1.8 kW Brewery Glycol MiniChiller (1 BBL) TCW19





FEATURES:

Air cooled packaged glycol minichiller designed for brewery 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

Model	TCW19					
Max Cooling Duty @ 10 ^o C Fluid / 2	20°C Ambient 1.8 kW ¹					
Cooling Duty @ -4 ^o C Fluid / 20 ^o C Ambient 0.8 k						
Refrigerant	R134a					
Refrigerant Charge	0.4 kg					
Fluid	Water/Glycol 30%					
Settable Fluid Temperature Range	-10°C to +10°C					
Fluid Flow Rate	390 to 1.200 Litres/Hour					
Ambient Temperature Operating R	Range $-5^{\circ}C$ to $+45^{\circ}C$					
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	g Splashproof - IP44					

¹ Correction Factors, Page 4

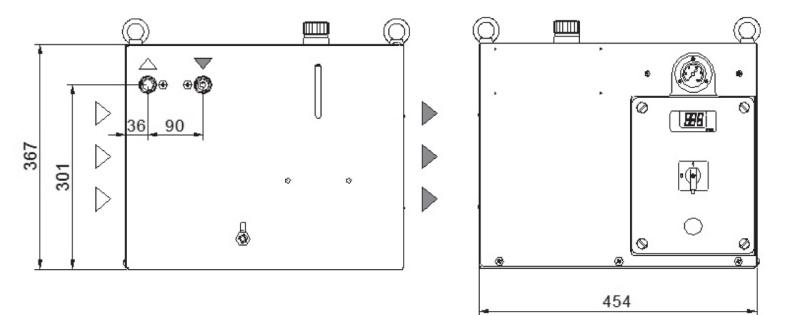
² Optional High Pressure Pump: 5.8 Bar

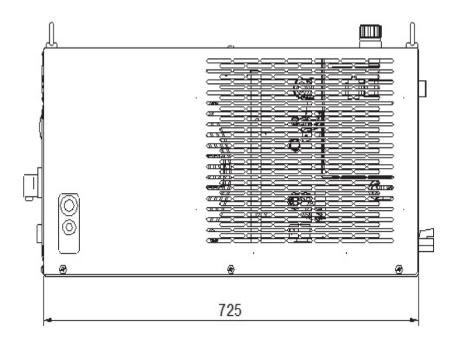
³ Excluding Lifting Handles

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



Dimensions





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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



Correction factors for calculating the cooling power													
Water Outlet Temperature	Fw	⁰ C					-10	-5	0	+5	+10		
	1.00	factor					0.26	0.36	0.47	0.62	0.79		
Ambient Temperature	Fa	٥C					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	_	%	0	10	15	20	25	30	35	40			
	Fg	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													