LCWB5-C4 Size 5 Negative temperature liquid chillers

COOLING CAPACITY

24100 - 34800 W

EVAPORATOR

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

AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille. Fan adjustment step pressure switch.

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, protective flow switch, 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.

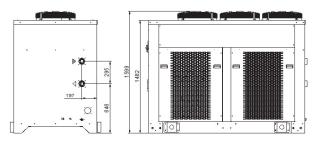
PAINT/COATING

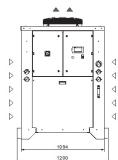
Standard colour: RAL 7035 textured.

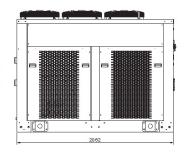
MAIN ACCESSORIES (ref. page 189)

- 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)
- HIGH-pressure pump version "H" 5 bar.
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework

Dimensions









In powder-coated steel sheet, RAL 7035 textured

Hermetic scroll compressor (connected in

tandem), cooled by the refrigerant, complete

with thermal cut-out. Case heating element for

oil. Electronic management coolant injection

valve. Stepped cooling power regulation, 2 steps.

Complete with charging port, drier filter, liquid

receiver, thermostatic valve, solenoid valve,

liquid viewing port, high- and low-pressure

pressure switch, intake oil separator, R404A refrigerant. Solenoid valve for liquid injection. High- and low-pressure gas pressure gauge.

STRUCTURE

COMPRESSOR

finish. Easily removed panels

REFRIGERATION CIRCUIT



Model		LCWB5	LCWC4					
Rated Cooling Capacity*	w		34800					
		24100						
Ambient temperature operating limits	°C		- +48					
Settable fluid temperature range	°C	-305						
Fluid type		Water + Ethylene Glycol 50%						
Temperature precision	K	+/-1						
Refrigerant gas	HFC	R	104A					
Power supply								
Supply voltage	V ph Hz	400V (+/-10%) 3ph 50Hz						
Secondary supply voltage	V	24 V AC						
Digital thermostat		۲۲.	(200					
Compressor								
Compressor type		S	croll					
Quantity - Number of circuits	no.	4 - 2	6 - 2					
Max. power draw	kW	56.0	84.0					
Max. current draw	A	94.0	141.5					
Axial Fan								
Compressor type		A	xial					
Quantity	no.		3					
Air flow rate	m₃/h	17000						
Max. power draw	kW	2.1						
Max. current draw	A		4.2					
Centrifugal Fan (optional)								
Fan type		Centrifugal						
Quantity	no.	3						
Air flow rate	m₃/h	17000						
Available head	Pa	260						
Max. power draw	kW	4.5						
Max. current draw	A	9.0						
Standard Pump								
Pump type		Cent	rifugal					
Quantity	no.		1					
Nominal/max fluid flow rate	l/min	100.0 - 300.0	150.0 - 300.0					
Nominal available head	bar	3.4	3.1					
Available power draw	kW	2.3						
Max. current draw	A	4.9						
High-Pressure Pump (optional)								
Pump type		Cont	rifugal					
		Centrifugal 1						
Quantity Nominal available head	no. bar	5.4	5.1					
Max. power draw Max. current draw	kW	3.7						
Max. current draw	A		6.3					
Storage tank capacity	l		160					
IN/OUT liquid connections	inch		2"					
Net weight (approximate)***	kg	650	720 094					
			1944					
Width	mm							
Width Depth	mm	2	062					
Width		2						

* Data relating to operation under the following conditions: intake/outlet temperature -20/-25°C, water with 50% 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 $\cos \phi = 0.8$.

TEXA

Correction factors for calculating the cooling power														
Water outlet temperature	Fw	°C	-30	-28	-26	-25	-22	-20	-18	-16	-14	-12	-10	-5
	FW	factor	0.75	0.85	0.95	1.00	1.1	1.20	1.30	1.42	1.54	1.64	1.76	1.80
Ambient Temperature	F -	°C					15	20	25	32	35	40	48	
	Fa	factor					1.16	1.10	1.05	1.00	0.97	0.91	0.84	
Percentage glycol by weight	F -	%										50		
	Fg	factor										1.00		
Cooling power = Nominal cooling power x Fw x Fa x Fg														