



[Licon OKN • OKNB

WALL MOUNTED CONVECTORS natural convection

Apart from their design the wall mounted convectors also offer many other advantages: efficient operation, higher performance at smaller dimensions, faster onset of heat. You won't burn yourself with our convectors! Surface max. temperature is 40 °C and the heat is transferred to the space of the room, and not into the wall. PLAN – design solution of wall mounted convector with flat front panel.



Wall mounted convectors with natural convection Licon OKN • OKNB

The wall mounted convectors Licon OKN are standard wall mounted convectors with a long history, used in households as well as in commercial premises. The modern design, easy mounting and economical operation are the reasons why they are so popular with our customers. With regard to the unique design of the heat exchanger used they achieve higher outputs even with small dimensions of the element. The great advantage of the wall mounted convectors OKN is their very low surface temperature of 40 °C and no heat dissipation into the wall.

Wall mounted convectors' classification

- OKN
- OKNB (InPool) – element intended for humid environment
- OKN PLAN – element with flat front panel

Standard delivery contains

- sheathing of zinc galvanised steel sheet coated in shade RAL 9010 – white
- Al/Cu heat exchanger with low water content, air vent and uniquely shaped lamellas for a higher heat output
- version with the bottom or side connection (according to the code in the order)
- set for suspension of the element on the wall containing dowels, screws and suspension brackets
- the set is packed in durable packaging and contains an installation instructions

Specification

height (mm)	450, 600
depth (mm)	60, 120
length (mm)	400, 600, 800, 1 000, 1 200, 1 400, 1 600, 1 800, 2 000
heat output (W)	from 266 to 2 598
max. working pressure (bar)	12
max. working temperature	110 °C
max. surface temperature	40 °C
connecting thread	inner G 1/2"
connection method	recommended bottom connection, side

Version Economic (OKN) • sheathing of zinc galvanised steel sheet coated in shade RAL 9010

Version InPool (OKNB) • sheathing made of stainless steel AISI 316 and coated with RAL 9010 colour; intended for humid environment

Selectable specification

- in case of ordering more than 5 pieces it is possible to choose another colour shade finish according to the RAL scale (the manufacturer must be consulted about the change)
- all-stainless steel design suitable for humid environments such as swimming pools, stainless steel AISI 316 coated in white colour shade RAL 9010
- in case of low temperature gradient or lack of performance the OKIOC unit can be used, see page 62

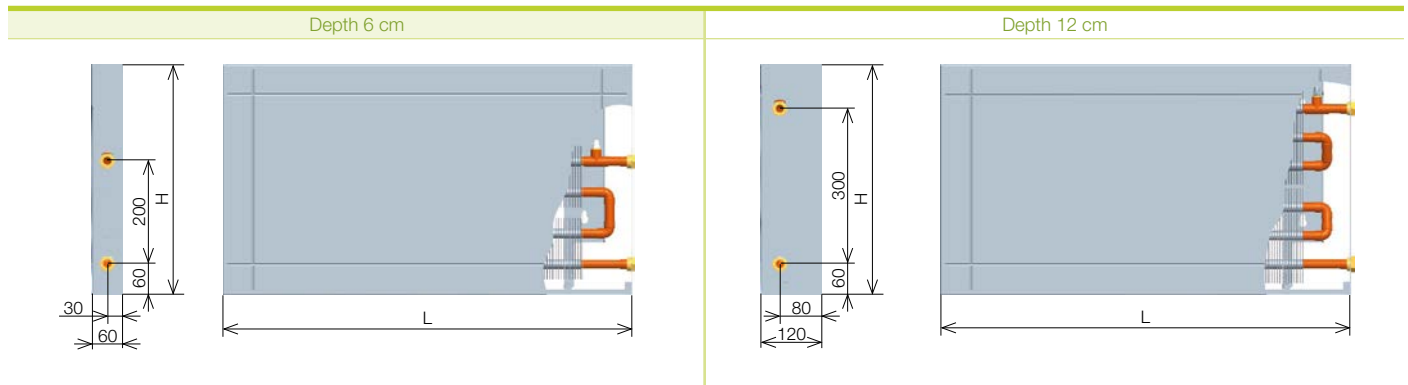
Design version Licon OKN PLAN

PLAN with an absolutely straight front plate.

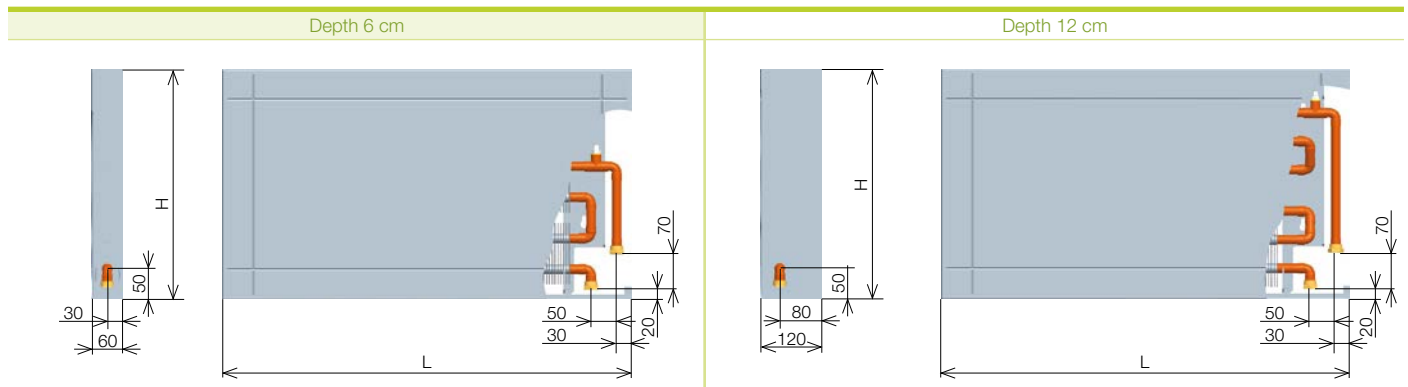


Elements' sections

Side connection



Bottom connection



OKN is available in right or left version. The connecting side must be indicated in the order. In the schematic representations the dimensions are expressed in mm.

Heat outputs

Heat outputs (W) at $t_1/t_2/t_i = 75/65/20\text{ }^\circ\text{C}$ ($\Delta t=50$) and $65/55/20\text{ }^\circ\text{C}$ ($\Delta t=40$) / EN 442

Depth (cm)	Δt	Length L (cm)									
		40	60	80	100	120	140	160	180	200	
Height 45	6	$\Delta t 50$	266	400	533	665	799	933	1065	1199	1332
		$\Delta t 40$	199	299	399	498	598	698	797	897	997
	12	$\Delta t 50$	449	675	902	1127	1354	1578	1804	2030	2258
		$\Delta t 40$	336	505	675	843	1013	1181	1350	1519	1690
Height 60	6	$\Delta t 50$	291	436	582	727	873	1018	1159	1304	1450
		$\Delta t 40$	218	327	435	544	653	762	867	976	1085
	12	$\Delta t 50$	519	779	1039	1298	1558	1818	2078	2338	2598
		$\Delta t 40$	388	583	777	972	1166	1360	1555	1749	1944

• temperature exponent $m = 1.3$



Design solutions

The wall mounted heating elements OKN, OKNB have on their front face a significant design element, which consists of one design section in the lengths from 40 to 120 cm, two sections in the lengths from 140 to 180 cm and three sections in the length of 200 cm.

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					

• temperature exponent $m = 1.3$

See the formula and example of conversion to a variant temperature difference on page 77.

Weights and water volumes of wall mounted convectors

OKNB pool version

Convectors intended for use at pools must be kept clean and regularly washed with clean water. More about the service and warranty conditions on www.licon.cz in the download section.

Type	45/6	60/6	45/12	60/12
kg/linear meter	14.9	19	16.4	20.6
stainless steel kg/1 linear meter	11.5	14.5	13	16
l/1 linear meter	1	1.5	1	1.5

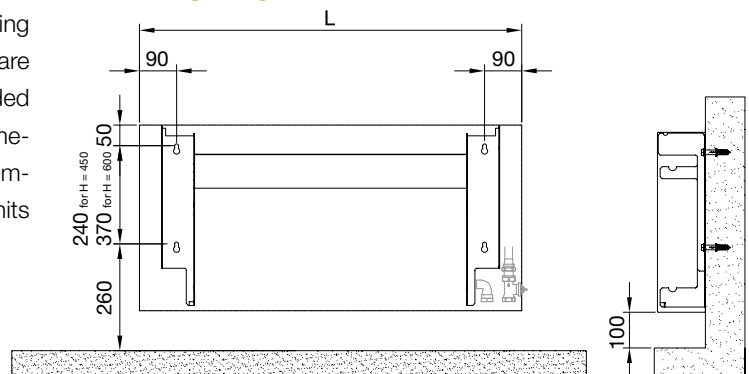
The listed weights are without a packaging.

Installation of convectors Licon OKN • OKNB

Installation instructions

It is recommended to always position the wall mounted heating element on a peripheral wall, 10 cm above the floor. Elements are suspended on the wall with the use of dowels and screws included in the packaging. See the sketch of element anchorage for the method of suspension on the wall. The elements are supplied assembled. Detailed information about installation and fixing the units OKN can be found in Assembly Instructions.

Anchoring diagram



Ordering codes Wall mounted convectors OKN • OKNB

			length	height	depth	Sheathing finish PLAN of one piece no design				
Economic	steel/unpainted exchanger	OKN	-	...	/	...	/	..	-	SP
InPool*	stainless steel for humid environment white/unpainted exchanger	OKNB	-	...	/	...	/	..	-	SP

* custom-made design

Wall mounted convectors Licon OKN
Wall mounted convectors Licon OKNB

Water inlet
SP bottom, right
SL bottom, left
BP side, right
BL side, left

ORDERING CODE: OKN length/height/depth (in cm) connection (B – side, S – bottom) connection side (L – left, P – right) PLAN version (PLAN). Example: OKN-140/60/9-SP = OKN convector element, length 140 cm, height 60 cm, depth 6 cm, bottom connection on the right side.