Licon OKIOC NEW

WALL-MOUNTED CONVECTORS
with forced convection and optimized convection

Developed for low temperature heating systems, high efficiency guaranteed also at very low temperature gradients, e.g. 35/30 °C. Ideal everywhere, where the heat source is a heat pump, a solar system, a condensation boiler or as a supplementary source of heat for floor heating, particularly during a transitional period or when an instant temperature increase in the room is required. At the same time suitable for rooms' dry-cooling during the summer months. All of this with the benefits of the Optimized Convection system – low noise and low fan intake while maintaining maximally attainable performances.

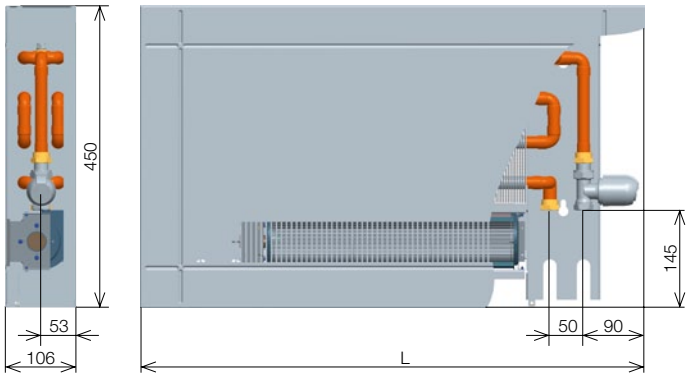
Univeral use – heating and dry-cooling!

OC OPTIMIZED CONVECTION

Wall-mounted convector with forced convection
Licon OKIOC 45/11

NEW

- used for heating or dry-cooling
- high efficiency even at low temperatures of the heating system
- patented design solutions
- high-perfomance, low energy and quiet fans
- the same regulation as the one for floor convectors PKOC and free standing convector with forced convection OLOC
- two pipe system
- right bottom connection
- controls possible through BMS
- the convector is intended for dry environment



The dimensions are given in mm

Specification

depth *(mm)*	110
depth *(mm)*	450
lengths *(L mm)*	750, 1 000, 1 250, 1 500, 1 750, 2 000
outputs *(W)*	281 - 6257
exchanger height *(mm)*	240
exchanger width *(mm)*	100
fans' impeller diameter *(mm)*	60
connection to the heating system	inner G 1/2"
connection method	recommended bottom connection, right

Specification

Height	cm	45																								
Width	cm	11																								
Lengths	cm	75				100				125				150				175				200				
Noisiness - acoustic pressure 1m	dB(A)	0	23.1	31.3	38	0	23.4	31.7	38.5	0	23.7	32.1	39	0	24	32.5	39.5	0	24.4	33	40.1	0	24.7	33.4	40.6	
Max. intake/voltage DC	W/V	5.5 / 13.5				8 / 13.5				9.5 / 13.5				14 / 13.5				16 / 13.5				18.5 / 13.5				
Rpm		Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3	
Cooling output	t1 °C	hum. %	Cooling output [W]																							
16/19 °C	28	50	0	149	207	263	0	291	407	527	0	387	542	703	0	434	604	791	0	523	732	966	0	618	864	1141	
	26	50	0	123	171	218	0	240	337	435	0	320	448	581	0	359	499	653	0	432	605	798	0	510	714	943	
	24	50	0	93	128	163	0	180	252	327	0	241	336	435	0	270	375	490	0	323	454	598	0	383	536	708	
Heat output	t1 °C		Heat output [W] / EN 442																							
75/65 °C	18		281	858	1139	1444	563	1716	2279	2888	751	2288	3039	3850	844	2574	3418	4332	1032	3146	4178	5294	1220	3718	4938	6257	
	20		**270**	**823**	**1093**	**1385**	**540**	**1646**	**2186**	**2770**	**720**	**2195**	**2915**	**3693**	**810**	**2469**	**3279**	**4155**	**990**	**3018**	**4008**	**5078**	**1170**	**3566**	**4736**	**6002**	
	22		259	788	1047	1326	517	1576	2093	2652	689	2102	2791	3537	776	2364	3140	3979	948	2890	3838	4863	1120	3415	4535	5747	
70/55 °C	18		239	727	966	1224	477	1454	1932	2448	636	1939	2575	3263	716	2182	2897	3671	875	2666	3541	4487	1034	3151	4185	5303	
	20		227	693	920	1165	454	1385	1839	2331	606	1847	2453	3108	682	2078	2759	3496	833	2539	3372	4273	985	3001	3986	5050	
	22		216	658	874	1107	432	1316	1748	2215	576	1755	2330	2953	648	1974	2622	3322	791	2413	3204	4060	935	2851	3787	4798	
55/45 °C	18		168	512	680	862	336	1025	1361	1724	448	1366	1814	2299	504	1537	2041	2587	616	1879	2495	3161	728	2220	2949	3736	
	20		157	478	635	805	314	957	1271	1610	419	1276	1694	2147	471	1435	1906	2415	575	1754	2330	2952	680	2073	2753	3489	
	22		146	445	590	748	292	889	1181	1496	389	1186	1575	1995	438	1334	1771	2245	535	1630	2165	2743	632	1927	2559	3242	
50/40 °C	18		140	428	568	720	281	856	1136	1440	374	1141	1515	1920	421	1283	1704	2160	515	1568	2083	2640	608	1854	2462	3119	
	20		129	394	524	663	259	788	1047	1327	345	1051	1396	1769	388	1183	1571	1990	474	1445	1920	2432	560	1708	2269	2875	
	22		118	361	479	607	237	722	958	1214	316	962	1278	1619	355	1082	1437	1821	434	1323	1757	2226	513	1563	2076	2631	

- temperature exponent m = 1.062

Cooling is possible only in the non-condensation zone, i.e. above the temperature of the dew-point. The element is not provided with condensate drain. Listed cooling performance SENSITIV.

Cooling performances for other operating conditions on request.

** SENSITIV – cooling power actually delivered for cooling the air.*

Correction factor page 78 • Assembly page 79 • Regulation page 80

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

OKIOC 45/11

Δt (K)	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
kt	0.338	0.358	0.378	0.398	0.418	0.438	0.459	0.479	0.499	0.520	0.540	0.561	0.581	0.602	0.623	0.643

Δt (K)	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
kt	0.664	0.685	0.705	0.726	0.747	0.768	0.789	0.810	0.831	0.852	0.873	0.894	0.915	0.936	0.958	0.979

Δt (K)	50	51	52	53	54	55	56	57	58	59	60
kt	1.000	1.021	1.043	1.064	1.085	1.107	1.128	1.149	1.171	1.192	1.214

- temperature exponent m = 1.062

Weights and water volumes of the wall-mounted radiator OKIOC

Type	45/11
kg/linear meter	21
l/1 linear meter	1.45

The listed weights are without a packaging.

The contents of supplies and selectable specifications

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
- group of low-energy fans
- connecting terminal (F Box)
- radiator wall-mounting consoles
- radiator mounting and maintenance instructions
- the set is packed in a cardboard packaging

Optional accessories

- in case of ordering more than 5 units it is possible to select another sheathing colour shade (the manufacturer must be consulted in connection with the change)
- shut off valve, thermostatic valve and actuator

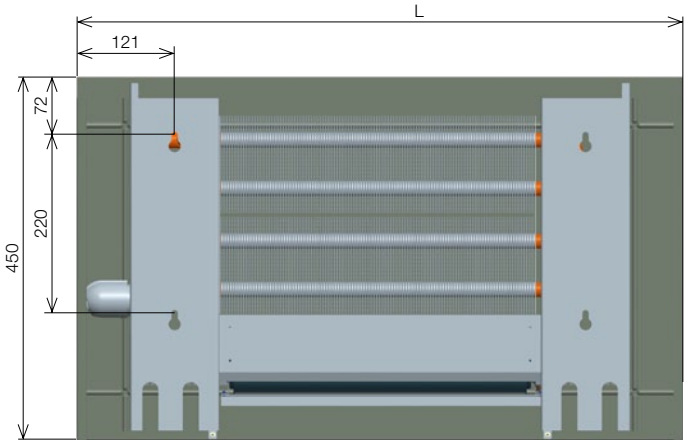
Note:

- Standard supply does not include the regulation. The regulation must be ordered separately in accordance with the technical parameters.
- Electrical regulation and regulation elements see page 80
- Regulation is identical for all OC system radiators

Convector installation – construction recommendations Licon OKIOC

- It is recommended to position the wall-mounted heating element on a peripheral wall, 10 cm above the floor.
- The hot water supply always in the upper pipes; recommend to fit with the stop valve and the thermostatic valve (consultation with the designer is required in case of cooling).
- We recommend to fit the fans once all building work is completed. The exchanger and the sheathing must be well protected against fouling and regular maintenance carried out - including cleaning of exchangers and fans.
- The radiator is fitted to the wall using brackets. Then the heat exchanger is inserted and connected to the heating system. We recommend to check the correct position of the exchanger and the fittings in relation to the sheathing. Fit the fans and the sheating only after all building work has been completed.

Anchoring diagram



Assembly electrical part

- Regulation is identical with the one for floor convectors and free standing convector with forced convection
- We recommend to fit OKIOC with the thermoelectric drive, order no. 02300
- Do not forget to provide power supply near the installation – more details in the electrical assembly part on page 80 or in the installation instructions

Design solution of the front face of OKIOC

The wall-mounted heating elements OKIOC have on their front face a significant design element, which consists of one design section in the lengths of 75, 100 and 125 cm, two sections in the lengths of 150 and 175 cm and three sections in the length of 200 cm.

Ordering codes Convectors OKIOC

				length		height		depth			Cover grid finish					
Exclusive	white steel/unpainted exchanger	OKIOC	-	...	/	...	/	..	-	1	00	1	-	R1		

** custom-made design*

- OKIOC: Wall-mounted convectors with forced convection Licon OKIOC (heating and dry-cooling)
- Sheathing material: 1 steel, white coat RAL 9010; 9 other finish/colour RAL of the sheathing *
- Cover grid finish: 00 Embossed grid
- Exchanger finishes: 1 recuperative, unpainted
- Elements of electrical regulation in a converter: R1 standard