



THE SENSOTHERM **FC FACADE CONVECTOR**

**Senso
therm**
heat with style



[Sensotherm FC

THE SENSOTHERM FACADE CONVECTOR natural convection

Facade convectors are ideal and effective solutions for installations in buildings with large glass walls, where the transmission of cold in the winter season considerably affects the interior microclimate. Novelty in the heat loss solution will enable the architects and designers to realise their ideas in the design and operation of the entire building, including the heating.



Facade convectors with natural convection Sensotherm FC • FCB

The Sensotherm FC by its direct location on the facade prevents the penetration of cold air into the interior space. The warm air rising from the convectors mixes with the cold air and creates a thermal screen, which provides greater thermal comfort of the indoor space and prevents condensation forming on the glass surface.

The Sensotherm FC offers:

- design freedom
- high-performance Al/Cu heat exchangers
- excellent controllability and fast heating start-up
- no heat transfer to the external facade
- additional space for placement of other through-running services

Standard delivery contains

- casing of RAL 9007 coated zinc galvanised steel
- heat exchanger with low water content and uniquely shaped fins & air vent
- connecting material
- the set is packed in durable packaging and contains installation instructions

Specification

widths (mm)	120, 150, 180
depth (mm)	56
lengths (mm)	800 - 3 000, in 200 steps
max. working pressure	12 Bar
max. working temperature	110 °C
connecting thread	inner G 1/2"

Standard Version • grey coated casing (RAL 9007) and unpainted exchanger

Exclusive Version • grey coated casing (RAL 9007) and coated exchanger (RAL 9007)

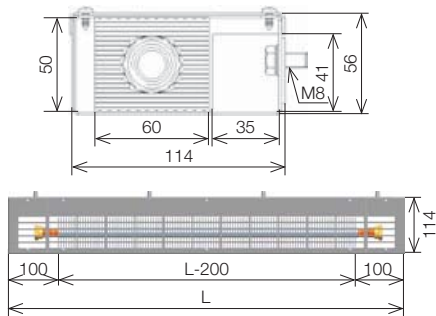
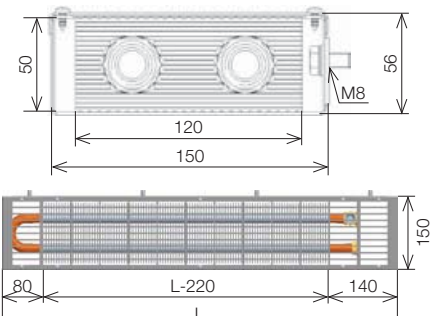
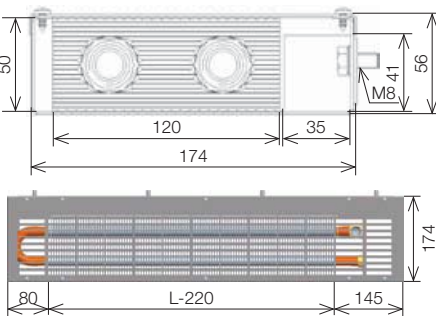
InPool Version (FCB) • casing of the stainless steel AISI 316 and unpainted exchanger

Selectable specification

- version Exclusive or InPool (using stainless steel AISI 316)
- coated heat exchanger
- if more than 5 pieces are ordered, another colour shade may be ordered from the RAL range at an additional cost.

Elements' sections

Overview of manufactured types

FC- xxx/6/12 – J1	FC- xxx/6/15–J2	FC- xxx/6/18–J2
depth 53 cm	depth 56 cm	depth 56 cm
width 114 cm	width 150 cm	width 174 cm
with optional integrated piping run	without integrated piping run	with optional integrated piping run
		

Heat outputs

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

Height (cm)	Width (cm)	Δt	Length L (cm)											
			80	100	120	140	160	180	200	220	240	260	280	300
Height 6	12	Δt 50	154	202	251	300	349	397	446	495	543	592	641	690
		Δt 40	115	151	188	224	261	297	334	370	407	443	480	516
Height 6	15	Δt 50	305	401	498	595	692	788	885	982	1078	1175	1272	1369
		Δt 40	228	300	373	445	517	590	662	735	807	879	952	1024
Height 6	18	Δt 50	305	401	498	595	692	788	885	982	1078	1175	1272	1369
		Δt 40	228	300	373	445	517	590	662	735	807	879	952	1024

Performances of the widths of 15 and 18 are the same due to using the same exchanger OR-J2. In addition the width of 18 comprises space for piping.

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	0.265	0.284	0.304	0.324	0.344	0.364	0.385	0.406	0.427	0.449	0.471	0.493	0.515	0.537	0.560	0.583
Δt (K)	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
k_t	0.606	0.629	0.652	0.676	0.700	0.724	0.748	0.773	0.797	0.822	0.847	0.872	0.897	0.923	0.948	0.974
Δt (K)	50	51	52	53	54	55	56	57	58	59	60					
k_t	1.000	1.026	1.052	1.079	1.105	1.132	1.159	1.186	1.213	1.240	1.267					

Weights and water volumes of wall-mounted convectors

Type	6/12	6/15	6/18
kg/linear meter	3.9	4.8	5.3
l/1 linear meter	0.2	0.42	0.42

The listed weights are without packaging.

Facade convectors installation

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Installation
on horizontal
crosspiece,
between vertical
supports



Installation
on vertical
support



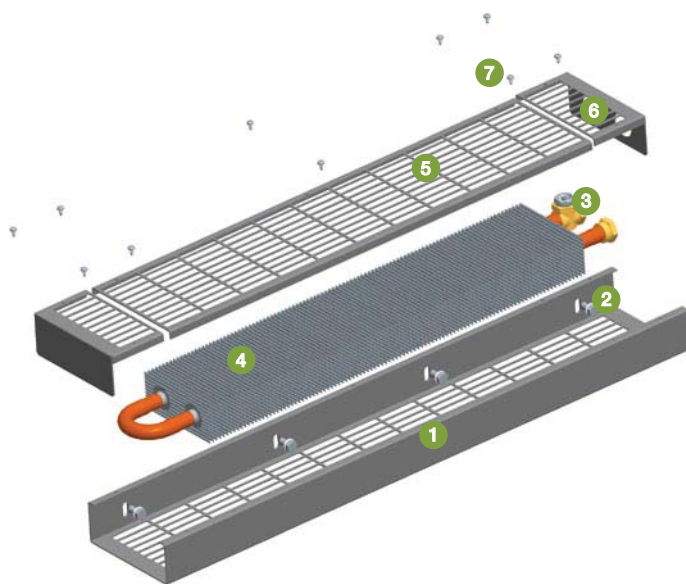
Facade convectors installation technique

Main load bearing U shape part is fixed to the facade's carrying elements. Then the heat exchanger is inserted and connected to the heating system. Last step consists of positioning the top

part and screwing of all parts together. Subject to agreement it is possible to make design modifications for the particular installation.

Convector FC assembly

- 1 carrier part
- 2 M8 fastening screw with washer
- 3 air vent
- 4 heat exchanger
- 5 top cover part
- 6 end part
- 7 screw (DIN 7981)



Ordering codes

Facade convectors FC • FCB

On facade installation technique
A on horizontal crosspiece,
between vertical supports
B on vertical support

			length			height			width			between vertical supports B on vertical support	
Standard	grey steel/unpainted exchanger	FC	-	...	/	...	/	..	-	1	A	1	
Exclusive	grey steel/grey coated exchanger *	FC	-	...	/	...	/	..	-	1	A	5	
InPool	grey coated stainless steel for humid environment/unpainted exchanger *	FCB	-	...	/	...	/	..	-	3	A	1	

* custom-made design

Facade convectors Sensotherm FC
Facade pool convectors Sensotherm FCB

Casing material
1 steel, grey coat RAL 9007
3 stainless steel (for humid environment), grey coat RAL 9007 *

Exchanger material
1 unpainted
5 coated



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