

AIR CONDITIONER

Wall mounted type

DESIGN & TECHNICAL MANUAL

INDOOR





WHZ09WMA21S

WHZ12WMA21S

OUTDOOR



WHZ09SZA21S WHZ12SZA21S

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- 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

1. Specifications

_					Wall mounted				
Туре					Inverter h	eat pump			
Model name					WHZ09WMA21S	WHZ12WMA21S			
Power supply					208/230	V ~ 60 Hz			
Power supply intake						or unit			
Available voltage rang	je					253 V			
			Rated	kW	2.64	3.52			
		Cooling		Btu/h	9,000 1.06—2.93	12,000 1.17—3.96			
			Min.—Max.	kW Btu/h	3,600—10,000	4,000—13,500			
Capacity				kW	3,000—10,000	3.81			
		Rated		Btu/h	10,500	13,000			
		Heating		kW	1.06—3.08	1.17—4.10			
			Min.—Max.	Btu/h	3,600—10,500	4,000—14,000			
		Cooling	Rated		0.560	0.780			
Input power		Cooling	Min.—Max.	kW	0.100—1.060	0.130—1.280			
Imput power		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 15.20			
SEER		_		Btu/hW Btu/hW	13.64 28.0	15.20 25.0			
HSPF		Cooling		Btu/hW	12.5	12.0			
INFI		Heating Cooling			97	96			
Power factor		Heating		%	97	96			
Moisture removal		ricating		pints/h (L/h)	1.9 (0.9)	2.5 (1.2)			
		Cooling		T	6.5	7.0			
Maximum operating c	urrent*1	Heating		Α	6.5	7.0			
		i i i i i i i i i i i i i i i i i i i	HIGHER		394 (670)	618 (1,050)			
			HIGH	-	365 (620)	559 (950)			
		Cooling	MED	1	294 (500)	483 (820)			
			LOW	1	235 (400)	453 (770)			
	A:	rflow rate	LOWER	7 0514 (3")	224 (380)	365 (620)			
F	Airflow rate		HIGHER	CFM (m ³ /h)	394 (670)	618 (1,050)			
Fan			HIGH		365 (620)	559 (950)			
		Heating	MED		294 (500)	483 (820)			
			LOW	1	235 (400)	453 (770)			
			LOWER	1	224 (380)	365 (620)			
	Type × Q'ty					w fan × 1			
	Motor output			W	25	35			
			HIGHER		42	48			
			HIGH		39	46			
		Cooling	MED	_	34	41			
			LOWER	_	31	37			
Sound pressure level*	2		LOWER	dB (A)	28 42	30			
			HIGHER HIGH	-	39	48 46			
		Heating	MED	-	39	40			
		licating	LOW	-	31	37			
			LOWER	-	28	30			
		Dimensions (I		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	2,	FPI		8			
Heat exchanger type		Rows × Stage	es	-	2 × 14	2 × 18			
3,,,,,,		Pipe type				pper			
		Fin type				inum			
Englogues		Material				tyrene			
Enclosure		Color				nite			
Dimensions		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)			
(H × W × D)		Gross		iii (iiiiii)	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)			
TTOIGHT		Gross		in (va)	24 (11)	33 (15)			
		Size	Liquid	in (mm)		Ø6.35)			
Connection pipe			Gas	()		Ø9.52)			
		Method				are			
Drain hose		Material				PVC			
		Tip diameter		in (mm)		, Ø7/8 (Ø23) (O.D.)			
0		Cooling		°F (°C)		(16 to 30)			
Operation range		_		%RH		r less			
Domote controller		Heating		°F (°C)		(16 to 30)			
Remote controller type	e				Wireless (W	ired [option])			
NOTES:									

NOTES:

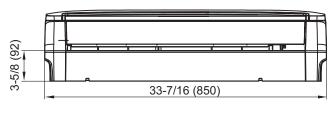
- · Specifications are based on the following conditions:
- Cooling: Indoor temperature of 80 °FDB (26.67 °CDB) /67 °FWB (19.44 °CWB), and outdoor temperature of 95 °FDB (35 °CDB) / 75 °FWB (23.9 °CWB).

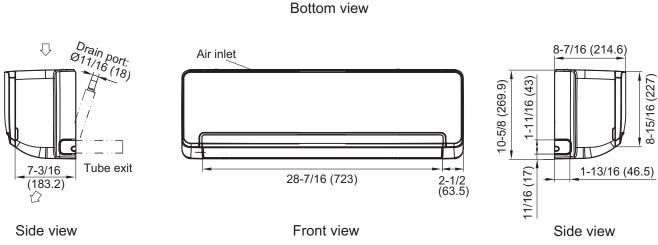
 Heating: Indoor temperature of 70 °FDB (21.11 °CDB) /59 °FWB (15.56 °CWB), and outdoor temperature of 47 °FDB (8.33 °CDB) /43 °FWB (6.11 °CWB).
- Pipe length: 25 ft (7.5 m), Height difference: 0 ft (0 m). (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
 *1: Maximum current is maximum value when operated within the operation range.
- *2: 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.

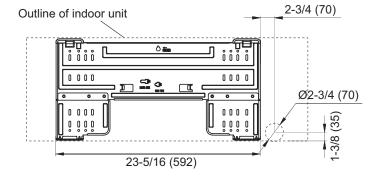
2. Dimensions

2-1. Model: WHZ09WMA21S

Unit: in (mm)

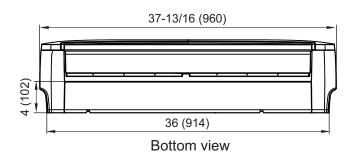


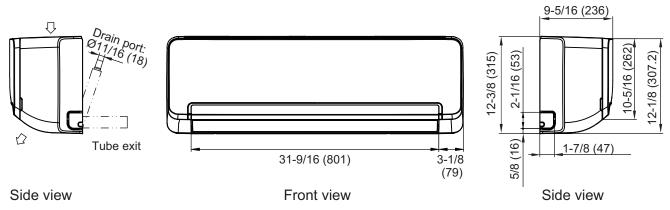


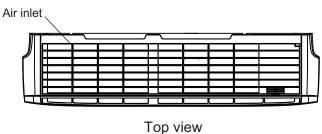


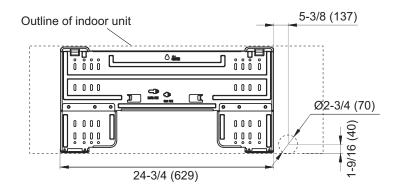
2-2. Model: WHZ12WMA21S

Unit: in (mm)



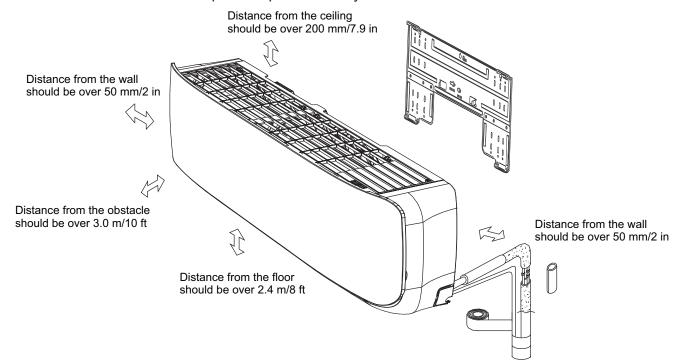






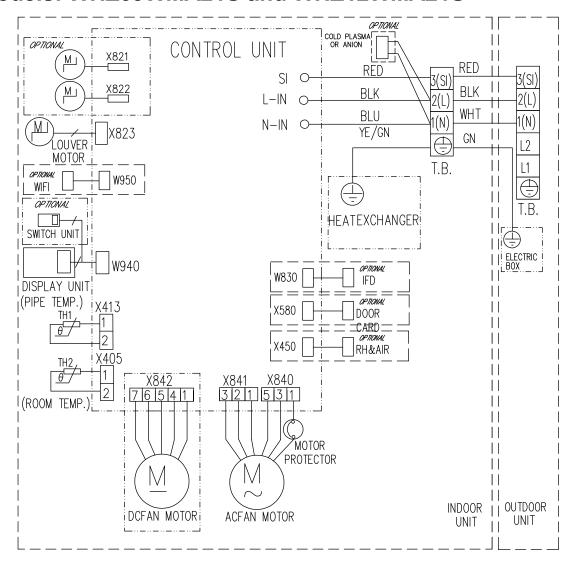
2-3. Installation space requirement

Provide sufficient installation space for product safety.



3. Wiring diagrams

3-1. Models: WHZ09WMA21S and WHZ12WMA21S



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

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			CFN												394					
										I	ndoor tei	nperature	е							
		°FDB	64 54			70				75			80			85			90	
		°FWB				60			83			67			71		73			
	°FDB	°FWB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	LPDB	FWB	kE	Btu	kW	kE	tu	kW	kE	Btu	kW	kB	tu	kW	kE	Btu	kW	kB	Btu	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
Lure Ture	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
era	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
temperature	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
loor	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
Outd	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
١	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	FR CFM									618										
				Indoor temperature																
		°FDB	64		70			75			80			85		90				
		°FWB		54		60			83			67			71			73		
	°FDB	°FWB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	FDB	FVVD	kE	Btu	kW	kB	tu	kW	kE	tu	kW	kB	tu	kW	kB	tu	kW	kB	Btu	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
ature	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
era	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
tempera	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
rte	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
loor	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
Outd	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
0	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

4-2. Heating capacity

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

■ Model: WHZ09WMA21S

CFM 394 Indoor temperature °FDB ΙP TC ΙP TC ΙP ΙP TC TC TC °FDB °FWB kBtu kW kBtu kW kBtu kW kBtu kW kBtu kW -15 6.25 0.93 6.05 0.95 5.71 0.96 0.97 0.99 5.66 5.52 8.91 0.98 8.02 7.76 8.65 0.99 1.01 1.05 7.32 1.12 -5 Outdoor temperature 9.96 1.06 9.81 9.61 8.35 1.17 3 1.08 1.08 9.11 1.11 12 10.12 1.08 10.01 9.86 9.61 9.47 14 1.11 1.11 1.12 1.13 23 19 10.31 1.11 10.21 9.97 1.15 9.82 1.16 9.63 1.15 1.14 32 28 10.65 1.18 1.15 10.23 1.15 10.03 1.15 9.84 1.16 10.42 37 1.11 41 11.79 0.81 11.33 1.08 10.89 1.09 10.46 1.1 10.02 43 12.48 1.09 1.09 10.68 1.11 12.61 1.04 1.06 11.78 11.28 50 47 12.49 0.81 12.21 0.86 11.51 0.88 11.34 0.89 10.87 0.93 50 12.34 0.87 11.85 0.88 11.63 0.89 10.95 0.92 59 12.94 12.51 0.86 11.96 0.87 11.81 0.88 11.51 0.91 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 ter	mperature				
		°FDB	6	0	6	35	7		7	5	7	8
	°FDB	°FWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
	FDB	FVVD	kBtu	kW	kBtu	kW	kBtu	kW	kBtu	kW	kBtu	kW
	-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
temperature	5	3	10.58	1.33	10.36	1.32	10.11	1.32	9.87	1.33	9.61	1.33
era	14	12	11.25	1.37	11.03	1.38	10.86	1.38	10.64	1.38	10.43	1.38
합	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
Outdoor	41	37	14.02	1.39	13.89	1.38	13.69	1.39	13.46	1.39	13.23	1.38
ğ	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

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 $16^{\circ}\text{C}(61^{\circ}\text{F})$ set temp automatically ; Fast heating operates at auto fan speed with $30^{\circ}\text{C}(86^{\circ}\text{F})$ 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.

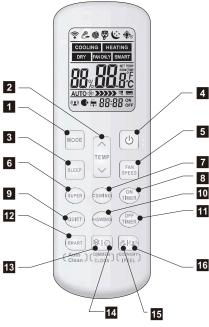
12 SMART(invalid for multi system)

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°C HEAT(optional)

Used to start or stop 8°C 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.

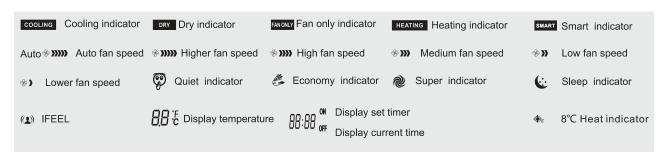
10 ◆ SWING

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

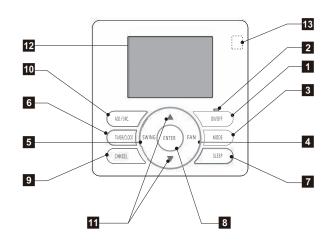
16 IFEEL

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.

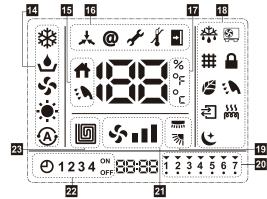
Indication symbols on LCD:



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.

SET TEMP. (temperature) (∇ / \triangle) 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

A: Room temperature, : Hot water temperature

16 Setting indicator

17 Temperature indicator

%: Relative moisture, ° : Fahrenheit, ° : Celsius

18 Status indicator

H: Filter clean, H: Filter clean, H: Lock, M: Air purge, N: Hot water, Electric heater, M: Sleep

- 19 Air direction indicator
- 20 Day of week indicator
- 21 Fan speed indicator
- 22 Timer indicator
- 23 Floor heater indicator

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	Warranty card	1
FOAIII IIISUIAUOII	12 model: 2	vvairanty card	
Drain joint	1	Rubber plug	6

Part 2. OUTDOOR UNIT

SINGLE TYPE:

WHZ09SZA21S

WHZ12SZA21S

1. Specifications

Туре				Inverter h	eat pump				
Model name				WHZ09SZA21S	WHZ12SZA21S				
Power supply				208/230	√ ~ 60 Hz				
Available voltage ra	ange			187—253 V					
	Airflow rate		CFM (m ³ /h)	1,177 ((2,000)				
Fan	Type × Q'ty		, ,	Propeller fan × 1					
	Motor output		W	3	0				
Sound pressure lev	ound pressure level *1		dB (A)	5	5				
		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)				
Heat exchanger typ	10	Fin pitch	FPI	1	-				
I leat exchanger typ)e	Rows × Stages	•	2 × 26	2.5 × 26				
		Pipe type		Сор					
		Fin type	Type (Material)	Aluminum					
		l' iii type	Surface treatment	Blue					
Compressor	Туре			Rot	-				
		Туре		R4 ²					
Refrigerant		Charge	lb oz	2 lb 7 oz	2 lb 14 oz				
		, and the second	g	1,100	1,300				
Refrigerant oil		Туре		VG74 (POE)					
Enclosure		Material		Steel					
		Color		Wh					
Dimensions	Net		in (mm)	23-1/16 × 31-7/8 × 1	` '				
$(H \times W \times D)$	Gross		()	25-3/16 × 37 × 15-3/	,				
Weight	Net		lb (kg)	75 (34)	84 (38)				
Wolgin	Gross		ib (itg)	82 (37)	93 (42)				
	Size	Liquid	in (mm)	Ø1/4 (
		Gas	()	Ø3/8 (
	Method			Fla					
Connection pipe	Pre-charge length			24.6	` '				
	Max. length		ft (m)	65 (
Max. height difference		` '		Indoor unit higher than outdoor unit: 32 (10) Outdoor unit higher than indoor unit: 16 (5)					
Onesetien ren	1	Cooling	°E (°C)	-0.4 to 115	(-18 to 46)				
Operation range		Heating	°F (°C)	-13 to 75 ((-25 to 24)				

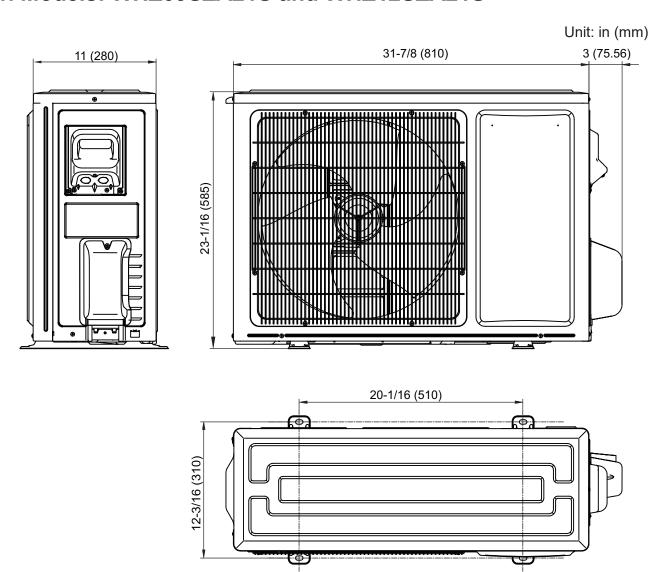
NOTES:

- 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



3. Installation space

3-1. Models: WHZ09SZA21S and WHZ12SZA21S

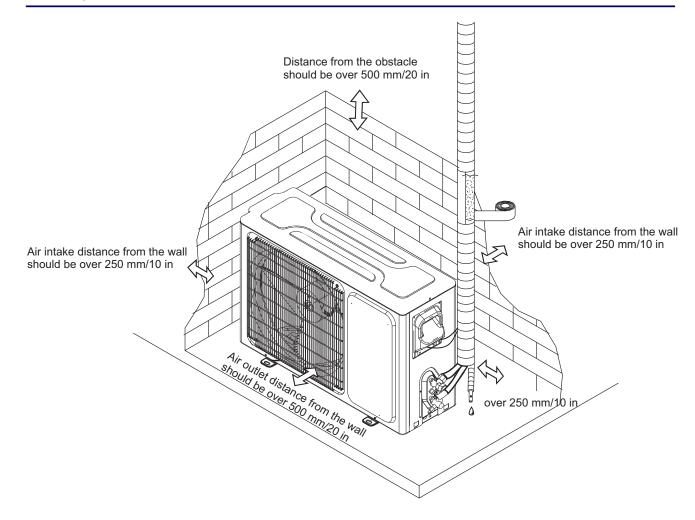
■ Space requirement

Provide sufficient installation space for product safety.

⚠ CAUTION

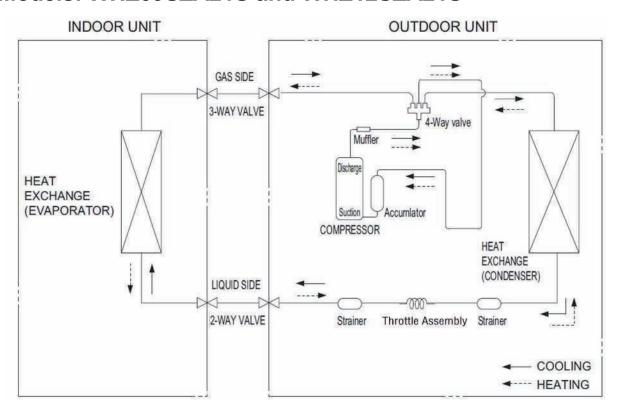
Keep the space shown in the installation examples.

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



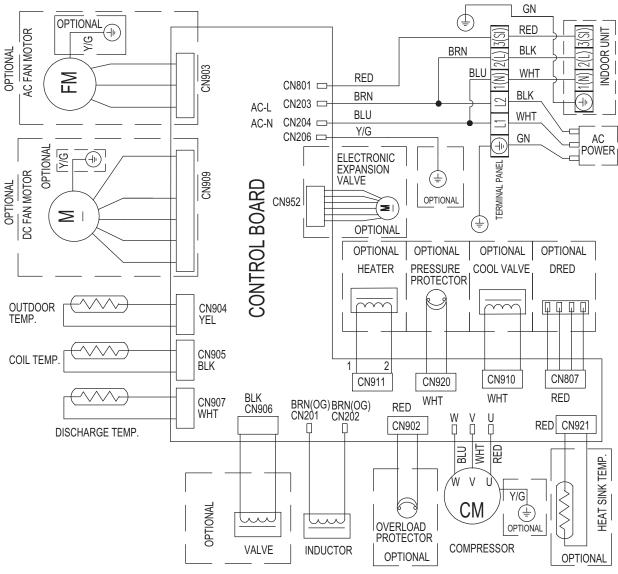
4. Refrigerant circuit

4-1. Models: WHZ09SZA21S and WHZ12SZA21S



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

Temperature	0°C 32°F	20°C 68°F	30°C 86°F	
Thermistor (ODU temp.)	15 k Ω 1.3 V	6.5 k Ω 2.2 V	4.5 k Ω 2.7 V	
1 /	1.5 V	Z.Z V	2.7 V	
Thermistor	15 k Ω	6.5 k Ω	4.5 k Ω	
(Pipe temp.)	1.3 V	2.2 V	2.7 V	
Thermistor	187 k Ω	72.1 k Ω	46.5 k Ω	
(Discharge temp.)	0.18 V	0.43 V	0.64 V	

Compressor 09 model: 2.08 Ω

12 model: 2.08Ω

(20°C 68°F)

6. Electrical characteristics

Model name				WHZ09SZA21S	WHZ12SZA21S
Power	Voltage		V	208/230 ~	
supply	Frequency		Hz	60	
MCA*1		Α	6.5	7.0	
Wiring spec.*2	MAX. CKT. BKR*3		Α	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		