

OCEAN *tech*

Water cooled water chillers, heat pumps and evaporating units featuring rotary or hermetic scroll compressors.



pure energy



Space availability and noise levels are critical factors for indoor chillers. OCEAN *tech* minichillers can be installed literally anywhere, allowing easy transport and installation.

The fully enclosed and acoustically insulated design, with noise levels down to 30dB(A), ensures unit operation is virtually imperceptible to occupants.

The optional storage and pump module, positioned next to the chiller, transforms OCEAN *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.



Cooling, conditioning, purifying.

BENEFITS

- Lowest noise levels (down to 30 dB(A)) for installation in residential surroundings;
- High EER/COP levels, especially at partial loads;
- 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;
- Self Adapting Control (SAC) with dynamic set point, for increased precision with low thermal inertias;
- 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.

VERSIONS

- Chiller (OCT);
- Heat pump with inversion on the refrigerant side (HOCT);
- Evaporating unit (MEOCT) with in/out shut-off valves and liquid receive, designed for use with a remote condenser.

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 (OCT/HOCT);
- IP22 electric protection rating;
- Extensive inspections and tests performed on all units (as per all MTA products);
- 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;
- xWEB300D remote supervision, allowing local or remote monitoring via a web server or a GPRS cell phone;
- Matching cooling towers or dry coolers available on request.

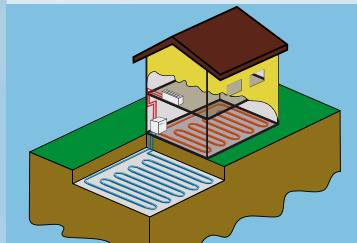
Microprocessor controller with dual icon-based display.



Separate storage and pump module with two pump versions.



Suitable for operation within geothermal applications.



Allows installation in even the most limited spaces.



Model OCT - HOCT - MEOCT		018	022	030	040	050	070	100	130	150	200	230	280	350	400	500	600
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Tower water

OCT	Cooling capacity	kW	4,46	5,80	7,72	11,0	15,6	23,7	32,4	41,9	48,4	65,6	73,7	88,2	111	127	164	193
	Total absorbed power	kW	1,28	1,61	2,17	2,74	3,85	5,84	7,59	9,47	11,1	14,8	16,9	20,7	25,1	28,9	38,1	44,4
	ESEER	-	3,76	3,77	3,67	4,45	4,39	4,31	4,56	4,71	4,63	5,46	5,40	5,34	5,61	5,52	5,31	5,38

Well water

OCT	Cooling capacity	kW	4,76	6,16	8,24	11,8	16,7	25,2	34,5	44,4	51,8	69,9	78,3	94,0	119	136	174	205
	Total absorbed power	kW	1,06	1,37	1,87	2,26	3,26	4,99	6,50	8,13	9,58	12,7	14,5	17,8	21,4	24,7	32,9	38,4
HOCT	Cooling capacity	kW	4,49	5,79	7,75	11,0	15,6	23,7	32,4	41,9	48,0	65,6	73,7	88,2	111	128	164	192
	Heating capacity	kW	4,87	6,23	8,32	11,8	16,8	25,3	34,3	44,6	50,4	69,2	78,1	93,1	118	137	176	205
	Total abs. power (in heating)	kW	1,46	1,81	2,43	3,44	4,61	6,82	8,88	11,2	12,7	17,6	20,3	24,1	30,6	35,7	45,9	53,3

Evaporating unit

ME	Cooling capacity	kW	4,23	5,50	7,35	10,4	14,8	22,5	30,8	39,7	45,8	62,0	69,7	83,7	105	121	156	183
	Total absorbed power	kW	1,29	1,62	2,16	2,93	4,07	6,06	7,93	10,1	11,6	15,8	18,0	21,6	26,9	31,0	40,3	47,1

Power supply	V/Ph/Hz	230±10%/1/50				400 ± 10% / 3 - PE / 50												
Circuits / Compressors	N°	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Sound pressure level	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	

All data refers to standard units at the following nominal conditions:

Tower water: evaporator water inlet/outlet temperature 12-7 °C; condenser water inlet/outlet temperature 30-35 °C.

Well water: evaporator water inlet/outlet temperature 12-7 °C; condenser water inlet/outlet temperature 15-30 °C.

Heat pump: condenser water inlet/outlet temperature 40-45 °C; evaporator water inlet/outlet temperature 12-7 °C.

Evaporating unit: evaporator water inlet/outlet temperature 12-7 °C; condensing temperature 45 °C.

Sound pressure level in hemispherical field at 10 m from operator side and 1.6 m from ground. Values with tolerance ± 2 dB.

The sound levels refer to unit operation under full load in nominal conditions. Data declared according to UNI EN 14511:2011.



MTA participates 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 with cooling capacity up to 600 kW
- Water/Water up to 1500 kW (N.A. on ME)

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Cooling, conditioning, purifying.



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.