



TOPAIRQUALITY

**CENTRIFUGAL
FAN COIL UNITS**

VCE




0,51 kW
11,00 kW


0,85 kW
23,75 kW


129 m³/h
2003 m³/h



VERTICAL CABINET TYPE



VCEx0

bottom air intake
(available also with feet)



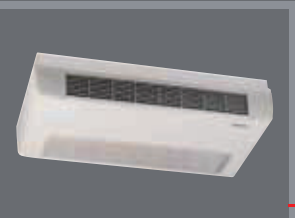
VCEx8

frontal air intake with socle



VCEx5

frontal air intake



VCEx4

frontal air intake



VCEx9

rear air intake



VCEx1

frontal air intake with socle

HORIZONTAL CABINET TYPE



CONCEALED VERSIONS



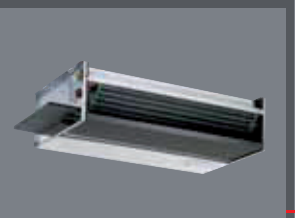
VCEx7

frontal air supply



VCEx2

vertical air supply



VCEx3

horizontal air supply



Comfort and reliability

DECORATIVE CABINET

Modern design that blends in with any environment. Made in hot-dip galvanized steel sheet pre-coated with PVC to ensure high resistance to rust, corrosion, chemical agents, aliphatic solvents and alcohols. Air grilles made of ABS and the control panel protective flap are inserted in the cabinet top. Standard colour: white. Other RAL colours are available on request.

The air supply part in the versions with cabinet consists of a grill and two flaps made of ABS material. The grill is divided into parts assembled together.

HEAT EXCHANGER

Coils are made of copper pipe expanded into aluminium fins in continuous block. Brass headers with female fittings (GAS threads) and easily accessible air vents.

In the standard version, the water connections are located on the left (when viewing the outlet). They may be supplied on the right on request.

The unit can be supplied with:

- 2-way valve package;
- 3-way valve package with 4 connections.



2-way valve package
with shut off/balancing valve



3-way valve package
with 4 connections
with shut off/balancing valve

AIR FILTER

Filtering honeycomb polypropylene fabric enclosed within a metal frame to facilitate withdrawal and cleaning.

Filtering rate of the standard model: EU1.

Available with different filtering rate on request.

BLOWER SECTION

Double-inlet centrifugal fans with statically and dynamically balanced horizontally-oriented aluminium impellers.

Single-phase asynchronous electric motor with overload cutout. 6 speeds of rotation (3 connected).

The motor is directly coupled to the fans and cushioned with flexible mountings to ensure low noise.

The unit can be equipped with variable speed EC motor, controlled by a proportional signal 0-10 V.



ACCESSORIES

A wide range of options and accessories is available for complete requirement satisfaction:

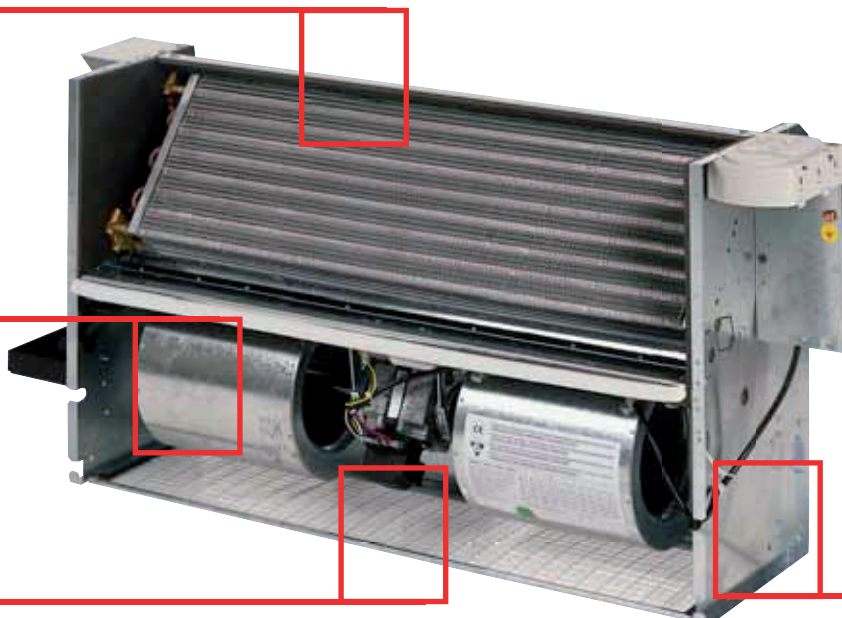
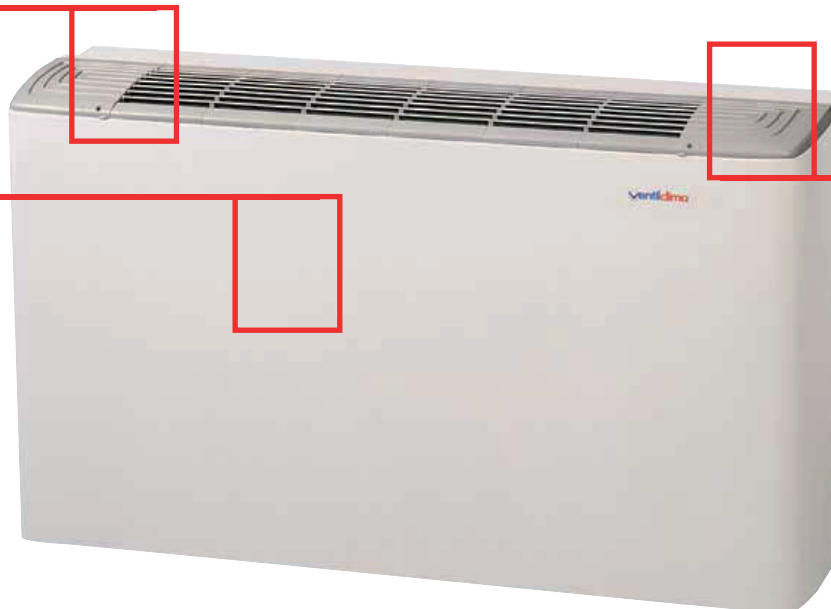
- heating coil for 4 pipe system;
- cooling coil
(4 rows or direct expansion);
- temperature control with the 3-way or 2-way valve sets
(on/off valves or modulating valves);
- electric heaters;
- external air intake with automatic or manual fresh air louver motor;
- plenum;
- Lacquered wooden panel or sheet panel for concealed versions;
- Brushless motors with 0-10 V proportional signal.

0-10 V  motor



The control panel is integrated into the unit's design, covered by a flap. It's fitted as standard on vertical versions and it is equipped with mode selector (off/summer/winter) and speed selector.

On request the unit can come with room thermostat, water low temperature thermostat or control panel with electronic thermostat.



STRUCTURE

Galvanized steel sheet (8/10 mm thick) insulated in all parts in direct contact with the conditioned air.

Insulated condensate tray made of galvanised steel sheet, complete with drain plug for complete drainage.

Sides with knock-outs for fast fixing of accessories. Wall-anchoring slots for easy fixing and levelling of the unit.

TECHNICAL DATA

MODEL	10	20	30	40	50	60	70	80	90	100	110	120
SPEEDS SET IN THE FACTORY	5° 4° 2°	4° 3° 2°	4° 3° 2°	5° 3° 2°	4° 3° 1°	5° 4° 2°	5° 4° 3°	3° 2° 1°	5° 3° 1°	5° 3° 2°	5° 3° 2°	5° 4° 2°

2 pipe system (3R coil)

COOLING Inlet water temp.: 7 °C Outlet water temp.: 12 °C Inlet air temp.: 27 °C d.b.-19 °C w.b.	Total cooling capacity	W max	860	1280	2170	2530	3110	3530	4100	5590	6900	7970	10000	11000
		W med	790	1170	1940	2030	2790	3130	3510	5170	5960	6830	7690	9380
		W min	670	1080	1450	1530	2200	2500	3080	4480	4830	6240	6020	6910
	Sensible cooling capacity	W max	740	1020	1760	2170	2180	2820	3150	3960	4820	6060	7910	8470
		W med	650	900	1570	1710	1930	2450	2670	3620	4110	5120	5920	7120
		W min	510	810	1200	1310	1500	1940	2300	3130	3290	4620	4580	5110
	Water flow	l/h max	148	220	373	435	535	662	745	961	1187	1376	1727	1898
Water pressure drop	kPa max	0,90	2,00	6,30	8,80	16,10	25,90	37,60	27,90	19,10	26,60	21,50	26,80	
HEATING Air temp.: 20 °C Inlet water temp.: 50 °C	Heating capacity	W max	1250	1870	2590	3280	3660	4480	5140	6690	8130	10100	13100	13300
		W med	1100	1650	2330	2640	3270	3940	4370	6180	6980	8540	9930	11200
		W min	850	1470	1870	2110	2570	3120	3790	5360	5620	7770	7750	8150
	Water flow	l/h max	148	220	373	435	535	662	745	961	1187	1376	1727	1898
Water pressure drop	kPa max	0,70	1,40	4,90	7,50	13,70	22,00	34,70	23,70	17,60	23,30	18,80	24,20	
HEATING Air temp.: 20 °C Inlet water temp.: 70/60 °C	Heating capacity	W max	2160	3230	4380	5530	6150	7510	8560	11260	13660	16860	22020	23750
		W med	1660	2840	3950	4460	5500	6610	7270	10400	11710	14300	16690	20010
		W min	1450	2510	3200	3570	4320	5230	6290	9020	9420	13010	13020	14520
	Water flow	l/h max	186	278	377	475	529	646	736	968	1175	1450	1893	2043
Water pressure drop	kPa max	1,00	2,00	4,50	8,10	12,10	19,00	30,70	21,80	15,60	23,50	20,50	22,90	
FURTHER DATA	Electric heater capacity	W -	600	1000	1000	1000	2000	2000	3000	3000	3000	4000	4000	4000
		A -	2,61	4,35	4,35	4,35	8,70	8,70	8,70	13,04	13,04	13,04	17,39	17,39
	Air flow	m³/h max	227	289	404	453	575	685	708	1058	1242	1356	2012	2003
		m³/h med	189	244	352	344	495	578	578	950	1014	1093	1370	1590
		m³/h min	136	209	269	262	362	429	486	788	770	969	989	1056
	Sound power level	dB(A) max	46	45	44	47	47	52	52	58	64	63	67	66
		dB(A) med	41	41	41	40	43	47	46	56	58	57	58	61
		dB(A) min	33	37	34	33	37	38	42	51	51	55	50	53
	Sound pressure level	dB(A) max	37	36	35	38	38	43	43	49	55	54	58	57
		dB(A) med	32	32	32	31	34	38	37	47	49	48	49	52
		dB(A) min	24	28	25	24	28	29	33	42	42	46	41	44
	Power input	W max	30	30	40	50	60	80	70	160	180	213	277	273
	Absorbed current	A max	0,18	0,25	0,28	0,28	0,45	0,45	0,44	0,96	0,95	0,97	1,27	1,25
Water content	L -	0,59	0,93	1,27	1,27	1,61	1,61	2,42	2,93	2,93	3,28	4,04	4,04	

4 pipe system (3R+1 coil)

COOLING Inlet water temp.: 7 °C Outlet water temp.: 12 °C Inlet air temp.: 27 °C d.b.-19 °C w.b.	Total cooling capacity	W max	840	1230	2080	2380	2760	3690	4470	5350	6570	7710	9700	10700
		W med	770	1130	1850	1900	2480	3260	3830	4950	5660	6590	7430	9060
		W min	650	1040	1380	1440	1960	2610	3350	4280	4580	6050	5790	6650
	Sensible cooling capacity	W max	710	1120	1600	1930	2220	2910	3340	4110	5260	5860	7660	8200
		W med	630	990	1430	1520	1960	2540	2830	3760	4470	4940	5720	6890
		W min	500	890	1090	1160	1530	2000	2440	3260	3570	4470	4400	4920
	Water flow	l/h max	144	212	358	409	509	635	769	920	1130	1330	1673	1837
Water pressure drop	kPa max	0,60	2,00	5,70	8,20	10,70	20,00	49,80	11,60	37,80	24,90	21,70	25,10	
HEATING Air temp.: 20 °C Inlet water temp.: 70/60 °C	Heating capacity	W max	1260	1890	2730	2890	3490	4140	5040	6210	7670	8380	10100	11400
		W med	1110	1670	2450	2330	3120	3750	4290	5840	6580	7390	8160	10000
		W min	860	1490	1970	1860	2450	3150	3710	5240	5300	6900	6750	9410
	Water flow	l/h max	108	163	235	249	300	356	433	465	578	739	891	1008
Water pressure drop	kPa max	2,10	5,70	13,90	16,40	27,90	35,10	61,50	22,00	29,70	48,40	41,30	47,30	
FURTHER DATA	Air flow	m³/h max	216	275	384	430	546	651	673	1005	1180	1291	1916	1908
		m³/h med	179	232	336	329	479	552	555	904	970	1041	1305	1514
		m³/h min	129	199	258	255	355	412	467	750	742	928	942	1006
	Sound power level	dB(A) max	45	47	44	47	46	53	53	59	65	63	67	67
		dB(A) med	40	43	40	41	42	48	47	57	59	58	58	62
		dB(A) min	34	39	34	35	35	41	43	51	51	55	51	52
	Sound pressure level	dB(A) max	36	38	35	38	37	44	44	50	56	54	58	58
		dB(A) med	31	34	31	32	33	39	38	48	50	49	49	53
		dB(A) min	25	30	25	26	26	32	34	42	42	46	42	43
	Power input	W max	30	30	40	56	60	80	78	160	180	182	273	273
Absorbed current	A max	0,18	0,25	0,28	0,28	0,45	0,45	0,44	0,96	0,95	0,97	1,27	1,25	
Water content (cooling)	L -	0,59	0,93	1,27	1,27	1,61	1,61	2,42	2,93	2,93	3,28	4,04	4,04	
Water content (heating)	L -	0,19	0,31	0,42	0,42	0,53	0,53	0,53	1,29	1,29	1,09	1,35	1,35	

- Standard unit with free outlet: external static pressure = 0 Pa
- Sound power level: ISO 23741
- Sound pressure level: 8,6 dB(A) lower that the sound power level for a room of 90 m3 with a reverberation time of 0,5 sec.

MODEL	10	20	30	40	50	60	70	80	90	100	110	120
SPEEDS SET IN THE FACTORY	5° 4' 2"	4° 3' 2"	4° 3' 2"	5° 3' 2"	4° 3' 1"	5° 4' 2"	5° 4' 3"	3° 2' 1"	5° 3' 1"	5° 3' 2"	5° 3' 2"	5° 4' 2"

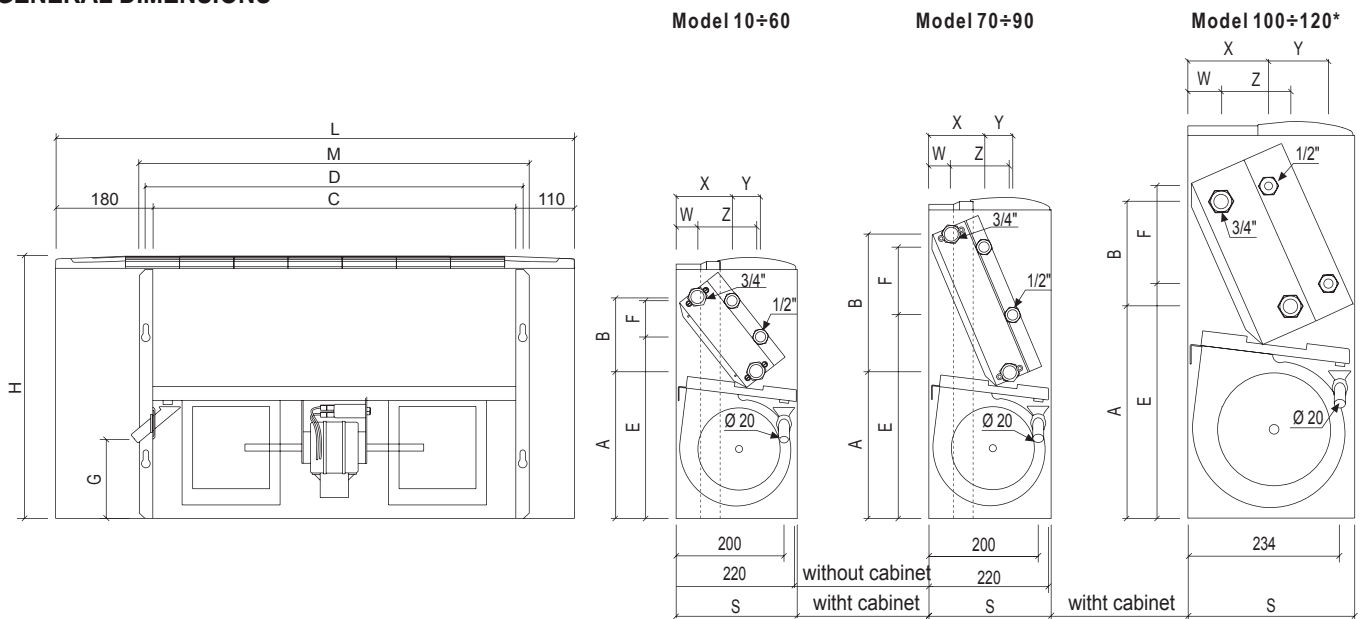
Maximum external static pressure (Pa) reducing unit performance of 50%

2 pipe system	Pa	max	25	25	19	27	32	36	44	55	53	75	84	84
	Pa	med	18	19	15	17	28	28	34	51	45	62	68	80
	Pa	min	11	15	10	11	19	16	26	41	33	49	47	58
4 pipe system	Pa	max	19	19	15	22	25	28	36	42	44	74	83	82
	Pa	med	15	15	13	14	21	22	28	38	37	61	67	79
	Pa	min	9	12	8	9	14	13	20	30	27	48	47	58

MODEL	10	20	30	40	50	60	70	80	90	100	110	120			
Fan	n°	1	1	2	2	2	2	2	2	3	3	3			
Standard coil	Row	n°	3	3	3	3	3	3	3	3	3	3			
	Fitting	Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"			
Auxiliary coil	Row	n°	1	1	1	1	1	1	1	1	1	1			
	Fitting	Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"			
External dimensions	Height	H	mm	480	480	480	480	480	585	585	585	602	602	602	
	Lenght	L	mm	660	860	1.060	1.060	1.260	1.260	1.260	1.460	1.460	1.660	1.960	1.960
	Depth*	S	mm	225	225	225	225	225	225	225	225	257	257	257	
Internal dimensions	M	mm	420	620	820	820	1.020	1.020	1.020	1.220	1.220	1.380	1.680	1.680	
	C	mm	370	570	770	770	970	970	970	1.170	1.170	1.330	1.630	1.630	
	D	mm	395	595	795	795	995	995	995	1.195	1.195	1.356	1.656	1.656	
	A	mm	274	274	274	274	274	274	268	268	268	333	333	333	
Standard coil hydraulic connections	B	mm	137	137	137	137	137	137	253	253	253	173	173	173	
	W	mm	39	39	39	39	39	39	41	41	41	39	39	39	
	Z	mm	109	109	109	109	109	109	107	107	107	141	141	141	
	E	mm	337	337	337	337	337	337	374	374	374	395	395	395	
Auxiliary coil hydraulic connections	F	mm	67	67	67	67	67	67	124	124	124	120	120	120	
	X	mm	103	103	103	103	103	103	101	101	101	115	115	115	
	Y	mm	53	53	53	53	53	53	52	52	52	62	62	62	
Condensate drain fitting	G	mm	147	147	147	147	147	147	147	147	147	167	167	167	
Net weight	kg	15,6	18,9	23,7	23,9	27,7	27,9	32,7	38,0	38,5	50,0	58,5	59,0		

* For x4 and x5 versions, the dimensions has to be increased of 10 mm.

GENERAL DIMENSIONS



* Dimensions referred to units with left side water connections.



VENTILCLIMA TAKES PART TO THE EUROVENT PROGRAM OF FAN COIL PERFORMANCE CERTIFICATION IN ORDER TO PROVIDE ITS CUSTOMERS THE RELIABILITY AND ACCURACY OF PERFORMANCES.



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