# **M2E** series 300~1500

## REFRIGERATION COMPRESSED AIR DRYER





# **Design condition**

A. Working pressure	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	2	5	> 10				
Correction factor	0.65	0.85	1.00				
C. Power source frequency	50	60					
Correction factor	0.83	1.00		_			
D. Ambient temperature	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

O Actual capacity =

M2E capacity  $\times$  (A $\times$ B $\times$ C $\times$ D $\times$ E)

O Actual capacity =

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

M	odel	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 supp	ply (60Hz)	3 φ 380V (220V \ 440V Optional)											
Power (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 (N)	Dimensions (mm)	H:1670	W:2300	L:720	H:1750	W:2450	L:850	H:1900	W:2500	L:1100	H:2100 W:2	2650 L:1250	
	Weight (kg)	500	530	600	750	830	920	1120	1300	1500	1900	2100	
High temp. (G)	Dimensions (mm)	H:1670	W:2700	L:720	H:1750	W:2750	L:850	H:1900	W:2900	L:1100	H:2100 W:2	2950 L:1250	
	Weight (kg)	600	630	700	880	960	1050	1300	1480	1700	2100	2350	
Operating conditions  Inlet temperature : Type N : 5~50°C (@40°C)  Type G : 5~80°C (@60°C)  Cooling water flow : Type N : 100 × max capacity (L/hr)  Type G : 250 × max capacity (L/hr)							<ul> <li>Ambient temperature : 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>						
Remarks		1. Ref comp (Kw): @ET10°C 、CT54°C  ■ Design conditions @60Hz: 2. Operating current (A): @ET5°C 、CT38°C  3. Full load current (A): @ET10°C 、CT54°C											
Other options  Standard inlet temperature (without pre cooler)  High inlet temerature (with pre cooler)  Stainless steel pressure vessel (except condenser& cooled condenser)  Air cooled condenser  PLC control panel  Accessories: Inlet/outlet pressure gauge, dew point meter						Typ oler) Typ Typ Typ	Type N Example: M2E-300SN Type G Example: M2E-300SG  Type P Example: M2E-300SNP Type A Example: M2E-300SNA Type PLC Example: M2E-300SN-PLC  r, electrical expansion valve, electric autodrain, flow meter, etc						



**Specification** 

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### REFRIGERATION COMPRESSED AIR DRYER

#### **Features**

- 1.Open & compact design easy for maintenance, saves space.
- 2.Low inlet/outlet connection port easy operation & installation.
- 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.
- 5.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.
- 7.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.







