




PROCESS COOLING
SOLUTIONS

TAE^{evn} PLUS

Air-cooled industrial chillers for high ambient temperature
with Scroll compressors and R134a refrigerant.

Cooling capacity 10 - 140 kW

R134a 

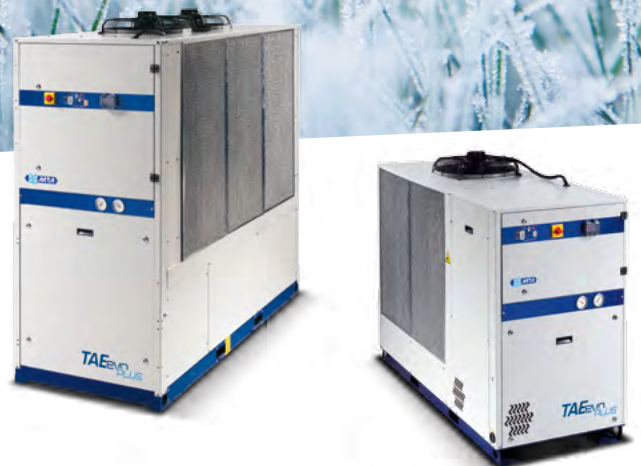
50°C 
MAX AMBIENT
TEMPERATURE



Air cooled chillers for high ambient temperatures.

The TAEvo Plus air cooled chillers, specifically designed for use in industrial applications, are compact units equipped, as standard, with an internal storage tank and pump, offering a tried and tested solution that has received worldwide acclaim.

The innovative evaporator-intank 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, coupled with operating limits among the most generous available on the market, allow TAEvo Plus to be personalised to a variety of industrial applications.



Cooling, conditioning, purifying.

Benefits

- The unique evaporator-in-tank configuration has been specifically designed for process cooling applications. It allows high flow rates with low pressure drops;
- Scroll compressors ensure high efficiency, excellent performance and elevated energy savings;
- Extended operating limits: Tw in max = +35 °C; Tw out min = 0 °C; Tamb max = +50 °C; Tamb min = 0 °C;
- R134a non ozone depleting refrigerant increase the performance thanks its outstanding heat conductivity;
- 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 Plus suitable for outdoor installation;
- For the mod.031-121 dual frequency as standard 400V/3/50 Hz - 460V/3/60 Hz;
- 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);
- Comprehensive safety equipment, including phase monitor pressure switches, antifreeze sensors, level sensors, crankcase heaters and an internal hydraulic bypass circuit.

Versions

- Non Ferrous Version (mod. 031-301).

Standard features

- Refrigerant R134a;
- Hermetic Scroll compressors;
- 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;
- Oversized air-cooled condensers (copper tubes /aluminium fins) with air filters as standard;
- Storage tank (design pressure 6 barg) complete with pump, filling/drain valve, pressure gauge;
- 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;
- Protection rating: IP54;
- Dynamic set point function (ambient temperature sensor standard);
- Phase monitor;
- Compressor crankcase heater.

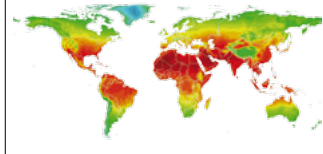
Main options and kit

- P3, P5 pumps;
- Version with painted fins against corrosion;
- EC brushless axial fans with high efficiency;
- Anti-freezing heaters (on tank and pumps);
- Electronic expansion valve (mod. 081 - 802);
- Manual filling tank kit: suitable for hydraulic circuits at atmospheric pressure;
- Automatic filling kit: suitable for pressurized hydraulic circuits (up to 6 barg);
- Remote ON/OFF kit and remote control kit (max 150 m);
- Remote control kit VICX620 display LED, VG1890 display LCD (max 150 m);
- Adapter kit for remote control display VICX620 and VG1890 (necessary for mod. 381 - 802)
- Supervisor kits: RS485 ModBus, xWEB300D;
- Automatic hydraulic bypass kit external (mod. 015-602).

IC208CX sophisticated microprocessor connectable to supervisor systems through RS485 or xWEB300D kits.



The refrigerant R134a and the condensers with high surface allow a reliable operation also at high temperatures up to +50 °C.



Standard Pump P3 (3 barg); optional P5 pump (5 barg). Available version with P3 pump and hydraulic circuit suitable for open storage tank systems.



The integral yet removable high capacity water tank ensures very precise water temperature control.



TAEvo Plus		031	051	081	121	201	301	401	602	802	
Cooling capacity 50/60 Hz (1)	kW	10,3/11,9	15,2/17,6	22,0/25,3	31,3/35,7	42,6/-	55,2/-	73,2/-	113,7/-	140,6/-	
Total absorbed power 50/60 Hz (1)	kW	2,26/2,97	3,12/3,92	4,52/5,63	6,87/8,63	8,96/-	12,0/-	16,3/-	24,4/-	32,4/-	
Cooling capacity 50/60 Hz (2)	kW	7,33/8,51	10,8/12,6	15,9/18,4	22,6/26,0	31,0/-	39,9/-	56,1/-	81,5/-	107,8/-	
Total absorbed power 50/60 Hz (2)	kW	2,53/3,29	3,48/4,36	5,03/6,26	7,59/9,52	10,0/-	13,3/-	18,4/-	27,0/-	36,6/-	
Power supply	V/Ph/Hz	400/460 ± 10% / 3 - PE / 50/60					400 ± 10% / 3 - PE / 50				
Noise level (50/60 Hz) (*)	db(A)	52,3/55,3	52,3/55,3	53,6/56,6	55,1/58,1	56,3/-	57,5/-	62,7/-	62,5/-	64,6/-	
Width	mm	660	660	761	761	866	866	1150	1255	1251	
Depth	mm	1315	1315	1862	1862	2250	2250	2793	3298	3545	
Height	mm	1373	1373	1437	1437	2054	2054	2090	2119	2151	
Working weight (P3 pump)	Kg	324	353	488	654	946	1045	1397	1741	2276	
Tank volume	l	115	115	140	255	350	350	410	500	678	
Tank water connections	Rp	1"	1"	1 1/2"	1 1/2"	2"	2"	2 1/2"	2 1/2"	3"	

All data refers to standard units at the following nominal conditions:

(1) Evaporator water inlet/outlet temperature 20/15 °C, external air temperature 25 °C.

(2) Evaporator water inlet/outlet temperature 12/7 °C, external air temperature 35 °C.

(*) Sound pressure level in free field at 10 m from unit condenser side and 1,6 m from ground.

Data declared according to UNI EN 14511:2013.



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.



MTA participates in the E.C.C. programme for LCP-HP. Certified products are listed on: www.eurovent-certification.com
Eurovent Certification applied to the units:
- Air/Water up to 600 kW
- Water/Water up to 1500 kW



EAC Declaration

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