C-NEXT

TAU24-37 Size 1

Industrial chillers for contaminated or dirty fluids

COOLING CAPACITY	2300/2700 - 3600/4200 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, or, 0-10 bar pressure gauge, protective flow switch, regulation sensor.

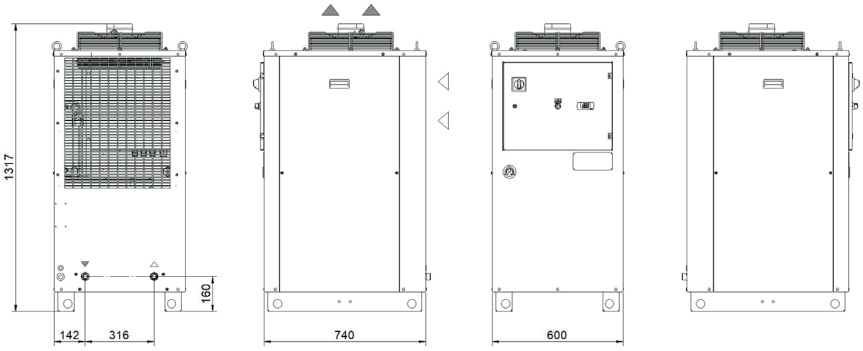
ELECTRICAL PANEL
With main disconnect switch, fused motor protection.

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		TAU24		TAU37	
		50Hz	60Hz	50Hz	60Hz
Rated Cooling Capacity*	W	2300	2700	3600	4200
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	230V (+/-10%) 1ph 50 or 60Hz			
Secondary supply voltage	V	230 V AC			
Digital thermostat		TX110			
Compressor					
Compressor type		Reciprocating			
Quantity - Number of circuits	no.	1 - 1			
Nominal power draw	kW	0.84	1.04	1.16	1.5
Axial Fan					
Fan type		Axial			
Quantity	no.	1			
Air flow rate	m3/h	1250 - 1650		1550 - 2050	
Centrifugal Fan (optional)					
Fan type		Centrifugal			
Quantity	no.	1			
Air flow rate	m3/h	2100 - 2400		2100 - 2400	
Available head	Pa	250			
Standard Pump					
Pump type		Centrifugal			
Quantity	no.	1			
Nominal/max fluid flow rate	l/min	5		8	
Nominal available head	bar	3	3	3	3
Storage tank capacity	l	50			
IN/OUT liquid connections	inch	3/4"			
Net weight (approximate)***	kg	151		153	
Width - Depth - Height	mm	600 - 740 - 1317			
Sound pressure level**	dB(A)	57	60	57	60

* 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												