

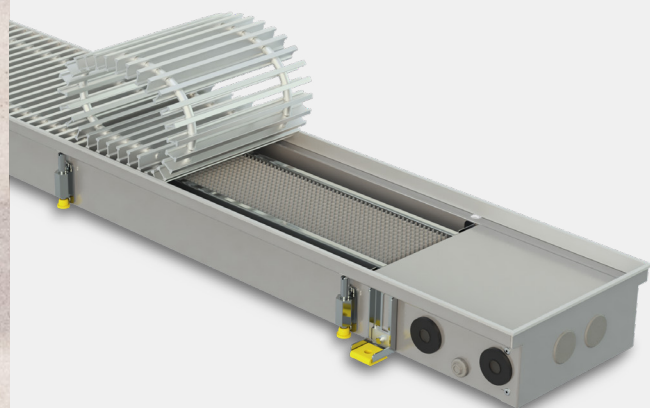


## TRENCH HEATERS FC

 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**.



25 BAR

### 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.



STAINLESS STEEL

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



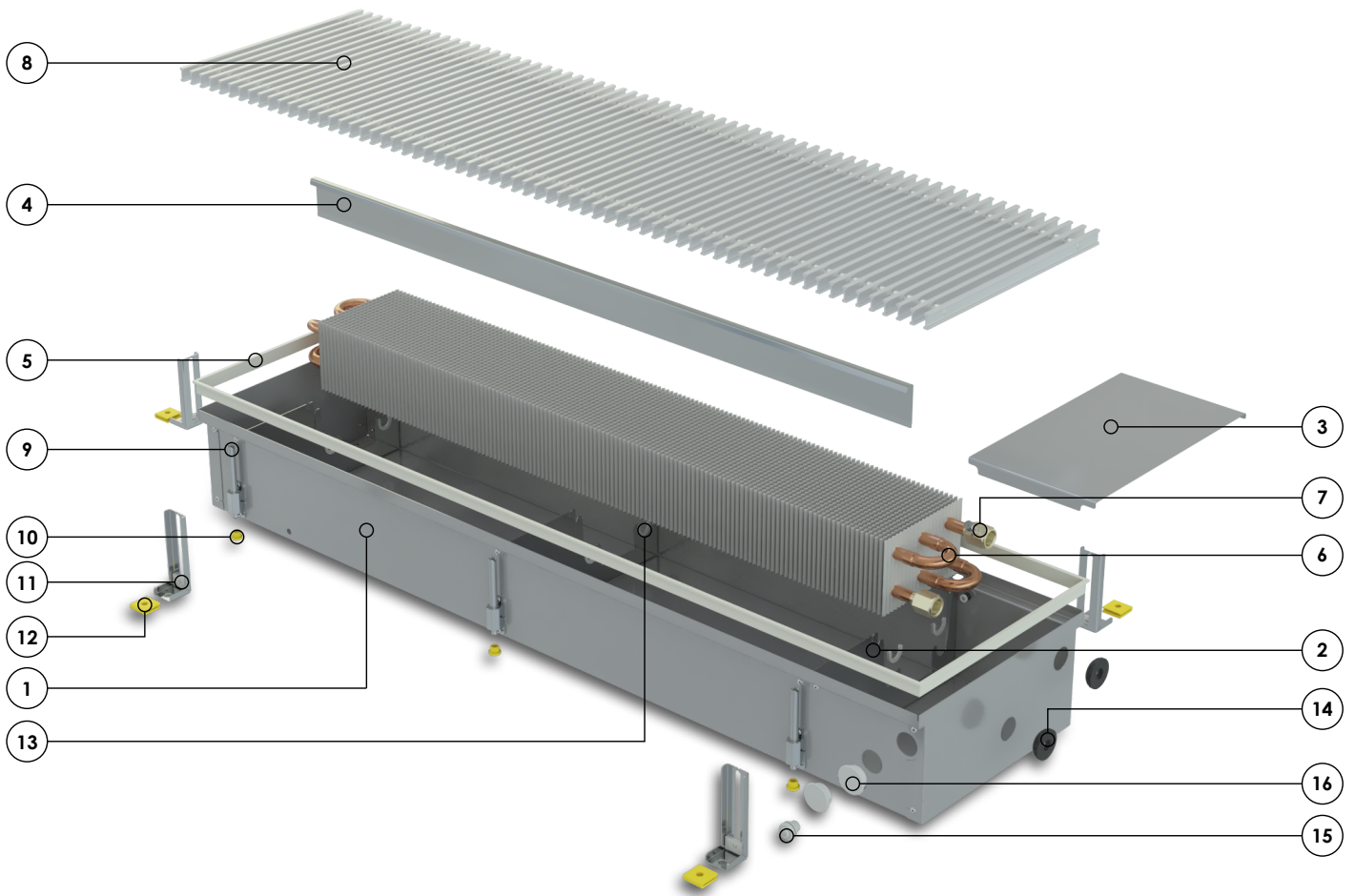
### Reinforced casings

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.

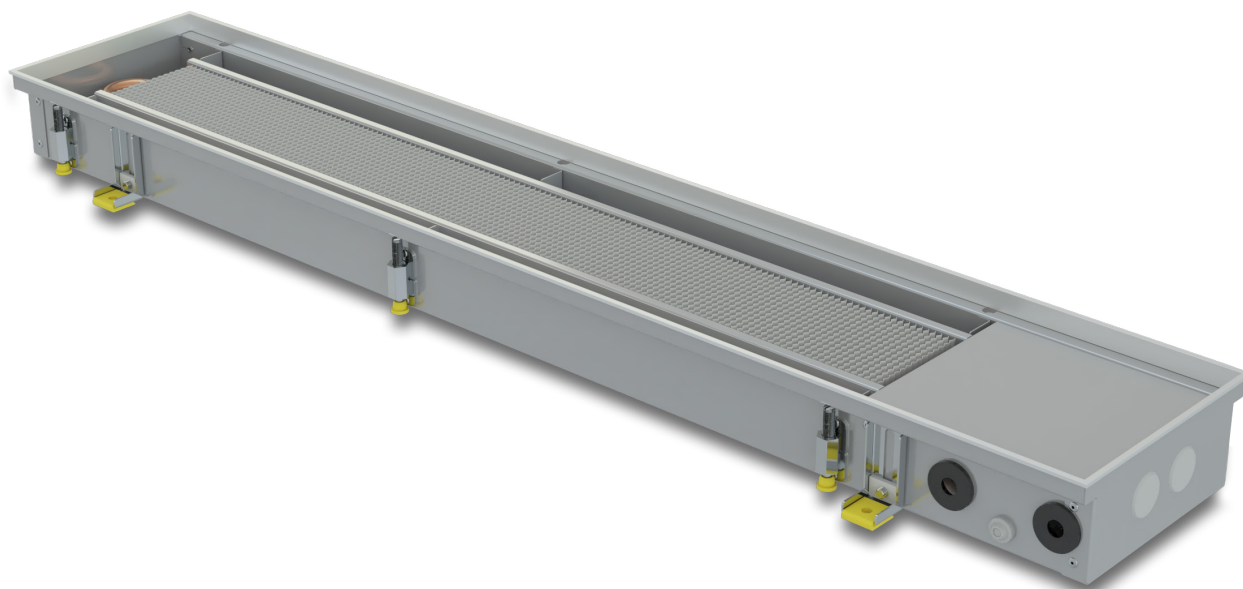
## STANDARD SET



- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>① Stainless steel casing</li> <li>② Casing stiffening elements</li> <li>③ Cover for hydraulic connections</li> <li>④ Air guiding element</li> <li>⑤ Anodized aluminium frame; colour match the colour of grille</li> <li>⑥ Copper - aluminium heat exchanger</li> <li>⑦ Air vent</li> <li>⑧ Protective - decorative grille (optional)</li> <li>⑨ Height adjustment and vertical load supporting bolts</li> <li>⑩ Noise isolating elements for adjusting bolts</li> </ul> | <ul style="list-style-type: none"> <li>⑪ Casing fixing to floor brackets</li> <li>⑫ Noise isolating elements for floor brackets</li> <li>⑬ Heat exchanger fixing and protection elements</li> <li>⑭ Pipe sealing and protection elements</li> <li>⑮ Cable sealing and protection elements</li> <li>⑯ Plugs for unused holes</li> </ul> <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

<b>FC</b> .....	6
396 models	
Length	from 80 to 500 cm
Width	22, 32 and 42 cm
Height	9, 11, 15, 30 and 45 cm
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### 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](http://www.konveka.com)



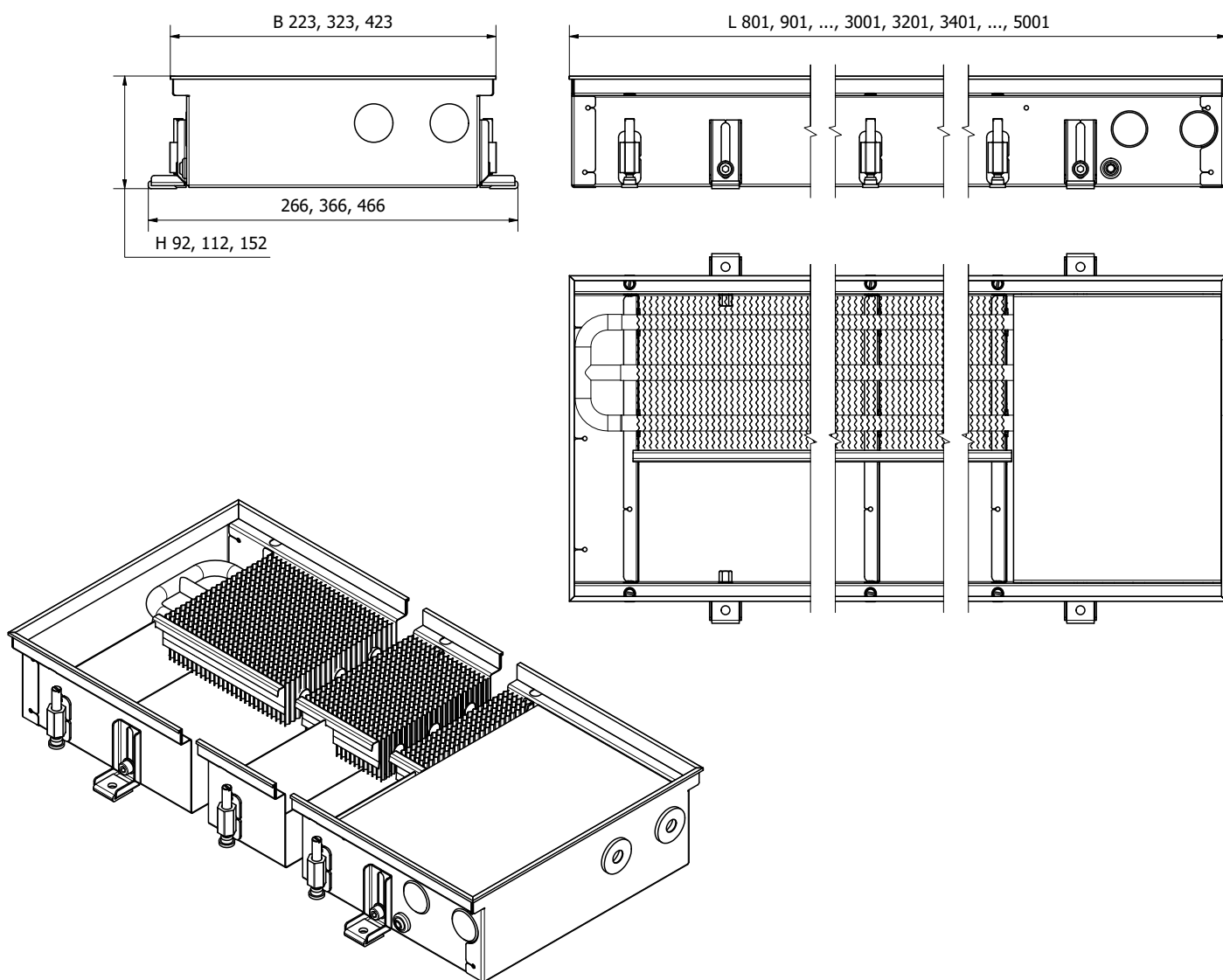
Pressure losses

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	$(L-0,245) \times (0,0157 \times q^2 + 2,6179 \times q - 40,88)$

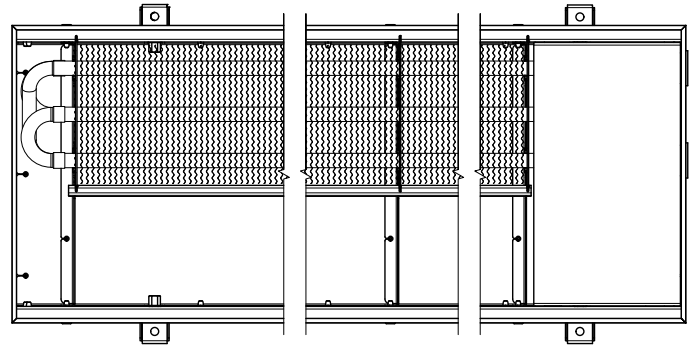
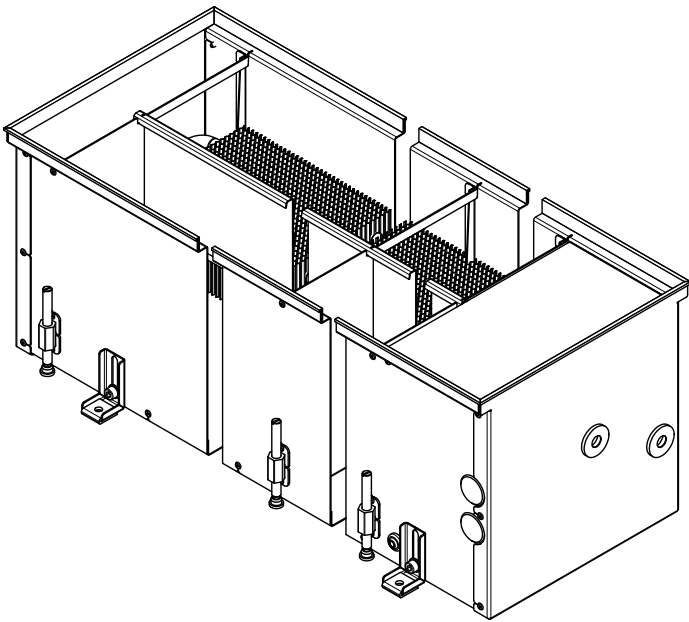
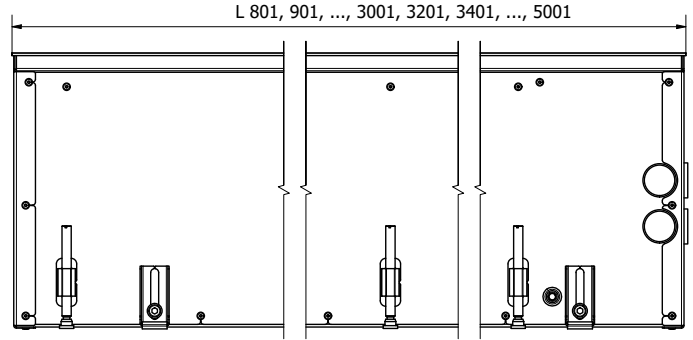
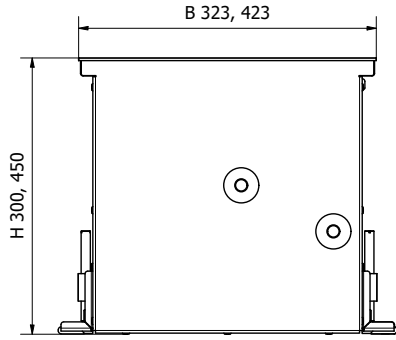
L – Length of trench heater (m) q – Flow of energy carrier (l/h)

**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

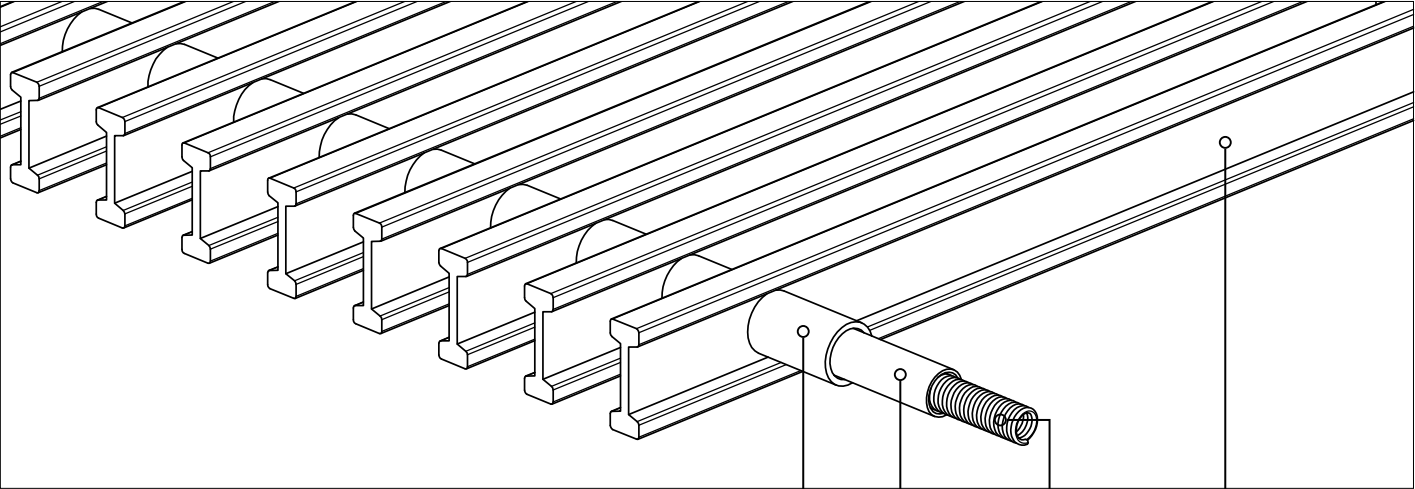
Body material - ABS

## ORDER CODES

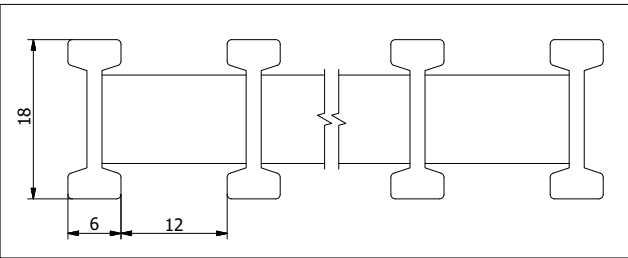
Accessory	Order code
Thermostatic valve	TVS15
Thermostatic valve actuator	A230NC
Lockshield valve (angle)	LA15
Lockshield valve (straight)	LS15
Room thermostat	TW230
Capillary thermostatic head	THC

# GRILLES

## ALUMINIUM ROLL-UP GRILLES



GRILLE PROFILE

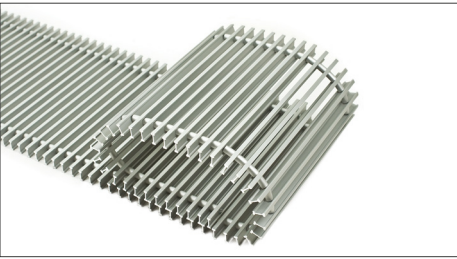


**1 Aluminium profile**  
 - made of anodized aluminium  
 - reinforced reversable double T profile

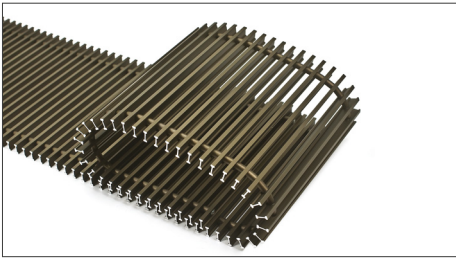
**2 Spacers**  
 - made of anodized aluminium  
 - does not shrink or crack when exposed on UV or heat  
 - the colour is exactly the same as colour of profiles

**3 Spring**  
**4 Flexible protective pipe**

SILVER (ALS)



BROWN (AL 10)

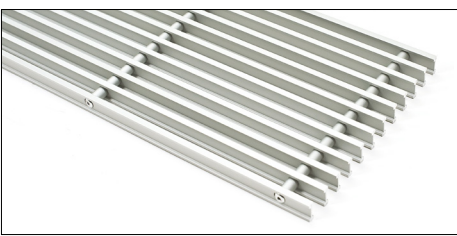


BLACK (AL 50)

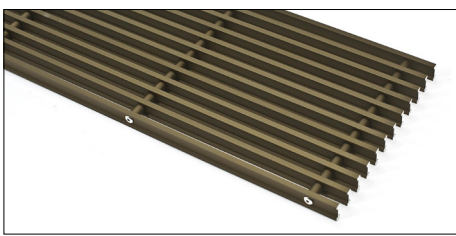


## ALUMINIUM LINEAR GRILLES

SILVER (ALS)



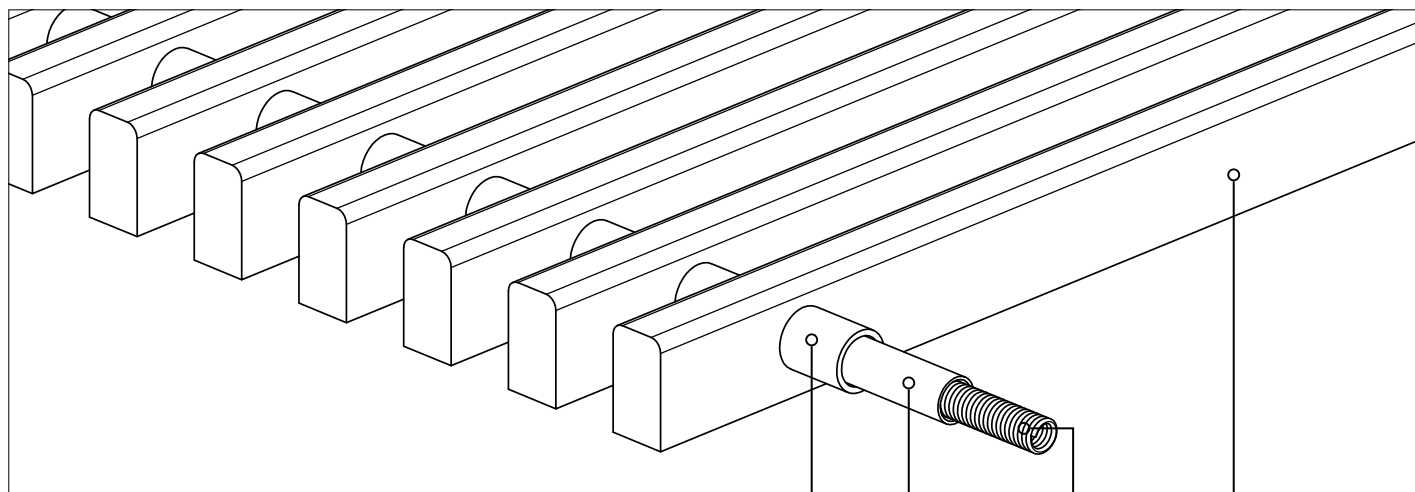
BROWN (AL 10)



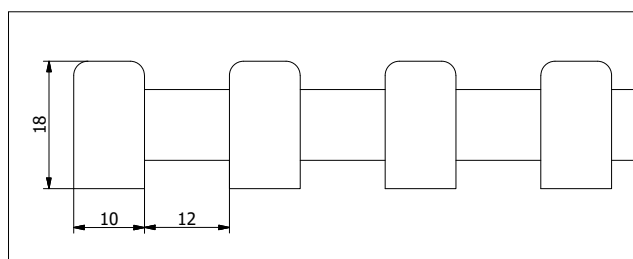
BLACK (AL 50)



## WOODEN ROLL-UP GRILLES



GRILLE PROFILE



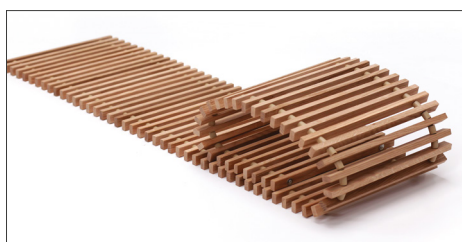
②      ④      ③      ①

① **Wooden profile**  
- made of solid wood

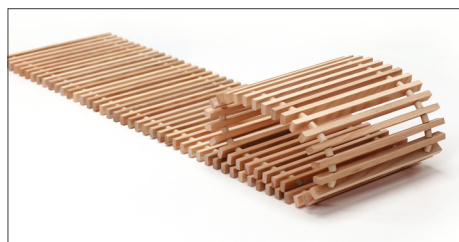
② **Spacers**  
- made of anodized aluminium  
- does not shrink or crack when  
exposed on UV or heat

③ **Spring**  
④ **Flexible protective pipe**

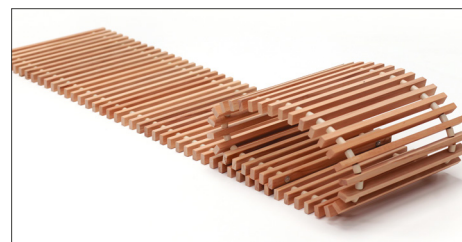
OAK



ASH



BEECH



## ORDER CODE FOR GRILLES

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

## 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:

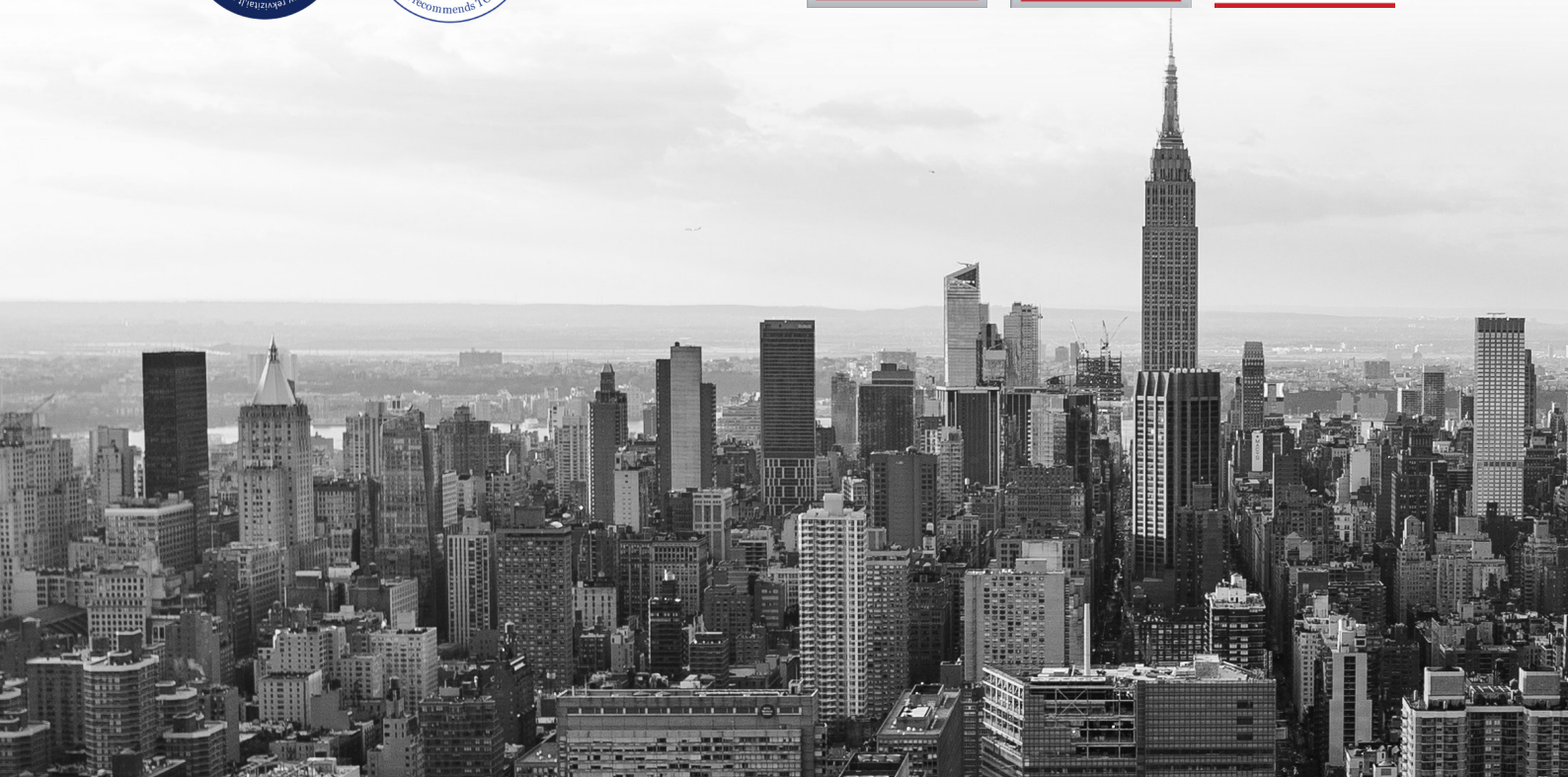
- We provide a **5 - 10 year warranty for all our products** (except their electrical part) without any additional warranty extension fees.
- **The capacities of all our products are determined by independent accredited laboratories** according to current standards. With us, 1kW means 1kW.
- We **do 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](http://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.













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