





Air-cooled process chillers with scroll compressors - R449A. Nominal cooling capacity 4,5 - 52,5 kW



High performances, low temperatures.

The TAEevo LWT is a specific range designed for process applications with low temperature of the glycolate fluid (up to -24 °C). If equipped with integrated pump, simplifies the installation operations and ensures a compact system. The innovative evaporator-in tank configuration ensures reduced ambient heat gain and a steady temperature of the process fluids. The use of components sourced from premium manufacturers and extensive factory testing of all units make for highest reliability levels, minimising the risks of unplanned stoppages and increasing productivity levels. An extensive range of accessories, allow TAEevo LWT to be personalised to cover a wide variety of industrial applications.



Benefits

- The unique evaporator-in-tank configuration has been specifically designed for process cooling applications. It allows to optimize the heat exchange and minimize the pressure drops also with contaminated process fluids;
- Extended operating limits: Tw in max = 0 °C; Tw out min = -24 °C; Tamb max = +42 °C; Tamb min = -5 °C:
- All the TAEevo LWT models already meet the limits set by the Tier 2 of ErP regulation for medium temperature process chillers (SEPR MT - 07/2018);
- The oversized hydraulic tank is standard and is able to compensate for the imbalances caused by sudden changes in load demand from the user;
- IP54 electrical protection rate makes TAEevo LWT suitable for outdoor installation: • Extensive range of accessories and kits, allow each unit to match the specific customer requirements:
- Cooling circuit suitable both for atmospheric and pressurized hydraulic circuits (up to 6 barg).

Options

- Hydraulic circuit configurations: SP (without pump) and P3 pump (3 barg optional);
- Version with painted fins against corrosion;
- Non Ferrous option.

Kits

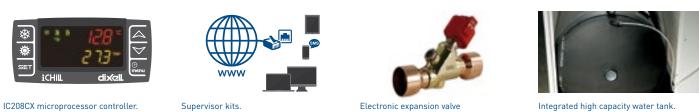
- Manual filling tank kit: suitable for hydraulic circuits at atmospheric pressure;
- Remote ON/OFF kit and remote control kit (max 150 m):
- Remote control kit VICX620 display LED, VGI890 display LCD (max 150 m);
- Adapter kit for remote control VICX620 and VGI890 (necessary for mod. 381-802);
- Supervisor kits: RS485 ModBus, xWEB300D EVO;
- Modularity kit: up to 5 units in MASTER/SLAVE.

Standard features

- Refrigerant R449A:
- Hermetic Scroll compressors;
- · Electronic expansion valve;
- · High-efficiency finned coil evaporator with copper tubes and aluminum fins, installed inside the water storage tank:
- Axial fans with die-cast aluminum/plastic crescent-shaped blades. The fans speed is electronically regulated (phase cut-off regulation);
- Air-cooled condensers (copper tubes /aluminium fins). Air filter standard;
- Storage tank (design pressure 6 barg) complete with filling/drain valves;
- Internal hydraulic bypass between the inlet and outlet connections:
- Electronic level sensor with water conductivity function;
- High and low refrigerant pressure switches;
- Refrigerant pressure gauges;
- Parametric microprocessor control IC208CX;
- · Electrical board protection rating: IP54; Phase monitor:
- Compressor crankcase heater.

Versions

Version for low environmental temperature -20 °C.



IC208CX microproces	sor controller.
---------------------	-----------------

Nominal cooling capacity (1)

Total absorbed power (1)

TAEevo LWT

SEPR MT (2)

Power supply Noise level 50 Hz (3)

Working weight (4)

Tank volume

EER (1)

Width

Depth

Height

Supervisor kits

kW

kW

V/Ph/Hz

db(A)

mm

mm

mm

Kg

ι

Electronic expansion valve

351

17.99

15,11

1,19

2.87

58.0

866

2250

2054

1028

350

2"

381

21,17

19.40

1,09

2,63

400±10% / 3-PE / 50

60,3

1150

2790

2090

1390

410

401

25,26

22,25

1,14

2.81

61,7

1150

2790

2090

1414

410

502

35,23

29,54

1,19

3,00

61.5

1255

3298

2119

1760

500

602

41,31

36,41

1,13

2,86

61.5

1255

3298

2119

1772

500

802

52.50

43.90

1,20

2,99

62.6

1250

3535

2151

2255

678

3'

1 1/2 1 1/2' 2" 2 1/2 2 1/2 2 1/2 2 1/2 Evaporator water connections Rp Data declared according to UNI EN 14511:2018. All data refers to standard units without accessories/options which require an electrical feeding source and in nominal working conditions. The data declared in this document anticipate those that will be published in the next Eurovent release.

251

14,11

11,01

1,28

3,00

56.3

866

2250

2054

951

350

121

9,30

7.95

1,17

2,63

54.1

761

1862

1437

641

255

(1) Evaporator water inlet/outlet temperature -15/-20 °C with 50% ethylene glycol, external air temperature 35 °C;

081

4.54

4,15

1,09

2,59

53.6

761

1862

1437

455

140

[2] Data declared in compliance with the European Regulation (EU) 2015/1095 with regard to ecodesign requirements for cooling products and medium temperature process chillers;

(3) Average value obtained in free field on a reflective surface at a distance of 10 m from the condensate side of the machine and at a height of 1.6 m from the unit support base. Values with tolerance ± 2 dB. The sound levels refer to operation of the unit under full load in nominal conditions;

(4) The weight refers to the 50 Hz version, without accessories/options.

The listed noise levels, weights and dimensions refer to base units with no options fitted









M.T.A. S.p.A. **Business office** Viale Spagna, 8 - ZI 35020 Tribano (PD) - Italy Tel. +39 049 9588611 Fax +39 049 9588612 info@mta-it.com www.mta-it.com



Cooling, conditioning, purifying.