Licon OLOC NEW

FREE STANDING CONVECTOR
with forced convection and optimized convection

Exclusive free standing convectors design enhanced by the state-of-the-art technologies. Universal design of the free standing convectors with high efficiency also at low temperature gradients. This predeterminates them as ideal radiators to be heated by heat pumps.

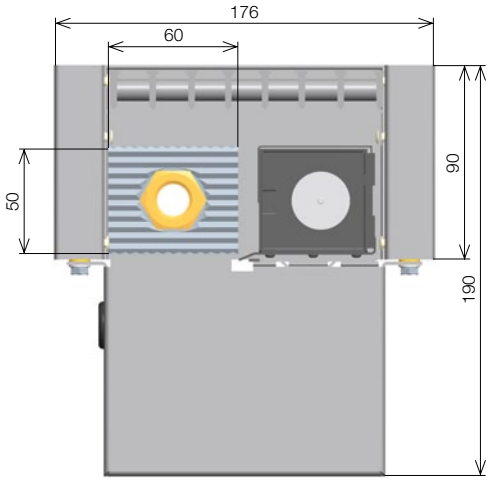
- high efficiency at low temperature of the heating water
- also suitable for installations with a heat pump
- energy efficient fans with an electric motor and a minimal intake
- immediate reaction to temperature changes in the room
- very quiet operation

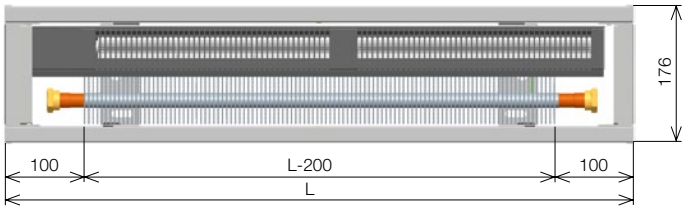
OC OPTIMIZED CONVECTION

Free standing convector with forced convection
Licon OLOC 9/18

NEW

- convector with the lowest construction height
- used for heating
- quietest operation at low speed
- also suitable for installations with a heat pump
- possibility of control through BMS (Building Management System)
- the convector is intended for dry environment





Specification

casing element height *(mm)*	90
widths *(mm)*	176
engths *(L mm)*	9 00, 1 200, 1 600, 2 000, 2 400, 2 800
exchanger height *(mm)*	50
exchanger width *(mm)*	60
exchanger effective length *(mm)*	L - 200
fans' impeller diameter *(mm)*	30
connection to the heating system	inner G 1/2"

Version Exclusive • coated in RAL 9010 zinc galvanised steel with aluminium unpainted grid

Specification

Width	*cm*	18																							
Depth	*cm*	9																							
Total length	*cm*	90				120				160				200				240				280			
Noisiness - acoustic pressure 1m	*dB(A)*	0	10.1	19.4	23.2	0	10.3	19.5	23.7	0	10.7	20.1	23.9	0	11.6	22.4	24.9	0	11.9	22.9	25.1	0	12	23.1	25.2
Power input:	*W/V*	4/13.5				5.5/13.5				7.5/13.5				10.5/13.5				13/13.5				15/13.5			
Speed switch position		Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3
Heat output	*t1 °C*	Heat output [W] / EN 442																							
90/70 °C	20	189	519	585	650	270	742	835	929	378	1039	1169	1300	486	1335	1504	1672	594	1632	1838	2043	702	1929	2172	2415
75/65 °C	18	162	444	500	555	231	634	714	794	323	887	999	1111	415	1141	1285	1428	508	1394	1570	1746	600	1648	1855	2063
	20	**155**	**425**	**478**	**532**	**221**	**607**	**684**	**760**	**309**	**850**	**957**	**1064**	**398**	**1093**	**1230**	**1368**	**486**	**1335**	**1504**	**1672**	**575**	**1578**	**1777**	**1976**
	22	148	406	457	509	211	580	653	727	296	812	915	1017	380	1045	1176	1308	465	1277	1438	1599	549	1509	1699	1889
70/55 °C	18	136	374	421	468	194	534	601	669	272	748	842	936	350	961	1082	1203	428	1175	1323	1471	505	1388	1563	1738
	20	129	355	400	445	185	508	572	636	259	711	800	890	333	914	1029	1144	407	1117	1258	1398	481	1320	1486	1653
	22	123	337	379	422	175	481	542	603	245	674	759	844	315	867	976	1085	386	1059	1193	1326	456	1252	1409	1567
55/45 °C	18	95	260	293	326	135	372	418	465	189	520	586	651	243	669	753	837	298	817	920	1023	352	966	1088	1209
	20	88	242	273	303	126	346	390	433	176	484	546	607	227	623	701	780	277	761	857	953	328	900	1013	1127
	22	82	225	253	281	117	321	361	402	164	449	506	562	210	577	650	723	257	706	795	884	304	834	939	1044
50/40 °C	18	79	216	243	270	112	308	347	386	157	431	486	540	202	555	625	695	247	678	763	849	292	801	902	1003
	20	72	198	223	248	103	283	319	355	144	396	446	496	186	510	574	638	227	623	702	780	268	736	829	922
	22	66	181	204	226	94	258	291	323	132	362	407	453	169	465	524	582	207	568	640	712	245	672	756	841
45/35 °C	18	63	172	194	216	90	246	277	308	125	344	388	431	161	443	499	554	197	541	609	678	233	640	720	801
	20	56	155	175	194	81	222	249	277	113	310	349	388	145	399	449	499	177	487	549	610	210	576	649	721
	22	50	138	156	173	72	197	222	247	101	276	311	346	129	355	400	445	158	434	489	543	187	513	578	642

• temperature exponent m = 1.1

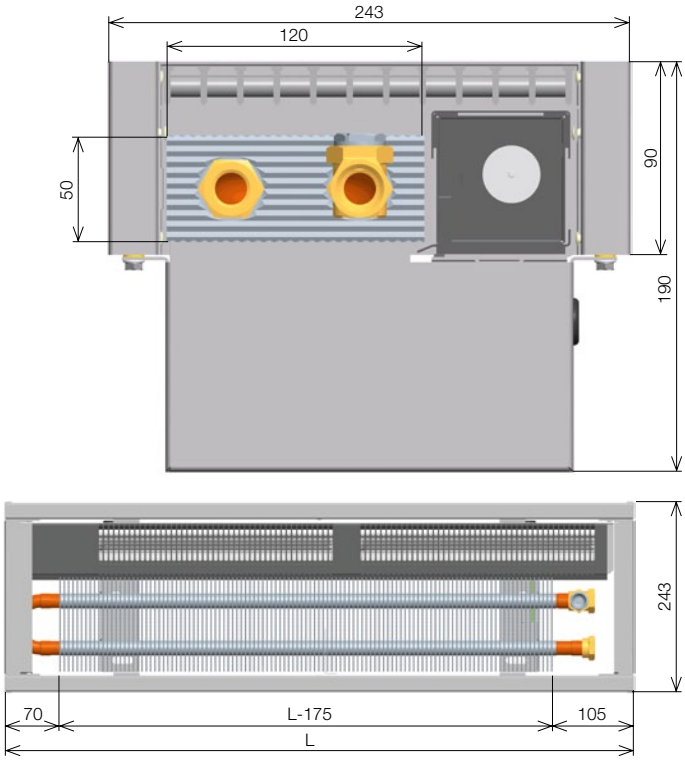
Correction factor page 74 • Assembly page 75 • Regulation page 80

Free standing convector with forced convection
Licon OLOC 9/24

NEW

OPTIMIZED CONVECTION

- convector with the lowest construction height
- used for heating
- high heat output
- possibility of control through BMS (Building Management System)
- the convector is intended for dry environment



Specification

casing element height *(mm)*	90
widths *(mm)*	243
engths *(L mm)*	900, 1 200, 1 600, 2 000, 2 400, 2 800
exchanger height *(mm)*	50
exchanger width *(mm)*	120
exchanger effective length *(mm)*	L - 175
fans' impeller diameter *(mm)*	40
connection to the heating system	2 x G 1/2" inner

Version Exclusive • coated in RAL 9010 zinc galvanised steel with aluminium unpainted grid

Specification

Width	*cm*	24																									
Depth	*cm*	9																									
Total length	*cm*	90				120				160				200				240				280					
Noisiness - acoustic pressure 1m	*dB(A)*	0	17.6	26.3	33	0	17.9	26.8	33.4	0	18.2	27.1	33.6	0	18.7	27.7	33.9	0	18.9	27.8	34.2	0	19.2	28	34.4		
Power input:	*W/V*	8/13.5				11/13.5				12/13.5				21.5/13.5				22.5/13.5				23.5/13.5					
Speed switch position		Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3		
Heat output	*t1 °C*	Heat output [W] / EN 442																									
90/70 °C	20	353	704	866	1027	499	996	1224	1452	693	1385	1702	2018	888	1773	2179	2585	1082	2162	2657	3152	1277	2551	3134	3718		
75/65 °C	18	301	602	740	877	426	851	1046	1240	592	1183	1454	1724	758	1515	1862	2208	925	1847	2270	2693	1091	2179	2678	3177		
	20	**289**	**576**	**708**	**840**	**408**	**815**	**1002**	**1188**	**567**	**1133**	**1392**	**1652**	**726**	**1451**	**1783**	**2115**	**886**	**1769**	**2174**	**2579**	**1045**	**2087**	**2565**	**3042**		
	22	276	551	677	803	390	779	958	1136	542	1083	1331	1579	695	1387	1705	2022	847	1691	2079	2466	999	1996	2452	2909		
70/55 °C	18	254	507	623	739	359	717	881	1045	499	997	1225	1453	639	1277	1569	1861	779	1556	1912	2269	919	1836	2256	2676		
	20	241	482	592	703	341	682	838	994	474	948	1164	1381	608	1214	1491	1769	741	1480	1818	2157	874	1746	2145	2544		
	22	229	457	562	666	324	646	794	942	450	899	1104	1310	576	1151	1414	1678	702	1403	1724	2045	829	1655	2034	2413		
55/45 °C	18	177	353	434	514	250	499	613	727	347	694	852	1011	445	888	1091	1295	542	1083	1331	1578	640	1278	1570	1862		
	20	165	329	404	479	233	465	571	677	323	646	794	942	414	827	1017	1206	505	1009	1239	1470	596	1190	1462	1735		
	22	153	305	374	444	216	431	529	628	300	599	736	873	384	767	942	1118	468	935	1149	1363	552	1103	1355	1608		
50/40 °C	18	147	293	360	427	207	414	508	603	288	575	707	839	369	737	905	1074	450	898	1104	1309	531	1060	1302	1545		
	20	135	269	330	392	190	380	467	554	265	529	650	771	339	677	832	987	413	825	1014	1203	487	974	1197	1419		
	22	123	245	302	358	174	347	426	506	241	482	593	703	309	618	759	900	377	753	925	1098	445	888	1092	1295		
45/35 °C	18	117	234	287	341	165	330	406	482	230	459	564	669	294	588	723	857	359	717	881	1045	424	846	1040	1233		
	20	105	210	259	307	149	297	366	434	207	414	508	603	265	530	651	772	323	646	793	941	381	762	936	1110		
	22	94	187	230	273	133	265	326	386	184	368	453	537	236	472	580	688	288	575	707	838	340	678	834	989		

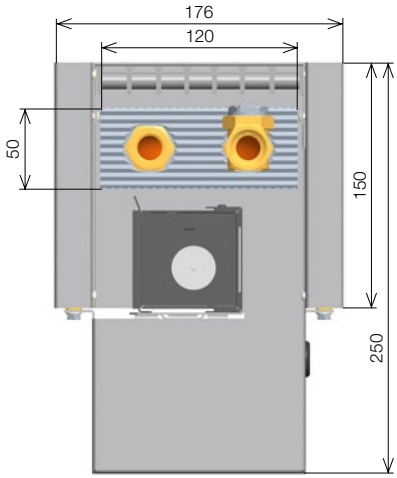
• temperature exponent m = 1.1

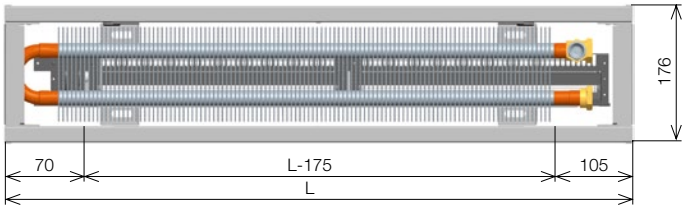
Correction factor page 74 • Assembly page 75 • Regulation page 80

Free standing convector with forced convection
Licon OLOC 15/18

NEW

- used for heating
- high heat output
- quietest operation at low speed
- possibility of control through BMS (Building Management System)
- the convector is intended for dry environment





Specification

casing element height *(mm)*	150
widths *(mm)*	176
engths *(L mm)*	900, 1 200, 1 600, 2 000, 2 400, 2 800
exchanger height *(mm)*	50
exchanger width *(mm)*	120
exchanger effective length *(mm)*	L - 175
fans' impeller diameter *(mm)*	40
connection to the heating system	2 x G 1/2" inner

Version Exclusive • coated in RAL 9010 zinc galvanised steel with aluminium unpainted grid

Specification

Width	*cm*	18																							
Depth	*cm*	15																							
Total length	*cm*	90				120				160				200				240				280			
Noisiness - acoustic pressure 1m	*dB(A)*	0	17.6	26.3	33	0	17.9	26.8	33.4	0	18.2	27.1	33.6	0	18.7	27.7	33.9	0	18.9	27.8	34.2	0	19.2	28	34.4
Power input:	*W/V*	8/13.5				11/13.5				12/13.5				21.5/13.5				22.5/13.5				23.5/13.5			
Speed switch position		Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3	Off	1	2	3
Heat output	*t1 °C*	Heat output [W] / EN 442																							
90/70 °C	20	335	751	914	1076	473	1062	1292	1521	658	1476	1796	2115	842	1891	2300	2709	1027	2305	2804	3303	1211	2720	3308	3896
75/65 °C	18	286	642	781	919	404	907	1104	1300	562	1261	1534	1807	719	1615	1965	2314	877	1970	2396	2822	1035	2324	2826	3329
	20	**274**	**615**	**748**	**881**	**387**	**869**	**1057**	**1245**	**538**	**1208**	**1469**	**1731**	**689**	**1547**	**1882**	**2217**	**840**	**1886**	**2294**	**2703**	**991**	**2225**	**2707**	**3188**
	22	262	588	715	842	370	831	1011	1190	514	1155	1405	1655	659	1479	1799	2119	803	1804	2194	2584	948	2128	2588	3048
70/55 °C	18	241	541	658	775	340	764	930	1095	473	1063	1293	1523	606	1361	1656	1950	739	1659	2018	2377	872	1958	2381	2805
	20	229	514	625	736	324	727	884	1041	450	1010	1229	1448	576	1294	1574	1854	703	1578	1919	2260	829	1861	2264	2666
	22	217	487	593	698	307	689	838	987	427	958	1165	1373	546	1227	1493	1758	666	1496	1820	2143	786	1765	2147	2529
55/45 °C	18	168	376	458	539	237	532	647	762	329	739	899	1059	422	947	1152	1357	514	1155	1404	1654	607	1362	1657	1952
	20	156	350	426	502	221	495	603	710	307	689	838	987	393	882	1073	1264	479	1075	1308	1541	565	1269	1543	1818
	22	145	325	395	465	205	459	559	658	284	638	777	915	364	818	995	1171	444	997	1213	1428	524	1176	1430	1685
50/40 °C	18	139	312	380	447	196	441	537	632	273	613	746	879	350	786	956	1125	427	958	1165	1372	503	1130	1374	1619
	20	128	287	349	411	181	405	493	581	251	564	686	807	321	722	878	1034	392	880	1070	1261	462	1038	1263	1487
	22	117	262	318	375	165	370	450	530	229	514	625	737	293	659	801	944	358	803	977	1150	422	947	1152	1357
45/35 °C	18	111	249	303	357	157	352	428	505	218	490	596	702	279	627	763	898	340	765	930	1095	402	902	1097	1292
	20	100	224	273	321	141	317	386	454	196	441	536	632	251	565	687	809	307	688	837	986	362	812	988	1164
	22	89	200	243	286	126	282	344	405	175	393	478	563	224	503	612	721	273	613	746	878	322	723	880	1036

• temperature exponent m = 1.1

Correction factor page 74 • Assembly page 75 • Regulation page 80

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

OLOC 9/18, 9/24, 15/18

Δt (K)	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
kt	0.325	0.345	0.365	0.385	0.405	0.426	0.446	0.467	0.487	0.508	0.528	0.549	0.570	0.591	0.612	0.633

Δt (K)	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
kt	0.654	0.675	0.697	0.718	0.739	0.761	0.782	0.804	0.825	0.847	0.869	0.891	0.912	0.934	0.956	0.978

Δt (K)	50	51	52	53	54	55	56	57	58	59	60
kt	1.000	1.022	1.044	1.066	1.088	1.111	1.133	1.155	1.177	1.200	1.222

- temperature exponent m = 1.1

Weights and water volumes OLOC

OLOC	9/18	9/24	15/18
kg/linear meter	11.6	7.7	10.2
l/linear meter	0.22	0.5	0.5

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)
- temperature switch
- stands for fixing to clean floor (it is not possible to use the wall mounting brackets or stands for the rough floor with the OLOC product)
- the set is packed in a cardboard packaging

Optional accessories

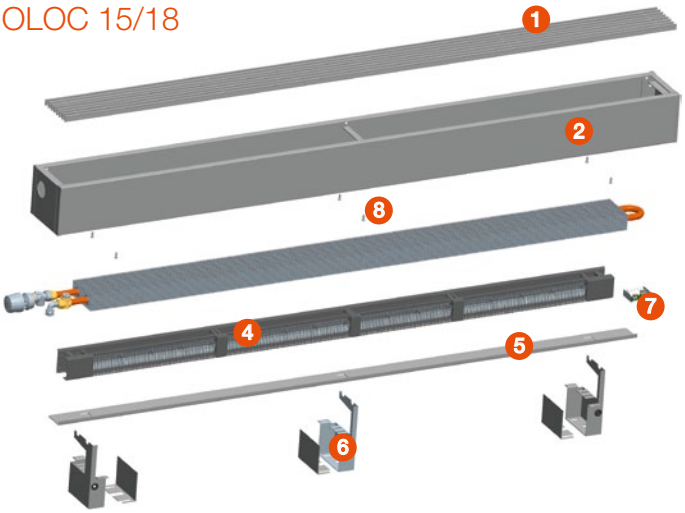
- shut off valve, thermostatic valve head or an actuator
- in case of ordering more than 5 units it is possible to select another sheathing colour shade (the manufacturer must be consulted in connection with the change)

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

Convectors assembly

OLOC 15/18



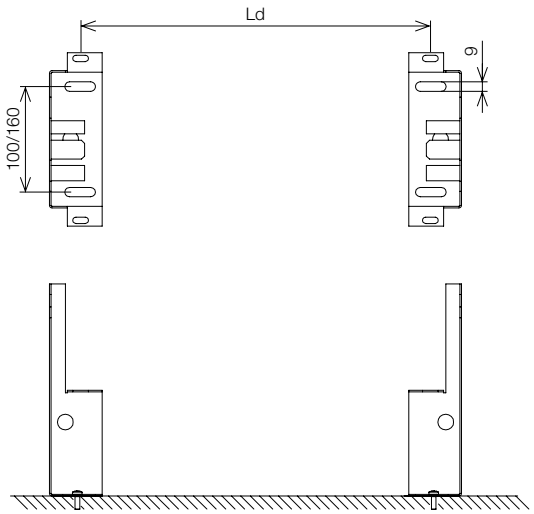
Convector breakdown

1. aluminium cover grid
2. metal plating
3. heat exchanger OR-J2
4. fans
5. fan support
6. stands
7. connecting terminal (F Box)
8. screw DIN 7981

Installation technique of OLOC (valid for all models)

Determine the stands spacing for anchoring them to the floor by pushing the fan's rail into the stands. The heat exchanger is then positioned in the stands and connected to the heating system.

The fan is fixed to the fan support and connected to the F-box. Finally, the cover with the breathing grid is put on and screwed onto the stands. The grid is removable for easy cleaning. You will find more detailed information in the installation instructions.



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)

Ordering codes Convectors OLOC

				length		height		width		Cover grid finish							
Exclusive	white steel/unpainted exchanger	OLOC	-	...	/	...	/	..	-	1	10	1	-	R1

* *custom-made design*

- OLOC: Free standing convector with forced convection Licon OLOC
- length / height: ...
- width: ..
- Sheathing material: 1 steel, white coat RAL 9010; 9 other finish/colour RAL of the sheathing *
- Cover grid finish: 10 aluminium/silver eloxal coat
- Exchanger finishes: 1 recuperative, unpainted
- Elements of electrical regulation in a converter: R1 standard