

# TAO24-37 Size 1

Industrial oil 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.

### HYDRAULIC CIRCUIT

Hydraulic circuit with gear pump without tank, with maximum available pressure 10 bar, 0-25 bar pressure gauge, regulation temperature sensor. Hydraulic safety with safety low-pressure pressure switch.

### 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.

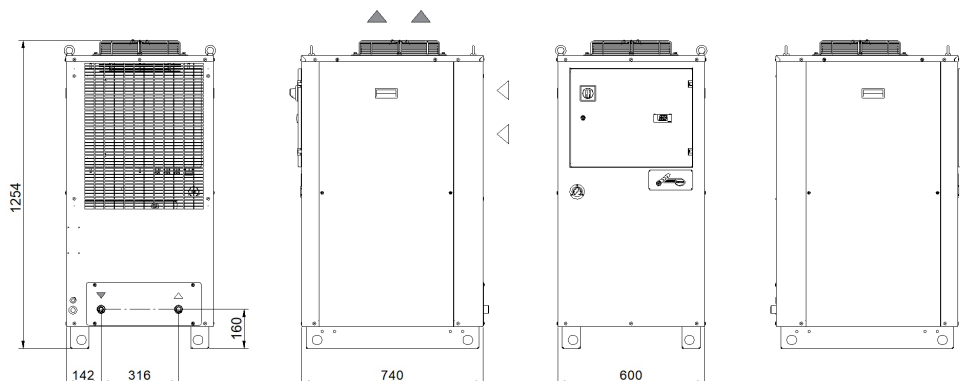
### PAINT/COATING

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
- UL1 - UL certified electrical panel and components
- Outdoor installation optionals

## Dimensions



Model		TAO24		TAO37	
		50Hz	60Hz	50Hz	60Hz
<b>Rated Cooling Capacity*</b>	W	2300	2700	3600	4200
Ambient temperature operating limits	°C	+15 - +45			
Settable fluid temperature range	°C	+25 - +40			
Fluid type		ISO VG 32			
Temperature precision	K	+/-2			
Refrigerant gas	HFC	R134a			
<b>Power supply</b>					
Supply voltage	V ph Hz	230V (+/-10%) 1ph 50/60Hz			
Secondary supply voltage	V	230 V AC			
Digital thermostat		TX110			
<b>Compressor</b>					
Compressor type		Reciprocating			
Quantity - Number of circuits	no.	1 - 1			
Nominal power draw	kW	0.84	1.04	1.16	1.5
<b>Axial Fan</b>					
Fan type		Axial			
Quantity	no.	1			
Air flow rate	m³/h	1250 - 1650		1550 - 2050	
<b>Centrifugal Fan (optional)</b>					
Fan type		Centrifugal			
Quantity	no.	1			
Air flow rate	m³/h	2100 - 2400		2100 - 2400	
Available head	Pa	250			
<b>Standard Pump</b>					
Pump type		Gear pump			
Quantity	no.	1			
Nominal/max fluid flow rate	l/min	10		20	
Nominal available head	bar	10		10	
<b>Storage tank capacity (optional)</b>					
Storage tank capacity (optional)	l	50			
IN/OUT liquid connections	inch	3/4"			
Net weight (approximate)***	kg	151		153	
Width	mm	600			
Depth	mm	740			
Height	mm	1254			
Height with tank and pump	mm	1726			
Sound pressure level**	dB(A)	57	60	57	60

\* Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, 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, without storage tank and 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.

Correction factors for calculating the cooling power												
Oil outlet temperature	Fo	°C	20	25	30	35						
		factor	0.59	0.77	1	1.22						
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
Oil type	Ft	type	ISO VG 10		ISO VG 22		ISO VG 32		ISO VG 46		ISO VG 68	
		factor	1.15		1.1		1		0.9		0.82	

Cooling power = Nominal cooling power x Fo x Fa x Ft

