

# M2E series 125~250

## REFRIGERATION COMPRESSED AIR DRYER



### Design condition

A. Working pressure: 0.7MPa	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Correction factor	0.63	0.75	0.87	1.00	1.06	1.12	1.17
B. Dew point : 10°C	2	5	> 10				
Correction factor	0.65	0.85	1.00				
C. Power source frequency: 60Hz	50	60					
Correction factor	0.83	1.00					
D. Ambient temperature: 38°C	42	40	< 38				
Correction factor	0.90	0.95	1.00				
E. Inlet temperature: 60°C	80	70	< 60				
Correction factor	0.88	0.94	1.00				

### Formula

- Actual capacity =  
M2E capacity × (A × B × C × D × E)
- Corrected capacity =  
Demanded capacity ÷ (A × B × C × D × E)

### Specification

Model	M2E-125S	M2E-150S	M2E-175S	M2E-200S	M2E-250S
Max. capacity (Nm <sup>3</sup> /min)	18	22	27	30	36
Connection (inch)	3"FL	3"FL	3"FL	3"FL	4"FL
Power supply	3φ /380V(220V,440V Optional)				
Ref. comp. (Kw)	3.6	4.2	4.7	6.5	7.0
Operating current (A)	5.0	6.4	7.6	9.8	10.2
Full-load current (A)	5.7	7.3	8.6	11.0	12.2
Refrigerant	R-407C (R22、R404A、R134a Optional)				
Fan motor (W)	600	600	600	600	250×2
Dimension	W:780 L:1280 H:1420				W:950 L:1800 H:1600
Net weight (kg) N Type	270	280	290	300	400
Net weight (kg) G Type	300	310	320	330	400
Operating scope	<ul style="list-style-type: none"> <li>■ Inlet temp. : N type 5~50°C (@40°C) G type 5~80°C (@60°C)</li> <li>■ Cooling water volume : N type 100 × capacity (L/hr) G type 250 × capacity (L/hr)</li> <li>■ Ambient temp. : 2~42°C (@38°C)</li> <li>■ Working pressure : &lt;1.0 MPa (@0.7 MPa)</li> <li>■ Dew point : 2~10°C (@10°C)</li> <li>■ Cooling water pressure : 0.2~0.4 MPa</li> <li>■ Cooling water temp. : 5~40°C (@32°C)</li> </ul>				
Remarks	<ul style="list-style-type: none"> <li>■ Design condition@60Hz : 1.Ref. comp.(kw) : @ET10°C、CT54°C 2.Operating current (A) : @ET5°C、CT45°C 3.Full-load current (A) : @ET10°C、CT54°C</li> </ul>				
Optional specifications	<ul style="list-style-type: none"> <li>■ Normal inlet temp. (Without pre-cooler)</li> <li>■ High inlet temp. (With pre-cooler)</li> <li>■ Stainless steel pressure vessel (Except condenser &amp; cooler)</li> <li>■ Water cooled</li> <li>■ PLC control panel</li> <li>■ High pressure type (Except high inlet temp.)</li> <li>■ Accessories: Inlet/Outlet pressure gauge, dew point meter, electric auto drain, flow meter. etc</li> <li>N type ex:M2E-150SN G type ex:M2E-150SG P type ex:M2E-150SGP W type ex:M2E-150SNW PLC type ex:M2E-150SG-PLC H type ex:M2E-150SNH(1.1~5.0 Mpa)</li> </ul>				

### Features

#### 1. Control panel

- Logic controller, complete auto functioning and standard wiring.
- Complete automatic, no adjustment is required.

#### 2. Fan motor

- Axial fan motor low noise, high speed, large flow and static pressure. CE certified, IP54.

#### 3. Condenser & cooler

- Condenser and pre-cooler 2 in 1 design with same fan motor.
- With filter strainer prevent oil vapor on fins, easy maintenance.

#### 4. Pressure control

- Pre-set type pressure switch (HPS & LPS) is used for better stability and fewer malfunctioning .
- Reset type high/low pressure trip switch (HPSM/LPSM) is prevent compressor from overloading.

#### 5. Heat exchanger

- Thread type bronze tubes with aluminum fins and diversion plate plus reversed-channel design makes better cooling efficiency, higher outlet air temperature and lower energy consumption.

#### 6. Evaporator

- Direct type, air and refrigerant contact completed the best water removal efficiency.

#### 7. Drainage system

- External zero lose drain trap with manual drain easy maintenance.
- With water collector under refrigerant compressor collects condensing water.

#### 8. Refrigeration compressor

- Hermetic, scroll type, high performance and efficiency.
- CE certified. Class F, IP 53.

#### 9. Pressure vessel

- Compact TWO-IN-ONE design: air-to-air heat exchanger combined with evaporator.
- CNS manufacturing standard; CE, SME, CSQL, standard upon request.

#### 10. Special features

- Epoxy coating aluminum fins. Chemical composition: Si, Fe, Cu, Mn, Zn.
- No more heat-transfer problem. Several units can be installed side by side.

