Westinghouse

REFRIGERANT **R410A**

INVERTER

AIR CONDITIONER

Wall mounted type

DESIGN & TECHNICAL MANUAL

INDOOR

WHZ09WMA21S

WHZ12WMA21S

OUTDOOR

WHZ09SZA21S
WHZ12SZA21S

DR_AS145EW_03
2023.07.05

Notices:

- Product specifications and design are subject to change without notice for future improvement.
- For further details, please check with our authorized dealer.

⚠ WARNING

This product can expose you to chemicals including Plumbum, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information go to www.P65Warnings.ca.gov.

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Part 1. INDOOR UNIT

WALL MOUNTED TYPE:
WHZ09WMA21S
WHZ12WMA21S

WALL MOUNTED
WHZ09-12WMA21S

1. Specifications

Type					Wall mounted	
					Inverter, Heat pump	
Model name					WHZ09WMA21S	WHZ12WMA21S
Power supply					208/230 V ~ 60 Hz	
Power supply intake					Outdoor unit	
Available voltage range					187—253 V	
Capacity		Cooling	Rated	kW	2.64	3.52
				Btu/h	9,000	12,000
			Min.—Max.	kW	1.06—2.93	1.17—3.96
				Btu/h	3,600—10,000	4,000—13,500
		Heating	Rated	kW	2.93	3.51
				Btu/h	10,000	12,000
			Min.—Max.	kW	1.05—3.07	1.17—4.10
				Btu/h	3,600—10,500	4,000—14,000
		Heating (17 °F)*1	Rated	kW	1.90	2.45
				Btu/h	6,500	8,345
		Heating (5°F) *2	Max.	kW	2.71	3.52
				Btu/h	9,250	12,030
Input power		Cooling	Rated	kW	0.580	0.780
			Min.—Max.		0.100—1.060	0.130—1.280
		Heating	Rated		0.780	0.855
			Min.—Max.		0.130—1.220	0.170—1.430
Current		Cooling	Rated	A	2.3	4.6
		Heating			3.4	4.8
EER2		Cooling		W/W	4.55	4.51
				Btu/hW	15.52	15.40
COP2		Heating		W/W	3.57	4.10
				Btu/hW	12.18	14.00
SEER2		Cooling		Btu/hW	27.5	23.5
HSPF2		Heating		Btu/hW	10.0	9.35
Power factor		Cooling		%	97	96
		Heating			97	97
Moisture removal				pints/h (L/h)	1.9 (0.9)	2.5 (1.2)
Maximum operating current*3		Cooling		A	6.5	7.0
		Heating			6.5	7.0
Fan	Airflow rate	Cooling	HIGHER	CFM (m^3/h)	394 (670)	618 (1,050)
			HIGH		365 (620)	559 (950)
			MED		294 (500)	483 (820)
			LOW		235 (400)	453 (770)
			LOWER		224 (380)	365 (620)
		Heating	HIGHER		394 (670)	618 (1,050)
			HIGH		365 (620)	559 (950)
			MED		294 (500)	483 (820)
			LOW		235 (400)	453 (770)
			LOWER		224 (380)	365 (620)
	Type × Qty				Crossflow fan × 1	
	Motor output			W	25	35
Sound pressure level*4		Cooling	HIGHER	dB (A)	42	48
			HIGH		39	46
			MED		34	41
			LOW		31	37
			LOWER		28	30
		Heating	HIGHER		42	48
			HIGH		39	46
			MED		34	41
			LOW		31	37
			LOWER		28	30
Heat exchanger type		Dimensions (H × W × D)		in (mm)	11-9/16 × 24-7/16 × 1-1/16 (294 × 620 × 27.2)	14-7/8 × 27-3/4 × 1-1/16 (378 × 705 × 27.2)
		Fin pitch		FPI	18	
		Rows × Stages			2 × 21	2 × 18
		Pipe type			Copper	
		Fin type			Aluminum	
Enclosure		Material			Polystyrene	
		Color			White	
Dimensions (H × W × D)		Net		in (mm)	10-5/8 × 33-7/16 × 8-7/16 (270 × 850 × 215)	12-3/8 × 37-13/16 × 9-5/16 (315 × 960 × 236)
		Gross			13-3/16 × 37 × 10-7/16 (335 × 940 × 265)	15-3/8 × 40-15/16 × 12-7/16 (390 × 1,040 × 316)
Weight		Net		lb (kg)	20 (9)	29 (13)
		Gross			24 (11)	33 (15)
Connection pipe		Size	Liquid	in (mm)	Ø1/4 (Ø6.35)	
			Gas		Ø3/8 (Ø9.52)	
		Method			Flare	
Drain hose		Material			Polyvinyl chloride	
		Tip diameter		in (mm)	Ø5/8 (Ø15.4) (I.D.), Ø7/8 (Ø23) (O.D.)	
Operation range		Cooling		°F (°C)	61 to 86 (16 to 30)	
				%RH	80 or less	
		Heating		°F (°C)	61 to 86 (16 to 30)	
Remote controller type					Wireless (Wired [option])	

WALL MOUNTED
WHZ09-12WMA21S

Type	Wall mounted	
	Inverter, Heat pump	
Model name	**WHZ09WMA21S**	**WHZ12WMA21S**

NOTES:

- Specifications are based on the following conditions:
  - Cooling: Indoor temperature of 80°FDB (26.67°CDB) /67°FWB (19.44°CWB), and outdoor temperature of 95°FDB (35°CDB) / 75°FWB (23.9°CWB).
  - Heating: Indoor temperature of 70°FDB (21.11°CDB) /59°FWB (15.56°CWB), and outdoor temperature of 47°FDB (8.33°CDB) /43°FWB (6.11°CWB).
  - *1: Heating (17°F): Indoor temperature of 70°FDB (21.11°CDB) /60°FWB (15.56°CWB), and outdoor temperature of 17°FDB (-8.33°CDB) /15°FWB (-9.44°CWB).
  - *2: Heating (5°F): Indoor temperature of 70°FDB (21.11°CDB)/60°FWB (15.56°CWB), and outdoor temperature of 5°FDB (-15.0°CDB)/4°FWB (-15.56°CWB).
  - Test conditions are based on AHRI 210/240 2023.
  - Pipe length: 25 ft (7.5 m), Height difference: 0 ft (0 m). (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *3: Maximum current is maximum value when operated within the operation range.
- *4: Sound pressure level:
  - Measured values in manufacturer's anechoic chamber.
  - Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.

M condition					
Model name				**WHZ09WMA21S**	**WHZ12WMA21S**
Capacity	Cooling	Rated	kW	2.64	3.52
			Btu/h	9,000	12,000
		Min.—Max.	kW	1.06—2.93	1.17—3.96
			Btu/h	3,600—10,000	4,000—13,500
	Heating	Rated	kW	3.08	3.81
			Btu/h	10,500	13,000
		Min.—Max.	kW	1.06—3.08	1.17—4.10
			Btu/h	3,600—10,500	4,000—14,000
Input power	Cooling	Rated	kW	0.560	0.780
		Min.—Max.		0.100—1.060	0.130—1.280
	Heating	Rated		0.770	0.855
		Min.—Max.		0.130—1.220	0.170—1.430
Current	Cooling	Rated	A	2.3	4.6
	Heating			3.4	4.8
EER	Cooling		W/W	4.71	4.51
			Btu/hW	16.07	15.40
COP	Heating		W/W	4.00	4.45
			Btu/hW	13.64	15.20
SEER	Cooling		Btu/hW	28.0	25.0
HSPF	Heating		Btu/hW	12.5	12.0
Power factor	Cooling		%	97	96
	Heating			97	97

NOTES:

Specifications are based on the following conditions:

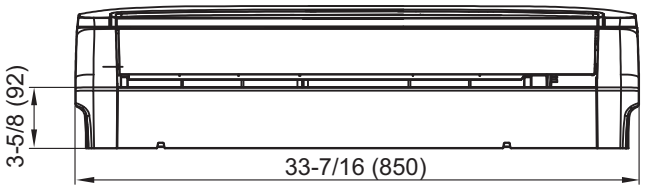
- Cooling: Indoor temperature of 80°FDB (26.67°CDB)/67°FWB (19.44°CWB), and outdoor temperature of 95°FDB (35°CDB)/75°FWB (23.9°CWB).
- Heating: Indoor temperature of 70°FDB (21.11°CDB)/59°FWB (15.56°CWB), and outdoor temperature of 47°FDB (8.33°CDB)/43°FWB (6.11°CWB).
- *: Heating (17°F): Indoor temperature of 70°FDB (21.11°CDB)/60°FWB (15.56°CWB), and outdoor temperature of 17°FDB (-8.33°CDB)/15°FWB (-9.44°CWB).
- Test conditions are based on AHRI 210/240 2017.
- Pipe length: 25 ft (7.5 m), Height difference: 0 ft (0 m). (Between outdoor unit and indoor unit.)

WALL MOUNTED
WHZ09-12WMA21S

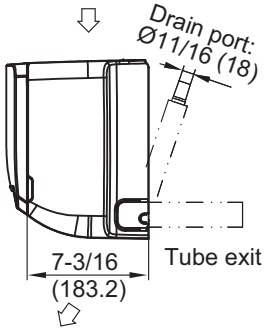
2. Dimensions

2-1. Model: WHZ09WMA21S

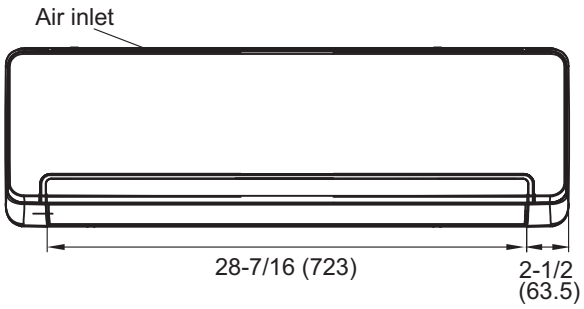
Unit: in (mm)



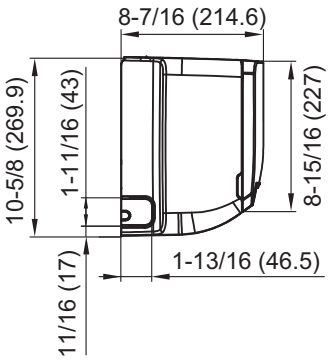
Bottom view



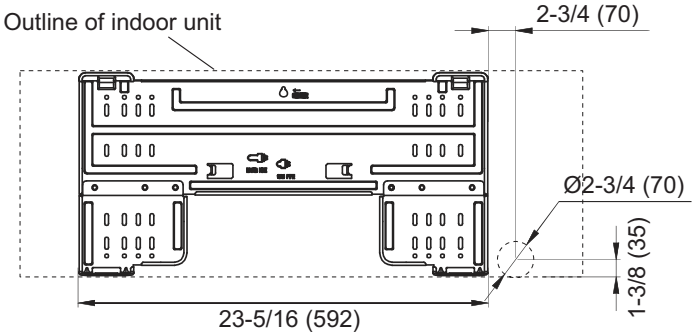
Side view



Front view



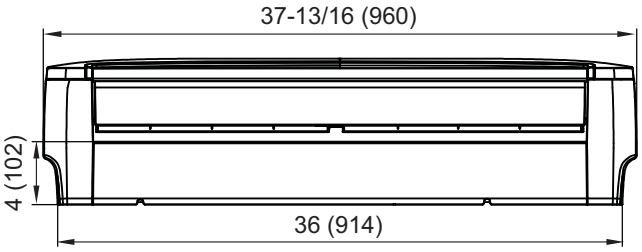
Side view



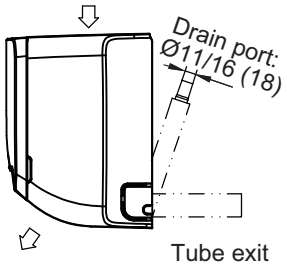
WALL MOUNTED
WHZ09-12WMA21S

2-2. Model: WHZ12WMA21S

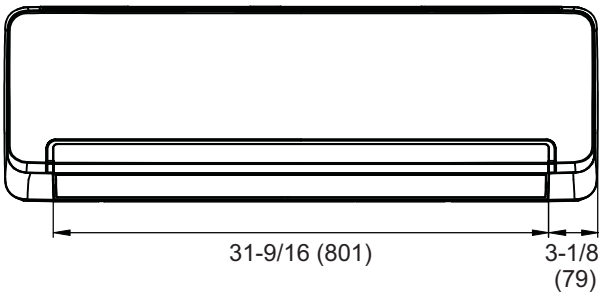
Unit: in (mm)



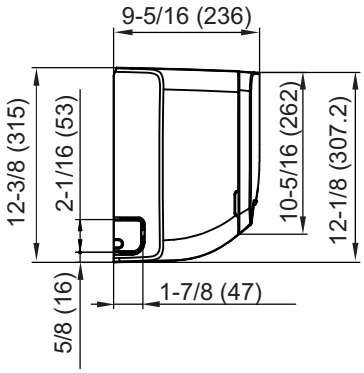
Bottom view



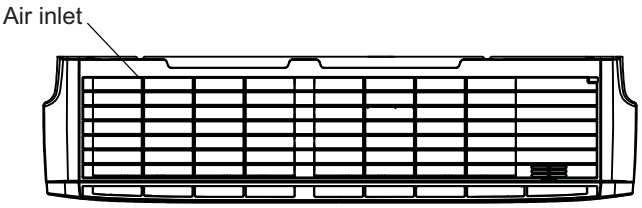
Side view



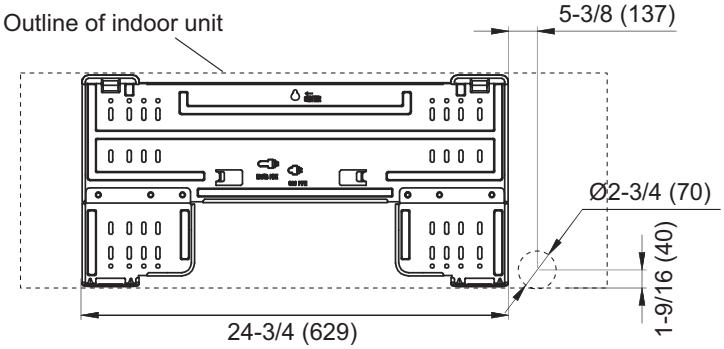
Front view



Side view



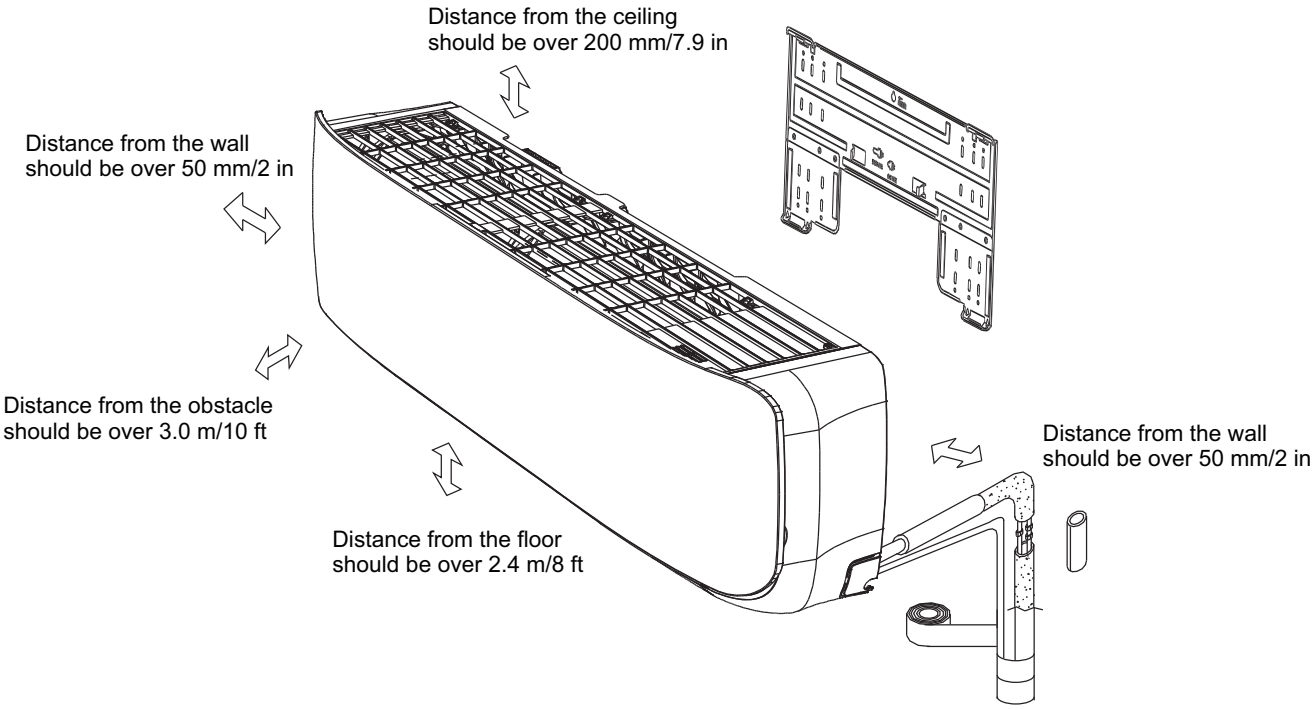
Top view



WALL MOUNTED
WHZ09-12WMA21S

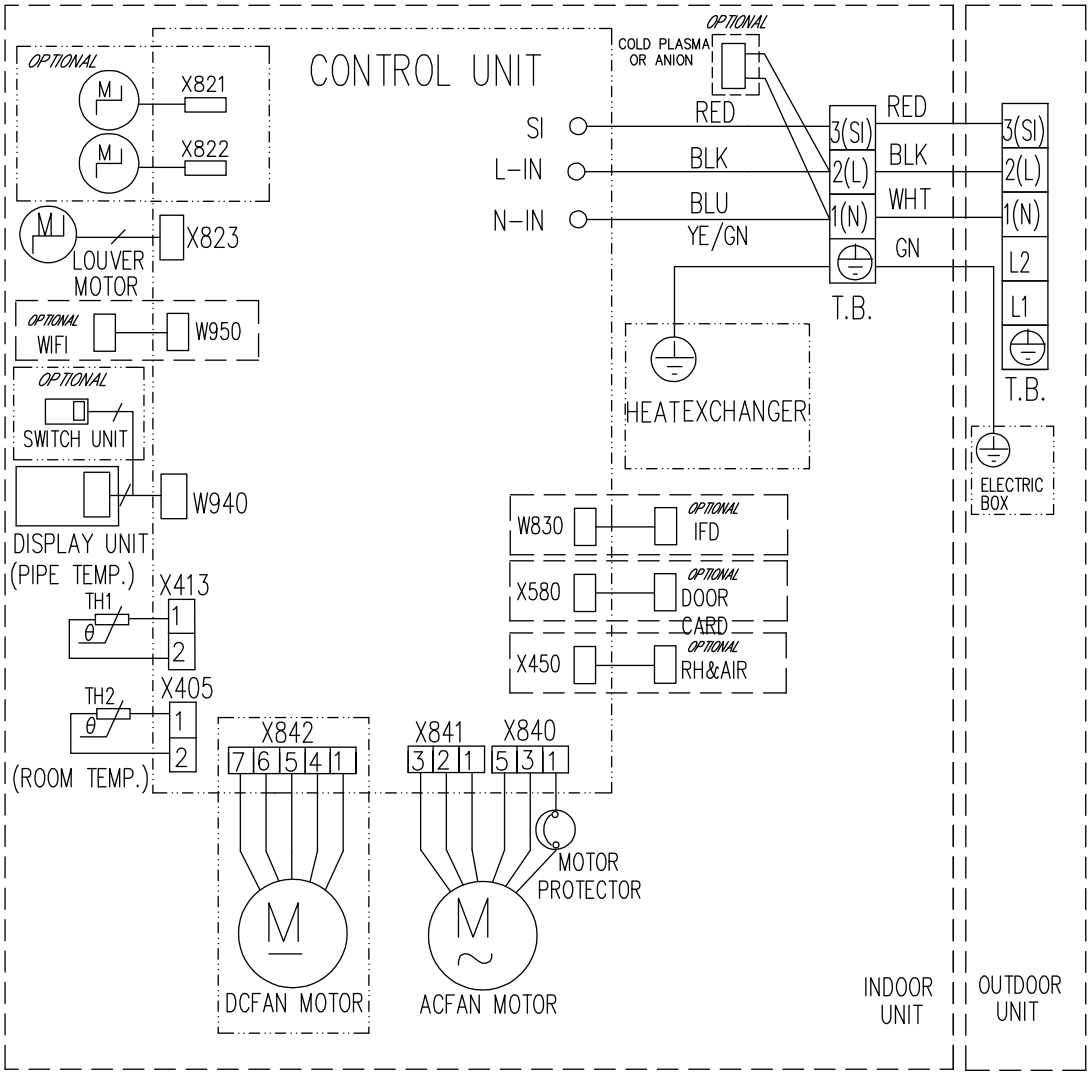
2-3. Installation space requirement

Provide sufficient installation space for product safety.



3. Wiring diagrams

3-1. Models: WHZ09WMA21S and WHZ12WMA21S



Temperature	0℃ 32°F	20℃ 68°F	30℃ 86°F
Thermistor (Pipe temp.)	15 k Ω 1.3 V	6.5 k Ω 2.2 V	4.5 k Ω 2.7 V
Thermistor (Room temp.)	15 k Ω 1.3 V	6.5 k Ω 2.2 V	4.5 k Ω 2.7 V

Fan motor

Pin No.	Terminal code	Function of terminal	Lead wire color
1	Vm	Motor power voltage input	Red
2	——	——	——
3	——	——	——
4	GND	GND	Black
5	Vcc	Control power voltage input	White
6	FG	Revolution pulse output	Blue
7	Vsp	Speed control voltage input	Yellow

WALL MOUNTED
WHZ09-12WMA21S

4. Capacity table

Capacity tables show each of following values calculated based on the outdoor temperature and the indoor temperature, under given Airflow Rate (AFR):

For cooling capacity: Total Capacity (TC), Sensible Heat Capacity (SHC), and Input Power (IP)
For heating capacity: Total Capacity (TC) and Input Power (IP)

4-1. Cooling capacity

■ Model: WHZ09WMA21S

AFR	CFM	394

		Indoor temperature																	
	°FDB	64			70			75			80			85			90		
	°FWB	54			60			83			67			71			73		
Outdoor temperature °FDB	°FWB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kBtu		kW	kBtu		kW	kBtu		kW	kBtu		kW	kBtu		kW	kBtu		kW
14	12	6.64	5.25	0.38	8.01	5.31	0.38	8.26	5.43	0.38	9.07	6.51	0.37	9.34	5.86	0.35	10.26	7.52	0.37
23	21	6.47	5.01	0.38	7.91	5.22	0.4	8.27	5.51	0.4	8.85	5.78	0.41	9.68	6.19	0.38	9.56	6.57	0.36
32	28	7.51	5.24	0.32	8.18	5.48	0.35	8.52	5.83	0.36	8.86	6.21	0.36	9.17	6.53	0.37	9.32	6.91	0.36
41	37	7.57	5.48	0.2	8.39	5.83	0.28	8.46	6.36	0.27	8.65	6.56	0.28	8.84	6.89	0.28	8.87	7.24	0.28
50	47	8.62	5.73	0.37	8.77	6.21	0.32	8.82	6.65	0.32	8.94	6.88	0.32	9.08	7.21	0.32	9.19	7.58	0.31
59	50	8.78	6.05	0.42	9.45	6.61	0.42	9.63	7.01	0.43	9.84	7.26	0.43	10.01	7.56	0.43	10.14	7.91	0.43
67	53	8.85	6.42	0.49	9.17	6.98	0.6	9.85	7.3	0.61	10.78	7.55	0.61	11.72	7.89	0.6	11.12	8.23	0.6
77	62	10.15	6.16	0.75	11.17	6.62	0.82	11.81	6.89	0.93	12.26	7.17	0.84	12.93	7.53	0.82	12.44	7.87	0.85
87	69	9.18	5.85	0.74	10.25	6.23	0.92	10.95	6.54	0.95	11.28	6.83	0.95	11.59	7.21	0.96	11.18	7.54	0.95
95	75	9.14	5.57	0.82	9.46	5.82	0.9	10.25	6.21	0.95	10.63	6.5	0.94	10.56	6.87	0.93	11.78	7.21	0.94
104	78	7.51	5.23	0.82	8.48	5.47	0.9	9.33	5.89	0.94	9.85	6.27	0.94	10.24	6.52	0.92	10.96	6.87	0.92
115	80	7.18	4.91	0.82	7.93	5.23	0.9	8.29	5.52	0.9	9.25	5.95	0.91	9.64	6.17	0.91	10.27	6.52	0.91

■ Model: WHZ12WMA21S

AFR	CFM	618

		Indoor temperature																	
	°FDB	64			70			75			80			85			90		
	°FWB	54			60			83			67			71			73		
Outdoor temperature °FDB	°FWB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kBtu		kW	kBtu		kW	kBtu		kW	kBtu		kW	kBtu		kW	kBtu		kW
14	12	9.92	7.31	0.7	10.53	7.59	0.71	10.99	7.92	0.72	11.42	8.24	0.73	11.9	8.59	0.73	1253	8.69	0.74
23	21	9.89	7.23	0.78	10.45	7.58	0.78	10.92	7.92	0.75	11.37	8.23	0.76	11.88	8.56	0.74	12.33	8.98	0.75
32	28	10.12	7.58	0.79	10.77	7.93	0.79	11.35	8.23	0.8	11.82	8.54	0.81	12.33	8.89	0.82	12.83	9.29	0.82
41	37	10.71	7.94	0.87	11.21	8.23	0.89	11.74	8.56	0.88	12.18	8.87	0.88	12.72	9.23	0.87	13.31	9.56	0.88
50	47	11.16	8.26	0.93	11.71	8.55	0.94	12.29	8.87	0.95	12.56	9.21	0.96	13.12	9.56	0.96	13.86	9.92	0.97
59	50	11.64	8.57	1.01	12.13	8.89	1.01	12.61	9.23	1.02	13.11	9.56	1.02	13.63	9.92	1.03	14.22	10.25	1.03
67	53	12.11	8.92	1.02	12.66	9.21	1.02	13.18	9.58	1.04	13.69	9.92	1.05	14.21	10.25	1.05	14.76	10.58	1.05
77	62	12.82	8.57	1.11	13.14	8.86	1.14	13.82	9.24	1.15	13.95	9.51	1.16	14.43	9.88	1.16	14.51	10.22	1.17
87	69	11.02	8.21	1.12	11.25	8.54	1.12	12.95	8.91	1.13	13.28	9.12	1.14	13.59	9.53	1.15	14.18	9.84	1.16
95	75	10.54	7.92	1.11	11.46	8.21	1.12	12.25	8.42	1.13	12.63	8.72	1.13	13.16	9.17	1.14	13.78	9.48	1.15
104	78	9.51	7.56	1.1	10.48	7.82	1.11	11.33	8.11	1.11	11.85	8.37	1.12	12.24	8.83	1.12	12.96	9.13	1.13
115	80	9.18	7.23	1.1	9.93	7.44	1.1	10.29	7.75	1.11	11.25	8.05	1.11	11.64	8.47	1.11	12.27	8.77	1.12

WALL MOUNTED
WHZ09-12WMA21S

4-2. Heating capacity

NOTE: Values mentioned in the table are calculated based on the maximum capacity.

■ Model: WHZ09WMA21S

AFR	CFM	394

		Indoor temperature									
		°FDB	60		65		70		75		78	
	°FDB	°FWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kBtu	kW	kBtu	kW	kBtu	kW	kBtu	kW	kBtu	kW
Outdoor temperature	-13	-15	6.25	0.93	6.05	0.95	5.71	0.96	5.66	0.97	5.52	0.99
	-5	-7	8.91	0.98	8.65	0.99	8.02	1.01	7.76	1.05	7.32	1.12
	5	3	9.96	1.06	9.81	1.08	9.61	1.08	9.11	1.11	8.35	1.17
	14	12	10.12	1.08	10.01	1.11	9.86	1.11	9.61	1.12	9.47	1.13
	23	19	10.31	1.11	10.21	1.14	9.97	1.15	9.82	1.16	9.63	1.15
	32	28	10.65	1.18	10.42	1.15	10.23	1.15	10.03	1.15	9.84	1.16
	41	37	11.79	0.81	11.33	1.08	10.89	1.09	10.46	1.1	10.02	1.11
	47	43	12.61	1.04	12.48	1.06	11.78	1.09	11.28	1.09	10.68	1.11
	50	47	12.49	0.81	12.21	0.86	11.51	0.88	11.34	0.89	10.87	0.93
	59	50	12.55	0.82	12.34	0.87	11.85	0.88	11.63	0.89	10.95	0.92
	68	59	12.94	0.81	12.51	0.86	11.96	0.87	11.81	0.88	11.51	0.91
	75	65	13.33	0.81	12.72	0.85	12.52	0.86	12.12	0.87	11.73	0.86

■ Model: WHZ12WMA21S

AFR	CFM	618

		Indoor temperature									
		°FDB	60		65		70		75		78	
	°FDB	°FWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kBtu	kW	kBtu	kW	kBtu	kW	kBtu	kW	kBtu	kW
Outdoor temperature	-13	-15	9.16	1.25	8.95	1.24	8.79	1.24	8.56	1.25	8.32	1.25
	-5	-7	9.92	1.27	9.73	1.26	9.42	1.26	9.2	1.27	9.01	1.27
	5	3	10.58	1.33	10.36	1.32	10.11	1.32	9.87	1.33	9.61	1.33
	14	12	11.25	1.37	11.03	1.38	10.86	1.38	10.64	1.38	10.43	1.38
	23	19	12.12	1.41	11.97	1.42	11.57	1.43	11.34	1.42	11.22	1.43
	32	28	12.67	1.37	12.41	1.39	12.23	1.38	12.03	1.39	11.81	1.39
	41	37	14.02	1.39	13.89	1.38	13.69	1.39	13.46	1.39	13.23	1.38
	47	43	14.95	1.44	14.73	1.43	14.51	1.43	14.29	1.44	14.06	1.43
	50	47	14.65	1.42	14.43	1.41	14.12	1.42	13.93	1.38	13.71	1.42
	59	50	14.08	1.21	13.98	1.18	13.81	1.18	13.58	1.19	13.36	1.18
	68	59	12.97	1.15	12.72	1.13	12.56	1.12	12.35	1.13	12.13	1.12
	75	65	13.56	1.11	13.42	1.09	13.12	1.08	12.89	1.11	12.67	1.12

WALL MOUNTED
WHZ09-12WMA21S

5. Remote controller

5-1. Wireless remote controller

1 MODE
Press this button to select the operation mode.

3 SLEEP
Used to set or cancel Sleep Mode operation.

6 SUPER
Used to start or stop the fast cooling/heating. (Fast cooling operates at high fan speed with 16℃(61°F) set temp automatically ; Fast heating operates at auto fan speed with 30℃(86°F) set temp automatically)

8 ON TIMER
Used to set or cancel the timer operation.

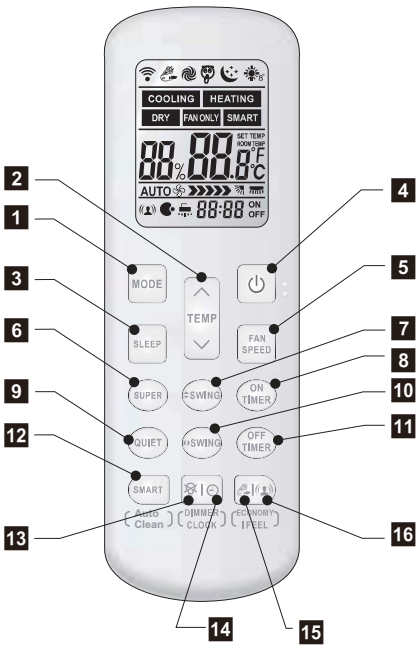
9 QUIET
Used to set or cancel Quiet Mode operation.

11 OFF TIMER
Used to set or cancel the timer operation.

12 SMART(invalid for multi system)
Used to enter logic operation directly when the units is on.

Auto Clean (invalid for multi system) will be activated by pressing SMART button more than 5 seconds under Cooling or Dry mode and be canceled by pressing SMART, POWER or MODE button.(Icon " will appear on LCD and disappear after around 30 minutes)

13 DIMMER
When you press this button, all the display of indoor unit will be closed. Press any button to resume display.



14 CLOCK
Used to set the current time.

15 ECONOMY
Used to set or cancel Economy Mode operation.

2 + **7** 8℃ HEAT(optional)
Used to start or stop 8℃ HEAT mode.

2 TEMP
Used to adjust the room temperature and the timer, also real time.

4 POWER
The appliance will be started when it is energized or will be stopped when it is in operation, if you press this button.

5 FAN SPEED
Used to select fan speed in sequence auto, higher, high, medium, low and lower.

7 SWING
Used to stop or start vertical adjustment louver swinging and set the desired up/ downairflow direction.

10 SWING
Used to stop or start Horizontal adjustment louver swinging and set the desired left/right airflow direction.

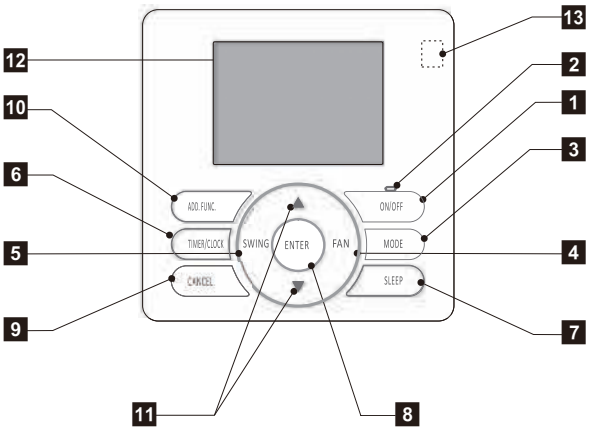
16 IFEEL
Press to set IFEEL Mode operation. In IFEEL mode,the Air Conditioner operates basis temperature sensor fitted in remote instead of machine, Advice to use IFEEL mode and the remote put where the indoor unit receive signal easily.Press this button above 5 seconds, start or stop IFEEL mode.

Indication symbols on LCD:

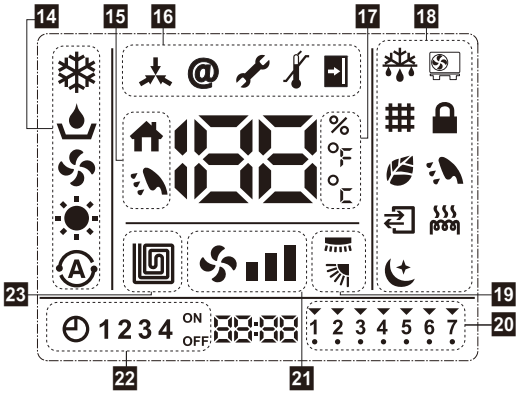
COOLING Cooling indicator	DRY Dry indicator	FAN ONLY Fan only indicator	HEATING Heating indicator	SMART Smart indicator
Auto Auto fan speed	Higher fan speed	High fan speed	Medium fan speed	Low fan speed
Lower fan speed	Quiet indicator	Economy indicator	Super indicator	Sleep indicator
IFEEL	Display temperature	Display set timer / Display current time		8℃ Heat indicator

WALL MOUNTED
WHZ09-12WMA21S

5-2. Wired remote controller



LCD screen



NOTE: Functions may differ by type of the indoor unit. For details, refer to the operation manual.

1 ON/OFF button

Starts and stops operation.

2 Run indicator

Indicates the appliance is on.

3 MODE button

Switches operation mode (COOL, DRY, and HEAT).

4 FAN button

Selects the fan speed in sequence HIGH, AUTO, LOW, MED, HIGH.

5 SWING button (invalid for some models)

Stops/Starts adjustment louver swing and sets the airflow direction.

6 TIMER/CLOCK button

Sets current time or set timer on/off.

7 SLEEP button

Sets/cancels sleep mode operation.

8 ENTER button

9 CANCEL button

10 ADD.FUNC. button (invalid for some models)

Sets filter clean, hot water, fresh air, electric heater, etc.

11 SET TEMP. (temperature) (▽ / △) button

Sets desired temperature.

12 LCD screen

13 Built-in infrared signal receiver

14 Operation mode

: Cooling mode, : Dry mode, : Fan only mode, : Heating mode, : Auto mode

15 Temperature mode

: Room temperature, : Hot water temperature

16 Setting indicator

: Central control, : Address setting, : Address setting, : Error indicator, : Temperature range limit, : Home leave control

17 Temperature indicator

: Relative moisture, : Fahrenheit, : Celsius

18 Status indicator

: Defrost, : Compressor run, : Filter clean, : Lock, : Air purge, : Hot water, : Ventilation, : Electric heater, : Sleep

19 Air direction indicator

20 Day of week indicator

21 Fan speed indicator

22 Timer indicator

23 Floor heater indicator

WALL MOUNTED
WHZ09-12WMA21S

6. Accessories

Part name	Q'ty	Part name	Q'ty
Remote controller instructions	1	Drain joint rubber seal	1
Use and installation instructions	1	Flare nuts	4
Remote controller	1	Bag of wall anchors and screws	1
Remote controller holder	1	Screw for installations	6
AAA battery	2	Screw cover	3
Foam insulation	09 model: 1 12 model: 2	Warranty card	1
Drain joint	1	Rubber plug	6

Part 2. OUTDOOR UNIT

SINGLE TYPE:

WHZ09SZA21S
WHZ12SZA21S

1. Specifications

Type				Inverter heat pump	
Model name				**WHZ09SZA21S**	**WHZ12SZA21S**
Power supply				208/230 V ~ 60 Hz	
Available voltage range				187—253 V	
Fan	Airflow rate		CFM (m^3/h)	1,177 (2,000)	
	Type × Q'ty			Propeller fan × 1	
	Motor output		W	30	
Sound pressure level *1			dB (A)	55	
Heat exchanger type		Dimensions (H × W × D)	in (mm)	33-1/16 × 21-1/2 × 11/16 (840 × 546 × 18.19) 33-1/16 × 21-1/2 × 11/16 (840 × 546 × 18.19)	33-1/16 × 21-1/2 × 11/16 (840 × 546 × 18.19) 33-1/16 × 21-1/2 × 11/16 (840 × 546 × 18.19) 19-11/16 × 16-9/16 × 11/16 (500 × 420 × 18.19)
		Fin pitch	FPI	18	
		Rows × Stages		2 × 26	2.5 × 26
		Pipe type		Copper	
		Fin type	Type (Material)	Aluminum	
			Surface treatment	Blue fin	
Compressor	Type			Rotary	
Refrigerant		Type		R410A	
		Charge	lb oz	2 lb 7 oz	2 lb 14 oz
			g	1,100	1,300
Refrigerant oil		Type		VG74 (POE)	
Enclosure		Material		Steel sheet	
		Color		White	
Dimensions (H × W × D)	Net		in (mm)	23-1/16 × 31-7/8 × 11 (585 × 810 × 280)	
	Gross			25-3/16 × 37 × 15-3/16 (640 × 940 × 385)	
Weight	Net		lb (kg)	75 (34)	84 (38)
	Gross			82 (37)	93 (42)
Connection pipe	Size	Liquid	in (mm)	Ø1/4 (Ø6.35)	
		Gas		Ø3/8 (Ø9.52)	
	Method			Flare	
	Pre-charge length		ft (m)	24.6 (7.5)	
	Max. length			65 (20)	
	Max. height difference			Indoor unit higher than outdoor unit: 32 (10) Outdoor unit higher than indoor unit: 16 (5)	
Operation range		Cooling	°F (°C)	-0.4 to 115 (-18 to 46)	
		Heating		-13 to 75 (-25 to 24)	

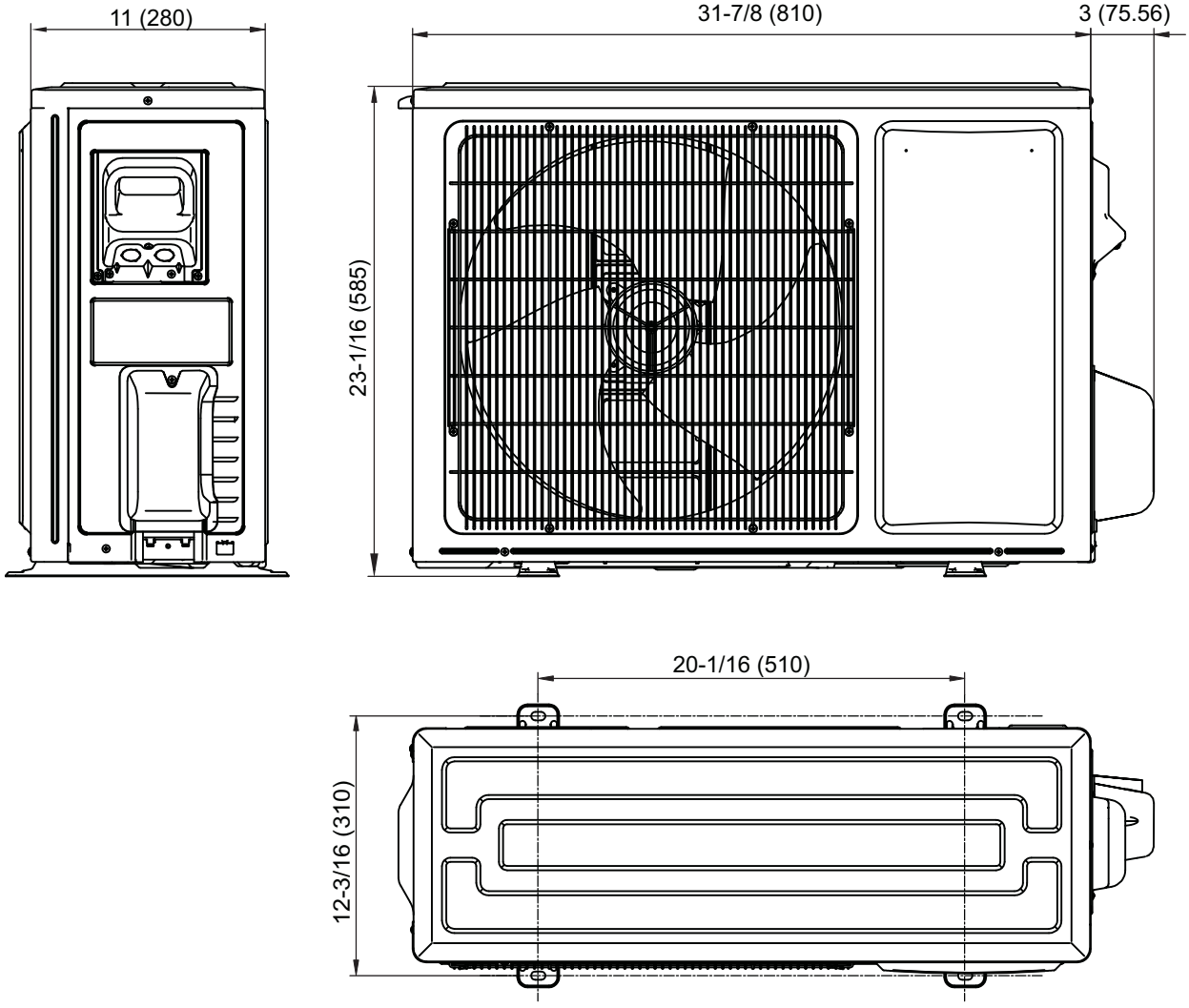
NOTES:

- Specifications are based on the following conditions:
  - Cooling: Indoor temperature of 80 °FDB (26.67 °CDB) / 67 °FWB (19.44 °CWB), and outdoor temperature of 95 °FDB (35 °CDB) / 75 °FWB (23.9 °CWB).
  - Heating: Indoor temperature of 70 °FDB (21.11 °CDB) / 59 °FWB (15 °CWB), and outdoor temperature of 47 °FDB (8.33 °CDB) / 43 °FWB (6.11 °CWB).
  - Pipe length: 24 ft 6 in (7.5 m), Height difference: 0 ft (0 m). (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: Sound pressure level
  - Measured values in manufacturer's anechoic chamber.
  - Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.

2. Dimensions

2-1. Models: WHZ09SZA21S and WHZ12SZA21S

Unit: in (mm)



OUTDOOR UNIT
WHZ09-12SZA21S

3. Installation space

3-1. Models: WHZ09SZA21S and WHZ12SZA21S

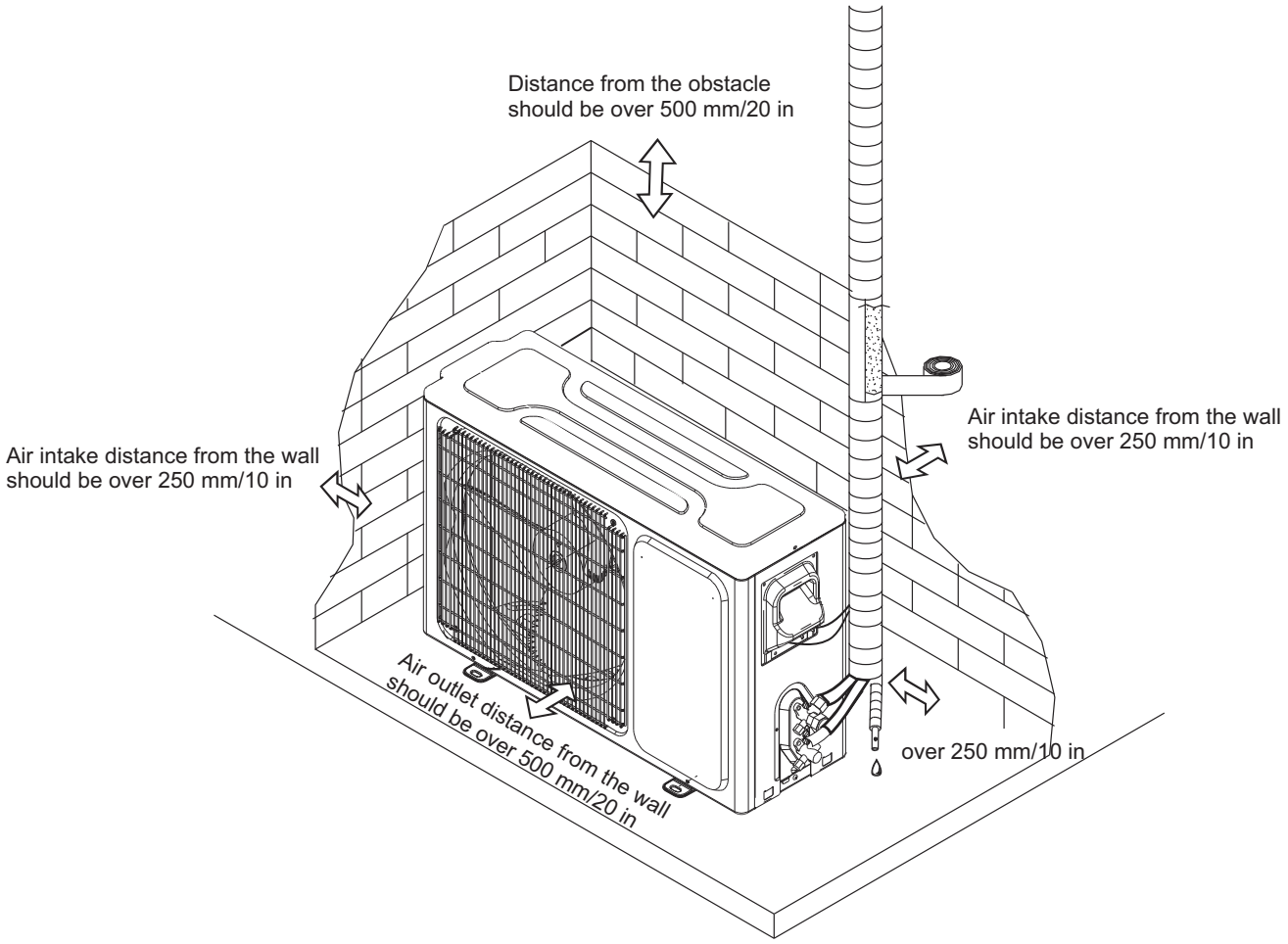
■ Space requirement

Provide sufficient installation space for product safety.

⚠ CAUTION

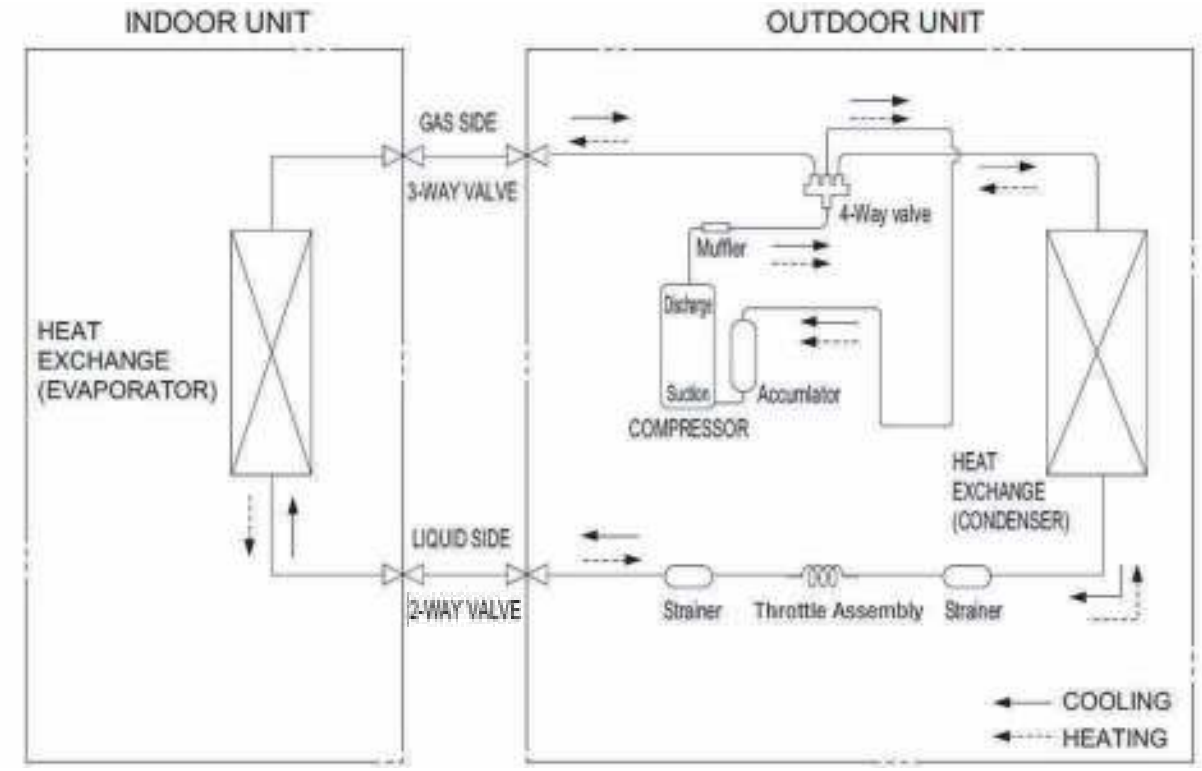
Keep the space shown in the installation examples.

If the installation is not performed accordingly, it could cause a short circuit and result in a lack of operating performance.



4. Refrigerant circuit

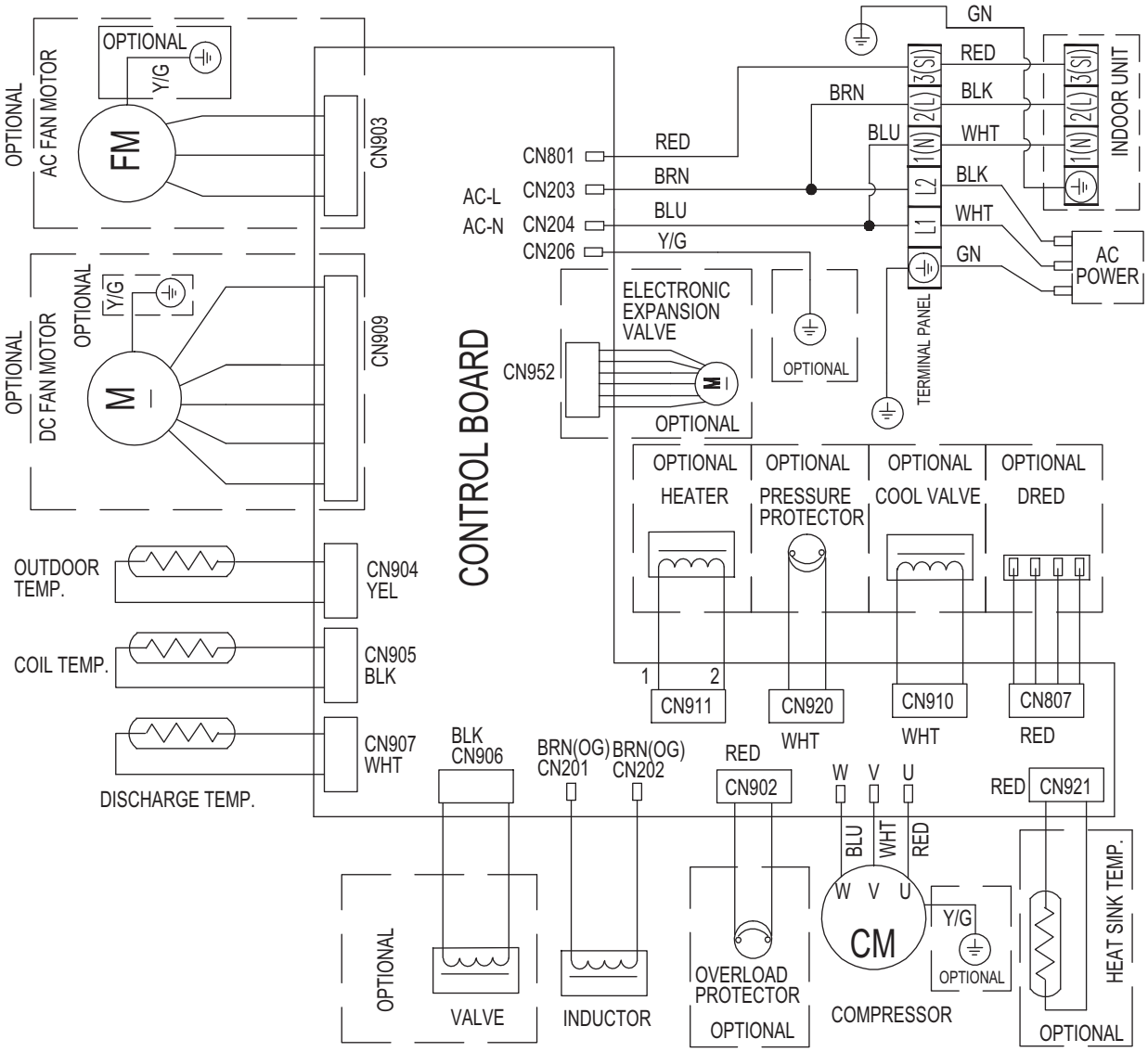
4-1. Models: WHZ09SZA21S and WHZ12SZA21S



OUTDOOR UNIT
WHZ09-12SZA21S

5. Wiring diagrams

5-1. Models: WHZ09SZA21S and WHZ12SZA21S



Fan motor

Pin No.	Terminal code	Function of terminal	Lead wire color
1	FG	Revolution pulse output	Blue
2	Vsp	Speed control voltage input	Yellow
3	Vcc	Control power voltage input	White
4	GND	GND	Black
5	——	——	——
6	Vm	Motor power voltage input	Red

Compressor
09 model: 2.08 Ω
12 model: 1.82 Ω
(20℃ 68℉)

Temperature	0℃ 32℉	20℃ 68℉	30℃ 86℉
Thermistor (ODU temp.)	15 k Ω 1.3 V	6.5 k Ω 2.2 V	4.5 k Ω 2.7 V
Thermistor (Pipe temp.)	15 k Ω 1.3 V	6.5 k Ω 2.2 V	4.5 k Ω 2.7 V
Thermistor (Discharge temp.)	187 k Ω 0.18 V	72.1 k Ω 0.43 V	46.5 k Ω 0.64 V

6. Electrical characteristics

Model name				WHZ09SZA21S	WHZ12SZA21S
Power supply	Voltage		V	208/230 ~	
	Frequency		Hz	60	
MCA*1			A	6.5	7.0
Wiring spec.*2	MAX. CKT. BKR*3		A	15	
	Power cable		AWG	3 × 16	
	Connection cable*4	Size	AWG	4 × 18	
		Limited wiring length	ft (m)	6.9 (21)	

*1: Minimum Circuit Ampacity (Calculation based on UL60335-2-40)

*2: Selected sample based on Japan Electrotechnical Standards and Codes Committee E0005. As the regulations of wire size and circuit breaker differ in each country or region, select appropriate devices complied to the regional standard.

*3: Maximum Circuit Breaker

*4: Limit voltage drop to less than 2%. If voltage drop is 2% or more, increase cable conductor size.

7. Accessories

Part name	Q'ty	Part name	Q'ty
Use and installation instructions	1	Power wire	1
Bottom rubber for outdoor unit	4		

OUTDOOR UNIT
WHZ09-12SZA21S