

# 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℃	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  $\times$  (A×B×C×D×E)

• Corrected capacity =

Demanded capacity  $\div$  (A×B×C×D×E)

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	3 \ \ /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> <li>Inlet temp. : I</li> <li>Cooling water</li> </ul>	N type 5~50°C (@40 G type 5~80°C (@60 volume : N type 100 G type 250	0℃) 0℃) 0 × capacity (L/hr) 0 × capacity (L/hr)	Ambient ter Working pr Dew point : Cooling wa Cooling wa	Ambient temp. : 2~42°C (@38°C)         Working pressure : <1.0 MPa (@0.7 MPa)				
Remarks	■ Design condition@60Hz: 1.Ref. comp.(kw): @ET10℃、CT54℃ 2.Operating current (A): @ET5℃、CT45℃ 3.Full-load current (A): @ET10℃、CT54℃								
Optional specifications	Normal inlet temp. (Without pre-cooler)       N type ex:M2E-150SN         High inlet temp. (With pre-cooler)       G type ex:M2E-150SG         Stainless steel pressure vessel (Except condenser & cooler)       P type ex:M2E-150SGP         Water cooled       W type ex:M2E-150SNW         PLC control panel       PLC type ex:M2E-150SG-PLC         High pressure type (Except high inlet temp.)       H type ex:M2E-150SNH(1.1~5.0 Mpa)         Accessories: Inlet/Outlet pressure gauge dew point meter electric auto drain flow meter etc								

## **Specification**



# M2E 125~250 REFRIGERATION COMPRESSED AIR DRYER



### **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.

