

## 2 Specifications

### 2.1. CS-A7HKD CU-A7HKD

Item		Unit	Indoor unit	Outdoor unit
Performance Test Condition			NEW JIS	
C O O L I N G	Capacity	kW	2.00 - 2.00	
		BTU/h	6820 - 6820	
		kcal/h	1720 - 1720	
	EER	W/W	3.28 - 3.17	
		BTU/hW	11.2 - 10.8	
	Noise Level	dB (A)	High: 33 Low: 26	High: 46 - 47
Power level dB		High: 46	High: 61 - 62	
H E A T I N G	Capacity	kW	2.10 - 2.10	
		BTU/h	7160 - 7160	
		kcal/h	1810 - 1810	
	Cop	W/W	4.20 - 4.00	
		BTU/hW	14.3 - 13.6	
	Noise Level	dB (A)	High: 36 Low: 28	High: 48 - 49
Power level dB		High: 49	High: 64 - 65	
Moisture Removal		l/h	1.3	
		(pt/h)	2.7	
Air Volume	Lo	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling; 5.9 (210) Heating; 6.3 (220)	—
	Me	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling; 7.0 (250) Heating; 6.9 (240)	—
	Hi	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling; 7.8 (280) Heating; 9.0 (320)	Cooling; 29.5 (1040) - 30.0 (1060)
	SHi	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling; 9.1 (320)	—
Refrigerant Control Device			—	Capillary Tube
Refrigerant Oil (Charged)		cm <sup>3</sup>	—	ATMOS NM56M or SUNISO 4GDID (290cm <sup>3</sup> )
Refrigerant (Charged) R22		kg (oz)	—	0.71 (25.0)
Dimension	Height	mm (inch)	280 (11 - 1/32)	510 (20 - 3/32)
	Width	mm (inch)	799 (31 - 15/32)	650 (25 - 19/32)
	Depth	mm (inch)	183 (7 - 7/32)	230 (9 - 1/16)
Net Weight		kg (lbs)	9 (20)	24 (53)
Pipe Diameter	Gas	mm (inch)	9.52 (3/8")	
	Liquid	mm (inch)	6.35 (1/4")	
Height Difference		m (ft)	5 (16.4)	
Pipe Length Range		m (ft)	3 (9.8) ~ 10 (32.8)	
Additional Gas Amount		g/m (oz/ft)	20 (0.2)	
Refrigeration Charge Less		m (ft)	7.5 (24.6)	
Drain Hose	Inner diameter	mm	16	—
	Length	mm	650	—
Compressor	Type		—	Rotary (1 cylinder) rolling piston type
	Motor Type		—	Induction (2-poles)
	Rated Output	W	—	550

Item		Unit	Indoor unit	Outdoor unit	
Fan	Type		Cross-flow Fan	Propeller Fan	
	Material		ASG20K1	PP Resin	
	Motor Type		Induction (4-poles)	Induction (6-poles)	
	Input power	W	42 - 47	56 - 63	
	Output power	W	15	30	
	Fan Speed	Lo (Cool / Heat)	rpm	780 / 840	—
		Me (Cool / Heat)	rpm	920 / 920	—
Hi (Cool / Heat)		rpm	1030 / 1200	800 - 830 / —	
SHi (Cool / Heat)		rpm	1200 / —	—	
Heat Exchanger	Fin material		Aluminium (Pre Coat)	Aluminium (Blue Coat)	
	Fin Type		Slit Fin	Corrugate Fin	
	Row × Stage × FPI		2 × 15 × 21	1 × 19 × 17	
	Size (W × H × L)	mm (inch)	610 × 315 × 25.4	22 × 483 × 576	
Air Filter Type	Material		Polypropelene	—	
	Style		One-touch	—	

1. Cooling capacities are based on indoor temperature of 27°C D.B. (80.6°F D.B.), 19.0°C W.B. (66.2°F W.B.) and outdoor air temperature of 35°C D.B. (95°F D.B.), 24°C W.B. (75.2°F W.B.)
2. Heating capacities are based on indoor temperature of 20°C D.B. (68°F D.B.) and outdoor air temperature of 7°C D.B. (44.6°F D.B.), 6°C W.B. (42.8°F W.B.)

Item		Unit		
Power Source (Phase, Voltage, Cycle)		ø	Single	Single
		V	220	230
		Hz	50	50
Input power	Cooling	W	610	630
	Heating	W	500	525
Starting Current		A	12.4	12.4
Running Current	Cooling	A	2.9	2.8
	Heating	A	2.4	2.4
Maximum Current		A	3.4	3.4
Power Factor	Cooling	%	96	98
	Heating	%	95	95
Power factor means total figure of compressor, indoor fan motor and outdoor fan motor.				
Power Cord	Number of core		3 (1.5mm)	
	Length	m (ft)	2 (6)	
Thermostat			—	—
Protection Device			—	2 Stage Overload Protector

**Note:**

- Specification are subjected to change without prior notice for further improvement.

## 2.2. CS-A9HKD CU-A9HKD

Item		Unit	Indoor unit	Outdoor unit	
Performance Test Condition			NEW JIS		
C O O L I N G	Capacity	kW	2.65 - 2.65		
		BTU/h	9040 - 9040		
		kcal/h	2280 - 2280		
	EER	W/W	3.19 - 3.08		
		BTU/hW	10.9 - 10.5		
	Noise Level	dB (A)	High: 36 Low: 26	High: 48 - 49	
Power level dB		High: 49	High: 63 - 64		
H E A T I N G	Capacity	kW	2.80 - 2.85		
		BTU/h	9550 - 9720		
		kcal/h	2410 - 2450		
	Cop	W/W	4.00 - 3.85		
		BTU/hW	13.6 - 13.1		
	Noise Level	dB (A)	High: 38 Low: 28	High: 48 - 49	
Power level dB		High: 51	High: 64 - 65		
Moisture Removal		l/h	1.6		
		(pt/h)	3.4		
Air Volume	Lo	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling: 6.4 (230) Heating: 6.7 (240)	—	
	Me	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling: 7.8 (270) Heating: 7.5 (260)	—	
	Hi	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling: 9.4 (330) Heating: 9.8 (350)	Cooling; 29.5 (1040) - 30.0 (1060)	
	SHi	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling: 10.2 (360)	—	
Refrigerant Control Device			—	Capillary Tube	
Refrigerant Oil (Charged)		cm <sup>3</sup>	—	ATMOS M60 or SUNISO 4GDID (350cm <sup>3</sup> )	
Refrigerant (Charged) R22		kg (oz)	—	0.67 (23.7)	
Dimension	Height	mm (inch)	280 (11 - 1/32)	510 (20 - 3/32)	
	Width	mm (inch)	799 (31 - 15/32)	650 (25 - 19/32)	
	Depth	mm (inch)	183 (7 - 7/32)	230 (9 - 1/16)	
Net Weight		kg (lbs)	9 (20)	27 (60)	
Pipe Diameter	Gas	mm (inch)	9.52 (3/8")		
	Liquid	mm (inch)	6.35 (1/4")		
Height Difference		m (ft)	5 (16.4)		
Pipe Length Range		m (ft)	3 (9.8) ~ 10 (32.8)		
Additional Gas Amount		g/m (oz/ft)	20 (0.2)		
Refrigeration Charge Less		m (ft)	7.5 (24.6)		
Drain Hose	Inner diameter	mm	16	—	
	Length	mm	650	—	
Compressor	Type		—	Rotary (1 cylinder) rolling piston type	
	Motor Type		—	Induction (2-poles)	
	Rated Output	W	—	750	
Fan	Type		Cross-flow Fan	Propeller Fan	
	Material		ASG20K1	PP Resin	
	Motor Type		Induction (4-poles)	Induction (6-poles)	
	Input power	W	42 - 47	56 - 63	
	Output power	W	15	30	
	Fan Speed	Lo (Cool / Heat)	rpm	830 / 890	—
		Me (Cool / Heat)	rpm	1000 / 1000	—
Hi (Cool / Heat)		rpm	1210 / 1310	800 - 830 / —	
SHi (Cool / Heat)		rpm	1310 / —	—	

Item		Unit	Indoor unit	Outdoor unit
Heat Exchanger	Fin material		Aluminium (Pre Coat)	Aluminium (Blue Coat)
	Fin Type		Slit Fin	Corrugate Fin
	Row × Stage × FPI		2 × 15 × 21	1 × 19 × 17
	Size (W × H × L)	mm (inch)	610 × 315 × 25.4	22 × 483 × 576
Air Filter Type	Material		Polypropelene	—
	Style		One-touch	—

- Cooling capacities are based on indoor temperature of 27°C D.B. (80.6°F D.B.), 19.0°C W.B. (66.2°F W.B.) and outdoor air temperature of 35°C D.B. (95°F D.B.), 24°C W.B. (75.2°F W.B.)
- Heating capacities are based on indoor temperature of 20°C D.B. (68°F D.B.) and outdoor air temperature of 7°C D.B. (44.6°F D.B.), 6°C W.B. (42.8°F W.B.)

Item		Unit		
Power Source (Phase, Voltage, Cycle)		∅	Single	Single
		V	220	230
		Hz	50	50
Input power	Cooling	W	830	860
	Heating	W	700	740
Starting Current		A	18	18
Running Current	Cooling	A	3.9	3.9
	Heating	A	3.3	3.3
Maximum Current		A	5.1	5.1
Power Factor	Cooling	%	97	96
	Heating	%	96	97
Power factor means total figure of compressor, indoor fan motor and outdoor fan motor.				
Power Cord	Number of core		3 (1.5mm)	
	Length	m (ft)	2 (6)	
Thermostat			—	—
Protection Device			—	2 Stage Overload Protector

**Note:**

- Specification are subjected to change without prior notice for further improvement.

## 2.3. CS-A12HKD CU-A12HKD

Item		Unit	Indoor unit	Outdoor unit	
Performance Test Condition			NEW JIS		
C O O L I N G	Capacity	kW	3.52 - 3.54		
		BTU/h	12000 - 12100		
		kcal/h	3030 - 3040		
	EER	W/W	3.26 - 3.16		
		BTU/hW	11.1 - 10.8		
	Noise Level	dB (A)	High: 39 Low: 29	High: 48 - 49	
Power level dB		High: 52	High: 63 - 64		
H E A T I N G	Capacity	kW	4.00 - 4.05		
		BTU/h	13640 - 13810		
		kcal/h	3440 - 3480		
	Cop	W/W	3.67 - 3.62		
		BTU/hW	12.5 - 12.3		
	Noise Level	dB (A)	High: 40 Low: 29	High: 48 - 49	
Power level dB		High: 53	High: 64 - 65		
Moisture Removal		l/h	2.0		
		(pt/h)	4.2		
Air Volume	Lo	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling: 6.1 (220) Heating: 6.5 (230)	—	
	Me	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling: 8.5 (300) Heating: 8.5 (300)	—	
	Hi	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling: 9.9 (350) Heating: 10.0 (350)	Cooling; 32.5 (1150) - 33.0 (1160)	
	SHi	m <sup>3</sup> /m (ft <sup>3</sup> /m)	Cooling: 10.1 (360)	—	
Refrigerant Control Device			—	Capillary Tube	
Refrigerant Oil (Charged)		cm <sup>3</sup>	—	ATMOS NM56M or SUNISO 4GDID (350cm <sup>3</sup> )	
Refrigerant (Charged) R22		kg (oz)	—	1.01 (35.7)	
Dimension	Height	mm (inch)	280 (11 - 1/32)	540 (21 - 9/32)	
	Width	mm (inch)	799 (31 - 15/32)	780 (30 - 23/32)	
	Depth	mm (inch)	183 (7 - 7/32)	289 (11 - 13/32)	
Net Weight		kg (lbs)	9 (20)	34 (75)	
Pipe Diameter	Gas	mm (inch)	12.70 (1/2")		
	Liquid	mm (inch)	6.35 (1/4")		
Height Difference		m (ft)	5 (16.4)		
Pipe Length Range		m (ft)	3 (9.8) ~ 15 (49.2)		
Additional Gas Amount		g/m (oz/ft)	20 (0.2)		
Refrigeration Charge Less		m (ft)	7.5 (24.6)		
Drain Hose	Inner diameter	mm	16	—	
	Length	mm	650	—	
Compressor	Type		—	Rotary (1 cylinder) rolling piston type	
	Motor Type		—	Induction (2-poles)	
	Rated Output	W	—	950	
Fan	Type		Cross-flow Fan	Propeller Fan	
	Material		ASG20K1	PP Resin	
	Motor Type		Induction (4-poles)	Induction (6-poles)	
	Input power	W	42 - 47	64 - 73	
	Output power	W	15	31	
	Fan Speed	Lo (Cool / Heat)	rpm	800 / 860	—
		Me (Cool / Heat)	rpm	1120 / 1120	—
Hi (Cool / Heat)		rpm	1300 / 1320	845 - 860 / —	
SHi (Cool / Heat)		rpm	1320 / —	—	

Item		Unit	Indoor unit	Outdoor unit
Heat Exchanger	Fin material		Aluminium (Pre Coat)	Aluminium (Blue Coat)
	Fin Type		Slit Fin	Corrugate Fin
	Row × Stage × FPI		2 × 15 × 21	2 × 24 × 17
	Size (W × H × L)	mm (inch)	610 × 315 × 25.4	36.38 × 504 × 713:684
Air Filter Type	Material		Polypropelene	—
	Style		One-touch	—

1. Cooling capacities are based on indoor temperature of 27°C D.B. (80.6°F D.B.), 19.0°C W.B. (66.2°F W.B.) and outdoor air temperature of 35°C D.B. (95°F D.B.), 24°C W.B. (75.2°F W.B.)
2. Heating capacities are based on indoor temperature of 20°C D.B. (68°F D.B.) and outdoor air temperature of 7°C D.B. (44.6°F D.B.), 6°C W.B. (42.8°F W.B.)

Item		Unit		
Power Source (Phase, Voltage, Cycle)		∅	Single	Single
		V	220	230
		Hz	50	50
Input power	Cooling	W	1.08	1.12
	Heating	W	1.09	1.12
Starting Current		A	20	20
Running Current	Cooling	A	5.1	5.1
	Heating	A	5.2	5.1
Maximum Current		A	6.0	6.0
Power Factor	Cooling	%	96	95
	Heating	%	95	95
Power factor means total figure of compressor, indoor fan motor and outdoor fan motor.				
Power Cord	Number of core		3 (1.5mm)	
	Length	m (ft)	2 (6)	
Thermostat			—	—
Protection Device			—	Overload Protector

**Note:**

- Specification are subjected to change without prior notice for further improvement.