

# TAO29-A0 Size 1 Three Phase

Industrial oil chillers

## COOLING CAPACITY

2900 - 3600 - 4550 - 6000 - 8100 - 9550 - 10900 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, relay motor protection, phase sequence relays.

### 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 or scroll compressor, cooled by the refrigerant, complete with thermal cut-out.

### REFRIGERATION CIRCUIT

Complete with charging port, drier filter, capillary or thermostatic valve, high-pressure safety pressure switch, R134a refrigerant.

### EVAPORATOR

Brazed stainless-steel plate model.

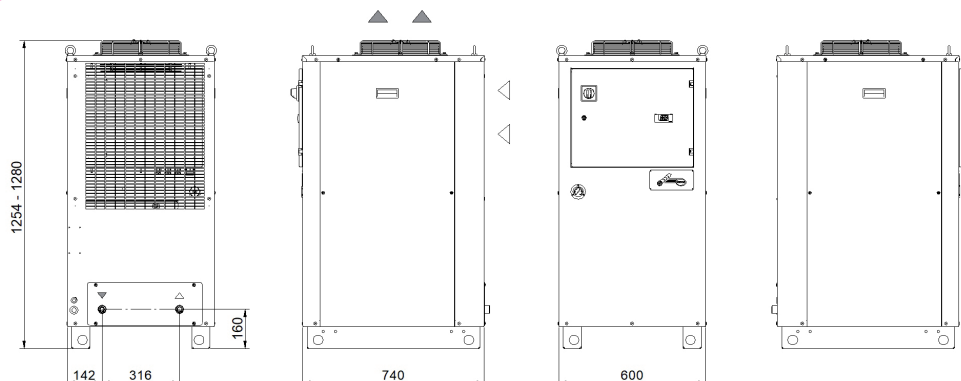
### PAINT/COATING

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		TAO29	TAO37	TAO46	TAO57	TAO76	TAO93	TAOAO	
<b>Rated Cooling Capacity*</b>	W	2900	3600	4550	6000	8100	9550	10900	
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	400V (+/-10%) 3ph 50Hz							
Secondary supply voltage	V	230 V AC							
Digital thermostat		TX110							
<b>Compressor</b>									
Compressor type		Reciprocating				Scroll			
Quantity - Number of circuits	no.	1/1							
Nominal power draw	kW	0.78	1.16	1.42	2.42	2.21	2.60	2.73	
<b>Axial Fan</b>									
Fan type		Axial							
Quantity	no.	1							
Air flow rate	m <sup>3</sup> /h	1550	1550	1800	1800	3150	3350	4400	
<b>Centrifugal Fan (optional)</b>									
Fan type		Centrifugal							
Quantity	no.	1							
Air flow rate	m <sup>3</sup> /h	2100 - 2400	2100 - 2400	2100 - 2400	2100 - 2400	2100 - 2400	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	20	20	30	40	40	
Nominal available head	bar	10	10	10	10	10	10	10	
Storage tank capacity (optional)	l	50							
IN/OUT liquid connections	inch	3/4"							
Net weight (approximate)***	kg	151	153	155	160	165	170	175	
Width	mm	600							
Depth	mm	740							
Height	mm	1254			1280				
Height with tank and pump	mm	1726			1752				
Sound pressure level**	dB(A)	57	57	57	57	57	57	57	
<p>* Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, ambient temperature 32°C.</p> <p>** Sound pressure level measured in a free parallelepiped field at a distance of 1 m from the machine per ISO 3746.</p> <p>*** Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.</p> <p>**** The electrical data refer to cos φ = 0.8.</p> <p>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												
<b>Oil outlet temperature</b>	<b>Fo</b>	°C	20	25	30	35						
		factor	0.59	0.77	1	1.22						
<b>Ambient Temperature</b>	<b>Fa</b>	°C				15	20	25	32	35	40	45
		factor				1.26	1.2	1.11	1	0.95	0.87	0.80
<b>Oil type</b>	<b>Ft</b>	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												

