CSW

Condensation dehumidifiers for industrial environments or swimming pools

CSW 63÷140

TFT
DRY AIR SOLUTIONS

GENERAL DECRIPTION

The CSW series of fixed dehumidifiers are high-performance devices that can be used in a variety of applications. They are particularly suitable for dehumidifying swimming pool environments, as they are resistant to corrosion caused by chlorine. They are equipped with a high efficiency, washable, polyurethane air filter, and easily replaceable, and the possibility of direct discharge. As an option, it is possible to install a condensate lifting pump that allows the pumping of the condensate up to a height of 3.5 metres from the positioning level of the machine. CSW series fixed dehumidifiers can be equipped with electric heaters or hot water coil for heating. Their elegant design makes them particularly suitable for installation in special environments such as libraries and offices.

TECHNICAL CHARACTERISTICS						
MODEL	**CSW**	**63**	**100**	**140**		**96V**
Performance						
Dehumidification capacity at 32°C 90% (4)	L/24h	69	116	140		100
Dehumidification capacity at 30°C 80% (4)	L/24h	57	94	115		80
Dehumidification capacity at 27°C 80% (4)	L/24h	47	76	90		60
Dehumidification capacity at 27°C 60% (4)	L/24h	32	53	75		48
Dehumidification capacity at 25°C 80% (4)	L/24h	44	72	80		56
Dehumidification capacity at 25°C 60% (4)	L/24h	31	50	60		40
Dehumidification capacity at 20°C 80% (4)	L/24h	37	60	70		45
Dehumidification capacity at 20°C 60% (4)	L/24h	24	40	43		32
Dehumidification capacity at 15°C 80% (4)	L/24h	31	50	50		37
Dehumidification capacity at 15°C 60% (4)	L/24h	18	28	30		24
Dehumidification capacity at 10°C 80% (4)	L/24h	26	41	35		28
Dehumidification capacity at 10°C 60% (4)	L/24h	13	21	20		16
Fans						
Air Flow	m^3/h	600	980	900		800
Available static pressure	Pa	50÷60	50÷60	50÷60		50÷60
Refrigerant						
Type		R410a	R410a	R407c		R410a
Refrigerant charge	Kg					
Global Warming Potential (GWP)		2088	2088	1774		2088
Load equivalent CO_2	t					
Electrical characteristics						
Power Supply	Volt/Ph/Hz	230/1/50	230/1/50	230/1/50		230/1/50
Total absorbed power at 27°C 60%	KW	0,84	1,39	1,88		1,4
Maximum absorbed power (1)	KW	0,97	1,61	2,29		1,61
Maximum absorbed current (1)	A	4,4	7,5	10,5		7,0
Starting current (1)	A	22	28	33		28
Integration for heating						
Supplementary electrical heater	KW	2	2,7	-		4
Hot water coil (2)	KW	2,2	3,2	-		4,5
Noise						
Sound pressure level (3)	dB (A)	49	52	49		49
Sound power level (3)	dB (A)	68	71	68		68

(1) With ambient conditions 35°C 70% without electrical resistance
(2) Ambient temperature 27°C, water temperature 70°/60°C, compressor off
(3) Sound pressure level calculated in a free field, 3 metres from the unit, directionality factor Q=2, according to ISO9614
(4) Operating temperature limits 7°÷35°C, relative humidity 40%÷99%

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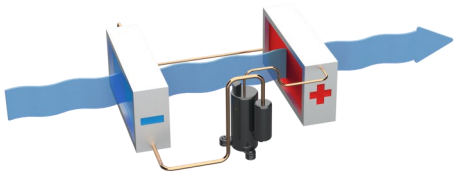
FRAME

All CSW units are made of galvanized sheet metal, powder coated with polyurethane powders at 180°C to ensure the best resistance to atmospheric agents. The frame is self -supporting. For size 140, the structure and external panels are made of anodized aluminium profiles and internal sheets are made of stainless steel.



REFRIGERANT CIRCUIT

The refrigerant gas used in these units is R410a or R407c. The refrigerant circuit is designed in accordance with ISO 97/23 on welding procedures and PED standards. The refrigeration circuit includes: filter drier, Schrader valve for maintenance and control, capillary tube for expansion, compressor, condenser and evaporator in copper tube with aluminium fins.

COMPRESSOR

The characteristics of the rotary compressor are: High efficiency to save energy, Low noise level, quiet operation, use of HFC refrigerant for environmental protection, high reliability, long life.

FAN

The fans are made of galvanized steel, centrifugal type with forward blades. They are all statically and dynamically balanced. All the electric motors used are directly connected to the fans. The motors are all IP54 rated.

AIR FILTER

Made of synthetic material, the air filter is washable and easy to replace.

MICROPROCESSORS

The microprocessor controls all the functions of the machine, such as: general operation, automatic defrosting system, alarms, humidity and temperature regulation (temperature only for the machine version with hot water battery or electric heating elements).

ELECTRICAL PANEL

The electrical panel complies with the electromagnetic compatibility standards (2004/108 EEC) and the electrical safety standards for low voltage appliances 2006/95 EEC. The electrical panel is composed of the following components: remote control terminals, electronic board. The installation must comply with the safety standards and the laws in force. Provide a main switch-disconnector, if necessary.

CONDENSATE COLLECTION TRAY

Stainless steel tray, condensate drain pipe connection ¾" Female.

TEST

The tests are carried out to verify the tightness of the cooling circuit. Electrical discharge tests and functional tests are also carried out.

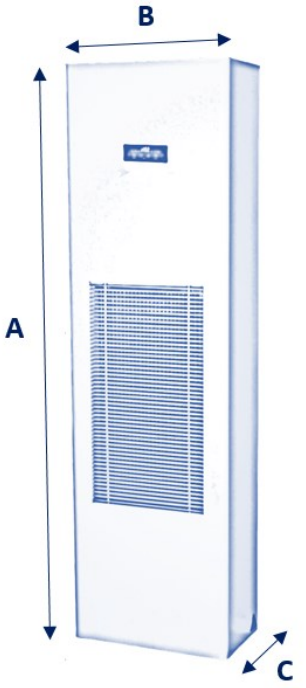
VERSION

CSW… Horizontal version (Fan-coils)
CSW…V Vertical version (cabinet)

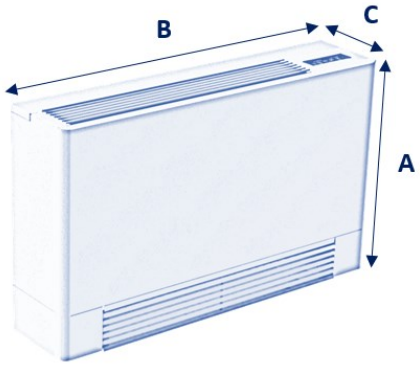
Model CSW	Code	63	100	140		96V
Hot gas defrost	HGAS	○	○	○		-
Built-in electronic temperature and humidity controller	RGITU	●	●	-		●
Remote electronic temperature and humidity controller	RGRTU	○	○	-		○
Electronic remote humidity regulator	RGRU	○	○	○		○
Condensate drain pump	PRC	○	○	○		○
Electric heating elements	HOEL	○	○	-		○
Heating hot water coil	HOWA	○	○	-		○
3-way on/off valve for hot water coil	KIVM	○	○	-		○

● *standard,* ○ *optional,* – *not available.*

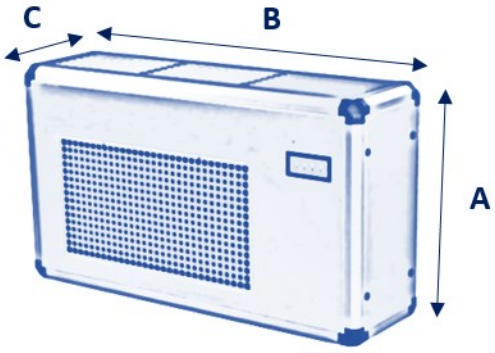
Dimensions model 96V



Dimensions model 63 - 100



Dimensions model 140



Model	CSW	63	100	140		96V
A	mm	605	740	710		1760
B	mm	1010	1220	1125		515
C	mm	235	250	360		290
Empty weight	Kg	48	72	66		72

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