

TCOA2-A9 Size 3

Industrial oil chillers

COOLING CAPACITY

12300 - 16400 - 17800 - 20700 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 screw pump without tank, with maximum available pressure 20 bar, pressure limiting valve calibrated at 10 bar, high- and low-pressure safety pressure switch, 0-25 bar oil pressure gauge, regulation sensor.

ELECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays.

MANAGEMENT AND CONTROL

The TX200 control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. Possibility of remote display for machine regulation.

PAINT/COATING

Standard colour: RAL 7035 textured.

STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

COMPRESSOR

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

REFRIGERATION CIRCUIT

Complete with charging port, liquid receiver, drier filter, thermostatic valve, high- and low-pressure pressure switch, liquid viewing port, solenoid valve, R410a refrigerant.

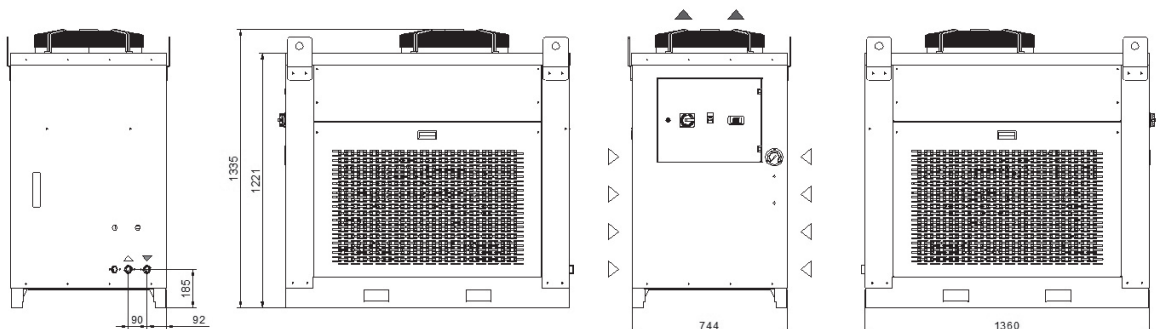
EVAPORATOR

With brazed stainless-steel plates and temperature sensor for protection against freezing.

MAIN ACCESSORIES (ref. page 189)

- HR - Oil heating element
- LTA - Operation at low ambient temperatures
- FP - Polyurethane air filter
- RU - Castors
- TD - Differential fluid temperature management (two sensors)
- FL - Customer flow switch
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework
- Temperature Precision +/- 1 K

Dimensions



| Model | | TCOA2 | TCOA4 | TCOA7 | TCOA9 |
|--------------------------------------|-------------------|------------------------|-------|-------|-------|
| Rated Cooling Capacity* | W | 12300 | 16400 | 17800 | 20700 |
| Ambient temperature operating limits | °C | +15 - +45 | | | |
| Settable oil temperature range | °C | +25 - +40 | | | |
| Fluid type | | ISO VG 32 | | | |
| Temperature precision | K | +/-2 | | | |
| Refrigerant gas | HFC | R410A | | | |
| Power supply | | | | | |
| Supply voltage | V ph Hz | 400V (+/-10%) 3ph 50Hz | | | |
| Secondary supply voltage | V | 24 V AC | | | |
| Digital thermostat | | TX200 | | | |
| Compressor | | | | | |
| Compressor type | | Scroll | | | |
| Quantity - Number of circuits | no. | 1 - 1 | | | |
| Max. power draw | kW | 4.7 | 6.4 | 6.6 | 7.4 |
| Max. current draw | A | 9.8 | 12.1 | 12.5 | 14.8 |
| Axial Fan | | | | | |
| Fan type | | Axial | | | |
| Quantity | no. | 1 | 1 | 1 | 1 |
| Air flow rate | m ³ /h | 5700 | 5700 | 5700 | 5700 |
| Max. power draw | kW | 0.7 | 0.7 | 0.7 | 0.7 |
| Max. current draw | A | 1.4 | 1.4 | 1.4 | 1.4 |
| Centrifugal Fan (optional) | | | | | |
| Fan type | | Centrifugal | | | |
| Quantity | no. | 1 | 1 | 1 | 1 |
| Air flow rate | m ³ /h | 5700 | 5700 | 5700 | 5700 |
| Available head | Pa | 250 | 250 | 220 | 220 |
| Max. power draw | kW | 1.5 | 1.5 | 1.5 | 1.5 |
| Max. current draw | A | 3 | 3 | 3 | 3 |
| Standard Pump | | | | | |
| Pump type | | Screw pump | | | |
| Quantity | no. | 1 | 1 | 1 | 1 |
| Nominal fluid flow rate | l/min | 60 | 60 | 60 | 60 |
| Nominal available head | bar | 20 | 20 | 20 | 20 |
| Max. power draw | kW | 3 | 3 | 3 | 3 |
| Max. current draw | A | 4.6 | 4.6 | 4.6 | 4.6 |
| Storage tank capacity (optional) | l | 150 | | | |
| IN/OUT liquid connections | inch | 1" | | | |
| Net weight (approximate)*** | kg | 240 | 255 | 280 | 295 |
| Width | mm | 744 | | | |
| Depth | mm | 1360 | | | |
| Height | mm | 1335 | | | |
| Sound pressure level** | dB(A) | 67 | 67 | 67 | 67 |
| IP rating | IP | 44 | | | |

* Data relating to operation under the following conditions: intake/outlet temperature 40/30°C, ISO VG 32 oil, ambient temperature 32°C. Cooling power refers to the evaporator unit.

** Sound pressure level, 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.

| Correction factors for calculating the cooling power | | | | | | | | | | | | |
|------------------------------------------------------|-----------|--------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| Oil outlet temperature | Fo | °C | 20 | 25 | 30 | 35 | | | | | | |
| | | factor | 0.82 | 0.92 | 1 | 1.05 | | | | | | |
| Ambient Temperature | Fa | °C | | | | 15 | 20 | 25 | 32 | 35 | 40 | 45 |
| | | factor | | | | 1.16 | 1.1 | 1.05 | 1 | 0.97 | 0.91 | 0.84 |
| 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 | | | | | | | | | | | | |