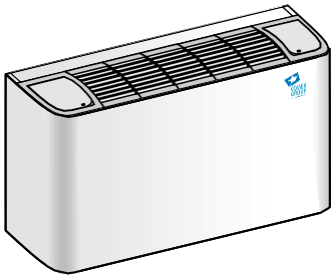
Functional characteristics " SMART WINDY serie SW "



- **Specially constructed units for low-temperature feeding (38 - 28) °C**
- Robust and compact units with a maximum thickness of 200 mm
- Wide range of models with a clean and elegant design
- Fixed fin grille adjustable to two positions
- Side flaps with snap closing and opening
- Plastic fans with low sound levels
- High-efficiency, easily removable air filters
- Condensate drip tray
- Control panel consisting of a two-pole switch for start-up and selection of the three speeds or remote control with thermostat for ceiling version
- Standard hydraulic connections on the left

AVAILABLE IN VERSIONS
VP 1 Vertical wall-mounted version (base cabinet)
VP 2 Vertical floor-standing version (cabinet with plinth+air intake grille)
VP 3 Vertical floor-standing version (cabinet with front air intake grille)
OP 1 Horizontal ceiling version (base cabinet)
OP 2 Horizontal ceiling version (cabinet with plinth + air intake grille)
OP 3 Vertical installation version (base unit; without cabinet)
VI 1 Vertical built-in version (front air intake; without cabinet)
VI 2 Vertical built-in version (front air supply; without cabinet) (**FTZ version** with frame and flush-mounted panel)
VI 3 Vertical built-in version (front air supply; without cabinet)
VI 4 Vertical built-in version (front intake and supply air; without cabinet)
OI 1 Horizontal built-in version (base; without cabinet)
OI 2 Horizontal built-in version (front air intake; without cabinet) (**FTZ version** with frame and flush-mounted panel)

COVER CABINET
(only for VP 1-VP 2-VP 3-OP 1-OP 2-OP 3 versions)
Refined, modern and elegant cover cabinet with rounded, harmonious shapes that fit well into any environment. Standard colour white (similar to RAL 9010), on request (with surcharge) any RAL colour. Constructed of thick, galvanised sheet metal and pre-coated with a polyvinyl chloride film, resistant to rust, corrosion, chemicals, solvents, aliphatics, alcohols. Thickness of the coating film approx. 10 times that of a normal epoxy powder coating (much more resistant to abrasion). Internal thermo-acoustic insulation (class M1). Small dimensions, only 220 mm thick. Air outlet grille with fixed fins adjustable to two positions (air flow can be reversed by rotating the grille 180°). Made of grey ABS (similar to RAL 7035), it is complete with side doors that can be opened to access the control panel (the control panel is an accessory).

SUPPORTING STRUCTURE
Load-bearing structure in thick galvanised sheet metal with holes for wall/ceiling fixing + Internal thermo-acoustic insulation (class M1).

CONDENSATE DRIP TRAY
Condensate drip tray with Ø 21 mm drain (standard on the same side as the hydraulic connections) and thermal insulation (class M1).

HEAT EXCHANGER
High-efficiency heat exchanger coil (turbulent fins with high Reynolds number) made of copper tube and aluminium fins blocked by mechanical expansion.
Coil connections equipped with anti-twist system, manual air vent valves, manual water drain valves. Standard left-hand connections; on request (without extra charge) right-hand connections, in any case easy reversibility on site. No. 1 coil for 2-pipe system.
The coils, tested at a pressure of 30 Bar, are suitable for operation with water up to a pressure of 15 Bar.
The coils are suitable for operation with hot water (from boilers), low temperature water (from condensing boilers, solar panels, heat pumps, etc.), superheated water (from industrial processes and/or superheated water heating units), cold water (from chillers and/or industrial processes), water with glycol added.

FAN UNIT
Fan unit consisting of 1, 2 or 3 double-intake centrifugal fans with plastic fans (with forward curved blades) directly coupled to the electric motor. Mounted on elastic supports and shock absorbers. Fan statically and dynamically balanced. Large diameter fans (= high air flow and high static pressure) with low speed (= low noise).
Electric motor with 6 speeds (product flexibility), fitted with thermal protector (Klixon), run capacitor always on, IP 42, Class B, electric cables protected with double insulation.
Built to international standards, 230V -1Ph- 50Hz.
Fan unit easily removable (fastening with only 4 screws).

AIR FILTER
Easily removable air filter, consisting of a metal frame containing the filtering septum. Regenerable by washing with water, blowing, suction. Made of polyester acrylic fabric, highly efficient, resin-coated and needle-punched. Suitable against Dust and Pollen (UNI-EN779, filtration grade G3, class M1).

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Technical characteristics " SMART WINDY SW series"

TECHNICAL DATA UNIT WITH 1 BATTERY (2-pipe system)

MODEL		Speed		SW 20	SW 40	SW 60	SW 80	SW 100
Cooling capacity Water: 7/12 °C (1)	Total	1 (Max)	W	2.516	3.884	5.105	7.684	10.442
		2	W	2.159	3.379	4.676	7.100	9.815
		3	W	2.053	3.263	4.380	6.547	9.085
		4	W	1.837	2.897	4.084	5.963	8.291
		5	W	1.635	2.618	3.441	5.056	6.954
		6 (Min)	W	1.333	2.136	3.237	4.687	6.537
	Sensible	1 (Max)	W	1.810	2.670	3.510	5.290	7.030
		2	W	1.546	2.270	3.180	4.835	6.538
		3	W	1.423	2.163	2.906	4.370	5.976
		4	W	1.249	1.885	2.703	3.904	5.357
		5	W	1.104	1.671	2.225	3.269	4.401
		6 (Min)	W	869	1.335	2.050	2.962	4.077
Air outlet temperature		1 (Max)	°C	12,3	11,2	11,1	10,7	9,8
		2	°C	10,8	10,1	10,4	10,1	9,2
		3	°C	11,0	9,9	10,1	9,5	8,8
		4	°C	10,3	8,8	9,5	8,8	7,9
		5	°C	9,1	8,6	7,9	7,2	6,3
		6 (Min)	°C	7,2	6,4	7,6	6,7	5,7
Thermal Capacity Water: in-out 38/28 °C (2)		4 (Max)	W	1.096	1.596	2.282	3.153	4.295
		5	W	972	1.437	1.889	2.654	3.548
		6 (Min)	W	787	1.165	1.774	2.454	3.328
Air outlet temperature		4 (Max)	°C	34,4	35,0	34,5	34,4	35,0
		5	°C	35,4	35,5	35,8	35,7	36,3
		6 (Min)	°C	37,6	37,5	36,4	36,4	37,0
Air flow rate (3)		1 (Max)	m³/h	380	520	680	1.000	1.260
		2	m³/h	295	415	590	880	1.130
		3	m³/h	275	390	530	770	1.010
		4	m³/h	230	320	475	660	865
		5	m³/h	190	280	360	510	655
		6 (Min)	m³/h	135	200	325	450	590
Sound levels (4)		1 (Max)	dB(A)	38	45	37	45	49
		2	dB(A)	31	38	34	41	46
		3	dB(A)	29	36	30	38	43
		4	dB(A)	25	31	27	35	40
		5	dB(A)	20	28	20	28	32
		6 (Min)	dB(A)	14	19	18	26	29
Water flow rate (5)	Cooling	1 (Max)	l/h	433	668	878	1.322	1.797
		2	l/h	372	581	805	1.222	1.689
		3	l/h	353	561	754	1.127	1.563
		4	l/h	316	499	703	1.026	1.427
		5	l/h	281	450	592	870	1.197
		6 (Min)	l/h	229	368	557	807	1.125

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MODEL		Speed		SW 20	SW 40	SW 60	SW 80	SW 100
Water flow rate (5)	Heating	4 (Max)	l/h	95	138	197	272	371
		5	l/h	84	124	163	229	306
		6 (Min)	l/h	68	101	153	212	287
Water pressure drops	Cooling	1 (Max)	kPa	19,6	28,6	29,2	31,1	32,9
		2	kPa	14,4	21,6	24,5	26,5	29,0
		3	kPa	13,0	20,2	21,5	22,6	24,9
		4	kPa	10,4	15,9	18,6	18,7	20,7
		5	kPa	8,2	13,0	13,2	13,4	14,5
		6 (Min)	kPa	5,4	8,6	11,7	11,5	12,8
	Heating	4 (Max)	kPa	0,9	1,1	1,3	1,2	1,3
		5	kPa	0,7	0,9	0,9	0,9	0,9
		6 (Min)	kPa	0,4	0,6	0,8	0,7	0,8
Condensate production	Cooling	1 (Max)	l/h	1,1	1,9	2,5	3,8	5,4
		2	l/h	1,0	1,8	2,4	3,6	5,2
		3	l/h	1,0	1,8	2,3	3,5	5,0
		4	l/h	0,9	1,6	2,2	3,3	4,7
		5	l/h	0,8	1,5	1,9	2,8	4,1
		6 (Min)	l/h	0,7	1,3	1,9	2,7	3,9
Motori elettrici								
		Motor power supply: 230 V - 1 Ph - 50 Hz						
Max. Motor power consumption		Max	W	55	65	75	145	175
		1 (Max)	A	0,25	0,40	0,35	0,65	0,77
		2	A	0,19	0,27	0,28	0,53	0,63
		3	A	0,18	0,23	0,24	0,45	0,54
		4	A	0,15	0,18	0,21	0,39	0,45
		5	A	0,13	0,15	0,16	0,29	0,31
		6 (Min)	A	0,10	0,10	0,14	0,25	0,27

Technical data referring to the following conditions: Standard unit - Atmospheric pressure 1013 mbar - Power supply 230V/1Ph/50Hz.
(1) - (2) - (3) - (4) - (5): Nominal technical data with free mouth unit (External static pressure = 0 Pa).
(1) Cooling: Ambient air temperature: 27°Cb.s., 19°Cb.u. - Inlet water temperature 7°C, outlet water temperature 12°C
(2) Heating: Ambient air temperature: 20°C - Inlet water temperature 38°C, outlet water temperature 28°C
(1)-(2)-(3) Cooling and Heating Yields: Values calculated from data measured in calorimetric chamber ref. standards UNI 6552 , UNI 6552/A242.
(5) Air flow rate: Values measured with box ref. standards AMCA 210-74 fig.11 and duct + diaphragm ref. standards CNR-UNI 10023.
(6) Sound levels: Sound pressure in free field, distance 2 m. Values calculated from sound power measured in reverberation chamber ref. standards ISO 3741 - ISO 3742.

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UNIT DIMENSIONS TABLE WITH 1 BATTERY (2-pipe system)

VP 1		vertical wall-mounted version (base cabinet)				
Model		SW 20 VP 1	SW 40 VP 1	SW 60 VP 1	SW 80 VP 1	SW 100 VP 1
L	mm	670	870	1.070	1.270	1.470
H	mm	470	470	470	470	470
T	mm	220	220	220	220	220

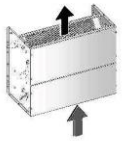
VP 2		vertical floor version (cabinet with plinth + air intake grille)				
Model		SW 20 VP 2	SW 40 VP 2	SW 60 VP 2	SW 80 VP 2	SW 100 VP 2
L	mm	670	870	1.070	1.270	1.470
H	mm	625	625	625	625	625
T	mm	220	220	220	220	220

VP 3		floor-standing vertical version (cabinet with front air intake grille)				
Model		SW 20 VP 3	SW 40 VP 3	SW 60 VP 3	SW 80 VP 3	SW 100 VP 3
L	mm	670	870	1.070	1.270	1.470
H	mm	470	470	470	470	470
T	mm	220	220	220	220	220

OP 1		horizontal ceiling version (base cabinet)				
Model		SW 20 OP 1	SW 40 OP 1	SW 60 OP 1	SW 80 OP 1	SW 100 OP 1
L	mm	670	870	1.070	1.270	1.470
H	mm	470	470	470	470	470
T	mm	220	220	220	220	220

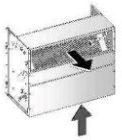
OP 2		horizontal ceiling version (cabinet with plinth + air intake grille)				
Model		SW 20 OP 2	SW 40 OP 2	SW 60 OP 2	SW 80 OP 2	SW 100 OP 2
L	mm	670	870	1.070	1.270	1.470
H	mm	625	625	625	625	625
T	mm	220	220	220	220	220

OP 3		horizontal ceiling version (cabinet with front air intake grille)				
Model		SW 20 OP 3	SW 40 OP 3	SW 60 OP 3	SW 80 OP 3	SW 100 OP 3
L	mm	670	870	1.070	1.270	1.470
H	mm	470	470	470	470	470
T	mm	220	220	220	220	220



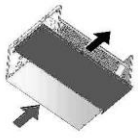
VI 1		vertical flush-mounted version (base; without cabinet)				
Model		SW 20 VI 1	SW 40 VI 1	SW 60 VI 1	SW 80 VI 1	SW 100 VI 1
L	mm	450	650	850	1.050	1.250
H	mm	450	450	450	450	450
T	mm	215	215	215	215	215

VI 2		vertical built-in version (front air intake; without cabinet)				
Model		SW 20 VI 2	SW 40 VI 2	SW 60 VI 2	SW 80 VI 2	SW 100 VI 2
L	mm	450	650	850	1.050	1.250
H	mm	450	450	450	450	450
T	mm	215	215	215	215	215

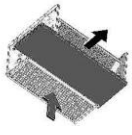


VI 3		vertical built-in version (front air delivery; without cabinet)				
Model		SW 20 VI 3	SW 40 VI 3	SW 60 VI 3	SW 80 VI 3	SW 100 VI 3
L	mm	450	650	850	1.050	1.250
H	mm	450	450	450	450	450
T	mm	215	215	215	215	215

VI 4		vertical flush-mounted version (frontal air intake and outlet; without cabinet)				
Model		SW 20 VI 4	SW 40 VI 4	SW 60 VI 4	SW 80 VI 4	SW 100 VI 4
L	mm	450	650	850	1.050	1.250
H	mm	450	450	450	450	450
T	mm	215	215	215	215	215



OI 1		horizontal flush-mounted version (base; without cabinet)				
Model		SW 20 OI 1	SW 40 OI 1	SW 60 OI 1	SW 80 OI 1	SW 100 OI 1
L	mm	535	735	935	1.135	1.335
H	mm	450	450	450	450	450
T	mm	215	215	215	215	215



OI 2		horizontal built-in version (front air intake; without cabinet)				
Model		SW 20 OI 2	SW 40 OI 2	SW 60 OI 2	SW 80 OI 2	SW 100 OI 2
L	mm	535	735	935	1.135	1.335
H	mm	450	450	450	450	450
T	mm	215	215	215	215	215

L = length ; H = height ; T = thickness

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