TCIA2÷A7 Size 3

Immersion coil chillers

COOLING CAPACITY	12300 - 14600 - 16400 - 19400 - 17800 - 20450 W

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, drier filter, thermostatic valve, high- and low-pressure pressure switch, refrigerant gas.

EVAPORATOR
Dual concentric coil in AISI 304 stainless steel. Resin-covered stainless-steel regulation sensor, IP67 rated.

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. On request, centrifugal fan for air expulsion ducting

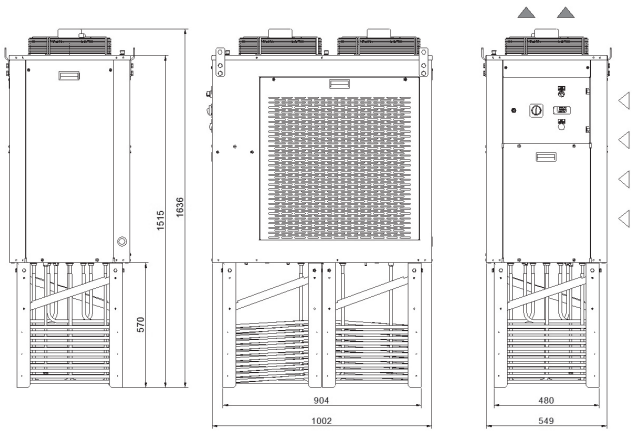
ELECTRICAL PANEL
With main disconnect switch, fused motor protection.

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 circuit or protection of the immersion coils. 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.

MAIN OPTIONS
FP - Polyurethane air filter
TD - Differential fluid temperature management (two sensors)
BGP - Hot gas bypass for +/- 0.5 K temperature precision
- Agitator for fluid movement
- Non-standard paint/coating
- Satin AISI 304 stainless steel framework
- Design of higher cooling powers with dedicated framework
- Centrifugal fans for condensation air ducting

DIMENSIONS



Model		TCIA2		TCIA4		TCIA7	
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Rated Cooling Capacity*	W	12300	14600	16400	19400	17800	20450
Ambient temperature operating limits	°C	-5 - +45					
Settable fluid temperature range	°C	+15 / +25 water or emulsion max 5 cSt - 40°C +20 / +30 mineral oil 32 cSt - 40°C					
Temperature precision	K	+/- 1					
Refrigerant gas	HFC	R410A					
Minimum fluid flow rate (emulsion/oil)	l/min	80 - 120					
Minimum volume in tank (emulsion/oil)	l.	150 - 250					
Power supply							
Supply voltage	V ph Hz	400/460V (+/-10%) 3ph 50/60Hz					
Secondary supply voltage	V	230V-24V AC					
Digital thermostat		TX110					
Compressor							
Compressor type		Scroll					
Quantity - Number of circuits	no.	1 - 1					
Max. power draw	kW	3.1	3.5	4.0	4.3	4.1	4.7
Max. current draw	A	9.8	9.6	12.1	11.8	12.5	12.1
Axial Fan							
Fan type		Axial					
Quantity	no.	2					
Air flow rate	m_3/h	4300					
Max. power draw	kW	0.4	0.55	0.4	0.55	0.4	0.55
Max. current draw	A	1.7	2.2	1.7	2.2	1.7	2.2
Net weight (approximate)***	kg	215		215		215	
Width - Depth - Height	mm	549 - 1002 - 1636					
Sound pressure level**	dB(A)	60		60		60	
IP rating	IP	44					

* Data relates to operation under the following conditions: 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 and axial fans.

The electrical data refer to cos φ = 0.8.

Correction factors for calculating the cooling power								
Ambient Temperature	Emulsion	Oil	Cooling capacity					
32	15	20	9471	11242	12628	15154	13706	15747
	20	25	11193	13286	14924	17909	16198	18610
	25	30	12300	14600	16400	19400	17800	20450
37	15	20	8881	10541	11841	14209	12852	14765
	20	25	10633	12622	14178	17014	15388	17679
	25	30	11685	13870	15580	18696	16910	19428
42	15	20	8334	9893	11113	13336	12061	13857
	20	25	9850	11692	13133	15760	14254	16376
	25	30	10824	12848	14432	17318	15664	17996