



# TAEvo LWT



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



## High performances, low temperatures.

The TAEvo LWT is a specific range designed for process applications with low temperature of the glycolate fluid (up to  $-24\text{ }^{\circ}\text{C}$ ). 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 TAEvo LWT to be personalised to cover a wide variety of industrial applications.



Cooling, conditioning, purifying.

## 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 TAEvo 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 TAEvo 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 microprocessor controller.



Supervisor kits.



Electronic expansion valve



Integrated high capacity water tank.

TAEvo LWT		081	121	251	351	381	401	502	602	802
Nominal cooling capacity [1]	kW	4,54	9,30	14,11	17,99	21,17	25,26	35,23	41,31	52,50
Total absorbed power [1]	kW	4,15	7,95	11,01	15,11	19,40	22,25	29,54	36,41	43,90
EER [1]		1,09	1,17	1,28	1,19	1,09	1,14	1,19	1,13	1,20
SEPR MT [2]		2,59	2,63	3,00	2,87	2,63	2,81	3,00	2,86	2,99
Power supply	V/Ph/Hz	400±10% / 3-PE / 50								
Noise level 50 Hz [3]	db(A)	53,6	54,1	56,3	58,0	60,3	61,7	61,5	61,5	62,6
Width	mm	761	761	866	866	1150	1150	1255	1255	1250
Depth	mm	1862	1862	2250	2250	2790	2790	3298	3298	3535
Height	mm	1437	1437	2054	2054	2090	2090	2119	2119	2151
Working weight [4]	Kg	455	641	951	1028	1390	1414	1760	1772	2255
Tank volume	l	140	255	350	350	410	410	500	500	678
Evaporator water connections	Rp	1 1/2"	1 1/2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	3"

**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.**

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

[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.



MTA is ISO9001 certified, a sign of its commitment to complete customer satisfaction.



MTA products comply with European safety directives, as recognised by the CE symbol.



EAC Declaration

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