

TCWB2-C8 Size 4

Industrial water chillers

COOLING CAPACITY

23000 - 28300 - 32800 - 37600 W



AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille.

LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Stainless-steel centrifugal pump with 3 bar available head. Stainless-steel storage tank complete with drain valve, electrical level and visual level indicator, 0-10 bar pressure gauge, differential pressure switch protecting the water flow, regulation sensor.

ELECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays.

MANAGEMENT AND CONTROL

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

PAINT/COATING

Standard colour: RAL 7035 textured.

STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

COMPRESSOR

Hermetic scroll compressor, cooled by the refrigerant, complete with thermal cut-out. Complete with charging port, safety valve, liquid receiver, drier filter, liquid inspection port, solenoid valve, thermostatic valve, high- and low-pressure pressure switch, R410A refrigerant.

EVAPORATOR

With brazed stainless-steel plates and temperature sensor for protection against freezing.

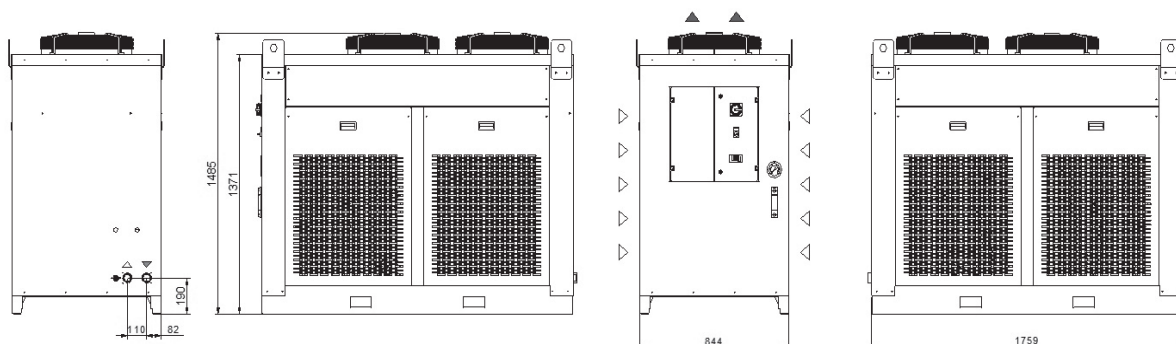
AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

MAIN ACCESSORIES (ref. page 189)

- BA - Mechanical bypass valve protecting the pump
- HR - Fluid heating element
- LTA - Operation at low ambient temperatures
- FP - Polyurethane air filter
- RU - Castors
- TD - Differential fluid temperature management (two sensors)
- LS - Liquid circuit for laser application
- HIGH-pressure pump version "H" - 5 bar, version "R" - 7 bar.
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework
- Temperature Precision +/- 1 K

Dimensions



Model		TCWB2	TCWB7	TCWC1	TCWC8
Rated Cooling Capacity*	W	23000	28300	32800	37600
Ambient temperature operating limits	°C	+15 - +45			
Settable fluid temperature range	°C	+8 - +25			
Fluid type		Water			
Temperature precision	K	+/-2			
Refrigerant gas	HFC	R410A			
Power supply					
Supply voltage	V ph Hz	400V (+/-10%) 3ph 50Hz			
Secondary supply voltage	V	24 V AC			
Digital thermostat		TX200			
Compressor					
Compressor type		Scroll			
Quantity - Number of circuits	no.	1 - 1			
Max. power draw	kW	8.6	10.1	11.6	13.3
Max. current draw	A	15.0	17.3	18.8	23.0
Axial Fan					
Fan type		Axial			
Quantity	no.	2	2	2	2
Air flow rate	m ³ /h	10000	10000	10000	10000
Max. power draw	kW	1.4	1.4	1.4	1.4
Max. current draw	A	2.8	2.8	2.8	2.8
Centrifugal Fan (optional)					
Fan type		Centrifugal			
Quantity	no.	2	2	2	2
Air flow rate	m ³ /h	10000	10000	10000	10000
Available head	Pa	250	250	220	220
Max. power draw	kW	3.0	3.0	3.0	3.0
Max. current draw	A	6.0	6.0	6.0	6.0
Standard Pump					
Pump type		Centrifugal			
Quantity	no.	1	1	1	1
Nominal/max fluid flow rate	l/min	65.0 - 150.0	80.0 - 150.0	95.0 - 150.0	110.0 - 150.0
Nominal available head	bar	3.7	3.5	3.3	3.1
Max. power draw	kW	1.7	1.7	1.7	1.7
Max. current draw	A	2.9	2.9	2.9	2.9
High Pressure Pump					
Pump type		Centrifugal			
Quantity	no.	1	1	1	1
Nominal available head	bar	5.8	5.5	5.2	5.0
Max. power draw	kW	2.6	2.6	2.6	2.6
Max. current draw	A	5.1	5.1	5.1	5.1
Storage tank capacity					
Storage tank capacity	l	220			
IN/OUT liquid connections	inch	1 1/2"			
Net weight (approximate)***	kg	440	460	500	520
Width	mm	844			
Depth	mm	1759			
Height	mm	1485			
Sound pressure level**	dB(A)	70	70	70	70
IP rating	IP	44			
* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. Cooling power refers to the evaporator unit.					
** Sound pressure level, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, per ISO 3746.					
*** Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.					
**** The electrical data refer to cos φ = 0.8.					

Correction factors for calculating the cooling power													
Water outlet temperature	Fw	°C					8	10	15	20	25		
		factor					0.86	0.92	1	1.05	1.12		
Ambient Temperature	Fa	°C					15	20	25	32	35	40	45
		factor					1.16	1.1	1.05	1	0.97	0.91	0.84
Percentage glycol by weight	Fg	%	0	10	15	20	25	30	35	40			
		factor	1	0.99	0.98	0.97	0.96	0.94	0.92	0.89			
Cooling power = Nominal cooling power x Fw x Fa x Fg													