



Refrigerant  
**R410A**  
INVERTER

AIR CONDITIONER

**Duct type**

# **DESIGN & TECHNICAL MANUAL**

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INDOOR



AMUG24LMAS  
AMUG30LMAS

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OUTDOOR



AOUH24LUAS1



AOUH30LUAS1

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**FUJITSU GENERAL LIMITED**

DR\_AR086EF\_02  
2023.07.25

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# **Part 1. INDOOR UNIT**

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**AMUG24LMAS**

**AMUG30LMAS**

# 1. Specifications

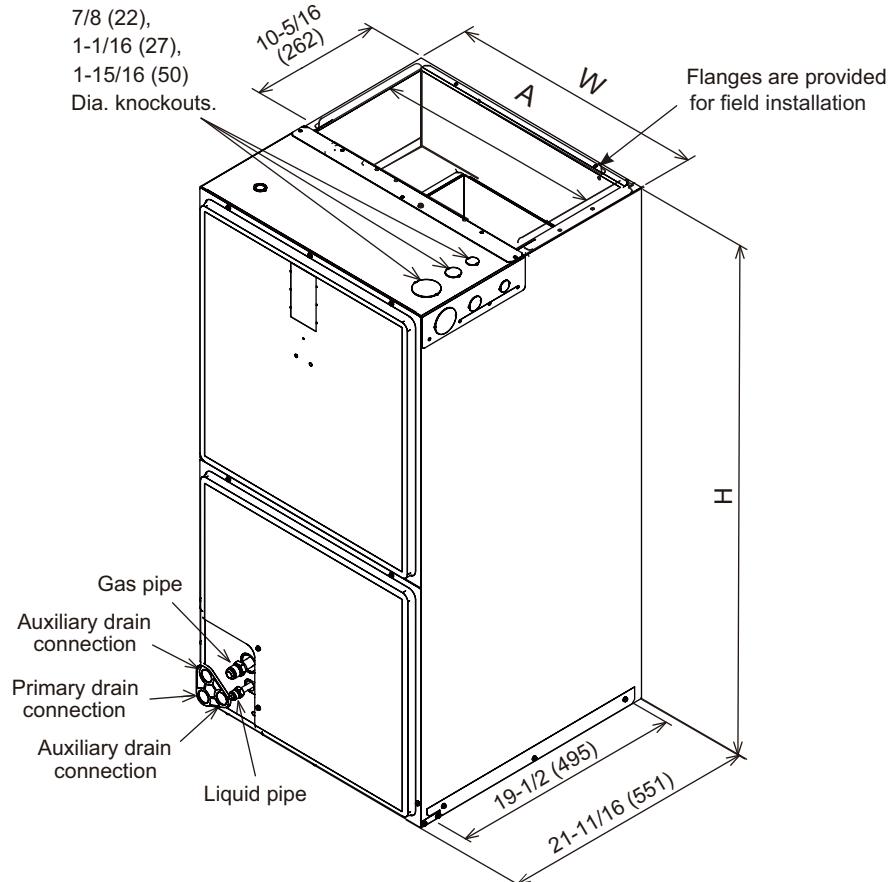
Type			Duct	
Model name			Inverter, Heat pump	
	AMUG24LMAS		AMUG30LMAS	
Power supply intake			Outdoor unit	
	Voltage	V	208/230	
System power supply	Frequency	Hz	60	
	Available voltage range	V	187—253	
Indoor unit power supply (from outdoor unit)		V	208/230	
Capacity	Cooling	Rated	kW	7.03
			Btu/h	24,000
			kW	1.58—8.21
		Btu/h	5,400—28,000	9,600—35,000
	Heating	Rated	kW	7.91
			Btu/h	27,000
		Min.—Max.	kW	1.58—9.38
			Btu/h	5,400—32,000
		17°FDB (Outdoor temp.) <sup>*1</sup>	kW	5.48
			Btu/h	18,700
			kW	7.50
			Btu/h	25,600
	5°FDB (Outdoor temp.) <sup>*2</sup>	Rated	kW	6.74
			Btu/h	23,000
		Max.	kW	7.91
			Btu/h	27,000
Input power	Cooling	Rated	2.05	3.00
			0.44—2.96	0.42—4.08
		Min.—Max.	2.31	2.82
			0.50—3.15	0.66—4.21
	Heating	Rated	1.92	2.32
			3.38	4.15
		Max.	3.47	4.12
			kW	
	Fan	HIGH	106.9	136.3
		MED	67.4	96.3
		LOW	50.6	57.7
		QUIET	19.7	22.7
Current	Cooling	Rated	A	9.1
	Heating			10.3
EER2	Cooling		Btu/hW	11.7
COP2	Heating		kW/kW	3.42
SEER2	Cooling		Btu/hW	18.8
HSPF2	Heating			10.0
Power factor	Cooling		%	97.9
	Heating			97.5
Moisture removal			pints/h (L/h)	5.5 (2.6)
Maximum operating current <sup>*3</sup>	Cooling		A	15.8
	Heating			15.8
Fan	Airflow rate	Cooling	CFM (m <sup>3</sup> /h)	800 (1,359)
				670 (1,138)
				590 (1,002)
				310 (527)
		Heating	CFM (m <sup>3</sup> /h)	800 (1,359)
				670 (1,138)
				590 (1,002)
				310 (527)
	Type × Qty			Sirocco fan × 1
	Motor output		W	—
Static pressure range			inWG (Pa)	0.08 to 1.00 (20 to 250)
Sound pressure level <sup>*4</sup>	Cooling	HIGH	dB (A)	40
		MED		34
		LOW		32
		QUIET		26
		Heating	CFM (m <sup>3</sup> /h)	37
				33
				31
				25
	Dimensions (H × W × D)		in (mm)	16 × 17-1/8 × 1-1/2 (406 × 435 × 38)
	Fin pitch		FPI	16
Heat exchanger type	Rows × Stages			2 × 48
	Pipe type			Aluminum
	Fin type			Aluminum
	Material			Steel sheet
Enclosure	Color			—
Dimensions (H × W × D)	Net		in (mm)	42-1/2 × 21 × 21-11/16 (1,080 × 533 × 551)
	Gross			42-3/4 × 24 × 25-5/16 (1,086 × 610 × 643)
Weight	Net		lb (kg)	104 (47.0)
	Gross			116 (52.5)
Connection pipe	Size	Liquid	in (mm)	Ø3/8 (Ø9.52)
		Gas		Ø5/8 (Ø15.88)
	Method			Flare
Drain port	Material			—
	Tip diameter		in (mm)	Ø3/4 (Ø19) (O.D.)
Operation range	Cooling	°F (°C)		64 to 90 (18 to 32)
		%RH		80 or less
	Heating	°F (°C)		60 to 86 (16 to 30)
Remote controller				Option: Wired, Wireless, Mobile app <sup>*5*6</sup> (AIRSTAGE Mobile)

Type	Duct	
	Inverter, Heat pump	
Model name	AMUG24LMAS	AMUG30LMAS
<b>NOTES:</b>		
<ul style="list-style-type: none"> <li>• Specifications are based on the following conditions:           <ul style="list-style-type: none"> <li>- Cooling: Indoor temperature of 80°FDB/67°FWB (26.67°CDB/19.44°CWB), and outdoor temperature of 95°FDB/75°FWB (35°CDB/23.9°CWB).</li> <li>- Heating: Indoor temperature of 70°FDB/60°FWB (21.11°CDB/15.56°CWB), and outdoor temperature of 47°FDB/43°FWB (8.33°CDB/6.11°CWB).</li> <li>- *1: Heating (17°F): Indoor temperature of 70°FDB/60°FWB (21.11°CDB/15.56°CWB), and outdoor temperature of 17°FDB/15°FWB (-8.33°CDB/-9.44°CWB).</li> <li>- *2: Heating (5°F): Indoor temperature of 70°FDB/60°FWB (21.11°CDB/15.56°CWB), and outdoor temperature of 5°FDB/4°FWB (-15.0°CDB/-15.56°CWB).</li> <li>- Test conditions are based on AHRI 210/240 2023.               <ul style="list-style-type: none"> <li>• Capacity test condition: Static pressure 0.58 inWG (145 Pa)</li> <li>• Pipe length: 25 ft (7.5 m), Height difference: 0 ft (0 m). (Between outdoor unit and indoor unit.)</li> <li>• Standard static pressure: 24 model: 0.18 inWG (45 Pa), 30 model: 0.23 inWG (58 Pa)</li> </ul> </li> <li>• Protective function might work when using it outside the operation range.</li> <li>• *3: Maximum current:               <ul style="list-style-type: none"> <li>- The maximum value when operated within the operation range.</li> <li>- The total current of indoor unit and outdoor unit.</li> </ul> </li> <li>• *4: Sound pressure level:               <ul style="list-style-type: none"> <li>- Measured values in manufacturer's anechoic chamber.</li> <li>- Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.</li> </ul> </li> <li>• *5: Available on Google Play™ store or on App Store®. Optional WLAN Adapter is also required. For details, refer to the setting manual.</li> <li>• *6: The firmware update function is not available for this product.</li> </ul> </li> </ul>		

## 2. Dimensions

### 2-1. Models: AMUG24LMAS and AMUG30LMAS

Unit: in (mm)



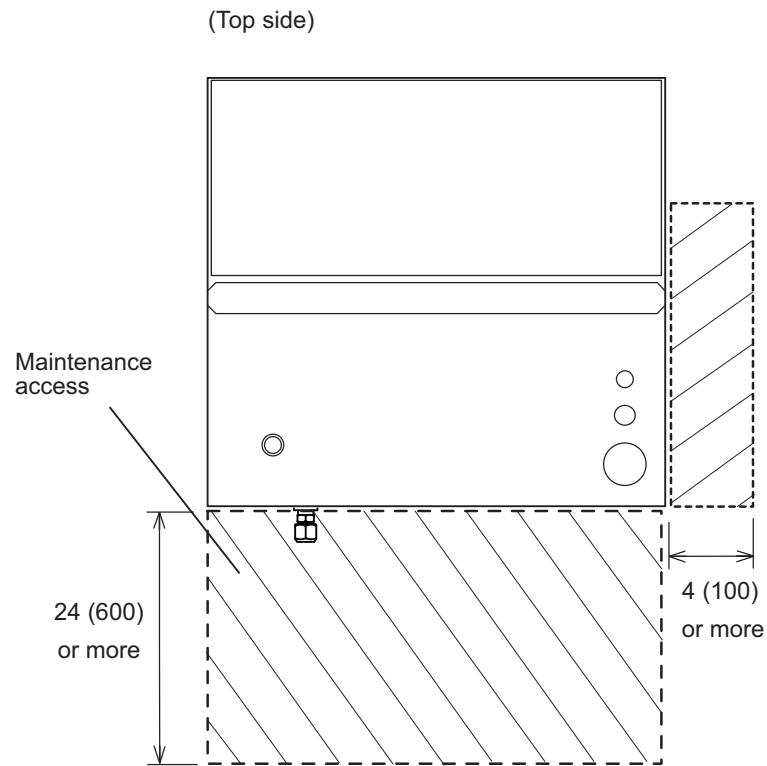
Model	Dimension		
	A (Supply duct)	W (Unit width)	H (Unit height)
AMUG24LMAS	19-1/2 (495)	21 (533)	42-1/2 (1,080)
AMUG30LMAS			

Model	Return air opening	
	Width	Depth/Length
AMUG24LMAS	19-3/8 (492)	19-3/4 (502)
AMUG30LMAS		

## 2-2. Installation space requirement

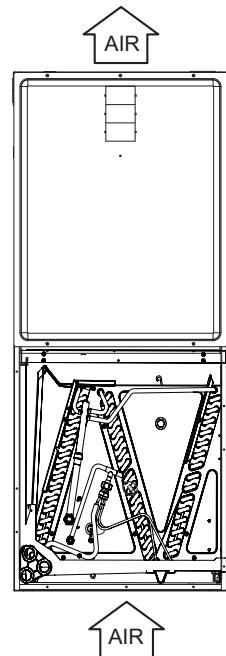
Provide sufficient installation space for product safety.

Unit: in (mm)

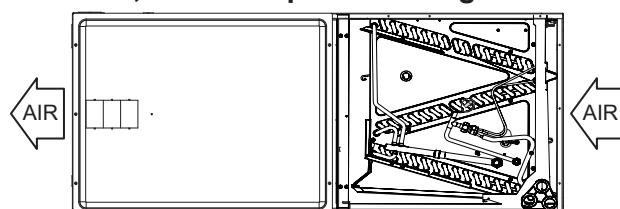


For installation method, the following 4 patterns

- **Pattern A: Vertical installation, air intake port at the bottom**

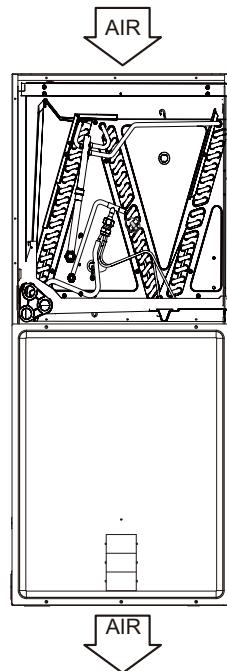


- **Pattern B: Horizontal installation, air intake port at the right**



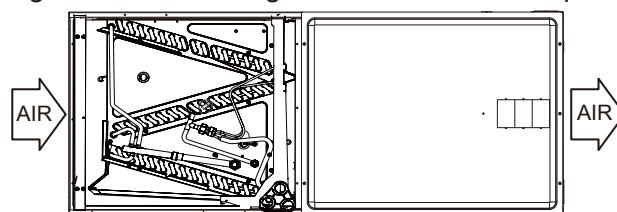
- **Pattern C: Vertical installation, air intake port at the top**

Reversing the heat exchanger and reattaching the thermistor are required



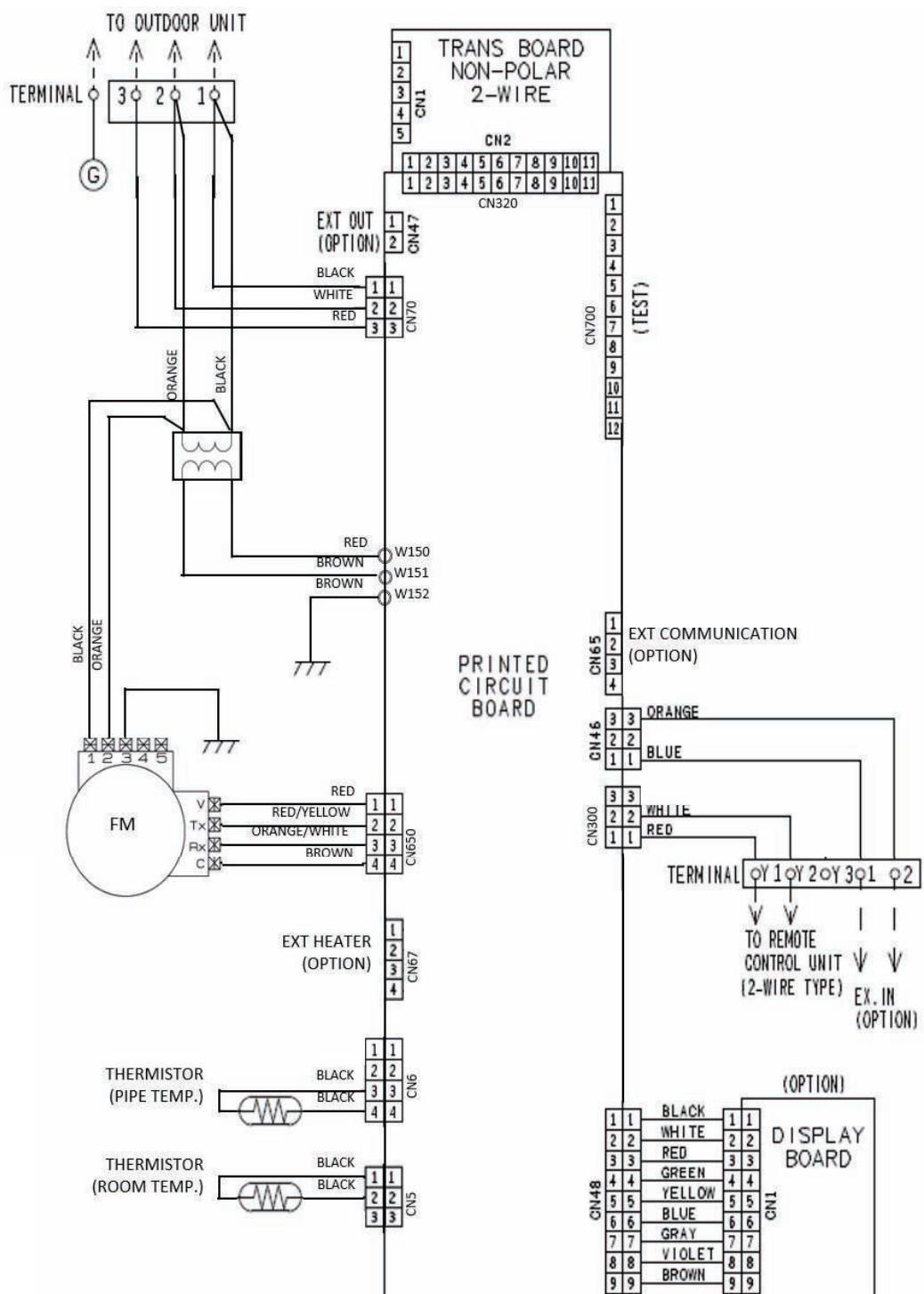
- **Pattern D: Horizontal installation, air intake port at the left**

Reversing the heat exchanger and reattaching the thermistor are required



### 3. Wiring diagram

#### 3-1. Models: AMUG24LMAS and AMUG30LMAS



## 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: AMUG24LMAS

AFR			CFM			800												
Outdoor temperature	Indoor temperature																	
	64			70			75			80			85			90		
°FDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	kBtu/h	kW		kBtu/h	kW		kBtu/h	kW		kBtu/h	kW		kBtu/h	kW		kBtu/h	kW	
-5	20.41	14.70	1.51	21.29	15.33	1.58	22.76	16.39	1.62	24.26	17.47	1.71	28.39	20.44	1.72	30.46	21.93	1.73
5	20.37	14.66	1.50	20.91	15.05	1.60	22.18	15.96	1.66	24.21	17.43	1.70	26.88	19.35	1.73	30.40	21.88	1.73
14	19.82	15.07	1.44	21.25	15.50	1.55	22.63	16.25	1.64	24.17	17.39	1.70	25.81	18.76	1.75	27.66	20.56	1.78
32	19.33	15.47	1.31	21.42	15.94	1.46	22.89	16.52	1.58	24.09	17.31	1.69	24.98	18.14	1.79	25.63	19.21	1.89
41	19.05	15.55	1.27	21.27	16.05	1.43	22.75	16.59	1.56	23.88	17.28	1.69	24.62	17.99	1.81	25.03	18.88	1.93
50	18.65	15.59	1.26	20.92	16.10	1.42	22.41	16.63	1.55	23.49	17.24	1.68	24.15	17.91	1.81	24.44	18.68	1.95
59	19.52	15.89	1.13	21.97	16.42	1.25	23.55	16.96	1.36	24.69	17.52	1.47	25.37	18.21	1.57	25.63	18.95	1.69
67	21.55	16.99	1.25	24.28	17.58	1.35	26.06	18.17	1.44	27.35	18.73	1.54	28.13	19.53	1.63	28.45	20.33	1.74
77	20.76	16.65	1.47	23.39	17.25	1.55	25.15	17.86	1.62	26.47	18.38	1.69	27.33	19.32	1.76	27.79	20.19	1.84
87	20.04	16.30	1.68	22.56	16.92	1.74	24.30	17.58	1.78	25.69	18.08	1.83	26.69	19.21	1.87	27.38	20.22	1.91
95	18.60	15.56	1.98	20.86	16.19	2.01	22.54	16.91	2.03	24.00	17.39	2.05	25.20	18.79	2.06	26.23	20.00	2.07
104	17.13	14.76	2.25	19.06	15.41	2.26	20.69	16.22	2.27	22.30	16.70	2.27	23.86	18.49	2.28	25.45	20.01	2.29
115	14.87	12.67	2.51	16.17	13.78	2.51	17.76	15.14	2.52	19.81	15.86	2.53	22.21	18.42	2.54	25.13	20.57	2.54

AFR			m³/h			1,359												
Outdoor temperature	Indoor temperature																	
	17.8			21.1			23.9			26.7			29.4			32.2		
°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	KW			KW			KW			KW			KW			KW		
-20.6	5.98	4.31	1.51	6.24	4.49	1.58	6.67	4.80	1.62	7.11	5.12	1.71	8.32	5.99	1.72	8.93	6.43	1.73
-15	5.97	4.30	1.50	6.13	4.41	1.60	6.50	4.68	1.66	7.10	5.11	1.70	7.88	5.67	1.73	8.91	6.41	1.73
-10	5.81	4.42	1.44	6.23	4.54	1.55	6.63	4.76	1.64	7.08	5.10	1.70	7.56	5.50	1.75	8.11	6.03	1.78
0	5.67	4.53	1.31	6.28	4.67	1.46	6.71	4.84	1.58	7.06	5.07	1.69	7.32	5.32	1.79	7.51	5.63	1.89
5	5.58	4.56	1.27	6.23	4.70	1.43	6.67	4.86	1.56	7.00	5.06	1.69	7.22	5.27	1.81	7.34	5.53	1.93
10	5.47	4.57	1.26	6.13	4.72	1.42	6.57	4.87	1.55	6.89	5.05	1.68	7.08	5.25	1.81	7.16	5.48	1.95
15	5.72	4.66	1.13	6.44	4.81	1.25	6.90	4.97	1.36	7.24	5.13	1.47	7.44	5.34	1.57	7.51	5.56	1.69
19.4	6.32	4.98	1.25	7.12	5.15	1.35	7.64	5.32	1.44	8.02	5.49	1.54	8.24	5.72	1.63	8.34	5.96	1.74
25	6.08	4.88	1.47	6.86	5.06	1.55	7.37	5.24	1.62	7.76	5.39	1.69	8.01	5.66	1.76	8.14	5.92	1.84
30	5.87	4.78	1.68	6.61	4.96	1.74	7.12	5.15	1.78	7.53	5.30	1.83	7.82	5.63	1.87	8.02	5.93	1.91
35	5.45	4.56	1.98	6.11	4.75	2.01	6.60	4.96	2.03	7.03	5.10	2.05	7.39	5.51	2.06	7.69	5.86	2.07
40	5.02	4.33	2.25	5.59	4.52	2.26	6.06	4.75	2.27	6.54	4.89	2.27	6.99	5.42	2.28	7.46	5.86	2.29
46.1	4.36	3.71	2.51	4.74	4.04	2.51	5.21	4.44	2.52	5.81	4.65	2.53	6.51	5.40	2.54	7.37	6.03	2.54

**Model: AMUG30LMAS**

AFR	CFM	870
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Outdoor temperature	Indoor temperature																		
	64			70			75			80			85			90			
	°FDB	54	60	63	67	71	73	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
-5	27.16	20.24	1.80	28.33	21.11	1.89	30.29	22.57	1.94	32.29	24.06	2.04	37.78	28.16	2.05	40.53	30.20	2.06	
5	27.00	20.18	1.80	27.71	20.71	1.92	29.41	21.97	2.00	32.10	23.98	2.05	35.64	26.63	2.07	40.30	30.11	2.07	
14	26.19	20.73	1.74	28.07	21.31	1.88	29.90	22.34	1.98	31.93	23.92	2.05	34.09	25.80	2.11	36.54	28.28	2.15	
32	25.36	21.25	1.60	28.10	21.90	1.79	30.03	22.70	1.93	31.60	23.78	2.07	32.77	24.92	2.20	33.63	26.39	2.31	
41	25.08	21.35	1.56	28.00	22.03	1.76	29.95	22.77	1.92	31.43	23.72	2.08	32.41	24.70	2.23	32.95	25.91	2.38	
50	24.83	21.39	1.57	27.85	22.09	1.76	29.83	22.81	1.92	31.27	23.65	2.09	32.14	24.56	2.25	32.52	25.63	2.42	
59	25.21	21.77	1.52	28.37	22.50	1.68	30.42	23.23	1.82	31.89	24.00	1.96	32.76	24.95	2.10	33.10	25.97	2.26	
67	27.01	22.34	1.82	30.43	23.12	1.97	32.66	23.89	2.11	34.28	24.63	2.25	35.26	25.68	2.39	35.66	26.74	2.53	
77	25.86	21.85	2.17	29.14	22.65	2.29	31.33	23.45	2.39	32.98	24.13	2.50	34.05	25.36	2.60	34.62	26.51	2.72	
87	24.82	21.36	2.51	27.93	22.18	2.59	30.09	23.04	2.66	31.81	23.69	2.72	33.05	25.18	2.79	33.91	26.50	2.85	
95	23.26	20.53	2.89	26.08	21.37	2.94	28.17	22.31	2.97	30.00	22.95	3.00	31.50	24.79	3.02	32.80	26.39	3.03	
104	21.64	19.62	3.24	24.08	20.48	3.25	26.14	21.56	3.26	28.18	22.20	3.28	30.14	24.58	3.29	32.16	26.61	3.30	
115	19.49	17.01	3.58	21.20	18.50	3.59	23.29	20.32	3.60	25.97	21.29	3.61	29.11	24.73	3.62	32.95	27.62	3.63	

AFR	m³/h	1,478
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Outdoor temperature	Indoor temperature																		
	17.8			21.1			23.9			26.7			29.4			32.2			
	°CDB	12.2	15.6	17.2	19.4	21.7	22.8	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	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	KW	KW									
-20.6	7.96	5.93	1.80	8.30	6.19	1.89	8.88	6.62	1.94	9.46	7.05	2.04	11.07	8.25	2.05	11.88	8.85	2.06	
-15	7.91	5.91	1.80	8.12	6.07	1.92	8.62	6.44	2.00	9.41	7.03	2.05	10.45	7.80	2.07	11.81	8.82	2.07	
-10	7.68	6.08	1.74	8.23	6.25	1.88	8.76	6.55	1.98	9.36	7.01	2.05	9.99	7.56	2.11	10.71	8.29	2.15	
0	7.43	6.23	1.60	8.24	6.42	1.79	8.80	6.65	1.93	9.26	6.97	2.07	9.60	7.30	2.20	9.86	7.73	2.31	
5	7.35	6.26	1.56	8.21	6.46	1.76	8.78	6.67	1.92	9.21	6.95	2.08	9.50	7.24	2.23	9.66	7.59	2.38	
10	7.28	6.27	1.57	8.16	6.48	1.76	8.74	6.69	1.92	9.16	6.93	2.09	9.42	7.20	2.25	9.53	7.51	2.42	
15	7.39	6.38	1.52	8.31	6.60	1.68	8.91	6.81	1.82	9.35	7.04	1.96	9.60	7.31	2.10	9.70	7.61	2.26	
19.4	7.92	6.55	1.82	8.92	6.78	1.97	9.57	7.00	2.11	10.05	7.22	2.25	10.33	7.53	2.39	10.45	7.84	2.53	
25	7.58	6.40	2.17	8.54	6.64	2.29	9.18	6.87	2.39	9.67	7.07	2.50	9.98	7.43	2.60	10.15	7.77	2.72	
30	7.28	6.26	2.51	8.19	6.50	2.59	8.82	6.75	2.66	9.32	6.94	2.72	9.69	7.38	2.79	9.94	7.77	2.85	
35	6.82	6.02	2.89	7.64	6.26	2.94	8.26	6.54	2.97	8.79	6.73	3.00	9.23	7.27	3.02	9.61	7.73	3.03	
40	6.34	5.75	3.24	7.06	6.00	3.25	7.66	6.32	3.26	8.26	6.51	3.28	8.83	7.20	3.29	9.43	7.80	3.30	
46.1	5.71	4.99	3.58	6.21	5.42	3.59	6.83	5.96	3.60	7.61	6.24	3.61	8.53	7.25	3.62	9.66	8.10	3.63	

## 4-2. Heating capacity

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

### ■ Model: AMUG24LMAS

		AFR		CFM				800			
		Indoor temperature									
Outdoor temperature	°FDB	60		65		70		72		75	
		TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
-5	-7	21.24	3.84	20.64	3.90	20.50	3.49	20.08	4.01	20.34	4.06
5	3	24.03	3.29	22.91	3.37	23.00	3.47	23.38	3.51	24.33	3.58
14	12	25.97	3.31	24.64	3.40	24.93	3.40	25.46	3.56	26.67	3.64
17	15	26.69	3.25	25.34	3.34	25.60	3.38	26.13	3.50	27.36	3.57
23	19	28.07	3.18	26.76	3.26	26.86	3.33	27.31	3.40	28.42	3.47
32	28	30.13	3.14	29.06	3.19	28.80	3.26	28.81	3.29	29.50	3.34
41	37	32.20	3.16	31.51	3.18	30.73	3.20	30.09	3.21	30.12	3.23
47	43	33.59	3.21	32.81	3.20	32.00	3.15	31.20	3.18	30.39	3.17
50	47	34.42	3.28	34.22	3.25	32.82	3.16	31.37	3.20	30.59	3.18
59	50	34.72	3.39	35.05	3.30	33.09	3.04	30.85	3.15	29.27	3.08

		AFR		m³/h				1,359			
		Indoor temperature									
Outdoor temperature	°CDB	15.6		18.3		21.1		22.2		23.9	
		TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
-20.6	-21.7	6.22	3.84	6.05	3.90	6.01	3.49	5.89	4.01	5.96	4.06
-15	-16.1	7.04	3.29	6.71	3.37	6.74	3.47	6.85	3.51	7.13	3.58
-10	-11.1	7.61	3.31	7.22	3.40	7.31	3.40	7.46	3.56	7.82	3.64
-8.3	-9.4	7.82	3.25	7.43	3.34	7.50	3.38	7.66	3.50	8.02	3.57
-5	-7.2	8.23	3.18	7.84	3.26	7.87	3.33	8.00	3.40	8.33	3.47
0	-2.2	8.83	3.14	8.52	3.19	8.44	3.26	8.44	3.29	8.65	3.34
5	2.8	9.44	3.16	9.24	3.18	9.01	3.20	8.82	3.21	8.83	3.23
8.3	6.1	9.84	3.21	9.62	3.20	9.38	3.15	9.14	3.18	8.91	3.17
10	8.3	10.09	3.28	10.03	3.25	9.62	3.16	9.19	3.20	8.97	3.18
15	10	10.18	3.39	10.27	3.30	9.70	3.04	9.04	3.15	8.58	3.08

### ■ Model: AMUG30LMAS

		AFR		CFM				870			
		Indoor temperature									
Outdoor temperature	°FDB	60		65		70		72		75	
		TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
-5	-7	23.94	4.28	23.26	4.35	23.10	3.89	22.63	4.47	22.93	4.53
5	3	28.22	3.90	26.90	4.00	27.00	4.12	27.44	4.17	28.58	4.26
14	12	30.60	4.02	29.02	4.13	29.36	4.14	29.97	4.33	31.43	4.42
17	15	31.50	3.99	29.90	4.10	30.20	4.15	30.83	4.29	32.30	4.39
23	19	33.15	3.97	31.60	4.07	31.72	4.16	32.24	4.24	33.59	4.33
32	28	35.67	4.01	34.40	4.08	34.08	4.18	34.10	4.21	34.94	4.27
41	37	38.20	4.15	37.38	4.18	36.44	4.20	35.68	4.22	35.75	4.24
47	43	39.90	4.30	38.97	4.28	38.00	4.21	37.04	4.25	36.11	4.24
50	47	40.62	4.33	40.37	4.29	38.72	4.16	37.00	4.22	36.11	4.19
59	50	37.79	3.84	38.13	3.74	36.00	3.45	33.56	3.57	31.87	3.48

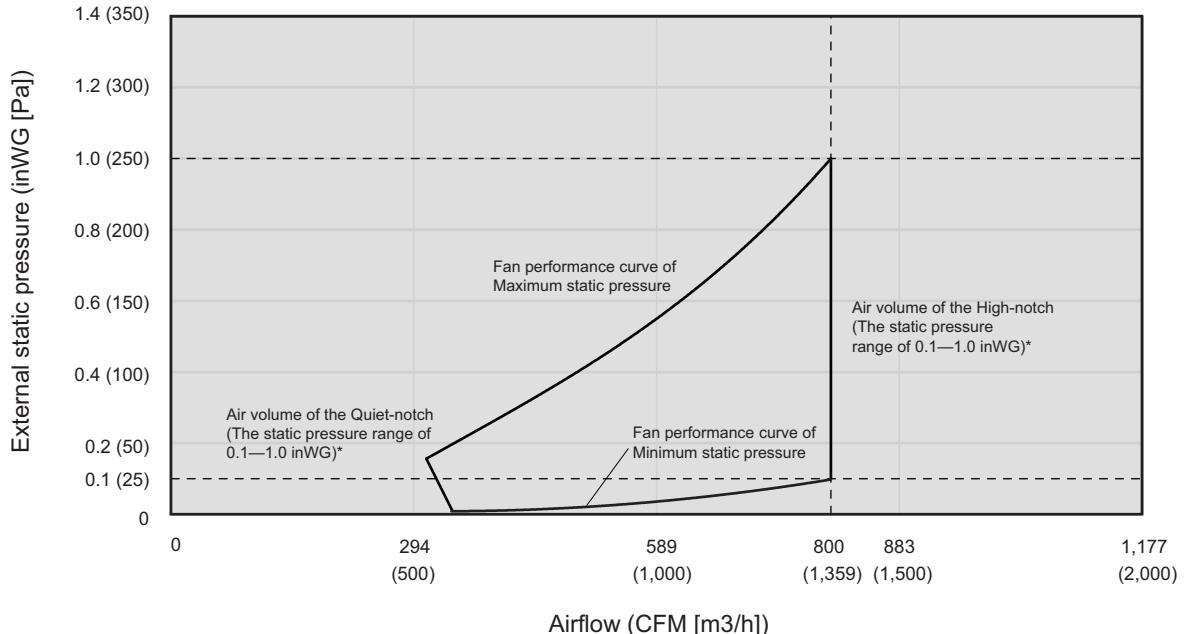
		AFR		m³/h				1,478			
		Indoor temperature									
Outdoor temperature	°CDB	15.6		18.3		21.1		22.2		23.9	
		TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
-20.6	-21.7	7.02	4.28	6.82	4.35	6.77	3.89	6.63	4.47	6.72	4.53
-15	-16.1	8.27	3.90	7.88	4.00	7.91	4.12	8.04	4.17	8.38	4.26
-10	-11.1	8.97	4.02	8.51	4.13	8.60	4.14	8.78	4.33	9.21	4.42
-8.3	-9.4	9.23	3.99	8.76	4.10	8.85	4.15	9.03	4.29	9.47	4.39
-5	-7.2	9.72	3.97	9.26	4.07	9.30	4.16	9.45	4.24	9.84	4.33
0	-2.2	10.45	4.01	10.08	4.08	9.99	4.18	9.99	4.21	10.24	4.27
5	2.8	11.20	4.15	10.96	4.18	10.68	4.20	10.46	4.22	10.48	4.24
8.3	6.1	11.69	4.30	11.42	4.28	11.14	4.21	10.86	4.25	10.58	4.24
10	8.3	11.90	4.33	11.83	4.29	11.35	4.16	10.84	4.22	10.58	4.19
15	10	11.08	3.84	11.18	3.74	10.55	3.45	9.84	3.57	9.34	3.48

## 5. Fan performance

**NOTE:** Airflow and capacity/outlet temperature curve data are measured based on the same conditions mentioned in "Specifications".

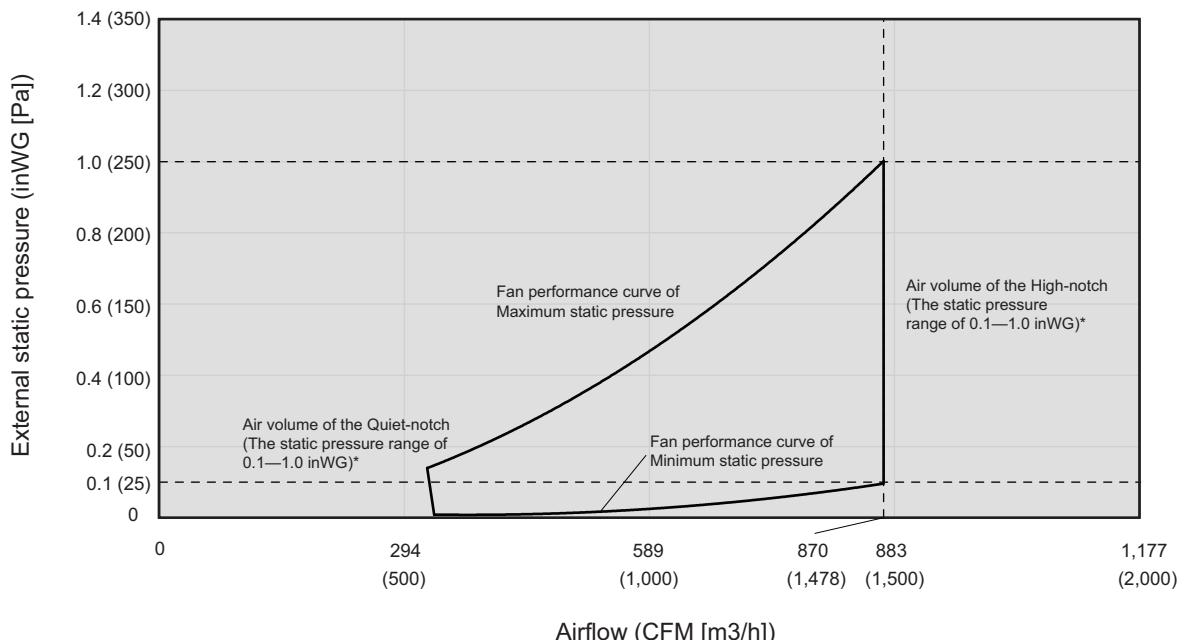
### 5-1. Fan performance curve

#### ■ Model: AMUG24LMAS



\*: The air volume is automatically adjusted near the target air volume by the function of automatic air volume adjustment. (Within the SP range of 0.1—1.0 inWG)

#### ■ Model: AMUG30LMAS



\*: The air volume is automatically adjusted near the target air volume by the function of automatic air volume adjustment. (Within the SP range of 0.1—1.0 inWG)

## 5-2. Airflow

### ■ Model: AMUG24LMAS

#### ● Cooling

Fan speed	Airflow	
HIGH	$m^3/h$	1,359
	l/s	378
	CFM	800
MED	$m^3/h$	1,138
	l/s	316
	CFM	670
LOW	$m^3/h$	1,002
	l/s	278
	CFM	590
QUIET	$m^3/h$	527
	l/s	146
	CFM	310

#### ● Heating

Fan speed	Airflow	
HIGH	$m^3/h$	1,359
	l/s	378
	CFM	800
MED	$m^3/h$	1,138
	l/s	316
	CFM	670
LOW	$m^3/h$	1,002
	l/s	278
	CFM	590
QUIET	$m^3/h$	527
	l/s	146
	CFM	310

**■ Model: AMUG30LMAS****● Cooling**

<b>Fan speed</b>	<b>Airflow</b>	
HIGH	m <sup>3</sup> /h	1,478
	l/s	411
	CFM	870
MED	m <sup>3</sup> /h	1,240
	l/s	344
	CFM	730
LOW	m <sup>3</sup> /h	1,002
	l/s	278
	CFM	590
QUIET	m <sup>3</sup> /h	527
	l/s	146
	CFM	310

**● Heating**

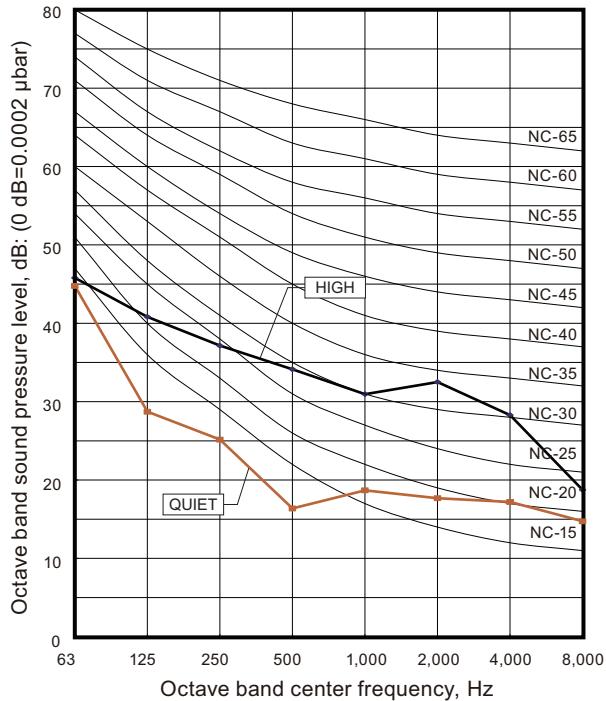
<b>Fan speed</b>	<b>Airflow</b>	
HIGH	m <sup>3</sup> /h	1,478
	l/s	411
	CFM	870
MED	m <sup>3</sup> /h	1,240
	l/s	344
	CFM	730
LOW	m <sup>3</sup> /h	1,002
	l/s	278
	CFM	590
QUIET	m <sup>3</sup> /h	527
	l/s	146
	CFM	310

## 6. Operation noise (sound pressure)

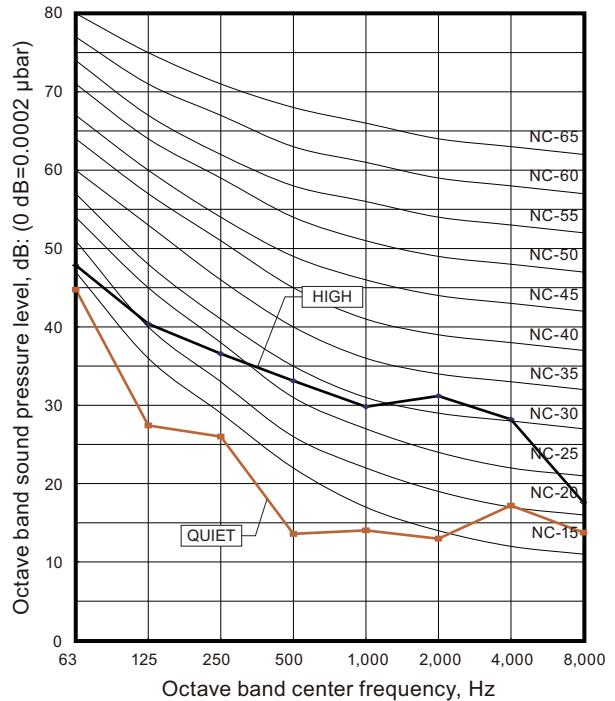
### 6-1. Noise level curve

#### ■ Model: AMUG24LMAS

##### ● Cooling

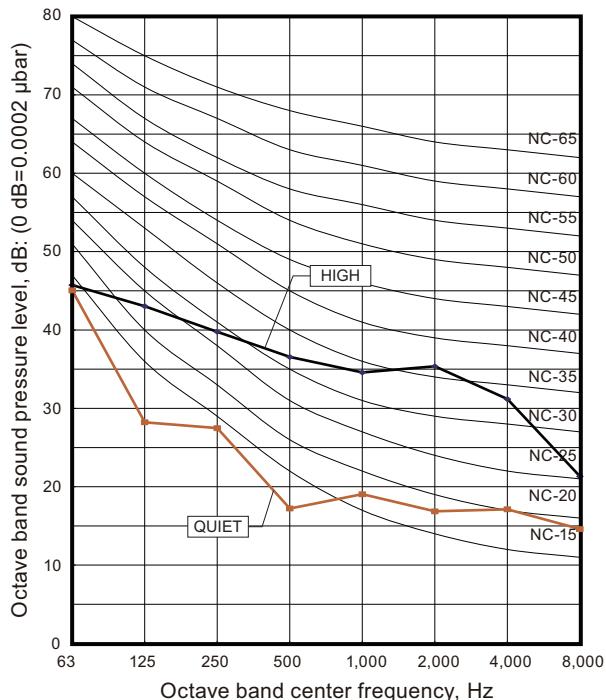


##### ● Heating

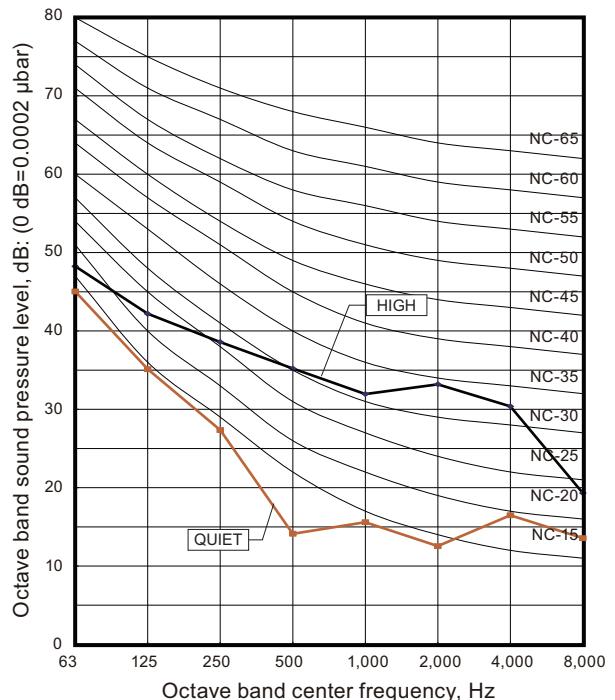


#### ■ Model: AMUG30LMAS

##### ● Cooling



##### ● Heating



## 7. External input and output

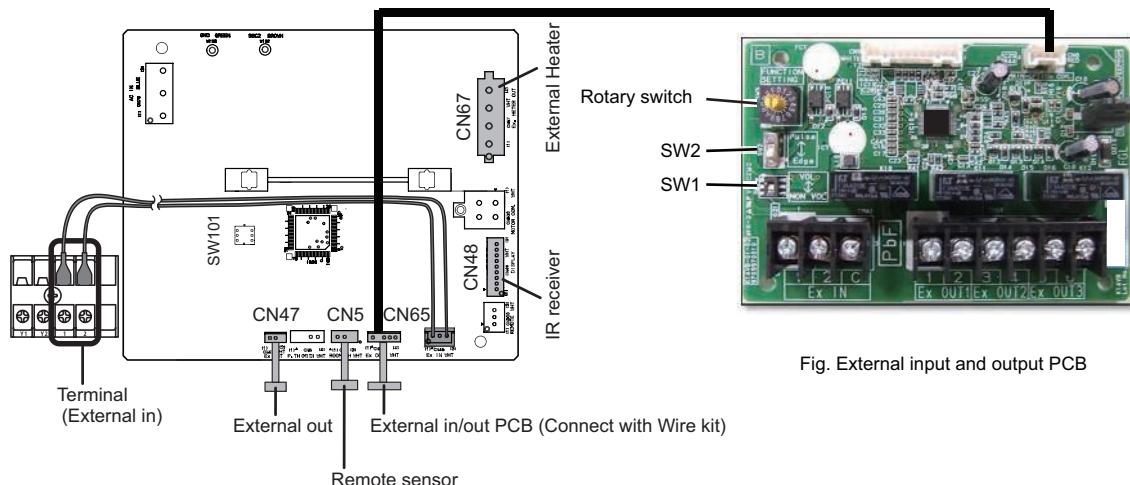


Fig. External input and output PCB

Connecting point	Input/Output	Function	Input select	Input signal	
Indoor unit	Terminal CN47	Input	Operation/Stop	Dry contact	Edge
			Forced stop		
	CN47	Output	Operation/Stop		
			Error status		
			Indoor unit fan operation status		
			Cooling thermostat On		
External Input and Output PCB (UTY-XCSX)	CN47/CN67	Output	Heating thermostat On		
			External heater output		
	Ex IN 1/2 Ex IN 1	Input	Operation/Stop	Dry contact/Apply voltage	Edge/Pulse
			Forced thermostat off		
		Output	Operation/Stop		
			Error status		
			Indoor unit fan operation status		
			External heater output		
			Cooling high/low output		
			Heating thermostat On		

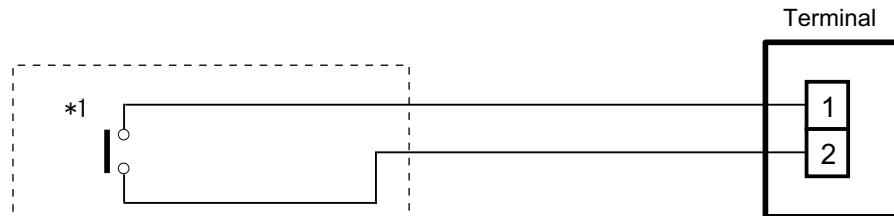
**NOTE:** For details of the switching function, refer to "[Setting of external input and output](#)" on page 20.

## 7-1. External input

- "Operation/Stop" mode or "Forced stop" mode can be selected with function setting of indoor unit.
- A twisted pair cable (22 AWG) should be used. Maximum length of cable is 492 ft (150 m).
- Use an external input and output cable with appropriate external dimension, depending on the number of cables to be installed.
- The wire connection should be separate from the power cable line.

### ■ Indoor unit

Indoor unit functions such as Operation/Stop can be done by using indoor unit terminal.



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

### ■ External Input and Output PCB

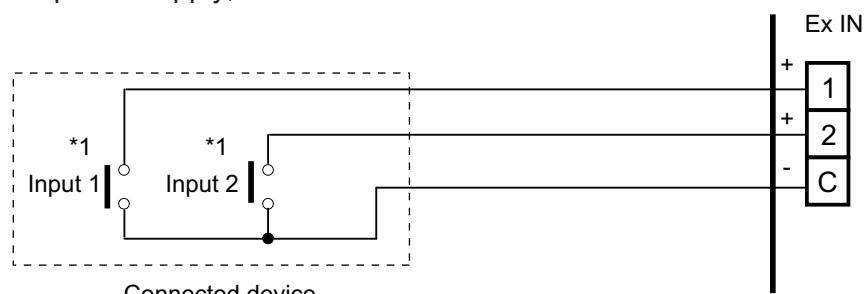
The indoor unit Operation/Stop can be set by using the input terminal on the PCB.

#### • Input select

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

##### – Dry contact

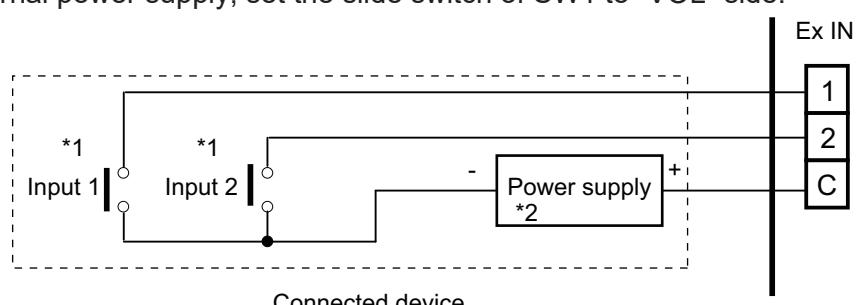
In case of internal power supply, set the slide switch of SW1 to "NON VOL" side.



\*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 SW1 to "VOL" side.



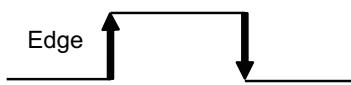
\*1: The switches can be used on the following condition: DC 12 V to 24 V, 1 mA to 15 mA.

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

## ■ Input signal type

- **Indoor unit**

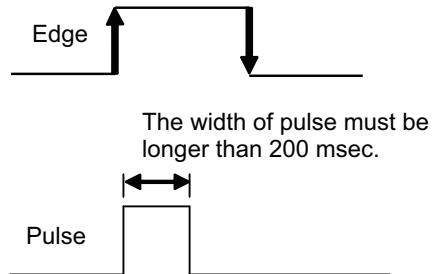
Input signal type is only "Edge".



- **External Input and Output PCB**

The input signal type can be selected.

Signal type (edge or pulse) can be switched by the DIP switch 2 (SW2) on the External Input and Output PCB.



**NOTE:** The input signal supports the following switch type:

- Edge: Alternate type switch
- Pulse: Momentary type switch

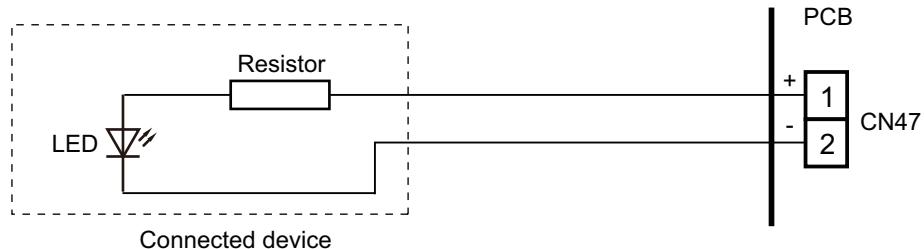
## 7-2. External output

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

### ■ Indoor unit

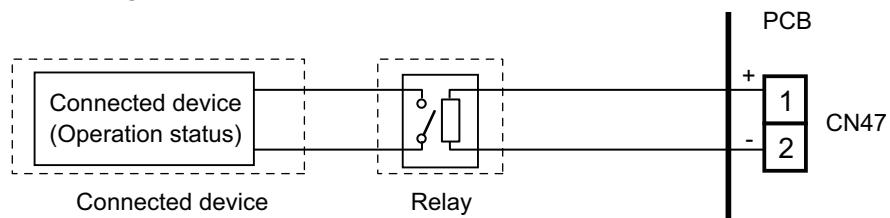
- A twisted pair cable (22 AWG) should be used. Maximum length of cable is 82 ft (25 m).
- Output voltage: High DC 12 V  $\pm 2$  V, Low 0 V.
- Permissible current: 50 mA
- For details, refer to "[Setting of external input and output](#)" on page 20.
- When indicator, etc. are connected directly**

**Example:** Function setting number 60 is set to "00"



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

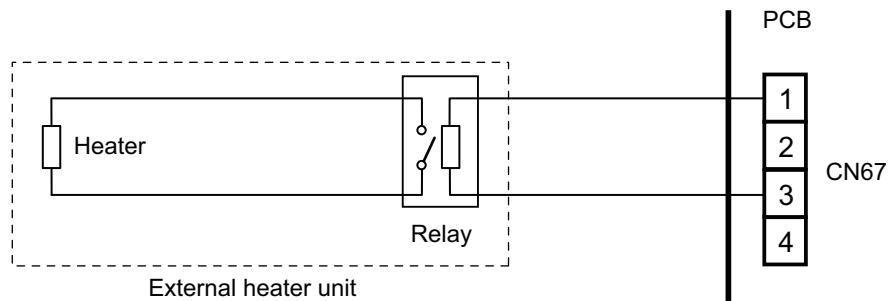
**Example:** Function setting number 60 is set to "00"



- When connecting with a external heater**

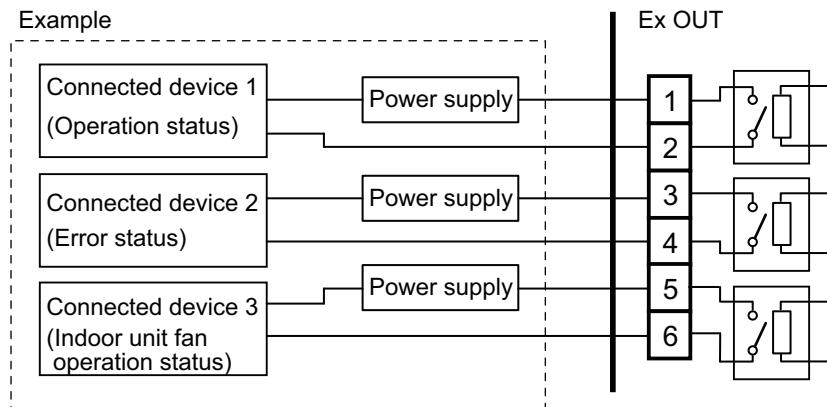
Output voltage:	Heater on: AC 24 V $\pm 25\%$
Permissible current:	Heater off: Open

Permissible current: 500 mA



## ■ External Input and Output PCB

- A twisted pair cable (22 AWG) should be used.
- Permissible voltage and current: DC 5 V to 30 V/3 A, AC 30 V to 250 V/3 A
- For details, refer to "[Setting of external input and output](#)" on page 20.



## 7-3. Setting of external input and output

- Indoor unit

Input		
Connection point	Function setting number 46	Function
Terminal	00	Operation/Stop mode 1
	01	(Setting prohibited)
	02	Forced stop mode
	03	Operation/Stop mode 2

Output		
Connection point	Function setting number 60	Function
CN47	00	Operation/Stop
	01—04	Cooling thermostat On
	05	Heating thermostat On
	06	Operation/Stop
	07—08	Cooling thermostat On
	09	Error status
	10	Indoor unit fan operation status
CN47/CN67	11	External heater output

- External Input and Output PCB

Switch setting		Ex IN		Ex OUT		
Rotary switch	SW2	1	2	1	2	3
1	Edge	Operation/Stop	Not available	Operation/Stop	Error status	Indoor unit fan operation status
	Pulse	Operation	Stop			External heater output
	2	Forced thermostat off	Not available		Error status	Indoor unit fan operation status
	3	Mechanical cooling off	Not available		Error status	Indoor unit fan operation status
	4	Forced thermostat off	Not available		Error status	Operation/Stop
	5	Mechanical cooling on*2	Not available		Cooling high/low output	Operation/Stop
	6	Mechanical cooling on*2	Not available		Error status	Operation/Stop
	7	Forced thermostat off	Not available		Error status	Indoor unit fan operation status
	8	Forced thermostat off	Not available		Error status	Indoor unit fan operation status
	9	Mechanical cooling off	Not available		Error status	Heating thermostat on
	A	Forced thermostat off	Not available		Heating thermostat on	External heater output
	B	Forced thermostat off	Not available		Operation/Stop	External heater output
	C	Forced thermostat off	Not available		Operation/Stop	Indoor unit fan operation status
	D	Forced thermostat off	Not available		Operation/Stop	External heater output

**NOTES:**

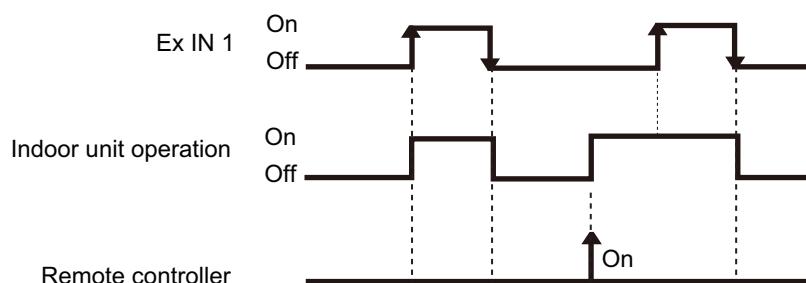
- When the rotary switch is selected to "1", the operation of the terminal input of the indoor unit and the External Input and Output PCB input are the same. The operation content depends on the setting of function setting number 46.
- \*1: The external input other than "Operation/Stop" is available only when the SW2 is set to "Edge".
- \*2: The external input of "Mechanical cooling on" is available only when the function setting number 60 is set to "03" or "04".

## 7-4. Details of control input function

### ■ Operation/Stop mode 1

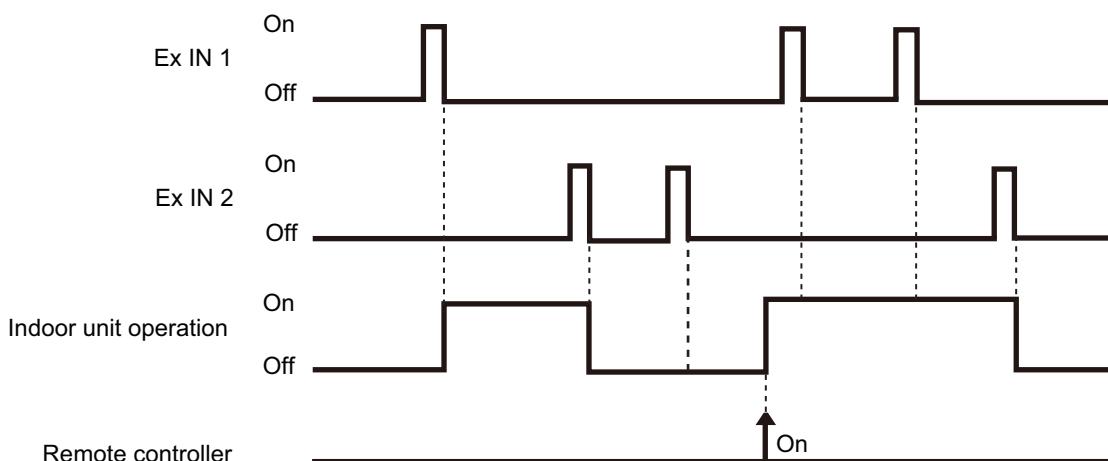
- In the case of "Edge" input

Function setting	External Input and Output PCB		External input		Input signal	Command
	Rotary switch	SW2				
46-00	—		Input of indoor unit	Terminal	Off → On	Operation
					On → Off	Stop
	1	Edge	External Input and Output PCB	Ex IN 1	Off → On	Operation
					On → Off	Stop



- In the case of "Pulse" input

Function setting	External Input and Output PCB		External input		Input signal	Command
	Rotary switch	SW2				
46-00	1	Pulse	External Input and Output PCB	Ex IN 1	Pulse	Operation
				Ex IN 2		Stop



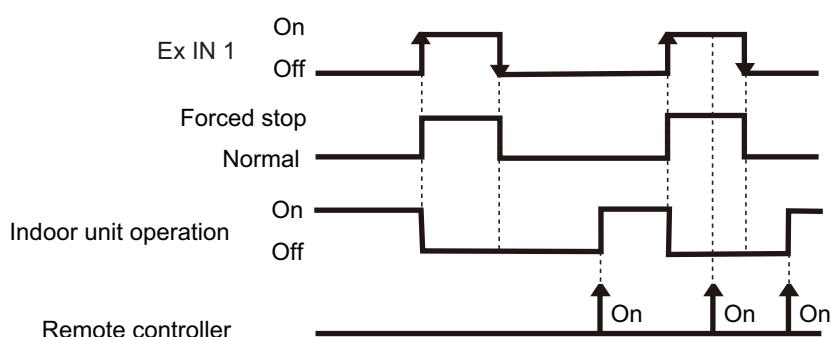
#### NOTES:

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

## ■ Forced stop

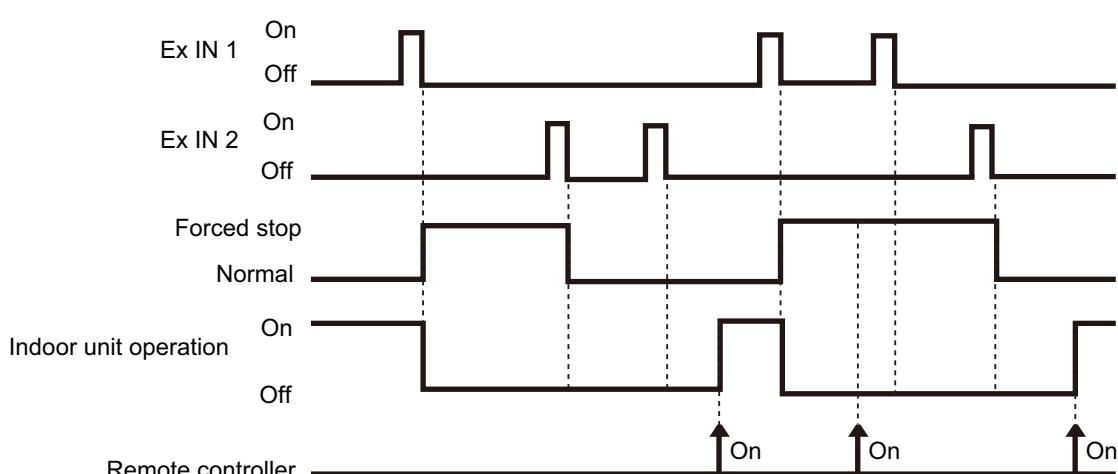
- In the case of "Edge" input

Function setting	External Input and Output PCB		External input	Input signal	Command
	Rotary switch	SW2			
46-02	—	Input of indoor unit	Terminal	Off → On	Forced stop (R.C. disabled)
				On → Off	Normal (R.C. enabled)
	1	Edge	External Input and Output PCB	Ex IN 1	Off → On
					Normal (R.C. enabled)



- In the case of "Pulse" input

Function setting	External Input and Output PCB		External input	Input signal	Command
	Rotary switch	SW2			
46-02	1	Pulse	External Input and Output PCB	Ex IN 1	Forced stop (R.C. disabled)
				Ex IN 2	



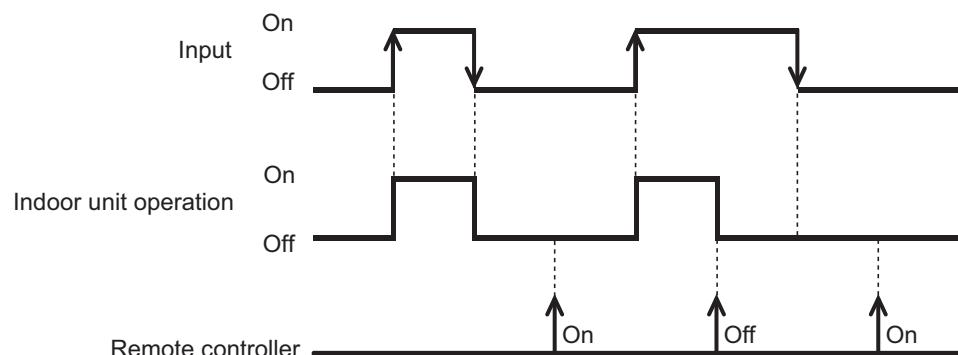
### NOTES:

- 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.

## ■ Operation/Stop mode 2

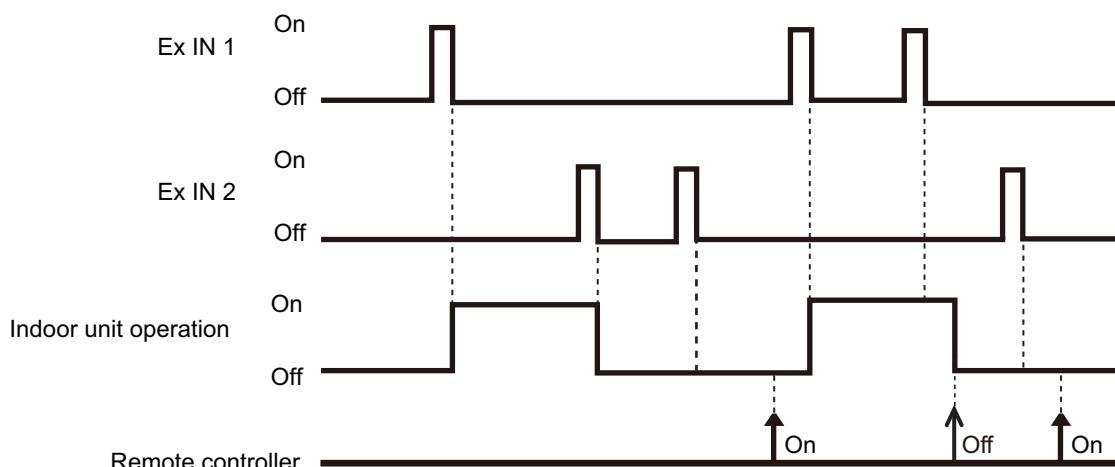
- In the case of "Edge" input

Function setting	External Input and Output PCB		External input		Input signal	Command
	Rotary switch	SW2				
46-03	—	Input of indoor unit	Terminal	Off → On	Operation (R.C. enabled)	
				On → Off	Stop (R.C. disabled)	
	1	Edge	External Input and Output PCB	Ex IN 1	Off → On	Operation (R.C. enabled)
					On → Off	Stop (R.C. disabled)



- In the case of "Pulse" input

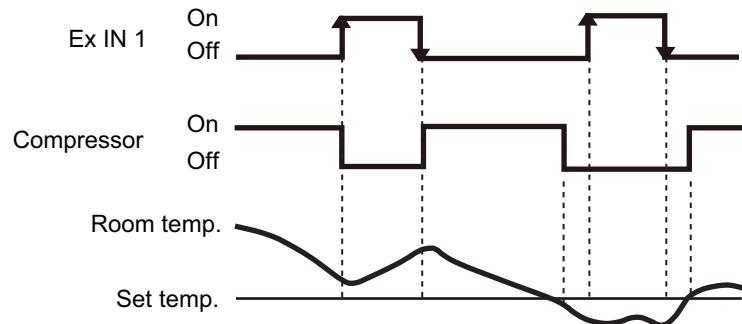
Function setting	External Input and Output PCB		External input		Input signal	Command
	Rotary switch	SW2				
46-03	1	Pulse	External Input and Output PCB	Ex IN 1	Pulse	Operation (R.C. enabled)
				Ex IN 2		Stop (R.C. disabled)



**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

External Input and Output PCB	External input		Input signal	Command
Rotary switch				
2, B, C, D	External Input and Output PCB	Ex IN 1	Off → On	Thermostat off
			On → Off	Normal operation
4, 7, 8, A	External Input and Output PCB	Ex IN 1	Off → On	Thermostat off
			On → Off	Normal operation

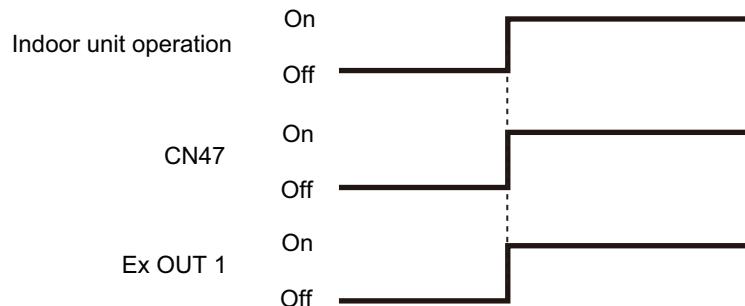


## 7-5. Details of control output function

### ■ Operation status

Function setting	External Input and Output PCB	External output		Output signal	Status
60-00	—	Output of indoor unit	CN47	Off → On	Operation
60-06				On → Off	Stop
—	1, B, C, D	External Input and Output PCB	Ex OUT 1	Off → On	Operation
—				On → Off	Stop

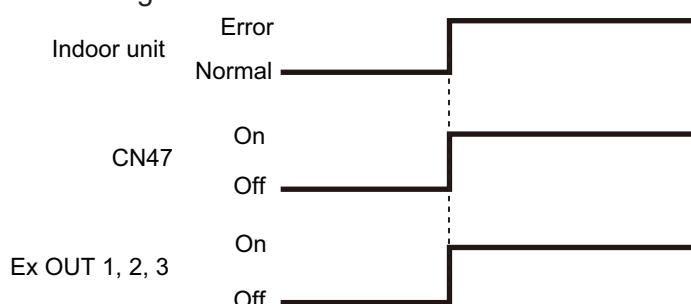
The output is low when the unit is stopped.



### ■ Error status

Function setting	External Input and Output PCB	External output		Output signal	Status
60-09	—	Output of indoor unit	CN47	Off → On	Error
—				On → Off	Normal
—	2, 3, 4, 6, 7, 8, 9	External Input and Output PCB	Ex OUT 1	Off → On	Error
—				On → Off	Normal
—	1, C	External Input and Output PCB	Ex OUT 2	Off → On	Error
—				On → Off	Normal
—	D	External Input and Output PCB	Ex OUT 3	Off → On	Error
—				On → Off	Normal

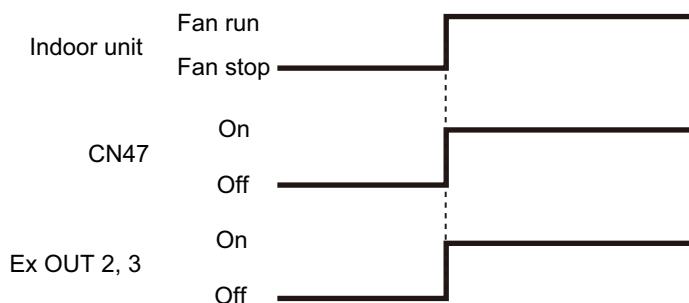
The output is on when an error is generated for the indoor unit.



## ■ Indoor unit fan operation status

Function setting	External Input and Output PCB	External output		Output signal	Status
60-10	—	Output of indoor unit	CN47	Off → On	Fan run
—	2, 3, 7, 8, B, D			On → Off	Fan stop
—	1	External Input and Output PCB	Ex OUT 2	Off → On	Fan run
—	—			On → Off	Fan stop
—	—	External Input and Output PCB	Ex OUT 3	Off → On	Fan run
—	—			On → Off	Fan stop

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



## ■ External heater output

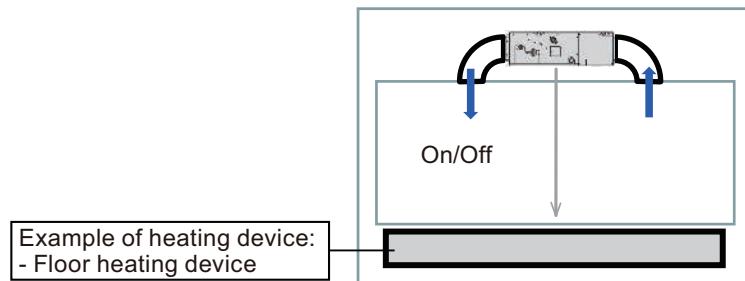
Control	Primary heater	Auxiliary heater	Function setting	
			Indoor unit	Wired R. C.
			Control switching external heaters No. 61	Sensor activation*2
Auxiliary heater control 1	Heat pump	External device*1	61-00	—
Auxiliary heater control 2	Heat pump	External device	61-01	—
Heat pump prohibition control	External device	None	61-02	On (Enabled)
Auxiliary heater control by outdoor temperature 1	Heat pump	External device	61-03	On (Enabled)
Auxiliary heater control by outdoor temperature 2	Heat Pump	External device	61-04	On (Enabled)
Auxiliary heater control by outdoor temperature 3	Heat Pump	External device	61-05	On (Enabled)
Auxiliary heat pump control	External device	Heat pump	61-06	On (Enabled)
Auxiliary heat pump control by outdoor temperature 1	External device	Heat pump	61-07	On (Enabled)
Auxiliary heat pump control by outdoor temperature 2	External device	Heat pump	61-08	On (Enabled)
Auxiliary heat pump control by outdoor temperature 3	External device	Heat pump	61-09	On (Enabled)

### NOTES:

- After turning off the heater, 3 minutes of standby time is required by next power-on of the heater.
- For items marked “—” in the table, any of validate or invalidate of the setting are acceptable.
- \*1: External device means Hot water, Electrical heater, etc.
- \*2: Sensor activation:
  - Setting change from the factory setting is required.
  - Indoor unit fan setting will be on for safety reason without sensor activation of wired remote controller.

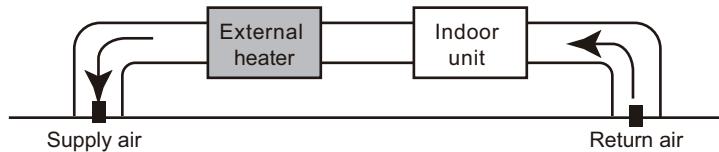
## ● Installation configuration of individual connection

External heating device is installed individually. (No use of indoor unit fan)

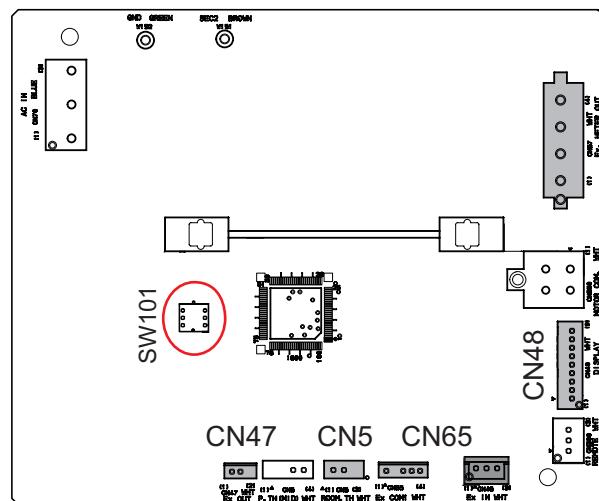


### ⚠ WARNING

- DIP Switch 101-3 must be in the ON position when ducted electric heat application is being used.** DIP switch 101-3 is set in the OFF position by default from the factory. When DIP switch 101-3 is in the ON position and ducted electric heat application is not being used, cold draft occurs due to fan delay off operation.



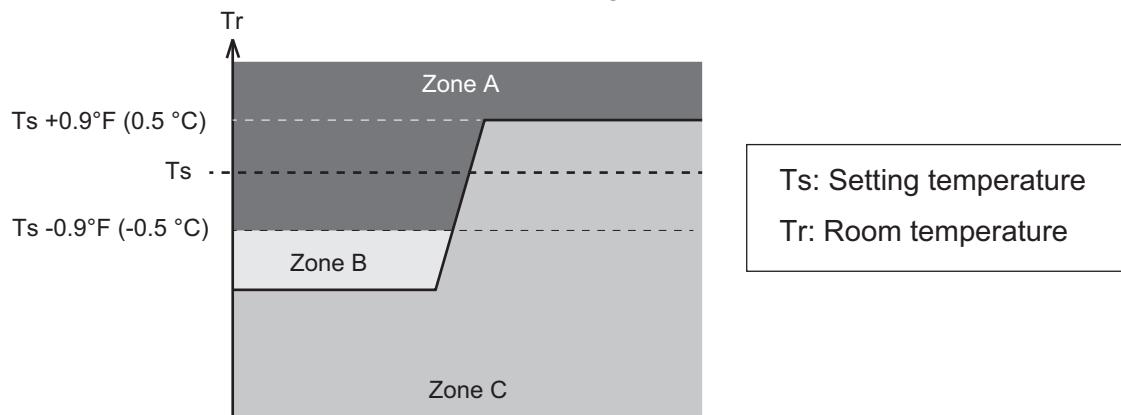
Operation			Condition
Heater off	DIP-SW101-3 Indoor unit fan setting for external heater	On Enabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Fan stop protection</li> </ul>
	DIP-SW101-3 Indoor unit fan setting for external heater	Off Disabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> </ul>



- Design and install external heater appropriately with considering its protection.
- Inappropriate designing and installation of external heater may cause a fire by emitted heat from the external heater.
- Fujitsu General Ltd. is not responsible for inappropriate designing or installation of external heating device.

## ● Auxiliary equipment control by room temperature

Auxiliary equipment control is switchable by room temperature. Auxiliary equipment switching is performed for each room temperature divided to following 3 zones.



Zone	Application	When temperature dropping		When temperature rising	
		Primary	Auxiliary	Primary	Auxiliary
A	Both of primary and auxiliary equipment is unnecessary.	Off	Off	Off	Off
B	Primary heater only. When room temperature stays in zone B for a long time, auxiliary equipment also operates.	On	Off <sup>*1</sup>	—	—
C	Auxiliary equipment also operates.	On	On <sup>*2</sup>	On	On <sup>*2</sup>

\*1: For standby time for auxiliary equipment operation, refer to indoor unit function number 71 "Contents of function setting" on page 49.

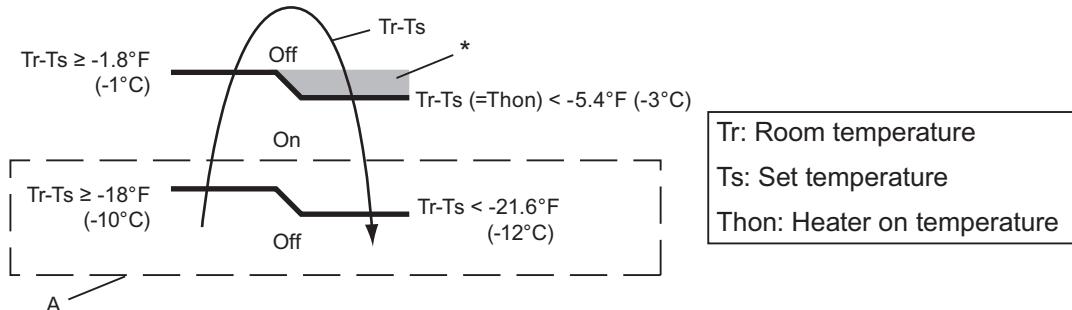
\*2: When indoor unit function number 61 is set to "00", auxiliary equipment operates according to the following conditions.

- $Ts - Tr > 21.6^{\circ}\text{F} (-12.0^{\circ}\text{C})$ : Auxiliary equipment turn off.
- $Ts - Tr > 18.0^{\circ}\text{F} (-10.0^{\circ}\text{C})$ : Auxiliary equipment turn on.

## ● Auxiliary heater control 1

Operation	Condition
Heater on	Heater is on as shown in following diagram of heating temperature.
Heater off	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Fan stop protection</li> </ul>

- Temperature of heater on (Thon): Adjustable by function number 62 (Operating temperature switching of external heaters).
- All control temperatures will shift by adjusting "Thon".



\*: When room temperature stays in this zone for a specific time, auxiliary heater is turned on. For details, refer to function number 71.

**Example:** When set temperature (Ts) is 72°F (22°C) (Factory setting),

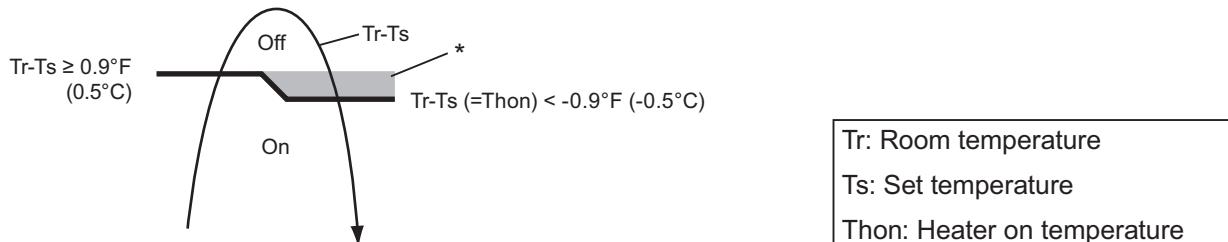
- and room temperature (Tr) increases above 53.6°F (12°C), signal output is on.
- and room temperature (Tr) increases above 69.8°F (21°C), signal output is off.
- and room temperature (Tr) decreases below 66.2°F (19°C), signal output is on.
- and room temperature (Tr) decreases below 50°F (10°C), signal output is off.

## ● Auxiliary heater control 2

Control that excludes "A" from "Auxiliary heater control 1" on page 31.

Operation	Condition
Heater on	Heater is on as shown in following diagram of heating temperature.
Heater off	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Fan stop protection</li> </ul>

- Temperature of heater on (Thon): Adjustable by function number 62 (Operating temperature switching of external heaters).
- All control temperatures will shift by adjusting "Thon".



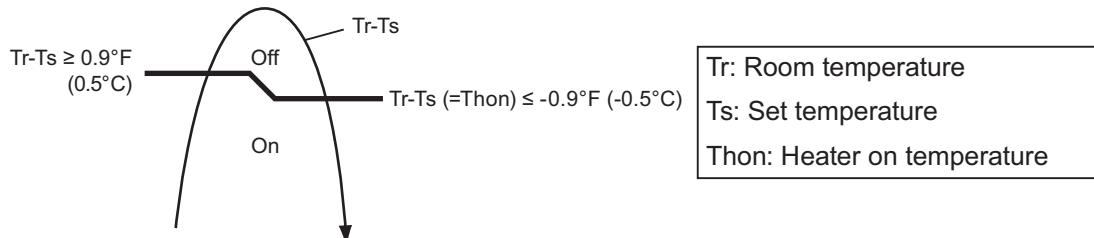
\*: When room temperature stays in this zone for a specific time, auxiliary heater is turned on. For details, refer to function number 71.

## ● Heat pump prohibition control

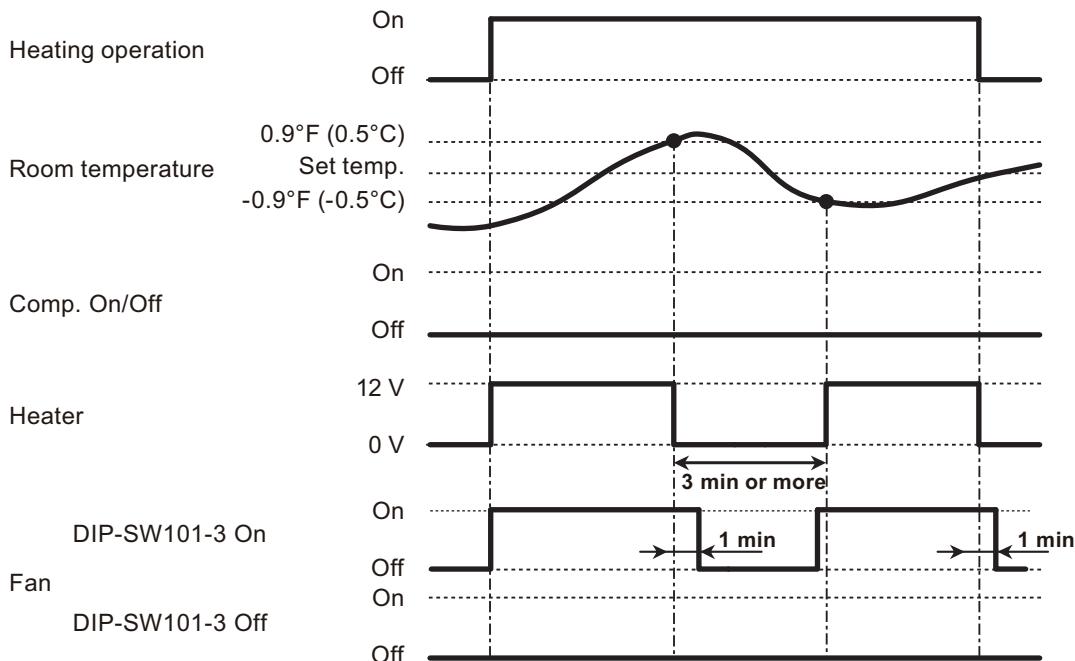
Perform heating by external heater only. Indoor unit is continuous thermostat off.

Operation			Condition
Heater on			Heater is on as shown in following diagram of heating temperature.
Heater off	DIP-SW101-3 Indoor unit fan setting for external heater	On Enabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Fan stop protection</li> </ul>
	DIP-SW101-3 Indoor unit fan setting for external heater	Off Disabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> </ul>

- Temperature of heater on (Thon): Adjustable by function number 62 (Operating temperature switching of external heaters).
- All control temperatures will shift by adjusting "Thon".



### • Operation status



**NOTE:** In following operations, compressor will be on.

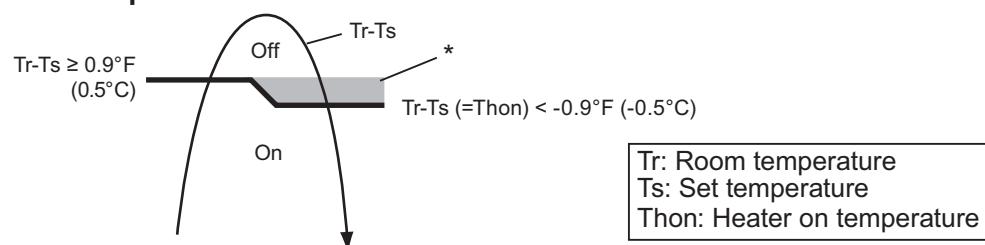
- Other than heating
- Test run

## ● Auxiliary heater control by outdoor temperature 1

This control selects heat pump or external heater according to the outdoor temperature. When outdoor temperature is high, the heating is performed by using heat pump only.

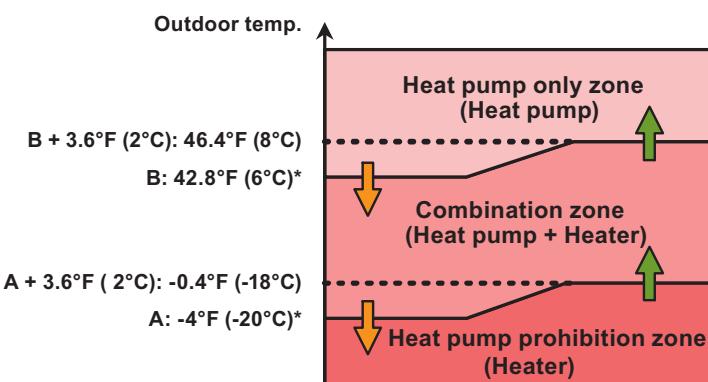
Operation			Condition
Heater on			Heater is on as shown in following diagram of heating temperature.
Heater off	DIP-SW101-3  Indoor unit fan setting for external heater	On  Enabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Heat pump only zone</li> <li>Fan stop protection</li> </ul>
	DIP-SW101-3  Indoor unit fan setting for external heater	Off  Disabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Heat pump only zone</li> </ul>

- Temperature of heater on (Thon): Adjustable by function number 62 (Operating temperature switching of external heaters).
- All control temperatures will shift by adjusting “Thon”.
- Outdoor temperature zone boundary A and B: Adjustable individually by function setting number 66 and 67.
- External heater output**



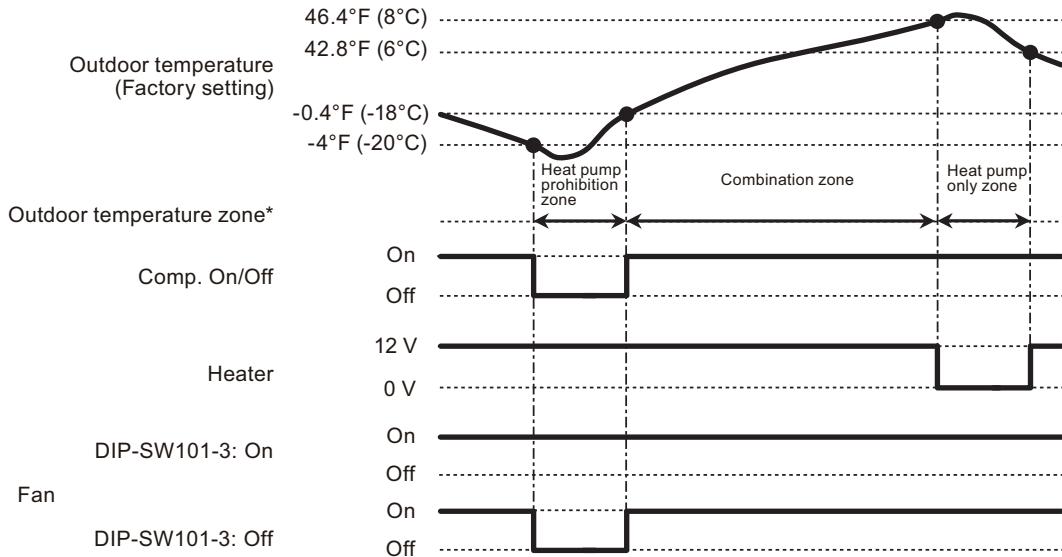
\*: When room temperature stays in this zone for a specific time, auxiliary heater is turned on. For details, refer to function number 71.

- Outdoor temperature zone**



\*: Adjustable by function setting 66 and 67

- Operation status



\*: The outdoor temperature zone transition from one to another will stay in that zone for minimum of 30 min.

**NOTE:** In following operations, compressor will be on in heat pump prohibition zone.

- Other than heating
- Test run

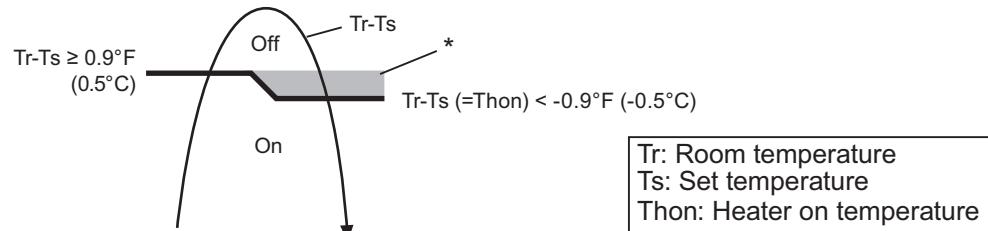
## ● Auxiliary heater control by outdoor temperature 2

This control selects heat pump or external heater according to the outdoor temperature. Even when outdoor temperature is high, the heating is performed by using both of heat pump and external heater.

Operation			Condition
Heater on			Heater is on as shown in following diagram of heating temperature.
Heater off	DIP-SW101-3 Indoor unit fan setting for external heater	On Enabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Fan stop protection</li> </ul>
	DIP-SW101-3 Indoor unit fan setting for external heater	Off Disabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> </ul>

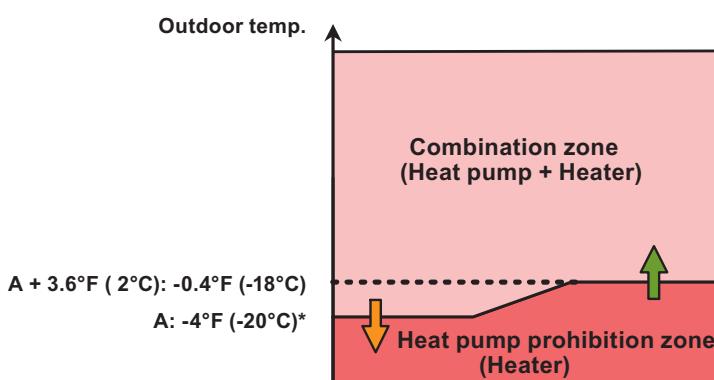
- Temperature of heater on (Thon): Adjustable by function number 62 (Operating temperature switching of external heaters).
- All control temperatures will shift by adjusting “Thon”.
- Outdoor temperature zone boundary A: Adjustable by function setting number 66.

### • External heater output



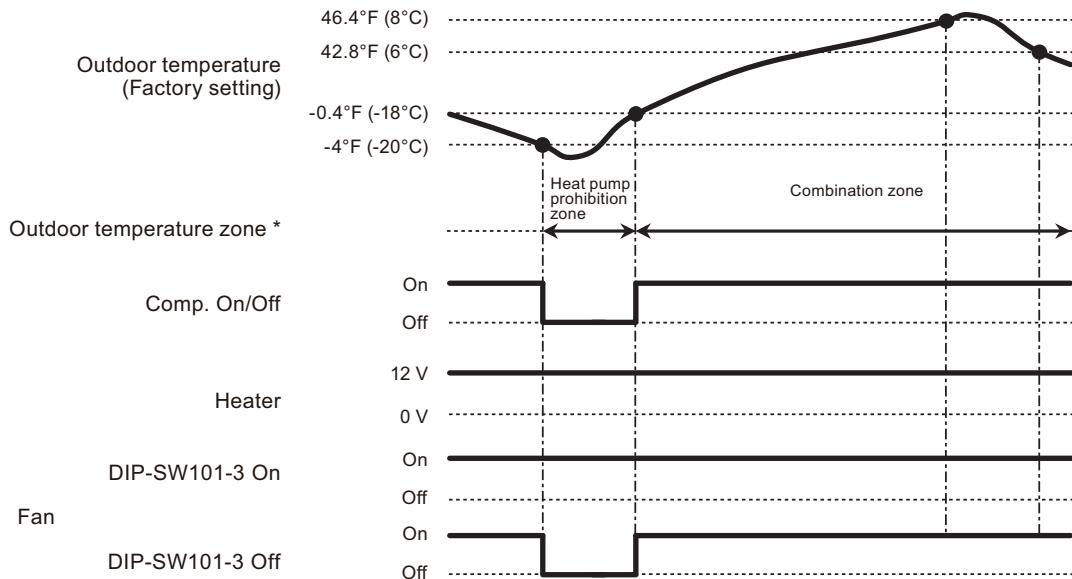
\*: When room temperature stays in this zone for a specific time, auxiliary heater is turned on. For details, refer to function number 71.

### • Outdoor temperature zone



\*: Adjustable by function setting 66

- Operation status



\* The outdoor temperature zone transition from one to another will stay in that zone for minimum of 30 min.

**NOTE:** In following operations, compressor will be on in heat pump prohibition zone.

- Other than heating
- Test run

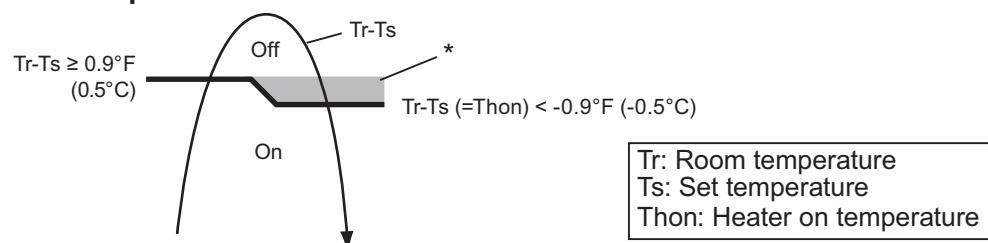
## ● Auxiliary heater control by outdoor temperature 3

This control selects heat pump or external heater according to the outdoor temperature. Even when outdoor temperature is high, the heating is performed by using both of heat pump and external heater.

Operation			Condition
Heater on			Heater is on as shown in following diagram of heating temperature.
Heater off	DIP-SW101-3 Indoor unit fan setting for external heater	On Enabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Fan stop protection</li> </ul>
	DIP-SW101-3 Indoor unit fan setting for external heater	Off Disabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> </ul>

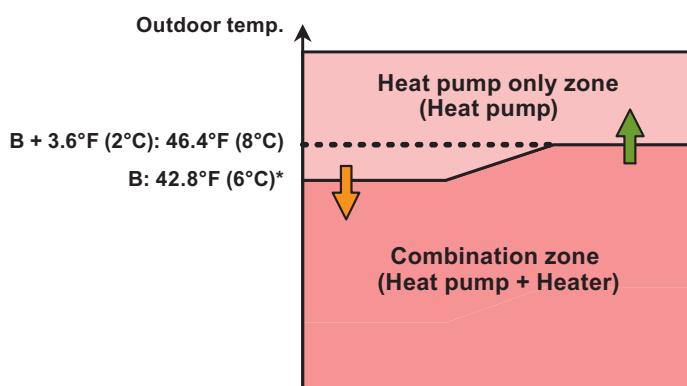
- Temperature of heater on (Thon): Adjustable by function number 62 (Operating temperature switching of external heaters).
- All control temperatures will shift by adjusting “Thon”.
- Outdoor temperature zone boundary B: Adjustable by function setting number 67.

### • External heater output



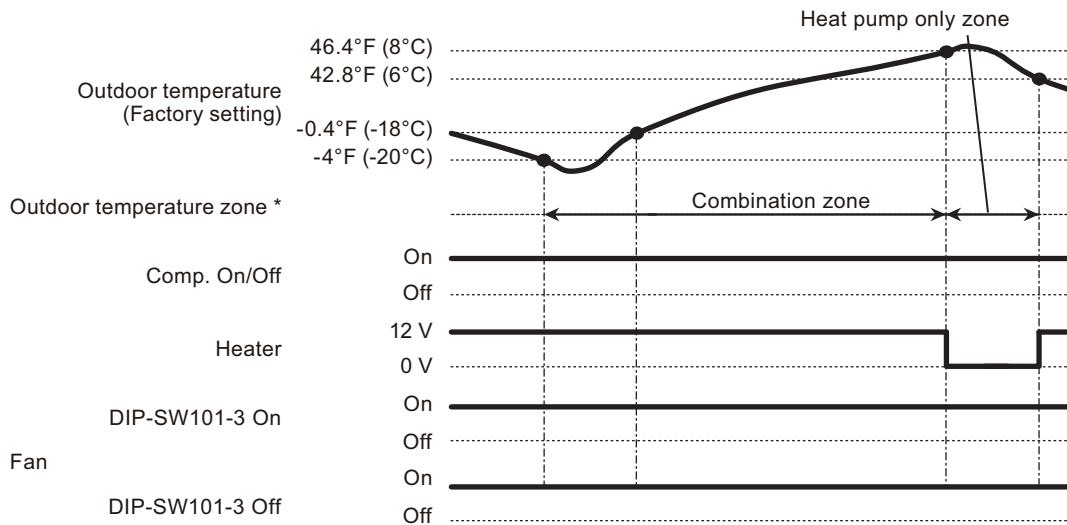
\*: When room temperature stays in this zone for a specific time, auxiliary heater is turned on. For details, refer to function number 71.

### • Outdoor temperature zone



\*: Adjustable by function setting 67

- Operation status



\*: The outdoor temperature zone transition from one to another will stay in that zone for minimum of 30 min.

**NOTE:** In following operations, compressor will be on in heat pump prohibition zone.

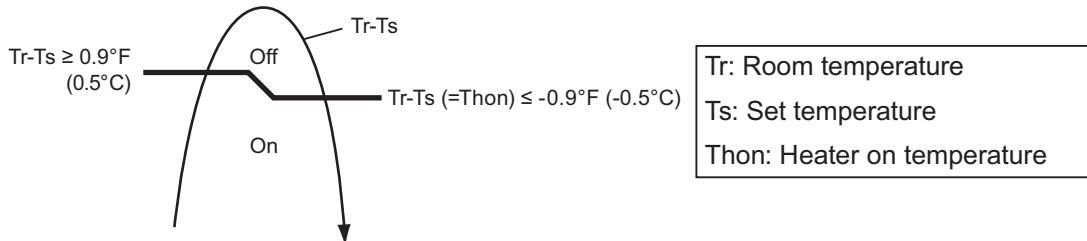
- Other than heating
- Test run

## ● Auxiliary heat pump control

- External heater output

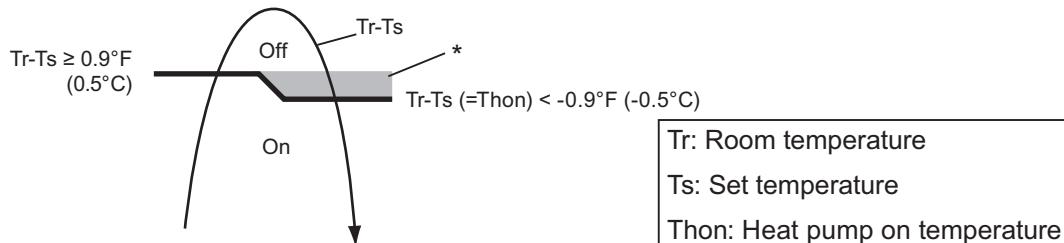
Operation			Condition
Heater on			Heater is on as shown in following diagram of heating temperature.
Heater off	DIP-SW101-3 Indoor unit fan setting for external heater	On Enabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Fan stop protection</li> </ul>
	DIP-SW101-3 Indoor unit fan setting for external heater	Off Disabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> </ul>

- Temperature of heater on (Thon): Set temperature (Ts) -0.9°F (-0.5°C)
- Temperature of heater off: Set temperature (Ts) +0.9°F (+0.5°C)



### • Auxiliary heat pump On/Off

- Temperature of heat pump on (Thon): Adjustable by function number 62 (Operating temperature switching of heat pump).
- All control temperatures will shift by adjusting “Thon”.



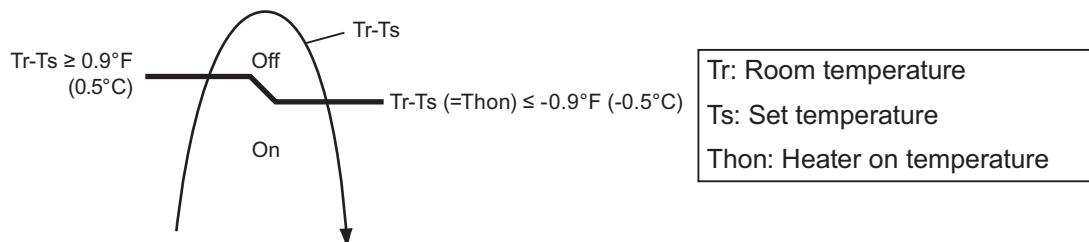
\*: When room temperature stays in this zone for a specific time, auxiliary heater is turned on. For details, refer to function number 71.

## ● Auxiliary heat pump control by outdoor temperature 1

- External heater output

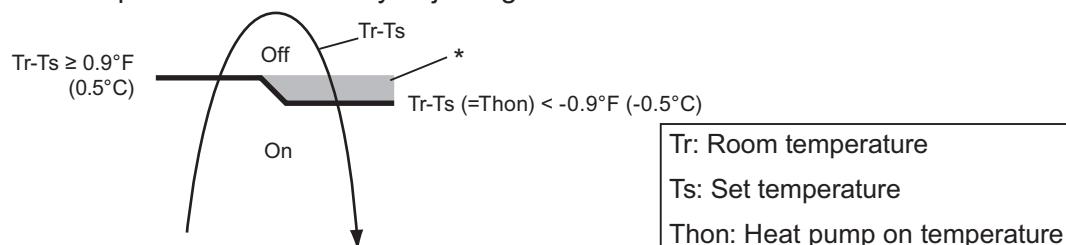
Operation			Condition
Heater on			Heater is on as shown in following diagram of heating temperature.
Heater off	DIP-SW101-3 Indoor unit fan setting for external heater	On Enabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Fan stop protection</li> </ul>
	DIP-SW101-3 Indoor unit fan setting for external heater	Off Disabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> </ul>

- Temperature of heater on (Thon): Set temperature (Ts) -0.9°F (-0.5°C)
- Temperature of heater off: Set temperature (Ts) +0.9°F (+0.5°C)



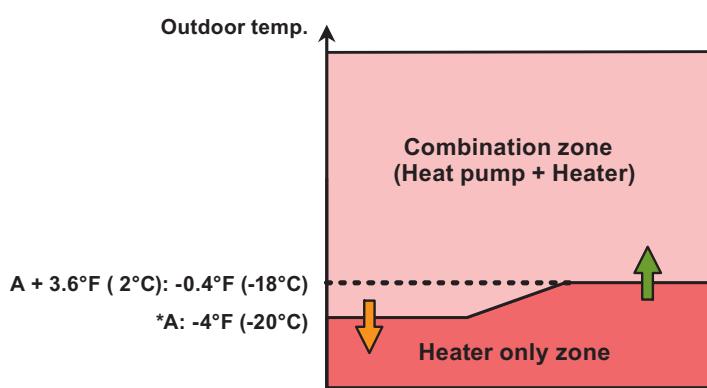
### • Auxiliary heat pump On/Off

- Temperature of heat pump on (Thon): Adjustable by function number 62 (Operating temperature switching of heat pump).
- All control temperatures will shift by adjusting “Thon”.



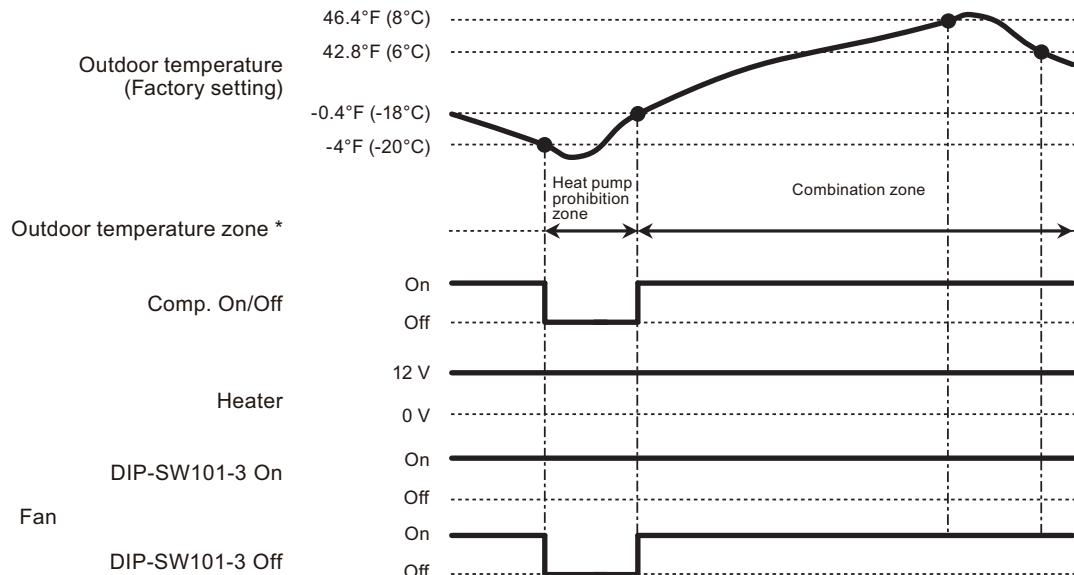
\*: When room temperature stays in this zone for a specific time, auxiliary heater is turned on. For details, refer to function number 71.

- Outdoor temperature zone



\*: Adjustable by function setting 66

- Operation status



\* The outdoor temperature zone transition from one to another will stay in that zone for minimum of 30 min.

**NOTE:** In following operations, compressor will be on in heat pump prohibition zone.

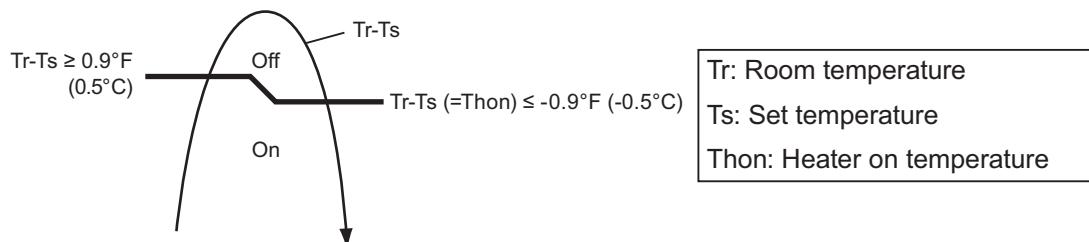
- Other than heating
- Test run

## ● Auxiliary heat pump control by outdoor temperature 2

- External heater output

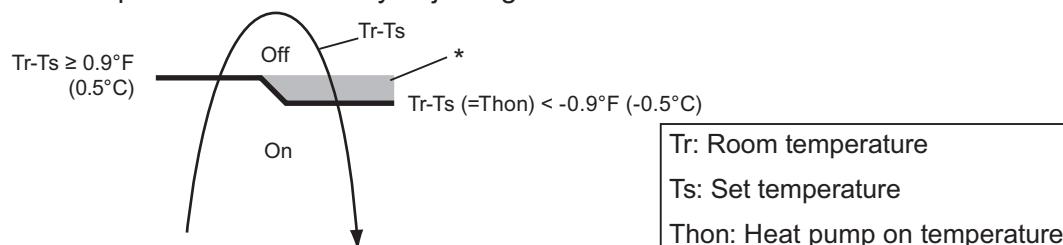
Operation			Condition
Heater on			Heater is on as shown in following diagram of heating temperature.
Heater off	DIP-SW101-3 Indoor unit fan setting for external heater	On Enabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Fan stop protection</li> </ul>
	DIP-SW101-3 Indoor unit fan setting for external heater	Off Disabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> </ul>

- Temperature of heater on (Thon): Set temperature (Ts) -0.9°F (-0.5°C)
- Temperature of heater off: Set temperature (Ts) +0.9°F (+0.5°C)



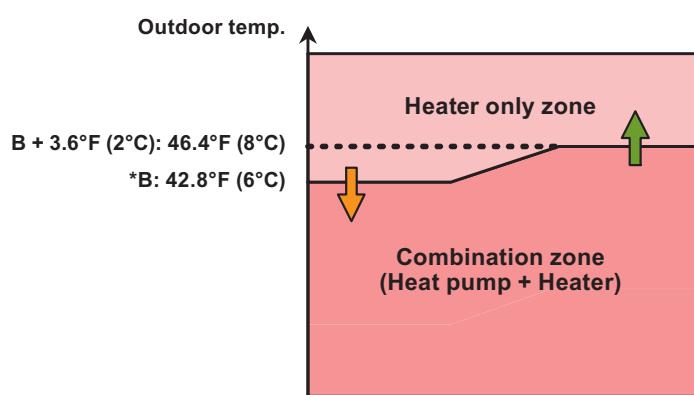
- Auxiliary heat pump On/Off

- Temperature of heat pump on (Thon): Adjustable by function number 62 (Operating temperature switching of heat pump).
- All control temperatures will shift by adjusting “Thon”.



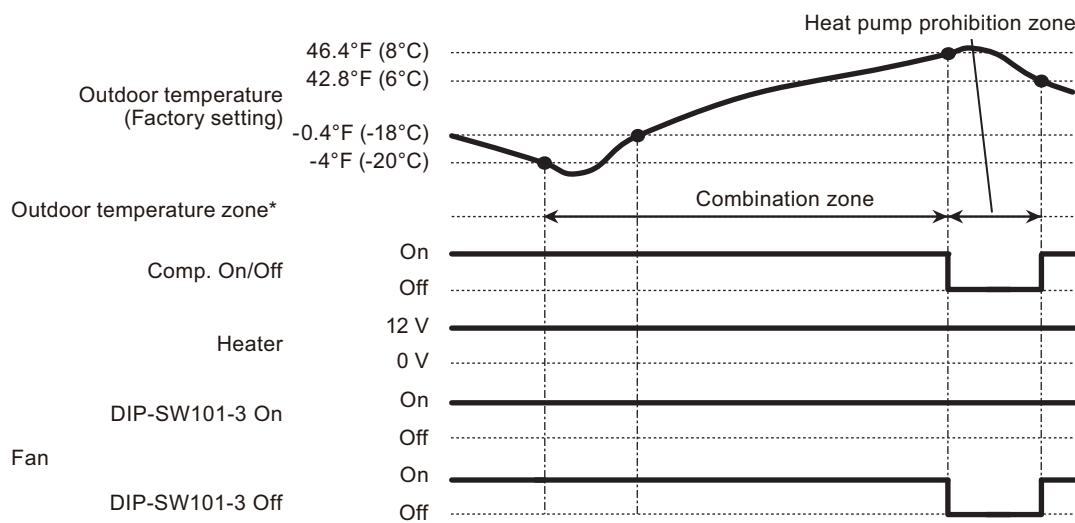
\*: When room temperature stays in this zone for a specific time, auxiliary heater is turned on. For details, refer to function number 71.

- Outdoor temperature zone



\*: Adjustable by function setting 67

- Operation status



\*: The outdoor temperature zone transition from one to another will stay in that zone for minimum of 30 min.

**NOTE:** In following operations, compressor will be on in heat pump prohibition zone.

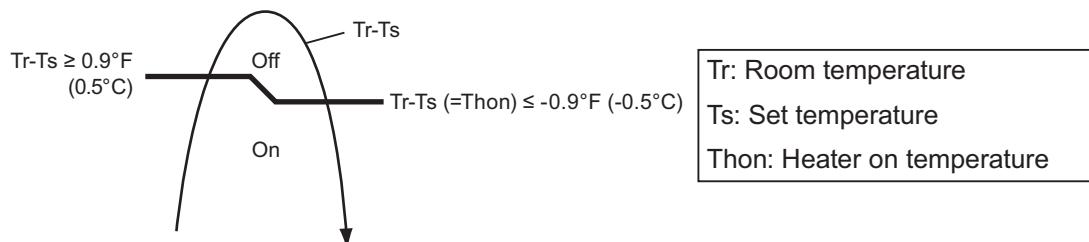
- Other than heating
- Test run

## ● Auxiliary heat pump control by outdoor temperature 3

- External heater output

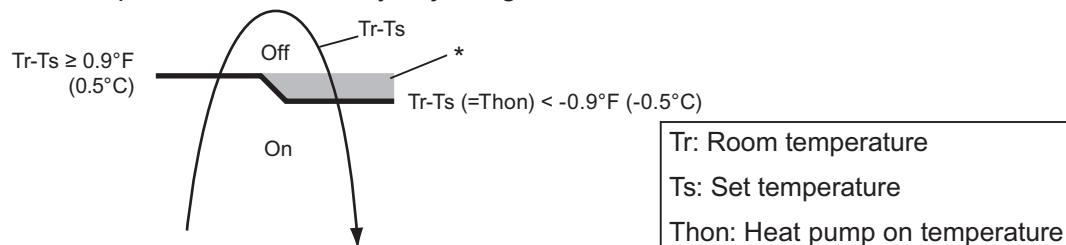
Operation			Condition
Heater on			Heater is on as shown in following diagram of heating temperature.
Heater off	DIP-SW101-3 Indoor unit fan setting for external heater	On Enabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> <li>Fan stop protection</li> </ul>
	DIP-SW101-3 Indoor unit fan setting for external heater	Off Disabled	<ul style="list-style-type: none"> <li>Heater is off as shown in following diagram of heating temperature.</li> <li>Other than heating mode</li> <li>Error occurred</li> <li>Forced thermostat off</li> </ul>

- Temperature of heater on (Thon): Set temperature (Ts) -0.9°F (-0.5°C)
- Temperature of heater off: Set temperature (Ts) +0.9°F (+0.5°C)



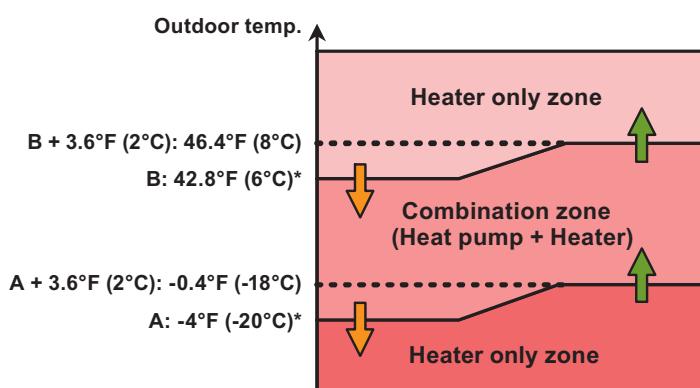
### • Auxiliary heat pump On/Off

- Temperature of heat pump on (Thon): Adjustable by function number 62 (Operating temperature switching of heat pump).
- All control temperatures will shift by adjusting “Thon”.



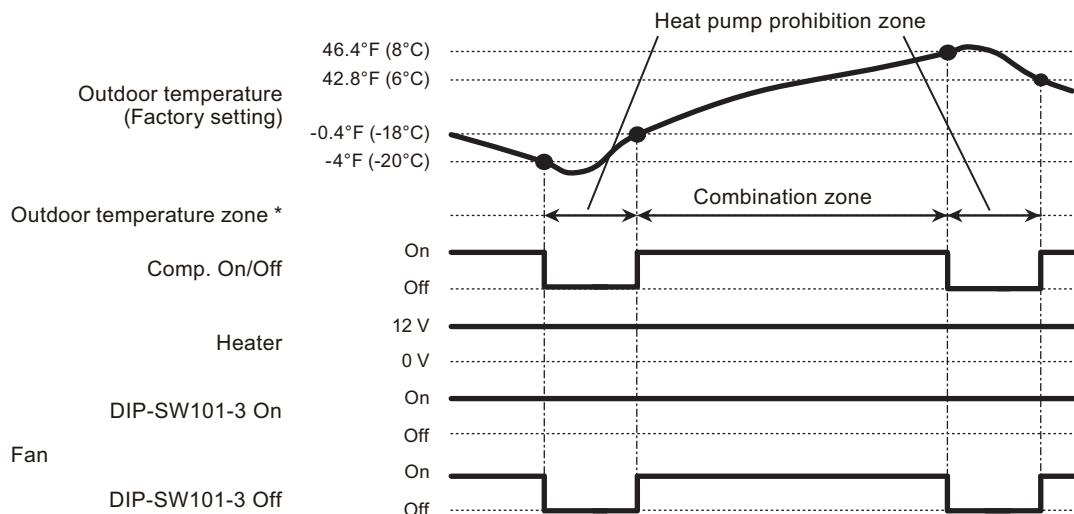
\*: When room temperature stays in this zone for a specific time, auxiliary heater is turned on. For details, refer to function number 71.

- Outdoor temperature zone



\*: Adjustable by function setting 66 and 67

- Operation status



\* The outdoor temperature zone transition from one to another will stay in that zone for minimum of 30 min.

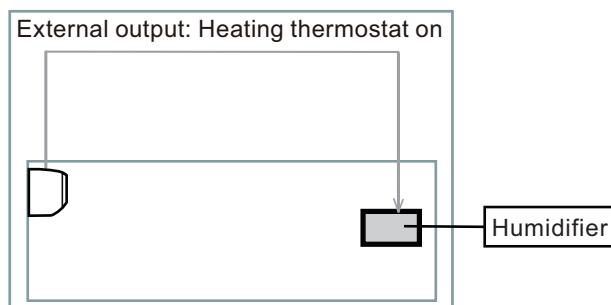
**NOTE:** In following operations, compressor will be on in heat pump prohibition zone.

- Other than heating
- Test run

## ■ Heating thermostat on for humidifier

Situation	Indoor unit				
	Mode	Function setting	Rotary SW	External output	
		Heating thermostat on no. 60		Heating thermostat on	Indoor unit fan operation status
Example of individual connection	5	60-05	7	CN47	Not used
	6	60-06	8	Output 3	
	7	60-07	9	Output 2	
	8	60-08	A	Output 1	

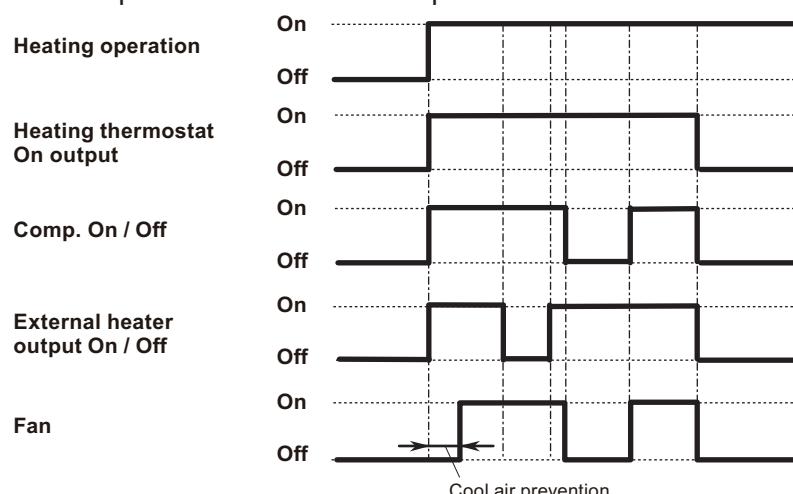
- Example of individual connection



- Operation status

The heating thermostat output for CN47, Output 1, Output 2, or Output 3 will be on when comp on or external heater on.

The heating thermostat output will be off when comp off and external heater off.



## 8. Group connection

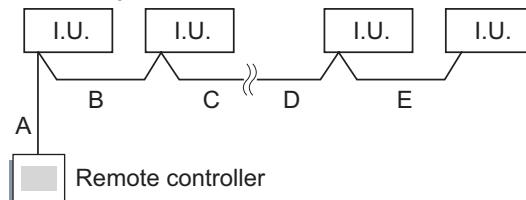
**NOTE:** Group control cannot be used together with WLAN Adapter.

### 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.

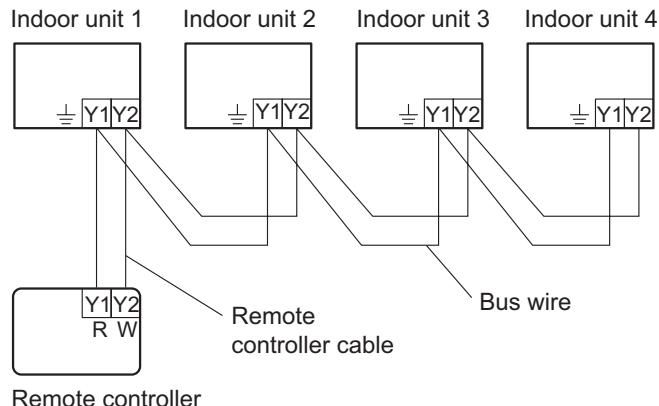


A, B, C, D, E: Remote controller cable	
Wiring length limitation	$A + B + C + D + E \leq 546.8 \text{ yd (500 m)}$

Wiring length limitation

$A + B + C + D + E \leq 546.8 \text{ yd (500 m)}$

Example of wiring method



2. Automatic address setting

After the remote controller connection in the system, the automatic address setting runs in the initial starting up. Do not change the remote controller address for the indoor unit.

## 9. 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.

### 9-1. Function settings on indoor unit

#### ■ Models: AMUG24LMAS and AMUG30LMAS

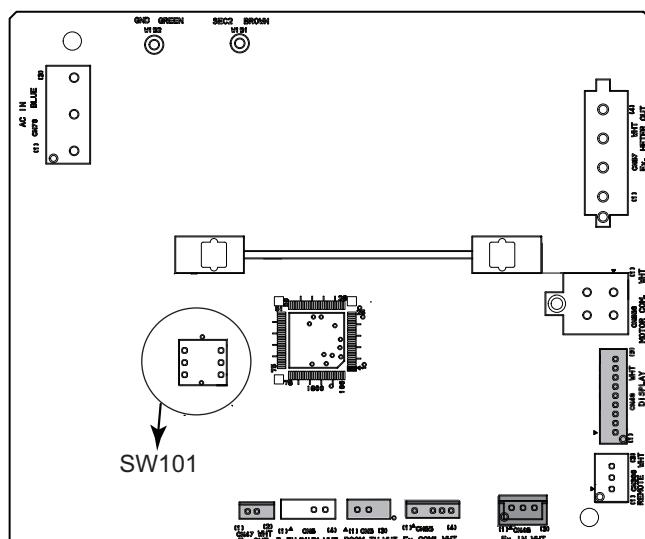
By using some components on the PCB, you can change the function settings.

#### Related components on the PCB and the applicable settings

Component	Setting content
DIP switch101	Setting change prohibited
	Setting change prohibited
	Fan delay setting

#### ● Component location

Components on the indoor unit main PCB used for the function settings are located as shown in the following figure.



#### ● DIP switch setting

- **Switch 1: Setting change prohibited (SW101)**
- **Switch 2: Setting change prohibited (SW101)**
- **Switch 3: Fan delay setting (SW101)**

When the indoor unit is stopped while operating in conjunction with auxiliary heater, the indoor unit fan operation will continue for 1 minute.

Switch 3	Fan delay	Factory setting
ON	Enabled	♦
OFF	Disabled	

## 9-2. 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 remote controller

Remote controller is not attached for this product. For details of the installing remote controller, refer to following information.

- Overview information: Operating manual of the remote controller
- Setting procedure: Installation manual of the remote controller

### ■ 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)	11	Filter sign
2)	30/31	Room temperature control for indoor unit sensor
3)	35/36	Room temperature control for wired remote controller sensor
4)	40	Auto restart
5)	42	Room temperature sensor switching
6)	43	Cold air prevention
7)	46	External input control
8)	48	Room temperature sensor switching (Aux.)
9)	49	Indoor unit fan control for energy saving for cooling
10)	60	Switching functions for external output terminal
11)	61	Control switching of external heaters
12)	62	Operating temperature switching of external heaters
13)	66	Outdoor temperature zone boundary temperature A
14)	67	Outdoor temperature zone boundary temperature B
15)	71	Standby time for auxiliary equipment operation
16)	72	Heat pump backup setting
17)	73	Emergency heat for external output terminal
18)	74	Fan delay time
19)	75	External heater use in defrosting
20)	92	Airflow adjustment for operation mode
21)	93	Airflow adjustment at heater only operation
22)	94	Fixed operation mode switching

#### 1) 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 (2,500 hours)	
	01	Long interval (4,400 hours)	
	02	Short interval (1,250 hours)	
	03	No indication	♦

## 2) 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 78°F and the setting value is "03" (-2°F), the corrected temp. will be 80°F (78°F - [-2°F]).

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°F (0.0°C)
		02	-1°F (-0.5°C)
		03	-2°F (-1.0°C)
		04	-3°F (-1.5°C)
		05	-4°F (-2.0°C)
		06	-5°F (-2.5°C)
		07	-6°F (-3.0°C)
		08	-7°F (-3.5°C)
		09	-8°F (-4.0°C)
		10	+1°F (+0.5°C)
		11	+2°F (+1.0°C)
		12	+3°F (+1.5°C)
		13	+4°F (+2.0°C)
		14	+5°F (+2.5°C)
		15	+6°F (+3.0°C)
		16	+7°F (+3.5°C)
		17	+8°F (+4.0°C)

### 3) 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°F (0.0°C)
		02	-1°F (-0.5°C)
		03	-2°F (-1.0°C)
		04	-3°F (-1.5°C)
		05	-4°F (-2.0°C)
		06	-5°F (-2.5°C)
		07	-6°F (-3.0°C)
		08	-7°F (-3.5°C)
		09	-8°F (-4.0°C)
		10	+1°F (+0.5°C)
		11	+2°F (+1.0°C)
		12	+3°F (+1.5°C)
		13	+4°F (+2.0°C)
		14	+5°F (+2.5°C)
		15	+6°F (+3.0°C)
		16	+7°F (+3.5°C)
		17	+8°F (+4.0°C)

### 4) 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.

### 5) 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.

#### NOTES:

- Remote controller sensor must be turned on by using the remote controller.
- When using the remote sensor unit, set to "00" or set to "01" and then select "indoor unit sensor" from wired remote controller.

**6) Cold air prevention**

This setting is to disable the cold air prevention function during heating operation. When disabled, the fan setting will always follow the setting on the remote controller. (Excluding defrost mode)

Function number	Setting value	Setting description	Factory setting
43	00	Enable	◆
	01	Disable	

**7) 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 (Remote controller enabled)	◆
	01	(Setting prohibited)	
	02	Forced stop mode	
	03	Operation/Stop mode 2 (Remote controller disabled)	

**8) 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	◆

**9) 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.

**NOTE:** 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.

**10) Switching functions for external output terminal**

Functions of the external output terminal can be switched. For details, refer to "External input and output".

Function number	Setting value	Setting description	Factory setting
60	00	Operation status	◆
	01—04	Cooling thermostat On	
	05	Heating operation	
	06	Operation/Stop	
	07—08	Cooling thermostat On	
	09	Error status	
	10	Fresh air control	
	11	External heater	

**11) Control switching of external heaters**

Sets the control method for external heater to be used.

For details, refer to "External heater output" in "[Details of control output function](#)" on page 26.

Function number	Setting value	Setting description	Factory setting
61	00	Auxiliary heater control 1	◆
	01	Auxiliary heater control 2	
	02	Heat pump prohibition control	
	03	Auxiliary heater control by outdoor temperature 1	
	04	Auxiliary heater control by outdoor temperature 2	
	05	Auxiliary heater control by outdoor temperature 3	
	06	Auxiliary heat pump control	
	07	Auxiliary heat pump control by outdoor temperature 1	
	08	Auxiliary heat pump control by outdoor temperature 2	
	09	Auxiliary heat pump control by outdoor temperature 3	

**12) Operating temperature switching of external heaters**

Sets the temperature conditions when the external heater is ON.

For details, refer to "External heater output" in "[Details of control output function](#)" on page 26.

Function number	Setting value	Setting description				Factory setting	
		Setting value of function 61:					
		00		01 to 09			
62	Heater: On	Heater: Off	Heater: On	Heater: Off	Heater: On	Heater: Off	
	00	-5.4°F (-3°C)	-1.8°F (-1°C)	-0.9°F (-0.5°C)	-0.9°F (-0.5°C)	◆	
	01	-3.6°F (-2°C)	-1.8°F (-1°C)	-1.8°F (-1°C)	-0.9°F (-0.5°C)		
	02	-3.6°F (-2°C)	-1.8°F (-1°C)	-3.6°F (-2°C)	-0.9°F (-0.5°C)		
	03	-5.4°F (-3°C)	-1.8°F (-1°C)	-5.4°F (-3°C)	-0.9°F (-0.5°C)		
	04	-7.2°F (-4°C)	-1.8°F (-1°C)	-7.2°F (-4°C)	-0.9°F (-0.5°C)		
	05	-9.0°F (-5°C)	-1.8°F (-1°C)	-9.0°F (-5°C)	-0.9°F (-0.5°C)		
	06	-5.4°F (-3°C)	-0.9°F (-0.5°C)	-0.9°F (-0.5°C)	0°F (0°C)		
	07	-3.6°F (-2°C)	-0.9°F (-0.5°C)	-1.8°F (-1°C)	0°F (0°C)		
	08	-3.6°F (-2°C)	-0.9°F (-0.5°C)	-3.6°F (-2°C)	0°F (0°C)		
	09	-5.4°F (-3°C)	-0.9°F (-0.5°C)	-5.4°F (-3°C)	0°F (0°C)		
	10	-7.2°F (-4°C)	-0.9°F (-0.5°C)	-7.2°F (-4°C)	0°F (0°C)		
	11	-9.0°F (-5°C)	-0.9°F (-0.5°C)	-9.0°F (-5°C)	0°F (0°C)		
	12	-5.4°F (-3°C)	0°F (0°C)	-0.9°F (-0.5°C)	-0.9°F (-0.5°C)		
	13	-3.6°F (-2°C)	0°F (0°C)	-1.8°F (-1°C)	-0.9°F (-0.5°C)		
	14	-3.6°F (-2°C)	0°F (0°C)	-3.6°F (-2°C)	-0.9°F (-0.5°C)		
	15	-5.4°F (-3°C)	0°F (0°C)	-5.4°F (-3°C)	-0.9°F (-0.5°C)		
	16	-7.2°F (-4°C)	0°F (0°C)	-7.2°F (-4°C)	-0.9°F (-0.5°C)		
	17	-9.0°F (-5°C)	0°F (0°C)	-9.0°F (-5°C)	-0.9°F (-0.5°C)		

**13) Outdoor temperature zone boundary temperature A**

Setting required if changing of the outdoor temperature setting for heat pump prohibition zone is required when auxiliary heater control by outdoor temperature 1 and 2 are performed on the indoor unit.

For details, refer to "External heater output" in "[Details of control output function](#)" on page 26.

Function number	Setting value	Setting description	Factory setting
66	00	-4.0°F (-20°C)	◆
	01	-0.4°F (-18°C)	
	02	3.2°F (-16°C)	
	03	6.8°F (-14°C)	
	04	10.4°F (-12°C)	
	05	14.0°F (-10°C)	
	06	17.6°F (-8°C)	
	07	21.2°F (-6°C)	
	08	24.8°F (-4°C)	

**14) Outdoor temperature zone boundary temperature B**

Setting required if changing of the outdoor temperature setting for heat pump only zone is required when auxiliary heater control by outdoor temperature 1 and 3 is performed on the indoor unit.

For details, refer to "External heater output" in "[Details of control output function](#)" on page 26.

Function number	Setting value	Setting description	Factory setting
67	00	42.8°F (6°C)	◆
	01	14.0°F (-10°C)	
	02	17.6°F (-8°C)	
	03	21.2°F (-6°C)	
	04	24.8°F (-4°C)	
	05	28.4°F (-2°C)	
	06	32.0°F (0°C)	
	07	35.6°F (2°C)	
	08	39.2°F (4°C)	
	09	42.8°F (6°C)	
	10	46.4°F (8°C)	
	11	50.0°F (10°C)	
	12	53.6°F (12°C)	
	13	57.2°F (14°C)	
	14	60.8°F (16°C)	
	15	64.4°F (18°C)	

**15) Standby time for auxiliary equipment operation**

Sets the standby time until the auxiliary equipment operation starts during primary equipment operation.

For details, refer to "[Details of control output function](#)" on page 26.

Function number	Setting value	Setting description	Factory setting
71	00	Disable	◆
	01	1 minute	
	02	2 minutes	
	•	•	
	•	•	
	•	•	
	98	98 minutes	
	99	99 minutes	

**16) Heat pump backup setting**

Enables or disables the heat pump backup instruction from the outdoor unit.

This function will be usable provided that the corresponding outdoor unit is connected.

Function number	Setting value	Setting description	Factory setting
72	00	Disable	◆
	01	Enable	

**17) Emergency heat for external output terminal**

Enables or disables emergency heat input.

Function number	Setting value	Setting description	Factory setting
73	00	Disable	◆
	01	Enable	

**NOTE:** When this function is used, IR Receiver Unit is necessary.

**18) Fan delay time**

Sets the fan delay time when the heater is turned off.

Function number	Setting value	Setting description	Factory setting
74	00	1 minute	◆
	01	50 seconds	
	02	40 seconds	
	03	30 seconds	

**19) External heater use in defrosting**

Enables or disables external heater use in defrosting.

**NOTE:** Inappropriate heater selection may cause cold air in defrosting.

Function number	Setting value	Setting description	Factory setting
75	00	Disable	◆
	01	Enable	

**20) Airflow adjustment for operation mode**

Strong or weak airflow can be set by ±10%.

Since the airflow volume by motor has the upper limit and lower limit, up-down adjustment may not be performed depending on the models or settings even if this setting is performed.

Function number	Setting value	Setting description		Factory setting
		Cooling setting	Heating setting	
92	00	Standard (no change)	Standard (no change)	◆
	01	Standard (no change)	+10% up	
	02	Standard (no change)	-10% down	
	03	+10% up	Standard (no change)	
	04	+10% up	+10% up	
	05	+10% up	-10% down	
	06	-10% down	Standard (no change)	
	07	-10% down	+10% up	
	08	-10% down	-10% down	

**21) Airflow adjustment at heater only operation**

By selecting the heater output in the table below at heater only operation, this function adjusts the airflow volume according to the heater output to prevent cold air feeling.

Function number	Setting value	Setting description		Factory setting
		Heater output range		
93	00	No heater		◆
	01	0 — 3.4 kW (Min. CFM)		
	02	3.4 — 6.8 kW (350 CFM)		
	03	6.8 — 10.4 kW (710 CFM)		
	04	10.4 — 13.7 kW (1,070 CFM)		
	05	13.7 — 17.1 kW (1,410 CFM)		

**22) Fixed operation mode switching**

Sets the operation mode to heat pump, heating only, or cooling only.

Function number	Setting value	Setting description	Factory setting
94	00	Heat pump	◆
	01	Heating only	
	02	Cooling only	

## 10. Accessories

### 10-1. Models: AMUG24LMAS and AMUG30LMAS

Part name	Exterior	Qty	Part name	Exterior	Qty
Operation manual		1	Cable tie (large)		4
Installation manual (indoor unit)		1	Cable tie (medium)		1
Rail		2	Cable tie (small)		1
Duct flanges		2	Drain hose insulation		1
Drain cap		2	Coupler heat insulation (large)		1
Self-tapping screw		16	Coupler heat insulation (small)		1

## 11. Optional parts

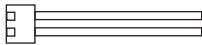
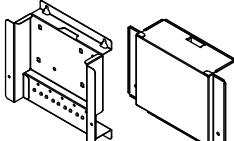
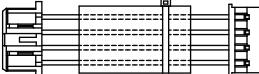
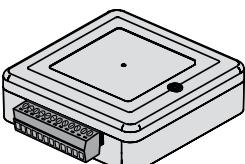
### 11-1. Controllers

Exterior	Part name	Model name	Summary
	Wired Remote Controller	UTY-RNRUZ*	Easy finger touch operation with LCD panel. Backlit LCD enables easy operation in a dark room. Wire type: Non-polar 2-wire
	Simple Remote Controller	UTY-RSRY	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
	Simple Remote Controller	UTY-RHRY	Compact remote controller concentrates on the basic functions such as Start/Stop, fan control, and temperature setting. Wire type: Non-polar 2-wire
	IR Receiver Kit with Wireless Remote Controller	UTY-LBTUM	Unit control is performed by Wireless Remote Controller Connecting point: CN48 on Main PCB

#### NOTES:

- Available functions may differ by the remote controller. For details, refer to the operation manual.
- When using the group controlling system of the Wired Remote Controller, using WLAN Adapter is prohibited.

## 11-2. Others

Exterior	Part name	Model name	Summary
	Remote Sensor Unit	UTY-XSZXZ*	Thermo-sensor for sensing the temperature of arbitrary place in the room.
	External Connect Kit	UTY-XWXZG	Use to connect with various peripheral devices and air conditioner PCB. For control output port. Connecting point: CN47 on Main PCB
	External Input and Output PCB	UTY-XCSX	Use to connect with external devices and air conditioner PCB.  Optional External Connect Kit is necessary for installation. Connecting point: CN65 on Main PCB
	External Input and Output PCB Box	UTZ-GXRA	For installing the External input and output PCB.
	Wire Kit	UTY-XWXZJ	Use to connect with external input and output PCB and Indoor unit PCB.
	WLAN Adapter	UTY-TFSXJ4	Remotely manage an air conditioning system using mobile devices such as smartphones and tablets. For connection indoor unit with UART interface. Appropriate application for each region is required to use this option. For details, contact FGL sales company. Connecting point: CN65 on Main PCB
	Thermostat Converter	UTY-TTRXZ*	This converter can control Fujitsu General products using a third-party thermostat controller. Connecting point: Terminal block (Y1, Y2) on Main PCB
	Network Converter	UTY-VTGX	This converter is required when connecting single split system to VRF network system. Connecting point: Terminal block (Y1, Y2) on Main PCB

**NOTE:** Combined use of following optional parts and WLAN Adapter (UTY-TFSXJ4) is not allowed.

- External Input and Output PCB

# **Part 2. OUTDOOR UNIT**

---

**SINGLE TYPE:**

**AOUH24LUAS1**

**AOUH30LUAS1**

# 1. Specifications

Type	Inverter, Heat pump		
Model name	AOUH24LUAS1		AOUH30LUAS1
Power supply	208/230 V~ 60 Hz		
Power supply intake	Outdoor unit		
Available voltage range	187—253 V		
Starting current	A	10.3	13.4
Fan	Airflow rate	Cooling	2,187 (3,715)
		Heating	2,187 (3,715)
	Type × Qty	Propeller fan × 1	
Motor output	W	100	120
Sound pressure level*	Cooling	dB (A)	52
			54
Heat exchanger type	Dimensions (H × W × D)	in (mm)	Main 1: 29-3/4 × 35-5/8 × 11/16 (756 × 905 × 18.19)
			Main 2: 29-3/4 × 35-5/8 × 11/16 (756 × 905 × 18.19)
			Main 1: 38-1/16 × 35-5/8 × 11/16 (966 × 905 × 18.19)
	Fin pitch	FPI	Main 1: 18 Main 2: 18
	Rows × Stages		Main 1: 1 × 36 Main 2: 1 × 36
	Pipe type		Copper tube
	Fin type	Type (Material)	Aluminum
		Surface treatment	PC fin
			Blue fin
Compressor	Type		DC twin rotary
	Motor output	W	1,360
Refrigerant	Type		R410A
	Charge	lb oz	4 lb 10 oz
		g	2,100
Refrigerant oil	Type		POE (RB68)
	Amount	in³ (cm³)	48.8 (800)
Enclosure	Material		Steel sheet
	Color	Beige Approximate color of Munsell 10YR 7.5/1.0	
Dimensions (H × W × D)	Net	in (mm)	31 × 37 × 11-12-5/8 (788 × 940 × 320)
			38-1/16 × 40-7/16 × 17-1/2 (966 × 1,027 × 445)
Weight	Net	lb (kg)	117 (53)
			134 (61)
Connection pipe	Size	in (mm)	Ø3/8 (Ø9.52)
			Ø5/8 (Ø15.88)
	Method		Flare
	Pre-charge length	ft (m)	66 (20)
	Max. length		164 (50)
	Max. height difference		98 (30)
Operation range	Cooling	°F (°C)	-5 to 115 (-21 to 46)
			-5 to 75 (-21 to 24)
Drain hose	Material		LDPE
	Tip diameter	in (mm)	Ø1/2 (Ø13.0) (I.D.) Ø5/8 to Ø11/16 (Ø16.0 to Ø16.7) (O.D.)

**NOTES:**

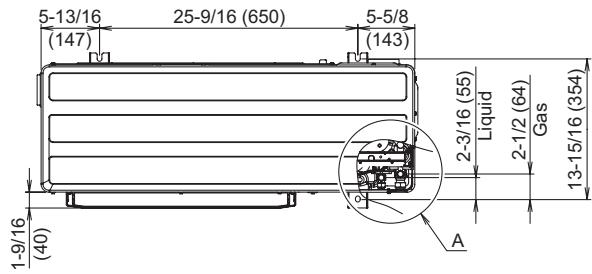
- Specifications are based on the following conditions:
  - Cooling: Indoor temperature of 80°FDB (26.67°CDB)/67°FWB (19.44°CWB), and outdoor temperature of 95°FDB (35°CDB)/75°FWB (23.9°CWB).
  - Heating: Indoor temperature of 70°FDB (21.11°CDB)/60°FWB (15.56°CWB), and outdoor temperature of 47°FDB (8.33°CDB)/43°FWB (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.
- \*: 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

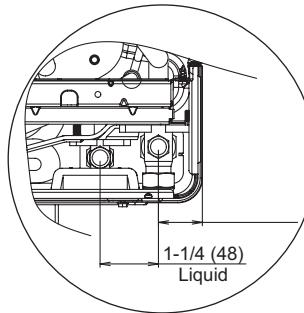
### 2-1. Model: AOUH24LUAS1

OUTDOOR UNIT  
AOUH24-30LUAS1OUTDOOR UNIT  
AOUH24-30LUAS1

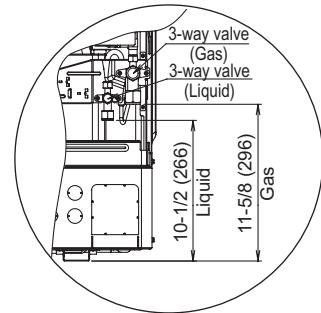
Unit: in (mm)



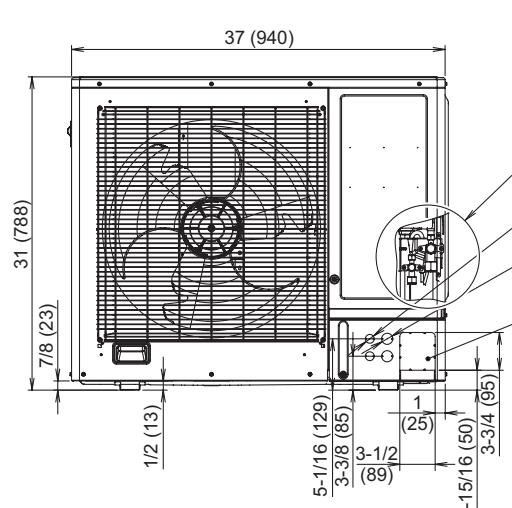
Top view



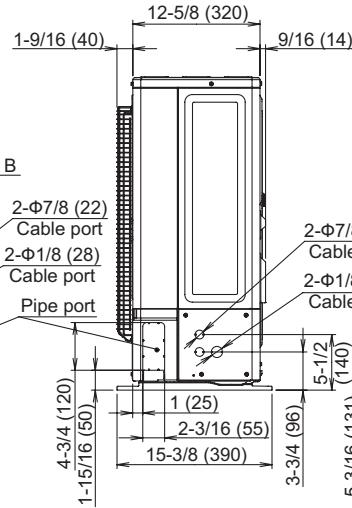
Detail A



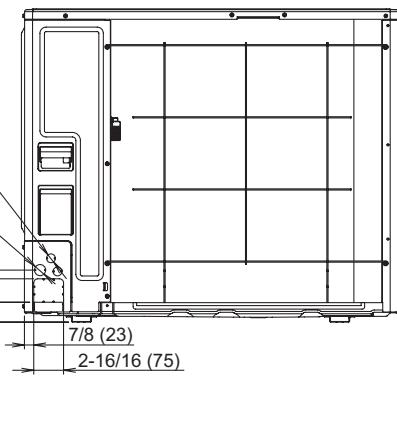
Detail B



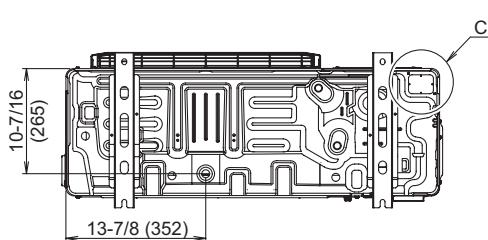
Front view



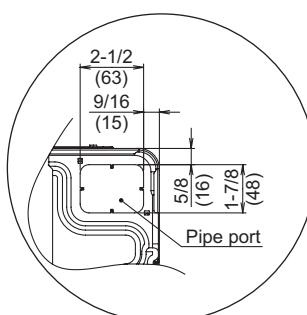
Side view



Rear view



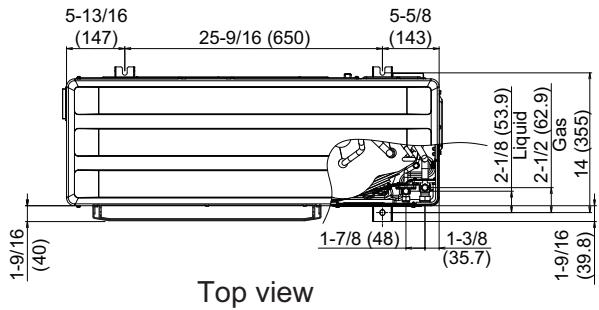
Bottom view



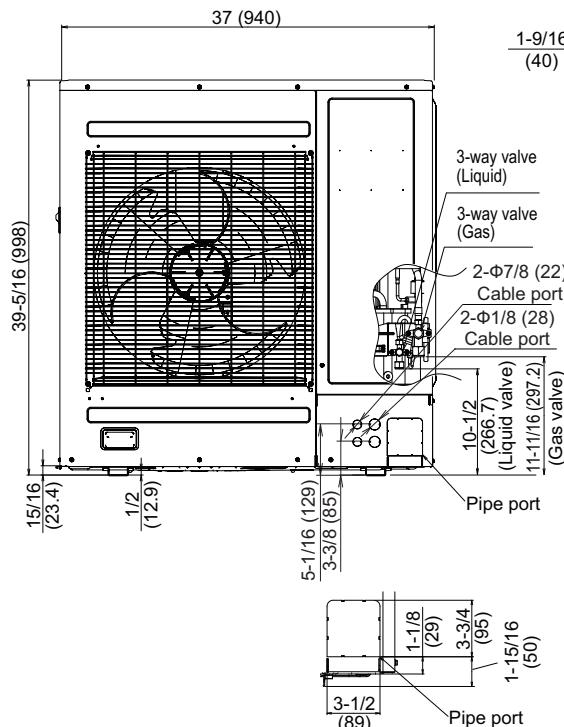
Detail C

## 2-2. Model: AOUH30LUAS1

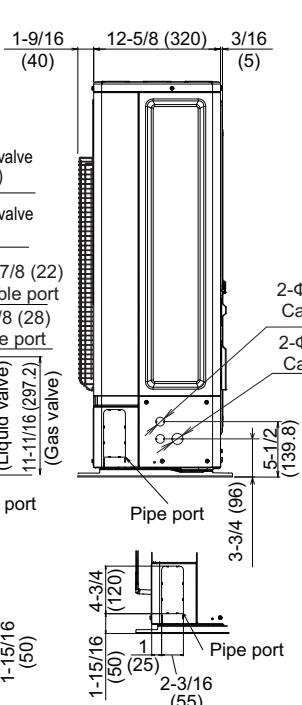
Unit: in (mm)

OUTDOOR UNIT  
AOUH24-30LUAS1OUTDOOR UNIT  
AOUH24-30LUAS1

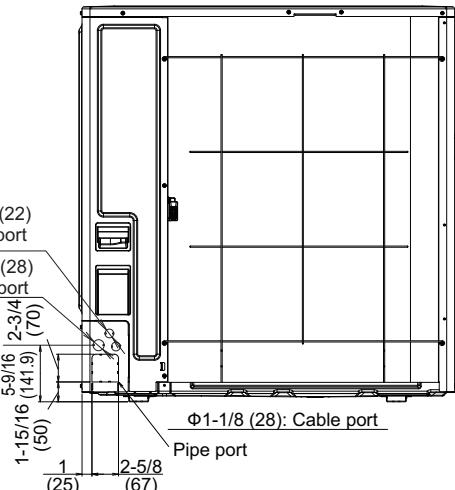
Top view



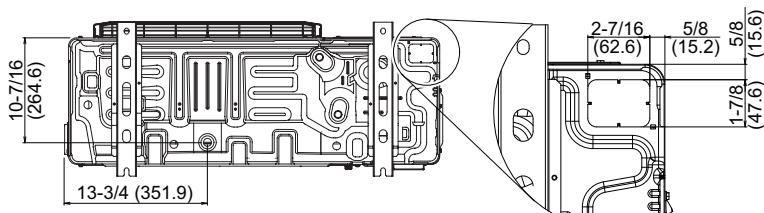
Front view



Side view



Rear view



Bottom view

### 3. Installation space

#### 3-1. Models: AOUH24LUAS1 and AOUH30LUAS1

##### ■ Space requirement

Provide sufficient installation space for product safety.

###### **⚠ CAUTION**

Keep the space shown in the installation examples.

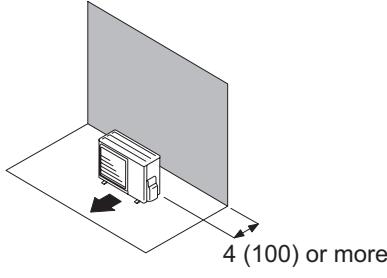
If the installation is not performed accordingly, it could cause a short circuit and result in a lack of operating performance.

##### ● Single outdoor unit installation

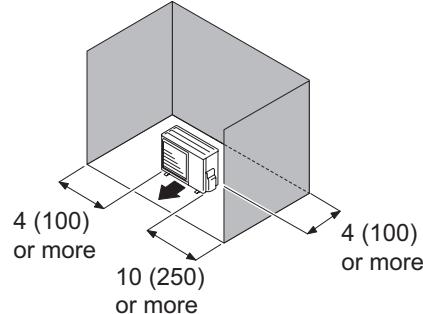
- When the upper space is open:

Unit: in (mm)

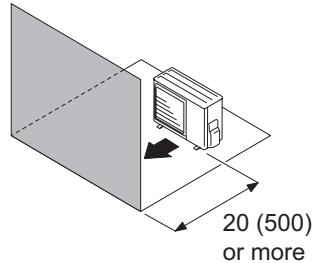
When there are obstacles at the rear only.



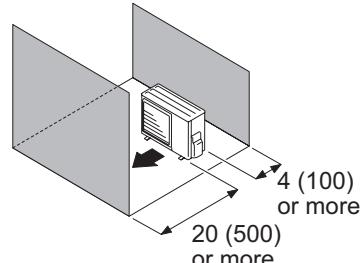
When there are obstacles at the rear and sides.



When there are obstacles at the front only.



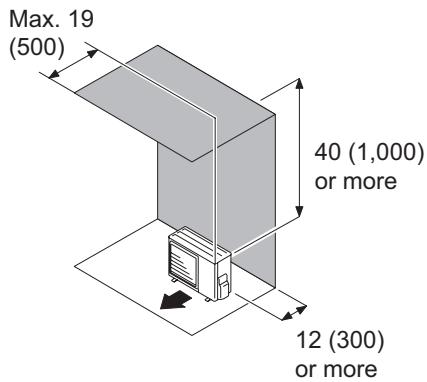
When there are obstacles at the front and rear.



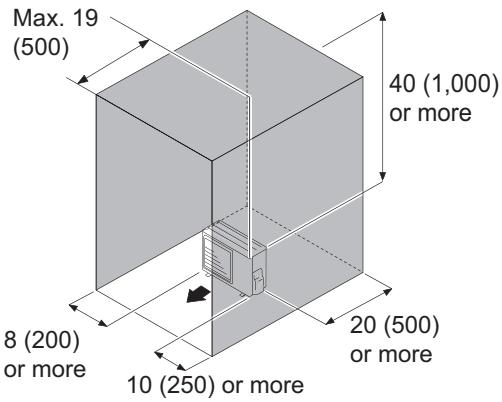
- When an obstruction in the upper space:

Unit: in (mm)

When there are obstacles at the rear and above.



When there are obstacles at the rear, sides, and above.



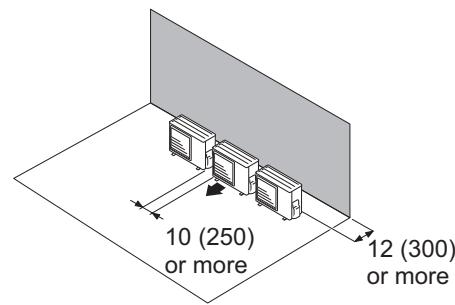
## ● Multiple outdoor unit installation

- 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:"**.

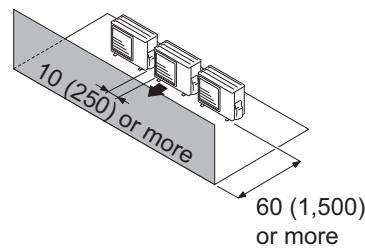
- When the upper space is open:**

Unit: in (mm)

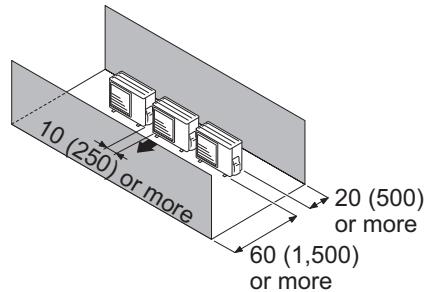
When there are obstacles at the rear only.



When there are obstacles at the front only.



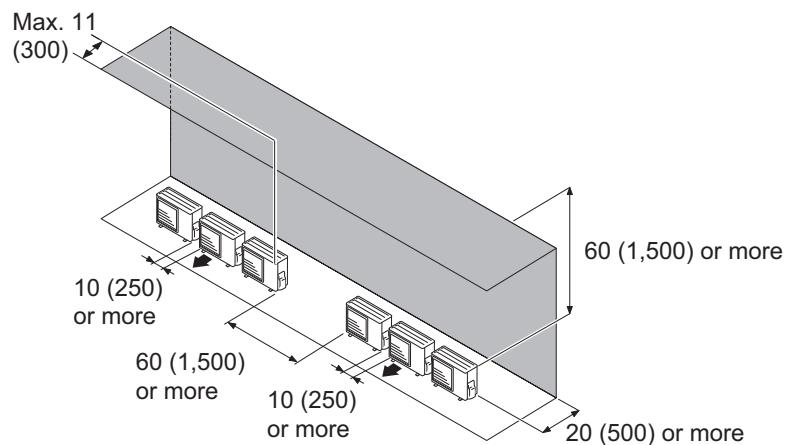
When there are obstacles at the front and rear.



- When an obstruction in the upper space:**

Unit: in (mm)

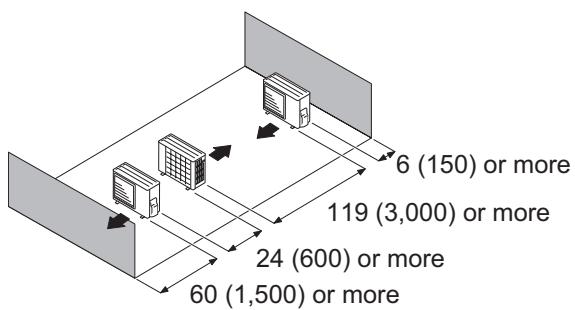
When there are obstacles at the rear and above.



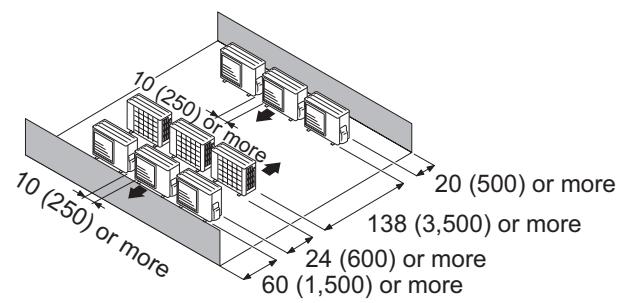
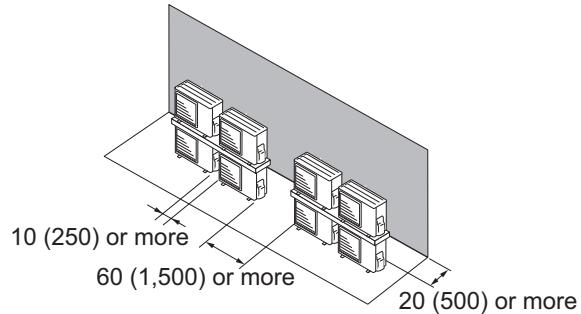
## ● Outdoor unit installation in multi-row

Unit: in (mm)

Single parallel unit arrangement



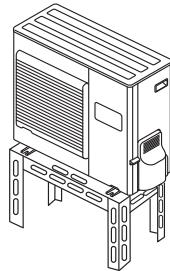
Multiple parallel unit arrangement

OUTDOOR UNIT  
AOUH24-30LUAS1**NOTES:**

- If the space is larger than stated above, the condition will be the same as when there is no obstacle.
- Height above the floor level should be 2 in (50 mm) or more.
- When installing the outdoor unit, be sure to open the front and left side to obtain better operation efficiency.

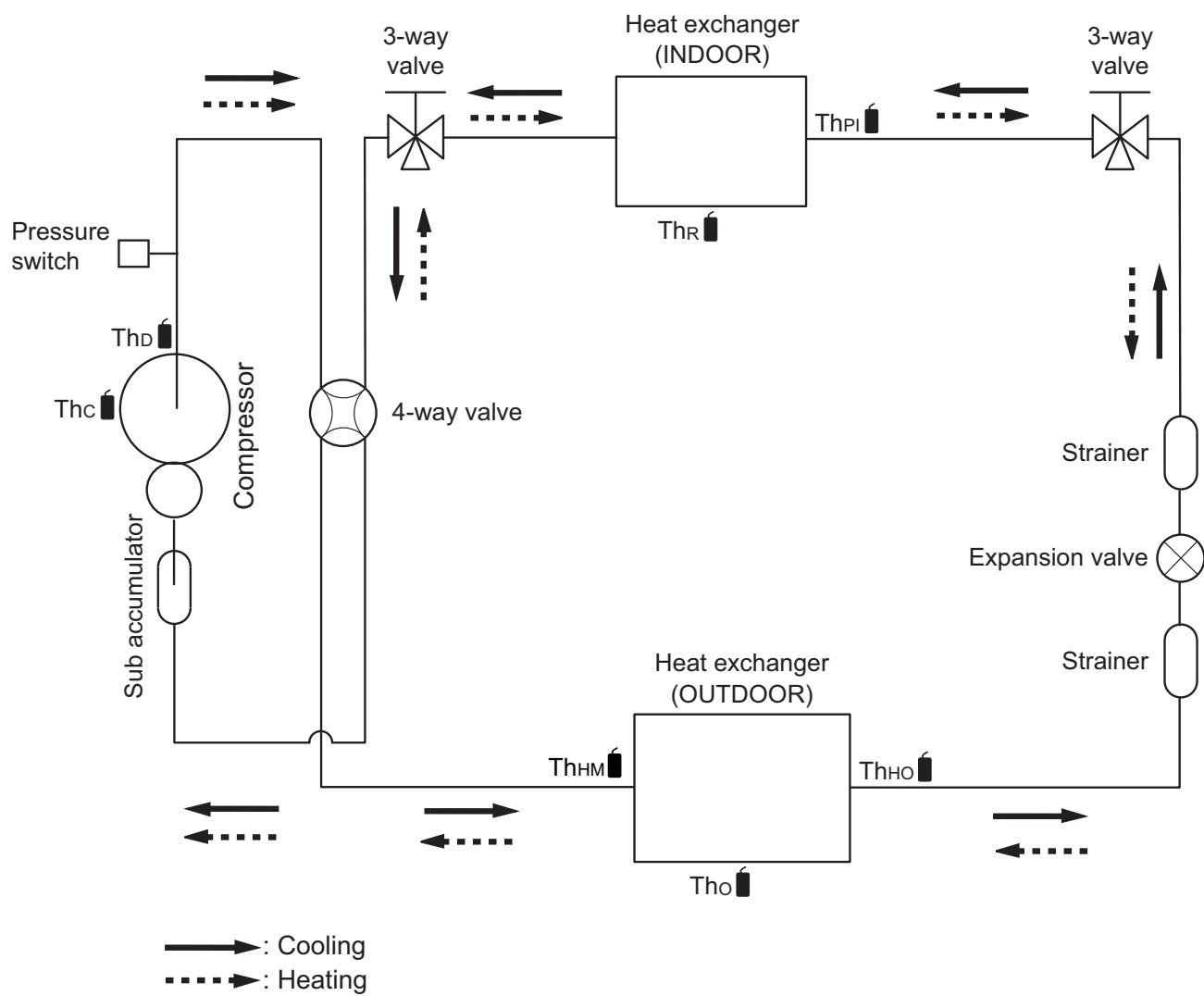
**△ CAUTION**

- Do not install the outdoor unit in two-stage where the drain water could freeze. Otherwise the drainage from the upper unit may form ice and cause a malfunction of the lower unit.
- When the outdoor temperature is 32 °F (0 °C) or less, do not use the accessory drain pipe and drain cap. If the drain pipe and drain cap are used, the drain water in the pipe may freeze in extremely cold climate. (For reverse cycle model only.)
- In area with heavy snowfall, if the inlet and outlet of the outdoor unit is blocked with snow, it might become difficult to get warm, and it is likely to cause product malfunction. Construct a canopy and a pedestal, or place the unit on a high stand that is locally installed.



## 4. Refrigerant circuit

### 4-1. Model: AOUH24LUAS1

OUTDOOR UNIT  
AOUH24-30LUAS1OUTDOOR UNIT  
AOUH24-30LUAS1

Thc : Thermistor (Compressor temperature)

Thd : Thermistor (Discharge temperature)

ThHM : Thermistor (Heat exchanger middle temperature)

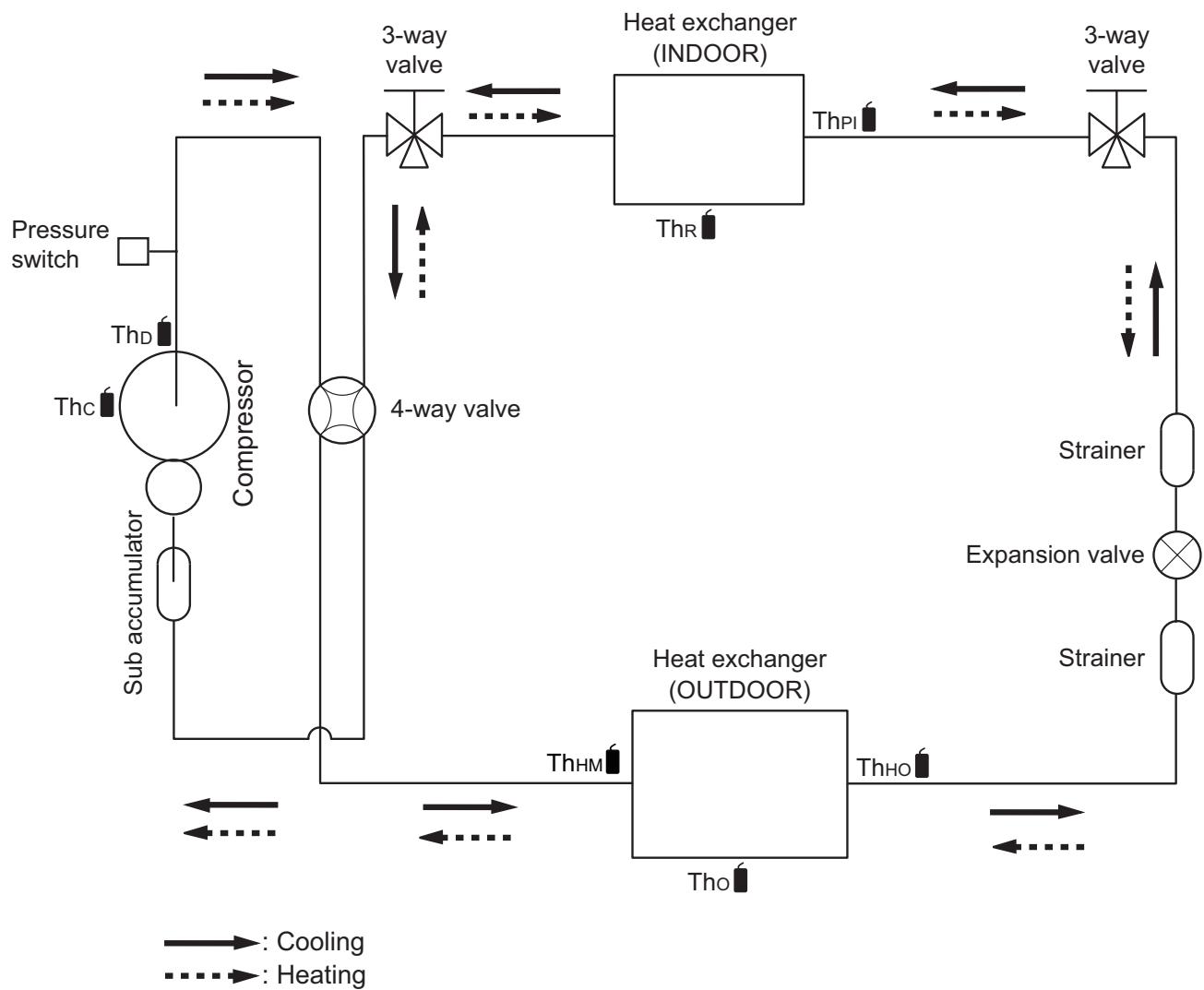
Tho : Thermistor (Outdoor temperature)

ThHO : Thermistor (Heat exchanger out temperature)

ThPI : Thermistor (Pipe temperature)

ThR : Thermistor (Room temperature)

## 4-2. Model: AOUH30LUAS1

OUTDOOR UNIT  
AOUH24-30LUAS1OUTDOOR UNIT  
AOUH24-30LUAS1

Thc : Thermistor (Compressor temperature)

Thd : Thermistor (Discharge temperature)

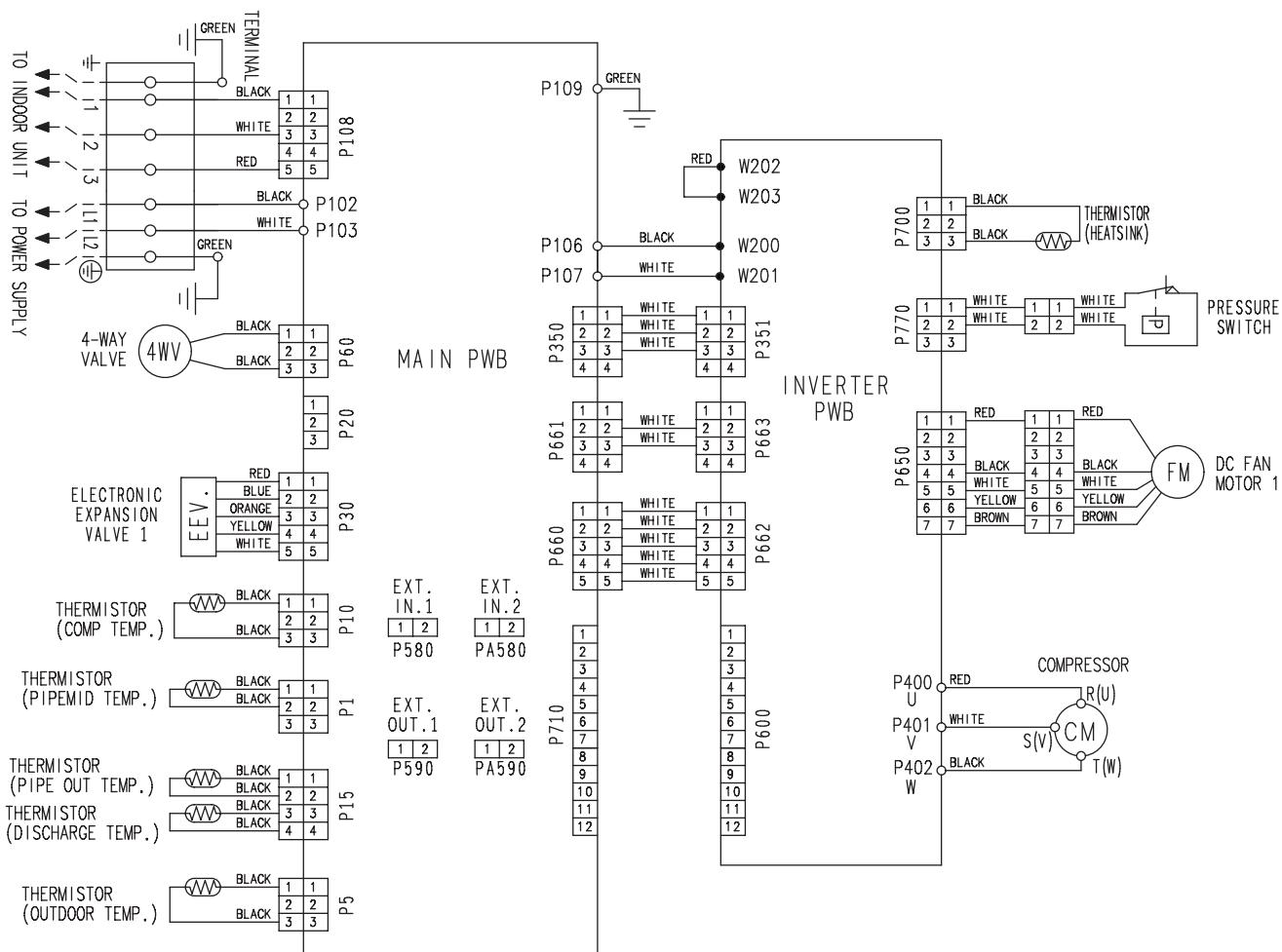
Th<sub>HM</sub> : Thermistor (Heat exchanger middle temperature)

Tho : Thermistor (Outdoor temperature)

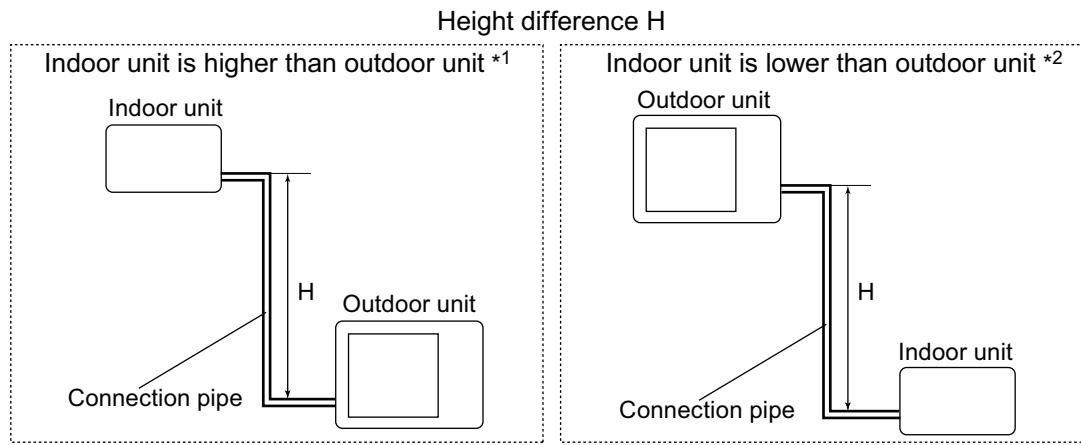
Th<sub>HO</sub> : Thermistor (Heat exchanger out temperature)Th<sub>PI</sub> : Thermistor (Pipe temperature)Th<sub>R</sub> : Thermistor (Room temperature)

## 5. Wiring diagrams

### 5-1. Models: AOUH24LUAS1 and AOUH30LUAS1



## 6. Capacity compensation rate for pipe length and height difference



### 6-1. Models: AOUH24LUAS1 and AOUH30LUAS1

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

COOLING		Pipe length								
		m	5	7.5	10	20	30	40	50	
Height difference H	Indoor unit is higher than outdoor unit * <sup>1</sup>	30	98	—	—	—	—	0.913	0.899	0.881
		20	65	—	—	—	0.941	0.929	0.914	0.896
		10	32	—	0.974	0.957	0.944	0.930	0.911	
		7.5	24	—	0.988	0.978	0.960	0.948	0.934	0.914
		5	16	0.998	0.992	0.982	0.964	0.952	0.938	0.919
	Indoor unit is lower than outdoor unit * <sup>2</sup>	0	0	1.000	1.000	0.989	0.972	0.960	0.945	0.926
		-5	-16	1.000	1.000	0.989	0.972	0.960	0.945	0.926
		-7.5	-24	—	1.000	0.989	0.972	0.960	0.945	0.926
		-10	-32	—	—	0.989	0.972	0.960	0.945	0.926
		-20	-65	—	—	—	0.972	0.960	0.945	0.926
		-30	-98	—	—	—	—	0.960	0.945	0.926

HEATING		Pipe length								
		m	5	7.5	10	20	30	40	50	
Height difference H	Indoor unit is higher than outdoor unit * <sup>1</sup>	30	98	—	—	—	—	0.939	0.922	0.907
		20	65	—	—	—	0.963	0.939	0.922	0.907
		10	32	—	—	0.999	0.963	0.939	0.922	0.907
		7.5	24	—	1.000	0.999	0.963	0.939	0.922	0.907
		5	16	1.000	1.000	0.999	0.963	0.939	0.922	0.907
	Indoor unit is lower than outdoor unit * <sup>2</sup>	0	0	1.000	1.000	0.999	0.963	0.939	0.922	0.907
		-5	-16	1.000	0.995	0.995	0.958	0.934	0.917	0.903
		-7.5	-24	—	0.983	0.992	0.955	0.932	0.915	0.900
		-10	-32	—	—	0.990	0.953	0.929	0.912	0.898
		-20	-65	—	—	—	0.943	0.920	0.903	0.889
		-30	-98	—	—	—	—	0.911	0.894	0.880

## 7. Additional charge calculation

### 7-1. Model: AOUH24LUAS1

Refrigerant type		R410A						
Factory charge amount	lb oz	4 lb 10 oz						
	g	2,100						

#### ■ Refrigerant charge

Total pipe length	ft	66 or less	82	98	114	131	147	164 (Max.)	0.43 oz/ft (40 g/m)
	m	20 or less	25	30	35	40	45	50 (Max.)	
Additional charge amount	oz	0	7	14	21	28	35	42	
	g	0	200	400	600	800	1,000	1,200	

### 7-2. Model: AOUH30LUAS1

Refrigerant type		R410A						
Factory charge amount	lb oz	5 lb 8 oz						
	g	2,500						

#### ■ Refrigerant charge

Total pipe length	ft	66 or less	82	98	114	131	147	164 (Max.)	0.43 oz/ft (40 g/m)
	m	20 or less	25	30	35	40	45	50 (Max.)	
Additional charge amount	oz	0	7	14	21	28	35	42	
	g	0	200	400	600	800	1,000	1,200	

## 8. Airflow

### 8-1. Model: AOUH24LUAS1

#### ● Cooling

m <sup>3</sup> /h	3,715
l/s	1,032
CFM	2,187

#### ● Heating

m <sup>3</sup> /h	3,715
l/s	1,032
CFM	2,187

### 8-2. Model: AOUH30LUAS1

#### ● Cooling

m <sup>3</sup> /h	3,910
l/s	1,086
CFM	2,301

#### ● Heating

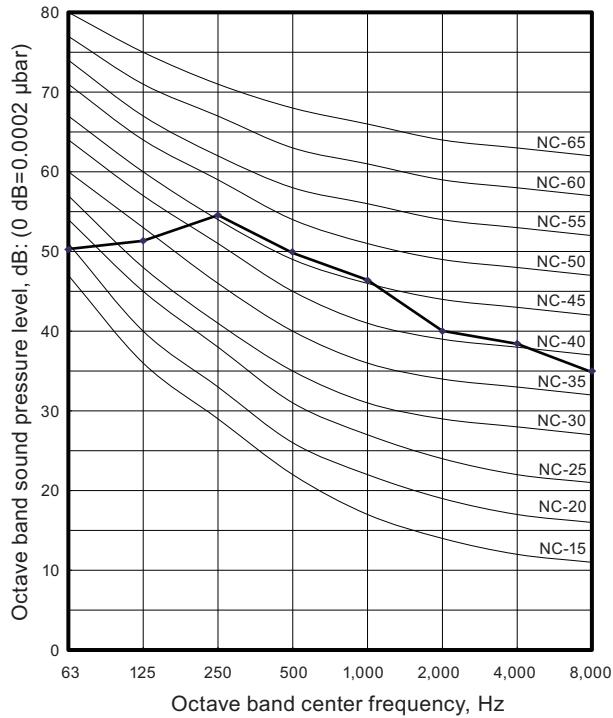
m <sup>3</sup> /h	3,770
l/s	1,047
CFM	2,219

## 9. Operation noise (sound pressure)

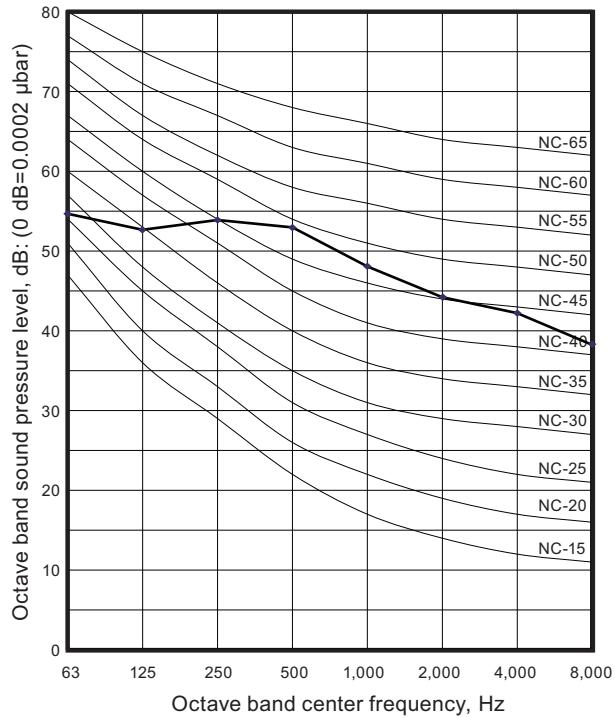
### 9-1. Noise level curve

#### ■ AOUH24LUAS1

##### ● Cooling

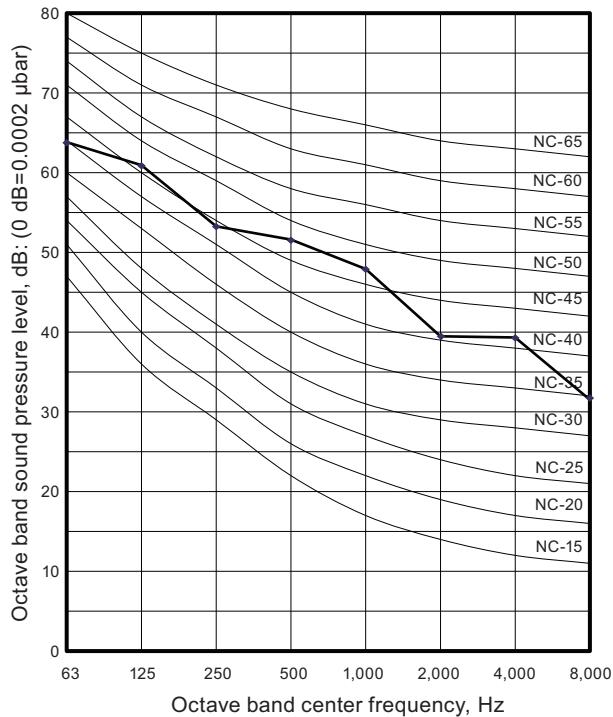


##### ● Heating

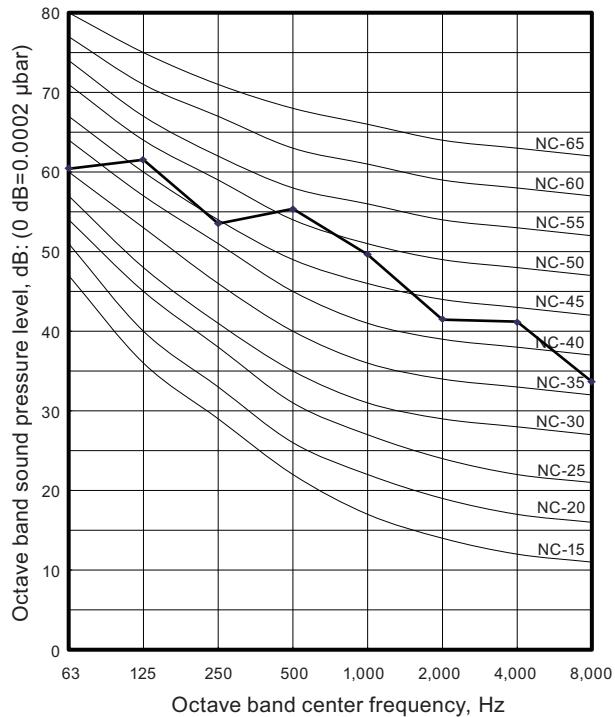


#### ■ AOUH30LUAS1

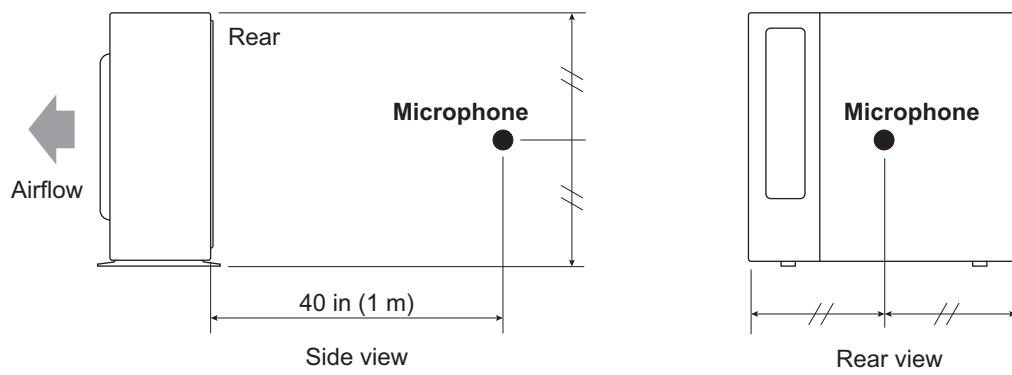
##### ● Cooling



##### ● 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			AOUH24LUAS1	AOUH30LUAS1
Power supply	Voltage	V	208/230	
	Frequency	Hz	60	
MCA *1		A	19.2	22.2
Starting current		A	10.3	13.4
Wiring spec.*2	MAX. CKT. BKR*3	A	20	25
	Power cable	AWG	12	
	Connection cable*4	Cross-sectional area	AWG	14
		Limited wiring length	ft (m)	167 (51)

### NOTES:

- \*1: Minimum Circuit Ampacity (Calculation based on UL1995)
- \*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.

## 11. Safety devices

Type of protection	Protection form	Model	
		AOUH24LUAS1	AOUH30LUAS1
Circuit protection	Current fuse (PCB*)	250 V, 20 A	250 V, 25 A or 30 A
		250 V, 3.15 A	
		250 V, 10 A × 2	
Fan motor protection	Thermal protection program	Activate 251.6 ±16.2°F (122 ±9°C) Fan motor stop	302 ±27°F (150 ±15°C) Fan motor stop
		Reset 240.8 +18.0 -16.2°F (116 +10 -9°C) Fan motor restart	248 ±27°F (120 ±15°C) Fan motor restart
Compressor protection	Thermal protection program (Compressor temp.)	Activate 226°F (108°C) Compressor stop	
		Reset After 3 minutes, and 176°F (80°C) or less Compressor restart	
	Thermal protection program (Discharge temp.)	Activate 230°F (110°C) Compressor stop	
		Reset After 7 minutes Compressor restart	
	Thermal protection program (Outdoor temp.) (Only in COOL and DRY mode)	Activate -13°F (-25°C) Compressor stop	
		Reset -4°F (-20°C) Compressor restart	

\*PCB: Printed Circuit Board

## 12. External input and output

With using external input and output functions, this product can be operated inter-connectedly with an external device.

Connector	Input	Output	Remarks
P580	Low noise mode	—	See external input/output settings for details.
PA580	Peak cut mode	—	
P590	—	Error status	
PA590	—	Compressor status	

### 12-1. External input

With using external input function, on/off status of "Low noise mode" and "Peak cut mode" can be specified by the external signal.

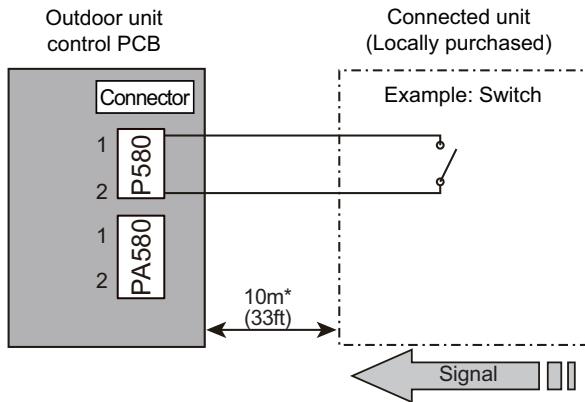
#### ■ Low noise mode

In following condition, the operating noise of the outdoor unit reduces comparing from the one in normal operating condition:

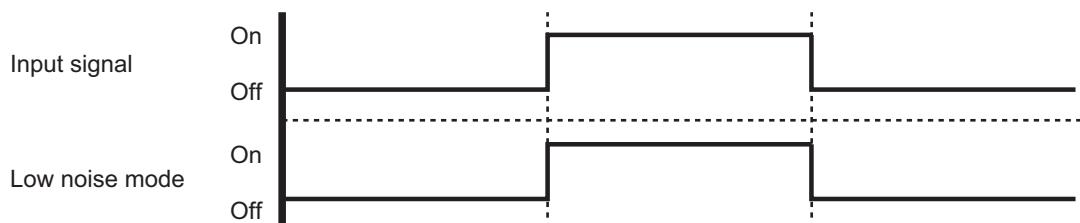
The air conditioner is set to the "Low noise mode" when closing the contact input of a commercial timer or on/off switch to a connector on the control PCB of the outdoor unit.

**NOTE:** Product performance may drop depending on some conditions such as the outdoor temperature.

- **Circuit diagram example**



- Contact capacity: DC 24 V or more, 10 mA or more.
- \*: Make the distance from the PCB to the connected unit within 33 ft (10 m).
- Construct a circuit as shown in this figure with using optional parts mentioned below.
- Input signal: On in "Low noise mode"
- Input signal: Off in normal operation
- To set the level of "Low noise mode," refer to "[Low noise mode](#)" on page 85 (under "Local setting procedure".)



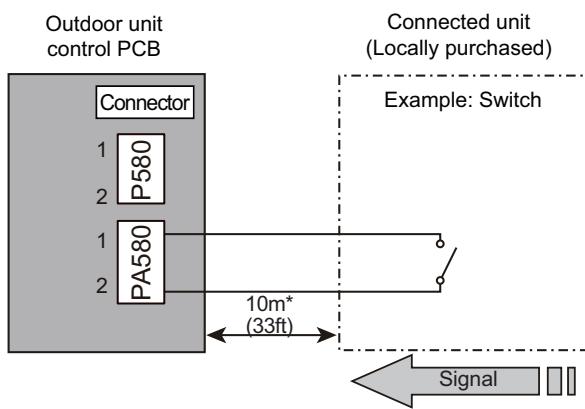
- **Optional part**

Part name	Model name	Exterior
External Connect Kit	UTY-XWZXZ3	External input wire

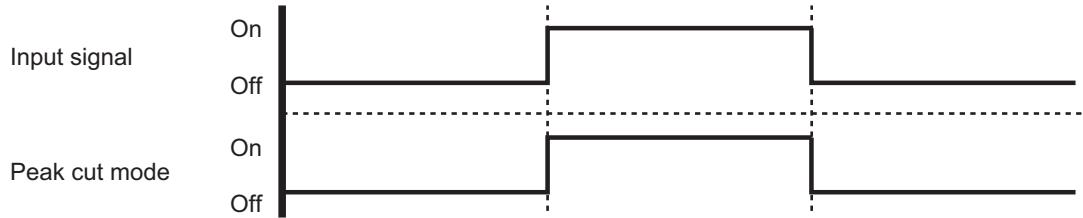
## ■ Peak cut mode

By performing following on-site work, operation that suppresses the current value can be enabled:  
The air conditioner is set to the “Peak cut mode” when closing the contact input of a commercial timer or on/off switch to a connector on the control PCB of the outdoor unit.

- **Circuit diagram example**



- Contact capacity: DC 24 V or more, 10 mA or more.
- \*: Make the distance from the PCB to the connected unit within 33 ft (10 m).
- Construct a circuit as shown in this figure with using optional parts mentioned below.
- Input signal: On in “Peak cut mode”
- Input signal: Off in normal operation
- To set the level of “Peak cut mode,” refer to [“Peak cut mode”](#) on page 86 (under “Local setting procedure”).



- **Optional part**

Part name	Model name	Exterior
External Connect Kit	UTY-XWZXZ3	External input wire

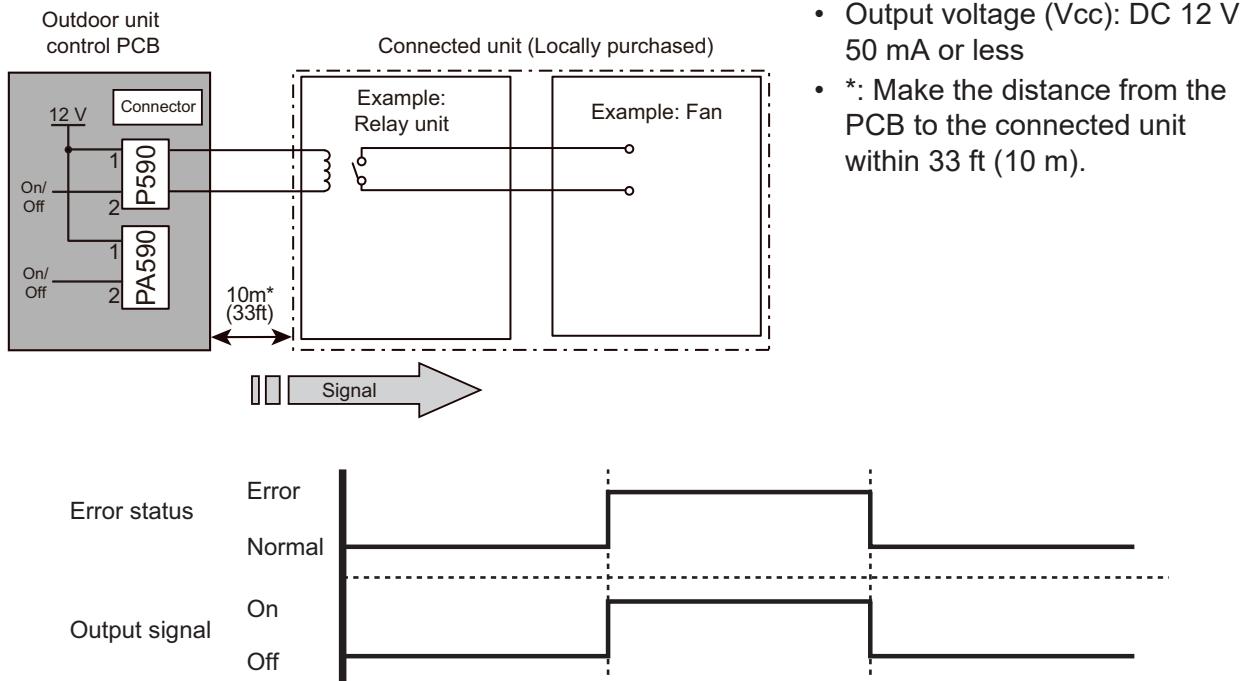
## 12-2. External output

With using external output function, some status signals are transmitted to the control PCB, and the related LED lamp indicates the status of this product.

### ■ Error status output

Signal on air conditioner error status is generated when a malfunction occurs.

- **Circuit diagram example**



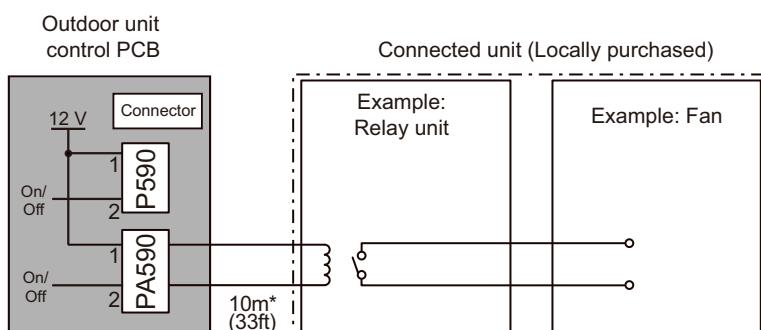
- **Optional part**

Part name	Model name	Exterior
External Connect Kit	UTY-XWZXZ3	External output wire 

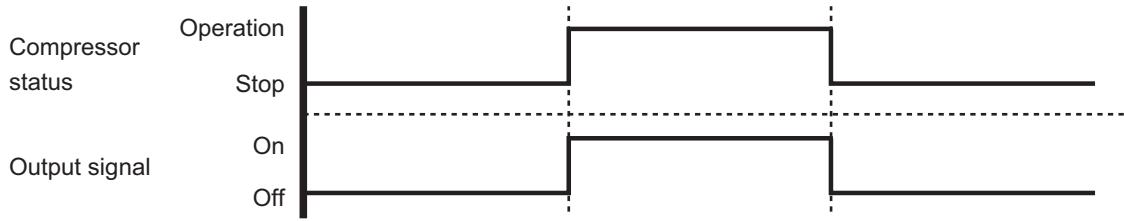
## ■ Compressor status output

Signal on compressor operation status is generated when the compressor is running.

- **Circuit diagram example**



- Output voltage (Vcc): DC 12 V  
50 mA or less
- \*: Make the distance from the PCB to the connected unit within 33 ft (10 m).



- **Optional part**

Part name	Model name	Exterior
External Connect Kit	UTY-XWZXZ3	External output wire 

## 13. Function settings

Perform appropriate function setting locally according to the installation environment.

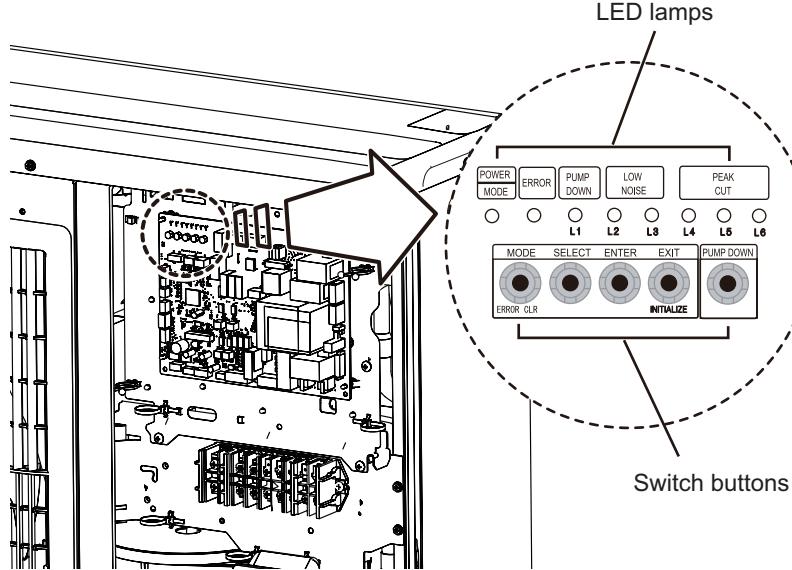
**NOTE:** Incorrect settings can cause a product malfunction.

### ⚠ CAUTION

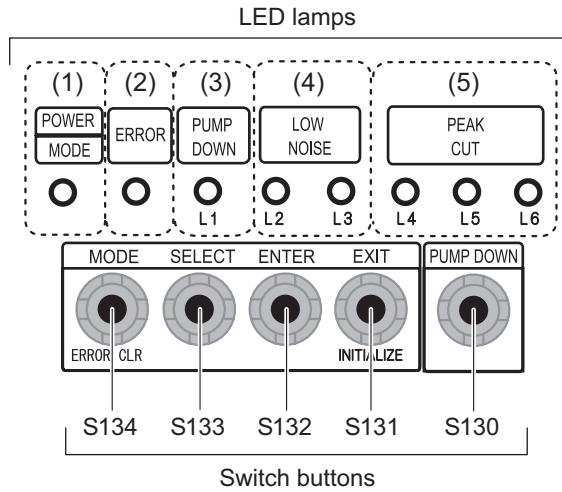
- Before setting up the switch buttons, discharge the static electricity from your body.
- Never touch the terminals or the patterns on the parts that are mounted on the PCB.

### 13-1. Control PCB and switch buttons location

Control PCB of the outdoor unit is located as shown in the following figure.



## ■ Switch buttons and the functions



LED lamp			Function or operation method
(1)	POWER/MODE	Green	Lights on while power on. Blinks to show the local setting on the outdoor unit or the error code.
(2)	ERROR	Red	Blinks during error operation.
(3)	PUMP DOWN (L1)	Orange	Lights on during pump down operation.
(4)	LOW NOISE MODE (L2 and L3)	Orange	Lights on during "Low noise mode" when local setting is activated. (Light pattern of L2 and L3 indicates the low noise level.)
(5)	PEAK CUT MODE (L4, L5, and L6)	Orange	Lights on during "Peak cut mode" when local setting is activated. (Light pattern of L4, L5, and L6 indicates the peak cut level.)

Switch button		Function or operation method
S134	MODE	Switches between "Local setting" and "Error code display".
S133	SELECT	Switches between the individual "Local settings" and the "Error code displays".
S132	ENTER	Switches between the individual "Local settings" and the "Error code displays".
S131	EXIT	Returns to "Operation status display".
S130	PUMP DOWN	Starts the pump down operation.

## 13-2. Local setting procedure

**NOTE:** Before performing the function setting, be sure to stop the operation of the air conditioner.

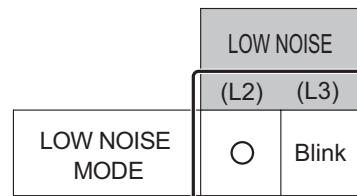
### ■ Low noise mode

1. Press the MODE switch button (S134) for 3 seconds or more to switch to “Local setting mode”.
2. After confirming the LED lamp of POWER/MODE blinks 9 times, press the ENTER switch button (S132).

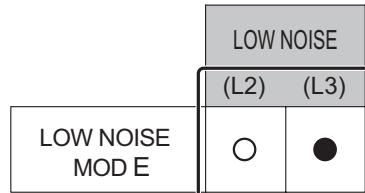
POWER	ERROR	PUMP DOWN (L1)	LOW NOISE (L2)	LOW NOISE (L3)	PEAK CUT (L4)	PEAK CUT (L5)	PEAK CUT (L6)
Blinks (9 times)	○	○	○	○	○	○	○

Sign “○”: Lights off

3. Press the SELECT switch button (S133), and adjust the LED lamp as shown below. Then the LED lamp indicates the current setting.



4. Press the ENTER switch button (S132).



Sign “●”: Lights on

5. Press the SELECT switch button (S133), and adjust the LED lamps as shown below.



6. Press the ENTER switch button (S132) and fix it.



7. To return to “Operating status display (Normal operation)”, press the EXIT switch button (S131).

#### In case of missing how many times you pressed the SELECT and ENTER switch buttons:

1. To return to “Operation status display (Normal operation)”, press the EXIT switch button once.
2. Restart from the beginning of setting procedure.

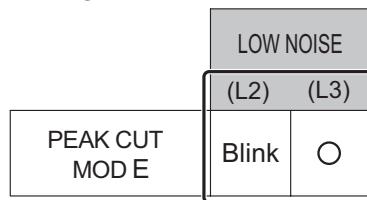
## ■ Peak cut mode

1. Press the MODE switch button (S134) for 3 seconds or more to switch to "Local setting mode".
2. After confirming the LED lamp of POWER/MODE blinks 9 times, press the ENTER switch button (S132).

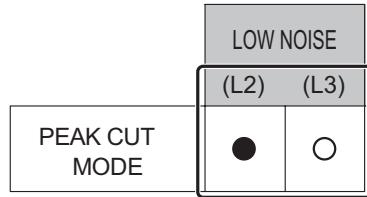
POWER	ERROR	PUMP DOWN (L1)	LOW NOISE (L2) (L3)		PEAK CUT (L4) (L5) (L6)		
MODE							
Blinks (9 times)	<input type="circle"/>	<input type="circle"/>	<input type="circle"/>				

Sign “  ”: Lights off

3. Press the SELECT switch button (S133), and adjust the LED lamp as shown below. Then the LED lamp indicates the current setting.



4. Press the ENTER switch button (S132).



Sign “  ”: Lights on

5. Press the SELECT switch button (S133), and adjust the LED lamps as shown below.

PEAK CUT		
(L4)	(L5)	(L6)
<input type="circle"/>	<input type="circle"/>	Blink
<input type="circle"/>	Blink	<input type="circle"/>
<input type="circle"/>	Blink	Blink
Blink	<input type="circle"/>	<input type="circle"/>

6. Press the ENTER switch button (S132) and fix it.

PEAK CUT		
(L4)	(L5)	(L6)
<input type="circle"/>	<input type="circle"/>	<input checked="" type="circle"/>
<input type="circle"/>	<input checked="" type="circle"/>	<input type="circle"/>
<input type="circle"/>	<input checked="" type="circle"/>	<input checked="" type="circle"/>
<input checked="" type="circle"/>	<input type="circle"/>	<input type="circle"/>

7. To return to "Operating status display (Normal operation)", press the EXIT switch button (S131).

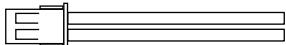
**NOTE:** When pressed number is lost during setting, you must redo the setting procedure. Return to "Operation status display (Normal operation)" by pressing the EXIT switch button once, and restart from the beginning of the setting procedure.

## 14. Accessories

### 14-1. Models: AOUH24LUAS1 and AOUH30LUAS1

Part name	Exterior	Qty	Part name	Exterior	Qty
Installation manual		1	Drain cap		3
Drain pipe		1			

## 15. Optional parts

Exterior	Part name	Model name	Summary
	External Connect Kit	UTY-XWZXZ3	Use to operate the external input and output functions of outdoor unit.