FUJITSU

REFRIGERANT R32
INVERTER

AIR CONDITIONER

Ceiling type

DESIGN & TECHNICAL MANUAL

INDOOR

ABYG18KRTA
ABYG22KRTA

ABYG24KRTA
ABYG30KRTA

ABYG36KRTA
ABYG45KRTA

OUTDOOR

AOYG18KBTB
AOYG22KBTB

AOYG24KBTB

AOYG30KBTB
AOYG36KBTB

AOYG45KBTB

FUJITSU GENERAL LIMITED

DR_AB010EF_03
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- For further details, please check with our authorized dealer.

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CONTENTS (continued)

Part 1. INDOOR UNIT

CEILING TYPE:

ABYG18KRTA
ABYG22KRTA
ABYG24KRTA
ABYG30KRTA
ABYG36KRTA
ABYG45KRTA

CEILING TYPE
ABYG18-45KRTA

1. Specifications

Type					Ceiling	
					Inverter heat pump	
Model name					ABYG18KRTA	ABYG22KRTA
Power supply					230 V ~ 50 Hz	
Power supply intake					Outdoor unit	
Available voltage range					198—264 V	
Capacity		Cooling	Rated	kW	5.2	6.0
				Btu/h	17,700	20,500
			Min.—Max.	kW	0.9—5.9	0.9—6.7
				Btu/h	3,100—20,100	3,100—22,900
		Heating	Rated	kW	6.0	7.0
				Btu/h	20,500	23,900
			Min.—Max.	kW	0.9—7.5	0.9—8.0
				Btu/h	3,100—25,600	3,100—27,300
Input power		Cooling	Rated	kW	1.55	1.87
			Max.		2.32	2.44
		Heating	Rated		1.62	1.95
			Max.		2.41	2.60
Current		Cooling	Rated	A	6.9	8.3
		Heating			7.2	8.6
EER		Cooling		kW/kW	3.35	3.21
COP		Heating			3.70	3.59
Power factor		Cooling		%	97.6	98.1
		Heating			97.9	98.5
Moisture removal				L/h (pints/h)	2.0 (3.5)	2.5 (4.4)
Maximum operating current *1		Cooling		A	12.1	12.6
		Heating			12.1	12.6
Fan	Airflow rate	Cooling	HIGH	m^3/h	840	900
			MED		790	790
			LOW		710	710
			QUIET		650	650
		Heating	HIGH		840	900
			MED		790	790
			LOW		710	710
			QUIET		650	650
	Type × Q'ty				Sirocco × 2	
	Motor output			W	50	
Sound pressure level *2		Cooling	HIGH	dB (A)	38	42
			MED		36	37
			LOW		33	34
			QUIET		31	31
		Heating	HIGH		38	42
			MED		36	37
			LOW		33	34
			QUIET		31	31
Heat exchanger type		Dimensions (H × W × D)		mm	294 × 715 × 39.9	
		Fin pitch		mm	1.30	
		Rows × Stages			3 × 14	
		Pipe type			Copper	
		Fin type			Aluminum	
Enclosure	Material				Steel sheet	
	Color				White Approximate color of Munsell N9.25/	
Dimensions (H × W × D)	Net			mm	235 × 1,080 × 705	
	Gross				330 × 1,165 × 825	
Weight	Net			kg	24	
	Gross				33	
Connection pipe	Size	Liquid		mm (in)	Ø6.35 (Ø1/4)	
		Gas			Ø12.70 (Ø1/2)	
	Method				Flare	
Drain hose	Material				PVC	
	Tip diameter			mm	Ø25 (I.D.), Ø32 (O.D.)	
Operation range		Cooling		°C	18 to 32	
				%RH	80 or less	
		Heating		°C	16 to 30	
Remote controller (Option)					Wired remote controller, Wireless remote controller, Mobile app*3 (FGLair™)	

NOTES:

- Specifications are based on the following conditions:
  - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
  - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
  - Pipe length: 5 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: Maximum current is maximum value when operated within the operation range.
- *2: Sound pressure level:
  - Measured values in manufacturer's anechoic chamber.
  - Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.
- *3: Available on Google Play™ store or on App Store®. Optional WLAN adapter is also required. For details, refer to the setting manual.
- This data is based on EN 14511 standard.

CEILING TYPE
ABYG18-45KRTA

Specifications for ErP Lot10					
Model name				**ABYG18KRTA**	**ABYG22KRTA**
Energy efficiency class	Cooling			A^{++}	A^{++}
	Heating (Average)			A^{+}	A^{+}
Pdesign	Cooling		kW	5.2 (35°C)	6.0 (35°C)
	Heating (Average)			4.4 (-10°C)	4.8 (-10°C)
SEER	Cooling		kWh/kWh	6.2	6.1
SCOP	Heating (Average)			4.1	4.0
Annual energy consumption	QCE		kWh/a	293	344
	QHE (Average)			1,501	1,677
Sound power level	Cooling	HIGH	dB (A)	53	57
	Heating			53	57

CEILING TYPE
ABYG18-45KRTA

Type					Ceiling	
					Inverter heat pump	
Model name					ABYG24KRTA	ABYG30KRTA
Power supply					230 V ~ 50 Hz	
Power supply intake					Outdoor unit	
Available voltage range					198—264 V	
Capacity		Cooling	Rated	kW	6.8	8.5
				Btu/h	23,200	29,000
			Min.—Max.	kW	0.9—8.0	2.8—10.0
				Btu/h	3,100—27,300	9,600—34,100
		Heating	Rated	kW	7.5	10.0
				Btu/h	25,600	34,100
			Min.—Max.	kW	0.9—9.1	2.7—11.2
				Btu/h	3,100—31,000	9,200—38,200
Input power		Cooling	Rated	kW	2.14	2.65
			Max.		2.92	4.14
		Heating	Rated		1.97	2.77
			Max.		2.59	4.38
Current		Cooling	Rated	A	9.5	11.7
		Heating			8.7	12.2
EER		Cooling		kW/kW	3.18	3.21
COP		Heating			3.81	3.61
Power factor		Cooling		%	98.3	98.5
		Heating			98.4	98.8
Moisture removal				L/h (pints/h)	2.2 (3.9)	3.0 (5.3)
Maximum operating current *1		Cooling		A	13.6	22.6
		Heating			13.6	22.6
Fan	Airflow rate	Cooling	HIGH	m^3/h	1,230	1,400
			MED		990	1,120
			LOW		860	980
			QUIET		700	800
		Heating	HIGH		1,230	1,400
			MED		990	1,120
			LOW		860	980
			QUIET		700	800
	Type × Q'ty				Sirocco × 3	
	Motor output			W	80	
Sound pressure level *2		Cooling	HIGH	dB (A)	41	45
			MED		36	40
			LOW		32	35
			QUIET		29	32
		Heating	HIGH		41	45
			MED		36	40
			LOW		32	35
			QUIET		29	32
Heat exchanger type		Dimensions (H × W × D)		mm	294 × 1,025 × 39.9	
		Fin pitch		mm	1.30	
		Rows × Stages			3 × 14	
		Pipe type			Copper	
		Fin type			Aluminum	
Enclosure	Material				Steel sheet	
	Color				White Approximate color of Munsell N9.25/	
Dimensions (H × W × D)	Net			mm	235 × 1,390 × 705	
	Gross				330 × 1,475 × 825	
Weight	Net			kg	31	
	Gross				41	
Connection pipe	Size	Liquid		mm (in)	Ø6.35 (Ø1/4)	Ø9.52 (Ø3/8)
		Gas			Ø12.70 (Ø1/2)	Ø15.88 (Ø5/8)
	Method				Flare	
Drain hose	Material				PVC	
	Tip diameter			mm	Ø25 (I.D.), Ø32 (O.D.)	
Operation range		Cooling		°C	18 to 32	
				%RH	80 or less	
		Heating		°C	16 to 30	
Remote controller (Option)					Wired remote controller, Wireless remote controller, Mobile app*3 (FGLair™)	

NOTES:

- Specifications are based on the following conditions:
  - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
  - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
  - Pipe length: 5 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: Maximum current is maximum value when operated within the operation range.
- *2: Sound pressure level:
  - Measured values in manufacturer's anechoic chamber.
  - Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.
- *3: Available on Google Play™ store or on App Store®. Optional WLAN adapter is also required. For details, refer to the setting manual.
- This data is based on EN 14511 standard.

CEILING TYPE
ABYG18-45KRTA

Specifications for ErP Lot10					
Model name				**ABYG24KRTA**	**ABYG30KRTA**
Energy efficiency class	Cooling			A^{++}	A^{++}
	Heating (Average)			A^{+}	A^{+}
Pdesign	Cooling		kW	6.8 (35°C)	8.5 (35°C)
	Heating (Average)			6.0 (-10°C)	8.0 (-10°C)
SEER	Cooling		kWh/kWh	6.2	6.1
SCOP	Heating (Average)			4.1	4.0
Annual energy consumption	QCE		kWh/a	384	486
	QHE (Average)			2,042	2,796
Sound power level	Cooling	HIGH	dB (A)	56	60
	Heating			56	60

CEILING TYPE
ABYG18-45KRTA

Type					Ceiling	
					Inverter heat pump	
Model name					ABYG36KRTA	ABYG45KRTA
Power supply					230 V ~ 50 Hz	
Power supply intake					Outdoor unit	
Available voltage range					198—264 V	
Capacity		Cooling	Rated	kW	9.5	12.1
				Btu/h	32,400	41,300
			Min.—Max.	kW	2.8—11.2	4.0—13.5
				Btu/h	9,600—38,200	13,600—46,000
		Heating	Rated	kW	10.8	13.5
				Btu/h	36,900	46,000
			Min.—Max.	kW	2.7—12.7	4.2—16.2
				Btu/h	9,200—43,300	14,300—55,300
Input power		Cooling	Rated	kW	2.96	4.22
			Max.		4.52	4.79
		Heating	Rated		2.88	3.84
			Max.		4.31	4.81
Current		Cooling	Rated	A	13.1	18.6
		Heating			12.7	16.9
EER		Cooling		kW/kW	3.21	2.87
COP		Heating			3.75	3.52
Power factor		Cooling		%	98.9	99.0
		Heating			98.8	98.9
Moisture removal				L/h (pints/h)	2.6 (4.6)	4.5 (7.9)
Maximum operating current *1		Cooling		A	22.6	28.5
		Heating			22.6	28.5
Fan	Airflow rate	Cooling	HIGH	m^3/h	1,850	1,900
			MED		1,470	1,510
			LOW		1,300	1,380
			QUIET		1,050	1,130
		Heating	HIGH		1,800	1,850
			MED		1,470	1,510
			LOW		1,300	1,380
			QUIET		1,050	1,130
	Type × Q'ty				Sirocco × 4	
	Motor output			W	110	
Sound pressure level *2		Cooling	HIGH	dB (A)	44	45
			MED		40	41
			LOW		37	39
			QUIET		32	34
		Heating	HIGH		44	45
			MED		40	41
			LOW		37	39
			QUIET		32	34
Heat exchanger type		Dimensions (H × W × D)		mm	294 × 1,335 × 39.9	
		Fin pitch		mm	1.30	
		Rows × Stages			3 × 14	
		Pipe type			Copper	
		Fin type			Aluminum	
Enclosure	Material				Steel sheet	
	Color				White Approximate color of Munsell N9.25/	
Dimensions (H × W × D)	Net			mm	235 × 1,700 × 705	
	Gross				330 × 1,785 × 825	
Weight	Net			kg	38	
	Gross				48	
Connection pipe	Size	Liquid		mm (in)	Ø9.52 (Ø3/8)	
		Gas			Ø15.88 (Ø5/8)	
	Method				Flare	
Drain hose	Material				PVC	
	Tip diameter			mm	Ø25 (I.D.), Ø32 (O.D.)	
Operation range		Cooling		°C	18 to 32	
				%RH	80 or less	
		Heating		°C	16 to 30	
Remote controller (Option)					Wired remote controller, Wireless remote controller, Mobile app*3 (FGLair™)	

NOTES:

- Specifications are based on the following conditions:
  - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
  - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
  - Pipe length: 5 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: Maximum current is maximum value when operated within the operation range.
- *2: Sound pressure level:
  - Measured values in manufacturer's anechoic chamber.
  - Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.
- *3: Available on Google Play™ store or on App Store®. Optional WLAN adapter is also required. For details, refer to the setting manual.
- This data is based on EN 14511 standard.

CEILING TYPE
ABYG18-45KRTA

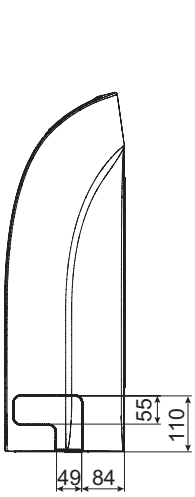
Specifications for ErP Lot10				
Model name				**ABYG36KRTA**
Energy efficiency class	Cooling			A^{++}
	Heating (Average)			A^{+}
Pdesign	Cooling		kW	9.5 (35°C)
	Heating (Average)			8.7 (-10°C)
SEER	Cooling		kWh/kWh	6.37
SCOP	Heating (Average)			4.21
Annual energy consumption	QCE		kWh/a	524
	QHE (Average)			2,904
Sound power level	Cooling	HIGH	dB (A)	59
	Heating			59

CEILING TYPE
ABYG18-45KRTA

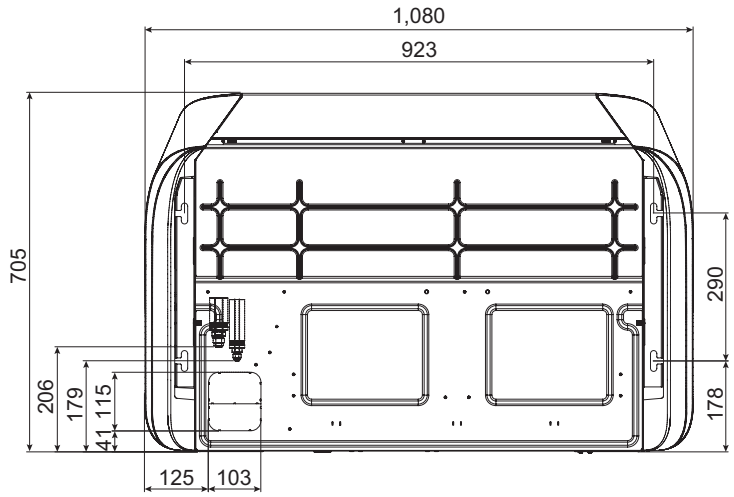
2. Dimensions

2-1. Models: ABYG18KRTA and ABYG22KRTA

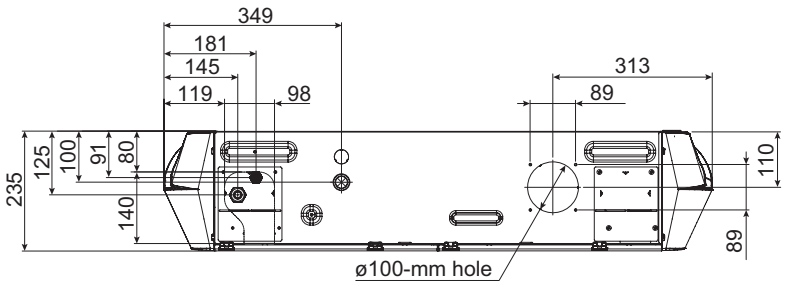
Unit: mm



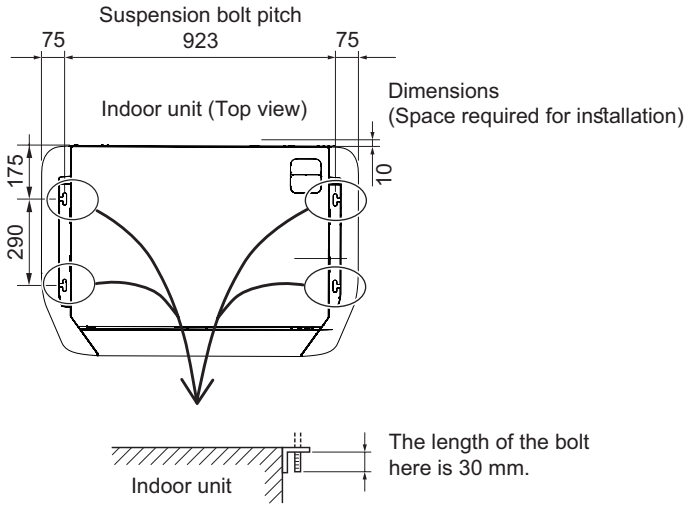
Side view



Top view



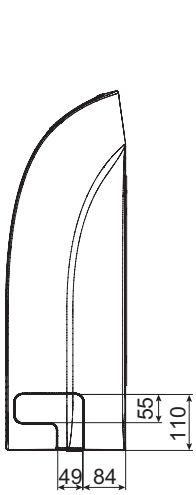
Rear view



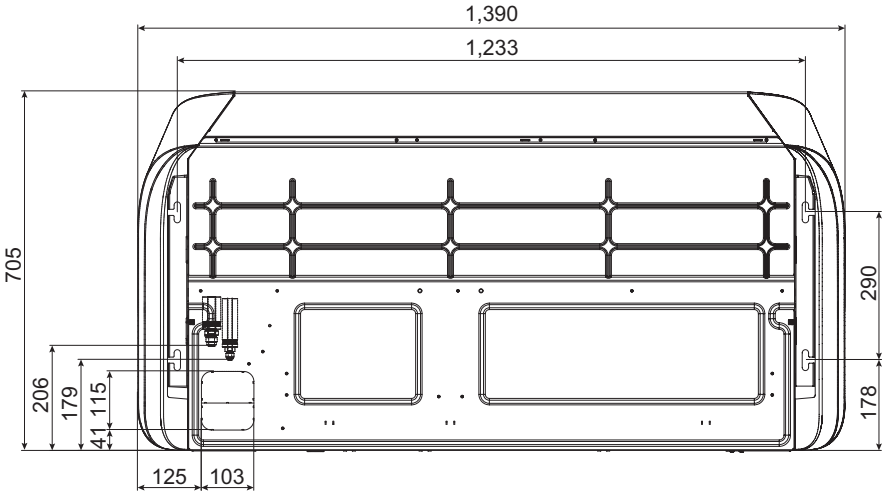
CEILING TYPE
ABYG18-45KRTA

2-2. Models: ABYG24KRTA and ABYG30KRTA

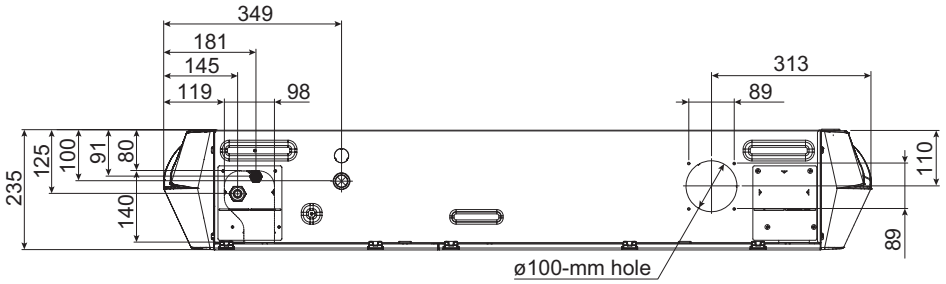
Unit: mm



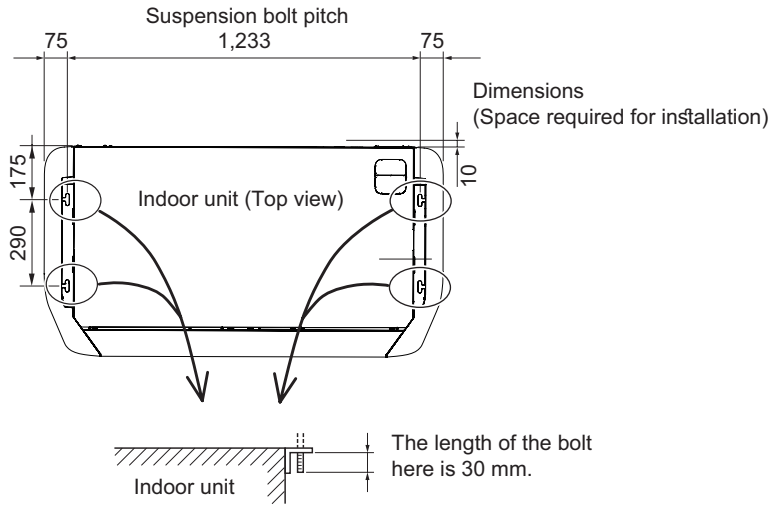
Side view



Top view



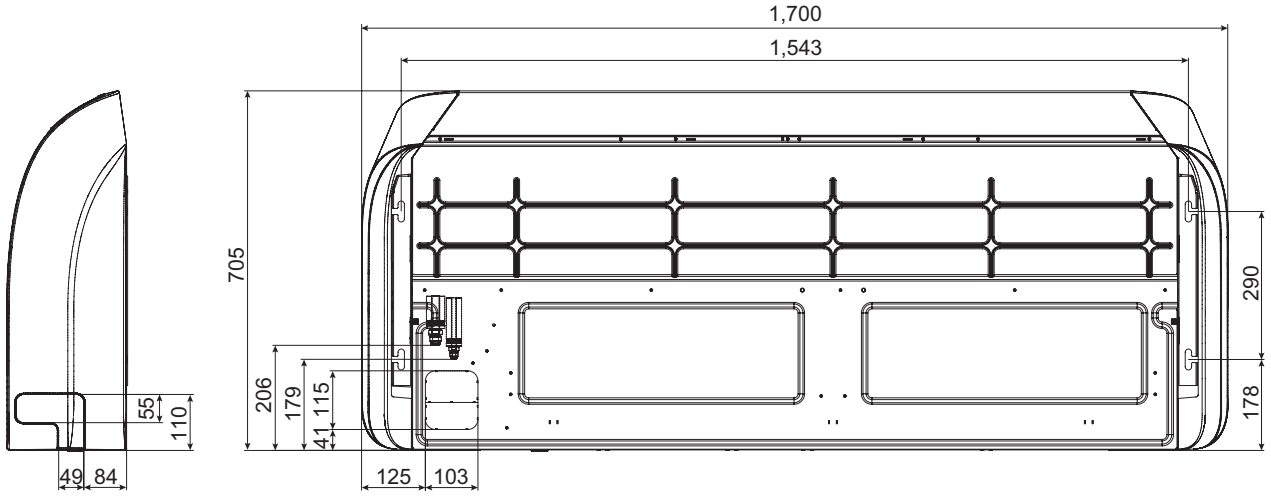
Rear view



CEILING TYPE
ABYG18-45KRTA

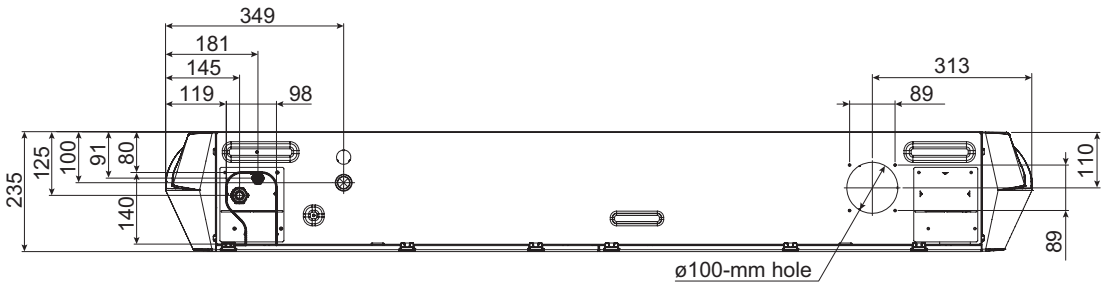
2-3. Models: ABYG36KRTA and ABYG45KRTA

Unit: mm

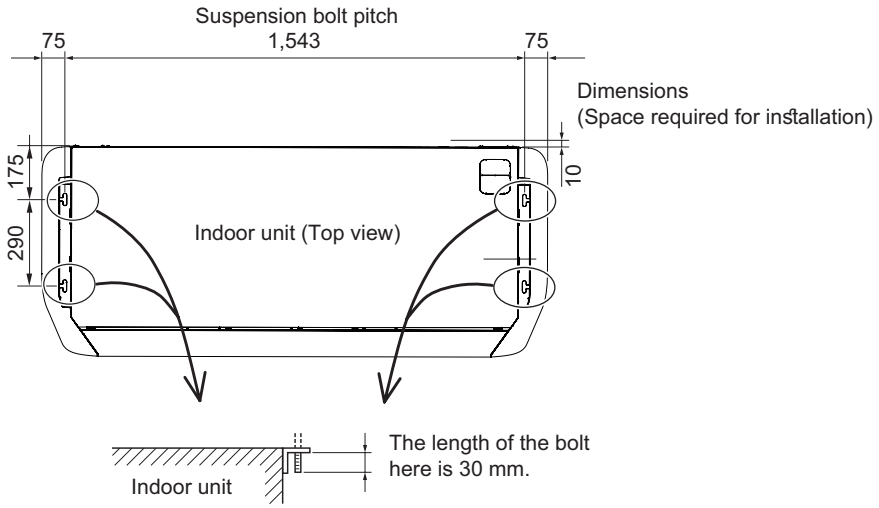


Side view

Top view



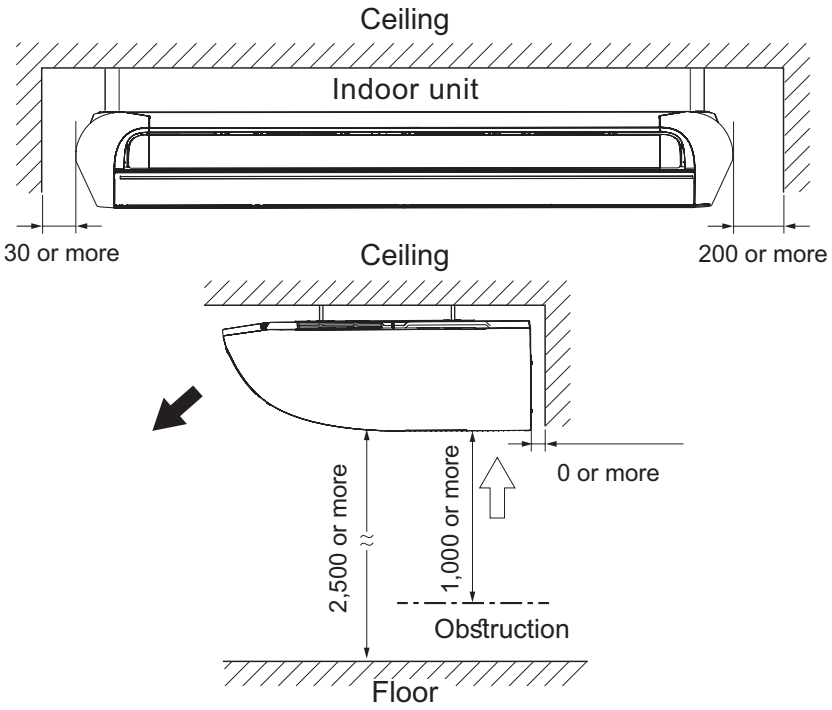
Rear view



CEILING TYPE
ABYG18-45KRTA

2-4. Installation space requirement

Unit: mm



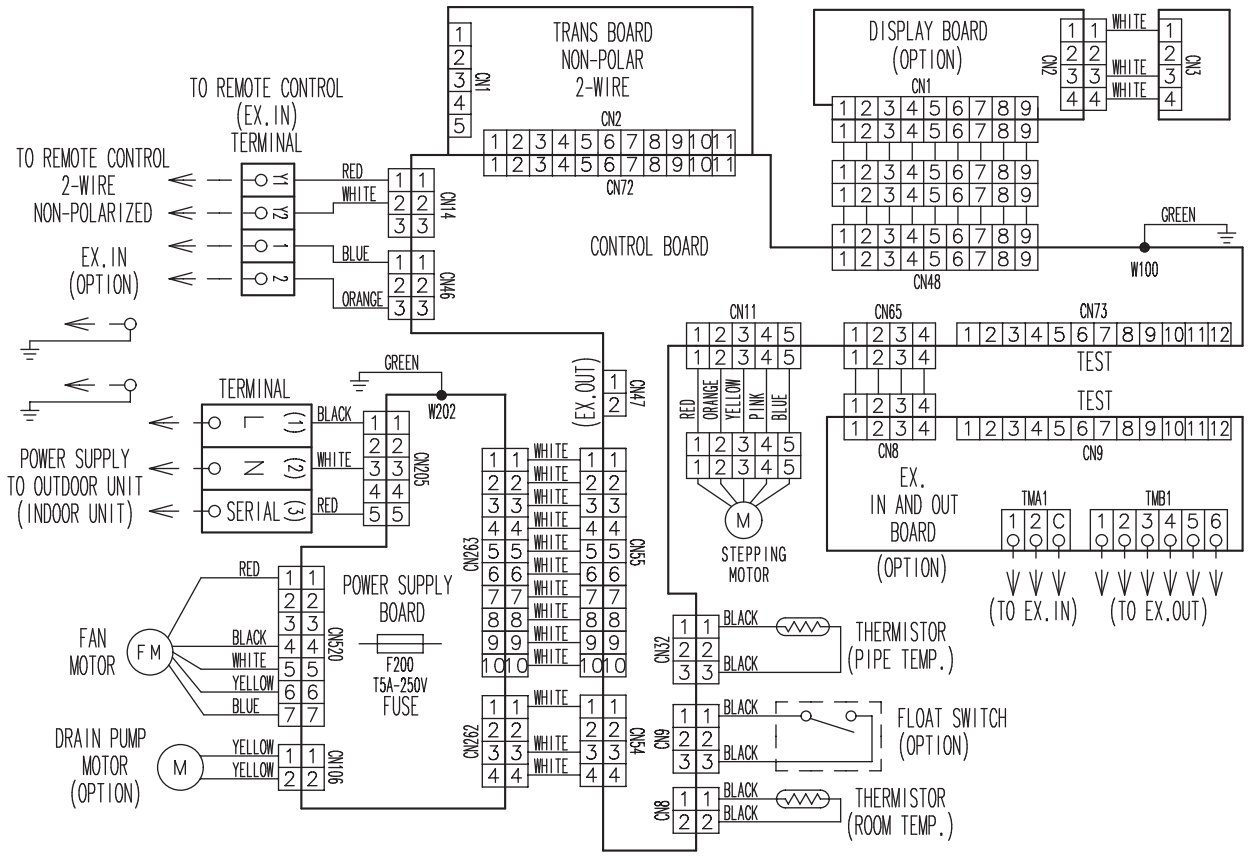
Required ceiling height varies according to the ceiling mode setting of function setting No. 20.

Ceiling height (m)		
Ceiling mode	Standard	High ceiling
18, 22, 24, and 30 models	2.7	3.5
36 and 45 models	3.5	4.3

CEILING TYPE
ABYG18-45KRTA

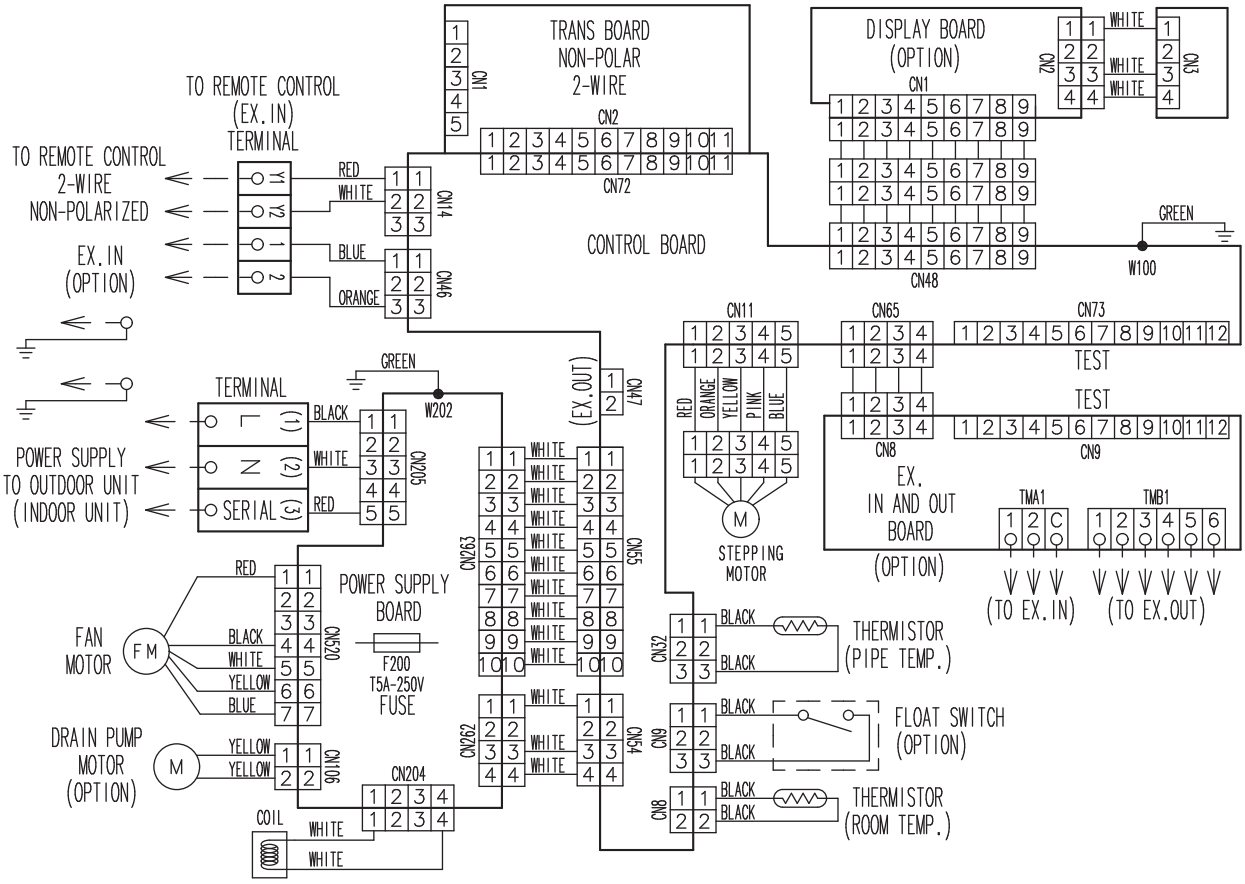
3. Wiring diagrams

3-1. Models: ABYG18KRTA, ABYG22KRTA, ABYG24KRTA, and ABYG30KRTA



CEILING TYPE
ABYG18-45KRTA

3-2. Models: ABYG36KRTA and ABYG45KRTA



CEILING TYPE
ABYG18-45KRTA

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: ABYG18KRTA

AFR	m^3/h	840

		Indoor temperature																				
	°CDB	18			21			23			25			27			29			32		
	°CWB	12			15			16			18			19			21			23		
Outdoor temperature	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kW			kW			kW			kW			kW			kW			kW		
	-15	4.17	3.31	0.47	4.65	3.33	0.48	4.80	3.62	0.48	5.12	3.63	0.49	5.28	3.92	0.49	5.60	3.90	0.49	5.91	4.16	0.50
	-10	4.20	3.33	0.41	4.68	3.35	0.41	4.84	3.64	0.42	5.16	3.66	0.42	5.32	3.95	0.42	5.64	3.93	0.43	5.96	4.19	0.43
	0	3.99	3.25	0.63	4.44	3.27	0.64	4.60	3.55	0.64	4.90	3.56	0.65	5.05	3.85	0.65	5.35	3.83	0.66	5.66	4.08	0.66
	5	3.91	3.23	0.67	4.36	3.24	0.68	4.50	3.53	0.68	4.80	3.54	0.69	4.95	3.82	0.70	5.25	3.81	0.70	5.54	4.05	0.71
	10	4.05	3.28	0.45	4.51	3.30	0.46	4.67	3.59	0.46	4.98	3.60	0.46	5.13	3.88	0.47	5.44	3.87	0.47	5.75	4.12	0.48
	15	3.92	3.24	0.56	4.36	3.26	0.57	4.51	3.54	0.57	4.81	3.56	0.58	4.96	3.84	0.58	5.26	3.82	0.59	5.56	4.07	0.59
	20	4.83	3.58	1.07	5.39	3.60	1.08	5.57	3.92	1.09	5.94	3.93	1.10	6.12	4.24	1.11	6.49	4.23	1.12	6.85	4.50	1.13
	25	4.59	3.44	1.22	5.11	3.46	1.24	5.29	3.76	1.25	5.64	3.77	1.26	5.81	4.07	1.27	6.16	4.06	1.28	6.51	4.32	1.29
	30	4.35	3.31	1.36	4.84	3.33	1.38	5.01	3.62	1.39	5.34	3.63	1.41	5.50	3.92	1.41	5.83	3.90	1.43	6.16	4.16	1.44
	35	4.11	3.17	1.50	4.58	3.18	1.52	4.73	3.46	1.53	5.04	3.47	1.54	5.20	3.75	1.55	5.51	3.74	1.57	5.82	3.98	1.58
	40	3.68	3.09	1.37	4.10	3.11	1.40	4.24	3.38	1.40	4.52	3.39	1.42	4.66	3.66	1.42	4.94	3.65	1.44	5.22	3.88	1.45
	46	2.58	2.31	1.02	2.87	2.48	1.04	2.97	2.66	1.04	3.16	2.71	1.05	3.26	2.92	1.06	3.46	2.91	1.07	3.65	3.10	1.08

■ Model: ABYG22KRTA

AFR	m^3/h	900

		Indoor temperature																				
	°CDB	18			21			23			25			27			29			32		
	°CWB	12			15			16			18			19			21			23		
Outdoor temperature	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kW			kW			kW			kW			kW			kW			kW		
	-15	4.99	3.69	0.60	5.56	3.72	0.61	5.75	4.04	0.61	6.13	4.05	0.62	6.32	4.38	0.62	6.70	4.36	0.63	7.08	4.64	0.64
	-10	5.03	3.70	0.51	5.61	3.72	0.51	5.80	4.05	0.52	6.18	4.06	0.52	6.37	4.39	0.52	6.75	4.37	0.53	7.13	4.65	0.54
	0	4.91	3.65	0.52	5.46	3.67	0.53	5.65	3.99	0.53	6.02	4.00	0.53	6.21	4.32	0.54	6.58	4.30	0.54	6.96	4.58	0.55
	5	4.77	3.60	0.65	5.32	3.62	0.66	5.50	3.93	0.67	5.86	3.95	0.67	6.04	4.26	0.68	6.40	4.25	0.68	6.76	4.52	0.69
	10	4.74	3.59	0.64	5.28	3.61	0.65	5.46	3.93	0.66	5.82	3.94	0.66	6.00	4.25	0.67	6.36	4.24	0.67	6.72	4.51	0.68
	15	4.59	3.52	0.77	5.11	3.55	0.78	5.29	3.85	0.79	5.64	3.87	0.79	5.81	4.18	0.80	6.16	4.16	0.81	6.51	4.43	0.81
	20	5.77	4.03	1.37	6.43	4.05	1.39	6.65	4.40	1.40	7.09	4.42	1.41	7.31	4.77	1.42	7.75	4.75	1.44	8.19	5.06	1.45
	25	5.43	3.90	1.52	6.05	3.92	1.54	6.25	4.26	1.55	6.66	4.27	1.57	6.87	4.62	1.57	7.28	4.60	1.59	7.69	4.90	1.61
	30	5.08	3.77	1.67	5.66	3.79	1.69	5.85	4.12	1.70	6.24	4.13	1.72	6.43	4.46	1.73	6.82	4.45	1.75	7.20	4.74	1.76
	35	4.74	3.64	1.80	5.28	3.66	1.83	5.46	3.98	1.84	5.82	3.99	1.86	6.00	4.31	1.87	6.36	4.29	1.89	6.72	4.57	1.91
	40	4.50	3.52	1.95	5.01	3.55	1.98	5.18	3.85	1.99	5.52	3.87	2.01	5.69	4.18	2.02	6.03	4.16	2.04	6.37	4.43	2.06
	46	3.69	3.12	1.69	4.11	3.14	1.71	4.25	3.41	1.72	4.53	3.42	1.74	4.67	3.70	1.75	4.95	3.68	1.76	5.23	3.92	1.78

■ Model: ABYG24KRTA

AFR	m^3/h	1,230

		Indoor temperature																				
	°CDB	18			21			23			25			27			29			32		
	°CWB	12			15			16			18			19			21			23		
Outdoor temperature	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kW			kW			kW			kW			kW			kW			kW		
	-15	5.66	4.46	0.69	6.30	4.48	0.70	6.52	4.87	0.70	6.95	4.89	0.71	7.16	5.28	0.71	7.59	5.26	0.72	8.02	5.60	0.73
	-10	5.70	4.47	0.58	6.35	4.49	0.59	6.57	4.88	0.59	7.00	4.90	0.60	7.22	5.29	0.60	7.65	5.27	0.61	8.09	5.62	0.61
	0	5.56	4.40	0.59	6.19	4.42	0.60	6.40	4.81	0.60	6.83	4.83	0.61	7.04	5.21	0.61	7.46	5.19	0.62	7.88	5.53	0.63
	5	5.41	4.34	0.75	6.02	4.37	0.76	6.23	4.75	0.76	6.64	4.76	0.77	6.85	5.14	0.78	7.26	5.12	0.78	7.67	5.46	0.79
	10	5.37	4.33	0.74	5.98	4.36	0.75	6.19	4.74	0.75	6.60	4.75	0.76	6.80	5.13	0.76	7.21	5.11	0.77	7.62	5.44	0.78
	15	5.20	4.25	0.88	5.79	4.28	0.90	5.99	4.65	0.90	6.39	4.67	0.91	6.58	5.04	0.91	6.98	5.02	0.92	7.37	5.35	0.93
	20	6.54	4.86	1.57	7.29	4.89	1.59	7.54	5.31	1.60	8.04	5.33	1.62	8.28	5.75	1.63	8.78	5.73	1.64	9.28	6.11	1.66
	25	6.15	4.70	1.74	6.85	4.73	1.77	7.09	5.14	1.78	7.55	5.16	1.79	7.79	5.57	1.80	8.25	5.55	1.82	8.72	5.91	1.84
	30	5.76	4.54	1.91	6.41	4.57	1.94	6.63	4.97	1.95	7.07	4.99	1.97	7.29	5.38	1.98	7.72	5.36	2.00	8.16	5.71	2.02
	35	5.37	4.39	2.07	5.98	4.41	2.10	6.19	4.80	2.11	6.60	4.82	2.13	6.80	5.20	2.14	7.21	5.18	2.16	7.62	5.52	2.18
	40	5.09	4.25	2.24	5.67	4.28	2.27	5.87	4.65	2.28	6.26	4.67	2.30	6.45	5.04	2.32	6.84	5.02	2.34	7.22	5.35	2.36
	46	4.18	3.76	1.93	4.66	3.79	1.96	4.82	4.12	1.97	5.13	4.13	1.99	5.29	4.46	2.00	5.61	4.44	2.02	5.93	4.73	2.04

CEILING TYPE
ABYG18-45KRTA

■ Model: ABYG30KRTA

AFR	m^3/h	1,400

		Indoor temperature																				
	°CDB	18			21			23			25			27			29			32		
	°CWB	12			15			16			18			19			21			23		
Outdoor temperature	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kW			kW			kW			kW			kW			kW			kW		
	-15	6.18	4.25	1.12	6.40	4.26	1.15	6.54	4.27	1.17	6.91	4.47	1.18	7.27	4.68	1.21	7.68	4.83	1.23	8.29	5.05	1.25
	-10	6.05	4.19	1.37	6.26	4.19	1.40	6.41	4.20	1.42	6.76	4.40	1.44	7.12	4.60	1.47	7.52	4.76	1.49	8.12	4.97	1.52
	0	5.79	4.05	1.85	6.00	4.06	1.89	6.13	4.07	1.92	6.47	4.26	1.95	6.82	4.46	1.99	7.20	4.60	2.01	7.77	4.81	2.05
	5	5.74	4.03	1.90	5.95	4.04	1.94	6.08	4.05	1.98	6.42	4.25	2.01	6.76	4.44	2.04	7.14	4.58	2.07	7.71	4.79	2.12
	10	5.69	4.01	1.95	5.89	4.03	2.01	6.03	4.04	2.03	6.36	4.23	2.07	6.70	4.42	2.11	7.07	4.57	2.14	7.64	4.77	2.18
	15	5.60	3.95	2.02	5.79	3.96	2.06	5.93	3.97	2.10	6.26	4.16	2.13	6.59	4.35	2.16	6.96	4.49	2.19	7.51	4.70	2.25
	20	8.44	5.48	2.24	8.74	5.49	2.29	8.94	5.50	2.32	9.44	5.77	2.37	9.93	6.03	2.40	10.49	6.22	2.44	11.33	6.51	2.49
	25	8.04	5.34	2.31	8.32	5.35	2.37	8.51	5.36	2.40	8.98	5.63	2.44	9.46	5.88	2.49	9.99	6.07	2.52	10.78	6.35	2.57
	30	7.63	5.21	2.39	7.90	5.22	2.44	8.08	5.23	2.49	8.53	5.48	2.53	8.98	5.73	2.56	9.48	5.92	2.61	10.24	6.19	2.66
	35	7.22	5.07	2.47	7.48	5.08	2.52	7.65	5.09	2.56	8.07	5.34	2.61	8.50	5.58	2.65	8.98	5.76	2.69	9.69	6.03	2.75
	40	6.76	4.94	2.57	7.00	4.95	2.64	7.16	4.95	2.68	7.56	5.20	2.73	7.95	5.44	2.77	8.40	5.61	2.81	9.07	5.87	2.87
	46	6.20	4.77	2.72	6.42	4.78	2.77	6.57	4.79	2.81	6.93	5.03	2.87	7.30	5.25	2.91	7.71	5.43	2.95	8.32	5.67	3.02

■ Model: ABYG36KRTA

AFR	m^3/h	1,850

		Indoor temperature																				
	°CDB	18			21			23			25			27			29			32		
	°CWB	12			15			16			18			19			21			23		
Outdoor temperature	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kW			kW			kW			kW			kW			kW			kW		
	-15	6.91	6.25	1.05	7.15	6.27	1.08	7.31	6.29	1.10	7.72	6.59	1.11	8.13	6.89	1.13	8.58	7.12	1.15	9.27	7.45	1.17
	-10	6.76	6.18	1.28	7.00	6.20	1.31	7.16	6.21	1.33	7.56	6.51	1.35	7.96	6.81	1.37	8.40	7.03	1.39	9.07	7.36	1.42
	0	6.47	6.03	1.73	6.70	6.05	1.77	6.86	6.07	1.80	7.24	6.36	1.83	7.62	6.65	1.86	8.05	6.87	1.88	8.69	7.19	1.92
	5	6.42	6.00	1.78	6.64	6.02	1.82	6.80	6.04	1.85	7.17	6.33	1.88	7.55	6.62	1.91	7.98	6.83	1.94	8.61	7.15	1.98
	10	6.36	5.97	1.83	6.59	6.00	1.88	6.74	6.01	1.90	7.11	6.29	1.94	7.49	6.58	1.97	7.91	6.80	2.00	8.54	7.12	2.04
	15	6.26	5.87	1.89	6.48	5.89	1.93	6.62	5.92	1.96	6.99	6.19	1.99	7.36	6.48	2.02	7.77	6.68	2.05	8.39	6.99	2.11
	20	9.44	8.00	2.50	9.77	8.04	2.56	9.99	8.06	2.59	10.55	8.44	2.64	11.10	8.83	2.69	11.73	9.12	2.73	12.66	9.54	2.79
	25	8.98	7.71	2.58	9.30	7.73	2.64	9.51	7.75	2.69	10.04	8.12	2.74	10.57	8.50	2.78	11.16	8.77	2.82	12.05	9.17	2.88
	30	8.53	7.40	2.67	8.83	7.43	2.74	9.03	7.44	2.78	9.53	7.80	2.82	10.03	8.15	2.87	10.60	8.42	2.91	11.44	8.82	2.97
	35	8.07	7.10	2.76	8.36	7.12	2.82	8.55	7.14	2.86	9.02	7.48	2.91	9.50	7.82	2.96	10.03	8.07	3.00	10.83	8.45	3.07
	40	7.55	6.79	2.88	7.82	6.81	2.95	8.00	6.83	2.99	8.44	7.15	3.04	8.89	7.49	3.09	9.39	7.73	3.14	10.14	8.08	3.20
	46	6.93	6.42	3.03	7.18	6.44	3.10	7.34	6.47	3.14	7.75	6.77	3.20	8.16	7.07	3.25	8.61	7.30	3.30	9.30	7.65	3.37

■ Model: ABYG45KRTA

AFR	m^3/h	1,900

		Indoor temperature																				
	°CDB	18			21			23			25			27			29			32		
	°CWB	12			15			16			18			19			21			23		
Outdoor temperature	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
		kW			kW			kW			kW			kW			kW			kW		
	-15	8.56	6.43	1.98	9.29	6.76	2.02	9.78	6.97	2.05	10.26	7.27	2.08	10.75	7.56	2.10	11.20	7.70	2.10	11.87	7.91	2.10
	-10	8.62	6.45	2.00	9.35	6.78	2.05	9.84	6.99	2.07	10.33	7.28	2.10	10.82	7.58	2.14	11.27	7.72	2.14	11.94	7.93	2.14
	0	8.73	6.48	2.05	9.47	6.81	2.09	9.96	7.02	2.13	10.46	7.32	2.15	10.95	7.62	2.19	11.41	7.75	2.19	12.09	7.97	2.19
	5	8.57	6.49	2.10	9.30	6.82	2.15	9.78	7.03	2.17	10.27	7.33	2.21	10.76	7.63	2.24	11.20	7.77	2.24	11.88	7.98	2.24
	10	8.42	6.50	2.15	9.13	6.83	2.20	9.61	7.04	2.23	10.08	7.34	2.27	10.56	7.64	2.29	11.00	7.78	2.29	11.66	7.99	2.29
	15	8.27	6.40	2.21	8.98	6.72	2.27	9.45	6.93	2.29	9.91	7.22	2.33	10.38	7.51	2.36	10.82	7.66	2.36	11.47	7.86	2.36
	20	11.05	8.14	3.59	11.99	8.54	3.67	12.61	8.81	3.73	13.24	9.18	3.78	13.86	9.55	3.83	14.44	9.73	3.83	15.31	9.99	3.83
	25	10.58	7.93	3.72	11.48	8.32	3.80	12.08	8.59	3.85	12.68	8.95	3.90	13.28	9.31	3.96	13.83	9.49	3.96	14.66	9.75	3.96
	30	10.11	7.73	3.83	10.97	8.11	3.92	11.54	8.37	3.97	12.12	8.72	4.03	12.69	9.07	4.09	13.22	9.24	4.09	14.01	9.49	4.09
	35	9.64	7.52	3.95	10.46	7.89	4.04	11.01	8.15	4.10	11.55	8.49	4.16	12.10	8.83	4.22	12.61	9.00	4.22	13.36	9.24	4.22
	40	8.22	6.87	3.57	8.92	7.23	3.65	9.38	7.45	3.69	9.85	7.76	3.75	10.32	8.08	3.80	10.75	8.23	3.80	11.39	8.46	3.80
	46	6.51	6.11	3.10	7.07	6.41	3.16	7.44	6.62	3.20	7.80	6.89	3.25	8.17	7.18	3.30	8.51	7.30	3.30	9.03	7.51	3.30

CEILING TYPE
ABYG18-45KRTA

4-2. Heating capacity

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

■ Model: ABYG18KRTA

AFR	m^3/h	840

			Indoor temperature									
		°CDB	16		18		20		22		24	
	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kW		kW		kW		kW		kW	
Outdoor temperature	-15	-16	5.05	1.77	4.93	1.81	4.81	1.85	4.69	1.88	4.57	1.92
	-10	-11	5.69	1.89	5.56	1.93	5.42	1.96	5.28	2.00	5.15	2.04
	-5	-7	6.33	2.00	6.18	2.04	6.03	2.08	5.88	2.12	5.73	2.17
	0	-2	6.97	2.12	6.81	2.17	6.64	2.21	6.47	2.25	6.31	2.30
	5	3	7.61	2.22	7.43	2.27	7.25	2.32	7.07	2.36	6.89	2.41
	7	6	7.88	2.27	7.69	2.31	7.50	2.36	7.31	2.41	7.13	2.45
	10	8	8.51	2.36	8.30	2.41	8.10	2.46	7.90	2.51	7.70	2.55
	15	10	8.46	2.08	8.26	2.12	8.06	2.17	7.86	2.21	7.66	2.24
	20	15	7.96	1.64	7.77	1.67	7.58	1.71	7.39	1.74	7.20	1.77
	24	17	8.40	1.63	8.20	1.66	8.00	1.70	7.80	1.73	7.60	1.76

■ Model: ABYG22KRTA

AFR	m^3/h	900

			Indoor temperature									
		°CDB	16		18		20		22		24	
	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kW		kW		kW		kW		kW	
Outdoor temperature	-15	-16	5.60	2.13	5.46	2.17	5.33	2.22	5.20	2.26	5.06	2.30
	-10	-11	6.14	2.21	6.00	2.26	5.85	2.31	5.70	2.35	5.56	2.40
	-5	-7	6.70	2.29	6.54	2.34	6.38	2.39	6.22	2.44	6.06	2.48
	0	-2	7.26	2.36	7.08	2.41	6.91	2.46	6.74	2.51	6.56	2.56
	5	3	7.81	2.44	7.63	2.49	7.44	2.54	7.25	2.59	7.07	2.64
	7	6	8.40	2.44	8.20	2.49	8.00	2.54	7.80	2.59	7.60	2.64
	10	8	8.05	2.30	7.86	2.35	7.67	2.40	7.48	2.45	7.29	2.49
	15	10	7.49	2.08	7.31	2.12	7.13	2.17	6.95	2.21	6.77	2.24
	20	15	7.04	1.77	6.87	1.80	6.70	1.84	6.53	1.88	6.37	1.91
	24	17	7.32	1.75	7.14	1.79	6.97	1.82	6.80	1.86	6.62	1.89

■ Model: ABYG24KRTA

AFR	m^3/h	1,230

			Indoor temperature									
		°CDB	16		18		20		22		24	
	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kW		kW		kW		kW		kW	
Outdoor temperature	-15	-16	6.37	2.12	6.21	2.16	6.06	2.21	5.91	2.25	5.76	2.30
	-10	-11	6.99	2.21	6.82	2.25	6.65	2.30	6.49	2.34	6.32	2.39
	-5	-7	7.62	2.28	7.44	2.33	7.26	2.38	7.08	2.43	6.89	2.47
	0	-2	8.25	2.35	8.06	2.40	7.86	2.45	7.66	2.50	7.47	2.55
	5	3	8.89	2.43	8.67	2.48	8.46	2.53	8.25	2.58	8.04	2.63
	7	6	9.56	2.43	9.33	2.48	9.10	2.53	8.87	2.58	8.65	2.63
	10	8	9.16	2.29	8.94	2.34	8.72	2.39	8.51	2.44	8.29	2.48
	15	10	8.52	2.07	8.31	2.11	8.11	2.16	7.91	2.20	7.70	2.23
	20	15	8.00	1.76	7.81	1.80	7.62	1.83	7.43	1.87	7.24	1.90
	24	17	8.32	1.74	8.13	1.78	7.93	1.81	7.73	1.85	7.53	1.88

CEILING TYPE
ABYG18-45KRTA

■ Model: ABYG30KRTA

AFR	m^3/h	1,400

			Indoor temperature									
		°CDB	16		18		20		22		24	
	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kW		kW		kW		kW		kW	
Outdoor temperature	-15	-16	7.10	2.80	7.07	2.81	7.04	2.81	6.86	2.81	6.40	2.82
	-10	-11	8.12	3.03	8.09	3.03	8.05	3.04	7.84	3.04	7.33	3.05
	-5	-7	9.14	3.26	9.10	3.26	9.07	3.26	8.83	3.27	8.25	3.28
	0	-2	9.71	3.50	9.67	3.51	9.63	3.51	9.38	3.52	8.76	3.54
	5	3	10.84	3.56	10.80	3.57	10.75	3.57	10.47	3.57	9.78	3.59
	7	6	11.30	3.58	11.25	3.59	11.20	3.59	10.91	3.59	10.19	3.61
	10	8	11.64	3.58	11.59	3.59	11.54	3.59	11.25	3.59	10.50	3.61
	15	10	12.11	3.58	12.06	3.59	12.01	3.59	11.70	3.59	10.93	3.61
	20	15	12.90	3.59	12.84	3.59	12.79	3.60	12.46	3.60	11.64	3.61
	24	17	13.53	3.60	13.47	3.60	13.41	3.61	13.07	3.61	12.20	3.62

■ Model: ABYG36KRTA

AFR	m^3/h	1,800

			Indoor temperature									
		°CDB	16		18		20		22		24	
	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kW		kW		kW		kW		kW	
Outdoor temperature	-15	-16	8.05	2.95	8.01	2.96	7.98	2.96	7.77	2.96	7.26	2.97
	-10	-11	9.21	3.19	9.17	3.20	9.13	3.20	8.89	3.20	8.31	3.22
	-5	-7	10.37	3.43	10.32	3.44	10.28	3.44	10.02	3.45	9.35	3.46
	0	-2	11.01	3.71	10.97	3.72	10.92	3.72	10.64	3.73	9.94	3.74
	5	3	12.30	3.77	12.24	3.77	12.19	3.78	11.88	3.78	11.09	3.79
	7	6	12.81	3.79	12.75	3.80	12.70	3.80	12.37	3.80	11.56	3.82
	10	8	13.20	3.79	13.15	3.80	13.09	3.80	12.75	3.80	11.91	3.82
	15	10	13.73	3.79	13.68	3.80	13.62	3.80	13.27	3.80	12.39	3.82
	20	15	14.63	3.80	14.56	3.81	14.50	3.81	14.13	3.81	13.19	3.83
	24	17	15.34	3.81	15.27	3.81	15.21	3.82	14.82	3.82	13.84	3.83

■ Model: ABYG45KRTA

AFR	m^3/h	1,850

			Indoor temperature									
		°CDB	16		18		20		22		24	
	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kW		kW		kW		kW		kW	
Outdoor temperature	-15	-16	12.04	4.74	11.75	4.76	11.46	4.78	11.19	4.78	10.53	4.78
	-10	-11	13.37	4.93	13.05	4.97	12.73	4.99	12.43	4.99	11.69	4.99
	-5	-7	14.70	5.14	14.35	5.16	14.00	5.19	13.67	5.19	12.86	5.19
	0	-2	15.48	5.34	15.11	5.36	14.74	5.39	14.40	5.39	13.54	5.39
	5	3	16.57	4.67	16.18	4.69	15.78	4.72	15.42	4.72	14.50	4.72
	7	6	17.01	4.67	16.61	4.69	16.20	4.71	15.82	4.71	14.88	4.71
	10	8	17.72	4.66	17.29	4.68	16.87	4.70	16.48	4.70	15.50	4.70
	15	10	18.89	4.64	18.44	4.66	17.99	4.69	17.57	4.69	16.53	4.69
	20	15	20.07	4.63	19.59	4.65	19.11	4.67	18.66	4.67	17.55	4.67
	24	17	21.01	4.60	20.50	4.64	20.00	4.66	19.54	4.66	18.38	4.66

CEILING TYPE
ABYG18-45KRTA

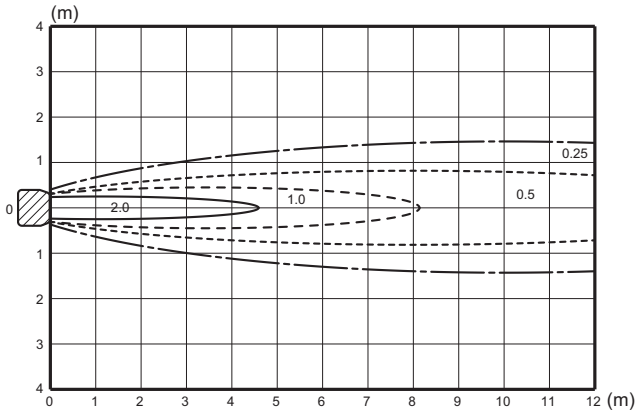
5. Fan performance

5-1. Air velocity and temperature distributions

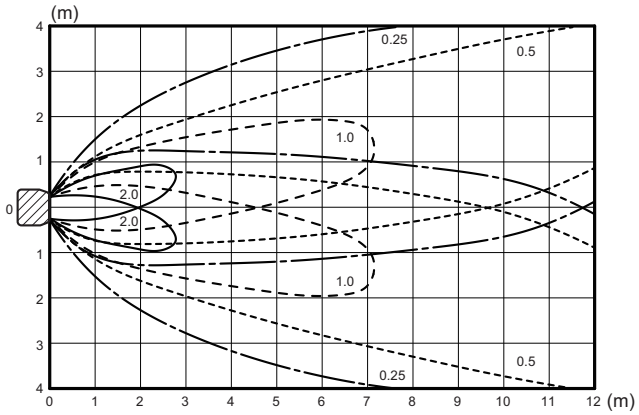
■ Model: ABYG18KRTA

Measuring conditions	Fan speed	Operation mode
	HIGH	FAN

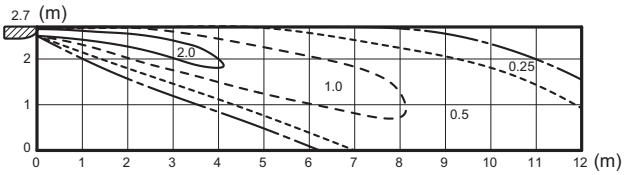
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



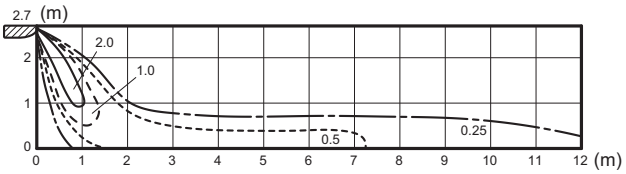
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Left & Right



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



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

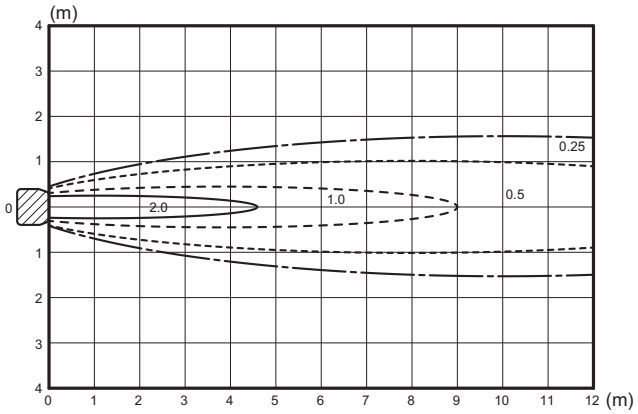


CEILING TYPE
ABYG18-45KRTA

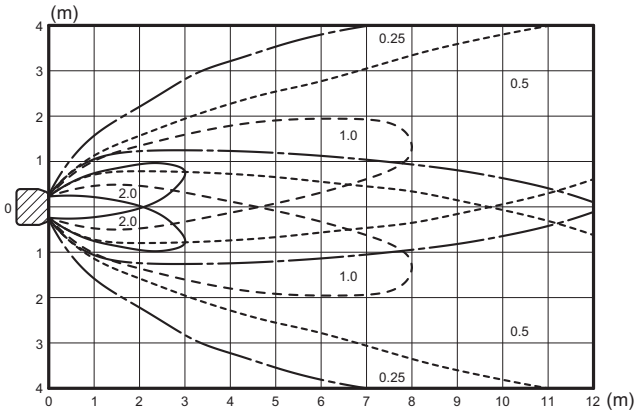
■ Model: ABYG22KRTA

Measuring conditions	Fan speed	Operation mode
	HIGH	FAN

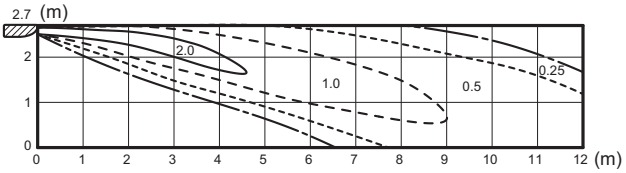
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



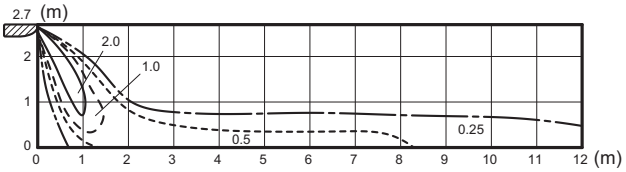
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Left & Right



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



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

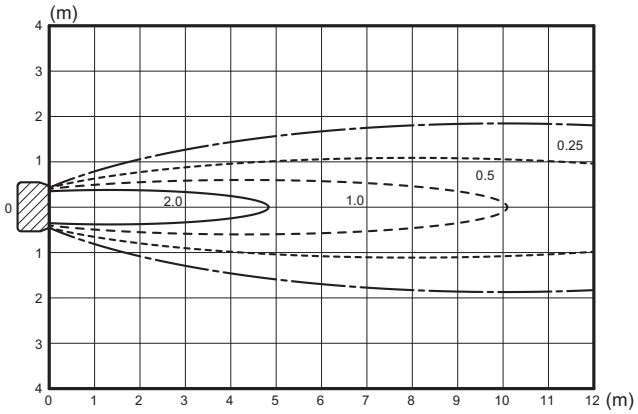


CEILING TYPE
ABYG18-45KRTA

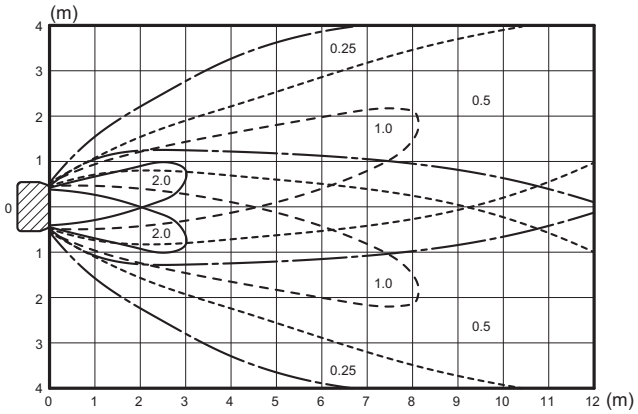
■ Model: ABYG24KRTA

Measuring conditions	Fan speed	Operation mode
	HIGH	FAN

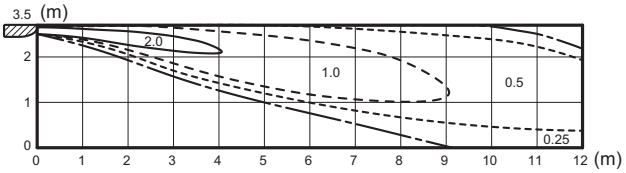
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



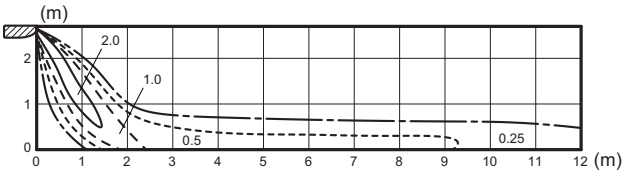
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Left & Right



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



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

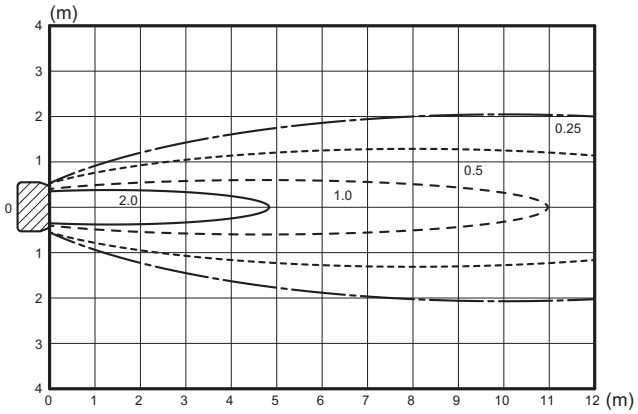


CEILING TYPE
ABYG18-45KRTA

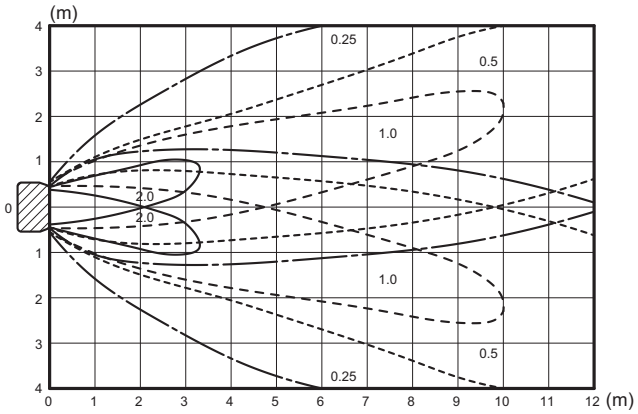
■ Model: ABYG30KRTA

Measuring conditions	Fan speed	Operation mode
	HIGH	FAN

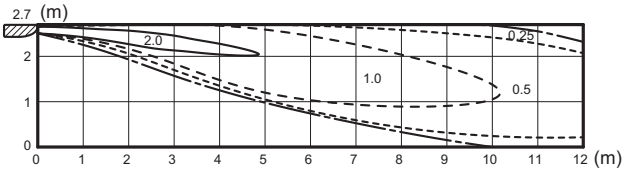
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



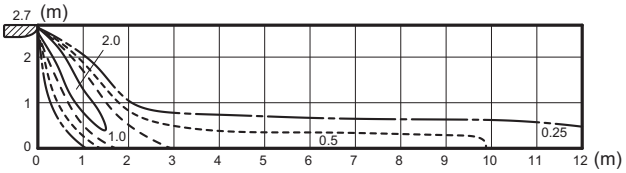
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Left & Right



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



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

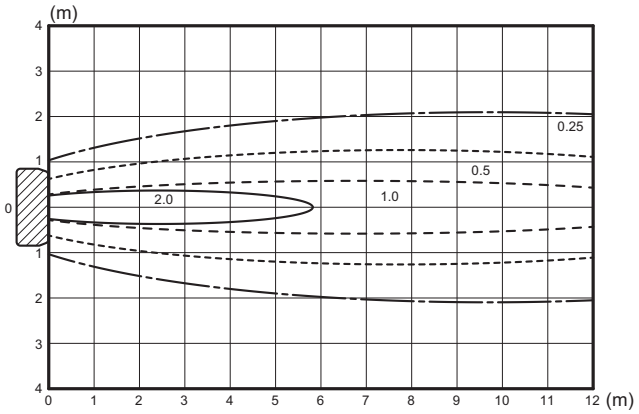


CEILING TYPE
ABYG18-45KRTA

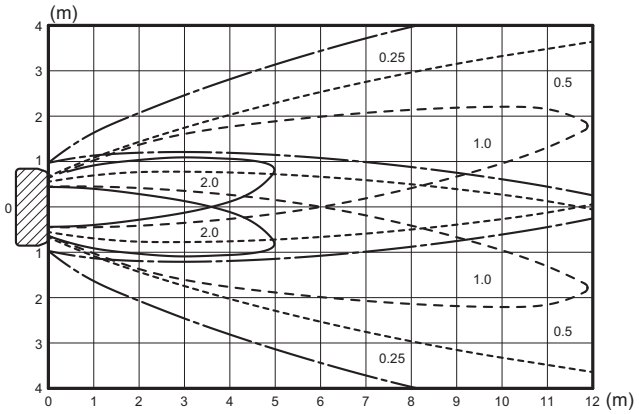
■ Model: ABYG36KRTA

Measuring conditions	Fan speed	Operation mode
	HIGH	FAN

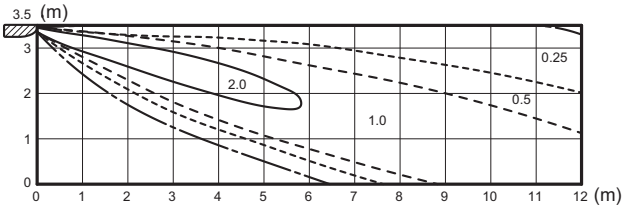
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



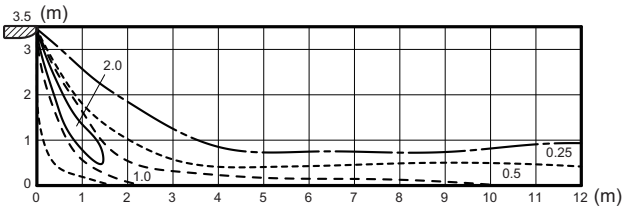
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Left & Right



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



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

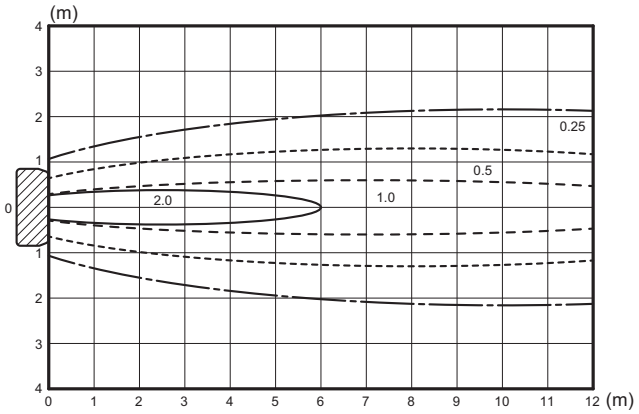


CEILING TYPE
ABYG18-45KRTA

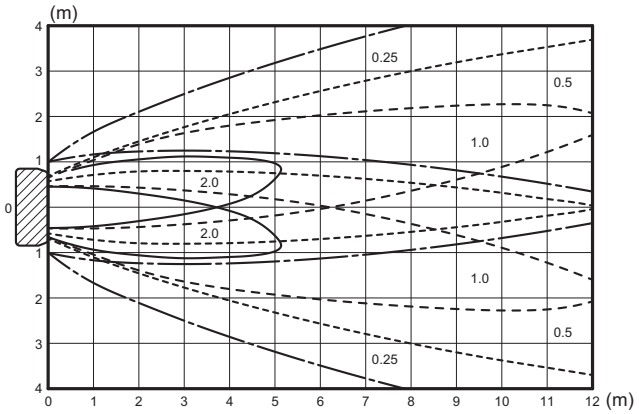
■ Model: ABYG45KRTA

Measuring conditions	Fan speed	Operation mode
	HIGH	FAN

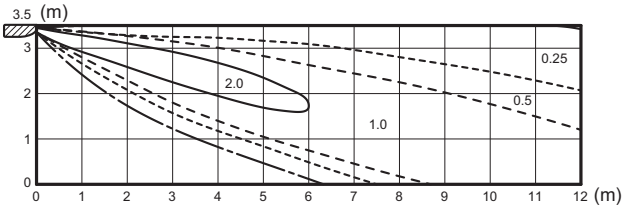
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Center



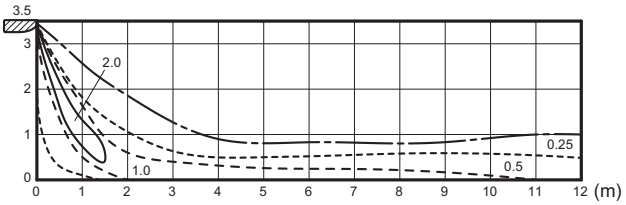
Top view
Vertical airflow direction louver: Up
Horizontal airflow direction louver: Left & Right



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



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



CEILING TYPE
ABYG18-45KRTA

5-2. Airflow

Conversion factor:

- 1 m^3/h = 0.2778 l/s = 0.5886 CFM
- 3.6 m^3/h = 1 l/s
- 1.699 m^3/h = 1 CFM

■ Model: ABYG18KRTA

● Cooling

Fan speed	Airflow	
HIGH	m^3/h	840
	l/s	233
	CFM	494
MED	m^3/h	790
	l/s	219
	CFM	465
LOW	m^3/h	710
	l/s	197
	CFM	418
QUIET	m^3/h	650
	l/s	181
	CFM	383

● Heating

Fan speed	Airflow	
HIGH	m^3/h	840
	l/s	233
	CFM	494
MED	m^3/h	790
	l/s	219
	CFM	465
LOW	m^3/h	710
	l/s	197
	CFM	418
QUIET	m^3/h	650
	l/s	181
	CFM	383

CEILING TYPE
ABYG18-45KRTA

■ Model: ABYG22KRTA

● Cooling

Fan speed	Airflow	
HIGH	m^3/h	900
	l/s	250
	CFM	530
MED	m^3/h	790
	l/s	219
	CFM	465
LOW	m^3/h	710
	l/s	197
	CFM	418
QUIET	m^3/h	650
	l/s	181
	CFM	383

● Heating

Fan speed	Airflow	
HIGH	m^3/h	900
	l/s	250
	CFM	530
MED	m^3/h	790
	l/s	219
	CFM	465
LOW	m^3/h	710
	l/s	197
	CFM	418
QUIET	m^3/h	650
	l/s	181
	CFM	383

CEILING TYPE
ABYG18-45KRTA

■ Model: ABYG24KRTA

● Cooling

Fan speed	Airflow	
HIGH	m^3/h	1,230
	l/s	342
	CFM	724
MED	m^3/h	990
	l/s	275
	CFM	583
LOW	m^3/h	860
	l/s	239
	CFM	506
QUIET	m^3/h	700
	l/s	194
	CFM	412

● Heating

Fan speed	Airflow	
HIGH	m^3/h	1,230
	l/s	342
	CFM	724
MED	m^3/h	990
	l/s	275
	CFM	583
LOW	m^3/h	860
	l/s	239
	CFM	506
QUIET	m^3/h	700
	l/s	194
	CFM	412

CEILING TYPE
ABYG18-45KRTA

■ Model: ABYG30KRTA

● Cooling

Fan speed	Airflow	
HIGH	m^3/h	1,400
	l/s	389
	CFM	824
MED	m^3/h	1,120
	l/s	311
	CFM	659
LOW	m^3/h	980
	l/s	272
	CFM	577
QUIET	m^3/h	800
	l/s	222
	CFM	471

● Heating

Fan speed	Airflow	
HIGH	m^3/h	1,400
	l/s	389
	CFM	824
MED	m^3/h	1,120
	l/s	311
	CFM	659
LOW	m^3/h	980
	l/s	272
	CFM	577
QUIET	m^3/h	800
	l/s	222
	CFM	471

CEILING TYPE
ABYG18-45KRTA

■ Model: ABYG36KRTA

● Cooling

Fan speed	Airflow	
HIGH	m^3/h	1,850
	l/s	514
	CFM	1,089
MED	m^3/h	1,470
	l/s	408
	CFM	865
LOW	m^3/h	1,300
	l/s	361
	CFM	765
QUIET	m^3/h	1,050
	l/s	292
	CFM	618

● Heating

Fan speed	Airflow	
HIGH	m^3/h	1,800
	l/s	500
	CFM	1,059
MED	m^3/h	1,470
	l/s	408
	CFM	865
LOW	m^3/h	1,300
	l/s	361
	CFM	765
QUIET	m^3/h	1,050
	l/s	292
	CFM	618

CEILING TYPE
ABYG18-45KRTA

■ Model: ABYG45KRTA

● Cooling

Fan speed	Airflow	
HIGH	m^3/h	1,900
	l/s	528
	CFM	1,118
MED	m^3/h	1,510
	l/s	419
	CFM	889
LOW	m^3/h	1,380
	l/s	383
	CFM	812
QUIET	m^3/h	1,130
	l/s	314
	CFM	665

● Heating

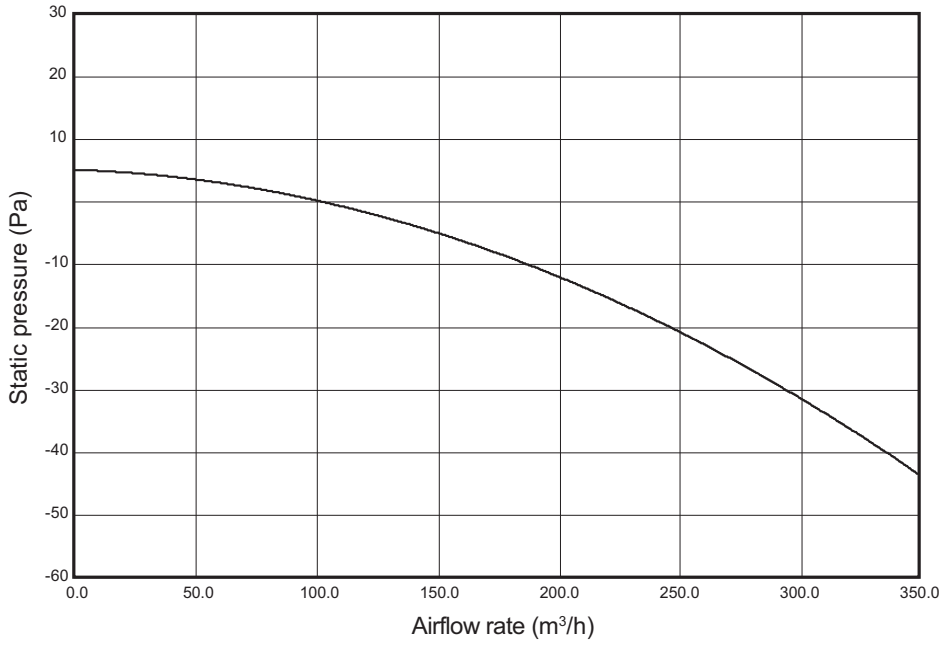
Fan speed	Airflow	
HIGH	m^3/h	1,850
	l/s	514
	CFM	1,089
MED	m^3/h	1,510
	l/s	419
	CFM	889
LOW	m^3/h	1,380
	l/s	383
	CFM	812
QUIET	m^3/h	1,130
	l/s	314
	CFM	665

CEILING TYPE
ABYG18-45KRTA

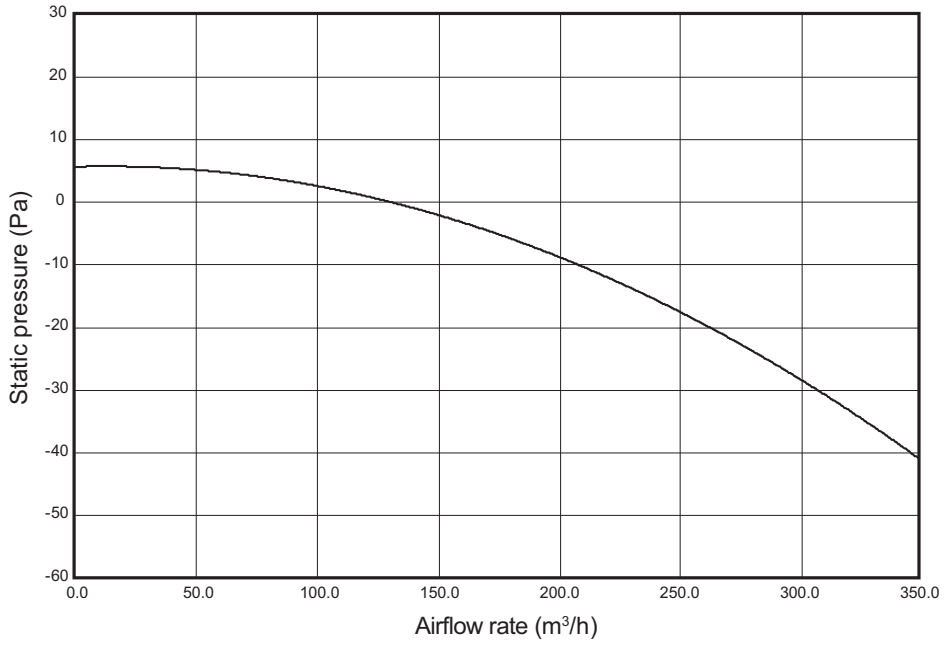
5-3. Fresh air characteristics

■ Airflow volume - Static pressure of Fresh air intake characteristics

● Models: ABYG18KRTA and ABYG22KRTA

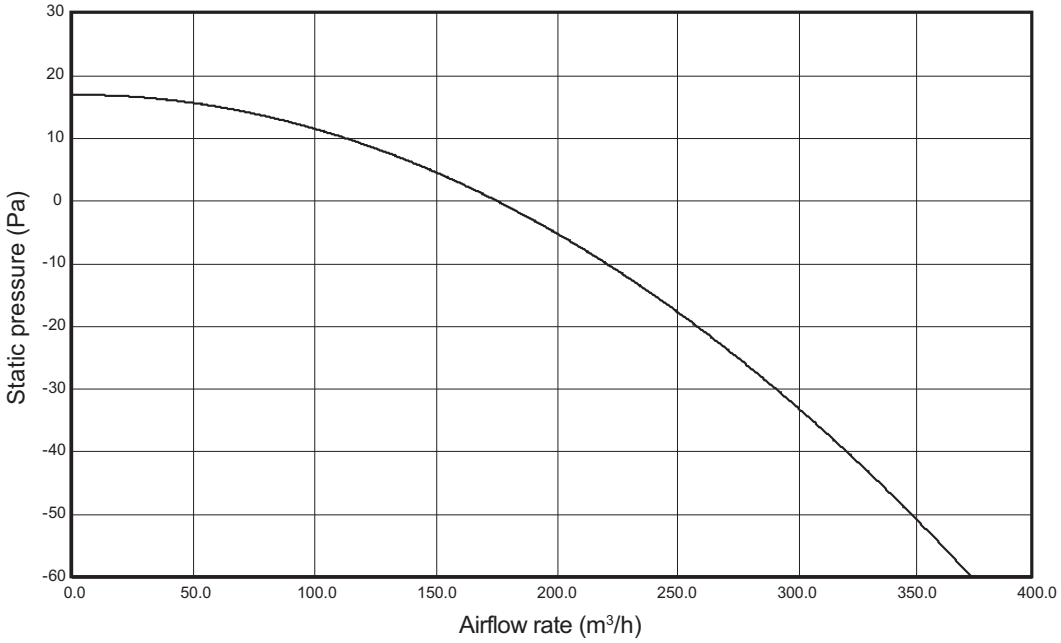


● Models: ABYG24KRTA and ABYG30KRTA

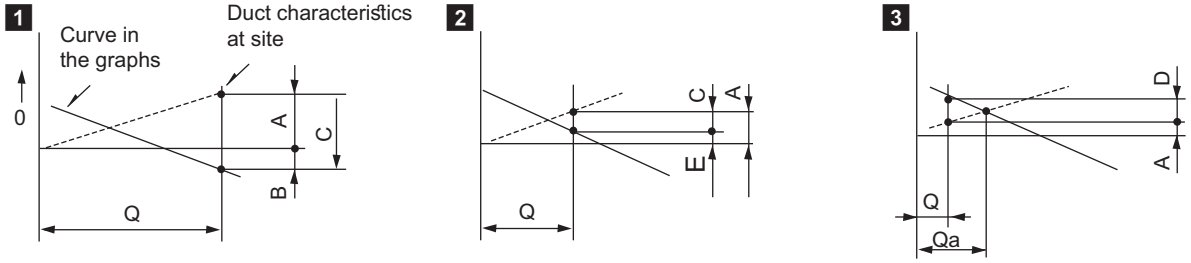


CEILING TYPE
ABYG18-45KRTA

● Models: ABYG36KRTA and ABYG45KRTA



■ How to read curve



Q: Designed amount of fresh air intake (m^3/h)

A: Static pressure loss of fresh air intake duct system with airflow amount Q (Pa)

B: Forced static pressure at air conditioner inlet with airflow amount Q (Pa)

C: Static pressure of booster fan with airflow amount Q (Pa)

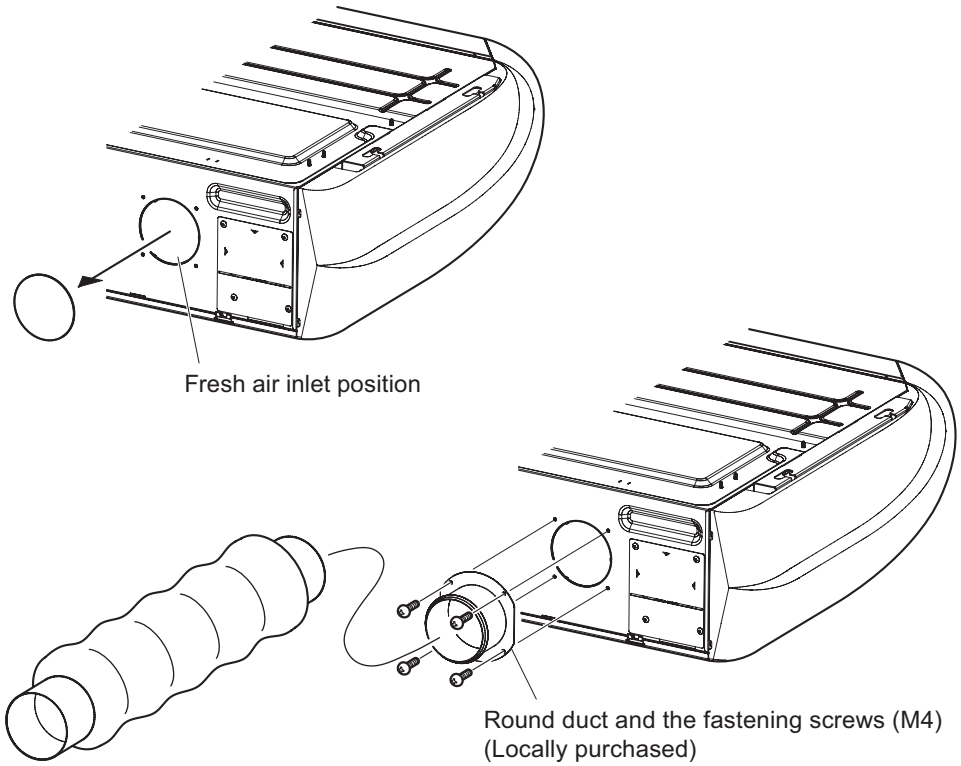
D: Static pressure loss increase amount of fresh air intake duct system for airflow amount Q (Pa)

E: Static pressure of indoor unit with airflow amount Q (Pa)

Qa: Estimated amount of fresh air intake without D (m^3/h)

CEILING TYPE
ABYG18-45KRTA

■ Installation



NOTE: When taking in the fresh air, thermal insulation is required to avoid the product malfunction caused by dew condensation.

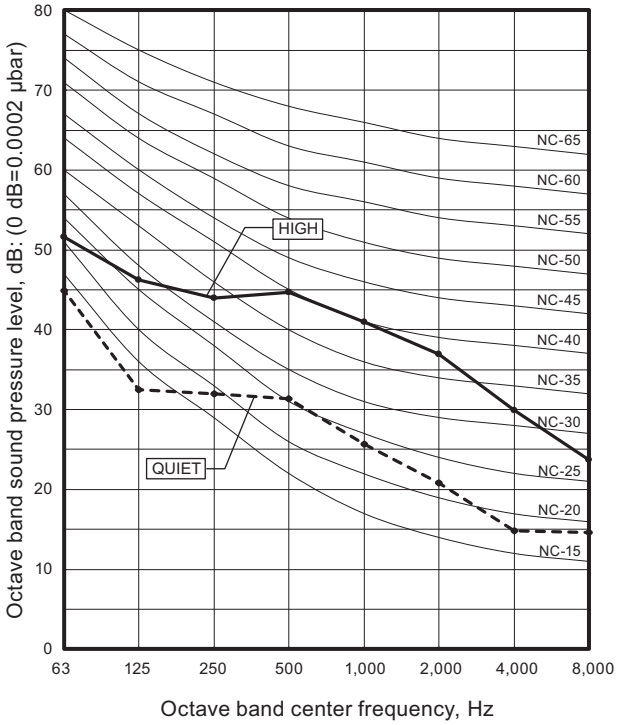
CEILING TYPE
ABYG18-45KRTA

6. Operation noise (sound pressure)

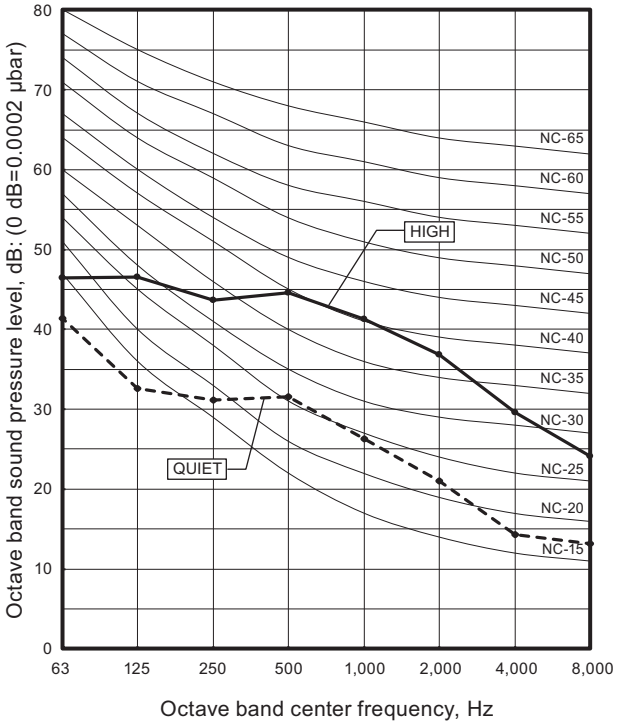
6-1. Noise level curve

■ Model: ABYG18KRTA

● Cooling

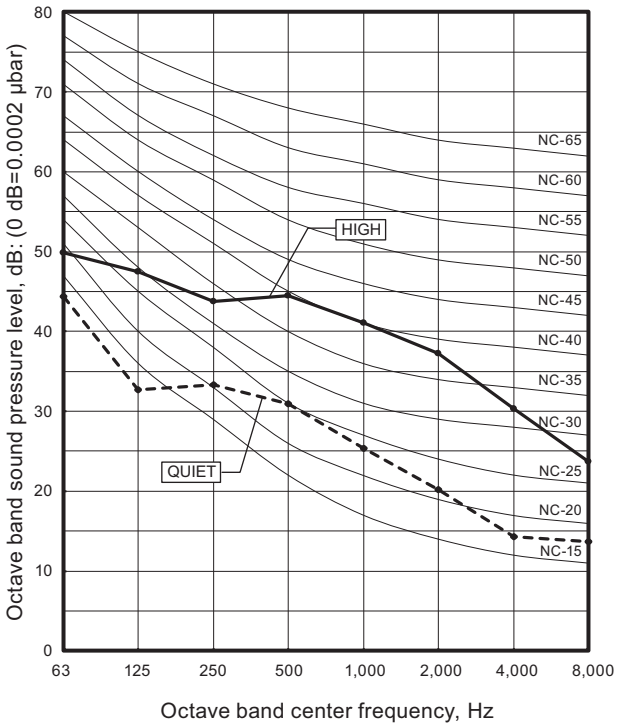


● Heating

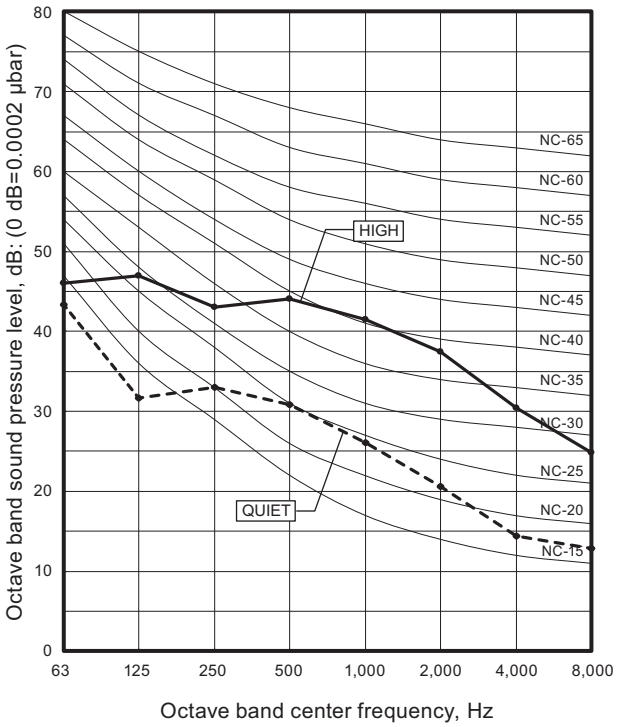


■ Model: ABYG22KRTA

● Cooling



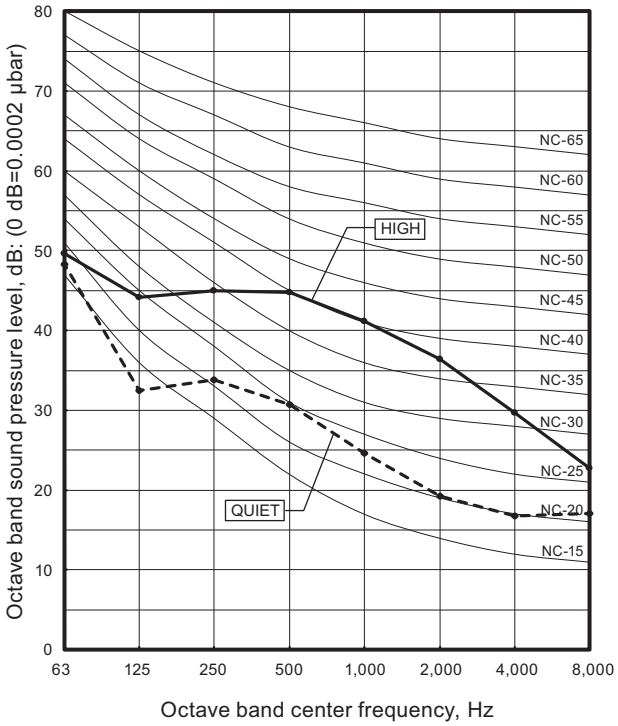
● Heating



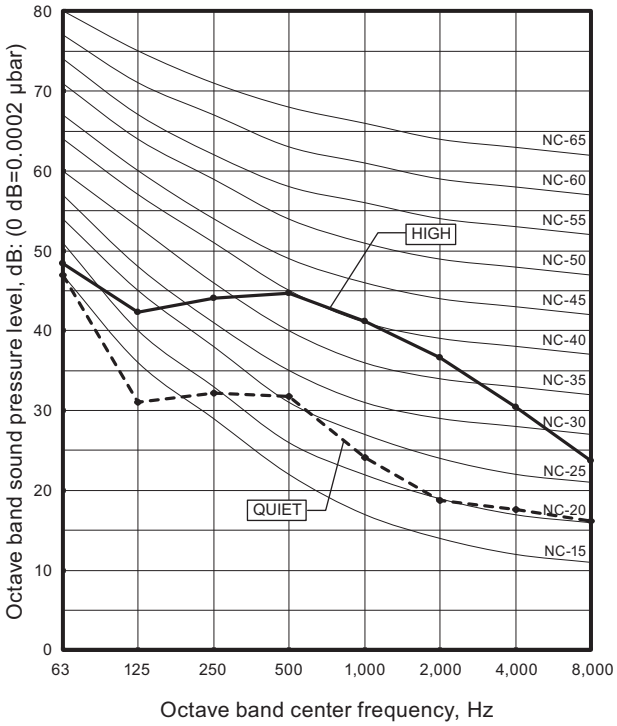
CEILING TYPE
ABYG18-45KRTA

■ Model: ABYG24KRTA

● Cooling

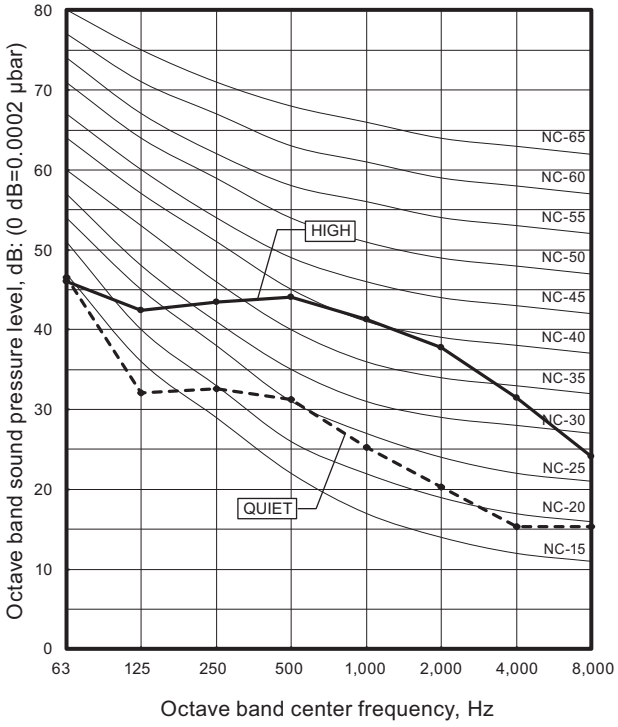


● Heating

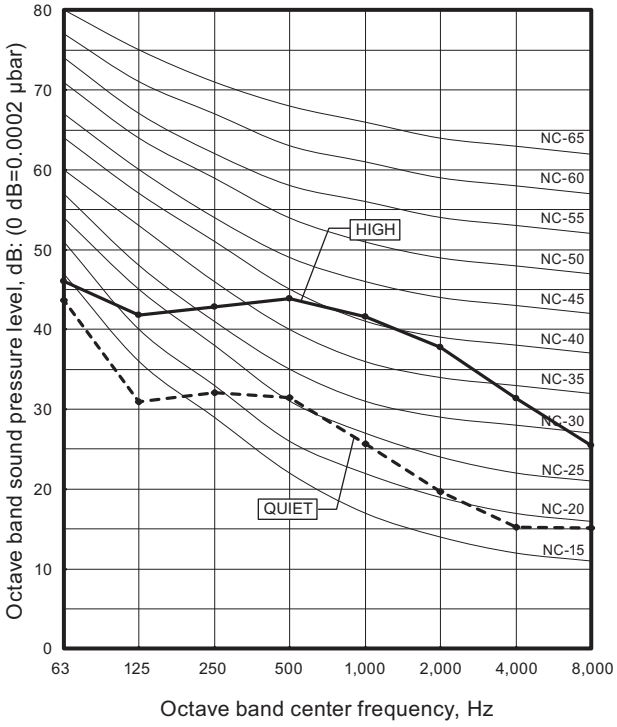


■ Model: ABYG30KRTA

● Cooling



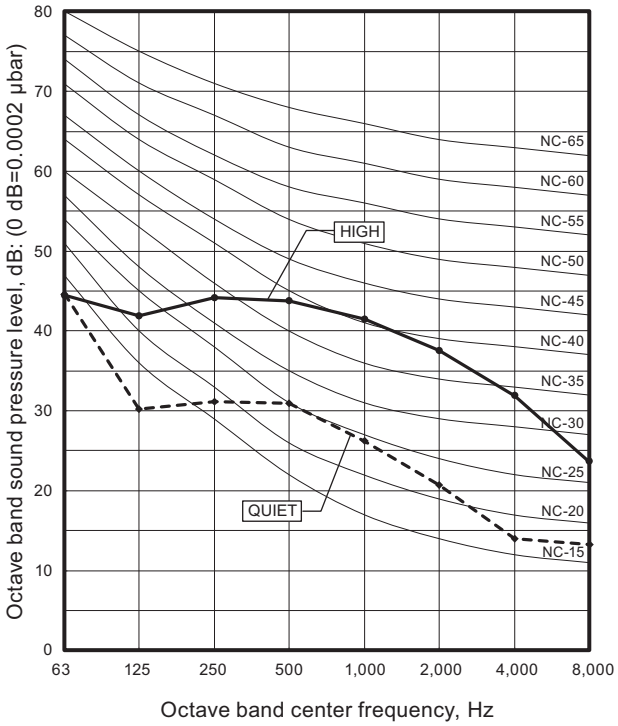
● Heating



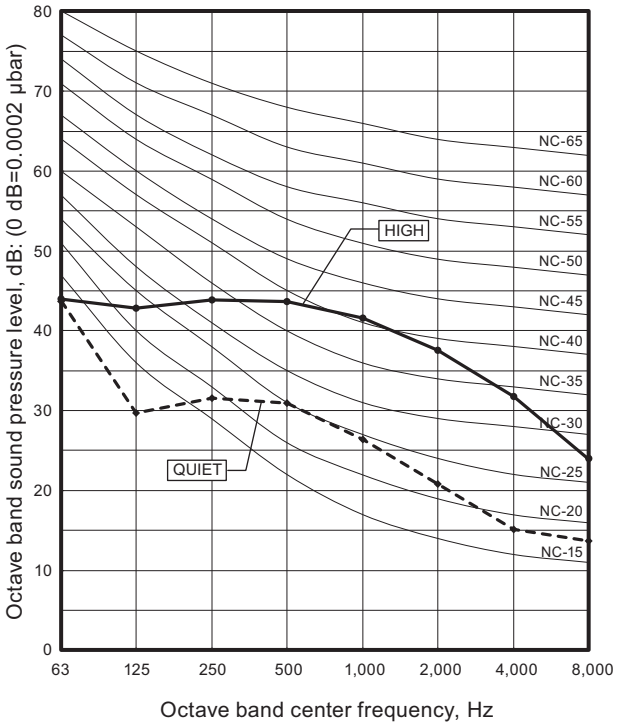
CEILING TYPE
ABYG18-45KRTA

■ Model: ABYG36KRTA

● Cooling

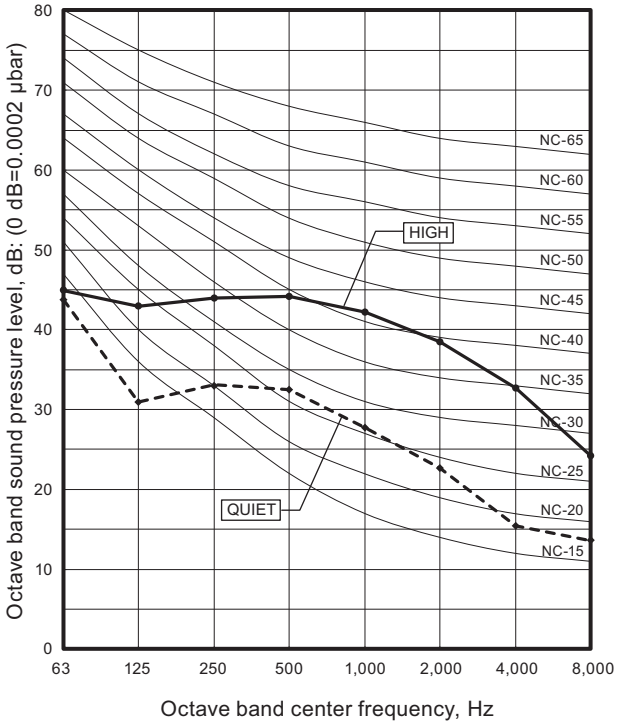


● Heating

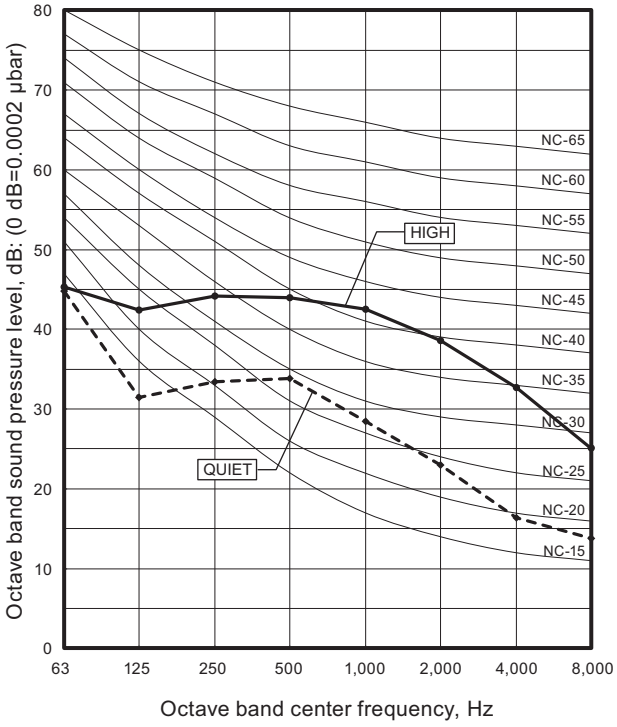


■ Model: ABYG45KRTA

● Cooling

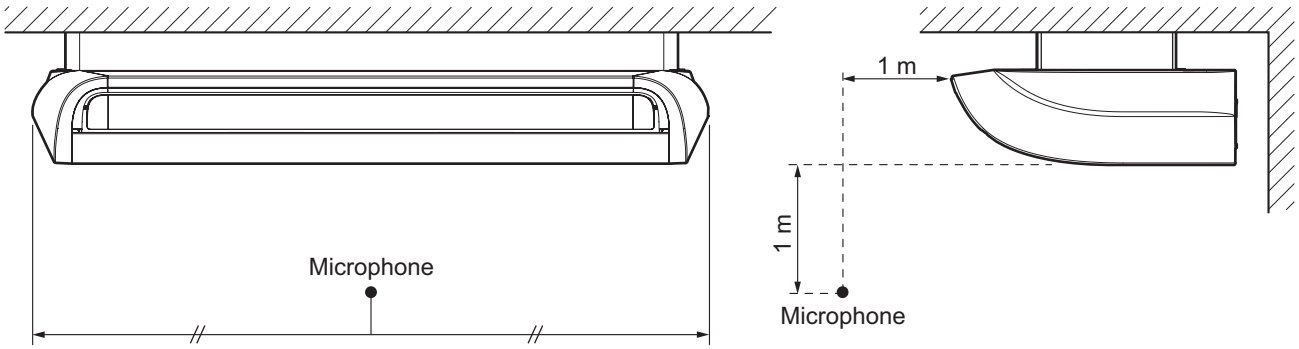


● Heating



CEILING TYPE
ABYG18-45KRTA

6-2. Sound level check point



CEILING TYPE
ABYG18-45KRTA

7. Safety devices

Type of protection	Protection form		Model	
			ABYG18KRTA	ABYG22KRTA
Circuit protection	Current fuse (PCB*)		250 V, 5.0 A	
Fan motor protection	Thermal protection program	Activate	135±15 °C Fan motor stop	
		Reset	105±15 °C Fan motor restart	

Type of protection	Protection form		Model	
			ABYG24KRTA	ABYG30KRTA
Circuit protection	Current fuse (PCB*)		250 V, 5.0 A	
Fan motor protection	Thermal protection program	Activate	135±15 °C Fan motor stop	
		Reset	105±15 °C Fan motor restart	

Type of protection	Protection form		Model	
			ABYG36KRTA	ABYG45KRTA
Circuit protection	Current fuse (PCB*)		250 V, 5.0 A	
Fan motor protection	Thermal protection program	Activate	135±15 °C Fan motor stop	
		Reset	105±15 °C Fan motor restart	

*PCB: Printed Circuit Board

CEILING TYPE
ABYG18-45KRTA

8. External input and output

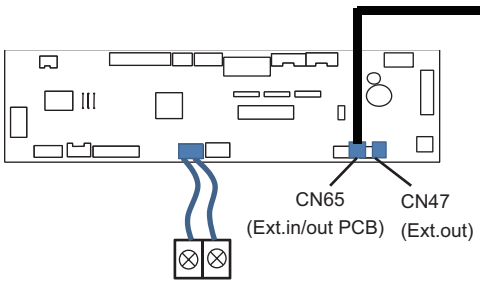


Fig. Indoor unit PCB

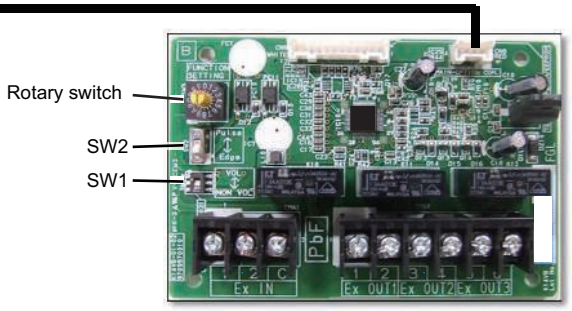


Fig. External input and output PCB

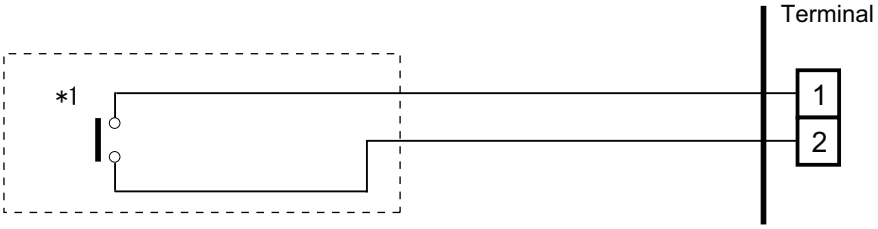
PCB	External input	External output	Connector	Input select	Input signal	External connect kit (Optional parts)
Indoor unit	Operation/Stop Forced stop	—	Terminal	Dry contact	Edge	—
	—	Operation status	CN47	—	—	UTY-XWZXZG
		Error status				
		Indoor unit fan operation status				
		External heater output				
External input and output (UTY-XCSX)	Operation/Stop	—	Input 1/ Input 2	Dry contact/ Apply voltage	Edge/ Pulse	—
	Forced thermostat off		Input 1		Edge	
	—	Operation status	Output 1 Output 2 Output 3	—	—	—
		Error status				
		Indoor unit status				
		External heater output				

8-1. External input

- “Operation/Stop” mode or "Forced stop" mode can be selected with function setting of indoor unit.
- A twisted pair cable (22AWG) should be used. Maximum length of cable is 150 m.
- 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 terminals.



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

CEILING TYPE
ABYG18-45KRTA

■ External input and output PCB

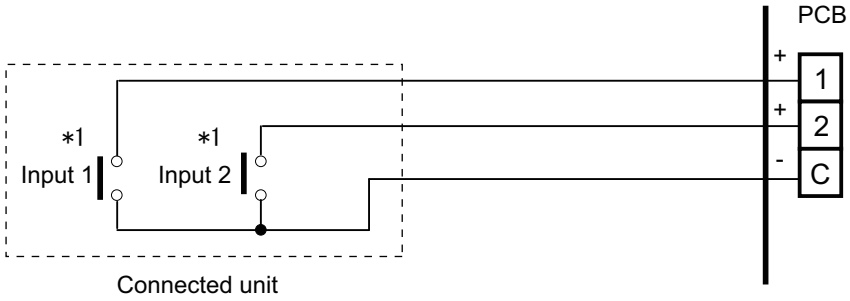
The indoor unit Operation/Stop can be set by using the input terminal on the PCB.

● Input select

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

• Dry contact

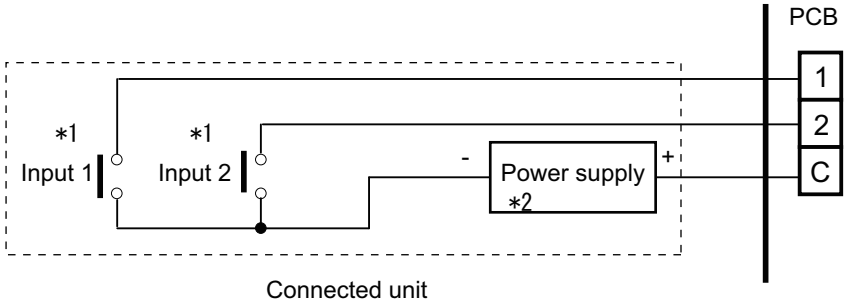
In case of internal power supply, set the slide switch of SW1 to "NON VOL" side.



*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.

CEILING TYPE
ABYG18-45KRTA

8-2. External output

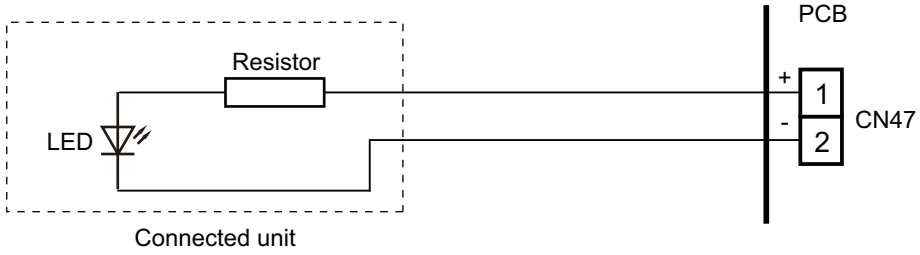
Use an external output cable with appropriate external dimension, depending on the number of cables to be installed.

■ Indoor unit

- A twisted pair cable (22AWG) should be used. Maximum length of cable is 25 m.
- Output voltage: High DC 12 V ± 2 V, Low 0 V.
- Permissible current: 50 mA
- For details, refer to Chapter 8-3. "Combination of external input and output" on page 41.

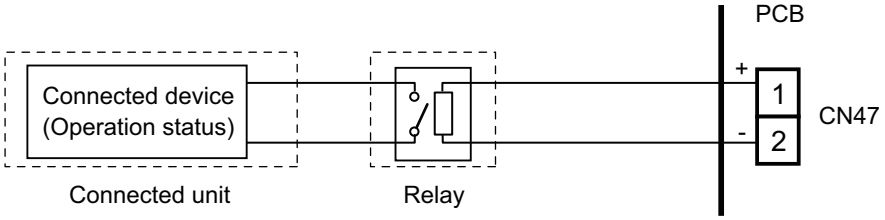
● When indicator, etc. are connected directly

Example: Function setting 60 is set to "00"



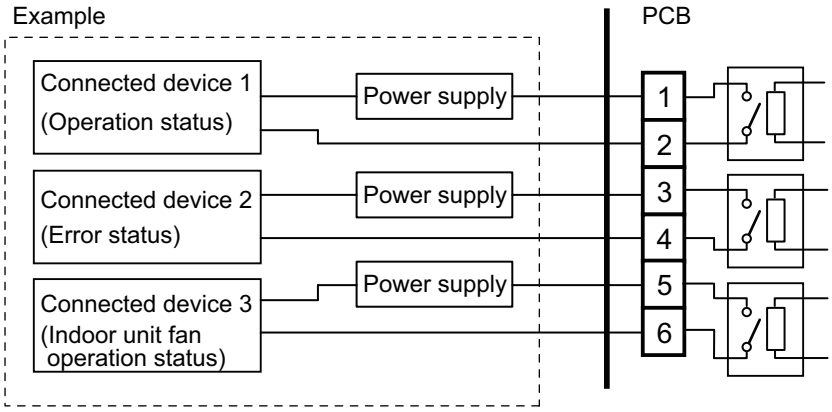
● When connecting with a device equipped with a power supply

Example: Function setting 60 is set to "00"



■ External input and output PCB

- A twisted pair cable (22AWG) 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 Chapter 8-3. "Combination of external input and output" on page 41.



CEILING TYPE
ABYG18-45KRTA

8-3. Combination of external input and output

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

Combination examples of external input and output are as follows:

Mode	Function setting	External input and output PCB (Rotary SW)	External input			
			Indoor unit Input	External input and output PCB		
			Terminal	Input 1	Input 2	Signal type
0-1	60-00	1	Operation/Stop	Operation/Stop	Not available	Edge
				Operation	Stop	Pulse
0-2	60-00	2	Operation/Stop	Forced Thermostat OFF	Not available	Edge
1—8	60-01 to 60-08	3 - 9, A	(Setting prohibited)			
9	60-09	B	Operation/Stop	Forced Thermostat OFF	Not available	Edge
10	60-10	C	Operation/Stop	Forced Thermostat OFF	Not available	Edge
11	60-11	D	Operation/Stop	Forced Thermostat OFF	Not available	Edge

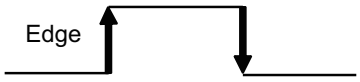
Mode	Function setting	External input and output PCB (Rotary SW)	External output			
			Indoor unit Output	External input and output PCB		
			CN47	Output 1	Output 2	Output 3
0-1	60-00	1	Operation/Stop	Operation/Stop	Error status	Indoor unit fan operation status
0-2	60-00	2	Operation/Stop	Error status	Indoor unit fan operation status	External heater output
1—8	60-01 to 60-08	3 - 9, A	(Setting prohibited)			
9	60-09	B	Error status	Operation/Stop	Indoor unit fan operation status	External heater output
10	60-10	C	Indoor unit fan operation status	Operation/Stop	Error status	External heater output
11	60-11	D	External heater output	Operation/Stop	Indoor unit fan operation status	Error status

NOTE: Input of Operation/Stop depends on the setting of function setting 46.
00: Operation/Stop mode 1 (R.C. enabled)
01: (Setting prohibited)
02: Forced stop
03: Operation/Stop mode 2 (R.C. disabled)

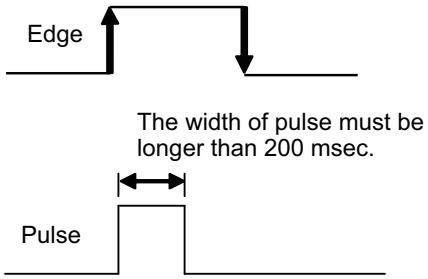
CEILING TYPE
ABYG18-45KRTA

■ 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.



CEILING TYPE
ABYG18-45KRTA

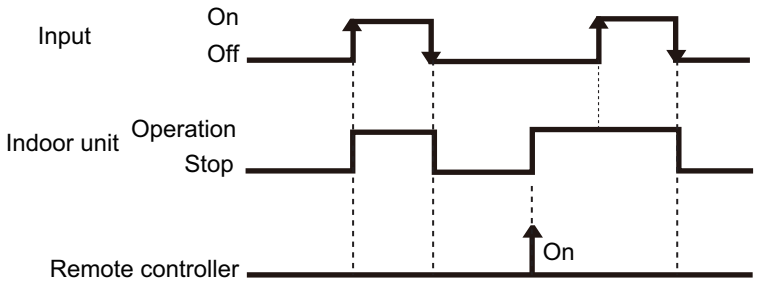
8-4. Details of function

■ Control input function

● When function setting is "Operation/Stop" mode 1

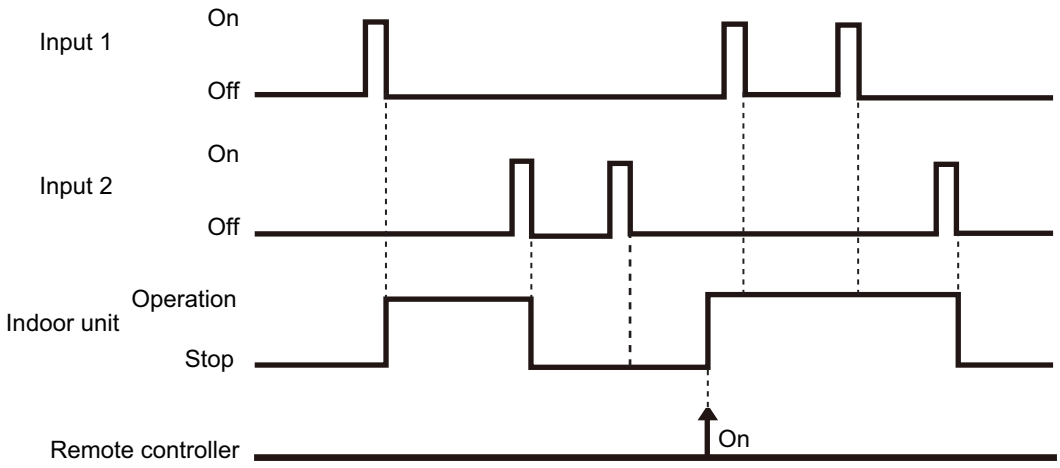
- In the case of "Edge" input

Function setting /	Rotary SW of External input and output PCB	External input		Input signal	Command
46-00	-	Input of indoor unit	Terminal	Off → On	Operation
				On → Off	Stop
	60-00 / 1	External input and output PCB	Input 1	Off → On	Operation
				On → Off	Stop



- In the case of "Pulse" input

Function setting /	Rotary SW of External input and output PCB	External input		Input signal	Command
46-00	60-00 / 1	External input and output PCB	Input 1	Pulse	Operation
			Input 2	Pulse	Stop



NOTES:

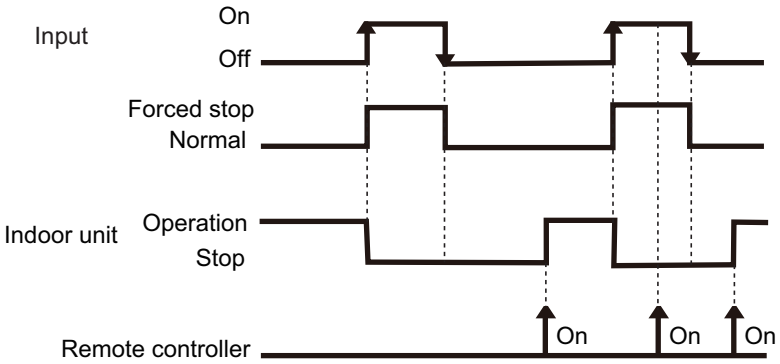
- The last command has priority.
- The indoor units within the same remote controller group operates in the same mode.

CEILING TYPE
ABYG18-45KRTA

● When function setting is "Forced stop" mode

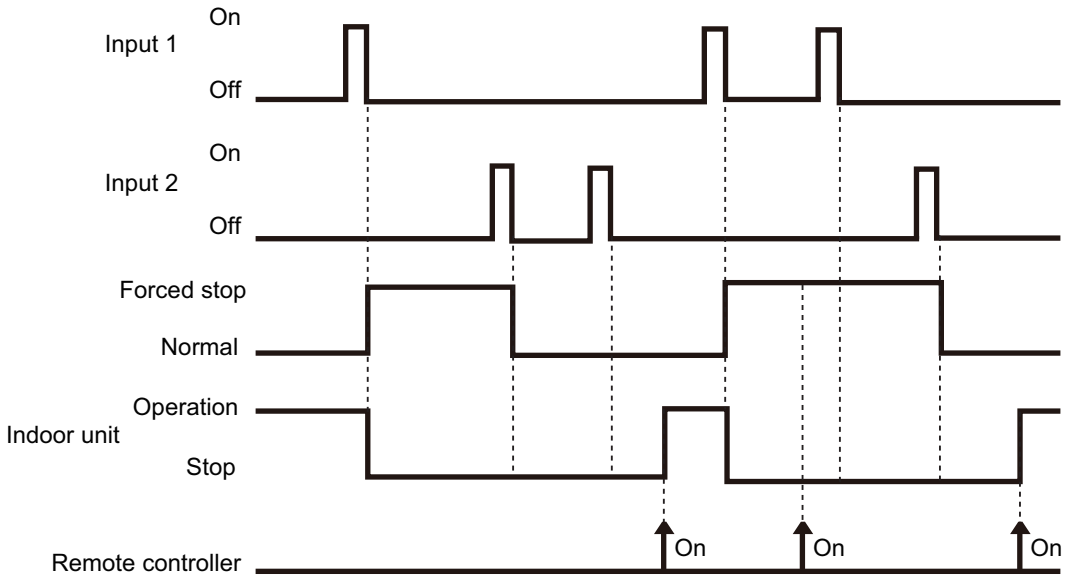
- In the case of "Edge" input

Function setting /	Rotary SW of External input and output PCB	External input		Input signal	Command
46-02	-	Input of indoor unit	Terminal	Off → On	Forced stop
				On → Off	Normal
	60-00 / 1	External input and output PCB	Input 1	Off → On	Forced stop
				On → Off	Normal



- In the case of "Pulse" input

Function setting /	Rotary SW of External input and output PCB	External input		Input signal	Command
46-02	60-00 / 1	External input and output PCB	Input 1	Pulse	Forced stop
			Input 2	Pulse	Normal



NOTES:

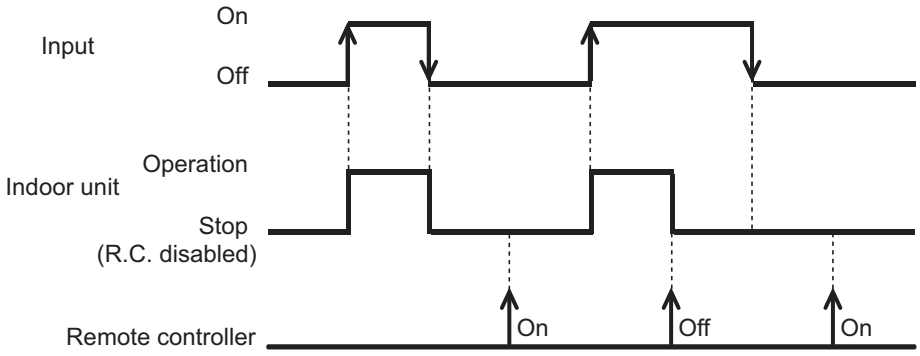
- When the forced stop is triggered, indoor unit stops and Operation/Stop operation by the remote controller is restricted.
- When forced stop function is used with forming a remote controller group, connect the same equipment to each indoor unit within the group.

CEILING TYPE
ABYG18-45KRTA

● When function setting is "Operation/Stop" mode 2

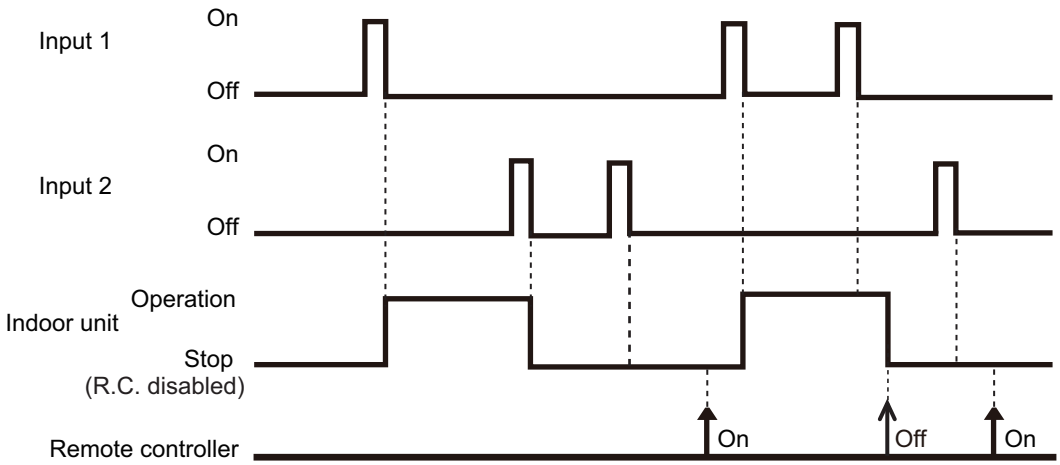
- In the case of "Edge" input

Function setting /	Rotary SW of External input and output PCB	External input		Input signal	Command
46-03	-	Input of indoor unit	Terminal	Off → On	Operation
				On → Off	Stop (R.C. disabled)
	60-00 / 1	External input and output PCB	Input 1	Off → On	Operation
				On → Off	Stop (R.C. disabled)



- In the case of "Pulse" input

Function setting /	Rotary SW of External input and output PCB	External input		Input signal	Command
46-03	60-00 / 1	External input and output PCB	Input 1	Pulse	Operation
			Input 2	Pulse	Stop (R.C. disabled)



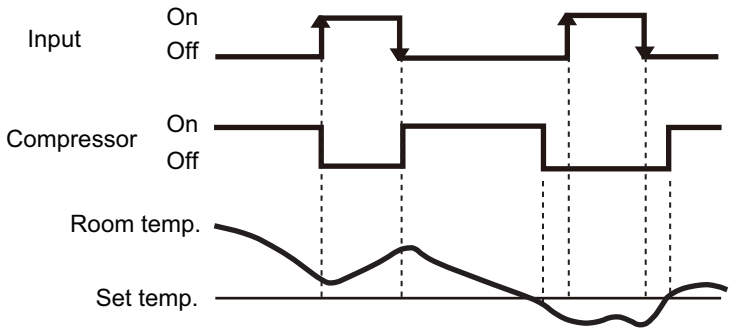
NOTES:

- 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.

CEILING TYPE
ABYG18-45KRTA

■ Forced thermostat off function

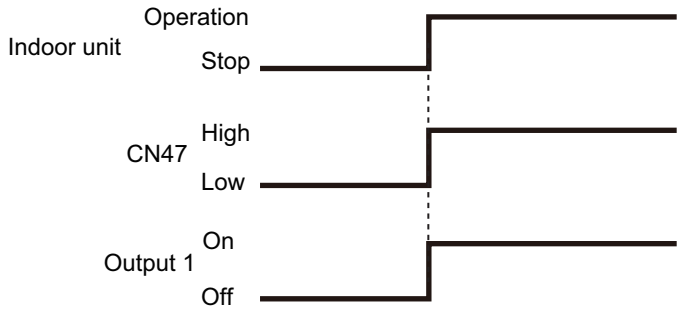
Function setting / Rotary SW of External input and output PCB	External input		Input signal	Command
60-00 / 2 60-09 / B 60-10 / C 60-11 / D	External input and output PCB	Input 1	Off → On	Thermostat off
			On → Off	Normal operation



■ Control output function

Function setting / Rotary SW of External input and output PCB	External output		Output signal	Command
60-00 / 1, 2	Output of indoor unit	CN47	Low → High	Operation
			High → Low	Stop
60-00 / 1 60-09 / B 60-10 / C 60-11 / D	External input and output PCB	Output 1	Off → On	Operation
			On → Off	Stop

The output is low when the unit is stopped.

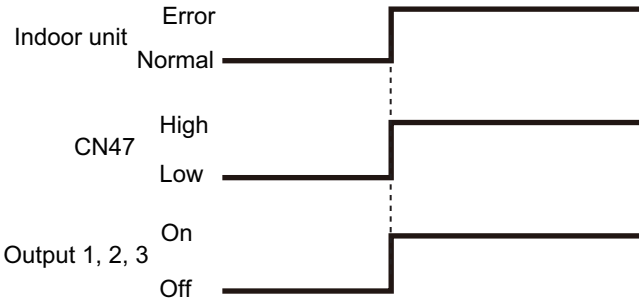


CEILING TYPE
ABYG18-45KRTA

■ Error status

Function setting / Rotary SW of External input and output PCB	External output		Output signal	Command
60-09 / B	Output of indoor unit	CN47	Low → High	Error
			High → Low	Normal
60-00 / 2	External input and output PCB	Output 1	Off → On	Error
			On → Off	Normal
60-00 / 1 60-10 / C		Output 2	Off → On	Error
			On → Off	Normal
60-11 / D		Output 3	Off → On	Error
			On → Off	Normal

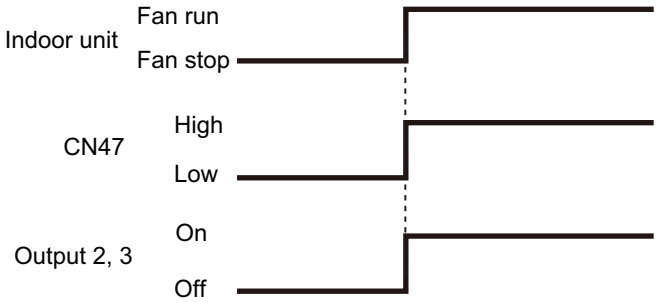
The output is ON when an error is generated for the indoor unit.



■ Indoor unit fan operation status

Function setting / Rotary SW of External input and output PCB	External output		Output signal	Command
60-10 / C	Output of indoor unit	CN47	Low → High	Fan run
			High → Low	Fan stop
60-00 / 2 60-09 / B 60-11 / D	External input and output PCB	Output 2	Off → On	Fan run
			On → Off	Fan stop
60-00 / 1		Output 3	Off → On	Fan run
			On → Off	Fan stop

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



CEILING TYPE
ABYG18-45KRTA

■ External heater output

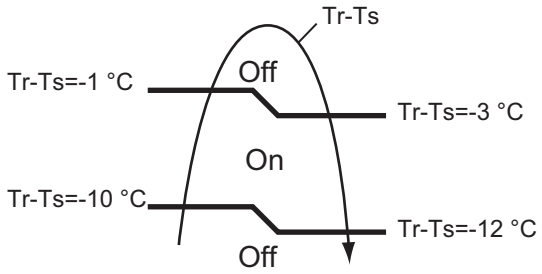
Function setting / Rotary SW of External input and output PCB	External output		Output signal	Command
60-11 / D	Output of indoor unit	CN47	Low → High	Heater on
			High → Low	Heater off
60-00 / 2 60-09 / B 60-10 / C	External input and output PCB	Output 3	Off → On	Heater on
			On → Off	Heater off

Output signal	Condition
Low → High Off → On	Heater turns on as shown in diagram of heating temperature
High → Low On → Off	Heater turns off as shown in diagram of heating temperature • Other than Heating mode • Error occurred • Forced thermo off • Fan stop protection

Specifications of the signal output performance are as shown as follows:

Example: When set temperature (Ts) is set at 22 °C;

- And room temperature (Tr) increase above 12 °C, signal output is on.
- And Tr increase above 21 °C, signal output is off.
- And Tr decrease below 19 °C, signal output is on.
- And Tr decrease below 10 °C, signal output is off.



The output also turns off in defrost operation.

CEILING TYPE
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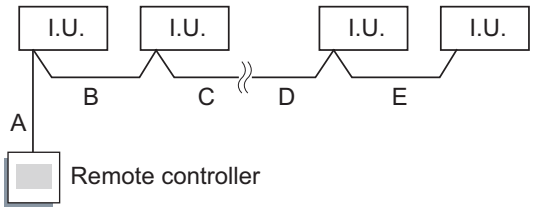
9. Group connection

Installation procedure for group control system:

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

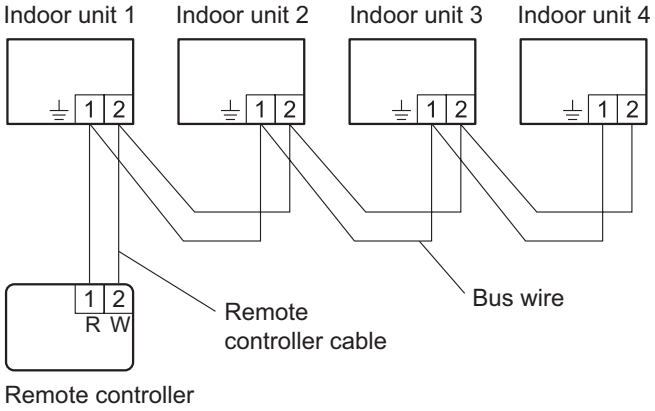
NOTE: When different type of indoor units (such as wall mounted type and cassette type, cassette type and duct type, or other combinations) are connected using group control system, some functions may no longer be available.

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 ≤ 500 m

Example of wiring method



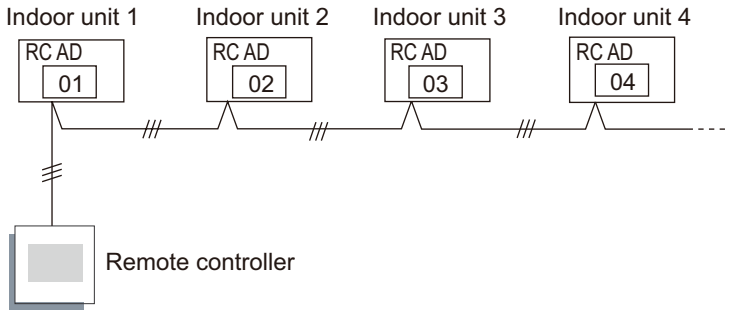
2. Set the R.C. address. (Function setting)
   - Addresses will be automatically set when initially starting up this unit. In such a case, do not change the remote controller address for the indoor unit, and keep it at the initial setting of “00”.
   - Only set addresses manually when using different numbers for addresses.
     Set the R.C. address of each indoor unit using the function setting. (Refer to “Remote controller address setting” in "Contents of function setting" on page 50.)

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

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

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

Example of wiring method



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10. 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.

10-1. Function settings by using remote controller

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

■ Setting procedure by using 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)	20	Ceiling height
3)	28	Horizontal louver direction switching for dew condensation prevention
4)	30/31	Room temperature control for indoor unit sensor
5)	35/36	Room temperature control for wired remote controller sensor
6)	40	Auto restart
7)	42	Room temperature sensor switching
8)	44	Remote controller custom code
9)	46	External input control
10)	48	Room temperature sensor switching (Aux.)
11)	49	Indoor unit fan control for energy saving for cooling
12)	60	Switching functions for external output terminal

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	♦

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2) Ceiling height

Select the appropriate ceiling height according to the place of installation.

Function number	Setting value	Setting description	Factory setting
20	00	Standard	♦
	01	High ceiling	

For the specific height for each setting value, refer to “Installation space” in Chapter 2. "Dimensions" on page 8.

3) Horizontal louver direction switching for dew condensation prevention

Automatically switches the position of the horizontal louver if the airflow direction is set at lower than the dew condensation limit position in cooling or drying operation.

Select suitable adjustment position according to the customer’s preference.

Function number	Setting value	Setting description	Factory setting
28	00	Adjust to dew condensation limit position	♦
	01	Adjust to cooling standard position	

4) Room temperature control for indoor unit sensor

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

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

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

Example of correction:

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

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

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

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5) Room temperature control for wired remote controller sensor

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

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

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

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

6) 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.

7) Room temperature sensor switching

(Only for wired remote controller)

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

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

00: Sensor on the indoor unit is active.

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

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

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8) Remote controller custom code

(Only for wireless remote controller)

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

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

9) External input control

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

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

10) 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	

11) Indoor unit fan control for energy saving for cooling

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

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

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

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

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

NOTES:

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

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12) 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—08	(Setting prohibited)	
	09	Error status	
	10	Indoor unit fan operation status	
	11	External heater	

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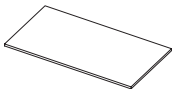
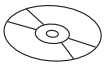
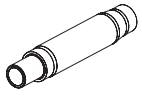
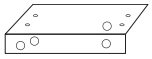
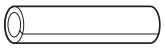
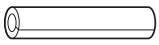
11. Accessories

11-1. Models: ABYG18KRTA and ABYG22KRTA

Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Operating manual		1	Insulation		1
Operating manual (CD-ROM)		1	Drain hose		1
Installation manual		1	Hose band		1
Template		1	Cable tie (large)		4
M10 nut A (with flange)		4	Cable tie (small)		1
M10 nut B (with spring lock washer)		4	Remote controller cable hole cap		1
Washer		8	Tapping screw (White)		6
Coupler heat insulation (large)		1	Tapping screw		3
Coupler heat insulation (small)		1			

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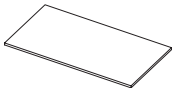
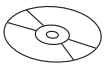
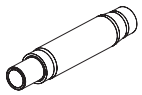
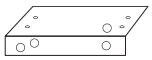
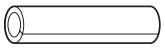
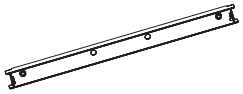
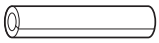
11-2. Models: ABYG24KRTA, ABYG30KRTA, ABYG36KRTA, and ABYG45KRTA

Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Operating manual		1	Insulation		1
Operating manual (CD-ROM)		1	Drain hose		1
Installation manual		1	Hose band		1
Template		1	Cable tie (large)		4
M10 nut A (with flange)		4	Cable tie (small)		1
M10 nut B (with spring lock washer)		4	Remote controller cable hole cap		1
Washer		8	Tapping screw (White)		6
Coupler heat insulation (large)		1	Casing guard		1
Coupler heat insulation (small)		1	Tapping screw		3

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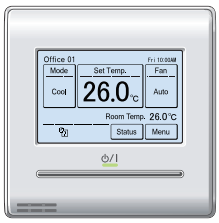
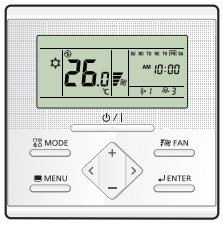
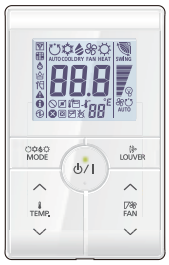
12. Optional parts

12-1. Controllers

Exterior	Part name	Model name	Summary
	Wired remote controller	UTY-RNRYZ*	Easy finger touch operation with LCD panel. Backlit LCD enables easy operation in a dark room. Wire type: Non-polar 2-wire
	Wired remote controller	UTY-RLRY	High visibility and easy operation. Room temperature can be accurately controlled using the built-in thermo sensor. 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-LBTYH	Unit control is performed by wireless remote controller.

NOTE: Available functions may differ by the remote controller. For details, refer to the operation manual.

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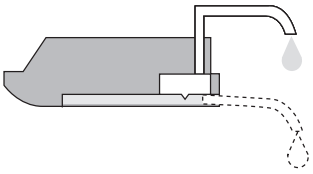
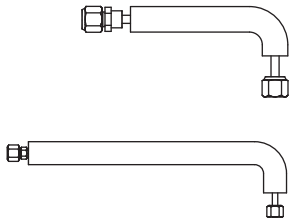
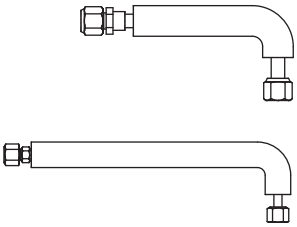
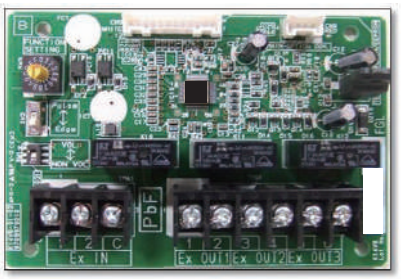
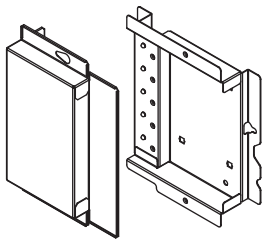
12-2. Others

Exterior	Part name	Model name	Summary
	Drain pump unit	UTR-DPB24T	Optional drain lift-up mechanism allows more flexible installation.
	Auxiliary pipe assembly	UTP-FX24A	For piping of upward direction only. • For liquid: 6.35 mm (1/4 in) • For gas: 12.70 mm (1/2 in)
	Auxiliary pipe assembly	UTP-FX35A	For piping of upward direction only. • For liquid: 9.52 mm (3/8 in) • For gas: 15.88 mm (5/8 in)
	External connect kit	UTY-XWZXZG	Use to connect with various peripheral devices and air conditioner PCB. For control output port.
	External input and output PCB	UTY-XCSX	Use to connect with external devices and air conditioner PCB.
	External input and output PCB box	UTZ-GXEA	For installing the External input and output PCB.
	Wireless LAN adapter	UTY-TFSXZ1	Remotely manage an air conditioning system using mobile devices such as smartphones and tablets. For connection indoor unit with UART interface.
	Modbus converter	UTY-VMSX	For connection between indoor unit with UART interface and a Modbus open network.

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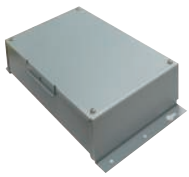
Exterior	Part name	Model name	Summary
	KNX converter	UTY-VKSX	For connection between indoor unit with UART interface and a KNX open network.
	Split system converter	UTY-VTGX	This converter is required when connecting single split system to VRF network system.
	Split system converter (AC power supply)	UTY-VTGXV	This converter is required when connecting single split system to VRF network system.
	External switch controller	UTY-TERX	Air conditioner switching can be controlled by connecting other external sensor switches.

NOTE: Combined use of following optional parts and Wireless LAN adapter (UTY-TFSXZ1) is not allowed.

- External input and output PCB (UTY-XCSX)
- Modbus converter
- KNX converter

CEILING TYPE
ABYG18-45KRTA

Part 2. OUTDOOR UNIT

SINGLE TYPE:

AOYG18KBTB
AOYG22KBTB
AOYG24KBTB
AOYG30KBTB
AOYG36KBTB
AOYG45KBTB

OUTDOOR UNIT
AOYG18-45KBTB

1. Specifications

Type				Inverter heat pump	
Model name				**AOYG18KBTB**	**AOYG22KBTB**
Power supply				230 V ~ 50 Hz	
Power supply intake				Outdoor unit	
Available voltage range				198—264 V	
Starting current			A	7.1	8.2
Fan	Airflow rate	Cooling	m^3/h	2,160	2,240
		Heating		1,830	1,960
	Type × Q'ty			Propeller × 1	
	Motor output		W	49	
Sound pressure level *1		Cooling	dB (A)	50	51
		Heating		50	51
Sound power level		Cooling	dB (A)	62	63
		Heating		62	63
Heat exchanger type		Dimensions (H × W × D)	mm	Main1: 588 × 881 × 18.19 Main2: 588 × 851 × 18.19	
		Fin pitch		1.3	
		Rows × Stages		1 × 28	
		Pipe type		Copper	
		Fin	Type (Material)	Aluminum	
			Surface treatment	PC fin	
Compressor	Type			DC Twin rotary	
	Motor output		W	900	1,060
Refrigerant		Type (Global warming potential)		R32 (675)	
		Factory charge	g	1,020	1,250
Refrigerant oil		Type		FW68S	RmM68AF
		Amount	cm^3	350	400
Enclosure		Material		Steel sheet	
		Color		Beige Approximate color of Munsell 10YR 7.5/1.0	
Dimensions (H × W × D)	Net		mm	632 × 799 × 290	
	Gross			692 × 940 × 375	
Weight	Net		kg	36	38
	Gross			40	42
Connection pipe	Size	Liquid	mm (in)	Ø6.35 (Ø1/4)	
		Gas		Ø12.70 (Ø1/2)	
	Method			Flare	
	Pre-charge length		m	20	
	Max. length			30	
	Max. height difference			20	25
Operation range		Cooling	°C	-15 to 46	
		Heating		-15 to 24	
Drain hose		Material		PP	
		Tip diameter	mm	Ø13.0 (I. D.), Ø16.0 to Ø16.8 (O. D.)	

NOTES:

- Specifications are based on the following conditions:
  - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
  - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
  - Pipe length: 5 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: 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.
- This data is based on EN 14511 standard.

OUTDOOR UNIT
AOYG18-45KBTB

Type				Inverter heat pump	
Model name				**AOYG24KBTB**	**AOYG30KBTB**
Power supply				230 V ~ 50 Hz	
Power supply intake				Outdoor unit	
Available voltage range				198—264 V	
Starting current			A	8.4	11.1
Fan	Airflow rate	Cooling	m^3/h	2,700	3,750
		Heating		2,700	3,750
	Type × Q'ty			Propeller × 1	
	Motor output		W	49	100
Sound pressure level *1		Cooling	dB (A)	53	53
		Heating		54	55
Sound power level		Cooling	dB (A)	65	68
		Heating		66	69
Heat exchanger type		Dimensions (H × W × D)	mm	Main1: 672 × 881 × 18.19 Main2: 672 × 851 × 18.19	Main1: 756 × 905 × 18.19 Main2: 756 × 905 × 18.19
		Fin pitch		1.30	1.45
		Rows × Stages		1 × 32	1 × 36
		Pipe type		Copper	
		Fin	Type (Material)	Aluminum	
			Surface treatment	PC fin	Blue fin
Compressor	Type			DC Twin rotary	
	Motor output		W	1,060	1,500
Refrigerant		Type (Global warming potential)		R32 (675)	
		Factory charge	g	1,250	1,900
Refrigerant oil		Type		RmM68AF	FW68D
		Amount	cm^3	400	600
Enclosure		Material		Steel sheet	
		Color		Beige Approximate color of Munsell 10YR 7.5/1.0	
Dimensions (H × W × D)	Net		mm	716 × 820 × 315	788 × 940 × 320
	Gross			776 × 961 × 450	966 × 1,027 × 445
Weight	Net		kg	42	52
	Gross			46	60
Connection pipe	Size	Liquid	mm (in)	Ø6.35 (Ø1/4)	Ø9.52 (Ø3/8)
		Gas		Ø12.70 (Ø1/2)	Ø15.88 (Ø5/8)
	Method			Flare	
	Pre-charge length		m	20	30
	Max. length			30	50
	Max. height difference			25	30
Operation range		Cooling	°C	-15 to 46	
		Heating		-15 to 24	
Drain hose		Material		PP	LDPE
		Tip diameter	mm	Ø13.0 (I. D.), Ø16.0 to Ø16.7 (O. D.)	

NOTES:

- Specifications are based on the following conditions:
  - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
  - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
  - Pipe length: 5 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: 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.
- This data is based on EN 14511 standard.

OUTDOOR UNIT
AOYG18-45KBTB

Type				Inverter heat pump	
Model name				**AOYG36KBTB**	**AOYG45KBTB**
Power supply				230 V ~ 50 Hz	
Power supply intake				Outdoor unit	
Available voltage range				198—264 V	
Starting current			A	13.0	18.6
Fan	Airflow rate	Cooling	m^3/h	3,750	4,450
		Heating		3,750	4,450
	Type × Q'ty			Propeller × 1	
	Motor output		W	100	120
Sound pressure level *1		Cooling	dB (A)	55	57
		Heating		55	57
Sound power level		Cooling	dB (A)	70	71
		Heating		70	71
Heat exchanger type		Dimensions (H × W × D)	mm	Main1: 756 × 905 × 18.19 Main2: 756 × 905 × 18.19	Main1: 966 × 905 × 18.19 Main2: 966 × 905 × 18.19 Sub: 966 × 543 × 18.19
		Fin pitch		1.45	
		Rows × Stages		1 × 36	1 × 46
		Pipe type		Copper	
		Fin	Type (Material)	Aluminum	
			Surface treatment	Blue fin	
Compressor	Type × Q'ty			DC Twin rotary × 1	
	Motor output		W	1,500	2,180
Refrigerant		Type (Global warming potential)		R32 (675)	
		Factory charge	g	1,900	2,700
Refrigerant oil		Type		FW68D	RmM68AF
		Amount	cm^3	600	800
Enclosure		Material		Steel sheet	
		Color		Beige Approximate color of Munsell 10YR 7.5/1.0	
Dimensions (H × W × D)	Net		mm	788 × 940 × 320	998 × 940 × 320
	Gross			966 × 1,027 × 445	1,176 × 1,027 × 445
Weight	Net		kg	52	67
	Gross			60	75
Connection pipe	Size	Liquid	mm (in)	Ø9.52 (Ø3/8)	
		Gas		Ø15.88 (Ø5/8)	
	Method			Flare	
	Pre-charge length		m	30	
	Max. length			50	
	Max. height difference			30	
Operation range		Cooling	°C	-15 to 46	
		Heating		-15 to 24	
Drain hose		Material		LDPE	
		Tip diameter	mm	Ø13.0 (I. D.), Ø16.0 to Ø16.7 (O. D.)	

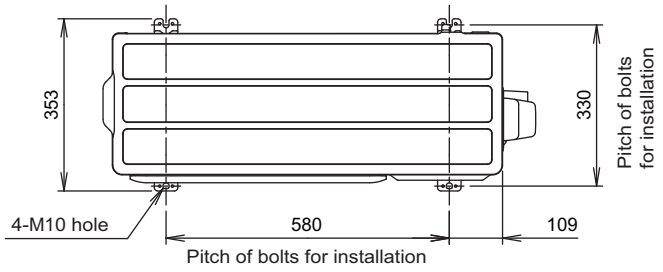
NOTES:

- Specifications are based on the following conditions:
  - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
  - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
  - Pipe length: 5 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: 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.
- This data is based on EN 14511 standard.

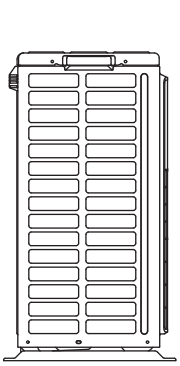
2. Dimensions

2-1. Models: AOYG18KBTB and AOYG22KBTB

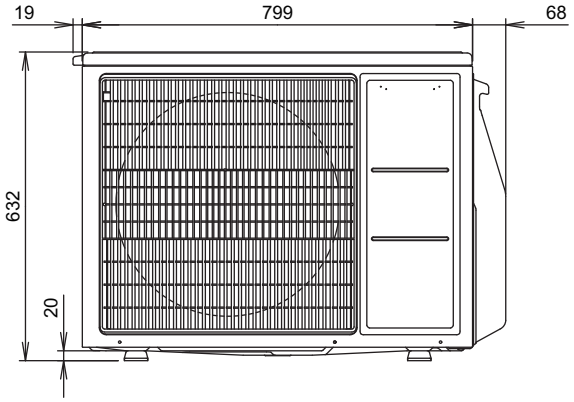
Unit: mm



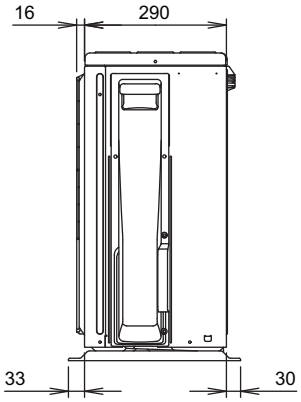
Top view



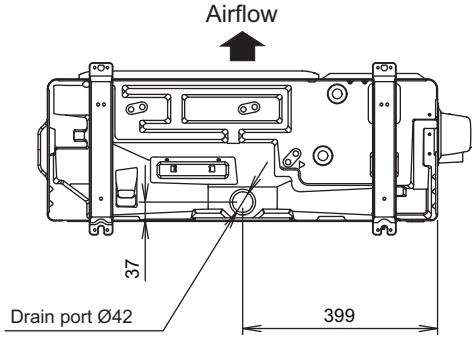
Side view



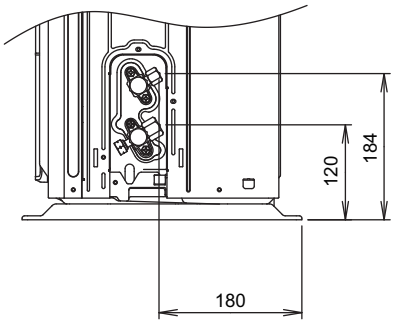
Front view



Side view



Bottom view

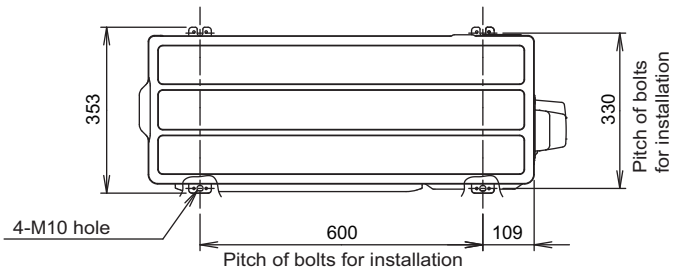


Side view (Valve part)

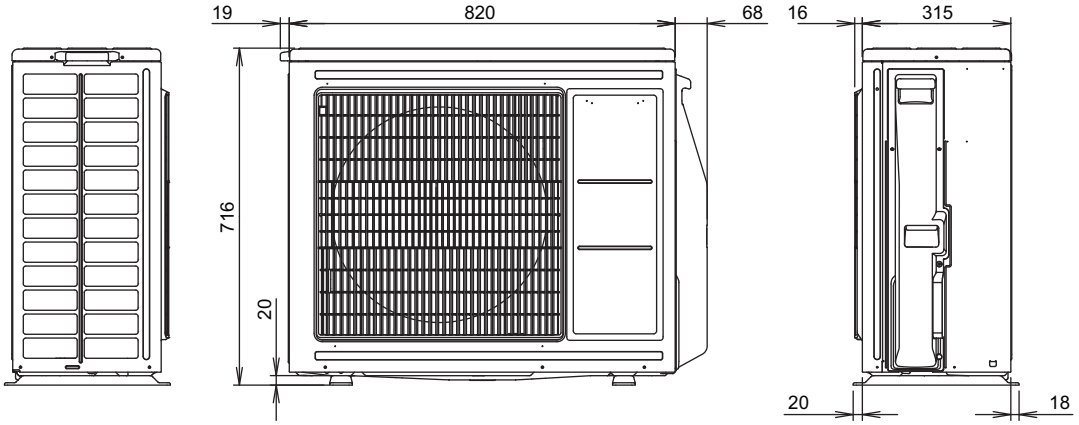
OUTDOOR UNIT
AOYG18-45KBTB

2-2. Model: AOYG24KBTB

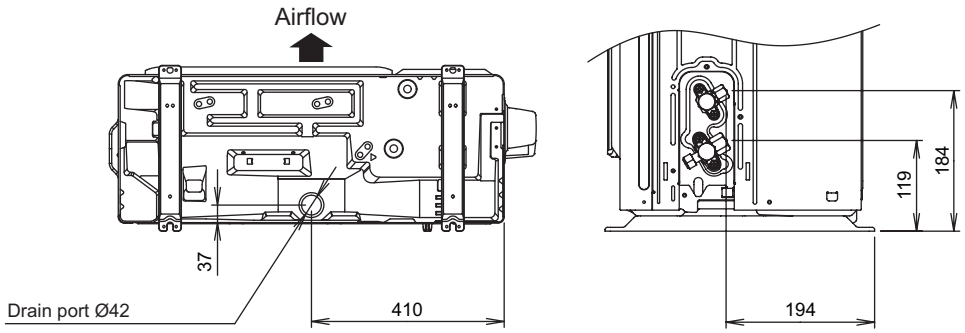
Unit: mm



Top view



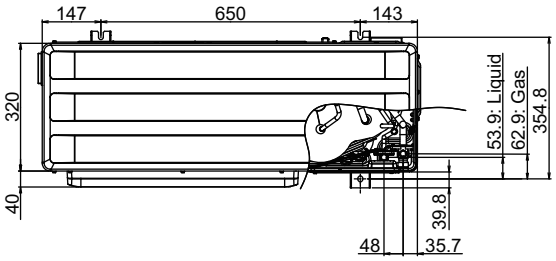
Side view　　Front view　　Side view



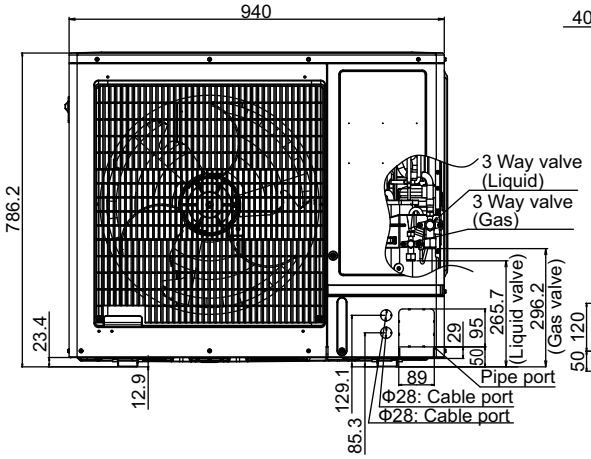
Bottom view　　Side view (Valve part)

2-3. Models: AOYG30KBTB and AOYG36KBTB

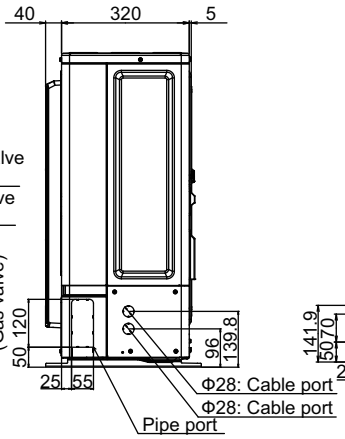
Unit: mm



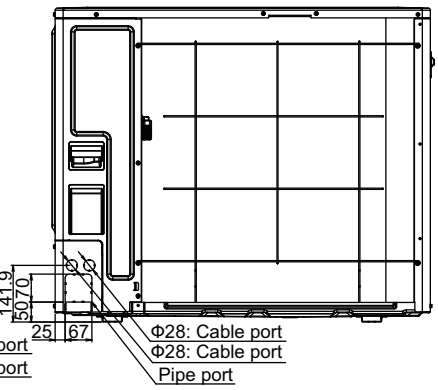
Top view



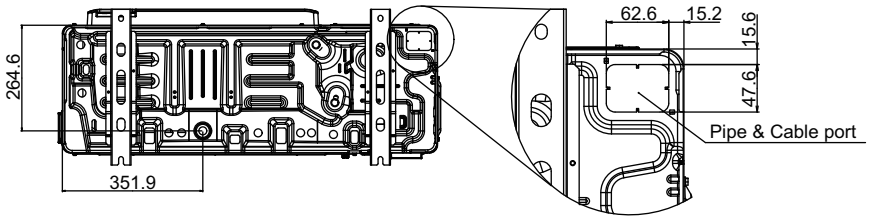
Front view



Side view



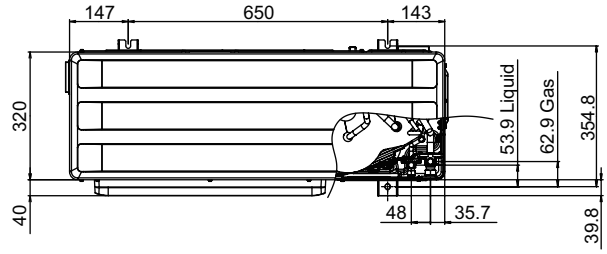
Rear view



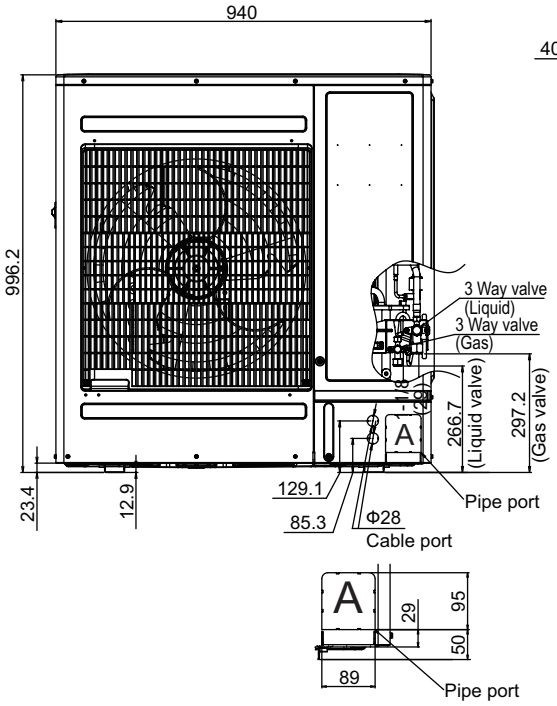
Bottom view

2-4. Model: AOYG45KBTB

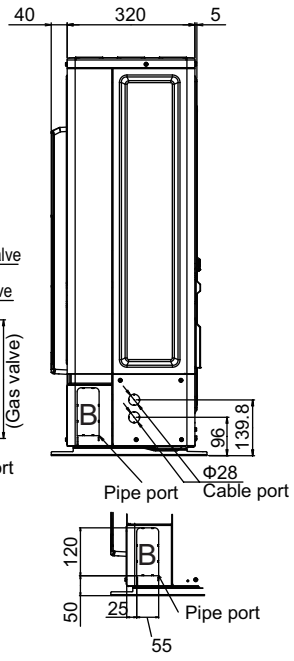
Unit: mm



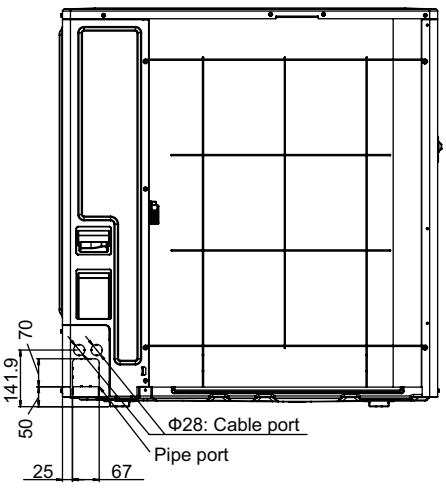
Top view



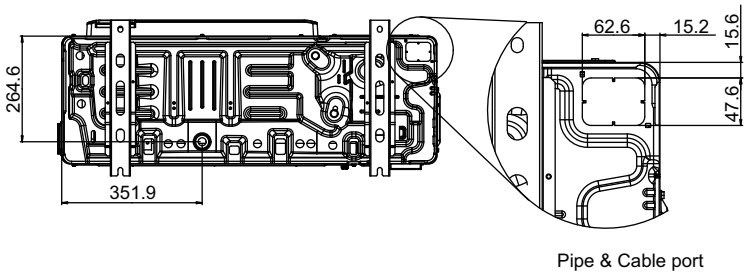
Front view



Side view



Rear view



Bottom view

OUTDOOR UNIT
AOYG18-45KBTB

3. Installation space

3-1. Models: AOYG18KBTB, AOYG22KBTB, and AOYG24KBTB

■ Space requirement

Provide sufficient installation space for product safety.

⚠ CAUTION

Keep the space shown in the installation examples.

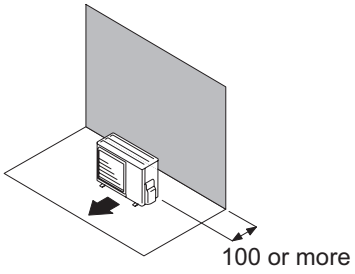
If the installation is not performed accordingly, it could cause a short circuit and result in a lack of operating performance.

● Single outdoor unit installation

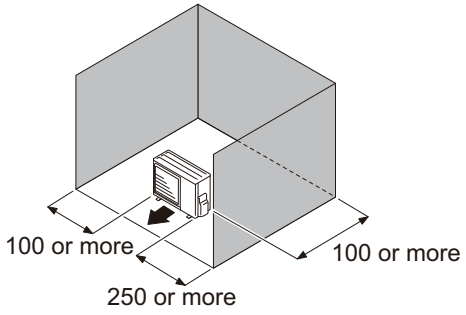
- **When the upper space is open:**

Unit: mm

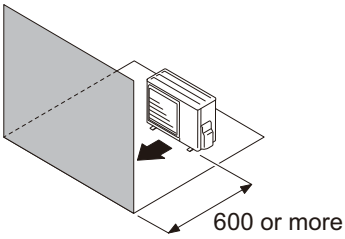
Obstacles at rear only



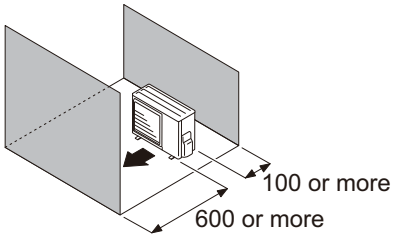
Obstacles at rear and sides



Obstacles at front



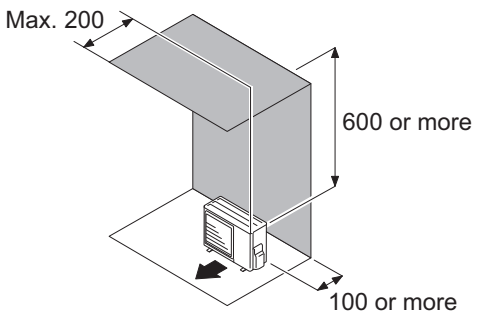
Obstacles at front and rear



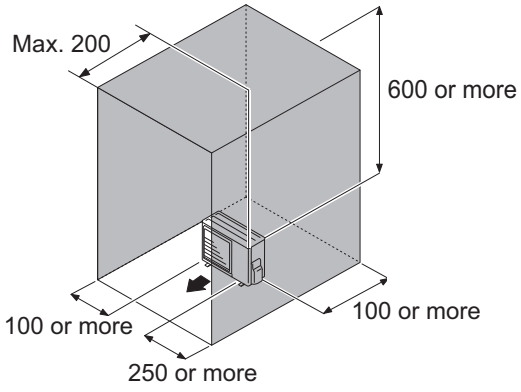
- **When an obstruction in the upper space:**

Unit: mm

Obstacles at rear and above



Obstacles at rear, sides, and above



OUTDOOR UNIT
AOYG18-45KBTB

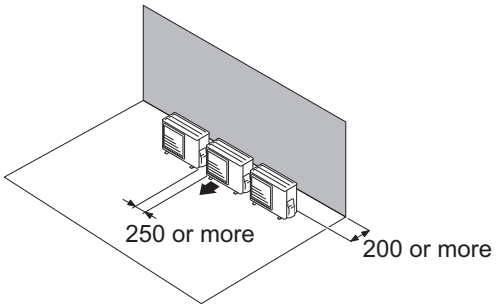
● Multiple outdoor unit installation

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

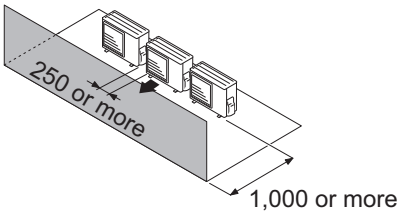
- **When the upper space is open:**

Unit: mm

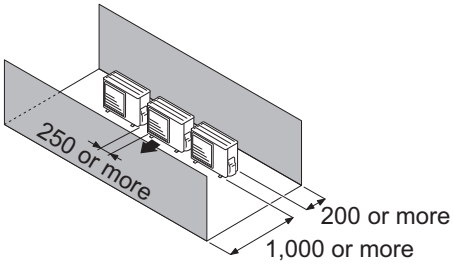
Obstacles at rear only



Obstacles at front only



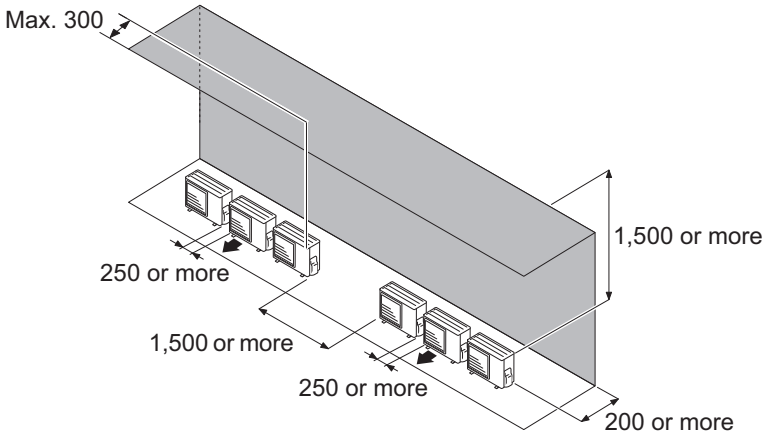
Obstacles at front and rear



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

Unit: mm

Obstacles at rear and above.

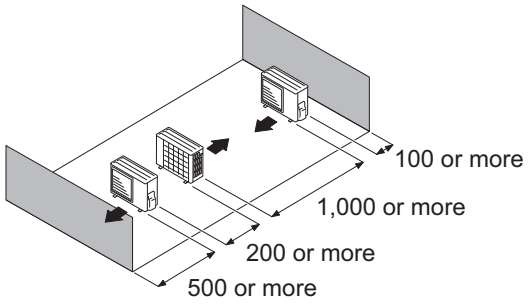


OUTDOOR UNIT
AOYG18-45KBTB

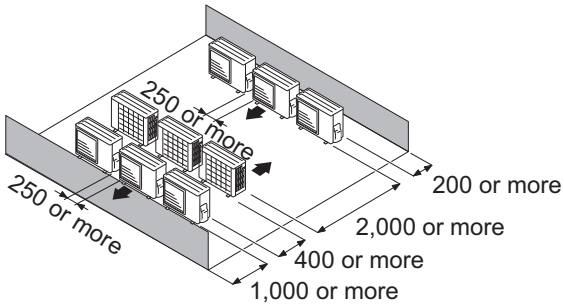
● Outdoor units installation in multi-row

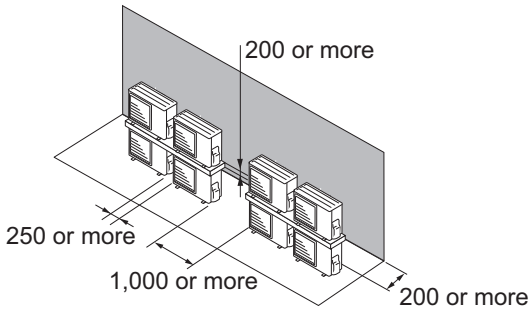
Unit: mm

Single parallel unit arrangement



Multiple parallel unit arrangement



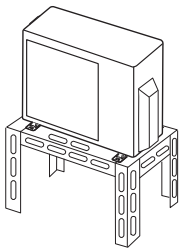


NOTES:

- If the space is larger than stated above, the condition will be the same as when there is no obstacle.
- 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 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.



OUTDOOR UNIT
AOYG18-45KBTB

3-2. Models: AOYG30KBTB, AOYG36KBTB, and AOYG45KBTB

■ Space requirement

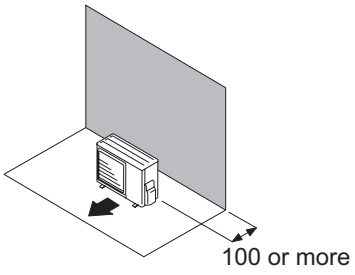
Provide sufficient installation space for product safety.

● Single outdoor unit installation

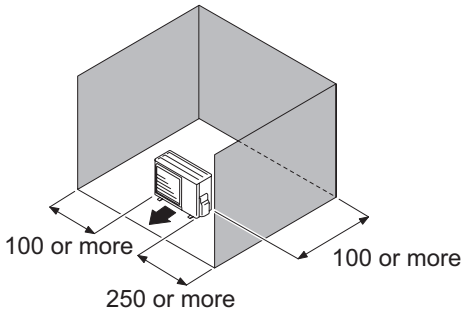
- **When the upper space is open:**

Unit: mm

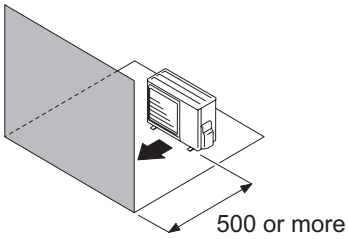
When there are obstacles at the rear only.



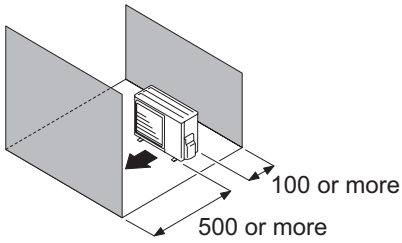
When there are obstacles at the rear and sides.



When there are obstacles at the front only.



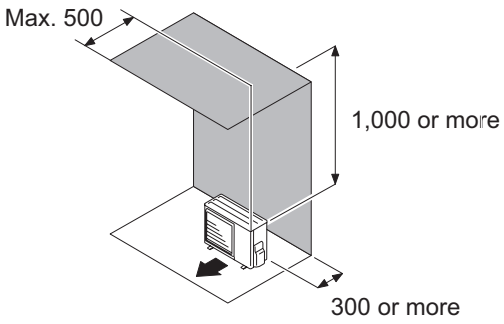
When there are obstacles at the front and rear.



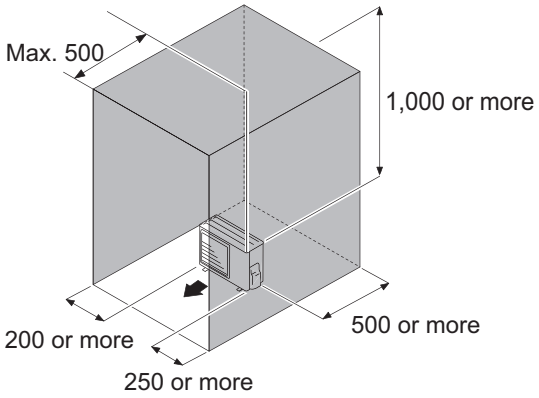
- **When there is an obstruction in the upper space:**

Unit: mm

When there are obstacles at the rear and above.



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



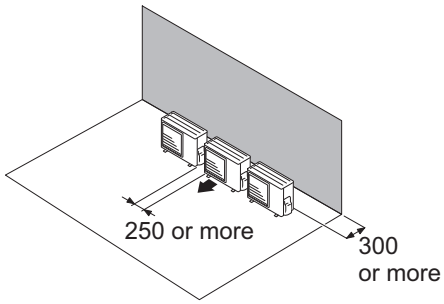
OUTDOOR UNIT
AOYG18-45KBTB

● Multiple outdoor unit installation

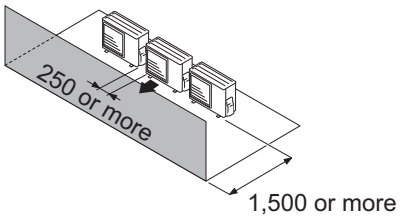
- **When the upper space is open:**

Unit: mm

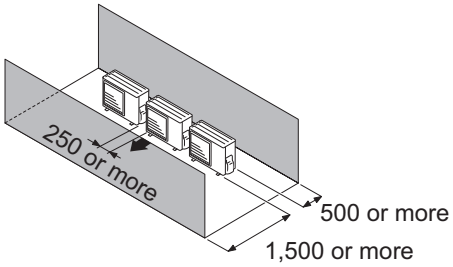
When there are obstacles at the rear only.



When there are obstacles at the front only.



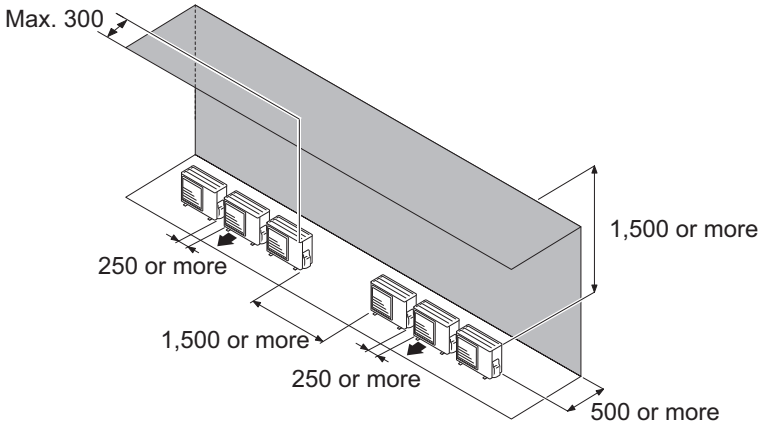
When there are obstacles at the front and rear.



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

Unit: mm

When there are obstacles at the rear and above.

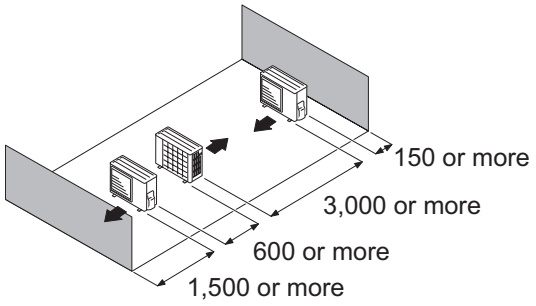


OUTDOOR UNIT
AOYG18-45KBTB

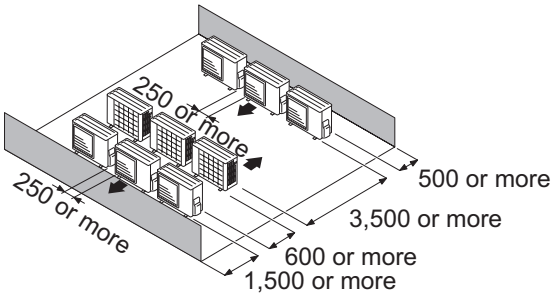
● Outdoor unit installation in multi-row

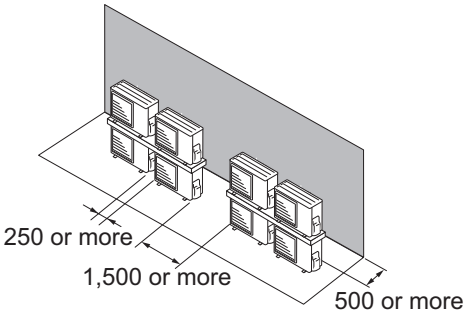
Unit: mm

Single parallel unit arrangement



Multiple parallel unit arrangement



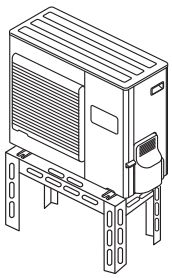


NOTES:

- 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 50 mm or more.
- When installing the outdoor unit, be sure to open the front and left side to obtain better operation efficiency.

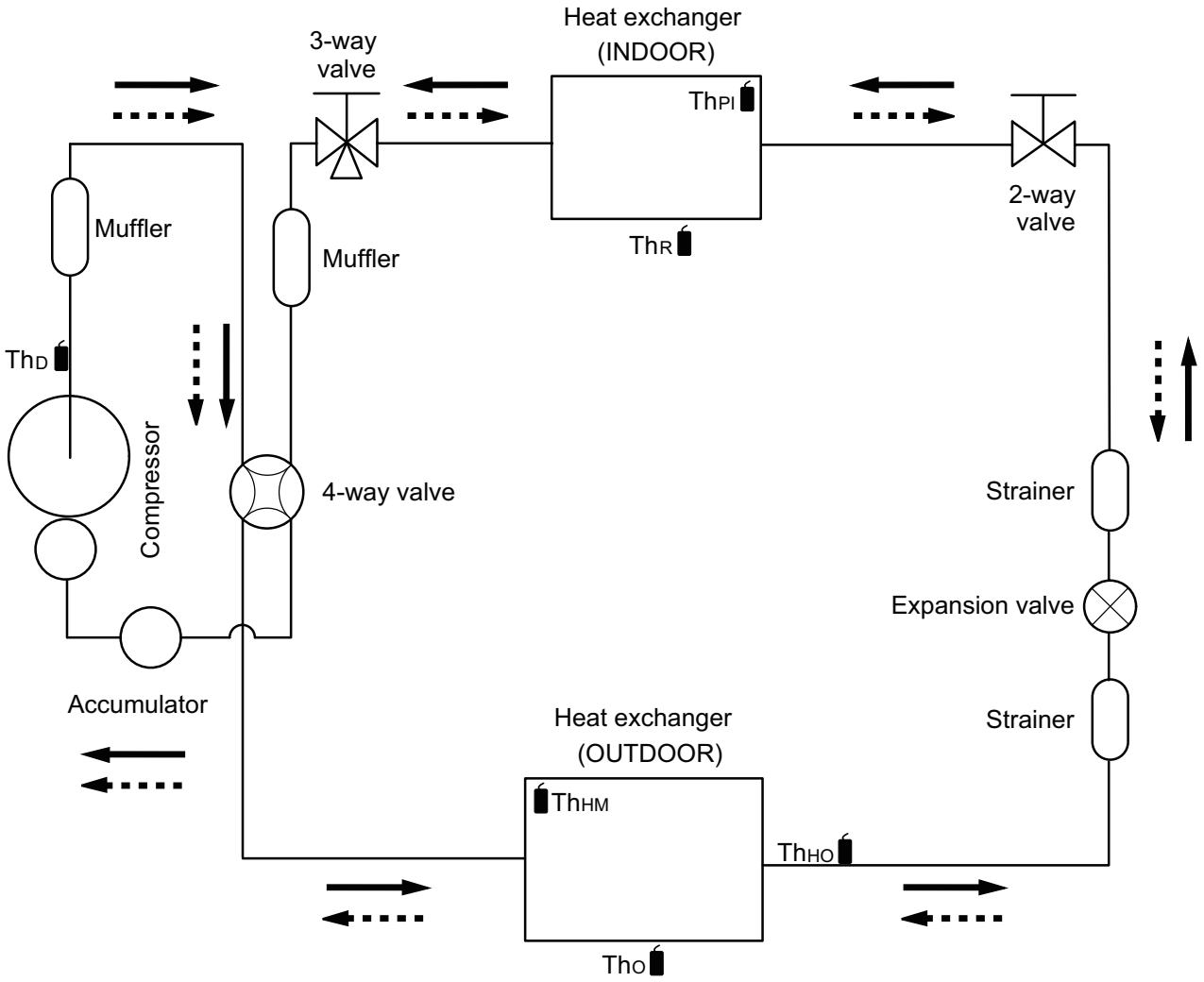
⚠ CAUTION

- 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 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: AOYG18KBTB



ThD : Thermistor (Discharge temperature)

ThO : Thermistor (Outdoor temperature)

ThHO: Thermistor (Heat exchanger out temperature)

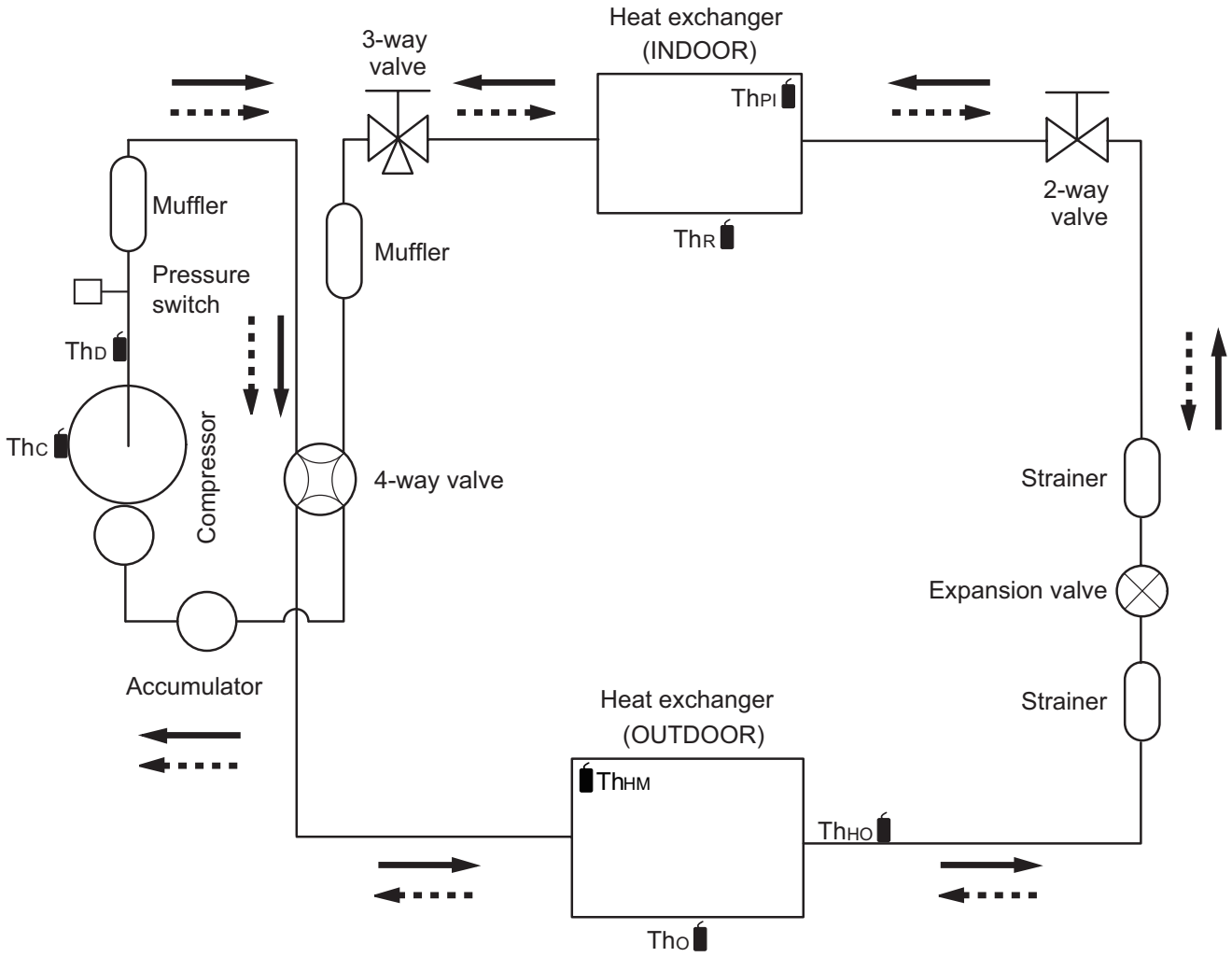
ThHM: Thermistor (Heat exchanger middle temperature)

ThR : Thermistor (Room temperature)

ThPI : Thermistor (Pipe temperature)

OUTDOOR UNIT
AOYG18-45KBTB

4-2. Model: AOYG22KBTB



ThC : Thermistor (Compressor temperature)

ThD : Thermistor (Discharge temperature)

ThO : Thermistor (Outdoor temperature)

ThHO : Thermistor (Heat exchanger out temperature)

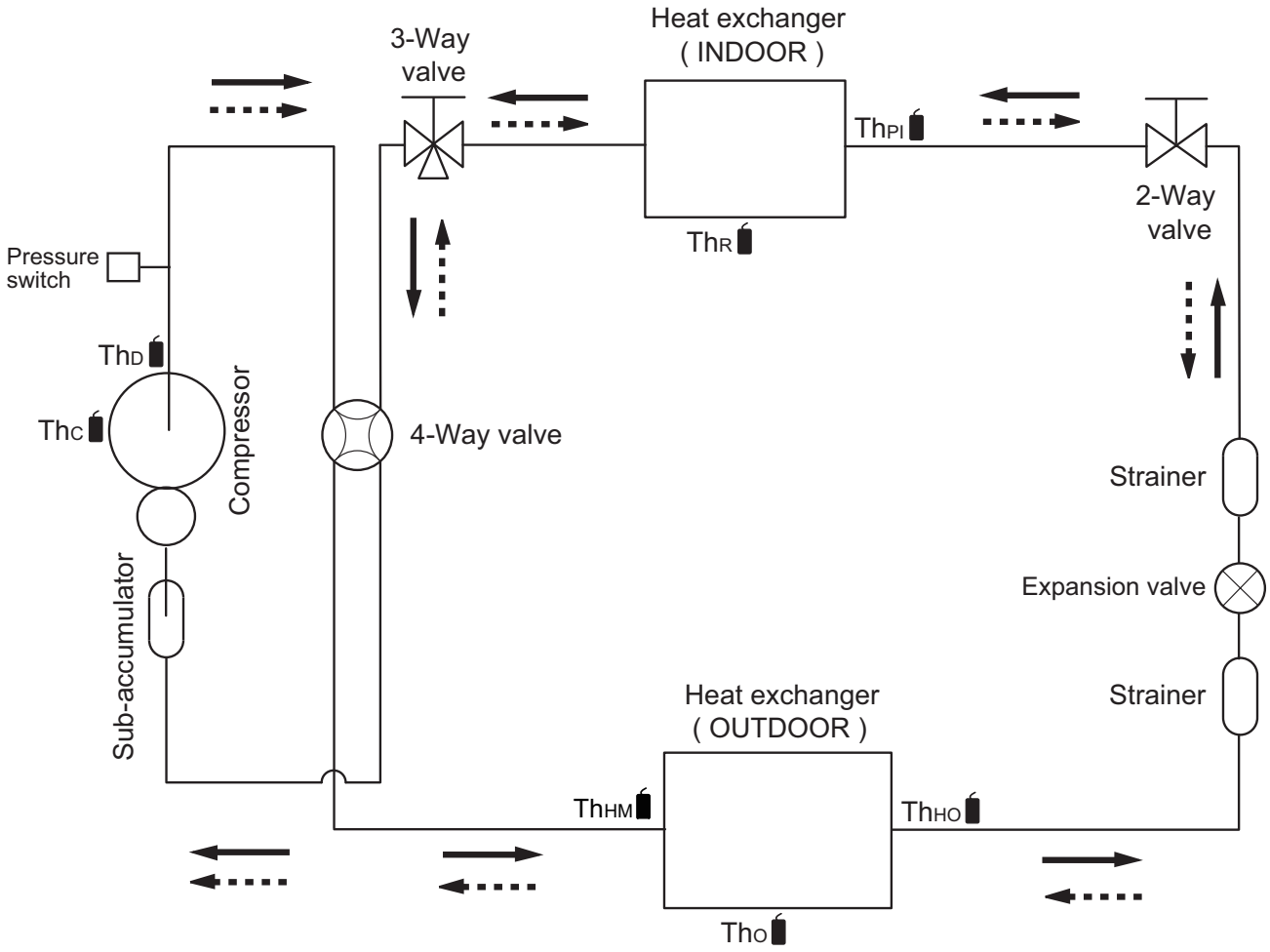
ThHM : Thermistor (Heat exchanger middle temperature)

ThR : Thermistor (Room temperature)

ThPI : Thermistor (Pipe temperature)

OUTDOOR UNIT
AOYG18-45KBTB

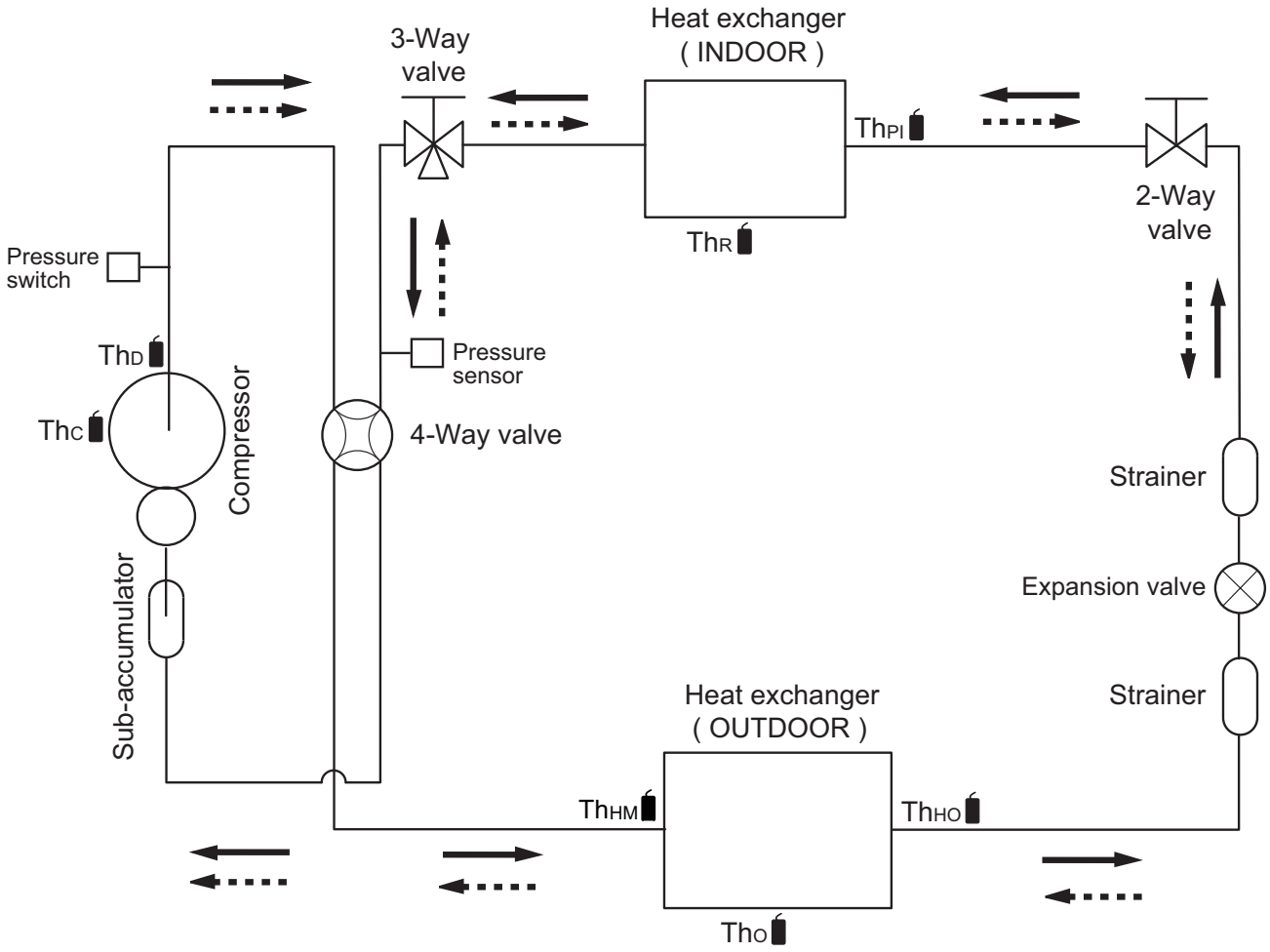
4-3. Models: AOYG24KBTB and AOYG30KBTB



: Cooling
: Heating

ThC : Thermistor (Compressor temperature)
ThD : Thermistor (Discharge temperature)
ThHM : Thermistor (Heat Exchanger Med temperature)
ThO : Thermistor (Outdoor temperature)
ThHO : Thermistor (Heat Exchanger Out temperature)
ThR : Thermistor (Room temperature)
ThPI : Thermistor (Pipe temperature)

4-4. Models: AOYG36KBTB and AOYG45KBTB



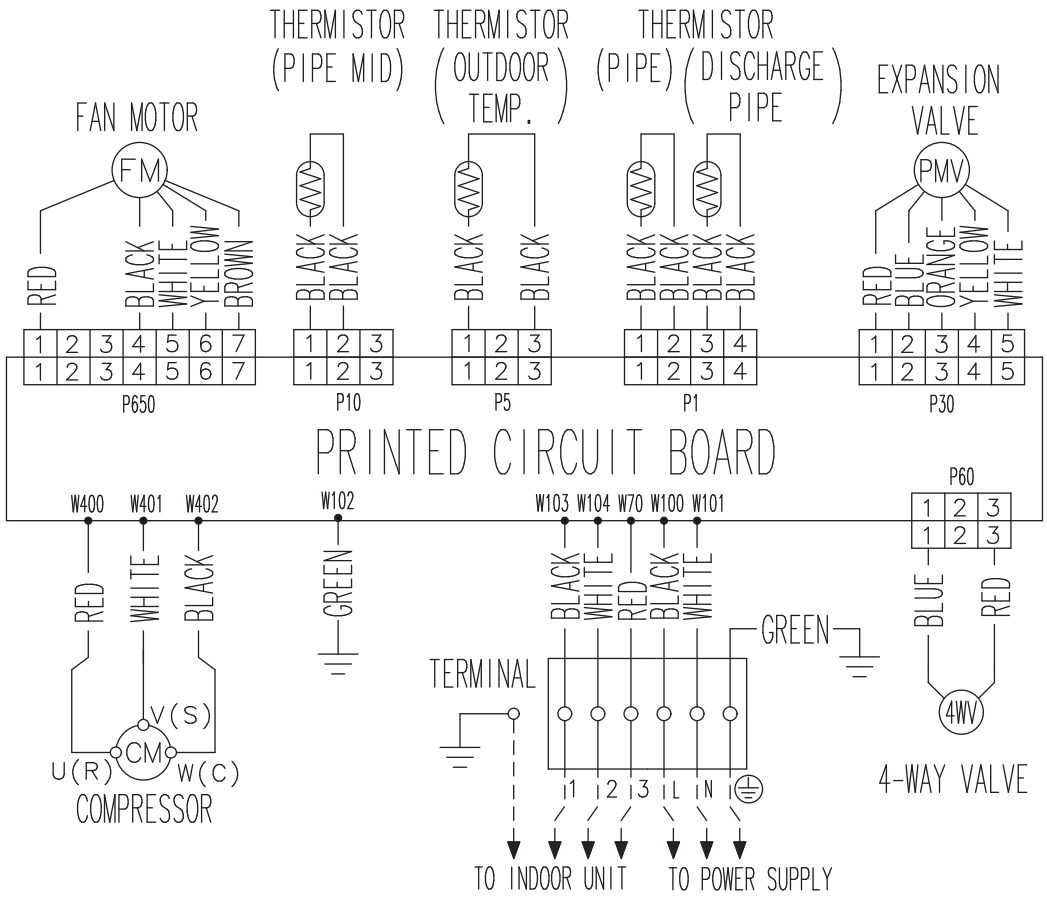
: Cooling
: Heating

ThC : Thermistor (Compressor temperature)
ThD : Thermistor (Discharge temperature)
ThHM: Thermistor (Heat Exchanger Med temperature)
ThO : Thermistor (Outdoor temperature)
ThHO : Thermistor (Heat Exchanger Out temperature)
ThR : Thermistor (Room temperature)
ThPI : Thermistor (Pipe temperature)

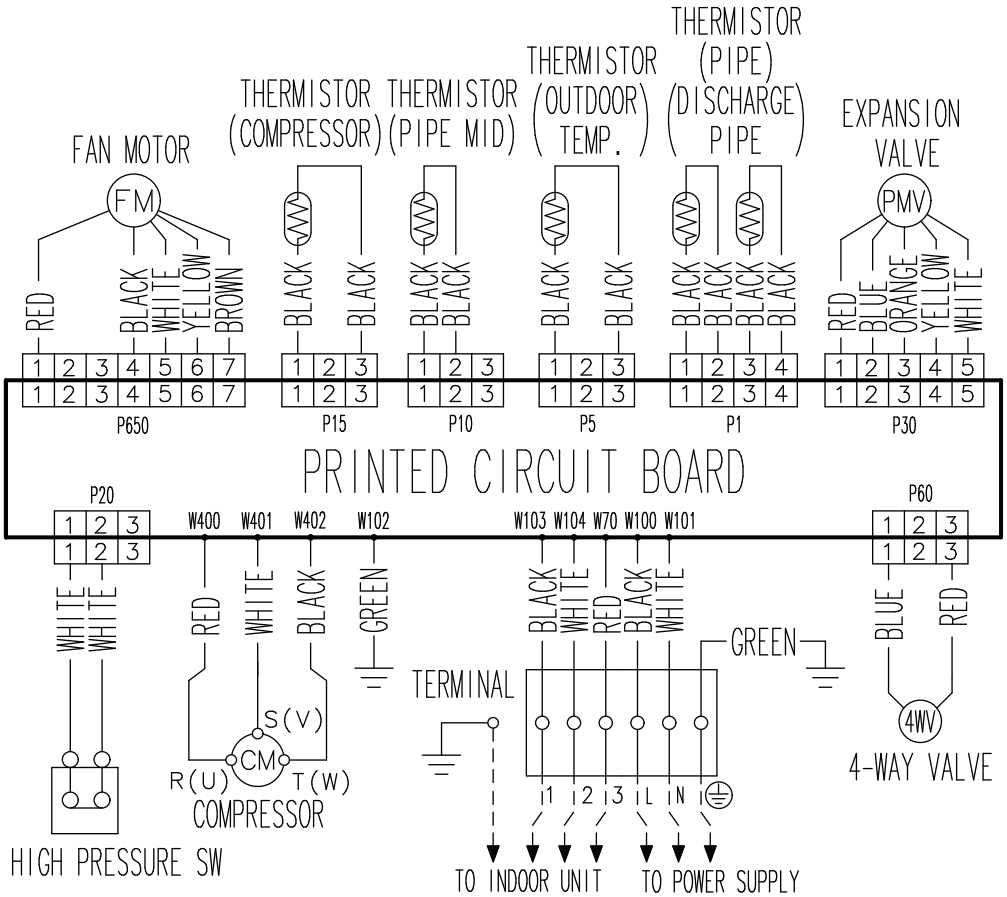
OUTDOOR UNIT
AOYG18-45KBTB

5. Wiring diagrams

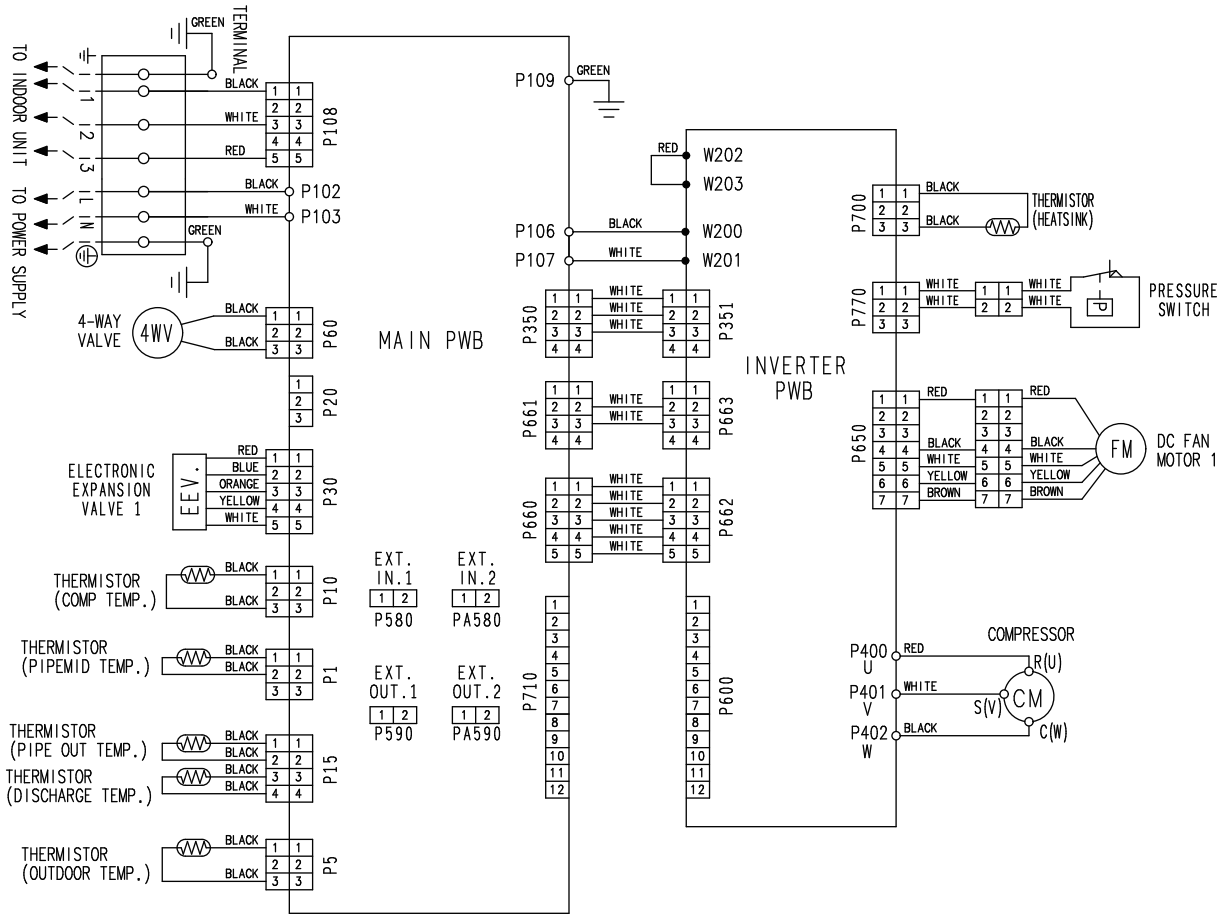
5-1. Model: AOYG18KBTB



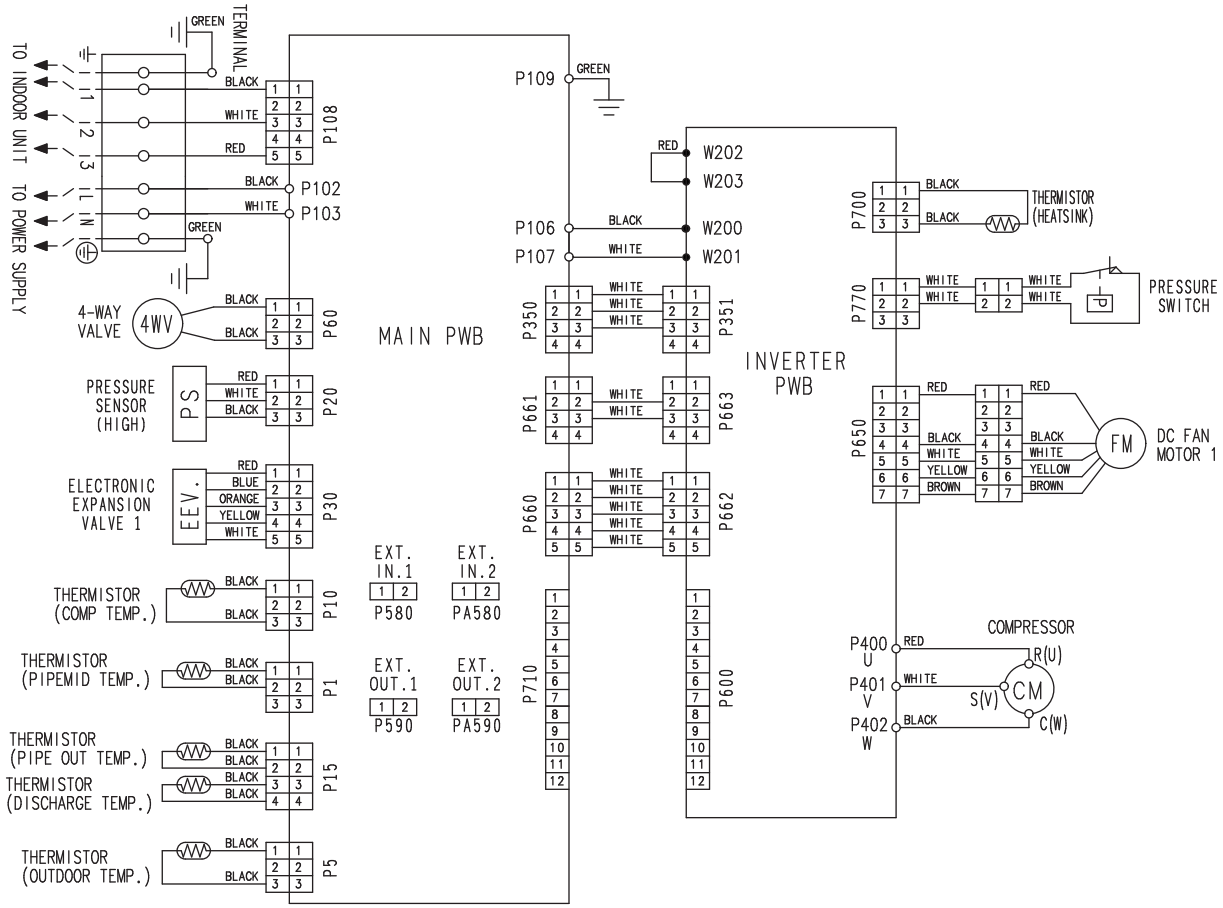
5-2. Models: AOYG22KBTB and AOYG24KBTB



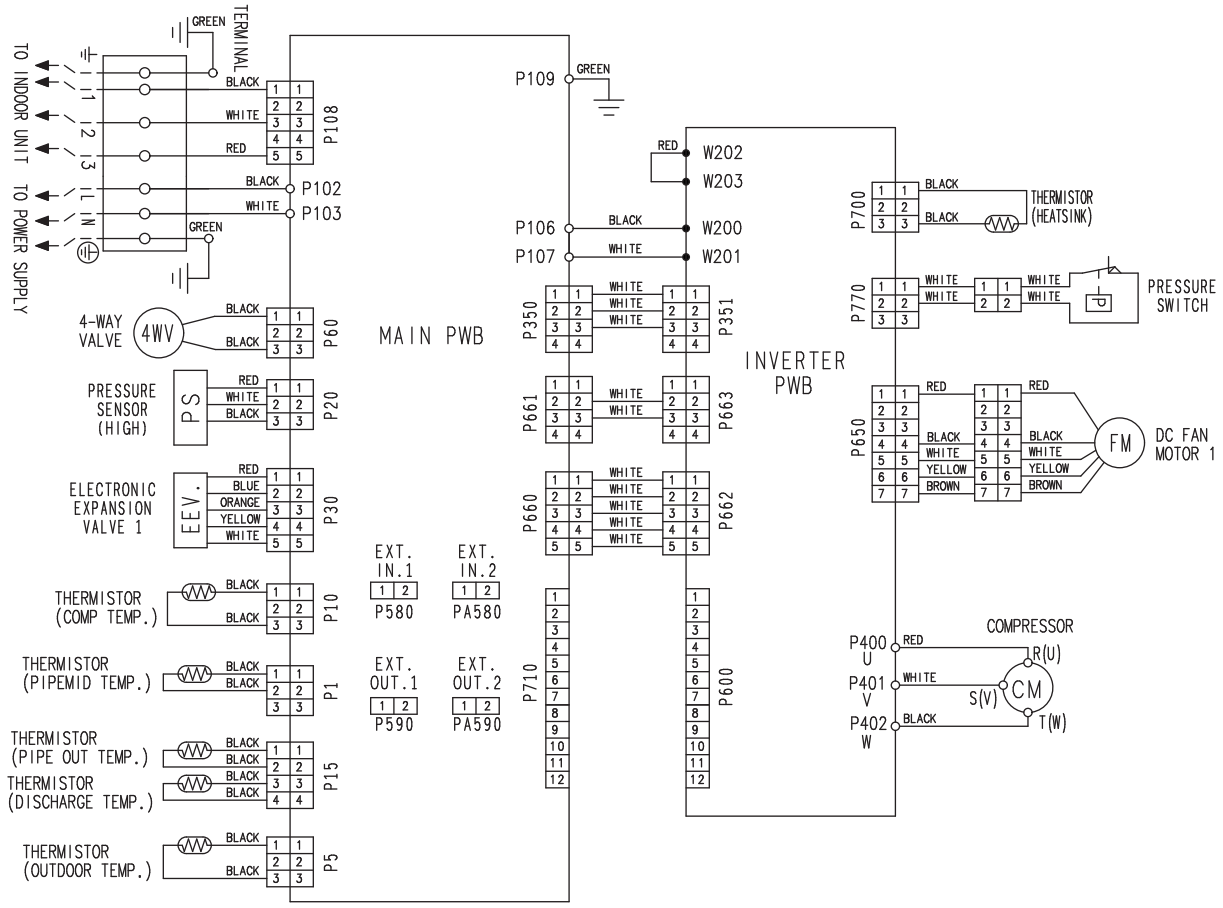
5-3. Model: AOYG30KBTB



5-4. Model: AOYG36KBTB

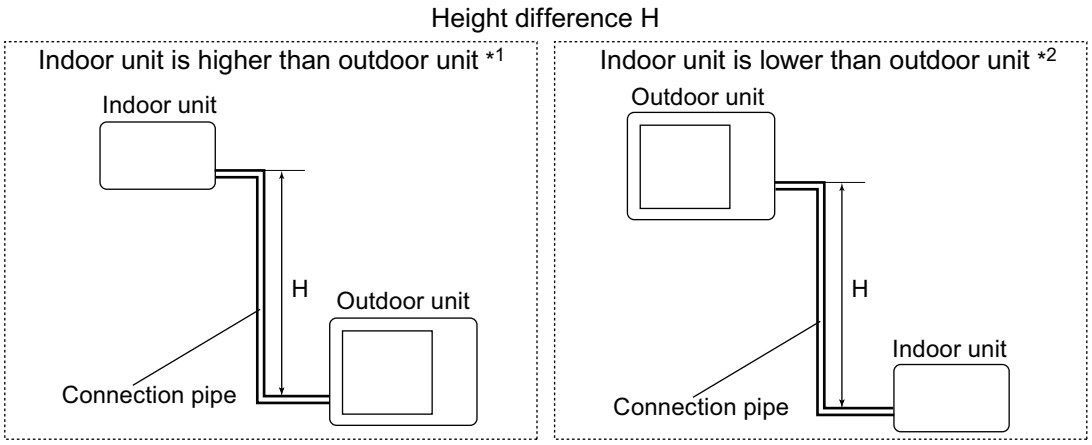


5-5. Model: AOYG45KBTB



OUTDOOR UNIT
AOYG18-45KBTB

6. Capacity compensation rate for pipe length and height difference



6-1. Model: AOYG18KBTB

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

COOLING			Pipe length (m)						
			5	7.5	10	15	20	25	30
Height difference H (m)	Indoor unit is higher than outdoor unit *1	20	—	—	—	—	0.932	0.930	0.924
		15	—	—	—	0.953	0.950	0.947	0.941
		10	—	—	0.983	0.968	0.966	0.962	0.956
		7.5	—	0.988	0.987	0.972	0.970	0.966	0.960
		5	0.992	0.992	0.991	0.976	0.974	0.970	0.964
		0	1.000	1.000	0.999	0.984	0.982	0.978	0.972
	Indoor unit is lower than outdoor unit *2	-5	1.000	1.000	0.999	0.984	0.982	0.978	0.972
		-7.5	—	1.000	0.999	0.984	0.982	0.978	0.972
		-10	—	—	0.999	0.984	0.982	0.978	0.972
		-15	—	—	—	0.984	0.982	0.978	0.972
		-20	—	—	—	—	0.982	0.978	0.972

HEATING			Pipe length (m)						
			5	7.5	10	15	20	25	30
Height difference H (m)	Indoor unit is higher than outdoor unit *1	20	—	—	—	—	0.894	0.867	0.839
		15	—	—	—	0.920	0.894	0.867	0.839
		10	—	—	0.982	0.920	0.894	0.867	0.839
		7.5	—	1.000	0.982	0.920	0.894	0.867	0.839
		5	1.000	1.000	0.982	0.920	0.894	0.867	0.839
		0	1.000	1.000	0.982	0.920	0.894	0.867	0.839
	Indoor unit is lower than outdoor unit *2	-5	0.995	0.995	0.977	0.916	0.889	0.862	0.836
		-7.5	—	0.993	0.975	0.913	0.887	0.860	0.832
		-10	—	—	0.972	0.911	0.885	0.858	0.830
		-15	—	—	—	0.902	0.876	0.849	0.821
		-20	—	—	—	—	0.863	0.834	0.809

6-2. Model: AOYG22KBTB

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

COOLING			Pipe length (m)						
			5	7.5	10	15	20	25	30
Height difference H (m)	Indoor unit is higher than outdoor unit *1	25	—	—	—	—	0.909	0.909	0.903
		15	—	—	—	0.953	0.950	0.947	0.941
		10	—	—	0.983	0.968	0.966	0.962	0.956
		7.5	—	0.988	0.987	0.972	0.970	0.966	0.960
		5	0.992	0.992	0.991	0.976	0.974	0.970	0.964
		0	1.000	1.000	0.999	0.984	0.982	0.978	0.972
	Indoor unit is lower than outdoor unit *2	-5	1.000	1.000	0.999	0.984	0.982	0.978	0.972
		-7.5	—	1.000	0.999	0.984	0.982	0.978	0.972
		-10	—	—	0.999	0.984	0.982	0.978	0.972
		-15	—	—	—	0.984	0.982	0.978	0.972
		-25	—	—	—	—	0.982	0.978	0.972

HEATING			Pipe length (m)						
			5	7.5	10	15	20	25	30
Height difference H (m)	Indoor unit is higher than outdoor unit *1	25	—	—	—	—	0.894	0.867	0.839
		15	—	—	—	0.920	0.894	0.867	0.839
		10	—	—	0.982	0.920	0.894	0.867	0.839
		7.5	—	1.000	0.982	0.920	0.894	0.867	0.839
		5	1.000	1.000	0.982	0.920	0.894	0.867	0.839
		0	1.000	1.000	0.982	0.920	0.894	0.867	0.839
	Indoor unit is lower than outdoor unit *2	-5	0.995	0.995	0.977	0.916	0.889	0.862	0.836
		-7.5	—	0.993	0.975	0.913	0.887	0.860	0.832
		-10	—	—	0.972	0.911	0.885	0.858	0.830
		-15	—	—	—	0.902	0.876	0.849	0.821
		-25	—	—	—	—	0.851	0.821	0.795

6-3. Model: AOYG24KBTB

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

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

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

6-4. Model: AOYG30KBTB

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 (m)	Indoor unit is higher than outdoor unit *1	30	—	—	—	—	0.926	0.916	0.906
		20	—	—	—	0.953	0.942	0.931	0.920
		10	—	—	0.979	0.968	0.958	0.946	0.936
		7.5	—	0.988	0.983	0.972	0.961	0.951	0.939
		5	0.992	0.992	0.987	0.976	0.965	0.954	0.943
		0	1.000	1.000	0.995	0.984	0.973	0.962	0.951
	Indoor unit is lower than outdoor unit *2	-5	1.000	1.000	0.995	0.984	0.973	0.962	0.951
		-7.5	—	1.000	0.995	0.984	0.973	0.962	0.951
		-10	—	—	0.995	0.984	0.973	0.962	0.951
		-20	—	—	—	0.984	0.973	0.962	0.951
		-30	—	—	—	—	0.973	0.962	0.951

HEATING			Pipe length (m)						
			5	7.5	10	20	30	40	50
Height difference H (m)	Indoor unit is higher than outdoor unit *1	30	—	—	—	—	0.931	0.914	0.899
		20	—	—	—	0.954	0.931	0.914	0.899
		10	—	—	0.990	0.954	0.931	0.914	0.899
		7.5	—	1.000	0.990	0.954	0.931	0.914	0.899
		5	1.000	1.000	0.990	0.954	0.931	0.914	0.899
		0	1.000	1.000	0.990	0.954	0.931	0.914	0.899
	Indoor unit is lower than outdoor unit *2	-5	0.995	0.995	0.986	0.949	0.926	0.909	0.895
		-7.5	—	0.993	0.983	0.946	0.924	0.907	0.892
		-10	—	—	0.981	0.944	0.921	0.904	0.890
		-20	—	—	—	0.935	0.912	0.895	0.881
		-30	—	—	—	—	0.903	0.886	0.872

6-5. Model: AOYG36KBTB

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 (m)	Indoor unit is higher than outdoor unit *1	30	—	—	—	—	0.902	0.882	0.862
		20	—	—	—	0.938	0.917	0.897	0.876
		10	—	—	0.973	0.953	0.933	0.912	0.891
		7.5	—	0.988	0.977	0.957	0.936	0.916	0.895
		5	0.992	0.992	0.981	0.961	0.940	0.919	0.898
		0	1.000	1.000	0.989	0.968	0.947	0.926	0.905
	Indoor unit is lower than outdoor unit *2	-5	1.000	1.000	0.989	0.968	0.947	0.926	0.905
		-7.5	—	1.000	0.989	0.968	0.947	0.926	0.905
		-10	—	—	0.989	0.968	0.947	0.926	0.905
		-20	—	—	—	0.968	0.947	0.926	0.905
		-30	—	—	—	—	0.947	0.926	0.905

HEATING			Pipe length (m)						
			5	7.5	10	20	30	40	50
Height difference H (m)	Indoor unit is higher than outdoor unit *1	30	—	—	—	—	0.978	0.968	0.958
		20	—	—	—	0.988	0.978	0.968	0.958
		10	—	—	0.998	0.988	0.978	0.968	0.958
		7.5	—	1.000	0.998	0.988	0.978	0.968	0.958
		5	1.000	1.000	0.998	0.988	0.978	0.968	0.958
		0	1.000	1.000	0.998	0.988	0.978	0.968	0.958
	Indoor unit is lower than outdoor unit *2	-5	0.995	0.995	0.993	0.983	0.973	0.963	0.953
		-7.5	—	0.993	0.991	0.981	0.971	0.961	0.951
		-10	—	—	0.988	0.978	0.968	0.958	0.948
		-20	—	—	—	0.968	0.958	0.949	0.939
		-30	—	—	—	—	0.949	0.939	0.929

6-6. Model: AOYG45KBTB

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 (m)	Indoor unit is higher than outdoor unit *1	30	—	—	—	—	0.900	0.879	0.858
		20	—	—	—	0.937	0.915	0.894	0.872
		10	—	—	0.973	0.952	0.931	0.908	0.887
		7.5	—	0.988	0.977	0.956	0.934	0.913	0.891
		5	0.992	0.992	0.981	0.960	0.938	0.916	0.894
		0	1.000	1.000	0.989	0.967	0.945	0.923	0.901
	Indoor unit is lower than outdoor unit *2	-5	1.000	1.000	0.989	0.967	0.945	0.923	0.901
		-7.5	—	1.000	0.989	0.967	0.945	0.923	0.901
		-10	—	—	0.989	0.967	0.945	0.923	0.901
		-20	—	—	—	0.967	0.945	0.923	0.901
		-30	—	—	—	—	0.945	0.923	0.901

HEATING			Pipe length (m)						
			5	7.5	10	20	30	40	50
Height difference H (m)	Indoor unit is higher than outdoor unit *1	30	—	—	—	—	0.978	0.968	0.958
		20	—	—	—	0.988	0.978	0.968	0.958
		10	—	—	0.998	0.988	0.978	0.968	0.958
		7.5	—	1.000	0.998	0.988	0.978	0.968	0.958
		5	1.000	1.000	0.998	0.988	0.978	0.968	0.958
		0	1.000	1.000	0.998	0.988	0.978	0.968	0.958
	Indoor unit is lower than outdoor unit *2	-5	0.995	0.995	0.993	0.983	0.973	0.963	0.953
		-7.5	—	0.993	0.991	0.981	0.971	0.961	0.951
		-10	—	—	0.988	0.978	0.968	0.958	0.948
		-20	—	—	—	0.968	0.958	0.949	0.939
		-30	—	—	—	—	0.949	0.939	0.929

OUTDOOR UNIT
AOYG18-45KBTB

7. Additional charge calculation

7-1. Model: AOYG18KBTB

Refrigerant type		R32
Refrigerant amount	g	1,020

■ Refrigerant charge

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

7-2. Models: AOYG22KBTB and AOYG24KBTB

Refrigerant type		R32
Refrigerant amount	g	1,250

■ Refrigerant charge

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

7-3. Models: AOYG30KBTB and AOYG36KBTB

Refrigerant type		R32
Refrigerant amount	g	1,900

■ Refrigerant charge

Total pipe length	m	30 or less	40	50 (Max.)	40 g/m
Additional charge amount	g	0	400	800	

7-4. Model: AOYG45KBTB

Refrigerant type		R32
Refrigerant amount	g	2,700

■ Refrigerant charge

Total pipe length	m	30 or less	40	50 (Max.)	40 g/m
Additional charge amount	g	0	400	800	

OUTDOOR UNIT
AOYG18-45KBTB

8. Airflow

8-1. Model: AOYG18KBTB

● Cooling

m^3/h	2,160
l/s	600
CFM	1,271

● Heating

m^3/h	1,830
l/s	508
CFM	1,077

8-2. Model: AOYG22KBTB

● Cooling

m^3/h	2,240
l/s	622
CFM	1,318

● Heating

m^3/h	1,960
l/s	544
CFM	1,154

8-3. Model: AOYG24KBTB

● Cooling

m^3/h	2,700
l/s	750
CFM	1,589

● Heating

m^3/h	2,700
l/s	750
CFM	1,589

OUTDOOR UNIT
AOYG18-45KBTB

8-4. Models: AOYG30KBTB and AOYG36KBTB

● Cooling

m^3/h	3,750
l/s	1,042
CFM	2,207

● Heating

m^3/h	3,750
l/s	1,042
CFM	2,207

8-5. Model: AOYG45KBTB

● Cooling

m^3/h	4,450
l/s	1,236
CFM	2,619

● Heating

m^3/h	4,450
l/s	1,236
CFM	2,619

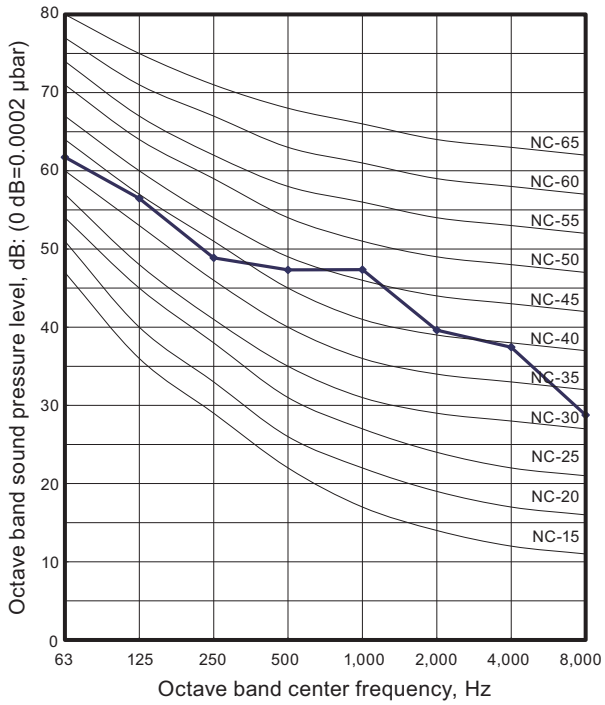
OUTDOOR UNIT
AOYG18-45KBTB

9. Operation noise (sound pressure)

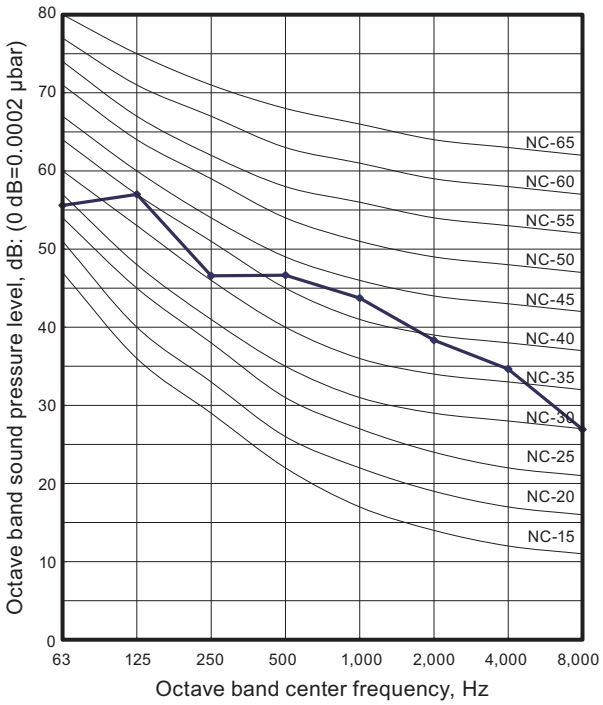
9-1. Noise level curve

■ Model: AOYG18KBTB

● Cooling

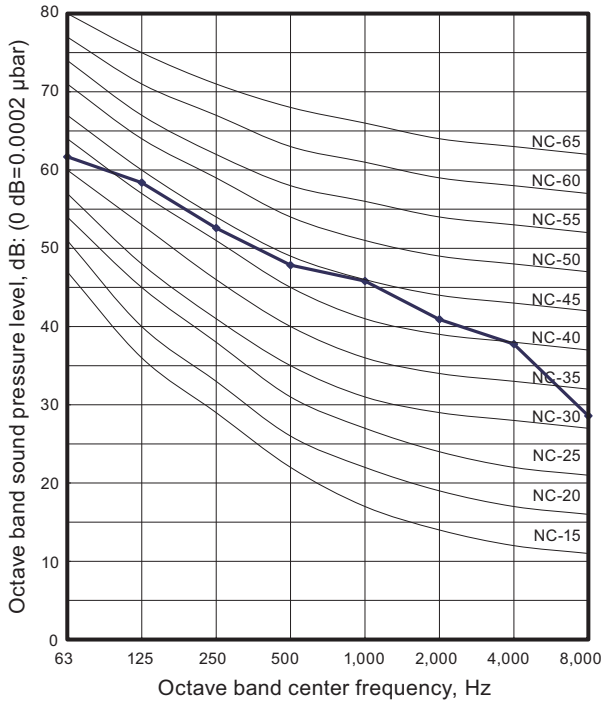


● Heating

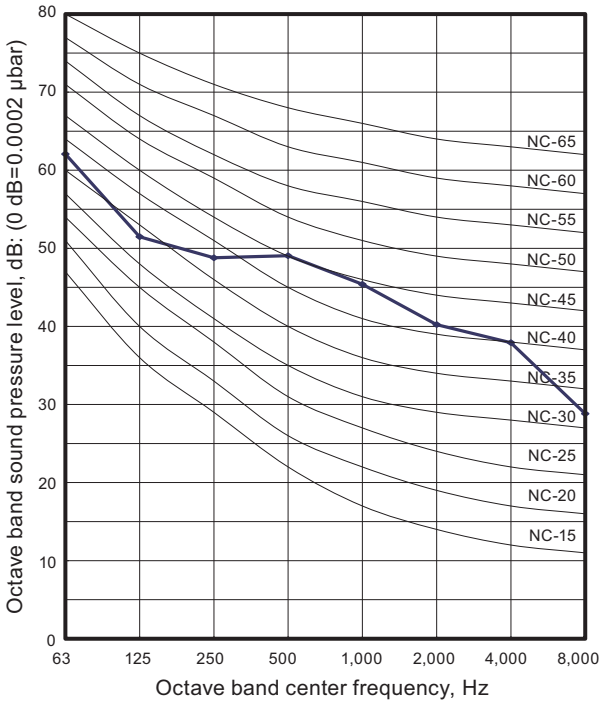


■ Model: AOYG22KBTB

● Cooling



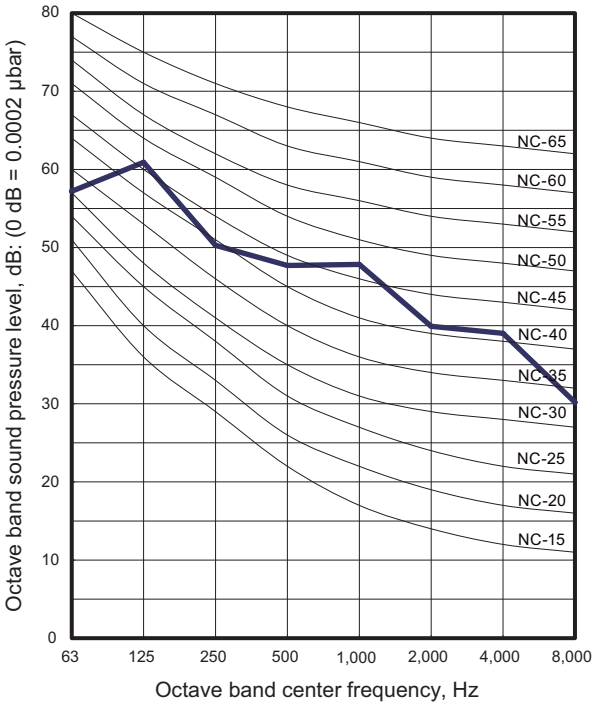
● Heating



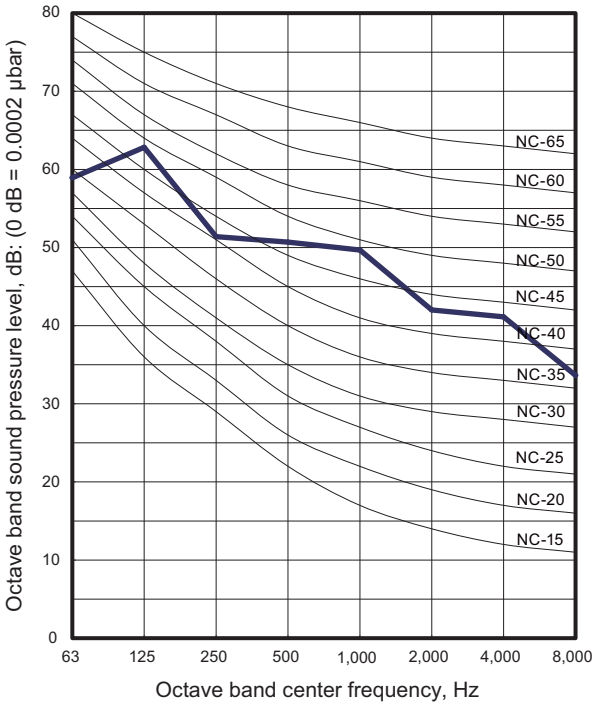
OUTDOOR UNIT
AOYG18-45KBTB

■ Model: AOYG24KBTB

● Cooling

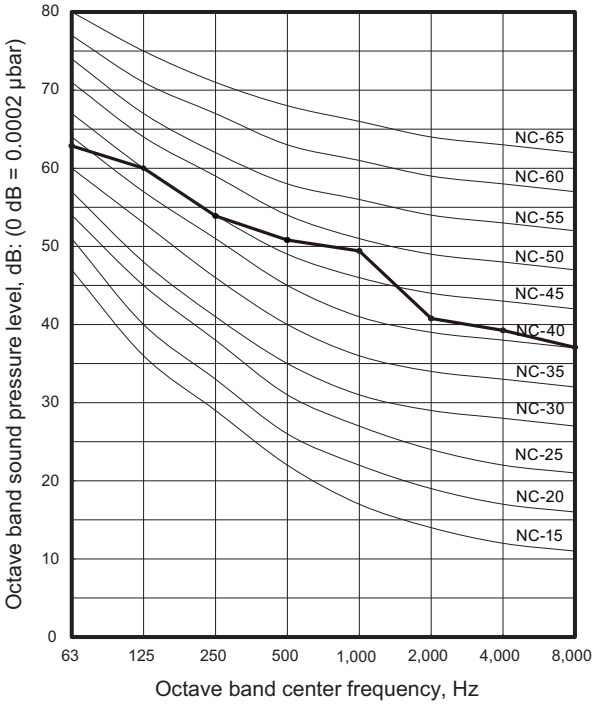


● Heating

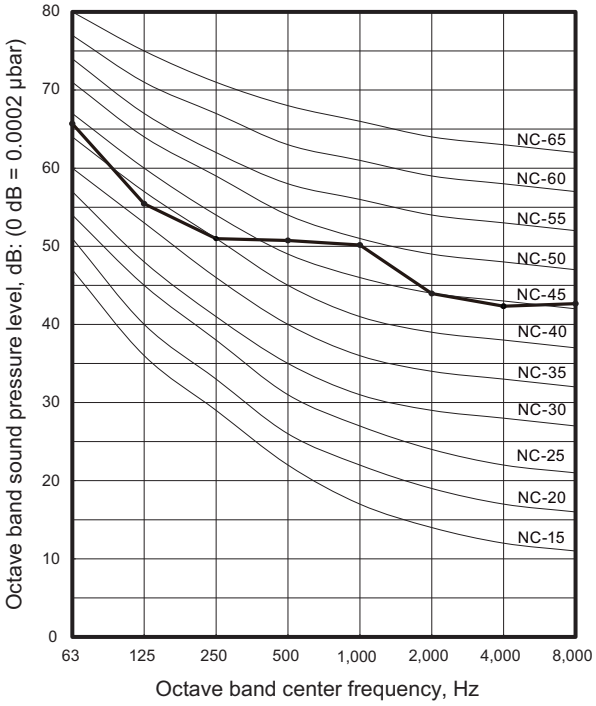


■ Model: AOYG30KBTB

● Cooling



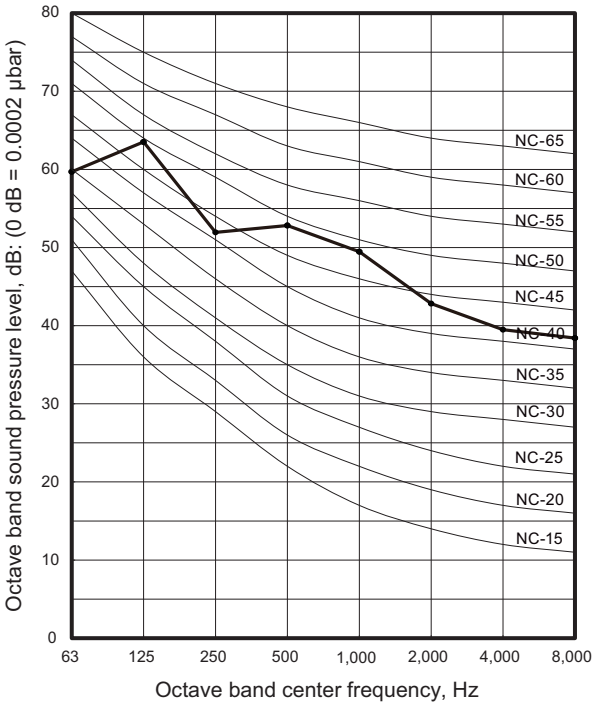
● Heating



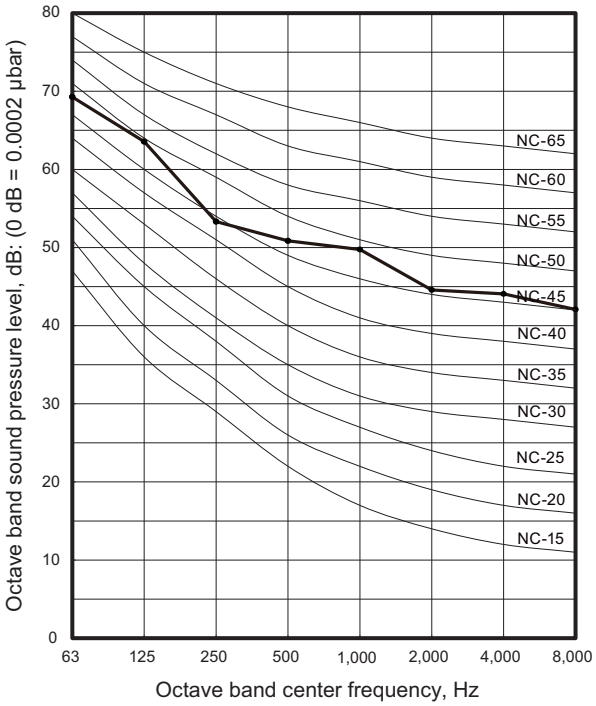
OUTDOOR UNIT
AOYG18-45KBTB

■ Model: AOYG36KBTB

● Cooling

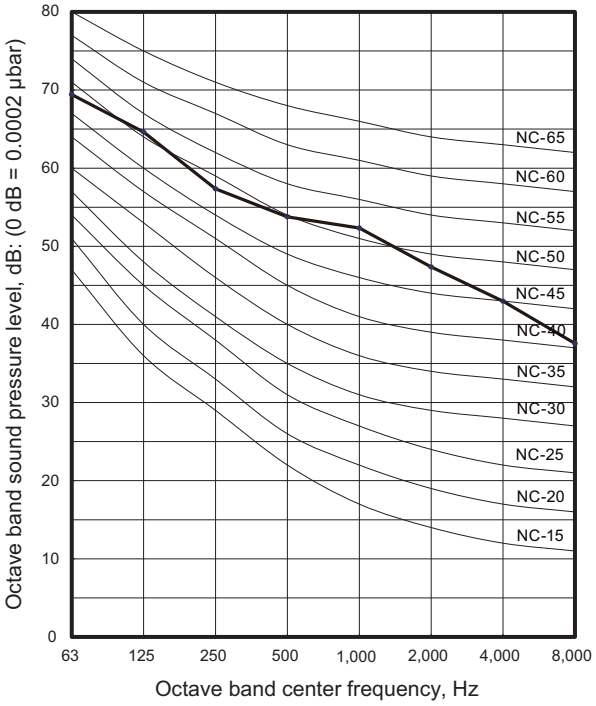


● Heating

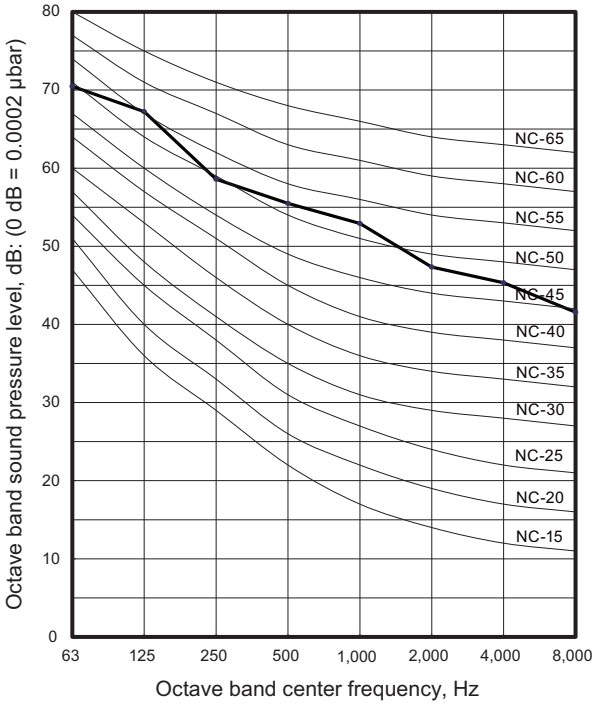


■ Model: AOYG45KBTB

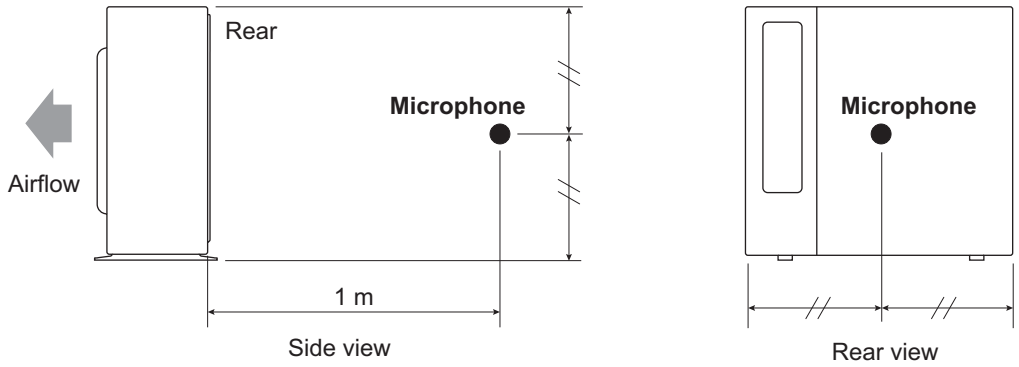
● Cooling



● Heating



9-2. Sound level check point



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

OUTDOOR UNIT
AOYG18-45KBTB

10. Electrical characteristics

Model name				AOYG18KBTB	AOYG22KBTB
Power supply	Voltage		V	230 ~	
	Frequency		Hz	50	
Max operating current *1			A	12.1	12.6
Starting current			A	7.1	8.2
Wiring spec. *2	Circuit breaker current		A	16	
	Power cable		mm^2	1.5	
	Connection cable *3	Cross-sectional area	mm^2	1.5	
		Limited wiring length	m	31	

Model name				AOYG24KBTB	AOYG30KBTB
Power supply	Voltage		V	230 ~	
	Frequency		Hz	50	
Max operating current *1			A	13.6	22.6
Starting current			A	8.4	11.1
Wiring spec. *2	Circuit breaker current		A	20	25
	Power cable		mm^2	2.5	4.0
	Connection cable *3	Cross-sectional area	mm^2	1.5	
		Limited wiring length	m	31	51

Model name				AOYG36KBTB	AOYG45KBTB
Power supply	Voltage		V	230 ~	
	Frequency		Hz	50	
Max operating current *1			A	22.6	28.5
Starting current			A	13.0	18.6
Wiring spec. *2	Circuit breaker current		A	25	32
	Power cable		mm^2	4.0	
	Connection cable *3	Cross-sectional area	mm^2	1.5	
		Limited wiring length	m	51	

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

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

*3: Limit voltage drop to less than 2%. Increase conductor size if voltage drop is 2% or more.

OUTDOOR UNIT
AOYG18-45KBTB

11. Safety devices

Type of protection	Protection form		Model	
			AOYG18KBTB	AOYG22KBTB
Circuit protection	Current fuse (Main PCB)		250 V, 25 A	
			250 V, 5 A	
			250 V, 3.15 A	
Fan motor protection	Terminal protection program	Activate	125±10 °C Fan motor stop	
		Reset	120±10 °C Fan motor restart	
Compressor protection	Terminal protection program (Discharge temp.)	Activate	110 °C Compressor stop	
		Reset	After 7 minutes Compressor restart	
	Terminal protection program (Compressor temp.)	Activate	—	108 °C Compressor stop
		Reset	—	After 3 minutes, and 80 °C or less Compressor restart
	Thermal protection program (Outdoor temp.) (Only in COOL or DRY mode)	Activate	-20 °C Compressor stop	
		Reset	-15 °C Compressor restart	
High pressure protection	Pressure switch	Activate	—	$4.2\ ^{+0}_{-0.15}$ MPa Compressor stop
		Reset	—	3.2 ±0.15 MPa Compressor restart

Type of protection	Protection form		Model	
			AOYG24KBTB	AOYG30KBTB
Circuit protection	Current fuse (Main PCB)		250 V, 25 A 250 V, 5 A 250 V, 3.15 A	250 V, 30 A 250 V, 3.15 A 250 V, 10 A × 2
Fan motor protection	Thermal protection program	Activate	125 ±10 °C Fan motor stop	122 ±9 °C Fan motor stop
		Reset	120 ±10 °C Fan motor restart	107—126 °C Fan motor restart
Compressor protection	Thermal protection program (Discharge temp.)	Activate	110 °C Compressor stop	
		Reset	After 7 minutes Compressor restart	
	Thermal protection program (Compressor temp.)	Activate	108 °C Compressor stop	
		Reset	80 °C or less Compressor restart	
	Thermal protection program (Outdoor temp.) (Only in COOL or DRY mode)	Activate	-20 °C Compressor stop	
		Reset	-15 °C Compressor restart	

OUTDOOR UNIT
AOYG18-45KBTB

Type of protection	Protection form		Model	
			AOYG36KBTB	AOYG45KBTB
Circuit protection	Current fuse (Main PCB)		250 V, 30 A 250 V, 3.15 A 250 V, 10 A × 2	
Fan motor protection	Thermal protection program	Activate	122 ±9 °C Fan motor stop	150 ±15 °C Fan motor stop
		Reset	107—126 °C Fan motor restart	120 ±15 °C Fan motor restart
Compressor protection	Thermal protection program (Discharge temp.)	Activate	110 °C Compressor stop	
		Reset	After 7 minutes Compressor restart	
	Thermal protection program (Compressor temp.)	Activate	108 °C Compressor stop	
		Reset	80 °C or less Compressor restart	
	Thermal protection program (Outdoor temp.) (Only in COOL or DRY mode)	Activate	-20 °C Compressor stop	
		Reset	-15 °C Compressor restart	

OUTDOOR UNIT
AOYG18-45KBTB

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.

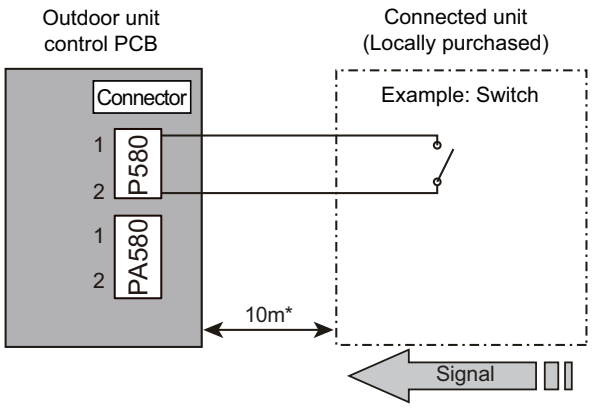
■ Low noise mode

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

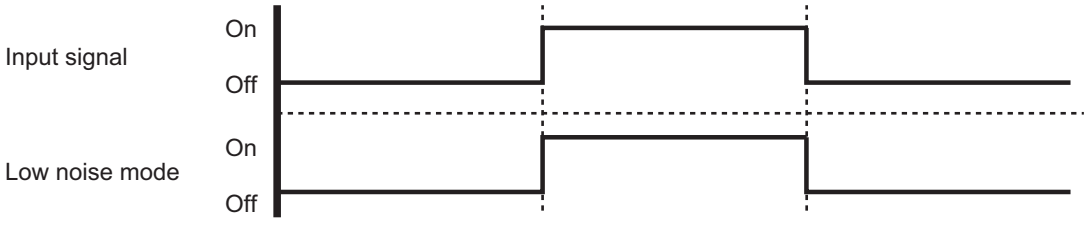
The air conditioner is set to the “Low noise mode” when closing the contact input of a commercial timer or on/off switch to a connector on the control PCB of the outdoor unit.

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

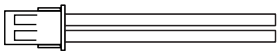
- **Circuit diagram example**



- Contact capacity: DC 24 V or more, 10 mA or more.
- *: Make the distance from the PCB to the connected unit within 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 104.



- **Optional part**

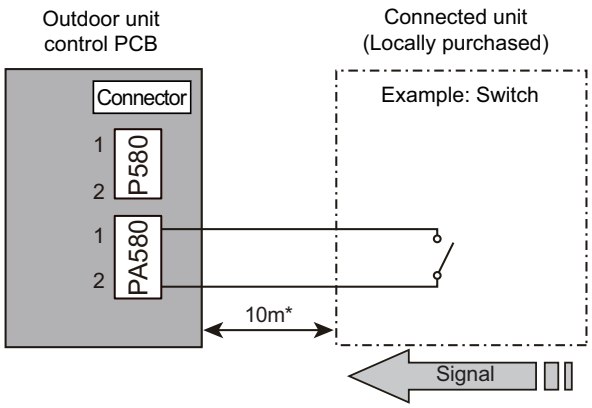
Part name	Model name	Exterior
External connect kit	UTY-XWZXZ3	External input wire 

OUTDOOR UNIT
AOYG18-45KBTB

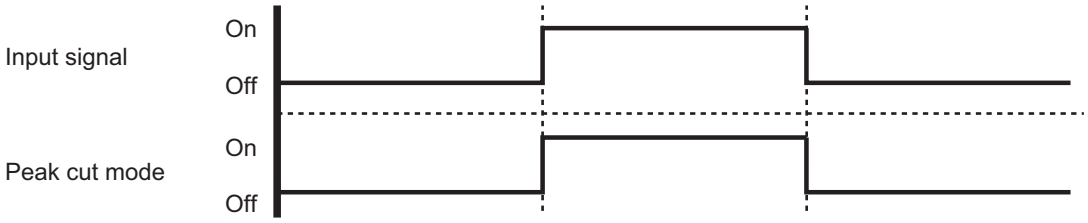
■ Peak cut mode

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.

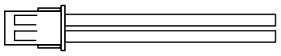
- **Circuit diagram example**



- Contact capacity: DC 24 V or more, 10 mA or more.
- *: Make the distance from the PCB to the connected unit within 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 105.



- **Optional part**

Part name	Model name	Exterior
External connect kit	UTY-XWZXZ3	External input wire 

OUTDOOR UNIT
AOYG18-45KBTB

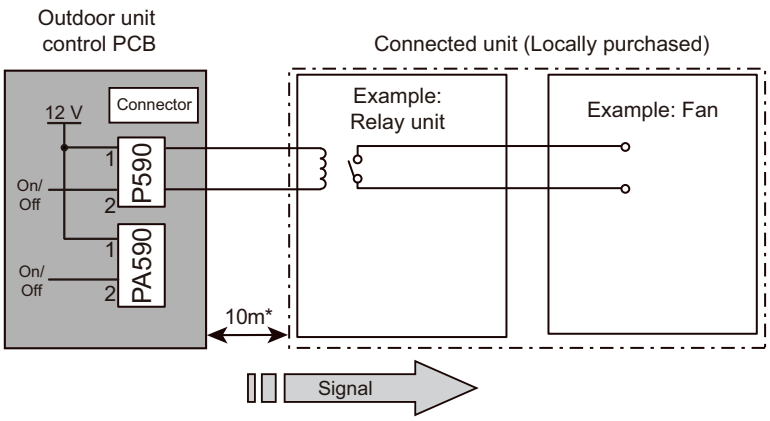
12-2. External output

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.

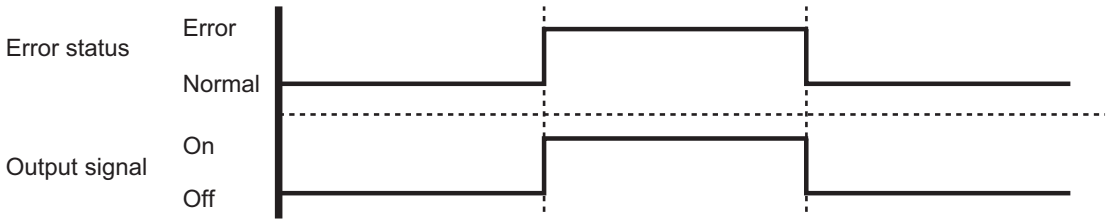
■ Error status output

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

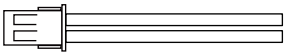
- **Circuit diagram example**



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



- **Optional part**

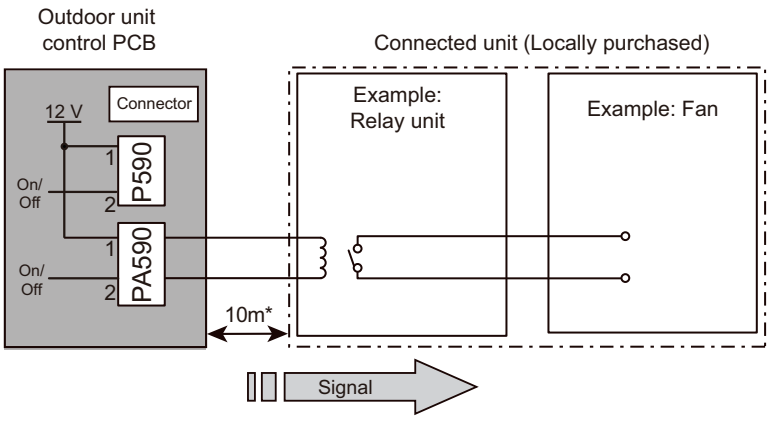
Part name	Model name	Exterior
External connect kit	UTY-XWZXZ3	External output wire 

OUTDOOR UNIT
AOYG18-45KBTB

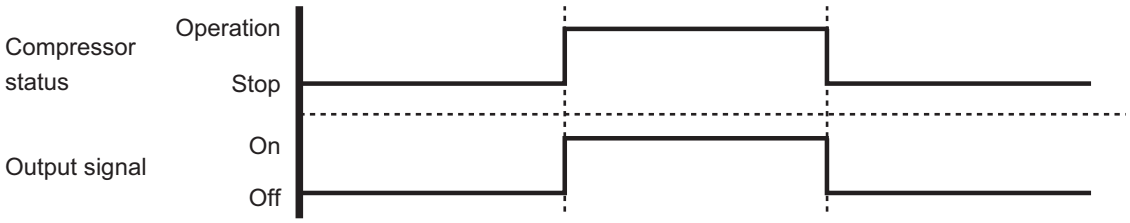
■ Compressor status output

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

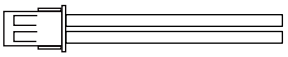
- **Circuit diagram example**



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



- **Optional part**

Part name	Model name	Exterior
External connect kit	UTY-XWZXZ3	External output wire 

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13. Function settings

Perform appropriate function setting locally according to the installation environment.

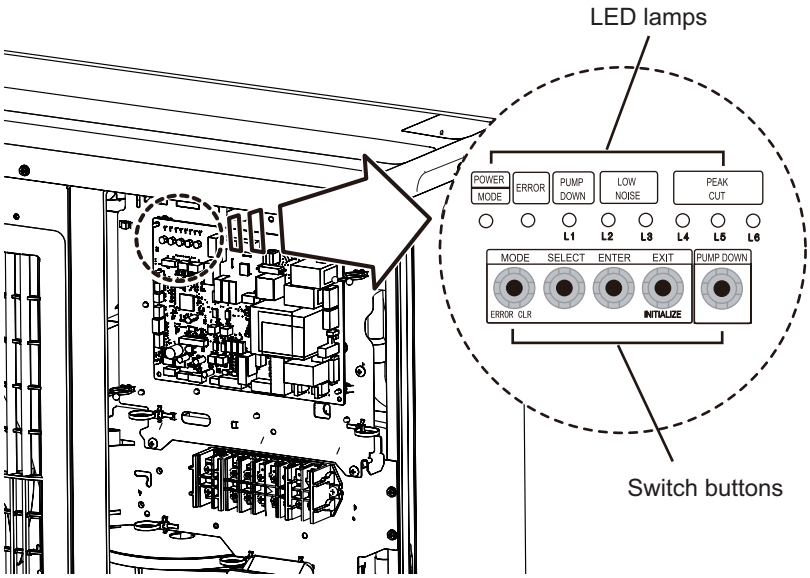
NOTE: Incorrect settings can cause a product malfunction.

⚠ 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.



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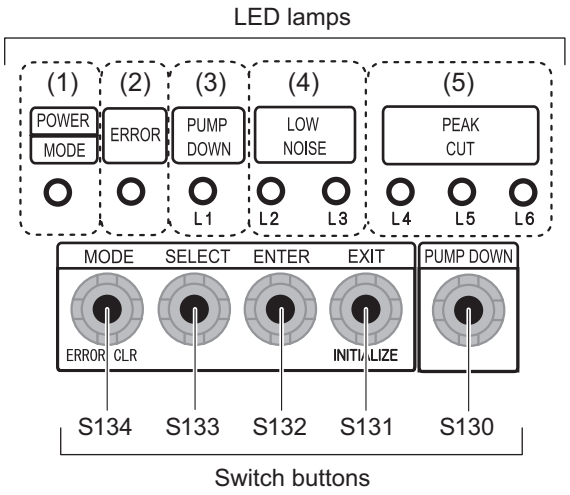
■ Switch buttons and the functions



LED lamp			Function or operation method
(1)	POWER/MODE	Green	Lights on while power on. Local setting in outdoor unit or error code is displayed with blink.
(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. (Lighting pattern of L2 and L3 indicates low noise level.)
(5)	PEAK CUT MODE (L4, L5, and L6)	Orange	Lights on during “Peak cut mode” when local setting is activated. (Lighting pattern of L4, L5, and L6 indicates 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.

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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 / MODE	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.

	LOW NOISE (L2)	LOW NOISE (L3)
LOW NOISE MODE	○	Blink

4. Press the ENTER switch button (S132).

	LOW NOISE (L2)	LOW NOISE (L3)
LOW NOISE MOD E	○	●

Sign “ ● ”: Lights on

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

	PEAK CUT (L4)	PEAK CUT (L5)	PEAK CUT (L6)
MODE 1: Low	○	○	Blink
MODE 2: Lower	○	Blink	○

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

	PEAK CUT (L4)	PEAK CUT (L5)	PEAK CUT (L6)
MODE 1: Low	○	○	●
MODE 2: Lower	○	●	○

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.

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

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■ 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 / MODE	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.

	LOW NOISE (L2)	LOW NOISE (L3)
PEAK CUT MOD E	Blink	○

4. Press the ENTER switch button (S132).

	LOW NOISE (L2)	LOW NOISE (L3)
PEAK CUT MODE	●	○

Sign “ ● ”: Lights on

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

	PEAK CUT (L4)	PEAK CUT (L5)	PEAK CUT (L6)
0 % of rated input ratio	○	○	Blink
50 % of rated input ratio	○	Blink	○
75 % of rated input ratio	○	Blink	Blink
100 % of rated input ratio	Blink	○	○

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

	PEAK CUT (L4)	PEAK CUT (L5)	PEAK CUT (L6)
0 % of rated input ratio	○	○	●
50 % of rated input ratio	○	●	○
75 % of rated input ratio	○	●	●
100 % of rated input ratio	●	○	○

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: AOYG18KBTB, AOYG22KBTB, and AOYG24KBTB

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

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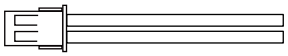
14-2. Models: AOYG30KBTB, AOYG36KBTB, and AOYG45KBTB

Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Installation manual		1	Drain cap		3
Drain pipe		1	One-touch bush		2

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.

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