



Floor Convectors
LC/SC

LC/SC Series

Floor Convectors

STEKON floor type convectors are designed in order to provide high comfort levels in living areas where wide windows are. This circumstance is provided by the help of the thermal curtain created in front of the window surface. And besides, they prevent the condensation that may occur on the window surfaces. Convectors provide warm air circulation by the help of a hot water sourced heat exchanger, supported by a fan or not, depending on the required capacity.

LC series convectors with fan, activate with 24 V DC safe voltage. Integrated EC fans have a very low energy consumption and may adjust their speed with a signal from the room thermostat or the building automation system. They are suitable for 0-10 V inlet signal.

Convector Control Option

- Room thermostat
- Building management system
- Regulator inside the unit

Room Thermostat

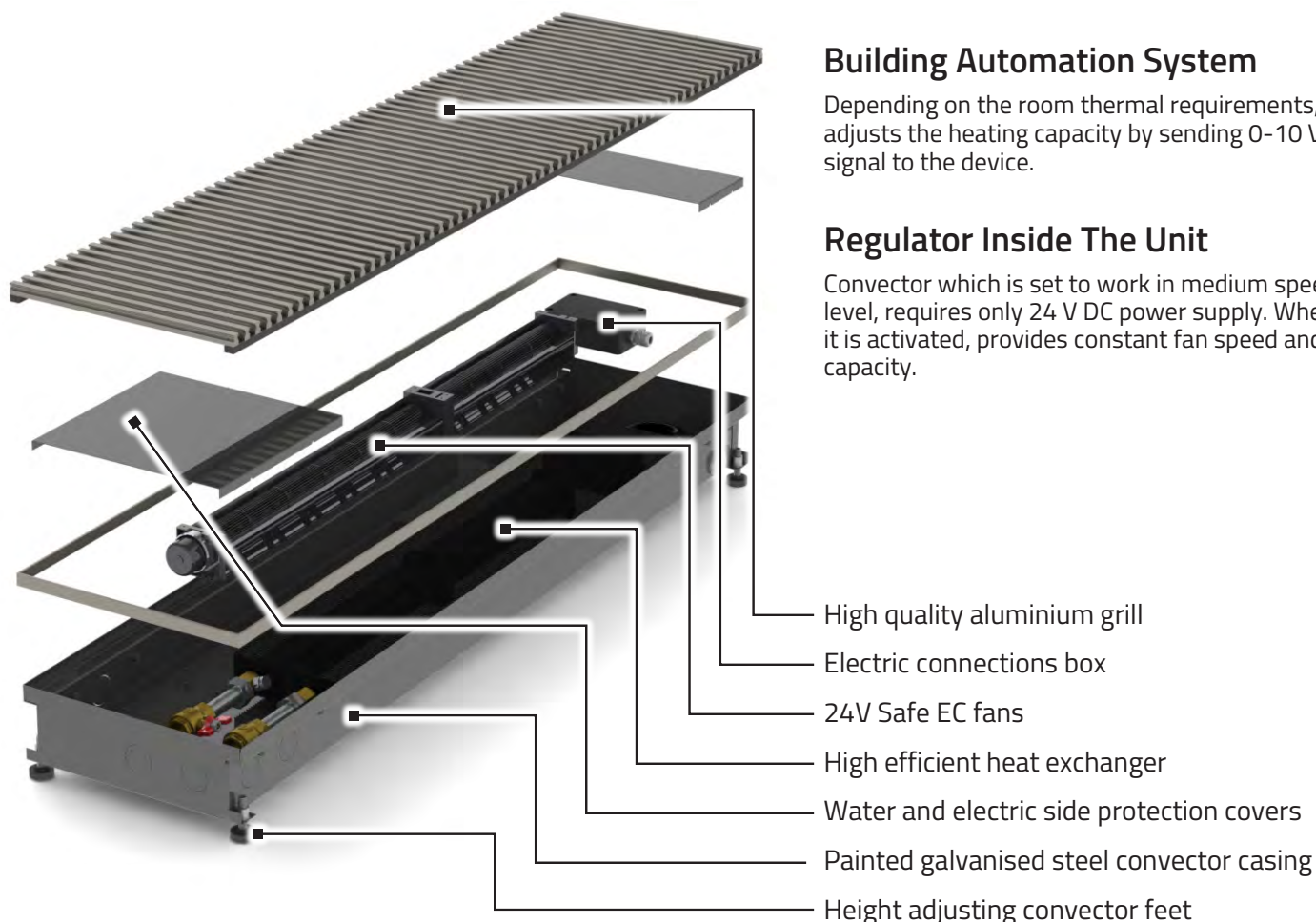
It operates by sending 0-10 V signal to the device according to the set value and the room temperature. Adjusts heating/cooling modes. Controls the valves.

Building Automation System

Depending on the room thermal requirements, adjusts the heating capacity by sending 0-10 V signal to the device.

Regulator Inside The Unit

Convector which is set to work in medium speed level, requires only 24 V DC power supply. When it is activated, provides constant fan speed and capacity.

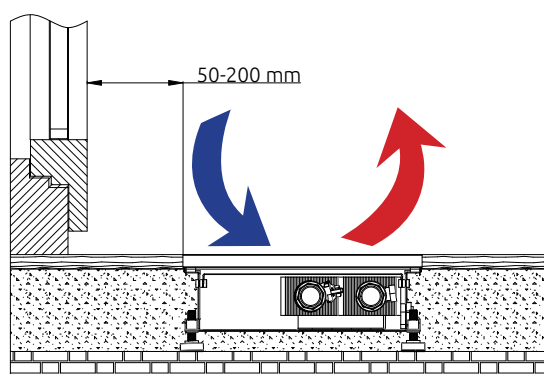
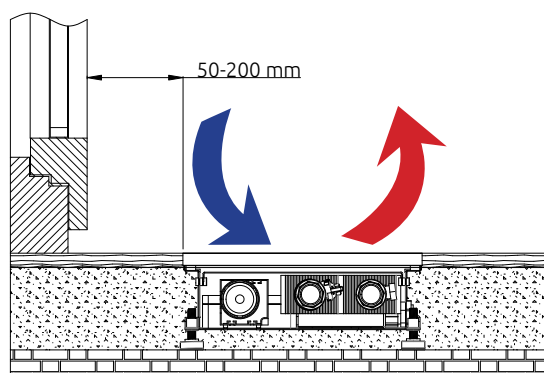




Application

STEKON convectors are installed in front of the windows, in concrete or in false floors. With many grill alternatives, they may satisfy different esthetical demands. Their installation method can save space for decorative purposes.

Floor convectors may be used as primary or secondary heating systems. If they are used as primary heating elements, they should be selected to provide the whole heating capacity required. The model and it's length has a huge role in the design. When the convectors are used as secondary heating elements, they support the existing heating systems like AHU or fan-coils and prevent the cold air radiation in front of the windows which disturbs people a lot. In very humid places they may be used to prevent condensation that may occur on the window surfaces.



Advantages

- Convector options with or without fan
- Economic and safe operating with 24 V DC power supply
- Single convector casing from 1000 mm to 3000 mm length
- Convector height options as 65 mm to 110 mm
- Several grill and frame options
- Special coating options
- Extra silent cross flow fans
- Continious and comfortable 0-10 V control signal
- Easy installation with plug&play electric box
- Heat exchanger tested according to EN 442-2

Construction, Materials

- Painted galvanised steel casing
- Aluminium grill and frame
- Aluminium fins – copper pipe heat exchanger
- Black painted galvanised steel fans

Accessories And Special Variations

- 0-10 V or open/close operation options
- Grill options with blades paralel to long or short side
- Aluminium anodized or RAL painted grill options
- Angled corner connection pieces
- Water connection from long or short side

Recommendations

- Should be taken care if the convector is the primary heating source or only used as a supporting system or to create a warm air curtain.
- The total heat loss in the room and the portion that the convector will provide should be calculated.
- Calculation should be done to decide if the convector without a fan can provide required capacity or if a fan support is necessary.
- The existing length and section dimensions should be considered to determine the convector size.
- The available place to install the tranformer (24 V DC output) should be determined.
- The available place to install the thermostat should be determined.
- The necessary adjustments should be done in the existing system for the required water and electrical connections of the convector.

Floor Convectors

LC 80 Series Floor Convectors With Fan

- Suitable for offices, living rooms and winter gardens
- High efficiency of forced convection
- Low energy loss and noise level with 24 V DC fans
- 3 speed fan control with 0-10 V signal
- Suitable to operate with other systems
- Suitable for dry room applications
- 2 pipe system



Technical Values

Floor Convector

Height	H = 80 mm
Width	W = 200 - 240 - 300 mm
Length	L = 1000 - 3000 mm

Heat Exchanger

Type	Al-Cu
Length	L - 250 mm
Connections	2 x G $\frac{1}{2}$ " male conn.

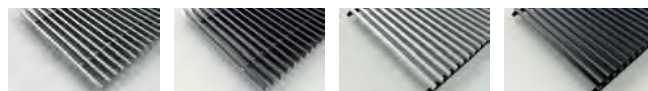
Operating Conditions

Max. temperature	110 °C
Max. Pressure	1 MPa (10 bar)
Room Conditions	Temp. = +2 - 40 °C RH = 20 - 70 %



24V DC
safe voltage 

Stepable Grill Options



Convector Capacity Table

Convector Length (mm)	1000	1250	1500	1750	2000	2250	2500	2750	3000
Number Of Fans	1	1	2	2	2	3	3	3	3
Inlet Power (W)	3,6	3,6	7,2	7,2	7,2	10,8	10,8	10,8	10,8

80/60, 20 °C

Length (mm)	Heating Capacity (W)								
	LC 80 200			LC 80 240			LC 80 300		
	Fan Speed			Fan Speed			Fan Speed		
	1	2	3	1	2	3	1	2	3
1000	428	482	599	772	929	1198	984	1148	1479
1250	581	654	811	1047	1261	1626	1334	1558	2000
1500	732	827	1026	1321	1592	2053	1684	1968	2532
1750	885	999	1241	1597	1924	2482	2035	2377	3060
2000	1038	1172	1454	1873	2256	2909	2387	2787	3586
2250	1192	1346	1669	2147	2589	3337	2734	3199	4115
2500	1344	1515	1882	2423	2919	3765	3089	3607	4642
2750	1497	1690	2096	2699	3253	4192	3437	4019	5168
3000	1649	1861	2310	2975	3583	4620	3812	4425	5696

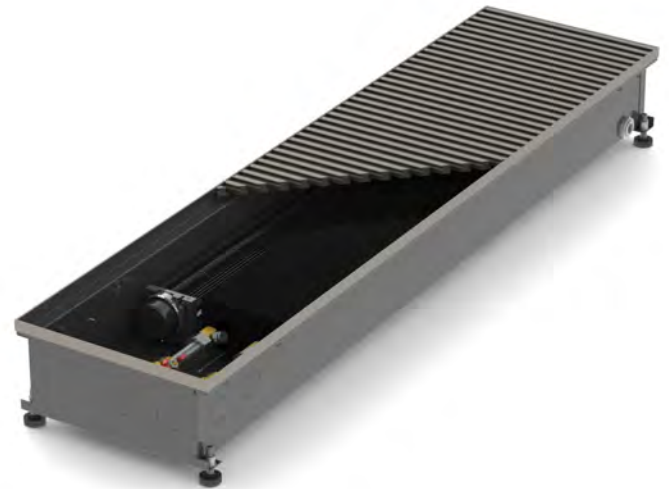
70/50, 22 °C

Length (mm)	Heating Capacity (W)								
	LC 80 200			LC 80 240			LC 80 300		
	Fan Speed			Fan Speed			Fan Speed		
	1	2	3	1	2	3	1	2	3
1000	305	343	427	565	680	877	725	846	1090
1250	414	466	578	766	923	1190	983	1148	1474
1500	522	590	732	967	1165	1503	1241	1450	1866
1750	631	712	885	1169	1408	1816	1500	1752	2255
2000	740	835	1037	1371	1651	2129	1759	2054	2642
2250	850	959	1190	1572	1895	2443	2015	2357	3032
2500	958	1080	1342	1773	2137	2756	2276	2657	3421
2750	1067	1205	1494	1975	2381	3068	2532	2961	3808
3000	1176	1326	1646	2177	2623	3381	2809	3261	4197

LC 110 Series

Floor Convectors With Fan

- Suitable for offices, living rooms and winter gardens
- Very high efficiency of forced convection
- Low energy loss and noise level with 24 V DC fans
- 3 speed fan control with 0-10 V signal
- Suitable to operate with other systems
- Suitable for dry room applications
- 2 pipe system



Technical Values

Floor Convector

Height	H = 110 mm
Width	W = 200 - 240 - 300 mm
Length	L = 1000 - 3000 mm

Heat Exchanger

Type	Al-Cu
Length	L - 240 mm
Connections	2 x G $\frac{1}{2}$ " male conn.

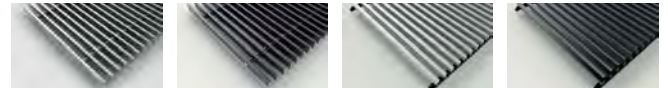
Operating Conditions

Max. temperature	110 °C
Max. Pressure	1 MPa (10 bar)
Room Conditions	Temp. = +2 - 40 °C RH. = 20 - 70 %



24V DC
safe voltage 

Stepable Grill Options



Convector Capacity Table

Convector Length (mm)	1000	1250	1500	1750	2000	2250	2500	2750	3000
Number Of Fans	1	1	2	2	2	3	3	3	3
Inlet Power (W)	4,2	4,2	8,4	8,4	8,4	12,6	12,6	12,6	12,6

80/60, 20 °C

Heating Capacity (W)									
LC 110 200			LC 110 240			LC 110 300			
Length (mm)	Fan Speed			Fan Speed			Fan Speed		
	1	2	3	1	2	3	1	2	3
1000	517	549	625	936	1063	1256	1164	1282	1513
1250	702	746	849	1269	1443	1708	1580	1740	2052
1500	885	942	1072	1604	1822	2154	1996	2199	2593
1750	1070	1138	1295	1938	2202	2602	2412	2656	3132
2000	1255	1335	1519	2272	2582	3051	2827	3114	3672
2250	1441	1533	1742	2608	2962	3499	3242	3573	4211
2500	1625	1727	1966	2941	3341	3948	3660	4029	4752
2750	1811	1926	2189	3277	3722	4396	4074	4488	5291
3000	1993	2121	2412	3610	4101	4846	4516	4944	5832

70/50, 22 °C

Heating Capacity (W)									
LC 110 200			LC 110 240			LC 110 300			
Length (mm)	Fan Speed			Fan Speed			Fan Speed		
	1	2	3	1	2	3	1	2	3
1000	369	391	446	683	776	917	858	944	1115
1250	500	532	605	927	1053	1247	1164	1282	1512
1500	631	672	764	1171	1330	1572	1470	1620	1910
1750	763	811	923	1415	1607	1899	1777	1957	2307
2000	894	952	1083	1659	1885	2227	2083	2294	2705
2250	1027	1093	1242	1904	2162	2554	2389	2632	3102
2500	1158	1231	1401	2147	2439	2882	2697	2969	3501
2750	1291	1373	1560	2392	2717	3209	3001	3307	3898
3000	1421	1512	1720	2635	2994	3537	3327	3643	4297

Floor Convectors

SC 80 Series

Floor Convector Without Fan

- Suitable for offices, corridors, living rooms and winter gardens
- High efficiency of natural convection
- Suitable to operate with other systems
- Suitable for dry room applications
- 2 pipe system



Technical Values

Floor Convector

Height	H = 80 mm
Width	W = 240 - 300 mm
Length	L = 1000 - 3000 mm

Heat Exchanger

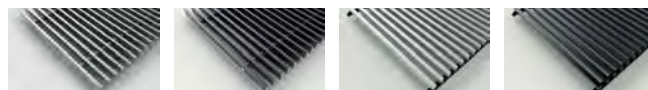
Type	Al-Cu
Length	L - 240 mm
Connections	2 x G $\frac{1}{2}$ " male conn.

Operating Conditions

Max. temperature	110 °C
Max. Pressure	1 MPa (10 bar)
Room Conditions	Temp. = +2 - 40 °C RH. = 20 - 70 %



Stepable Grill Options



80/60, 20 °C

	Heating Capacity (W)	
	SC 80 240	SC 80 300
1000	188	215
1250	254	290
1500	321	367
1750	387	443
2000	454	520
2250	520	597
2500	588	673
2750	653	750
3000	722	826

70/50, 22 °C

	Heating Capacity (W)	
	SC 80 240	SC 80 300
1000	126	146
1250	171	198
1500	216	250
1750	261	302
2000	305	354
2250	349	407
2500	396	458
2750	439	511
3000	485	563

SC 110 Series

Floor Convector Without Fan

- Suitable for offices, corridors, living rooms and winter gardens
- High efficiency of natural convection
- Suitable to operate with other systems
- Suitable for dry room applications
- 2 pipe system



Technical Values

Floor Convector

Height	H = 110 mm
Width	W = 240 - 300 mm
Length	L = 1000 - 3000 mm

Heat Exchanger

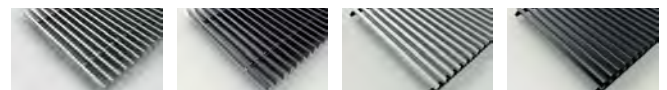
Type	Al-Cu
Length	L - 250 mm
Connections	2 x G $\frac{1}{2}$ " male conn.

Operating Conditions

Max. temperature	110 °C
Max. Pressure	1 MPa (10 bar)
Room Conditions	Temp.= +2 - 40 °C RH.= 20 - 70 %



Stepable Grill Options



80/60, 20 °C

	Heating Capacity (W)	
	SC 110 240	SC 110 300
1000	245	324
1250	332	441
1500	419	556
1750	506	672
2000	593	788
2250	679	906
2500	767	1020
2750	853	1138
3000	942	1252

70/50, 22 °C

	Heating Capacity (W)	
	SC 110 240	SC 110 300
1000	166	220
1250	225	299
1500	284	378
1750	343	456
2000	402	536
2250	460	616
2500	520	693
2750	578	773
3000	638	850

Floor Convectors

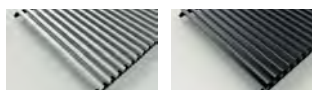
LC 65 Series Floor Convectors With Fan

- Suitable for offices, living rooms and winter gardens
- High efficiency of forced convection
- Low energy loss and noise level with 24 V DC fans
- 3 speed fan control with 0-10 V signal
- Suitable to operate with other systems
- Suitable for dry room applications
- 2 pipe system



24V DC
safe voltage 

Stepable Grill Options



**Minimum
Height
!**

Technical Values

Floor Convector

Height	H = 65 mm
Width	W = 240 mm
Length	L = 1000 - 3000 mm

Heat Exchanger

Type	Al-Cu
Length	L - 240 mm
Connections	2 x G $\frac{1}{2}$ " male conn.

Operating Conditions

Max. temperature	110 °C
Max. Pressure	1 MPa (10 bar)
Room Conditions	Temp. = +2 - 40 °C RH. = 20 - 70 %

Convector Capacity Table

Convector Length (mm)	1000	1250	1500	1750	2000	2250	2500	2750	3000
Number Of Fans	1	1	2	2	2	3	3	3	3
Inlet Power (W)	3,6	3,6	7,2	7,2	7,2	10,8	10,8	10,8	10,8

80/60, 20 °C

Heating Capacity (W)									
Length (mm)	LC 65 240								
	Fan Speed								
	1	2	3						
1000	655	789	1017						
1250	888	1071	1380						
1500	1122	1353	1743						
1750	1356	1634	2106						
2000	1590	1916	2469						
2250	1824	2198	2833						
2500	2057	2480	3196						
2750	2291	2761	3559						
3000	2525	3043	3922						

70/50, 22 °C

Heating Capacity (W)									
Length (mm)	LC 65 240								
	Fan Speed								
	1	2	3						
1000	479	577	744						
1250	650	784	1010						
1500	821	990	1276						
1750	993	1196	1542						
2000	1164	1402	1807						
2250	1335	1609	2073						
2500	1506	1815	2339						
2750	1677	2021	2605						
3000	1848	2227	2871						

Stekon SC – Technical Specifications (Convectors Without Fan)

Convectors shall be without fan, with grills and decorative frames and shall be installed in concrete.

Casing shall be painted galvanised sheet steel. Casing height shall be minimum 65 mm, maximum 110 mm. Convector casing shall have height adjusting feet for accurate adjustment in concrete. Heat exchanger inside the casing shall have copper pipe, aluminium blades. Heat exchanger operating pressure shall be 10 bar, test pressure shall be 16 bar.

Walkable grills to cover the convector casing shall be provided with the convector. Architectural decisions about the grill and frame shall be done in the later stages. Flexible pipes, regulation and ball valve shall be provided with the convector.

Convectors shall be available to provide the performance required in the BOQ. Heating capacity shall be tested according to EN442-2.

Stekon LC – Technical Specifications (Convectors With Fan)

Convectors shall be with fan, with grills and decorative frames and shall be installed in concrete. Convector shall be provided with the tangential fan inside the casing.

Casing shall be painted galvanised sheet steel. Casing height shall be minimum 65 mm, maximum 110 mm. Convector casing shall have height adjusting feet for accurate adjustment in concrete. Heat exchanger inside the casing shall have copper pipe, aluminium blades. Heat exchanger operating pressure shall be 10 bar, test pressure shall be 16 bar.

Convector fan voltage shall be 24 V DC for safety purposes. Fan motors shall have an EC technology and shall provide low noise operation.

Walkable grills to cover the convector casing shall be provided with the convector. Architectural decisions about the grill and frame shall be done in the later stages. Flexible pipes, regulation and ball valve shall be provided with the convector.

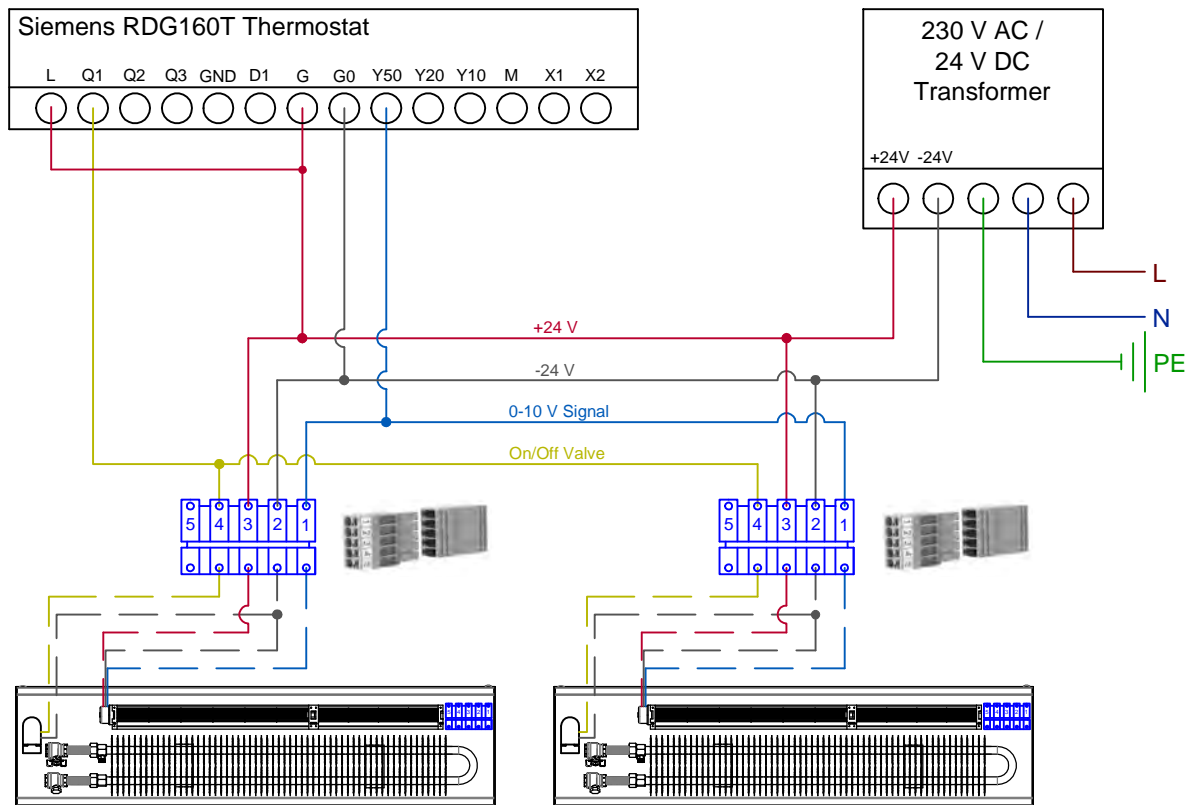
Room thermostat and transformer shall be offered separately.

Convectors shall be available to provide the performance required in the BOQ. Heating capacity shall be tested according to EN442-2.

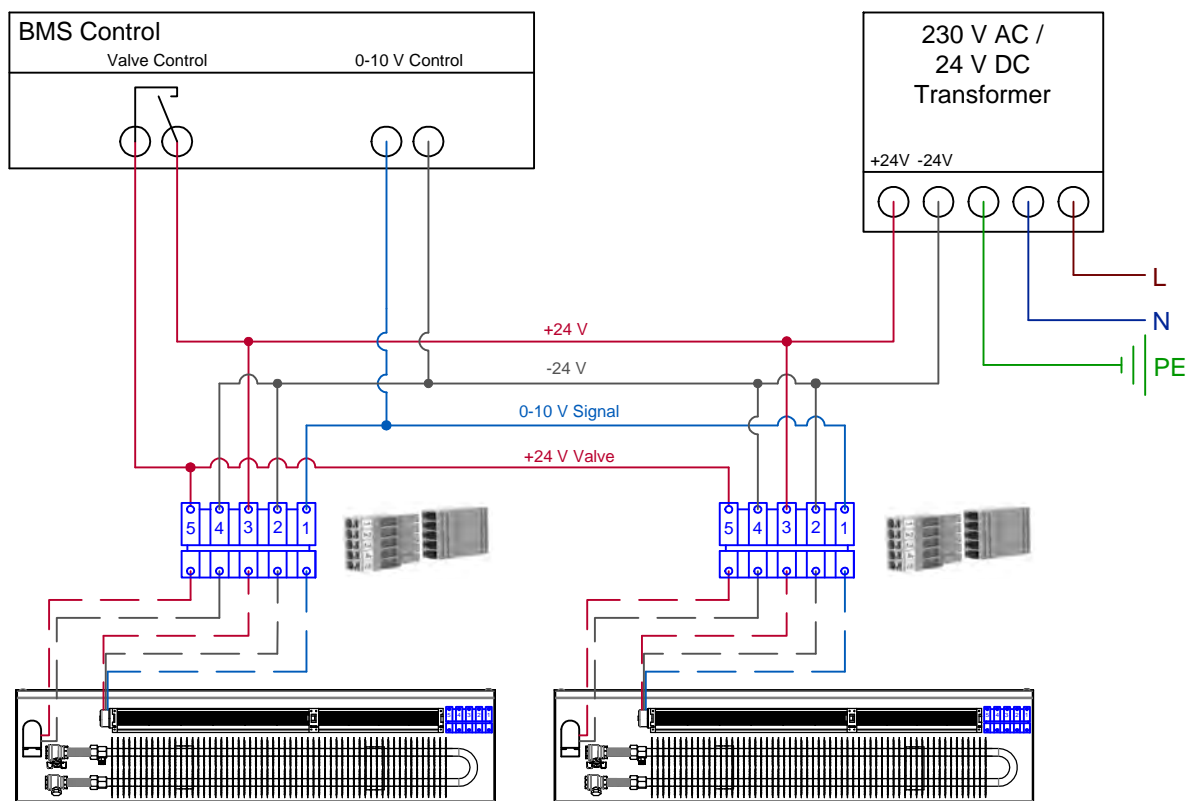
Floor Convectors

Electrical Connections For Floor Convectors With Fan - Siemens Thermostat

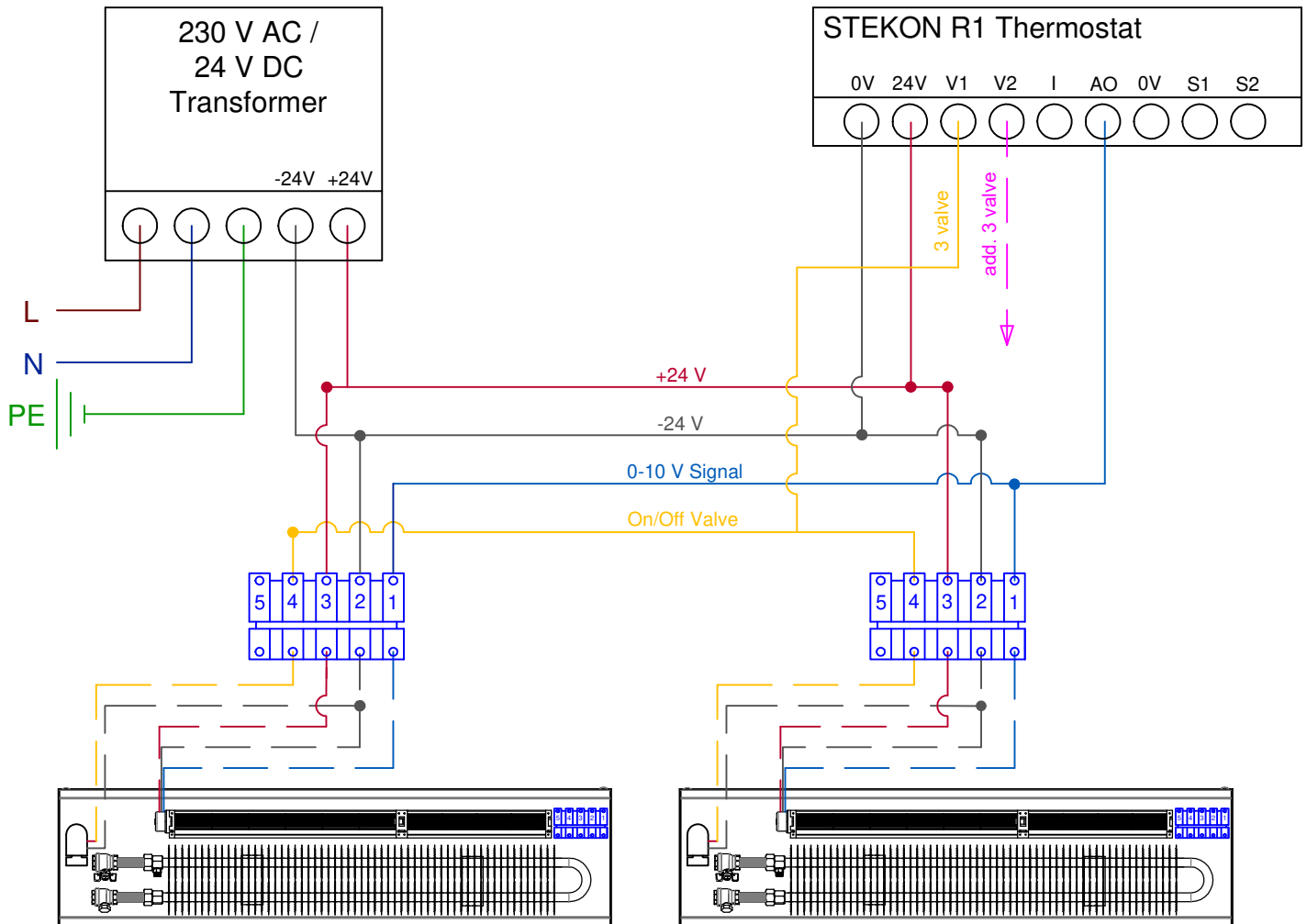
0-10 V fan control with room thermostat



Fan control through the building management system (BMS)



Electrical Connections For Floor Convectors With Fan - Stekon R1 Thermostat



- 1) 24V DC +/- power supplies are made by putting a 2-core cable between the transformer and the convectors.
- 2) A 4-core cable is considered between the convector and the closest to the room thermostat (5 core cable should be considered if more than 3 valves are to be controlled). More than 6 valves cannot be controlled with 1 thermostat.
- 3) According to the convector to be controlled, cable parallels are made between the devices. Distances of 20m or more are not recommended..

* recommended cable cross section 1 - 1,5

Floor Convectors

Separable Inner Mechanism Option - IM

STEKON floor convectors are also available with separable inner parts, if requested.

After the empty convector casings are delivered at site and the installation stage has ended, the table with the inner parts of the convector is installed in the casing. This way the risk of dirtiness of building dust and insufficient protection at site is lowered.

After the inner parts are installed, the electrical and water connections may be done. And when the fine works have finished the grills may be laid on the convector casings.

This option should be mentioned at the ordering stage of the convectors. It can be applied to all convector models.



Drainage Option – DR

STEKON floor convectors are also available with integrated drainage pipes if requested.

In areas like closed pools, the convectors shall have drainage systems in order to transfer the water that may splash in, from the water drops around the pool.

This option should be mentioned at the ordering stage of the convectors.



Ordering Code

LC 80 / 240 / 1000 / SK / U / I / L1 / IM /DR

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

(1)	Model	LC	= Floor Convector With Fan
		SC	= Floor Convector Without Fan
(2)	Height	65	= 65mm
		80	= 80 mm
		110	= 110 mm
(3)	Width		= 200 - 240 - 300 mm
(4)	Length	1000	= 1000 - 3000 mm
(5)	Control Type	SK	= 0-10 V kontrol
		OF	= Sabit hız aç/kapa kontrol
(6)	Grilles	U	= Blades Parallel To Long Side
		K	= Blades Parallel To Short Side
(7)	Frame Type	I	= Standard Frame
		F	= L frame
(8)	Water Connections	L1	= From Left Short Side
		L2	= From Left Long Side
		R1	= From Right Short Side
		R2	= From Right Long Side
(9)	Add. Option	IM	= Seperate inner mechanism
(10)	Add. Option	DR	= Drain connection

Floor Convectors

Notes

