



THE SENSOTHERM **FSC CONVECTOR**

**Senso
therm**
heat with style



[Sensotherm FSCL • FSCLB • FSCLE

FREE STANDING CONVECTOR
natural convection

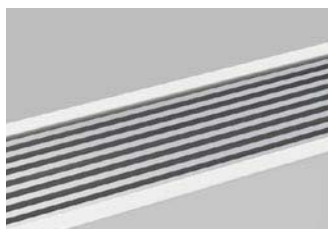
Do you like large glass surfaces or are the interior window sills low?
Use the subtle and graceful shapes of the free-standing convector.
The design will let the windows stand out and provide a great view from
the interior. Outstanding technical specifications ensure excellent
thermal comfort in the room.



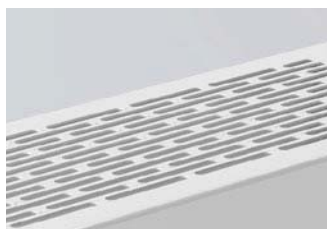
Free-standing convectors with natural convection Sensotherm FSCL, FSCLB & FSCLE

Grouping of the free-standing convectors

- FSCL design of zinc galvanised steel – with aluminium grille (silver eloxal coat) see image
- FSCLB pool design – chemical proof stainless steel AISI 316 for wet environment coated in RAL 9010 colour shade
- FSCLE zinc galvanised steel – design with embossed cover grille -see sketch (not available for pool applications)



Version FSCL, FSCLB



Version FSCLE

Specification

casing element height (mm)	90, 150, 300, 450, 600
widths (mm)	180, 240
lengths (mm)	800, 1 000, 1 200, 1 400, 1 600, 1 800, 2 000, 2 200, 2 400, 2 600, 2 800, 3 000
outputs (W)	from 473 to 4 733
max. working pressure	12 bar
max. working temperature	110 °C
max. surface temperature	40 °C
connecting thread	inner G 1/2"
connection method	recommend bottom connection, side

Version Exclusive (FSCL) • zinc galvanised steel sheet coated in colour shade RAL 9010 with aluminium anodized grille without surface finish
Version InPool (FSCLB) • chemical proof stainless steel AISI 316 for humid environment coated in RAL 9010 with with aluminium anodized grille without surface finish
Version Economic (FSCLE) • zinc galvanised steel sheet coated in colour shade RAL 9010 with an embossed grid, which is part of the casing.

Standard delivery contains

- casing of zinc galvanised steel sheet coated in shade RAL 9010 – white
- unpainted aluminium breathing grille, silver on FSCL and FSCLB. On FSCLE embossed in the free-standing convector casing
- Al/Cu heat exchanger for universal connection (side or bottom) with low water content, air vent and uniquely shaped fins for a higher heat output
- stand on clean floor, see sketch on page 5.
- the unit is packed in a durable packaging and contains an installation manual

Optional specification

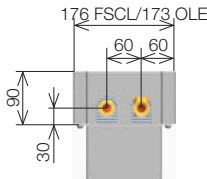
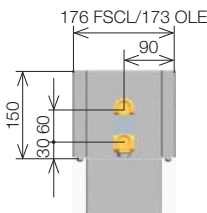
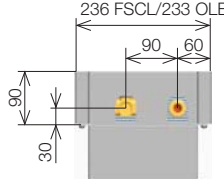
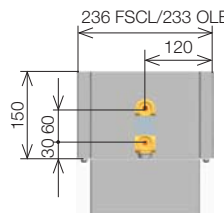
- stands on rough floor or wall suspending consoles, see sketch on page 6
- if more than 5 pieces are ordered another colour shade can be chosen from the RAL range at an additional cost
- pool design suitable for humid environment e.g. swimming pools areas
- pool design FSCLB – using stainless steel AISI 316 coated in white colour shade RAL 9010

Sensotherm FSCL PLAN


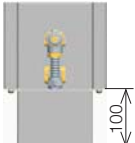

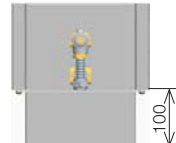
Design version PLAN with completely flat front panel is available up to the height of 30 cm (only FSCL and FSCLB).

Elements' sections

Side connection

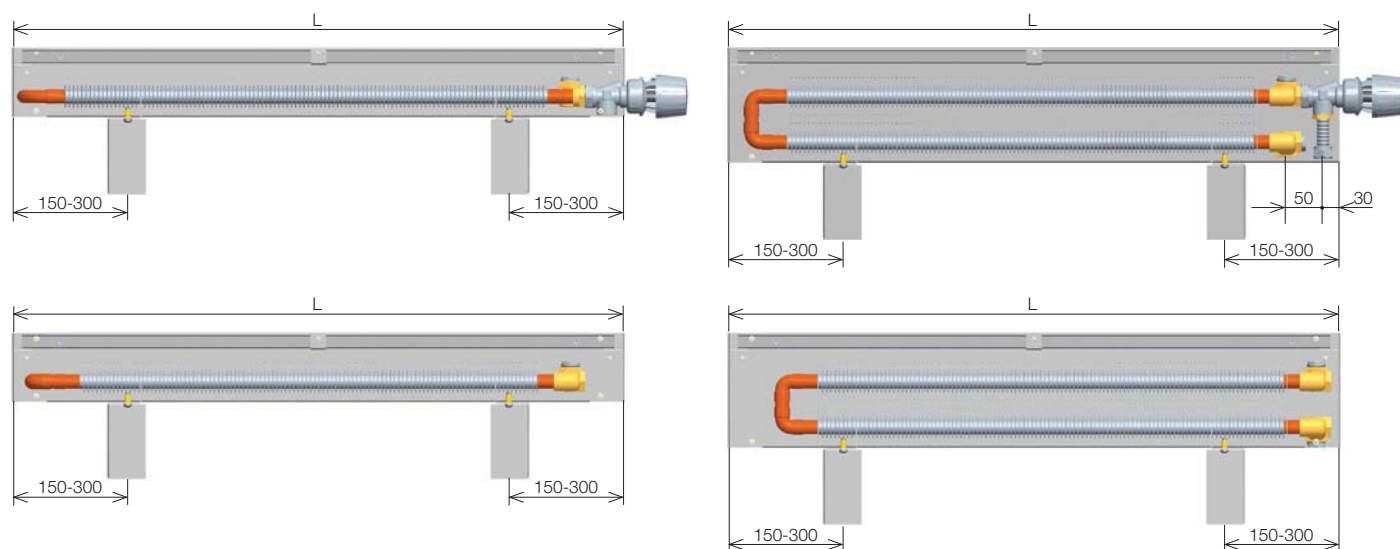
width	18 cm	18 cm	24 cm	24 cm
height	9 cm	15 cm	9 cm	15 cm
				

Bottom connection

width	18 cm	18 cm	24 cm	24 cm
height	9 cm	15 cm	9 cm	15 cm
				

Height without stands. FSCL and FSQLE mounted convectors are produced for versatile side/bottom connection. The connection type can be selected on site during installation. In the case of bottom connection, please speak to Sensotherm for valve advice.

Sketches of FSCL with stands finished floor



FSCL and FSQLE mounted convectors are supplied with stands for finished floor as standard. Another possibility of anchoring to the building structure is the use of stands on rough floor or the use of wall consoles (see the illustration on page 6). Dimensions are given in mm.



For more detailed dimensional sketches including calculating the stands' distances see page 6.

Weights and volumes of water of the free-standing convectors

Type	9/18	9/24	15/18	15/24	30/18	30/24	45/18	45/24	60/18	60/24
kg/linear meter	6.5	8.1	9.2	11.5	12.9	15.4	16.7	19.2	20.5	23.1
stainless steel kg/linear meter	7	8.7	10	12.4	14.5	17.1	19	21.8	23.6	26.4
l/linear meter	0.5	0.75	1	1.6	1	1.6	1	1.6	1	1.6

The listed weights are without packaging.

Heating outputs

Heat outputs (W) at 75/65/20 °C ($\Delta t=50$) and 65/55/20 °C ($\Delta t=40$) / EN 442

Width (cm)		Δt	Length L (cm)												
			80	100	120	140	160	180	200	220	240	260	280	300	
Height 9	18	Δt 50	473	596	720	845	969	1093	1217	1342	1466	1590	1714	1838	
		Δt 40	349	440	531	623	715	806	898	990	1081	1172	1264	1356	
	24	Δt 50	845	1096	1347	1598	1849	2100	2351	2603	2853	3104	3356	3607	
		Δt 40	624	808	993	1179	1364	1549	1734	1920	2104	2290	2475	2661	
Height 15	18	Δt 50	589	743	897	1052	1207	1362	1517	1671	1826	1980	2135	2290	
		Δt 40	434	548	662	776	890	1004	1119	1233	1347	1460	1575	1689	
	24	Δt 50	1105	1433	1760	2089	2417	2745	3074	3402	3730	4058	4387	4715	
		Δt 40	815	1057	1298	1541	1783	2025	2267	2509	2751	2993	3236	3478	
Height 30	18	Δt 50	781	985	1191	1396	1601	1807	2012	The free-standing FSCLE convectors are made only in heights of 90, 150 and 300 mm and the 180 and 240 mm widths					
		Δt 40	576	727	878	1030	1181	1333	1484						
	24	Δt 50	1370	1777	2183	2590	2998	3404	3811						
		Δt 40	1011	1310	1610	1911	2211	2511	2811						
Height 45	18	Δt 50	824	1040	1256	1473	1690	1906	2123	The free-standing FSCLE convectors are made only in heights of 90, 150 and 300 mm and the 180 and 240 mm widths					
		Δt 40	608	767	927	1086	1246	1406	1566						
	24	Δt 50	1547	2006	2465	2924	3384	3843	4303						
		Δt 40	1141	1480	1818	2157	2496	2835	3174						
Height 60	18	Δt 50	942	1188	1436	1683	1931	2179	2426	The free-standing FSCLE convectors are made only in heights of 90, 150 and 300 mm and the 180 and 240 mm widths					
		Δt 40	695	876	1059	1242	1424	1607	1790						
	24	Δt 50	1702	2207	2711	3217	3723	4227	4733						
		Δt 40	1255	1628	2000	2373	2746	3118	3491						

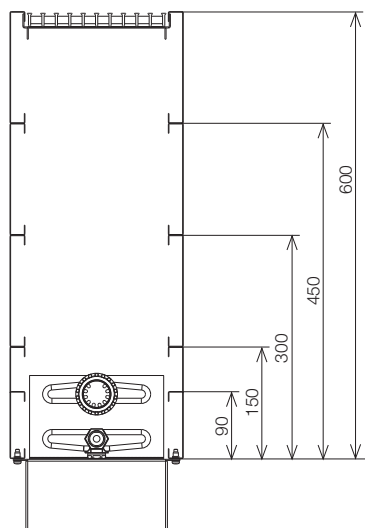
- The free-standing FSCLE convectors are made only in heights of 90, 150 and 300 mm and the 180 and 240 mm widths

Correction factor k_t for a variant temperature difference Δt (K)

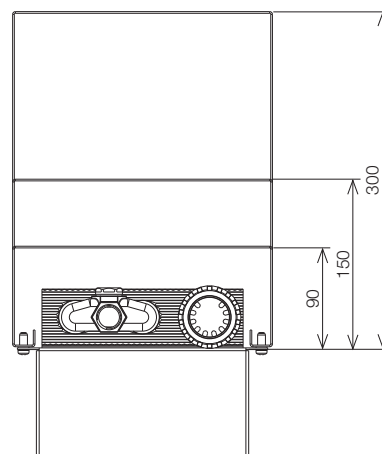
Δt (K)	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
k_t	0.248	0.267	0.287	0.306	0.326	0.347	0.367	0.389	0.410	0.432	0.453	0.476	0.498	0.521	0.544	0.567
Δt (K)	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
k_t	0.591	0.615	0.639	0.663	0.688	0.713	0.738	0.763	0.788	0.814	0.840	0.866	0.892	0.919	0.946	0.973
Δt (K)	50	51	52	53	54	55	56	57	58	59	60					
k_t	1.000	1.027	1.055	1.083	1.111	1.139	1.167	1.196	1.224	1.253	1.282					

Heights of the free-standing convectors

Sensotherm
FSCL



Sensotherm FSCLE
(maximum height 300 mm)



Free-standing convectors installation

Sensotherm FSCL • FSCLB • FSCLE

Installation instructions

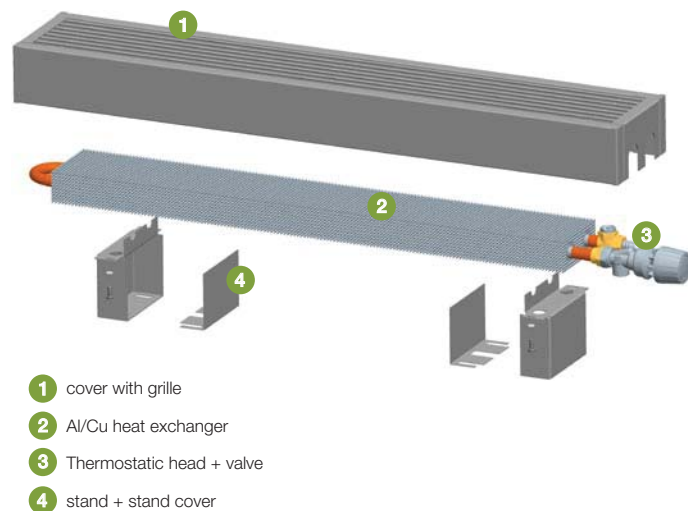
FSCL stand models

- a) **wall-mounted** – attachment to the wall. Recommended positioning 100mm above the clean floor. The delivered consoles (2 pieces) allow a height and length tolerance of approx. 20mm. The mounting spacings are indicated on the sketch.
- b) **standtype** – attachment to the floor. Stands on rough and clean floor can be chosen. The rough floor version allows a height tolerance of about 50mm. The floor mounting spacing is given on the sketch.

Installation procedure (valid for all models)

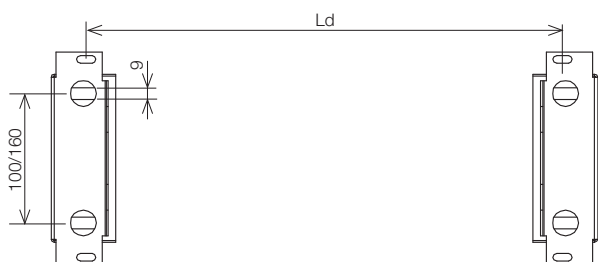
The first step consists in measurement and drilling for the consoles or stands. The heat exchanger is then positioned and connected to the heating system. Finally, the cover with the breathing grille is put on and screwed onto the consoles or the stands. The FSCL and FSCLB grilles are removable for easy cleaning. More detailed information is available in the installation instructions. The elements are supplied assembled.

Free-standing convectors assembly



Mounting location

Floor anchoring diagram



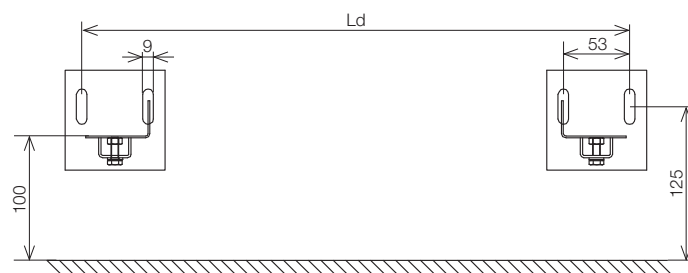
L = Convector length

Ld = L - 300 mm (up to the convector length of 1400 mm)

Ld = L - 400 mm (up to the convector length of 2 000 mm)

Ld = L - 600 mm (above the convector length of 2000 mm)

Wall anchoring diagram



L = Convector length

Ld = L - 247 mm (up to the convector length of 1 400 mm)

Ld = L - 347 mm (up to the convector length of 2 000 mm)

Ld = L - 547 mm (above the convector length of 2000 mm)

Overview of stands and consoles for FSCL attachment

width 18 cm	width 24 cm	width 18 cm	width 24 cm	width 18 cm	width 24 cm
wall-mounted console		clean floor stand *		rough floor stand	

After suspending the free-standing convector the distance between the wall and the element is 10 - 30 mm.

* part of supply



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