

TAL24-37 Size 1

Industrial water chillers

COOLING CAPACITY

2300-2700 - 3600-4200 W



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.

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.

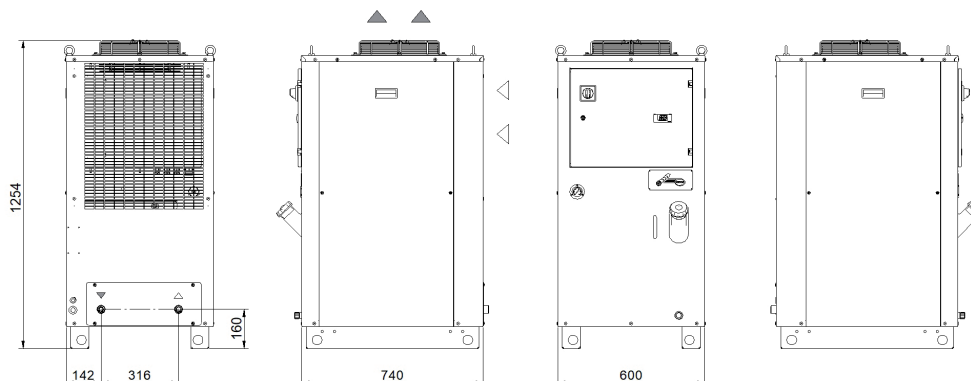
PAINT/COATING

Standard colour: RAL 7035 textured.

MAIN ACCESSORIES (ref. page 189)

- BA - Mechanical bypass valve protecting the pump
- LTA - Operation at low ambient temperatures
- FP - Polyurethane air filter
- 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
- LTW - -10 - +5 water temperature range
- HIGH-pressure pump version "H" - 5 bar, version "R" - 7 bar.
- Outdoor installation optionals

Dimensions



Model		TAL24		TAL37	
		50Hz	60Hz	50Hz	60Hz
Rated Cooling Capacity*	W	2300	2700	3600	4200
Ambient temperature operating limits	°C	+15 - +45			
Settable fluid temperature range	°C	+8 - +25			
Fluid type		Water			
Temperature precision	K	+/-2			
Refrigerant gas	HFC	R134a			
Power supply					
Supply voltage	V ph Hz	230V (+/-10%) 1ph 50/60Hz			
Secondary supply voltage	V	230 V AC			
Digital thermostat		TX110			
Compressor					
Compressor type		Reciprocating			
Quantity - Number of circuits	no.	1 - 1			
Nominal power draw	kW	0.84	1.04	1.16	1.5
Axial Fan					
Fan type		Axial			
Quantity	no.	1			
Air flow rate	m³/h	1250 - 1650		1550 - 2050	
Centrifugal Fan (optional)					
Fan type		Centrifugal			
Quantity	no.	1			
Air flow rate	m³/h	2100 - 2400		2100 - 2400	
Available head	Pa	250			
Standard Pump					
Pump type		Peripheral			
Quantity	no.	1			
Nominal/max fluid flow rate	l/min	7 - 18		10 - 18	
Nominal available head	bar	4.4	5.8	3.1	4.5
High-Pressure Pump (optional)					
Pump type		Peripheral			
Quantity	no.	1			
Nominal available head	bar	5.6	7.5	5	6.8
Storage tank capacity	l	50			
IN/OUT liquid connections	inch	3/4"			
Net weight (approximate)***	kg	151		153	
Width	mm	600			
Depth	mm	740			
Height	mm	1254			
Sound pressure level**	dB(A)	57	60	57	60
<p>* Data relating to operation under the following conditions: intake/outlet temperature 20/15°C, water without glycol, ambient temperature 32°C. ** Sound pressure level measured in a free parallelepiped field at a distance of 1 m from the machine 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. However, due to our continuous development and improvement of our products, all information is subject to change without notice.</p>					

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 = Nominal cooling power x Fw x Fa x Fg													