AIR CONDITIONER

Wall Mounted type

Refrigerant R410A

INVERTER

DESIGN & TECHNICAL MANUAL

INDOOR

AS∗G07LECA
AS∗G09LECA
AS∗G12LECA

AS∗G14LECA

OUTDOOR

AO∗G07LEC
AO∗G09LEC
AO∗G12LEC

AO∗G14LEC

FUJITSU GENERAL LIMITED

1. INDOOR UNIT

WALL MOUNTED TYPE :

AS∗G07LECA
AS∗G09LECA
AS∗G12LECA
AS∗G14LECA

DTR_AS049E_04
2013.07.19

WALL MOUNTED TYPE
AS∗G07-14LE

CONTENTS

1. INDOOR UNIT

WALL MOUNTED TYPE
AS∗G07-14LE

1. FEATURES

■ MODEL

AS∗G07LECA / AO∗G07LEC
AS∗G09LECA / AO∗G09LEC
AS∗G12LECA / AO∗G12LEC
AS∗G14LECA / AO∗G14LEC

AS∗G07LECA
AS∗G09LECA
AS∗G12LECA

AS∗G14LECA

AO∗G07LEC
AO∗G09LEC
AO∗G12LEC

AO∗G14LEC

■ FEATURES

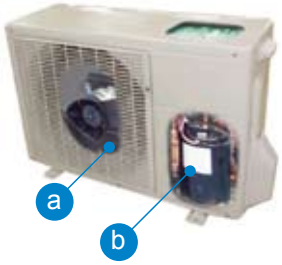
● Energy efficiency classification A

Europe Energy-Efficiency classification A achieved

● ALL DC

a DC fan motor

b DC compressor



Front view

● Quiet operation

INDOOR UNIT

Airflow mode can be set in 4 steps and more detailed airflow setting is possible to reduce noise.

Fan speed	Noise level
Quiet	**21**dB(A)

(AS∗G07/09/12LE)

OUTDOOR UNIT

Low noise mode

Introduction of a low outdoor noise operation mode allow the outdoor unit to have quiet mode operation setting.

* Performance may drop depending on the outside air temperature condition, etc.

Rated noise value -3dB

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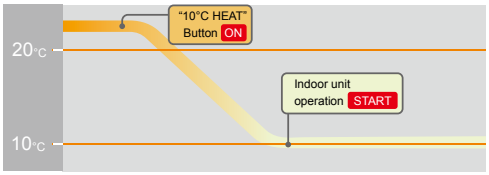
● 10°C HEAT Operation

The room temperature can be set to go no lower than 10°C,
thus ensuring that the room does not get too cold when not occupied

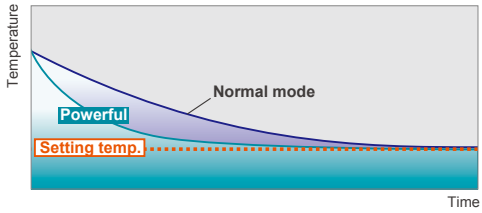
Caution)

- When the room temperature is higher than 10°C, “10°C HEAT” operation will not start. Operation starts and maintains the room temperature at 10°C when the temperature drops below 10°C.



● Powerful operation

20 minutes continuous operation by maximum airflow and maximum compressor speed is possible. Rapid cooling and heating makes the room comfortable quickly.



● Low outdoor air temperature correspondence

Corresponds to cooling operation at -10°C outdoor air temperature.
Corresponds to heating operation at -15°C outdoor air temperature.

Cooling	Heating
-10 to 43°C	-15 to 24°C

● Corresponds to maximum 20m long piping

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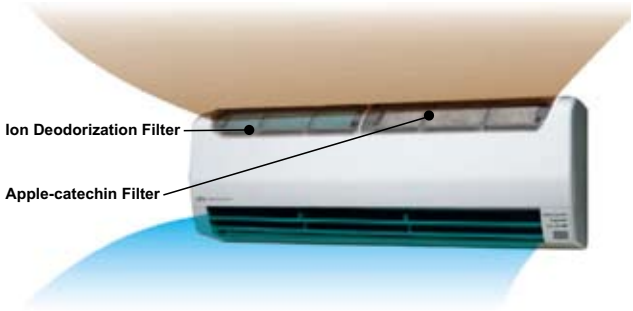
● Air conditioner filter features




Ion
Deodorization Filter


Apple-
catechin Filter

● Easy maintenance

Easy maintenance and always clean.

Since the front panel is easy to remove, maintenance is made easy.

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2. WIRELESS REMOTE CONTROLLER

■ FEATURES

∗ 4 mode timer setup available (On / Off / Program / Sleep)
∗ Easy operation.
∗ Easy to change signal code (max.4 signal codes) by button operation.

● Simple function setting

Setting of the air conditioner selection function is performed by remote controller.

● Built-in timers

Select from four different timer programs (On / Off / Program / Sleep).

● Program timer

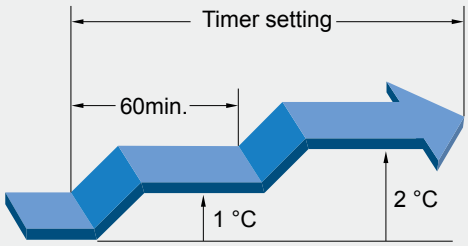
The program timer operates the on and off timer once within a 24 hour period.

● Sleep timer

The sleep timer function automatically corrects the temperature thermostat setting according to the timer setting to prevent excessive cooling and heating while sleeping.

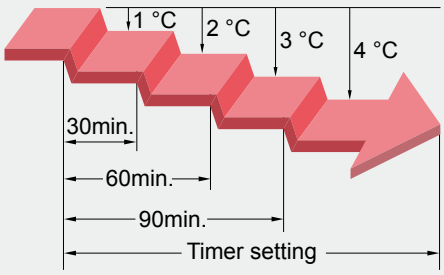
Cooling operation/dry operation

When the sleep timer is set, the set temperature automatically rises 1 °C every hour. The set temperature can rise up to a maximum of 2 °C.

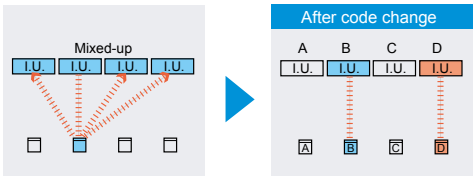


Heating operation

When the sleep timer is set, the set temperature automatically drops 1 °C every 30 minutes. The set temperature can drop to a maximum of 4 °C.



● Switching remote controller signal code



• Code selector switch eliminates units being wrongly switched.
(Up to 4 signal codes can be set.)

*I.U.=Indoor unit

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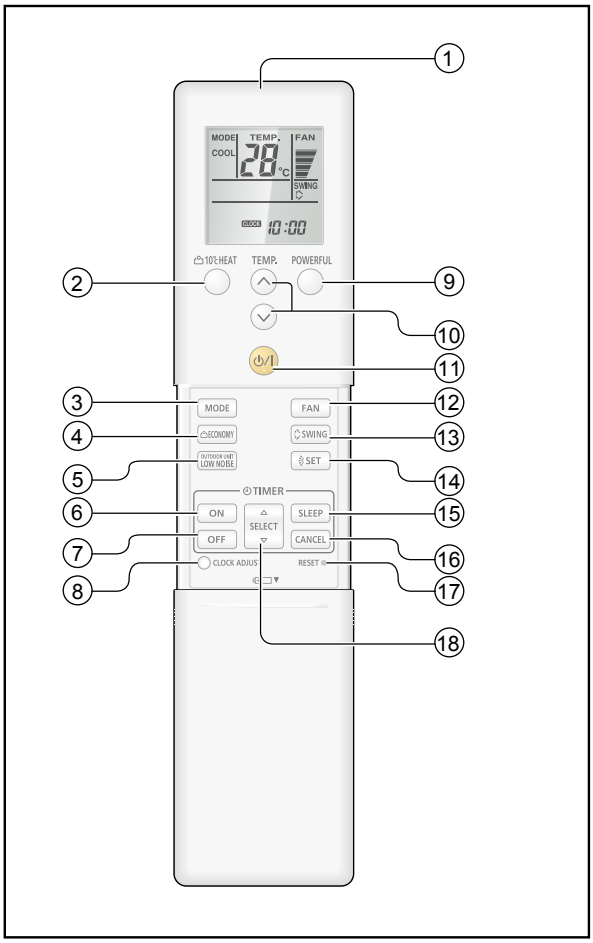
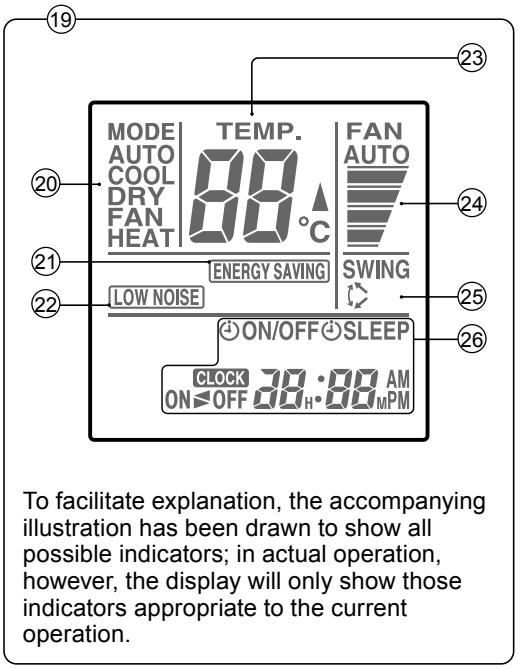
■ FUNCTIONS



① Signal Transmitter
② 10 °C HEAT button
③ MODE button
④ ECONOMY button
⑤ OUTDOOR UNIT LOW NOISE button
⑥ ON TIMER button
⑦ OFF TIMER button
⑧ CLOCK ADJUST button
⑨ POWERFUL button
⑩ SET TEMP. button (▲ / ▼)
⑪ START/STOP button
⑫ FAN button
⑬ SWING button
⑭ SET button
⑮ SLEEP TIMER button
⑯ CANCEL button
⑰ RESET button
⑱ TIMER set button (▲ / ▼)

Display panel



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

⑲ Remote Controller Display
⑳ Operation Mode Display
㉑ ENERGY SAVING MODE Display
㉒ LOW NOISE MODE Display
㉓ Temperature SET Display
㉔ FAN Speed Display
㉕ SWING Display
㉖ Clock & TIMER Display

■ SPECIFICATION

SIZE	(H x W x D mm)	205 x 61 x 17
WEIGHT	(g)	122
ACCESSORY		Holder

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AS∗G07-14LE

3. SPECIFICATIONS

Type					WALL MOUNTED INVERTER HEAT PUMP			
Model name					AS∗G07LECA	AS∗G09LECA	AS∗G12LECA	AS∗G14LECA
Power source					230V~ 50Hz			
Available voltage range					198-264V~ 50Hz			
European energy label				Cooling	A	A	A	A
				Heating	A	A	A	A
Capacity	Cooling	Rated		kW	2.10	2.50	3.40	4.00
				Btu/h	7,200	8,500	11,600	13,600
		Min-Max		kW	0.5~3.0	0.5~3.2	0.9~3.9	0.9~5.0
				Btu/h	1,700~10,200	1,700~10,900	3,100~13,300	3,100~17,100
	Heating	Rated		kW	3.00	3.20	4.00	5.00
				Btu/h	10,200	10,900	13,600	17,100
		Min-Max		kW	0.5~4.0	0.5~4.2	0.9~5.3	0.9~6.4
				Btu/h	1,700~13,600	1,700~14,300	3,100~18,000	3,100~21,800
Input power	Cooling	Rated		kW	0.47	0.64	0.92	1.105
		Min-Max			0.25~1.19	0.25~1.27	0.25~1.40	0.25~2.03
	Heating	Rated			0.685	0.75	0.99	1.305
		Min-Max			0.25~1.60	0.25~1.60	0.25~1.99	0.25~2.40
Current	Cooling	Rated		A	2.7	3.5	4.4	5.3
		Max			6.0	6.0	6.5	9.0
	Heating	Rated			3.5	3.8	4.7	6.0
		Max			7.5	7.5	9.0	10.5
EER	Cooling			kW/kW	4.47	3.91	3.70	3.62
COP	Heating				4.38	4.27	4.04	3.83
Sensible capacity	Cooling			kW	1.2	1.6	2.2	2.6
Power factor	Cooling			%	76	80	91	91
	Heating				85	86	92	94
Moisture removal				l/h(pints/h)	1.3 (2.3)	1.3 (2.3)	1.8 (3.2)	2.1 (3.7)
FAN	Airflow rate	Cooling	High	m^3/h	690			770
			Med		610			680
			Low		440			540
			Quiet		300			410
		Heating	High		710			770
			Med		610			680
			Low		480			580
			Quiet		310			420
	Type× Q'ty				Crossflow fanx1			
	Motor output			W	30			
Sound pressure level		Cooling	High	dB(A)	43			44
			Med		38			40
			Low		31			33
			Quiet		21			25
		Heating	High		43			44
			Med		38			40
			Low		31			35
			Quiet		21			27
Heat exchanger type		Dimensions (H×W×D)		mm	256x630x20			320x630x20 Sub:84x630x13.3
		Fin pitch			1.1			1.1 Sub:1.4
		Rows Stages			2x16			2x20 Sub:1x4
		Pipe type			Copper			
		Fin type			Aluminium			
Enclosure		Material			Polystyrene			
		Colour			White Approximate colour of MUNSELL N9.25/			
Dimensions (H × W × D)	Net			mm	260x790x198			260x790x203
	Gross				259x840x328			263x840x375
Weight	Net			kg	7.5			8
	Gross				9.5			10.5
Connection pipe	Size	Liquid		mm	Ø6.35(Ø1/4in)			
		Gas			Ø9.52(Ø3/8in)			Ø12.7(Ø1/2in)
	Method				Flare			
Operation range		Cooling		°C	18 to 32			
				%RH	80 or less			
		Heating		°C	30 or less			
Remote controller type					Wireless			
Drain pipe	Material				PP+LLDPE			
	Size			mm	Outer diameter:21/Outer diameter:13.6			

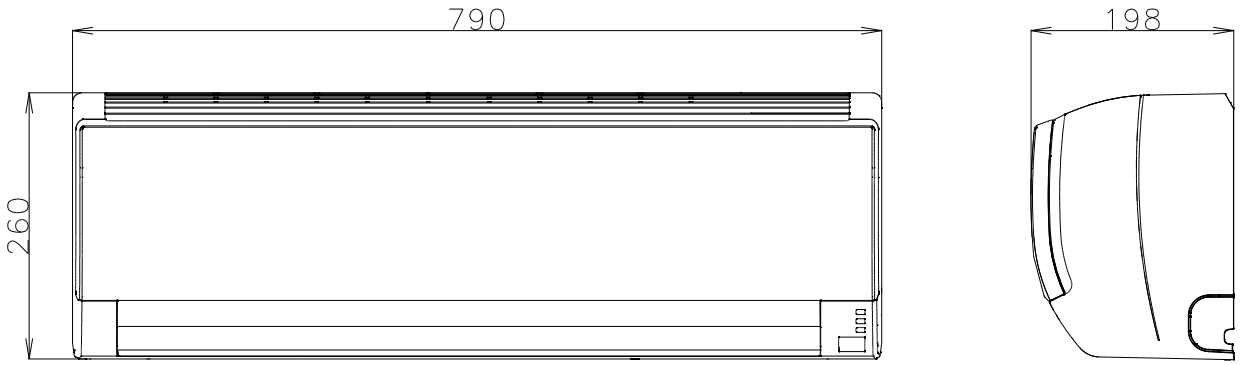
Note:
Specifications are based on the following conditions
Cooling:Indoor temperature of 27°C CDB/19°CCWB.and outdoor temperature of 35°C CDB/24°CCWB.
Heating:Indoor temperature of 20°C CDB/15°CCWB.and outdoor temperature of 7°C CDB/6°CCWB.
Pipe length:5m,Height difference:0m(Outdoor unit-Indoor unit)
The maximum current is the maximum value when operated within the operation range.

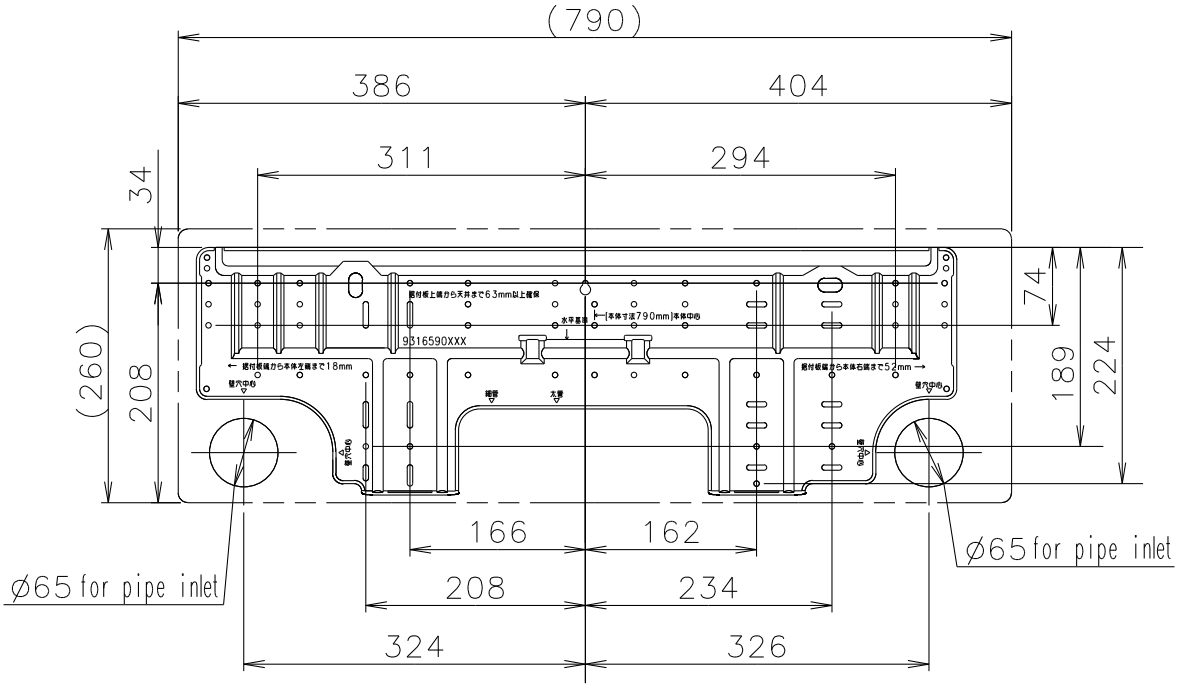
WALL MOUNTED TYPE
AS∗G07-14LE

4. DIMENSIONS

■MODEL: AS∗G07LECA, AS∗G09LECA, AS∗G12LECA

(Unit : mm)





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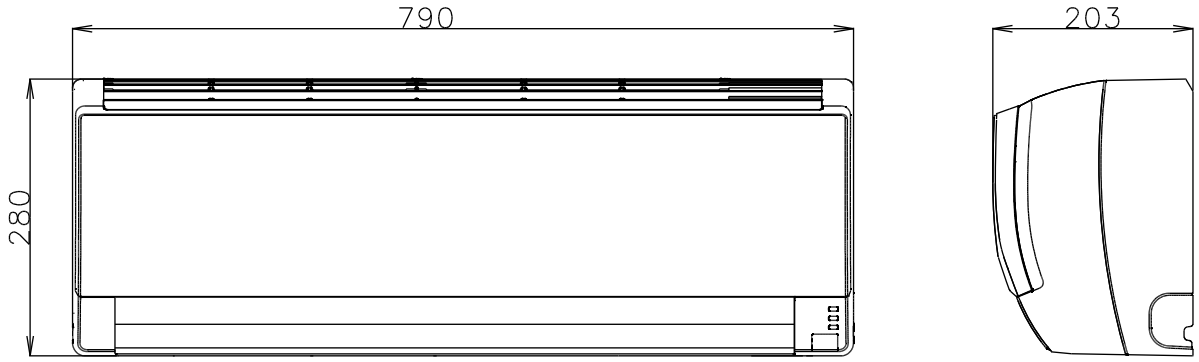
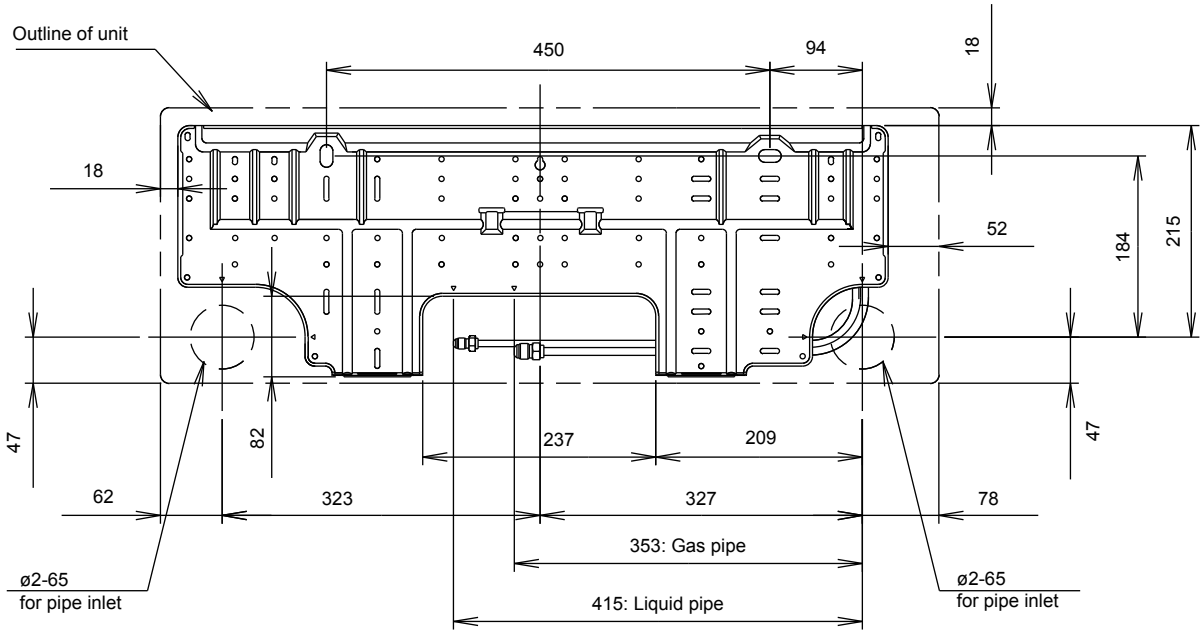
■MODEL: AS∗G14LECA

(Unit : mm)

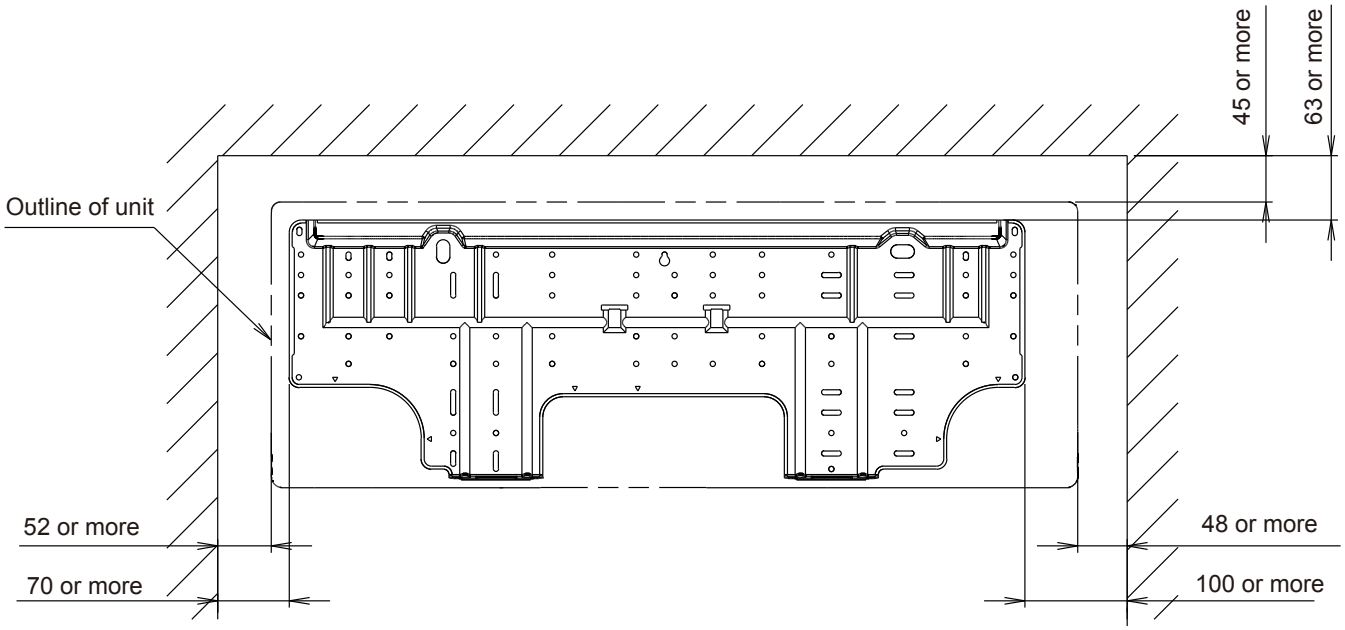


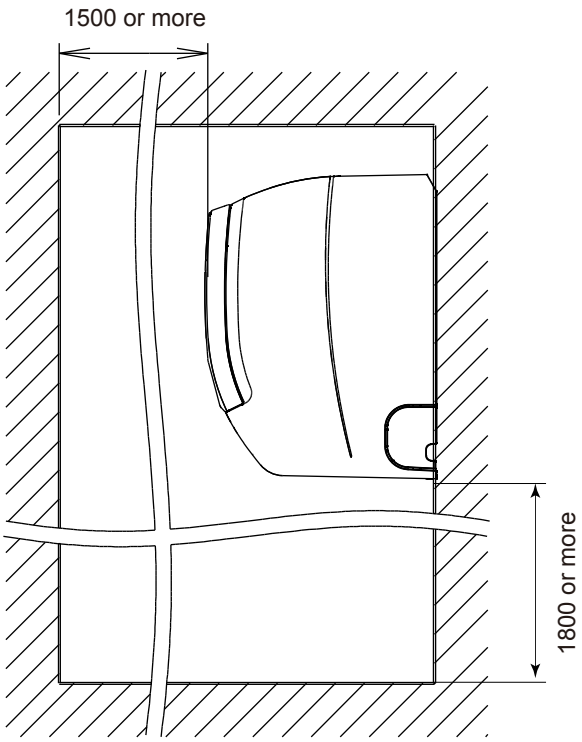


WALL MOUNTED TYPE
AS∗G07-14LE

■ INSTALLATION PLACE

(Unit : mm)

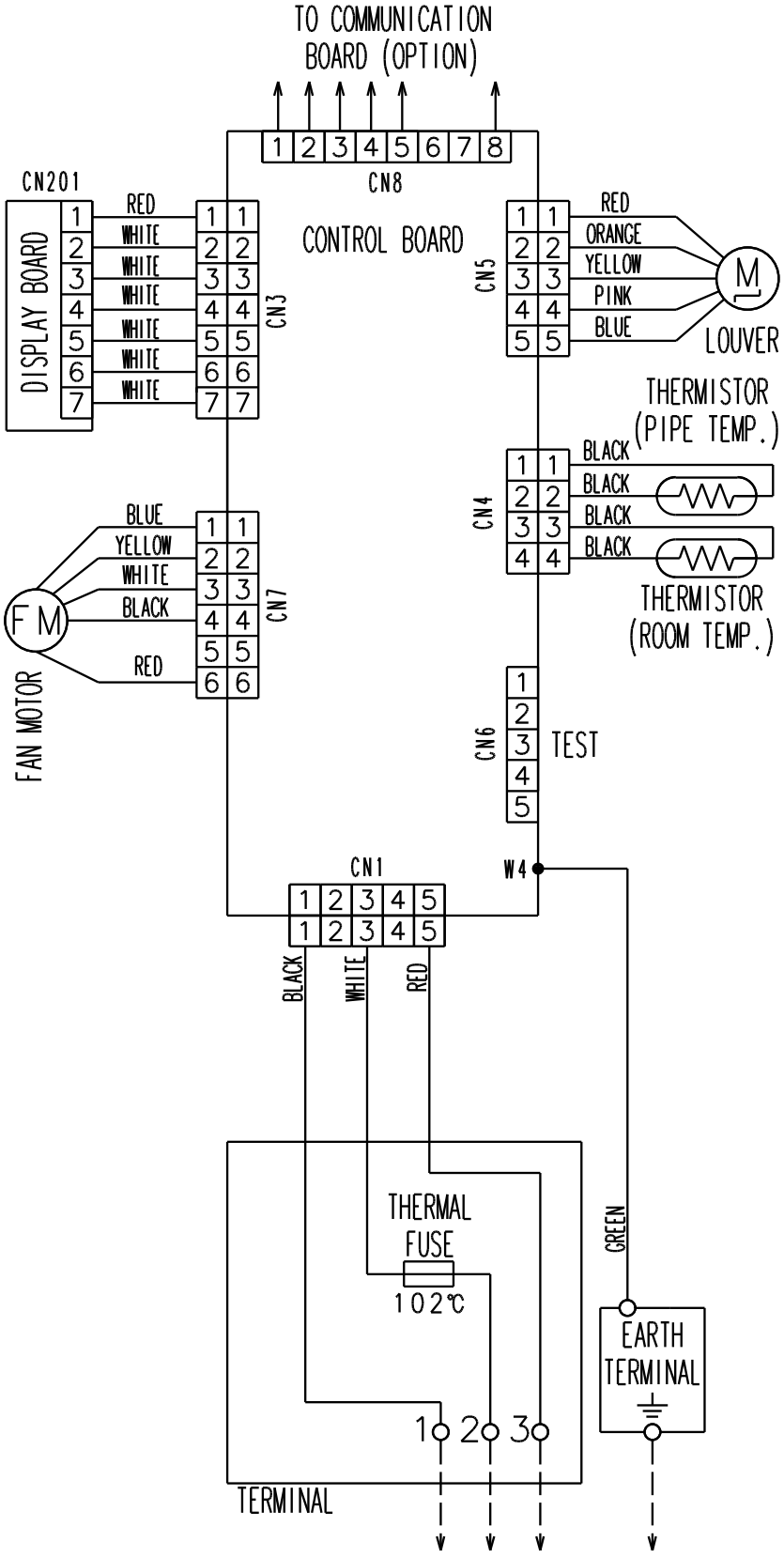




WALL MOUNTED TYPE
AS∗G07-14LE

5. WIRING DIAGRAMS

■ MODELS: AS∗G07LECA, AS∗G09LECA, AS∗G12LECA, AS∗G14LECA



WALL MOUNTED TYPE
AS∗G07-14LE

6. CAPACITY TABLE

6-1. COOLING CAPACITY

■ MODEL: AS∗G07LECA

AFR	11.5

		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
	20	1.97	1.22	0.33	2.19	1.23	0.34	2.26	1.33	0.34	2.41	1.34	0.34	2.49	1.45	0.34	2.64	1.44	0.35	2.79	1.53	0.35
	25	1.87	1.16	0.37	2.08	1.17	0.38	2.15	1.27	0.38	2.29	1.27	0.38	2.36	1.37	0.38	2.50	1.37	0.39	2.65	1.46	0.39
	30	1.76	1.10	0.41	1.97	1.10	0.42	2.03	1.20	0.42	2.17	1.20	0.42	2.23	1.30	0.43	2.37	1.29	0.43	2.50	1.38	0.44
	35	1.66	1.03	0.45	1.85	1.04	0.46	1.91	1.13	0.46	2.04	1.13	0.47	2.10	1.22	0.47	2.23	1.22	0.47	2.35	1.29	0.48
	40	1.48	0.92	0.45	1.65	0.92	0.46	1.70	1.00	0.46	1.82	1.01	0.47	1.87	1.09	0.47	1.98	1.08	0.47	2.10	1.15	0.48
	43	1.37	0.85	0.45	1.53	0.86	0.46	1.58	0.93	0.46	1.68	0.93	0.47	1.74	1.01	0.47	1.84	1.00	0.47	1.94	1.07	0.48

■ MODEL: AS∗G09LECA

AFR	11.5

		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
	20	2.34	1.62	0.45	2.61	1.63	0.46	2.70	1.77	0.46	2.87	1.78	0.46	2.96	1.92	0.47	3.14	1.91	0.47	3.32	2.04	0.48
	25	2.22	1.54	0.50	2.48	1.55	0.51	2.56	1.68	0.52	2.73	1.69	0.52	2.81	1.82	0.52	2.98	1.82	0.53	3.15	1.93	0.53
	30	2.10	1.45	0.56	2.34	1.46	0.57	2.42	1.59	0.57	2.58	1.60	0.58	2.66	1.72	0.58	2.82	1.72	0.59	2.98	1.83	0.59
	35	1.98	1.37	0.62	2.20	1.38	0.63	2.28	1.50	0.63	2.43	1.50	0.64	2.50	1.62	0.64	2.65	1.61	0.65	2.80	1.72	0.65
	40	1.76	1.22	0.62	1.96	1.23	0.63	2.03	1.33	0.63	2.16	1.34	0.64	2.23	1.44	0.64	2.36	1.44	0.65	2.50	1.53	0.65
	43	1.63	1.13	0.62	1.82	1.14	0.62	1.88	1.24	0.63	2.00	1.24	0.63	2.07	1.34	0.64	2.19	1.33	0.64	2.31	1.42	0.65

■ MODEL: AS∗G12LECA

AFR	11.5

		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
	20	3.18	2.18	0.63	3.55	2.19	0.64	3.67	2.38	0.64	3.91	2.39	0.65	4.03	2.58	0.65	4.27	2.57	0.66	4.51	2.74	0.67
	25	3.03	2.08	0.72	3.37	2.09	0.73	3.49	2.27	0.73	3.72	2.28	0.74	3.83	2.46	0.74	4.06	2.45	0.75	4.29	2.61	0.76
	30	2.86	1.96	0.80	3.19	1.97	0.81	3.30	2.15	0.82	3.52	2.15	0.82	3.63	2.32	0.83	3.84	2.32	0.84	4.06	2.47	0.85
	35	2.69	1.84	0.89	2.99	1.85	0.90	3.09	2.01	0.91	3.30	2.02	0.92	3.40	2.18	0.92	3.60	2.17	0.93	3.81	2.31	0.94
	40	2.27	1.56	0.83	2.53	1.57	0.84	2.62	1.70	0.84	2.79	1.71	0.85	2.87	1.84	0.86	3.05	1.84	0.86	3.22	1.96	0.87
	43	2.09	1.43	0.83	2.33	1.44	0.84	2.41	1.57	0.84	2.57	1.57	0.85	2.65	1.70	0.86	2.81	1.69	0.87	2.96	1.80	0.87

■ MODEL: AS∗G14LECA

AFR	12.8

		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
	20	3.72	2.58	0.77	4.14	2.60	0.78	4.29	2.83	0.79	4.57	2.83	0.79	4.71	3.06	0.80	4.99	3.05	0.81	5.28	3.25	0.81
	25	3.55	2.46	0.87	3.95	2.48	0.88	4.08	2.69	0.89	4.35	2.70	0.89	4.49	2.92	0.90	4.76	2.91	0.91	5.03	3.10	0.92
	30	3.36	2.34	0.97	3.75	2.35	0.98	3.87	2.55	0.99	4.13	2.56	1.00	4.26	2.77	1.00	4.51	2.76	1.01	4.77	2.94	1.02
	35	3.16	2.19	1.07	3.52	2.21	1.08	3.64	2.40	1.09	3.88	2.41	1.10	4.00	2.60	1.11	4.24	2.59	1.12	4.48	2.76	1.13
	40	2.78	1.93	1.05	3.09	1.94	1.07	3.20	2.11	1.07	3.41	2.12	1.08	3.51	2.28	1.09	3.73	2.28	1.10	3.94	2.42	1.11
	43	2.53	1.76	1.03	2.82	1.77	1.05	2.91	1.92	1.06	3.11	1.93	1.07	3.20	2.08	1.07	3.39	2.07	1.08	3.59	2.21	1.09

AFR : Air Flow Rate (m^3/min)
TC : Total Capacity (kW)
SHC : Sensible Heat Capacity (kW)
IP :Input Power (kW)

WALL MOUNTED TYPE
AS∗G07-14LE

6-2. HEATING CAPACITY

■ MODEL: AS∗G07LECA

AFR	11.8

		Indoor temperature											
		(°CDB)	16		18		20		22		24		
	(°CDB)	(°CWB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	
Outdoor temperature	-15	-16	2.25	0.99	2.19	1.01	2.14	1.03	2.09	1.05	2.03	1.07	
	-10	-11	2.56	1.02	2.50	1.04	2.43	1.06	2.37	1.08	2.31	1.11	
	-5	-7	2.93	1.05	2.86	1.07	2.79	1.10	2.72	1.12	2.65	1.14	
	0	-2	3.47	1.09	3.39	1.12	3.31	1.14	3.23	1.16	3.14	1.19	
	5	3	4.05	1.15	3.96	1.17	3.86	1.19	3.76	1.22	3.67	1.24	
	7	6	4.20	1.17	4.10	1.20	4.00	1.22	3.90	1.25	3.80	1.27	
	10	8	4.42	1.19	4.31	1.21	4.21	1.24	4.10	1.26	4.00	1.29	
	15	10	4.58	1.18	4.47	1.20	4.36	1.23	4.25	1.25	4.14	1.27	

■ MODEL: AS∗G09LECA

AFR	11.8

		Indoor temperature											
		(°CDB)	16		18		20		22		24		
	(°CDB)	(°CWB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	
Outdoor temperature	-15	-16	2.25	0.99	2.19	1.01	2.14	1.03	2.09	1.05	2.03	1.07	
	-10	-11	2.56	1.02	2.50	1.04	2.43	1.06	2.37	1.08	2.31	1.11	
	-5	-7	2.93	1.05	2.86	1.07	2.79	1.10	2.72	1.12	2.65	1.14	
	0	-2	3.47	1.09	3.39	1.12	3.31	1.14	3.23	1.16	3.14	1.19	
	5	3	4.05	1.15	3.96	1.17	3.86	1.19	3.76	1.22	3.67	1.24	
	7	6	4.41	1.17	4.31	1.20	4.20	1.22	4.10	1.25	3.99	1.27	
	10	8	4.64	1.19	4.53	1.21	4.42	1.24	4.31	1.26	4.20	1.29	
	15	10	4.81	1.18	4.69	1.20	4.58	1.23	4.46	1.25	4.35	1.27	

■ MODEL: AS∗G12LECA

AFR	11.8

		Indoor temperature											
		(°CDB)	16		18		20		22		24		
	(°CDB)	(°CWB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	
Outdoor temperature	-15	-16	3.40	1.72	3.32	1.76	3.24	1.80	3.16	1.83	3.07	1.87	
	-10	-11	3.76	1.72	3.67	1.76	3.58	1.79	3.49	1.83	3.40	1.86	
	-5	-7	4.18	1.72	4.08	1.76	3.98	1.79	3.88	1.83	3.78	1.87	
	0	-2	4.68	1.72	4.57	1.76	4.46	1.80	4.35	1.83	4.24	1.87	
	5	3	5.05	1.52	4.93	1.55	4.81	1.58	4.69	1.61	4.57	1.64	
	7	6	5.36	1.51	5.23	1.54	5.10	1.57	4.97	1.60	4.85	1.63	
	10	8	5.55	1.51	5.42	1.54	5.29	1.57	5.16	1.60	5.02	1.63	
	15	10	5.54	1.41	5.41	1.44	5.28	1.47	5.15	1.50	5.01	1.53	

■ MODEL: AS∗G14LECA

AFR	12.8

		Indoor temperature											
		(°CDB)	16		18		20		22		24		
	(°CDB)	(°CWB)	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP	
Outdoor temperature	-15	-16	3.47	1.78	3.39	1.81	3.30	1.85	3.22	1.89	3.14	1.93	
	-10	-11	4.15	1.87	4.05	1.91	3.95	1.95	3.85	1.99	3.76	2.03	
	-5	-7	4.78	1.97	4.67	2.01	4.55	2.06	4.44	2.10	4.33	2.14	
	0	-2	5.59	2.07	5.46	2.11	5.32	2.16	5.19	2.20	5.06	2.24	
	5	3	6.40	2.17	6.24	2.21	6.09	2.26	5.94	2.30	5.79	2.35	
	7	6	6.72	1.80	6.56	1.83	6.40	1.87	6.24	1.91	6.08	1.94	
	10	8	7.14	1.80	6.97	1.84	6.80	1.88	6.63	1.92	6.46	1.96	
	15	10	7.46	1.81	7.28	1.85	7.11	1.89	6.93	1.93	6.75	1.97	

AFR : Air Flow Rate (m^3/min)
TC : Total Capacity (kW)
IP :Input Power (kW)

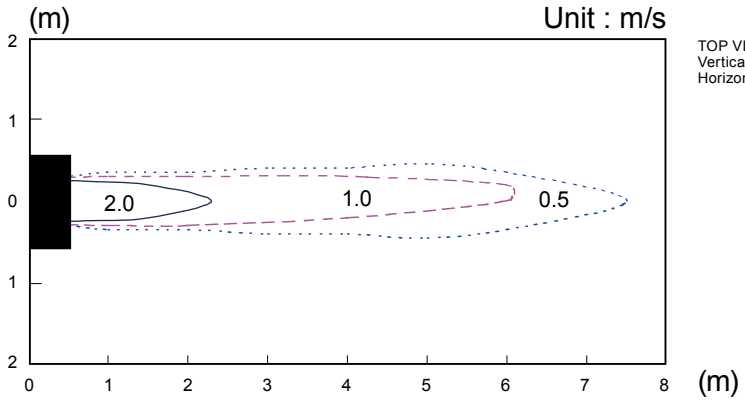
WALL MOUNTED TYPE
AS∗G07-14LE

7. FAN PERFORMANCE

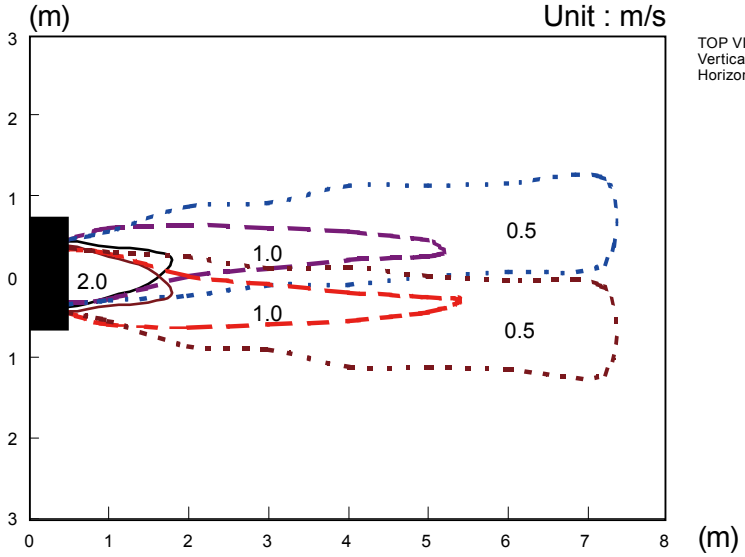
7-1. AIR VELOCITY DISTRIBUTION

■ MODEL: AS∗G07LECA, AS∗G09LECA, AS∗G12LECA

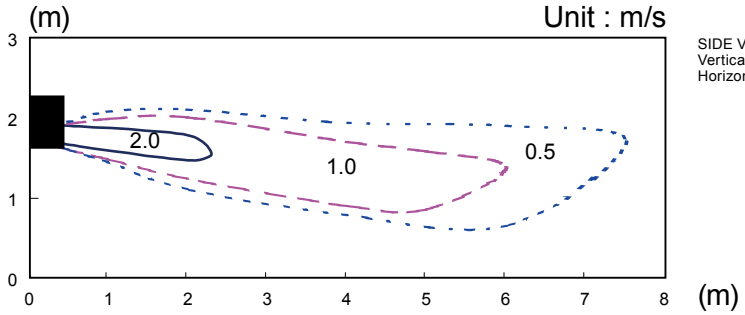
Note:
Fan speed : High
Operation mode : FAN



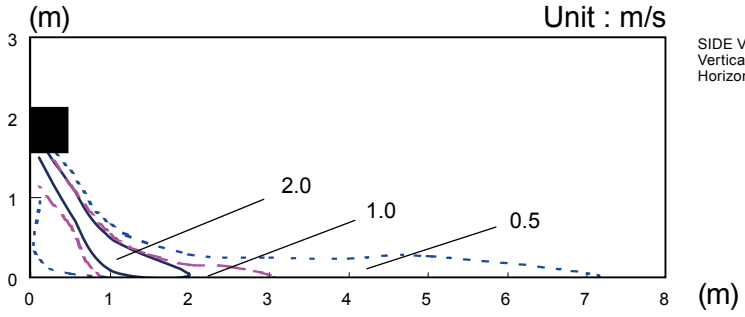
TOP VIEW
Vertical flap : Up
Horizontal flap : Center



TOP VIEW
Vertical flap : Up
Horizontal flap : Right & Left



SIDE VIEW
Vertical flap : Up
Horizontal flap : Center

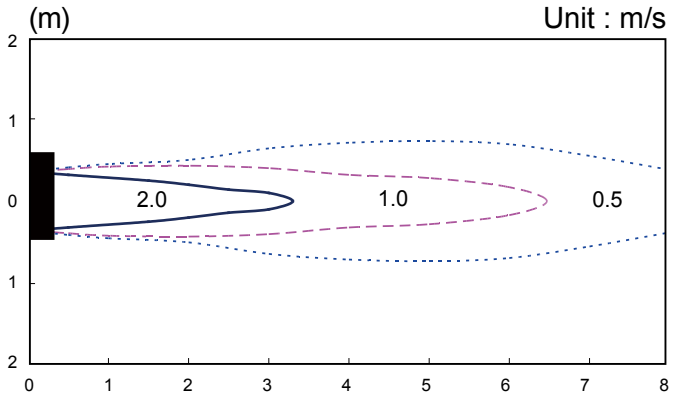


SIDE VIEW
Vertical flap : Down
Horizontal flap : Center

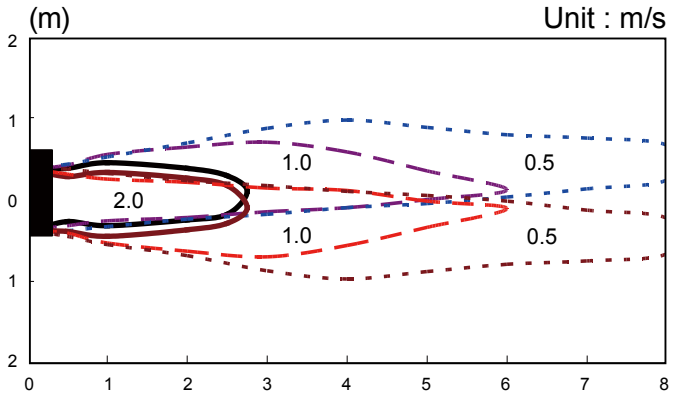
WALL MOUNTED TYPE
AS∗G07-14LE

Note:
Fan speed : High
Operation mode : FAN

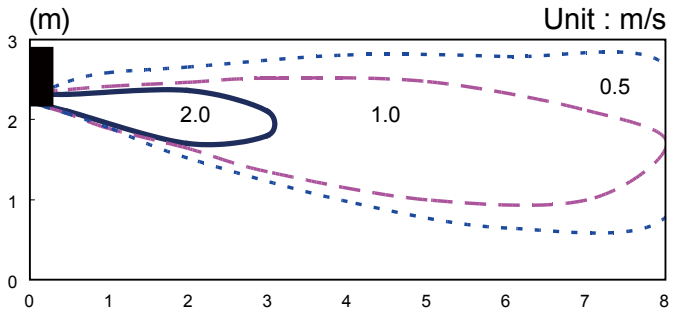
■MODEL: AS∗G14LECA



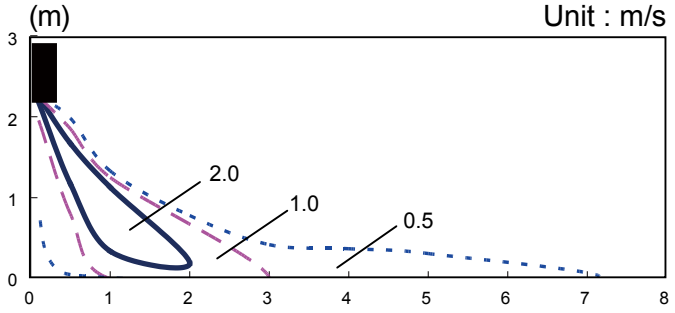
TOP VIEW
VERTICAL FLAP : Upward
HORIZONTAL FLAP : Center



TOP VIEW
VERTICAL FLAP : Upward
HORIZONTAL FLAP : Right & Left



SIDE VIEW
VERTICAL FLAP : Upward
HORIZONTAL FLAP : Center



SIDE VIEW
VERTICAL FLAP : Downward
HORIZONTAL FLAP : Center

WALL MOUNTED TYPE
AS∗G07-14LE

7-2. AIRFLOW

■ MODELS: AS∗G07LECA, AS∗G09LECA, AS∗G12LECA

● Cooling

Fan speed	Number of rotations (r.p.m.)	Airflow	
HIGH	1400	m^3/h	690
		l/s	191
		CFM	406
MED	1200	m^3/h	610
		l/s	169
		CFM	359
LOW	920	m^3/h	440
		l/s	122
		CFM	259
QUIET	620	m^3/h	300
		l/s	83
		CFM	176

● Heating

Fan speed	Number of rotations (r.p.m.)	Airflow	
HIGH	1440	m^3/h	710
		l/s	197
		CFM	417
MED	1200	m^3/h	610
		l/s	169
		CFM	359
LOW	980	m^3/h	480
		l/s	133
		CFM	282
QUIET	670	m^3/h	310
		l/s	86
		CFM	182

WALL MOUNTED TYPE
AS∗G07-14LE

■ MODEL: AS∗G14LECA

● Cooling

Fan speed	Number of rotations (r.p.m.)	Airflow	
HIGH	1400	m^3/h	770
		l/s	213
		CFM	453
MED	1230	m^3/h	680
		l/s	188
		CFM	400
LOW	1000	m^3/h	540
		l/s	150
		CFM	318
QUIET	750	m^3/h	410
		l/s	114
		CFM	241

● Heating

Fan speed	Number of rotations (r.p.m.)	Airflow	
HIGH	1400	m^3/h	770
		l/s	213
		CFM	453
MED	1230	m^3/h	680
		l/s	188
		CFM	400
LOW	1050	m^3/h	580
		l/s	161
		CFM	341
QUIET	770	m^3/h	420
		l/s	116
		CFM	247

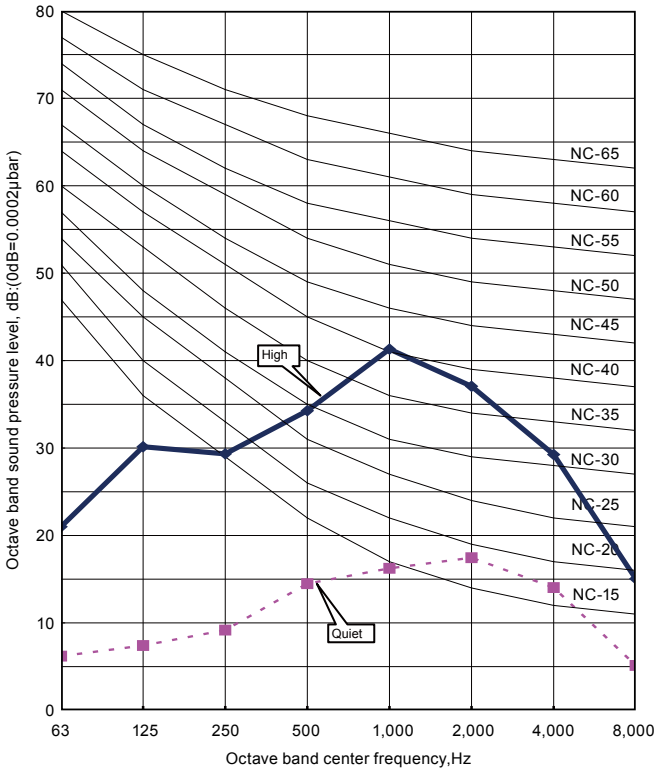
WALL MOUNTED TYPE
AS∗G07-14LE

8. OPERATION NOISE (SOUND PRESSURE)

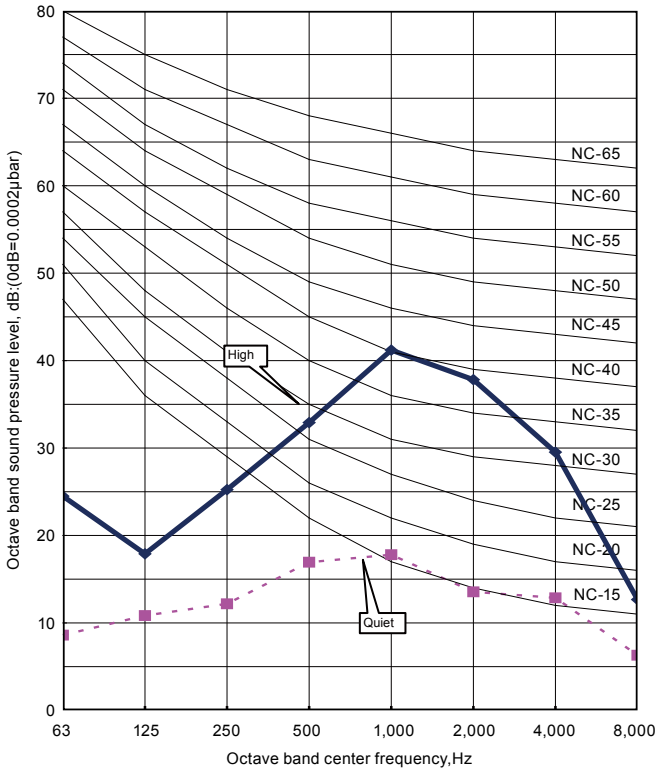
8-1. NOISE LEVEL CURVE

■ MODEL: AS∗G07LECA

● Cooling

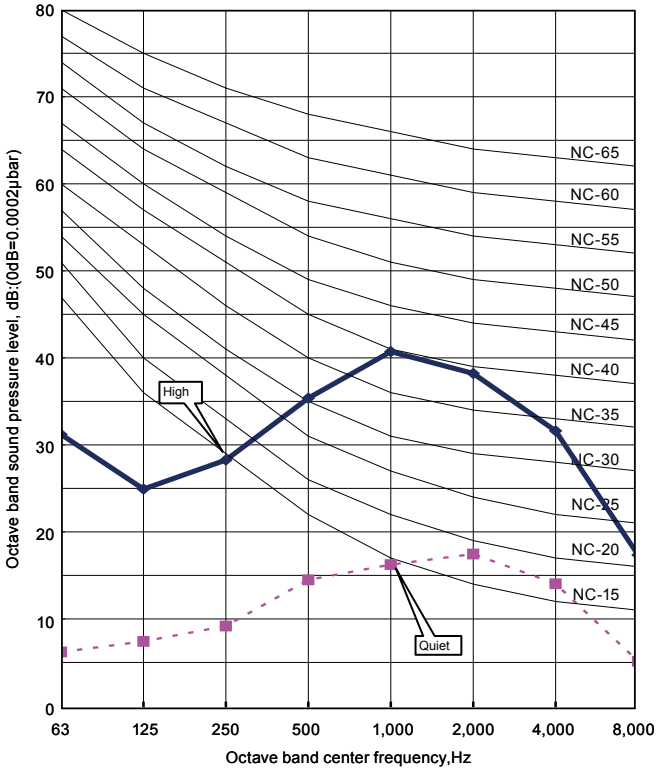


● Heating

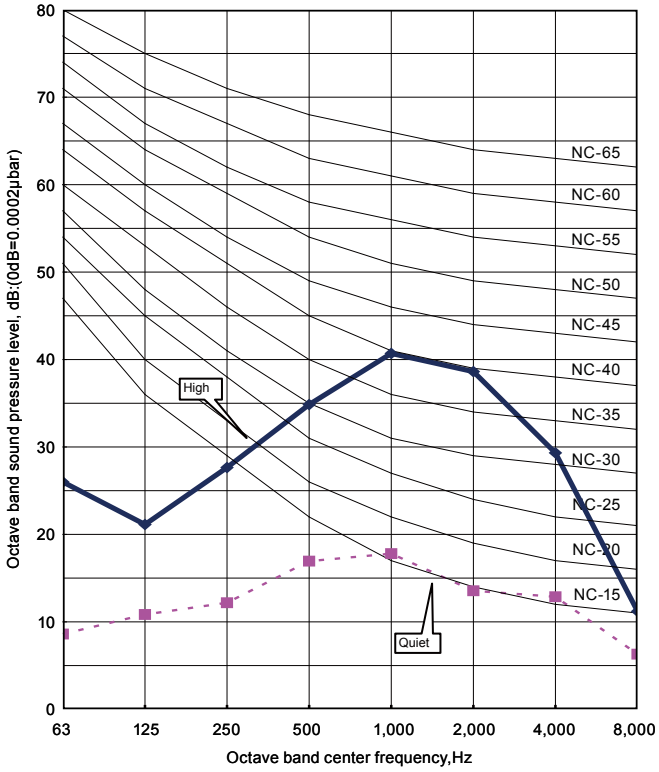


■ MODEL: AS∗G09LECA

● Cooling



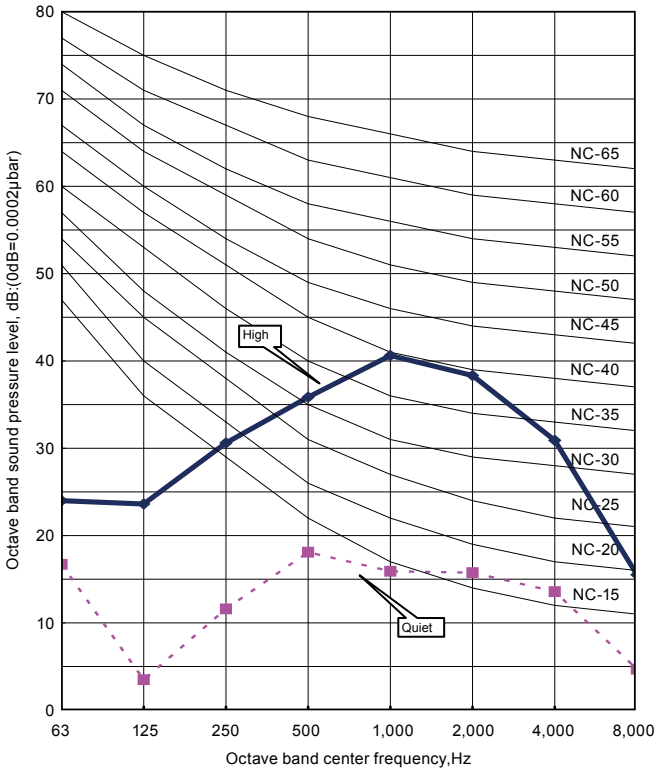
● Heating



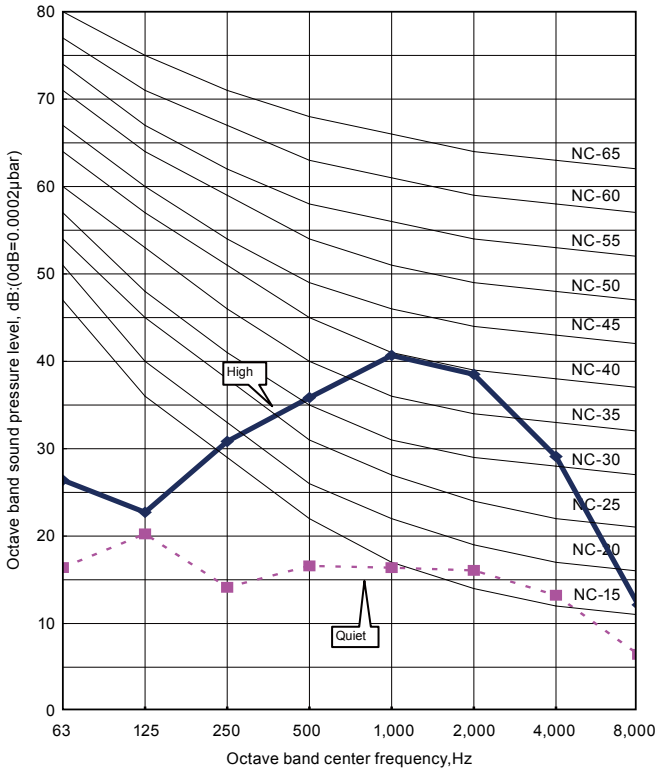
WALL MOUNTED TYPE
AS∗G07-14LE

■MODEL: AS∗G12LECA

●Cooling

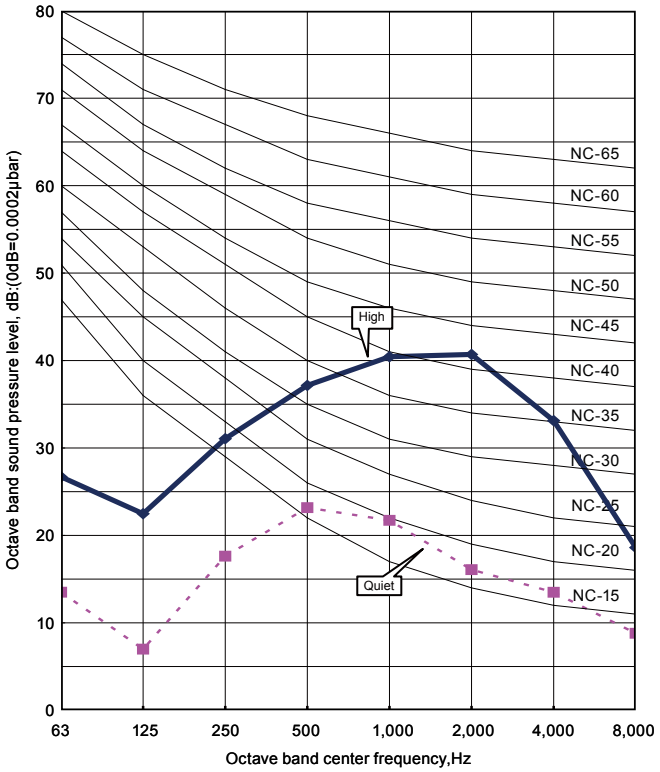


●Heating

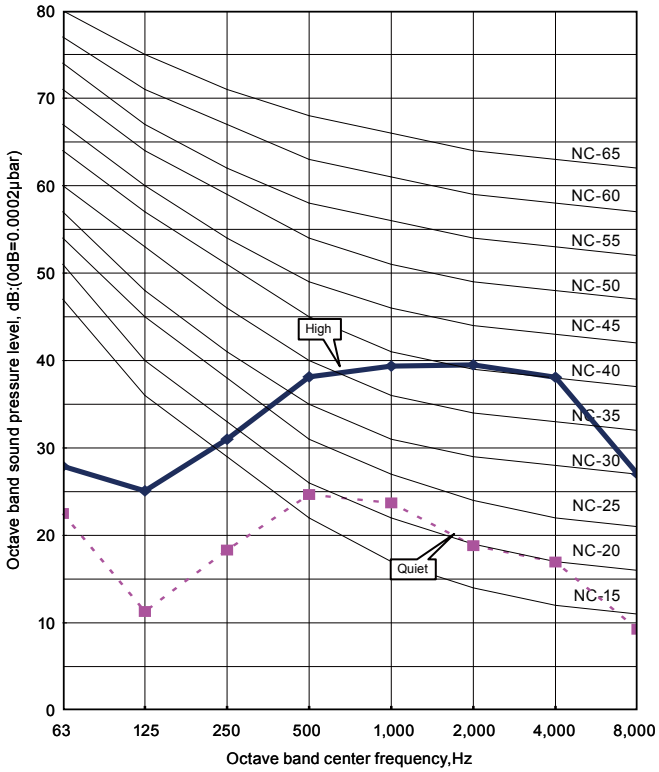


■MODEL: AS∗G14LECA

●Cooling

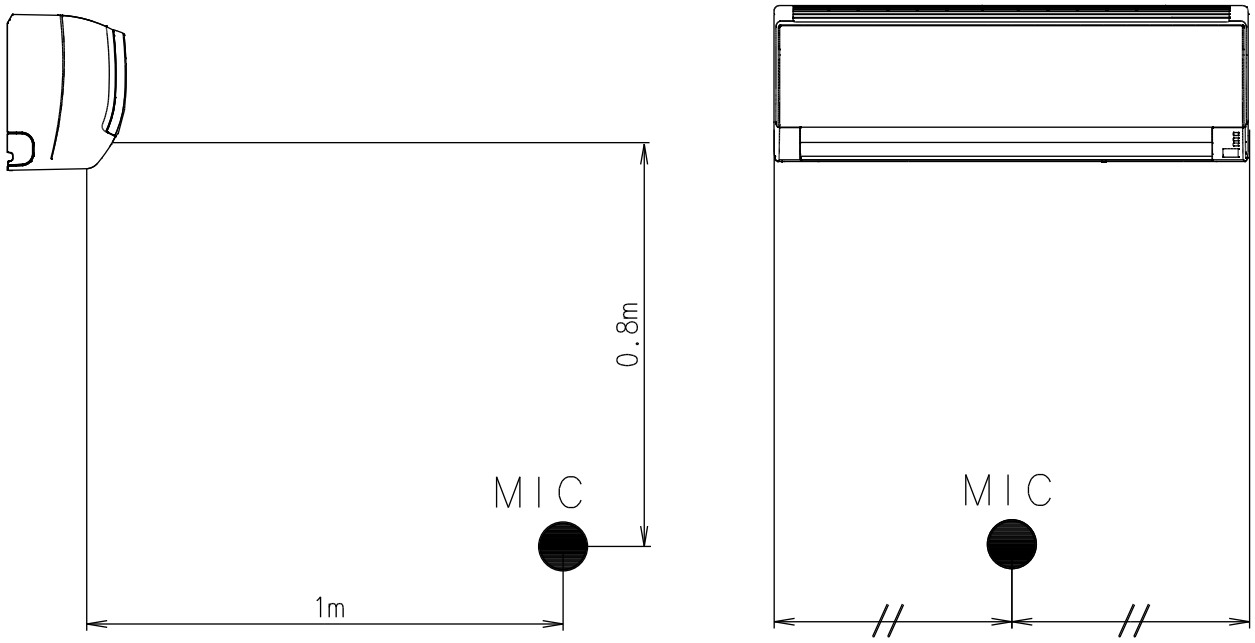


●Heating



WALL MOUNTED TYPE
AS∗G07-14LE

8-2. SOUND LEVEL CHECK POINT



WALL MOUNTED TYPE
AS∗G07-14LE

9. ELECTRIC CHARACTERISTICS

Model name			AS∗G07LECA	AS∗G09LECA	AS∗G12LECA	AS∗G14LECA
Power supply	Voltage	V	230~			
	Frequency	Hz	50			
Max. operating current		A	0.4			
Wiring Spec.	Connection cable	mm^2	1.0-1.5			1.5
	Limited wiring length	m	21			

Note : Wiring Spec.
1. Selected Sample
   (Selected based on Japan Electrotechnical Standards and Codes Committee E0005)
2. Limited wiring length: Limit voltage drop to less than 2%. Increase cable gauge if voltage drop is 2% or more.

WALL MOUNTED TYPE
AS∗G07-14LE

10. SAFETY DEVICES

	Protection form	Model
		AS∗G07LECA AS∗G09LECA AS∗G12LECA AS∗G14LECA
Circuit protection	Current fuse (PCB)	250V 3.15A
Terminal protection	Current (thermal) fuse	250V 3A
Fan motor protection	Thermal protector program	100^{+15}_{-10}°C OFF 95^{+5}_{-10}°C ON

WALL MOUNTED TYPE
AS∗G07-14LE

11. EXTERNAL INPUT & OUTPUT

Connector	INPUT	OUTPUT	REMARKS
CN303	Control input	-	See external input/output settings for details.
CN304	-	Operation status output	

11-1. EXTERNAL INPUT

■ CONTROL INPUT (Operation/Stop or Forced stop)

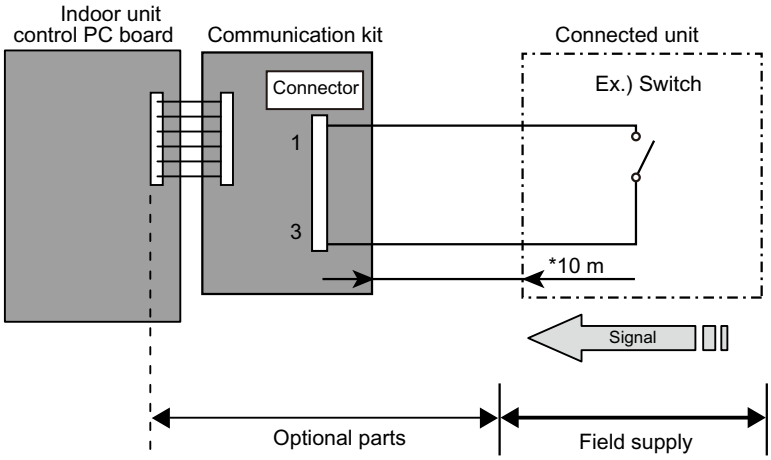
The air conditioner can be remotely operated by means of the following on-site work.

"Operation/Stop" mode or "Forced stop" mode can be selected with function setting of indoor unit.

Unit operation is started at the following contents by adding the contact input of a commercial ON/OFF switch to a connector on the external control PC board and turning it ON.

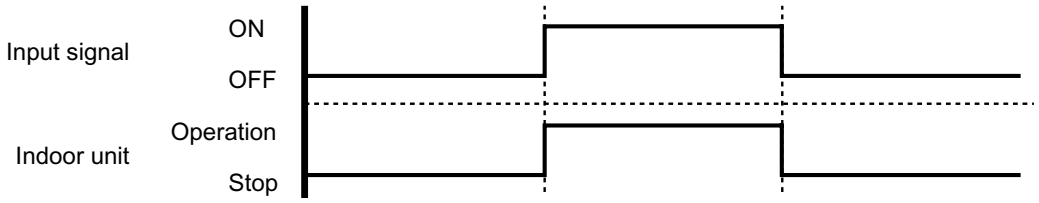
Unit operation	Initial setting after power is ON	Starting mode other than initial setting
Operation mode	Auto changeover	Mode at previous operation
Set temperature	24°C	Temperature at previous operation
Air flow mode	AUTO	Mode at previous operation
Up-down air direction (swing)	Standard air direction (swing OFF)	Air direction at previous operation
Left-right air direction (swing)	Standard air direction (swing OFF)	Air direction at previous operation

● Circuit diagram example



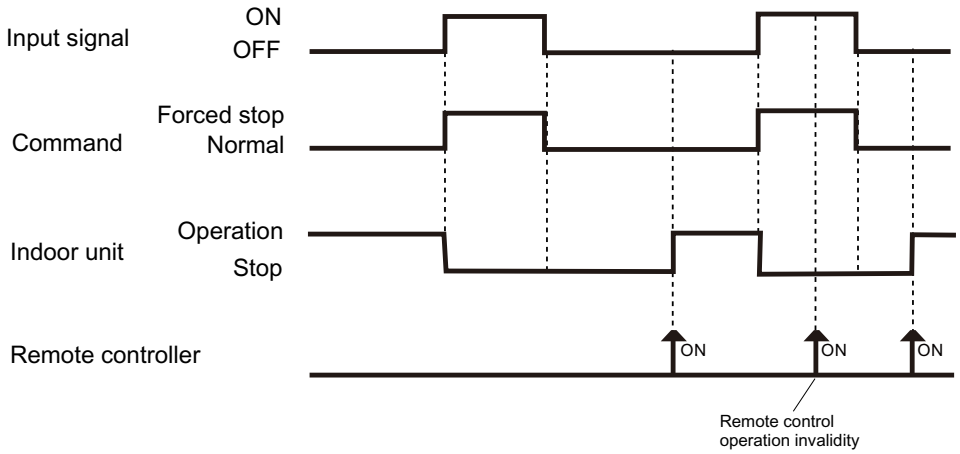
* Make the distance from the PC board to the connected unit within 10m.
Contact capacity : 24VDC or more, 10mA or more.
Please use non-polar relays and switches.

● When function setting is "Operation/Stop" mode



WALL MOUNTED TYPE
AS∗G07-14LE

● When function setting is in "Forced stop" mode

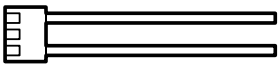


● Parts (Optional)

Parts name	Model name
External connect kit	UTY-XWZX
Communication box kit	UTY-XCBXE (for AS∗G07/09/12LE) UTY-XCBXZ1 (for AS∗G14LE)

*For operating the EXTERNAL function, the Compact wall mounted type requires the communication kit in addition to the wire (UTY-XWZX).

Wire (External input) : UTY-XWZX



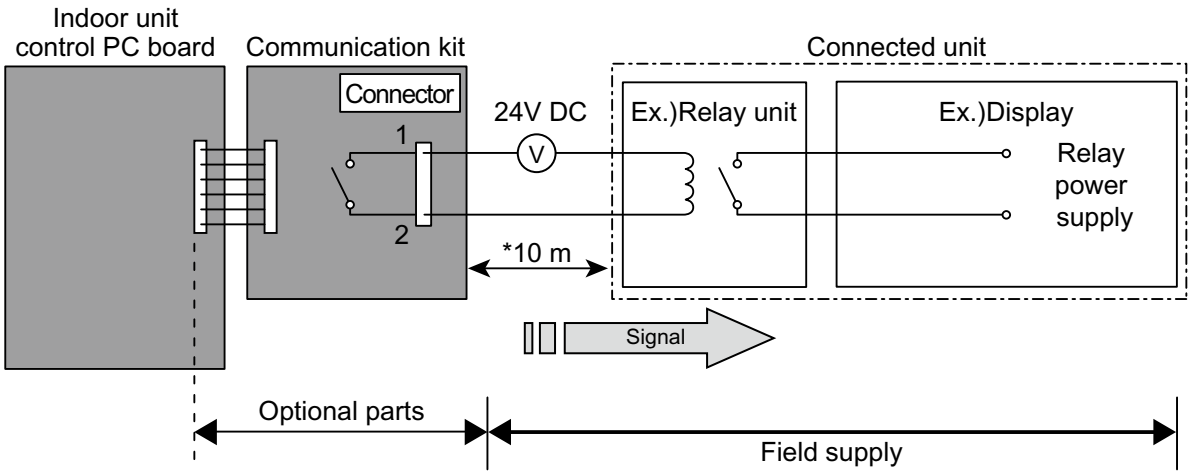
WALL MOUNTED TYPE
AS∗G07-14LE

11-2. EXTERNAL OUTPUT

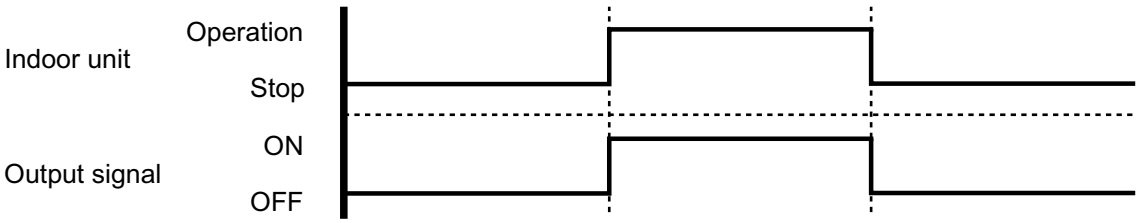
■ OPERATION STATUS OUTPUT

An air conditioner operation status signal can be output.

● Circuit diagram example



* Make the distance from the PC board to the connected unit within 10m.
Relay spec. : Max.24VDC, 10mA to less than 500mA.

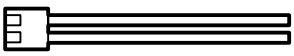


● Parts (Optional)

Parts name	Model name
External connect kit	UTY-XWZX
Communication box kit	UTY-XCBXE (for AS∗G07/09/12LE) UTY-XCBXZ1 (for AS∗G14LE)

*For operating the EXTERNAL function, the wall mounted type requires the communication kit in addition to the wire (UTY-XWZX).

Wire (External output) : UTY-XWZX



WALL MOUNTED TYPE
AS∗G07-14LE

12. FUNCTION SETTINGS

12-1. INDOOR UNIT (Setting by remote controller)

- The function settings of the control of the indoor unit can be changed by this procedure according to the installation conditions. Incorrect settings can cause the indoor unit to malfunction.
- After the power is turned on, perform the “Function Setting” according to the installation conditions using the remote controller.
- The settings may be selected between the following two: Function Number and Setting Value.
- Settings will not be changed if invalid numbers or setting values are selected.

■ PREPARATION

- Turn on the power

* Before turning on the power of the indoor units, make sure the piping air-tight test and vacuuming have been conducted.

* Also check again to make sure no wiring mistakes were made before turning on the power.

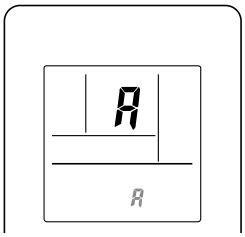
■ FUNCTION SETTING METHOD (for Wireless remote controller)

Entering the Function Setting Mode

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

STEP 1

Setting the Remote controller Signal Code



Use the following steps to select the signal code of the remote controller. (Note that the air conditioner cannot receive a signal code if the air conditioner has not been set for the signal code.) The signal codes that are set through this process are applicable only during the Function Setting process. For details on how to set the signal codes through the normal process, refer to the instructions under REMOTE CONTROLLER SIGNAL CODE SETTING.

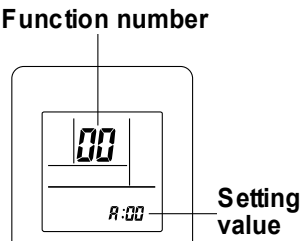
1. Press the SET TEMP. (▲) (▼) button to change the signal code between A → b → c → d Match the code on the display to the air conditioner signal code. (Initially set to A)
   (If the signal code does not need to be selected, press the 10°C Heat button and proceed to STEP 2.)
2. Press the MODE button and check that the indoor unit can receive signals at the displayed signal code.
3. Press the 10°C Heat button to accept the signal code, and proceed to STEP 2.

The air conditioner signal code is set to A prior to shipment.
Contact your retailer to change the signal code.

The remote controller resets to signal code A when the batteries in the remote controller are replaced. If you use a signal code other than signal code A, reset the signal code after replacing the batteries.
If you do not know the air conditioner signal code setting, try each of the signal codes (A → b → c → d) until you find the code which operates the air conditioner.

STEP 2

Selecting the Function Number and Setting Value



1. Press the SET TEMP. (▲) (▼) buttons to select the function number. (Press the 10°C Heat button to switch between the left and right digits.)
2. Press the POWERFUL button to proceed to setting the value. (Press the POWERFUL button again to return to the function number selection.)
3. Press the SET TEMP. (▲) (▼) buttons to select the setting value. (Press the 10°C Heat button to switch between the left and right digits.)
4. Press the MODE button, then the START/STOP button in order to fix the settings.
5. Press the RESET button to end the function setting mode.
6. After completing the FUNCTION SETTING, be sure to turn off the power and turn it on again.

⚠CAUTION
After turning off the power, wait 30 seconds or more before turning on it again. The Function Setting will not become active unless the power is turned off then on again.

WALL MOUNTED TYPE
AS∗G07-14LE

■ FUNCTION DETAILS

	Functions
1)	Filter sign
2)	Room temperature control for cooling
3)	Room temperature control for heating
4)	Auto restart
5)	Room temperature sensor switching
6)	Remote controller signal code
7)	External input control

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).

(◆... Factory setting)

	Setting description	Function number	Setting value
	Standard (400 hours)	11	00
	Long interval (1000 hours)		01
	Short interval (200 hours)		02
◆	No indication		03

2) Room temperature control for cooling

Depending on the installed environment, correction of the room temperature sensor may be required.

Select the appropriate control setting according to the installed environment.

(◆... Factory setting)

	Setting description	Function number	Setting value
◆	Standard	30	00
	Slightly lower control		01
	Lower control		02
	Higher control		03

3) Room temperature control for heating

Depending on the installed environment, correction of the room temperature sensor may be required.

Select the appropriate control setting according to the installed environment.

(◆... Factory setting)

	Setting description	Function number	Setting value
◆	Standard	31	00
	Lower control		01
	Slightly higher control		02
	Higher control		03

WALL MOUNTED TYPE
AS∗G07-14LE

4) Auto restart

Enable or disable automatic restart after a power interruption.

(◆... Factory setting)

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

*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 input device

5) Room temperature sensor switching

(Only for Wired remote controller)

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

(◆... Factory setting)

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

*00: Sensor on the indoor unit is active.

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

6) Remote controller signal code

(Only for wireless remote controller)

The indoor unit signal code can be changed.

Select the appropriate signal code.

(◆... Factory setting)

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

7) External input control

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

(◆... Factory setting)

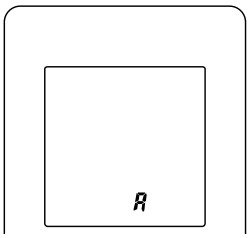
	Setting description	Function number	Setting value
◆	Operation/Stop mode	46	00
	(Setting prohibited)		01
	Forced stop mode		02

WALL MOUNTED TYPE
AS∗G07-14LE

■ REMOTE CONTROLLER SIGNAL CODE SETTING

Use the following steps to select the signal code of the remote controller.
(Note that the air conditioner cannot receive a signal if the right signal code has not been set.)

1. Press the START/STOP button until only the clock is displayed on the remote controller display.
2. Press the MODE button for at least five seconds to display the current signal code (initially set to A).
3. Press the SET TEMP. (▲) (▼) button to change the signal code between A → b → c → d.
   Match the code on the display to the air conditioner signal code.
4. Press the MODE button again to return to the clock display. The signal code will be changed.



If no buttons are pressed within 30 seconds after the signal code is displayed, the system returns to the original clock display. In this case, start again from step 1.

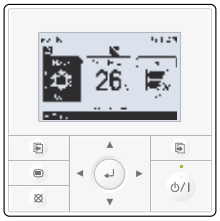
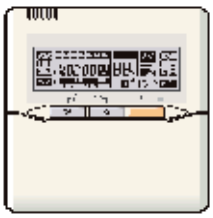
The air conditioner signal code is set to A prior to shipment.

The remote controller resets to signal code A when the batteries in the remote controller are replaced. If you use a signal code other than signal code A, reset the signal code after replacing the batteries. If you do not know the air conditioner signal code setting, try each of the signal codes (A → b → c → d) until you find the code which operates the air conditioner.

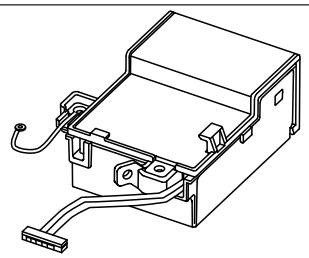
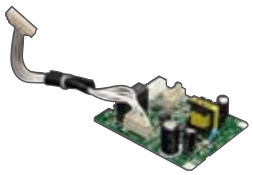
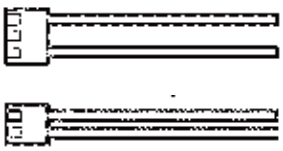
WALL MOUNTED TYPE
AS∗G07-14LE

13. OPTIONAL PARTS

13-1. CONTROLLER

Exterior	Parts name	Model No.	Summary
	Wired remote controller	UTY-RVN∗M	Large and full-dot liquid crystal screen, wide and large keys easy to press, user-intuitive arrow key. *Optional communication kit is necessary for installation.
	Wired remote controller	UTY-RNN∗M	The room temperature can be controlled by detecting the temperature accurately with built-in thermo sensor. *Optional communication kit is necessary for installation.
	Simple remote controller	UTY-RSN∗M	Compact remote controller concentrates on the basic functions such as Start/Stop, Fan Control, Temperature Setting and Operation mode. *Optional communication kit is necessary for installation.

13-2. OTHERS

Exterior	Parts name	Model No.	Summary
	Communication box kit	UTY-XCBXE	Use to connect with optional devices and air conditioner PC board.
	Communication kit	UTY-XCBXZ1	Use to connect with optional devices and air conditioner PC board. (for AS∗G14LE)
	External connect kit	UTY-XWZX	Required when external device is connected. *Optional communication kit is necessary for installation.

2. OUTDOOR UNIT

SINGLE TYPE :

AO∗G07LEC
AO∗G09LEC
AO∗G12LEC
AO∗G14LEC

DTR_AO072E_02
2011.03.28

CONTENTS

2. OUTDOOR UNIT

OUTDOOR UNIT
AO*G07-14LE

1. SPECIFICATIONS

Type				INVERTER HEAT PUMP			
Model name				AO∗G07LEC	AO∗G09LEC	AO∗G12LEC	AO∗G14LEC
Power sourse				230V~ 50Hz			
Available voltage range				198-264V ~ 50Hz			
Starting current			A	3.5	3.8	4.7	6.0
Fan	Airflow rate	Cooling	m^3/h	1,720		1,830	1,800
		Heating		1,510		1,600	1,660
	Type×Q'ty			Propeller fan×1			
	Motor output		W	40			
Sound pressure level		Cooling	dB(A)	45		50	49
		Heating		45		50	50
Heat exchanger type		Dimensions(H×W×D)	mm	650 × 504 × 18.2		642 × 504 × 36.4	896 × 504 × 36.4
		Fin pitch		1.3		1.4	1.3
		Rows×Stages		1 × 24		2× 24	
		Pipe type		Copper			
		Fin Type		Aluminium			
Compressor	Type×Q'ty			Rotary×1			
	Motor output		W	500		750	
Refrigerant		Type		R410A			
		Charge	g	650		800	1050
Refrigerant oil		Type		POE(VG74)			
Enclosure		Material		Steel			
		Colour		Beige Approximate colour of MUNSELL 10YR7.5/1.0			
Dimensions (H×W×D)	Net		mm	540 × 660 ×290			540 × 790 × 290
	Gross		mm	611 × 797 × 401			648 × 938 × 400
Weight	Net		kg (lbs.)	23(51)		29(64)	34(75)
	Gross			26(57)		32(71)	38(84)
Connenction pipe	Size	Liquid	mm	Ø6.35 (Ø1/4 in.)			
		Gas		Ø9.52 (Ø3/8in.)			Ø12.7 (Ø1/2in.)
	Method			Flare			
	Pre-charge length		m	15			
	Max.length			20			
	Max.height difference			15			
Operation range		Cooling	°C	-10 to 43			
		Heating		-15 to 24			

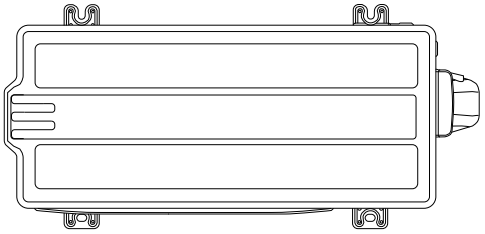
Note :
Specifications are based on the following conditions.
Cooling : Indoor temperature of 27 °CDB / 19 °CWB.and outdoor temperature of 35 °CDB/24 °CWB.
Heating : Indoor temperature of 20 °CDB / 15 °CWB.and outdoor temperature of 7 °CDB/6 °CWB.
Pipe length : 5 m, Height difference : 0 m.(Outdoor unit - Indoor unit)
The maximum current is the maximum value when the operated within the operation range(temperature).

OUTDOOR UNIT
AO∗G07-14LE

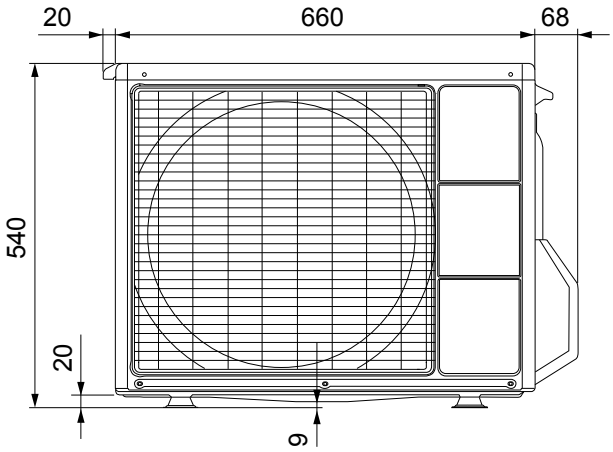
2. DIMENSIONS

■ MODEL: AO∗G07LE, AO∗G09LE, AO∗G12LE

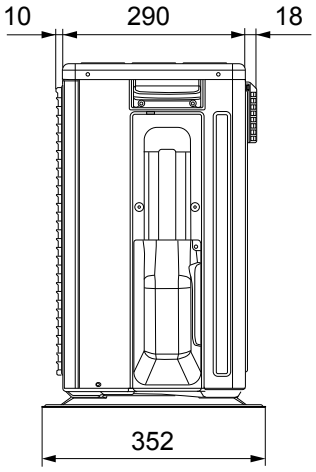
(Unit : mm)



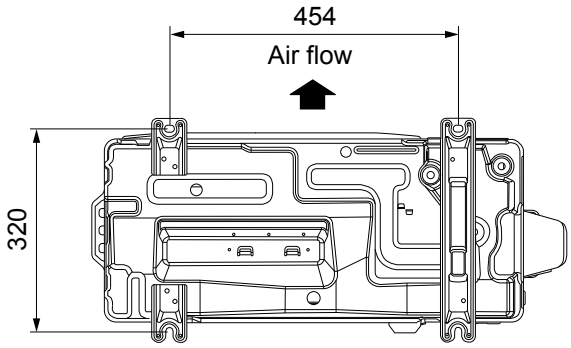
Top view



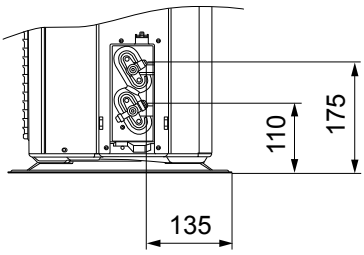
Front view



Side view

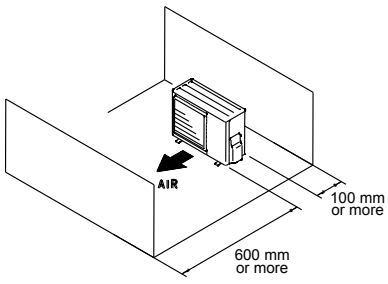


Bottom view

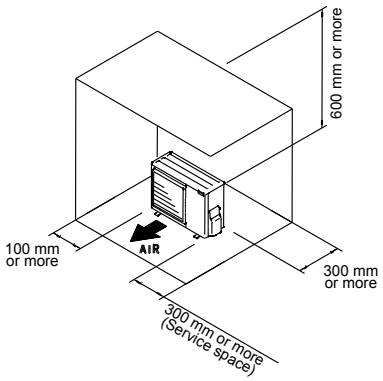


■ INSTALLATION PLACE

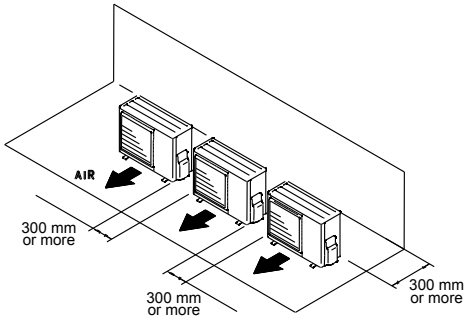
When there are obstacles at the back or front sides.



When there are obstacles at the back, side(s), and top.



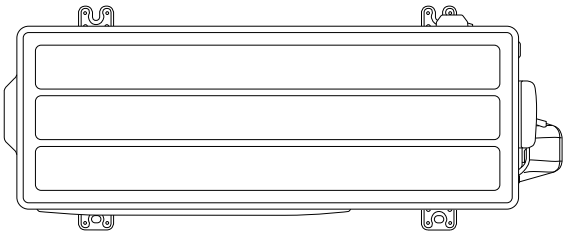
When there are obstacles at the back, side with the installation of more than one unit.



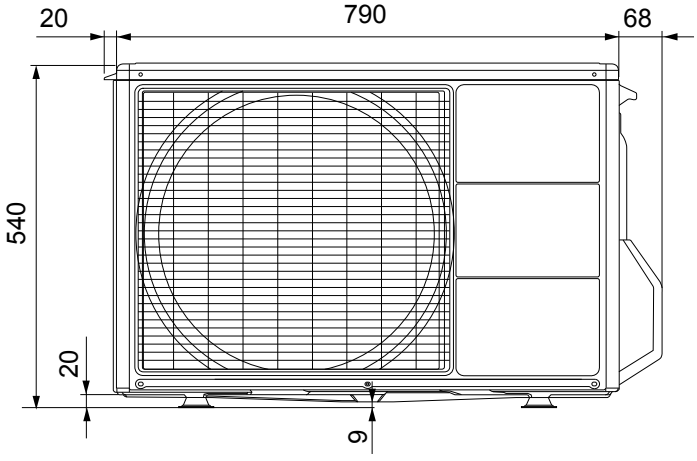
OUTDOOR UNIT
AO∗G07-14LE

■ MODEL: AO∗G14LE

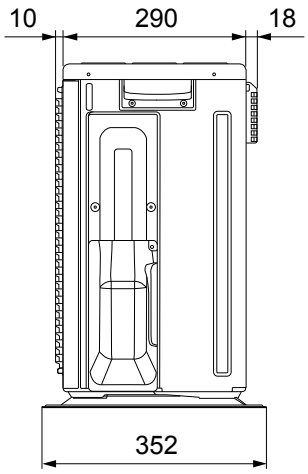
(Unit : mm)



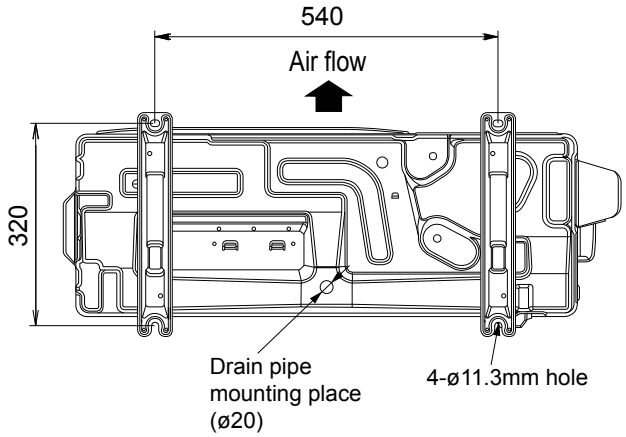
Top view



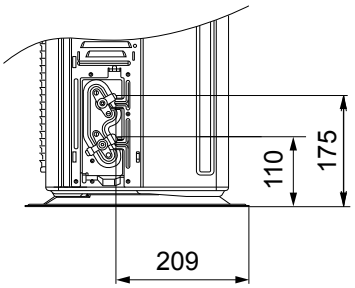
Front view



Side view

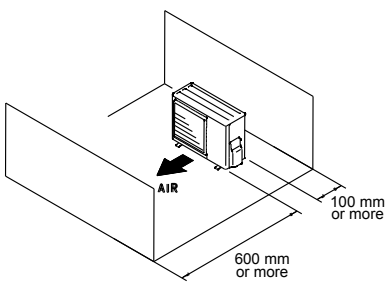


Bottom view

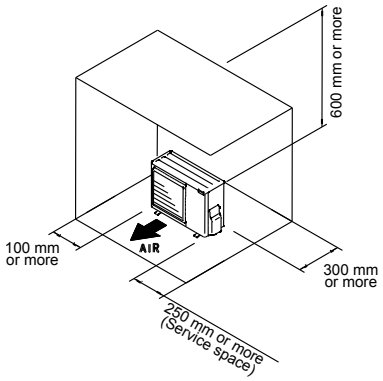


■ INSTALLATION PLACE

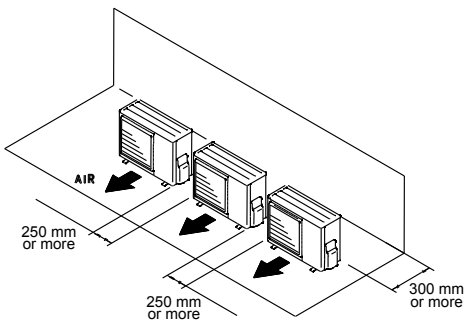
When there are obstacles at the back or front sides.



When there are obstacles at the back, side(s), and top.

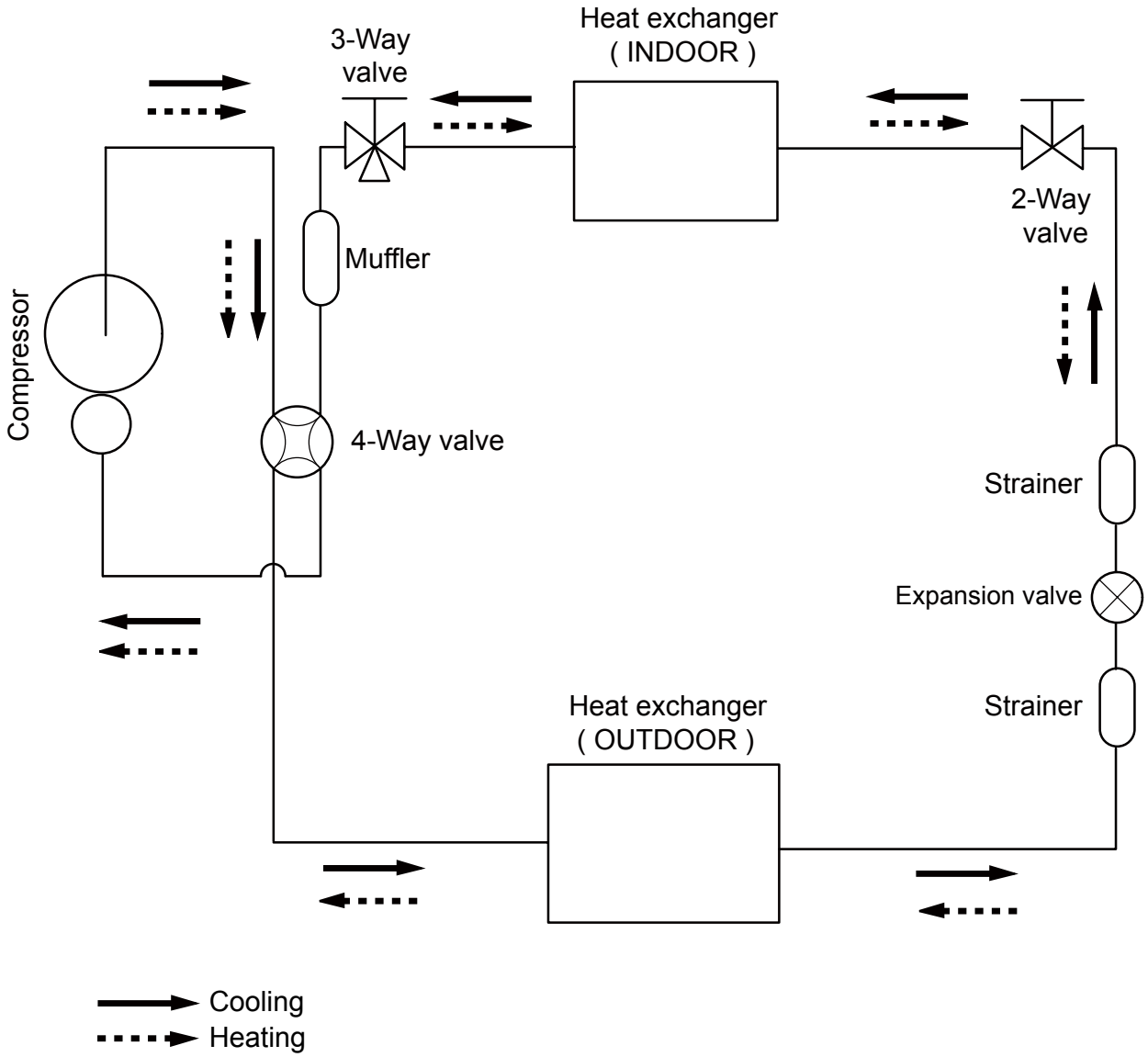


When there are obstacles at the back, side with the installation of more than one unit.



3. REFRIGERANT CIRCUIT

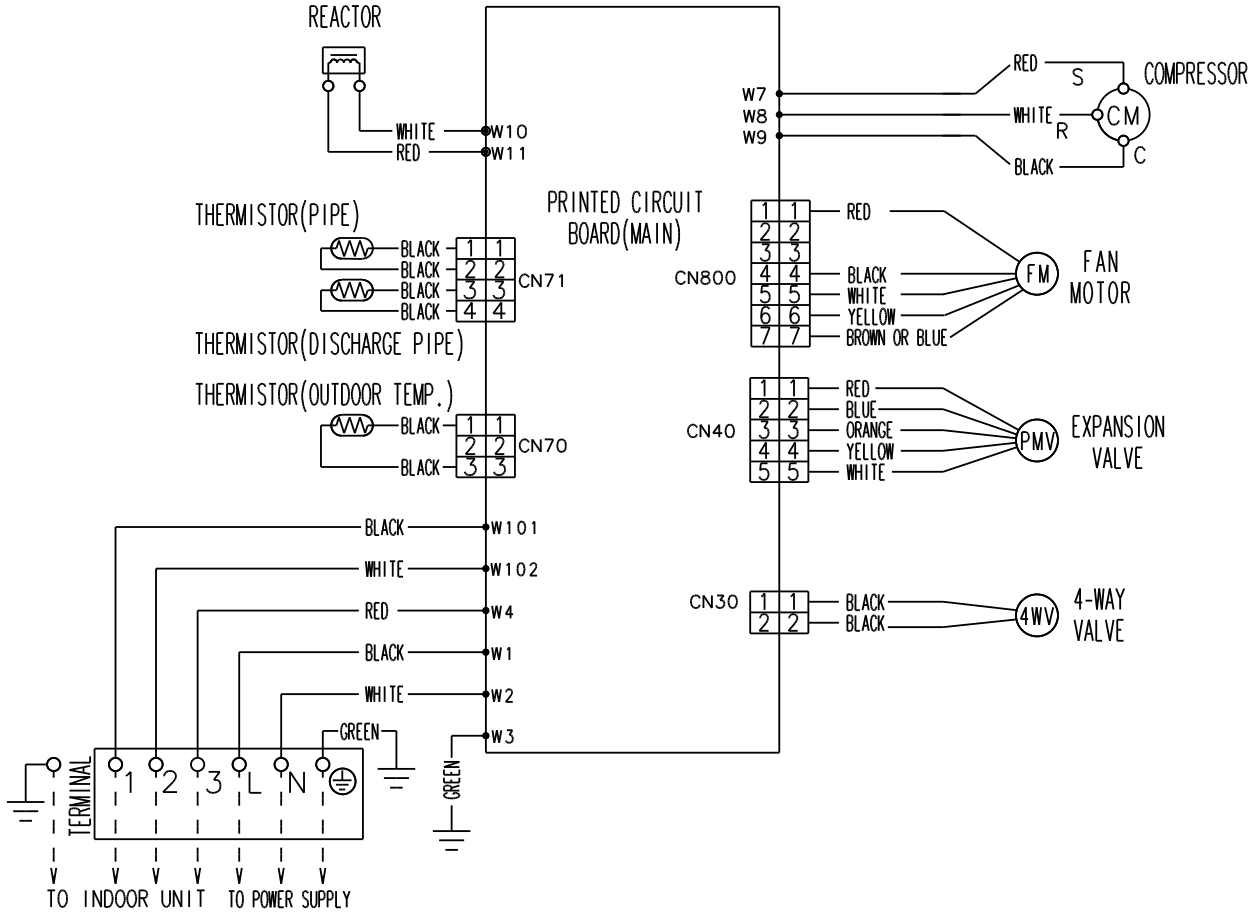
■ MODEL: AO∗G07LE, AO∗G09LE, AO∗G12LE, AO∗G14LE



Refrigerant pipe diameter
Liquid : 1/4" (6.35 mm)
Gas : 3/8" (9.52 mm) :07/09/12LE
1/2" (12.7 mm) :14LE

4. WIRING DIAGRAMS

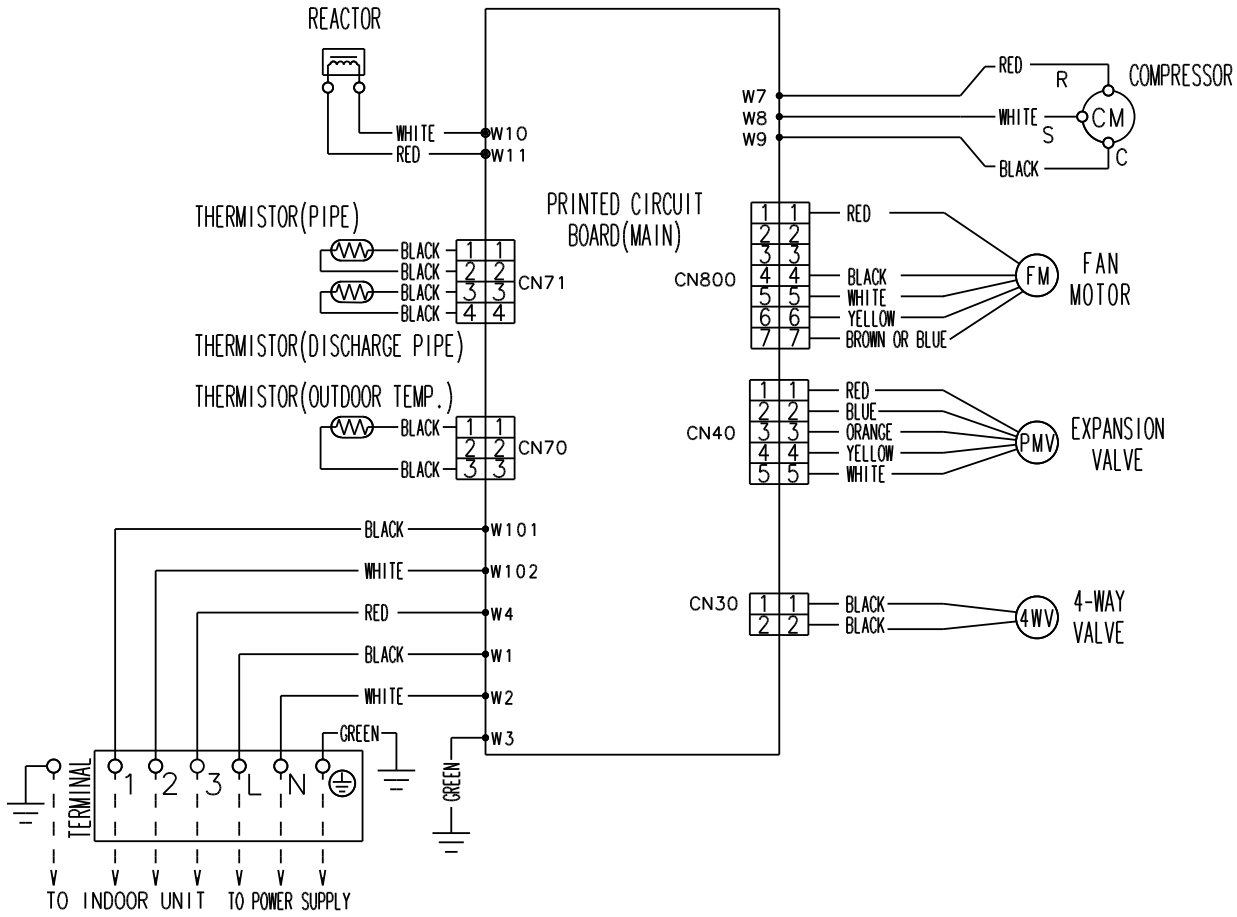
■ MODEL: AO*G07LE, AO*G09LE



OUTDOOR UNIT
AO*G07-14LE

OUTDOOR UNIT
AO*G07-14LE

■ MODEL: AO*G12LE, AO*G14LE



OUTDOOR UNIT
AO∗G07-14LE

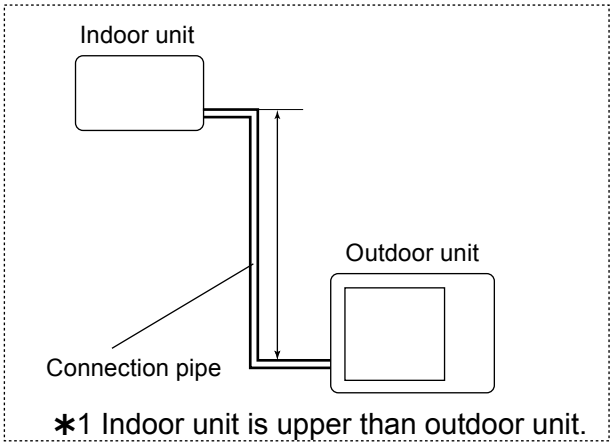
5. CAPACITY COMPENSATION RATE FOR PIPE LENGTH AND HEIGHT DIFFERENCE

■ MODEL: AO∗G07LE, AO∗G09LE

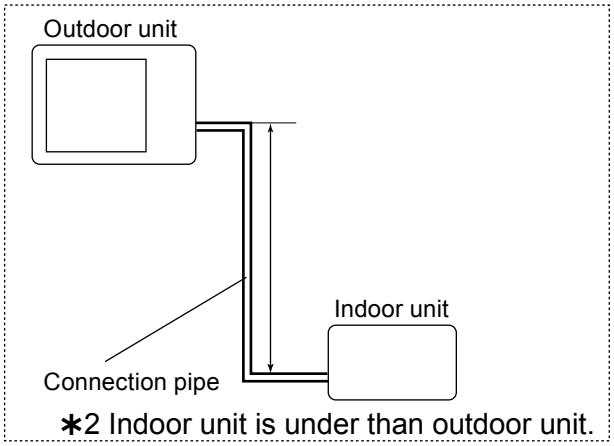
COOLING			Pipe length (m)				
			5	7.5	10	15	20
Height difference H (m)	∗1 Indoor unit is upper than outdoor unit.	15	-	-	-	0.872	0.910
		10	-	-	0.961	0.886	0.925
		7.5	-	0.979	0.965	0.890	0.929
		5	0.992	0.983	0.969	0.893	0.933
		0	1.000	0.991	0.976	0.901	0.940
	∗2 Indoor unit is under than outdoor unit	-5	1.000	0.991	0.976	0.901	0.940
		-7.5	-	0.991	0.976	0.901	0.940
		-10	-	-	0.976	0.901	0.940
		-15	-	-	-	0.901	0.940

HEATING			Pipe length (m)				
			5	7.5	10	15	20
Height difference H (m)	∗1 Indoor unit is upper than outdoor unit.	15	-	-	-	0.832	0.822
		10	-	-	0.917	0.832	0.822
		7.5	-	0.961	0.917	0.832	0.822
		5	1.000	0.961	0.917	0.832	0.822
		0	1.000	0.961	0.917	0.832	0.822
	∗2 Indoor unit is under than outdoor unit	-5	0.995	0.956	0.912	0.828	0.818
		-7.5	-	0.954	0.910	0.826	0.816
		-10	-	-	0.908	0.824	0.814
		-15	-	-	-	0.815	0.805

Height difference H



∗1 Indoor unit is upper than outdoor unit.



∗2 Indoor unit is under than outdoor unit.

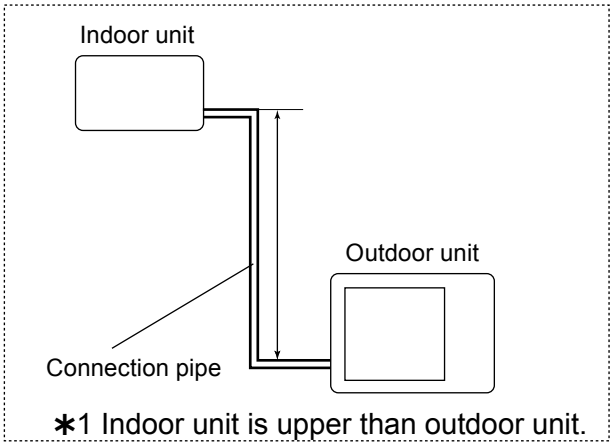
OUTDOOR UNIT
AO∗G07-14LE

■ MODEL: AO∗G12LE

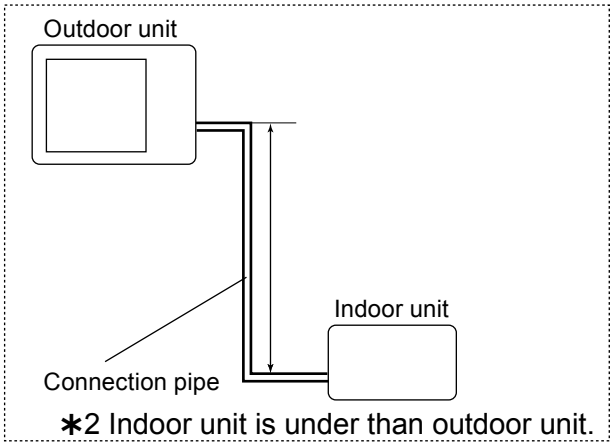
COOLING			Pipe length (m)				
			5	7.5	10	15	20
Height difference H (m)	∗1 Indoor unit is upper than outdoor unit.	15	-	-	-	0.858	0.868
		10	-	-	0.929	0.872	0.882
		7.5	-	0.960	0.933	0.876	0.885
		5	0.992	0.964	0.937	0.879	0.889
		0	1.000	0.972	0.944	0.887	0.896
	∗2 Indoor unit is under than outdoor unit	-5	1.000	0.972	0.944	0.887	0.896
		-7.5	-	0.972	0.944	0.887	0.896
		-10	-	-	0.944	0.887	0.896
		-15	-	-	-	0.887	0.896

HEATING			Pipe length (m)				
			5	7.5	10	15	20
Height difference H (m)	∗1 Indoor unit is upper than outdoor unit.	15	-	-	-	0.896	0.879
		10	-	-	0.968	0.890	0.879
		7.5	-	0.994	0.968	0.896	0.879
		5	1.000	0.994	0.968	0.896	0.879
		0	1.000	0.994	0.968	0.896	0.879
	∗2 Indoor unit is under than outdoor unit	-5	0.995	0.989	0.963	0.891	0.875
		-7.5	-	0.987	0.961	0.889	0.873
		-10	-	-	0.959	0.887	0.871
		-15	-	-	-	0.878	0.862

Height difference H



∗1 Indoor unit is upper than outdoor unit.



∗2 Indoor unit is under than outdoor unit.

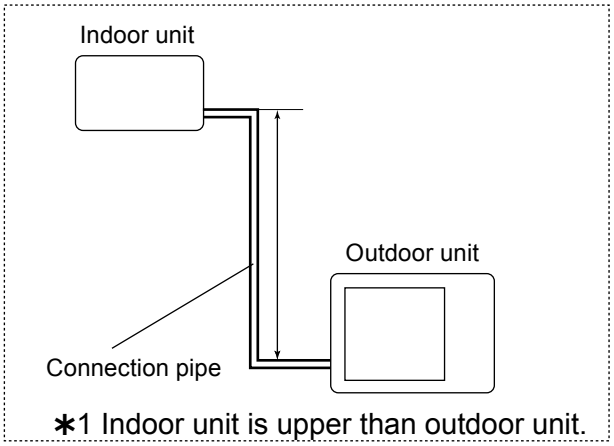
OUTDOOR UNIT
AO∗G07-14LE

■ MODEL: AO∗G14LE

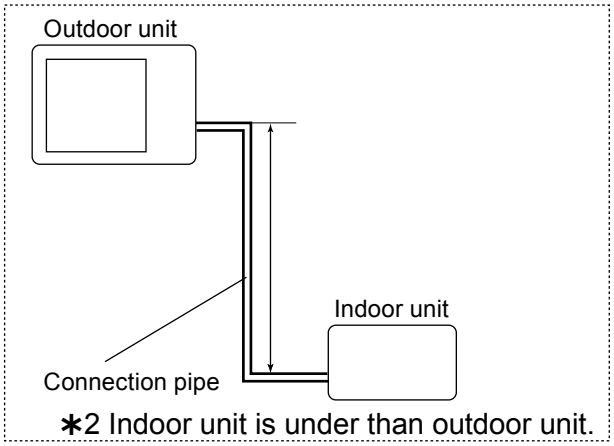
COOLING			Pipe length (m)				
			5	7.5	10	15	20
Height difference H (m)	∗1 Indoor unit is upper than outdoor unit.	15	-	-	-	0.893	0.909
		10	-	-	0.955	0.908	0.924
		7.5	-	0.975	0.959	0.912	0.928
		5	0.992	0.979	0.963	0.916	0.931
		0	1.000	0.987	0.970	0.923	0.939
	∗2 Indoor unit is under than outdoor unit	-5	1.000	0.987	0.970	0.923	0.939
		-7.5	-	0.987	0.970	0.923	0.939
		-10	-	-	0.970	0.923	0.939
		-15	-	-	-	0.923	0.939

HEATING			Pipe length (m)				
			5	7.5	10	15	20
Height difference H (m)	∗1 Indoor unit is upper than outdoor unit.	15	-	-	-	0.956	0.938
		10	-	-	1.004	0.956	0.938
		7.5	-	1.013	1.004	0.956	0.938
		5	1.000	1.013	1.004	0.956	0.938
		0	1.000	1.013	1.004	0.956	0.938
	∗2 Indoor unit is under than outdoor unit	-5	0.995	1.008	0.999	0.951	0.933
		-7.5	-	1.005	0.997	0.948	0.931
		-10	-	-	0.994	0.946	0.929
		-15	-	-	-	0.937	0.919

Height difference H



∗1 Indoor unit is upper than outdoor unit.



∗2 Indoor unit is under than outdoor unit.

OUTDOOR UNIT
AO∗G07-14LE

6. ADDITIONAL CHARGE CALCULATION

■ MODEL: AO∗G07LE, AO∗G09LE

Refrigerant type		R410A
Refrigerant amount	g	650

● Refrigerant charge

Total pipe length	m	15 or less	20 (MAX)	20g/m
Additional charge	g	0	100	

■ MODEL: AO∗G12LE

Refrigerant type		R410A
Refrigerant amount	g	800

● Refrigerant charge

Total pipe length	m	15 or less	20 (MAX)	20g/m
Additional charge	g	0	100	

■ MODEL: AO∗G14LE

Refrigerant type		R410A
Refrigerant amount	g	1050

● Refrigerant charge

Total pipe length	m	15 or less	20 (MAX)	20g/m
Additional charge	g	0	100	

OUTDOOR UNIT
AO∗G07-14LE

7. AIR FLOW

■ MODEL: AO∗G07LE, AO∗G09LE

● Cooling

Number of rotations (r.p.m.)	Air flow	
730	1720	m^3/h
	476	l/s
	1011	CFM

● Heating

Number of rotations (r.p.m.)	Air flow	
650	1510	m^3/h
	418	l/s
	888	CFM

■ MODEL: AO∗G12LE

● Cooling

Number of rotations (r.p.m.)	Air flow	
860	1830	m^3/h
	507	l/s
	1076	CFM

● Heating

Number of rotations (r.p.m.)	Air flow	
760	1600	m^3/h
	443	l/s
	941	CFM

OUTDOOR UNIT
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■ MODEL: AO∗G14LE

● Cooling

Number of rotations (r.p.m.)	Air flow	
800	1800	m^3/h
	499	l/s
	1058	CFM

● Heating

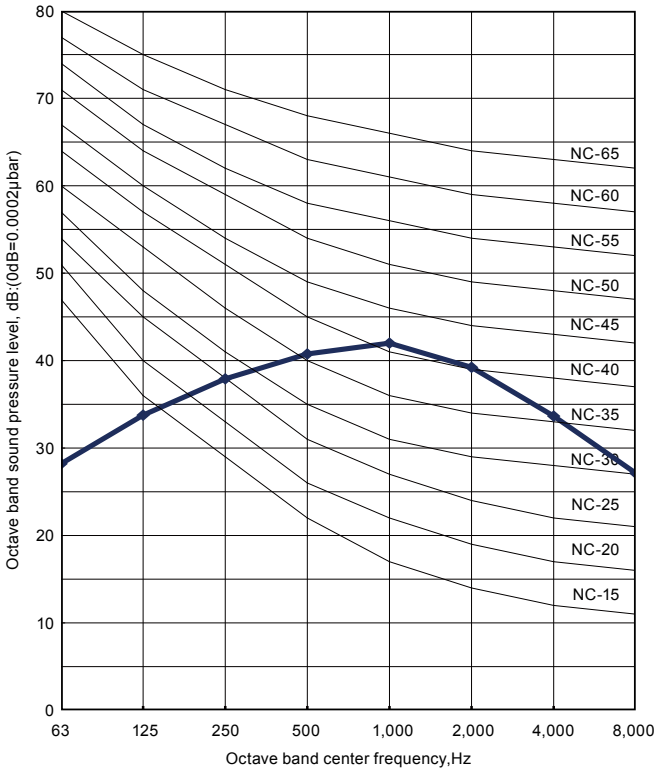
Number of rotations (r.p.m.)	Air flow	
750	1660	m^3/h
	460	l/s
	976	CFM

8. OPERATION NOISE

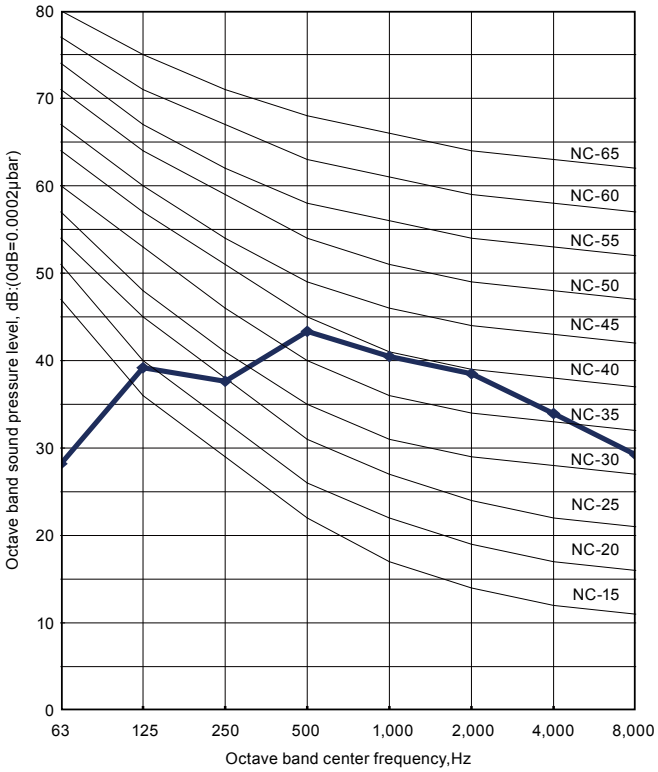
8-1. NOISE LEVEL CURVE

■ MODEL: AO∗G07LE

● Cooling

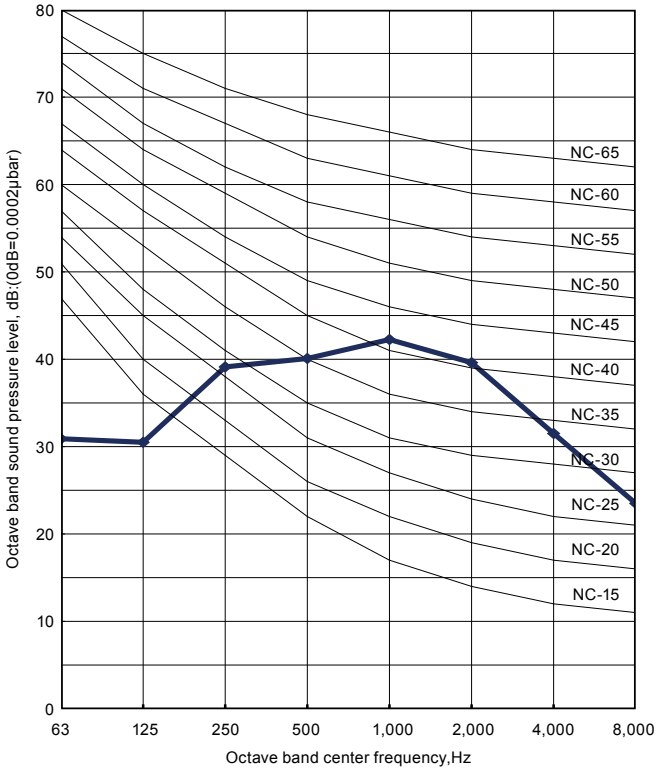


● Heating

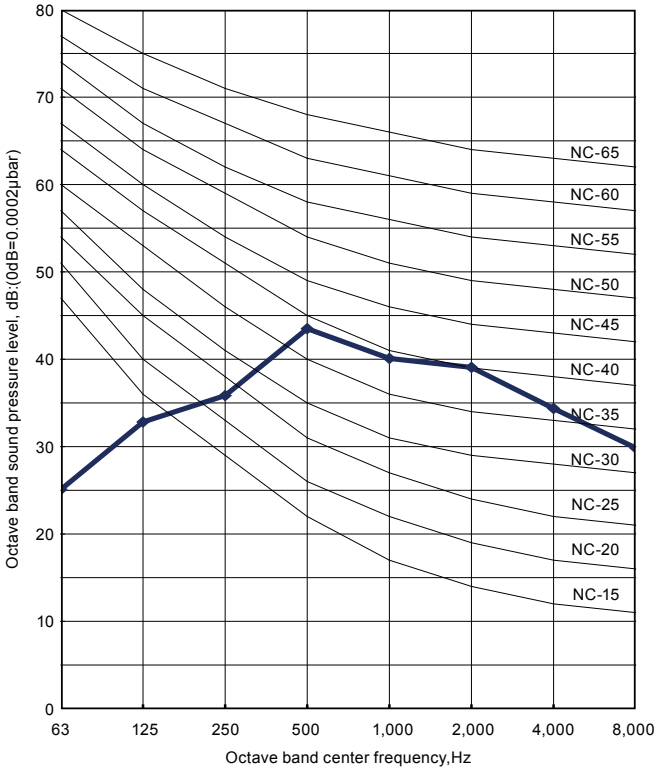


■ MODEL: AO∗G09LE

● Cooling



● Heating



OUTDOOR UNIT
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OUTDOOR UNIT
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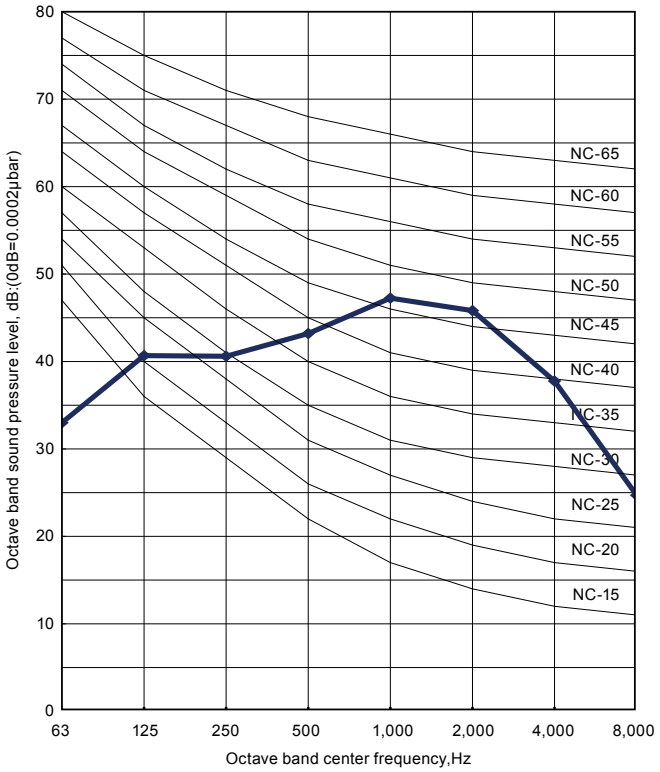
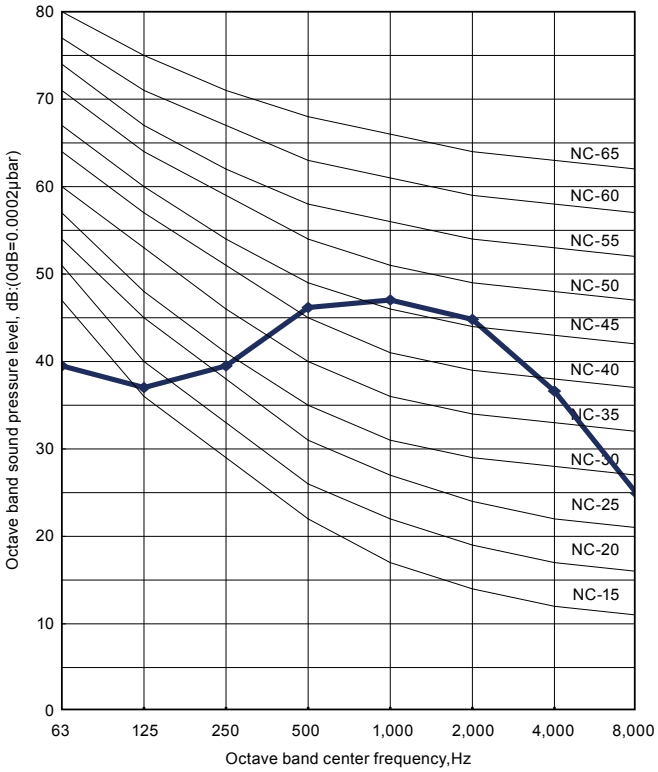
■MODEL: AO*G12LE

●Cooling

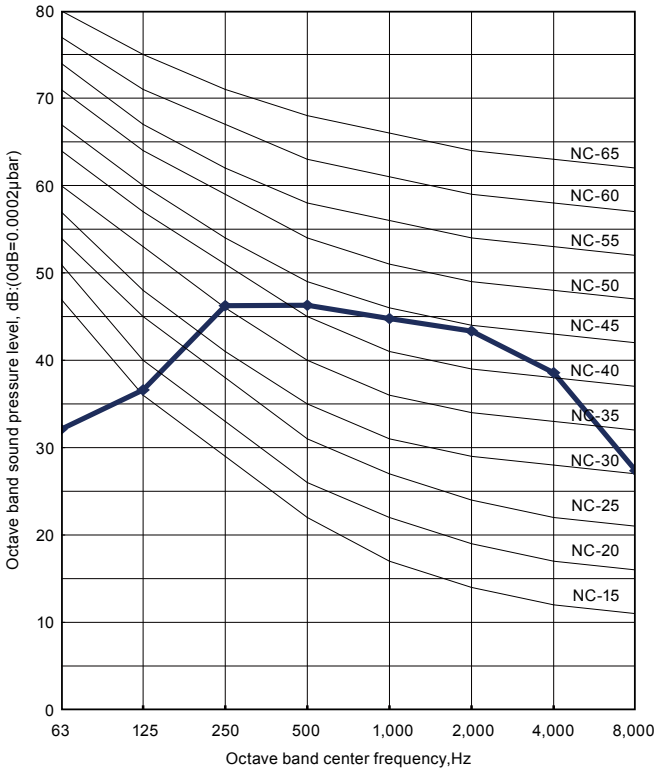


●Heating

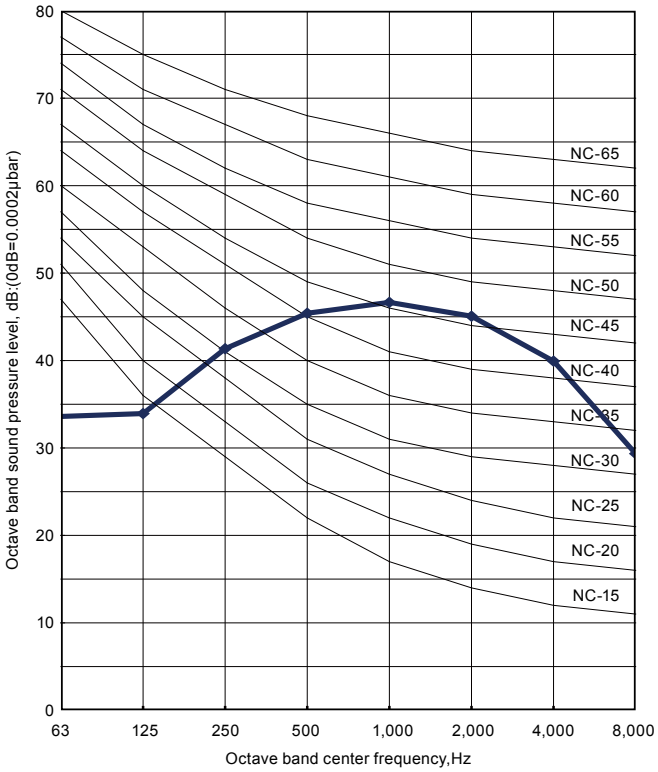


■MODEL: AO*G14LE

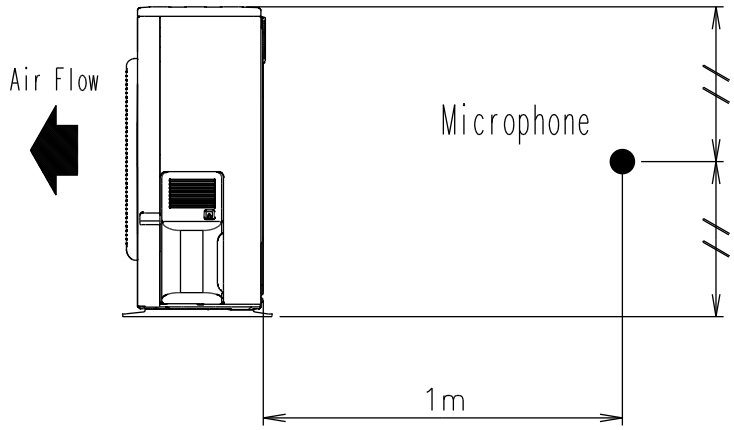
●Cooling

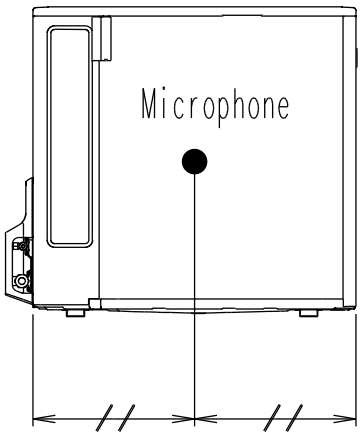


●Heating



8-2. SOUND LEVEL CHECK POINT





OUTDOOR UNIT
AO*G07-14LE

9. ELECTRIC CHARACTERISTICS

Model name			AO∗G07LE	AO∗G09LE	AO∗G12LE	AO∗G14LE
Power supply	Voltage	V	230 ~			
	Frequency	Hz	50			
*1) Max operating current		A	7.5	7.5	9.0	10.5
Starting Current		A	3.5	3.8	4.7	6.0
*2) Wiring Spec.:	Main Fuse (Circuit breaker) Current	A	20			
	Power Cable	mm^2	1.5			
	*3) Limited wiring length :	m	21			

*1) The maximum current is the total current of indoor unit and outdoor unit.

*2) Wiring Spec.:

Selected Sample
(Selected based on Japan Electrotechnical Standard and Codes Committee E0005)

*3) Limited wiring length :

This is the wiring length in case voltage descent is less than 2%.
When the wiring length becomes long, please select the wiring of a more larger diameter.

10. SAFETY DEVICES

	Protection form	Model			
		AO∗G07LE	AO∗G09LE	AO∗G12LE	AO∗G14LE
Circuit protection	Current fuse (MAIN PRINTED CIRCUIT BOARD)	20A/250V 5A/250V			
Fan motor protection	Thermal protection program	OFF : 100^{+10}_{-10}°C ON : 95^{+10}_{-10}°C			
High Pressure Protection	Terminal protection program COMPRESSOR TEMP.	OFF:110°C ON:After 7 minutes			

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