

Industrial chillers for contaminated or dirty fluids

COOLING CAPACITY

2900 - 3600 - 4550 - 6000 - 8100 - 9550 - 10900 W



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, expansion valve, high-pressure pressure switch, R134a refrigerant.

EVAPORATOR

Tube bundle heat exchanger (allows for inspection).

AIR CONDENSER

Microchannel condensing coil, complete with safety grille.

AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille.

LIQUID CIRCUIT

Non-ferrous liquid circuit composed of peripheral electric pump, storage tank made of plastic material complete with integrated visual level indicator, 0-10 bar pressure gauge, protective flow switch, regulation sensor.

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.

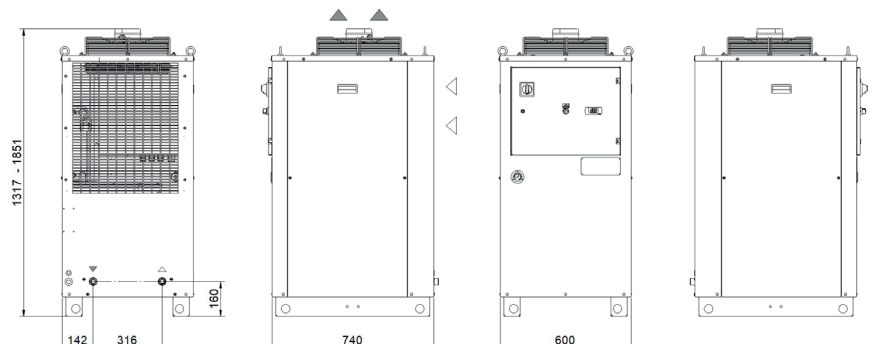
PAINT/COATING

Standard colour: RAL 7035 textured.

MAIN OPTIONS

- 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 - Electrical panel and UL-certified components
- HIGH-pressure pump version "H" - 5 bar, version "R" - 7 bar.
- Outdoor installation options

DIMENSIONS



Model		TAU29	TAU37	TAU46	TAU57	TAU76	TAU93	TAUA0	
Rated Cooling Capacity*	W	2900	3600	4550	6000	8100	9550	10900	
Ambient temperature operating limits	°C	+15 - +45							
Settable fluid temperature range	°C	+25 - +40							
Fluid type		Emulsion 90% water - 10% oil							
Temperature precision	K	+/-2							
Refrigerant gas	HFC	R134a							
Power supply									
Supply voltage	V ph Hz	400V (+/-10%) 3ph 50Hz							
Secondary supply voltage	V	230 V AC							
Digital thermostat		TX110							
Compressor									
Compressor type		Reciprocating				Scroll			
Quantity - Number of circuits	no.	1 - 1							
Nominal power draw	kW	0.78	1.16	1.42	2.42	2.21	2.60	2.73	
Axial Fan									
Fan type		Axial							
Quantity	no.	1							
Air flow rate	m³/h	1550	1550	1800	1800	3150	3350	4400	
Centrifugal Fan (optional)									
Fan type		Centrifugal							
Quantity	no.	1							
Air flow rate	m³/h	2100 - 2400	2100 - 2400	2100 - 2400	2100 - 2400	2100 - 2400	2100 - 2400	2100 - 2400	
Available head	Pa	250							
Standard Pump									
Pump type		Centrifugal							
Quantity	no.	1							
Nominal/max fluid flow rate	l/min	6.5	8	10	13.5	18	21	24	
Nominal available head	bar	3	2.9	2.8	2.7	3.1	3	2.8	
Storage tank capacity	l	50							
IN/OUT liquid connections	inch	3/4"							
Net weight (approximate)***	kg	151	153	155	160	165	170	175	
Width - Depth	mm	600 - 740							
Height	mm	1317				1851			
Sound pressure level**	dB(A)	57	57	57	57	57	57	57	
* Data relates to operation under the following conditions: inlet/outlet temp. 37/30°C, 90% water - 10% oil emulsion, ambient temperature 32°C.									
** Sound pressure level, measured in a free parallelepiped field at a distance of 1 m, per ISO 3746.									
*** Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans.									
The electrical data refer to cos φ = 0.8.									

Correction factors for calculating the cooling power												
90% water - 10% ISO VG 32 oil emulsion outlet temperature	Fo	°C	20	25	30	35						
		factor	0.59	0.77	1	1.22						
Ambient Temperature	Fa	°C				15	20	25	32	32	40	45
		factor				1.26	1.2	1.11	1	0.95	0.87	0.8
Oil type	Ft	%	water	90% water -10% ISO VG 32 oil		70% water -30% ISO VG 32 oil		40% water -60% ISO VG 32 oil		100% ISO VG 32		
		factor	1.05	1		0.9		0.74		0.53		
Cooling Power = Nominal Cooling Power x Fo x Fa x Ft												