TAEevo TECH MINI

ErP

R134a

R410A

Air-cooled process chillers with atmospheric in-tank evaporator.

Nominal cooling capacity 1,9 – 4,4 kW

The compact 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 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.

MTA®

Benefits

- The unique in-tank evaporator 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 TAEevo 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;
- 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

- Temperature Close Control version: outlet water temperature accuracy ±0,5 °C;
- LWT version: suitable for low outlet water temperature (Tw out min = -5 °C);
- P5 Pump: peripheral non ferrous pump (5 barg head pressure);
- Tank level switch;
- Multipole industrial connector;
- Hydraulic disconnect system;
- 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: 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 aluminium microchannel condenser with protection coating (mod. M03) and a removable metal mesh filter;
- 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;
- 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.

Robust structure with eyebolts.

XR60CX microprocessor controller features an integrated display with icons.

TAEevo Tech		M03	M05	M08	M10
Nominal cooling capacity (1) ▼	kW	1,29	2,00	2,51	3,03
EER (1) ▼	-	2,81	2,66	2,85	2,60
SEPR HT (2) ▼	-	5,02	5,04	5,11	5,00
Nominal cooling capacity (3)	kW	1,88	2,92	3,52	4,42
EER (3)	-	4,60	4,47	4,67	4,36
Power supply	V/ph/Hz	230 ± 10% / 1-PE / 50-60	230 ± 10% / 1-PE / 50		
Circuits / Compressors	n°	1 / 1	1 / 1	1 / 1	1 / 1
Refrigerant	-	R134a	R410A	R410A	R410A
Sound Power (4) ▼	dB(A)	74	75	75	75
Lenght	mm	690	690	690	690
Width	mm	486	486	486	486
Height	mm	622	622	872	872
Operating weight (5)	kg	103	111	149	150
Tank volume	l	15	15	22	22
Evaporator water connections	Rp-DN	1/2''	1/2''	1/2''	1/2''

Data declared according to UNI EN 14511, and they refer to units without options which require an electrical feeding source and in nominal working conditions.
(1) Evaporator water inlet/outlet temperature 12/7 °C, external air temperature 35 °C;
(2) Data declared in compliance with the European Regulation (EU) 2016/2281 with regard to ecodesign requirements for cooling products and high temperature process chillers;
(3) Evaporator water inlet/outlet temperature 20/15 °C, external air temperature 25 °C;
(4) Sound power is determined on the basis of measurements taken in accordance with the standard ISO 3744;
(5) Operating weight refers to the unit without options but is considering a P3 pump.
▼ 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 partecipates 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

www.mta-it.com

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