

# LCW45-70 Size 3

Negative temperature liquid chillers

## COOLING CAPACITY

6500 - 10450 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.

### AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille. Fan adjustment step pressure switch.

### 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.

### STRUCTURE

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

### COMPRESSOR

Hermetic scroll compressor (connected in tandem for model 70), cooled by the refrigerant, complete with thermal cut-out. Case heating element for oil. Electronic management coolant injection valve.

### REFRIGERATION CIRCUIT

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.

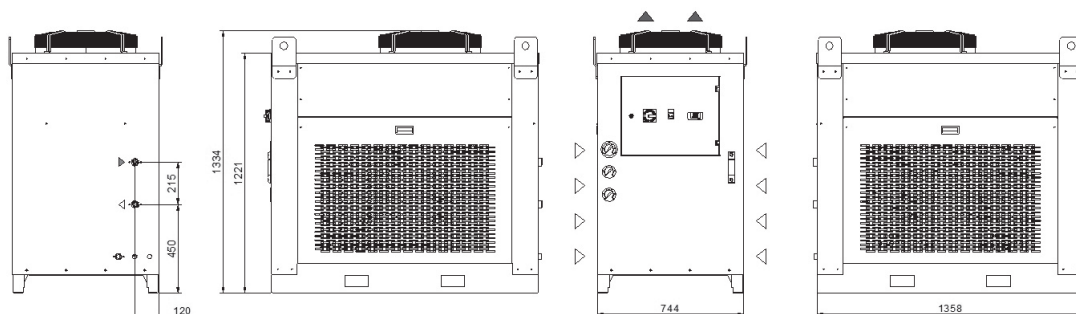
### PAINT/COATING

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



Model		LCW45	LCW70
<b>Rated Cooling Capacity*</b>	W	6500	10450
Ambient temperature operating limits	°C	+15 - +48	
Settable fluid temperature range	°C	-30 - -5	
Fluid type		Water + Ethylene Glycol 50%	
Temperature precision	K	+/-2	
Refrigerant gas	HFC	R404A	
<b>Power supply</b>			
Supply voltage	V ph Hz	400V (+/-10%) 3ph 50Hz	
Secondary supply voltage	V	24 V AC	
Digital thermostat		TX200	
<b>Compressor</b>			
Compressor type		Scroll	
Quantity - Number of circuits	no.	1 - 1	2 - 1
Max. power draw	kW	14.0	22.0
Max. current draw	A	23.5	37.4
<b>Axial Fan</b>			
Compressor type		Axial	
Quantity	no.	1 - 1	
Air flow rate	m <sup>3</sup> /h	5700	
Max. power draw	kW	0.7	
Max. current draw	A	1.4	
<b>Centrifugal Fan (optional)</b>			
Fan type		Centrifugal	
Quantity	no.	1	1
Air flow rate	m <sup>3</sup> /h	5700	5700
Available head	Pa	220	220
Max. power draw	kW	1.5	1.5
Max. current draw	A	3.0	3.0
<b>Standard Pump</b>			
Pump type		Centrifugal	
Quantity	no.	1	
Nominal/max fluid flow rate	l/min	25.0 - 80.0	35.0 - 80.0
Nominal available head	bar	3.7	3.5
Available power draw	kW	1.2	
Max. current draw	A	2.4	
<b>High-Pressure Pump (optional)</b>			
Pump type		Centrifugal	
Quantity	no.	1	
Nominal available head	bar	5.1	4.9
Max. power draw	kW	2.6	
Max. current draw	A	5.1	
Storage tank capacity	l	60	
IN/OUT liquid connections	inch	1"	
Net weight (approximate)***	kg	350	380
Width	mm	744	
Depth	mm	1358	
Height	mm	1334	
Sound pressure level**	dB(A)	67	68
IP rating	IP	44	

\* 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 φ = 0.8.

Correction factors for calculating the cooling power														
<b>Water outlet temperature</b>	<b>Fw</b>	°C	-30	-28	-26	-25	-22	-20	-18	-16	-14	-12	-10	-5
		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
<b>Ambient Temperature</b>	<b>Fa</b>	°C					15	20	25	32	35	40	48	
		factor					1.16	1.10	1.05	1.00	0.97	0.91	0.84	
<b>Percentage glycol by weight</b>	<b>Fg</b>	%										50		
		factor										1.00		
Cooling power = Nominal cooling power x Fw x Fa x Fg														