# ∕⁄/indman

### 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>B</b> . Dew point : 10°C	2	5	> 10					
Correction factor	0.65	0.85	1.00					
<b>C</b> . Power source frequency : 60Hz	50	60						
Correction factor	0.83	1.00						
<b>D</b> . Ambient temperature: 38°C	42	40	< 38					
Correction factor	0.90	0.95	1.00					
E. Inlet temperature (N)	50	45	< 40	(N) : Standard				
Correction factor	0.90	0.95	1.00	(G): High temperature				
E. Inlet temperature (G)	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-300S	M2E-350S	M2E-400S	M2E-500S	M2E-600S	M2E-700S	M2E-800S	M2E-900S	M2E-1000S	M2E-1250S	M2E-1500S	
Max. capacity (Nm³/min)	43	50	61	72	79	93	116	125	134	155	180	
Connection (inch)	4"FL	4"FL	4"FL	5"FL	5"FL	6"FL	6"FL	6"FL	8"FL	8"FL	8"FL	
Power supply	3ø 380V(220V, 440V Optional)											
Ref. comp. (kw)	6.3	7.0	9.3	11.0	12.5	13.5	16.9	21.9	21.9	27.4	27.4	
Operating current (A)	7.7	8.5	13.7	15.4	17.5	18.4	26.1	28.3	28.3	36.6	36.6	
Full-load current (A)	10.6	11.9	17.1	19.8	22.7	23.2	32.2	37.2	37.2	47.4	47.4	
Refrigerant	R-407C (R22, R404A, R134a Optional)											
Condenser (RT)	7.5	7.5	10	12.5	12.5	15	20	20	20	25	30	
Standard Dim. (mm)	H:167	:1670 W:2300 L:720 H:1750 W:2450 L:850				_:850	H:1900 W:2500 L:1100 H:2100				V:2650 L:1250	
(N) Weight (kg)	500	530	600	750	830	920	1120	1300	1500	1900	2100	
High Dim. (mm)	H:167	H:1670 W:2700 L:720 H:1750 W:2750 L:850 H:1900 W:2900 L:110						_:1100	H:2100 W:2950 L:1250			
temp. (G) Weight (kg)	600	630	700	880	960	1050	1300	1480	1700	2100	2350	
Operating scope	<ul> <li>Inlet temperature: N type: 5~50°C (@40°C)</li> <li>G type: 5~80°C (@60°C)</li> <li>Cooling water flow: N type: 100 × max. capacity (L/hr)</li> <li>G type: 250 × max. capacity (L/hr)</li> <li>Ambient temp.: 2~42°C (@38°C)</li> <li>Working pressure: ≤ 1.0 MPa (@0.7 MPa)</li> <li>Water pressure: 0.2~0.4 MPa</li> <li>Water temperature: 5~40°C (@32°C)</li> <li>Dew point: 2~10°C (@10°C)</li> </ul>											
Pesign condition@60Hz:  1. Ref. comp.(kw): @ET10°C, CT54°C  2. Operating current (A): @ET5°C: CT38°C  3. Full-load current (A): @ET10°C": CT54°C												
Optional specifications	<ul> <li>Standard inlet temperature (without pre cooler)</li> <li>High inlet temerature (with pre cooler)</li> <li>Stainless steel pressure vessel (except condenser&amp; cooler)</li> <li>Air cooled condenser</li> <li>PLC control panel</li> <li>Accessories: Inlet/outlet pressure gauge, dew point meter, electrical expansion valve, electric autodrain, flow meter, etc.</li> </ul>											

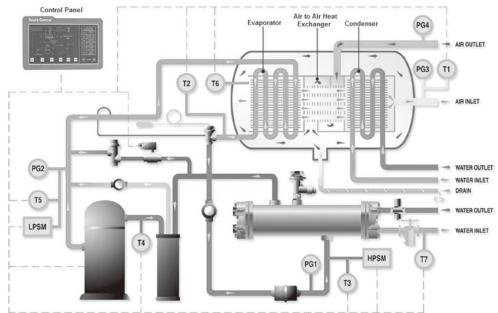


#### REFRIGERATION COMPRESSED AIR DRYER



#### **Features**

- 1. Open & compact design easy for maintenance, saves space.
- 2. Low inlet/outlet connection port easy operation & installation.
- 3. Single tube design for heat exchanger with large & short tubes to reduce pressure drop (0.01 to 0.015MPa), thus saves energy.
- 4. 3 in 1 design with water cooled system pre-cooler + heat exchanger + evaporator. Material uses copper tubes + aluminium fins with anodizing process to prevent corrosion and increase life span.
- Moisture separator design with large orifice to the speed of air and using gravity force to separate air & condensed water with the efficiency of 98% above. Also reduce friction generated by pressure.
- 6. Heat exchanger is using the design of reverse heat exchange with direct type of pre-cooler & evaporator. This is to minimize leaking & maintain better dew point.
- Using scroll type refrigerant compressor that has advantage of lower power consumption & refrigerant R-470C to fulfill international environmental standard.
- 8. SCS microcomputer control system to monitor, protect, display, signal output for remote control.(PLC control optional)
- 9. Manual & auto drain system with zero lose drain for easy maintenance & energy saving.



# Application Oil-lubricated or Aftercooler Air tank Grade C Refrigeration Grade T Grade A Desiccant Grade T Grade H Oil-free compressor filter air dryer filter air dryer filter

