TCOD4-G8 Size 5

Industrial oil chillers

COOLING CAPACITY

41400 - 46100 - 56600 - 65600 - 75200 W



AIR CONDENSER

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

AXIAI FAN

Axial fan (connected in tandem for E0, E4), complete with thermal cut-out and safety grille.

LIQUID CIRCUIT

Hydraulic circuit with screw pump without tank, with maximum available pressure 20 bar, pressure limiting valve calibrated at 10 bar, 0-25 bar oil pressure gauge, protective flow switch, temperature regulation sensor.

ELECTRICAL PANEL

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

MANAGEMENT AND CONTROL

The TX400 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. Dual remote ON-OFF. RS485 connection. Possibility of remote display for machine regulation.

PAINT/COATING

Standard colour: RAL 7035 textured.

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

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.

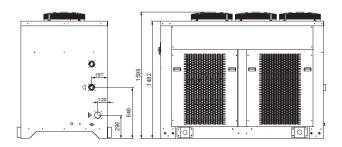
REFRIGERATION CIRCUIT

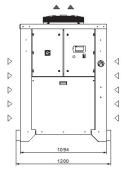
Complete with charging port, safety valve, liquid receiver, drier filter, liquid inspection port, solenoid valve, thermostatic valve, high- and low-pressure pressure switch, R410A refrigerant. Stepped cooling power regulation, 2 steps on models TCW E0-E4-F7-G8.

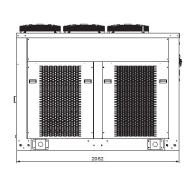
EVAPORATOR

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

Dimensions











Model		TCOD4	TCOE0	TCOE4	TCOF7	TCOG8				
Rated Cooling Capacity*	w	41400	46100	56600	65600	75200				
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	R410A								
Power supply										
Supply voltage	V ph Hz	400V (+/-10%) 3ph 50Hz								
Secondary supply voltage	V	24 V AC								
Digital thermostat		TX400								
Compressor										
Compressor type				Scroll						
Quantity - Number of circuits	no.	1 - 1	2	2 - 2						
Max. power draw	kW	14.8	16.7	20.2	23.2	26.6				
Max. current draw	А	25.3	29.8	34.5	37.6	46				
Axial Fan										
Fan type				Axial						
Quantity	no.	3	3	3	3	3				
Air flow rate	m₃/h	17000	17000	17000	17000	17000				
Max. power draw	kW	2.1	2.1	2.1	2.1	2.1				
Max. current draw	А	4.2	4.2	4.2	4.2	4.2				
Centrifugal Fan (optional)										
Fan type										
Quantity	no.	3	3	3	3	3				
Air flow rate	m₃/h	17000	17000	17000	17000	17000				
Available head	Pa	260	260	260	230	230				
Max. power draw	kW	4.5	4.5	4.5	4.5	4.5				
Max. current draw	А	9	9	9	9	9				
Standard Pump										
Pump type		Screw pump								
Quantity	no.	1	1	1	1	1				
Nominal fluid flow rate	l/min	220	220	220	220	220				
Nominal available head	bar	10	10	10	10	10				
Max. power draw	kW	11	11	11	11	11				
Max. current draw	А	19.5	19.5	19.5	19.5	19.5				
Storage tank capacity (optional)	l	250								
IN/OUT liquid connections	inch	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"				
Net weight (approximate)***	kg	580	620	660	710	730				
Width	mm	1094								
		2062								
Depth	mm			2062						
Height	mm			1599						
		72	72		72	72				

^{*} 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.

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												



^{**} 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.

 $^{^{\}star\star\star} \ \text{Weight includes pallets and packaging (where provided for), with refrigerant charge, without storage tank and axial fans.}$

^{****} The electrical data refer to $\cos \phi = 0.8$.