

# Free-Match Outdoor Unit



## DC Inverter Series-Free match-Outdoors Units

Series	Appearance	Refrigerant	Type	14kBtu/h	18kBtu/h	21kBtu/h	27kBtu/h	28kBtu/h	36kBtu/h	42kBtu/h
1 Drive 2		R32	Inverter	●	●					
1 Drive 3		R32	Inverter			●	●			

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1 Drive 4		R32	Inverter					●	●	
1 Drive 5		R32	Inverter							●

# Nomenclature-Free Match

## Outdoor Unit

A M 2 - H 24 / 4 D R1 A

Design Series Code  
 Refrigerant Type:  
 R1: R410A  
 D: DC Inverter  
 Power Supply:  
 2: 208-230V~, 1Ph, 60Hz  
 5: 380-415V~, 3Ph, 50Hz  
 9: 208-230V~, 3Ph, 60Hz  
 S: 380-415V~, 3Ph, 50/60Hz  
 Cooling Capacity (kBtu/h)  
 H: Cooling & Heating  
 2: 1 drive 2  
 Multit-split AC  
 AUX

R3:R32  
 ON/OFF Omitted  
 4: 220-240V~, 1Ph, 50Hz  
 6: 380-415V~, 3Ph, 60Hz  
 N: 220-240V~, 1Ph, 50/60Hz  
 C: Cooling Only  
 3: 1 drive 3 4: 1 drive 4

## Indoor Unit

A M CA - H 12 / 4 D R1 A

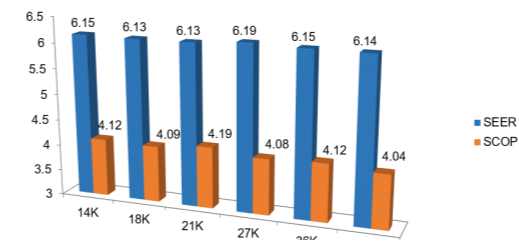
Design Series Code  
 Refrigerant Type:  
 R1: R410A  
 D: DC Inverter  
 Power Supply:  
 2: 208-230V~, 1Ph, 60Hz  
 5: 380-415V~, 3Ph, 50Hz  
 9: 208-230V~, 3Ph, 60Hz  
 S: 380-415V~, 3Ph, 50/60Hz  
 Cooling Capacity (kBtu/h)  
 H: Cooling & Heating  
 Indoor Unit Type:  
 CA: Four-Way Cassette  
 SD: Slim Duct  
 M: Multit-split AC  
 L: Light Commercial  
 AUX

R3:R32  
 ON/OFF Omitted  
 4: 220-240V~, 1Ph, 50Hz  
 6: 380-415V~, 3Ph, 60Hz  
 N: 220-240V~, 1Ph, 50/60Hz  
 C: Cooling Only  
 CF: Ceiling&Floor  
 WM: Wall-mounted  
 U:Universal

# Feature

## Highly efficient and Energy-efficient

The outdoor unit is equipped with high-efficiency DC inverter compressor, speed-adjustable fan, electronic expansion valve and advanced 180° sine wave vector drive, with SEER higher than 6.1 and SCOP higher than 4.0, meets EU A++/A+.



## Wide operating range

The outdoor unit can operate smoothly in both scorching summer with a temperature as high as 52°C and freezing winter with a temperature as low as -15°C, making you feel like spring all year round.



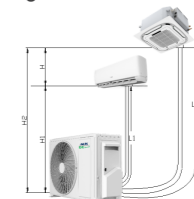
## 180° sine wave control

The DC inverter compressor adopts 180° sine wave variable speed technology for more accurate control, resulting in smoother motor operation, extended service life, and reduced noise levels.



## Long Piping Capability

Long piping capability allows designer / installer more flexible installation design.



Piping Length (m)	14/18K	21/27K	28/36K	42K
	1 drive 2	1 drive 3	1 drive 4	1 drive 5
Total Piping Length	40	60	80	80
Single Piping Length (L1 /L2)	25	30	35	35
High difference between IDU &ODU (HI/H2)	15	15	15	15
High difference between IDUs (H)	10	10	10	10

## Multi Protection

The unit contains multiple protection functions to ensure the normal operation of the unit and greatly reduce the frequency of failure.

### System protection

- Discharge temperature too high protection
- Condenser temperature too high protection
- High and low pressure protection
- Temperature sensor protection
- Compressor overloading protection
- Phase sequence protection
- Communication failure protection
- Anti-freezing protection
- Anti-cold air protection

### Drive module protection

- High power consumption protection
- Over current protection
- Over temperature protection
- High or low voltage protection

## Independent EXV control

Each IDU Adjusted by a EXV , whole unit could achieve quick cooling/heating. EXV was designed in outdoor unit , decrease throttling noise of indoor unit.

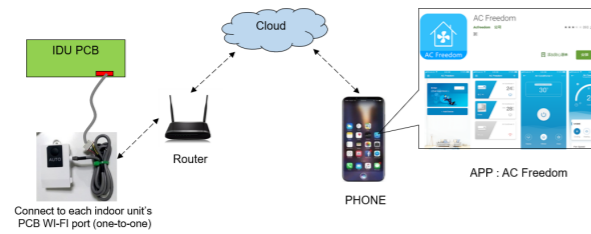


Valve orifice size : Φ 1.5 mm



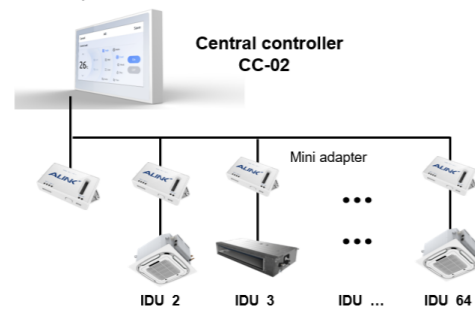
## WiFi Function

All IDUs support wifi function(optional), Customers can enjoy fun and convenience of remote control via mobile phones and other mobile terminals (Android and IOS) to control the AC at anytime and anywhere.



## Central Control

With the control function of weekly timer,zone (or group) setting etc., the centralized controller can control 64 units withRS 485 wire connection and the centralcontrol adapter.



## Combination

AM2-H14/4DR3 AM2-H14/4DR3C		Suggested Combination	
		One indoor unit	Two indoor units
1 drive 2	7	7+7	—
	9	7+9	—
	12	9+9	—
	18	—	—

AM2-H18/4DR3 AM2-H18/4DR3S AM2-H18/4DR3C		Suggested Combination	
		One indoor unit	Two indoor units
1 drive 2	7	7+7	9+12
	9	7+9	—
	12	7+12	—
	18	9+9	—

AM3-H21/4DR3 AM3-H21/4DR3C		Suggested Combination			
		One indoor unit	Two indoor units	Three indoor units	
1 drive 3	18	7+7	9+12	7+7+7	—
	—	7+9	9+18	7+7+9	—
	—	7+12	12+12	7+7+12	—
	—	7+18	—	7+9+9	—
	—	9+9	—	9+9+9	—

AM3-H27/4DR3 AM3-H27/4DR3C		Suggested Combination			
		One indoor unit	Two indoor units		Three indoor units
1 drive 3	18	7+7	9+18	7+7+7	7+9+18
	—	7+9	12+12	7+7+9	7+12+12
	—	7+12	12+18	7+7+12	9+9+9
	—	7+18	—	7+7+18	9+9+12
	—	9+9	—	7+9+9	9+12+12
	—	9+12	—	7+9+12	—

AM4-H36/4DR3		Suggested Combination					
		One indoor unit	Two indoor units		Three indoor units		
1 drive 4	24	7+7	9+18	7+7+7	7+9+18	9+12+18	
	—	7+9	9+24	7+7+9	7+9+24	9+12+24	
	—	7+12	12+12	7+7+12	7+12+12	12+12+12	
	—	7+18	12+18	7+7+18	7+12+18	12+12+18	
	—	7+24	12+24	7+7+24	7+12+24	—	
	—	9+9	18+18	7+9+9	9+9+9	—	
	—	9+12	—	7+9+12	9+9+12	—	
	Three indoor units						
	—	7+7+7+7	7+7+12+12	9+9+9+9	—	—	
	—	7+7+7+9	7+7+12+18	9+9+9+12	—	—	
—	7+7+7+12	7+9+9+9	9+9+9+18	—	—		
—	7+7+7+18	7+9+9+12	9+9+12+12	—	—		
—	7+7+9+9	7+9+9+18	9+12+12+12	—	—		
—	7+7+9+12	7+9+12+18	—	—	—		
—	7+7+9+18	7+12+12+12	—	—	—		

AM4-H42/4DR3		Suggested Combination					
		One Unit	Two Units		Three Units		
1 drive 5	24	7+7	9+24	7+7+7	7+9+24	9+9+24 12+18+18	
	—	7+9	12+12	7+7+9	7+12+12	9+12+12 12+18+24	
	—	7+12	12+18	7+7+12	7+12+18	9+12+18 18+18+18	
	—	7+18	12+24	7+7+18	7+12+24	9+12+24 —	
	—	7+24	18+18	7+7+24	7+18+18	9+18+18 —	
	—	9+9	18+24	7+9+9	9+9+9	12+12+12 —	
	—	9+12	—	7+9+12	9+9+12	12+12+18 —	
	—	9+18	—	7+9+18	9+9+18	12+12+24 —	
	Four Units						
	—	7+7+7+7	7+7+9+24	7+9+12+24			
—	7+7+7+9	7+7+12+12	7+12+12+12				
—	7+7+7+12	7+7+12+18	9+9+9+9				
—	7+7+7+18	7+7+12+24	9+9+9+12				
—	7+7+7+24	7+9+9+9	9+9+9+18				
—	7+7+9+9	7+9+9+12	9+9+12+12				
—	7+7+9+12	7+9+9+18	9+12+12+12				
—	7+7+9+18	7+9+12+18	12+12+12+12				
Five Units							
—	7+7+7+7+7	7+7+7+12+18	7+9+9+9+12	9+9+12+12+12			
—	7+7+7+7+9	7+7+9+9+9	7+9+9+9+18	—			
—	7+7+7+7+12	7+7+9+9+12	7+9+9+12+12	—			
—	7+7+7+7+18	7+7+9+9+18	7+9+12+12+12	—			
—	7+7+7+9+9	7+7+9+12+12	9+9+9+9+9	—			
—	7+7+7+9+12	7+7+9+12+18	9+9+9+9+12	—			
—	7+7+7+9+18	7+7+12+12+12	9+9+9+9+18	—			
—	7+7+7+12+12	7+9+9+9+9	9+9+9+12+12	—			

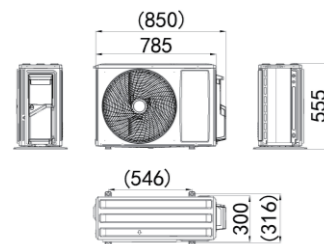
# Specification

Specification		14K	18K	21K
DC INVERTER	Model	AM2-H14/4DR3C	AM2-H18/4DR3C	AM3-H21/4DR3C
System Format		1 drive 2	1 drive 2	1 drive 3
Capacity	Cooling	Btu/h	13989(6142-15388)	18084(6824-19892)
		kW	4.1(1.8-4.51)	5.3(2.0-5.83)
	Heating	Btu/h	15354(6995-18015)	19107(7541-21017)
		kW	4.5(2.05-5.28)	5.6(2.21-6.16)
Electric Data	Power Supply	V~,Hz,Ph	220-240,50,1	220-240,50,1
	Cooling Power Input	W	1240(198-2100)	1640(280-2300)
	Heating Power Input	W	1150(198-2100)	1480(280-2300)
	Rated Current (cooling&heating)	A	5.39/5.00	7.13/6.43
Performance	SEER/SCOP	W/W	6.15/4.12	6.13/4.09
	Energy Rate		A++/A+	A++/A+
	EER/COP	W/W	3.31/3.91	3.23/3.78
	Air Flow Volume	m³/h	2600	2600
	Sound Pressure Noise Level	dB(A)	53	54
	Sound Power Noise Level	dB(A)	63	64
Dimension	Net (W*D*H)	mm	785×300×555	785×300×555
	Packing (W*D*H)	mm	900×380×615	900×380×615
Weight	Net/Gross	kg	30/32.5	30/32.5
Piping	Liquid Side	mm(inch)	2×6.35(1/4)	2×6.35(1/4)
	Gas Side	mm(inch)	2×9.52(3/8)	2×9.52(3/8)
	Max. length for all rooms(m)	m	40	40
	Max. length for one IDU(m)	m	25	25
	Max. height difference between IDU and OU(m)	m	15	15
	Max. height difference between IDUs(m)	m	10	10
Ambient Temp (Cooling/Heating)		°C	-10-52°C/-15-24°C	-10-52°C/-15-24°C
Stuffing Quantity		unit	114/237/316	114/237/316

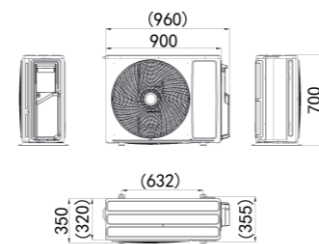
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## Dimension

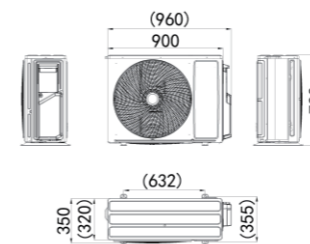
AM2-H14/4DR3C、AM2-H18/4DR3C



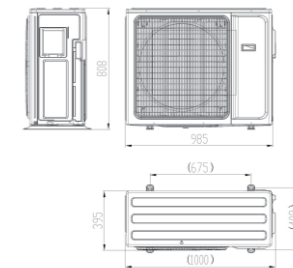
AM3-H21/4DR3C



AM3-H27/4DR3C



AM4-H36/4DR3、AM5-H42/4DR3



Model		27K	36K	42K
DC INVERTER	Model	AM3-H27/4DR3C	AM4-H36/4DR3	AM5-H42/4DR3
System Format		1 drive 3	1 drive 4	1 drive 5
Capacity	Cooling	Btu/h	26955(7848-29650)	35826(8530-37532)
		kW	7.9(2.3-8.69)	10.50(2.5-11.0)
	Heating	Btu/h	27978(8359-30776)	37532(9110-38214)
		kW	8.2(2.45-9.02)	11.00(2.67-11.2)
Electric Data	Power Supply	V~,Hz,Ph	220-240,50,1	220-240,50,1
	Cooling Power Input	W	2440(560-3400)	3950(680-4930)
	Heating Power Input	W	2210(560-3400)	3150(530-3850)
	SEER/SCOP	W/W	6.19/4.08(F)	6.15/4.12(F)
Performance	Energy Rate		A++/A+	A++/A+
	EER/COP	W/W	3.23/3.71	2.66/3.49
	Air Flow Volume	m³/h	4100	4000
	Sound Pressure Noise Level	dB(A)	57	61
Dimension	Net Dimension (W*D*H)	mm	900×350×700	985×395×808
	Packing Dimension (W*D*H)	mm	1015×415×755	1105×495×895
Weight	Net	kg	44.5	74
	Gross	kg	48	78
Piping	Liquid Side	mm(inch)	3×6.35(1/4)	4×6.35(1/4)
	Gas Side	mm(inch)	3×9.52(3/8)	4×9.52(3/8)
	Max. length for all rooms (m)	m	60	80
	Max. length for one IDU (m)	m	30	35
	Max. height difference between IDU and OU (m)	m	15	15
	Max. height difference between IDUs (m)	m	10	10
Ambient Temp (Cooling/Heating)		°C	-10-52°C/-15-24°C	-10-52°C/-15-24°C
Stuffing Quantity		unit	90/189/189	44/96/144

Remark: The above designs and specifications are subject to change of product improvement without prior notice.