

Aquilo



Merriott



Contents

Introduction	04	Convectors Connected in Series	30
Range Overview	05	Decorative Grilles	31
Aquila FMS:		Customised Designs	34
Introduction	06	Connections to Pipe Systems	36
Dimensions, Weight & Water Contents	07	Electrical Installation	38
Technical Details	08	Wiring Diagrams (Examples)	39
Aquila F1S (Fan Version):		Hydraulic Characteristics	46
Introduction	12	Conversion Table	51
Dimensions, Weight & Water Contents	13	Accessories	52
Technical Details	14		
Aquila F2C/F2V (Heating or Cooling):			
Introduction	20		
Dimensions, Weight & Water Contents	21		
Technical Details	22		
Aquila F4C/F4V (Heating & Cooling):			
Introduction	26		
Dimensions, Weight & Water Contents	27		
Technical Details	28		



Combining aesthetic design and high-efficiency heating for modern spaces

Aquilo Trench convectors offer an ideal blend of aesthetics and performance for any building. These convectors are typically installed in the floor, making them perfect for spaces with large glazed surfaces or limited wall space. A significant advantage of these convectors is their low water content in the heat exchanger compared to classic radiators, which allows for rapid room heating. Their floor installation makes them an optimal choice for efficient heat circulation within a room.

There are two primary types of floor convectors: those without fans (natural convection) and those with fans (forced convection). Convectors without fans operate on natural convection, where the heat exchanger warms up through flowing water and the heat naturally rises. Convectors with fans use forced convection, where a fan blows the air heated by the exchanger into the room. These convectors come in various dimensions, power ratings, and duct types, and they are supplied with either aluminium or wooden grilles.

OUTPUTS:

All Aquilo Trench Convectors are tested in accordance with EN16430.

WARRANTY:

Convectors - 10 Years
Electrical Components - 2 years

MATERIALS:

Duct - Galvanised or Stainless Steel

Grille - Wood, Duralumin or
Stainless Steel

Heat Exchanger - Aluminium
Finned Copper

CONNECTIONS:

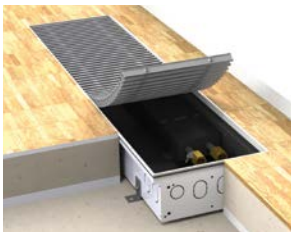
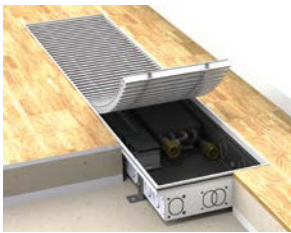
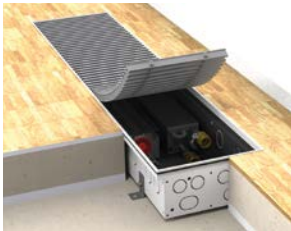
G 1/2" - Internal Thread

TESTING:

Operating - 10 bar
Test - 13 bar

Range Overview

The Aquilo range provides a flexible and energy-efficient heating and cooling solution tailored for modern interiors. With multiple models available to suit various building requirements, this product line is ideal for maintaining comfort in spaces with large, glazed surfaces, open layouts, or limited wall space. Each system is designed to blend seamlessly into the floor, preserving architectural aesthetics without compromising performance.

	Model	Operation	Fan	Connections	Height (mm)	Widths (mm)	Length* (mm)
	FMS	Heating Only	No Fan	2 Pipe	90, 110, 140, 190	200, 250, 300, 340, 420	700 - 3600
	FIS	Heating Only	24V Fan	2 Pipe	75, 110	170, 200, 230, 250	700 - 3000
	F2C	Heating or Cooling	24V Fan	2 Pipe	110, 170	230, 340	850 - 2700
	F2V	Heating or Cooling	230V Fan	2 Pipe	170	340	850 - 2700
	F4C	Heating & Cooling	24V Fan	4 Pipe	170	340	850 - 2700
	F4V	Heating & Cooling	230V Fan	4 Pipe	170	340	850 - 2700

*Special versions can be manufactured at non-standard lengths.

Decorative Grille Styles

Wooden Grille



Natural Beech



Varnished Beech



Natural Oak



Varnished Oak

Duralumin Grille



Natural



Black



Dark Bronze



Light Bronze

Stainless Steel Grille



Stainless Steel

Aquilo FMS (No Fan)

Aquilo FMS trench convectors are designed for in-floor installation, featuring a black-painted copper-aluminium heat exchanger inside a black-coated galvanised steel duct. The convector is topped with a decorative grille, available in various finishes. It connects to the heating system via two G 1/2" internal thread pipes.

Duct Features

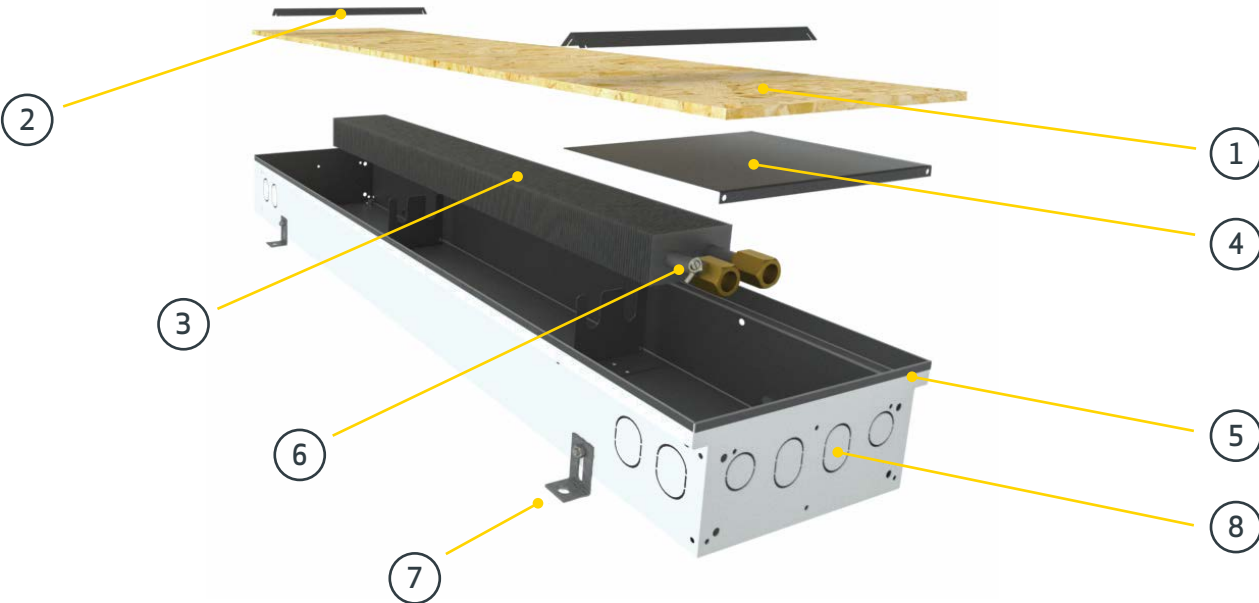
- > Levelling feet M8 x 30mm with internal hexagon (4 pcs. for duct length up to 2.5m, 6 pcs. for over 2.5m)
- > Knock-outs for heating system pipes
- > Protection for heat exchanger and duct to prevent damage or scuffing during installation

Heat Exchanger Accessories

- > Manual air vent
- > 10cm stainless steel flexible hose connector kit with G 1/2" thread

TECHNICAL SPECIFICATION:

Width (mm)	200, 250, 300, 340, 420
Length (mm)	700 - 3600
Height (mm)	90, 100, 140, 190
Heat exchanger	Aluminium Finned Copper (RAL9005)
Duct design	Galvanised Steel, black RAL 9005 powder-coated inside or Stainless Steel
Grille material	Wood (Oak or Beech); Duralumin (choice of colours); Stainless Steel
Standard connections	2 x G 1/2" - internal thread
Pressure class	10 bar
Maximum temperature	110°C



- 1: Protective cover.

2: Braces to prevent distortion during floor laying.

3: Heat exchanger (copper pipes, aluminium fins, coated with black varnish).
- 4: Cover plate to hide valves and connections.

5: Duct (double-side galvanised and varnished).

6: Air vent.

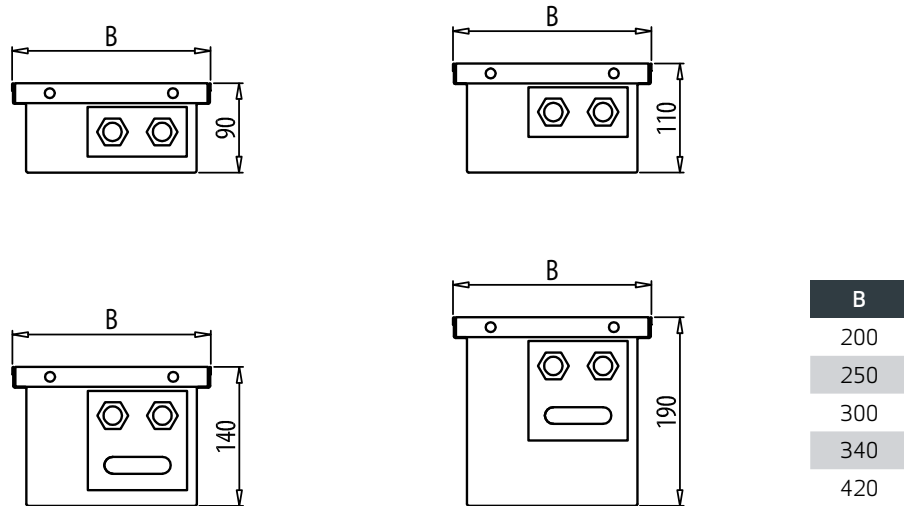
7: Levelling feet.

8: Knock-outs for pipe connections.

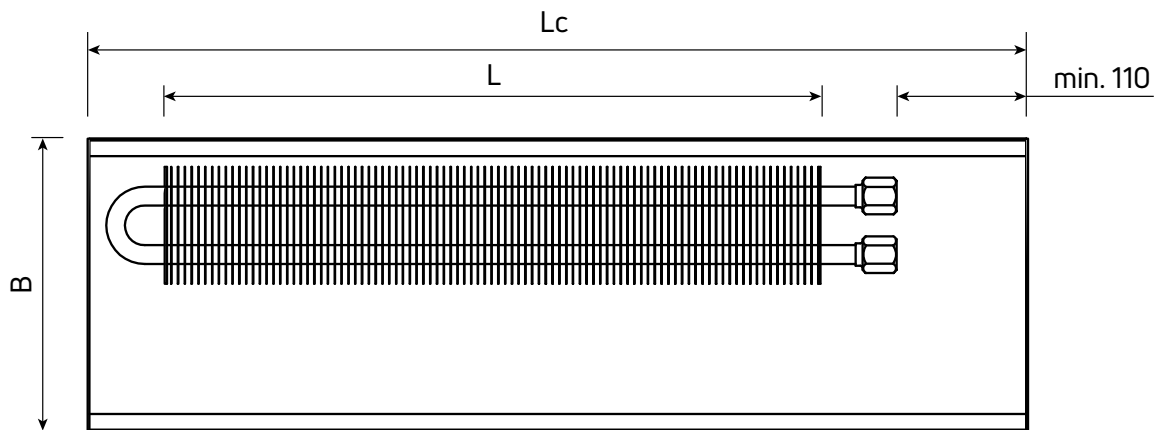
Dimensions, Weight & Water Contents

Aquila FMS (No Fan)

SIDE VIEWS



TOP VIEW



L_c - Convector's overall length
L - Exchanger's length
B - Width

Weight & Water Contents

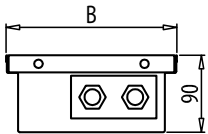
Width B (mm)	200				250				300				340				420			
Height (mm)	90	110	140	190	90	110	140	190	90	110	140	190	90	110	140	190	90	110	140	190
Weight (kg/m)	6.7	7	8.8	9.5	7.3	7.7	9.5	10.2	8.8	9	11.7	12.3	9.3	9.7	12.2	13	11.3	11.5	14.8	15.5
Water Content (l/m)	0.3	0.3	0.6	0.6	0.3	0.3	0.6	0.6	0.3	0.3	0.9	0.9	0.3	0.3	0.9	0.9	0.6	0.6	1.2	1.2

NOTE: Grille weights can be found on page 33.

Technical Details

Aquilo FMS (No Fan)
 Height 90mm

Heat Outputs



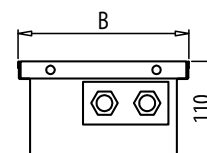
Lc Overall Length (mm)	Heat Output t _e / t _i / t _a (°C)	B - Width (mm)				
		200	250	300	340	420
700	75/65/20	110	137	176	194	228
	55/45/20	54	67	86	95	111
800	75/65/20	134	166	215	237	277
	55/45/20	66	81	105	116	135
900	75/65/20	158	196	253	279	327
	55/45/20	77	96	124	136	160
1000	75/65/20	182	226	291	321	377
	55/45/20	89	111	142	157	184
1100	75/65/20	206	255	330	363	426
	55/45/20	101	125	161	178	208
1200	75/65/20	230	285	368	406	476
	55/45/20	112	139	180	199	233
1300	75/65/20	254	315	406	448	525
	55/45/20	124	154	199	219	257
1400	75/65/20	278	344	445	490	575
	55/45/20	136	168	218	240	281
1500	75/65/20	302	374	483	532	624
	55/45/20	148	183	236	260	305
1600	75/65/20	326	404	521	575	674
	55/45/20	159	198	255	281	330
1800	75/65/20	374	463	598	659	773
	55/45/20	183	226	292	322	378
2000	75/65/20	422	523	675	744	872
	55/45/20	206	256	330	364	426
2200	75/65/20	470	582	751	828	971
	55/45/20	230	285	367	405	475
2400	75/65/20	518	641	828	912	1070
	55/45/20	253	313	405	446	523
2500	75/65/20	542	671	866	955	1120
	55/45/20	265	328	423	467	548
2600	75/65/20	566	701	905	997	1169
	55/45/20	277	343	443	488	572
2700	75/65/20	590	730	943	1039	1219
	55/45/20	289	357	461	508	596
2800	75/65/20	614	760	981	1081	1268
	55/45/20	300	372	480	529	620
2900	75/65/20	638	790	1019	1124	1318
	55/45/20	312	386	498	550	645
3000	75/65/20	662	820	1058	1166	1367
	55/45/20	324	401	517	570	668
3200	75/65/20	710	879	1134	1250	1466
	55/45/20	347	430	555	611	717
3400	75/65/20	758	938	1211	1335	1565
	55/45/20	371	459	592	653	765
3600	75/65/20	806	998	1288	1419	1665
	55/45/20	394	488	630	694	814

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.
 When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.9.

Aquila FMS (No Fan)

Height 110mm

Heat Outputs



Lc Overall Length (mm)	Heat Output $t_e / t_r / t_l$ (°C)	B - Width (mm)				
		200	250	300	340	420
700	75/65/20	121	161	213	232	278
	55/45/20	59	79	104	113	136
800	75/65/20	148	196	260	282	338
	55/45/20	72	96	127	138	165
900	75/65/20	174	231	306	332	399
	55/45/20	85	113	150	162	195
1000	75/65/20	200	266	353	383	459
	55/45/20	98	130	173	187	224
1100	75/65/20	227	301	399	433	520
	55/45/20	111	147	195	212	254
1200	75/65/20	253	336	445	483	580
	55/45/20	124	164	218	236	284
1300	75/65/20	280	372	492	534	640
	55/45/20	137	182	241	261	313
1400	75/65/20	306	407	538	584	701
	55/45/20	150	199	263	286	343
1500	75/65/20	332	442	584	635	761
	55/45/20	162	216	286	311	372
1600	75/65/20	359	477	631	685	822
	55/45/20	176	233	309	335	402
1800	75/65/20	411	547	724	786	942
	55/45/20	201	267	354	384	461
2000	75/65/20	464	617	816	886	1063
	55/45/20	227	302	399	433	520
2200	75/65/20	517	687	909	987	1184
	55/45/20	253	336	445	483	579
2400	75/65/20	570	757	1002	1088	1305
	55/45/20	279	370	490	532	638
2500	75/65/20	596	792	1048	1138	1365
	55/45/20	291	387	512	556	667
2600	75/65/20	623	827	1095	1188	1426
	55/45/20	305	404	535	581	697
2700	75/65/20	649	862	1141	1239	1486
	55/45/20	317	422	558	606	727
2800	75/65/20	675	897	1187	1289	1546
	55/45/20	330	439	580	630	756
2900	75/65/20	702	932	1234	1340	1607
	55/45/20	343	456	603	655	786
3000	75/65/20	728	967	1280	1390	1667
	55/45/20	356	473	626	680	815
3200	75/65/20	781	1038	1373	1491	1788
	55/45/20	382	508	671	729	874
3400	75/65/20	834	1108	1466	1591	1909
	55/45/20	408	542	717	778	934
3600	75/65/20	886	1178	1558	1692	2030
	55/45/20	433	576	762	827	993

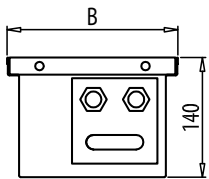
Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.9.

Technical Details

Aquila FMS (No Fan)
Height 140mm

Heat Outputs



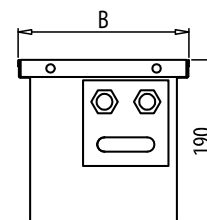
Lc Overall Length (mm)	Heat Output t _e / t _i / t _a (°C)	B - Width (mm)				
		200	250	300	340	420
700	75/65/20	134	199	238	276	325
	55/45/20	66	97	116	135	159
800	75/65/20	163	242	290	337	395
	55/45/20	80	118	142	165	193
900	75/65/20	193	285	341	397	466
	55/45/20	94	139	167	194	228
1000	75/65/20	222	328	393	457	537
	55/45/20	109	160	192	223	263
1100	75/65/20	251	371	445	517	607
	55/45/20	123	181	218	253	297
1200	75/65/20	280	414	496	577	678
	55/45/20	137	202	243	282	332
1300	75/65/20	309	458	548	637	748
	55/45/20	151	224	268	311	366
1400	75/65/20	339	501	600	697	819
	55/45/20	166	245	293	341	400
1500	75/65/20	368	544	652	757	890
	55/45/20	180	266	319	370	435
1600	75/65/20	397	587	703	817	960
	55/45/20	194	287	344	400	469
1800	75/65/20	455	673	807	938	1102
	55/45/20	222	329	395	459	539
2000	75/65/20	514	760	910	1058	1243
	55/45/20	251	372	445	517	608
2200	75/65/20	572	846	1014	1178	1384
	55/45/20	280	414	496	576	677
2400	75/65/20	630	932	1117	1298	1525
	55/45/20	308	456	546	635	746
2500	75/65/20	660	975	1169	1358	1596
	55/45/20	323	477	572	664	780
2600	75/65/20	689	1019	1220	1418	1666
	55/45/20	337	498	597	693	815
2700	75/65/20	718	1062	1272	1479	1737
	55/45/20	351	519	622	723	849
2800	75/65/20	747	1105	1324	1539	1808
	55/45/20	365	540	647	753	884
2900	75/65/20	776	1148	1376	1599	1878
	55/45/20	379	561	673	782	918
3000	75/65/20	805	1191	1427	1659	1949
	55/45/20	394	582	698	811	953
3200	75/65/20	864	1278	1531	1779	2090
	55/45/20	422	625	749	870	1022
3400	75/65/20	922	1364	1634	1899	2231
	55/45/20	451	667	799	929	1091
3600	75/65/20	981	1450	1738	2019	2373
	55/45/20	480	709	850	987	1160

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.
When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.9.

Aquila FMS (No Fan)

Height 190mm

Heat Outputs



Lc Overall Length (mm)	Heat Output t _e / t _i / t _a (°C)	B - Width (mm)				
		200	250	300	340	420
700	75/65/20	138	226	300	364	449
	55/45/20	67	111	147	178	220
800	75/65/20	169	275	365	444	547
	55/45/20	83	134	178	217	267
900	75/65/20	199	325	430	523	645
	55/45/20	97	159	210	256	315
1000	75/65/20	229	374	496	602	742
	55/45/20	112	183	243	294	363
1100	75/65/20	259	423	561	681	840
	55/45/20	127	207	274	333	411
1200	75/65/20	289	472	626	761	937
	55/45/20	141	231	306	372	458
1300	75/65/20	319	521	691	840	1035
	55/45/20	156	255	338	411	506
1400	75/65/20	349	571	756	919	1133
	55/45/20	171	279	370	449	554
1500	75/65/20	379	620	822	998	1230
	55/45/20	185	303	402	488	601
1600	75/65/20	409	669	887	1078	1328
	55/45/20	200	327	434	527	649
1800	75/65/20	470	767	1017	1236	1523
	55/45/20	230	375	497	604	745
2000	75/65/20	530	866	1148	1395	1719
	55/45/20	259	423	561	682	841
2200	75/65/20	590	964	1278	1553	1914
	55/45/20	289	471	625	759	936
2400	75/65/20	650	1062	1408	1711	2109
	55/45/20	318	519	689	837	1031
2500	75/65/20	680	1112	1474	1791	2207
	55/45/20	333	544	721	876	1079
2600	75/65/20	710	1161	1539	1870	2305
	55/45/20	347	568	753	914	1127
2700	75/65/20	741	1210	1604	1949	2402
	55/45/20	362	592	784	953	1175
2800	75/65/20	771	1259	1669	2028	2500
	55/45/20	377	616	816	992	1223
2900	75/65/20	801	1308	1734	2108	2598
	55/45/20	392	640	848	1031	1270
3000	75/65/20	831	1357	1800	2187	2695
	55/45/20	406	664	880	1069	1318
3200	75/65/20	891	1456	1930	2345	2891
	55/45/20	436	712	944	1147	1414
3400	75/65/20	951	1554	2060	2504	3086
	55/45/20	465	760	1007	1224	1509
3600	75/65/20	1011	1653	2191	2662	3281
	55/45/20	494	808	1071	1302	1604

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.9.

Aquilo FIS (Fan Version)

Aquilo FIS trench convectors are designed for in-floor installation with a black-painted copper-aluminium heat exchanger inside a black-coated galvanised steel duct. They feature whisper quiet centrifugal fans, powered by 24V motors. The convector is topped with a decorative grille, available in various finishes. It connects to the heating system via two G 1/2" internal thread pipes.

Heat Exchanger Accessories

- > Manual air vent
- > Two side covers
- > 10cm stainless steel flexible hose connector kit with G 1/2" thread

Duct Features

- > Levelling feet M8 x 30mm with internal hexagon (4 pcs. for duct length up to 2.5m, 6 pcs. for over 2.5m)
- > Knock-outs for heating system pipes
- > 2 rubber grommets for domestic electric circuit connection

Standard Electrical Accessories

- > 1 or 2 modules with 24V motor-driven centrifugal fans
- > Each module includes one motor

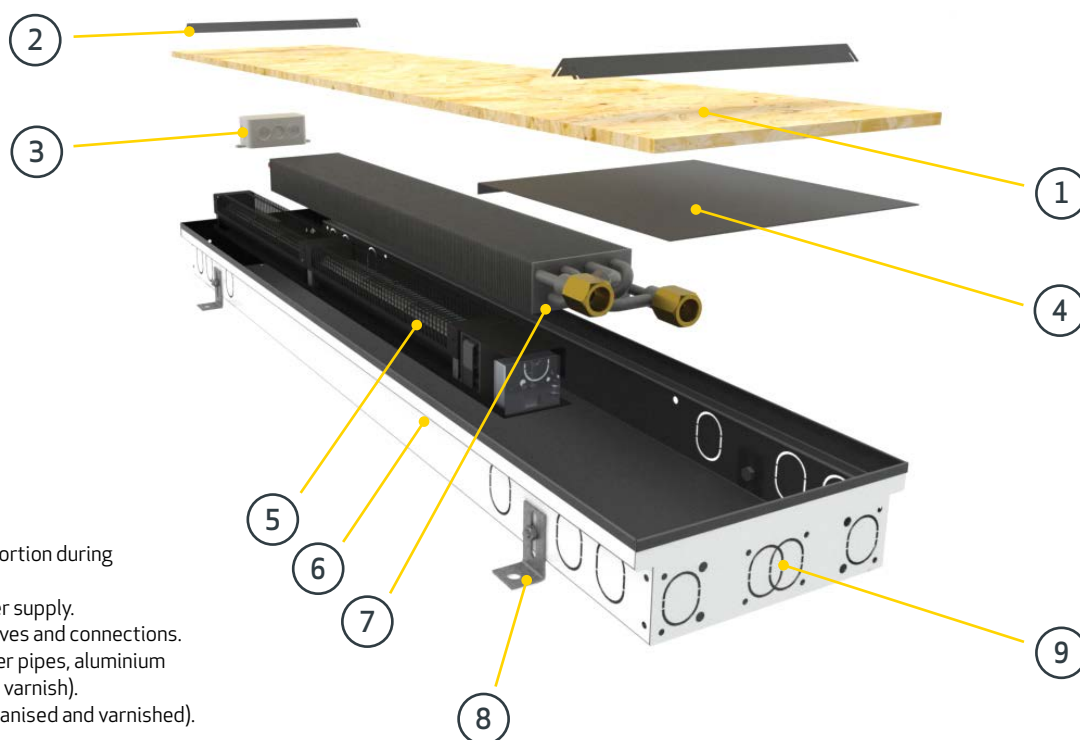
Mandatory Extra Electrical Accessories (Ordered Separately)

- > DRP transformer (~230/24V) sized according to the convector or group of convectors, based on the number of connected motors
- > Manual switch or room thermostat (manual or automatic) for regulating heat output via three-level fan speed control

TECHNICAL SPECIFICATION:

Height - Width (mm)	75-170, 200, 230 110-230, 250
Length (mm)	700 - 3000
Heat exchanger	Aluminium Finned Copper (RAL9005)
Duct design	Galvanised Steel, black RAL 9005 powder-coated inside or Stainless Steel
Grille material	Wood (Oak or Beech); Duralumin (choice of colours); Stainless Steel
Standard connections	2 x G 1/2" - internal thread
Pressure class	10 bar
Maximum temperature	110°C

NOTE: Do not power the FIS convector directly from the ~230V circuit. An appropriate transformer is required.

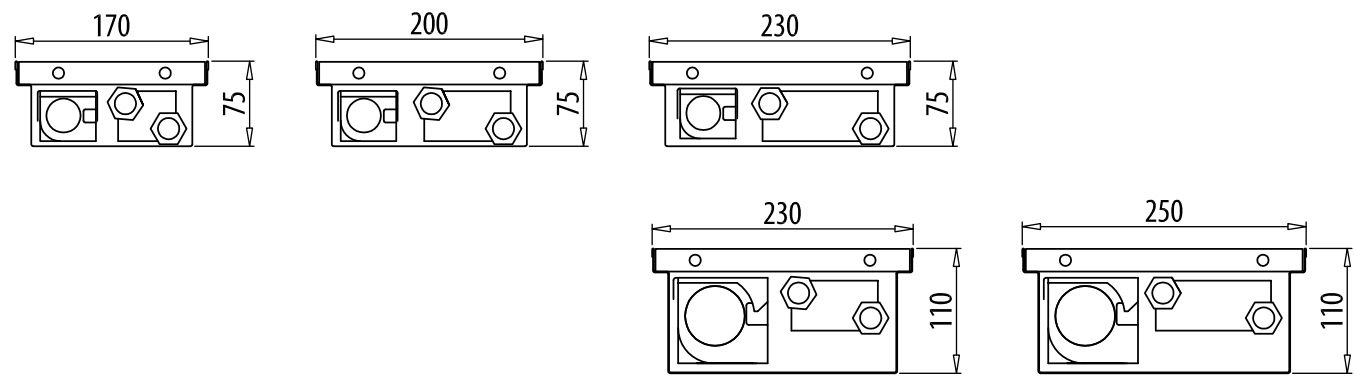


- 1: Protective cover.
- 2: Braces to prevent distortion during floor laying.
- 3: Flush box for fan power supply.
- 4: Cover plate to hide valves and connections.
- 5: Heat exchanger (copper pipes, aluminium fins, coated with black varnish).
- 6: Duct (double-side galvanised and varnished).
- 7: Air vent.
- 8: Levelling feet.
- 9: Knock-outs for pipe connections.

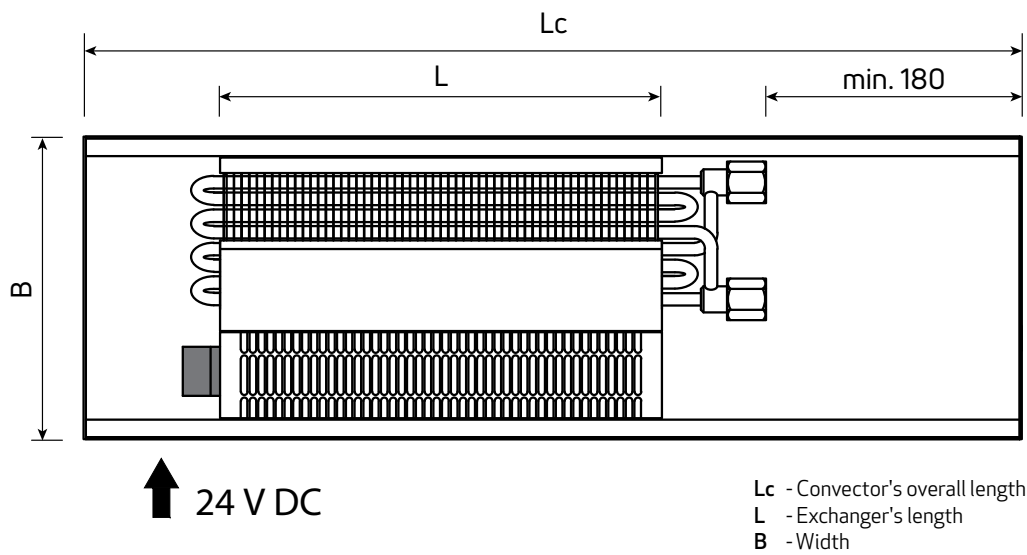
Dimensions, Weight & Water Contents

Aquila F1S (Fan Version)

SIDE VIEWS



TOP VIEW



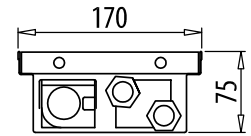
Weight & Water Contents

Height (mm)	75			110	
Width (mm)	170	200	230	230	250
Weight (kg/m)	7.2	8	9.3	9.2	10.2
Water Content (l/m)	0.1	0.2	0.4	0.2	0.4

Technical Details

Aquila F1S (Fan Version)
Height 75mm, Width 170mm

Heat Outputs, Sound Intensity, Electric Power



Lc Overall Length (mm)	Heat Output t _s / t _r / t _i (°C)	Width 170 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
700	75/65/20 55/45/20	192 109	342 195	427 243	< 20	22	30	1	7.2
800	75/65/20 55/45/20	192 109	342 195	427 243					7.2
900	75/65/20 55/45/20	192 109	342 195	427 243					7.2
1000	75/65/20 55/45/20	397 226	706 402	883 503		23	31		8.4
1100	75/65/20 55/45/20	397 226	706 402	883 503					8.4
1200	75/65/20 55/45/20	397 226	706 402	883 503					8.4
1300	75/65/20 55/45/20	602 343	1070 610	1338 763		24	32		10
1400	75/65/20 55/45/20	602 343	1070 610	1338 763					10
1500	75/65/20 55/45/20	714 407	1269 723	1586 904		25	32		11.3
1600	75/65/20 55/45/20	714 407	1269 723	1586 904					11.3
1800	75/65/20 55/45/20	875 499	1555 886	1944 1108	21	26	33	2	12
2000	75/65/20 55/45/20	987 563	1754 1000	2193 1250					13.7
2200	75/65/20 55/45/20	1086 619	1930 1100	2413 1375					13.7
2400	75/65/20 55/45/20	1297 739	2306 1314	2882 1643	22	27	34		15.4
2500	75/65/20 55/45/20	1297 739	2306 1314	2882 1643					15.4
2600	75/65/20 55/45/20	1409 803	2504 1427	3130 1784	23	28	35		16.6
2800	75/65/20 55/45/20	1564 891	2780 1585	3475 1981					17.8
3000	75/65/20 55/45/20	1564 891	2780 1585	3475 1981					17.8

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

The fan is powered by 24V.

Sound intensity measured in accordance with ISO 9614-2:1997.

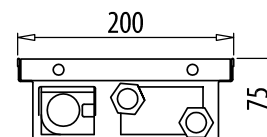
For Linear Grilles, add 10mm to overall convector height.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.97.

Aquila F1S (Fan Version)

Height 75mm, Width 200mm

Heat Outputs, Sound Intensity, Electric Power



Lc Overall Length (mm)	Heat Output t _s / t _r / t _i (°C)	Width 200 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
700	75/65/20 55/45/20	285 162	506 288	633 361	< 20	22	30	1	7.2
800	75/65/20 55/45/20	285 162	506 288	633 361					7.2
900	75/65/20 55/45/20	285 162	506 288	633 361					7.2
1000	75/65/20 55/45/20	588 335	1046 596	1307 745		23	31		8.4
1100	75/65/20 55/45/20	588 335	1046 596	1307 745					8.4
1200	75/65/20 55/45/20	588 335	1046 596	1307 745					8.4
1300	75/65/20 55/45/20	891 508	1585 903	1981 1129		24	32		10
1400	75/65/20 55/45/20	891 508	1585 903	1981 1129					10
1500	75/65/20 55/45/20	1057 602	1878 1070	2348 1338		25	32		11.3
1600	75/65/20 55/45/20	1057 602	1878 1070	2348 1338					11.3
1800	75/65/20 55/45/20	1296 739	2303 1313	2879 1641	21	26	33	2	12
2000	75/65/20 55/45/20	1461 833	2598 1481	3247 1851					13.7
2200	75/65/20 55/45/20	1608 917	2859 1630	3574 2037					13.7
2400	75/65/20 55/45/20	1921 1095	3414 1946	4268 2433	22	27	34		15.4
2500	75/65/20 55/45/20	1921 1095	3414 1946	4268 2433					15.4
2600	75/65/20 55/45/20	2086 1189	3708 2114	4635 2642	23	28	35		16.6
2800	75/65/20 55/45/20	2316 1320	4117 2347	5146 2933					17.8
3000	75/65/20 55/45/20	2316 1320	4117 2347	5146 2933					17.8

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

The fan is powered by 24V.

Sound intensity measured in accordance with ISO 9614-2:1997.

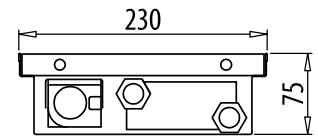
For Linear Grilles, add 10mm to overall convector height.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.97.

Technical Details

Aquilo F1S (Fan Version)
Height 75mm, Width 230mm

Heat Outputs, Sound Intensity, Electric Power



Lc Overall Length (mm)	Heat Output t _s / t _r / t _i (°C)	Width 230 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
700	75/65/20 55/45/20	313 178	556 317	695 396	< 20	22	30	1	7.2
800	75/65/20 55/45/20	313 178	556 317	695 396					7.2
900	75/65/20 55/45/20	313 178	556 317	695 396					7.2
1000	75/65/20 55/45/20	645 368	1147 654	1434 817		23	31		8.4
1100	75/65/20 55/45/20	645 368	1147 654	1434 817					8.4
1200	75/65/20 55/45/20	645 368	1147 654	1434 817					8.4
1300	75/65/20 55/45/20	978 557	1739 991	2174 1239		24	32		10
1400	75/65/20 55/45/20	978 557	1739 991	2174 1239					10
1500	75/65/20 55/45/20	1160 661	2062 1175	2578 1469					25
1600	75/65/20 55/45/20	1160 661	2062 1175	2578 1469		11.3			
1800	75/65/20 55/45/20	1422 811	2528 1441	3160 1801	21	26	33	2	12
2000	75/65/20 55/45/20	1604 914	2851 1625	3564 2031					13.7
2200	75/65/20 55/45/20	1765 1006	3138 1789	3922 2236					13.7
2400	75/65/20 55/45/20	2108 1202	3747 2136	4684 2670	22	27	34		15.4
2500	75/65/20 55/45/20	2108 1202	3747 2136	4684 2670					15.4
2600	75/65/20 55/45/20	2290 1305	4070 2320	5088 2900	23	28	35		16.6
2800	75/65/20 55/45/20	2542 1449	4518 2575	5648 3219					17.8
3000	75/65/20 55/45/20	2542 1449	4518 2575	5648 3219					17.8

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

The fan is powered by 24V.

Sound intensity measured in accordance with ISO 9614-2:1997.

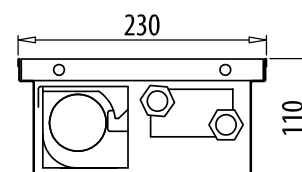
For Linear Grilles, add 10mm to overall convector height.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.97.

Aquila F1S (Fan Version)

Height 110mm, Width 230mm

Heat Outputs, Sound Intensity, Electric Power



Lc Overall Length (mm)	Heat Output t _s / t _r / t _i (°C)	Width 230 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
700	75/65/20 55/45/20	397 226	706 402	882 503	21	26	32	1	8.4
800	75/65/20 55/45/20	397 226	706 402	882 503					8.4
900	75/65/20 55/45/20	397 226	706 402	882 503					8.4
1000	75/65/20 55/45/20	820 467	1458 831	1822 1039	22	28	34		11.3
1100	75/65/20 55/45/20	820 467	1458 831	1822 1039					11.3
1200	75/65/20 55/45/20	820 467	1458 831	1822 1039					11.3
1300	75/65/20 55/45/20	1242 708	2209 1259	2761 1574	23	30	36		12
1400	75/65/20 55/45/20	1242 708	2209 1259	2761 1574					12
1500	75/65/20 55/45/20	1473 840	2619 1493	3274 1866	24	31	37		13.2
1600	75/65/20 55/45/20	1473 840	2619 1493	3274 1866					13.2
1800	75/65/20 55/45/20	1806 1029	3211 1830	4014 2288	25	33	39	2	17.8
2000	75/65/20 55/45/20	2037 1161	3621 2064	4526 2580					16.8
2200	75/65/20 55/45/20	2242 1278	3986 2272	4982 2840					18.5
2400	75/65/20 55/45/20	2678 1526	4760 2713	5950 3392	26	35	41		19.2
2500	75/65/20 55/45/20	2678 1526	4760 2713	5950 3392					19.2
2600	75/65/20 55/45/20	2908 1658	5170 2947	6462 3683	27	36	42		20.4
2800	75/65/20 55/45/20	3228 1840	5739 3271	7174 4089					21.6
3000	75/65/20 55/45/20	3228 1840	5739 3271	7174 4089					21.6

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

The fan is powered by 24V.

Sound intensity measured in accordance with ISO 9614-2:1997.

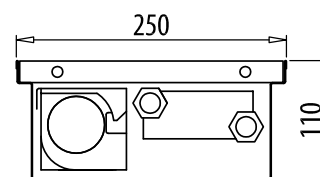
For Linear Grilles, add 10mm to overall convector height.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.97.

Technical Details

Aquila F1S (Fan Version)
Height 110mm, Width 250mm

Heat Outputs, Sound Intensity, Electric Power



Lc Overall Length (mm)	Heat Output t _s / t _r / t _i (°C)	Width 250 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
700	75/65/20 55/45/20	541 308	962 548	1202 685	21	26	32	1	8.4
800	75/65/20 55/45/20	541 308	962 548	1202 685					8.4
900	75/65/20 55/45/20	541 308	962 548	1202 685					8.4
1000	75/65/20 55/45/20	1117 637	1986 1132	2482 1415	22	28	34		11.3
1100	75/65/20 55/45/20	1117 637	1986 1132	2482 1415					11.3
1200	75/65/20 55/45/20	1117 637	1986 1132	2482 1415					11.3
1300	75/65/20 55/45/20	1693 965	3010 1716	3763 2145	23	30	36		12
1400	75/65/20 55/45/20	1693 965	3010 1716	3763 2145					12
1500	75/65/20 55/45/20	2007 1144	3569 2034	4461 2543	24	31	37		13.2
1600	75/65/20 55/45/20	2007 1144	3569 2034	4461 2543					13.2
1800	75/65/20 55/45/20	2461 1403	4375 2494	5469 3117	25	33	39	2	17.8
2000	75/65/20 55/45/20	2775 1582	4934 2812	6167 3515					16.8
2200	75/65/20 55/45/20	3055 1741	5430 3095	6788 3869					18.5
2400	75/65/20 55/45/20	3648 2079	6486 3697	8107 4621	26	35	41		19.2
2500	75/65/20 55/45/20	3648 2079	6486 3697	8107 4621					19.2
2600	75/65/20 55/45/20	3962 2258	7044 4015	8805 5019	27	36	42		20.4
2800	75/65/20 55/45/20	4399 2507	7820 4457	9775 5572					21.6
3000	75/65/20 55/45/20	4399 2507	7820 4457	9775 5572					21.6

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

The fan is powered by 24V.

Sound intensity measured in accordance with ISO 9614-2:1997.

For Linear Grilles, add 10mm to overall convector height.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.97.



Aquilo F2C/F2V (Heating or Cooling)

Aquilo F2C and F2V trench convectors are designed for in-floor installation, suitable for heating or cooling. They feature a black-painted copper-aluminium heat exchanger inside of a black-coated galvanised steel duct. They feature whisper quiet centrifugal fans, driven by 24V motors (F2C model) or 230V motors (F2V model). The convector is topped with a decorative grille, available in various finishes. It connects to the heating system via two G 1/2" internal thread pipes.

Heat Exchanger Accessories

- > Manual air vent
- > Two side covers
- > 10cm stainless steel flexible hose connector kit with G 1/2" thread

Duct Features

- > Levelling feet M8 x 30mm with internal hexagon (4 pcs. for duct length up to 2.5m, 6 pcs. for over 2.5m)
- > Knock-outs for heating system pipes
- > 2 rubber grommets for domestic electric circuit connection

Standard Electrical Accessories (Included)

- > 1 module with centrifugal fans driven by 24V motors in the F2C model and 230V in the F2V model
- > Each module includes one motor
- > 230V fan equipped with a fail-safe cut-off mechanism in the event of water ingress

Mandatory Extra Electrical Accessories (Ordered Separately)

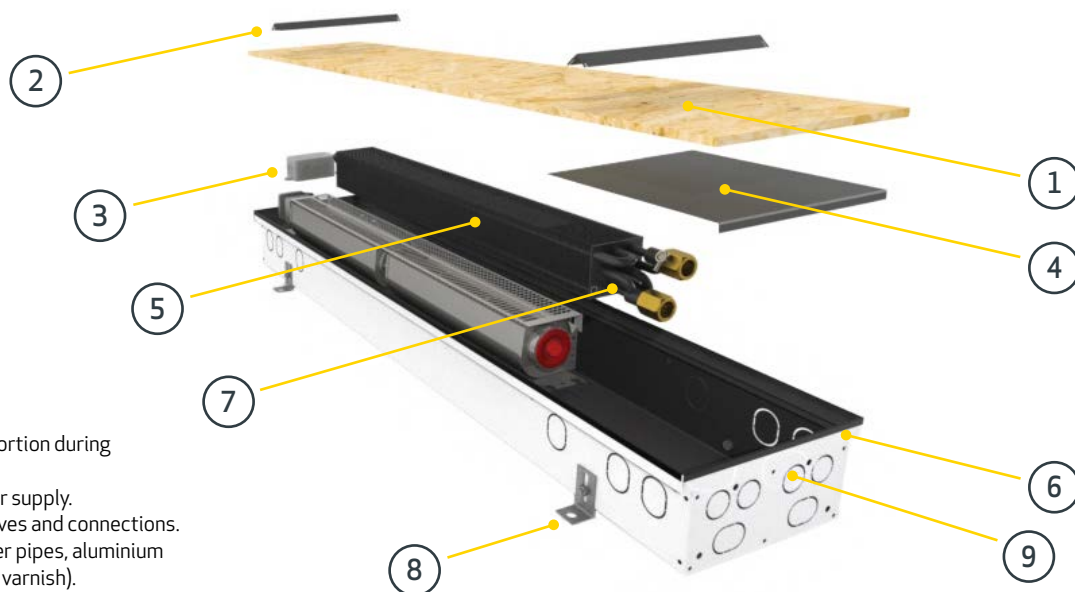
- > F2C - DRP transformer (~230/24V) sized according to the convector or group of convectors, based on the number of connected motors
- > Manual switch or room thermostat (manual or automatic) for regulating heat output via three-level fan speed control

TECHNICAL SPECIFICATION:

Height - Width (mm)	F2C: (H) 110 - (W) 230 F2C, F2V: (H) 340 - (W) 170
Length (mm)	850, 1200, 1600, 2100, 2400, 2700
Heat exchanger	Aluminium Finned Copper (RAL9005)
Duct design	Galvanised Steel, black RAL 9005 powder-coated inside or Stainless Steel
Grille material*	Wood (Oak or Beech); Duralumin (choice of colours); Stainless Steel
Standard connections	2 x G 1/2" - internal thread
Pressure class	10 bar
Maximum temperature	110°C

*Only Duralumin versions can be used in cooling applications.

NOTE: Do not power the F2C convector directly from the ~230V circuit. An appropriate DRP transformer is required.

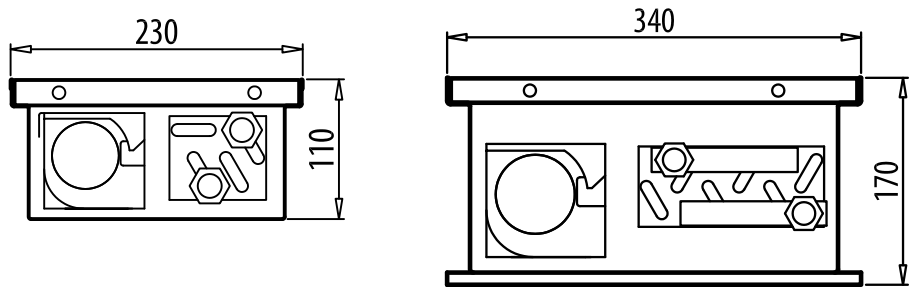


- 1: Protective cover.
- 2: Braces to prevent distortion during floor laying.
- 3: Flush box for fan power supply.
- 4: Cover plate to hide valves and connections.
- 5: Heat exchanger (copper pipes, aluminium fins, coated with black varnish).
- 6: Duct (double-side galvanised and varnished).
- 7: Air vent.
- 8: Levelling feet.
- 9: Knock-outs for pipe connections.

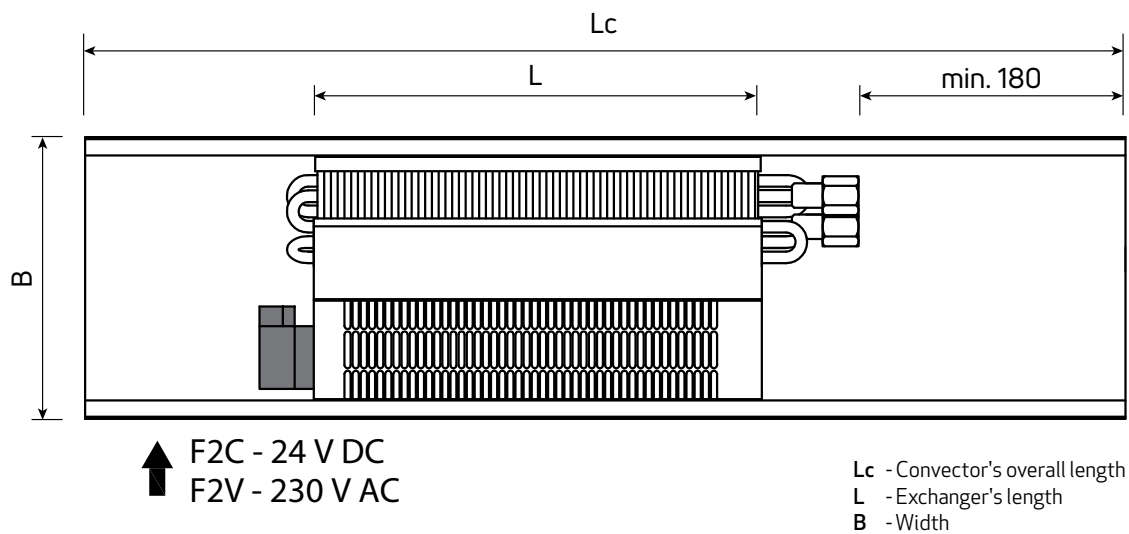
Dimensions, Weight & Water Contents

Aquilo F2C/F2V (Heating or Cooling)

SIDE VIEWS



TOP VIEW



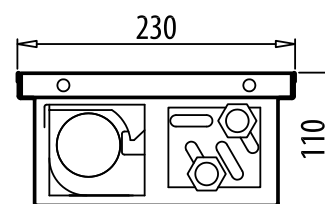
Weight & Water Contents

	Aquilo F2C		Aquilo F2V
Height (mm)	110	170	170
Width B (mm)	230	340	340
Weight (kg/m)	13.1	20.8	21.1
Water Content (l/m)	0.3	0.7	0.7

Technical Details

Aquilo F2C (Heating or Cooling)
Height 110mm, Width 230mm

Heating & Cooling Outputs, Sound Intensity, Electric Power



Heating

Lc Overall Length (mm)	Heat Output $t_s / t_r / t_i$ (°C)	Width 230 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
850	75/65/20 55/45/20	501 286	890 507	1113 634	21	26	32	1	9
1200	75/65/20 55/45/20	1001 571	1780 1015	2225 1268	22	28	34		13
1600	75/65/20 55/45/20	1487 848	2644 1507	3305 1884	23	30	36		19
2100	75/65/20 55/45/20	2120 1208	3770 2149	4712 2686	25	33	39	2	21
2400	75/65/20 55/45/20	2592 1477	4607 2626	5759 3283	26	35	41		27
2700	75/65/20 55/45/20	3107 1771	5524 3149	6905 3936	27	36	42		33

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

The fan is powered by 24V.

Sound intensity measured in accordance with ISO 9614-2:1997.

Cooling

Lc Overall Length (mm)	Cooling Output $t_s / t_r / t_i$ (°C)	Width 230 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
850	8/14/28	128	227	284	21	26	32	1	9
1200	8/14/28	255	454	567	22	28	34		13
1600	8/14/28	379	674	843	23	30	36		19
2100	8/14/28	541	962	1202	25	33	39	2	21
2400	8/14/28	661	1175	1469	26	35	41		27
2700	8/14/28	792	1409	1761	27	36	42		33

Cooling output (W) in accordance with EN 16430 at 8/14/28°C.

The fan is powered by 24V.

Sound intensity measured in accordance with ISO 9614-2:1997.

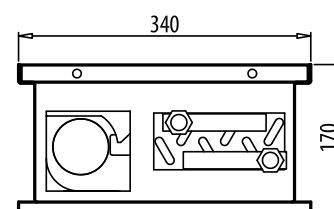
For Linear Grilles, add 10mm to overall convector height.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.97.

Aquila F2C (Heating or Cooling)

Height 170mm, Width 340mm

Heating & Cooling Outputs, Sound Intensity, Electric Power



Heating

Lc Overall Length (mm)	Heat Output $t_s / t_r / t_i$ (°C)	Width 340 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
850	75/65/20 55/45/20	776 442	1380 787	1725 983	21	27	33	1	19
1200	75/65/20 55/45/20	1553 885	2760 1573	3450 1967	22	29	34		20
1600	75/65/20 55/45/20	2306 1314	4099 2336	5124 2921	23	31	37		22
2100	75/65/20 55/45/20	3288 1874	5845 3332	7306 4164	25	34	40	2	35
2400	75/65/20 55/45/20	4018 2290	7143 4072	8929 5090	26	35	42		37
2700	75/65/20 55/45/20	4817 2746	8564 4881	10705 6102	27	37	43		39

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

The fan is powered by 24V.

Sound intensity measured in accordance with ISO 9614-2:1997.

Cooling

Lc Overall Length (mm)	Cooling Output $t_s / t_r / t_i$ (°C)	Width 340 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
850	8/14/28	198	352	440	21	27	33	1	19
1200	8/14/28	396	705	881	22	29	34		20
1600	8/14/28	589	1046	1308	23	31	37		22
2100	8/14/28	839	1492	1865	25	34	40	2	35
2400	8/14/28	1026	1823	2279	26	35	42		37
2700	8/14/28	1230	2186	2733	27	37	43		39

Cooling output (W) in accordance with EN 16430 at 8/14/28°C.

The fan is powered by 24V.

Sound intensity measured in accordance with ISO 9614-2:1997.

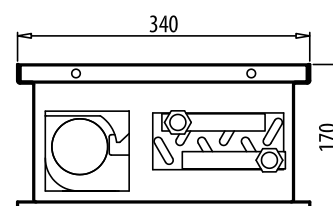
For Linear Grilles, add 10mm to overall convector height.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.97.

Technical Details

Aquilo F2V (Heating or Cooling)
Height 170mm, Width 340mm

Heating & Cooling Outputs, Sound Intensity, Electric Power



Heating

Lc Overall Length (mm)	Heat Output $t_s / t_r / t_i$ (°C)	Width 340 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
850	75/65/20 55/45/20	942 537	1675 955	2094 1194	22	30	41	1	20
1200	75/65/20 55/45/20	1885 1074	3351 1910	4189 2388	23	31	41		25
1600	75/65/20 55/45/20	2800 1596	4978 2837	6222 3547	25	33	42		43
2100	75/65/20 55/45/20	3992 2275	7096 4045	8870 5056	25	35	45	2	45
2400	75/65/20 55/45/20	4879 2781	8674 4944	10842 6180	27	35	45		63
2700	75/65/20 55/45/20	5849 3334	10398 5927	12998 7409	28	36	46		81

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

The fan is powered by 230V.

Sound intensity measured in accordance with ISO 9614-2:1997.

Cooling

Lc Overall Length (mm)	Cooling Output $t_s / t_r / t_i$ (°C)	Width 340 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
850	8/14/28	293	522	652	22	30	41	1	20
1200	8/14/28	586	1042	1303	23	31	41		25
1600	8/14/28	871	1549	1936	25	33	42		43
2100	8/14/28	1242	2208	2760	25	35	45	2	45
2400	8/14/28	1518	2699	3374	27	35	45		63
2700	8/14/28	1820	3236	4045	28	36	46		81

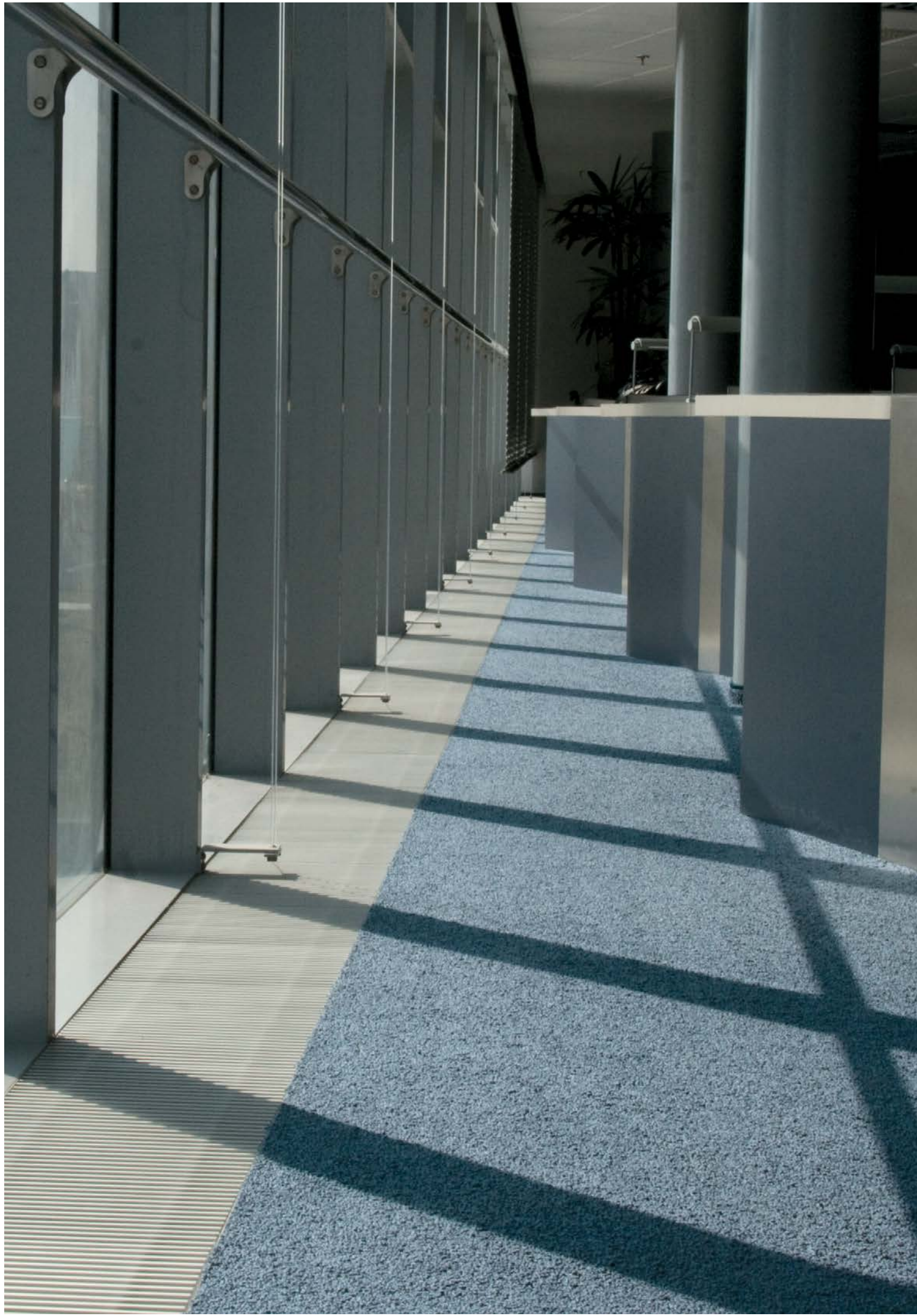
Cooling output (W) in accordance with EN 16430 at 8/14/28°C.

The fan is powered by 230V.

Sound intensity measured in accordance with ISO 9614-2:1997.

For Linear Grilles, add 10mm to overall convector height.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.97.



Aquilo F4C/F4V (Heating & Cooling)

Aquilo F4C and F4V trench convectors are designed for in-floor installation, suitable for heating and/or cooling. They feature a double-loop copper-aluminium heat exchanger, painted black, inside a black-coated galvanised steel duct. Whisper quiet centrifugal fans, driven by 24V motors (F4C) or 230V motors (F4V), are included. The convector is topped with a decorative grille, ordered separately, and connects to heating and cooling systems via four G 1/2" internal thread pipes.

Heat Exchanger Accessories

- > Manual air vent
- > Two side covers
- > 10cm stainless steel flexible hose connector kit with G 1/2" thread

Duct Features

- > Levelling feet M8 x 30mm with internal hexagon (4 pcs. for duct length up to 2.5m, 6 pcs. for over 2.5m)
- > Knock-outs for heating system pipes
- > 2 rubber grommets for domestic electric circuit connection

Standard Electrical Accessories (Included)

- > 1 or 2 modules with centrifugal fans driven by 24V motors in the F4C model and 230V in the F4V model
- > Each module includes one motor
- > 230V fan equipped with a fail-safe cut-off mechanism in the event of water ingress

Obligatory Additional Electrical Accessories

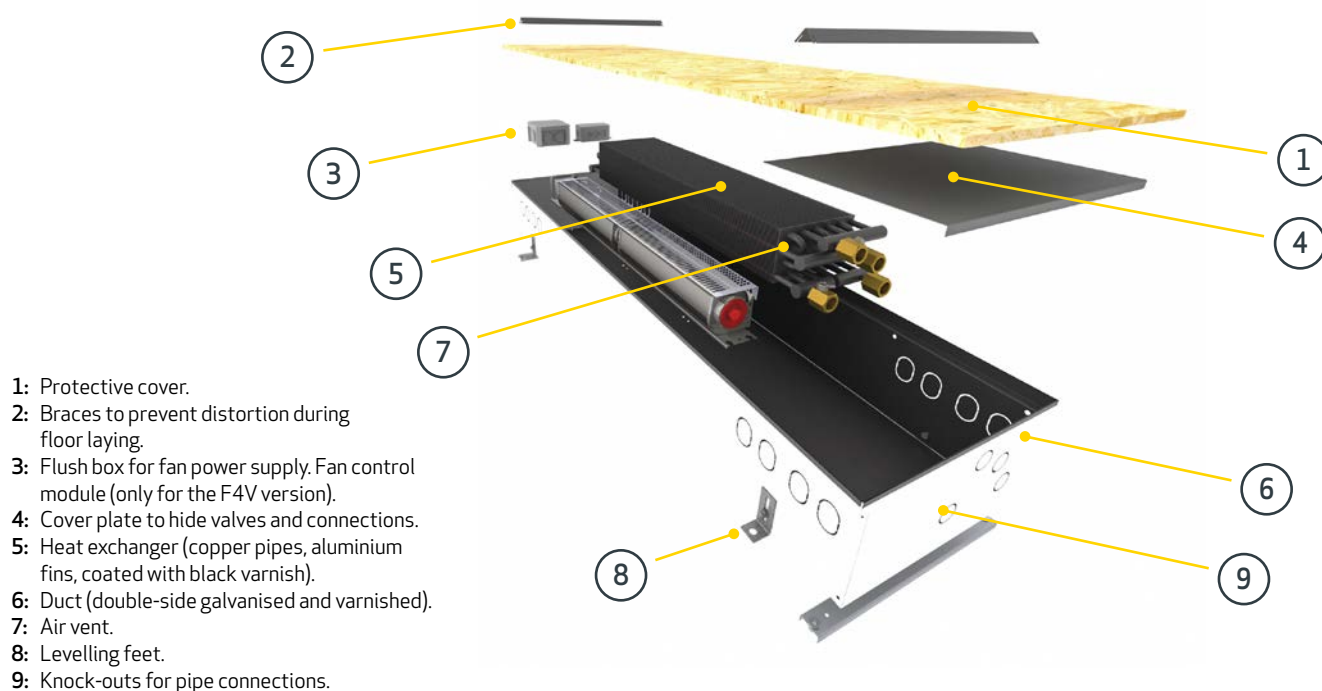
- > F4C - DRP transformer (~230/24V) sized according to the convector or group of convectors, based on the number of connected motors
- > Manual switch or room thermostat (manual or automatic) for regulating heat output via three-level fan speed control
- > Remote-controlled thermostat available

TECHNICAL SPECIFICATION:

Width (mm)	340
Length (mm)	850, 1200, 1600, 2100, 2400, 2700
Height (mm)	170
Heat exchanger	Aluminium Finned Copper (RAL9005)
Duct design	Galvanised Steel, black RAL 9005 powder-coated inside or Stainless Steel
Grille material*	Duralumin (choice of colours)
Standard connections	4 x G 1/2" - internal thread
Pressure class	10 bar
Maximum temperature	110°C

*Only Duralumin versions can be used in cooling applications.

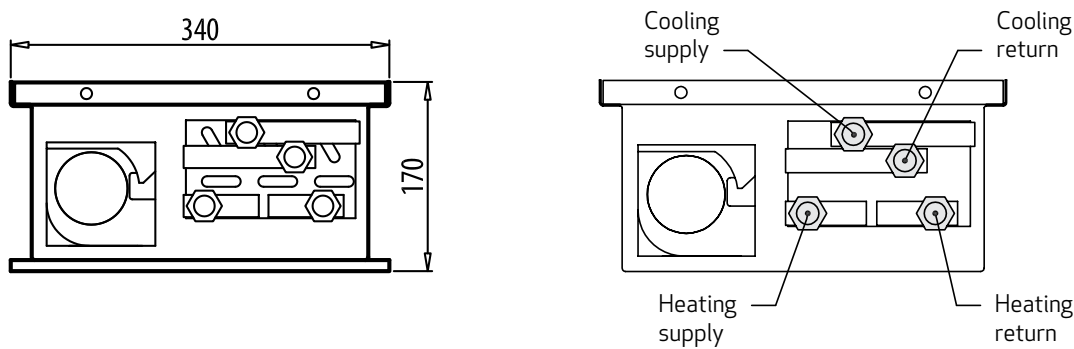
NOTE: Do not power the F4C convector directly from the ~230V circuit. An appropriate DRP transformer is required.



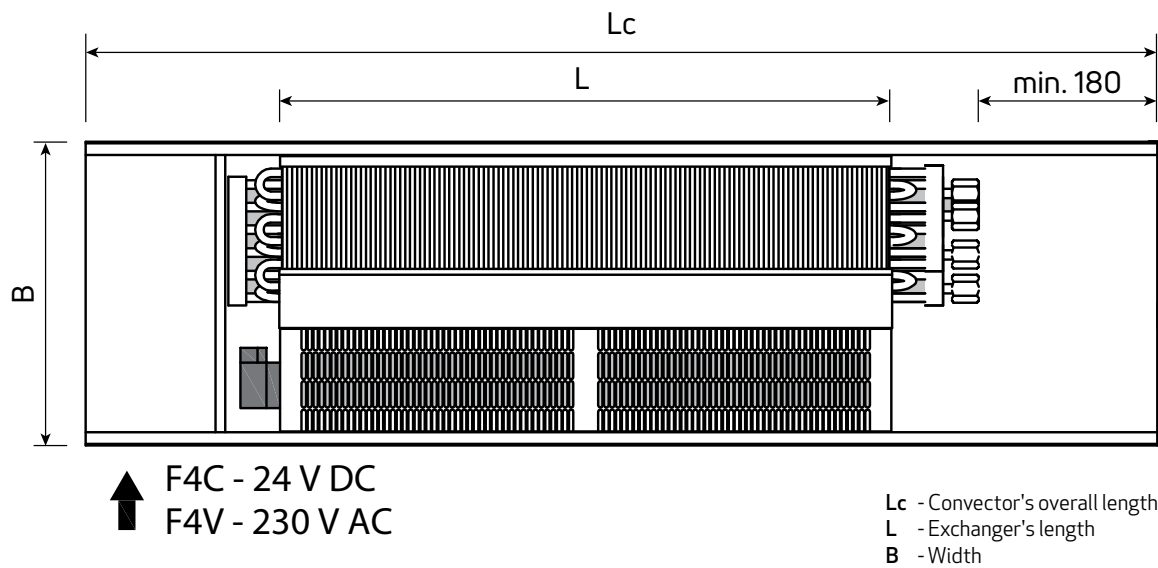
Dimensions, Weight & Water Contents

Aquila F4C/F4V (Heating & Cooling)

SIDE VIEWS



TOP VIEW



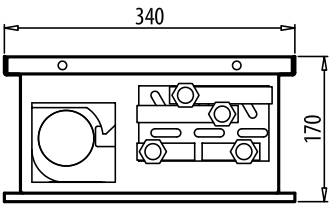
Weight & Water Contents

Width B (mm)	340
Height (mm)	170
Weight (kg/m)	21.6
Water Content (l/m)	1.0

Technical Details

Aquilo F4C (Heating & Cooling)
Height 170mm, Width 340mm

Heating & Cooling Outputs, Sound Intensity, Electric Power



Heating

Lc Overall Length (mm)	Heat Output t _s / t _r / t _i (°C)	Width 340 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
850	75/65/20 55/45/20	524 299	932 531	1165 664	21	26	32	1	24
1200	75/65/20 55/45/20	1049 598	1865 1063	2331 1329	22	28	34		25
1600	75/65/20 55/45/20	1558 888	2770 1579	3462 1973	23	30	36		27
2100	75/65/20 55/45/20	2221 1266	3949 2251	4936 2814	25	33	39	2	40
2400	75/65/20 55/45/20	2715 1548	4826 2751	6033 3439	26	35	41		42
2700	75/65/20 55/45/20	3255 1855	5786 3298	7233 4123	27	36	42		44

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.
The fan is powered by 24V.

Cooling

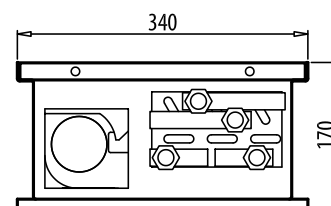
Lc Overall Length (mm)	Cooling Output t _s / t _r / t _i (°C)	Width 340 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
850	8/14/28	198	352	440	21	26	32	1	24
1200	8/14/28	396	705	881	22	28	34		25
1600	8/14/28	589	1046	1308	23	30	36		27
2100	8/14/28	839	1492	1865	25	33	39	2	40
2400	8/14/28	1026	1823	2279	26	35	41		42
2700	8/14/28	1230	2186	2733	27	36	42		44

Cooling output (W) in accordance with EN 16430 at 8/14/28°C.
The fan is powered by 24V.
Sound intensity measured in accordance with ISO 9614-2:1997.
For Linear Grilles, add 10mm to overall convector height.
When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.97.

Aquila F4V (Heating & Cooling)

Height 170mm, Width 340mm

Heating & Cooling Outputs, Sound Intensity, Electric Power



Heating

Lc Overall Length (mm)	Heat Output $t_s / t_r / t_i$ (°C)	Width 340 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
850	75/65/20 55/45/20	637 363	1132 645	1415 807	22	30	41	1	25
1200	75/65/20 55/45/20	1274 726	2264 1290	2830 1613	23	31	41		30
1600	75/65/20 55/45/20	1892 1078	3363 1917	4204 2396	25	33	42		48
2100	75/65/20 55/45/20	2697 1537	4795 2733	5994 3417	25	35	45	2	50
2400	75/65/20 55/45/20	3296 1879	5860 3340	7325 4175	27	35	45		68
2700	75/65/20 55/45/20	3952 2253	7026 4005	8782 5006	28	36	46		86

Heat output (W) in accordance with EN 16430 at 75/65/20 and 55/45/20°C.

The fan is powered by 230V.

Cooling

Lc Overall Length (mm)	Cooling Output $t_s / t_r / t_i$ (°C)	Width 340 (mm), Fan's Speed Setting			Sound Intensity [dB(A)], Fan's Speed Setting			Number of Motors	Electric Power (W)
		1	2	3	1	2	3		
850	8/14/28	293	522	652	22	30	41	1	25
1200	8/14/28	586	1042	1303	23	31	41		30
1600	8/14/28	871	1549	1936	25	33	42		48
2100	8/14/28	1242	2208	2760	25	35	45	2	50
2400	8/14/28	1518	2699	3374	27	35	45		68
2700	8/14/28	1820	3236	4045	28	36	46		86

Cooling output (W) in accordance with EN 16430 at 8/14/28°C.

The fan is powered by 230V.

Sound intensity measured in accordance with ISO 9614-2:1997.

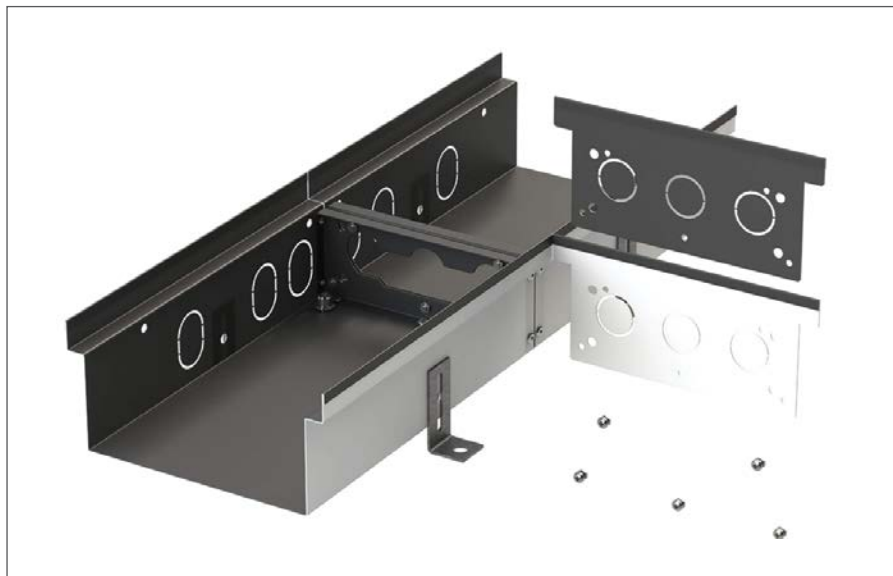
For Linear Grilles, add 10mm to overall convector height.

When using grilles made of wood or stainless steel, the outputs given in the table should be multiplied by the factor 0.97.

Convectors Connected in Series

To create a seamless, continuous convector, remove the end plates and connect units of the same width and height.

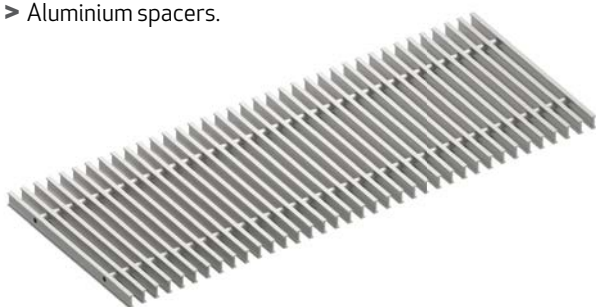
Be sure to order a grille that matches the total length of your assembled convector for a perfect fit and polished finish.



Decorative Grilles

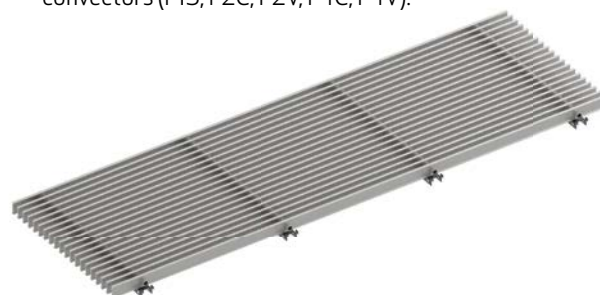
Transverse (roll-up)

- The slats and the spacer rings are threaded on a spring.
- Suitable for all slat materials and all convector types and sizes.
- Aluminium spacers.



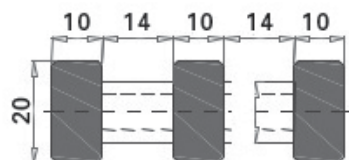
Linear

- The slats are either duralumin or stainless steel.
- Supplied together with the grille support.
- 10mm to be added to convector height for fan-assisted convectors (F1S, F2C, F2V, F4C, F4V).



Grille Materials

Wood



Natural Beech



Varnished Beech

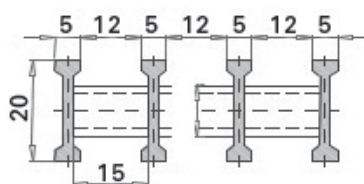


Natural Oak



Varnished Oak

Duralumin



Natural - anodised



Black - anodised

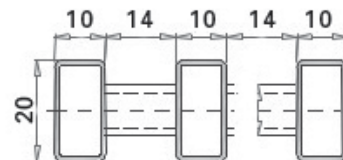


Dark Bronze - anodised



Light Bronze - anodised

Stainless Steel



Stainless Steel

NOTE: RAL colours available, please contact Merriott Sales Office for more information.

Decorative Grilles

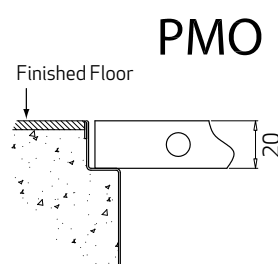
Decorative Frames

Decorative grilles for Aquilo trench convectors come in versions without (PMO) or with L, U, or Z-type decorative finishing frames. Frames and grilles must be ordered together due to varying lengths in frame and no-frame versions for the same width convectors.

L, U, and Z-type frames are available only in Duralumin and match all Duralumin grille colour options.

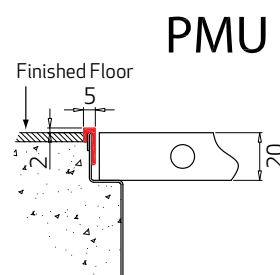
No Decorative Frame (Standard Model)

Decorative grilles without a frame are suitable for use only when the trench convector is precisely installed and aligned with the finished floor level. This option requires an exact trench width and a flawless floor finish around the convector to ensure a seamless integration without the need for a decorative frame.



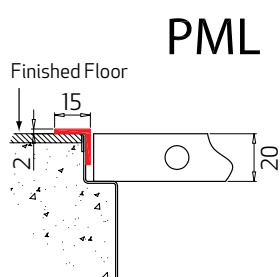
U-Type Decorative Frame

The U-type decorative grille frame outlines the trench convector within the floor, covering the trench edge and highlighting the duct's outline. The U profile is delivered in ready-made segments adapted to the length of the grille to be mounted on the edge of the trench. The U-type frame is installed with the grille and should be sealed with silicone.



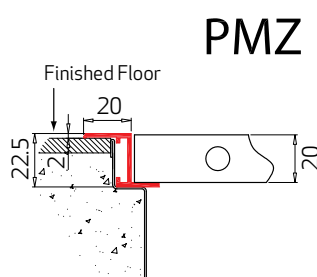
L-Type Decorative Frame

The L-type decorative grille frame outlines the trench convector, covering the contact area between the duct and the floor. Ideal for installations with uneven gaps, the L-type frame is supplied in pre-cut segments and installed with the grille. It can be easily fixed to the floor using double-sided self-adhesive tape.



Z-Type Decorative Frame

The Z-type decorative grille frame visually outlines the trench convector, covering the contact area between the duct and floor while providing a base for the grille. It's ideal for installations where the duct is set deeper than the floor, unevenly positioned, or where gaps are uneven. The Z-type frame is supplied with the grille, and silicone adhesive is recommended for floor fixing.



> L, U, and Z-type decorative frames are available in the same colours as the grilles and must be ordered together with the grille. The grille width differs depending on the frame type (PMO, PML, PMU, or PMZ), the grille widths are as follows:

- > PMO = B - 6mm;
- > PMU = B - 12mm;
- > PML = B - 12mm;
- > PMZ = B - 20mm;

where: B - the total width of the convector.

> Maximum length of the U, L & Z frames in one section is 3500mm.

> For Z-type frame installation, position the duct 3-5mm below the finished floor surface.

> The Z-type frame is pre-assembled and should be fixed to the finished floor with silicone. L-type frames come in pieces with double-sided tape, while U-type frames are delivered disassembled. The manufacturer is not responsible for mounting issues if the duct is deformed due to incorrect installation or damage.

Supports for Linear Grilles

Supports are needed to maintain grille stability and rigidity. They are provided in appropriate quantities and secured with plastic strips for transport and installation, which can be removed after fitting.



Grilles - Weight (kg/m)

Type	PMO							PMU, PML							PMZ						
Width (mm)	170	200	230	250	300	340	420	170	200	230	250	300	340	420	170	200	230	250	300	340	420
Duralumin	1.9	2.2	2.4	2.6	3.0	3.4	4.0	2.6	2.9	3.2	3.3	3.8	4.1	4.8	3.1	3.3	3.6	3.8	4.2	4.6	5.3
Beech, Oak	1.5	1.7	1.9	2.0	2.4	2.6	3.2	2.2	2.5	2.7	2.8	3.1	3.4	3.9	2.7	2.9	3.1	3.3	3.6	3.9	4.5
Stainless Steel	5.1	5.8	6.6	7.2	8.5	9.5	11.6	5.6	6.4	7.2	7.8	9.1	10.1	12.2	5.9	6.7	7.5	8.0	9.3	10.4	12.5

Customised Designs

Special Versions



Raised Floors

- > Adjustable range: 20–200mm.
- > Plates are riveted to the base of the convector duct, with height easily set via screw adjustment.
- > Recommended quantity: 1 piece per 500mm of convector length, plus 1 additional piece.



Acoustic Film

- > Already engineered for ultraquiet performance, the addition of an acoustic film reduces noise even further - for environments where silence matters.
- > ~2 dBA noise reduction.
- > Fan assisted models only.



Curved Version

- > All trench convectors and grilles are fully adaptable for curved applications.
- > Custom shapes made to exact specifications.



In Duct Transformer

- > 50W DC power source.
- > Requires a convector length extension of 150–200mm.
- > Can be connected in parallel with other units in the room.
- > DC power supply: IP67 rated for robust protection.
- > 230V connection wiring box: IP66 rated.
- > Compatible with convector models FIS, F2C, and F4C.



Integrated Air Spigot

- > Enables fresh air supply or connection to a heat recovery system via the convector duct.
- > Compatible with all trench convector models.
- > Customisable spigot shapes and sizes available.
- > Spigot dimensions are determined by the height of the convector duct.

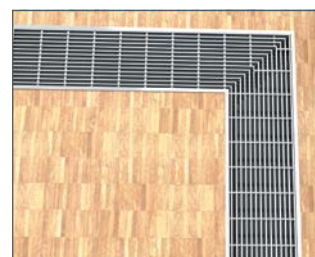
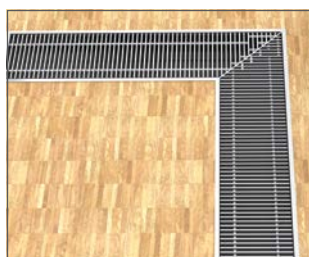
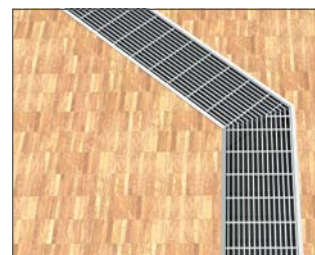
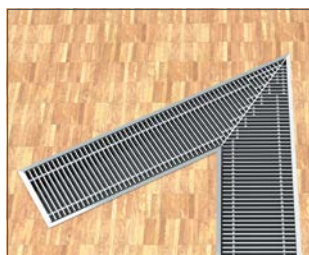
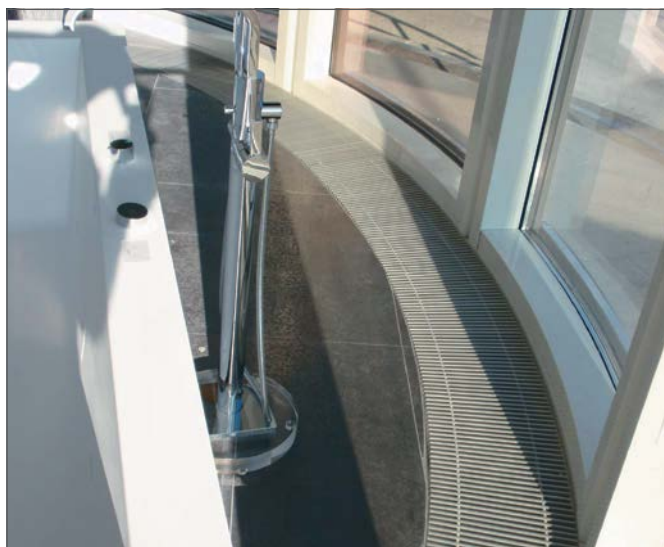
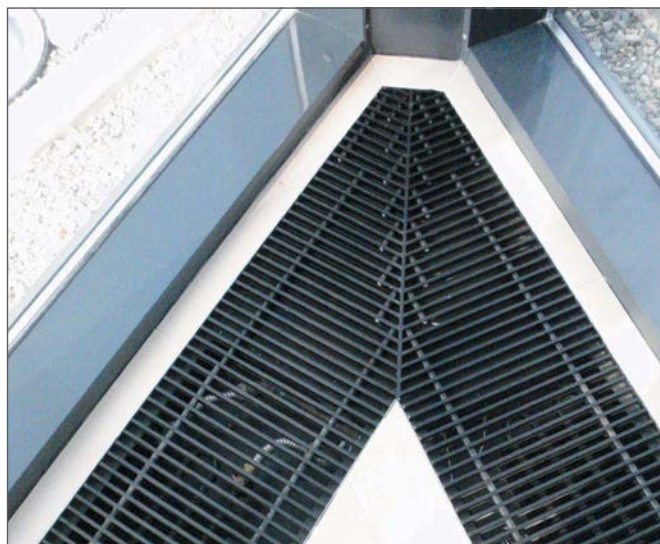


Swimming Pool Version*

- > Requires corrosion-resistant materials and a sealed, drainable duct system.
- > Duct constructed from durable AISI 316L stainless steel.
- > All joints sealed with a specialist waterproof sealant.
- > Drainage outlets integrated into the duct base - position and direction adjustable on request.
- > 24V fan power supply.

*To be installed at least 3.5m from the edge of the pool.

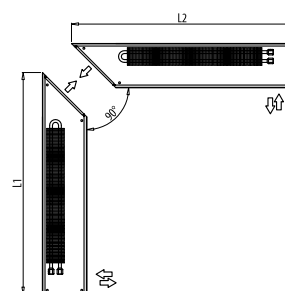
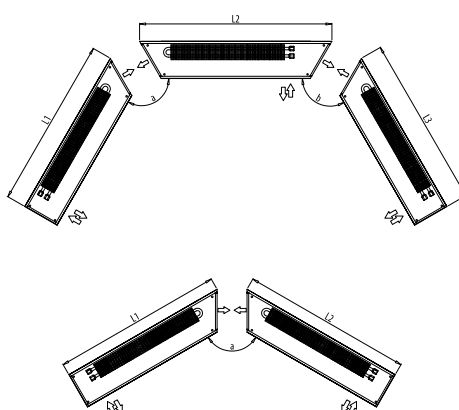
Examples of Special Grilles



Non-standard Convectors

Corner type trench convectors are available on request. The duct is manufactured after the design has been accepted by the customer.

NOTE: Stainless steel grilles are not available for corner versions.



The ducts are connected from the front with 4 x M6 bolts.

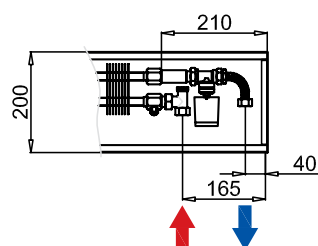
Connections to Pipe Systems

→ = Flow (in)
← = Return (out)

PLEASE NOTE: FMS is reversible. All other convectors come with connections from the right from the room side. Convectors with a left hand side connection are available upon request.

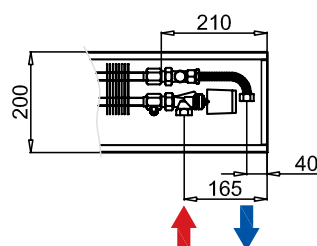
FMS-20

Height: 90, 110, 140, 190mm



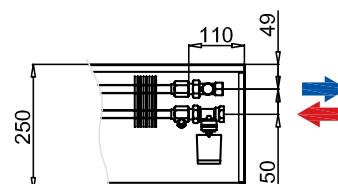
FMS-20

Height: 90, 110, 140, 190mm



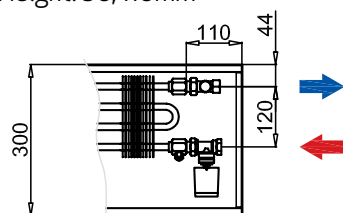
FMS-25

Height: 90, 110, 140, 190mm



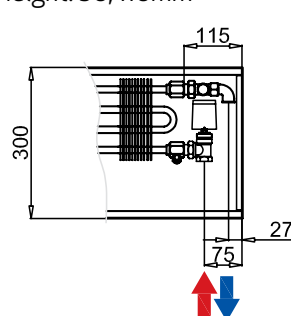
FMS-30

Height: 90, 110mm



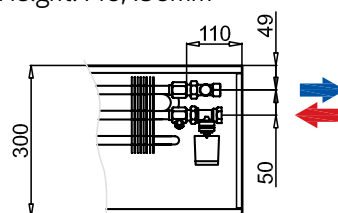
FMS-30

Height: 90, 110mm



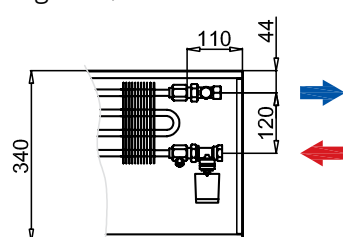
FMS-30

Height: 140, 190mm



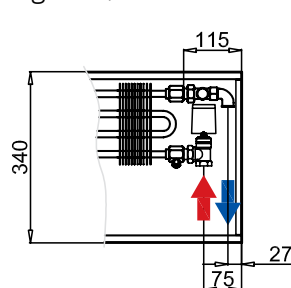
FMS-34

Height: 90, 110mm



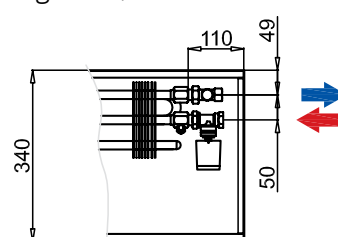
FMS-34

Height: 90, 110mm



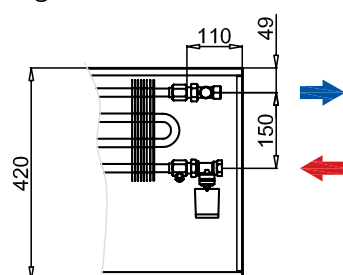
FMS-34

Height: 140, 190mm



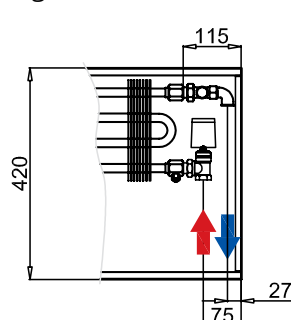
FMS-42

Height: 90, 110mm



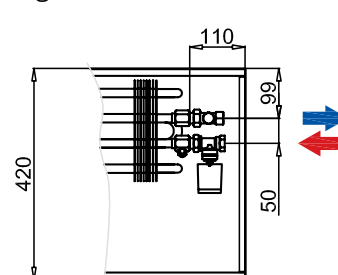
FMS-42

Height: 90, 110mm



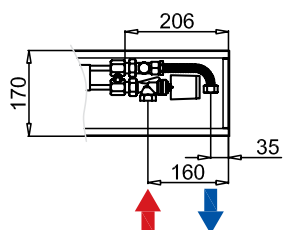
FMS-42

Height: 140, 190mm



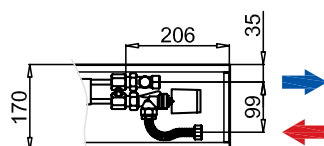
F1S-17

Height: 75mm



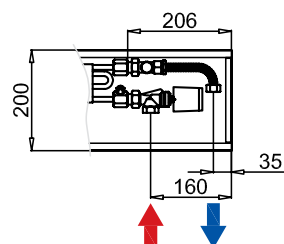
F1S-17

Height: 75mm



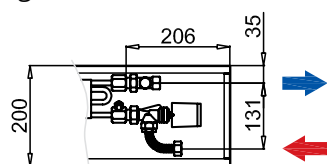
F1S-20

Height: 75mm

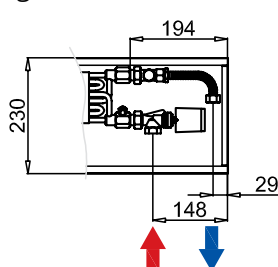


F1S-20

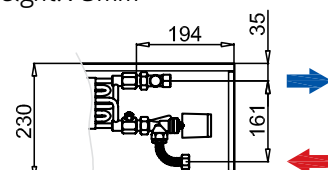
Height: 75mm

**F1S-23**

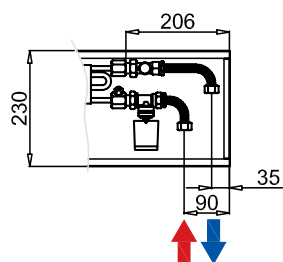
Height: 75mm

**F1S-23**

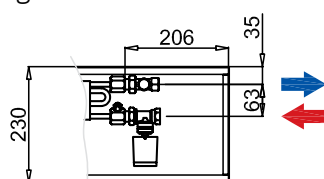
Height: 75mm

**F1S-23**

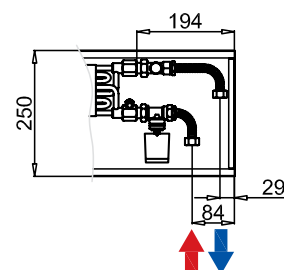
Height: 110mm

**F1S-23**

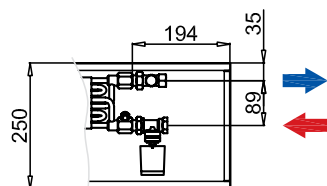
Height: 110mm

**F1S-25**

Height: 75mm

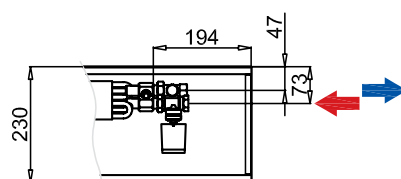
**F1S-25**

Height: 75mm



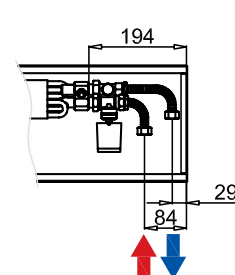
F2C-23

Height: 110mm



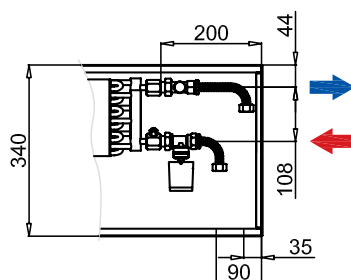
F2C-23

Height: 110mm



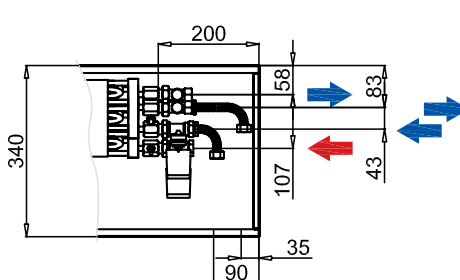
F2C-34 / F2V-34

Height: 170mm



F4C-34 / F4V-34

Height: 170mm



Electrical Installation

Electrical Connections for Trench Convectors Aquilo F1S, F2C/F2V and F4C/F4V

The transformer electrical circuit should be equipped with a circuit breaker. The transformer should be connected to the electrical supply with 3 x 1.5mm² cable. The DRP transformer connection to the thermostat should be made with a 5 x 1.0mm² cable. The Aquilo convector duct's cables should be connected using the terminals in the electrical installation box (1 or 2, depending on the number of motors).

Proper Selection of DRP Transformers (F1S, F2C and F4C Models Only)

The Aquilo F1S, F2C and F4C convector fan motors are powered by 24V, and that is why additional DRP transformers are required together with a wall-mounted regulating device connected to a 3-speed fan control. DRP transformers (depending on type) can control only the specified limited number of fans motors and cannot control more than they are designed for. The number of transformers must be the same as the number of room thermostats. The power supply unit intended for mounting on a DIN rail is installed directly in the electrical switchboard. We recommend ordering a power supply with an input power at least 20% higher than the total calculated input power of the convectors.

EXAMPLE:

Trench Convectors Selected: 4 x F1S, 110mm (Height) x 230mm (Width) x 1200mm (Length)

Power Consumption of Trench Convector: 11.3W

Total Power Consumption Combined Trench Convector's: 4 x 11.3W = 45.2W

DRP Minimum Power Selection: 45.2W + (20% of 45.2W), 45.2W + 9.04W = 54.24W

Requirement: DRP-24V-060W

Type	Power (W)
DRP-24V-030W	30
DRP-24V-060W	60
DRP-24V-100W	100
DRP-24V-120W	120
DRP-24V-240W	240

Lc Overall Length (mm)	Heat Output t _s / t _r / t _i (°C)	Width 230 (mm), Fan's Speed Setting			Electric Power (W)
		1	2	3	
1000	75/65/20	820	1458	1822	11.3
	55/45/20	467	831	1039	
1100	75/65/20	820	1458	1822	11.3
	55/45/20	467	831	1039	
1200	75/65/20	820	1458	1822	11.3
	55/45/20	467	831	1039	

Example information taken from page 17.

Trench Convectors' Heat Output Regulation (Aquilo F1S, F2C/F2V and F4C/F4V)

The heat output can be controlled by adjusting either the water flow or the air flow (for fan-equipped models). The water flow is managed using a thermostatic valve combined with a thermostat or an actuator. For models like the Aquilo F1S, F2C/F2V, and F4C/F4V convectors, power control is achieved by adjusting the fan speed in three stages. The fan can be operated manually by the user or automatically via a thermostat.

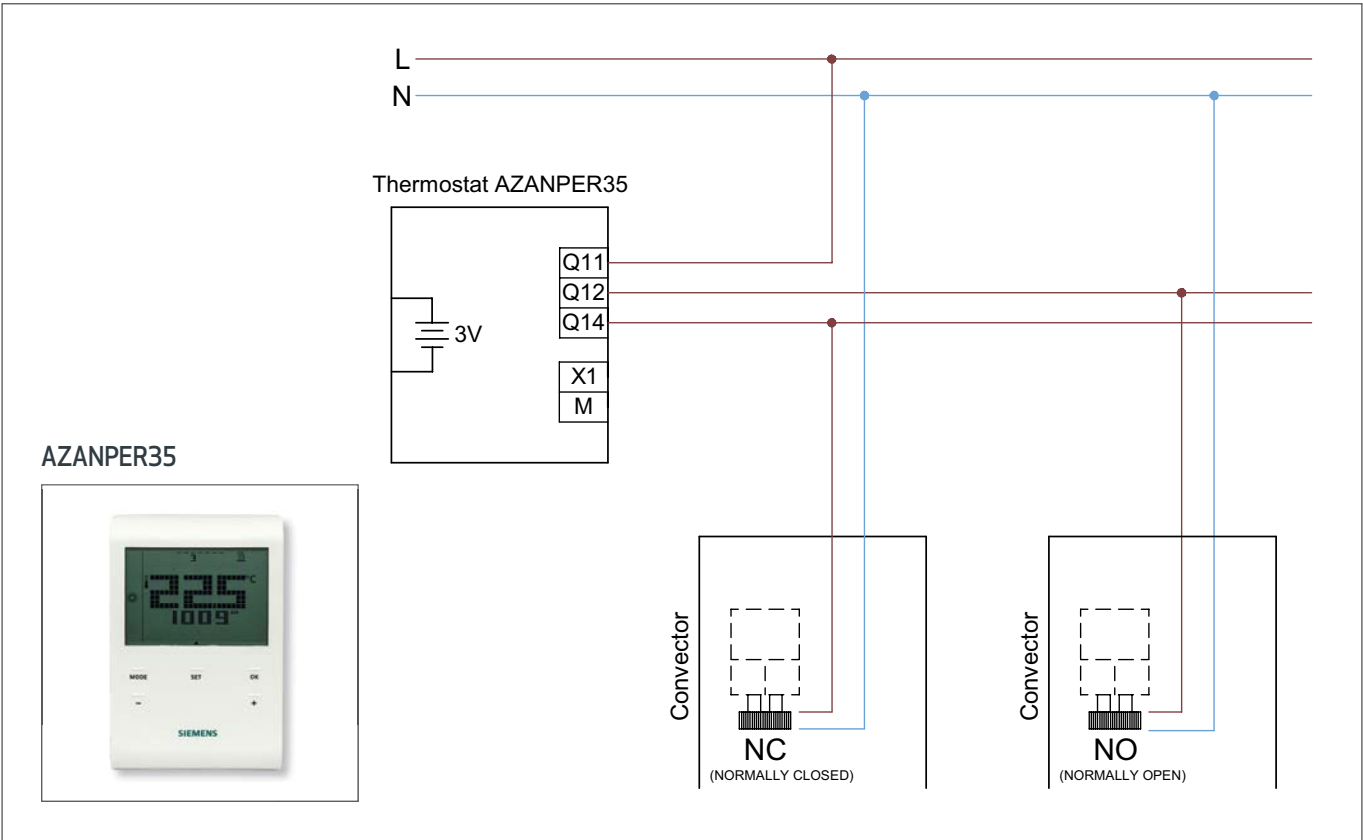
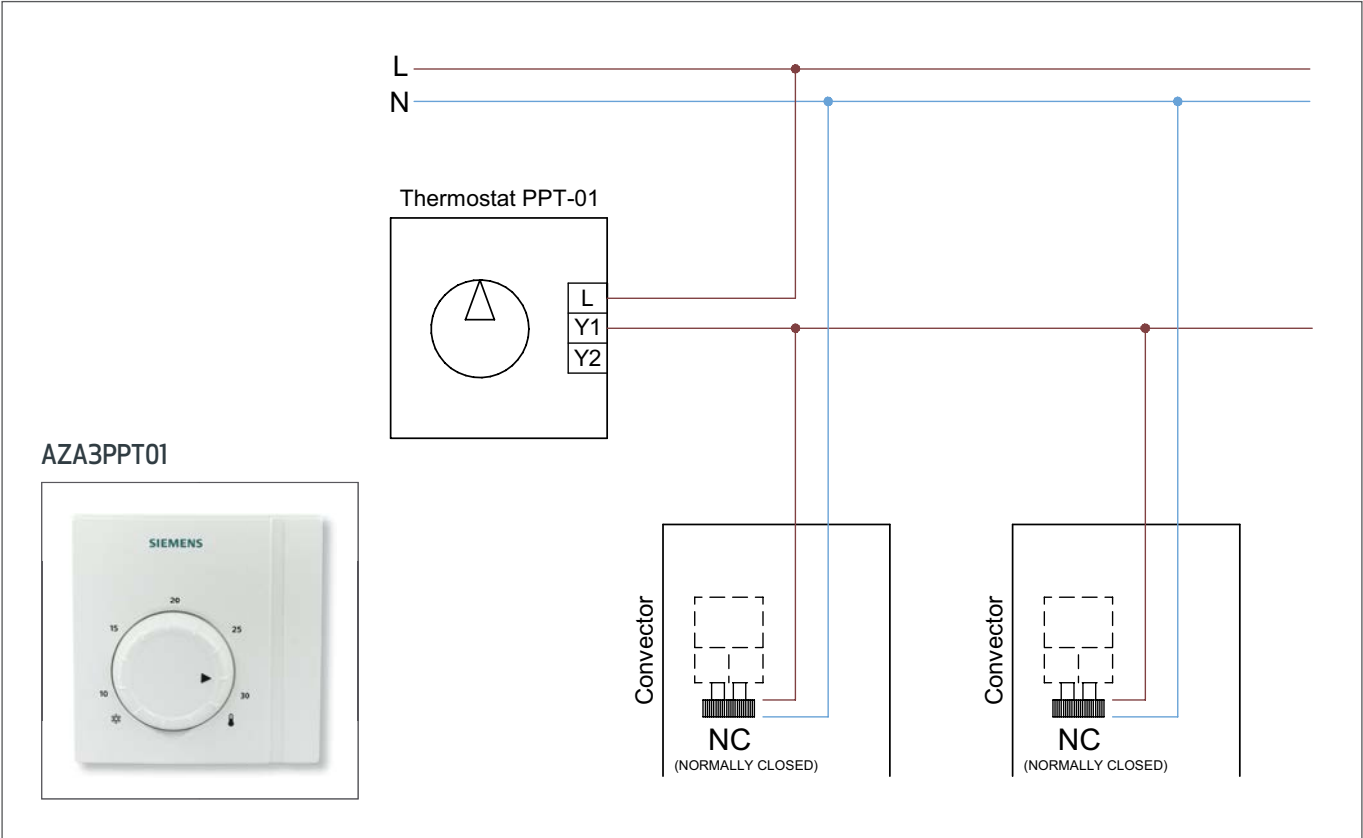
NOTE: 2 pipe systems require 1 actuator. 4 Pipe systems require 2 actuators.

Thermostat Selection

						
Model Type	REMADJHEAD	AZA3PPT01	AZANPER35	AZANPER36	AZANPER39	AZANPER37
FMS	X	X	X			
F1S				X		X
F2C				X		X
F2V					X	
F4C						X
F4V					X	

Wiring Diagrams (Examples)

Aquilo FMS Convectors with Room Thermostat



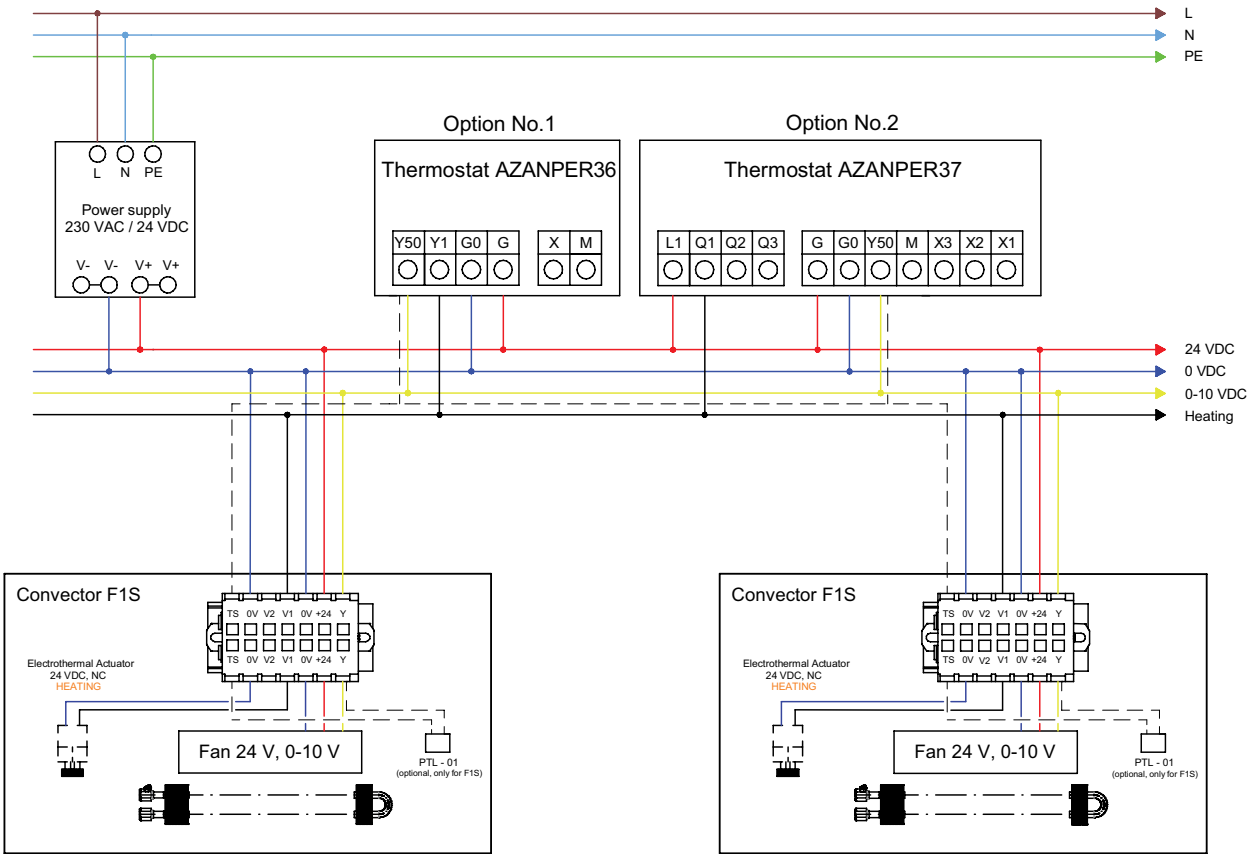
Wiring Diagrams (Examples)

Aquila F1S Convector with Room Thermostat, DRP Transformer

AZANPER36



AZANPER37

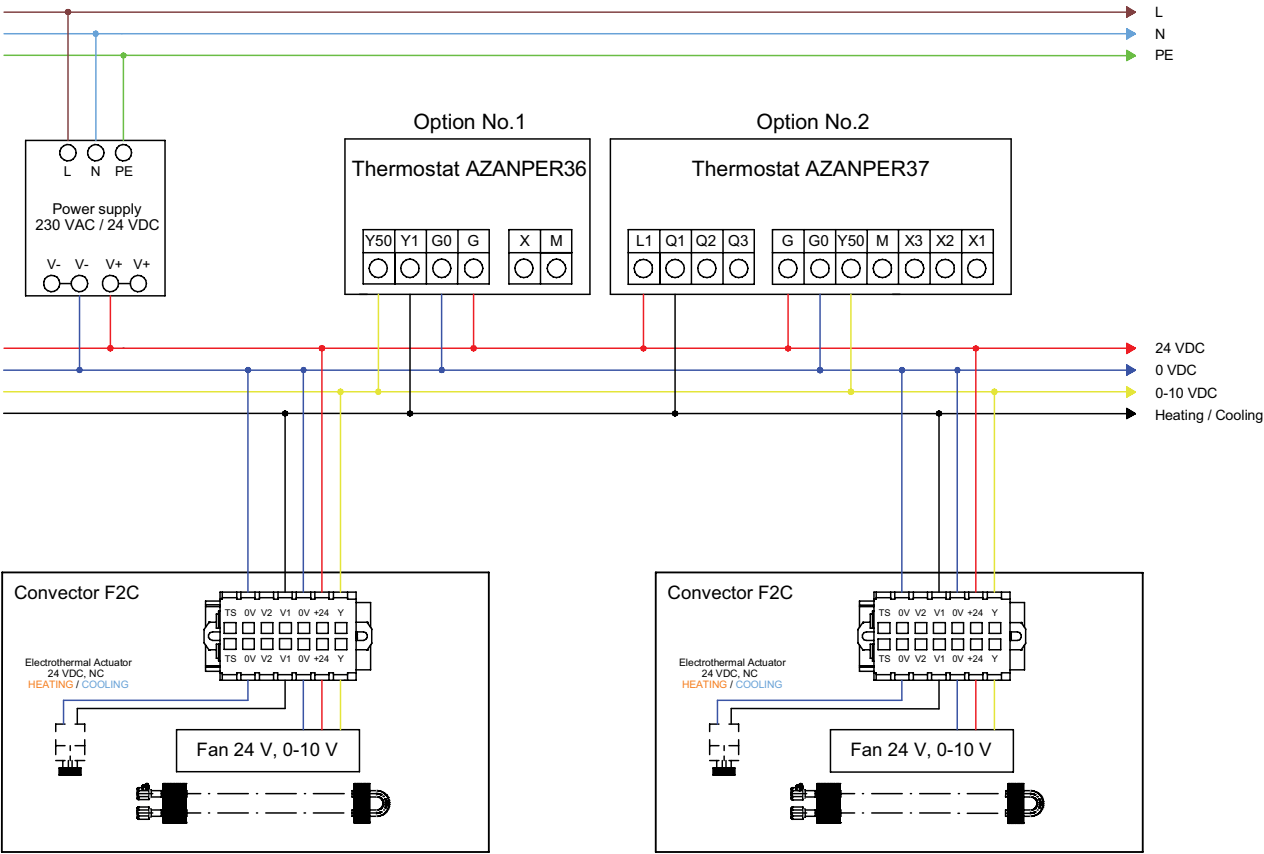


Aquilo F2C Convector with Room Thermostat, DRP Transformer

AZANPER36

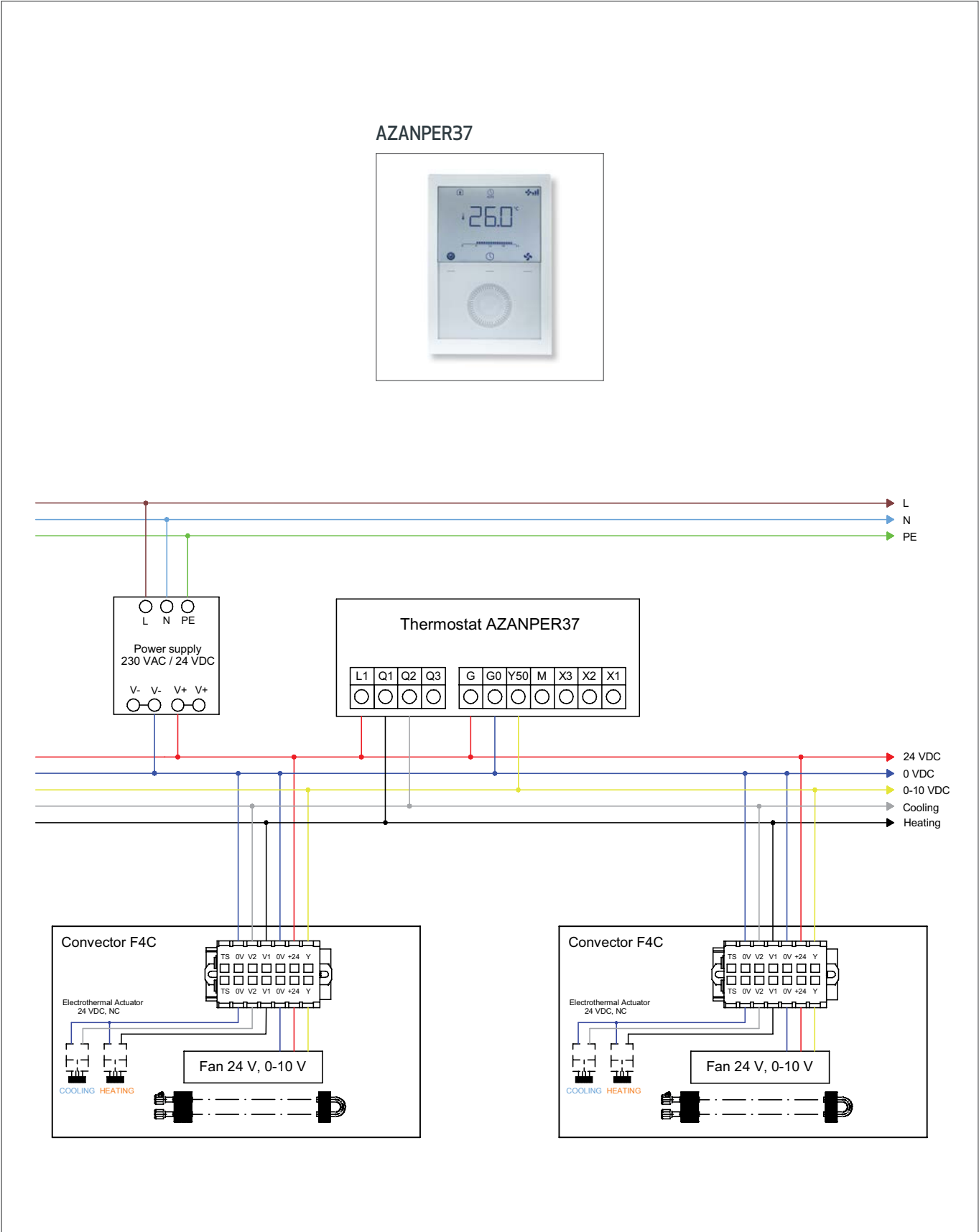


AZANPER37



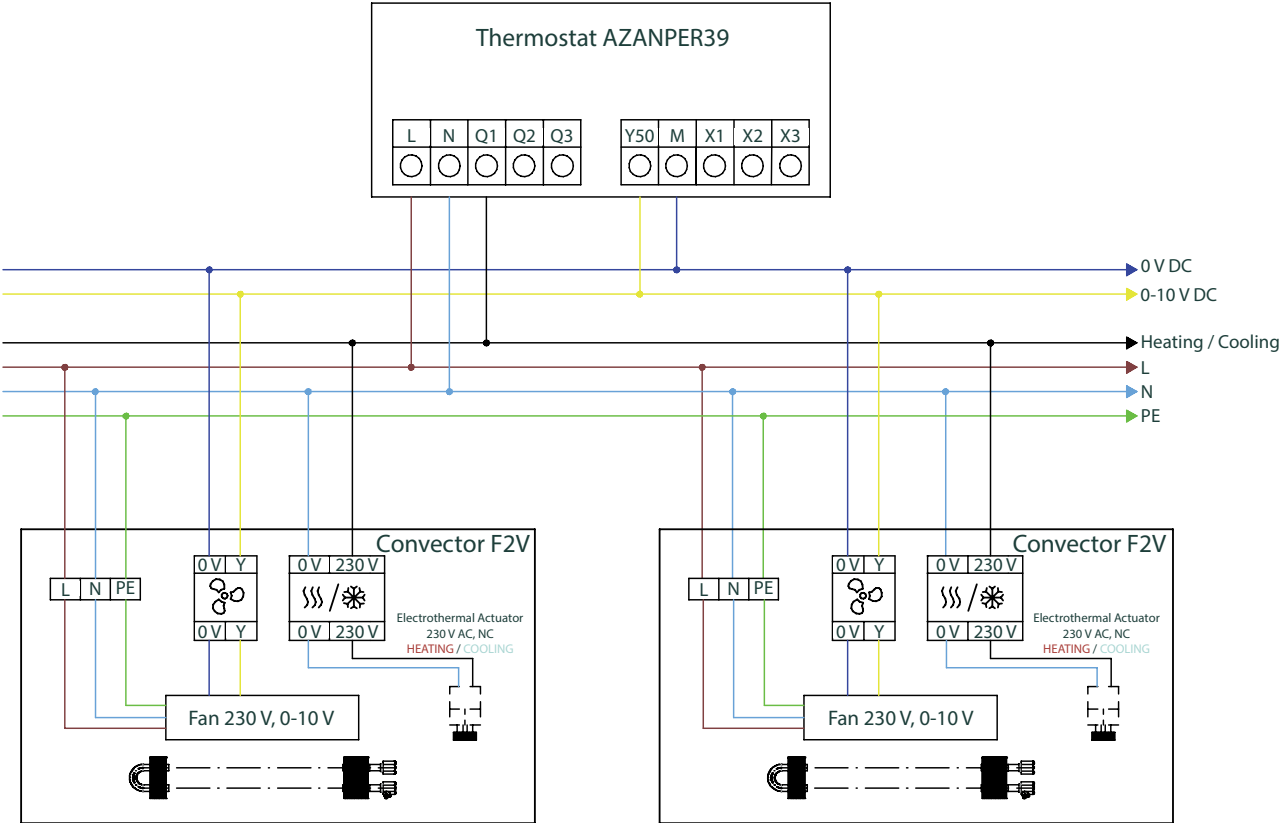
Wiring Diagrams (Examples)

Aquila F4C Convector with Room Thermostat, DRP Transformer



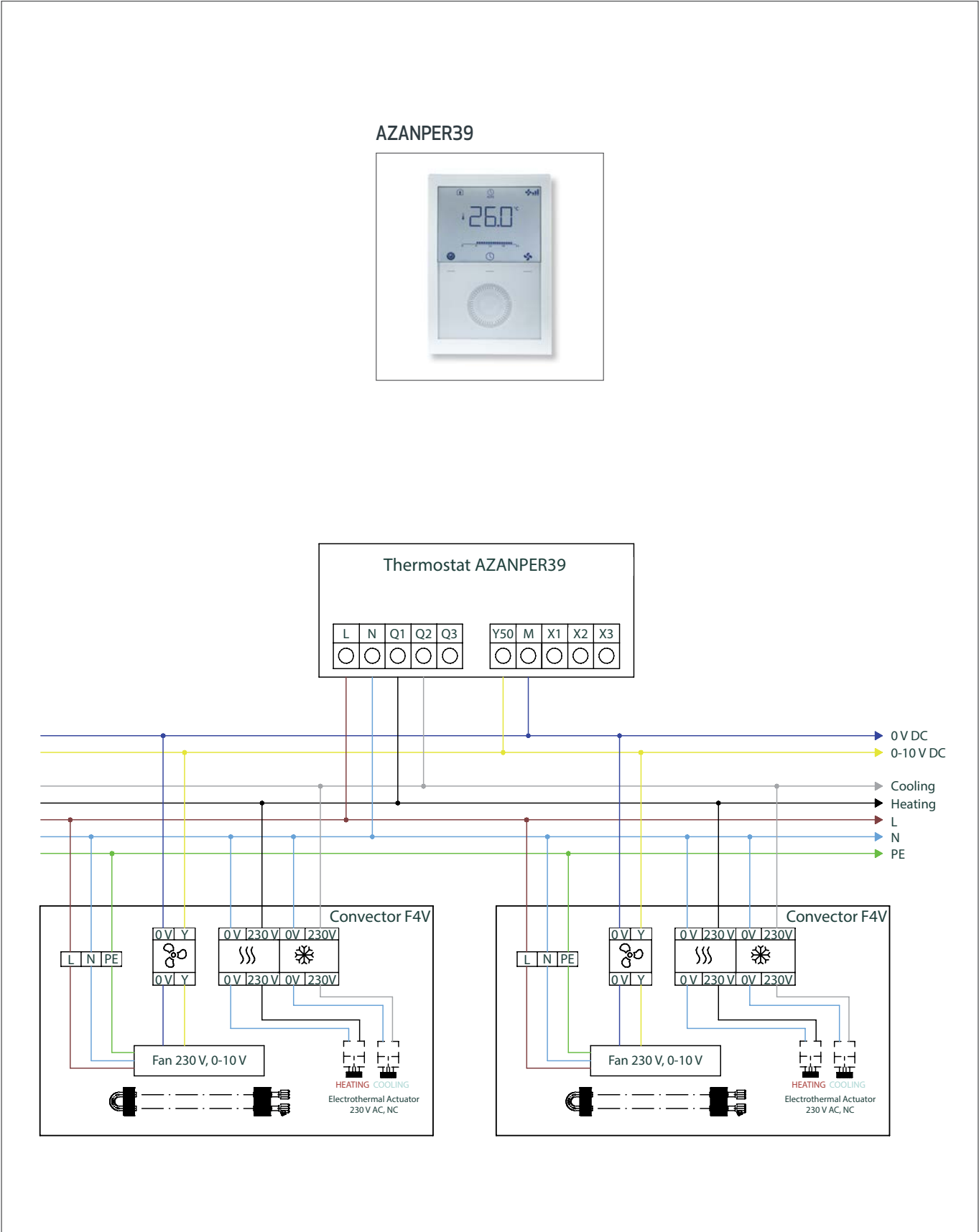
Aquila F2V Convector with Room Thermostat

AZANPER39

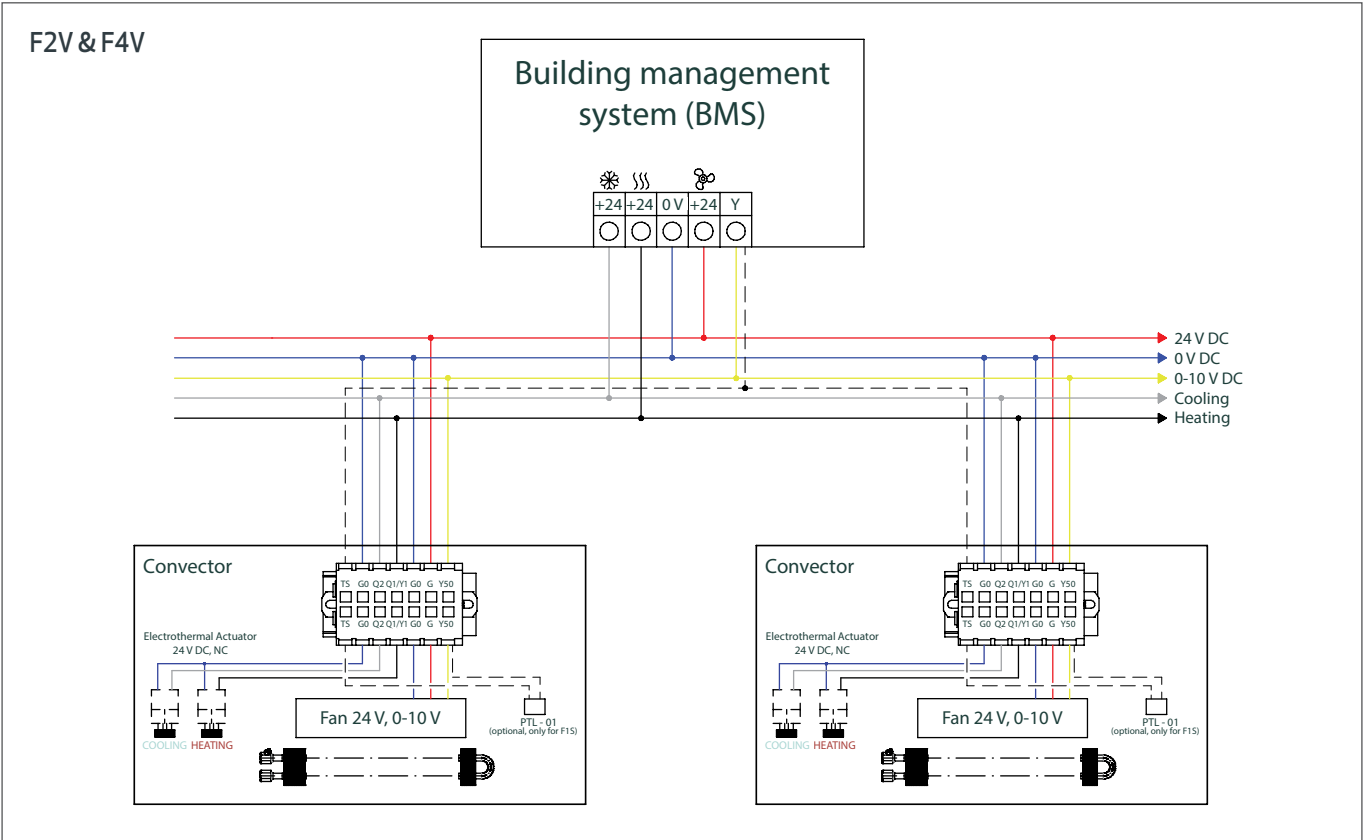
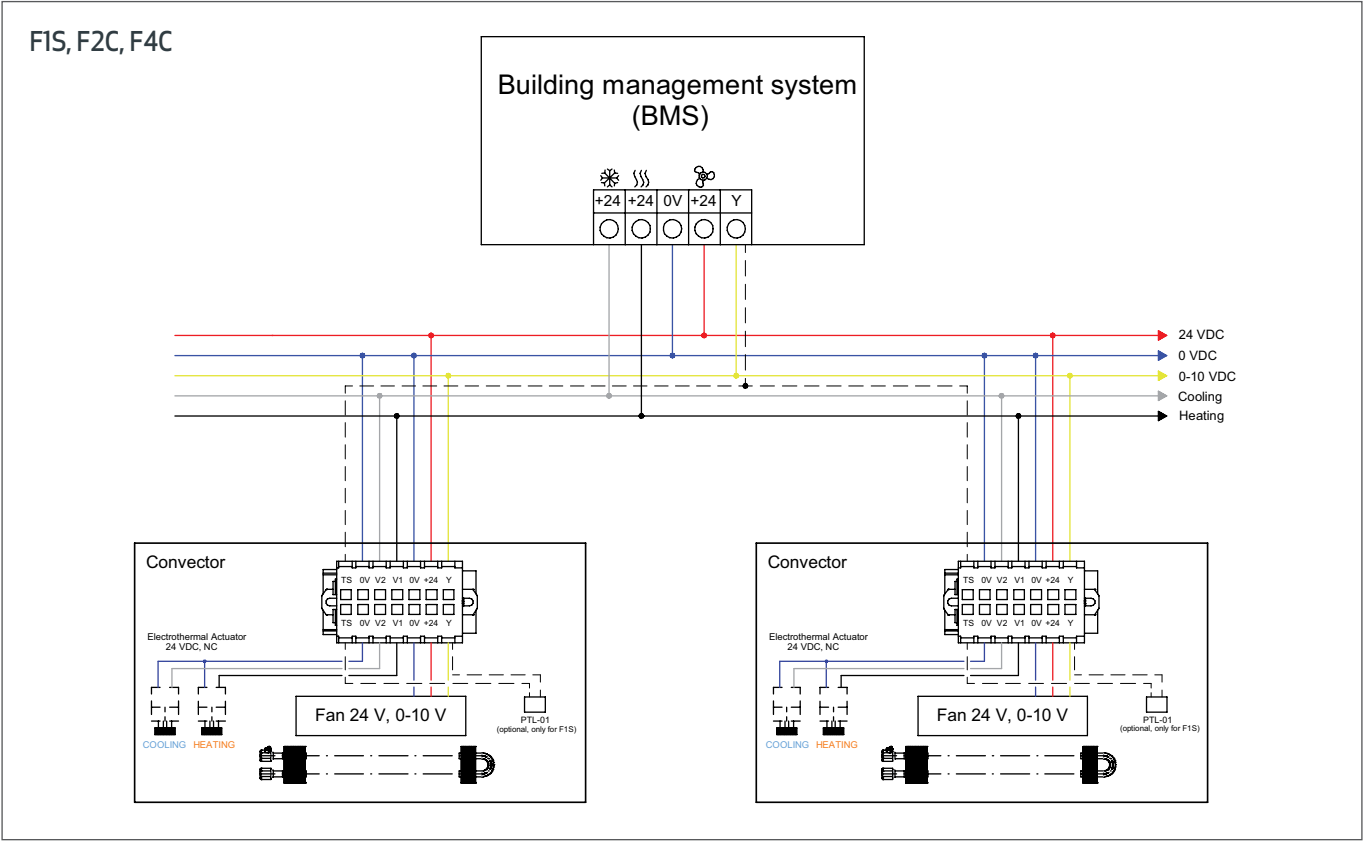


Wiring Diagrams (Examples)

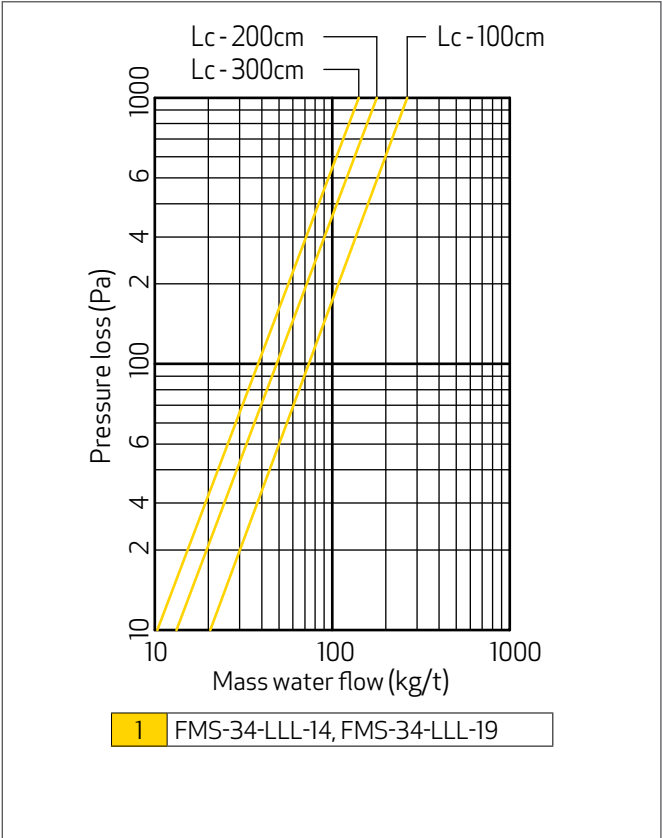
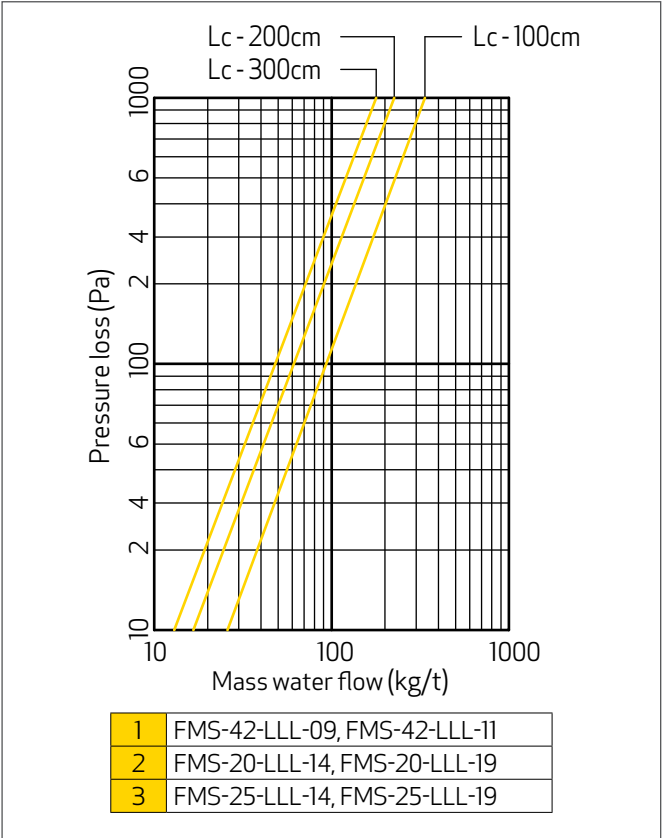
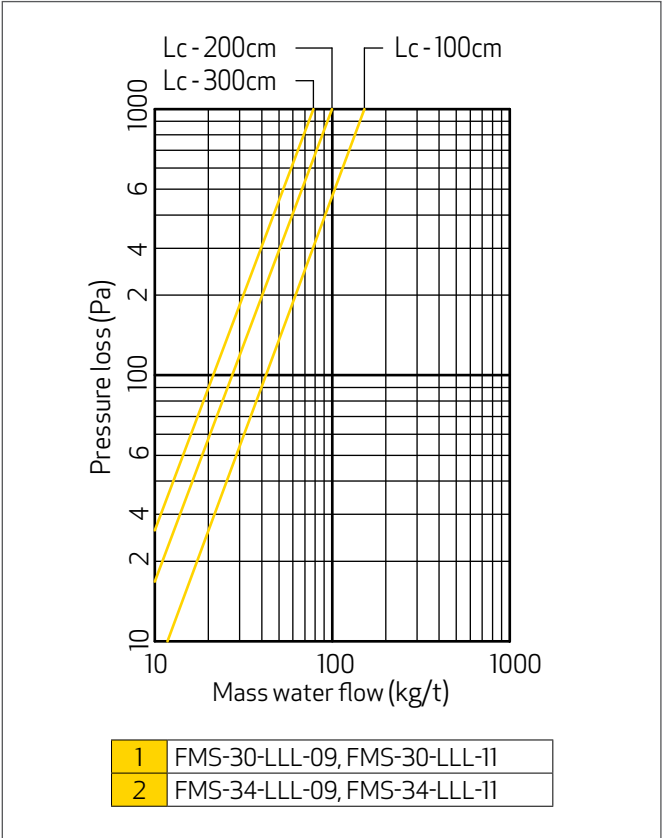
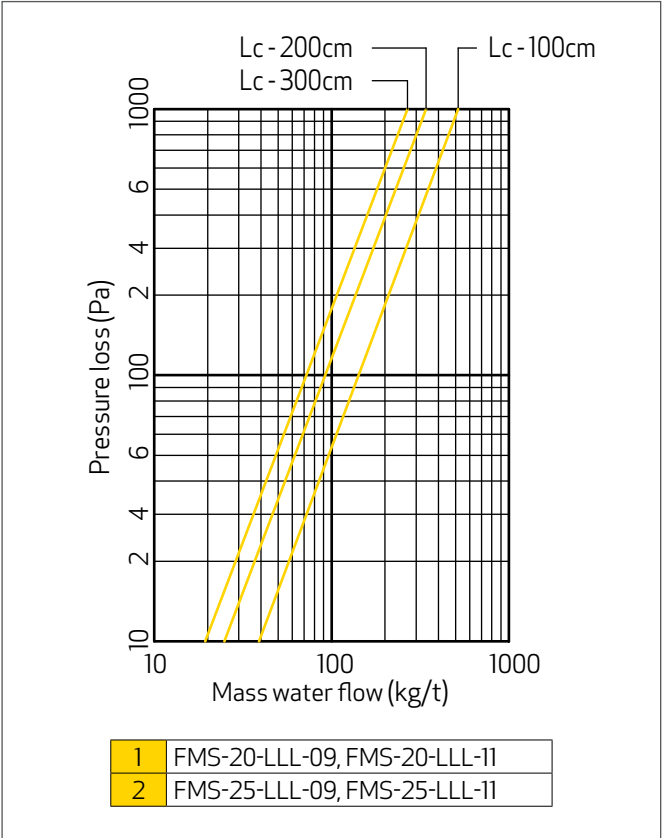
Aquila F4V Convector with Room Thermostat

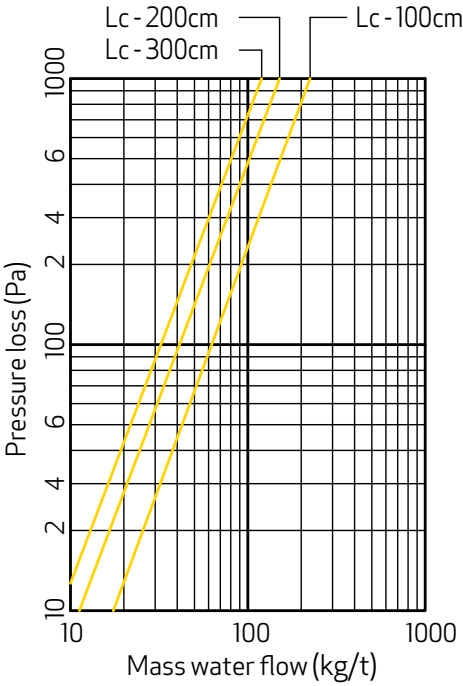


Aquila Convectors Controlled by BMS

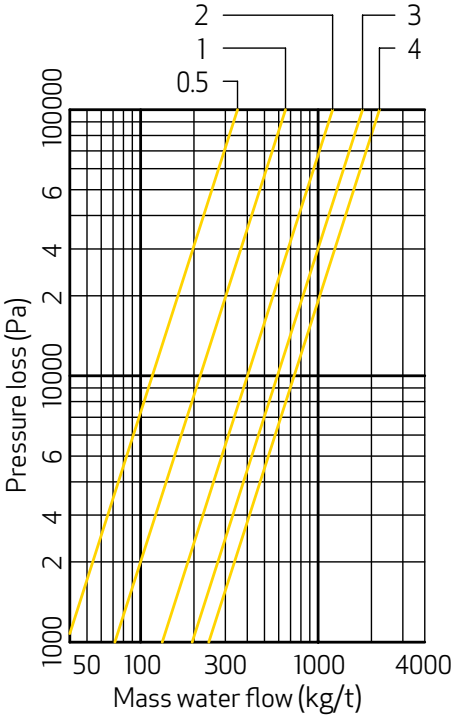


Hydraulic Characteristics

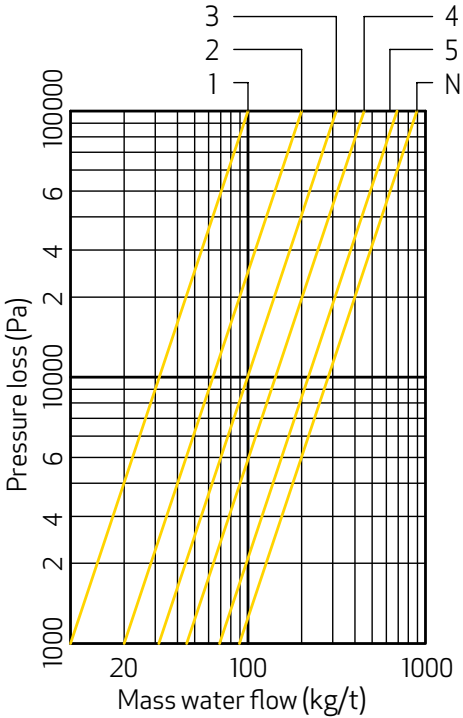




1 FMS-42-LLL-14, FMS-42-LLL-19

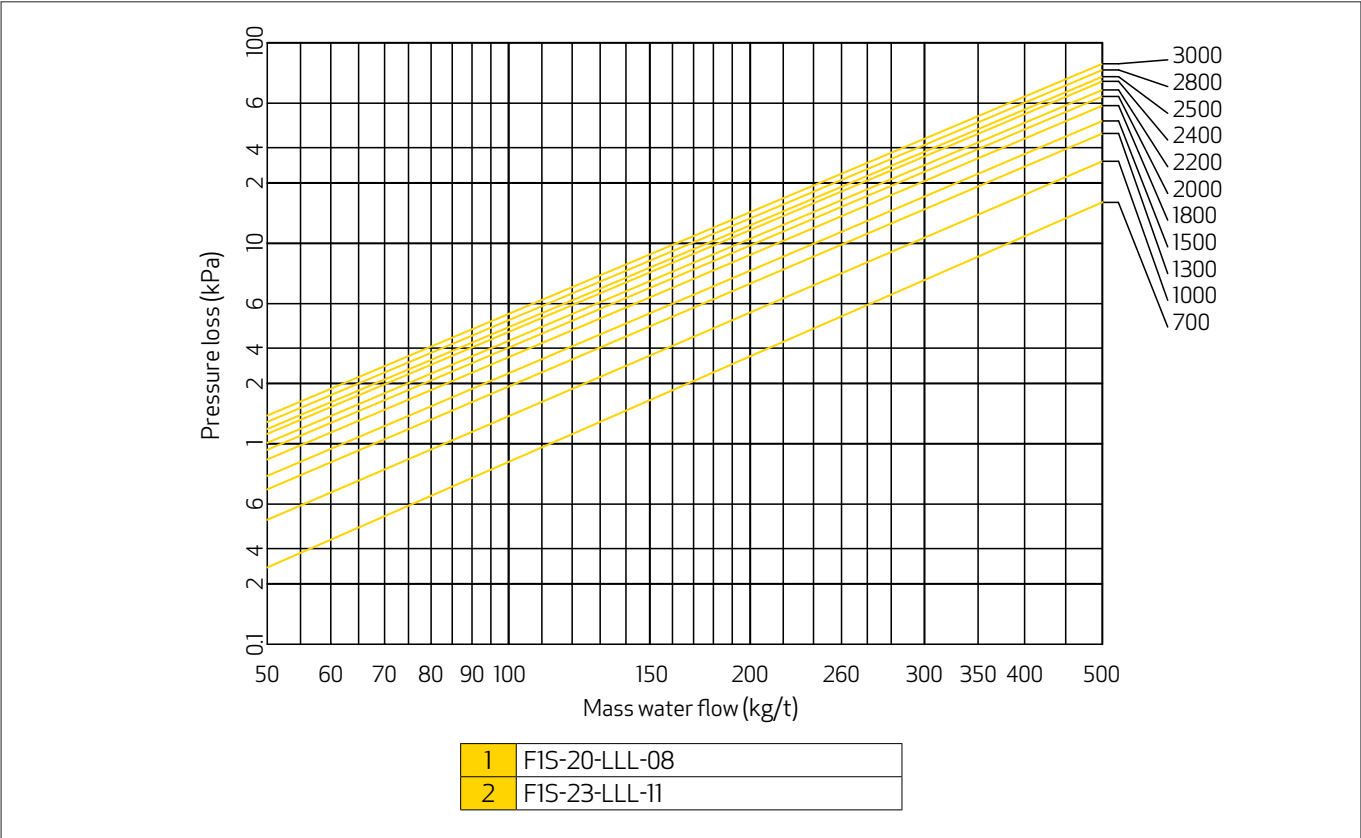
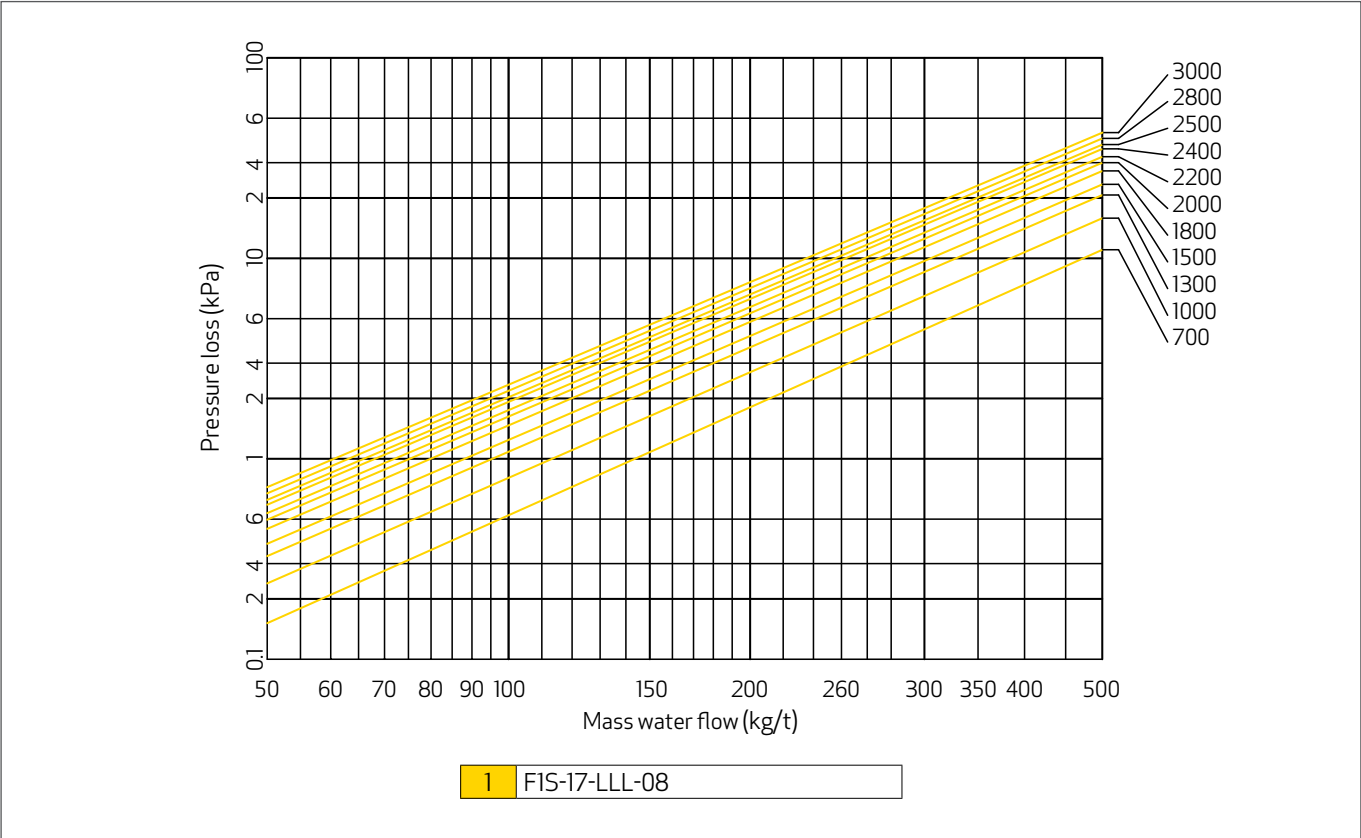


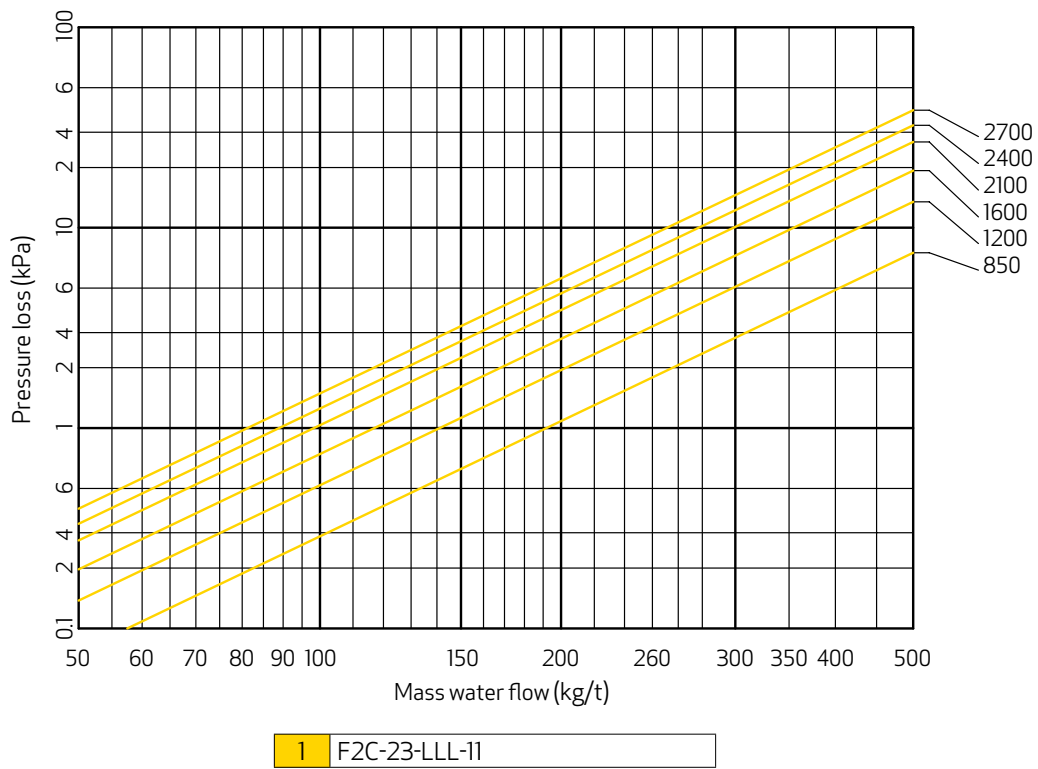
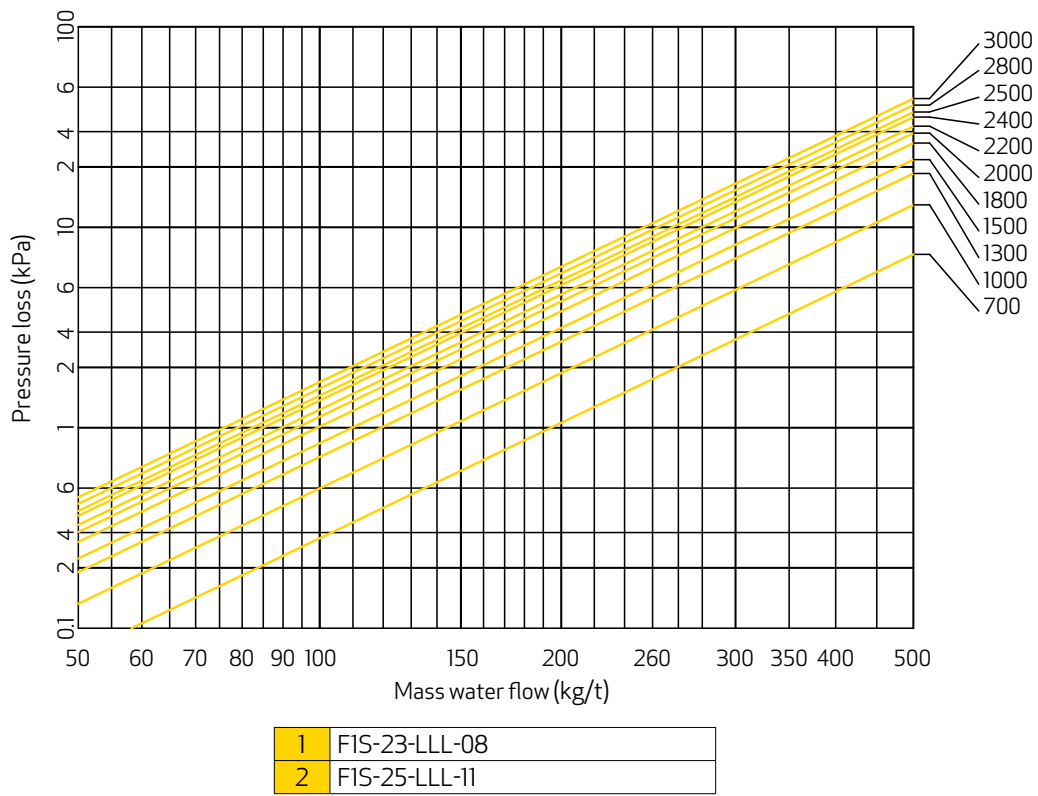
1 PRS-01, PRS-02



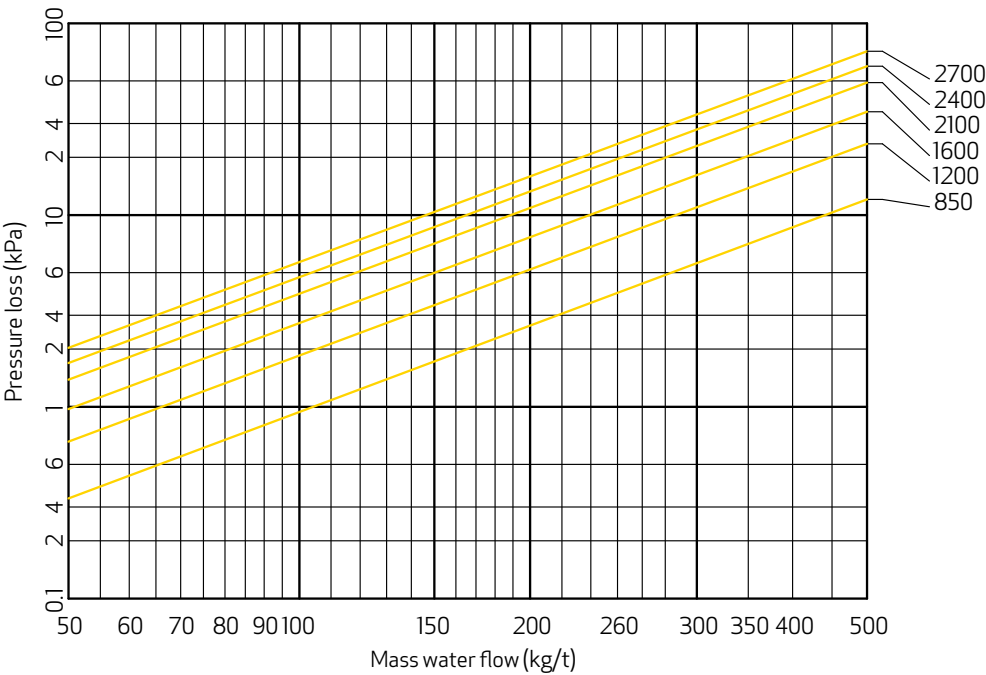
1 PTV-01, PTV-02

Hydraulic Characteristics

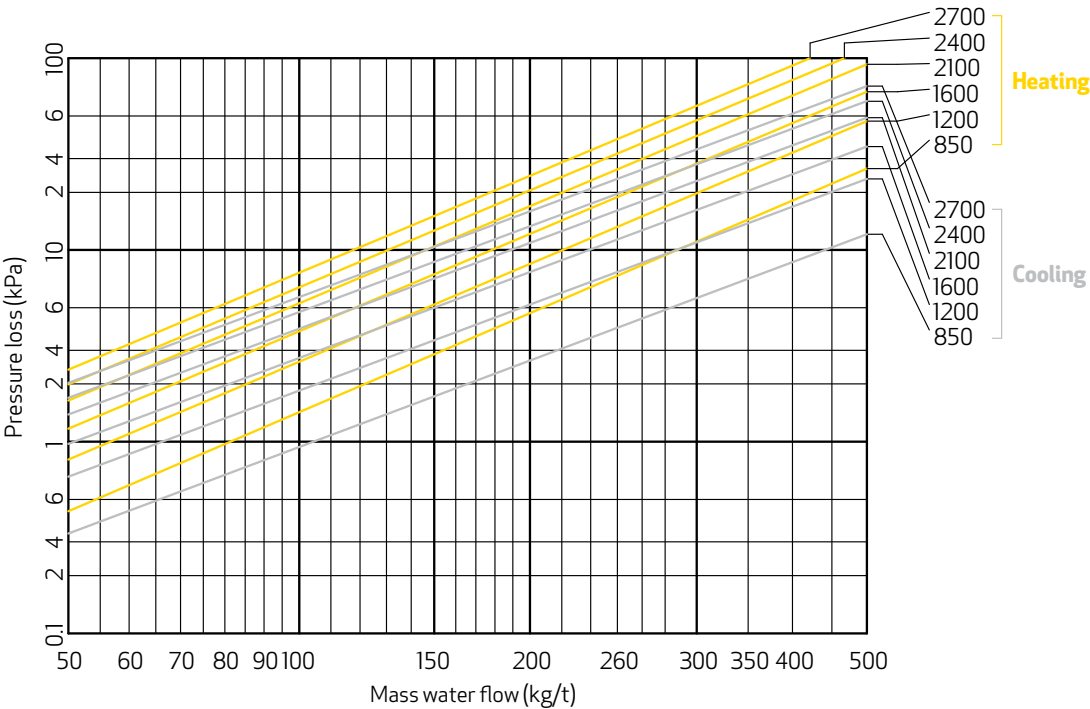




Hydraulic Characteristics



1	F2C-34-LLL-17
2	F2V-34-LLL-17



1	F4C-34-LLL-17
2	F4V-34-LLL-17

Conversion Table

Supply Water Temperature (°C)	Air Temperature (°C)	Aquila FMS Trench Convector n = 1.4															
		35	40	45	50	55	60	65	70	75	80	85	Return Water Temperature (°C)				
90	15	0.78	0.88	0.98	1.08	1.17	1.26	1.35	1.43	1.52	1.61	1.69		0.52	0.46	15	45
	20	0.63	0.73	0.83	0.93	1.02	1.11	1.19	1.28	1.36	1.45	1.53		0.42	0.36	20	
	24	0.51	0.62	0.72	0.81	0.90	0.99	1.08	1.16	1.24	1.32	1.40		0.33	0.28	24	
85	15	0.73	0.83	0.93	1.02	1.11	1.19	1.28	1.36	1.45	1.53		0.62	0.57	0.51	15	50
	20	0.59	0.69	0.78	0.87	0.96	1.05	1.13	1.21	1.29	1.37		0.52	0.46	0.40	20	
	24	0.47	0.58	0.67	0.76	0.85	0.93	1.01	1.09	1.17	1.25		0.44	0.38	0.32	24	
80	15	0.69	0.78	0.87	0.96	1.05	1.13	1.21	1.29	1.37		0.73	0.67	0.61	0.56	15	55
	20	0.55	0.64	0.73	0.82	0.90	0.99	1.07	1.14	1.22		0.62	0.57	0.51	0.44	20	
	24	0.44	0.54	0.63	0.71	0.79	0.87	0.95	1.03	1.10		0.54	0.48	0.42	0.35	24	
75	15	0.64	0.73	0.82	0.90	0.99	1.07	1.14	1.22		0.84	0.78	0.72	0.66	0.59	15	60
	20	0.51	0.60	0.69	0.77	0.85	0.92	1.00	1.07		0.73	0.67	0.61	0.55	0.48	20	
	24	0.40	0.50	0.58	0.66	0.74	0.82	0.89	0.96		0.64	0.59	0.53	0.46	0.39	24	
70	15	0.60	0.69	0.77	0.85	0.92	1.00	1.07		0.95	0.89	0.83	0.77	0.70	0.63	15	65
	20	0.47	0.56	0.64	0.71	0.79	0.86	0.93		0.84	0.78	0.72	0.66	0.59	0.52	20	
	24	0.37	0.46	0.54	0.61	0.68	0.76	0.83		0.75	0.69	0.63	0.57	0.50	0.42	24	
65	15	0.56	0.64	0.71	0.79	0.86	0.93		1.06	1.00	0.94	0.88	0.81	0.74	0.67	15	70
	20	0.43	0.51	0.59	0.66	0.73	0.80		0.95	0.89	0.83	0.77	0.70	0.63	0.55	20	
	24	0.33	0.41	0.49	0.56	0.63	0.70		0.86	0.80	0.74	0.68	0.61	0.54	0.46	24	
60	15	0.51	0.59	0.66	0.73	0.80		1.17	1.11	1.05	0.99	0.92	0.86	0.78	0.71	15	75
	20	0.39	0.47	0.54	0.60	0.67		1.06	1.00	0.94	0.88	0.81	0.74	0.67	0.59	20	
	24	0.30	0.37	0.44	0.51	0.57		0.97	0.91	0.85	0.79	0.72	0.65	0.58	0.49	24	
55	15	0.47	0.54	0.60	0.67		1.28	1.22	1.16	1.10	1.04	0.97	0.90	0.83	0.76	15	80
	20	0.35	0.42	0.49	0.55		1.17	1.11	1.05	0.99	0.92	0.86	0.78	0.71	0.62	20	
	24	0.27	0.33	0.40	0.46		1.08	1.02	0.96	0.90	0.83	0.77	0.69	0.61	0.52	24	
50	15	0.42	0.49	0.55		1.40	1.34	1.28	1.21	1.15	1.08	1.01	0.94	0.87	0.79	15	85
	20	0.31	0.37	0.43		1.28	1.22	1.16	1.10	1.04	0.97	0.90	0.83	0.75	0.66	20	
	24	0.23	0.29	0.35		1.19	1.13	1.07	1.01	0.95	0.88	0.81	0.73	0.66	0.56	24	
45	15	0.37	0.43		1.51	1.45	1.39	1.33	1.26	1.19	1.13	1.06	0.98	0.91	0.82	15	90
	20	0.27	0.33		1.40	1.34	1.28	1.21	1.15	1.08	1.01	0.94	0.87	0.78	0.69	20	
	24	0.19	0.25		1.30	1.25	1.19	1.12	1.06	0.99	0.92	0.85	0.77	0.68	0.59	24	
Return Water Temperature (°C)					85	80	75	70	65	60	55	50	45	40	35	Air Temperature (°C)	Supply Water Temperature (°C)
Aquila F1S, F2C, F2V, F4C, F4V Trench Convectors, Fan Version n = 1.1																	

EXAMPLE:

Convector: FMS H250 x L1000 x D110

Output @ 75/65/20°C: QN = 266W

Supply Temperature: 55°C, Return Temperature: 45°C, Air Temperature: 20°C

Correction Factor: K1 = 0.49

Corrected Heat Output: Q = QN x K1

= 266W x 0.49 = 130W

Accessories

Product			Product Code																								
	DN15 thermostatic valve - NF shortened version PN10 / 110°C Straight version DN15 PTV-01 Angle version DN15 PTV-02		AZA3PTV01 AZA3PTV02																								
	<table><tr><th>Valve setting</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>N</th></tr><tr><td>k_v (m³/h)</td><td>0.10</td><td>0.20</td><td>0.31</td><td>0.45</td><td>0.69</td><td>0.89</td></tr></table>	Valve setting	1	2	3	4	5	N	k _v (m³/h)	0.10	0.20	0.31	0.45	0.69	0.89												
Valve setting	1	2	3	4	5	N																					
k _v (m³/h)	0.10	0.20	0.31	0.45	0.69	0.89																					
	DN15 thermostatic lockshield valve PN10 / 110°C Straight version DN15 PRS-01 Angle version DN15 PRS-02		AZA3PRS01 AZA3PRS02																								
	<table><tr><th>Speed no. until total cut-off</th><th>0.25</th><th>0.5</th><th>0.75</th><th>1</th><th>1.5</th><th>2</th><th>2.5</th><th>3</th><th>3.5</th><th>4</th><th>k_{vs}</th></tr><tr><td>k_v (m³/h)</td><td>0.2</td><td>0.4</td><td>0.5</td><td>0.65</td><td>1.0</td><td>1.3</td><td>1.7</td><td>1.9</td><td>2.1</td><td>2.3</td><td>2.5</td></tr></table>	Speed no. until total cut-off	0.25	0.5	0.75	1	1.5	2	2.5	3	3.5	4	k _{vs}	k _v (m³/h)	0.2	0.4	0.5	0.65	1.0	1.3	1.7	1.9	2.1	2.3	2.5		
Speed no. until total cut-off	0.25	0.5	0.75	1	1.5	2	2.5	3	3.5	4	k _{vs}																
k _v (m³/h)	0.2	0.4	0.5	0.65	1.0	1.3	1.7	1.9	2.1	2.3	2.5																
	24V actuator for thermostatic valve Operating voltage 24V Cable length 1.0m Power load 1W IP protection rating IP 54		Normally closed (NC) FDA00NCS3NN540N0																								
	230V actuator for thermostatic valve Operating voltage 230V Cable length 1.0m Power load 1W IP protection rating IP 54		Normally closed (NC) FDA30NCS3NN540N0																								
	REMADJHEAD - Remote thermostatic valve with a capillary pipe Temperature regulation control 8 - 28°C Capillary wire length 2m or 5m Anti-freezing protection 8°C Thermostatic actuator length 70mm, M30 x 1.5 thread		2m FD0S3200000YACUK3 5m FD0S3500000YACUK3																								
	PPT-01 room thermostat Control of up to 24 x thermal actuators with 230V power supply. For FMS convectors. Operating voltage 230V / 50Hz Required temperature setting range 8 - 30°C Terminal load 0.2 - 6 (2) A IP protection rating IP 30 Colour White RAL 9010 Width x height x depth 96.4 x 99.6 x 42.8mm		AZA3PPT01																								

Product	Product Code
 PER-36 room thermostat with a 3 speed control switch Control of up to 4 x thermal actuators with 24V power supply. For F1S, F2C convectors. Operating voltage 24V DC Temp setting range 8 - 30°C Speed settings 3 stage speed switch Fan control voltage 0 - 10V DC IP protection rating IP 30 Width x height x depth 96 x 110 x 29mm	AZANPER36
 PER-35 room thermostat with a weekly programme 24V or 230V Control of up to 20 x thermal actuators with 230V power supply. Control of up to 4 x thermal actuators with 24V power supply. For FMS convectors. Operating voltage 24 - 230V AC Supply voltage 3V DC (2 x 1.5V) IP protection rating IP 30 Temp setting range 5 - 35°C Width x height x depth 85 x 127 x 21.5mm	AZANPER35
 PER-39 room thermostat with automatic speed fan switch 230V Control of up to 20 x thermal actuators with 230V power supply. For F2V, F4V convector. Operating voltage 230V AC EC fan control voltage 0-10V DC IP protection rating IP 30 Temp setting range 5 - 40°C Width x height x depth 92 x 134 x 25mm	AZANPER39
 PER-37 room thermostat with automatic speed fan switch 24V Control of up to 10 x thermal actuators with 24V power supply. Operating voltage 24V DC EC fan control voltage 0 - 10V DC IP protection rating IP 30 Temp setting range 5 - 40°C Width x height x depth 92 x 134 x 25mm	AZANPER37
 Temperature sensor PTL-01 For use with F1S convectors only. The fan switches on when the water temperature in the heat exchanger reaches 40°C. No cold air blows into the room when turning on the heater.	AZANPTL01

Accessories

Product		Product Code																														
 		DRP-24V-030W Voltage transformer 230V to 24V, 30W DRP-24V-060W Voltage transformer 230V to 24V, 60W DRP-24V-100W Voltage transformer 230V to 24V, 100W DRP-24V-120W Voltage transformer 230V to 24V, 120W DRP-24V-240W Voltage transformer 230V to 24V, 240W																														
<table><tr><th>Power supply size</th><th>30W</th><th>60W</th><th>100W</th><th>120W</th><th>240W</th></tr><tr><td>Input supply voltage</td><td>180-264V AC</td><td>180-264V AC</td><td>180-264V AC</td><td>85-264V AC</td><td>24V DC/2.5 A</td></tr><tr><td>Output voltage</td><td>24V DC/1.25 A</td><td>24V DC/2.50 A</td><td>24V DC/4.15 A</td><td>24V DC/5.00 A</td><td>24V DC/10.00 A</td></tr><tr><td>Dimensions (h x w x d) mm</td><td>56 x 62.5 x 93</td><td>56 x 78 x 93</td><td>56 x 100 x 93</td><td>118.5 x 50 x 121</td><td>118.5 x 85 x 121</td></tr><tr><td>Ordering code</td><td>DRP-24V-030W</td><td>DRP-24V-060W</td><td>DRP-24V-100W</td><td>DRP-24V-120W</td><td>DRP-24V-240W</td></tr></table>			Power supply size	30W	60W	100W	120W	240W	Input supply voltage	180-264V AC	180-264V AC	180-264V AC	85-264V AC	24V DC/2.5 A	Output voltage	24V DC/1.25 A	24V DC/2.50 A	24V DC/4.15 A	24V DC/5.00 A	24V DC/10.00 A	Dimensions (h x w x d) mm	56 x 62.5 x 93	56 x 78 x 93	56 x 100 x 93	118.5 x 50 x 121	118.5 x 85 x 121	Ordering code	DRP-24V-030W	DRP-24V-060W	DRP-24V-100W	DRP-24V-120W	DRP-24V-240W
Power supply size	30W	60W	100W	120W	240W																											
Input supply voltage	180-264V AC	180-264V AC	180-264V AC	85-264V AC	24V DC/2.5 A																											
Output voltage	24V DC/1.25 A	24V DC/2.50 A	24V DC/4.15 A	24V DC/5.00 A	24V DC/10.00 A																											
Dimensions (h x w x d) mm	56 x 62.5 x 93	56 x 78 x 93	56 x 100 x 93	118.5 x 50 x 121	118.5 x 85 x 121																											
Ordering code	DRP-24V-030W	DRP-24V-060W	DRP-24V-100W	DRP-24V-120W	DRP-24V-240W																											
		Auxiliary relay Used to increase the number of connected actuators. Control of up to 60 x connected thermal actuators with 24V or 230V power supply. DIN rail mounting. Supply voltage Switching current IP protection rating Width x height x depth 24V DC 16A IP 20 17.6 x 64 x 90mm																														

Merriott UK & Ireland

Purmo Group (UK) Ltd, Eastern Avenue, Team Valley,
Gateshead, Tyne & Wear NE11 0PG
Tel: 0330 0415 472

sales@merriottuk.com
sales@merriott.ie

www.merriottuk.com / www.merriott.ie
Follow us on  @MerriottUK and 

Merriott