



PHOENIX G



Air cooled water chillers
featuring semi-hermetic screw compressors with R513A.
Nominal cooling capacity 375 - 1908 kW



Accuracy and capacity with low GWP.

The PHOENIX G series has been developed to optimize the capacities and qualities of refrigerant R513A, green alternative with low GWP. They find their natural application in situations where, for most of the year, the thermal request is lower by the load which the unit was dimensioned.

Thanks to Smart Stepless regulation according to the exact effective cooling load requested by the system, PHOENIX G achieves SEPR HT seasonal efficiency ratio compliant with the ErP regulation, as well as very high nominal load EER ratios.



Cooling, conditioning, purifying.

Benefits

- Refrigerant R513A with low GWP;
- High seasonal energy efficiency (SEPR HT);
- The controller provides maximum flexibility to adapt to any operating condition, thanks to the Smart Stepless algorithm specifically developed by MTA;
- High reliability and continuity of operation (up to 2 screw compressors and "Smart Stepless" algorithm);
- Extended operating limits;
- Complete safety equipment, including phase monitor, pressure switches, differential pressure switch, crankcase heaters, compressors operating envelope and oil level;
- Wide range of accessories and kits for custom solutions.

Options

- Low ambient temperature version (down to -20 °C);
- Single pump with low or medium head pressure;
- Twin water pump with low head pressure;
- Water accumulation tank (up to model 6002);
- Antifreeze heaters for heat exchangers and hydraulic module (if included);
- Suction compressors valves;
- High efficiency EC brushless fans (base equipment for SSN configuration);
- Microchannels condenser coils;
- Protection coating for condenser coils, suitable for installation in aggressive environments;
- Metallic mesh filters for condenser coils protection;
- Soft-starter for compressors;
- Soundproof housing for compressors (for HE configuration);
- Total heat recovery (up to model 6002).

Standard features

- Refrigerant R513A;
- High efficiency screw compressors with stepless regulation optimized for R513A refrigerant gas;
- Crankcase heater compressor and phase-monitor;
- Air-cooled condensers (copper tubes/aluminium fins) with transverse "V" shape;
- Axial fans configured with protective grilles and sickled bladed with die-cast aluminium airfoil profiled;
- Electronic expansion valve;
- Shell & tube evaporator optimized for R513A;
- Victaulic hydraulic connections ki (supplied as standard with each unit);
- Electrical cabinet protection rating IP54;
- xDRIVE controller programmed with software specifically developed by MTA; high computing capacity and user friendly graphic interface; connectivity and supervision via Ethernet, USB, RS485 Modbus.

Acoustic configurations

- HE - basic acoustic configuration;
- SHE - low noise acoustic configuration;
- SSN - very low noise acoustic configuration.

Kits

- Antivibration mountings kit;
- Metallic mesh filters for condenser coils protection;
- Replicated remote user terminal kit;
- Supervision system xWEB300D EVO;
- Modularity kit for xDRIVE (master/slave from 3 to 7 units).

| PNG2 model | 2501 | | | 3201 | | | 3601 | | | 4302 | | | 5002 | | | 5602 | | | 6002 | | |
|------------------------------|---------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|
| | HE | SHE | SSN | HE | SHE | SSN | HE | SHE | SSN | HE | SHE | SSN | HE | SHE | SSN | HE | SHE | SSN | HE | SHE | SSN |
| Nominal cooling capacity (1) | kW | | | | | | | | | | | | | | | | | | | | |
| Total absorbed power (1) | kW | | | | | | | | | | | | | | | | | | | | |
| EER (2) | | | | | | | | | | | | | | | | | | | | | |
| SEPR HT (3) | | | | | | | | | | | | | | | | | | | | | |
| Max external air temp. (4) | °C | | | | | | | | | | | | | | | | | | | | |
| Power supply | V/Ph/Hz | | | | | | | | | | | | | | | | | | | | |
| Circuits / Compressors | N° | | | | | | | | | | | | | | | | | | | | |
| Sound power level (5) | dB(A) | | | | | | | | | | | | | | | | | | | | |
| Sound pressure level (6) | dB(A) | | | | | | | | | | | | | | | | | | | | |
| Width | mm | | | | | | | | | | | | | | | | | | | | |
| Depth | mm | | | | | | | | | | | | | | | | | | | | |
| Height | mm | | | | | | | | | | | | | | | | | | | | |
| Installed weight | kg | | | | | | | | | | | | | | | | | | | | |

| PNG2 model | 6402 | | | 7202 | | | 8402 | | | 9602 | | | 11202 | | | 12802 | | |
|------------------------------|---------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|-------|-----|-----|-------|-----|-----|
| | HE | SHE | SSN | HE | SHE | SSN | HE | SHE | SSN | HE | SHE | SSN | HE | SHE | SSN | HE | SHE | SSN |
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| Height | mm | | | | | | | | | | | | | | | | | |
| Installed weight | kg | | | | | | | | | | | | | | | | | |

Data declared according to UNI EN 14511:2018, referring to standard units without accessories/options and in nominal working conditions. Listed noise levels, dimensions and weights refer to base units without options.

- (1) Data referred to nominal conditions, ambient temperature 25 °C and evaporator water IN/OUT temperature 20/15 °C;
- (2) Data referred to full load operation and nominal conditions, ambient temperature 25 °C and evaporator water IN/OUT temperature 20/15 °C;
- (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) Data declared referred to cooling mode and outlet water temperature 15 °C;
- (5) Determined on the basis of measurements taken in accordance with the standard ISO 3744;
- (6) Average value obtained in free field on a reflective surface at a distance of 10 m from the external side of the electrical panel of machine and at 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.



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. Certification applied to the units: - Air/Water up to 600 kW - Water/Water up to 1500 kW

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