

## AIR-CONDENSED MOTO-CONDENSING UNITS

To be used in systems in two sections, the units of the MTE series can be joined to exchange batteries of air handling units.

The outdoor MTE moto-condensing units have been designed on the base of the MPE series; they offer a high efficiency with extremely low sound levels.

They are equipped with:

- > interception taps on liquid and gas sides ;
- > electric heater on compressor carter to obstacle the dilution of the oil during stops;
- > pre-load raised at steam with nitrogen;
- > schrader valves for the load operations with pressures control;
- > indicator for humidity and liquid flow located in order to be seen from the outside without removing panels;
- > electric board with control microprocessor accessible from the outside and output in very low tension with the thermostatic control with clean unit contact, external sectionator, sequence/phase control, compressor protection, soft starter of the compressor when starting.



### Code

Commercial name of the series	
MTE	Air condensed moto-condensing unit for outdoor installation
Model	
004	
005	
007	Gives information on the cooling capacity of the standard model
009	
010	
012	
013	
015	
018	
021	
024	
029	
033	
038	
042	
058	
071	
Operation	
C	Cooling only unit
Power supply	
0	400V 3N 50 Hz
M	230V singlephase 50Hz

### Option and unit configuration

13 digits which customize the unit complying with the customer's requirements:

Digit	Name	Description
<b>1</b>	<b>Thermal expansion device</b>	
0		Not present
T		Traditional
A		Electronic 230V
<b>2</b>	<b>Liquid receiver</b>	
0		Not present
2		Present with shut-off valve
<b>3</b>	<b>Liquid line accessory</b>	
0		Not present
S		Solenoid valve on liquid line
<b>4</b>	<b>Heat recovery</b>	
0		Not present
<b>5</b>	<b>Condensation control</b>	
0		Not present
C		Modulating with fan speed control
<b>6</b>	<b>Phase sequence relay</b>	
1		Present
<b>7</b>	<b>Acoustic insulation</b>	
0		Not present
1		Sound proofing insulation for compressor
<b>8</b>	<b>Refrigerant circuit accessories</b>	
0		Not present
M		Refrigerant pressure gauges
<b>9</b>	<b>Remote control</b>	
0		Not present
2		RS 485 port (modbus or carel protocol)
S		Simplified remote control
M		Base microprocessor remote
<b>10</b>	<b>Special coil</b>	
0		Standard
R		Copper/Copper
C		Cataphoresis
B		Fins protection treatment
<b>11</b>	<b>Condenser protection grille</b>	
0		Not present
G		Present
<b>12</b>	<b>Compressor options</b>	
1		Crackcase electric heater
2		Soft starter
<b>13</b>	<b>Control panel</b>	
1		Base

<b>MTE air cooled moto-condensing units - PRELIMINARY technical data</b>											
<b>MTE-C</b>		<b>004 M</b>	<b>005 M</b>	<b>007 M</b>	<b>009 M</b>	<b>009</b>	<b>010 M</b>	<b>010</b>	<b>012</b>	<b>013</b>	<b>015</b>
Power supply	V-ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	400-3N-50	230-1-50	400-3N-50	400-3N-50	400-3N-50	400-3N-50
Cooling capacity	kW	4,30	5,40	7,11	9,12	9,15	9,60	9,58	12,15	13,43	15,26
Total power input	kW	1,36	1,72	2,30	3,34	3,15	3,36	3,36	4,42	4,43	5,48
EER		3,17	3,15	3,10	2,73	2,91	2,86	2,85	2,75	3,03	2,78
Maximum power input	kW	2,3	2,8	2,9	3,0	3,0	4,8	6,8	8,3	8,6	10,1
Maximum current absorbed	A	11,7	14,2	14,7	14,7	7,5	24,3	12,4	14,9	15,4	18,0
Starting ampere	A	48	63	63	63	45	97	48	63	63	66
n° of scroll compressors / circuits		1 / 1									
Rated amount of refrigerant requested	kg	1,5	1,5	2	2	2	2,3	2,3	2,3	3	3
High/low pressure switch	bar	2 / 42									
n° of axial fans		1					2				
Air flow	m <sup>3</sup> /h	3.635	3.635	3.406	3.406	3.406	6.686	6.686	6.686	5.986	5.986
Gas line connection	mm	16	16	16	16	16	22	22	22	22	22
Liquid line connection	mm	10	10	10	10	10	12	12	12	12	12
Height	mm	758	758	758	758	758	1225	1225	1225	1225	1225
Lenght	mm	960	960	960	960	960	1220	1220	1220	1220	1220
Width	mm	450	450	450	450	450	550	550	550	550	550
Sound Power level	dB(A)	67	67	67	67	67	71	71	71	71	71
Sound pressure level	dB(A)	39	39	39	39	39	43	43	43	43	43
		<b>018</b>	<b>021</b>	<b>024</b>	<b>029</b>	<b>033</b>	<b>038</b>	<b>042</b>	<b>058</b>	<b>071</b>	
Power supply	V-ph-Hz	400-3N-50	400-3N-50	400-3N-50	400-3N-50	400-3N-50	400-3N-50	400-3N-50	400-3N-50	400-3N-50	
Cooling capacity	kW	18,42	20,79	24,41	29,26	32,95	37,70	42,29	58,11	70,79	
Total power input	kW	6,65	7,50	8,42	9,88	11,45	12,27	13,45	17,87	24,21	
EER		2,77	2,77	2,90	2,96	2,88	3,07	3,14	3,25	2,92	
Maximum power input	kW	12,4	13,5	15,6	18,1	19,3	22,2	22,4	28,8	38,1	
Maximum current absorbed	A	23,3	25,2	28,7	35,2	37,2	42,2	41,3	56,3	70,3	
Starting ampere	A	73	102	102	130	163	158	160	215	260	
n° of scroll compressors / circuits		1 / 1									
Rated amount of refrigerant requested	kg	3,8	3,8	4,1	3,6	4,0	5,5	7,0	7,0	10	
High/low pressure switch	bar	2 / 42									
n° of axial fans		2			4			2			
Air flow	m <sup>3</sup> /h	11.940	11.940	11.460	21.500	21.500	19.700	21.230	20.050	20050	
Gas line connection	mm	28	28	28	32	32	32	35	42	42	
Liquid line connection	mm	16	16	16	16	16	16	16	22	22	
Height	mm	1225	1225	1225	1275	1275	1275	1485	1485	1485	
Lenght	mm	1220	1220	1220	1565	1565	1565	1990	1990	1990	
Width	mm	550	550	550	601	601	601	950	950	950	
Sound Power level	dB(A)	78	78	78	81	81	81	80	80	80	
Sound pressure level	dB(A)	50	50	50	53	53	53	52	52	52	

- Cooling capacity: external air temperature 35°C, evaporating temperature 5°C
- Sound pressure detected 10 m away and with a height of 1,5 m from the ground in a free space (fan side).