

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.

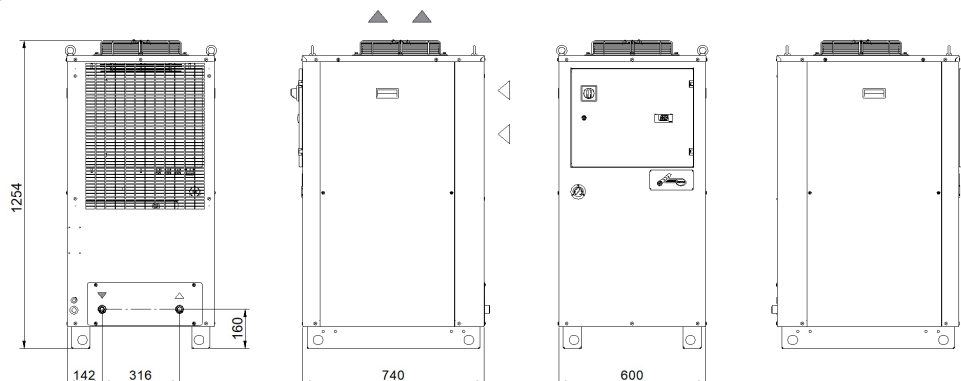
PAINT/COATING

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 |
| Rated Cooling Capacity* | W | 2300 | 2700 | 3600 | 4200 |
| Ambient temperature operating limits | °C | +15 - +45 | | | |
| Settable fluid temperature range | °C | +20 - +35 | | | |
| Fluid type | | ISO VG 32 | | | |
| 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 | m ³ /h | 1250 - 1650 | | 1550 - 2050 | |
| Centrifugal Fan (optional) | | | | | |
| Fan type | | Centrifugal | | | |
| Quantity | no. | 1 | | | |
| Air flow rate | m ³ /h | 2100 - 2400 | | 2100 - 2400 | |
| Available head | Pa | 250 | | | |
| Standard Pump | | | | | |
| Pump type | | Gear pump | | | |
| Quantity | no. | 1 | | | |
| Nominal/max fluid flow rate | l/min | 10 | | 20 | |
| Nominal available head | bar | 10 | | 10 | |
| Storage tank capacity | | | | | |
| 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 | | | |
| 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 at 50Hz, measured in a free hemispherical field at a distance of 1 m from the machine and 1.5 metres from the ground, 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 | | | | | | | | | | | | |

