HOCEAN TECH

ErP Tier 2 COMPLIANT

Water cooled heat pumps featuring rotary
or hermetic scroll compressors with R410A.
Nominal cooling capacity 4 – 175 kW
Nominal heating capacity 5 – 197 kW

The compact and low noise heat pump.

Space availability and noise levels are critical factors for indoor heat pumps. HOCEAN Tech heat pumps can be installed literally anywhere, allowing easy transport and installation. The fully enclosed and acoustically insulated design, with noise levels down to 30 dB(A), ensures unit operation is virtually imperceptible to occupants. The optional storage and pump module, positioned next to the heat pump, transforms HOCEAN Tech into a packaged full-feature system, including a single easy to use microprocessor for simplest operation.
The robust industrial design featuring renowned components, unloading function and wide operating limits combine to offer guaranteed operation in all conditions.

MTA®
Cooling, conditioning, purifying.

Advantages

- Lowest noise levels, down to 30 dB(A), for installation in residential surroundings;
- Extremely compact, allows installation just about anywhere;
- Operates with water outlet temperatures from 0 °C to 20 °C;
- Unloading function (model 200-600) allowing unit operation even in extreme conditions;
- Robust design with high quality components from renowned international suppliers, fruit of MTA's industrial background;
- Eurovent certified performance;
- Flexibility of use, sized for operation with water either from a tower or from a geothermal source;
- Easy installation and complete access to all components;
- Easy to use intuitive controller with dual icon display.

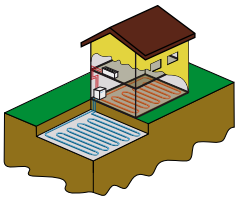
Standard features

- Hermetic rotary (018-030), scroll (040-150) and twin scroll (200-600) compressors;
- Single evaporator and brazed stainless steel plate condenser;
- Factory charged with non-freezing oil and refrigerant;
- IP22 electric protection rating;
- Extensive inspections and tests performed on all units;
- Environmentally friendly refrigerant R410A with zero ozone depletion potential;
- Compressor crankcase heater;
- Phase monitor against phase reversal.

Main options

- Storage and pump module with a geometrical configuration allowing the two units to be mounted together;
- High and low head pressure pumps;
- Noise reducing compressor housing;
- Condensing pressure control valve;
- Antivibration dampers;
- Soft starter;
- Remote user interface;
- RS485 MODBUS interface for connection to supervisor systems;
- xWEB300DEVO remote supervision, allowing local or remote monitoring via a web server or a GPRS.

Microprocessor controller with dual icon-based display.



Suitable for operation within geothermal applications.

Separate storage and pump module with two pump versions.

Allows installation in even the most limited spaces.

Models		018	022	030	040	050	070	100	130	150	200	230	280	350	400	500	600
Nominal cooling capacity (1)	kW	4,16	5,23	6,71	10,19	14,32	21,92	29,47	39,00	42,77	60,57	68,91	83,32	103,26	117,15	142,17	175,68
Total absorbed power (1)	kW	1,19	1,52	1,81	2,67	3,87	5,75	7,45	9,43	10,73	14,51	16,90	20,10	25,61	29,59	35,16	45,74
EER (2)		3,51	3,45	3,70	3,82	3,70	3,82	3,96	4,14	3,99	4,18	4,08	4,15	4,03	3,96	4,04	3,84
Nominal cooling capacity (3)	kW	4,70	5,86	7,68	11,49	16,11	24,61	33,10	43,82	48,04	68,09	77,50	93,67	115,96	131,42	159,41	196,87
Total absorbed power (3)	kW	1,00	1,33	1,60	2,23	3,33	4,86	6,36	8,03	9,18	12,43	14,46	17,21	22,03	25,33	30,27	39,59
EER (4)		4,69	4,41	4,81	5,16	4,84	5,06	5,20	5,45	5,23	5,48	5,36	5,44	5,26	5,19	5,27	4,97
Nominal heating capacity (5)	kW	4,89	6,13	7,47	11,80	16,46	25,16	33,31	43,70	48,93	69,53	79,35	95,71	119,22	130,12	158,41	197,02
Total absorbed power (5)	kW	1,39	1,76	2,11	3,45	4,73	7,28	9,13	11,67	13,18	18,50	21,45	25,53	32,27	36,58	43,13	55,78
COP (6)		3,53	3,47	3,54	3,42	3,48	3,46	3,65	3,75	3,71	3,76	3,70	3,75	3,69	3,56	3,67	3,53
SCOP (7)		3,68	3,62	3,74	3,84	3,76	3,77	3,99	4,11	4,07	4,58	4,49	4,58	4,47	4,26	4,42	4,21
ErP efficiency class (8)		A+	A+	A+	A+	A+	A+	A+	A++	A++	A+	A+	A+	A++	A+	A+	A+
Power supply	V/Ph/Hz	230 ± 10 % / 1 / 50				400 ± 10% / 3-PE / 50											
Circuits / Compressors	N°	1/1									1/2						
Sound power (9)	dB(A)	58	58,7	59,1	62,7	63,9	65,6	68	71,7	74,1	75,4	76,6	77,1	78,9	79,8	80	81,7
Sound pressure (10)	dB(A)	30,0	30,7	31,1	34,7	35,9	37,6	40,0	43,7	46,1	47,4	48,6	49,1	50,9	51,8	52,0	53,7
Depth	mm	310	310	310	310	500	500	500	500	500	660	660	660	660	785	785	785
Width	mm	520	520	520	520	780	780	780	780	780	1735	1735	1735	1735	1950	1950	1950
Height	mm	830	830	830	830	1000	1000	1000	1000	1000	1200	1200	1200	1200	1200	1200	1200
Installed weight	kg	49	53	59	67	120	158	180	204	216	399	430	486	548	617	691	725

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.

(1) Data referred to nominal working conditions: evaporator water temperature IN/OUT 12/7 °C and condenser water temperature IN/OUT 30/35 °C;
(2) Data referred to the full load and in nominal working conditions: evaporator water temperature IN/OUT 12/7 °C and condenser water temperature IN/OUT 30/35 °C;
(3) Data referred to nominal working conditions: evaporator water temperature IN/OUT 12/7 °C and condenser water temperature IN/OUT 15/30 °C;
(4) Data referred to the full load and in nominal working conditions: evaporator water temperature IN/OUT 12/7 °C and condenser water temperature IN/OUT 15/30 °C;
(5) Data referred to nominal working conditions: water temperature IN/OUT 40/45 °C and evaporator water temperature IN/OUT 12/7 °C;
(6) Data referred to nominal working conditions: condenser water temperature IN/OUT 40/45 °C and evaporator water temperature IN/OUT 12/7 °C;
(7) Data declared according to the European Regulation 813/2013 for heat pumps at low temperature (BT) in average climate conditions (Strasbourg) and fixed outlet water temperature;
(8) Data declared according to the European Regulation 813/2013;
(9) Determined on the basis of measurements taken in accordance with the standard ISO 3744;
(10) 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 a 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 without accessories/options.
The listed noise levels, weights and dimensions refer to base chillers with no options/accessories fitted.

ISO 9001 BUREAU VERITAS Certification

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.

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

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

EAC Declaration

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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