



iPHOENIX G



Air cooled water chillers featuring semi-hermetic variable-speed inverter screw compressors with R513A.
Nominal cooling capacity 382 - 1945 kW



The low GWP inverter solution

iPHOENIX G features variable-speed inverter technology with excellent efficiency at partial loads, aligned with SEPR HT Tier 2 seasonal efficiency indexes in compliance with ErP. Refrigerant R513A, a low GWP green alternative, is applied throughout, within a robust and reliable package featuring highest quality components.



Cooling, conditioning, purifying.

Benefits

- Refrigerant R513A with low GWP;
- High seasonal energy efficiency (SEPR HT);
- The variable-speed inverter technology and the Step regulation ensure maximum flexibility, adapting capacity to all operating conditions;
- Extended operating limits;
- Complete safety equipment, including phase monitor, pressure switches, differential pressure switch, crankcase heaters and monitoring of the operating envelope and compressor oil level;
- Wide range of options and kits for custom solutions.

Options

- Low ambient temperature version (down to -20 °C);
- Single pump with low or medium head pressure;
- Twin pumps with low or medium head pressure;
- Water accumulation tank (up to model 6002);
- Antifreeze heaters for heat exchangers and hydraulic module (if included);
- Compressor suction valves;
- AC axial fans (standard on HE);
- High efficiency EC brushless fans (standard on SSN – option on HE);
- Microchannel condenser coils;
- Protection coating for condenser coils, suitable for installation in aggressive environments;
- Metallic mesh filters for condenser coil protection;
- Compressors soundproof housing (for HE configuration);
- Complete soundproof housing (hydraulic and compressors compartment);
- Total heat recovery (up to model 6002).

Standard features

- Refrigerant R513A;
- Single refrigerant circuit with variable-speed inverter screw compressors (mod.2501-4001) and twin refrigerant circuits (1+i) with variable-speed inverter and Step regulation screw compressors (mod.4302-12202);
- Crankcase heater and phase-monitor;
- "V" shape air-cooled condensers (copper tubes/aluminium fins);
- Electronic expansion valve;
- Shell & tube evaporator optimized for R513A;
- Victaulic hydraulic connections kit (supplied as standard with each unit);
- Electrical cabinet protection rating IP54;
- Programmable controller with high computing capacity and user-friendly graphic interface; connectivity and supervision via Ethernet, USB and RS485 Modbus.

Acoustic configurations

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

Kits

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

iPNG2 Model		2501		3201		4001		4302		5002		5302		6002	
		HE	SSN	HE	SSN	HE	SSN	HE	SSN	HE	SSN	HE	SSN	HE	SSN
Nominal cooling capacity (1)	kW	381,69	340,48	495,61	440,13	638,11	566,72	670,99	598,77	798,79	712,42	843,70	748,11	981,01	874,24
Total absorbed power (1)	kW	95,19	101,54	124,88	132,00	157,43	168,26	165,68	178,64	186,08	198,73	201,75	217,87	228,24	241,73
EER (2)		4,01	3,35	3,97	3,33	4,05	3,37	4,05	3,35	4,29	3,58	4,18	3,43	4,30	3,62
SEPR HT (3)		5,69	5,99	5,58	5,74	5,83	6,12	5,64	5,88	5,85	6,20	5,80	6,04	5,90	6,22
Power supply	V/Ph/Hz	400 ± 10% / 3-PE / 50													
Circuits / Compressors	N°	1/1		1/1		1/1		2/2		2/2		2/2		2/2	
Sound power level (4)	dB(A)	97,8	90,3	98,5	91,0	100,0	92,6	98,5	91,0	99,5	91,9	99,6	92,0	100,1	92,5
Sound pressure level (5)	dB(A)	69,8	62,3	70,5	63,0	72,0	64,6	70,5	63,0	71,5	63,9	71,6	64,0	72,1	64,5
Width	mm	2190		2190		2190		2190		2190		2190		2190	
Depth	mm	3500		3500		4500		4500		5500		5500		6500	
Height	mm	2425		2425		2425		2425		2425		2425		2425	
Installed weight	kg	2361	2398	3149	3163	3771	3769	4328	4447	5284	5368	6473	5593	5509	6528

iPNG2 Model		6402		6802		8202		8602		10402		12202	
		HE	SSN	HE	SSN	HE	SSN	HE	SSN	HE	SSN	HE	SSN
Nominal cooling capacity (1)	kW	1032,12	917,73	1134,44	1015,37	1337,22	1196,67	1603,94	1447,22	1721,10	1541,02	1944,90	1740,94
Total absorbed power (1)	kW	247,51	266,35	260,69	276,40	318,09	344,28	396,30	429,41	412,99	445,99	481,46	509,11
EER (2)		4,17	3,45	4,35	3,67	4,20	3,48	4,05	3,37	4,17	3,46	4,04	3,42
SEPR HT (3)		5,58	5,74	5,71	5,98	5,75	5,99	5,69	5,90	5,89	6,09	5,83	6,05
Power supply	V/Ph/Hz	400 ± 10% / 3-PE / 50											
Circuits / Compressors	N°	2/2		2/2		2/2		2/2		2/2		2/2	
Sound power level (4)	dB(A)	100,4	92,8	100,5	92,9	101,8	94,2	101,1	93,5	101,6	93,9	102,6	95,0
Sound pressure level (5)	dB(A)	72,4	64,8	72,5	64,9	73,8	66,2	73,1	65,5	73,6	65,9	74,6	67,0
Width	mm	2190		2190		2190		2190		2190		2190	
Depth	mm	6500		7500		8500		9500		10500		11500	
Height	mm	2515		2515		2515		2515		2515		2515	
Installed weight	kg	6621	6676	7185	7211	8046	8044	8798	8767	9480	9420	10295	10206

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. The listed noise levels, weights and dimensions refer to base units with no options fitted.

- (1) Data referred to nominal conditions, external ambient temperature 25 °C and evaporator water temperature IN/OUT 20/15 °C;
- (2) Data referred to the full load functioning and nominal conditions, external ambient temperature 25 °C and evaporator water temperature IN/OUT 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) Determined on the basis of measurements taken in accordance with the standard ISO 3744;
- (5) 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 recognized by the CE symbol.



MTA participates in the E.C.C. programme for LCP-HR. 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

M.T.A. S.p.A.
Business Office
Viale Spagna, 8 - ZI
35020 Tribano (PD) - Italy
Tel. +39 049 9588611
Fax +39 049 9588612
info@mta-it.com
www.mta-it.com



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