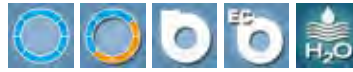


TCW 22÷122

WATER CASSETTE WITH 3-SPEED OR EC INVERTER RADIAL FAN.



The Water Cassette of the TCW series has been designed to be installed in false ceilings, in domestic environments or the services sector including offices, hotels, restaurants, gyms and shops.

Part of an hydronic system equipped with a liquid Chiller, the TCW Water Cassette generates cool air silently and with instantaneous reaction. During the winter, if combined with a boiler or heat pump, it provides warm air, making it possible to meet home or business heating needs. A filter, which absorbs and retains dust in suspension, allows to keep the air quality at a suitable level, and its easy removal enables continuous cleaning cycles to be carried out, which are particularly important in order to guarantee suitable hygiene standards in highly frequented rooms. The TCW series, in addition to having a rich set of accessories to complete the unit, also has an attractive intake grid that integrates perfectly in the surrounding environment and adjustable deflectors to distribute the air in the room in an ideal manner. TCW Water Cassette features auxiliary moisture drain pan already included and are pre-set for master-slave functioning, with RS485 serial interface. Units are available both with 3-Speed and EC Inverter fans. The units equipped with EC Inverter motor are able to modulate the air flow ensuring a perfect adaptability to the load without any temperature fluctuations, achieving superior performance compared to the traditional solutions even from energy consumption point of view.

EC INVERTER FAN

VERSION

TCW	TCW/WB
Base unit with remote control for 2-Pipe system	Unit with remote control for 4-Pipe system
TCW/EC	TCW/WB/EC
Unit with EC Inverter fan and remote control for 2-Pipe system	Unit with EC Inverter fan and remote control for 4-Pipe system

FEATURES

- Structure for insulated recess fitting, limited body depth (250/290 mm) and compact dimensions; specially designed for easy installation and maintenance of the hydraulic and electrical connections, accessible starting from the front panel grind.
- Casing in insulated galvanized sheet; combined air intake/suction grid; automatic adjustment of air diffusion on the four sides; suction in middle with regenerable filter; precut holes for connection to an external air intake and for connection to a branch duct for conditioning an adjoining room.
- Combined air diffusion/suction grid with air filter and adjustable air diffusion on the 4 sides with suction in middle.
- Radial fan turbine with direct feed. The motors, mounted on elastic suspension and equipped with internal thermal safety, are 3-Speed.
- Centrifugal fan turbine with direct feed. EC INVERTER motors, mounted on elastic suspension and equipped with internal thermal safety (32-53-73-122).
- Lift pump with float and detection at 3 levels (On-Off-Alarm) of condensation for lift in the upper part of the box. Discharge occurs by gravity, outside the appliance (lift height up to 500 mm).
- Heat exchanger in copper pipes and aluminium fins with air vent on the headers.
- Regenerable-type air filter, accessible after opening the combined air intake/suction grid.
- Microprocessor control with timer for on/off programming. Program for automatic operations, cooling, heating and ventilation; night wellness program and dehumidifier.
- Infrared remote control with wall support.

ACCESSORIES

LOOSE ACCESSORIES

EH	Supplementary electrical heater
DRC	Wall mounted automatic electronic control panel
V2	3-Way on/off valve for 2-Pipe system
V4	3-Way on/off valves for 4-Pipe system

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MODEL			22	32	42	53	63	73	122
Cooling 2-Pipe unit	Total cooling capacity (1)	kW	2.4	3.2	4.1	4.9	6.1	6.9	10.9
	Sensible cooling capacity (1)	kW	1.7	2.5	3.0	3.5	4.9	5.1	7.9
	Water flow (1)	l/h	413	550	705	843	1049	1187	1875
	Pressure drops (1)	kPa	10	20	28	42	28	39	43
Cooling 2-Pipe unit (EC version)	Total cooling capacity (1)	kW	---	3.2	---	4.6	---	6.8	10.9
	Sensible cooling capacity (1)	kW	---	2.4	---	3.2	---	5.0	7.9
	Water flow (1)	l/h	---	550	---	791	---	1170	1875
	Pressure drops (1)	kPa	---	20	---	39	---	39	38
Heating 2-Pipe unit	Heating capacity (2)	kW	4.9	6.6	7.8	9.7	11.9	12.7	18.9
	Water flow (2)	l/h	422	568	672	834	1023	1090	1624
Heating 2-Pipe unit (EC version)	Heating capacity (2)	kW	---	7.1	---	9.2	---	13.4	18.3
	Water flow (2)	l/h	---	610	---	791	---	1152	1574
	Pressure drops (2)	kPa	---	20	---	34	---	31	25
Cooling 4-Pipe unit	Total cooling capacity (1)	kW	---	---	3.1	3.9	---	5.8	7.9
	Sensible cooling capacity (1)	kW	---	---	2.4	2.9	---	4.5	6.0
	Water flow (1)	l/h	---	---	533	671	---	998	1359
	Pressure drops (1)	kPa	---	---	21	23	---	46	29
Cooling 4-Pipe unit (EC version)	Total cooling capacity (1)	kW	---	---	---	3.8	---	5.8	7.1
	Sensible cooling capacity (1)	kW	---	---	---	2.8	---	4.2	5.2
	Water flow (1)	l/h	---	---	---	654	---	998	1221
	Pressure drops (1)	kPa	---	---	---	21	---	52	24
Heating 4-Pipe unit	Heating capacity (2)	kW	---	---	3.8	4.3	---	5.0	9.7
	Water flow (2)	l/h	---	---	326	370	---	430	834
	Pressure drops (2)	kPa	---	---	11	12	---	15	27
Heating 4-Pipe unit (EC version)	Heating capacity (2)	kW	---	---	---	4.3	---	4.6	9.3
	Water flow (2)	l/h	---	---	---	370	---	395	800
	Pressure drops (2)	kPa	---	---	---	11	---	14	19
Water connections	2-Pipe (In / Out)	"G	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	4-Pipe (In / Out)	"G	---	---	3/4"	3/4"	---	3/4"	3/4"
Air flow	Max	m ³ /h	380	580	730	810	1050	1300	2130
	Med	m ³ /h	240	290	520	617	820	960	1640
	Min	m ³ /h	200	200	450	450	700	700	1380
Air flow (EC version)	Max	m ³ /h	---	580	---	810	---	1300	2100
	Min	m ³ /h	---	200	---	200	---	360	820
Electrical heater	Power supply	V/Ph/Hz	230/1/50						
	Absorbed power	kW	1	1	2	2	3	3	4
Electrical characteristics	Power supply	V/Ph/Hz	230/1/50						
	Max absorbed power	kW	0.04	0.06	0.06	0.09	0.11	0.20	0.30
Electrical characteristics (EC version)	Power supply	V/Ph/Hz	---	230/1/50	---	230/1/50	---	230/1/50	
	Max absorbed power	kW	---	0.03	---	0.04	---	0.09	0.20
Sound pressure	Max (3)	dB(A)	39	42	46	48	51	53	55
	Med (3)	dB(A)	33	36	40	43	44	48	48
	Min (3)	dB(A)	31	31	34	34	39	39	42
Sound pressure (EC version)	Max (3)	dB(A)	---	42	---	48	---	53	54
	Min (3)	dB(A)	---	29	---	30	---	34	36
Weights	Transport weight	Kg	31	31	33	33	40	40	55
	Operating weight	Kg	28	28	30	30	36	36	50

DIMENSIONS			22	32	42	53	63	73	122
BODY	L	mm	580	580	580	580	730	730	830
	W	mm	680	680	680	680	830	830	980
	H	mm	580	580	580	580	730	730	830
PANEL	L	mm	680	680	680	680	830	830	980
	W	mm	250	250	290	290	260	260	290
	H	mm	28	28	28	28	28	28	28

CLEARANCE AREA

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NOTES

1. Ambient air temperature 27 °C d.b./19 °C w.b., water temperature 7/12 °C.
 2. Ambient air temperature 20 °C d.b., water temperature 70/60 °C.
 3. Sound pressure level measured at 1 m from the unit with reverberation time 0,5 s.
- N.B.** Maximum operating pressure 1000 kPa.
N.B. Maximum inlet water temperature 80 °C.
N.B. Inhibited ethylene glycol can be added to the water.