



1.0 to 4.8 kW



1.2 to 5.2 kW

The **VPX** fan coil unit has been specially designed to meet the job requirements that call for false-ceiling installations and for air distribution by ductwork.

The particularity and the modularity of the VPX unit offer different configurations of air diffusion (in J, U, L and I configurations) in order to meet the installation demands of your premises.

> General features <

Casing

Fabricated from 1.2 mm thick galvanized steel sheet, lined with 10 mm thick polyethylene foam insulation. Provision for hanging the unit is provided by fixing brackets with slots located on the top part of the casing.

The VPX fan coil unit is available, as standard equipment, with two pre-punched holes provided for fresh air intake (Ø100 and 125 mm).

The condensate drain pan is made of 1.2 mm thick galvanized steel sheet and is externally insulated by a 2 mm thick polyethylene foam, in addition to the 10 mm thick insulation of the casing.

Access to fan-motor assembly for service and maintenance works is facilitated by removing the bottom panel, without removing the distribution ducts.

Coil compartment

Coil compartment is lined with 10 mm thick polyethylene foam insulation and incorporates water coils which are provided with ½" Ø male threaded couplings.

Coil

Coils are leak tested under water (27 bar) and are suitable for a maximum working pressure of 10 bar.

Consists of copper tubes and aluminium fins, this finned block ensures optimum heat transfer between air and water.

Coils have 4 or 5 rows according to the capacity to be dissipated.

Furthermore, the finned block can have 1 row, circuited independently for hot water in the 4-pipe systems.

In addition, each coil (heating and cooling) is fitted with an air vent cock located at the upper part of the coil and accessible from the exterior of the unit.

Fan compartment

Fan compartment, in which is located a fan-motor assembly, is lined with 2 mm thick closed cell polyethylene foam insulation.

Fan is composed of double inlet forward curved centrifugal type aluminium wheels and of galvanized steel scrolls.

Motor is of class F, direct drive, 7-speed type suitable for nominal voltage of 230 V/1 ph/50 Hz. Motor is equipped with a built-in thermal overload protection of automatic reset type.

Access to fan compartment for maintenance works is facilitated by removing the panel (held by 6 screws) located at the bottom side of the casing.

Air filter

Filter consists of cleanable synthetic media. Filter is easily removable and has G4 class (90% arrestance).

Access to filter for maintenance works is facilitated by removing the panel (held by 2 screws) located at the bottom side of the casing.

Configurations

The VPX fan coil unit is available in several versions :

- 2-pipe version,
- 2-pipe/2-wire version,
- 4-pipe version.

Air duct connections

The connections are realized with Ø200 mm circular or Ø250 mm oblong duct collars on the return and discharge air sides.

Duct collars are completely integrated into the unit casing. The discharge duct collar is internally insulated by a polyethylene foam.

Arrangements

The VPX fan coil unit is available in 4 arrangements. Each arrangement symbolized by a letter representing the direction of air stream circulating in the unit.

- J** : straight return-side discharge,
- U** : return and discharge at same side,
- L** : side return-straight discharge,
- I** : straight return and discharge.

Fixations

The unit is supplied with 4 slotted fixing brackets as standard.

The fixing brackets, by a shrewd system combining clipping and screwing, can be quickly installed and removed. It is thus possible to choose the most accessible side of the unit according to the arrangement and the installation requirements.

Electrical compartment

Electrical compartment is easily accessible from the bottom side after removing the panel held by 2 screws. This compartment is lined with 10 mm thick closed cell polyethylene foam insulation.

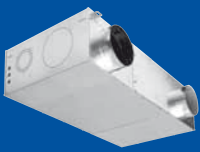
Electric heater

Electric heater is for 2-pipe/2-wire version. 3 types of electrical resistances are available :

- 750 W
- 1500 W
- 2250 W

Controls

Unit can be fitted with electromechanical or electronic control systems.

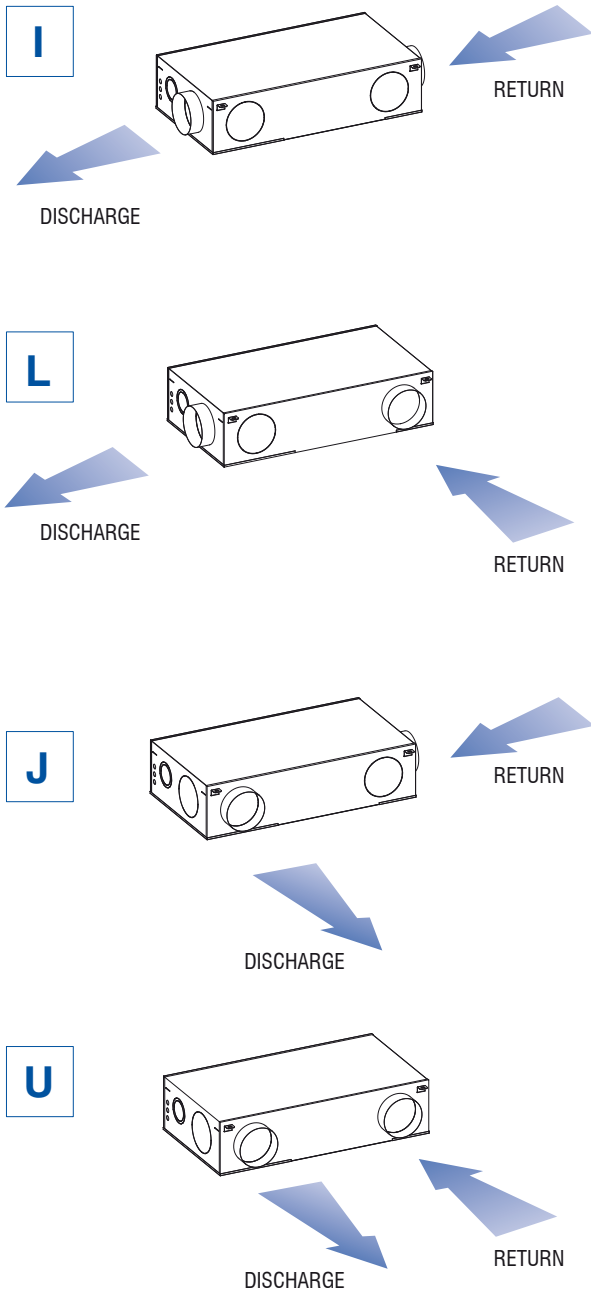


4 configurations : VPU, VPL, VPI & VPJ
2-pipe, 2-pipe/2-wire or 4-pipe version

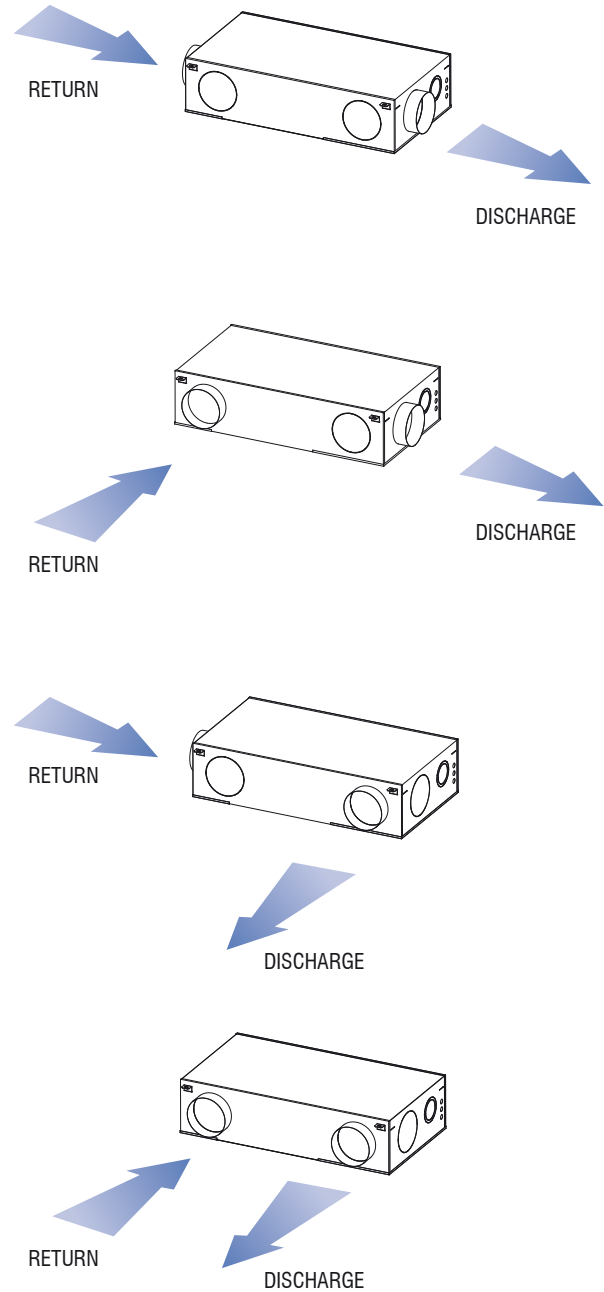
1.0 to 4.8 kW
1.2 to 5.2 kW

> Configurations of VPX <

Right-hand service side



Left-hand service side



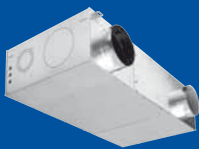
I, L, J, U : Symbolize the direction of air stream in the unit.

> Air flow data (m³/h) - VPX <

External static pressure (Pa)	Configuration (1)	Coil (2)	Circular or oblong duct collar	Fan speed						
				V 1	V 2	V 3	V 4	V 5	V 6	V 7
0	JIL	4 rows	Ø 200 mm	204	339	444	540	626	696	867
			Ø 250 mm	238	335	445	518	619	700	924
		5 rows	Ø 200 mm	273	338	436	524	597	697	908
	U		Ø 200 mm	217	293	380	463	534	603	784
			Ø 250 mm	221	280	366	441	503	574	716
	Ø 250 mm	212	285	374	451	518	580	771		
Ø 200 mm	235	327	432	514	590	675	840			
Ø 200 mm	244	334	412	499	573	640	818			
25	JIL	4 rows	Ø 200 mm	175	270	389	484	575	660	808
			Ø 250 mm	191	296	403	495	591	678	873
		5 rows	Ø 200 mm	167	272	384	477	559	647	857
	U		Ø 200 mm	140	236	338	415	488	566	730
			Ø 250 mm	124	218	317	396	468	539	693
	Ø 250 mm	133	226	325	406	483	564	745		
Ø 200 mm	160	262	374	468	554	619	793			
Ø 200 mm	155	256	364	456	538	610	781			
50	JIL	4 rows	Ø 200 mm		228	343	440	527	618	770
			Ø 250 mm		251	369	470	562	650	844
		5 rows	Ø 200 mm		213	335	433	522	604	816
	U		Ø 200 mm				379	452	528	697
			Ø 250 mm		159	268	356	432	505	664
	Ø 250 mm		164	276	363	444	526	714		
Ø 200 mm			331	428	514	585	752			
Ø 200 mm				413	497	575	747			
75	JIL	4 rows	Ø 200 mm			305	403	486	573	740
			Ø 250 mm			337	442	531	619	818
		5 rows	Ø 200 mm			291	392	484	565	779
	U		Ø 200 mm			243	342	420	491	673
			Ø 250 mm			221	316	395	468	632
	Ø 250 mm			227	321	403	480	679		
Ø 200 mm			309	373	470	551	713			
Ø 200 mm					453	535	711			
100	JIL	4 rows	Ø 200 mm				371	450	529	707
			Ø 250 mm			305	411	497	584	784
		5 rows	Ø 200 mm			252	355	446	527	743
	U		Ø 200 mm					385	455	644
			Ø 250 mm				272	356	429	595
	Ø 250 mm			178	280	362	436	641		
Ø 200 mm			235	337	419	496	672			
Ø 200 mm								671		

(1) Air flow data are the same for I, J or L configurations.

(2) Total number of rows of the coil (for example a 4-pipe coil : 4 rows + 1 row = 5 rows).



4 configurations : VPU, VPL, VPI & VPJ
2-pipe, 2-pipe/2-wire or 4-pipe version



1.0 to 4.8 kW



1.2 to 5.2 kW

> Fan motor electrical data <

Fan speed		V1	V2	V3	V4	V5	V6	V7
Capacities	W	52	81	116	148	179	209	280
Absorbed current (1)	A	0.23	0.35	0.5	0.64	0.77	0.89	1.22

(1) Maximum absorbed current given for 0 Pa external static pressure.

> Sound power levels L_w - dB(A) <

"I" configuration

Fan speed		V1	V2	V3	V4	V5	V6	V7
Radiated L _w	dB(A)	38.9	40.8	44	46.1	48.8	50.5	54.4
Return L _w	dB(A)	45.8	47.7	50.9	54	56.9	59.3	64.2
Discharge L _w	dB(A)	44.6	46.5	49.7	54	56.8	59.6	64.5

"U" configuration

Fan speed		V1	V2	V3	V4	V5	V6	V7
Radiated L _w	dB(A)	40.9	43.3	45.9	48.8	50.7	52.4	56.3

"L" and "J" configurations

Fan speed		V1	V2	V3	V4	V5	V6	V7
Radiated L _w	dB(A)	38.4	40.8	43.4	46.3	48.2	49.4	54.3

> Coil water volume <

Coil		4 rows	5 rows	4 rows + 1
Volume	dm ³	1.5	1.9	1.5 + 0.3

> Cooling capacities - VPX - 2-pipe system <

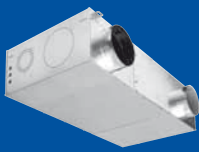
4-row coil - "I" configuration - Ø 200 mm duct collar
40 Pa external static pressure

Fan speed				V1	V2	V3	V4	V5	V6	V7
Air flow (m³/h)				142	242	360	456	546	635	783
5/10 °C	27 °C	Pt	W	1355	2260	3222	3801	4513	5070	5753
	50%	Ps	W	860	1466	2128	2523	2973	3164	3607
	25 °C	Pt	W	1152	1863	2701	3246	3845	4344	4992
	50%	Ps	W	747	1215	1785	2152	2543	2837	3290
	23 °C	Pt	W	960	1468	2150	2575	3058	3453	3950
	50%	Ps	W	642	979	1434	1720	2039	2402	2792
6/11 °C	27 °C	Pt	W	873	2098	3036	3633	4312	4846	5503
	50%	Ps	W	586	1366	1965	2369	2795	3032	3470
	25 °C	Pt	W	1063	1690	2457	2944	3489	3939	4513
	50%	Ps	W	685	1092	1593	1913	2265	2607	3030
	23 °C	Pt	W	873	1313	1907	2283	2713	3062	3499
	50%	Ps	W	586	880	1267	1515	1804	2192	2557
7/12 °C	27 °C	Pt	W	1020	1580	2267	2779	3353	3833	4327
	50%	Ps	W	710	1106	1570	1961	2345	2690	3102
	25 °C	Pt	W	971	1511	2203	2635	3125	3525	4032
	50%	Ps	W	628	972	1415	1692	2007	2386	2776
	23 °C	Pt	W	786	1180	1664	1995	2378	2684	3066
	50%	Ps	W	532	797	1118	1335	1593	1999	2342
8/13 °C	27 °C	Pt	W	1079	1743	2525	3023	3581	4041	4628
	50%	Ps	W	671	1081	1572	1885	2229	2584	3007
	25 °C	Pt	W	880	1325	1946	2326	2762	3114	3554
	50%	Ps	W	571	857	1251	1491	1773	2175	2543
	23 °C	Pt	W	699	1050	1434	1727	2064	2334	2670
	50%	Ps	W	481	723	984	1174	1404	1828	2154
10/15 °C	27 °C	Pt	W	885	1356	1983	2367	2809	3164	3609
	50%	Ps	W	555	848	1227	1460	1733	2157	2524
	25 °C	Pt	W	696	1045	1454	1747	2084	2355	2692
	50%	Ps	W	468	703	967	1153	1379	1818	2149
	23 °C	Pt	W	540	827	1113	1303	1564	1777	2046
	50%	Ps	W	397	604	812	946	1138	1573	1873

> Heating capacities - VPX - 2-pipe system <

4-row coil - "I" configuration - Ø 200 mm duct collar
40 Pa external static pressure

Fan speed				V1	V2	V3	V4	V5	V6	V7
Air flow(m³/h)				142	242	360	456	546	635	783
80/60 °C	19 °C	PC	W	2449	4027	5769	7310	8334	8657	10708
	20 °C	PC	W	2400	3947	5653	7165	8167	8479	10488
	21 °C	PC	W	2351	3866	5530	7018	7999	8301	10267
70/50 °C	19 °C	PC	W	2157	3567	5126	6481	7437	7803	9660
	20 °C	PC	W	2110	3489	5013	6338	7272	7628	9442
	21 °C	PC	W	2063	3411	4900	6195	7106	7452	9225
50/40 °C	19 °C	PC	W	1257	2069	2958	3754	4273	4408	5471
	20 °C	PC	W	1206	1986	2839	3604	4100	4224	5251
	21 °C	PC	W	1159	1903	2720	3453	3927	4043	5027



4 configurations : VPU, VPL, VPI & VPJ
2-pipe, 2-pipe/2-wire or 4-pipe version



1.0 to 4.8 kW



1.2 to 5.2 kW

> Cooling capacities - VPX - 2-pipe system <

5-row coil - "I" configuration - Ø 200 mm duct collar
40 Pa external static pressure

Fan speed				V1	V2	V3	V4	V5	V6	V7
Air flow (m³/h)				98	197	311	392	465	543	708
5/10 °C	27 °C	Pt	W	1116	2054	3226	3942	4597	5486	6693
	50%	Ps	W	704	1291	2026	2462	2886	3432	4192
	25 °C	Pt	W	894	1735	2738	3326	3883	4633	5679
	50%	Ps	W	592	1140	1786	2159	2515	3000	3728
	23 °C	Pt	W	832	1407	2249	2715	3175	3800	4631
	50%	Ps	W	573	982	1545	1850	2144	2570	3219
6/11 °C	27 °C	Pt	W	1048	1929	3031	3687	4318	5127	6317
	50%	Ps	W	661	1213	1898	2306	2694	3206	3959
	25 °C	Pt	W	833	1595	2526	3060	3574	4267	5220
	50%	Ps	W	557	1060	1659	1933	2318	2773	3454
	23 °C	Pt	W	755	1282	2026	2442	2851	3425	4165
	50%	Ps	W	528	911	1418	1698	1951	2353	2955
7/12 °C	27 °C	Pt	W	833	1560	2454	2949	3455	4019	4777
	50%	Ps	W	564	1051	1668	2046	2433	2774	3287
	25 °C	Pt	W	769	1449	2304	2779	3243	3883	4735
	50%	Ps	W	522	979	1532	1830	2119	2546	3187
	23 °C	Pt	W	628	1155	1795	2160	2526	3044	3687
	50%	Ps	W	458	844	1291	1531	1760	2134	2704
8/13 °C	27 °C	Pt	W	850	1645	2596	3137	3665	4376	5359
	50%	Ps	W	550	1055	1645	1974	2290	2741	3421
	25 °C	Pt	W	702	1291	2069	2490	2906	3491	4234
	50%	Ps	W	487	897	1406	1699	1922	2326	2927
	23 °C	Pt	W	562	1029	1557	1879	2201	2659	3222
	50%	Ps	W	424	780	1172	1383	1585	1931	2470
10/15 °C	27 °C	Pt	W	713	1323	2112	2534	2961	3552	4304
	50%	Ps	W	481	892	1392	1650	1893	2289	2898
	25 °C	Pt	W	564	1027	1576	1896	2219	2680	3244
	50%	Ps	W	419	768	1162	1371	1565	1905	2488
	23 °C	Pt	W	430	795	1161	1386	1636	1983	2420
	50%	Ps	W	360	668	981	1147	1305	1596	2094

> Heating capacities - VPX - 2-pipe system <

5-row coil - "I" configuration - Ø 200 mm duct collar
40 Pa external static pressure

Fan speed				V1	V2	V3	V4	V5	V6	V7
Air flow (m³/h)				98	197	311	392	465	543	708
80/60 °C	19 °C	PC	W	1750	3426	5244	6351	7694	8642	10499
	20 °C	PC	W	1716	3359	5141	6225	7545	8472	10289
	21 °C	PC	W	1682	3293	5038	6099	7395	8303	10078
70/50 °C	19 °C	PC	W	1527	2999	4610	5609	6771	7649	9366
	20 °C	PC	W	1494	2934	4510	5487	6623	7480	9180
	21 °C	PC	W	1461	2870	4410	5364	6476	7312	8951
50/40 °C	19 °C	PC	W	921	1775	2712	3273	3983	4464	5406
	20 °C	PC	W	880	1706	2608	3144	3828	4289	5194
	21 °C	PC	W	855	1636	2502	3016	3672	4113	4979

> Cooling capacities - VPX - 4-pipe system <

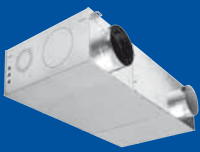
**4-row coil - "I" configuration - Ø 200 mm duct collar
40 Pa external static pressure**

Fan speed				V1	V2	V3	V4	V5	V6	V7
Air flow (m³/h)				98	197	311	392	465	543	708
5/10 °C	27 °C	Pt	W	980	1852	2826	3336	3929	4443	5295
	50%	Ps	W	620	1192	1857	2198	2580	2777	3323
	25 °C	Pt	W	837	1519	2360	2834	3341	3801	4593
	50%	Ps	W	542	985	1550	1871	2201	2485	3028
	23 °C	Pt	W	701	1240	1875	2248	2658	3021	3634
	50%	Ps	W	469	828	1706	1497	1768	2106	2575
6/11 °C	27 °C	Pt	W	917	1715	2652	3187	3757	4248	5070
	50%	Ps	W	576	1084	1105	2064	2424	2658	3192
	25 °C	Pt	W	775	1374	2144	2571	3035	3447	4155
	50%	Ps	W	501	885	1389	1668	1962	2286	2789
	23 °C	Pt	W	639	1125	1657	1989	2356	2679	3220
	50%	Ps	W	431	754	1105	1321	1567	1921	2356
7/12 °C	27 °C	Pt	W	755	1302	1989	2437	2925	3364	3991
	50%	Ps	W	520	916	1382	1724	2051	2363	2857
	25 °C	Pt	W	712	1251	1922	2300	2719	3087	3711
	50%	Ps	W	460	807	1234	1478	1743	2092	2559
	23 °C	Pt	W	576	1009	1441	1735	2062	2346	2820
	50%	Ps	W	392	684	974	1166	1383	1751	2157
8/13 °C	27 °C	Pt	W	788	1421	2207	2644	3117	3535	4264
	50%	Ps	W	492	880	1370	1642	1933	2270	2766
	25 °C	Pt	W	646	1129	1695	2029	2401	2726	3273
	50%	Ps	W	420	732	1090	1304	1543	1909	2342
	23 °C	Pt	W	513	899	1256	1498	1786	2036	2454
	50%	Ps	W	355	618	865	1025	1222	1603	1981
10/15 °C	27 °C	Pt	W	651	1134	1728	2066	2441	2770	3323
	50%	Ps	W	410	709	1073	1278	1513	1895	2327
	25 °C	Pt	W	512	895	1258	1517	1805	2056	2475
	50%	Ps	W	346	601	844	1007	1201	1596	1979
	23 °C	Pt	W	394	702	999	1153	1347	1545	1877
	50%	Ps	W	292	514	728	841	988	1377	1724

> Heating capacities - VPX - 4-pipe system <

**1-row coil - "I" configuration - Ø 200 mm duct collar
40 Pa external static pressure**

Fan speed				V1	V2	V3	V4	V5	V6	V7
Air flow (m³/h)				98	197	311	392	465	543	708
80/60 °C	19 °C	PC	W	1443	2337	3034	3417	3712	3988	4477
	20 °C	PC	W	1412	2286	2968	3343	3631	3901	4379
	21 °C	PC	W	1382	2236	2903	3269	3551	3813	4280
70/50 °C	19 °C	PC	W	1308	2139	2805	3178	3457	3723	4195
	20 °C	PC	W	1279	2090	2740	3104	3377	3636	4098
	21 °C	PC	W	1250	2041	2675	3030	3297	3550	3999
50/40 °C	19 °C	PC	W	728	1268	1518	1713	1858	1994	2234
	20 °C	PC	W	697	1117	1452	1637	1779	1908	2137
	21 °C	PC	W	666	1066	1385	1561	1697	1822	2040

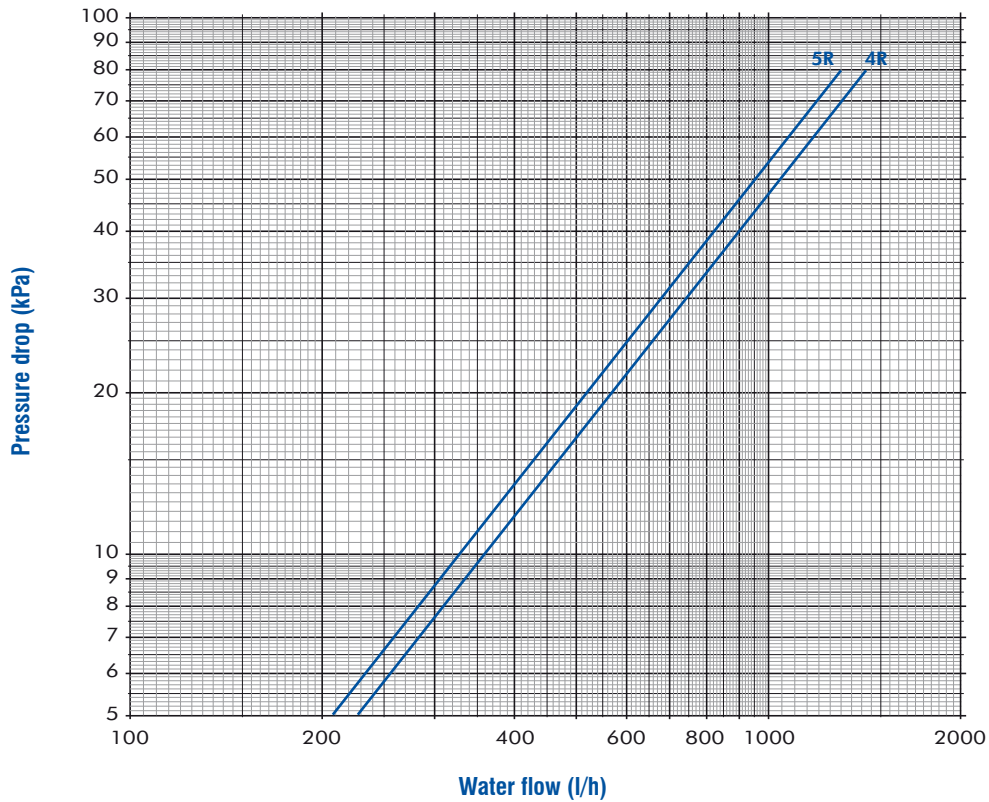


4 configurations : VPU, VPL, VPI & VPJ
2-pipe, 2-pipe/2-wire or 4-pipe version

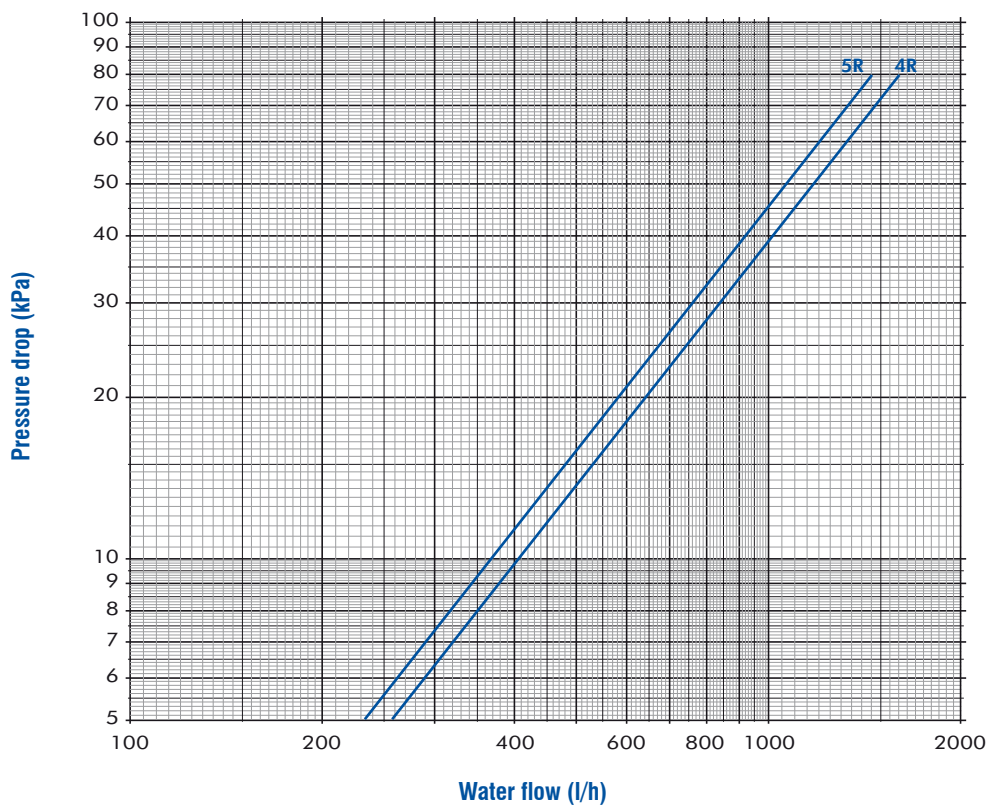
1.0 to 4.8 kW
1.2 to 5.2 kW

> Water pressure drops <

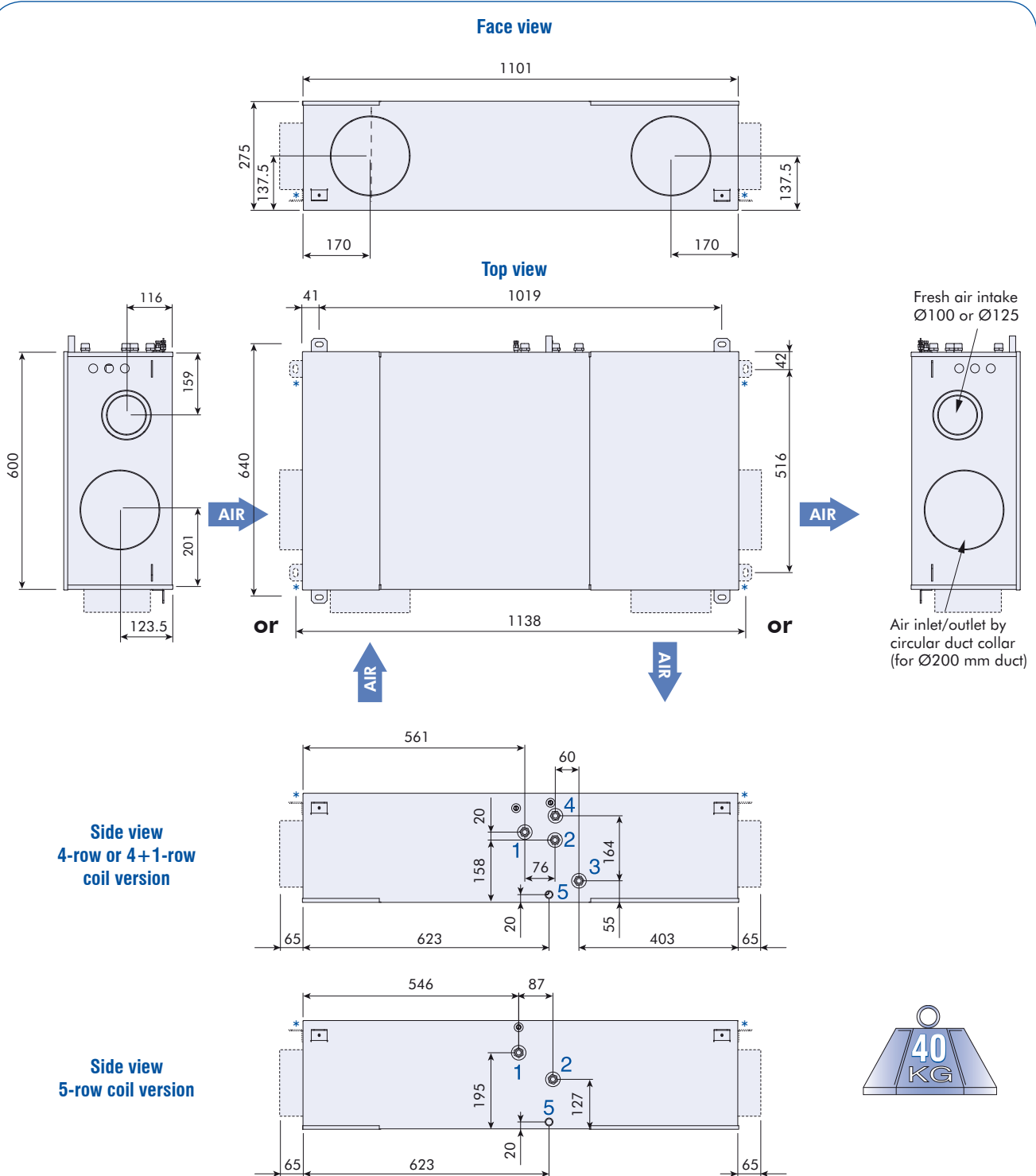
Cooling coils



Heating coils

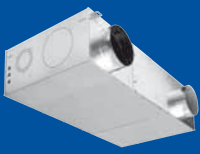


> Dimensional data - VPX with Ø200 mm circular duct collar <



LEGEND	
1	Water outlet Ø1/2 male connection
2	Water inlet Ø1/2 male connection
3	Hot water coil inlet Ø1/2 male connection
4	Hot water coil outlet Ø1/2 male connection
5	Condensate outlet Ø5/8 (15.9 mm)
*	Optional brackets

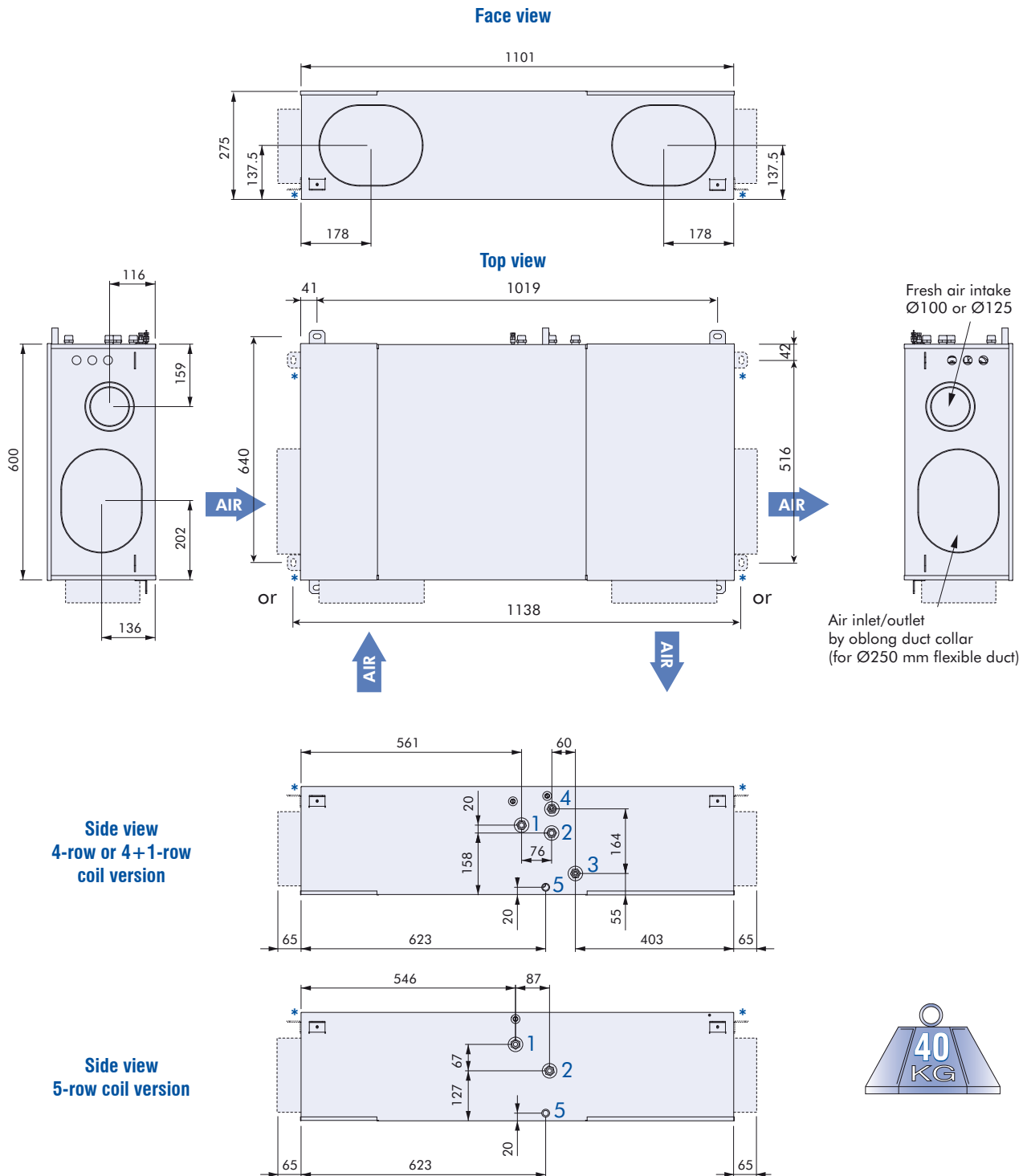
Dimensions in mm (Tolerance ±1 mm).



4 configurations : VPU, VPL, VPI & VPJ
2-pipe, 2-pipe/2-wire or 4-pipe version

1.0 to 4.8 kW
1.2 to 5.2 kW

> Dimensional data - VPX with Ø250 mm oblong duct collar <

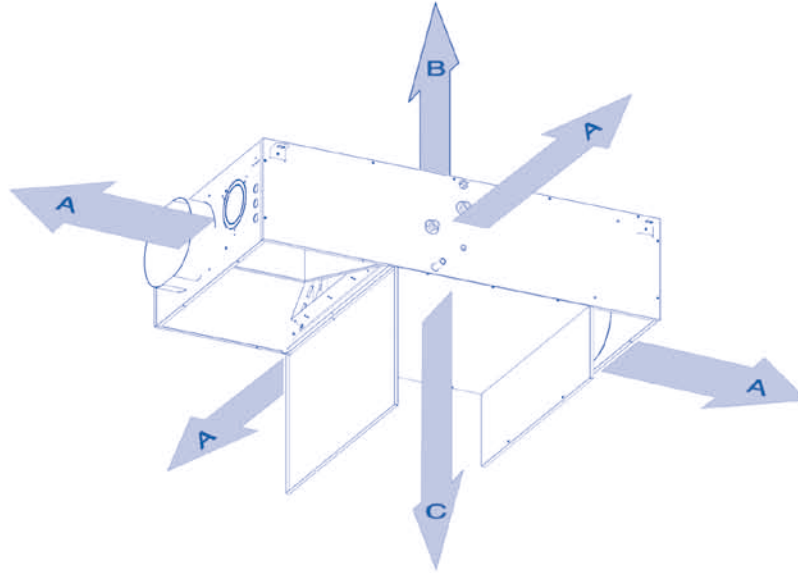


Dimensions in mm (Tolerance ±1 mm).

LEGEND

1	Water outlet Ø1/2 male connection
2	Water inlet Ø1/2 male connection
3	Hot water coil inlet Ø1/2 male connection
4	Hot water coil outlet Ø1/2 male connection
5	Condensate outlet Ø5/8 (15.9 mm)
*	Optional brackets

> Clearances and access - VPX <



A = 600 mm min, B = 30 mm min, C = 20 mm + bottom access panel

