OF FEW FCH TO ROOM THERMOSTAT



WIRING DIAGRAM FCH2



WIRING DIAGRAM FCH4

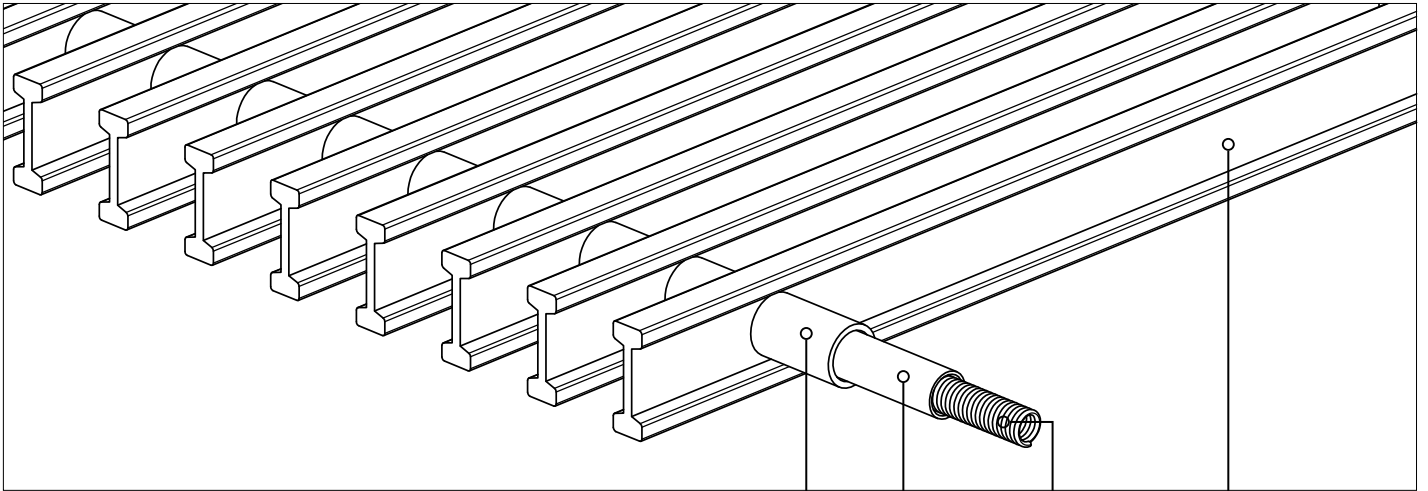


- Trench heaters installed in the same room are controlled based on the Master - Slave principle
- Speed of fans are controlled 0-10 V by room thermostat. Voltage – 24VDC

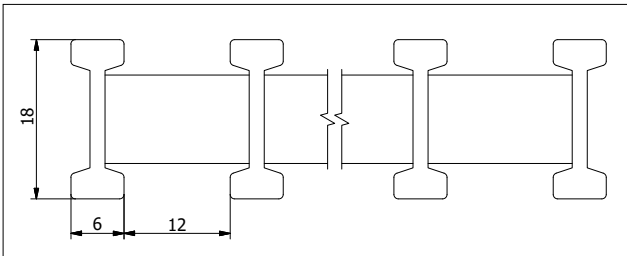
- Valve actuators are controlled ON/OFF by room thermostat. Voltage – 24VDC
- Up to 30 trench heaters can be controlled with one room thermostat TW24

GRILLES

ALUMINIUM ROLL-UP GRILLES



GRILLE PROFILE



GRILLES

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

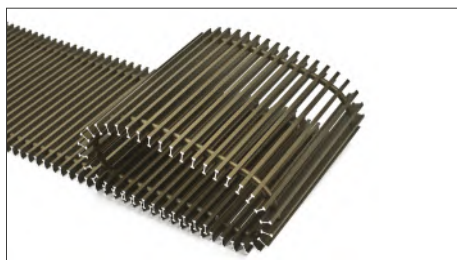
3 Spring

4 Flexible protective pipe

SILVER (ALS)



BROWN (AL 10)



BLACK (AL 50)



ALUMINIUM LINEAR GRILLES

SILVER (ALS)



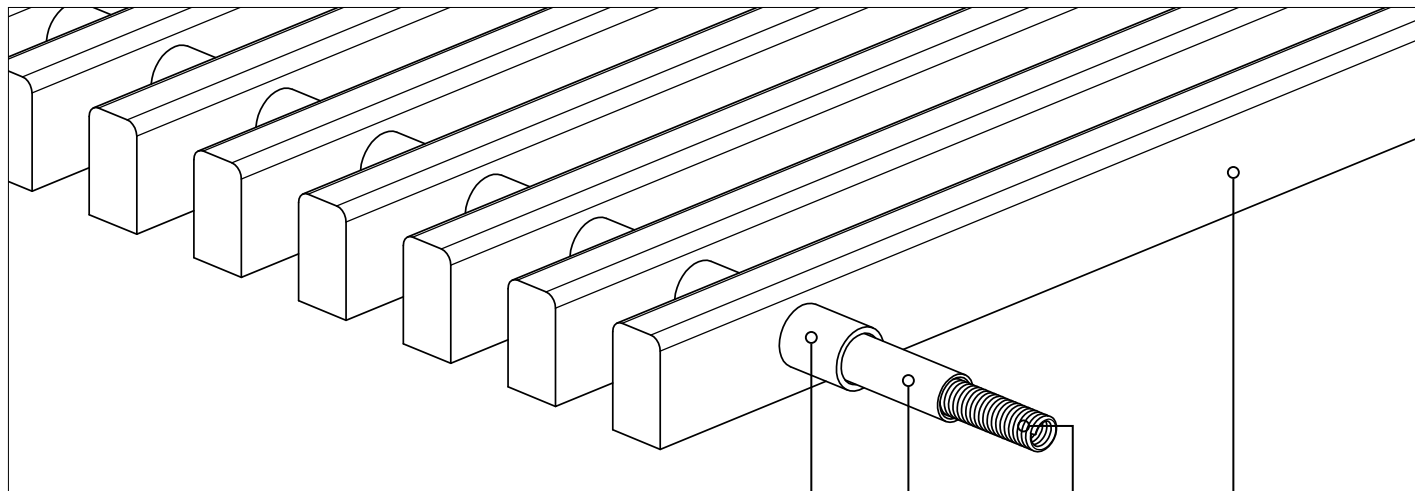
BROWN (AL 10)



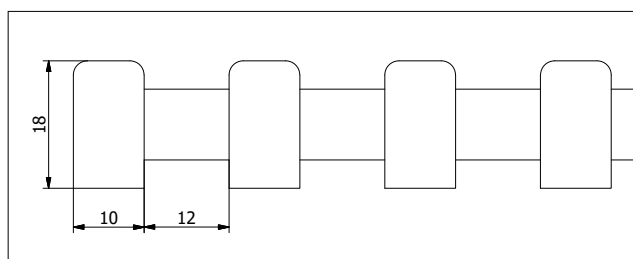
BLACK (AL 50)



WOODEN ROLL-UP GRILLES



GRILLE PROFILE

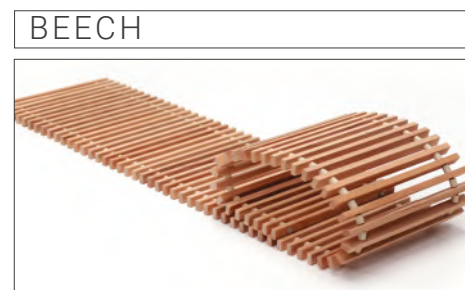
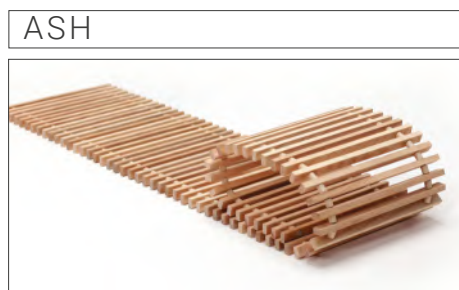


② ④ ③ ①

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

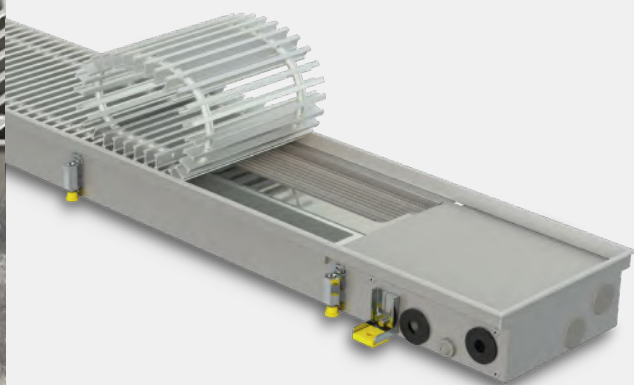
Type	Length, cm	Width, cm	Material	Example
GR	200	32	ALS	GR 200-32 ALS

TRENCH HEATERS FH

 FOR HEATING

 FAN ASSISTED

- 36 models
- Stainless steel casings
- Remarkably low noise level
- Tested according to EN 16430 in independent accredited laboratory
- 10 year warranty for casings and heat exchangers
- Fans with most economical and quiet EC-type motors
- Excellent compatibility with heat pumps and condensate boilers
- Max operating pressure 25 bar
- Possibility to control up to 30 units with 1 thermostat
- Highly efficient and economic copper-aluminium heat exchangers
- Safe voltage of fans – 24V (DC)
- Supply air filters are in standard set
- Reversible reinforced profile grilles
- All fixing brackets and bolts have sound proofing elements
- Possibility to change level of casing at any time during exploitation (when installed in raised floors)



TRENCH HEATERS **FH**

Small but full of energy, FH trench heaters **with fans** will fill your room with pleasant warmth even in the coldest winters.

Quiet and extremely economical EC fans increase convection efficiency more than 4 times, almost without any sound.

Due to **extremely low inertia**, can quickly increase and precisely maintain the set room temperature, **providing the room with exactly as much heat as you require just when it is required.**

Create an effective warm air curtain for large windows, without allowing cold to penetrate the premises. The **heat is perfectly distributed** throughout the room.

Operates very well with **low-temperature heat sources**, such as heat pumps or condensing boilers.

Fully integrated into the floor, and therefore **do not impede free passage.**

Perfect for any interior, as the only visible element is the grill, the material and colour of which matches floor covering.

May be walked on and can easily **withstand the weight of a number of adults.**

Supplied with a **stainless steel casings** and **copper-aluminium heat exchangers**, to ensure they remain extremely reliable over the long-term.



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 manufactured by Konveka have been tested by independent accredited laboratories according to the latest standards.

With us, 1 kW means 1 kW.



Fans with EC technology

All Konveka 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, FH 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 FH 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**. Konveka devices easily withstand hydraulic tests, hydraulic shocks and can be installed in extremely tall buildings.

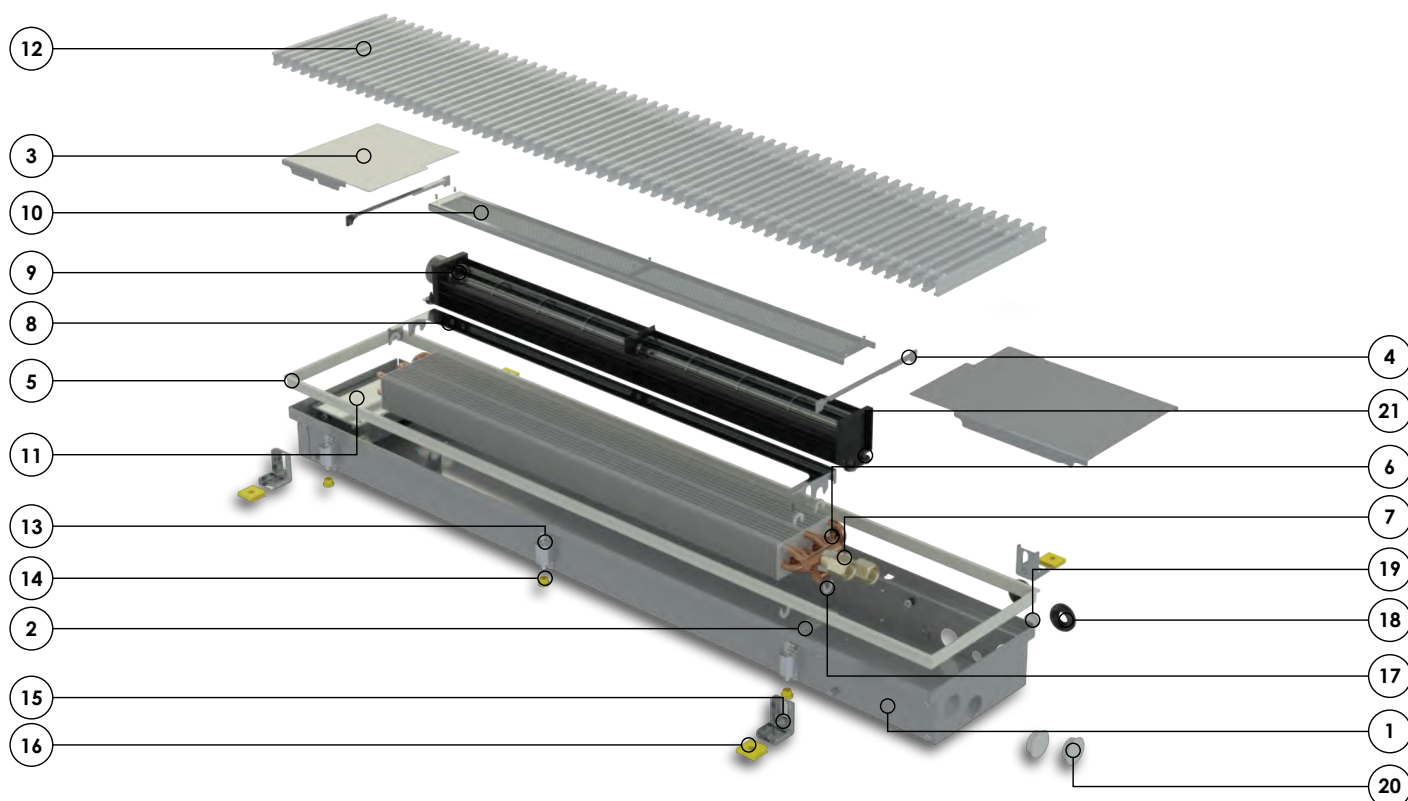


Safe operating voltage of fans

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

STANDARD SET

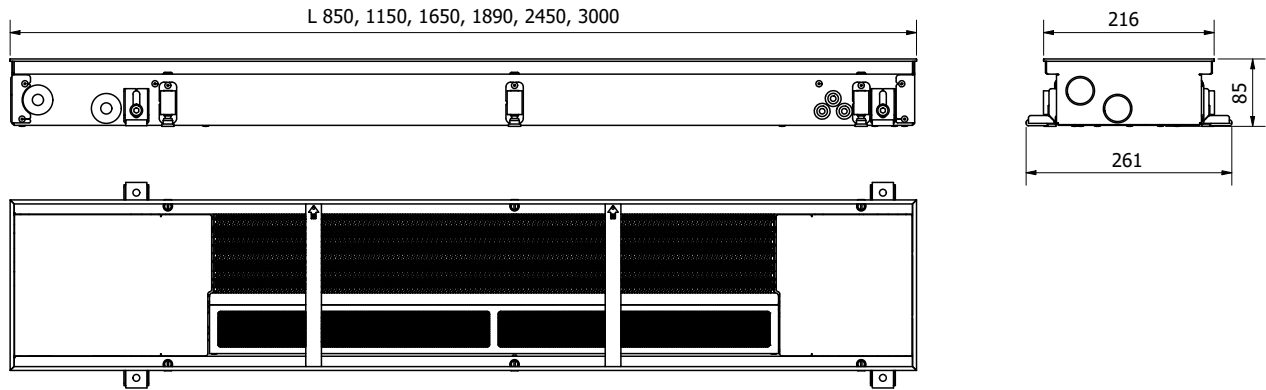
FH



- | | |
|---|---|
| <ul style="list-style-type: none"> ① Stainless steel casing ② Brackets for heat exchanger ③ Hydraulic connections cover ④ Casing's stiffening elements ⑤ Anodized aluminium frame; colour matches the colour of grille ⑥ Copper - aluminium heat exchanger ⑦ Air vent ⑧ Air guiding element ⑨ Fan with EC motor ⑩ Air filter ⑪ Control box (optional) ⑫ Protective - decorative grille (optional) ⑬ Height adjustment and vertical load supporting bolts | <ul style="list-style-type: none"> ⑭ Noise isolating elements for adjusting screws ⑮ Casing fixing to the floor brackets ⑯ Noise isolation elements for floor brackets ⑰ Heat exchanger fixing - protecting elements ⑱ Pipe sealing and protection elements ⑲ Cable sealing and protection elements ⑳ Plugs for unused casing holes ㉑ Vibration dampers for fan <p>All fasteners required for installation</p> <p>Installation manual</p> <p>5-layer, 2 parts cardboard box, additionally used for device protecting during installation and construction works</p> |
|---|---|

OVERVIEW

FH4-H	6
6 models	
Lengths	85, 115, 165, 189, 245 and 300 cm
Width	21,6 cm
Height	8,5 cm
Average heat output	2009 W/m
FH4-M	9
6 models	
Lengths	91, 121, 175, 200, 250 and 300 cm
Width	17,3 cm
Height	8,5 cm
Average heat output	1637 W/m
FH4-L3	12
6 models	
Lengths	85, 115, 165, 190, 245 and 300 cm
Width	25,8 cm
Height	8,5 cm
Average heat output	1576 W/m
FH4-L2	15
6 models	
Lengths	85, 115, 165, 190, 245 and 300 cm
Width	20,8 cm
Height	8,5 cm
Average heat output	1353 W/m
FH3-H	18
6 models	
Lengths	91, 121, 175, 200, 250 and 300 cm
Width	16,3 cm
Height	7,5 cm
Average heat output	1032 W/m
FH3-L	21
6 models	
Lengths	85, 115, 165, 190, 245 and 300 cm
Width	19,8 cm
Height	7,5 cm
Average heat output	1009 W/m
ACCESORIES	24
ELECTRICAL CONNECTION DIAGRAMS	25
GRILLES	26
ABOUT KONVEKA	28



TECHNICAL DATA

Length	850-3000 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, m ³ /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	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m ³ /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 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	
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 300									
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	

Heat outputs at specific temperatures are available in Selection tables at www.konveka.com

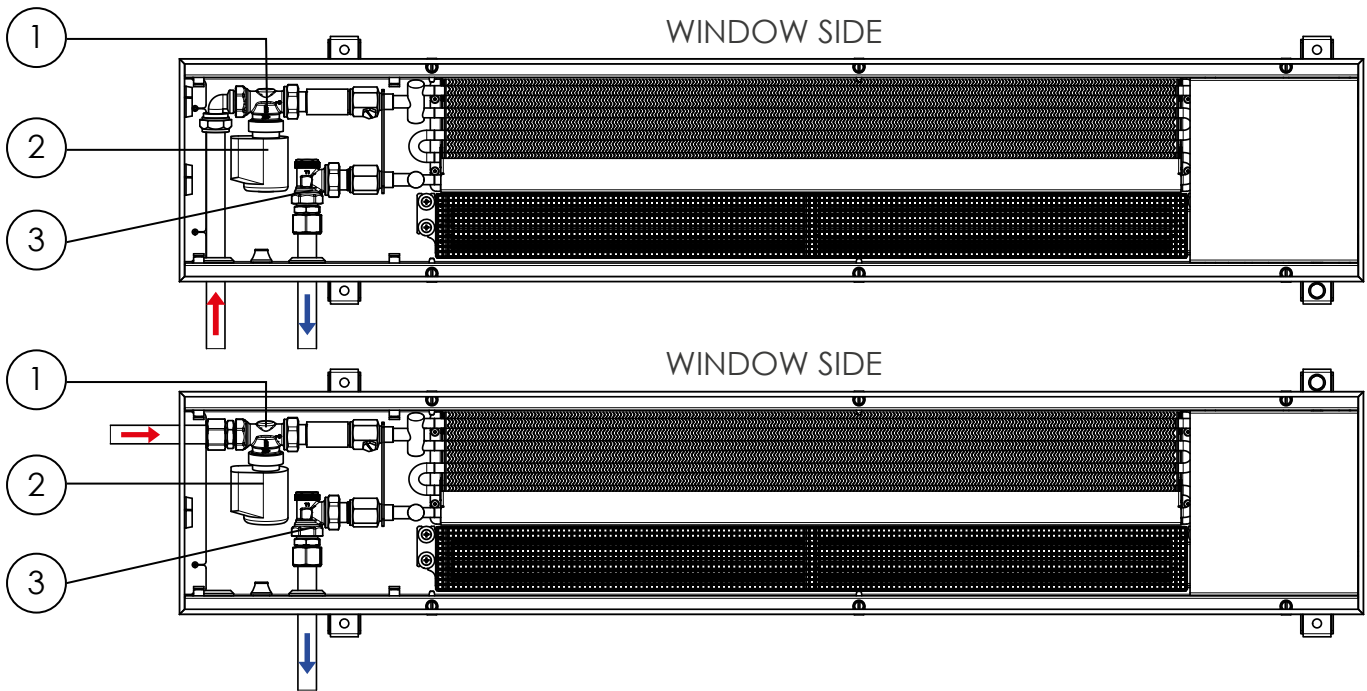
Pressure losses

Length, cm	MAX flow, l/h	MAX power, W	Formulas for pressure losses, Pa	MAX pressure losses, Pa
85	99	1 148	$0,41 \times (-0,00006 \times q^3 + 0,04893 \times q^2 - 0,69919 \times q - 8,14817)$	140
115	171	1 988	$0,71 \times (-0,00006 \times q^3 + 0,04893 \times q^2 - 0,69919 \times q - 8,14817)$	712
165	295	3 428	$1,22 \times (-0,00006 \times q^3 + 0,04893 \times q^2 - 0,69919 \times q - 8,14817)$	3 025
190	357	4 150	$1,48 \times (-0,00006 \times q^3 + 0,04893 \times q^2 - 0,69919 \times q - 8,14817)$	4 741
245	481	5 590	$2,00 \times (-0,00006 \times q^3 + 0,04893 \times q^2 - 0,69919 \times q - 8,14817)$	8 638
300	606	7 046	$2,52 \times (-0,00006 \times q^3 + 0,04893 \times q^2 - 0,69919 \times q - 8,14817)$	10 530

q – Flow of energy carrier (l/h)

EXAMPLE OF CONNECTIONS

FH4-H



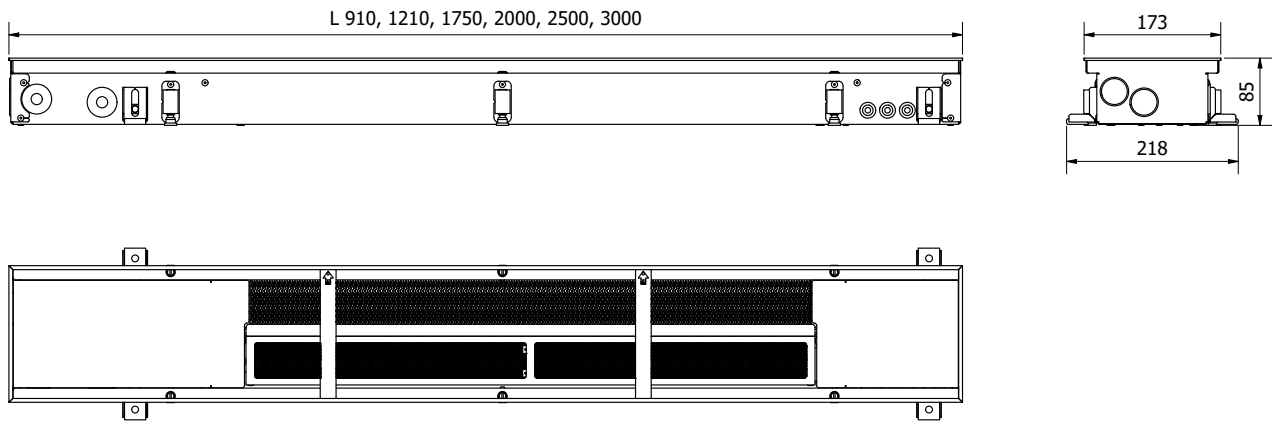
- ① Thermostatic valve, straight ② Thermostatic valve actuator ③ Angle lockshield valve

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, m ³ /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	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m ³ /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 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	
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	

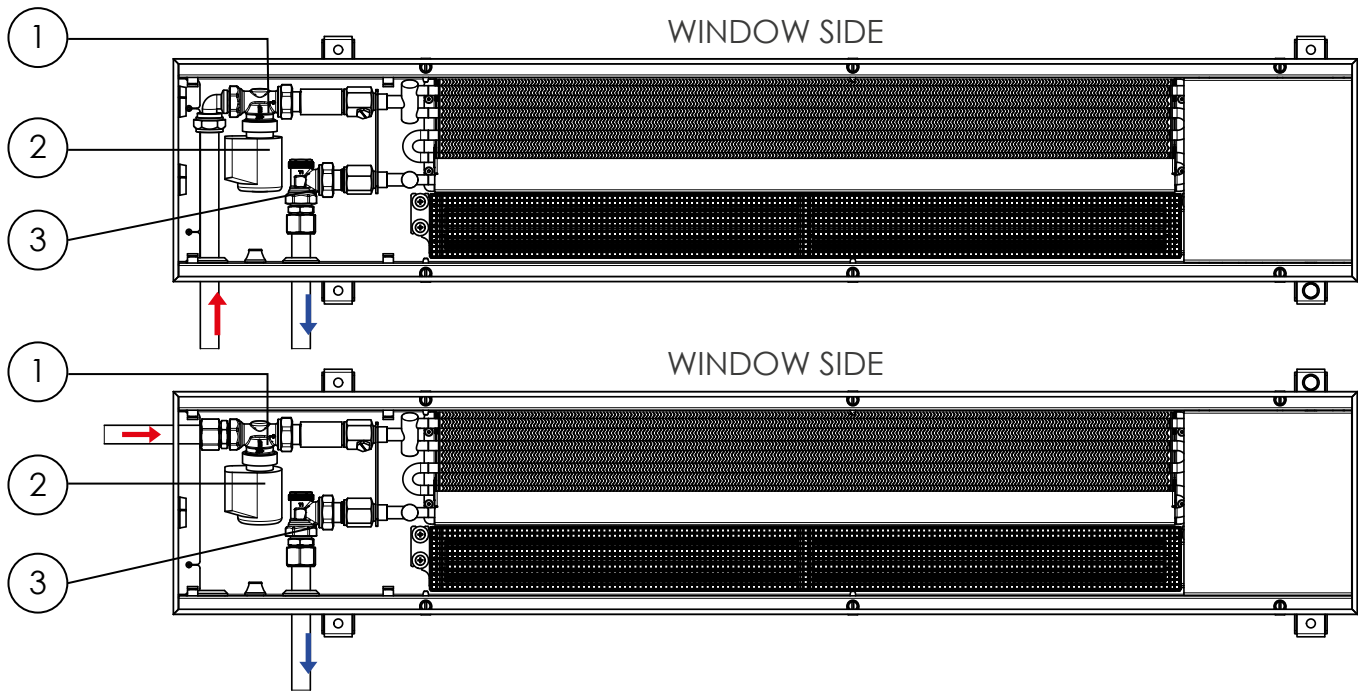
Heat outputs at specific temperatures are available in Selection tables at www.konveka.com

Pressure losses

Length, cm	MAX flow, l/h	MAX power, W	Formulas for pressure losses, Pa	MAX pressure losses, Pa
91	84	979	$0,41 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	348
121	146	1 695	$0,71 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	1 377
175	251	2 922	$1,22 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	6 892
200	304	3 538	$1,48 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	12 375
250	410	4 765	$2,00 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	30 929
300	517	6 007	$2,52 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	63 064

q – Flow of energy carrier (l/h)

EXAMPLE OF CONNECTIONS



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

INSTALLATION FEATURES

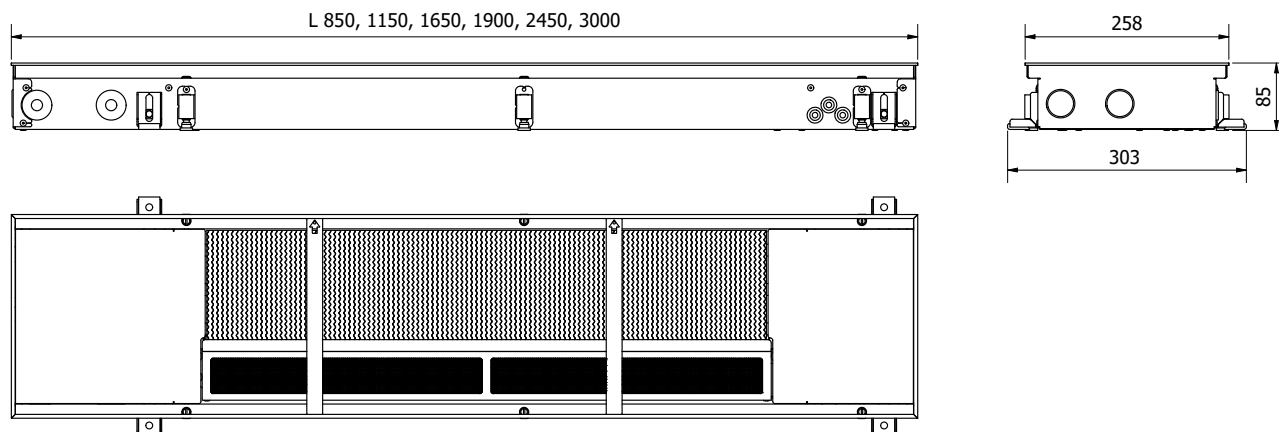
- Side with heat exchanger is always mounted closer to the window (wall)
- Energy carrier supply pipes has to be connected to heat exchangers connectors which are further from the fans
- Energy carrier outlet pipes has to be connected to heat exchangers connectors which are closer to the fans
- Height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

ORDER CODE

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

FH4-L3

FH4-L3



TECHNICAL DATA

Length	850-3000 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, m ³ /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	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m ³ /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 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	
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 300									
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	

Heat outputs at specific temperatures are available in Selection tables at www.konveka.com

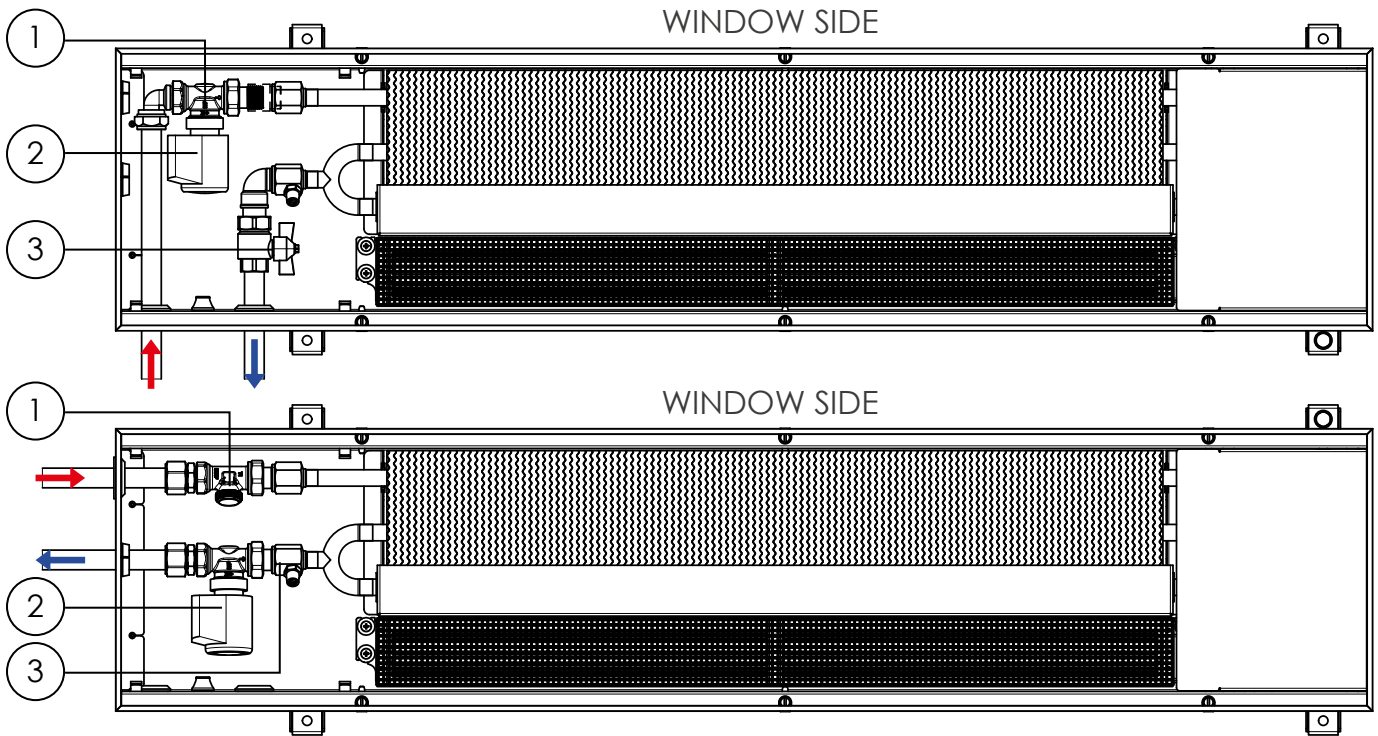
Pressure losses

Length, cm	MAX flow, l/h	MAX power, W	Formulas for pressure losses, Pa	MAX pressure losses, Pa
85	77	901	$0,41 \times (0,0017 \times q^2 + 0,3853 \times q + 1,0716)$	17
115	134	1 560	$0,71 \times (0,0017 \times q^2 + 0,3853 \times q + 1,0716)$	59
165	231	2 689	$1,22 \times (0,0017 \times q^2 + 0,3853 \times q + 1,0716)$	222
190	280	3 255	$1,48 \times (0,0017 \times q^2 + 0,3853 \times q + 1,0716)$	359
245	377	4 385	$2,00 \times (0,0017 \times q^2 + 0,3853 \times q + 1,0716)$	774
300	475	5 527	$2,52 \times (0,0017 \times q^2 + 0,3853 \times q + 1,0716)$	1 429

q – Flow of energy carrier (l/h)

EXAMPLE OF CONNECTIONS

FH4-L3



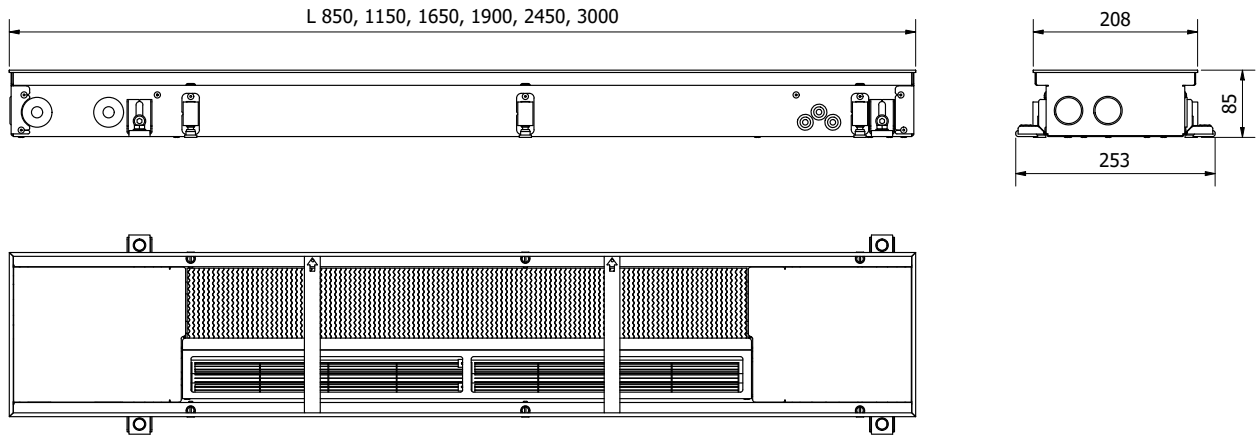
- ① Thermostatic valve, straight ② Thermostatic valve actuator ③ Straight lockshield valve

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	850-3000 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, m ³ /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	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m ³ /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 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	
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 300									
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	

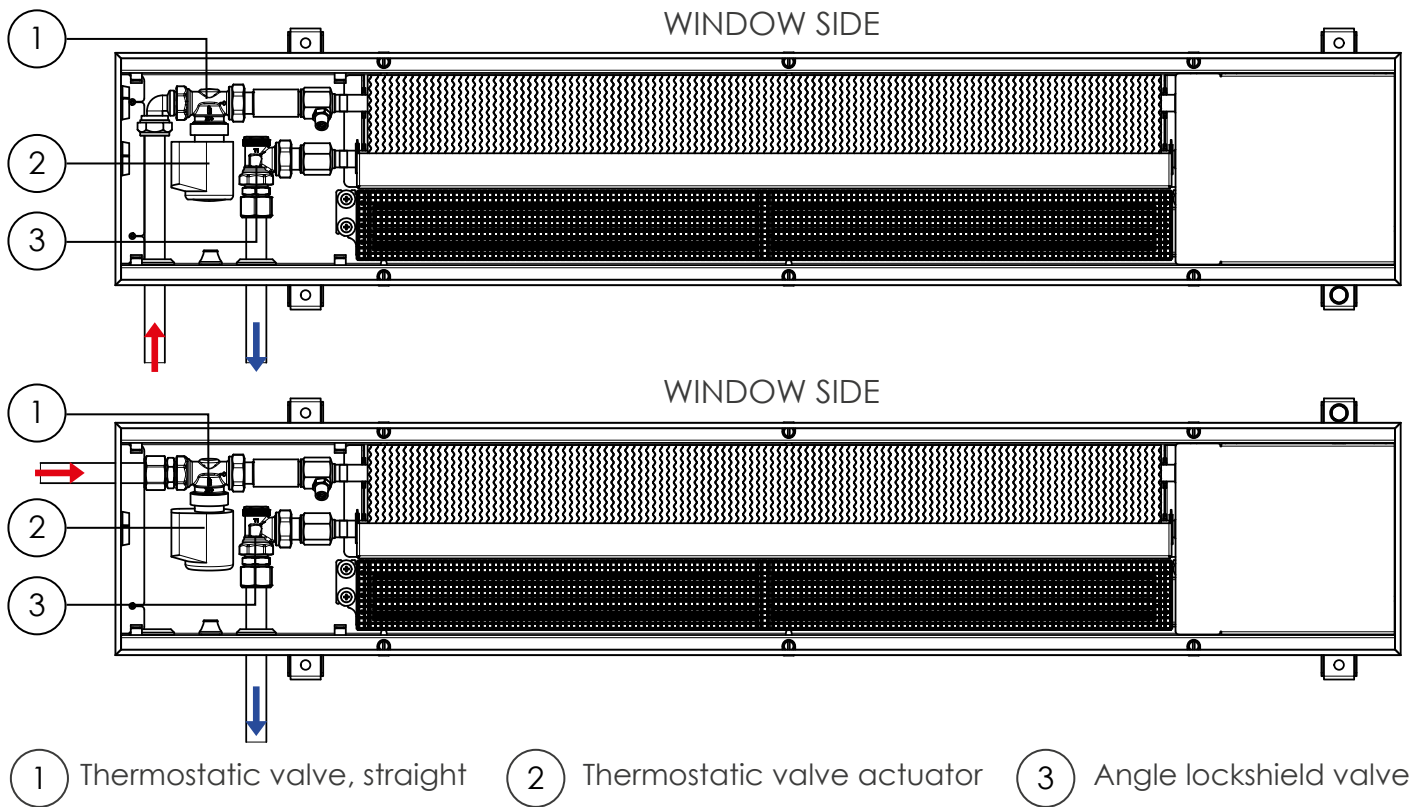
Heat outputs at specific temperatures are available in Selection tables at www.konveka.com

Pressure losses

Length, cm	MAX flow, l/h	MAX power, W	Formulas for pressure losses, Pa	MAX pressure losses, Pa
85	99	773	$0,41 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	14
115	171	1 339	$0,71 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	69
165	295	2 308	$1,22 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	343
190	357	2 795	$1,48 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	603
245	481	3 764	$2,00 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	1 456
300	606	4 745	$2,52 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	2 894

q – Flow of energy carrier (l/h)

EXAMPLE OF CONNECTIONS



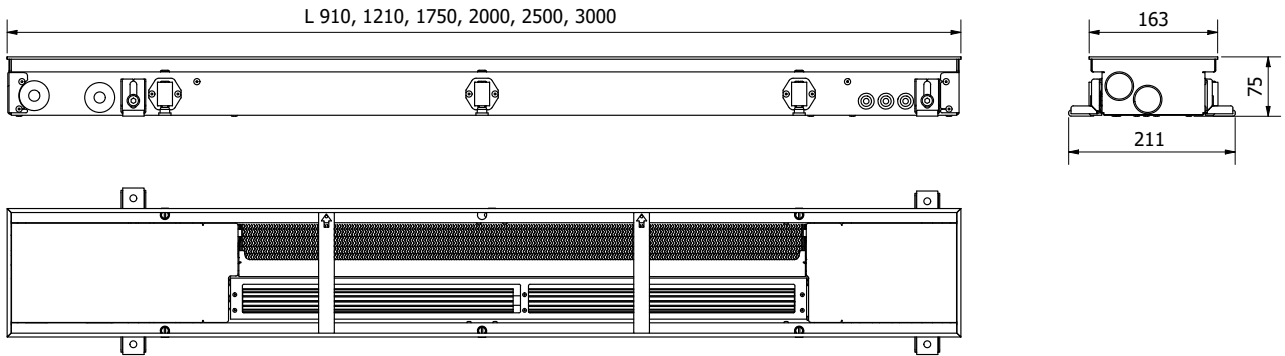
FH4-L2

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, m ³ /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	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m ³ /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 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	
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	

Heat outputs at specific temperatures are available in Selection tables at www.konveka.com

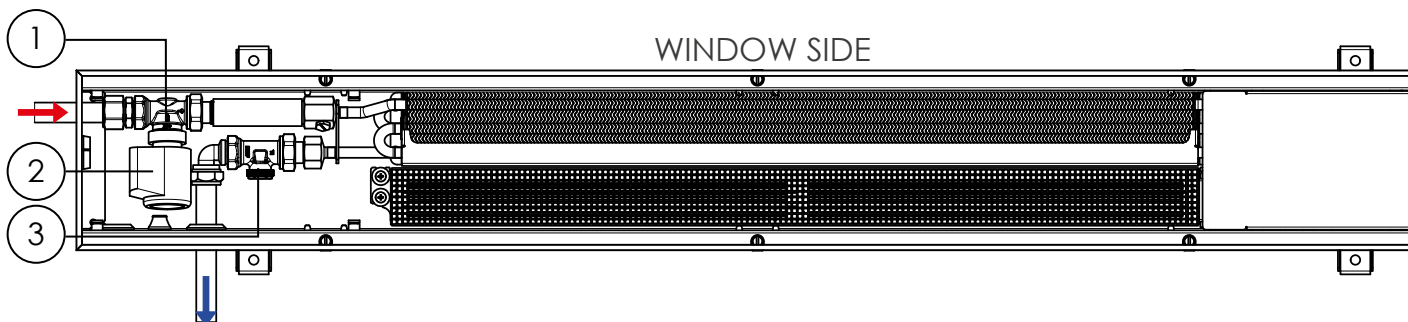
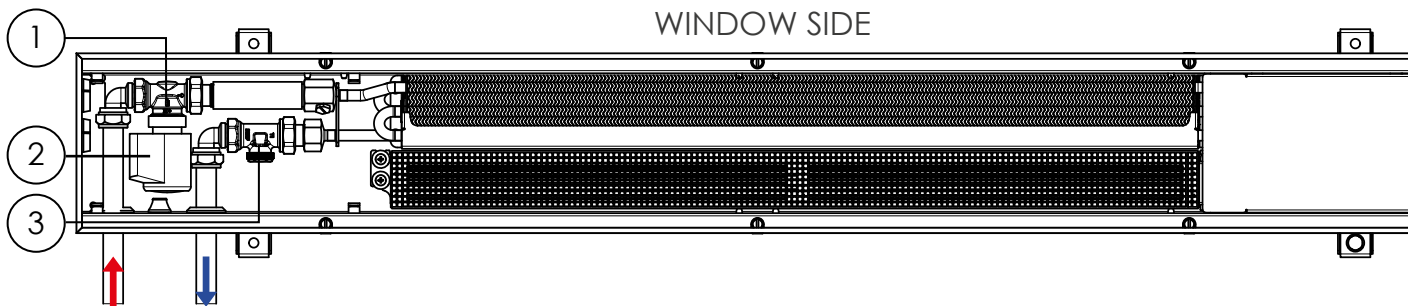
Pressure losses

Length, cm	MAX flow, l/h	MAX power, W	Formulas for pressure losses, Pa	MAX pressure losses, Pa
91	53	617	$0,41 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	244
121	92	1 069	$0,71 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	669
175	158	1 842	$1,22 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	2 767
200	192	2 230	$1,48 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	4 841
250	258	3 004	$2,00 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	11 891
300	326	3 786	$2,52 \times (0,1033 \times q^2 - 6,0365 \times q + 625,15)$	24 178

q – Flow of energy carrier (l/h)

EXAMPLE OF CONNECTIONS

FH3-H



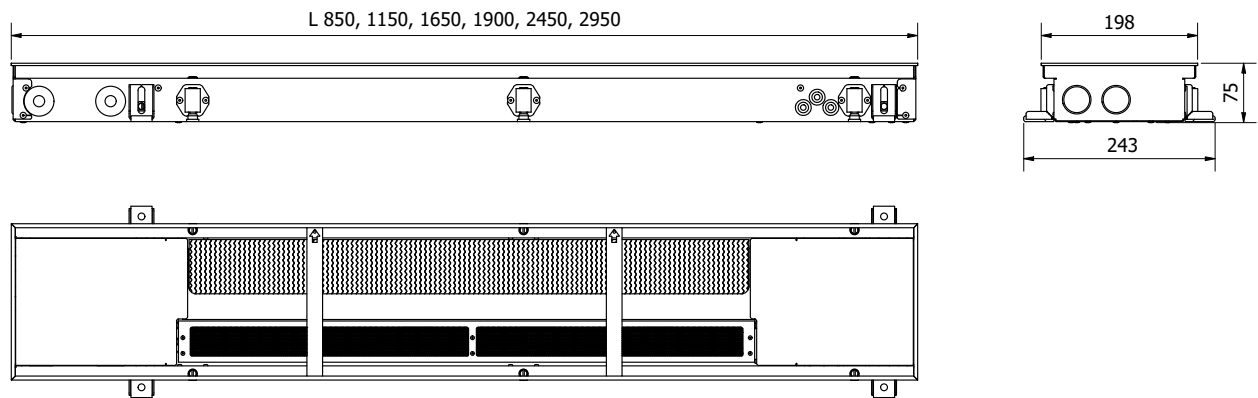
- ① Thermostatic valve, straight ② Thermostatic valve actuator ③ Straight lockshield valve

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	850-3000 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	

Fan speed	Heat output, W			Sound pressure level, dB(A)	Max. air flow, m ³ /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 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	
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 300									
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	

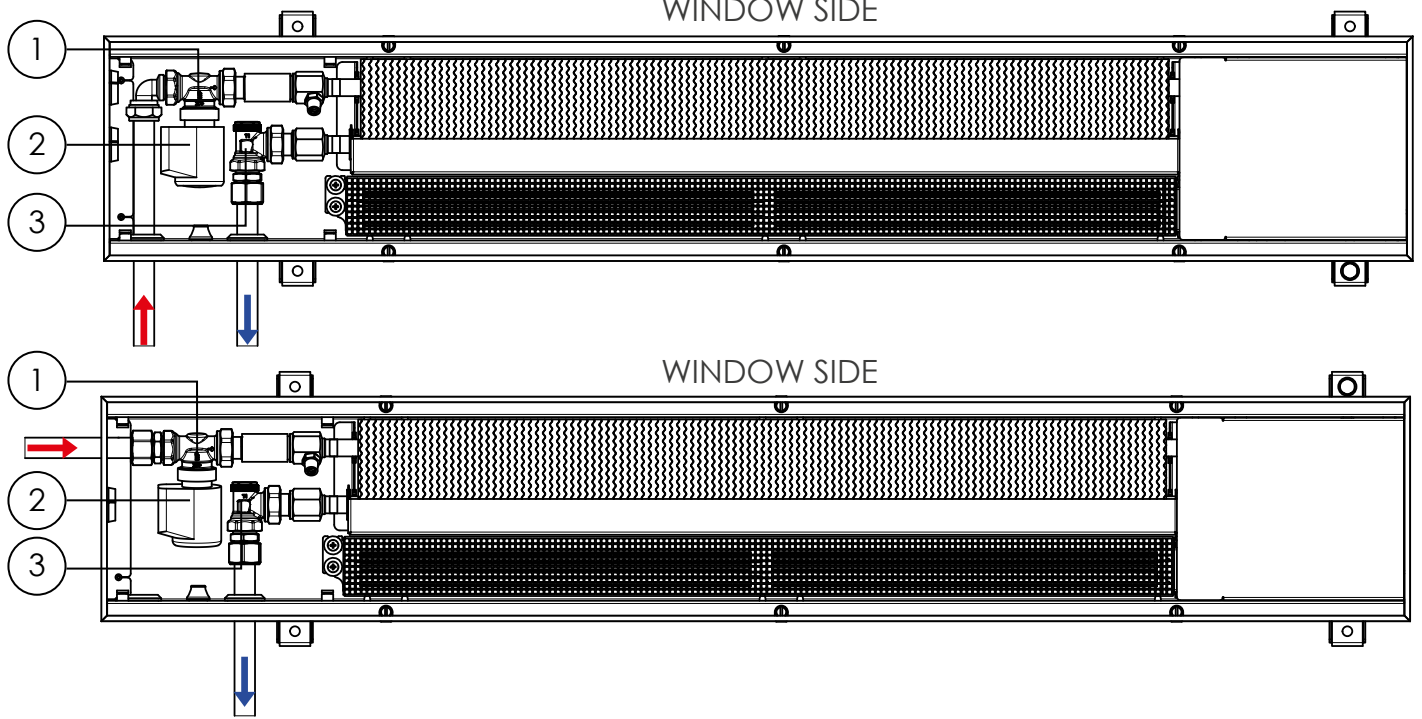
Heat outputs at specific temperatures are available in Selection tables at www.konveka.com

Pressure losses

Length, cm	MAX flow, l/h	MAX power, W	Formulas for pressure losses, Pa	MAX pressure losses, Pa
85	50	577	$0,41 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	8
115	86	998	$0,71 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	39
165	148	1 721	$1,22 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	194
190	179	2 084	$1,48 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	340
245	241	2 807	$2,00 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	819
300	304	3 538	$2,52 \times (0,0067 \times q^2 + 0,0917 \times q - 2,1454)$	1 625

q – Flow of energy carrier (l/h)

EXAMPLE OF CONNECTIONS



FH3-L

- 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

ACCESSORIES

THERMOSTATIC VALVE **TVS15**

Controls flow of energy carrier. Controlled by thermal actuator A24NC



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 **A24NC**

Opens / closes thermostatic valve. Controlled by room thermostat TW24



Opening/closing of thermostatic valves (ON/OFF)

Thermoelectric

Opened/Closed indicator

Voltage 24V DC

ROOM THERMOSTAT **TW24**

Controls thermal actuator A24NC 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 A24NC and room thermostat TW24



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

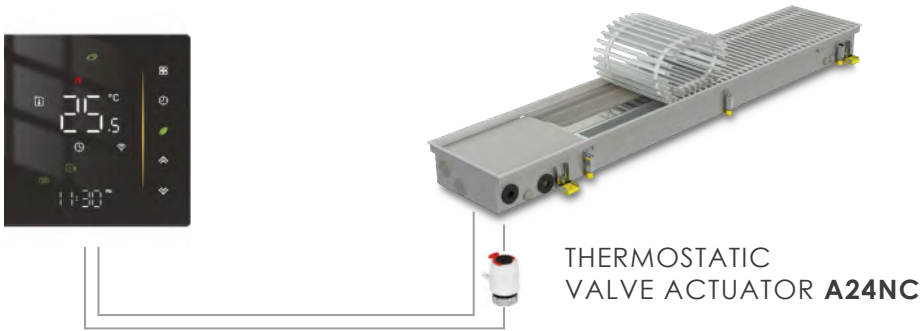
ORDER CODES

Accessory	Order code
Thermostatic valve	TVS15
Thermostatic valve actuator	A24NC
Lockshield valve (angle)	LA15
Lockshield valve (straight)	LS15
Room thermostat	TW24
Electric control box	CB20

CONNECTING ONE FH TO ROOM THERMOSTAT

ROOM THERMOSTAT **TW24**

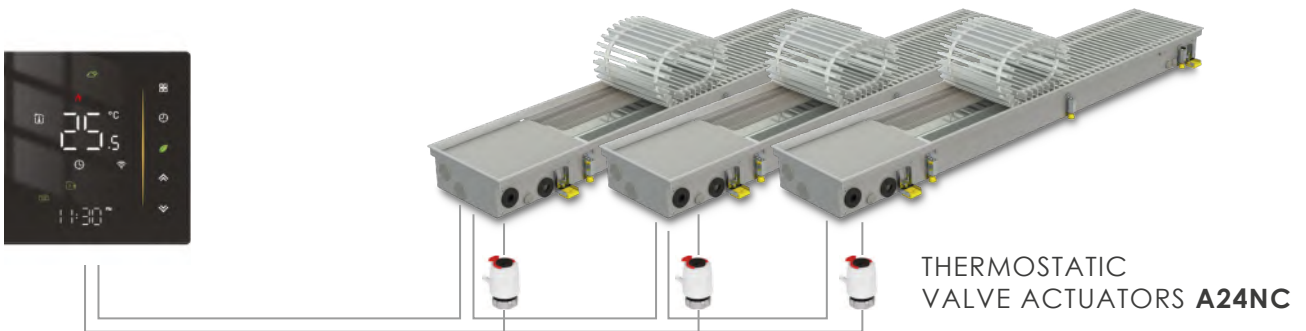
TRENCH HEATER **FH**



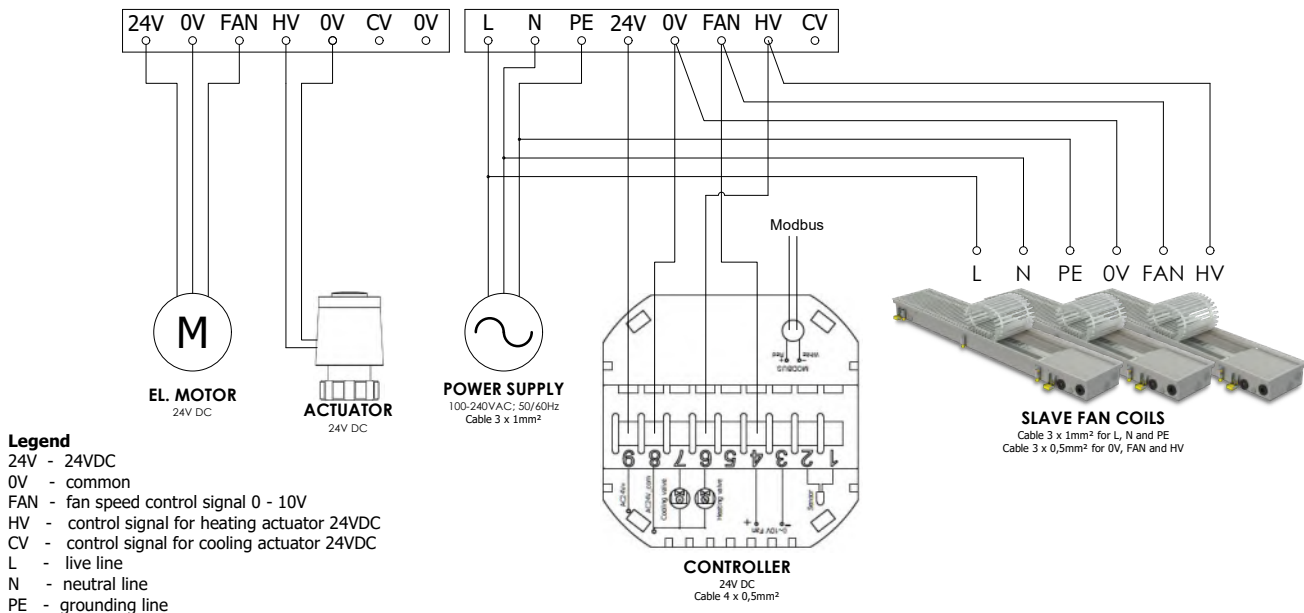
CONNECTING MULTIPLE FH TO ROOM THERMOSTAT

ROOM THERMOSTAT **TW24**

TRENCH HEATERS **FH** (UP TO 30 PCS)



WIRING DIAGRAM



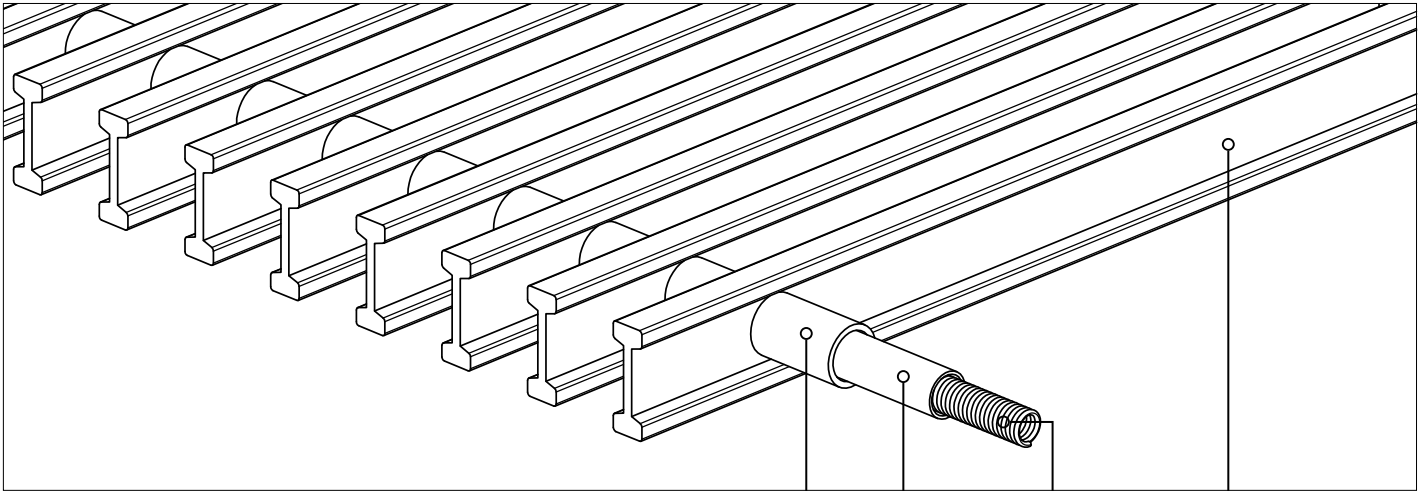
- Trench heaters installed in the same room are controlled based on Master-Slave principle
- Speed of fans are controlled 0-10 V by room thermostat. Voltage – 24VDC

- Valve actuators are controlled ON/OFF by room thermostat. Voltage – 24VDC
- Up to 30 trench heaters can be controlled with one room thermostat TW24

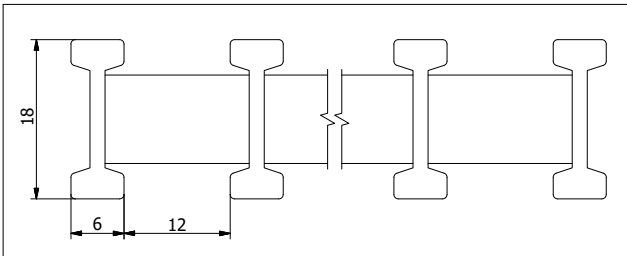
GRILLES

ALUMINIUM ROLL-UP GRILLES

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

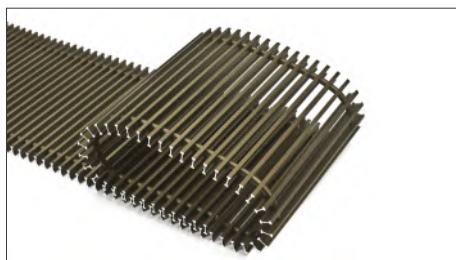
3 Spring

4 Flexible protective pipe

SILVER (ALS)



BROWN (AL 10)



BLACK (AL 50)



ALUMINIUM LINEAR GRILLES

SILVER (ALS)



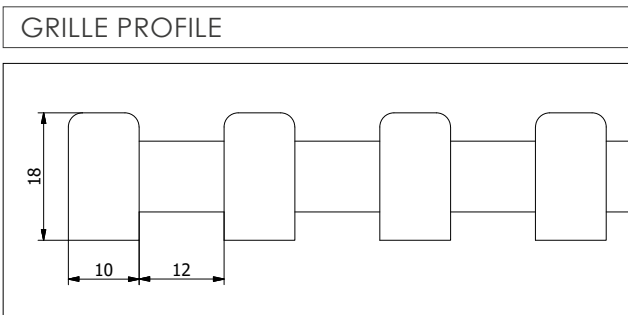
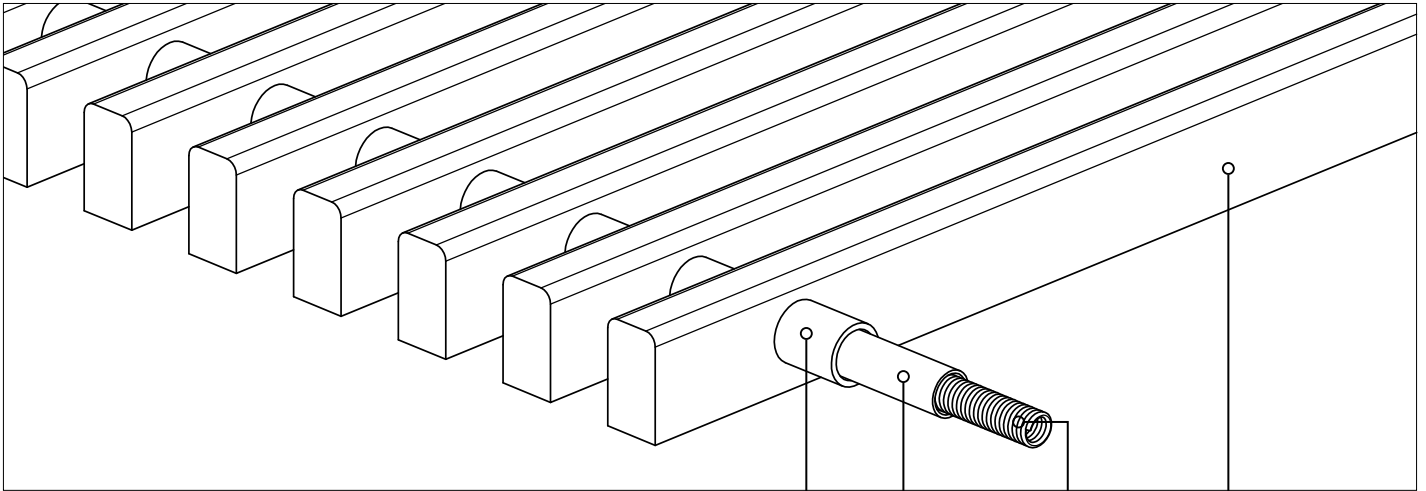
BROWN (AL 10)



BLACK (AL 50)



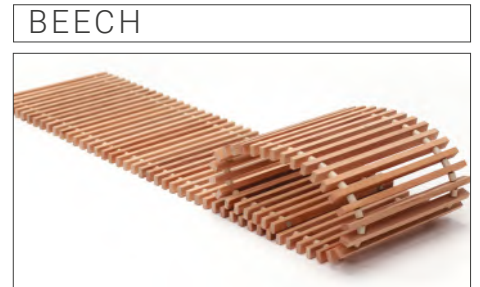
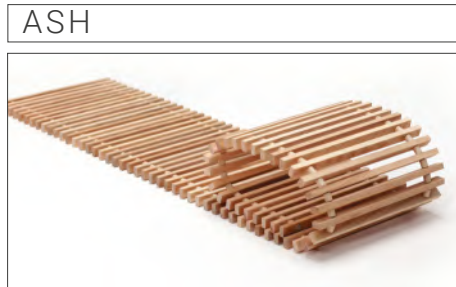
WOODEN ROLL-UP GRILLES



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	115	21,6	ALS	GR 115-21,6 ALS

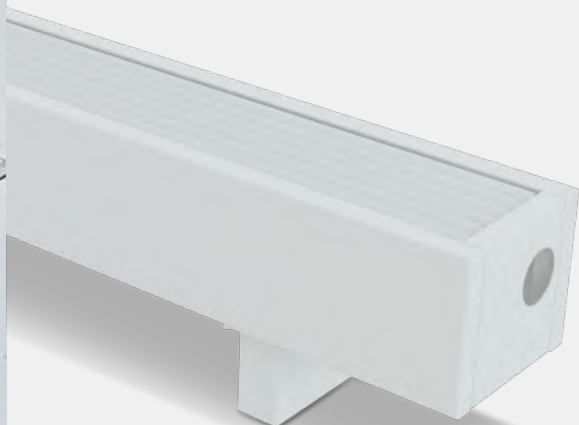


FREESTANDING CONVECTORS SC

 FOR HEATING

 NATURAL CONVECTION

- 288 models x 2 types
- Perfect for rooms where installation of trench convectors not possible or not necessary
- Attractive classic design
- Tested according to EN442 in independent accredited laboratory
- 10 year warranty for heat exchangers
- Safe casings - all sharp edges are rounded
- Low heights (from 14,5 cm) - not obstructive for large windows
- Exceptional rigidity: can withstand weight of few people
- Highly efficient, rapid and economic copper - aluminium heat exchangers
- Possibility to install on the floor or on the wall
- Good compatibility with heat pumps
- Low surface temperature even at maximum heating output
- Easy installation and maintenance



2024



SC

FREESTANDING CONVECTORS **SC**

Freestanding convectors SC operate on the principle of **natural convection** and are an economic alternative to trench heaters. Their heating capacity is high, which means they may be used as the main heaters for low to medium energy performance buildings.

Due to **extremely low inertia**, can quickly increase and precisely maintain the set room temperature, **providing the room with exactly as much heat as you require just when it is required.**

Create an effective warm air curtain for large windows, without allowing cold to penetrate the premises. The heat is perfectly distributed throughout the room.

The standard colour is white, but they **are also available in other RAL standard colours on request.**

Classic design and wide range of colour options **allow** the convectors to be **adapted to a wide range of the interior designs and styles**, while the low casing will **not obstruct the view through the window.**

The casings are **safe**: they have no sharp edges and do not reach temperatures over 40°C.

The design is simple and has been created for a **fast and easy installation.**

SC



10-year warranty for heat exchangers

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



Tested according to EN442

The outputs of freestanding convectors SC have been tested by independent accredited laboratories according to the latest standards.

With us, 1 kW means 1 kW.



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**. Konveka devices easily withstand hydraulic tests and hydraulic shocks and can be installed in extremely tall buildings.



Noiseless

Completely noiseless operation



Reinforced casings

Casings of convectors SC are very sturdy: they can maintain the weight of few people



Small water content

Due to small water content convectors SC have extremely low inertia. Thus, they precisely maintain set room temperature avoiding redundant overheating



Easy and fast installation

Convectors SC designed for easy and fast installation and maintenance



OVERVIEW

STANDARD SET 5

TECHNICAL DETAILS 6

288 models

Length from 60 to 290 cm

Width 15, 20 and 25 cm

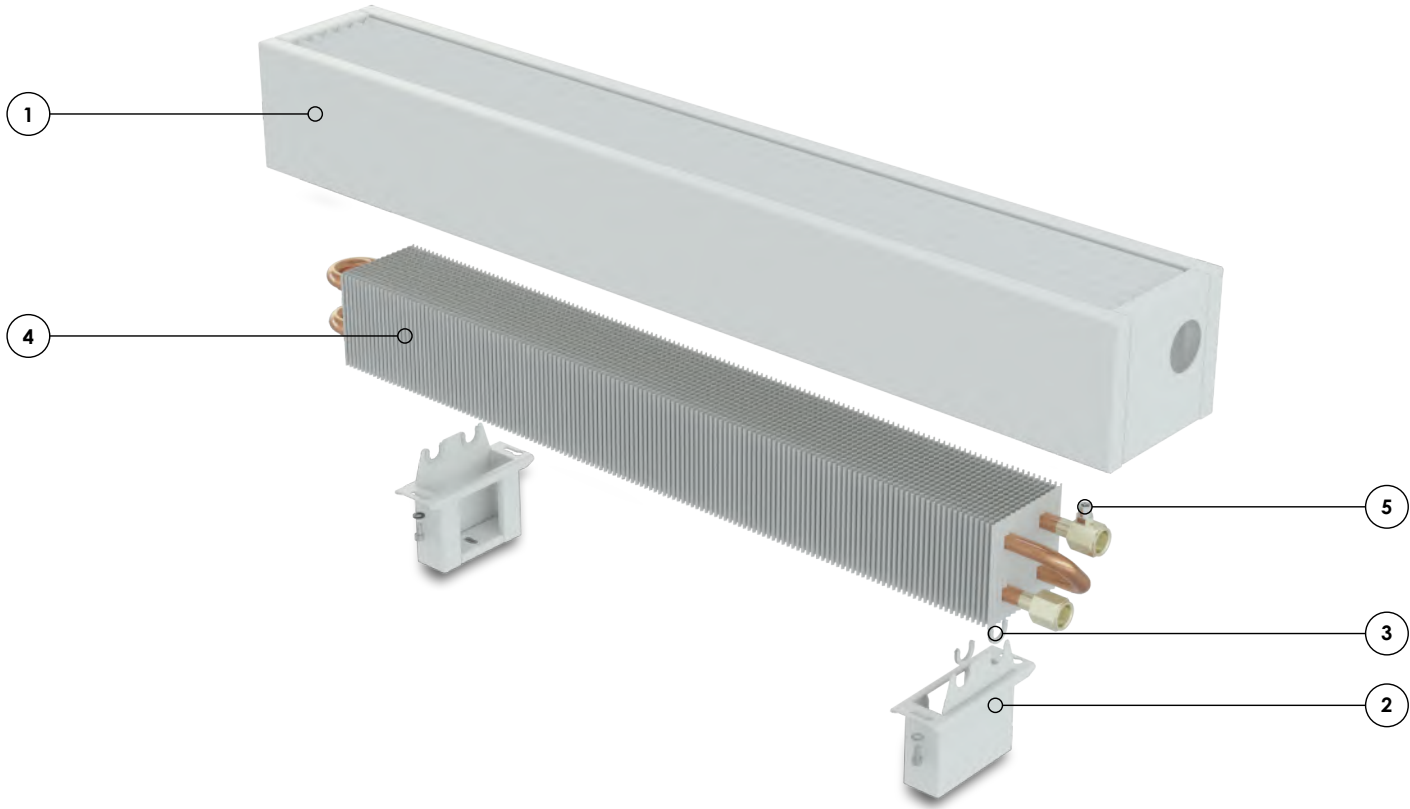
Height 14,5; 21,5; 26,5 and 33 cm

Heat output up to 5 095 W

ACCESSORIES 8

ABOUT KONVEKA 9

STANDARD SET

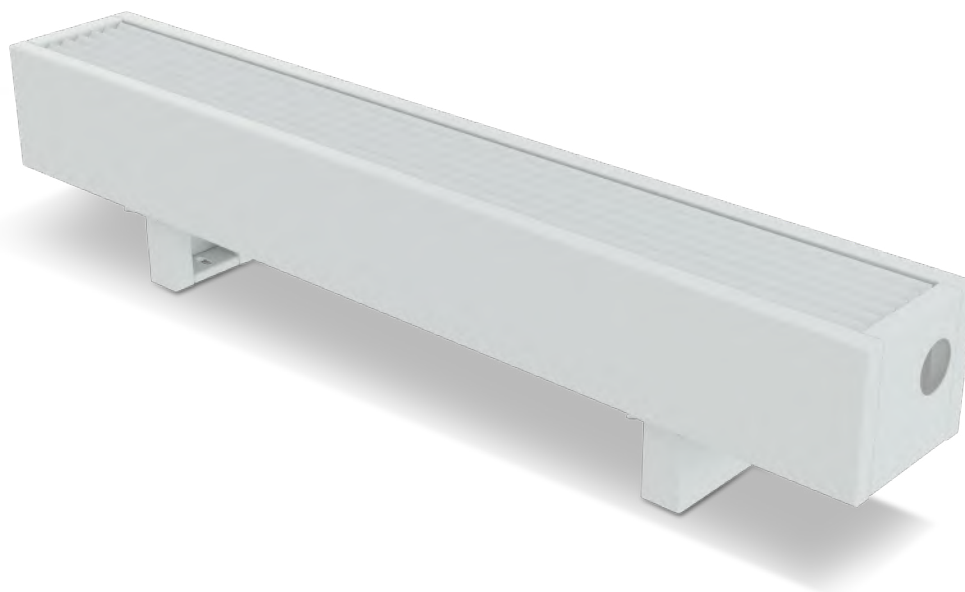


- ① Powder coated steel casing
- ② Powder coated steel brackets
- ③ Heat exchanger fixing-protection elements
- ④ Copper aluminium heat exchanger
- ⑤ Air vent

All fasteners required for installation
 Installation manual
 5 layer 2 parts cardboard box, additionally used for device protection during installation and construction works

SC

TECHNICAL DETAILS



Dimensions

Length	from 60 to 290 cm
Width	15, 20 and 25 cm
Height	14,5; 21,5; 26,5 and 33 cm

Colour

Standard colour	white, RAL 9016
	any RAL colour - optional

Connections to the heating system

Heat exchanger thread	G 1/2" (inner)
Standard connection side	right
Optional connection side	left

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

EN442 certified heat outputs, W (75/65/20°C)

Width, cm	Height, cm	Length, cm																							
		60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290
15	14,5	178	223	269	314	359	404	449	494	539	585	630	675	720	765	810	855	901	946	991	1 036	1 081	1 126	1 171	1 217
	21,5	272	341	410	479	548	617	686	755	824	893	962	1 031	1 100	1 169	1 238	1 307	1 376	1 445	1 514	1 583	1 652	1 721	1 790	1 859
	26,5	324	407	489	571	653	735	817	900	982	1 064	1 146	1 228	1 310	1 392	1 475	1 557	1 639	1 721	1 803	1 885	1 968	2 050	2 132	2 214
	33	377	472	567	663	758	853	948	1 044	1 139	1 234	1 330	1 425	1 520	1 616	1 711	1 806	1 902	1 997	2 092	2 188	2 283	2 378	2 474	2 569
20	14,5	267	335	403	471	538	606	674	741	809	877	945	1 012	1 080	1 148	1 215	1 283	1 351	1 419	1 486	1 554	1 622	1 689	1 757	1 825
	21,5	409	512	616	719	823	926	1 029	1 133	1 236	1 340	1 443	1 547	1 650	1 754	1 857	1 961	2 064	2 168	2 271	2 374	2 478	2 581	2 685	2 788
	26,5	487	610	733	856	980	1 103	1 226	1 349	1 473	1 596	1 719	1 842	1 965	2 089	2 212	2 335	2 458	2 582	2 705	2 828	2 951	3 074	3 198	3 321
	33	562	704	846	988	1 130	1 273	1 415	1 557	1 699	1 841	1 984	2 126	2 268	2 410	2 552	2 695	2 837	2 979	3 121	3 263	3 406	3 548	3 690	3 832
25	14,5	373	467	562	656	750	845	939	1 034	1 128	1 222	1 317	1 411	1 505	1 600	1 694	1 789	1 883	1 977	2 072	2 166	2 261	2 355	2 449	2 544
	21,5	571	715	860	1 004	1 148	1 293	1 437	1 582	1 726	1 871	2 015	2 160	2 304	2 448	2 593	2 737	2 882	3 026	3 171	3 315	3 460	3 604	3 749	3 893
	26,5	659	825	992	1 159	1 326	1 492	1 659	1 826	1 993	2 160	2 326	2 493	2 660	2 827	2 993	3 160	3 327	3 494	3 660	3 827	3 994	4 161	4 327	4 494
	33	747	936	1 125	1 314	1 503	1 692	1 881	2 070	2 259	2 448	2 637	2 827	3 016	3 205	3 394	3 583	3 772	3 961	4 150	4 339	4 528	4 717	4 906	5 095

Heat outputs at specific temperatures are available at www.konveka.com

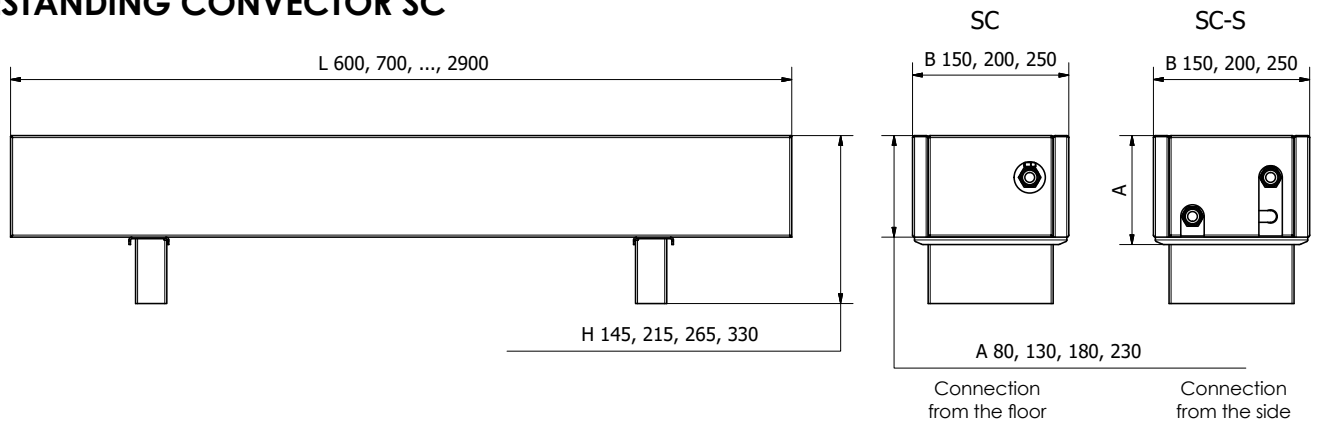
Pressure losses

Width, cm	Height, cm	MAX flow	MAX power	Formulas for pressure losses, Pa
15	8	122	1 420	$(L-0,2) \times (0,0074 \times q^2 - 0,0501 \times q + 0,0796)$
	13	190	2 204	$(L - 0,2) \times (0,0078 \times q^2 + 1,309 \times q - 20,44)$
20	18	226	2 627	$(L-0,2) \times (0,0111 \times q^2 + 2,2429 \times q - 58,22)$
	23	246	2 858	$(L-0,2) \times (0,0157 \times q^2 + 2,6179 \times q - 40,88)$
	8	171	1 986	$(L - 0,24) \times (0,0022 \times q^2 + 0,304 \times q + 4,12)$
	13	265	3 083	$(L - 0,2) \times (0,0111 \times q^2 + 2,2429 \times q - 58,22)$
	18	316	3 676	$(L - 0,24) \times (0,0084 \times q^2 + 0,5728 \times q + 14,976)$
25	23	344	3 998	$(L - 0,2) \times (0,0301 \times q^2 + 1,8654 \times q + 5,7952)$
	8	239	2 779	$(L - 0,2) \times (0,0078 \times q^2 + 1,309 \times q - 20,44)$
	13	371	4 314	$(L-0,2) \times (0,0157 \times q^2 + 2,6179 \times q - 40,88)$
	18	442	5 142	$(L - 0,2) \times (0,0301 \times q^2 + 1,8654 \times q + 5,7952)$
	23	481	5 594	$(L-0,2) \times (0,0313 \times q^2 + 5,2215 \times q - 78,19)$

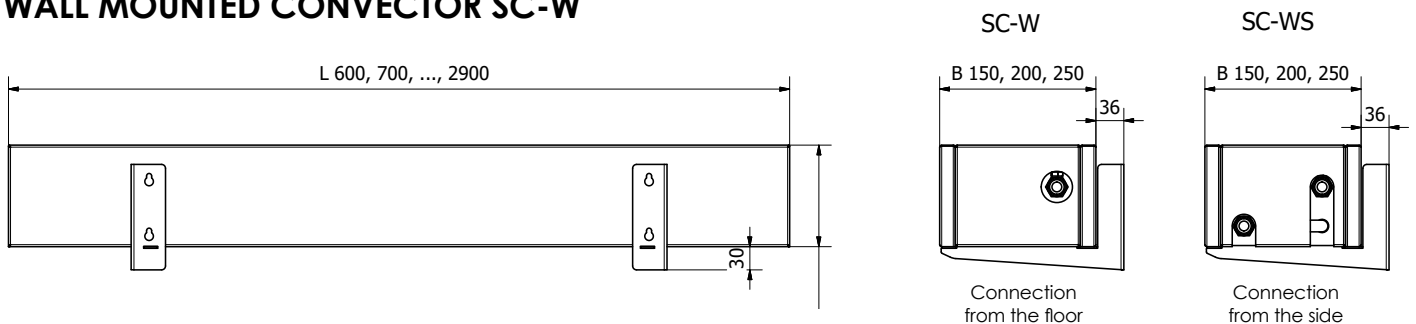
L – Length of trench heater (m) q – Flow of energy carrier (l/h)

DIMENSIONS

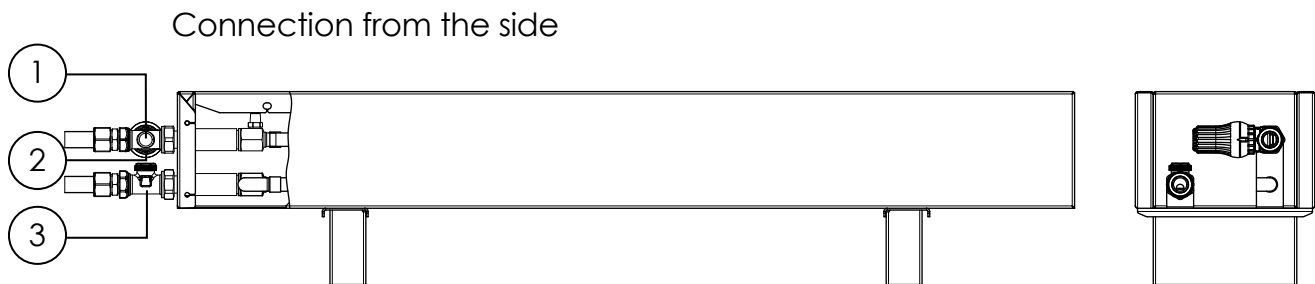
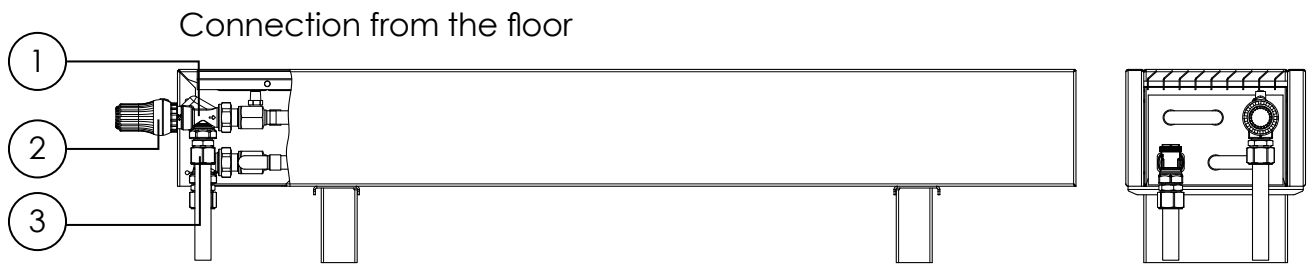
FREESTANDING CONVECTOR SC



WALL MOUNTED CONVECTOR SC-W



EXAMPLE OF CONNECTIONS



- ① Thermostatic valve, axial
 ② Thermostatic head
 ③ Angle lockshield valve

ORDER CODES

Type	Model	Length, cm	Width, cm	Height, cm	Example
Standing convector, connection from floor SC	SC	100	15	8	SC 100-15-08
Standing convector, connection from side SC-S	SC-S	100	15	8	SC-S 100-15-08
Wall mounted convector, connection from floor SC-W	SC-W	100	15	8	SC-W 100-15-08
Wall mounted convector, connection from side SC-WS	SW-WS	100	15	8	SC-WS 100-15-08

SC

ACCESSORIES

THERMOSTATIC VALVE (AXIAL) **TVA15**

Controls flow of energy carrier. Controlled by thermostatic head TH



Controls flow with thermostatic head

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

DN15 Kvs = 2,00

LOCKSHIELD VALVE (ANGLE) **LA15**

Opens, closes or limits flow of energy carrier



For energy carrier opening, closing and presetting of maximal flow

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

DN15 Kvs = 1,74

DN20 Kvs = 1,93

THERMOSTATIC HEAD **TH**

Controls preset room temperature



Temperature range 6°C - 28°C

Accuracy - 0,6K

Max temperature limitation

Frost protection

Thread - M30 x 1,5mm

Body material - ABS

ORDER CODES FOR ACCESSORIES

Accessory	Order code
Thermostatic valve (axial)	TVA15
Lockshield valve (angle)	LA15
Capillary thermostatic head	TH



Konveka, UAB
Vokieciu 185, LT-45251 Kaunas
Tel. +370 600 05968, +370 677 06303
Email: donatas@konveka.lt, sales@konveka.lt

www.konveka.com