

#### FEATURES:

Air cooled packaged chiller designed for industrial cooling, including:

Integral 3.1 Bar pump (optional 4.5 Bar pump available)

Integral buffer tank

Refrigerant - R134a

Suitable for indoor or outdoor siting

Single phase power supply

#### Specification Overview<sup>4</sup>

Model	TAL37
Nominal Cooling Duty @ 15°C Fluid / 20°C Ambient	3.9 kW
Cooling Duty @ 25°C Fluid / 20°C Ambient	5.7 kW <sup>1</sup>
Cooling Duty @ 8°C Fluid / 20°C Ambient	2.7 kW <sup>1</sup>
Refrigerant / Charge	R134a / 1 kg
Fluid <sup>1</sup>	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	3.1 Bar <sup>2</sup>
Internal Tank Capacity	50 Litres
Connection Sizes	<sup>3</sup> / <sub>4</sub> " BSP
Power	230V/1Ph/50Hz
Full Load Amps	12.6 Amps
Dimensions (mm)	1254 (H) x 740 (L) x 600 (W)
Net Weight <sup>3</sup>	153 Kg
Suitable for Indoor or Outdoor Siting	Fully Weatherproof

<sup>1</sup> Correction Factors, Page 4

<sup>2</sup> Optional High Pressure Pump: 4.5 Bar

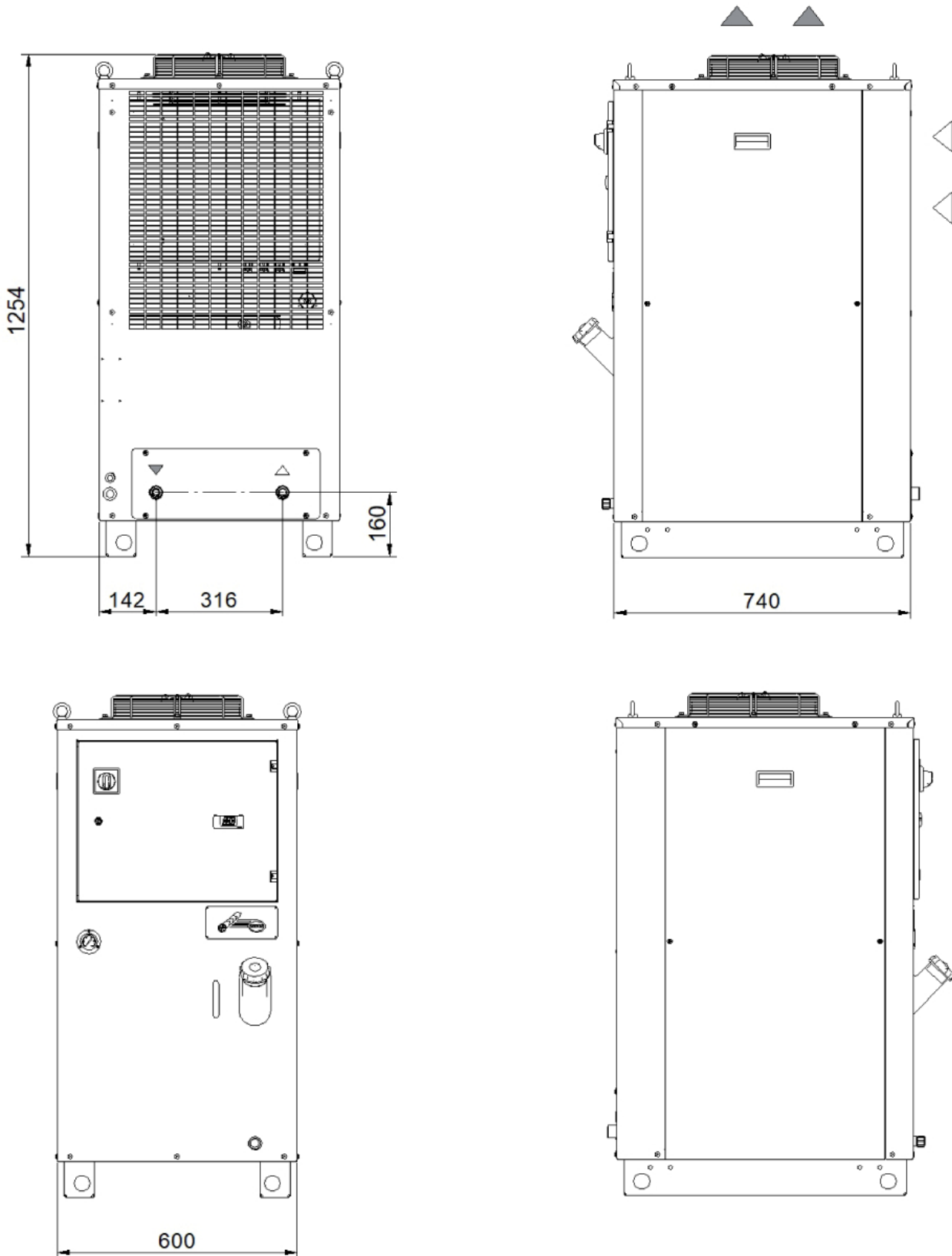
<sup>3</sup> Including Packaging and Refrigerant, Tank Empty

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

# 3.9kW Packaged Industrial Chiller TAL37



## Dimensions



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## **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 - 4.5 bar

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## Correction factors for calculating the cooling power

<b>Water Outlet Temperature</b>	<b>Fw</b>	°C					8	10	<b>15</b>	20	25		
		factor					0.69	0.77	<b>1</b>	1.22	1.44		
<b>Ambient Temperature</b>	<b>Fa</b>	°C					15	20	25	<b>32</b>	35	40	45
		factor					1.26	1.2	1.11	<b>1</b>	0.95	0.87	0.80
<b>Percentage Glycol by weight</b>	<b>Fg</b>	%	<b>0</b>	10	15	20	25	30	35	40			
		factor	<b>1</b>	0.96	0.95	0.94	0.93	0.91	0.90	0.88			
<b>Cooling power (kW) = 3.6 x Fw x Fa x Fg</b>													