

1. Outdoor Unit

1-1. Specifications

Unit specifications (1)

Outdoor Unit			MODEL			U-8MZ1E8			U-10MZ1E8			U-12MZ1E8		
Performance test condition			EN14511, EN14825											
Power supply			ø Wire, Hz		3ø4W, 50Hz			3ø4W, 50Hz			3ø4W, 50Hz			
			V		380	400	415	380	400	415	380	400	415	
C O O L I N G	Capacity	kW	22.4	22.4	22.4	28.0	28.0	28.0	33.5	33.5	33.5			
		BTU/h	76500	76500	76500	95600	95600	95600	114300	114300	114300			
	Input power	kW	6.78	6.78	6.78	8.00	8.00	8.00	11.1	11.1	11.1			
	EER	(kW/kW)	3.3	3.3	3.3	3.5	3.5	3.5	3.0	3.0	3.0			
	SEER		7.27			7.82			7.37					
	ηsc		288.0			310.1			292.1					
	Current	A	11.7	11.1	10.7	13.5	12.8	12.4	18.3	17.4	16.8			
	Power factor	%	88	88	88	90	90	90	92	92	92			
	Noise outdoor	dB-A (Normal)	57.0			60.0			64.0					
		Power level dB (Normal)	75.0			77.0			81.0					
dB-A (Silent)		54.0			57.0			61.0						
dB-A (Silent 2)		52.0			55.0			59.0						
dB-A (Silent 3)		50.0			50.0			50.0						
H E A T I N G	Capacity	kW	25.0	25.0	25.0	31.5	31.5	31.5	37.5	37.5	37.5			
		BTU/h	85300	85300	85300	107500	107500	107500	128000	128000	128000			
	Input power	kW	5.55	5.55	5.55	7.32	7.32	7.32	9.37	9.37	9.37			
	COP	(kW/kW)	4.5	4.5	4.5	4.3	4.3	4.3	4.0	4.0	4.0			
	SCOP		4.35			4.38			4.33					
	ηsh		171.0			172.4			170.3					
	Current	A	9.81	9.32	8.98	12.5	11.9	11.5	15.7	14.9	14.4			
	Power factor	%	86	86	86	89	89	89	91	91	91			
	Noise outdoor	dB-A	57.0			60.0			67.0					
		Power Level dB	75.0			77.0			84.0					
Max Current (A) / Max Input power (kW)			17.0 / 10.4	17.0 / 10.9	17.0 / 11.3	18.0 / 11.0	18.0 / 11.6	18.0 / 12.0	20.0 / 12.2	20.0 / 12.9	20.0 / 13.3			
Starting current (A) / Comp output (kW)			1 / -	1 / -	1 / -	1 / -	1 / -	1 / -	1 / -	1 / -	1 / -			
Time Delay fuse max size (A)			20			25			25					
Earth leakage circuit breaker max size (A)			20			25			25					
Fan motor output		kW / Pole number	0.750	/	8	0.750	/	8	0.750	/	8			
External static pressure		Pa	0~80			0~80			0~80					
Air flow		m³/min	209			209			209					
Refrigerant type / amount (ship) kg / amount (max) kg			R32 / 6.3 kg / 40.0 kg			R32 / 6.4 kg / 40.0 kg			R32 / 8.5 kg / 40.0 kg					
F-GAS	GWP /CO2eq (ton) (PRECHARGED AMOUNT) /CO2eq (ton) (MAXIMUM CHARGED AMOUNT)		675 / 4.25 ton / 27.0 ton			675 / 4.32 ton / 27.0 ton			675 / 5.74 ton / 27.0 ton					
Product dimension		Height	mm		1660			1660			1660			
		Width	mm		880			880			880			
		Depth	mm		765			765			765			
Packing dimension		Height	mm		1795			1795			1795			
		Width	mm		980			980			980			
		Depth	mm		865			865			865			
Weight		(NET)	kg		203			203			206			
		(GROSS)	kg		218			218			221			
Layers limit			1			1			1					
Operation condition (Outdoor)		Cool (DBT)	- 10°C~ 52°C			- 10°C~ 52°C			- 10°C~ 52°C					
		Heat (DBT)	- 25°C~ 24°C			- 25°C~ 24°C			- 25°C~ 24°C					
MAX. WORKING PRESSURE		High side bar (MPa)	41.5 (4.15)			41.5 (4.15)			41.5 (4.15)					
		Low side bar (MPa)	22.6 (2.26)			22.6 (2.26)			22.6 (2.26)					
P I P E I N G	Pipe port diameter mm (Under 100m for ultimate Indoor unit.)		9.52 (Liquid) 19.05 (Gas)			9.52 (Liquid) 19.05 (Gas)			9.52 (Liquid) 22.22 (Gas)					
	Pipe diameter mm *1 (Over 100m for ultimate Indoor unit.)		12.7 (Liquid) 22.22 (Gas)			12.7 (Liquid) 22.22 (Gas)			12.7 (Liquid) 28.58 (Gas)					
	Balance pipe mm		6.35			6.35			6.35					
	Connecting method		brazing (Liquid), brazing (Gas), flared (Balance)											
	Max tubing length m		7.5	~	200	7.5	~	200	7.5	~	200			
	Total Max tubing length m		7.5	~	1000	7.5	~	1000	7.5	~	1000			
	Indoor unit & Outdoor unit height difference (Outdoor unit upper / Outdoor unit Lower) m		50 (90 *2)	/	40 (60 *2)	50 (90 *2)	/	40 (60 *2)	50 (90 *2)	/	40 (60 *2)			
	Max connectable indoor units pcs.*3		29			36			43					
Max allowable indoor/outdoor capacity ratio %*4			50	~	130	50	~	130	50	~	130			

*1: If the longest tubing equivalent length exceeds 100 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes.

*2: If each value extends to (), a special setting and limitation is required.

*3: In case of 1.0kW indoor unit connection.

*4: If the following conditions are satisfied, the effective range is above 130% and below 200%.

i) Obey the limited number of connectable indoor units.

ii) The lower limit of operating range for heating outdoor temperature is limited to -10°CWB (standard -25°CWB).

iii) Simultaneous operation is limited to less than 130% of connectable indoor units.

Indoor units combination of performance test, 8HP: S-56MU2E5C ×4, 10HP: S-73MU2E5C ×4, 12HP: S-56MU2E5C ×6