

TCO22-55

Size 1 Three Phase

Industrial oil chillers

COOLING CAPACITY

2200 - 3300 - 4400 - 5300 W



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 20 bar, pressure limiting valve calibrated at 10 bar, 0-25 bar pressure gauge, regulation temperature sensor. Hydraulic safety with safety low- and high-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 hydraulic circuit. An on-off contact allows the machine to be switched on remotely. Control disconnect switch for switching on the machine.

PAINT/COATING

Standard colour: RAL 7035 textured.

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, thermostatic valve, high- and low-pressure pressure switch, R134a refrigerant.

EVAPORATOR

With brazed stainless-steel plates with protection against freezing.

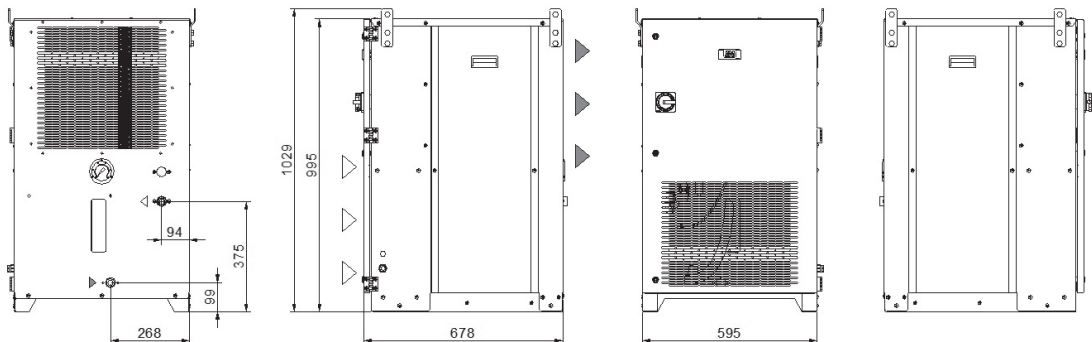
AIR CONDENSER

Finned high-efficiency copper tube condensing coil, complete with safety grille.

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)
- BGC - Hot gas bypass for +/- 1 K temperature precision
- FL - Customer flow switch
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework

Dimensions



Model		TCO22	TCO36	TCO44	TCO55
Rated Cooling Capacity*	W	2200	3300	4400	5300
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	R134a			
Power supply					
Supply voltage	V ph Hz	400V (+/-10%) 3ph 50Hz			
Secondary supply voltage	V AC	230			
Digital thermostat		TX110			
Compressor					
Compressor type		Reciprocating			
Quantity - Number of circuits	no.	1 - 1			
Max. power draw	kW	1.50	1.72	2.32	2.61
Max. current draw	A	2.71	3.10	4.2	4.7
Axial Fan					
Fan type		Axial			
Quantity	no.	1	1	1	1
Air flow rate	m ³ /h	2300	2300	2050	2050
Available head	Pa	250			
Max. power draw	kW	0.18	0.18	0.18	0.18
Max. current draw	A	0.81	0.81	0.81	0.81
Centrifugal Fan (optional)					
Fan type		Centrifugal			
Quantity	no.	1	1	1	1
Air flow rate	m ³ /h	2100 - 2400	2100 - 2400	2100 - 2400	2100 - 2400
Max. power draw	W	145 - 205	145 - 205	145 - 205	145 - 205
Max. current draw	A	0.35 - 0.37	0.35 - 0.37	0.35 - 0.37	0.35 - 0.37
Standard Pump					
Pump type		Gear pump			
Quantity	no.	1	1	1	1
Nominal fluid flow rate	l/min	10	10	20	20
Nominal available head	bar	20	20	20	20
Max. power draw	kW	0.75	0.75	1.1	1.1
Max. current draw	A	1.7	1.7	2.6	2.6
Storage tank capacity (optional)					
Storage tank capacity (optional)	l	30			
IN/OUT liquid connections	inch	3/4"			
Net weight (approximate)***	kg	132	134	136	138
Width	mm	595			
Depth	mm	678			
Height	mm	995			
Sound pressure level**	dB(A)	57	57	57	57
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												