

FEATURES:

Air cooled packaged chiller designed for industrial cooling, including:

Integral 4.4 Bar pump (optional 5.8 Bar pump available)

Integral buffer tank

Refrigerant - R134a

Suitable for indoor or outdoor siting

Single phase power supply

Specification Overview⁴

Model	TAL24
Nominal Cooling Duty @ 15°C Fluid / 20°C Ambient	2.5 kW
Cooling Duty @ 25°C Fluid / 20°C Ambient	3.6 kW ¹
Cooling Duty @ 8°C Fluid / 20°C Ambient	1.7 kW ¹
Refrigerant / Charge	R134a / 0.65 kg
Fluid ¹	Water/Glycol 30%
Settable Fluid Temperature Range	+8°C to +25°C
Fluid Flow Rate	420 to 1,080 Litres/Hour
Ambient Temperature Operating Range	-5°C to +45°C
Internal Pump Nominal Pressure	4.4 Bar ²
Internal Tank Capacity	50 Litres
Connection Sizes	³ / ₄ " BSP
Power	230V/1Ph/50Hz
Full Load Amps	11.5 Amps
Dimensions (mm)	1254 (H) x 740 (L) x 600 (W)
Net Weight ³	151 Kg
Suitable for Indoor or Outdoor Siting	Fully Weatherproof

¹ Correction Factors, Page 4

² Optional High Pressure Pump: 5.8 Bar

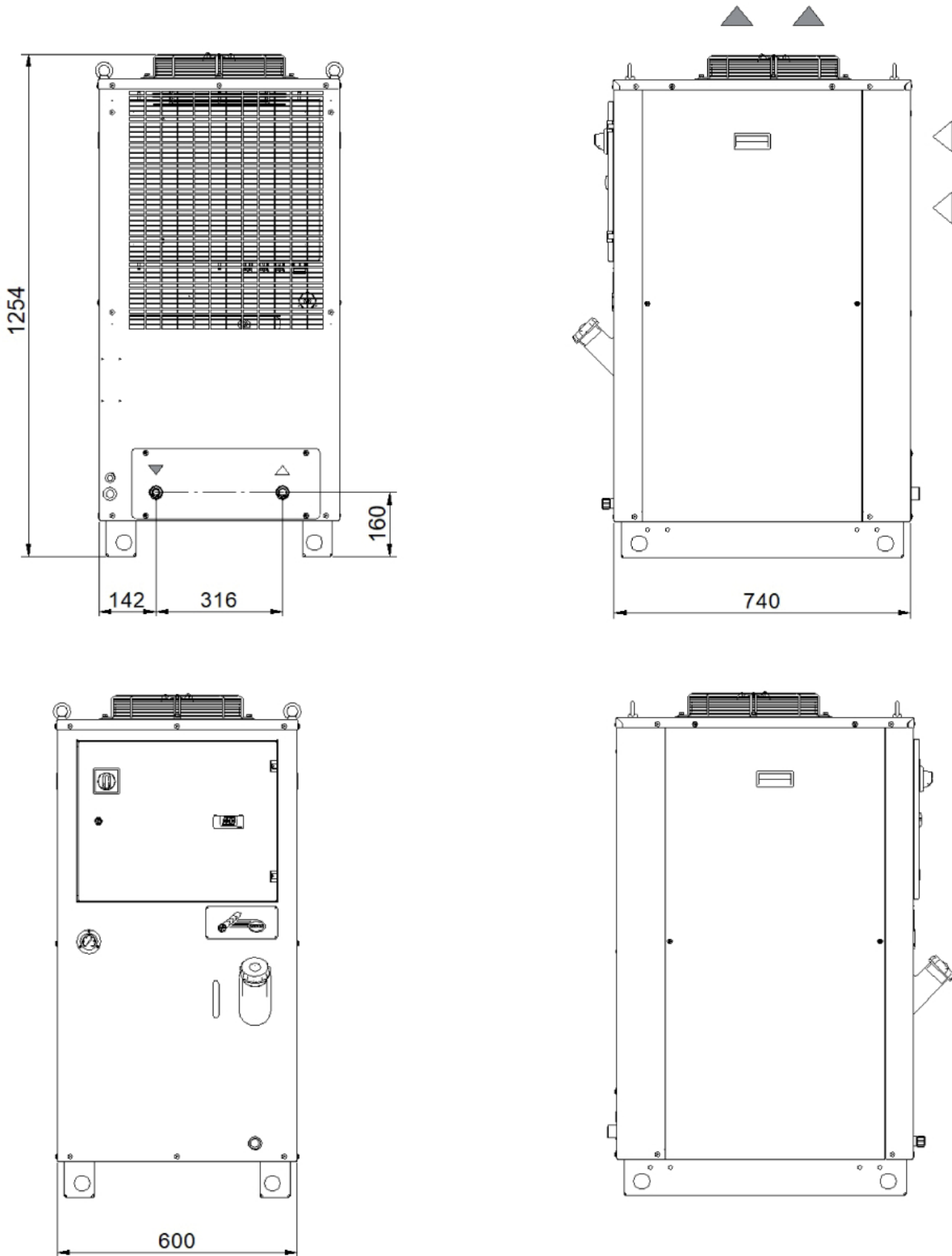
³ Including Packaging and Refrigerant, Tank Empty

⁴ Due to the continuous development of our products, all information is subject to change without notice
Data Sheet V1.2

2.5kW Packaged Industrial Chiller TAL24



Dimensions



STRUCTURE

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

COMPRESSOR

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

REFRIGERATION CIRCUIT

Complete with charging port, drier filter, capillary, high-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 thermal cut-out and safety grille.

LIQUID CIRCUIT

Non-ferrous liquid circuit composed of peripheral electric pump, plastic storage tank complete with visual level indicator, 0-10 bar pressure gauge, protective flow switch, regulation sensor.

ELECTRICAL PANEL

With main disconnect switch, fused motor protection.

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 (pump included). Control disconnect switch for switching on the machine.

PAINT/COATING

Standard colour: RAL 7035 textured.

OPTIONAL ACCESSORIES

BA - Mechanical bypass valve protecting the pump

RU - Castors

TD - Differential fluid temperature management (two sensors)

BGC - Hot gas bypass for +/- 1 K temperature precision

BGP - Hot gas bypass for +/- 0.5 K temperature precision

LS - Liquid circuit for laser application

UL1 - UL certified electrical panel and components

High pressure pump - 5.8 bar

2.5kW Packaged Industrial Chiller TAL24



Correction factors for calculating the cooling power

Water Outlet Temperature	Fw	°C					8	10	15	20	25		
		factor					0.69	0.77	1	1.22	1.44		
Ambient Temperature	Fa	°C					15	20	25	32	35	40	45
		factor					1.26	1.2	1.11	1	0.95	0.87	0.80
Percentage Glycol by weight	Fg	%	0	10	15	20	25	30	35	40			
		factor	1	0.96	0.95	0.94	0.93	0.91	0.90	0.88			
Cooling power (kW) = 2.3 x Fw x Fa x Fg													