



# TAE<sub>ev</sub><sup>in</sup> TECH MINI

Air-cooled industrial chillers.

Nominal cooling capacity 1,8 – 4,4 kW



R134a

R410A



## New generation of compact liquid chillers for industrial processes.

Most of the industrial processes today has a growing need for competitive technical solutions suitable to ensure greater productivity, meeting the high quality requirements of the final product and environment friendly. The reliability, the compactness and flexibility of the cooling systems significantly reduce the operating costs and the environmental impact of the entire plant. The new generation of liquid chillers TAEevo Tech MINI has been specifically designed for process cooling water and antifreeze mixtures, ensuring superior reliability, minimum dimensions and high energy efficiency.

The new evaporator with finned coil immersed in the tank is designed to ensure the maximum level of efficiency and is able to reduce ambient heat gain, ensuring an excellent stability of the temperature of the process fluid too. All the units are manufactured according to ISO 9001, 14001 and Eurovent accreditation standards, ensuring the highest levels of performance and quality.



Cooling, conditioning, purifying.

## Benefits

- The unique evaporator-in-tank configuration has been specifically designed for process cooling applications. It allows high water flow rates with low pressure drops and ensures a reliable operation even in demanding applications;
- Hydraulic circuit Non Ferrous: it allows to treat even fluids aggressive to carbon steel, maintaining maximum quality and cleanliness of the process fluid;
- All the TAEvo TECH MINI models already meet the limits set by the ErP for SEPR HT (Tier 2 01/01/2021);
- Easy installation thanks to their compact dimensions. The robust structure with eyebolts allows lifting the unit by means of straps with hooks;
- Easy maintenance: the rational layout of the hydraulic components, the simplicity of the refrigerant circuit and the numbering of electric cables simplify the operations of checking and maintenance, which can also be performed with running unit;
- The disassembly of the condenser air filter for the periodic cleaning operations is facilitated thanks to the fastening system interlocking;
- Thanks to the dual frequency design, the M03 model is ready for 50 Hz and 60 Hz applications;
- Extended operating limits: temperature range of the fluid from 0 °C up to + 30 °C. Max ambient temperature up to + 45 °C; ambient temperature min. of +5 °C.

## Options

- Close temperature control version (mod. M08-M10): this version offers extremely precise regulation of the outlet water temperature (hysteresis  $\pm 0,5$  °C);
- LWT brine version: suitable for low outlet water temperature (mod. M08-M10): [Tw out min=-5 °C];
- P5 Pump (mod. M08-M10): peripheral non ferrous pump (5 barg head pressure);
- Tank level switch (mod. M08-M10);
- Multipole industrial connector (mod. M08-M10);
- Hydraulic disconnect system (mod. M08-M10);
- Stainless steel frame.

## Standard features

- Refrigerant fluids (ODP=0) R134a (mod. M03) R410A (mod. M05-10);
- Hermetic rotary compressors;
- High efficiency finned coil evaporator Installed inside the storage tank and featuring copper tubes and aluminum fins;
- Water buffer tank in polyethylene equipped with a drain valve, a water filling and overflow connections and a visual level indicator;
- P3 Pump (mod. M03-M10): peripheral non ferrous pump (3 barg head pressure);
- Axial fans equipped with sickle-shaped galvanized steel sheet blades equipped with thermal protection and safety guard;
- Air-cooled condenser with copper tubes and aluminum fins with high efficiency. The heat exchanger is protected by metal air filters;
- Atmospheric pressure hydraulic circuit built with non-ferrous materials equipped with a pressure gauge 0-6 bar;
- Calibrated hydraulic bypass;
- All units can be used with mixtures of water and ethylene glycol/propylene up to 30%;
- High pressure switch with manual reset (mod. M05-M10);
- Pressure connections for checks and maintenance;
- Digital microprocessor XR60CX;
- Green/red light on the frontal panel to signal the existence/absence of alarms (mod. M08-10);
- Lamination device: capillary or calibrated orifice;
- Thermostatic expansion valve (Close temperature control version / Brine version);
- Power supply: 230/1/50-60Hz (M03); 230/1/50Hz (M05-10);
- Protection grade IP33.

## Kits

- Water filter kit;
- Automatic hydraulic by-pass kit;
- Antivibration mountings kit;
- Dynamic set point kit;
- Wheels kit.



Hydraulic circuit Non Ferrous maintains maximum cleanliness of the process fluid.



Innovative finned coil evaporator with high efficiency.



TAEvo Tech MINI mod. 03 dual frequency 50/60 Hz.



XR60CX microprocessor controller features an integrated display with icons.

TAEvo Tech MINI		03	05	08	10
		50 Hz / 60 Hz			
Nominal Cooling capacity (1) ▼	kW	1,22 / 1,23	1,84	2,33	2,98
Total absorbed power (1) ▼	kW	0,46 / 0,55	0,70	0,89	1,17
Nominal power P3 pump optional (3 barg)	kW	0,18	0,37	0,37	0,37
EER (1) ▼	-	2,67 / 2,23	2,65	2,61	2,55
Nominal Cooling capacity (2)	kW	1,76 / 1,80	2,70	3,43	4,43
Total absorbed power (2)	kW	0,40 / 0,50	0,60	0,77	1,01
EER (2)	-	4,38 / 3,59	4,47	4,47	4,38
SEPR HT (3) ▼	-	5,05	5,10	5,12	5,00
Power supply	V/Ph/Hz	230 $\pm$ 10% / 1 - PE / 50-60			
Sound power level (4) ▼	db(A)	74 / 75	75	75	75
Width	mm	486	486	486	486
Depth	mm	660	660	660	660
Height	mm	623	623	876	876
Working weight without pump	kg	63	65	91	94
Working weight with P3 pump optional (3 barg)	kg	68	71	97	100
Tank volume	l	15	15	22	22
Evaporator water connections	Rp	1/2"	1/2"	1/2"	1/2"

**Data declared according to UNI EN 14511:2018. All data refers to standard units without accessories/options which require an electrical feeding source, without pump and in nominal working conditions. The listed noise levels, weights and dimensions refer to base units with P3 pump.**

(1) Evaporator water inlet/outlet temperature 12/7 °C, external air temperature 35 °C, total absorbed power of the compressor and fan;

(2) Evaporator water inlet/outlet temperature 20/15 °C, external air temperature 25 °C, total absorbed power of the compressor and fan;

(3) Data declared in compliance with the European Regulation (EU) 2016/2281 with regard to ecodesign requirements for cooling products and high temperature process chillers;

(4) Sound power on the basis of measurements made in compliance with ISO 3744.

▼ Eurovent certified data.



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](http://www.eurovent-certification.com)  
Eurovent Certification applies to the units:  
- Air/Water up to 600 kW  
- Water/Water up to 1500 kW



EAC Declaration

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