

2.2 kW Packaged Industrial MiniChiller TCW19



FEATURES:

- Air cooled packaged chiller designed for industrial cooling, including:
- Integral 4.6 Bar pump
- Integral buffer tank
- Refrigerant - R134a
- Suitable for indoor siting or protected outdoor siting (Splashproof - IP44)
- Single phase power supply

Specification Overview⁴

Model	TCW19
Nominal Cooling Duty @ 15°C Fluid / 20°C Ambient	2.2 kW
Cooling Duty @ 25°C Fluid / 20°C Ambient	2.5 kW ¹
Cooling Duty @ 8°C Fluid / 20°C Ambient	2 kW ¹
Refrigerant / Charge	R134a / 0.4 kg
Fluid	Water/Glycol 30%
Settable Fluid Temperature Range	+8°C to +25°C
Fluid Flow Rate	390 to 1.200 Litres/Hour
Ambient Temperature Operating Range	-5°C to +45°C
Internal Pump Nominal Pressure	4.6 Bar ²
Internal Tank Capacity	10 Litres
Connection Sizes	1/2" BSP
Power	230V/1Ph/50Hz
Full Load Amps	10 Amps
Dimensions (mm)	367 ³ (H) x 725 (L) x 454 (W)
Dry Weight	55 Kg
Indoor or Protected Outdoor Siting	Splashproof - IP44

¹ Correction Factors, Page 4

² Optional High Pressure Pump: 5.8 Bar

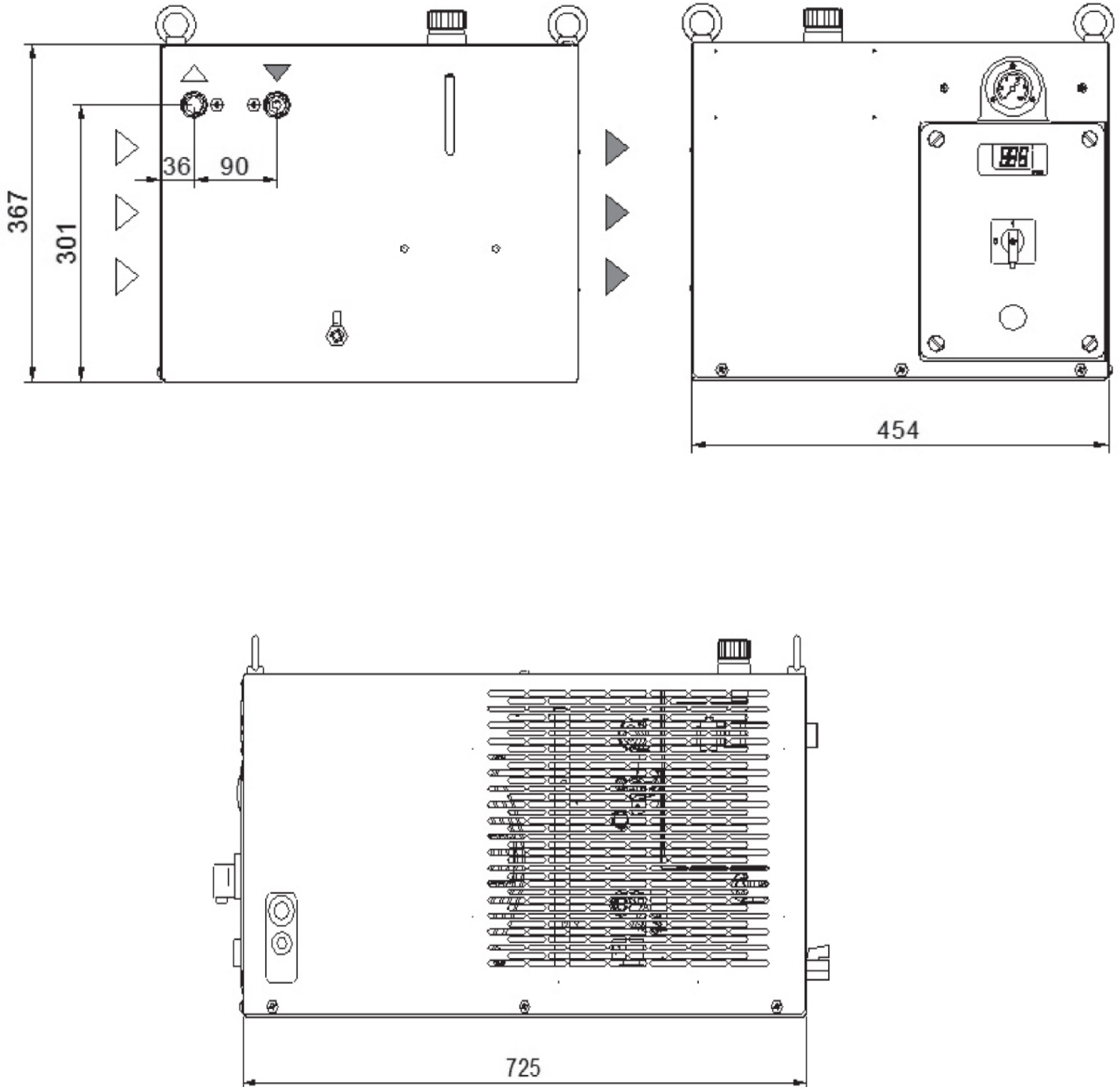
³ Excluding Lifting Handles

⁴ Due to the continuous development of our products, all information is subject to change without notice
Data Sheet V1.1

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Dimensions



STRUCTURE

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

COMPRESSOR

Hermetic reciprocating compressor, cooled by the refrigerant, complete with thermal cut-out.

REFRIGERATION CIRCUIT

Complete with charging port, drier filter, thermostatic expansion valve, high and low pressure safety pressure switch, R134a refrigerant.

EVAPORATOR

Brazed stainless-steel plate model.

AIR CONDENSER

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

AXIAL FAN

Axial fan, complete with electrical thermal protection and safety grille.

LIQUID CIRCUIT

Liquid circuit composed entirely of non-ferrous material in contact with the liquid to prevent contamination. Standard liquid circuit with open reservoir and pump, protective flow switch, pressure gauge, regulation sensor. Peripheral electric pump with 4.6 bar available head. Plastic storage tank complete with drain valve and visual level indicator.

ELECTRICAL PANEL

With main breaker, fused motor protection with LED visual fault indicator, voltage presence light.

MANAGEMENT AND CONTROL

The TX110 control unit manages the chiller's operation, providing warnings including high/low temperature alarms and a general serious fault alarm, with the display indicating if this refers to the refrigeration or liquid circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the machine.

PAINT/COATING

Standard colour: RAL 7035 textured.

OPTIONAL ACCESSORIES

- BA - Mechanical bypass valve protecting the pump
- BM - Manual bypass valve protecting the pump
- LE - Electrical level indicator
- RU - Castors
- TD - Differential fluid temperature management (two sensors)
- BGC - Hot gas bypass for +/- 1 K temperature precision
- LS - Liquid circuit for laser application
- High pressure pump - 5.8 bar
- Satin AISI 304 stainless steel framework

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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	30	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 (kW) = 2.2 x Fw x Fa x Fg													