

Industrial water chillers

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 or Scroll compressor, cooled by the refrigerant, complete with thermal cut-out.

REFRIGERATION CIRCUIT

Complete with charging port, drier filter, expansion or thermostatic valve, high-pressure pressure switch, R134a refrigerant.

EVAPORATOR

Brazed stainless-steel plate model.

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 centrifugal 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, 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 liquid circuit. An on-off contact allows the machine to be switched on remotely (pump included). Control disconnect switch for switching on the machine.

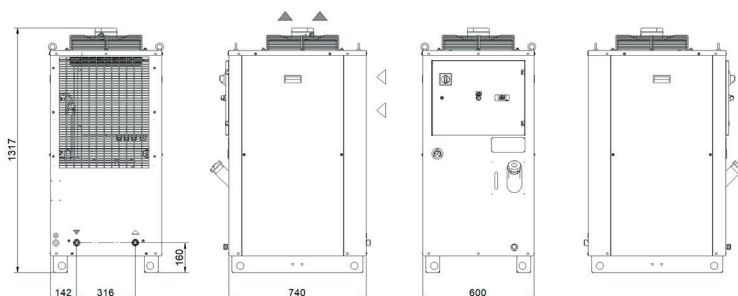
PAINT/COATING

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
- LS - Liquid circuit for laser application
- UL1 - Electrical panel and UL-certified components
- LTW - Water temperature range -10/+5 °C
- HIGH-pressure pump version "H" - 5 bar, version "R" - 7 bar.
- Outdoor installation options

DIMENSIONS



Model		TAL29	TAL37	TAL46	TAL57	TAL76	TAL93	TALAO	
Rated Cooling Capacity*	W	2900	3600	4550	6000	8100	9550	10900	
Ambient temperature operating limits	°C	+15 - +45							
Settable fluid temperature range	°C	+8 - +25							
Fluid type		Water							
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	m ³ /h	1550	1550	1800	1800	3150	3350	4400	
Centrifugal Fan (optional)									
Fan type		Centrifugal							
Quantity	no.	1							
Air flow rate	m ³ /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	8 - 40	10 - 40	12.5 - 40	16 - 40	21 - 70	26 - 70	31.5 - 70	
Nominal available head	bar	3	2.9	2.8	2.7	3.1	3	2.8	
High-Pressure Pump (optional)									
Pump type		Centrifugal							
Quantity	no.	1							
Nominal available head	bar	5.1	4.9	4.8	4.6	5.5	5.3	5.1	
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 - Height	mm	600 - 740 - 1317							
Sound pressure level**	dB(A)	57	57	57	57	57	57	57	

* Data relates to operation under the following conditions: inlet/outlet temp. 20/15°C, water without glycol, 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													
Water outlet temperature	Fw	°C					8	10	15	20	25		
		factor					0.69	0.77	1	1.22	1.44		
Ambient Temperature	Fa	°C					15	20	25	32	35	40	45
		factor					1.26	1.2	1.11	1	0.95	0.87	0.80
Percentage glycol by weight	Fg	%	0	10	15	20	25	30	35	40			
		factor	1	0.96	0.95	0.94	0.93	0.91	0.90	0.88			
Cooling power = Nominal cooling power x Fw x Fa x Fg													