GENERAL

REFRIGERANT R32
INVERTER

AIR CONDITIONER

Duct type

DESIGN & TECHNICAL MANUAL

INDOOR		
	ARXG12KHTAP ARXG14KHTAP	ARXG18KHTAP ARXG22KHTAP
OUTDOOR		
	AOHG12KBTB AOHG14KBTB	AOHG18KBTB AOHG22KBTB

FUJITSU GENERAL LIMITED

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Part 1. INDOOR UNIT

DUCT TYPE:

ARXG12KHTAP
ARXG14KHTAP
ARXG18KHTAP
ARXG22KHTAP

DUCT TYPE
ARXG12-22KHTAP

1. Specifications

Type					Duct			
					Inverter heat pump			
Model name					ARXG12KHTAP	ARXG14KHTAP	ARXG18KHTAP	ARXG22KHTAP
Power supply					230 V ~ 50 Hz			
Power supply intake					Outdoor unit			
Available voltage range					198—264 V			
Capacity		Cooling	Rated	kW	3.5	4.3	5.2	6.0
				Btu/h	11,950	14,650	17,700	20,500
			Min.—Max.	kW	0.9 — 4.4	0.9 — 5.4	0.9 — 5.9	0.9 — 6.7
				Btu/h	3,100 — 15,000	3,100 — 18,400	3,100 — 20,100	3,100 — 22,900
		Heating	Rated	kW	4.1	5.0	6.0	7.0
				Btu/h	14,000	17,050	20,500	23,900
			Min.—Max.	kW	0.9 — 5.7	0.9 — 6.5	0.9 — 7.5	0.9 — 8.0
				Btu/h	3,100 — 19,400	3,100 - 22,100	3,100 — 25,600	3,100 — 27,300
Input power		Cooling	Rated	kW	0.87	1.17	1.36	1.71
			Max.		2.24	2.35	2.79	2.80
		Heating	Rated		1.00	1.25	1.56	1.81
			Max.		2.24	2.35	2.79	2.80
Current		Cooling	Rated	A	3.9	5.1	6.0	7.5
		Heating			4.4	5.5	6.8	7.9
Power factor		Cooling		%	97.0	99.7	98.6	99.1
		Heating			98.8	98.8	99.7	99.6
EER		Cooling		kW/kW	4.02	3.68	3.82	3.51
COP		Heating			4.10	4.00	3.85	3.87
Moisture removal				L/h (pints/h)	0.7 (1.2)	0.9 (1.6)	1.2 (2.1)	1.5 (2.6)
Maximum operating current *1		Cooling		A	9.7	10.2	12.1	12.6
		Heating			9.7	10.2	12.1	12.6
Fan	Airflow rate	Cooling	HIGH	m^3/h	850	950	1,050	1,050
			MED		680	760	840	840
			LOW		590	670	740	740
			QUIET		510	570	630	630
		Heating	HIGH		850	950	1,050	1,050
			MED		680	760	840	840
			LOW		590	670	740	740
			QUIET		510	570	630	630
	Type × Q'ty				Sirocco fan × 1		Sirocco fan × 2	
	Motor output			W	154		197	
Recommended static pressure range				Pa	30 to 200			
Sound pressure level *2		Cooling	HIGH	dB (A)	32	33	28	28
			MED		27	28	25	25
			LOW		26	27	22	22
			QUIET		24	25	20	20
		Heating	HIGH		32	33	28	28
			MED		27	28	25	25
			LOW		26	27	22	22
			QUIET		24	25	20	20
Heat exchanger type		Dimensions (H × W × D)		mm	420 × 458 × 39.9		420 × 758 × 39.9	
		Fin pitch			1.4			
		Rows × Stages			3 × 20			
		Pipe type			Copper tube			
		Fin type			Aluminum			
Enclosure		Material			Steel sheet			
		Color			—			
Dimensions (H × W × D)	Net			mm	300 × 700 × 700		300 × 1,000 × 700	
	Gross				400 × 938 × 875		400 × 1,238 × 875	
Weight	Net			kg	27		35	
	Gross				34		44	
Connection pipe	Size	Liquid		mm (in)	Ø 6.35 (Ø 1/4)			
		Gas			Ø 9.52 (Ø 3/8)		Ø 12.7 (Ø 1/2)	
	Method				Flare			
Drain port	Material				PVC			
	Size			mm	Ø 26 (I.D.), Ø 32 (O.D.)			
Drain hose	Material				PVC			
	Size			mm	Ø 25 (I.D.), Ø 32 (O.D.)			
Operation range		Cooling		°C	18 to 32			
				%RH	80 or less			
		Heating		°C	16 to 30			
Remote control (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.
  - Standard static pressure; 35 Pa
  - Pipe length: 5 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: Maximum operating current is the total current of the indoor unit and the outdoor unit.
- *2: Sound pressure level:
  - Measured values in manufacturer's anechoic chamber.
  - Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.
- *3: Available on Google Play™ store or on App Store®. Optional WLAN Adapter is also required. For details, refer to the setting manual.

DUCT TYPE
ARXG12-22KHTAP

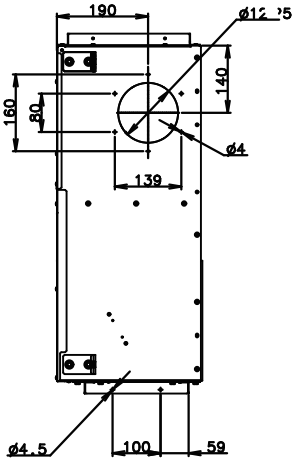
Specifications for ErP Lot10							
Model name				**ARXG12KHTAP**	**ARXG14KHTAP**	**ARXG18KHTAP**	**ARXG22KHTAP**
Energy efficiency class	Cooling			A^{++}	A^{++}	A^{++}	A^{++}
	Heating (Average)			A^{+}	A^{+}	A^{+}	A^{+}
Pdesign	Cooling		kW	3.5 (35°C)	4.3 (35°C)	5.2 (35°C)	6.0 (35°C)
	Heating (Average)			3.4 (-10°C)	3.8 (-10°C)	4.4 (-10°C)	4.8 (-10°C)
SEER	Cooling		kWh/kWh	6.30	6.20	6.50	6.50
SCOP	Heating (Average)			4.10	4.00	4.10	4.20
Annual energy consumption	QCE		kWh/a	194	243	280	323
	QHE (Average)			1,159	1,328	1,501	1,597
Sound power level	Cooling	HIGH	dB (A)	57	59	54	57
	Heating			58	60	54	57

DUCT TYPE
ARXG12-22KHTAP

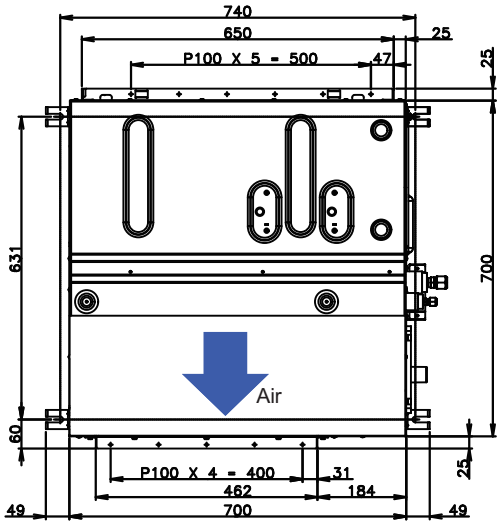
2. Dimensions

2-1. Models: ARXG12KHTAP and ARXG14KHTAP

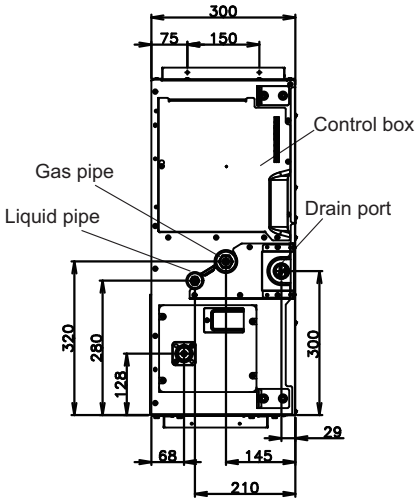
Unit: mm



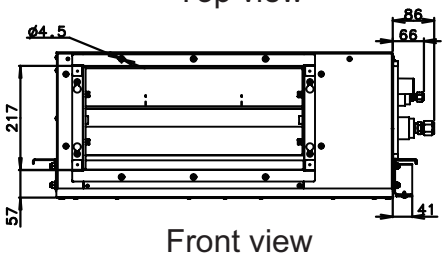
Side view (L)



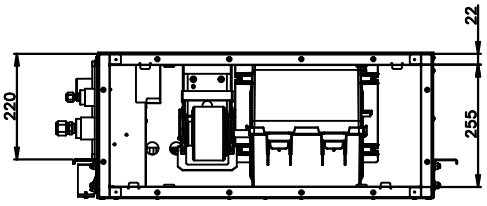
Top view



Side view (R)



Front view

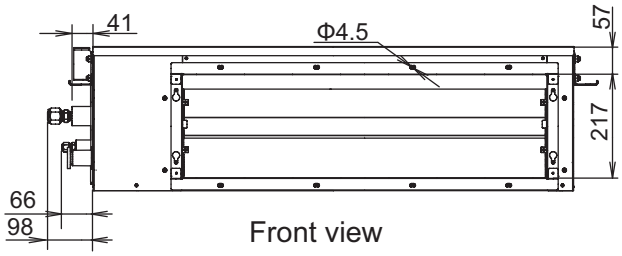


Rear view

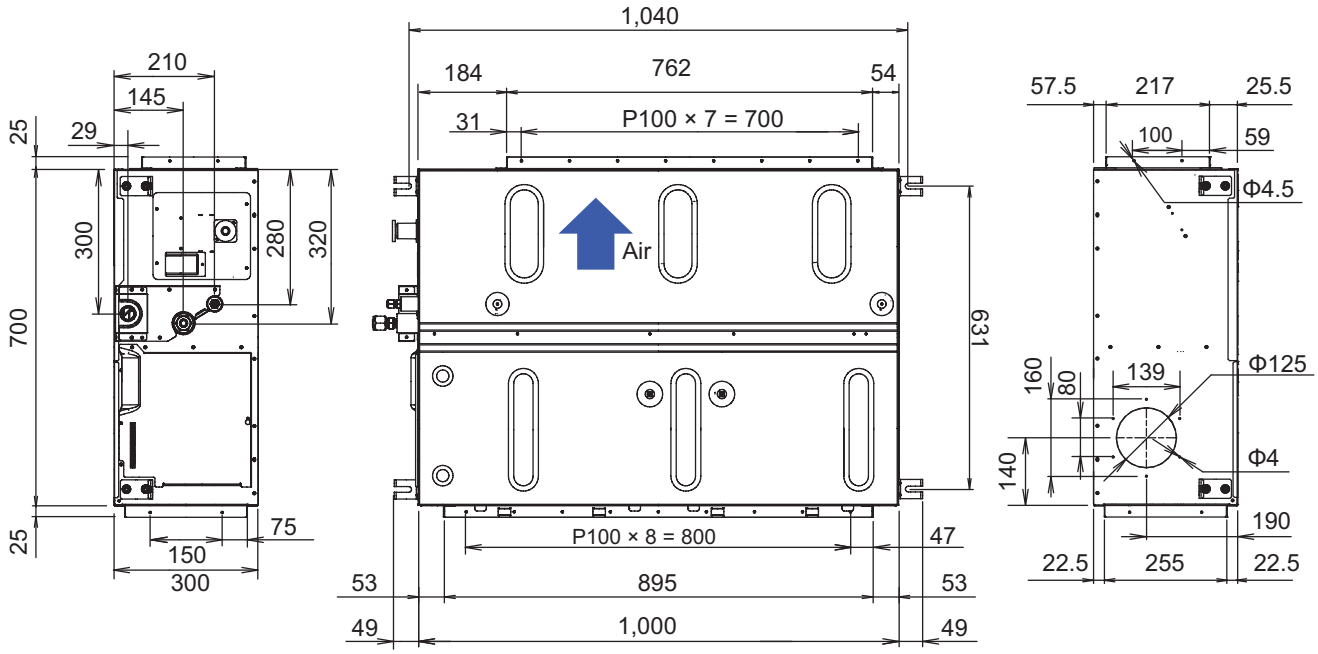
DUCT TYPE
ARXG12-22KHTAP

2-2. Models: ARXG18KHTAP and ARXG22KHTAP

Unit: mm



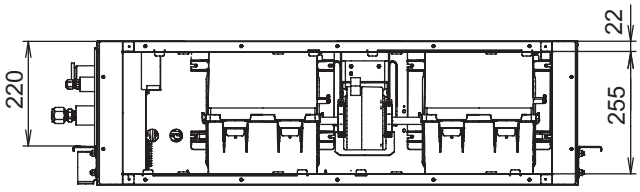
Front view



Side view

Top view

Side view



Rear view

DUCT TYPE
ARXG12-22KHTAP

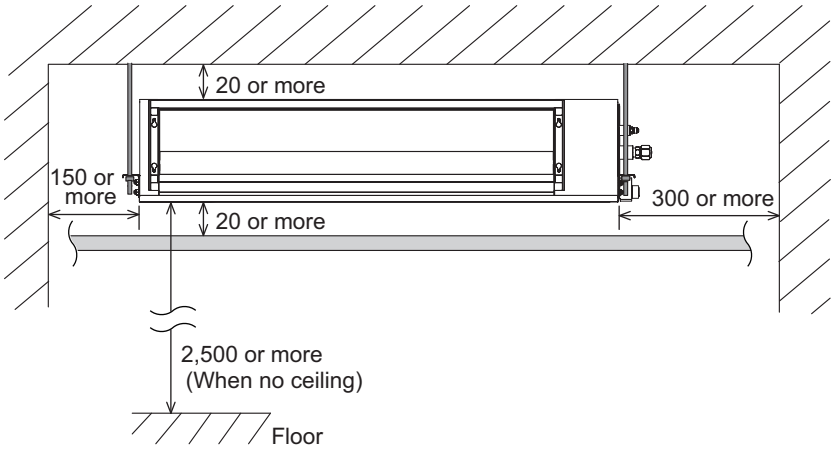
2-3. Installation space requirement

Provide sufficient installation space for product safety.

NOTE: The detailed component shape depends on the model.

■ Models: ARXG12KHTAP, ARXG14KHTAP, ARXG18KHTAP, and ARXG22KHTAP

Unit: mm



DUCT TYPE
ARXG12-22KHTAP

2-4. Maintenance space requirement

Provide sufficient maintenance space for efficient maintenance.

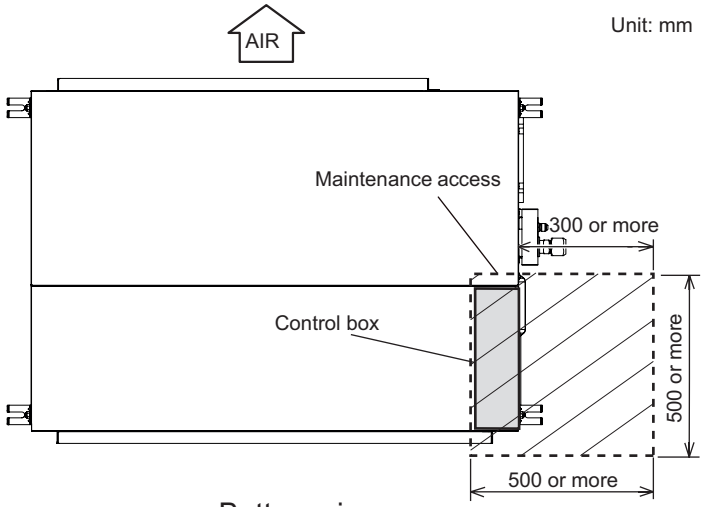
NOTES:

- Do not place any wiring or illumination in the maintenance space, as they will impede service.
- The detailed component shape depends on the model.

■ Models: ARXG12KHTAP, ARXG14KHTAP, ARXG18KHTAP, and ARXG22KHTAP

- Provide a maintenance access for maintenance purposes.

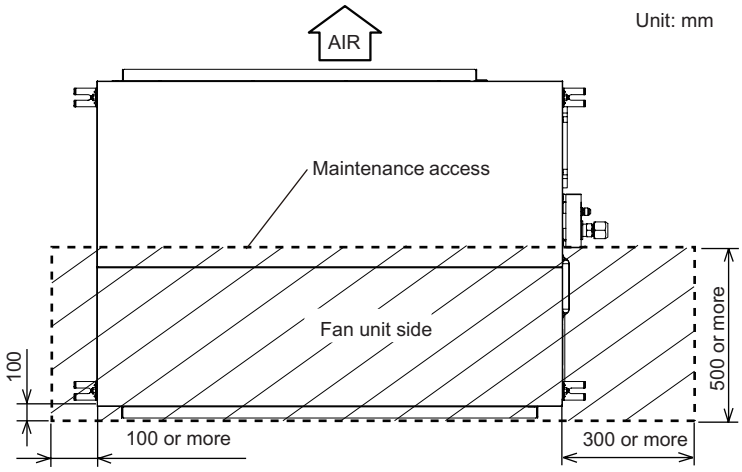
Unit: mm



Bottom view

- The maintenance access necessary for fan units and filter maintenance.

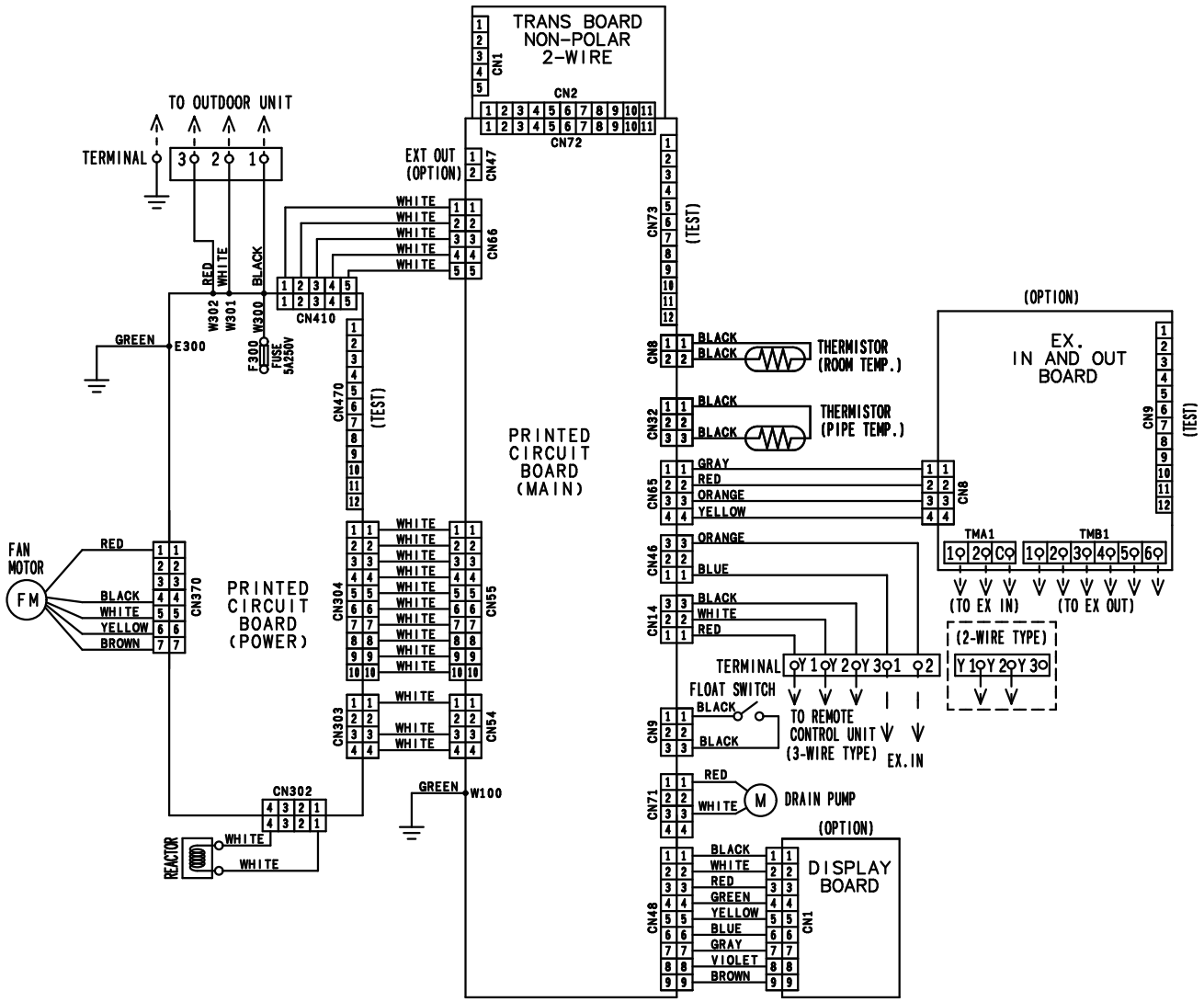
Unit: mm



Bottom view

3. Wiring diagrams

3-1. Models: ARXG12KHTAP, ARXG14KHTAP, ARXG18KHTAP, and ARXG22KHTAP



DUCT TYPE
ARXG12-22KHTAP

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: ARXG12KHTAP

AFR	m^3/h	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	2.92	2.80	0.66	3.25	2.82	0.67	3.36	3.06	0.67	3.58	3.07	0.68	3.69	3.32	0.68	3.91	3.31	0.69	4.13	3.52	0.69
	-10	3.11	2.90	0.55	3.47	2.92	0.56	3.59	3.18	0.56	3.82	3.19	0.57	3.94	3.44	0.57	4.18	3.43	0.58	4.41	3.65	0.58
	0	3.45	3.08	0.37	3.85	3.10	0.37	3.98	3.37	0.37	4.24	3.38	0.38	4.37	3.65	0.38	4.63	3.64	0.38	4.89	3.87	0.39
	5	3.31	3.00	0.43	3.69	3.01	0.44	3.81	3.28	0.44	4.06	3.29	0.45	4.19	3.55	0.45	4.44	3.54	0.45	4.69	3.77	0.46
	10	3.39	3.02	0.44	3.78	3.04	0.45	3.90	3.30	0.45	4.16	3.32	0.46	4.29	3.58	0.46	4.55	3.57	0.46	4.80	3.80	0.47
	15	3.29	2.97	0.52	3.67	2.99	0.53	3.79	3.25	0.53	4.04	3.26	0.54	4.17	3.52	0.54	4.42	3.51	0.55	4.67	3.73	0.55
	20	3.29	2.99	0.58	3.67	3.01	0.59	3.79	3.27	0.59	4.04	3.28	0.60	4.17	3.54	0.60	4.42	3.53	0.61	4.67	3.76	0.61
	25	3.11	2.85	0.67	3.47	2.87	0.68	3.59	3.12	0.68	3.82	3.13	0.69	3.94	3.38	0.69	4.18	3.37	0.70	4.41	3.59	0.70
	30	2.94	2.71	0.76	3.27	2.73	0.77	3.39	2.96	0.78	3.61	2.97	0.79	3.72	3.21	0.79	3.94	3.20	0.80	4.17	3.41	0.81
	35	2.77	2.57	0.84	3.08	2.59	0.85	3.19	2.82	0.86	3.40	2.82	0.87	3.50	3.05	0.87	3.71	3.04	0.88	3.92	3.24	0.89
	40	2.68	2.53	0.94	2.98	2.55	0.95	3.08	2.77	0.96	3.29	2.78	0.97	3.39	3.00	0.97	3.59	2.99	0.98	3.80	3.18	0.99
	46	2.36	2.36	0.93	2.63	2.51	0.94	2.72	2.72	0.95	2.90	2.74	0.96	2.99	2.96	0.96	3.17	2.95	0.97	3.35	3.14	0.98

■ Model: ARXG14KHTAP

AFR	m^3/h	950

		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	3.32	3.13	0.90	3.70	3.15	0.91	3.82	3.42	0.92	4.07	3.44	0.93	4.20	3.71	0.93	4.45	3.70	0.94	4.70	3.94	0.95
	-10	3.60	3.27	0.58	4.01	3.29	0.59	4.15	3.57	0.59	4.42	3.58	0.60	4.56	3.87	0.60	4.83	3.85	0.61	5.11	4.11	0.61
	0	3.74	3.34	0.41	4.17	3.36	0.42	4.31	3.66	0.42	4.60	3.67	0.43	4.74	3.96	0.43	5.02	3.94	0.43	5.31	4.20	0.44
	5	3.56	3.24	0.50	3.97	3.26	0.51	4.10	3.54	0.51	4.37	3.56	0.52	4.51	3.84	0.52	4.78	3.82	0.53	5.05	4.07	0.53
	10	3.61	3.20	0.50	4.02	3.22	0.51	4.16	3.50	0.51	4.43	3.51	0.52	4.57	3.79	0.52	4.84	3.77	0.53	5.12	4.02	0.53
	15	3.55	3.21	0.60	3.95	3.23	0.61	4.09	3.51	0.61	4.36	3.52	0.62	4.49	3.80	0.62	4.76	3.78	0.63	5.03	4.03	0.63
	20	3.94	3.44	0.80	4.39	3.46	0.81	4.54	3.77	0.82	4.84	3.78	0.83	4.99	4.08	0.83	5.29	4.06	0.84	5.59	4.33	0.85
	25	3.76	3.34	0.92	4.19	3.36	0.93	4.33	3.66	0.94	4.62	3.67	0.95	4.76	3.96	0.95	5.05	3.94	0.96	5.33	4.20	0.97
	30	3.58	3.22	1.02	3.99	3.24	1.04	4.12	3.53	1.04	4.39	3.54	1.05	4.53	3.82	1.06	4.80	3.80	1.07	5.07	4.05	1.08
	35	3.40	3.12	1.13	3.78	3.14	1.15	3.91	3.42	1.15	4.17	3.43	1.16	4.30	3.70	1.17	4.56	3.69	1.18	4.82	3.93	1.19
	40	3.25	3.05	1.23	3.63	3.06	1.24	3.75	3.33	1.25	4.00	3.34	1.26	4.12	3.61	1.27	4.37	3.60	1.28	4.61	3.83	1.30
	46	2.45	2.45	0.94	2.73	2.63	0.95	2.82	2.82	0.96	3.01	2.87	0.97	3.10	3.10	0.97	3.29	3.09	0.98	3.47	3.29	0.99

■ Model: ARXG18KHTAP

AFR	m^3/h	1,050

		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	3.74	0.41	4.65	3.76	0.42	4.80	4.09	0.42	5.12	4.10	0.43	5.28	4.43	0.43	5.60	4.41	0.43	5.91	4.70	0.44
	-10	4.20	3.76	0.36	4.68	3.79	0.36	4.84	4.12	0.36	5.16	4.13	0.37	5.32	4.46	0.37	5.64	4.44	0.37	5.96	4.73	0.38
	0	3.99	3.67	0.55	4.44	3.69	0.56	4.60	4.02	0.56	4.90	4.03	0.57	5.05	4.35	0.57	5.35	4.33	0.58	5.66	4.62	0.58
	5	3.91	3.65	0.59	4.36	3.67	0.60	4.50	3.99	0.60	4.80	4.00	0.61	4.95	4.32	0.61	5.25	4.30	0.62	5.54	4.58	0.62
	10	4.05	3.71	0.40	4.51	3.73	0.40	4.67	4.05	0.40	4.98	4.07	0.41	5.13	4.39	0.41	5.44	4.37	0.41	5.75	4.66	0.42
	15	3.92	3.66	0.49	4.36	3.68	0.50	4.51	4.01	0.50	4.81	4.02	0.51	4.96	4.34	0.51	5.26	4.32	0.52	5.56	4.60	0.52
	20	4.83	4.04	0.94	5.39	4.07	0.95	5.57	4.42	0.96	5.94	4.44	0.97	6.12	4.79	0.97	6.49	4.77	0.98	6.85	5.08	0.99
	25	4.59	3.89	1.07	5.11	3.91	1.09	5.29	4.26	1.09	5.64	4.27	1.10	5.81	4.61	1.11	6.16	4.59	1.12	6.51	4.89	1.13
	30	4.35	3.74	1.20	4.84	3.76	1.22	5.01	4.09	1.22	5.34	4.10	1.23	5.50	4.43	1.24	5.83	4.41	1.25	6.16	4.70	1.26
	35	4.11	3.58	1.31	4.58	3.60	1.33	4.73	3.91	1.34	5.04	3.93	1.35	5.20	4.24	1.36	5.51	4.22	1.37	5.82	4.50	1.39
	40	3.68	3.49	1.19	4.10	3.51	1.21	4.24	3.82	1.22	4.52	3.83	1.23	4.66	4.14	1.24	4.94	4.12	1.25	5.22	4.39	1.26
	46	2.58	2.58	0.90	2.87	2.77	0.91	2.97	2.97	0.92	3.16	3.02	0.93	3.26	3.26	0.93	3.46	3.25	0.94	3.65	3.46	0.95

DUCT TYPE
ARXG12-22KHTAP

■ Model: ARXG22KHTAP

AFR	m^3/h	1,050

		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	4.27	0.55	5.56	4.30	0.56	5.75	4.67	0.56	6.13	4.69	0.57	6.32	5.06	0.57	6.70	5.04	0.58	7.08	5.37	0.58
	-10	5.03	4.28	0.46	5.61	4.30	0.47	5.80	4.68	0.47	6.18	4.69	0.48	6.37	5.07	0.48	6.75	5.05	0.48	7.13	5.38	0.49
	0	4.91	4.21	0.47	5.46	4.24	0.48	5.65	4.61	0.48	6.02	4.62	0.49	6.21	4.99	0.49	6.58	4.97	0.49	6.96	5.29	0.50
	5	4.77	4.16	0.60	5.32	4.19	0.61	5.50	4.55	0.61	5.86	4.57	0.62	6.04	4.93	0.62	6.40	4.91	0.63	6.76	5.23	0.63
	10	4.74	4.14	0.59	5.28	4.17	0.60	5.46	4.53	0.60	5.82	4.55	0.61	6.00	4.91	0.61	6.36	4.89	0.62	6.72	5.21	0.62
	15	4.59	4.08	0.70	5.11	4.10	0.72	5.29	4.46	0.72	5.64	4.47	0.73	5.81	4.83	0.73	6.16	4.81	0.74	6.51	5.12	0.74
	20	5.77	4.65	1.25	6.43	4.68	1.27	6.65	5.09	1.28	7.09	5.10	1.29	7.31	5.51	1.30	7.75	5.49	1.31	8.19	5.85	1.33
	25	5.43	4.51	1.39	6.05	4.53	1.41	6.25	4.93	1.42	6.66	4.94	1.43	6.87	5.34	1.44	7.28	5.32	1.45	7.69	5.67	1.47
	30	5.08	4.35	1.52	5.66	4.37	1.55	5.85	4.75	1.56	6.24	4.77	1.57	6.43	5.15	1.58	6.82	5.13	1.60	7.20	5.46	1.61
	35	4.74	4.20	1.65	5.28	4.23	1.68	5.46	4.60	1.68	5.82	4.61	1.70	6.00	4.98	1.71	6.36	4.96	1.73	6.72	5.28	1.74
	40	4.50	4.08	1.79	5.01	4.10	1.82	5.18	4.46	1.83	5.52	4.47	1.84	5.69	4.83	1.85	6.03	4.81	1.87	6.37	5.12	1.89
	46	3.69	3.60	1.54	4.11	3.63	1.56	4.25	3.94	1.57	4.53	3.95	1.59	4.67	4.27	1.59	4.95	4.25	1.61	5.23	4.53	1.63

DUCT TYPE
ARXG12-22KHTAP

4-2. Heating capacity

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

■ Model: ARXG12KHTAP

AFR	m^3/h	850

			Indoor temperature									
		°CDB	16		18		20		22		27	
	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kW		kW		kW		kW		kW	
Outdoor temperature	-15	-16	3.87	1.43	3.78	1.46	3.69	1.49	3.60	1.52	3.51	1.55
	-10	-11	4.35	1.50	4.24	1.53	4.14	1.56	4.04	1.59	3.93	1.62
	-5	-7	4.83	1.56	4.72	1.60	4.60	1.63	4.49	1.66	4.37	1.70
	0	-2	5.31	1.62	5.19	1.66	5.06	1.69	4.93	1.72	4.81	1.76
	5	3	5.79	1.69	5.65	1.72	5.51	1.76	5.37	1.80	5.23	1.83
	7	6	5.99	1.71	5.84	1.74	5.70	1.78	5.56	1.82	5.42	1.85
	10	8	6.13	1.67	5.99	1.71	5.84	1.74	5.69	1.77	5.55	1.81
	15	10	6.37	1.61	6.22	1.65	6.07	1.68	5.92	1.71	5.77	1.74
	20	15	6.15	1.32	6.01	1.35	5.86	1.38	5.71	1.41	5.57	1.43
	24	18	6.09	1.17	5.95	1.20	5.80	1.22	5.66	1.24	5.51	1.26

■ Model: ARXG14KHTAP

AFR	m^3/h	950

			Indoor temperature									
		°CDB	16		18		20		22		27	
	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kW		kW		kW		kW		kW	
Outdoor temperature	-15	-16	4.54	1.72	4.43	1.75	4.32	1.79	4.21	1.83	4.10	1.86
	-10	-11	5.05	1.77	4.93	1.80	4.81	1.84	4.69	1.88	4.57	1.91
	-5	-7	5.58	1.80	5.44	1.84	5.31	1.88	5.18	1.92	5.04	1.96
	0	-2	6.09	1.84	5.95	1.88	5.80	1.92	5.66	1.96	5.51	2.00
	5	3	6.62	1.89	6.46	1.93	6.30	1.97	6.14	2.01	5.99	2.05
	7	6	6.83	1.90	6.66	1.94	6.50	1.98	6.34	2.02	6.18	2.06
	10	8	6.96	1.83	6.80	1.87	6.63	1.91	6.46	1.95	6.30	1.99
	15	10	7.21	1.74	7.04	1.77	6.87	1.81	6.70	1.85	6.53	1.87
	20	15	7.09	1.48	6.92	1.51	6.75	1.54	6.58	1.57	6.41	1.59
	24	18	7.47	1.48	7.29	1.51	7.11	1.54	6.93	1.57	6.75	1.59

■ Model: ARXG18KHTAP

AFR	m^3/h	1,050

			Indoor temperature									
		°CDB	16		18		20		22		27	
	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kW		kW		kW		kW		kW	
Outdoor temperature	-15	-16	5.05	1.63	4.93	1.67	4.81	1.70	4.69	1.73	4.57	1.77
	-10	-11	5.69	1.75	5.56	1.78	5.42	1.82	5.28	1.86	5.15	1.89
	-5	-7	6.33	1.85	6.18	1.89	6.03	1.93	5.88	1.97	5.73	2.01
	0	-2	6.97	1.96	6.81	2.00	6.64	2.04	6.47	2.08	6.31	2.12
	5	3	7.61	2.06	7.43	2.11	7.25	2.15	7.07	2.19	6.89	2.24
	7	6	7.88	2.10	7.69	2.15	7.50	2.19	7.31	2.23	7.13	2.28
	10	8	8.51	2.18	8.30	2.22	8.10	2.27	7.90	2.32	7.70	2.36
	15	10	8.46	1.92	8.26	1.96	8.06	2.00	7.86	2.04	7.66	2.07
	20	15	7.96	1.52	7.77	1.55	7.58	1.58	7.39	1.61	7.20	1.64
	24	18	8.40	1.51	8.20	1.54	8.00	1.57	7.80	1.60	7.60	1.63

■ Model: ARXG22KHTAP

AFR	m^3/h	1,050

			Indoor temperature									
		°CDB	16		18		20		22		27	
	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
			kW		kW		kW		kW		kW	
Outdoor temperature	-15	-16	5.60	2.09	5.46	2.14	5.33	2.18	5.20	2.22	5.06	2.27
	-10	-11	6.14	2.17	6.00	2.21	5.85	2.26	5.70	2.31	5.56	2.35
	-5	-7	6.70	2.25	6.54	2.29	6.38	2.34	6.22	2.39	6.06	2.43
	0	-2	7.26	2.32	7.08	2.37	6.91	2.42	6.74	2.47	6.56	2.52
	5	3	7.81	2.40	7.63	2.45	7.44	2.50	7.25	2.55	7.07	2.60
	7	6	8.40	2.40	8.20	2.45	8.00	2.50	7.80	2.55	7.60	2.60
	10	8	8.05	2.27	7.86	2.31	7.67	2.36	7.48	2.41	7.29	2.45
	15	10	7.49	2.04	7.31	2.09	7.13	2.13	6.95	2.17	6.77	2.20
	20	15	7.04	1.74	6.87	1.77	6.70	1.81	6.53	1.85	6.37	1.87
	24	18	7.32	1.72	7.14	1.75	6.97	1.79	6.80	1.83	6.62	1.85

DUCT TYPE
ARXG12-22KHTAP

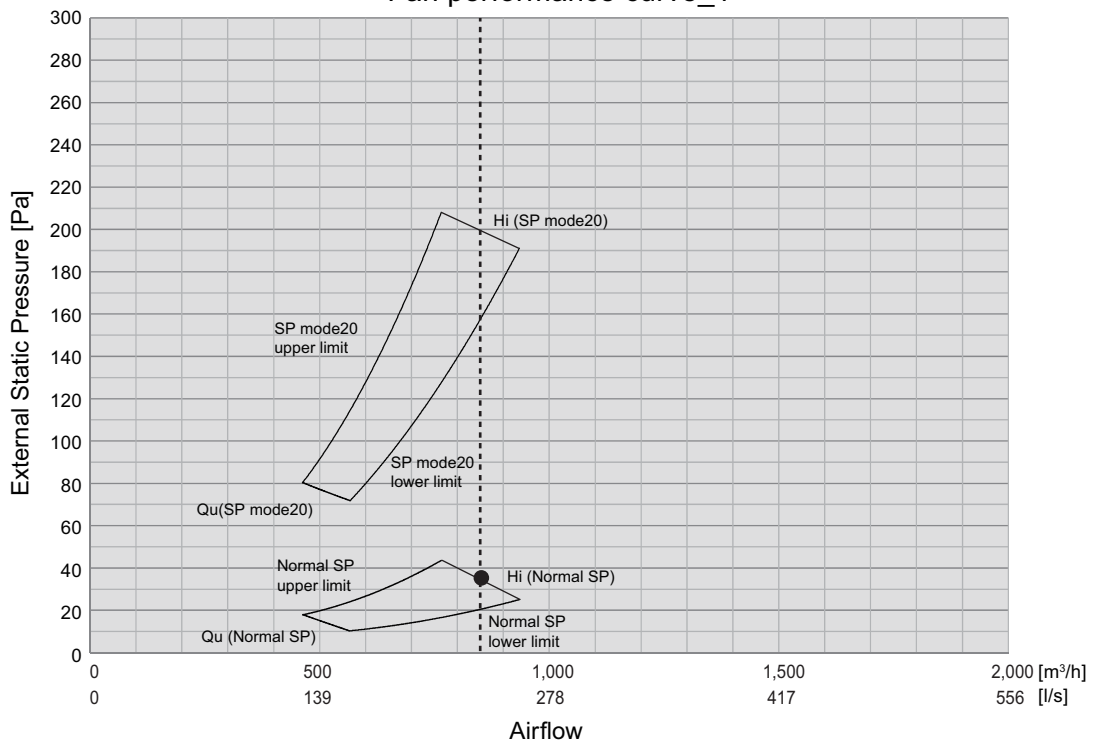
5. Fan performance

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

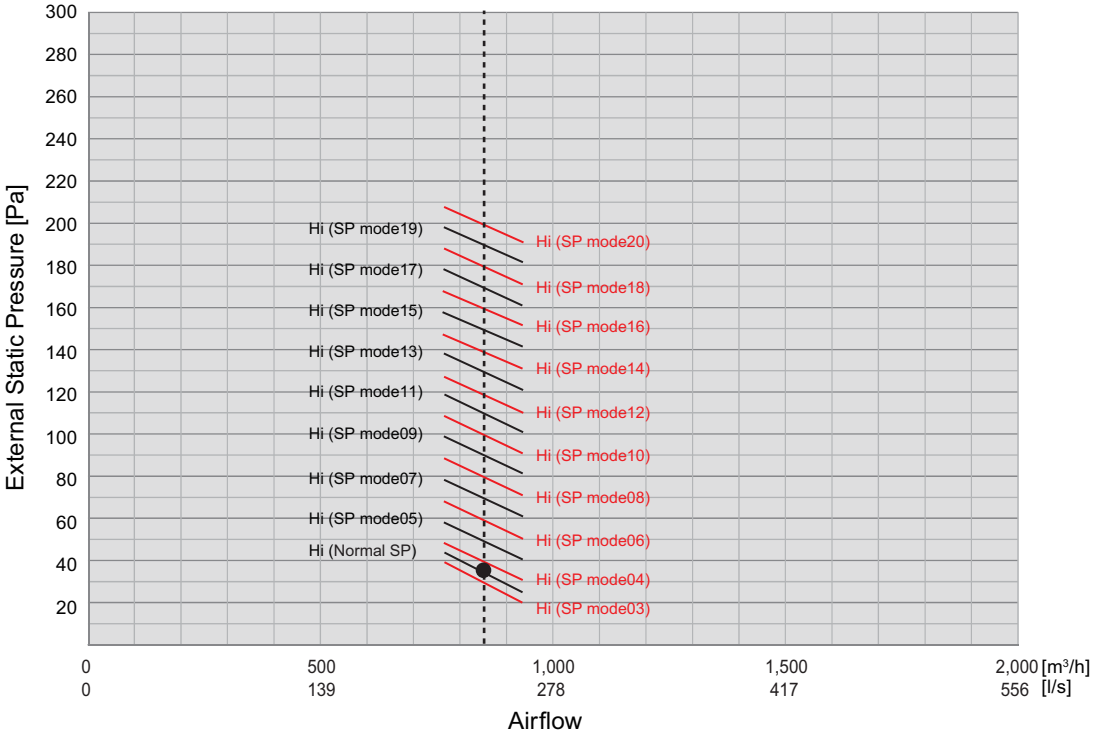
5-1. Fan performance curve

■ Model: ARXG12KHTAP

Fan performance curve_1



Fan performance curve_2
(For function setting by remote controller)



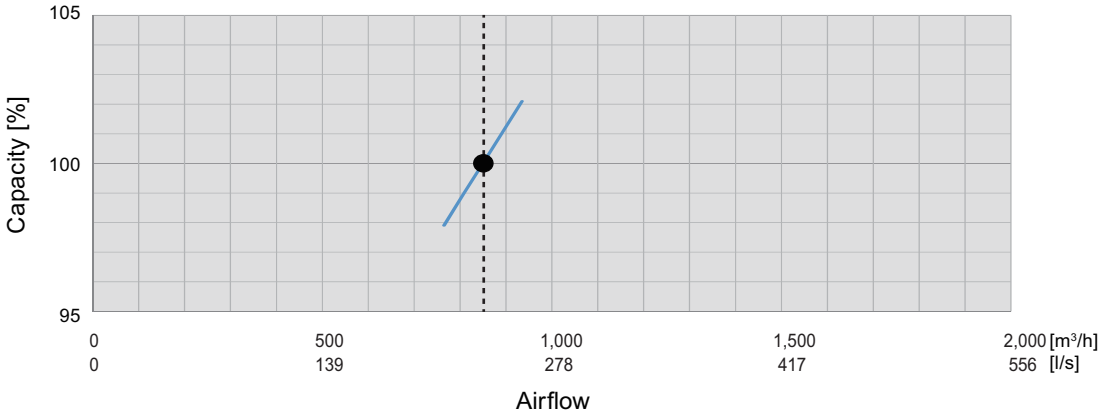
DUCT TYPE
ARXG12-22KHTAP

NOTES:

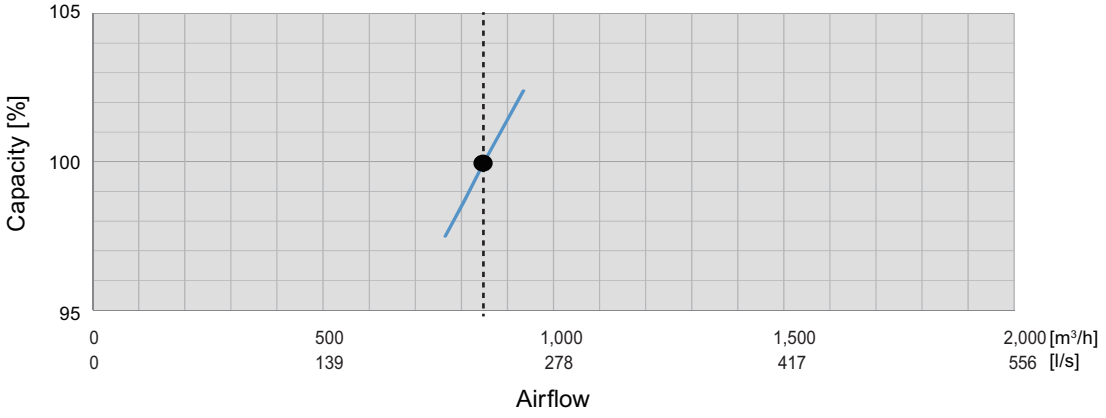
- Setting of the external static pressure is switchable into modes by using the remote controller.
- According to the resistance of the connecting duct, perform the setting of the external static pressure with referring “Fan performance curve_2” above.
- The default setting is set at “Normal SP”.

● Characteristics of air volume and capacity

- Cooling



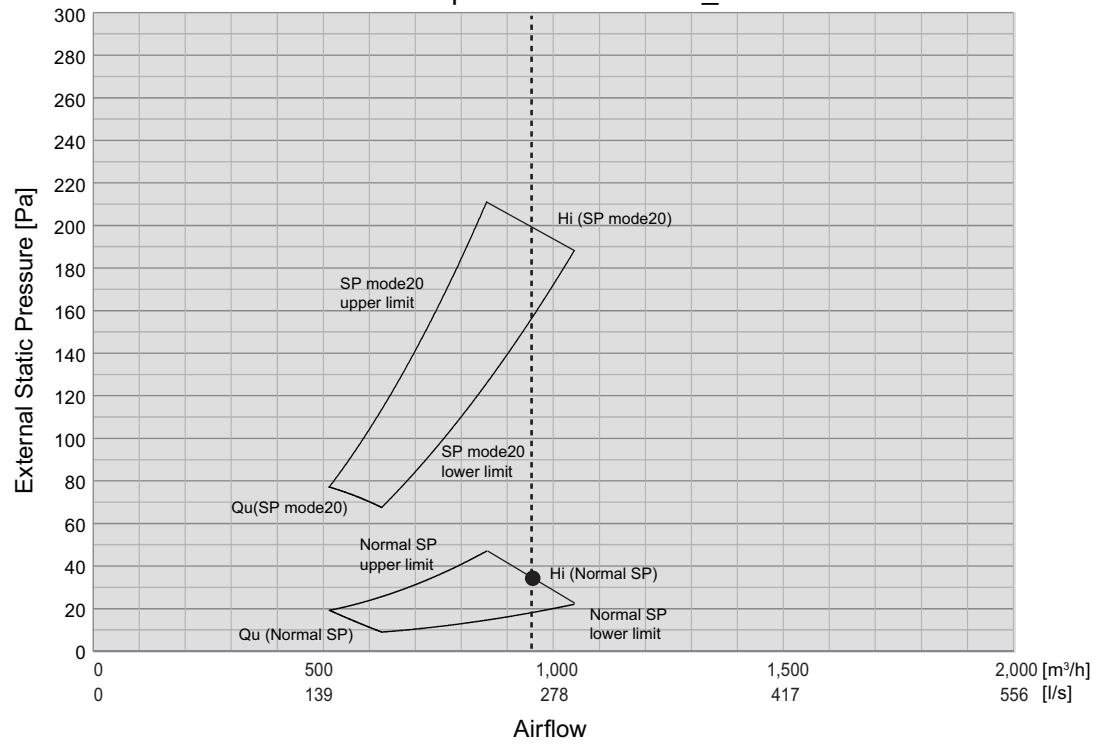
- Heating



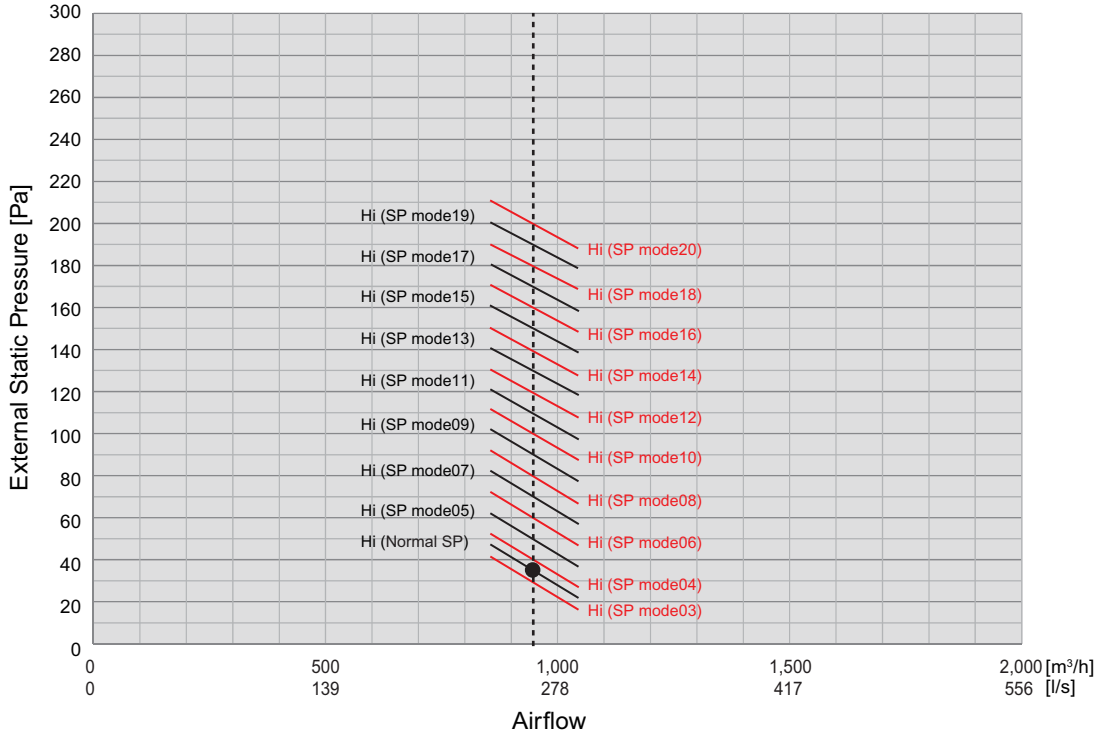
DUCT TYPE
ARXG12-22KHTAP

■ Model: ARXG14KHTAP

Fan performance curve_1



Fan performance curve_2
(For function setting by remote controller)



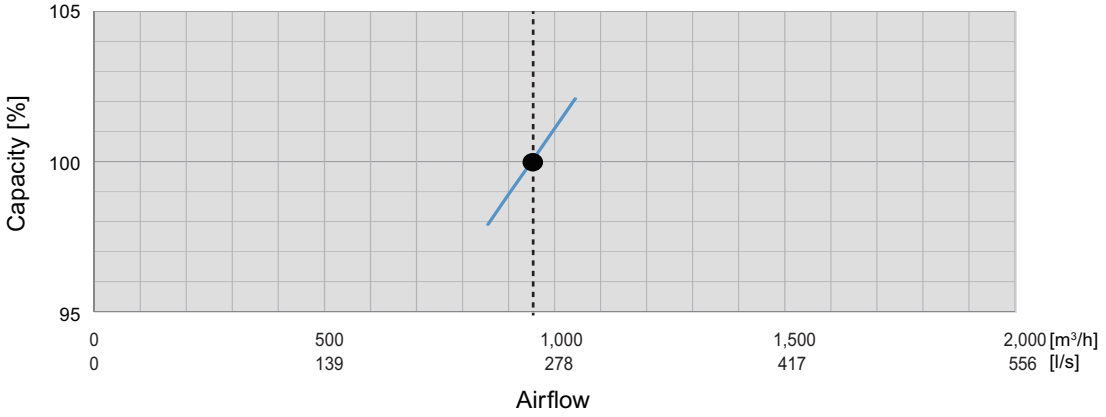
NOTES:

- Setting of the external static pressure is switchable into modes by using the remote controller.
- According to the resistance of the connecting duct, perform the setting of the external static pressure with referring “Fan performance curve_2” above.
- The default setting is set at "Normal SP".

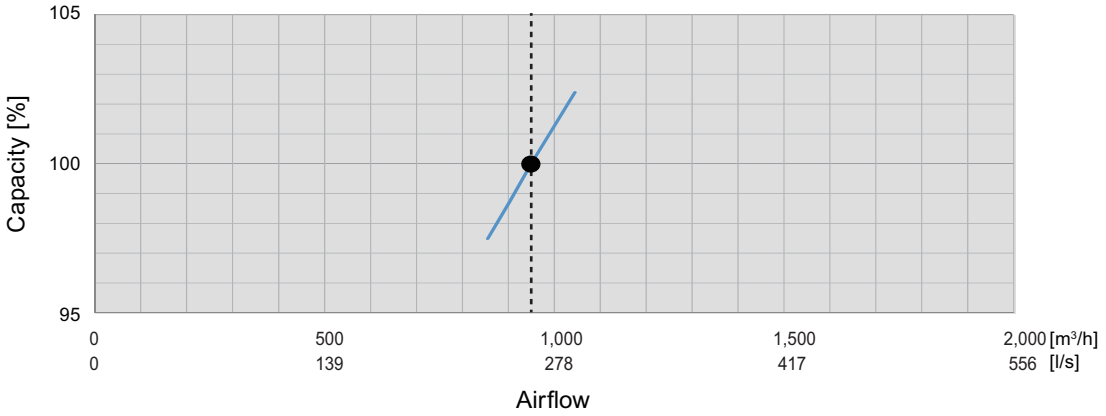
DUCT TYPE
ARXG12-22KHTAP

● Characteristics of air volume and capacity

- Cooling



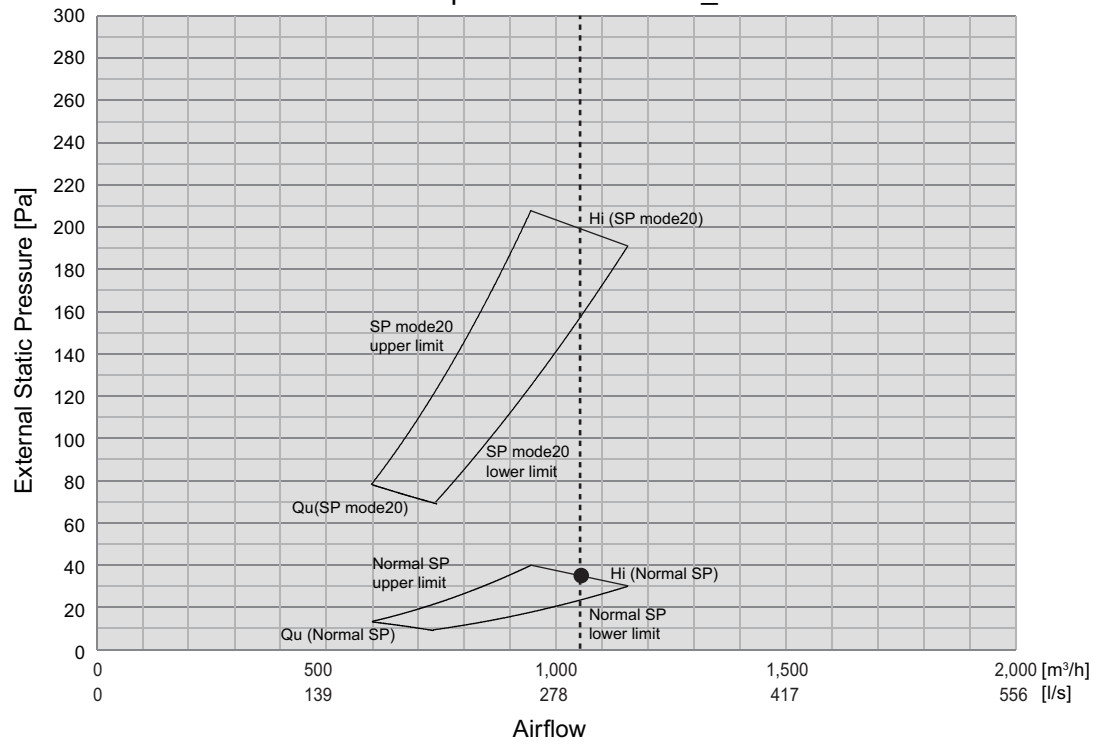
- Heating



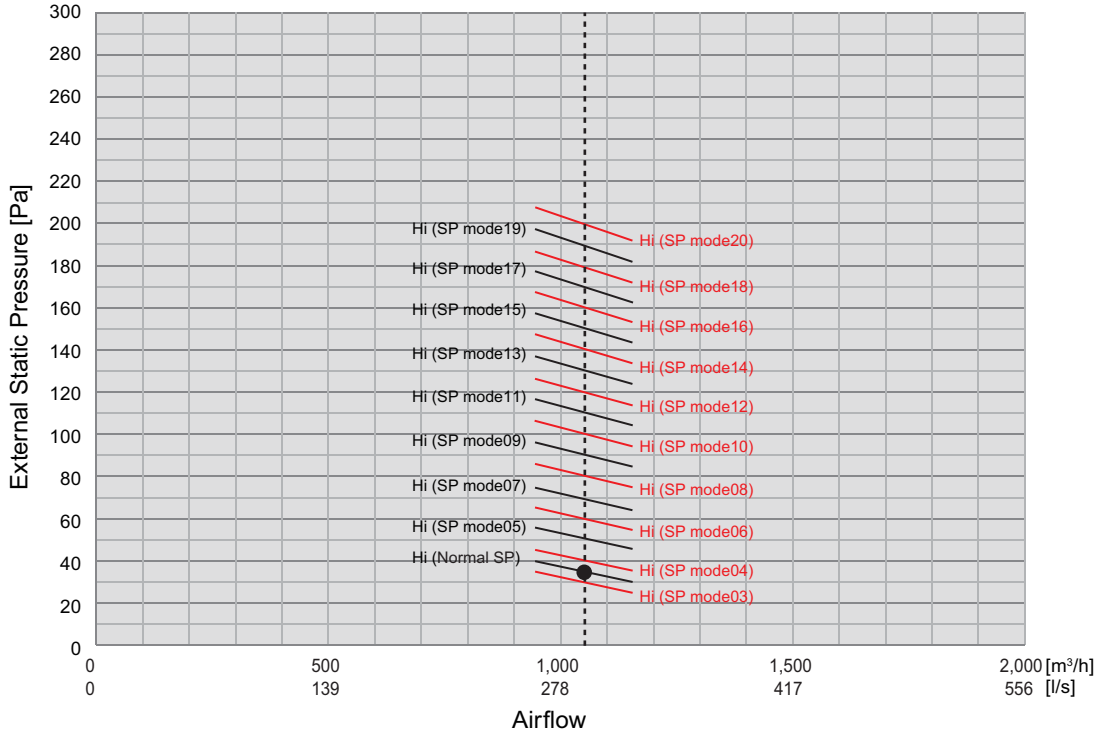
DUCT TYPE
ARXG12-22KHTAP

■ Models: ARXG18KHTAP and ARXG22KHTAP

Fan performance curve_1



Fan performance curve_2
(For function setting by remote controller)



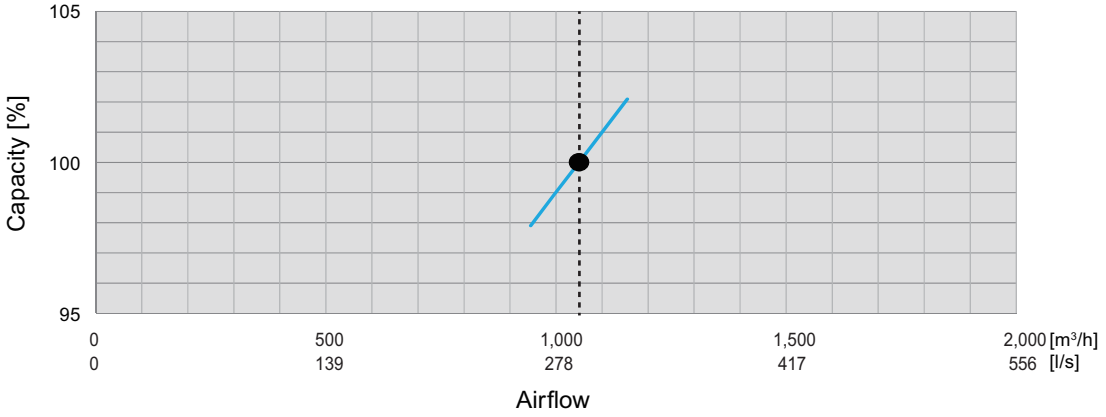
NOTES:

- Setting of the external static pressure is switchable into modes by using the remote controller.
- According to the resistance of the connecting duct, perform the setting of the external static pressure with referring “Fan performance curve_2” above.
- The default setting is set at “Normal SP”.

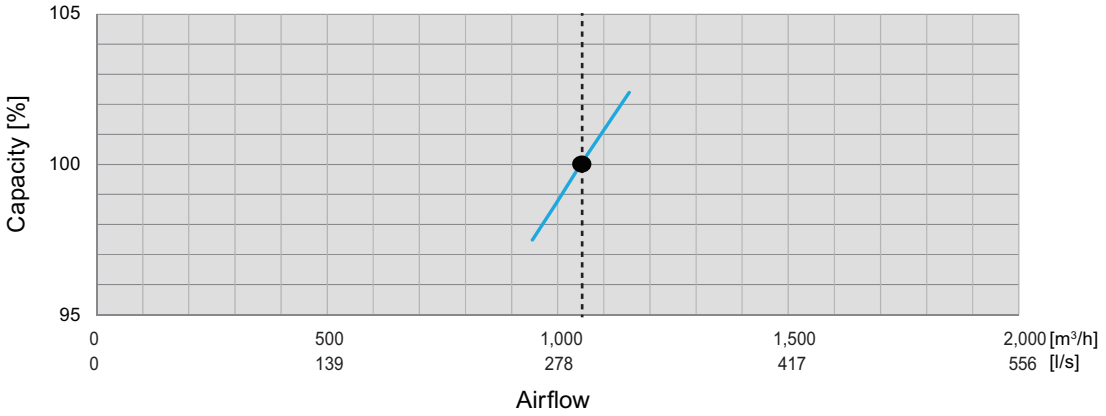
DUCT TYPE
ARXG12-22KHTAP

● Characteristics of air volume and capacity

- Cooling



- Heating



■ Automatic airflow adjustment procedures

1. To start the auto setting, use setting value 32 in function number 26.
2. Run the air conditioner on fan mode (High).
   * For instructions on how to operate the air conditioner, refer to the operation manual of the remote controller.

   During automatic airflow adjustment, the mode will be fixed at fan (High).

   When this function is active, do not operate the outdoor unit.
3. The air conditioner will run for about 1 to 8 min then stop automatically.
   * Do not change the throttles of the inlet and outlet ports during operation.

   When used in a group control system, the setting will take about 10 min.
4. Turn the air conditioner off and on again.
5. Check the setting value of function number 26.
   * If the setting value has not changed, repeat the procedure from step 2.

⚠ CAUTION

When the duct or outlet installations are changed after the Automatic airflow adjustment is completed, repeat the procedure from step 1.

DUCT TYPE
ARXG12-22KHTAP

5-2. Airflow

■ Model: ARXG12KHTAP

● Cooling

Fan speed	Airflow	
HIGH	m^3/h	850
	l/s	236
	CFM	500
MED	m^3/h	680
	l/s	189
	CFM	400
LOW	m^3/h	590
	l/s	164
	CFM	347
QUIET	m^3/h	510
	l/s	142
	CFM	300

● Heating

Fan speed	Airflow	
HIGH	m^3/h	850
	l/s	236
	CFM	500
MED	m^3/h	680
	l/s	189
	CFM	400
LOW	m^3/h	590
	l/s	164
	CFM	347
QUIET	m^3/h	510
	l/s	142
	CFM	300

DUCT TYPE
ARXG12-22KHTAP

■ Model: ARXG14KHTAP

● Cooling

Fan speed	Airflow	
HIGH	m^3/h	950
	l/s	264
	CFM	559
MED	m^3/h	760
	l/s	211
	CFM	447
LOW	m^3/h	670
	l/s	186
	CFM	394
QUIET	m^3/h	570
	l/s	158
	CFM	336

● Heating

Fan speed	Airflow	
HIGH	m^3/h	950
	l/s	264
	CFM	559
MED	m^3/h	760
	l/s	211
	CFM	447
LOW	m^3/h	670
	l/s	186
	CFM	394
QUIET	m^3/h	570
	l/s	158
	CFM	336

DUCT TYPE
ARXG12-22KHTAP

■ Models: ARXG18KHTAP and ARXG22KHTAP

● Cooling

Fan speed	Airflow	
HIGH	m^3/h	1,050
	l/s	292
	CFM	618
MED	m^3/h	840
	l/s	233
	CFM	494
LOW	m^3/h	740
	l/s	206
	CFM	436
QUIET	m^3/h	630
	l/s	175
	CFM	371

● Heating

Fan speed	Airflow	
HIGH	m^3/h	1,050
	l/s	292
	CFM	618
MED	m^3/h	840
	l/s	233
	CFM	494
LOW	m^3/h	740
	l/s	206
	CFM	436
QUIET	m^3/h	630
	l/s	175
	CFM	371

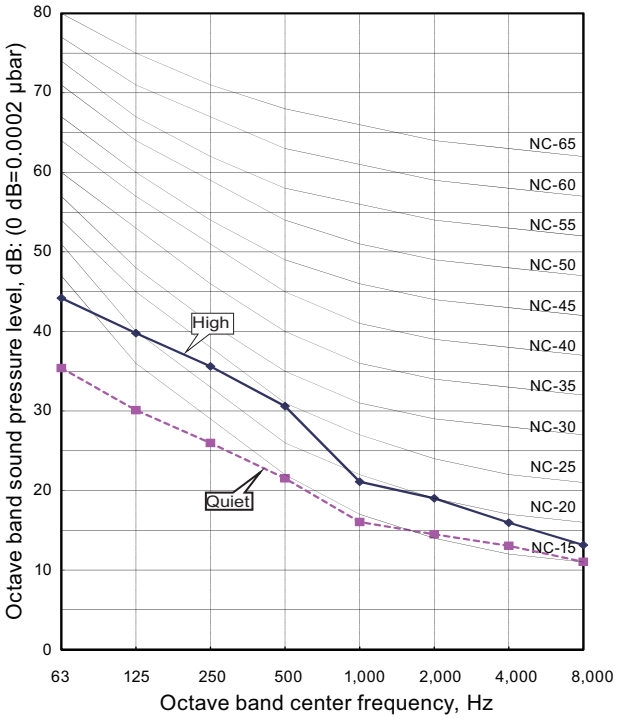
DUCT TYPE
ARXG12-22KHTAP

6. Operation noise (sound pressure)

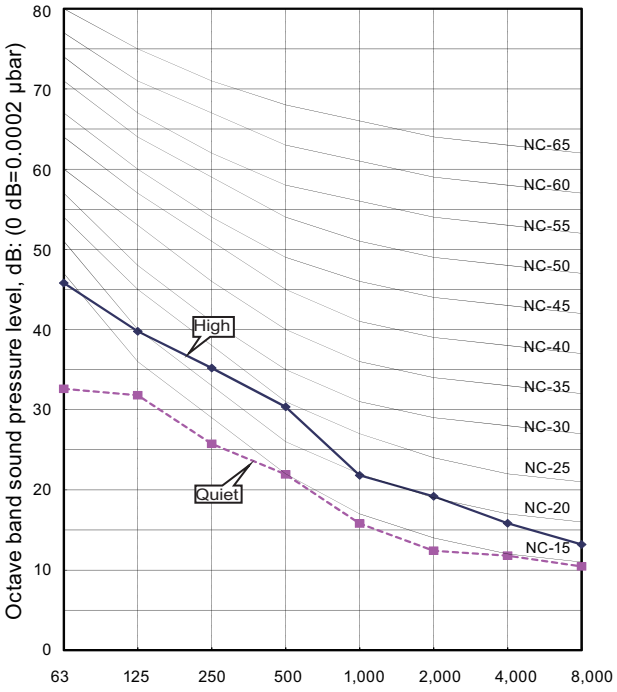
6-1. Noise level curve

■ Model: ARXG12KHTAP

● Cooling

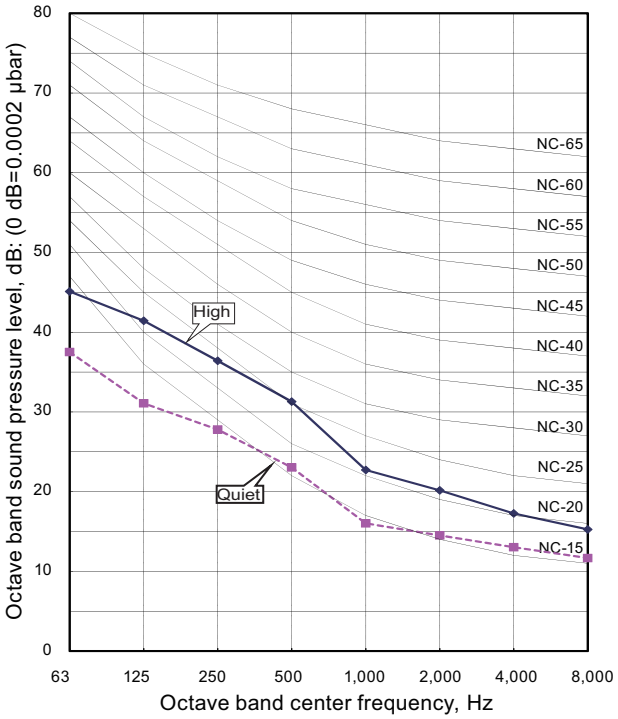


● Heating

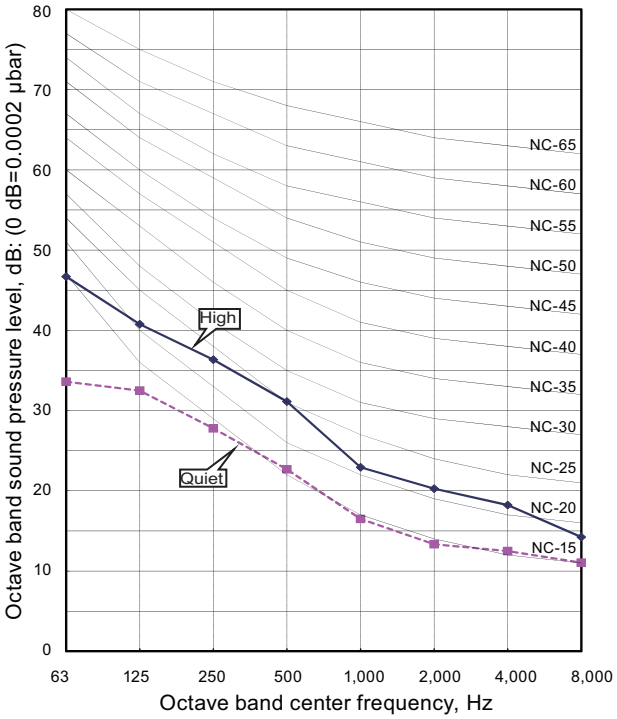


■ Model: ARXG14KHTAP

● Cooling



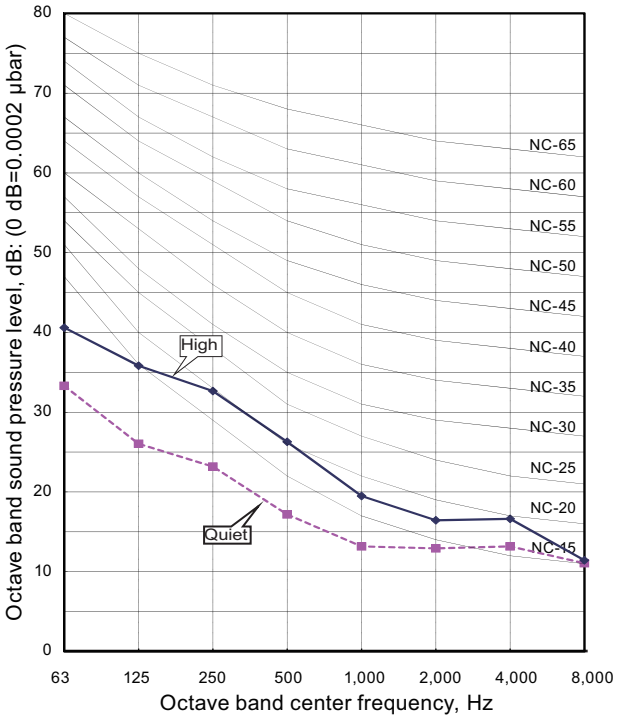
● Heating



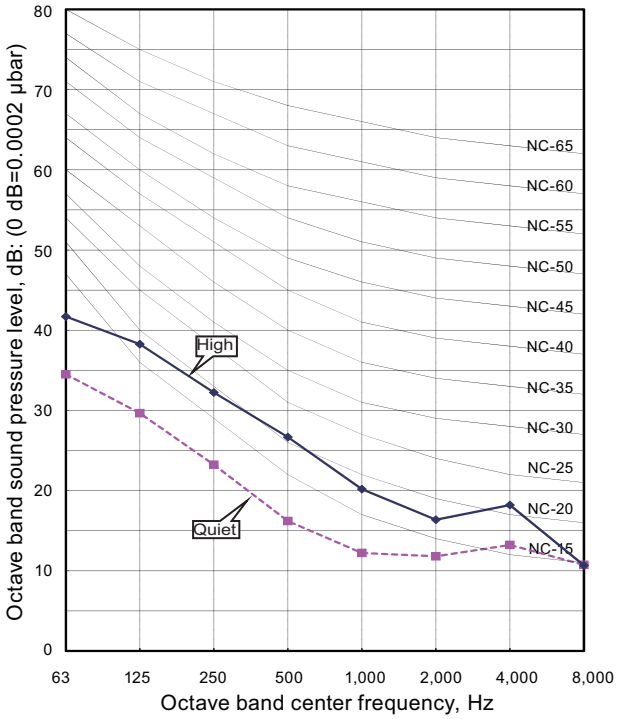
DUCT TYPE
ARXG12-22KHTAP

■ Models: ARXG18KHTAP and ARXG22KHTAP

● Cooling

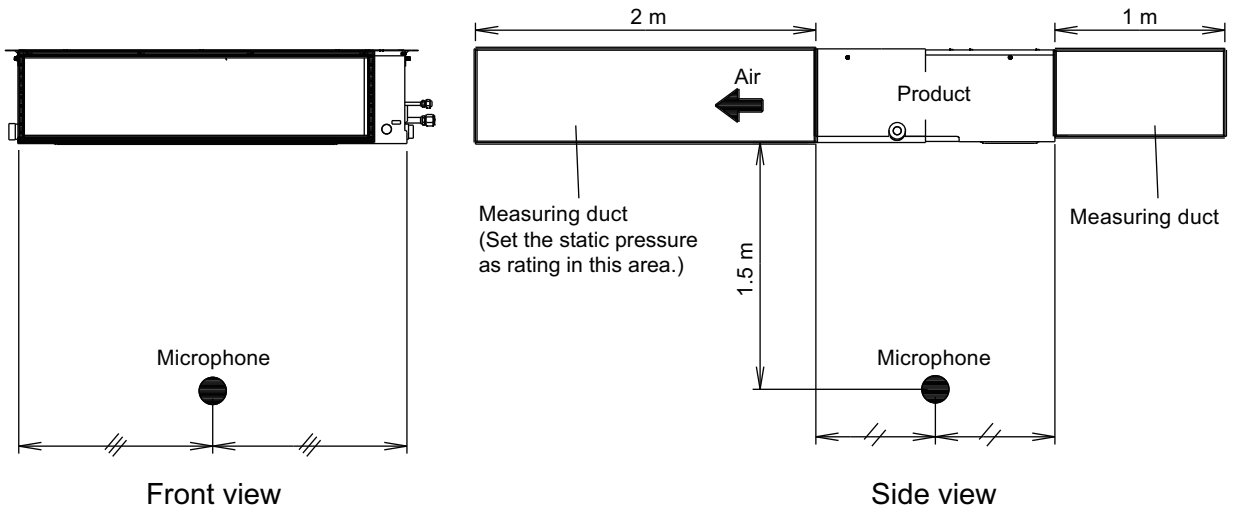


● Heating



DUCT TYPE
ARXG12-22KHTAP

6-2. Sound level check point



DUCT TYPE
ARXG12-22KHTAP

7. Safety devices

Type of protection	Protection form		Model	
			ARXG12KHTAP ARXG14KHTAP	ARXG18KHTAP ARXG22KHTAP
Circuit protection	Current fuse (PCB*)		250 V, 5A	
Fan motor protection	Thermal protection program	Activate	115 ± 15 °C Fan motor stop	
		Reset	70 °C Fan motor restart	
	Current protection	Activate	-	

*: Printed Circuit Board

DUCT TYPE
ARXG12-22KHTAP

8. External input and output

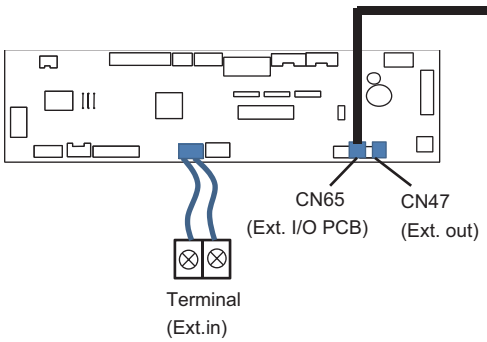


Fig. Indoor unit PCB

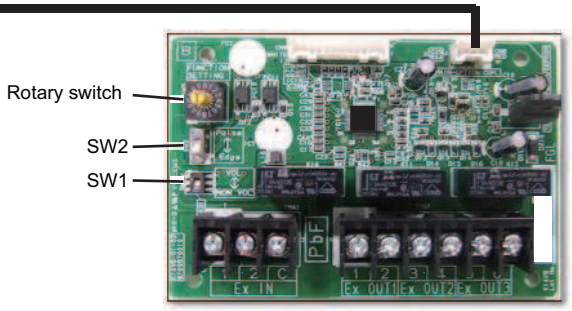


Fig. External Input and Output PCB

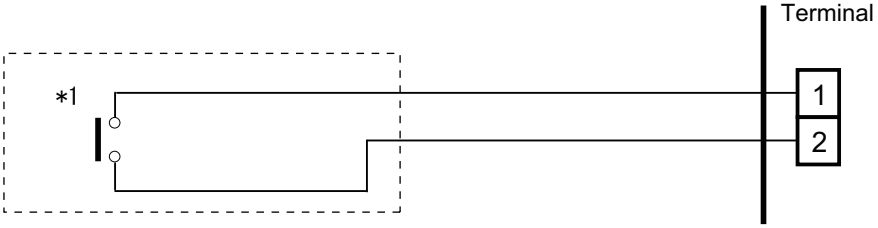
PCB	External input	External output	Connector	Input select	Input signal	External connect kit (Optional parts)
Indoor unit	Operation/Stop Forced stop	—	Terminal	Dry contact	Edge	—
	—	Operation status Error status Indoor unit fan operation status External heater output	CN47	—	—	UTY-XWZXZG
External input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

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.

DUCT TYPE
ARXG12-22KHTAP

■ External input and output PCB

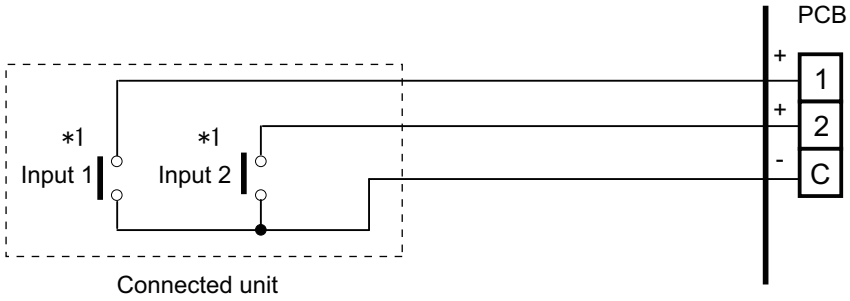
The indoor unit Operation/Stop can be set by using the input terminal on the PCB.

● Input select

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

• Dry contact

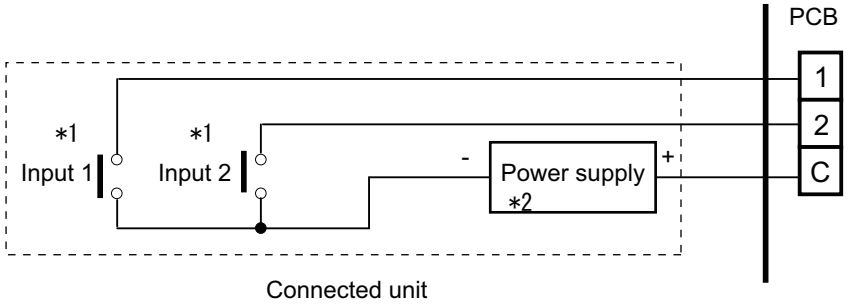
In case of internal power supply, set the slide switch of SW1 to "NON VOL" side.



*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.

DUCT TYPE
ARXG12-22KHTAP

8-2. External output

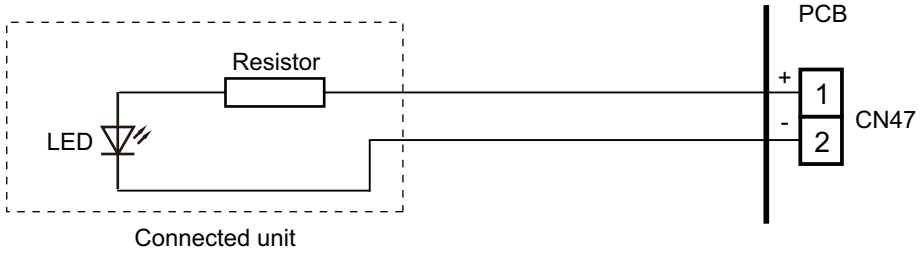
Use an external output cable with appropriate external dimension, depending on the number of cables to be installed.

■ 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 28.

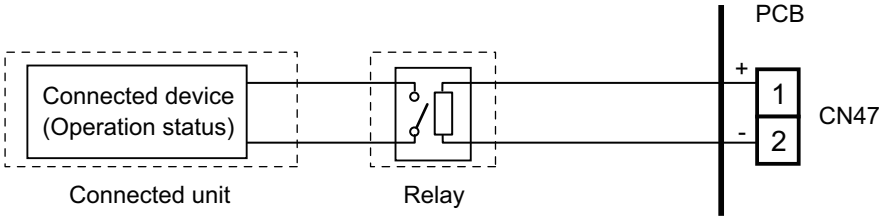
● When indicator, etc. are connected directly

Example: Function setting 60 is set to "00"



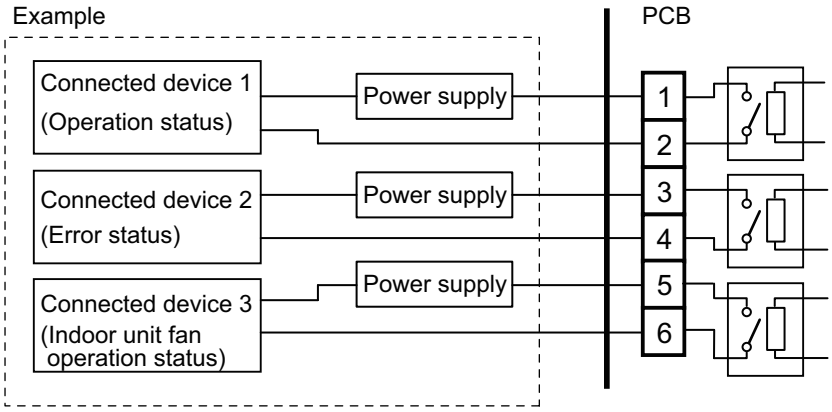
● When connecting with a device equipped with a power supply

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 28.



DUCT TYPE
ARXG12-22KHTAP

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

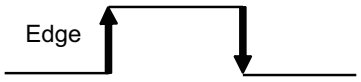
Mode	Function setting	External input and output PCB (Rotary SW)	External output			
			Indoor unit Output	External input and output PCB		
			CN47	Output 1	Output 2	Output 3
0-1	60-00	1	Operation/Stop	Operation/Stop	Error status	Indoor unit fan operation status
0-2	60-00	2	Operation/Stop	Error status	Indoor 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 (Remote controller enabled)
01: (Setting prohibited)
02: Forced stop
03: Operation/Stop mode 2 (Remote controller disabled)

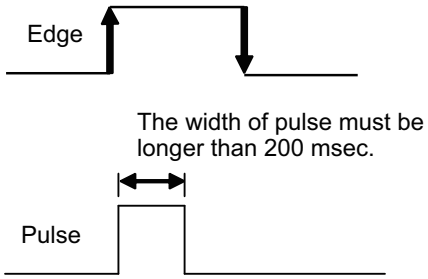
DUCT TYPE
ARXG12-22KHTAP

■ 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.



DUCT TYPE
ARXG12-22KHTAP

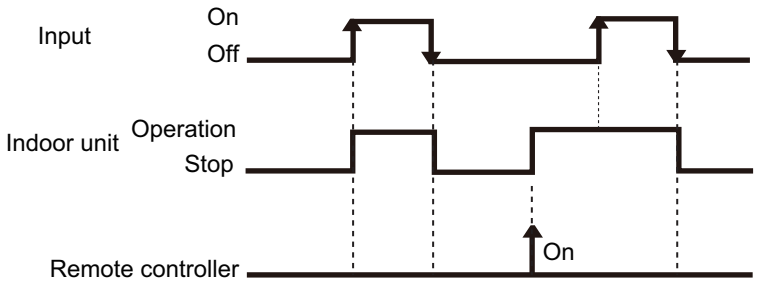
8-4. Details of function

■ Control input function

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

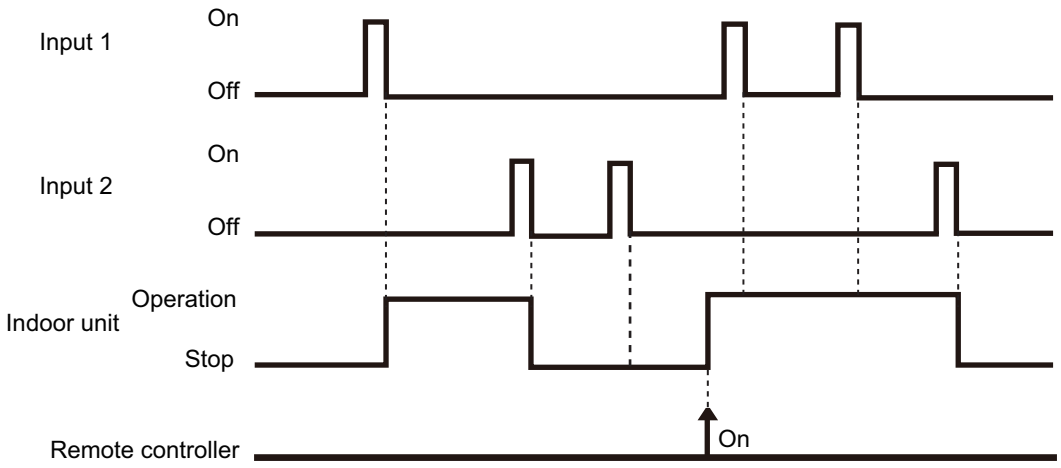
- In the case of "Edge" input

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:

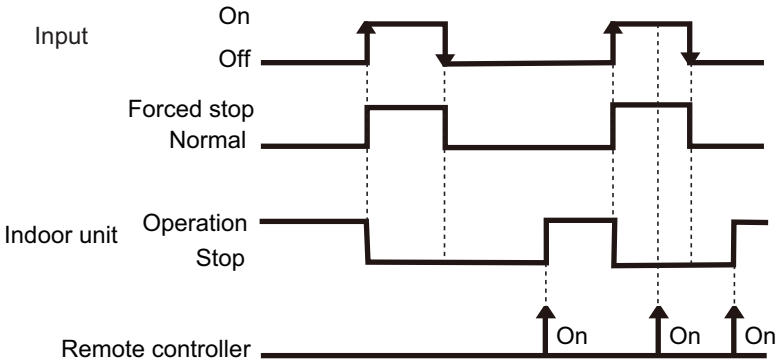
- The last command has priority.
- The indoor units within the same remote controller group operates in the same mode.

DUCT TYPE
ARXG12-22KHTAP

● When function setting is "Forced stop" mode

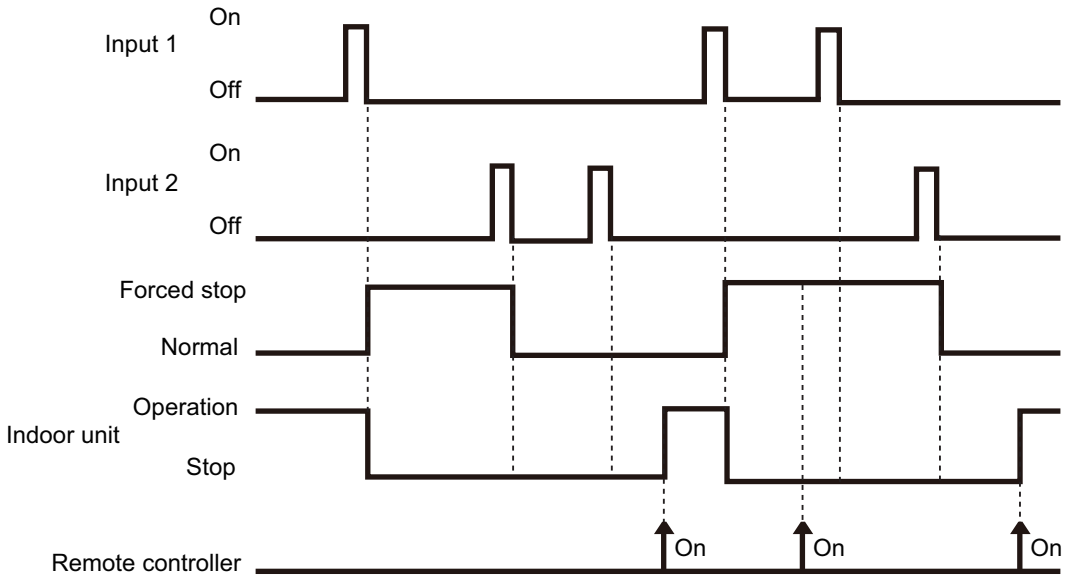
- In the case of "Edge" input

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:

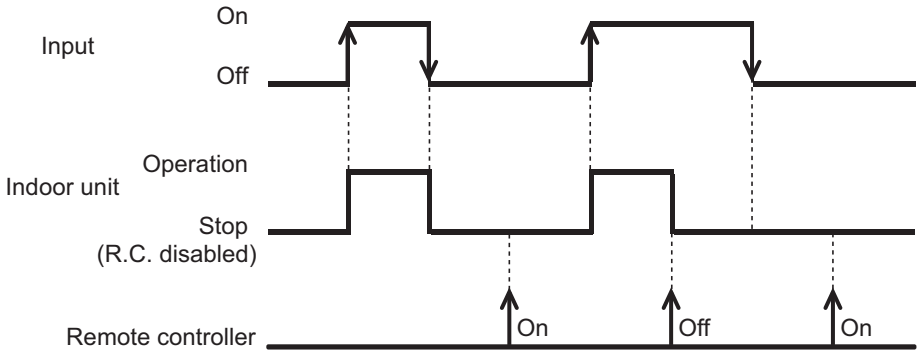
- When the forced stop is triggered, indoor unit stops and Operation/Stop operation by the remote controller is restricted.
- When forced stop function is used with forming a remote controller group, connect the same equipment to each indoor unit within the group.

DUCT TYPE
ARXG12-22KHTAP

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

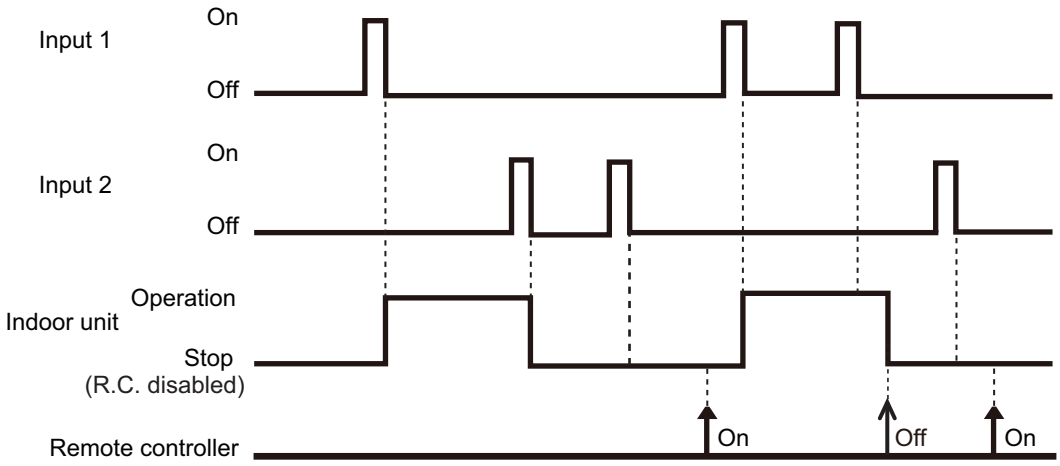
- In the case of "Edge" input

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 (Remote controller disabled)
	60-00 / 1	External input and output PCB	Input 1	Off → On	Operation
				On → Off	Stop (Remote controller 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 (Remote controller disabled)



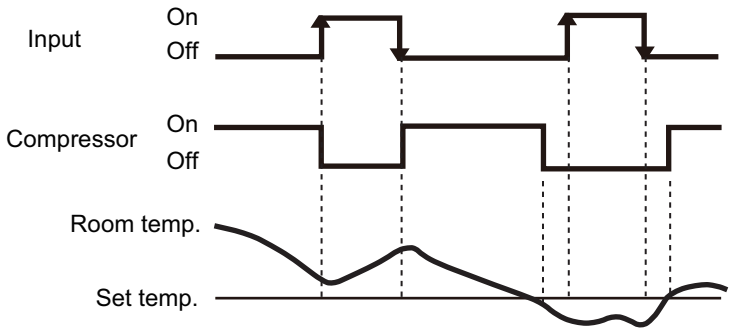
NOTES:

- 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.

DUCT TYPE
ARXG12-22KHTAP

■ Forced thermostat off function

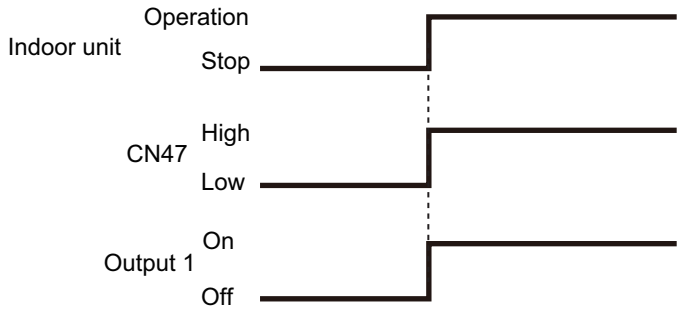
Function setting /	Rotary SW of External input and output PCB	External input		Input signal	Command
60-00 / 2 60-09 / B 60-10 / C 60-11 / D		External input and output PCB	Input 1	Off → On	Thermostat off
				On → Off	Normal operation



■ 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.

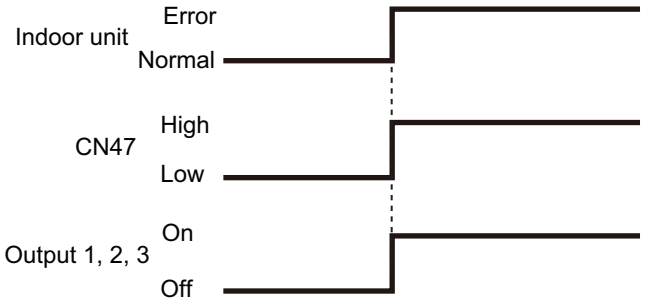


DUCT TYPE
ARXG12-22KHTAP

■ 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

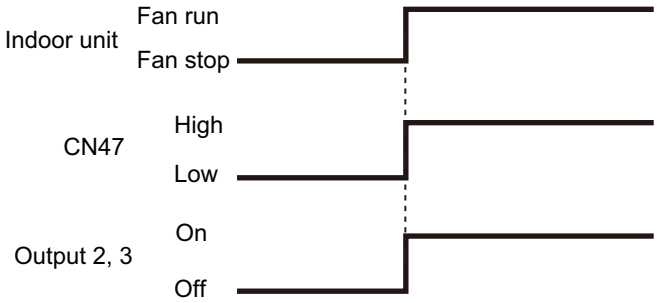
The output is ON when an error is generated for the indoor unit.



■ 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.



DUCT TYPE
ARXG12-22KHTAP

■ External heater output

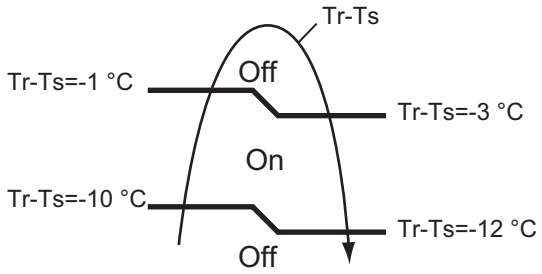
Function setting / Rotary SW of External input and output PCB	External output		Output signal	Command
60-11 / D	Output of indoor unit	CN47	Low → High	Heater on
			High → Low	Heater off
60-00 / 2 60-09 / B 60-10 / C	External input and output PCB	Output 3	Off → On	Heater on
			On → Off	Heater off

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.

DUCT TYPE
ARXG12-22KHTAP

9. Function settings

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

NOTE: Incorrect settings can cause a product malfunction.

9-1. Function settings on indoor unit

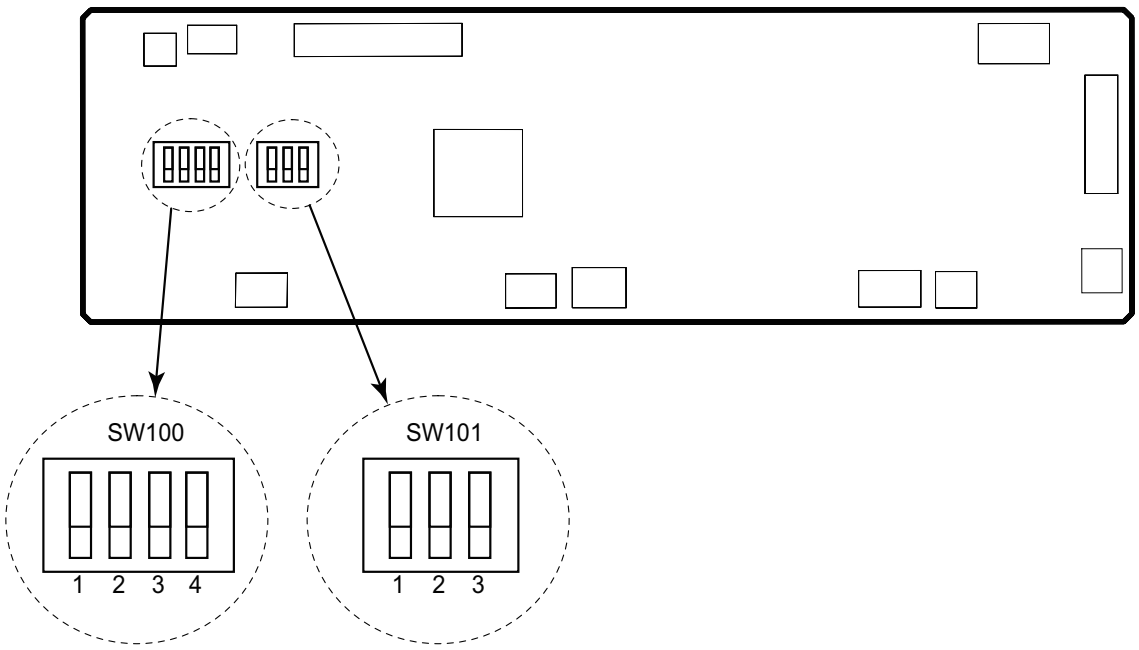
By using some components on the PCB, you can change the function settings.

Related components on the PCB and the applicable settings

Component			Setting content
DIP switch	SW100	1	Remote controller address setting
		2	
		3	
		4	
	SW101	1	Drainage function setting
		2	Setting change prohibited
		3	Fan delay setting

● Component location

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

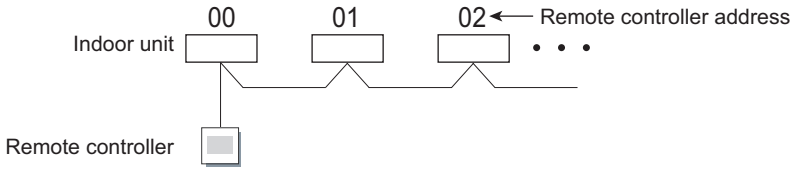


DUCT TYPE
ARXG12-22KHTAP

● DIP switch setting

- **SW100: Remote controller address setting**
  When operating a number of indoor units by using a wired remote controller, DIP switch setting for assigning unit number to each indoor unit is required.
  The slide switches are normally set to make the unit number 00.

Remote controller address	Switch number				Factory setting
	1	2	3	4	
00	OFF	OFF	OFF	OFF	♦
01	ON	OFF	OFF	OFF	
02	OFF	ON	OFF	OFF	
03	ON	ON	OFF	OFF	
04	OFF	OFF	ON	OFF	
05	ON	OFF	ON	OFF	
06	OFF	ON	ON	OFF	
07	ON	ON	ON	OFF	
08	OFF	OFF	OFF	ON	
09	ON	OFF	OFF	ON	
10	OFF	ON	OFF	ON	
11	ON	ON	OFF	ON	
12	OFF	OFF	ON	ON	
13	ON	OFF	ON	ON	
14	OFF	ON	ON	ON	
15	ON	ON	ON	ON	



- **SW101-Switch 1: Drainage function setting**

Switch 1	Drainage function	Factory setting
ON	Disabled	
OFF	Enabled	♦

- **SW101-Switch 2: Setting change prohibited**

- **SW101- Switch 3: Fan delay setting**
  When the indoor unit is stopped while operating in conjunction with auxiliary heater, the indoor unit fan operation will continue for 1 minute.

Switch 3	Fan delay	Factory setting
ON	Enabled	
OFF	Disabled	♦

DUCT TYPE
ARXG12-22KHTAP

9-2. Function settings by using remote controller

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

■ Setting procedure by using remote controller

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

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

■ Contents of function setting

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

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

● Function setting list

	Function no.	Functions
1)	11	Filter sign
2)	26	Static pressure
3)	30/31	Room temperature control for indoor unit sensor
4)	35/36	Room temperature control for wired remote controller sensor
5)	40	Auto restart
6)	42	Room temperature sensor switching
7)	43	Cold air prevention
8)	46	External input control
9)	48	Room temperature sensor switching (Aux.)
10)	49	Indoor unit fan control for energy saving for cooling
11)	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	♦

DUCT TYPE
ARXG12-22KHTAP

2) Static pressure

Select the appropriate static pressure according to the installation conditions.

Function number	Setting value	Setting description	Factory setting
26	03	30 Pa	
	04	40 Pa	
	05	50 Pa	
	06	60 Pa	
	07	70 Pa	
	08	80 Pa	
	09	90 Pa	
	10	100 Pa	
	11	110 Pa	
	12	120 Pa	
	13	130 Pa	
	14	140 Pa	
	15	150 Pa	
	16	160 Pa	
	17	170 Pa	
	18	180 Pa	
	19	190 Pa	
	20	200 Pa	
	31	Standard (35 Pa)	♦
	32	Automatic airflow adjustment	

DUCT TYPE
ARXG12-22KHTAP

3) Room temperature control for indoor unit sensor

NOTE: If the remote sensor unit option is selected, perform this setting.

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		

DUCT TYPE
ARXG12-22KHTAP

4) Room temperature control for wired remote controller sensor

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

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

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

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

5) Auto restart

Enables or disables automatic restart after a power interruption.

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

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

6) Room temperature sensor switching

(Only for wired remote controller)

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

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

00: Sensor on the indoor unit is active.

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

DUCT TYPE
ARXG12-22KHTAP

7) Cold air prevention

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

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

8) External input control

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

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

9) Room temperature sensor switching (Aux.)

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

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

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

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

10) Indoor unit fan control for energy saving for cooling

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

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

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

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

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

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

DUCT TYPE
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11) Switching functions for external output terminal

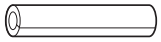
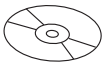
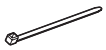
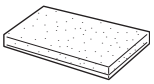
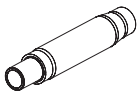
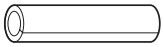
Functions of the external output terminal can be switched. For details, refer to “External input and output”.

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	

DUCT TYPE
ARXG12-22KHTAP

10. Accessories

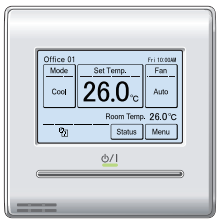
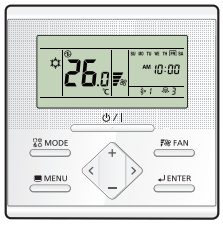
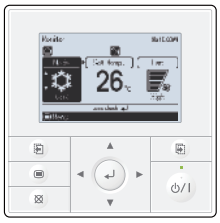
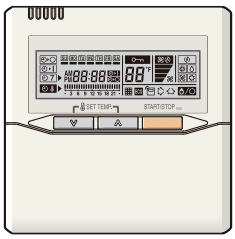
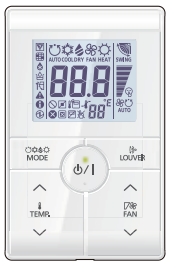
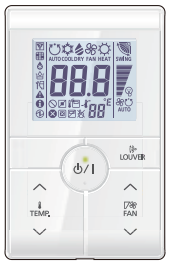
10-1. Models: ARXG12KHTAP, ARXG14KHTAP, ARXG18KHTAP, and ARXG22KHTAP

Part name	Exterior	Q'ty	Part name	Exterior	Q'ty
Operating manual		1	Coupler heat insulation (small)		1
Operating manual (CD-ROM)		1	Cable tie (large)		4
Installation manual		1	Cable tie (medium)		1
Special nut A (large flange)		4	Cable tie (small)		1
Special nut B (small flange)		4	Drain hose insulation		1
Washer		8	Drain hose		1
Coupler heat insulation (large)		1	Hose band		1

DUCT TYPE
ARXG12-22KHTAP

11. Optional parts

11-1. Controllers

Exterior	Part name	Model name	Summary
	Wired Remote Controller	UTY-RNRGZ*	Easy finger touch operation with LCD panel. Backlit LCD enables easy operation in a dark room. Wire type: Non-polar 2-wire
	Wired Remote Controller	UTY-RLRG	High visibility and easy operation. Room temperature can be accurately controlled using the thermo sensor. Wire type: Non-polar 2-wire
	Wired Remote Controller	UTY-RVNGM	Large and full-dot liquid crystal screen, wide and large keys easy to press, user-intuitive arrow key. Wire type: Polar 3-wire
	Wired Remote Controller	UTY-RNNGM	Room temperature can be controlled by detecting the temperature accurately with thermo sensor. Wire type: Polar 3-wire
	Simple Remote Controller	UTY-RSRG	Compact remote controller concentrates on the basic functions such as Start/Stop, fan control, temperature setting, and operation mode. Wire type: Non-polar 2-wire
	Simple Remote Controller	UTY-RHRG	Compact remote controller concentrates on the basic functions such as Start/Stop, fan control, and temperature setting. Wire type: Non-polar 2-wire
	Simple Remote Controller	UTY-RSNGM	Compact remote controller concentrates on the basic functions such as Start/Stop, fan control, temperature setting, and operation mode. Wire type: Polar 3-wire

DUCT TYPE
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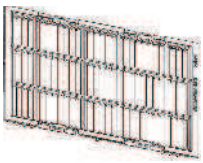
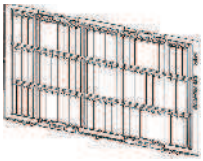
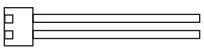
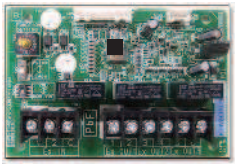
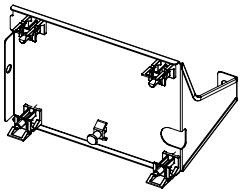
Exterior	Part name	Model name	Summary
	IR Receiver Kit with Wireless Remote Controller	UTY-LBTGM	Unit control is performed by Wireless Remote Controller

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

11-2. Others

Exterior	Part name	Model name	Summary
	Remote Sensor Unit	UTY-XSZX	Thermo-sensor for sensing the temperature of arbitrary place in the room.
	Long-life Filter	UTD-LFNC	Long-life Filter can be mounted to the indoor unit.
	Long-life Filter	UTD-LFNB	Long-life Filter can be mounted to the indoor unit.
	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. Optional External Connect Kit is necessary for installation.
	External Input and Output PCB Bracket	UTZ-GXNA	For installing the External input and output PCB.
	WLAN Adapter	UTY-TFSXZ1	Remotely manage an air conditioning system using mobile devices such as smartphones and tablets. For connection indoor unit with UART interface. Appropriate application for each region is required to use this option. For details, contact FGL sales company.

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Exterior	Part name	Model name	Summary
	Modbus Converter	UTY-VMSX	For connection between indoor unit with UART interface and a Modbus open network.
	KNX Convertor	UTY-VKSX	For connection between indoor unit with UART interface and a KNX open network.
	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 WLAN Adapter is not allowed.

- External Input and Output PCB (UTY-XCSX)
- Modbus Converter
- KNX Convertor

DUCT TYPE
ARXG12-22KHTAP

Part 2. OUTDOOR UNIT

SINGLE TYPE:

AOHG12KBTB
AOHG14KBTB
AOHG18KBTB
AOHG22KBTB

1. Specifications

Type				Inverter heat pump			
Model name				**AOHG12KBTB**	**AOHG14KBTB**	**AOHG18KBTB**	**AOHG22KBTB**
Power supply				230 V ~ 50 Hz			
Available voltage range				198—264 V			
Starting current			A	4.8	5.8	7.1	8.2
Fan	Airflow rate	Cooling	m^3/h	1,580	1,670	2,160	2,240
		Heating		1,520	1,580	1,830	1,960
	Type × Qty			Propeller fan × 1			
	Motor output		W	23		49	
Sound pressure level *1		Cooling	dB (A)	47	49	50	51
		Heating		47	49	50	51
Sound power level		Cooling	dB (A)	61	62	62	63
		Heating		61	62	62	63
Heat exchanger type		Dimensions (H × W × D)	mm	504 × 881 × 18.19 504 × 851 × 18.19		588 × 881 × 18.19 588 × 851 × 18.19	
		Fin pitch		1.3			
		Rows × Stages		2 × 24		2 × 28	
		Pipe type		Copper tube			
		Fin type	Type (Material)	Aluminum			
			Surface treatment	PC fin			
Compressor	Type × Qty			DC Twin rotary × 1			
	Motor output		W	810	900		1,060
Refrigerant		Type (Global warming potential)		R32 (675)			
		Charge	g	850		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	542 × 799 × 290		632 × 799 × 290	
	Gross			602 × 940 × 375		692 × 940 × 375	
Weight	Net		kg	33		36	38
	Gross			37		40	42
Connection pipe	Size	Liquid	mm (in)	Ø 6.35 (Ø 1/4)			
		Gas		Ø 9.52 (Ø 3/8)		Ø 12.70 (Ø 1/2)	
	Method			Flare			
	Pre-charge length		m	15		20	
	Max. length			25		30	
	Max. height difference			20			25
Operation range		Cooling	°C	-15 to 46			
		Heating		-15 to 24			
Drain hose		Material		PP			
		Size	mm	Ø 13.0 (I. D.), Ø 16.0 to Ø 16.8 (O. D.)			

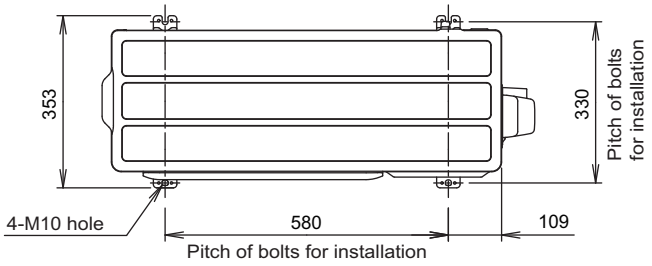
NOTES:

- 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.
- Protective function might work when using it outside the operation range.
- *1: Sound pressure level
  - Measured values in manufacturer's semi-anechoic chamber.
  - Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.

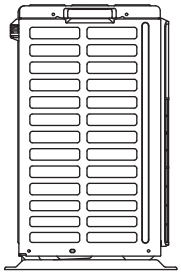
2. Dimensions

2-1. Models: AOHG12KBTB and AOHG14KBTB

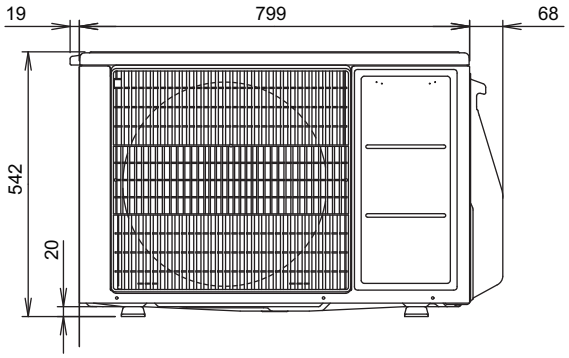
Unit: mm



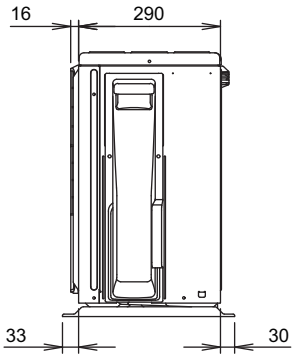
Top view



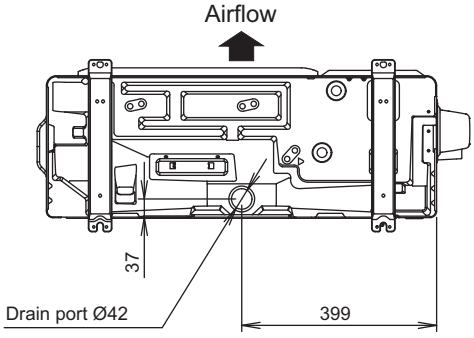
Side view



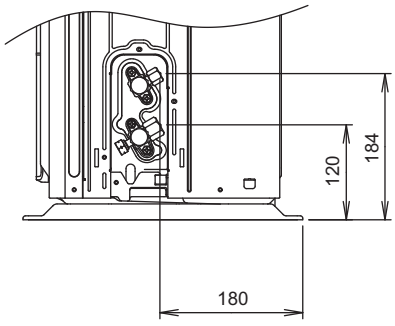
Front view



Side view



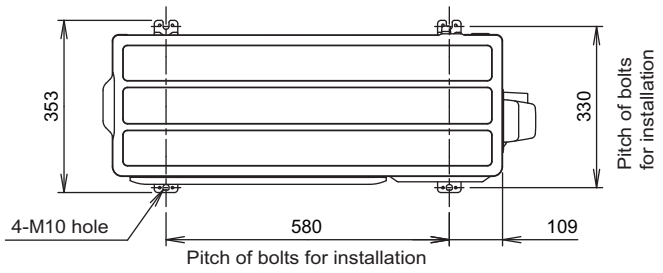
Bottom view



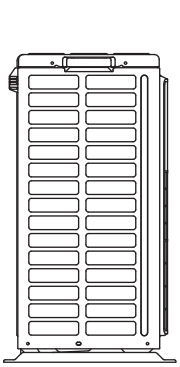
Side view (Valve part)

2-2. Models: AOHG18KBTB and AOHG22KBTB

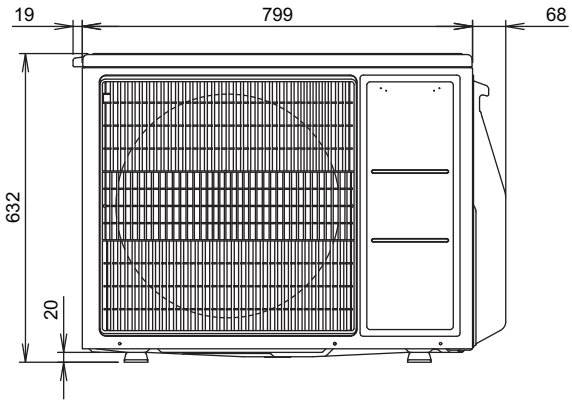
Unit: mm



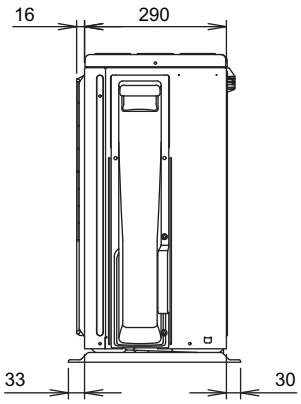
Top view



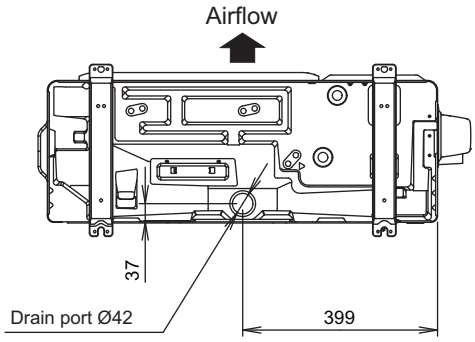
Side view



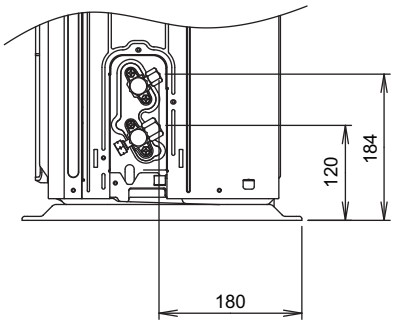
Front view



Side view



Bottom view



Side view (Valve part)

3. Installation space

3-1. Models: AOHG12KBTB, AOHG14KBTB, AOHG18KBTB, and AOHG22KBTB

OUTDOOR UNIT
AOHG12-22KBTB

■ Space requirement

Provide sufficient installation space for product safety.

⚠ CAUTION

Keep the space shown in the installation examples.

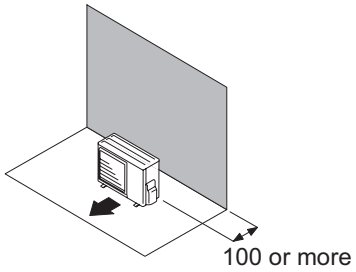
If the installation is not performed accordingly, it could cause a short circuit and result in a lack of operating performance.

● Single outdoor unit installation

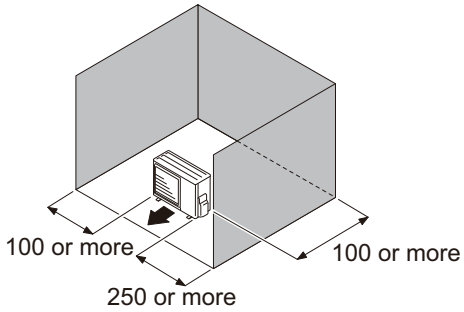
- **When the upper space is open:**

Unit: mm

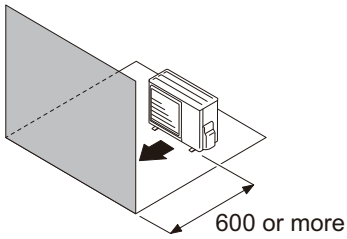
Obstacles at rear only



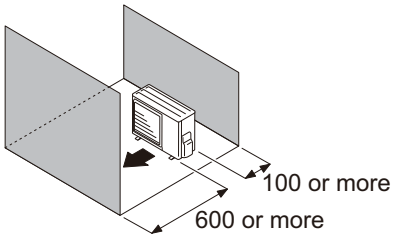
Obstacles at rear and sides



Obstacles at front



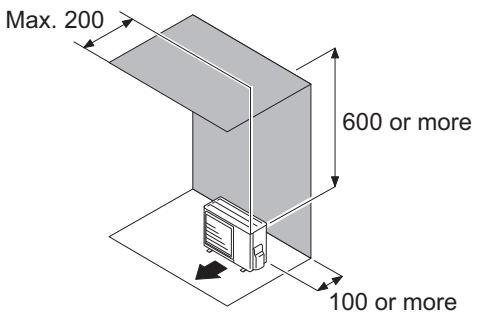
Obstacles at front and rear



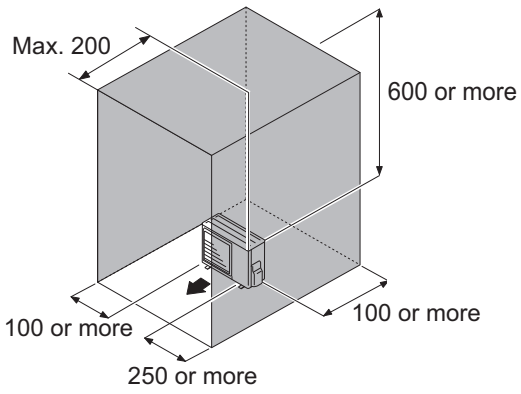
- **When an obstruction in the upper space:**

Unit: mm

Obstacles at rear and above



Obstacles at rear, sides, and above



OUTDOOR UNIT
AOHG12-22KBTB

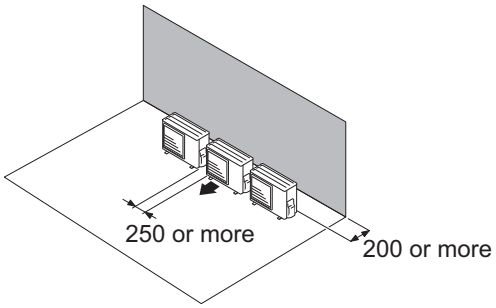
● Multiple outdoor unit installation

- 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:**".

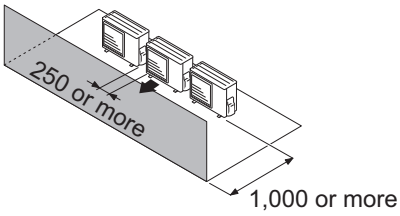
- **When the upper space is open:**

Unit: mm

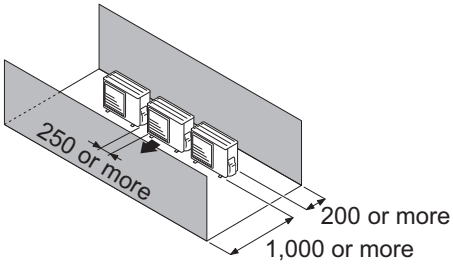
Obstacles at rear only



Obstacles at front only



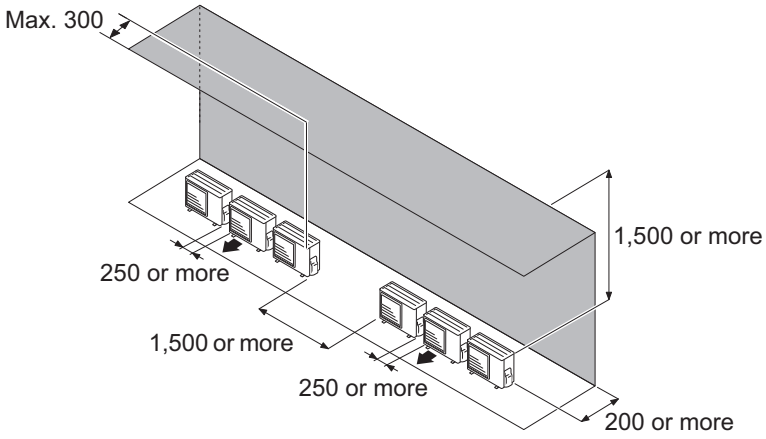
Obstacles at front and rear



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

Unit: mm

Obstacles at rear and above.

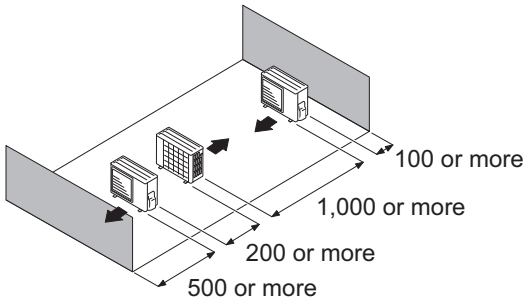


OUTDOOR UNIT
AOHG12-22KBTB

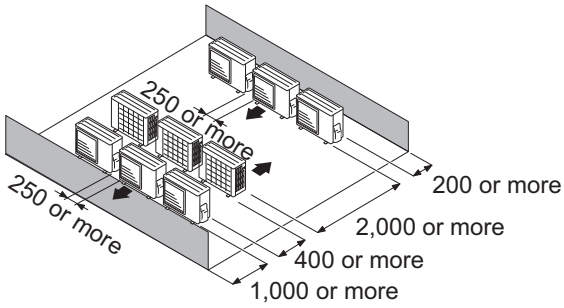
● Outdoor units installation in multi-row

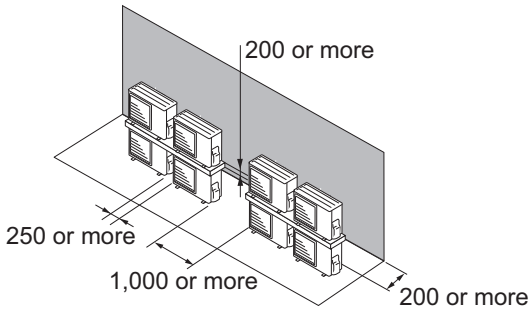
Unit: mm

Single parallel unit arrangement



Multiple parallel unit arrangement



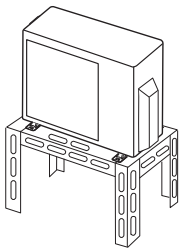


NOTES:

- 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

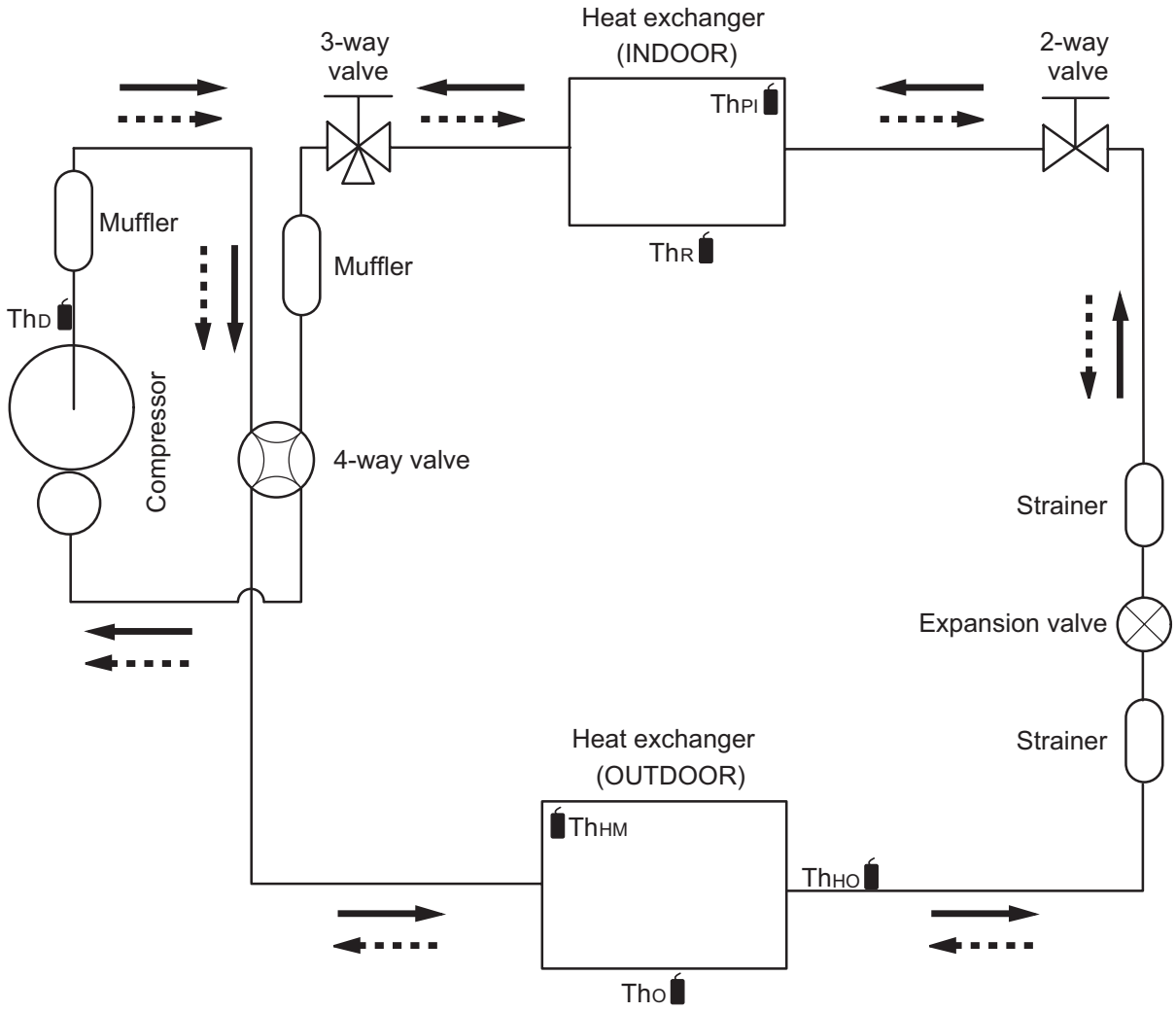
- Do not install the outdoor unit in two-stage where the drain water could freeze. Otherwise the drainage from the upper unit may form ice and cause a malfunction of the lower unit.
- When the outdoor temperature is 0 °C or less, do not use the accessory drain pipe and drain cap. If the drain pipe and 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
AOHG12-22KBTB

4. Refrigerant circuit

4-1. Models: AOHG12KBTB and AOHG14KBTB



ThD : Thermistor (Discharge temperature)

ThHM: Thermistor (Heat exchanger middle temperature)

ThO : Thermistor (Outdoor temperature)

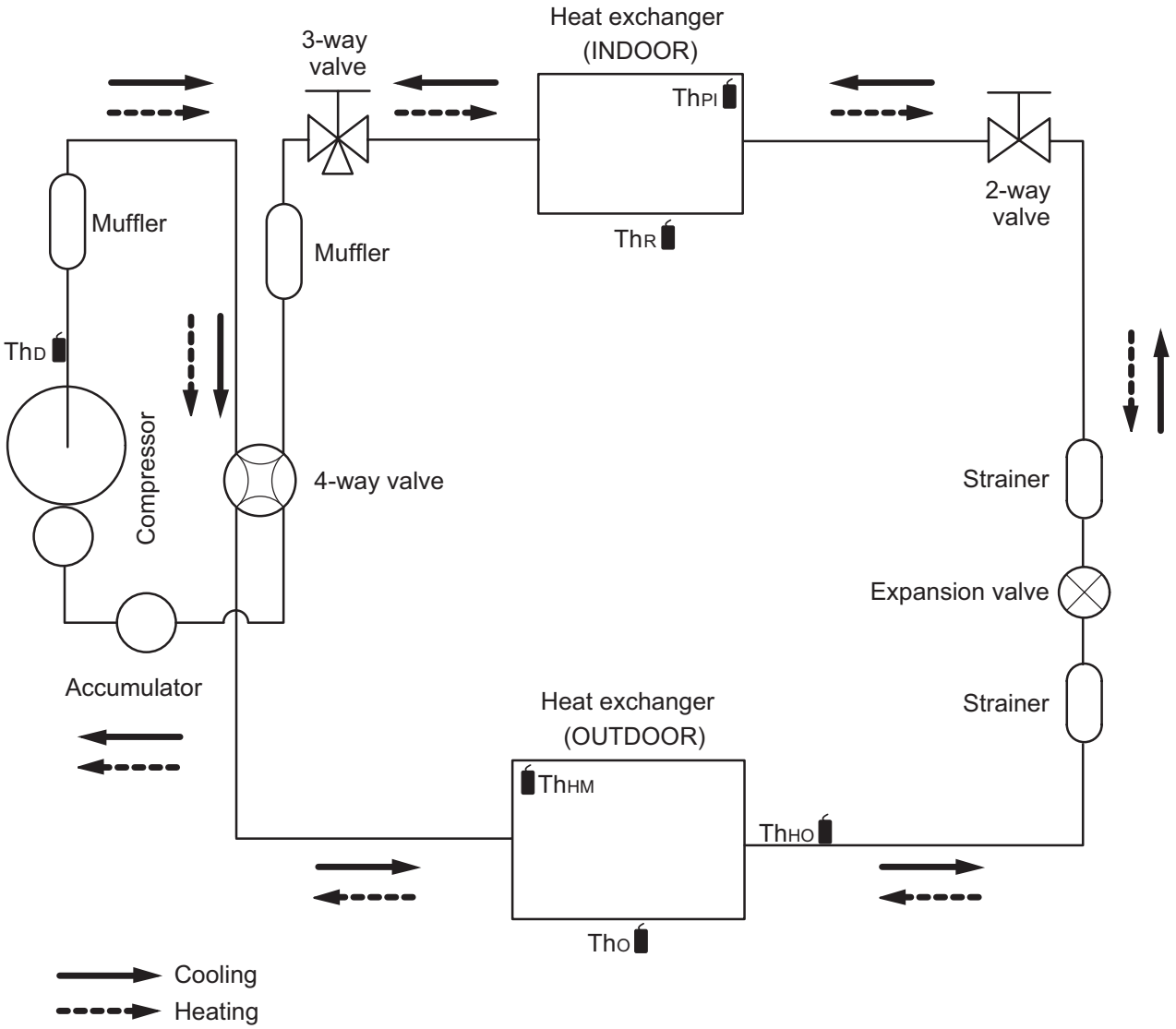
ThHO: Thermistor (Heat exchanger out temperature)

ThPI : Thermistor (Pipe temperature)

ThR : Thermistor (Room temperature)

OUTDOOR UNIT
AOHG12-22KBTB

4-2. Model: AOHG18KBTB



ThD : Thermistor (Discharge temperature)

ThHM: Thermistor (Heat exchanger middle temperature)

ThO : Thermistor (Outdoor temperature)

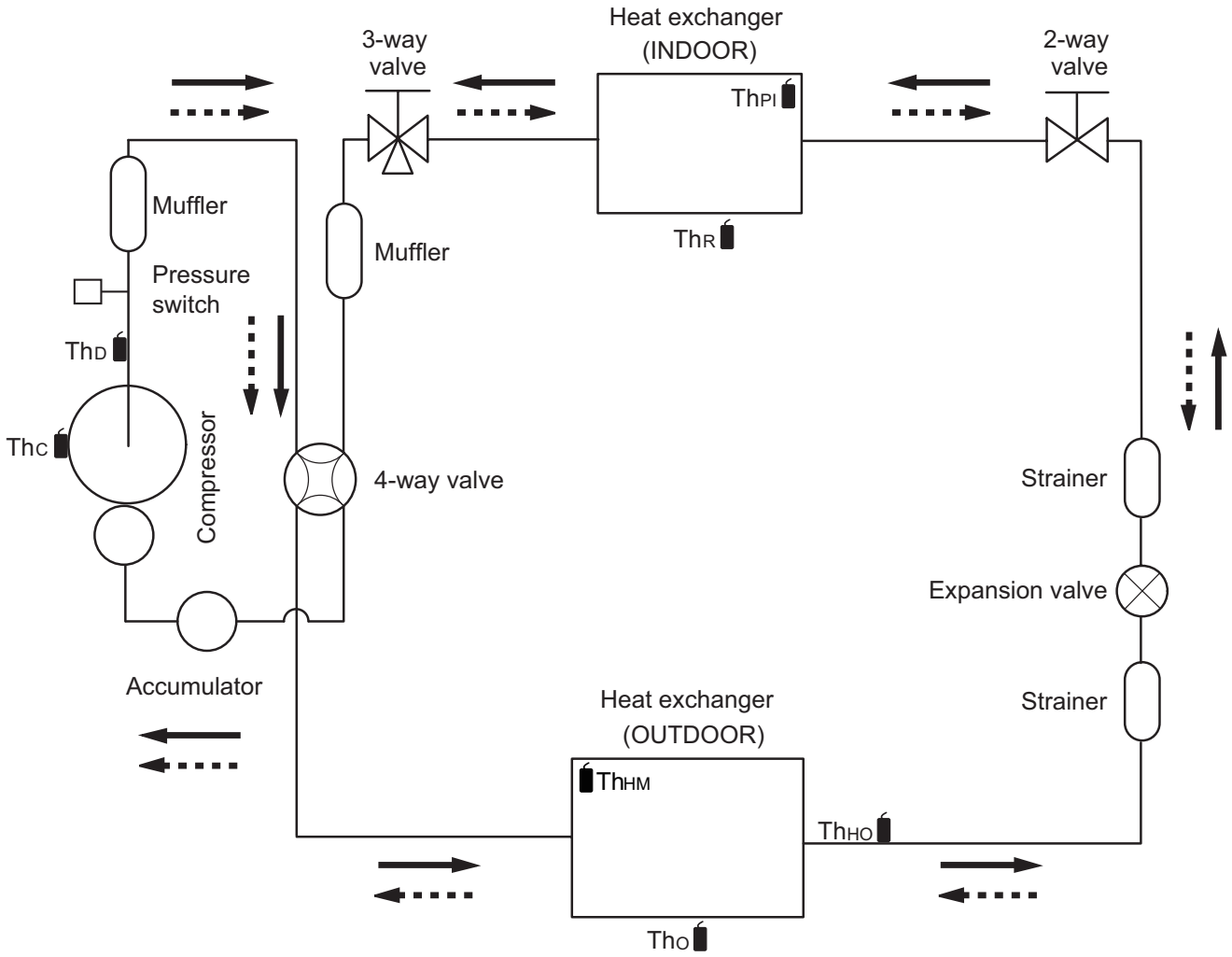
ThHO: Thermistor (Heat exchanger out temperature)

ThPI : Thermistor (Pipe temperature)

ThR : Thermistor (Room temperature)

OUTDOOR UNIT
AOHG12-22KBTB

4-3. Model: AOHG22KBTB



ThC : Thermistor (Compressor temperature)

ThD : Thermistor (Discharge temperature)

ThHM: Thermistor (Heat exchanger middle temperature)

ThO : Thermistor (Outdoor temperature)

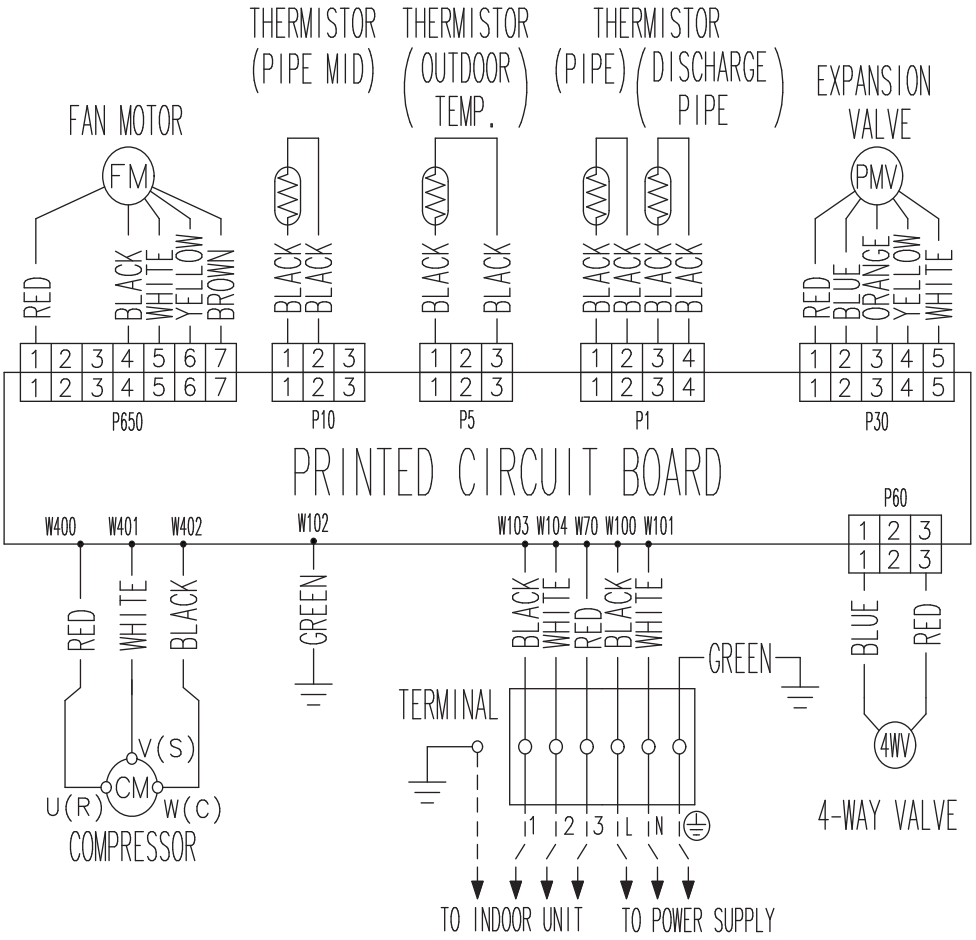
ThHO: Thermistor (Heat exchanger out temperature)

ThPI : Thermistor (Pipe temperature)

ThR : Thermistor (Room temperature)

5. Wiring diagrams

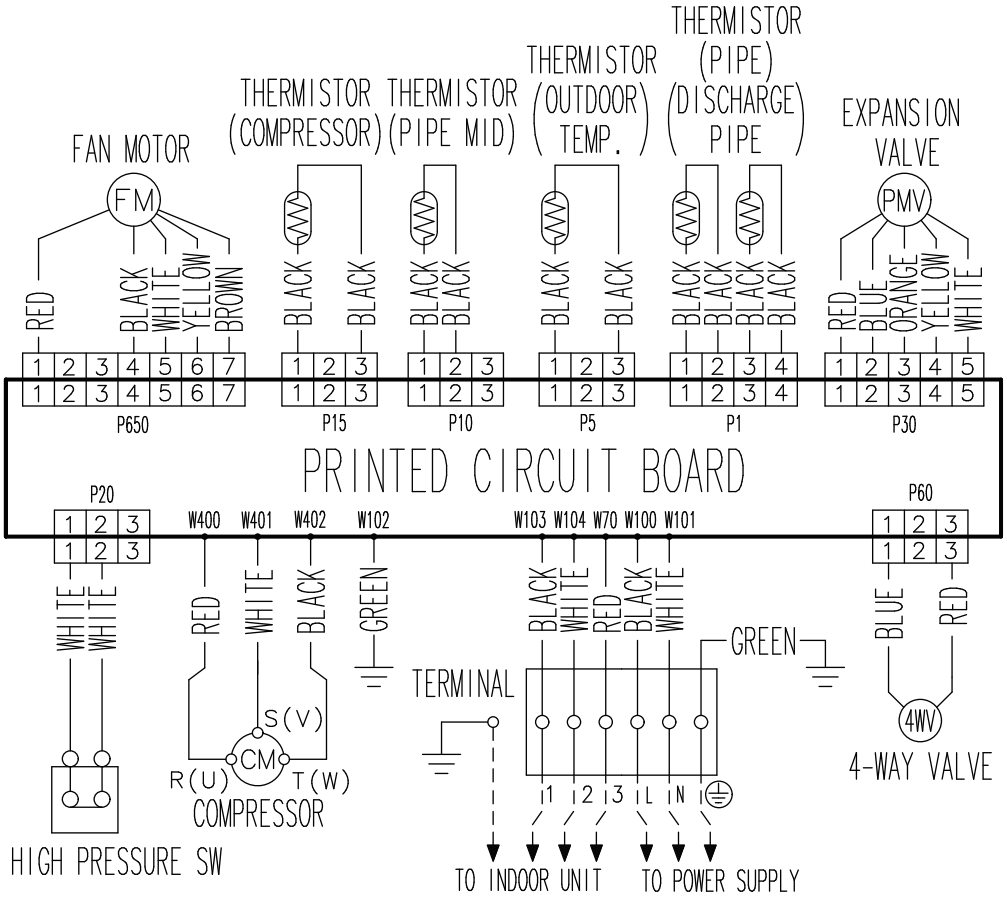
5-1. Models: AOHG12KBTB, AOHG14KBTB, and AOHG18KBTB



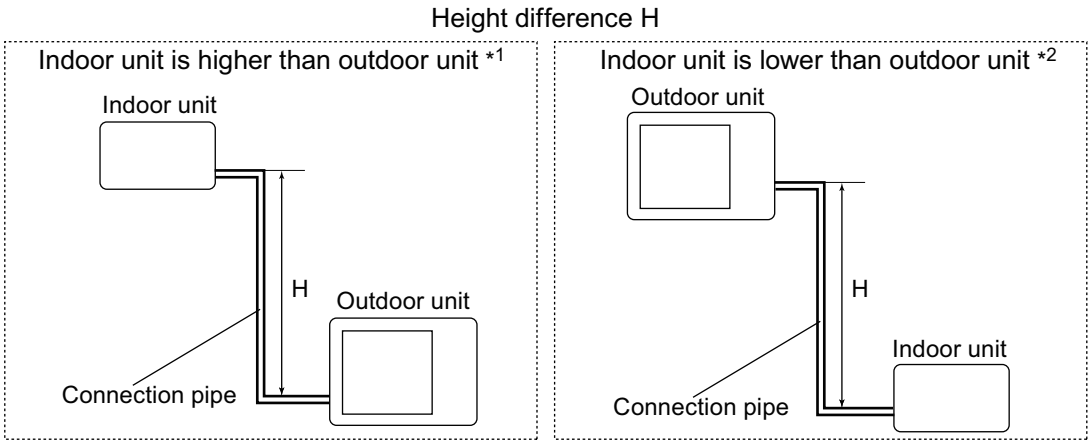
OUTDOOR UNIT
AOHG12-22KBTB

OUTDOOR UNIT
AOHG12-22KBTB

5-2. Model: AOHG22KBTB



6. Capacity compensation rate for pipe length and height difference



6-1. Model: AOHG12KBTB

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

COOLING			Pipe length (m)					
			5	7.5	10	15	20	25
Height difference H (m)	Indoor unit is higher than outdoor unit *1	20	—	—	—	—	0.879	0.851
		15	—	—	—	0.903	0.894	0.867
		10	—	—	0.964	0.918	0.909	0.881
		7.5	—	0.988	0.968	0.922	0.912	0.885
		5	0.992	0.992	0.972	0.925	0.916	0.888
		0	1.000	1.000	0.980	0.933	0.923	0.895
	Indoor unit is lower than outdoor unit *2	-5	1.000	1.000	0.980	0.933	0.923	0.895
		-7.5	—	1.000	0.980	0.933	0.923	0.895
		-10	—	—	0.980	0.933	0.923	0.895
		-15	—	—	—	0.933	0.923	0.895
		-20	—	—	—	—	0.923	0.895

HEATING			Pipe length (m)					
			5	7.5	10	15	20	25
Height difference H (m)	Indoor unit is higher than outdoor unit *1	20	—	—	—	—	0.916	0.896
		15	—	—	—	0.943	0.916	0.896
		10	—	—	1.010	0.943	0.916	0.896
		7.5	—	1.000	1.010	0.943	0.916	0.896
		5	1.000	1.000	1.010	0.943	0.916	0.896
		0	1.000	1.000	1.010	0.943	0.916	0.896
	Indoor unit is lower than outdoor unit *2	-5	0.995	0.995	1.005	0.939	0.912	0.892
		-7.5	—	0.993	1.002	0.936	0.909	0.890
		-10	—	—	0.999	0.934	0.907	0.887
		-15	—	—	—	0.925	0.898	0.878
		-20	—	—	—	—	0.890	0.868

6-2. Model: AOHG14KBTB

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

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

HEATING			Pipe length (m)					
			5	7.5	10	15	20	25
Height difference H (m)	Indoor unit is higher than outdoor unit *1	20	—	—	—	—	0.891	0.862
		15	—	—	—	0.918	0.891	0.862
		10	—	—	0.981	0.918	0.891	0.862
		7.5	—	1.000	0.981	0.918	0.891	0.862
		5	1.000	1.000	0.981	0.918	0.891	0.862
		0	1.000	1.000	0.981	0.918	0.891	0.862
	Indoor unit is lower than outdoor unit *2	-5	0.995	0.995	0.976	0.914	0.886	0.858
		-7.5	—	0.993	0.974	0.912	0.884	0.856
		-10	—	—	0.972	0.909	0.882	0.854
		-15	—	—	—	0.900	0.873	0.845
		-20	—	—	—	—	0.863	0.834

6-3. Model: AOHG18KBTB

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

6-4. Model: AOHG22KBTB

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

OUTDOOR UNIT
AOHG12-22KBTB

7. Additional charge calculation

7-1. Models: AOHG12KBTB and AOHG14KBTB

Refrigerant type		R32
Factory charge amount	g	850

■ Refrigerant charge

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

7-2. Model: AOHG18KBTB

Refrigerant type		R32
Factory charge amount	g	1,020

■ Refrigerant charge

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

7-3. Model: AOHG22KBTB

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	

OUTDOOR UNIT
AOHG12-22KBTB

8. Airflow

8-1. Model: AOHG12KBTB

● Cooling

m^3/h	1,580
l/s	439
CFM	930

● Heating

m^3/h	1,520
l/s	422
CFM	895

8-2. Model: AOHG14KBTB

● Cooling

m^3/h	1,670
l/s	464
CFM	983

● Heating

m^3/h	1,580
l/s	439
CFM	930

8-3. Model: AOHG18KBTB

● Cooling

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

● Heating

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

8-4. Model: AOHG22KBTB

OUTDOOR UNIT
AOHG12-22KBTB

● Cooling

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

● Heating

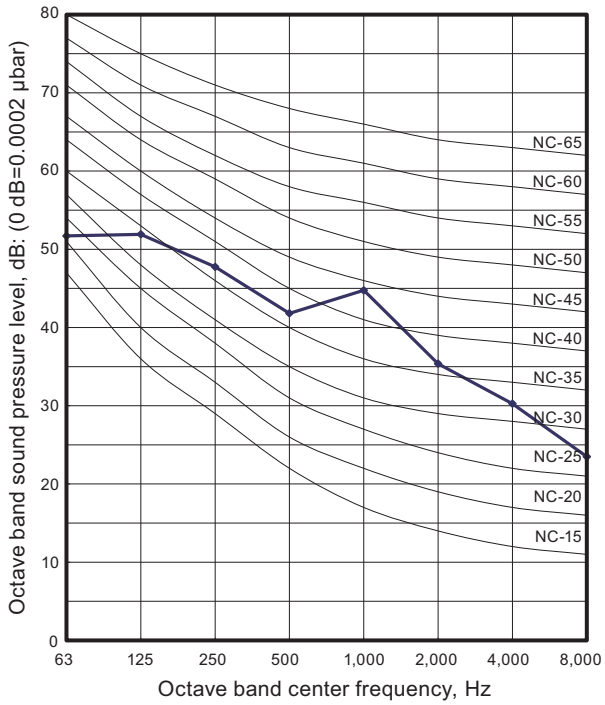
m^3/h	1,960
l/s	544
CFM	1,154

9. Operation noise (sound pressure)

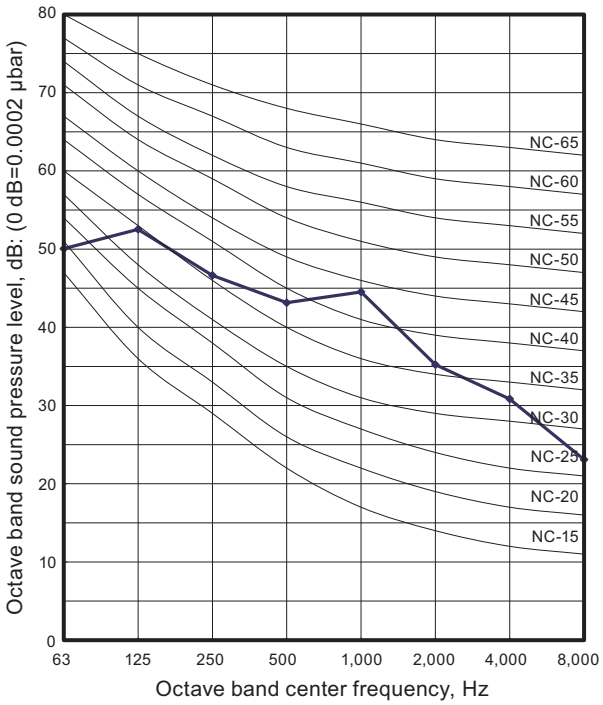
9-1. Noise level curve

■ Model: AOHG12KBTB

● Cooling

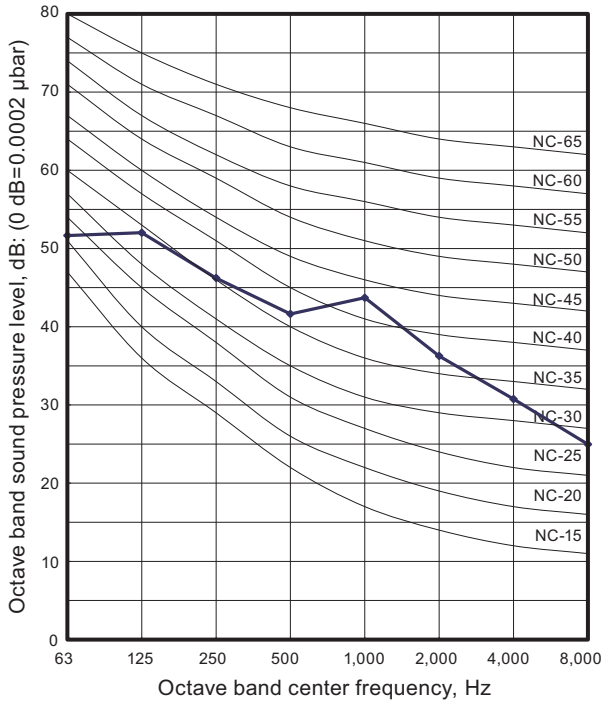


● Heating

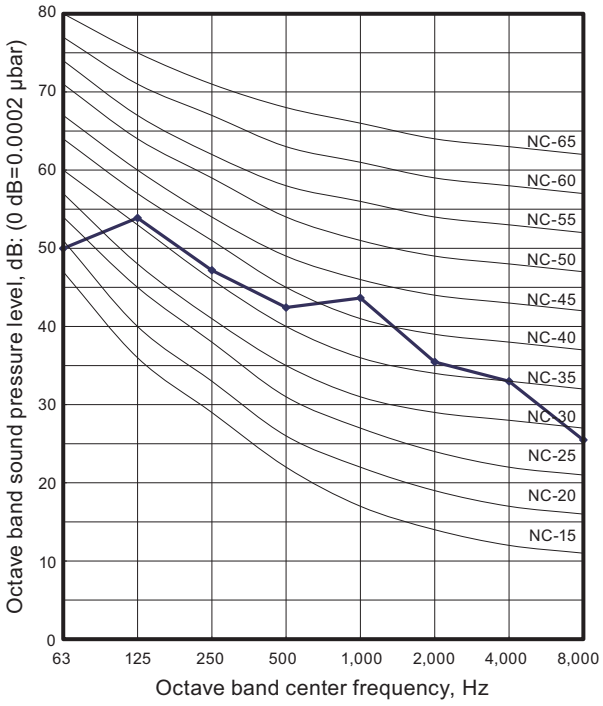


■ Model: AOHG14KBTB

● Cooling



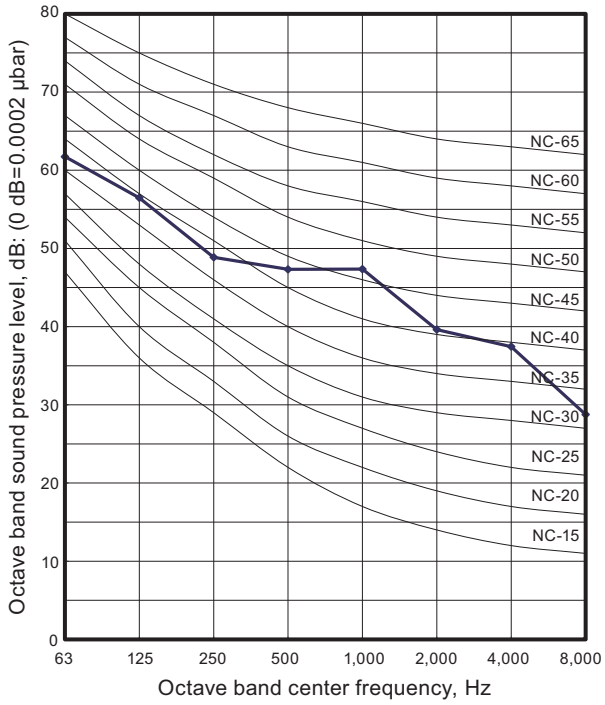
● Heating



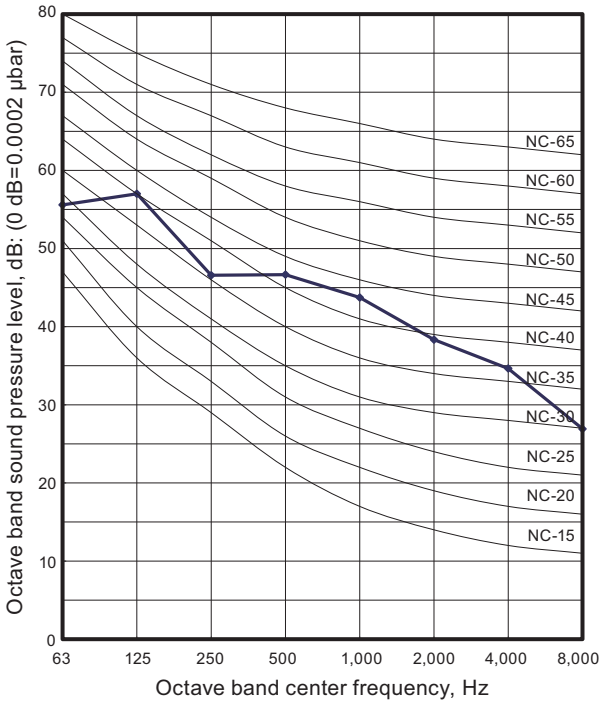
OUTDOOR UNIT
AOHG12-22KBTB

■ Model: AOHG18KBTB

● Cooling

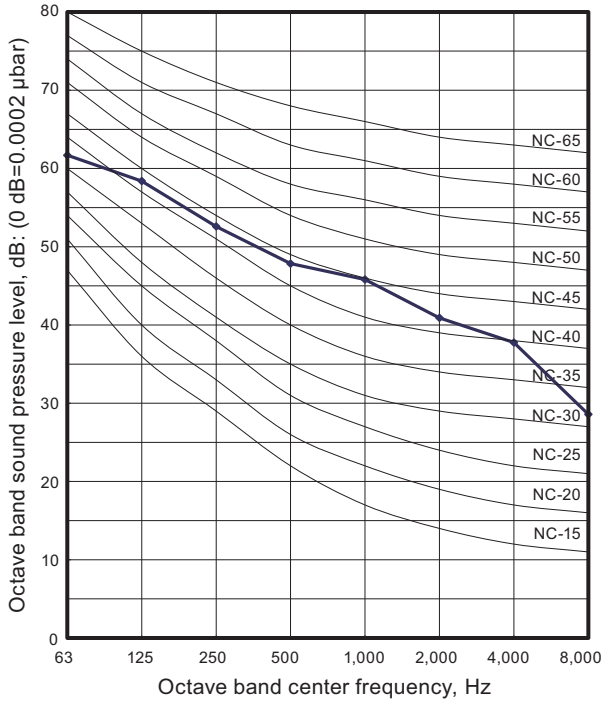


● Heating

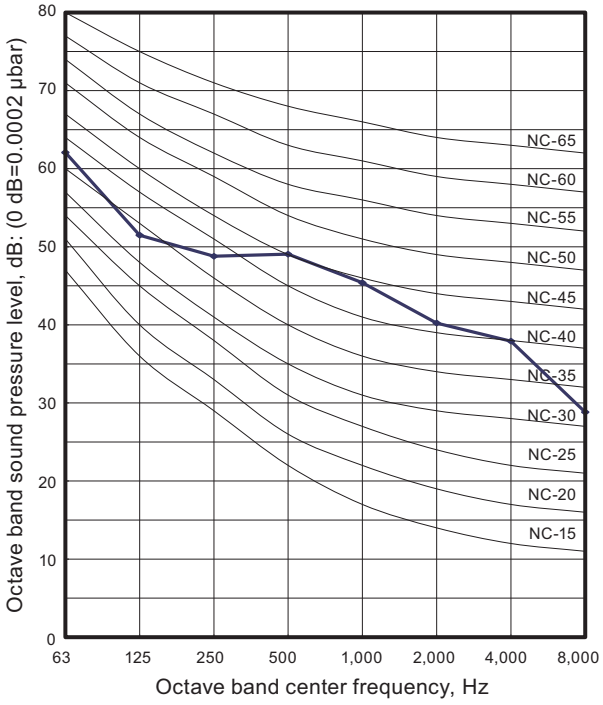


■ Model: AOHG22KBTB

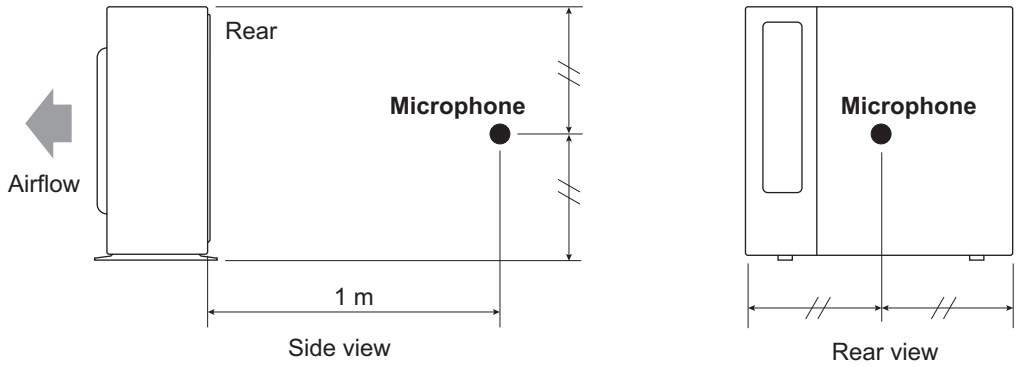
● Cooling



● 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
AOHG12-22KBTB

10. Electrical characteristics

OUTDOOR UNIT
AOHG12-22KBTB

Model name				AOHG12KBTB	AOHG14KBTB
Power supply	Voltage		V	230 ~	
	Frequency		Hz	50	
Max operating current *1			A	9.7	10.2
Starting current			A	4.8	5.8
Wiring spec. *2	Circuit breaker current		A	13	
	Power cable		mm^2	1.5	
	Connection cable *3	Cross-sectional area	mm^2	1.5	
		Limited wiring length	m	26	

Model name				AOHG18KBTB	AOHG22KBTB
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	

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

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

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

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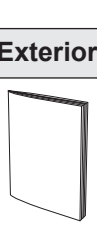
11. Safety devices

Type of protection	Protection form		Model	
			AOHG12KBTB	AOHG14KBTB
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	100±15 °C Fan motor stop	
		Reset	95±10 °C Fan motor restart	
Compressor protection	Terminal protection program (Discharge temp.)	Activate	110 °C Compressor stop	
		Reset	After 7 minutes Compressor restart	
	Thermal protection program (Outdoor temp.) (Only in COOL or DRY mode)	Activate	-20 °C Compressor stop	
		Reset	-15 °C Compressor restart	

Type of protection	Protection form		Model	
			AOHG18KBTB	AOHG22KBTB
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	115 °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

12. Accessories

12-1. Models: AOHG12KBTB, AOHG14KBTB, AOHG18KBTB, and AOHG22KBTB

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

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