

AIR CONDITIONER

Wall mounted type

DESIGN & TECHNICAL MANUAL

INDOOR



ASHG18KMTA
ASHG24KMTA
ASHG18KMTB
ASHG24KMTB

OUTDOOR



AOHG18KMTA



AOHG24KMTA

FUJITSU GENERAL LIMITED

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Part 1. INDOOR UNIT

WALL MOUNTED TYPE:

ASHG18KMTA

ASHG24KMTA

ASHG18KMTB

ASHG24KMTB

1. Specifications

Type				Wall mounted		
				Inverter heat pump		
Model name				ASHG18KMTA ASHG18KMTB	ASHG24KMTA ASHG24KMTB	
Power supply				230 V ~ 50 Hz		
Power supply intake				Outdoor unit		
Available voltage range				198—264 V		
Capacity	Cooling	Rated	kW	5.20	7.10	
			Btu/h	17,700	24,200	
		Min.—Max.	kW	0.90—6.00	0.90—8.30	
			Btu/h	3,100—20,500	3,100—28,300	
	Heating	Rated	kW	6.30	8.00	
			Btu/h	21,500	27,200	
		Min.—Max.	kW	0.90—8.70	0.90—10.10	
			Btu/h	3,100—29,600	3,100—34,400	
Input power	Cooling	Rated	kW	1.39	2.08	
				Min.—Max.	0.09—1.66	0.24—3.15
	Heating	Rated		1.56	1.91	
				Min.—Max.	0.09—2.86	0.14—3.00
	Fan	HIGH	W	37.5	61.6	
				MED	22.9	26.7
				LOW	13.3	13.3
				QUIET	8.2	8.2
Current	Cooling	Rated	A	6.1	9.3	
	Heating			7.0	8.6	
EER	Cooling			3.74	3.41	
COP	Heating			4.04	4.19	
Sensible capacity	Cooling			kW	5.30	
Power factor	Cooling			%	98	
	Heating			%	96	
Moisture removal			L/h (pints/h)	1.7 (3.0)	2.7 (4.8)	
Maximum operating current *1		Cooling	A	9.5	13.5	
		Heating		13.5	16.0	
Fan	Airflow rate	Cooling	m³/h	980	1,170	
				MED	810	850
				LOW	640	640
				QUIET	510	510
		Heating		HIGH	1,020	1,170
				MED	850	850
				LOW	640	640
				QUIET	510	510
	Type × Q'ty		Cross flow fan × 1			
	Motor output		W			
Sound pressure level *2	Cooling		dB (A)	45	49	
				MED	40	40
				LOW	35	35
				QUIET	29	29
	Heating	HIGH		46	49	
		MED		40	40	
		LOW		35	35	
		QUIET		29	29	
Heat exchanger type	Dimensions (H × W × D)		mm	Main1: 210 × 798 × 26.6, Main2: 135 × 798 × 20 Sub1: 84 × 798 × 13.3, Sub2: 84 × 798 × 13.3		
	Fin pitch			Main1: 1.2, Main2: 1.1 Sub1: 1.4, Sub2: 1.4		
	Rows × Stages		Main1: 2 × 10, Main2: 2 × 8 Sub1: 1 × 4, Sub2: 1 × 4			
	Pipe type		Copper			
	Fin type		Aluminum			
	Material		Polystyrene			
Enclosure	Color			White Approximate color of Munsell N 9.25/		
	Dimensions (H × W × D)	Net	mm	280 × 980 × 240		
Gross		322 × 1,078 × 346				
Weight	Net	kg	13.0			
	Gross		18			
Connection pipe	Size	Liquid	mm (in)	Ø 6.35 (Ø 1/4)		
		Gas		Ø 12.70 (Ø 1/2)		
Drain hose	Method			Flare		
	Material			PP + HDPE		
Operation range	Size		mm	Ø 13.8 (I.D.), Ø 15.8 to Ø 16.7 (O.D.)		
	Cooling			°C	18 to 32	
		%RH	80 or less			
Remote control	Heating			°C	16 to 30	
		Wireless remote controller (Option: Wired remote controller, Mobile app*3 [FGLair™])				

NOTES:

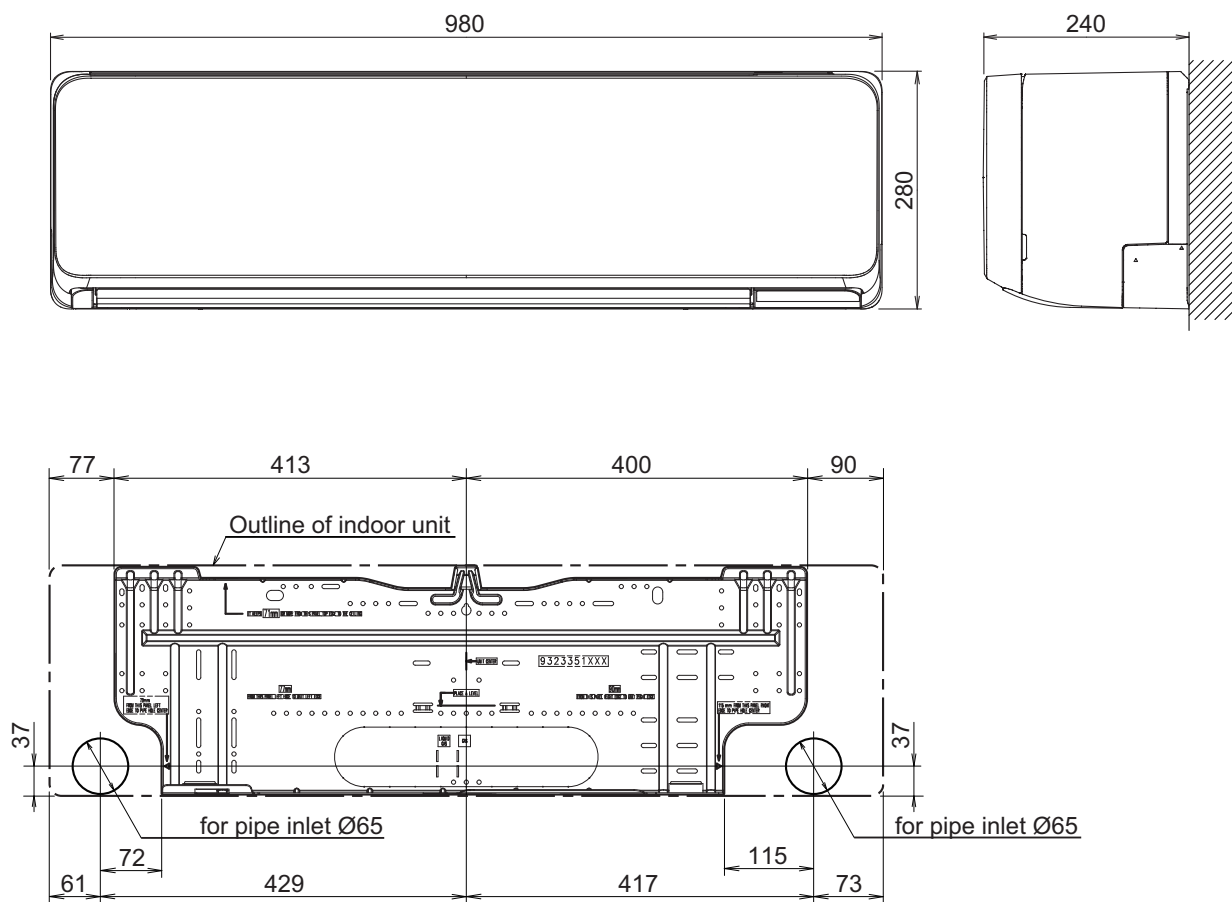
- Specifications are based on the following conditions:
 - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
 - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
 - Pipe length: 5 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: Maximum operating current is the total current of the indoor unit and the outdoor unit.
- *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.
- *3: Available on Google Play™ store or on App Store®. Optional WLAN adapter is also required. For details, refer to the setting manual.

Specifications for ErP Lot10					
Model name			ASHG18KMTA ASHG18KMTB		ASHG24KMTA ASHG24KMTB
Energy efficiency class	Cooling		A ⁺⁺		
	Heating (Average)		A ⁺		
Pdesign	Cooling	kW	5.2 (35°C)	7.1 (35°C)	
	Heating (Average)		4.8 (-10°C)	7.1 (-10°C)	
SEER	Cooling	kWh/kWh	7.77	7.28	
SCOP	Heating (Average)		4.56	4.18	
Annual energy consumption	QCE	kWh/a	234	341	
	QHE (Average)		1,472	2,372	
Sound power level	Cooling	HIGH	dB (A)	60	65
	Heating			61	65

2. Dimensions

2-1. Models: ASHG18KMTA, ASHG18KMTB, ASHG24KMTA, and ASHG24KMTB

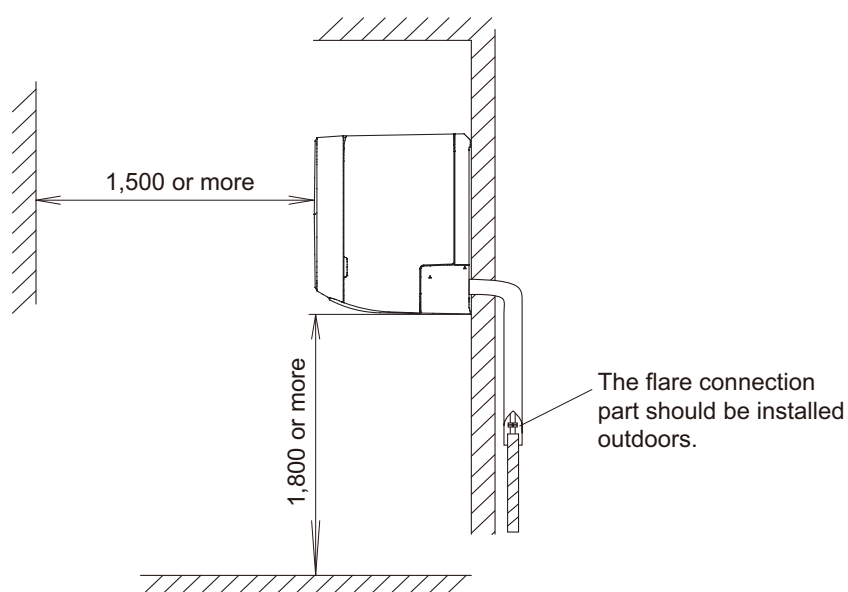
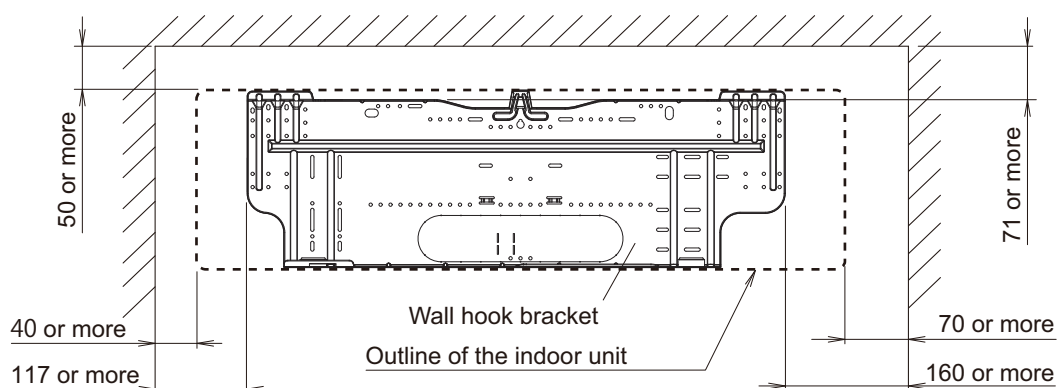
Unit: mm



■ Installation space requirement

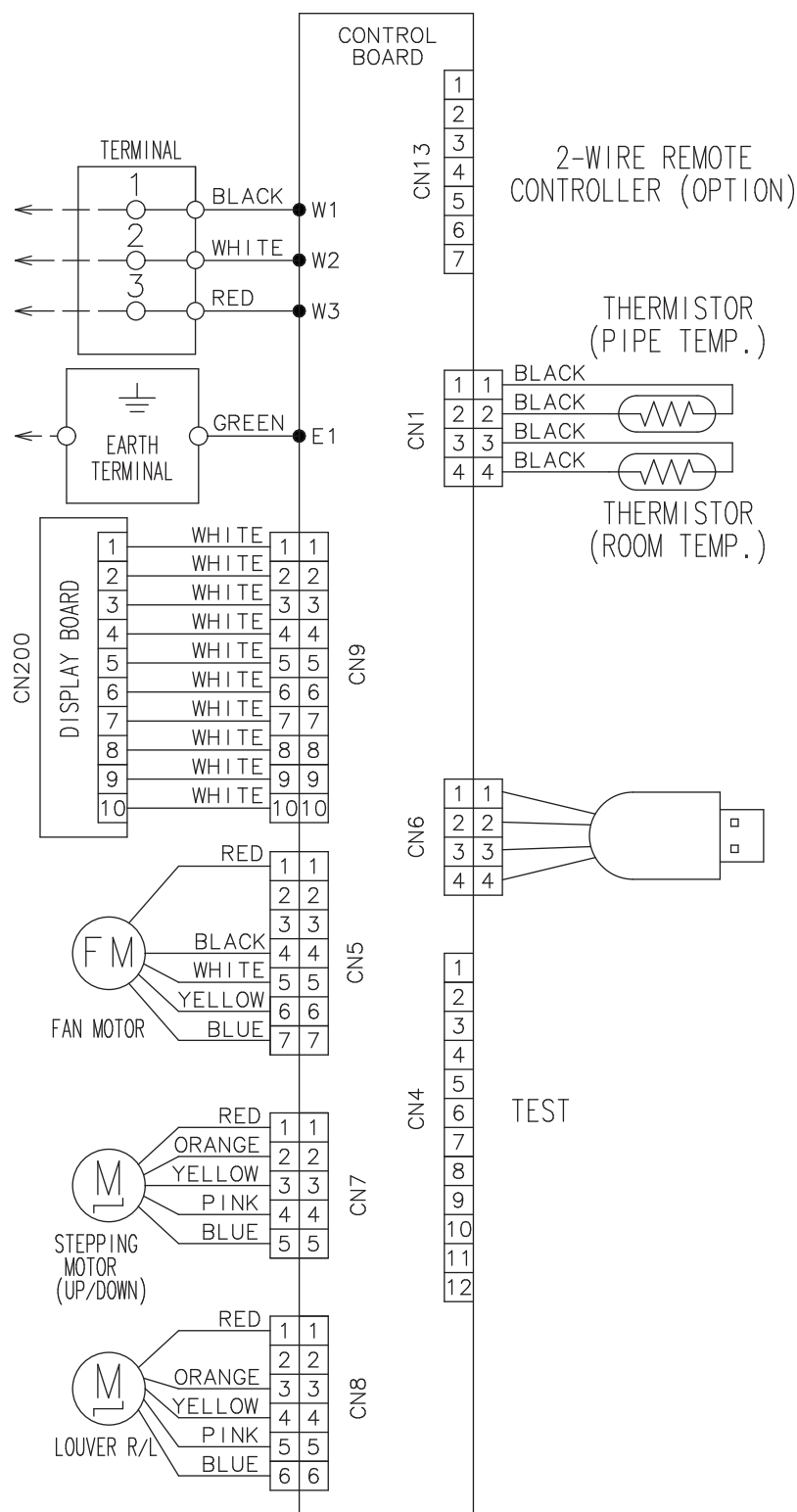
Provide sufficient installation space for product safety.

Unit: mm



3. Wiring diagrams

3-1. Models: ASHG18KMTA, ASHG18KMTB, ASHG24KMTA, and ASHG24KMTB



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

■ Models: ASHG18KMTA and ASHG18KMTB

AFR		m³/h									980											
Outdoor temperature		Indoor temperature																				
	°CDB	18			21			23			25			27			29			32		
	°CWB	12			15			16			18			19			21			23		
	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kW			kW			kW			kW			kW			kW			kW		
	-10	3.18	2.84	0.46	3.48	3.11	0.46	3.59	3.21	0.46	3.82	3.41	0.47	3.93	3.52	0.47	4.19	3.75	0.48	4.47	3.99	0.48
	-5	2.98	2.76	0.55	3.26	3.02	0.55	3.36	3.11	0.56	3.58	3.31	0.56	3.69	3.41	0.57	3.93	3.63	0.58	4.19	3.87	0.58
	0	2.78	2.68	0.64	3.05	2.93	0.65	3.14	3.02	0.65	3.34	3.21	0.66	3.44	3.31	0.67	3.67	3.52	0.67	3.91	3.76	0.68
	5	3.12	2.81	0.44	3.41	3.07	0.44	3.52	3.17	0.45	3.74	3.37	0.45	3.86	3.47	0.45	4.11	3.70	0.46	4.38	3.94	0.46
	10	2.95	2.74	0.52	3.23	3.00	0.53	3.33	3.09	0.53	3.54	3.29	0.54	3.65	3.39	0.54	3.88	3.61	0.55	4.14	3.85	0.55
	15	3.83	3.11	0.57	4.19	3.40	0.57	4.32	3.51	0.58	4.60	3.73	0.58	4.74	3.84	0.59	5.05	4.09	0.60	5.38	4.37	0.60
	20	4.61	3.45	0.93	5.05	3.77	0.94	5.20	3.89	0.95	5.53	4.13	0.96	5.70	4.26	0.97	6.07	4.54	0.98	6.48	4.84	0.99
	25	4.49	3.40	1.05	4.92	3.72	1.06	5.07	3.83	1.07	5.39	4.08	1.08	5.56	4.20	1.09	5.92	4.48	1.10	6.31	4.77	1.11
	30	4.35	3.34	1.19	4.76	3.65	1.20	4.91	3.76	1.21	5.22	4.00	1.23	5.38	4.13	1.24	5.73	4.40	1.25	6.11	4.69	1.26
	35	4.21	3.28	1.33	4.60	3.59	1.35	4.74	3.69	1.36	5.04	3.93	1.38	5.20	4.05	1.39	5.54	4.32	1.40	5.91	4.60	1.42
	40	3.92	3.14	1.42	4.29	3.44	1.44	4.42	3.54	1.45	4.70	3.77	1.47	4.85	3.88	1.48	5.17	4.14	1.50	5.51	4.41	1.51
46	3.45	2.91	1.47	3.78	3.18	1.48	3.90	3.28	1.50	4.14	3.48	1.51	4.27	3.59	1.53	4.55	3.83	1.55	4.85	4.08	1.56	

■ Model: ASHG24KMTA and ASHG24KMTB

AFR		m³/h										1,170										
Outdoor temperature		Indoor temperature																				
	°CDB	18			21			23			25			27			29			32		
	°CWB	12			15			16			18			19			21			23		
	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kW			kW			kW			kW			kW			kW			kW		
	-10	4.34	3.72	0.68	4.75	4.07	0.69	4.90	4.20	0.70	5.21	4.46	0.70	5.37	4.60	0.71	5.72	4.90	0.72	6.10	5.23	0.72
	-5	4.07	3.61	0.82	4.46	3.95	0.83	4.59	4.07	0.84	4.88	4.33	0.84	5.03	4.46	0.85	5.36	4.76	0.86	5.72	5.07	0.87
	0	3.80	3.50	0.96	4.16	3.83	0.97	4.28	3.95	0.98	4.56	4.20	0.99	4.70	4.33	1.00	5.01	4.61	1.01	5.34	4.92	1.02
	5	4.26	3.68	0.65	4.66	4.02	0.66	4.80	4.14	0.67	5.11	4.41	0.67	5.27	4.54	0.68	5.61	4.84	0.69	5.98	5.16	0.69
	10	4.03	3.59	0.78	4.41	3.92	0.79	4.54	4.04	0.80	4.83	4.30	0.81	4.98	4.43	0.81	5.30	4.72	0.82	5.65	5.04	0.83
	15	5.23	4.07	0.85	5.73	4.45	0.85	5.90	4.59	0.86	6.27	4.88	0.87	6.47	5.03	0.88	6.89	5.36	0.89	7.35	5.71	0.90
	20	6.29	4.51	1.39	6.89	4.94	1.41	7.10	5.09	1.42	7.55	5.41	1.44	7.78	5.58	1.45	8.29	5.95	1.46	8.84	6.34	1.48
25	6.14	4.45	1.56	6.71	4.87	1.58	6.92	5.02	1.60	7.36	5.34	1.61	7.59	5.50	1.63	8.08	5.86	1.65	8.62	6.25	1.66	
30	5.94	4.37	1.78	6.50	4.78	1.80	6.70	4.93	1.82	7.12	5.24	1.84	7.34	5.40	1.86	7.82	5.75	1.87	8.34	6.13	1.89	
35	5.74	4.29	2.00	6.28	4.69	2.02	6.48	4.83	2.04	6.89	5.14	2.06	7.10	5.30	2.08	7.57	5.65	2.10	8.07	6.02	2.12	
40	5.36	4.11	2.13	5.86	4.50	2.15	6.04	4.63	2.18	6.42	4.93	2.20	6.62	5.08	2.22	7.05	5.41	2.24	7.52	5.77	2.26	
46	4.72	3.80	2.20	5.16	4.16	2.22	5.32	4.29	2.24	5.66	4.56	2.27	5.83	4.70	2.29	6.21	5.01	2.31	6.62	5.34	2.34	

4-2. Heating capacity

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

■ Models: ASHG18KMTA and ASHG18KMTB

AFR	m ³ /h	1,020
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			Indoor temperature															
			16		18		20		22		24		26		28			
			TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP		
			kW		kW		kW		kW		kW		kW		kW			
Outdoor temperature	°CDB	°CWB	-15	-16	5.17	1.92	5.04	1.96	4.90	2.00	4.76	2.04	4.63	2.08	4.49	2.12	4.36	2.16
	-10	-11	6.23	1.89	6.06	1.93	5.90	1.98	5.74	2.01	5.57	2.04	5.41	2.09	5.25	2.13		
	-5	-7	7.31	2.11	7.12	2.15	6.93	2.07	6.74	2.24	6.55	2.28	6.36	2.33	6.17	2.37		
	0	-2	8.45	2.71	8.23	2.76	8.01	2.70	7.79	2.87	7.57	2.93	7.34	2.99	7.12	3.05		
	5	3	9.36	3.18	9.11	3.25	8.87	3.32	8.63	3.38	8.38	3.44	8.14	3.52	7.89	3.58		
	7	6	9.18	2.75	8.94	2.80	8.70	2.86	8.46	2.91	8.22	2.97	7.98	3.03	7.74	3.09		
	10	8	9.29	2.64	9.05	2.69	8.81	2.79	8.56	2.81	8.32	2.86	8.08	2.92	7.83	2.97		
	15	10	9.35	2.28	9.11	2.32	8.86	2.46	8.62	2.42	8.37	2.46	8.13	2.52	7.88	2.56		
	20	15	9.42	2.04	9.17	2.09	8.93	2.17	8.68	2.17	8.43	2.21	8.19	2.26	7.94	2.30		
	24	18	9.48	1.89	9.23	1.93	8.98	1.97	8.73	2.01	8.48	2.05	8.24	2.09	7.99	2.13		

■ Model: ASHG24KMTA and ASHG24KMTB

AFR	m ³ /h	1,170
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			Indoor temperature															
			16		18		20		22		24		26		28			
			TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP		
			kW		kW		kW		kW		kW		kW		kW			
Outdoor temperature	°CDB	°CWB	-15	-16	6.56	2.76	6.39	2.81	6.22	2.87	6.05	2.93	5.88	2.98	5.70	3.05	5.53	3.10
	-10	-11	7.41	2.83	7.21	2.89	7.02	2.94	6.82	3.01	6.63	3.07	6.44	3.13	6.24	3.19		
	-5	-7	8.25	2.96	8.04	3.02	8.05	3.04	7.60	3.15	7.39	3.21	7.17	3.27	6.96	3.33		
	0	-2	9.10	3.17	8.86	3.24	8.63	3.26	8.39	3.37	8.15	3.43	7.91	3.50	7.67	3.57		
	5	3	9.78	3.34	9.53	3.41	9.73	3.48	9.01	3.55	8.76	3.61	8.50	3.69	8.25	3.76		
	7	6	10.66	2.88	10.38	2.94	10.10	3.00	9.82	3.06	9.54	3.11	9.26	3.18	8.98	3.24		
	10	8	10.78	2.77	10.50	2.83	10.22	2.93	9.94	2.94	9.66	3.00	9.37	3.06	9.09	3.12		
	15	10	10.86	2.39	10.58	2.44	10.29	2.58	10.01	2.54	9.72	2.59	9.44	2.64	9.15	2.69		
	20	15	10.93	2.15	10.65	2.19	10.36	2.28	10.07	2.28	9.79	2.32	9.50	2.37	9.22	2.41		
	24	18	11.00	1.99	10.71	2.03	10.42	2.07	10.13	2.11	9.84	2.15	9.56	2.19	9.27	2.24		

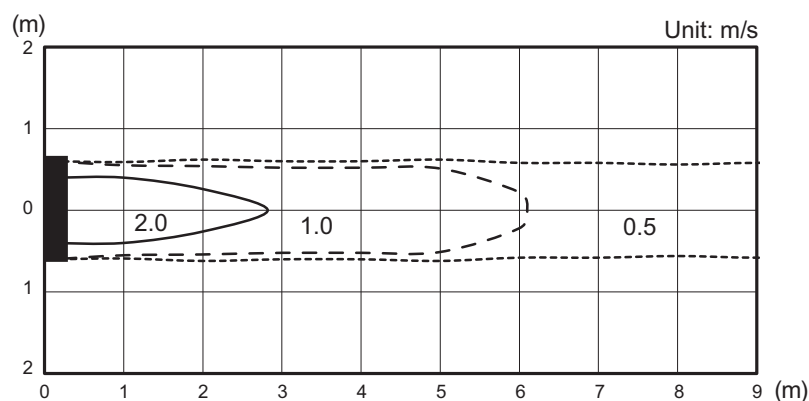
5. Fan performance

5-1. Air velocity distributions

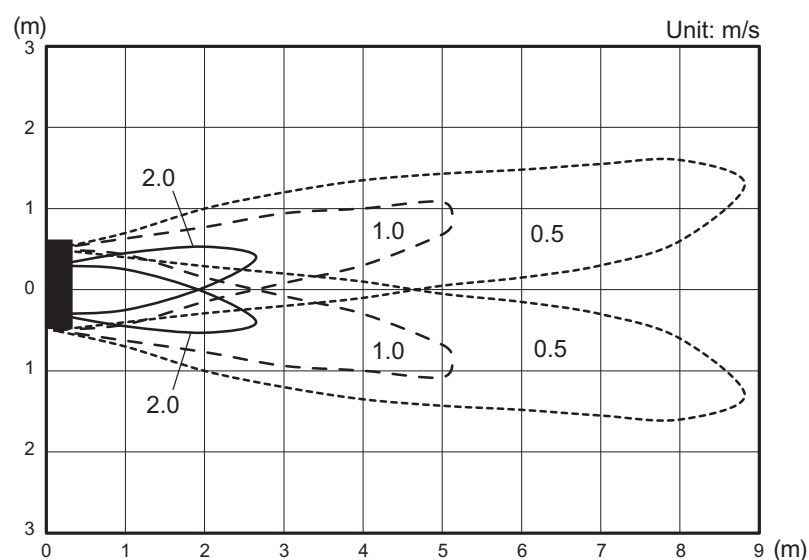
■ Models: ASHG18KMTA and ASHG18KMTB

Measuring conditions	Fan speed	Operation mode
	HIGH	FAN

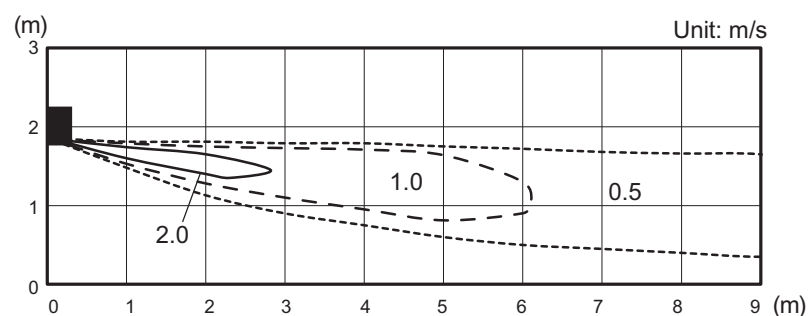
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



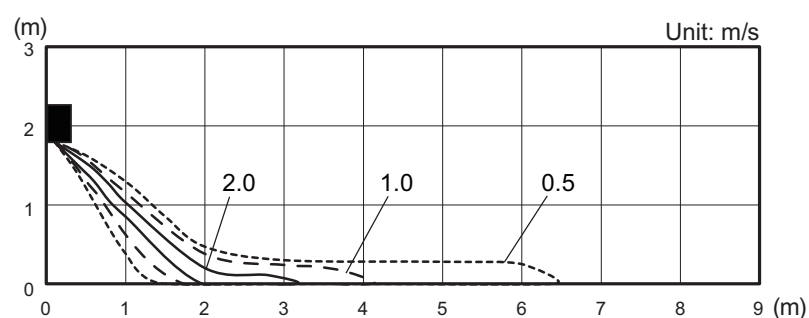
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Left & Right



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



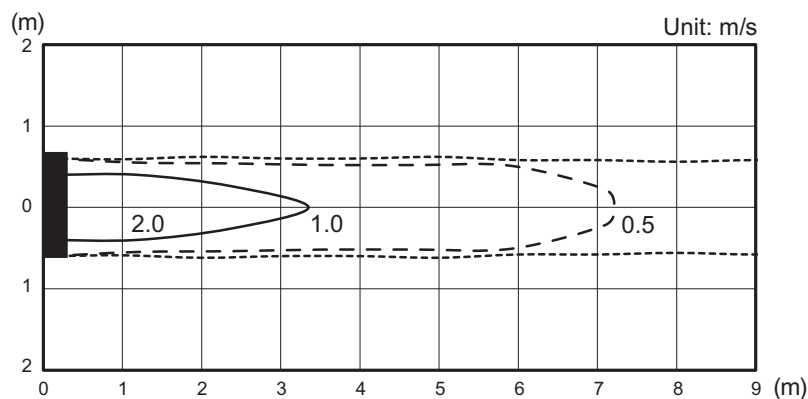
Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



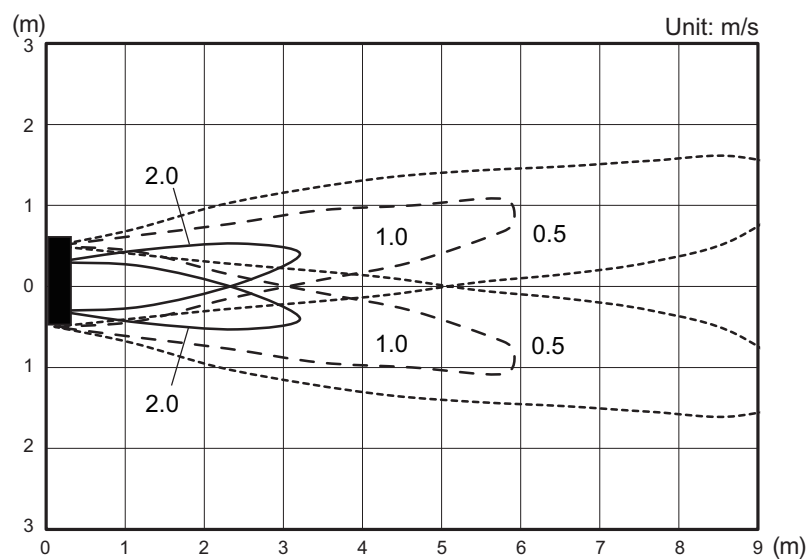
Model: ASHG24KMTA and ASHG24KMTB

Measuring conditions	Fan speed	Operation mode
	HIGH	FAN

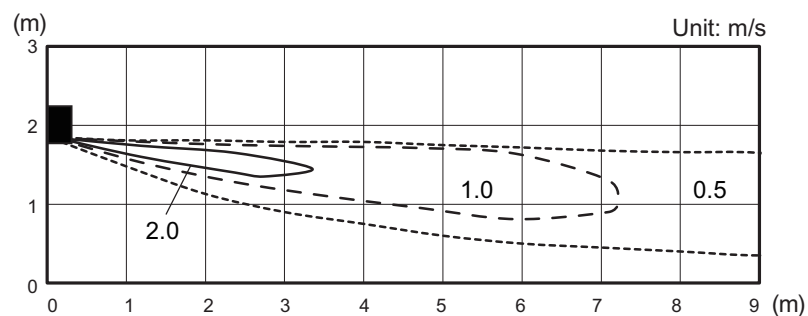
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



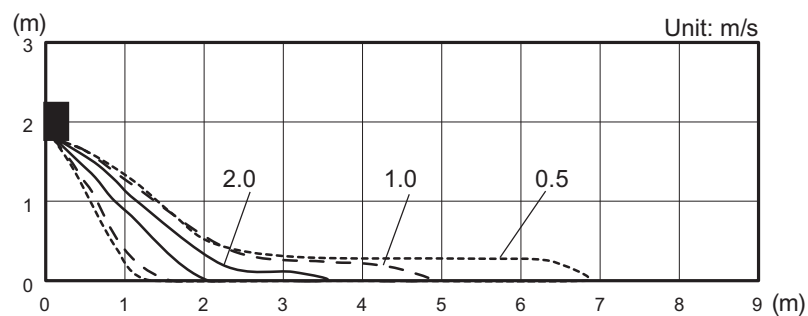
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Left & Right



Side view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



Side view
Vertical airflow direction louver: Down
Horizontal airflow direction louver: Center



5-2. Airflow

■ Models: ASHG18KMTA and ASHG18KMTB

● Cooling

Fan speed	Airflow	
HIGH	m ³ /h	980
	l/s	272
	CFM	577
MED	m ³ /h	810
	l/s	225
	CFM	477
LOW	m ³ /h	640
	l/s	178
	CFM	377
QUIET	m ³ /h	510
	l/s	142
	CFM	300

● Heating

Fan speed	Airflow	
HIGH	m ³ /h	1,020
	l/s	283
	CFM	600
MED	m ³ /h	850
	l/s	236
	CFM	500
LOW	m ³ /h	640
	l/s	178
	CFM	377
QUIET	m ³ /h	510
	l/s	142
	CFM	300

■ Model: ASHG24KMTA and ASHG24KMTB

● Cooling

Fan speed	Airflow	
HIGH	m ³ /h	1,170
	l/s	325
	CFM	689
MED	m ³ /h	850
	l/s	236
	CFM	500
LOW	m ³ /h	640
	l/s	178
	CFM	377
QUIET	m ³ /h	510
	l/s	142
	CFM	300

● Heating

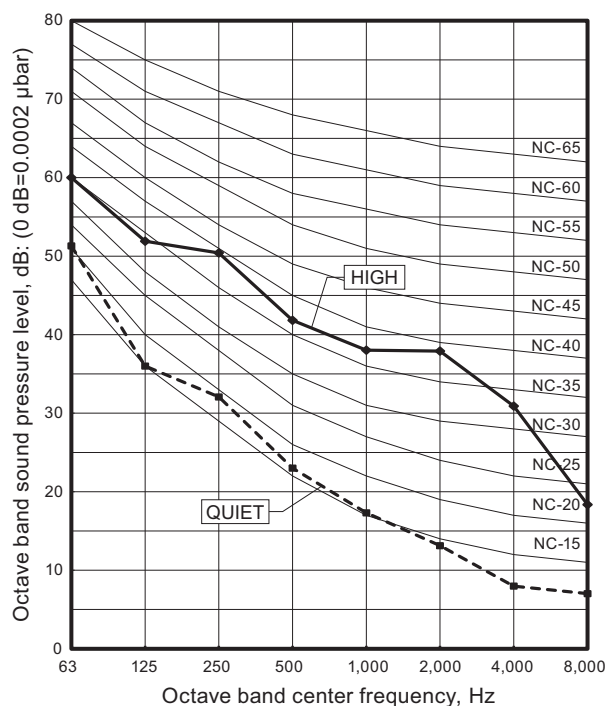
Fan speed	Airflow	
HIGH	m ³ /h	1,170
	l/s	325
	CFM	689
MED	m ³ /h	850
	l/s	236
	CFM	500
LOW	m ³ /h	640
	l/s	178
	CFM	377
QUIET	m ³ /h	510
	l/s	142
	CFM	300

6. Operation noise (sound pressure)

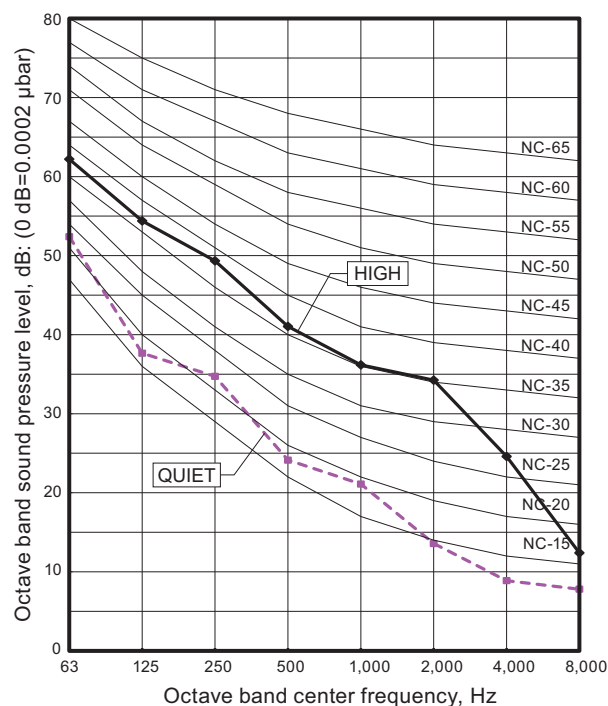
6-1. Noise level curve

■ Models: ASHG18KMTA and ASHG18KMTB

● Cooling

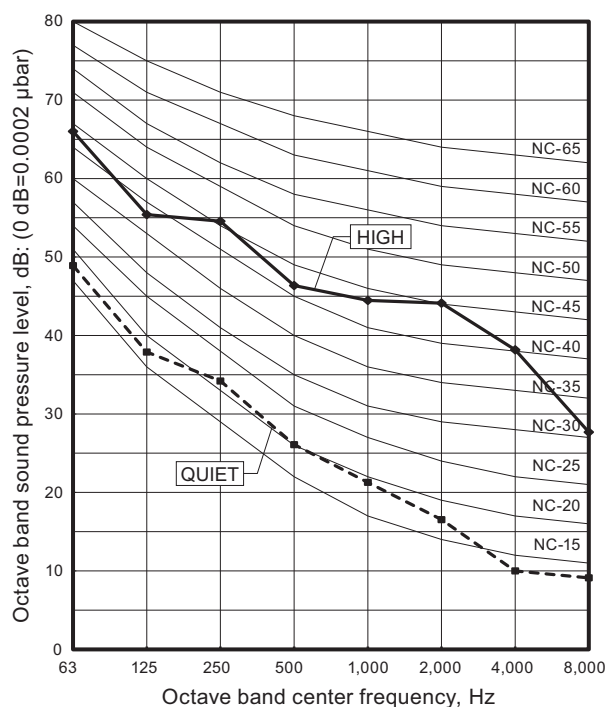


● Heating

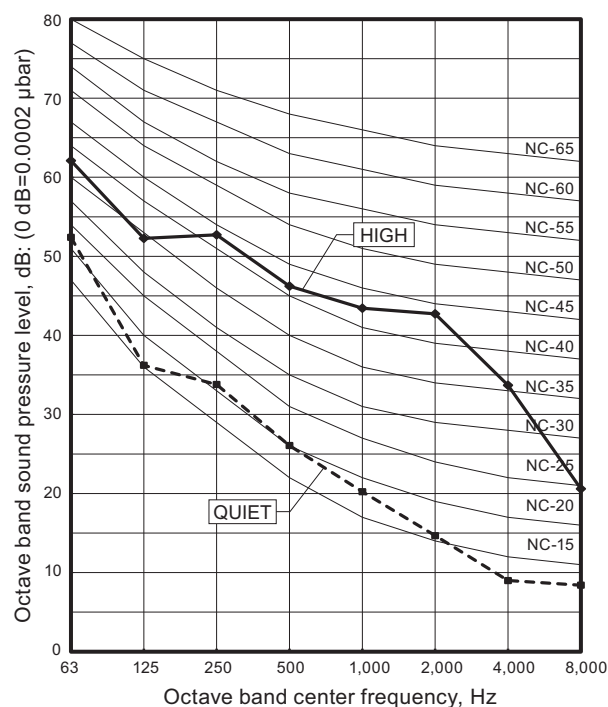


■ Model: ASHG24KMTA and ASHG24KMTB

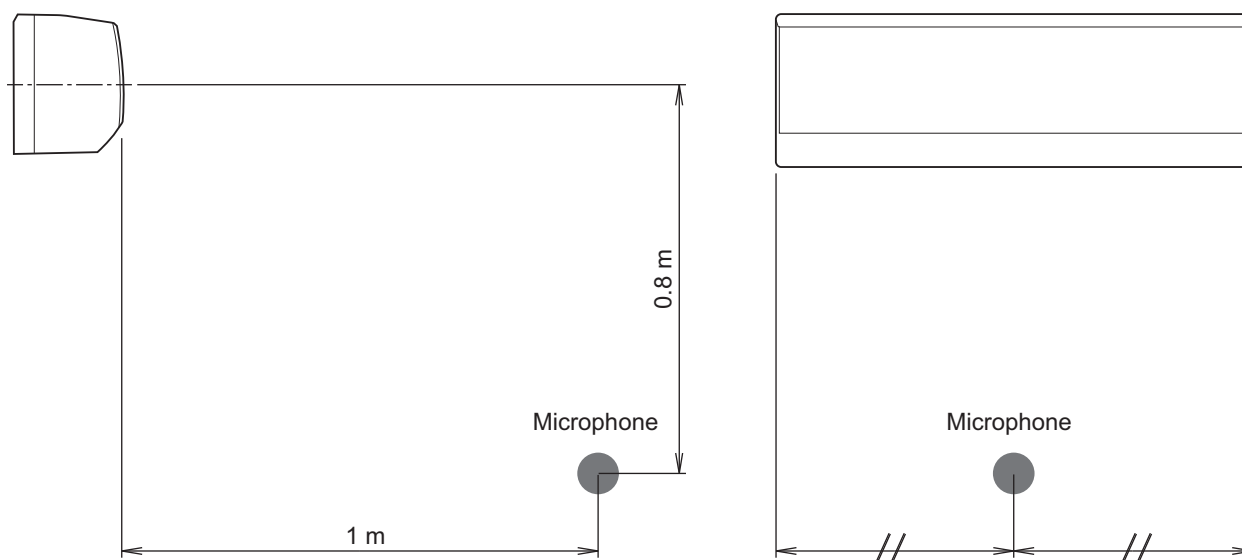
● Cooling



● Heating



6-2. Sound level check point



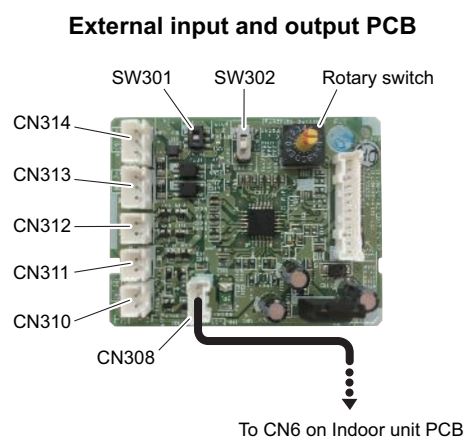
NOTE: Detailed shape of the actual indoor unit might be slightly different from the one illustrated above.

7. Safety devices

Type of protection	Protection form		Model	
			ASHG18KMTA ASHG18KMTB	ASHG24KMTA ASHG24KMTB
Circuit protection	Current fuse (PCB*)		250 V, 3.15 A	
Fan motor protection	Thermal protector program	Activate	125 ±24°C Fan motor stop	
		Reset	100 ±25°C Fan motor restart	

*PCB: Printed Circuit Board

8. External input and output



PCB	External input	External output	Connector	Input select	Input signal
External input and output (UTY-XCSXZ2)	Operation/Stop	—	CN313/ CN314	Dry contact/ Apply voltage	Edge/Pulse
	Forced stop		CN313		Edge
	Forced thermostat off			Operation status	CN310
	—	Error status	CN311		
		Indoor unit fan operation status	CN312		

8-1. External input

With using external input function, some functions on this product can be controlled from an external device.

- "Operation/Stop" mode or "Forced stop" mode can be selected with function setting of indoor unit.
- A twisted pair cable should be used. Maximum length of cable is 150 m.
- The wire connection should be separate from the power cable line.

External input and output PCB

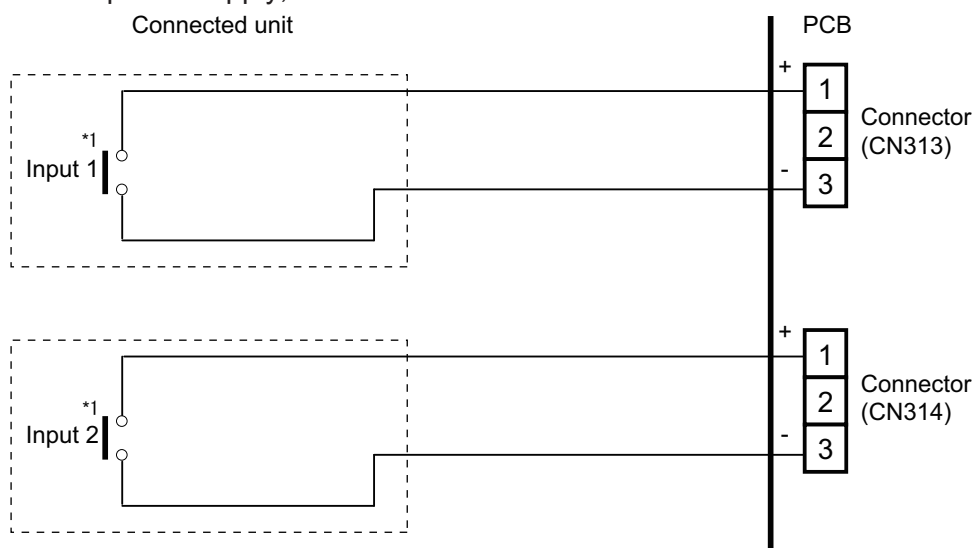
The indoor unit Operation/Stop can be set by using the input connector on the PCB.

Input select:

Use either one of these types of connectors according to the application. (Both types of connectors cannot be used simultaneously.)

– Dry contact

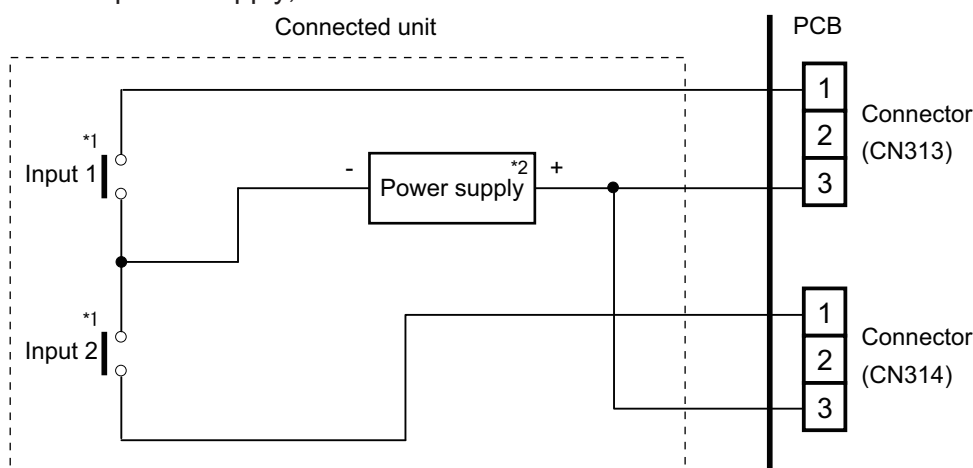
In case of internal power supply, set the slide switch of SW301 to "NON VOL" side.



*1: The switches can be used on the following condition: DC 12 V to 24 V, 1 mA to 15 mA.

– Apply voltage

In case of external power supply, set the slide switch of SW301 to "VOL" side.



*1: The switches can be used on the following condition: DC 12 V to 24 V, 1 mA to 15 mA.

*2: Make the power supply DC 12 to 24 V, 10 mA or more.

8-2. External output

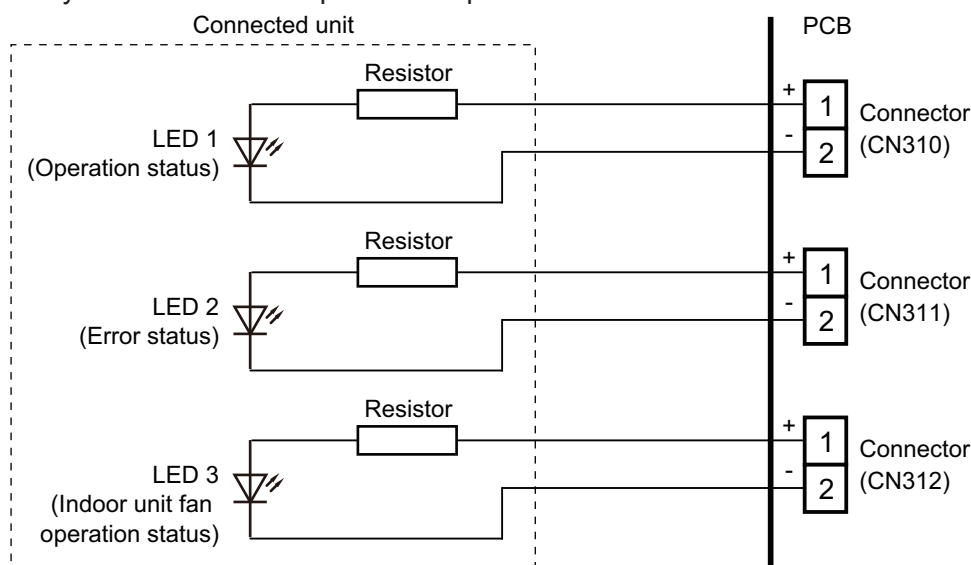
Use an external output cable with appropriate external dimension, depending on the number of cables to be installed.

External input and output PCB

- A twisted pair cable (22AWG) should be used. Maximum length of cable is 25 m.
- Output voltage: High DC 12 V \pm 2 V, Low 0 V.
- Permissible current: 50 mA
- For details, refer to ["Combination of external input and output"](#) on page 19.

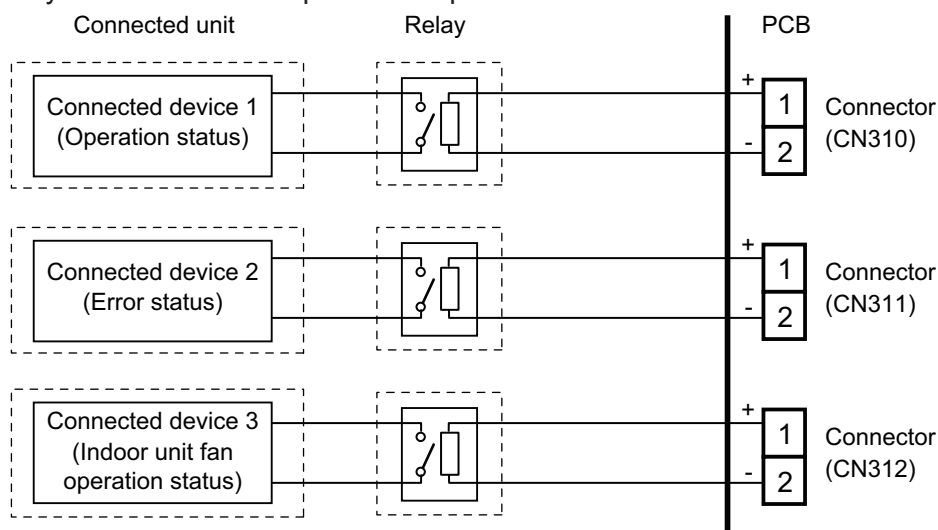
- **When indicator or other components are connected directly:**

Example: Rotary SW on External input and output PCB is set to "1".



- **When connecting with a device equipped with a power supply:**

Example: Rotary SW on External input and output PCB is set to "1".



8-3. Combination of external input and output

By combining the function setting of the indoor unit and rotary switch setting of the External input and output PCB, you can select various combinations of functions.

Combination examples of external input and output are as follows:

Mode	External input and output PCB (Rotary SW)	External input		
		External input and output PCB		
		CN313	CN314	Signal type
0-1	1	Operation/Stop	Not available	Edge
		Operation	Stop	Pulse
0-2	2	Forced Thermostat OFF	Not available	Edge
1—8	3 - 9, A	(Setting prohibited)		
9	B	Forced Thermostat OFF	Not available	Edge
10	C	Forced Thermostat OFF	Not available	Edge
11	D	Forced Thermostat OFF	Not available	Edge

Mode	External input and output PCB (Rotary SW)	External output		
		External input and output PCB		
		CN310	CN311	CN312
0-1	1	Operation/Stop	Error status	Indoor unit fan operation status
0-2	2	Error status	Indoor unit fan operation status	Not available
1—8	3 - 9, A	(Setting prohibited)		
9	B	Operation/Stop	Indoor unit fan operation status	Not available
10	C	Operation/Stop	Error status	Not available
11	D	Operation/Stop	Indoor unit fan operation status	Error status

NOTE: Input of Operation/Stop depends on the setting of function setting 46.

00: Operation/Stop mode 1 (R.C. enabled)

01: (Setting prohibited)

02: Forced stop

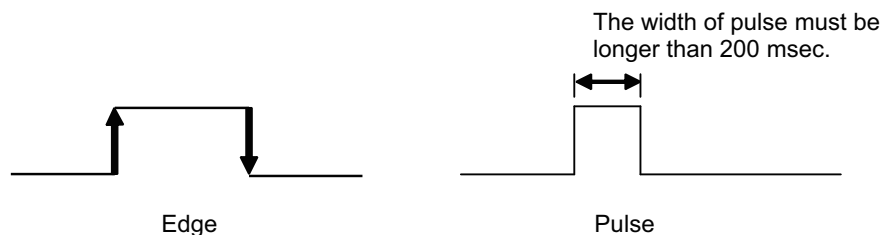
03: Operation/Stop mode 2 (R.C. disabled)

Input signal type

External input and output PCB:

The input signal type can be selected.

Signal type (edge or pulse) can be switched by the DIP switch SW302 on the External input and output PCB.

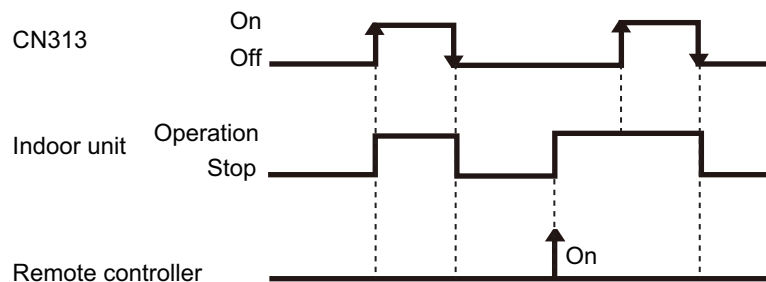


8-4. Details of function

■ Control input function

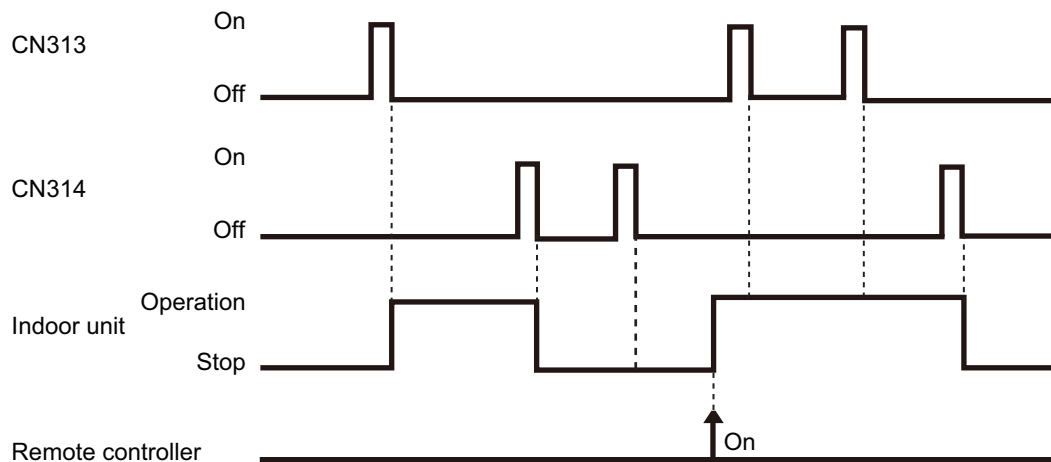
- When function setting is “Operation/Stop” mode 1
 - In the case of “Edge” input:

Function setting	Rotary SW on External input and output PCB	External input		Input signal	Command
46-00	1	External input and output PCB	CN313	Off → On	Operation
				On → Off	Stop



- In the case of “Pulse” input:

Function setting	Rotary SW on External input and output PCB	External input		Input signal	Command
46-00	1	External input and output PCB	CN313	Pulse	Operation
			CN314	Pulse	Stop



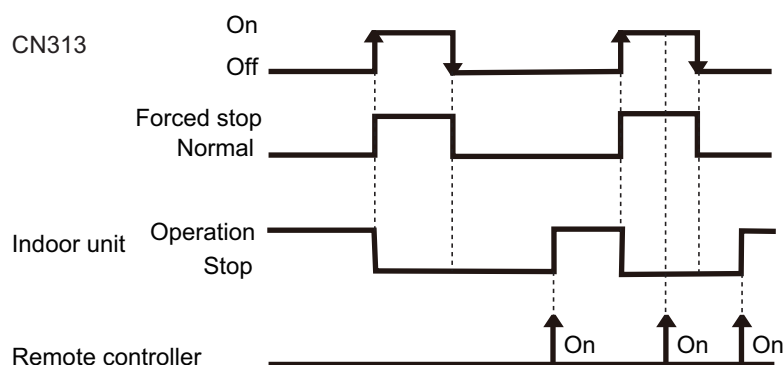
NOTES:

- The last command has priority.
- The indoor units within the same remote controller group operates in the same mode.

- When function setting is “Forced stop” mode

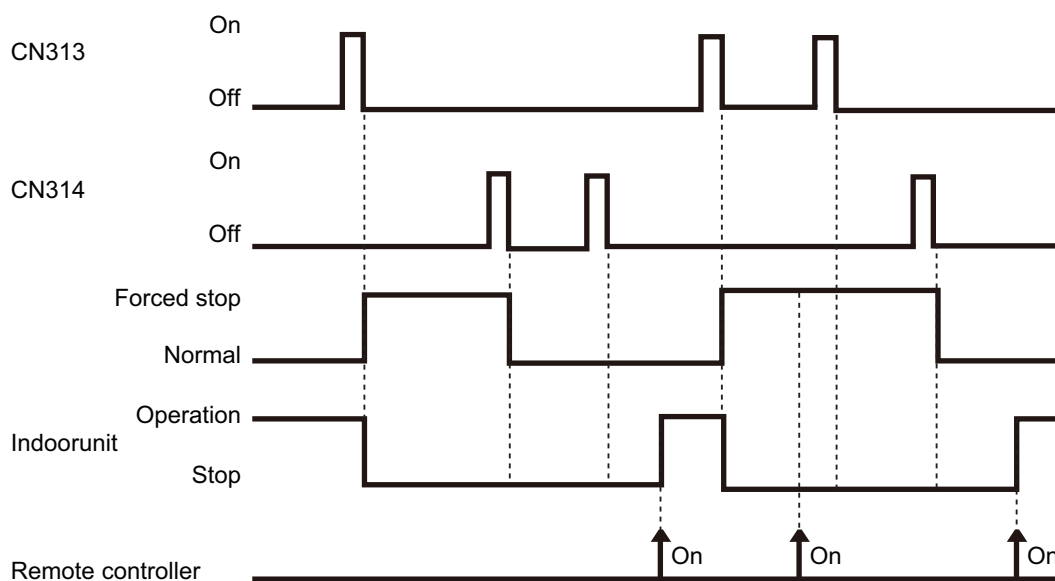
- In the case of “Edge” input:

Function setting	Rotary SW on External input and output PCB	External input		Input signal	Command
46-02	1	External input and output PCB	CN313	Off → On	Forced stop
				On → Off	Normal



- In the case of “Pulse” input:

Function setting	Rotary SW on External input and output PCB	External input		Input signal	Command
46-02	1	External input and output PCB	CN313	Pulse	Forced stop
			CN314	Pulse	Normal

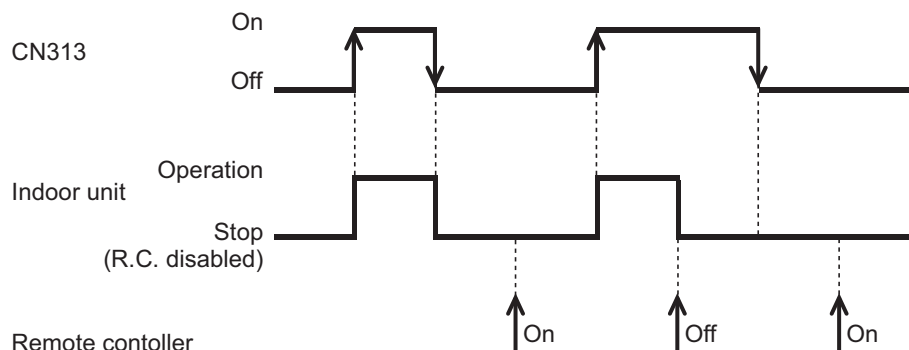

NOTES:

- When the forced stop is triggered, indoor unit stops and Operation/Stop operation by the remote controller is restricted.
- When forced stop function is used with forming a remote controller group, connect the same equipment to each indoor unit within the group.

- When function setting is “Operation/Stop” mode 2

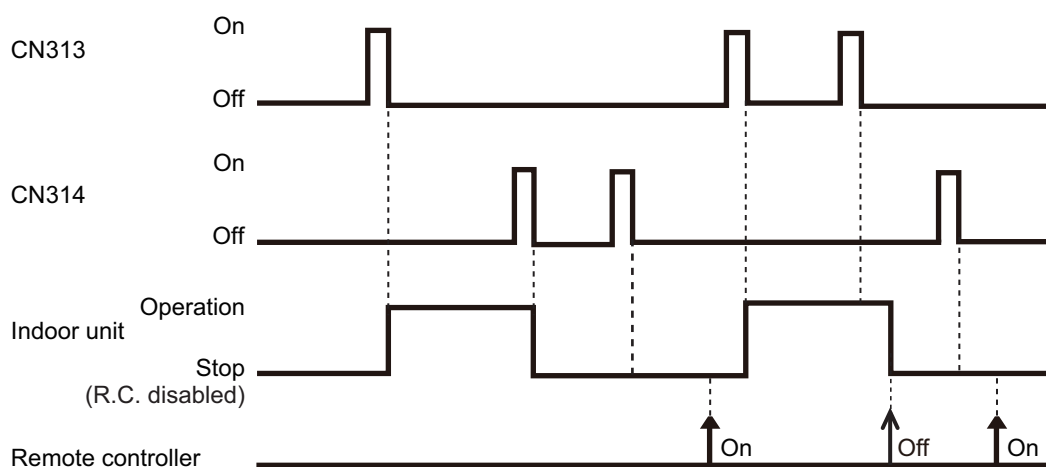
- In the case of “Edge” input:

Function setting	Rotary SW on External input and output PCB	External input		Input signal	Command
46-03	1	External input and output PCB	CN313	Off → On	Operation
				On → Off	Stop (R.C. disabled)



- In the case of “Pulse” input:

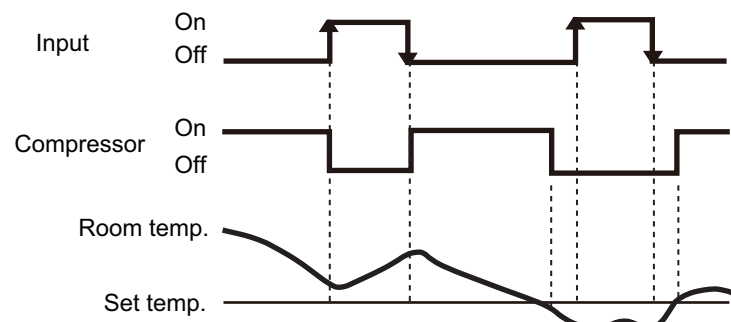
Function setting	Rotary SW on External input and output PCB	External input		Input signal	Command
46-03	1	External input and output PCB	CN313	Pulse	Operation
			CN314	Pulse	Stop (R.C. disabled)



NOTE: When “Operation/Stop” mode 2 function is used with forming a remote controller group, connect the same equipment to each indoor unit within the group.

- Forced thermostat off function

Rotary SW on External input and output PCB	External input		Input signal	Command
2 B C	External input and output PCB	CN313	Off → On	Thermostat off
			On → Off	Normal operation

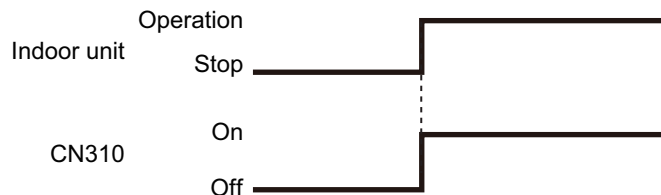


Control output function

• Operation/Stop status

Rotary SW on External input and output PCB	External output		Output signal	Command
1	External input and output PCB	CN310	Off → On	Operation
B			On → Off	Stop
C				
D				

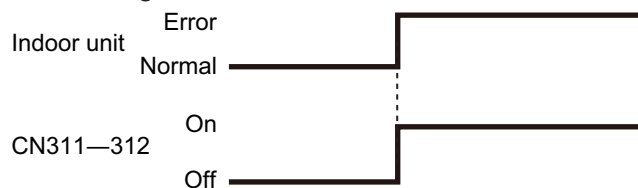
The output is low when the unit is stopped.



• Error status

Rotary SW on External input and output PCB	External output		Output signal	Command
1	External input and output PCB	CN311	Off → On	Error
C			On → Off	Normal
D		CN312	Off → On	Error
			On → Off	Normal

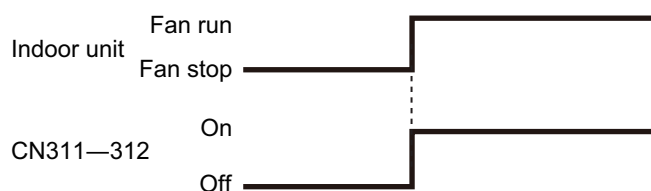
The output is ON when an error is generated for the indoor unit.



• Indoor unit fan operation status

Rotary SW on External input and output PCB	External output		Output signal	Command
1	External input and output PCB	CN312	Off → On	Fan run
			On → Off	Fan stop
2		CN311	Off → On	Fan run
B			On → Off	Fan stop
D				

Output signal	Condition
On Low → High	The indoor unit fan is operating.
Off High → Low	The fan is stopped or during cold air prevention. During thermostat off when in dry mode operation.



9. Group connection

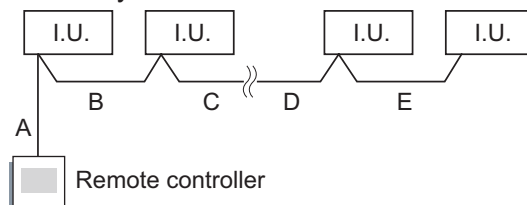
NOTE: Group control cannot be used together with Wireless LAN adapter.

Installation procedure for group control system:

A number of indoor units can be operated at the same time using a single remote controller.

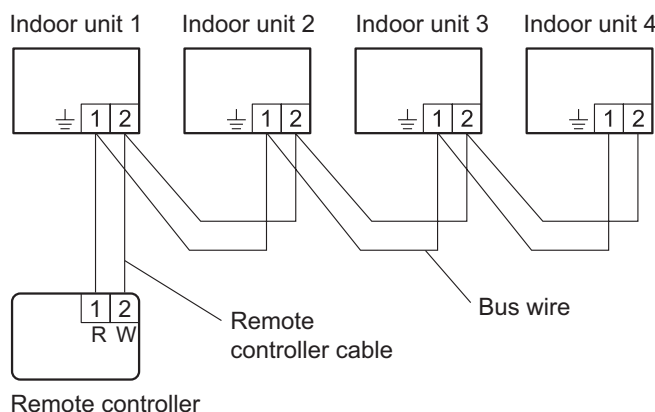
NOTE: When different type of indoor units (such as wall mounted type and cassette type, cassette type and duct type, or other combinations) are connected using group control system, some functions may no longer be available.

1. Connect up to 16 indoor units in a system.



A, B, C, D, E: Remote controller cable	
Wiring length limitation	$A + B + C + D + E \leq 500 \text{ m}$

Example of wiring method



2. Set the R.C. address. (Function setting)

- Addresses will be automatically set when initially starting up this unit. In such a case, do not change the remote controller address for the indoor unit, and keep it at the initial setting of "00".
- Only set addresses manually when using different numbers for addresses. Set the R.C. address of each indoor unit using the function setting. (Refer to "Remote controller address setting" in ["Contents of function setting"](#) on page 29.)

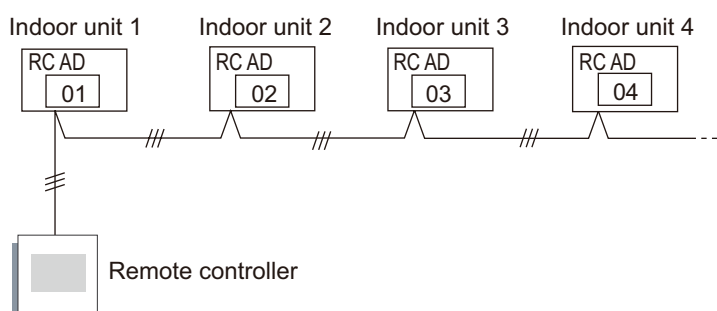
NOTES:

- Do not use the same setting value.
- Setting is reflected after the power is turned on again.

Also set the R.C. address for the remote controller. For details, refer to the remote controller installation manual.

NOTE: In manual setting, connect up to 15 indoor units in a system.

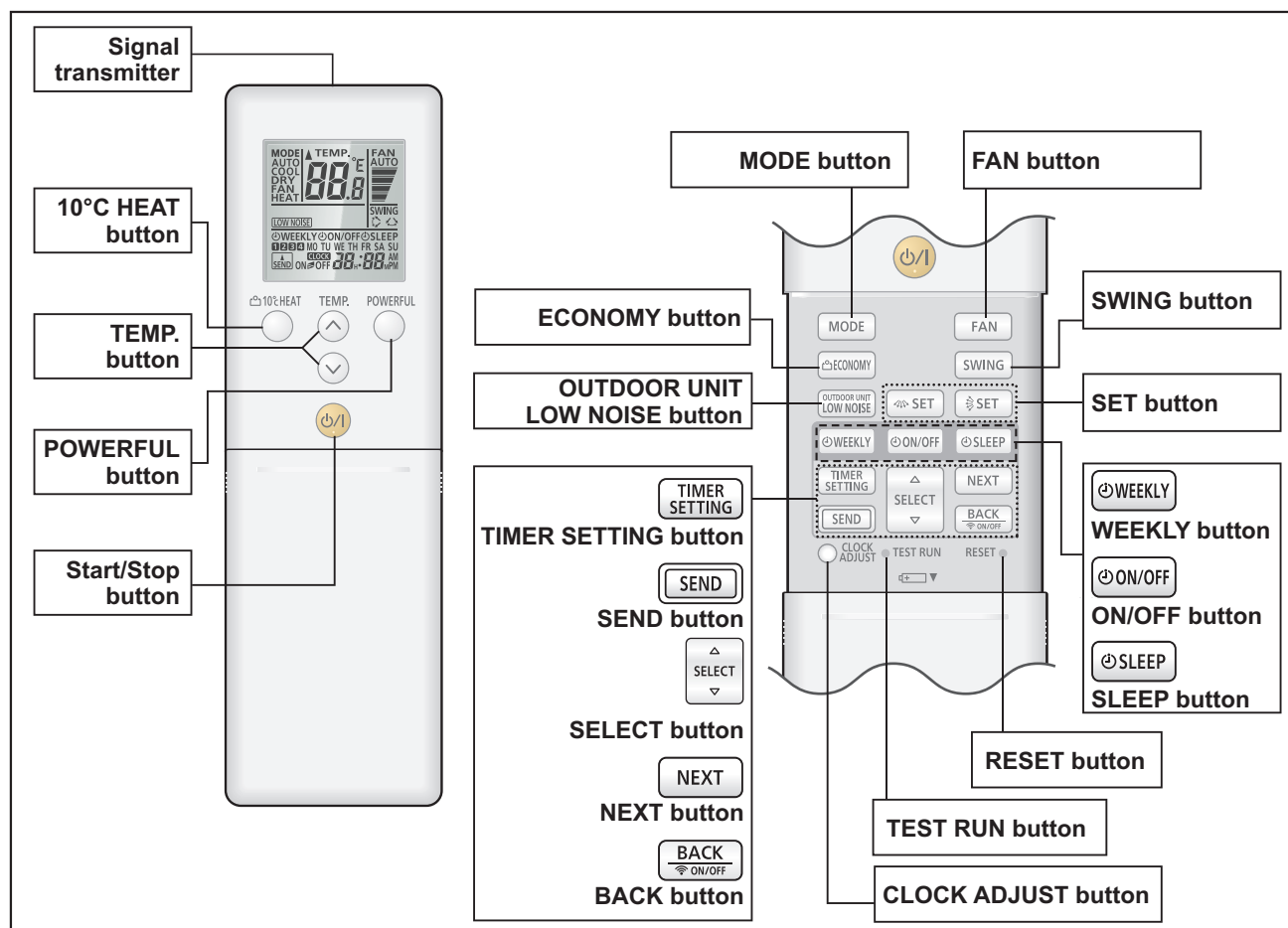
Example of wiring method



10. Remote controller

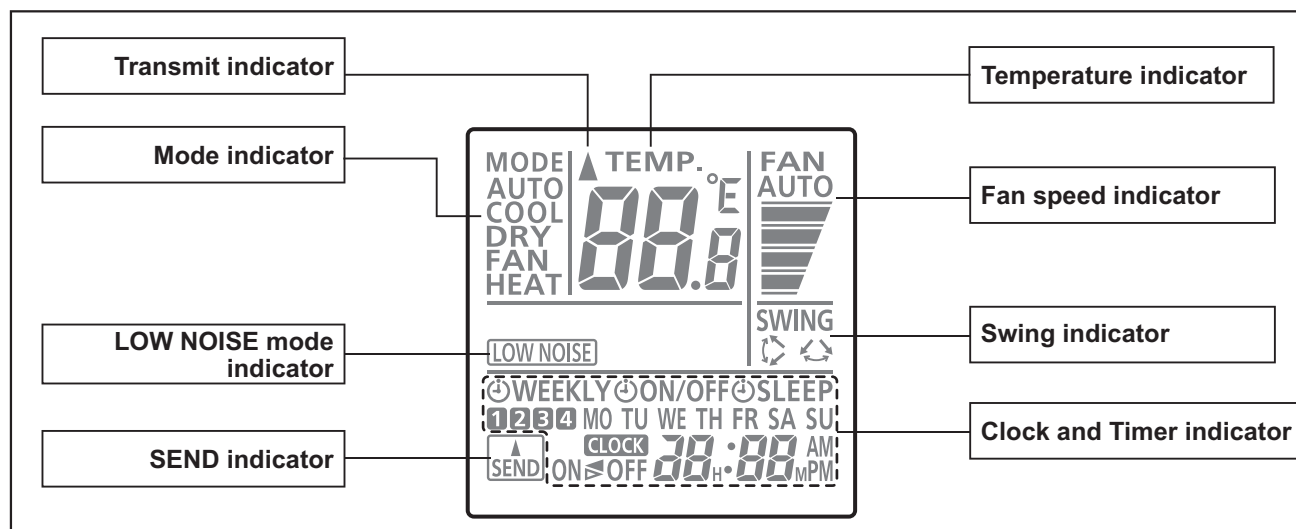
10-1. Wireless remote controller

Overview



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

Display panel

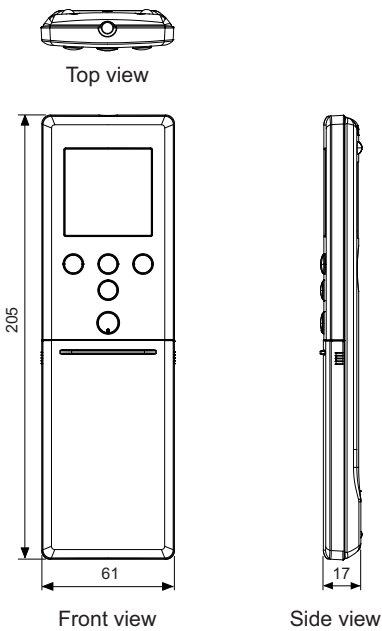


To facilitate explanation, the accompanying illustration has been drawn to show all possible indicators; in actual operation, however, the display will only show those indicators appropriate to the current operation.

■ Specifications

● Controller

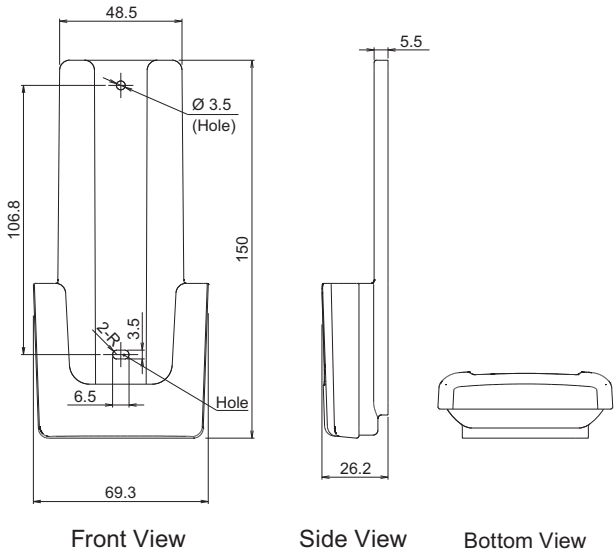
Unit: mm



Size (H × W × D)	mm	205 × 61 × 17
Weight	g	125 (without batteries)

● Holder

Unit: mm



Size (H × W × D)	mm	150 × 69.3 × 26.2
Weight	g	27

11. Function settings

To adjust the functions of this product according to the installation environment, various types of function settings are available.

NOTE: Incorrect settings can cause a product malfunction.

11-1. Function settings by using remote controller

Some function settings can be changed on the remote controller. After confirming the setting procedure and the content of each function setting, select appropriate functions for your installation environment.

■ Setting procedure by using wireless remote controller

The function number and the associated setting value are displayed on the LCD of the remote controller. Follow the instructions written in the local setup procedure supplied with the remote controller, and select appropriate setting according to the installation environment.

Before connecting the power supply of the indoor unit, reconfirm following items:

- Cover for the electrical enclosure on the outdoor unit is in place.
- There is no wiring mistake.
- Piping air tight test and vacuuming have been performed firmly.
- All the necessary wiring work for outdoor unit has been finished.

After reconfirming the items listed above, connect the power supply of the indoor unit.

NOTES:

- Settings will not be changed if invalid numbers or setting values are selected.
- When optional wired remote controller is used, refer to the installation manual enclosed with the remote controller.

Entering function setting mode:

While pressing the POWERFUL button and TEMP. (△) button simultaneously, press the RESET button to enter the function setting mode.

Selecting the function number and setting value:

1. Press the TEMP. (△) (▽) buttons to select the function number. To switch between the left and right digits, press the 10 °C HEAT button.
2. Press the POWERFUL button to proceed to value setting. To return the function number selection, press the POWERFUL button again.
3. Press the TEMP. (△) (▽) buttons to select the setting value. To switch between the left and right digits, press the 10 °C HEAT button.
4. Press the MODE button once. Confirm that you hear the beep sound.
5. Press the START/STOP button to fix the function setting. Confirm that you hear the beep sound.
6. Press the RESET button to end the function setting mode.
7. After completing the function setting, be sure to disconnect the power supply and then reconnect it.

Function number
Setting value



⚠ CAUTION

After disconnecting the power supply, wait 30 seconds or more before reconnecting it. The function setting will not become active unless the power supply is disconnected and then reconnected.

NOTES:

- The air conditioner custom code is set to \overline{H} prior to shipment.
- If you do not know the air conditioner custom code setting, try each of the custom codes ($\overline{H} \rightarrow \overline{b}$ $\rightarrow \overline{c} \rightarrow \overline{d}$) until you find the code that operates the air conditioner.

■ Contents of function setting

Each function setting listed in this section is adjustable in accordance with the installation environment.

NOTE: Setting will not be changed if invalid numbers or setting values are selected.

● Function setting list

	Function no.	Functions
1)	00	Remote controller address setting
2)	11	Filter sign
3)	30/31	Room temperature control for indoor unit sensor
4)	35/36	Room temperature control for wired remote controller sensor
5)	40	Auto restart
6)	42	Room temperature sensor switching
7)	44	Remote controller custom code
8)	46	External input control
9)	48	Room temperature sensor switching (Aux.)
10)	49	Indoor unit fan control for energy saving for cooling

1) Remote controller address setting

Multiple indoor units can be operated by using one wired remote controller.

Set the unit number of each indoor unit.

Function number	Setting value	Setting description	Factory setting
00	00	Unit no. 0	◆
	01	Unit no. 1	
	02	Unit no. 2	
	03	Unit no. 3	
	04	Unit no. 4	
	05	Unit no. 5	
	06	Unit no. 6	
	07	Unit no. 7	
	08	Unit no. 8	
	09	Unit no. 9	
	10	Unit no. 10	
	11	Unit no. 11	
	12	Unit no. 12	
	13	Unit no. 13	
	14	Unit no. 14	
	15	Unit no. 15	

NOTE: When different type of indoor units (such as wall mounted type and cassette type, cassette type and duct type, or other combinations) are connected using group control system, some functions may no longer be available.

2) Filter sign

Select appropriate intervals for displaying the filter sign on the indoor unit according to the estimated amount of dust in the air of the room.

If the indication is not required, select "No indication" (03).

Function number	Setting value	Setting description	Factory setting
11	00	Standard (400 hours)	
	01	Long interval (1,000 hours)	
	02	Short interval (200 hours)	
	03	No indication	◆

3) Room temperature control for indoor unit sensor

Depending on the installed environment, correction of the room temperature sensor may be required. Select the appropriate control setting according to the installed environment.

The temperature of the room temperature sensor is corrected as follows:

Corrected temp. = Temp. of the room temp. sensor - Correction temp. value

Example of correction:

When the temperature of the room temp. sensor is 26°C and the setting value is "03" (-1.0°C), corrected temp. will be 27°C (26°C - [-1.0°C]).

The temperature correction values show the difference from the Standard setting "00" (manufacturer's recommended value).

Function number		Setting value	Setting description	Factory setting
30 (For cooling)	31 (For heating)	00	Standard setting	◆
		01	No correction 0.0 °C	
		02	-0.5 °C	More cooling Less heating
		03	-1.0 °C	
		04	-1.5 °C	
		05	-2.0 °C	
		06	-2.5 °C	
		07	-3.0 °C	
		08	-3.5 °C	
		09	-4.0 °C	
		10	+0.5 °C	Less cooling More heating
		11	+1.0 °C	
		12	+1.5 °C	
		13	+2.0 °C	
		14	+2.5 °C	
		15	+3.0 °C	
		16	+3.5 °C	
		17	+4.0 °C	

4) Room temperature control for wired remote controller sensor

Depending on the installed environment, correction of the wire remote temperature sensor may be required. Select the appropriate control setting according to the installed environment.

To change this setting, set Function 42 to Both "01".

Ensure that the Thermo Sensor icon is displayed on the remote controller screen.

Function number		Setting value	Setting description	Factory setting
35 (For cooling)	36 (For heating)	00	Standard setting	◆
		01	No correction 0.0°C	
		02	-0.5 °C	More cooling Less heating
		03	-1.0 °C	
		04	-1.5 °C	
		05	-2.0 °C	
		06	-2.5 °C	
		07	-3.0 °C	
		08	-3.5 °C	
		09	-4.0 °C	
		10	+0.5 °C	Less cooling More heating
		11	+1.0 °C	
		12	+1.5 °C	
		13	+2.0 °C	
		14	+2.5 °C	
		15	+3.0 °C	
		16	+3.5 °C	
		17	+4.0 °C	

5) Auto restart

Enables or disables automatic restart after a power interruption.

Function number	Setting value	Setting description	Factory setting
40	00	Enable	◆
	01	Disable	

NOTE: Auto restart is an emergency function such as for power outage etc. Do not attempt to use this function in normal operation. Be sure to operate the unit by remote controller or external device.

6) Room temperature sensor switching

(Only for wired remote controller)

When using the wired remote controller temperature sensor, change the setting to "Both" (01).

Function number	Setting value	Setting description	Factory setting
42	00	Indoor unit	◆
	01	Both	

00: Sensor on the indoor unit is active.

01: Sensors on both indoor unit and wired remote controller are active.

NOTE: Remote controller sensor must be turned on by using the remote controller.

7) Remote controller custom code

(Only for wireless remote controller)

The indoor unit custom code can be changed. Select the appropriate custom code.

Function number	Setting value	Setting description	Factory setting
44	00	A	◆
	01	B	
	02	C	
	03	D	

8) External input control

"Operation/Stop" mode or "Forced stop" mode can be selected.

Function number	Setting value	Setting description	Factory setting
46	00	Operation/Stop mode 1	◆
	01	(Setting prohibited)	
	02	Forced stop mode	
	03	Operation/Stop mode 2	

NOTE: If this function is necessary, the rotary switch on the External input and output PCB should be set to 1.

9) Room temperature sensor switching (Aux.)

To use the temperature sensor on the wired remote controller only, change the setting to "Wired remote controller" (01).

This function will only work if the function setting 42 is set at "Both" (01).

When the setting value is set to "Both" (00), more suitable control of the room temperature is possible by setting function setting 30 and 31 too.

Function number	Setting value	Setting description	Factory setting
48	00	Both	◆
	01	Wired remote controller	

10) Indoor unit fan control for energy saving for cooling

Enables or disables the power-saving function by controlling the indoor unit fan rotation when the outdoor unit is stopped during cooling operation.

Function number	Setting value	Setting description	Factory setting
49	00	Disable	
	01	Enable	
	02	Remote controller	◆

00: When the outdoor unit is stopped, the indoor unit fan operates continuously following the setting on the remote controller.

01: When the outdoor unit is stopped, the indoor unit fan operates intermittently at a very low speed.

02: Enable or disable this function by remote controller setting.

NOTES:

- As the factory setting, this setting is initially activated.
- Set to "00" or "01" when connecting a remote controller that cannot set the Fan control for energy saving function or connecting a network converter.
To confirm if the remote controller has this setting, refer to the operating manual of each remote controller.

11-2. Custom code setting for wireless remote controller

To interconnect the air conditioner and the wireless remote controller, assignment of the custom code for the wireless remote controller is required.

NOTE: Air conditioner cannot receive a signal if the air conditioner has not been set for the custom code.

When 2 or more air conditioners are installed in a room, and the remote controller is operating an air conditioner other than the one you wish to set, change the custom code of the remote controller to operate only the air conditioner you wish to set. (4 selections possible.)

Confirm the setting of the remote controller custom code and the function setting. If these do not match, the remote controller cannot be used to operate for the air conditioner.

1. Press the START/STOP button until only the clock is displayed on the remote controller display.
2. Press the MODE button for at least 5 seconds to display the current custom code. (Initially set to \overline{A} .)
3. Press the TEMP. (\wedge) (\vee) buttons to change the custom code between $\overline{A} \rightarrow \overline{B} \rightarrow \overline{C} \rightarrow \overline{D}$. Match the code on the display to the air conditioner custom code. (Initially set to \overline{A} .)
4. Press the MODE button again to return to the clock display. The custom code will be changed.


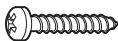


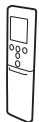




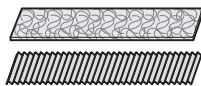
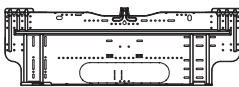


NOTES:

- If no button is pressed within 30 seconds after the custom code is displayed, the system returns to the original clock indicator. In this case, start again from step 1.
- The air conditioner custom code is set to \overline{A} prior to shipment. To change the custom code, contact your retailer.
- If you do not know the assigned code for the air conditioner, try each of the custom code ($\overline{A} \rightarrow \overline{B} \rightarrow \overline{C} \rightarrow \overline{D}$) until you find the code which operates the air conditioner.

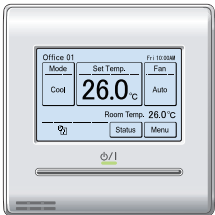
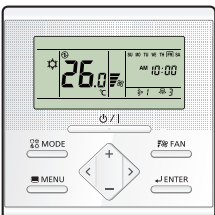
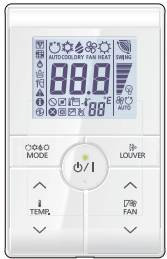

12. Accessories

12-1. Models: ASHG18KMTA, ASHG18KMTB, ASHG24KMTA, and ASHG24KMTB

Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Operating manual		1	Tapping screw (large)		5
Installation manual		1	Tapping screw (small)		2
Remote controller		1	Battery		2
Remote controller holder		1	Filter holder		2
Cloth tape		1	Air cleaning filters		1
Wall hook bracket		1			

13. Optional parts



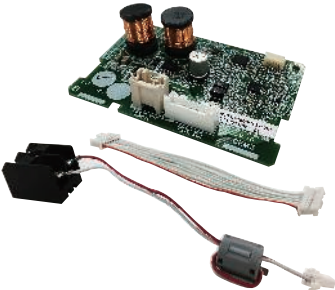

13-1. Controllers

Exterior	Part name	Model name	Summary
	Wired remote controller	UTY-RNRGZ*	Easy finger touch operation with LCD panel. Backlit LCD enables easy operation in a dark room. Wire type: Non-polar 2-wire Optional communication kit is necessary for installation.
	Wired remote controller	UTY-RLRG	High visibility and easy operation. Room temperature can be accurately controlled using the built-in thermo sensor. Wire type: Non-polar 2-wire Optional communication kit is necessary for installation.
	Simple remote controller	UTY-RSRG	Compact remote controller concentrates on the basic functions such as Start/Stop, fan control, temperature setting, and operation mode. Wire type: Non-polar 2-wire Optional communication kit is necessary for installation.
	Simple remote controller	UTY-RHRG	Compact remote controller concentrates on the basic functions such as Start/Stop, fan control, and temperature setting. Wire type: Non-polar 2-wire Optional communication kit is necessary for installation.

NOTES:

- Available functions may differ by the remote controller. For details, refer to the operation manual.
- When using a Wireless LAN adapter, group controlling system of the wired remote controller is prohibited.

13-2. Others

Exterior	Part name	Model name	Summary
	External connect kit	UTY-XWZXZ5	Required when external device is connected.
	External input and output PCB	UTY-XCSXZ2	Use to connect with external devices and air conditioner PCB. Optional External connect kit is necessary for installation.
	Communication kit	UTY-TWRXZ2	Use to connect Non-polar 2-core wired remote controller.
	Wireless LAN adapter	UTY-TFSXF2	Remotely manage an air conditioning system using mobile devices such as smartphones and tablets.

Part 2. OUTDOOR UNIT

SINGLE TYPE:

AOHG18KMTA

AOHG24KMTA

1. Specifications

Type				Inverter heat pump		
Model name				AOHG18KMTA	AOHG24KMTA	
Power supply				230 V ~ 50 Hz		
Power supply intake				Outdoor unit		
Available voltage range				198—264 V		
Starting current			A	7.0	8.6	
Fan	Airflow rate	Cooling	m³/h	2,350	3,240	
		Heating		2,100	2,820	
	Type × Q'ty		Propeller fan × 1			
	Motor output		W	49		
Sound pressure level *1		Cooling	dB (A)	50	54	
		Heating		50	52	
Sound power level		Cooling	dB (A)	65	67	
		Heating		65	66	
Heat exchanger type		Dimensions (H × W × D)	mm	588 × 881 × 18.19	672 × 881 × 18.19	
		588 × 851 × 18.19		672 × 851 × 18.19		
		Fin pitch		1.3		
		Rows × Stages		1 × 28	1 × 32	
		Pipe type		Copper tube		
		Fin type	Type (Material)	Aluminum		
Surface treatment	PC fin					
Compressor	Type	DC twin rotary				
	Motor output		W	900	1,060	
Refrigerant		Type (Global warming potential)		R32 (675)		
		Charge	g	1,020	1,320	
Refrigerant oil		Type		FW68S		
		Amount	cm³	350	RmM68AF 400	
Enclosure		Material		Steel sheet		
		Color		Beige Approximate color of Munsell 10YR 7.5/1.0		
Dimensions (H × W × D)	Net		mm	632 × 799 × 290	716 × 820 × 315	
	Gross			692 × 940 × 375	776 × 961 × 450	
Weight	Net		kg	36	42	
	Gross			40	46	
Connection pipe	Size	Liquid	mm (in)	Ø 6.35 (Ø 1/4)		
		Gas		Ø 12.70 (Ø 1/2)		
	Method			Flare		
	Pre-charge length		m	15		
	Max. length			25	30	
	Max. height difference			20	25	
Operation range		Cooling	°C	-10 to 46		
		Heating		-15 to 24		
Drain hose		Material		PP		
		Size	mm	Ø 13.0 (I. D.), Ø 16.0 to Ø 16.7 (O. D.)		
NOTES:						
<ul style="list-style-type: none">Specifications are based on the following conditions:<ul style="list-style-type: none">Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.Pipe length: 5 m, Height difference: 0 m.Protective function might work when using it outside the operation range.*1: Sound pressure level<ul style="list-style-type: none">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: AOHG18KMTA

2-2. Model: AOHG24KMTA

OUTDOOR UNIT
AOHG18, 24KMTAOUTDOOR UNIT
AOHG18, 24KMTA

3. Installation space

3-1. Models: AOHG18KMTA and AOHG24KMTA

■ Space requirement

Provide sufficient installation space for product safety.

⚠ CAUTION

Keep the space shown in the installation examples.

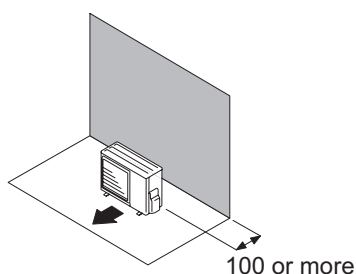
If the installation is not performed accordingly, it could cause a short circuit and result in a lack of operating performance.

● Single outdoor unit installation

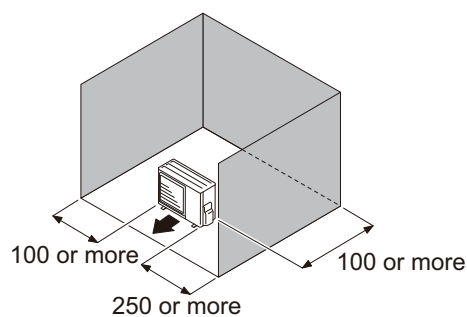
- When the upper space is open:

Unit: mm

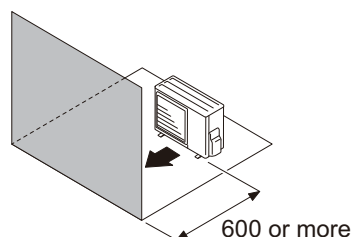
Obstacles at rear only



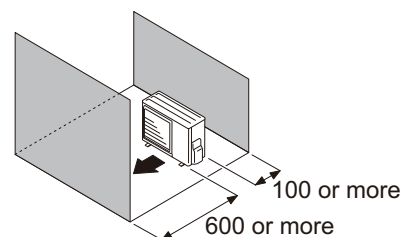
Obstacles at rear and sides



Obstacles at front



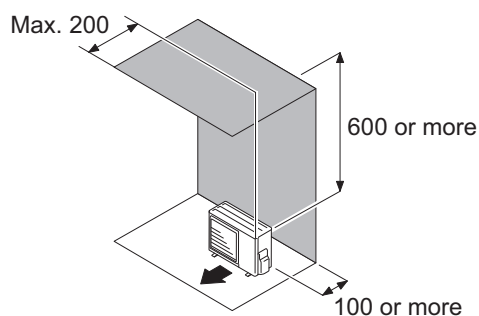
Obstacles at front and rear



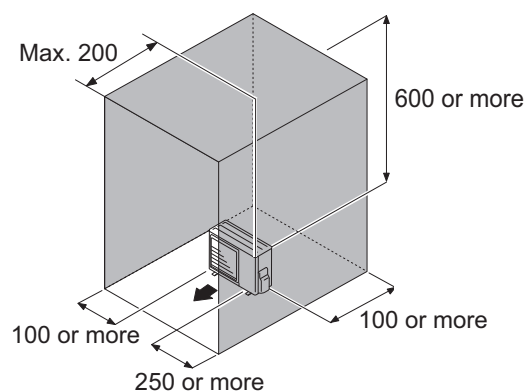
- When an obstruction in the upper space:

Unit: mm

Obstacles at rear and above



Obstacles at rear, sides, and above



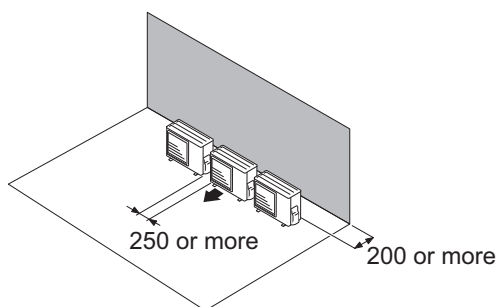
● Multiple outdoor unit installation

- Provide at least 250 mm of space between the outdoor units if multiple units are installed.
- When routing the piping from the side of an outdoor unit, provide space for piping.
- No more than 3 units must be installed side by side.
When 4 units or more are arranged in a line, provide the space as shown in the following example **“When an obstruction in the upper space:”**.

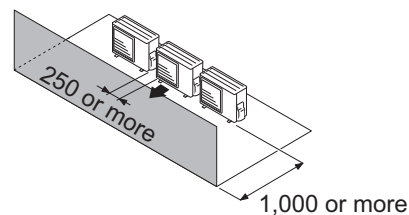
- **When the upper space is open:**

Unit: mm

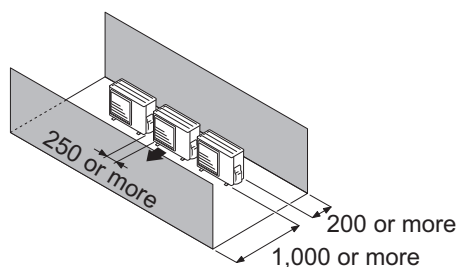
Obstacles at rear only



Obstacles at front only



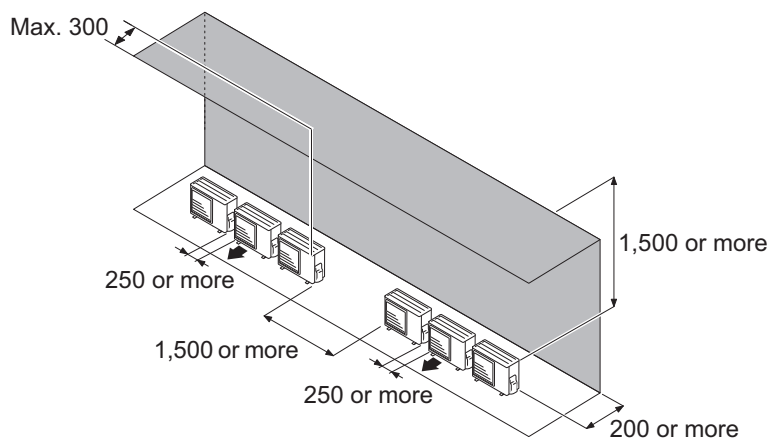
Obstacles at front and rear



- **When an obstruction in the upper space:**

Unit: mm

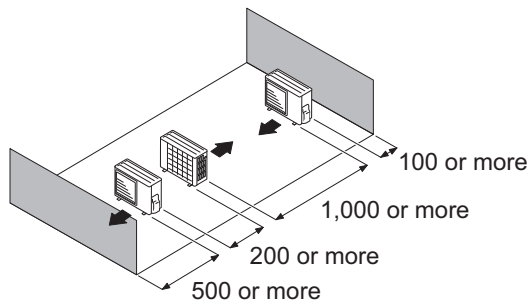
Obstacles at rear and above.



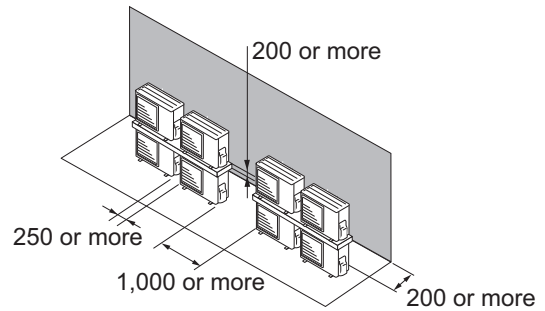
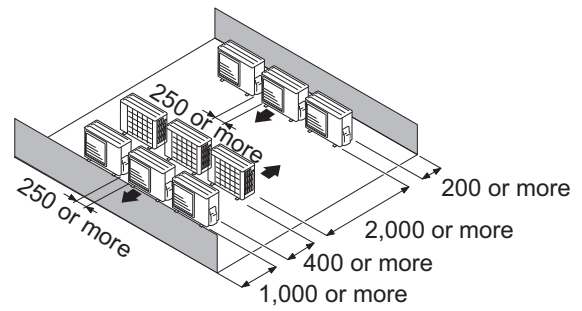
● Outdoor units installation in multi-row

Unit: mm

Single parallel unit arrangement

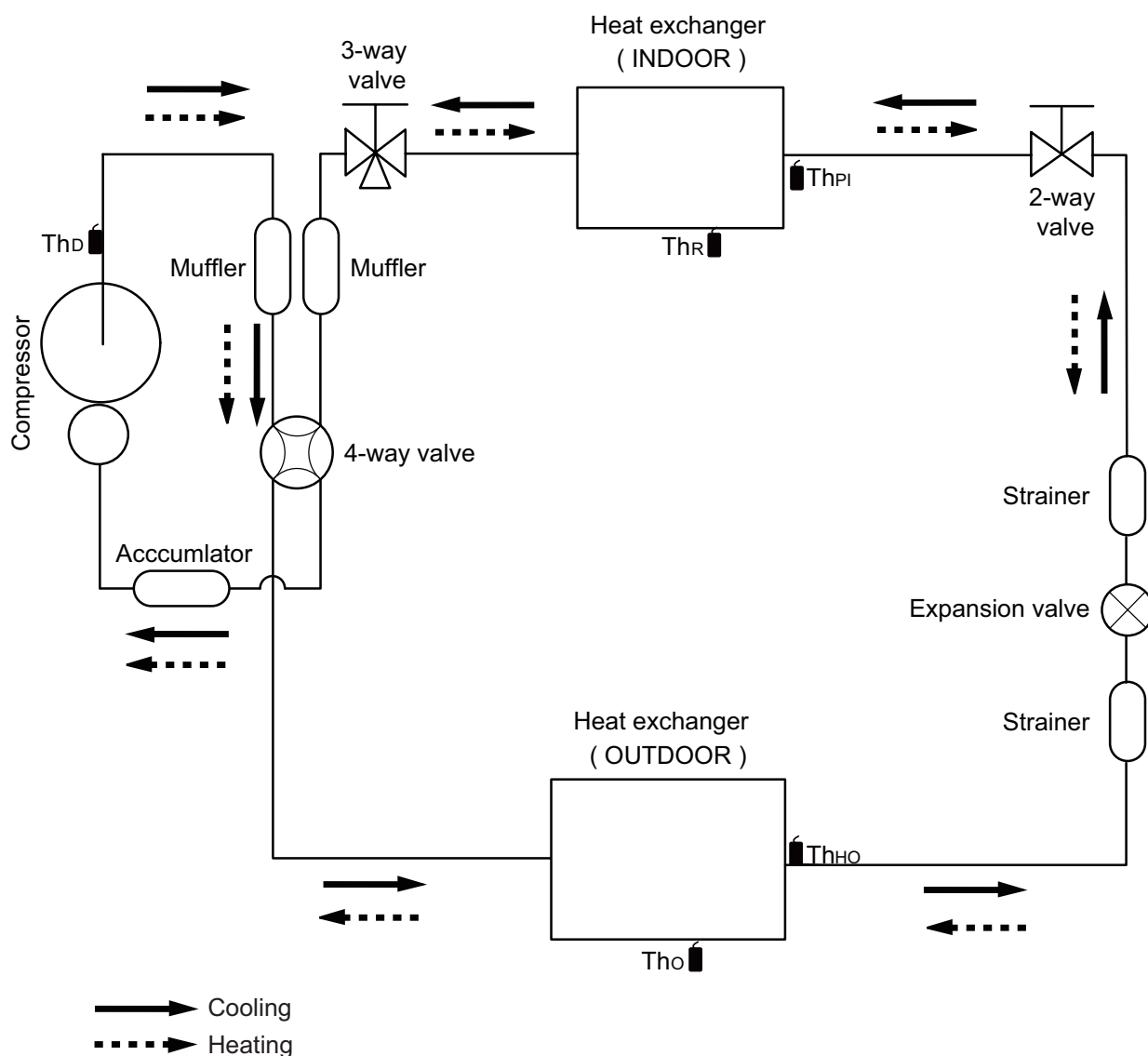


Multiple parallel unit arrangement

OUTDOOR UNIT
AOHG18, 24KMTAOUTDOOR UNIT
AOHG18, 24KMTA

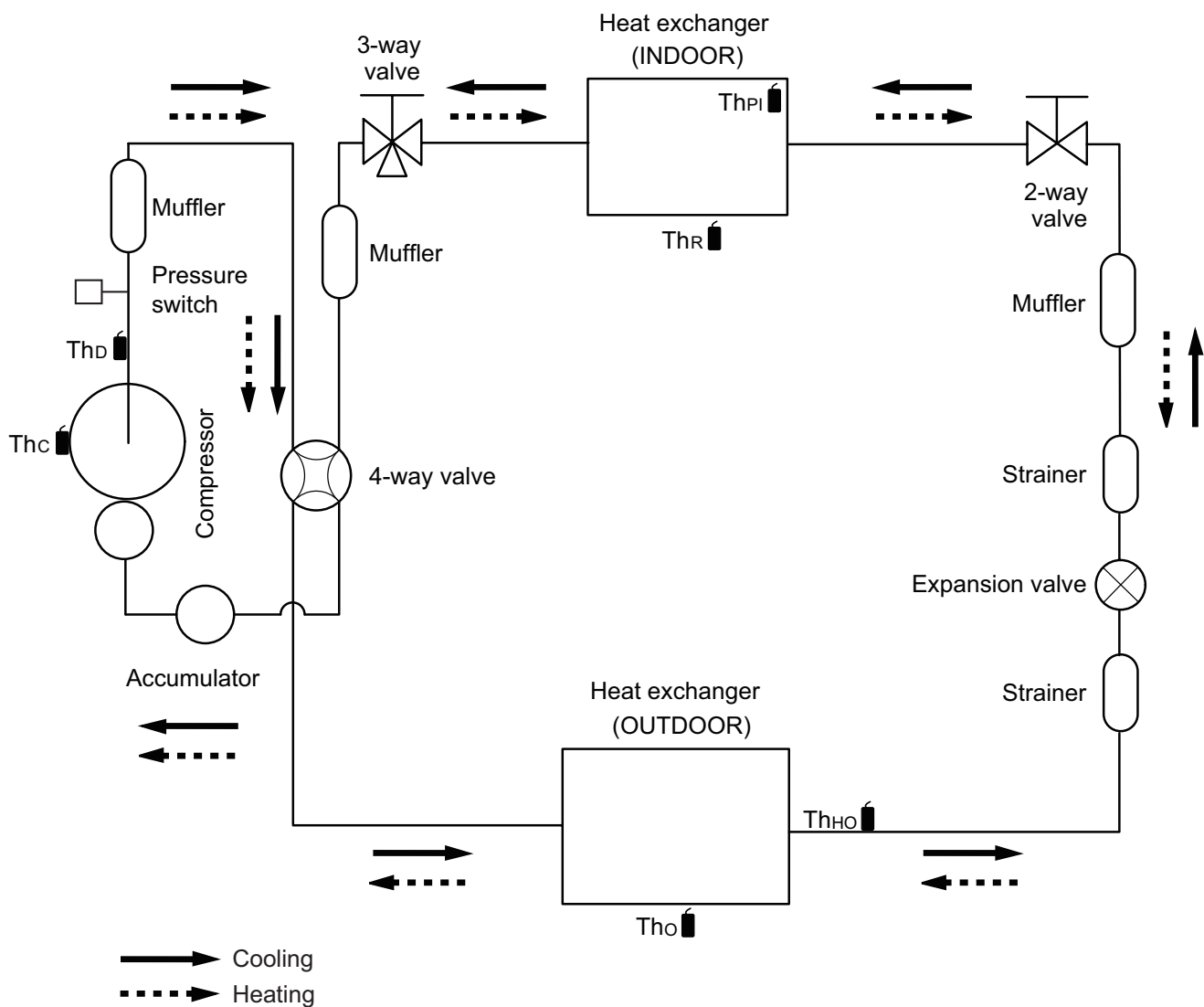
4. Refrigerant circuit

4-1. Model: AOHG18KMTA



- Th_D : Thermistor (Discharge temperature)
 Th_O : Thermistor (Outdoor temperature)
 Th_{HO} : Thermistor (Heat exchanger out temperature)
 Th_R : Thermistor (Room temperature)
 Th_{PI} : Thermistor (Pipe temperature)

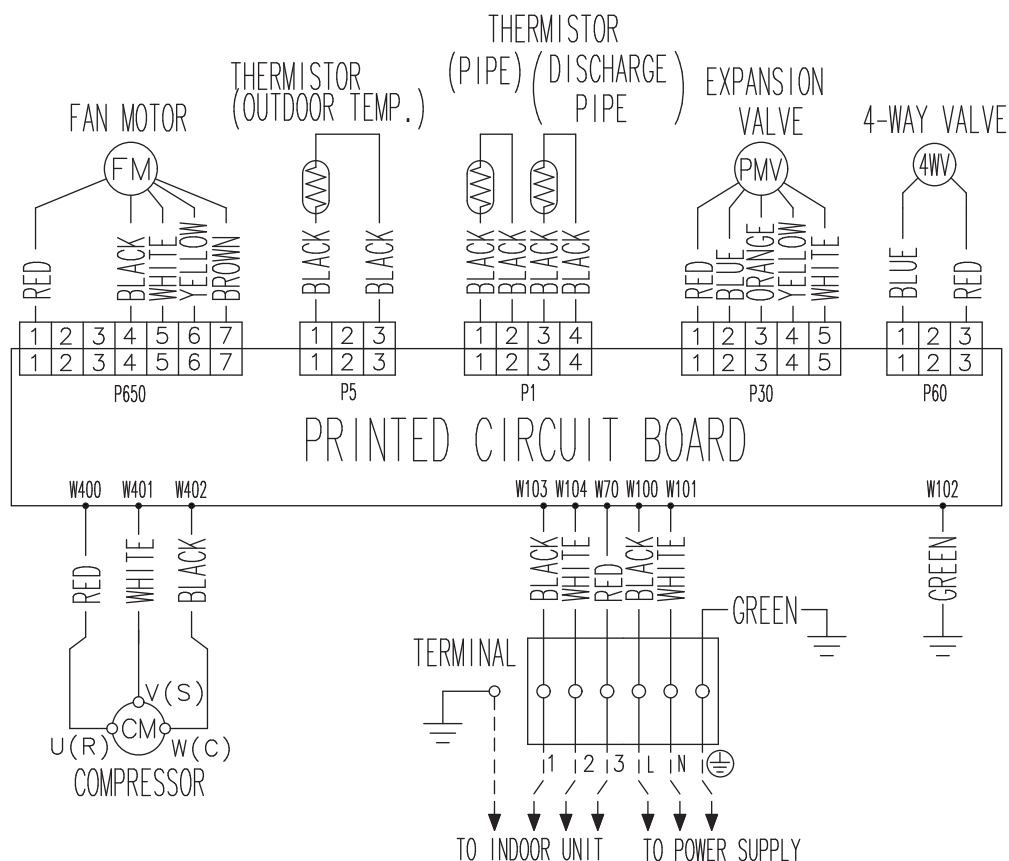
4-2. Model: AOHG24KMTA



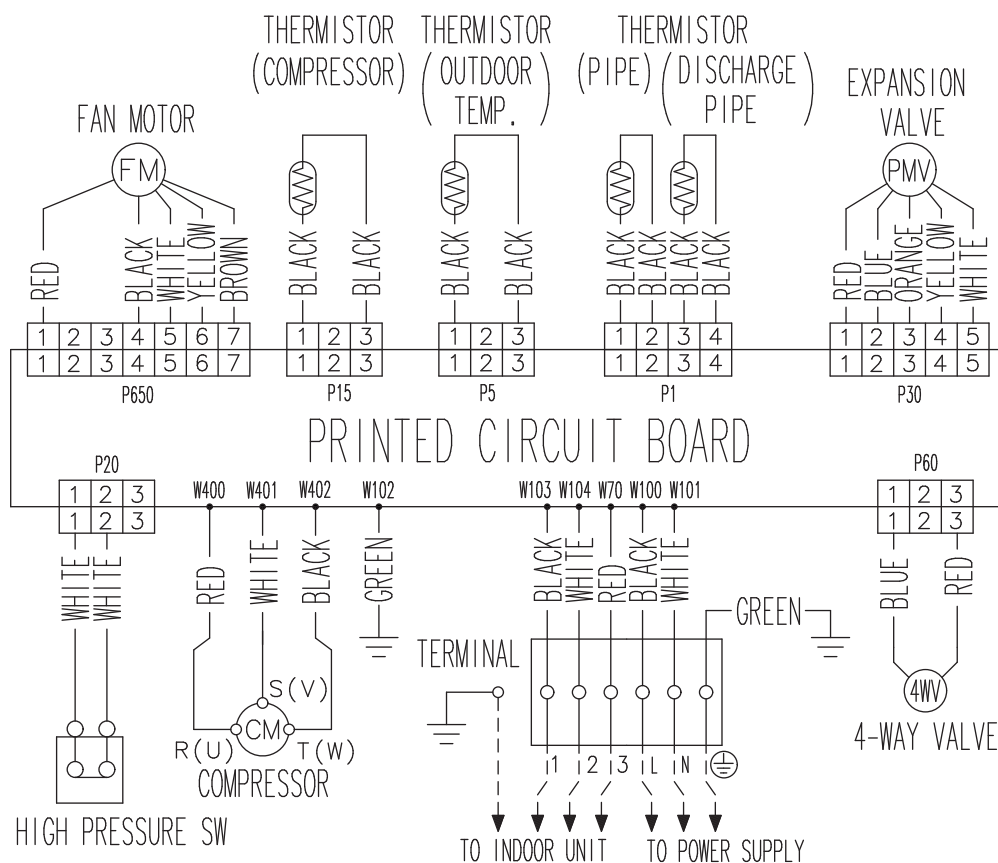
- Th_C : Thermistor (Compressor temperature)
 Th_D : Thermistor (Discharge temperature)
 Th_O : Thermistor (Outdoor temperature)
 Th_{HO} : Thermistor (Heat exchanger out temperature)
 Th_R : Thermistor (Room temperature)
 Th_{PI} : Thermistor (Pipe temperature)

5. Wiring diagrams

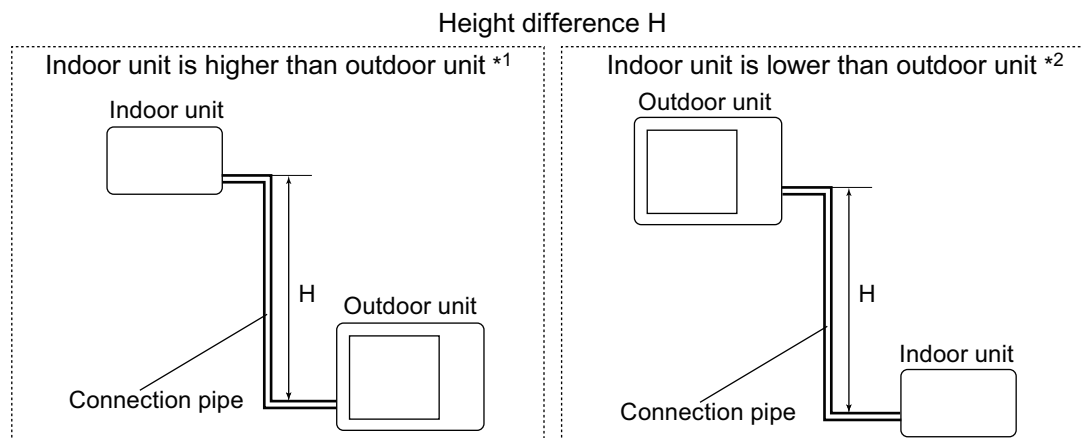
5-1. Model: AOHG18KMTA



5-2. Model: AOHG24KMTA



6. Capacity compensation rate for pipe length and height difference



6-1. Model: AOHG18KMTA

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

COOLING			Pipe length (m)					
			5	7.5	10	15	20	25
Height difference H (m)	Indoor unit is higher than outdoor unit *1	20	—	—	—	—	0.917	0.900
		10	—	—	0.966	0.947	0.932	0.914
		7.5	—	0.979	0.970	0.951	0.936	0.918
		5	0.992	0.983	0.974	0.955	0.939	0.922
		0	1.000	0.991	0.981	0.963	0.946	0.930
	Indoor unit is lower than outdoor unit *2	-5	1.000	0.991	0.981	0.963	0.946	0.930
		-7.5	—	0.991	0.981	0.963	0.946	0.930
		-10	—	—	0.981	0.963	0.946	0.930
		-20	—	—	—	—	0.946	0.930

HEATING			Pipe length (m)					
			5	7.5	10	15	20	25
Height difference H (m)	Indoor unit is higher than outdoor unit *1	20	—	—	—	—	0.887	0.871
		10	—	—	0.952	0.903	0.887	0.871
		7.5	—	0.976	0.952	0.903	0.887	0.871
		5	1.000	0.976	0.952	0.903	0.887	0.871
		0	1.000	0.976	0.952	0.903	0.887	0.871
	Indoor unit is lower than outdoor unit *2	-5	0.995	0.971	0.947	0.899	0.883	0.866
		-7.5	—	0.969	0.945	0.897	0.881	0.865
		-10	—	—	0.942	0.894	0.879	0.863
		-20	—	—	—	—	0.869	0.854

6-2. Model: AOHG24KMTA

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

COOLING			Pipe length (m)						
			5	7.5	10	15	20	25	30
Height difference H (m)	Indoor unit is higher than outdoor unit *1	25	—	—	—	—	—	0.893	0.877
		20	—	—	—	—	0.917	0.900	0.885
		10	—	—	0.966	0.947	0.932	0.914	0.899
		7.5	—	0.979	0.970	0.951	0.936	0.918	0.903
		5	0.992	0.983	0.974	0.955	0.939	0.922	0.906
			0	1.000	0.991	0.981	0.963	0.946	0.930
	Indoor unit is lower than outdoor unit *2	-5	1.000	0.991	0.981	0.963	0.946	0.930	0.914
		-7.5	—	0.991	0.981	0.963	0.946	0.930	0.914
		-10	—	—	0.981	0.963	0.946	0.930	0.914
		-20	—	—	—	—	0.946	0.930	0.914
		-25	—	—	—	—	—	0.930	0.914

HEATING			Pipe length (m)						
			5	7.5	10	15	20	25	30
Height difference H (m)	Indoor unit is higher than outdoor unit *1	25	—	—	—	—	—	0.871	0.855
		20	—	—	—	—	0.887	0.871	0.855
		10	—	—	0.952	0.903	0.887	0.871	0.855
		7.5	—	0.976	0.952	0.903	0.887	0.871	0.855
		5	1.000	0.976	0.952	0.903	0.887	0.871	0.855
			0	1.000	0.976	0.952	0.903	0.887	0.871
	Indoor unit is lower than outdoor unit *2	-5	0.995	0.971	0.947	0.899	0.883	0.866	0.850
		-7.5	—	0.969	0.945	0.897	0.881	0.865	0.849
		-10	—	—	0.942	0.894	0.879	0.863	0.847
		-20	—	—	—	—	0.869	0.854	0.838
		-25	—	—	—	—	—	0.850	0.834

7. Additional charge calculation

7-1. Model: AOHG18KMTA

Refrigerant type		R32
Refrigerant amount	g	1,020

■ Refrigerant charge

Total pipe length	m	15 or less	20	25 (Max.)	20 g/m
Additional charge	g	0	100	200	

7-2. Model: AOHG24KMTA

Refrigerant type		R32
Refrigerant amount	g	1,320

■ Refrigerant charge

Total pipe length	m	15 or less	20	25	30 (Max.)	20 g/m
Additional charge	g	0	100	200	300	

8. Airflow

8-1. Model: AOHG18KMTA

● Cooling

m ³ /h	2,350
l/s	653
CFM	1,383

● Heating

m ³ /h	2,100
l/s	583
CFM	1,236

8-2. Model: AOHG24KMTA

● Cooling

m ³ /h	3,240
l/s	900
CFM	1,907

● Heating

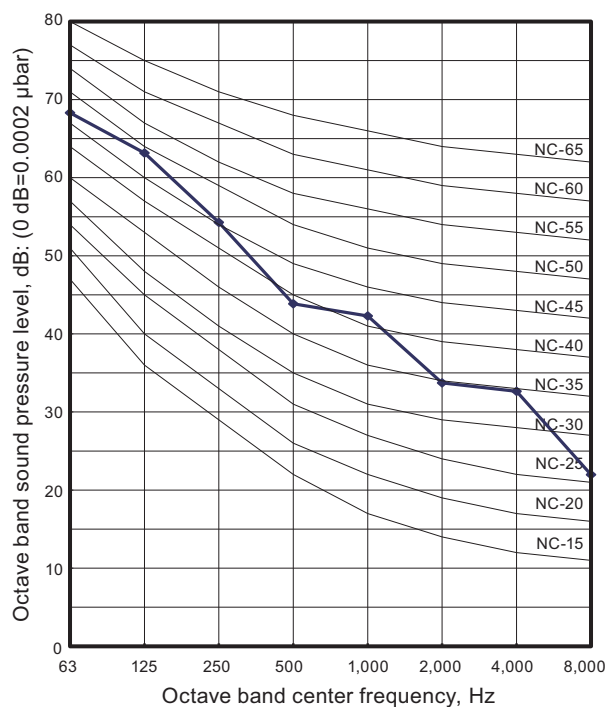
m ³ /h	2,820
l/s	783
CFM	1,660

9. Operation noise (sound pressure)

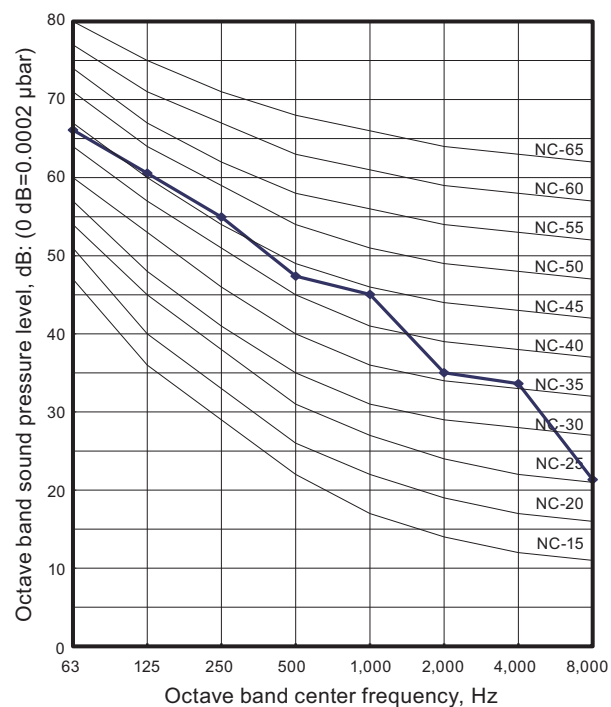
9-1. Noise level curve

Model: AOHG18KMTA

● Cooling

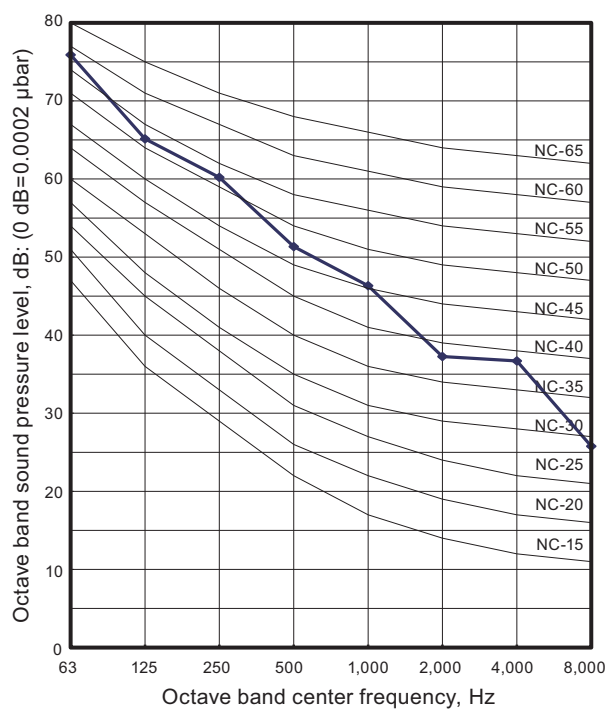


● Heating

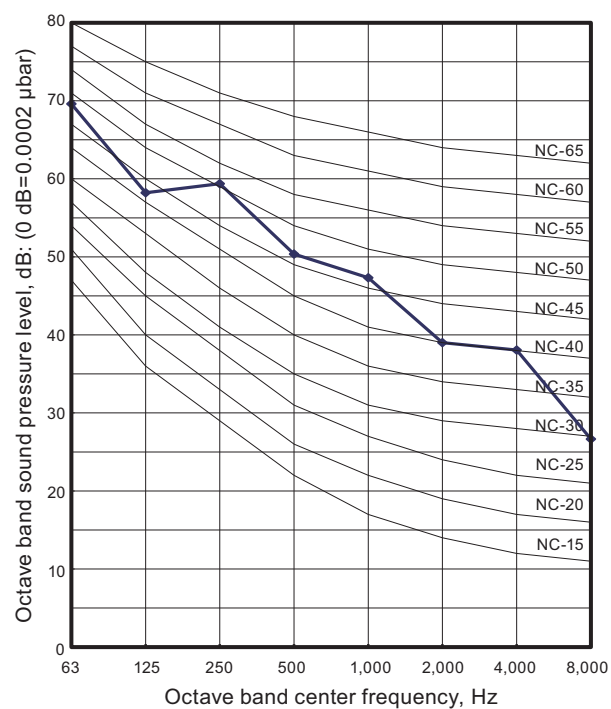


Model: AOHG24KMTA

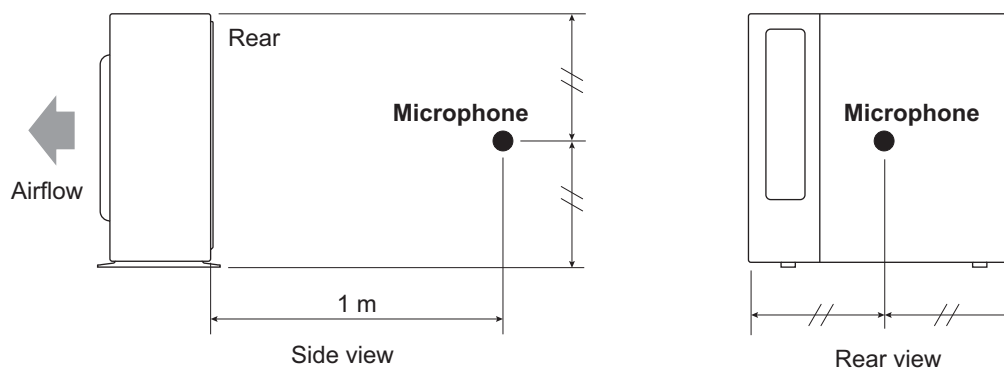
● Cooling



● Heating



9-2. Sound level check point



NOTE: Detailed shape of the actual outdoor unit might be slightly different from the one illustrated above.

10. Electrical characteristics

Model name				AOHG18KMTA		AOHG24KMTA	
Power supply	Voltage		V	230 ~			
	Frequency		Hz	50			
Max operating current *1			A	13.5		16.0	
Starting current			A	7.0		8.6	
Wiring spec. *2	Circuit breaker current		A	16		20	
	Power cable		mm ²	2.5			
	Connection cable *3	Cross-sectional area	mm ²	1.5—2.5			
		Limited wiring length	m	26		31	

*1: Maximum operating current is the total current of the indoor unit and the outdoor unit.

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

11. Safety devices

Type of protection	Protection form		Model	
			AOHG18KMTA	AOHG24KMTA
Circuit protection	Current fuse (PCB*)		250 V, 25 A	
			250 V 5 A	
			250 V, 3.15 A	
Fan motor protection	Thermal protection program	Activate	100±15°C Fan motor stop	
		Reset	95±10°C Fan motor restart	
Compressor protection	Thermal protection program (Discharge temp.)	Activate	110°C Compressor stop	
		Reset	After 7 minutes Compressor restart	
	Thermal protection program (Outdoor temp.) (Only in COOL or DRY mode)	Activate	-20 °C Compressor stop	-15 °C Compressor stop
		Reset	-15 °C Compressor restart	-10 °C Compressor restart

12. Accessories

12-1. Models: AOHG18KMTA and AOHG24KMTA

Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Installation manual		1	Drain pipe		1