NEPTUNE TECH ME

Condenserless units, cooling only version featuring hermetic scroll compressors.

Nominal cooling capacity 274 – 722 kW





Compact and low noise condenserless units.

The condenserless units NEPTUNE TECH ME offers the optimal combination of energy efficiency, ease of use and high quality. The multiscroll configuration with one or two independent refrigerant circuits ensures operation continuity, excellent partial load energy savings and lowest noise levels. NEPTUNE TECH ME compact layout allows it to even pass through the most common technical rooms, further simplifying installation. The robust industrial design featuring high quality components, the unloading function and wide operating limits combine to offer guaranteed operation in all conditions.



Benefits

- High energy efficiency levels, especially at partial loads;
- Extremely compact, even handling through the typical technical rooms;
- Unloading function allowing operation even in extreme conditions;
- Robust design with high quality components by renowned suppliers, derived from MTA's industrial background;
- Ease of installation and accessibility to all internal components;
- Wide temperature limits of evaporator water outlet (from 0 °C to 25 °C);
- Wide ambient temperature limits (from -10 °C to +45 °C);
- Easy to use parametric controller with graphic display.

Options

- Soundproof compressors housing;
- Anti-freeze heaters for evaporators.

Standard Features

- 3 to 6 hermetic scroll compressors, on one or two refrigerant circuits;
- Compressors crankcase heater and phase monitor;
- Brazed stainless steel plate evaporators;
- Electronic expansion valves;
- Inspections and tests performed on all units;
- IP54 electrical protection rating.

Kits

- Victaulic hydraulic connections;
- Antivibration mounts;
- Soft starter:
- Remote display;
- RS485 Modbus interface for connection to supervisor systems;
- xWEB300D EVO to monitoring, control and register data, based on "WEB server" technology.



Microprocessor controller with dual icon-based display.



Optimised performance thanks to multiscroll logic.



Ideal for medium and large process cooling applications.



Supervision systems.

Models NET ME		075	090	100	110	120	135	150	165	180
Nominal cooling capacity (1)	kW	273,93	341,76	363,94	406,19	452,41	522,64	570,82	637,45	722,34
Total absorbed power (1)	kW	56,79	73,98	75,41	86,95	98,32	105,48	113,10	130,43	147,34
EER (2)		4,82	4,62	4,83	4,67	4,60	4,95	5,05	4,89	4,90
Nominal cooling capacity (3)	kW	209,71	261,45	278,66	310,85	346,28	386,63	422,28	471,41	534,37
Total absorbed power (3)	kW	56,51	73,19	75,15	86,27	97,37	104,93	112,64	129,41	146,18
EER (4)		3,71	3,57	3,71	3,60	3,56	3,68	3,75	3,64	3,66
Power supply	V/Ph/Hz	400 ± 10% / 3-PE / 50								
Circuits / Compressors	N°	1/3	1/3	2/4	2/4	2/4	2/5	2/6	2/6	2/6
Sound power (5)	dB(A)	86,1	87,8	87,3	88,3	89,0	89,1	89,1	90,0	90,8
Sound pressure (6)	dB(A)	58,1	59,8	59,3	60,3	61,0	61,1	61,1	62,0	62,8
Depth	mm	2010	2010	2610	2610	2610	3705	3705	3705	3705
Width	mm	800	800	800	800	800	800	800	800	800
Height	mm	1830	1830	1830	1830	1830	1830	1830	1830	1830
Installed weight	kg	842	1037	1158	1258	1422	1673	1771	1945	2165

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: evaporator water temperature IN/OUT 20/15 $^{\circ}$ C and condensing temperature 45 $^{\circ}$ C;
- (2) Data referred to the full load functioning: evaporator water temperature IN/OUT 20/15 °C and condensing temperature 45 °C;
- (3) Data referred to nominal conditions: evaporator water temperature IN/OUT 12/7 $^{\circ}$ C and condensing temperature 45 $^{\circ}$ C;
- [4] Data referred to the full load functioning: evaporator water temperature IN/OUT 12/7 °C and condensing temperature 45 °C;
- [5] Sound power: determined on the basis of measurements taken in accordance with the standard ISO 3744.
- (6) Sound pressure at 10 m: 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.









