



### Features

- The "FAN-UP" plus "TWO-IN-ONE" air-cooled pre-cooler & condenser make better result in ventilation. Compact, state-of-the-art. (Screen mesh for pre-cooler & condenser optional.)
- "TWO-IN-ONE" heat exchanger & evaporator plus multi-stage stainless steel water separator provide 99% water separation and 2~10 P.D.P., meets first compressed air quality class of ISO 8573.1.
- Manual - Electronic auto drain valve with screen mesh keeps you free from daily maintenance.
- Compact SCS microprocessor details the operation of dryer.
- Stainless steel air-side piping or high pressure models optional.
- 0.02 MPa pressure drop helps energy saving.
- Reheating reversed air flow and sub-cooling design completely increase the cooling capacity by 20%.
- Environmental friendly refrigerant R-134 a partially adopted.

### Specification

Model	M2E-10GP	M2E-15GP	M2E-25GP	M2E-40GP	M2E-60GP	M2E-75GP	M2E-100GP
Max. capacity(Nm <sup>3</sup> /min)	1.2	2.4	3.6	5.5	8.1	10.6	15
Connection(inch)	3/4"Rc	1"Rc	1"Rc	1-1/2"Rc	1-1/2"Rc	2"Rc	2"Rc
Power supply (50/60Hz)	220V/1 φ				220V/3 φ		
Ref. comp.(kw)	0.5	0.65	0.95	1.2	1.9	2.6	2.6
Operating current(A)	2.4	3	4.3	5	7.5	3.5	3.5
Full-load current(A)	2.75	3.35	4.9	5.7	8.7	4	4
Refrigerant	R134a			R-22			
Fan motor(W)	60	60	60	180	250	400	400
Dimension L (mm)	735	775	775	960	960	1050	1050
W (mm)	500	600	600	700	700	1020	1020
H (mm)	380	380	380	500	500	540	540
Net weight(kg)	40	50	54	83	93	127	173

### 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℃	42	40	< 38				
Correction factor	0.90	0.95	1.00				
E. Inlet temperature: 60℃	80	70	< 60				
Correction factor	0.88	0.94	1.00				

### Operating scope

Inlet temperature : 5~80℃ (@60℃).  
 Ambient temperature : 2~42℃ (@38℃).  
 Working pressure : ≤1.0MPa (@0.7MPa).  
 Dew point : 2~10℃ (@10℃).

### Remarks

- Design condition @60Hz
  1. Ref. comp.(Kw) : @ET10℃, CT54℃.
  2. Operating current (A) : @ET5℃, CT45℃.
  3. Full-load current (A) : @ET10℃, CT54℃.
- Max. working pressure 1.0 MPa, high pressure available.
  - H<sub>1</sub>(1.1~2.0MPa) Designate NH<sub>1</sub>P. Ex. M2E-15NH<sub>1</sub>P.
  - H<sub>2</sub>(2.1~3.0MPa) Designate NH<sub>2</sub>P. Ex. M2E-15NH<sub>2</sub>P.
  - H<sub>3</sub>(3.1~4.0MPa) Designate NH<sub>3</sub>P. Ex. M2E-15NH<sub>3</sub>P.
  - H<sub>4</sub>(4.1~5.0MPa) Designate NH<sub>4</sub>P. Ex. M2E-15NH<sub>4</sub>P.
- PS: High pressure inlet temperature @42℃.
- M2E-08G differs from other models in design without explanation.

### Formula

- Actual capacity =  

$$\text{M2E capacity} \times (A \times B \times C \times D \times E)$$
- Corrected capacity =  

$$\text{Demanded capacity} \div (A \times B \times C \times D \times E)$$

### Features

#### 1. Control panel

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

#### 2. Pre-cooler

- Combined with air-to-refrigerant condenser by a heat insulation area. Compact of high technology.
- Excellent inlet air distribution results in high performance and low pressure drop.

#### 3. Pressure control

- Pre-set type pressure switch (HPS&LPS) is used for better stability and fewer malfunctioning.
- Reset type high pressure switch (HPSM) is specially designed for models larger than M2E-75 to prevent compressor from overloading.

#### 4. Refrigeration compressor

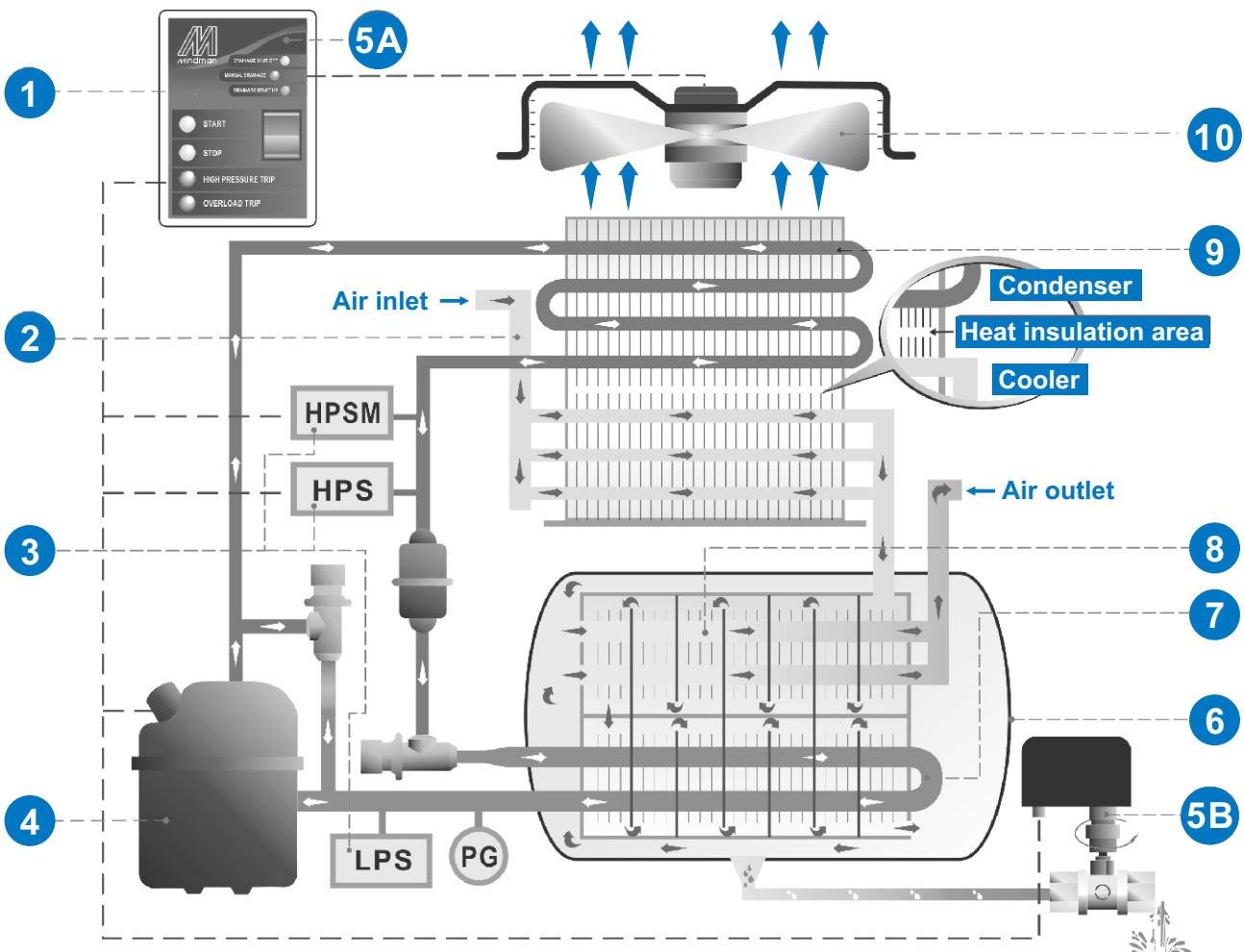
- Hermetic, High performance and efficiency.
- CE Certified.
- Class F, IP53.

#### 5. Electronic drainage

- Timer control with manual drain test.
- Anti-blockage by a large ball valve.
- Driven by motor, no more coil burnt down concern.

#### 6. Pressure vessel

- Stainless steel pressure vessel, antirust and life extend.
- Compact TWO-IN-ONE design: Air-to-air heat exchanger combined with evaporator.
- Leak test by high precision instrument, leakage free is guaranteed.
- CNS manufacturing standard ; CE, ASME, CSQL standard upon request.



### 7. Evaporator

- Wave type aluminum fins with diversion plate increases the contact surface of air and refrigerant. The lower by-pass and higher cooling efficiency is easy to achieve.

### 8. 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.

### 9. Condenser

- Large air intake area and Blow-Up design is greatly helpful for better heat rejection and good ventilation.

### 10. Fan motor

- Low noise, high speed, large flow and static pressure.
- CE Certified, IP54.

## Application

