

1. Outdoor Unit

1-1. Specifications

Unit specifications (For Europe)

Outdoor		MODEL	U-4LZ2E8			U-5LZ2E8			
Performance test condition		EN14511, EN14825			EN14511, EN14825				
Power supply		V, Ø, Hz	380-400-415 V 3N~ 50 Hz			380-400-415 V 3N~ 50 Hz			
		Wire	4W			4W			
		V	380	400	415	380	400	415	
Cooling	Capacity	kW	12.1	12.1	12.1	14.0	14.0	14.0	
		BTU/h	41300	41300	41300	47800	47800	47800	
	Current	A	4.37	4.15	4.00	5.50	5.23	5.04	
	Input power	kW	2.67	2.67	2.67	3.40	3.40	3.40	
	EER	kW / kW	4.53	4.53	4.53	4.12	4.12	4.12	
	Power factor	%	93	93	93	94	94	94	
	SEER	kW / kW	8.50			8.12			
	η_{sc}	%	337.0			321.8			
	Noise outdoor		dB-A (Normal)	52.0			53.0		
			Power Level dB (Normal)	69.0			70.0		
dB-A (Silent 1)			49.0			50.0			
dB-A (Silent 2)			47.0			48.0			
dB-A (Silent 3)			45.0			46.0			
Heating	Capacity	kW	12.5	12.5	12.5	16.0	16.0	16.0	
		BTU/h	42700	42700	42700	54600	54600	54600	
	Current	A	3.91	3.71	3.58	5.50	5.22	5.03	
	Input power	kW	2.37	2.37	2.37	3.40	3.40	3.40	
	COP	kW / kW	5.27	5.27	5.27	4.71	4.71	4.71	
	Power factor	%	92	92	92	94	94	94	
	SCOP	kW / kW	5.05			4.61			
	η_{sh}	%	199.0			181.4			
	Noise outdoor		dB-A (Normal)	54.0			56.0		
			Power Level dB	72.0			74.0		
Max current(A) / Max input power(kW)			7.20 / 4.40	7.20 / 4.63	7.20 / 4.80	9.20 / 5.69	9.20 / 5.99	9.20 / 6.22	
Starting current(A) / Comp output(kW)			1 / -	1 / -	1 / -	1 / -	1 / -	1 / -	
Time delay fuse max size(A)			15			15			
Earth leakage circuit breaker max size(A)			15			15			
Fan motor output		W / Pole number	120 / 8			120 / 8			
External static pressure		Pa	0 ~ 35			0 ~ 35			
Air flow		m ³ / min	69			72			
Refrigerant type / amount(ship) kg / amount(max) kg			R32 / 2.7kg / 12.0kg			R32 / 2.7kg / 12.0kg			
F-Gas	GWP / CO ₂ eq (ton) (PRECHARGED AMOUNT) / CO ₂ eq (ton) (MAXIMUM CHARGED AMOUNT)		675 / 1.82 ton / 8.10 ton			675 / 1.82 ton / 8.10 ton			
Product dimension	Height	mm	996			996			
	Width	mm	980			980			
	Depth	mm	370			370			
Packing dimension	Height	mm	1134			1134			
	Width	mm	1095			1095			
	Depth	mm	529			529			
Weight	(NET) kg		94			94			
	(GROSS) kg		102			102			
Layers limit			3			3			
Operation condition (Outdoor)	Cool (DBT)		-10°C~52°C			-10°C~52°C			
	Heat (WBT)		-20°C~18°C			-20°C~18°C			
Max. working pressure	High side bar (MPa)		41.5(4.15)			41.5(4.15)			
	Low side bar (MPa)		22.6(2.26)			22.6(2.26)			
Piping	Pipe diameter mm (inch) (90m below for ultimate Indoor unit)		(Liquid) 9.52 (3/8) (Gas) 15.88 (5/8)			(Liquid) 9.52(3/8) (Gas) 15.88(5/8)			
	Pipe diameter mm (inch) (Over 90m for ultimate Indoor unit)		-			-			
	Balance pipe mm (inch)		-			-			
	Connecting method		flared(Liquid) , flared(Gas)			flared(Liquid) , flared(Gas)			
	Max tubing length m		7.5	~	90	7.5	~	90	
	Total Max tubing length m		7.5	~	180	7.5	~	180	
	Indoor unit & Outdoor unit height difference (Outdoor unit upper / Outdoor unit Lower) m		50 / 40			50 / 40			
Max connectable indoor units pcs.		7 (10 *1)			8 (12 *1)				
Max allowable indoor/outdoor capacity ratio %		50~150 (130 *2)			50~150 (130 *2)				

Max total refrigerant amount of outdoor unit is 12.0kg

*1 The numbers in parenthesis indicates maximum number of connectable indoor unit in case of 1.5kW indoor unit's connection.

*2 Max allowable indoor/outdoor capacity ratio in case of 1.5kW indoor unit's connection.

1. Outdoor Unit

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Unit specifications (For Europe)

Outdoor	MODEL	U-6LZ2E8						
Performance test condition		EN14511, EN14825						
Power supply	V, \emptyset , Hz	380-400-415 V 3N~ 50 Hz						
	Wire	4W						
	V	380	400	415				
Cooling	Capacity	kW	15.5	15.5	15.5			
		BTU/h	52900	52900	52900			
	Current	A	6.44	6.12	5.89			
	Input power	kW	4.00	4.00	4.00			
	EER	kW / kW	3.88	3.88	3.88			
	Power factor	%	94	94	94			
	SEER	kW / kW	7.71					
	η_{sc}	%	305.4					
	Noise outdoor		dB-A (Normal)	54.0				
			Power Level dB (Normal)	72.0				
dB-A (Silent 1)			51.0					
dB-A (Silent 2)			49.0					
dB-A (Silent 3)			47.0					
Heating	Capacity	kW	16.5	16.5	16.5			
		BTU/h	56300	56300	56300			
	Current	A	6.02	5.72	5.51			
	Input power	kW	3.73	3.73	3.73			
	COP	kW / kW	4.42	4.42	4.42			
	Power factor	%	94	94	94			
	SCOP	kW / kW	4.59					
	η_{sh}	%	180.6					
	Noise outdoor		dB-A (Normal)	56.0				
			Power Level dB	75.0				
Max current(A) / Max input power(kW)		9.90 / 6.15	9.90 / 6.47	9.90 / 6.72				
Starting current(A) / Comp output(kW)		1 / -	1 / -	1 / -				
Time delay fuse max size(A)		15						
Earth leakage circuit breaker max size(A)		15						
Fan motor output	W / Pole number	120	/	8				
External static pressure	Pa	0~35						
Air flow	m ³ / min	74						
Refrigerant type / amount(ship) kg / amount(max) kg		R32 / 2.7kg / 12.0kg						
F-Gas	GWP /							
	CO ₂ eq (ton) (PRECHARGED AMOUNT) / CO ₂ eq (ton) (MAXIMUM CHARGED AMOUNT)	675 / 1.82 ton / 8.10 ton						
Product dimension	Height	mm	996					
	Width	mm	980					
	Depth	mm	370					
Packing dimension	Height	mm	1134					
	Width	mm	1095					
	Depth	mm	529					
Weight	(NET) kg		94					
	(GROSS) kg		102					
Layers limit		3						
Operation condition (Outdoor)	Cool (DBT)	-10°C~-52°C						
	Heat (WBT)	-20°C~-18°C						
Max. working pressure	High side bar (MPa)	41.5(4.15)						
	Low side bar (MPa)	22.6(2.26)						
Piping	Pipe diameter mm (inch) (90m below for ultimate Indoor unit)	(Liquid) 9.52 (3/8) (Gas) 15.88 (5/8)						
	Pipe diameter mm (inch) (Over 90m for ultimate Indoor unit)	-						
	Balance pipe mm (inch)	-						
	Connecting method	flared(Liquid) , flared(Gas)						
	Max tubing length m	7.5	~	90				
	Total Max tubing length m	7.5	~	180				
	Indoor unit & Outdoor unit height difference (Outdoor unit upper / Outdoor unit Lower) m	50 / 40						
Max connectable indoor units pcs.		9 (12 *1)						
Max allowable indoor/outdoor capacity ratio %		50~150 (130 *2)						

Max total refrigerant amount of outdoor unit is 12.0kg

*1 The numbers in parenthesis indicates maximum number of connectable indoor unit in case of 1.5kW indoor unit's connection.

*2 Max allowable indoor/outdoor capacity ratio in case of 1.5kW indoor unit's connection.