

AIR CONDITIONER

Duct type

DESIGN & TECHNICAL MANUAL

INDOOR



AR*G60LHTA

OUTDOOR



AO*G60LATT

FUJITSU GENERAL LIMITED

1. INDOOR UNIT

**DUCT TYPE :
AR*G60LHTA**

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1. INDOOR UNIT

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1. FEATURES

■ MODEL

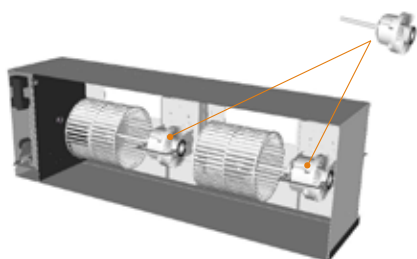
AR*G60LHTA / AO*G60LATT



■ FEATURES

● Energy saving technology (ALL DC)

DC fan motor



The power consumption has been reduced drastically by the introduction of DC fan motors.

● Space saving

• Compact size

High performance has been realized with a compact indoor unit.

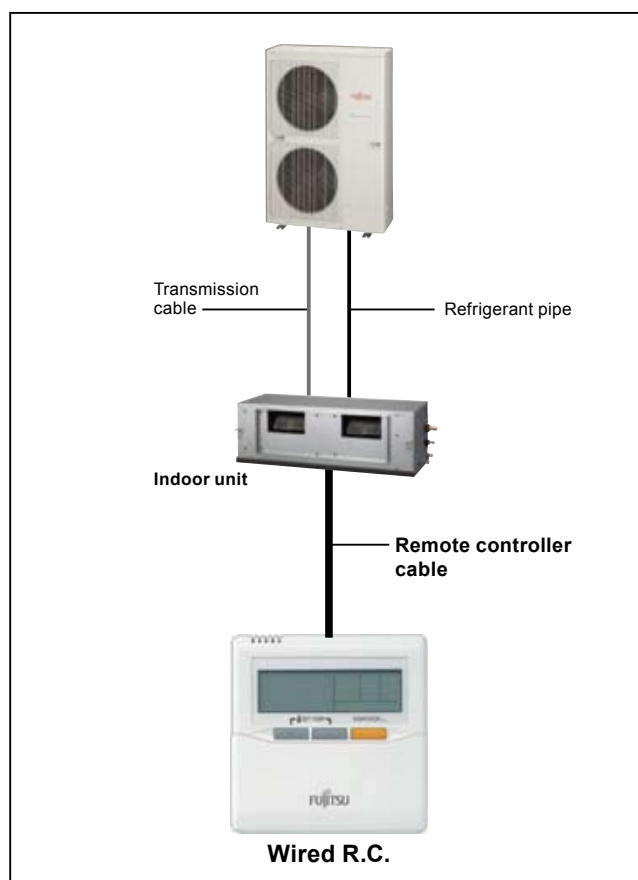
Due to the compact size of the indoor unit, the installation space required has been reduced allowing for a wider selection on installation locations.



● Control system

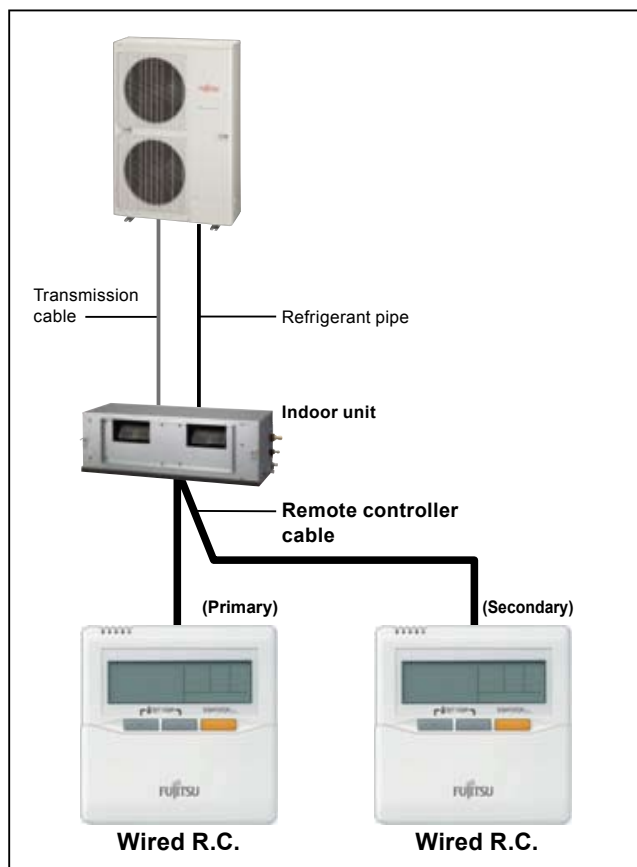
• 1-Remote controller control

This is the most basic system.



• 2-Remote controllers control

Control locally and from a remote point is possible using 2-remote controllers.

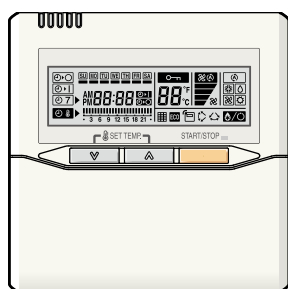


* For 2-wired type remote controllers, specify a Primary and a Secondary remote controller.

* The timer function of the remote controller specified the Secondary cannot be used.

2. WIRED REMOTE CONTROLLER

■ FEATURES



- * Various timer setup (ON / OFF / WEEKLY) are possible.
- * Equipped with weekly timer as standard function.(2 times Start / Stop per day for a week)
- * When setting up a timer, operation mode and a temperature setup can be changed.
- * When a failure occurs, the error code is displayed. (Maximum of 16)
- * Error indication.(A maximum of 16 error histories are memorizable.)
- * Up to 16 indoor units can be simultaneously controlled.
- * The room temperature can be controlled by being detected the temperature accurately with built-in thermo sensor.

● Simple function setting

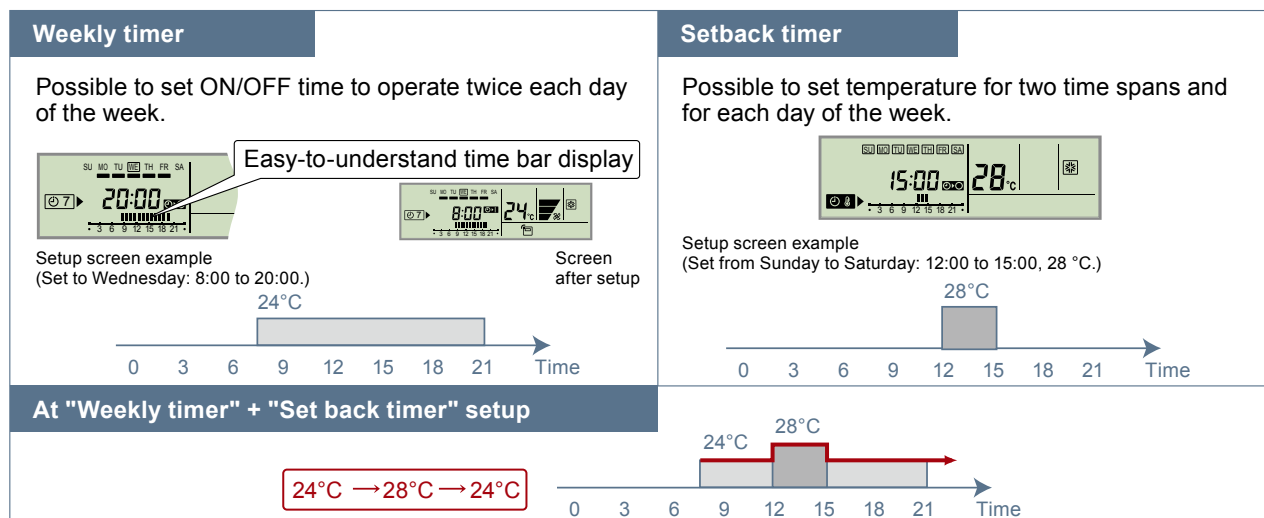
Setting of the air conditioner selection function is performed by remote controller.

● High performance and compact size

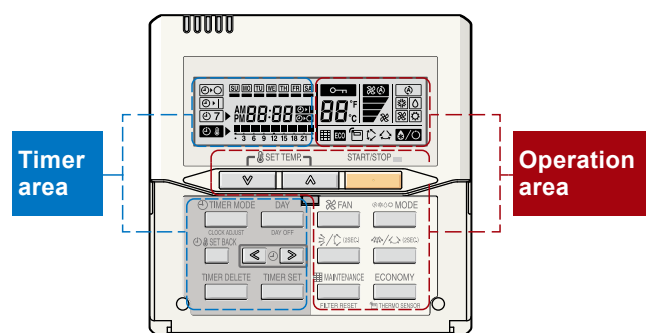
Three functions are combined in one unit.



● Built-in timers



● Easy-to-understand operation

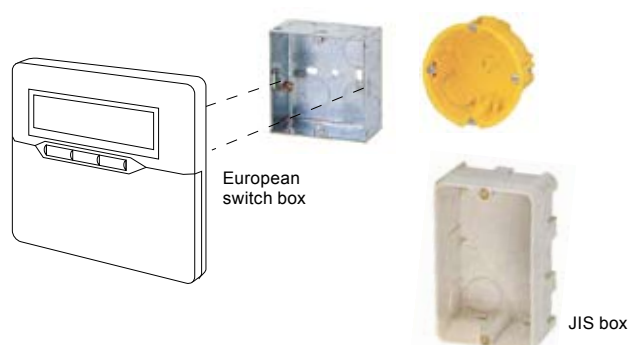


[Variable timer control]

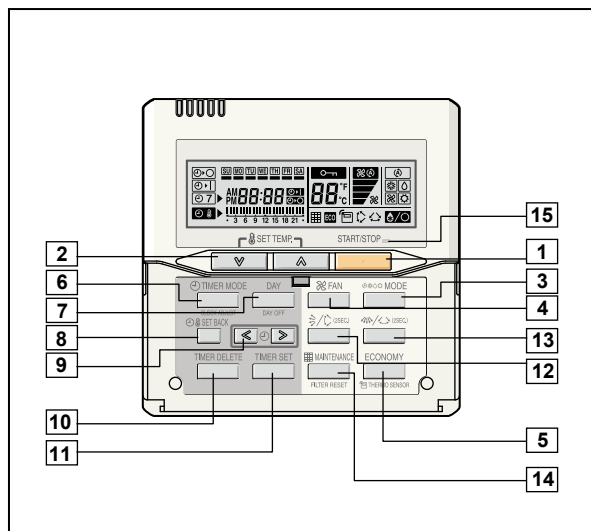
The operation/display sections are zoned according to time and operation, enabling variable programming to match application.

● Simple installation

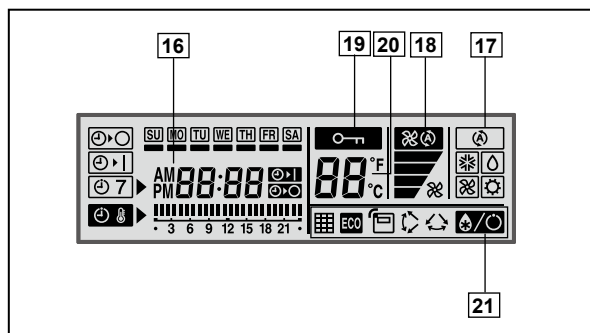
Components are compatible with standard switch boxes. Flat back construction allows equipment to be installed wherever it is needed.



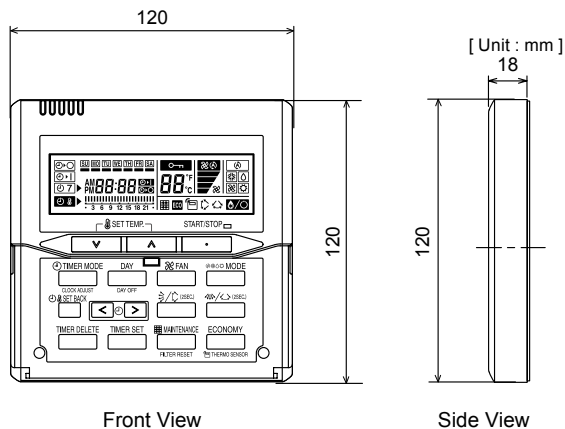
FUNCTIONS



Display panel



DIMENSION



Front View

Side View

SPECIFICATION

SIZE	(H x W x D mm)	120 x 120 x 18
WEIGHT	(g)	160
CABLE LENGTH	(m)	10
POWER	(V)	12

WIRING SPECIFICATIONS

Use	Size	Wire type	Remarks
Remote controller cable	0.33mm ² (22AWG)	Polar 3 core	Use sheathed PVC cable.

- 1 START/STOP button**
Pressed to start and stop operation.
- 2 SET TEMP. button**
Selects the setting temperature.
- 3 MODE button**
Selects the operating mode (AUTO, HEAT, FAN, COOL, DRY).
- 4 FAN button**
Selects the fan speed (AUTO, LOW, MED, HIGH).
- 5 ECONOMY button**
Turns the economy efficient mode on and off.
- 6 TIMER MODE (CLOCK ADJUST) button**
Selects the timer mode (OFF TIMER, ON TIMER, WEEKLY TIMER). Set the current time.
- 7 DAY (DAY OFF) button**
Temporarily cancels of one day timer.
- 8 SET BACK button**
Pressed to select the set back timer.
- 9 Set time button**
Pressed to set time.
- 10 TIMER DELETE button**
The schedule of a weekly timer is deleted.
- 11 TIMER SET button**
Sets the date, hour, minute and on-off time.
- 12 Vertical airflow direction and swing button**
Push for two seconds to change the swing mode.
- 13 Horizontal airflow direction and swing button**
Push for two seconds to change the swing mode.
- 14 FILTER RESET button**
- 15 Operation lamp**
Lights during operation and when the timer is on.
- 16 Timer and clock display**
- 17 Operation mode display**
- 18 Fan speed display**
- 19 Operation lock display**
- 20 Temperature display**
- 21 Function display**
 - Defrost display
 - Thermo sensor display
 - Economy display
 - Vertical swing display
 - Horizontal swing display
 - Filter display

Functions will be different due to type of indoor unit.
For details, please see operation manual.

3. SPECIFICATIONS

Type				DUCTED MODEL		
				INVERTER HEATPUMP		
Model name				AR✱G60LHTA		
Power source				230V 50Hz		
Available voltage range				198 - 264V 50Hz		
Capacity	Cooling	Rated	kW	15.0		
			Btu/h	51,200		
		Min - Max.	kW	6.2-17.5		
			Btu/h	21,200-60,000		
	Heating	Rated	kW	18.0		
			Btu/h	61,500		
		Min - Max.	kW	6.2-20.0		
			Btu/h	21,200-68,300		
Input power	Cooling	Rated	kW	4.70		
		Max		7.15		
	Heating	Rated		5.15		
		Max		7.15		
Current	Cooling	Rated	A	6.9		
	Heating			7.6		
EER		Cooling	kW/kW	3.19		
COP		Heating		3.50		
Moisture removal			l/h (pints/h)	2.0 (3.5)		
Maximum operating current *		Cooling		A	12.5	
		Heating			12.5	
Fan	Air flow rate	Cooling	High	m³/h	3,550	
			Med		3,000	
			Low		2,450	
		Heating	High		3,550	
			Med		3,000	
			Low		2,450	
	Type × Q'ty			Sirocco x 2		
	Motor output			W	197 x 2	
Recommended static pressure			Pa	60-260		
Sound pressure level		Cooling	High	dB (A)	45	
			Med		40	
			Low		36	
		Heating	High		45	
			Med		40	
			Low		36	
Heat exchanger type		Dimensions (H × W × D)		mm	378 x 1,090 x 53.2	
		Fin pitch			1.3	
		Rows x Stages		4 x 18		
		Pipe type		Copper		
		Fin type		Aluminium		
Enclosure		Material		Steel		
		Colour		-		
Dimensions (H × W × D)	Net		mm	425 x 1,250 x 490		
	Gross			490 x 1,440 x 655		
Weight	Net		kg	54		
	Gross			61		
Connection pipe	Size	Liquid	mm	Ø 9.52 (Ø 3/8 in.)		
		Gas		Ø 15.88 (Ø 5/8 in.)		
	Method			Flare		
Operation range		Cooling	°C	18 to 32		
			%RH	80 or less		
		Heating	°C	16 to 30		
Remote controller type				Wired		
				Steel		
Drain port	Material		mm	Ø 23.4 (I.D.), Ø 25.4 (O.D.)		
	Size					

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.

Standard static pressure : 60 Pa.

Pipe length : 7.5 m, Height difference : 0 m. (Outdoor unit - Indoor unit)

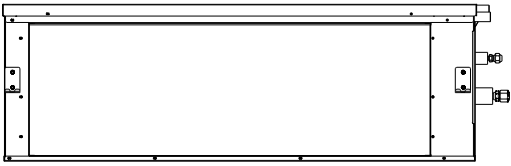
The protective function may work when using it outside the temperature range mentioned above.

Drain hose should be field supplied.

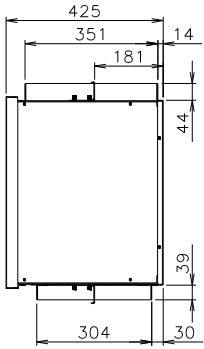
*: The maximum current is the maximum value when operated within the operation range.

4. DIMENSIONS

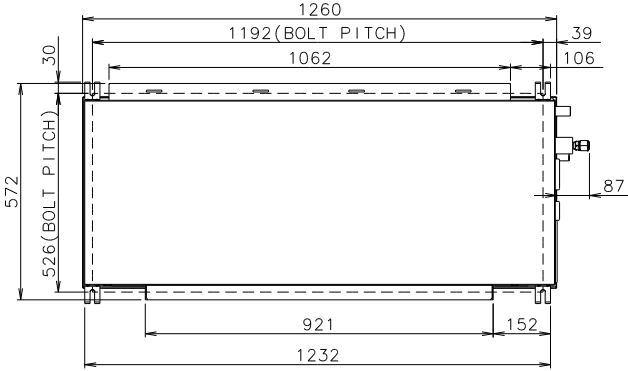
■ MODEL: AR*G60LHTA



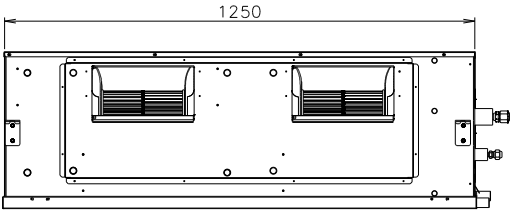
REAR VIEW



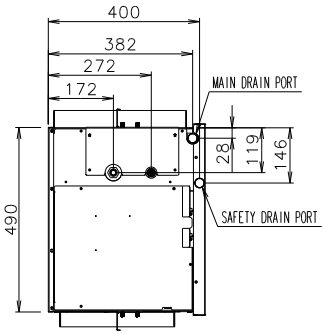
SIDE VIEW (L)



AIR FLOW
TOP VIEW



FRONT VIEW



SIDE VIEW (R)

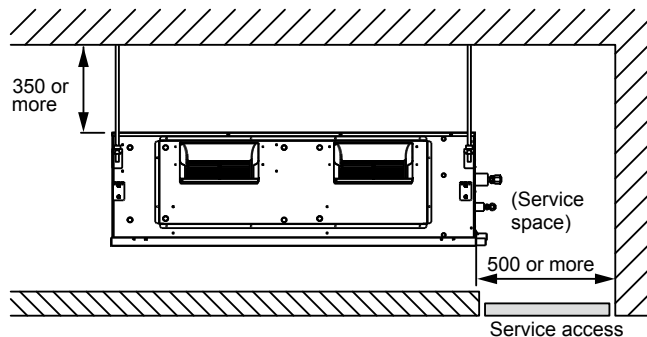
(Unit : mm)

■ INSTALLATION PLACE

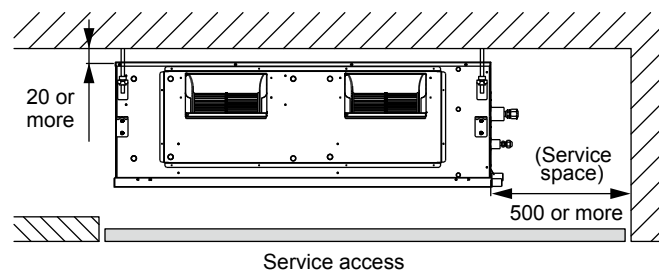
(Unit : mm)

●AR*G60LHTA

Installation by which service space is made on top of the unit (recommended).



Installation by which service is carried out from the bottom of the unit.

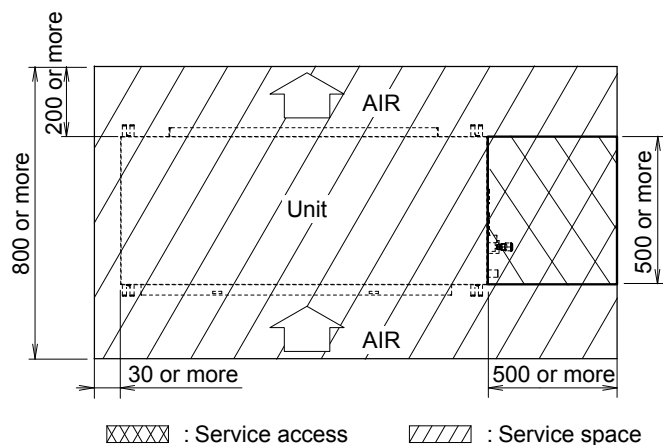


■ MAINTENANCE SPACE

Provide a maintenance space for inspection purposes as shown below.
Do not place any wiring or illumination in the service space, as they will impede service.

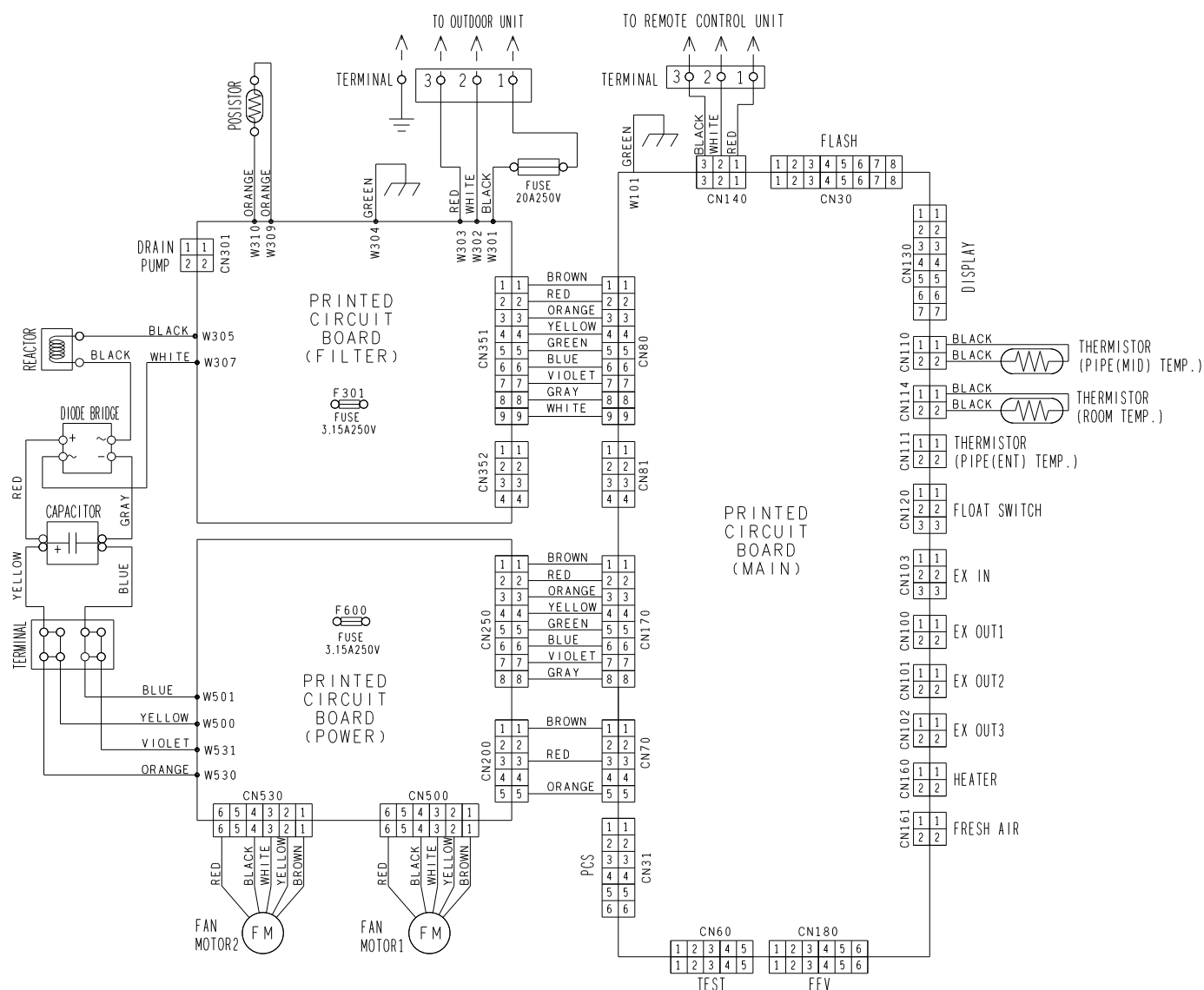
(Unit : mm)

●AR*G60LHTA



5. WIRING DIAGRAMS

■ MODEL: AR*G60LHTA



6. CAPACITY TABLE

6-1. COOLING CAPACITY

This table is created using the rated capacity.

■ MODEL: AR*G60LHTA

AFR	59.2
-----	------

		Indoor temperature																							
		18			21			23			25			27			29			32					
		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			
	-15	13.04	12.32	2.77	14.53	12.40	2.82	15.02	13.48	2.83	16.01	13.52	2.86	16.51	14.60	2.87	17.50	14.54	2.90	18.49	15.49	2.93			
	-10	13.03	12.31	2.78	14.51	12.38	2.82	15.01	13.46	2.83	16.00	13.51	2.86	16.49	14.59	2.88	17.48	14.53	2.90	18.47	15.48	2.93			
	0	13.03	12.33	2.79	14.51	12.40	2.84	15.00	13.48	2.85	15.99	13.53	2.88	16.49	14.61	2.89	17.48	14.55	2.92	18.47	15.50	2.95			
	5	12.92	12.35	3.17	14.39	12.43	3.22	14.88	13.51	3.23	15.86	13.55	3.27	16.35	14.64	3.28	17.33	14.58	3.32	18.32	15.53	3.35			
	10	12.68	12.19	3.31	14.13	12.27	3.37	14.61	13.33	3.38	15.57	13.38	3.42	16.05	14.45	3.44	17.02	14.39	3.47	17.98	15.33	3.50			
	15	12.45	12.00	3.56	13.86	12.08	3.62	14.34	13.13	3.63	15.28	13.17	3.67	15.76	14.22	3.69	16.70	14.17	3.73	17.65	15.09	3.76			
	20	12.32	12.00	3.34	13.72	12.08	3.39	14.19	13.13	3.41	15.12	13.17	3.44	15.59	14.22	3.46	16.53	14.17	3.49	17.46	15.09	3.53			
	25	12.21	11.85	3.89	13.60	11.92	3.95	14.06	12.96	3.98	14.99	13.01	4.02	15.45	14.05	4.04	16.38	13.99	4.08	17.31	14.90	4.12			
	30	11.69	11.62	4.46	13.03	11.74	4.53	13.47	12.77	4.56	14.36	12.81	4.60	14.80	13.83	4.63	15.69	13.78	4.67	16.58	14.68	4.72			
	35	11.85	11.60	4.54	13.20	11.87	4.61	13.65	12.90	4.63	14.55	12.94	4.68	15.00	13.98	4.70	15.90	13.92	4.75	16.80	14.83	4.79			
	40	11.00	10.99	5.23	12.26	11.25	5.32	12.68	12.23	5.34	13.51	12.27	5.40	13.93	13.25	5.42	14.77	13.19	5.48	15.60	14.05	5.53			
	46	7.14	7.14	3.66	7.95	7.67	3.71	8.22	8.13	3.73	8.76	8.36	3.77	9.03	9.03	3.79	9.57	9.00	3.83	10.12	9.58	3.87			

AFR: Air Flow Rate (m³/min)
 TC : Total Capacity (kW)
 SHC: Sensible Heat Capacity (kW)
 IP : Input Power (kW)

6-2. HEATING CAPACITY

This table is created using the rated capacity.

MODEL: AR*G60LHTA

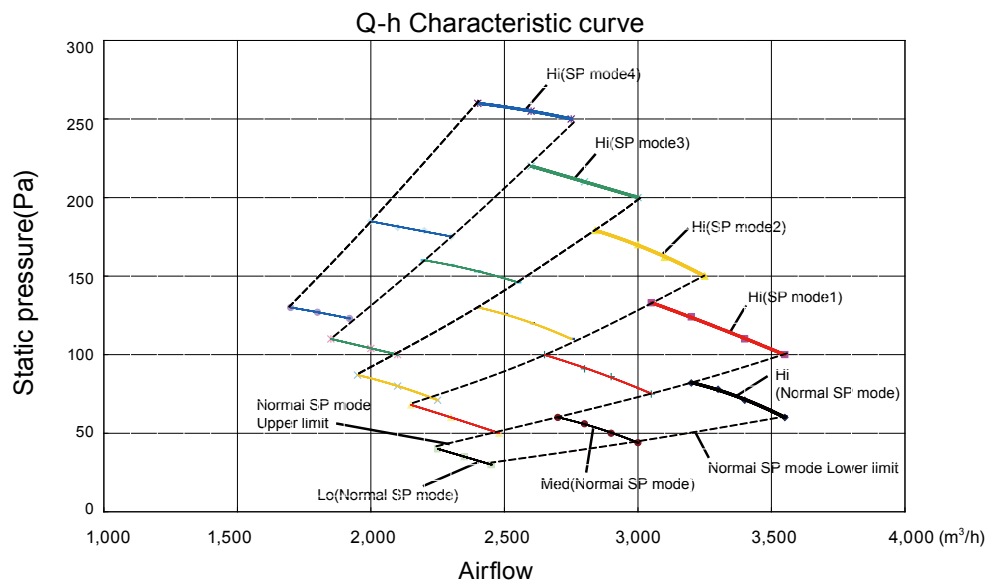
AFR	59.2
-----	------

			Indoor temperature									
		°CDB	16		18		20		22		24	
Outdoor temperature	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP	TC	IP
	-15	-16	13.17	5.18	12.86	5.29	12.55	5.40	12.23	5.51	11.92	5.62
	-10	-11	14.64	5.18	14.29	5.29	13.95	5.40	13.60	5.51	13.25	5.62
	-5	-7	16.23	5.18	15.85	5.29	15.46	5.40	15.07	5.51	14.69	5.62
	0	-2	17.48	5.19	17.06	5.30	16.64	5.41	16.23	5.52	15.81	5.63
	5	3	18.84	5.20	18.39	5.31	17.94	5.42	17.49	5.53	17.05	5.64
	7	6	18.90	4.94	18.45	5.05	18.00	5.15	17.55	5.25	17.10	5.36
	10	8	20.74	4.62	20.25	4.71	19.76	4.81	19.26	4.91	18.77	5.00
	15	10	22.28	4.58	21.75	4.68	21.22	4.77	20.69	4.87	20.16	4.94
	20	15	21.63	4.51	21.12	4.60	20.60	4.69	20.09	4.79	19.57	4.86
	24	18	19.91	3.75	19.43	3.83	18.96	3.91	18.48	3.99	18.01	4.05

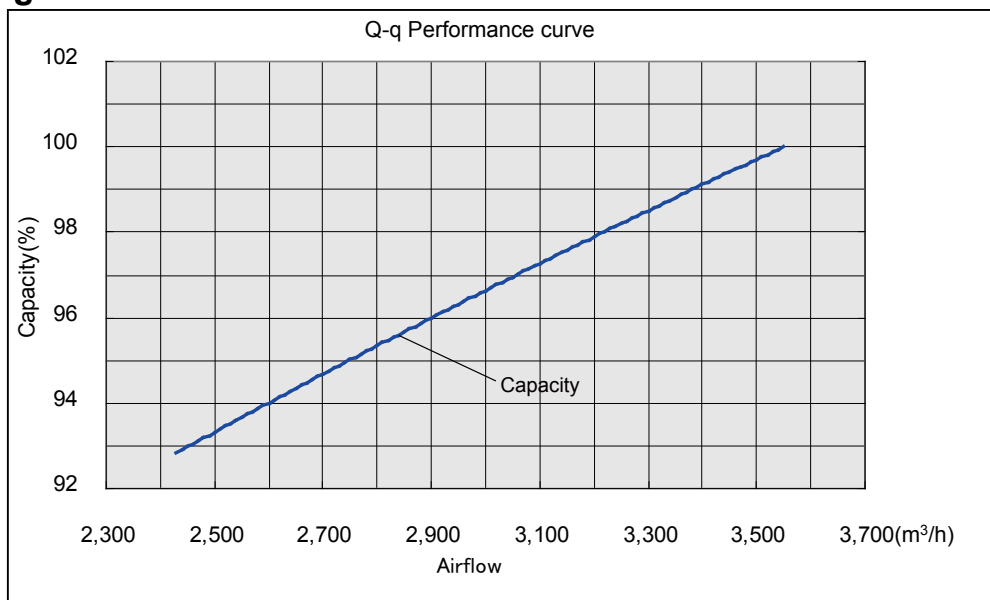
AFR: Air Flow Rate (m³/min)
TC : Total Capacity (kW)
IP : Input Power (kW)

7. FAN PERFORMANCE AND CAPACITY

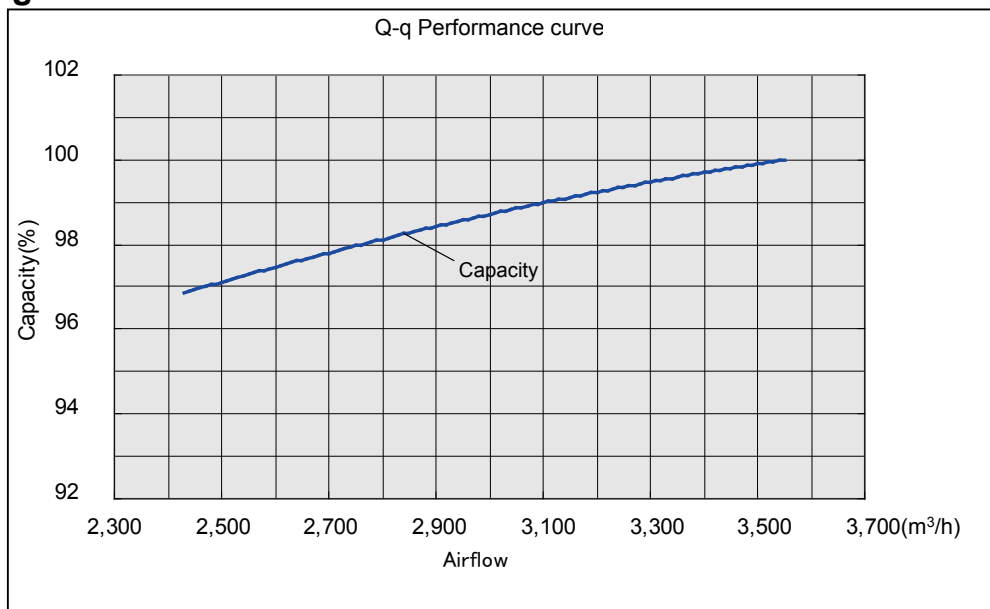
■ MODEL: AR*G60LHTA



● Cooling



● Heating



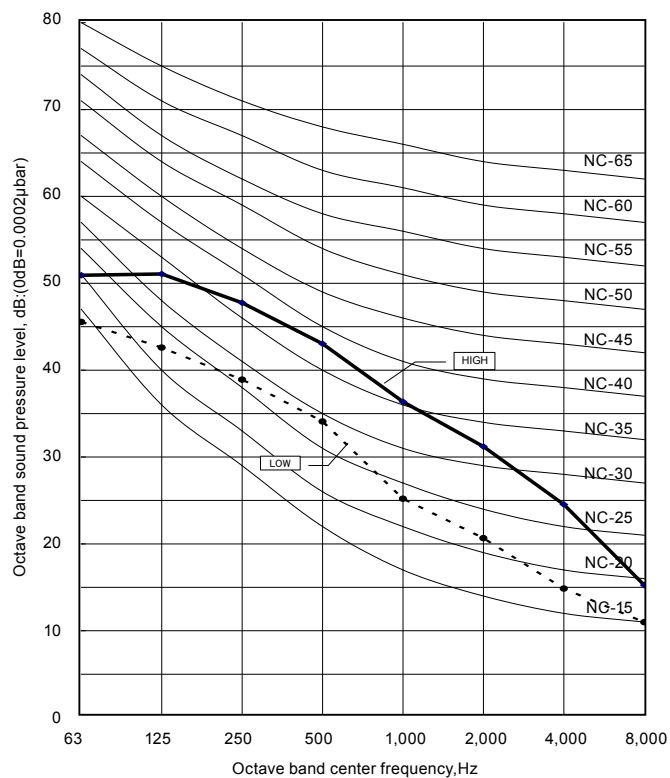
8. OPERATION NOISE

8-1. NOISE LEVEL CURVE

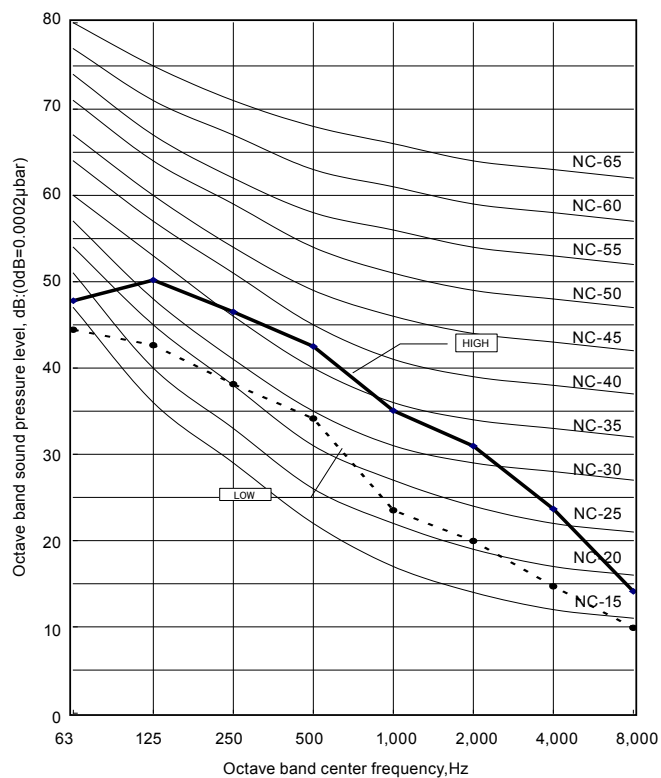
■ MODEL: AR*G60LHTA

Condition
Static pressure : 60Pa
Static pressure mode : Normal

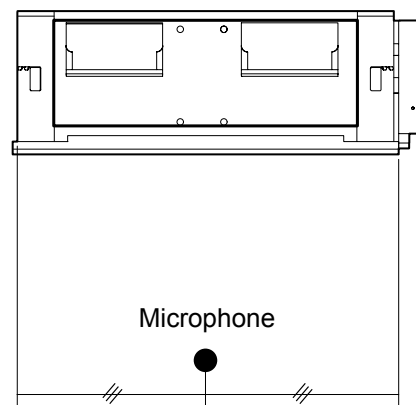
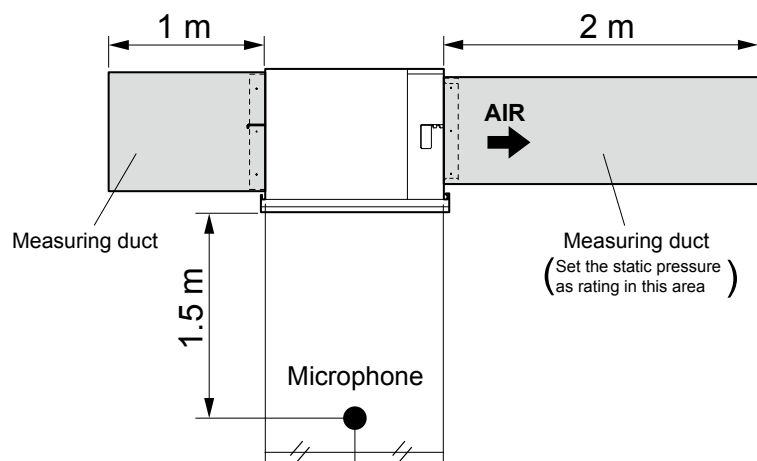
● Cooling



● Heating



8-2. SOUND LEVEL CHECK POINT



9. ELECTRIC CHARACTERISTICS

Model name			AR*G60LHTA
Power supply	Voltage	V	230~
	Frequency	Hz	50
Max Operating Current (Indoor unit)		A	3.5
Wiring spec. (Indoor unit to outdoor unit)	Connection cable	mm ²	1.5 (Min.)
	Limited wiring length	m	75

- Note: Wiring specification
1. Selected sample
(Selected based on Japan Electrotechnical Standard 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.
 3. If the transmission wire is longer than 50m, use the bigger conductor size.

10. SAFETY DEVICES

	Protection form	Model
		AR*G60LHTA
Circuit protection	Current fuse (PCB)	250V 3.15A
Fan motor protection	Thermal protection program	115±15°C OFF 70°C ON

11. EXTERNAL INPUT & OUTPUT

INPUT	OUTPUT	Connector	REMARKS
CONTROL INPUT	—	CN103	See external input/output settings for details.
—	OPERATION STATUS	CN100	
—	ERROR STATUS	CN101	
—	FRESH AIR CONTROL	CN161	
—	AUXILIARY HEATER	CN160	

11-1. EXTERNAL INPUT

CONTROL INPUT (Operation/Stop or Forced stop)

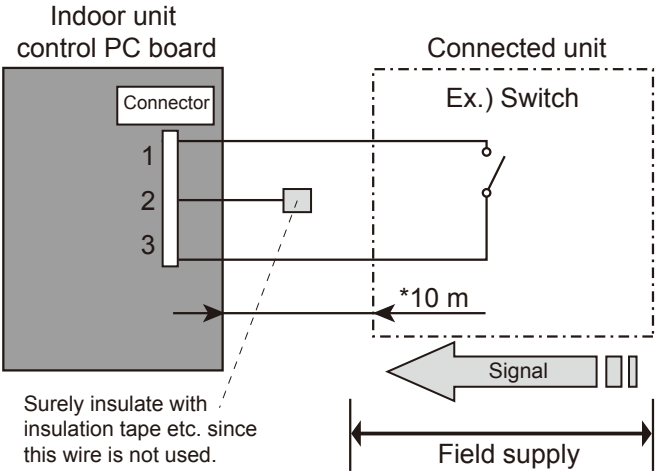
The air conditioner can be remotely operated by means of the following on-site work.

"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.

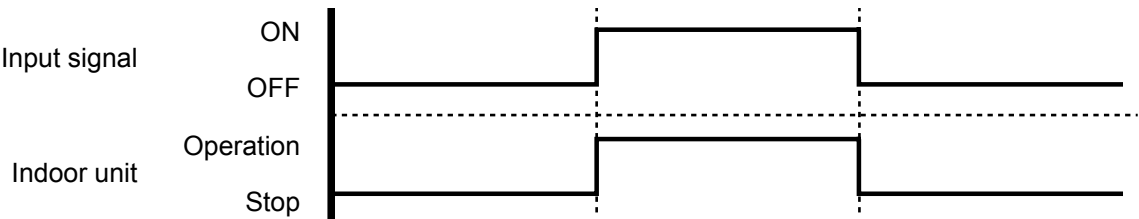
Unit operation	Initial setting after power is ON	Starting mode other than initial setting
Operation mode	Auto changeover	Mode at previous operation
Set temperature	24°C	Temperature at previous operation
Air flow mode	AUTO	Mode at previous operation

Circuit diagram example

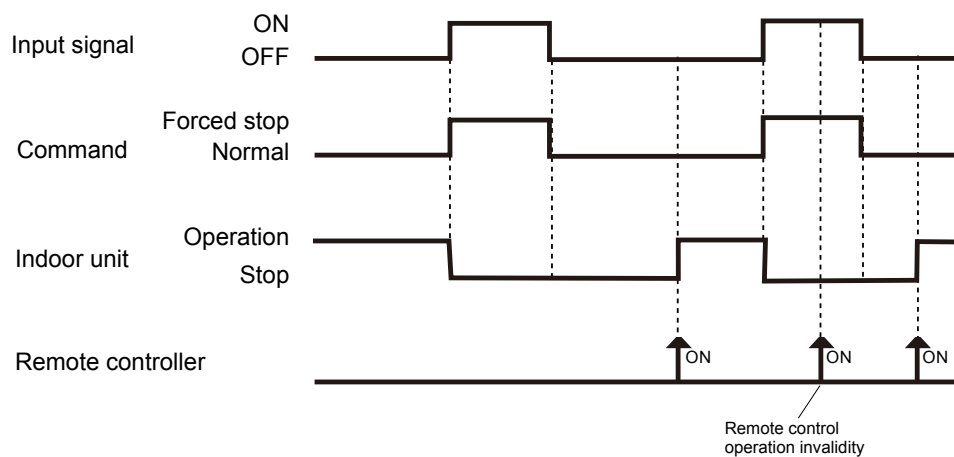


* Make the distance from the PC board to the connected unit within 10 m.
Contact capacity : 5VDC or more, 15mA or more.
Please use non-polar relays and switches.

• When function setting is in "Operation/Stop" mode



- When function setting is in "Forced stop" mode



● Parts (Optional)

Model name
UTD-ECS5A

Wire (External input)

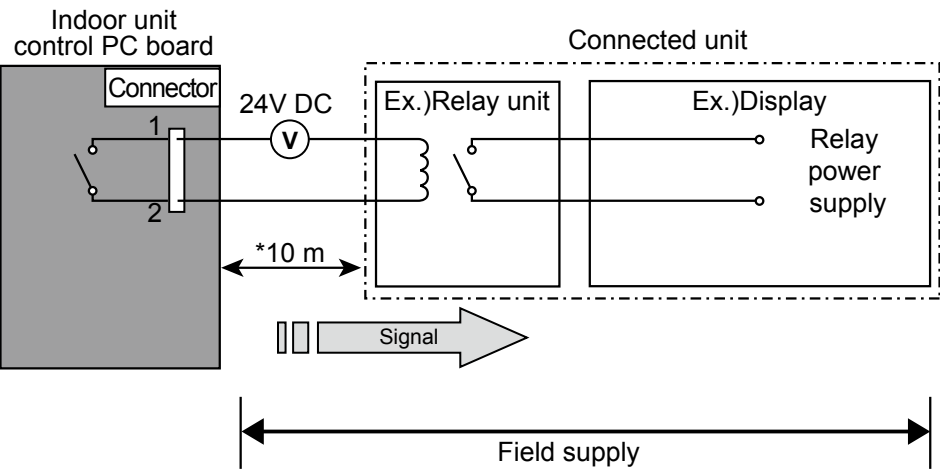


11-2. EXTERNAL OUTPUT

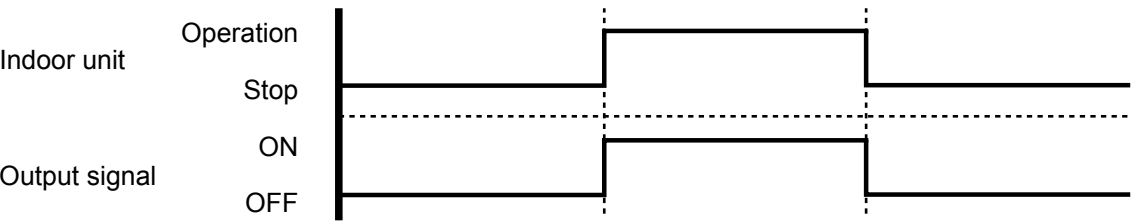
■ OPERATION STATUS OUTPUT

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)

Model name
UTD-ECS5A

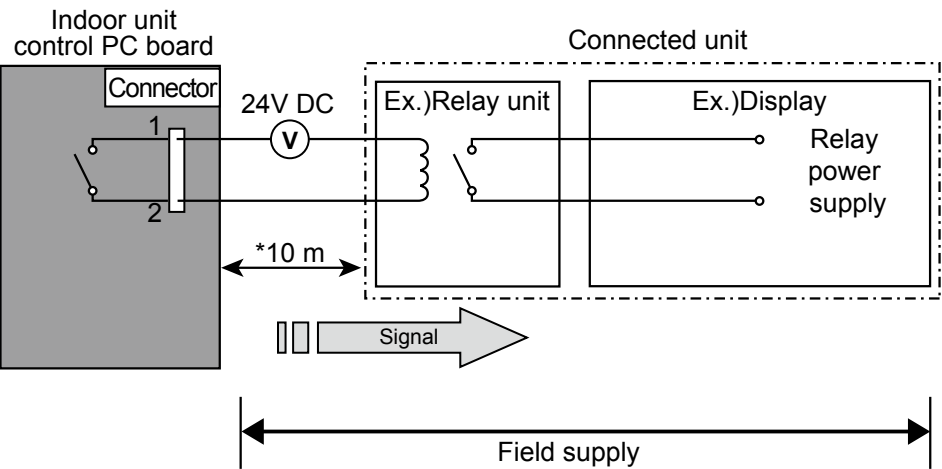
Wire (External output)



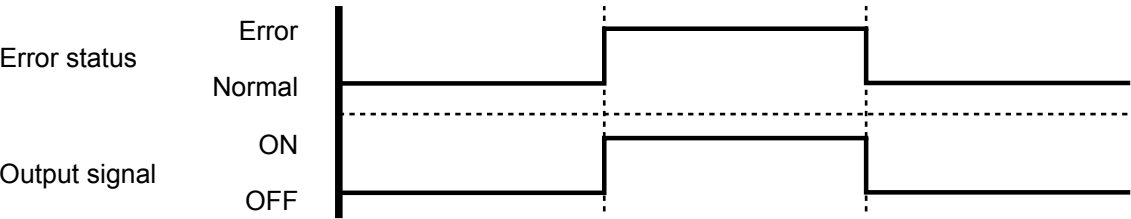
■ ERROR STATUS OUTPUT

An air conditioner condition normal/error 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)

Model name
UTD-ECS5A

Wire (External output)

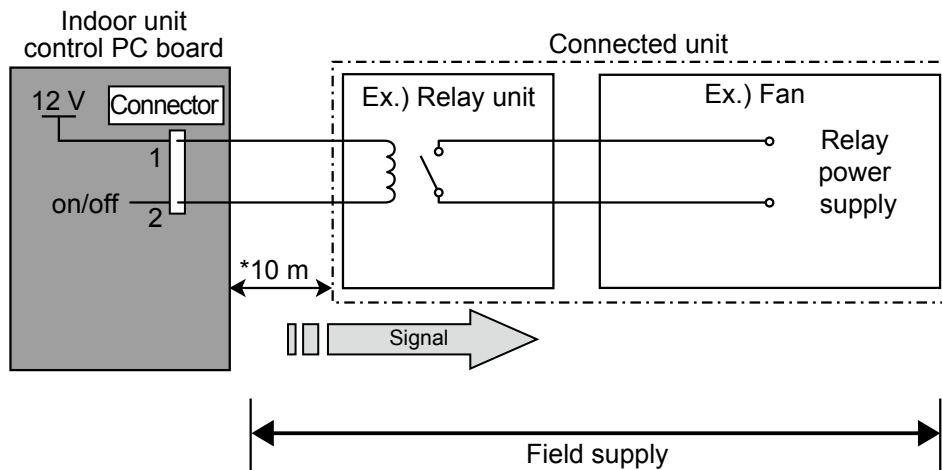


■ FRESH AIR CONTROL OUTPUT

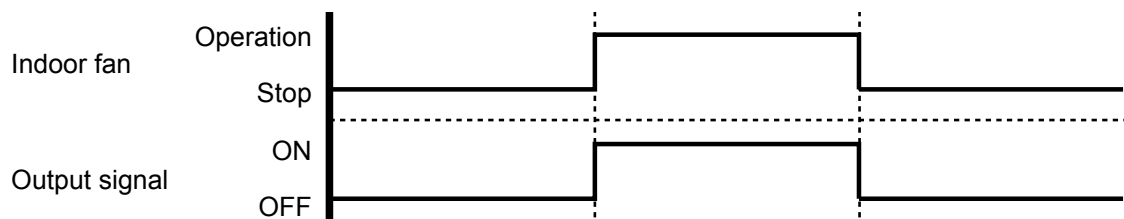
A signal linked to air conditioner indoor fan ON can be output.

* However, signal becomes OFF during cold air prevention control operation.

● Circuit diagram example



* Make the distance from the PC board to the connected unit within 10m.
Relay spec. : Rated 12VDC, 50mA or less.



● Parts (Optional)

Model name
UTD-ECS5A

Wire (Fresh air output)



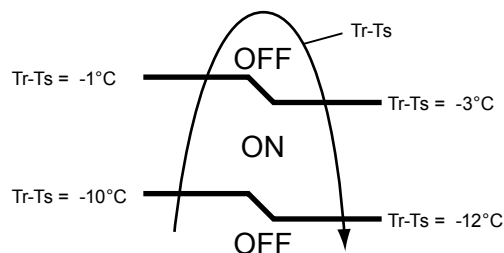
AUXILIARY HEATER OUTPUT

A signal is outputted from Connector when indoor fan and compressor is turned on under heating operation.

*Signal output performance specifications are as shown on the right

Ex. When Set Temperature(T_s) is 22°C ;

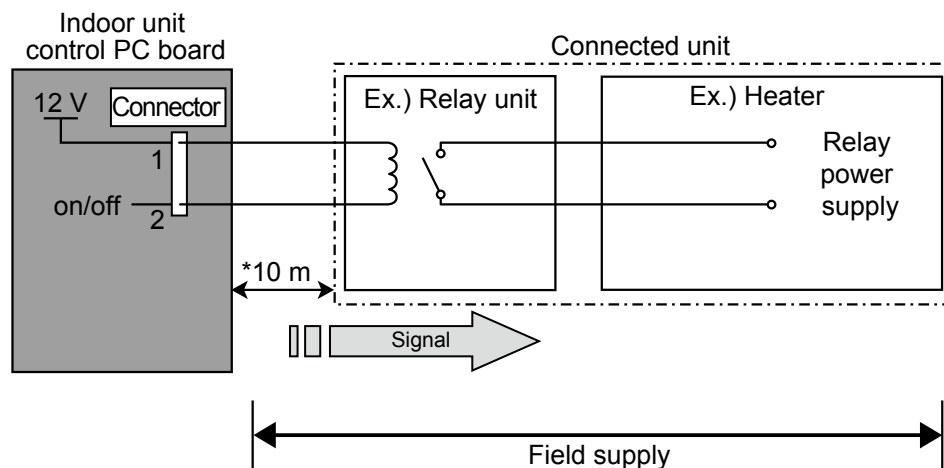
- and Room Temperature(T_r) increase above 12°C , signal output is on.
- and Room Temperature(T_r) increase above 21°C , signal output is off.
- and Room Temperature(T_r) decrease below 19°C , signal output is on.
- and Room Temperature(T_r) decrease below 10°C , signal output is off.



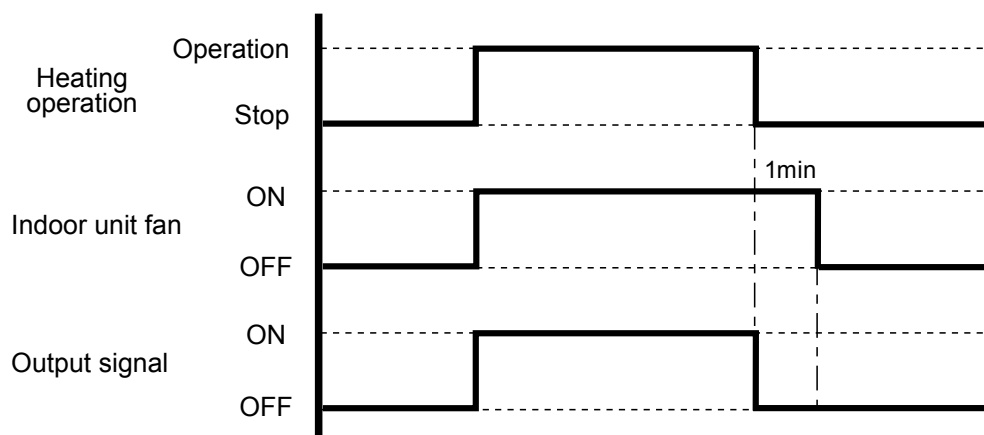
Jumper wire (Indoor Unit)

This is used to continue indoor unit fan operation for 1 minute after thermo OFF in heating mode. 1 minute delay control set by cutting jumper wire on PCB.

Circuit diagram example

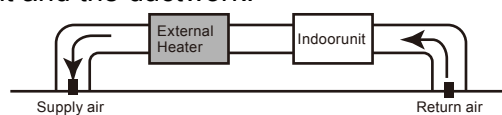


* Make the distance from the PC board to the connected unit within 10m.
Relay spec. : Rated 12VDC, 50mA or less.



⚠ CAUTION

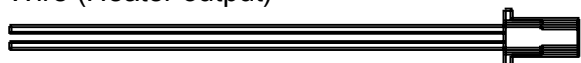
Please place an external a heater between the indoor unit and the ductwork.
Please be sure to use delay control of the fan.



● **Parts (Optional)**

Model name
UTD-ECS5A

Wire (Heater output)



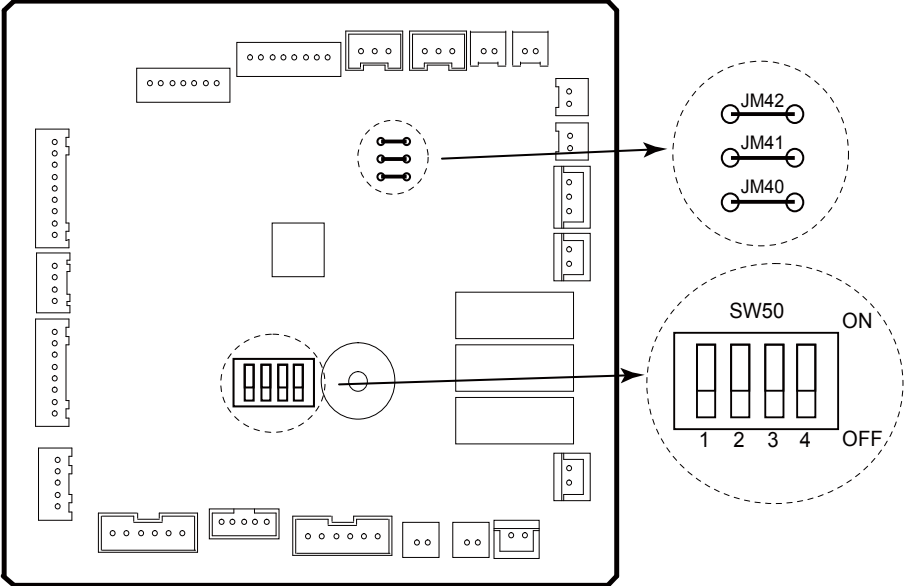
12. FUNCTION SETTINGS

12-1. INDOOR UNIT

INDOOR UNIT		
DIP-SW50	1	Remote controller address setting
	2	
	3	
	4	
Jumper Wire	JM40	Setting forbidden
	JM41	
	JM42	Fan delay setting

■ SWITCH POSITION

MAIN PCB



■ DIP-SW SETTING

● Remote controller address setting (SW50)

A number of indoor units can be operated at the same time using a single remote controller.
Set the unit number of each indoor unit using the DIP switches on the indoor unit circuit board.
(See the following table.)

The DIP switches are normally set to make the unit number 00.

(◆ . . . Factory setting)

Remote controller address	DIP switch No.			
	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

■ JUMPER WIRE SETTING

● JM40, 41 setting forbidden

● Fan delay setting (JM42)

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

(◆ . . . Factory setting)

JM 42	JM state
◆ Connect	Invalid
Disconnect	Valid

12-2. 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 or Setting Value.
- Settings will not be changed if invalid numbers or setting values are selected.

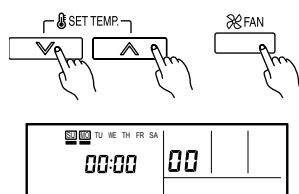
■ PREPARATION

- 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.

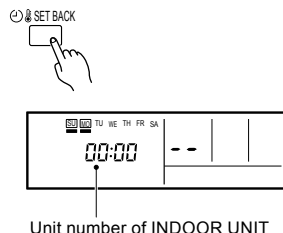
■ FUNCTION SETTING METHOD (for Wired remote controller)

● Setting method

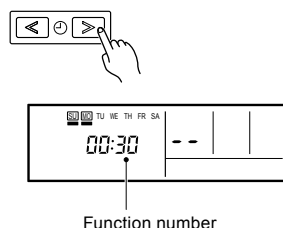
(1) Press the SET TEMP. buttons (▼) (▲) and FAN button simultaneously for more than 5 seconds to enter the function setting mode.



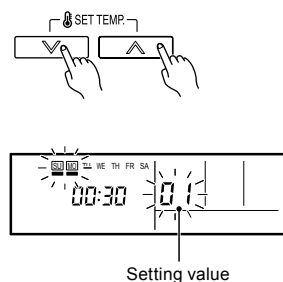
(2) Press the SET BACK button to select the indoor unit number.



3) Press the Set time buttons to select the function number.



(4) Press the SET TEMP. buttons (▼) (▲) to select the setting value. The display flashes during setting value selection.



- (5) Press the TIMER SET button to confirm the setting. Press the TIMER SET button for a few seconds until the setting value stops flashing. If the setting value display changes or if “-” is displayed when the flashing stops, the setting value has not been set correctly. (An invalid setting value may have been selected for the indoor unit.)
- (6) Repeat steps 2 to 5 to perform additional settings. Press the SET TEMP. buttons (▼) (▲) and FAN simultaneously again for more than 5 seconds to cancel the function setting mode. In addition, the function setting mode will be automatically canceled after 1 minute if no operation is performed.
- (7) 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 it on again. The Function Setting will not become active unless the power is turned off then on again.

■ CONTENTS OF FUNCTION SETTING

- Follow the instructions in the Local Setup Procedure, which is supplied with the remote control, in accordance with the installed condition.
After the power is turned on, perform the Function Setting on the remote control.
- The settings may be selected between the following two: Function Number or Setting Value.
- Settings will not be changed if invalid numbers or setting values are selected.

1)	Filter sign
2)	Static pressure
3)	Cooler room temperature correction
4)	Heater room temperature correction
5)	Auto restart
6)	Indoor room temperature sensor switching function
7)	Cool air prevention
8)	External input control
9)	Room temperature control switching

1) Filter sign

The indoor unit has a sign to inform the user that it is time to clean the filter. Select the time setting for the filter sign display interval in the table below according to the amount of dust or debris in the room. If you do not wish the filter sign to be displayed, select the setting value for “No indication”.

(◆ . . . Factory setting)

Setting description	Function number	Setting value
Standard (2500 hours)	11	00
Long interval (5000 hours)		01
Short interval (1250 hours)		02
No indication		03

2) Static pressure

Select appropriate static pressure according to the installation conditions.

(◆ . . . Factory setting)

Setting description	Function number	Setting value
Normal (60Pa)	21	00
Static pressure 1 (100Pa)		02
Static pressure 2 (150Pa)		03
Static pressure 3 (200Pa)		04
Static pressure 4 (250Pa)		05

3) Cooler room temperature correction

Depending on the installed environment, the room temperature sensor may require correction. The settings may be selected as shown in the table below.

(◆...Factory setting)

	Setting description	Function number	Setting value
◆	Standard (No correction)	30	00
	Lower control (-1.0°C)		01
	Slightly lower control (-0.5°C)		02
	Slightly warmer control (+0.5°C)		03
	Warmer control (+1.0°C)		04

4) Heater room temperature correction

Depending on the installed environment, the room temperature sensor may require correction. The settings may be changed as shown in the table below.

(◆...Factory setting)

	Setting description	Function number	Setting value
◆	Standard (No correction)	31	00
	Lower control (-1.0°C)		01
	Slightly lower control (-0.5°C)		02
	Slightly warmer control (+0.5°C)		03
	Warmer control (+1.0°C)		04

5) Auto restart

Enable or disable automatic system restart after a power outage.

(◆...Factory setting)

	Setting description	Function number	Setting value
◆	Yes	40	00
	No		01

* Auto restart is an emergency function such as for power failure etc.
Do not start and stop the indoor unit by this function in normal operation.
Be sure to operate by the control unit, or external input device.

6) Indoor room temperature sensor switching function

(Only for Wired remote controller)

The following settings are needed when use the control by Wired remote controller temperature sensor.

(◆...Factory setting)

	Setting description	Function number	Setting value
◆	No	42	00
	Yes		01

* If setting value is "00":
Room temperature is controlled by the indoor unit temperature sensor.
* If setting value is "01":
Room temperature is controlled by either indoor unit temperature sensor or remote controller unit sensor.

7) Cool air prevention

This setting is used to set the fan speed when the compressor stops once the room temperature has reached the set temperature during heating operation.

(◆...Factory setting)

	Setting description	Function number	Setting value
◆	Super low	43	00
	Follow the setting on the remote controller (corresponding to ventilation)		01

8) 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 forbidden)		01
	Forced stop mode		02

9) Room temperature control switching

This setting is used to set the room temperature control method when the wired remote controller is selected by the Indoor Room Temperature Sensor Switching Function.

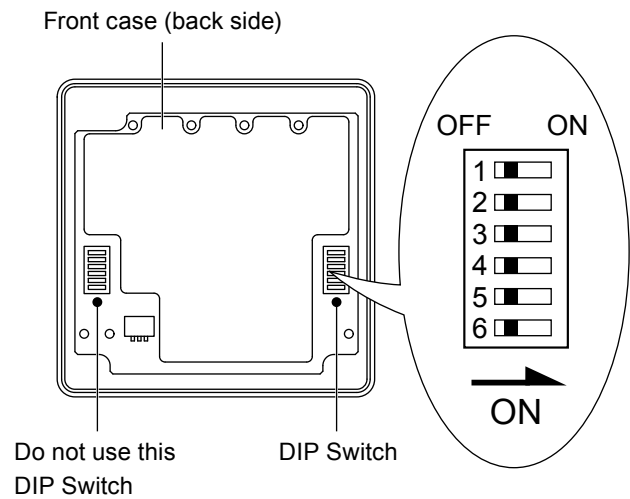
(◆ . . . Factory setting)

◆	Setting description	Function number	Setting value
	Control by the sensors of both the indoor unit and the wired remote controller.	48	00
	Control only by the sensor of the wired remote controller		01

12-3. WIRED REMOTE CONTROLLER

DIP SW	1	Can not be used. (Do not change)
	2	Dual remote controller setting
	3	Can not be used. (Do not change)
	4	Can not be used. (Do not change)
	5	Can not be used. (Do not change)
	6	Memory backup setting

SWITCH POSITION



DIP SWITCH SETTING

Dual remote controller setting

Set the remote controller DIP switch No.2 according to the following table.

(◆...Factory setting)

Number of remote controller	Primary unit	Secondary unit
	DIP-SW No.2	DIP-SW No.2
◆ 1 (Normal)	OFF	—
2 (Dual)	OFF	ON

Memory backup setting

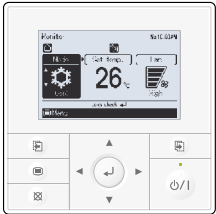
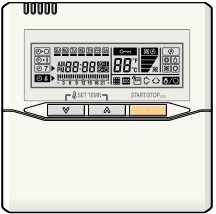
Set to ON to use batteries for the memory backup. If batteries are not used, all of the settings stored in memory will be deleted if there is a power failure.

(◆...Factory setting)

DIP-SW No.6	Memory backup
◆ OFF	Invalidity
ON	Validity

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.
	Wired remote controller	UTY-RNN*M	The room temperature can be controlled by being detected the temperature accurately with built-in thermo sensor.
	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.

13-2. OTHERS

Exterior	Parts name	Model No.	Summary
	Remote sensor	UTY-XSZX	New amenity space can be offered by installing the Remote sensor in the remote controller.
 (x 1)  (x 2)  (x 1)  (x 2)	External control set	UTD-ECS5A	Use to connect with various peripheral devices and air conditioner PC board. (Set of 6)

2. OUTDOOR UNIT

**SINGLE TYPE :
AO*G60LATT**

CONTENTS

2. OUTDOOR UNIT

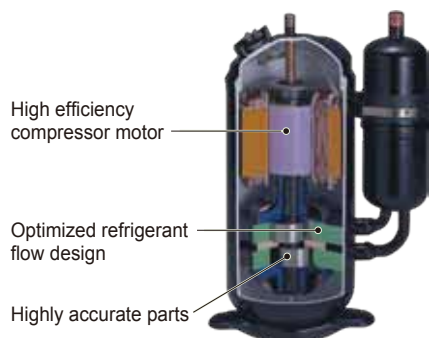
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1. FEATURES

■ FEATURES

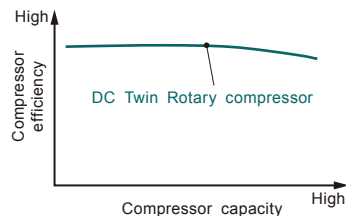
● Energy saving technology (ALL DC)

DC twin rotary compressor



DC twin rotary compressor

Efficiency in all load regions is good. Especially good performance from low to medium at normal operation.



DC fan motor



Miniaturized, low noise, high efficiency, multi-stage DC fan motor is mounted.

● Peak cut operation

Peak cut mode (Optional parts: UTY-XWZXZ2)

Suppresses maximum capacity and performs energy-saving operation and can prevent breaker tripping.

This function performs operation by setting a peak current value and reducing the power consumption.

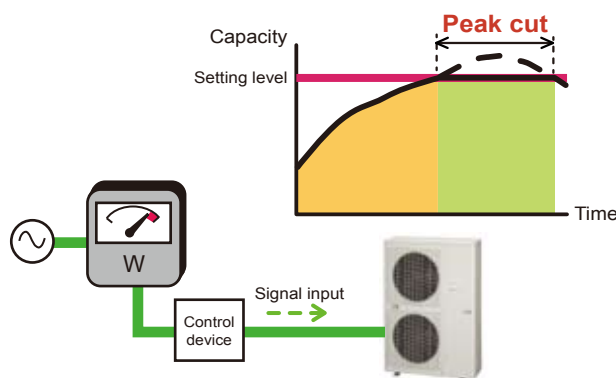
* Performance drops by reducing the power consumption preferentially.

Level 1 ... Performs operation which suppresses the power consumption to almost 0% by stopping the compressor.

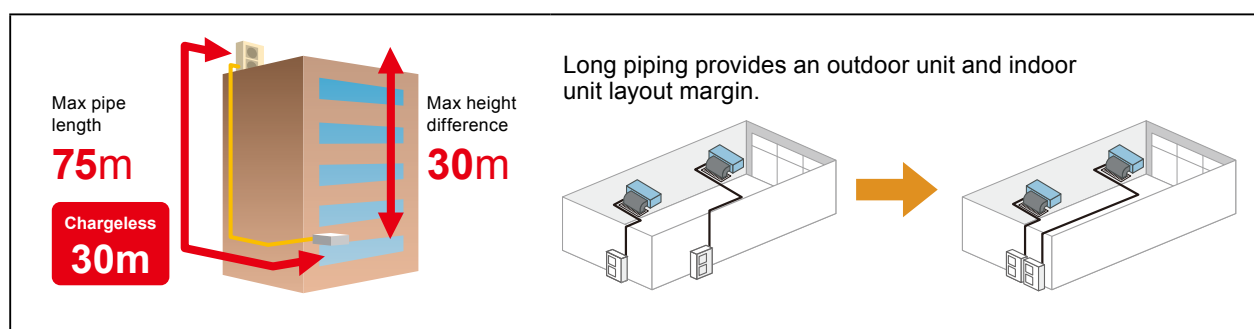
Level 2 ... Performs operation which suppresses the power consumption to 50% of the rated power consumption value.

Level 3 ... Performs operation which suppresses the power consumption to 75% of the rated power consumption value.

Level 4 ... Performs operation which suppresses the power consumption to the rated power consumption value (100%).



● High install ability long piping correspondence



● Space saving

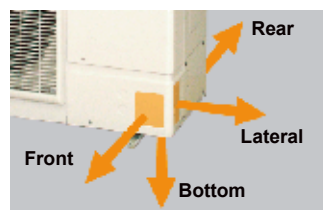
Compact size

High performance has been realized with a compact outdoor unit.
Due to the compact size of the outdoor unit, the installation space required has been reduced allowing for a wider selection on installation locations.



● 4-directions piping connection

Four directions piping connection is possible. The perfect route can be selected according to the installation.



● Low outdoor air temperature correspondence

Both cooling and heating operations can be performed when the outdoor air temperature is low.

Cooling

-15 °C

Heating

Dry-bulb -15 °C
Wet-bulb -20 °C

● External output (option)

Compressor status output

This output indicates the outdoor unit compressor status.

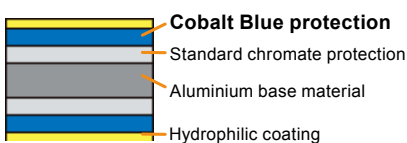
Error status output

This output indicates the outdoor unit and connected indoor unit's Normal / Error.

● Blue fin heat exchanger

Corrosion-resistance of the heat exchanger even in coastal areas has been improved by blue fin treatment of the outdoor unit heat exchanger.

Blue fin heat exchanger



● Service, maintenance

- "Error display" and "Operating information" can be explained by LED display.
- Pump down operation can be performed by one button when refrigerant recovery.



● Quiet operation

Low noise mode (Optional parts: UTY-XWZXZ2)

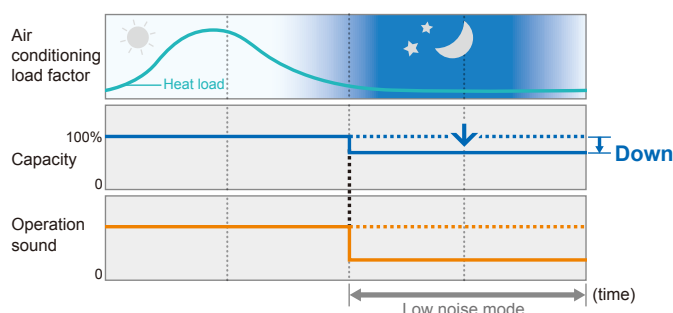
Suppresses operating sound.

This function suppresses the outdoor unit noise value to the following 2 level.

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

Level 1 ... Rated noise value -2dB

Level 2 ... Rated noise value -4dB



2. SPECIFICATIONS

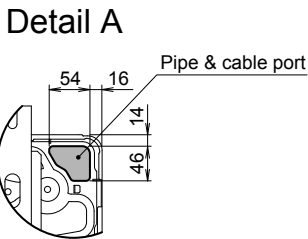
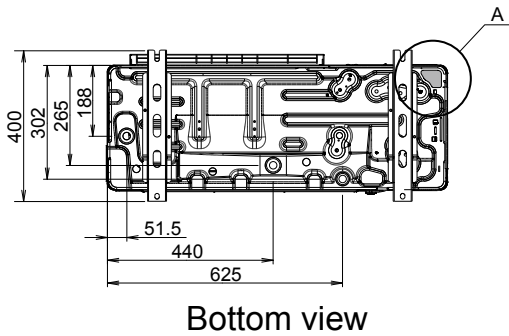
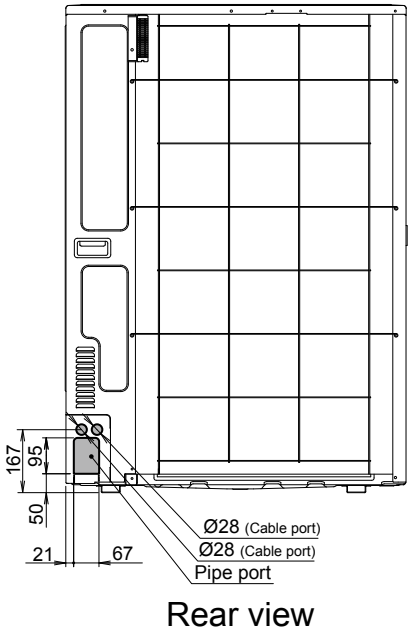
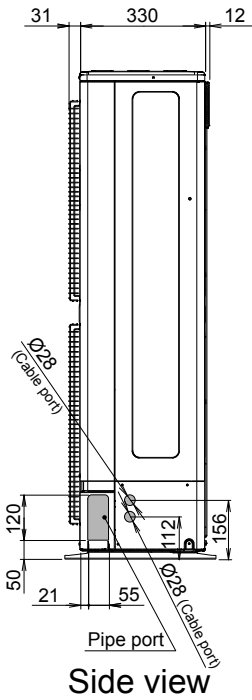
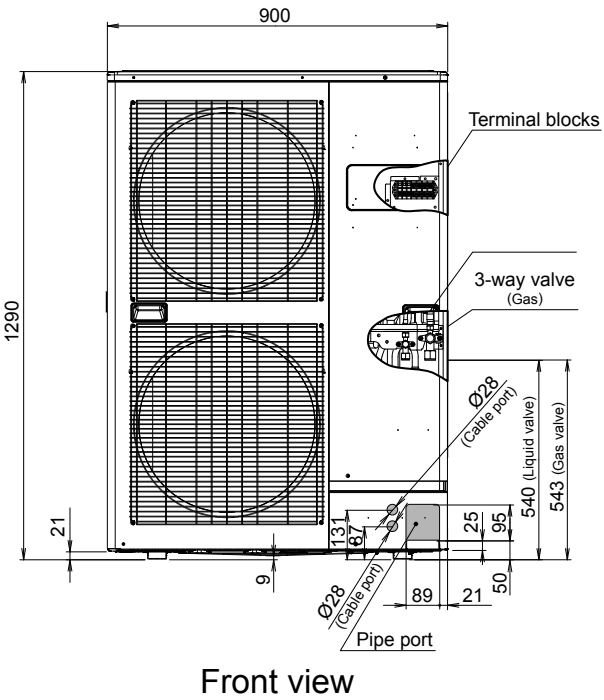
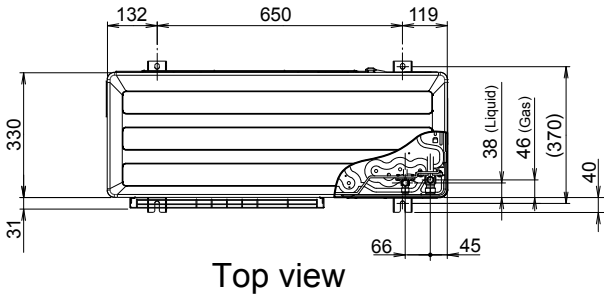
Type				INVERTER HEATPUMP		
Model name				AO*G60LATT		
Power source				3N~ 400V 50Hz		
Available voltage range				3N~ 342V - 457V 50Hz		
Starting current			A	7.6		
Fan	Airflow rate	Cooling	m³/h	6,900		
		Heating		7,300		
	Type × Q'ty		Propeller × 2			
	Motor output		W	104		
Sound pressure level		Cooling	dB (A)	56		
		Heating		58		
Heat exchanger type		Dimensions (H × W × D)		mm	1260 × 900 × 36.4	
		Fin pitch			1.30	
		Rows x Stages		2 × 60		
		Pipe type		Copper		
		Fin type	Type (Material)		Corrugate (Aluminium)	
			Surface treatment		Corrosion resistance (Blue fin)	
Compressor	Type × Q'ty		Twin Rotary × 1			
	Motor output		W	3750		
Refrigerant		Type		R410A		
		Charge	g	3450		
Refrigerant oil		Type		POE		
Enclosure		Material		Steel sheet		
		Colour		BEIGE (Approximate colour of MUNSELL 10YR 7.5 / 1.0)		
Dimensions (H × W × D)	Net		mm	1290 × 900 × 330		
	Gross			1430 × 1050 × 445		
Weight	Net		kg	104		
	Gross			113		
Connection pipe	Size (Standard)	Liquid	mm	Ø 9.52 (Ø 3/8 in.)		
		Gas		Ø 15.88 (Ø 5/8 in.)		
	Method		Flare			
	Pre-charge length		m	30		
	Max. length			75		
	Max. height difference			30		
Operation range		Cooling	°C	-15 to 46		
		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 : 7.5 m, Height difference : 0 m.(Outdoor unit - Indoor unit)
 The protective function may work when using it outside the temperature range mentioned above.

3. DIMENSIONS

■ MODEL: AO*G60LATT

(Unit : mm)



OUTDOOR UNIT
AO*G60LATT

OUTDOOR UNIT
AO*G60LATT

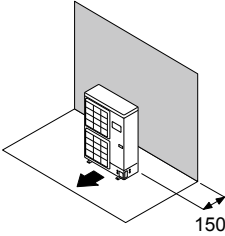
4. INSTALLATION PLACE

4-1. SINGLE OUTDOOR UNIT INSTALLATION

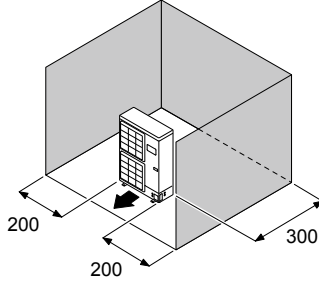
■ WHEN THE UPWARD AREA IS OPEN

(Unit : mm)

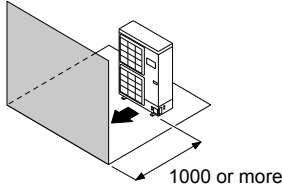
Obstacles at rear only



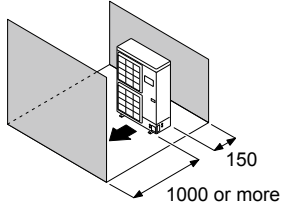
Obstacles at rear and sides only



Obstacles at front only



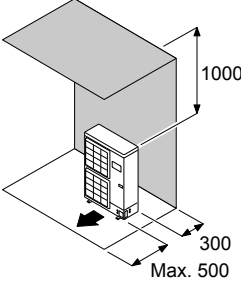
Obstacles at front and rear only



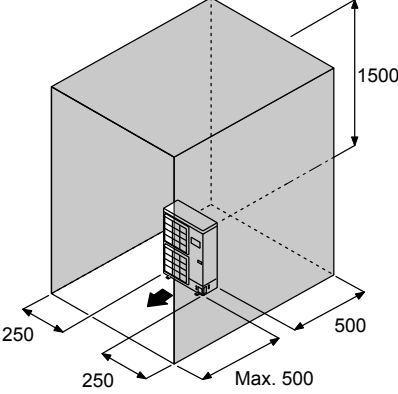
■ WHEN AN OBSTRUCTION IS PRESENT ALSO IN THE UPWARD AREA

(Unit : mm)

Obstacles at rear and above only



Obstacles at rear, sides, and above only

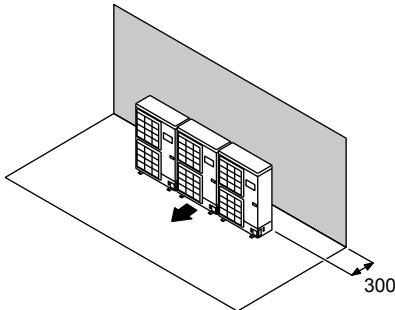


4-2. MULTIPLE OUTDOOR UNIT INSTALLATION

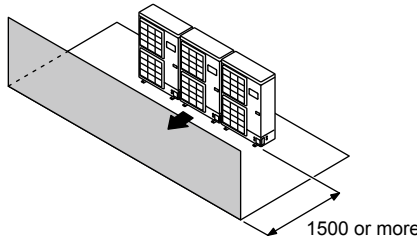
■ WHEN THE UPWARD AREA IS OPEN

(Unit : mm)

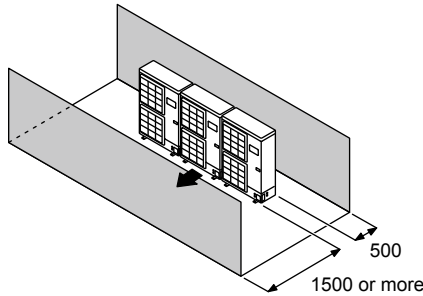
Obstacles at rear only



Obstacles at front only



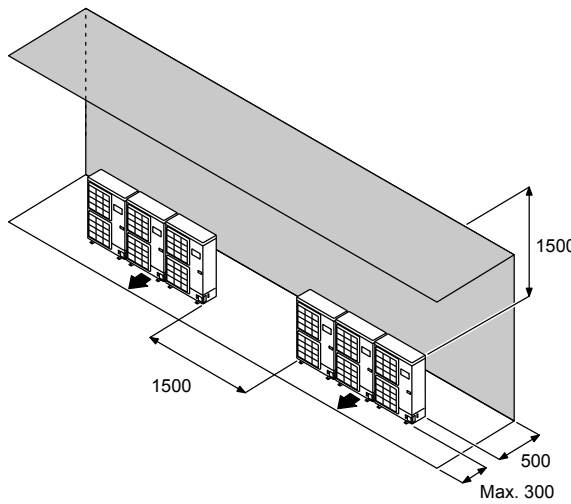
Obstacles at front and rear only



■ WHEN AN OBSTRUCTION IS PRESENT ALSO IN THE UPWARD AREA

(Unit : mm)

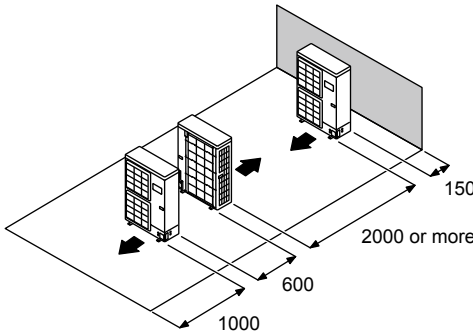
Obstacles at rear and above only



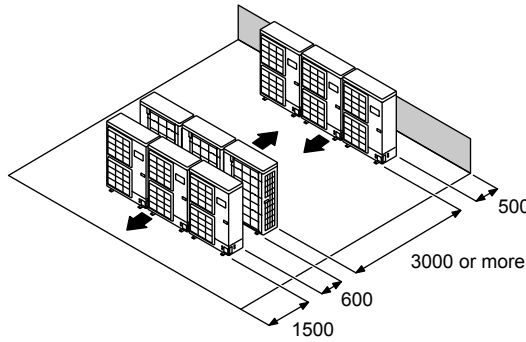
4-3. OUTDOOR UNIT INSTALLATION IN MULTI ROW

(Unit : mm)

Single parallel unit arrangement

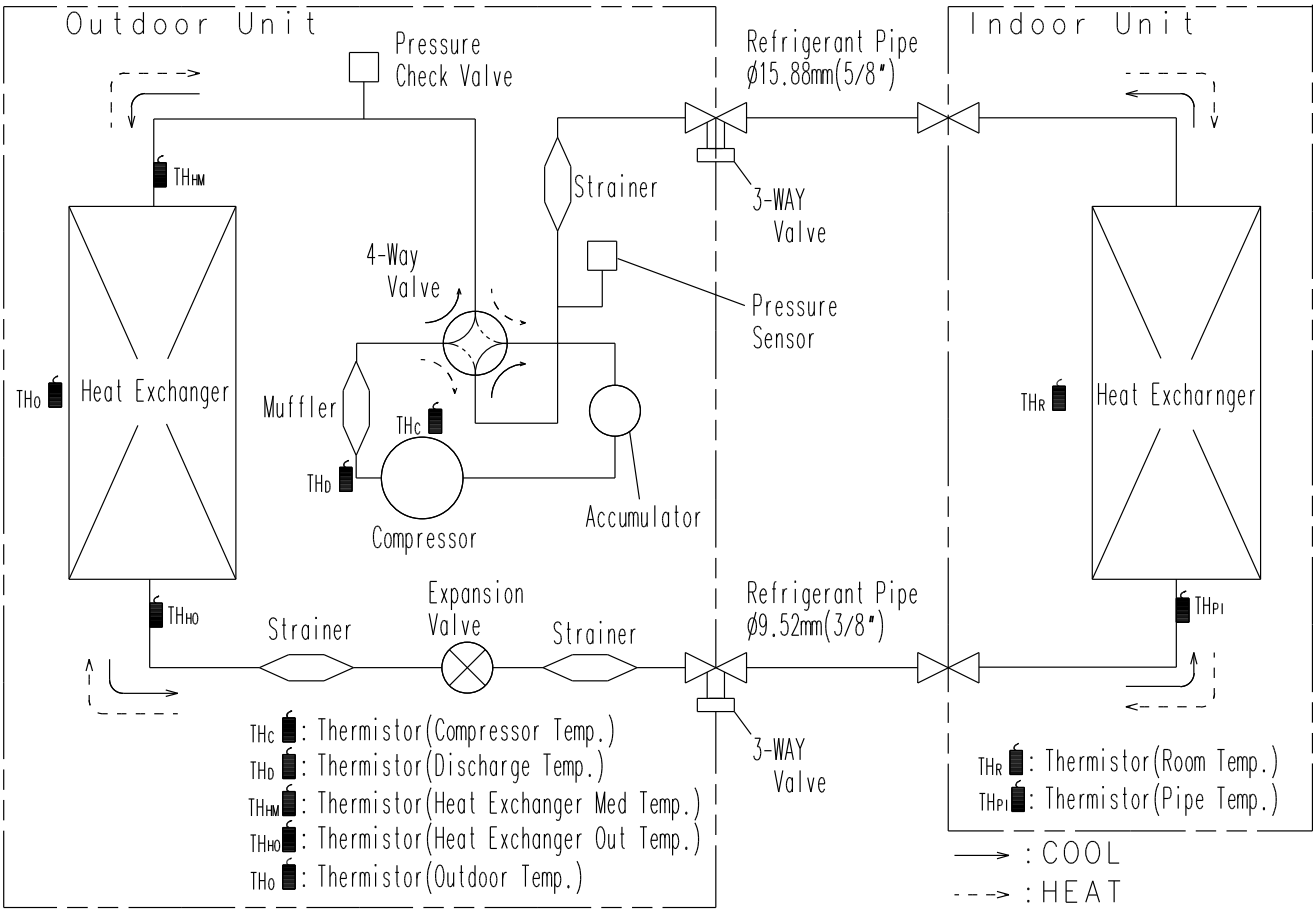


Multiple parallel unit arrangement



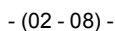
5. REFRIGERANT CIRCUIT

■ MODEL: AO*G60LATT



■ **MODEL: AO*G60LATT**

**OUTDOOR UNIT
AO*G60LATT**



7. CAPACITY COMPENSATION RATE FOR PIPE LENGTH AND HEIGHT DIFFERENCE

■ MODEL: AO*G60LATT

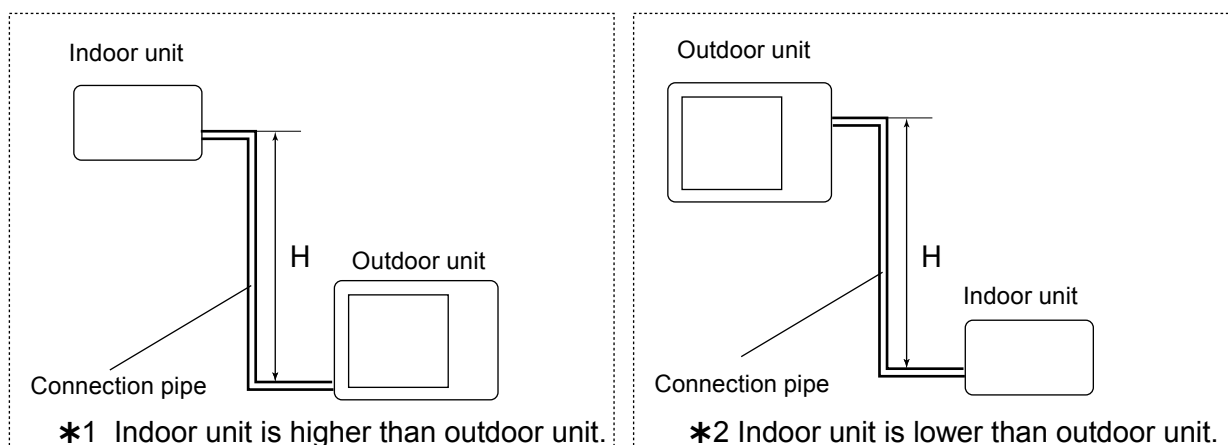
OUTDOOR UNIT
AO*G60LATT

COOLING			Pipe length (m)								
			5	7.5	10	20	30	40	50	60	75
Height difference H (m)	*1 Indoor unit is higher than outdoor unit.	30	-	-	-	-	0.871	0.837	0.803	0.768	0.717
		20	-	-	-	0.921	0.886	0.851	0.816	0.781	0.729
		10	-	-	0.971	0.936	0.901	0.865	0.830	0.794	0.741
		7.5	-	0.988	0.975	0.940	0.904	0.869	0.833	0.798	0.744
		5	0.992	0.992	0.979	0.944	0.908	0.872	0.836	0.801	0.747
		0	1.000	1.000	0.987	0.951	0.915	0.879	0.843	0.807	0.753
	*2 Indoor unit is lower than outdoor unit	-5	1.000	1.000	0.987	0.951	0.915	0.879	0.843	0.807	0.753
		-7.5	-	1.000	0.987	0.951	0.915	0.879	0.843	0.807	0.753
		-10	-	-	0.971	0.951	0.915	0.879	0.843	0.807	0.753
		-20	-	-	-	0.951	0.915	0.879	0.843	0.807	0.753
		-30	-	-	-	-	0.915	0.879	0.843	0.807	0.753

OUTDOOR UNIT
AO*G60LATT

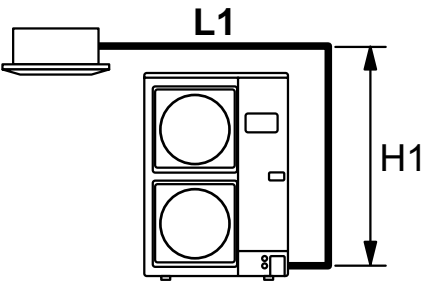
HEATING			Pipe length (m)								
			5	7.5	10	20	30	40	50	60	75
Height difference H (m)	*1 Indoor unit is higher than outdoor unit.	30	-	-	-	-	0.978	0.968	0.958	0.948	0.935
		20	-	-	-	0.988	0.978	0.968	0.958	0.948	0.935
		10	-	-	0.998	0.988	0.978	0.968	0.958	0.948	0.935
		7.5	-	1.000	0.998	0.988	0.978	0.968	0.958	0.948	0.935
		5	1.000	1.000	0.998	0.988	0.978	0.968	0.958	0.948	0.935
		0	1.000	1.000	0.998	0.988	0.978	0.968	0.958	0.948	0.935
	*2 Indoor unit is lower than outdoor unit	-5	0.995	0.995	0.993	0.983	0.973	0.963	0.953	0.943	0.930
		-7.5	-	0.993	0.990	0.980	0.970	0.960	0.950	0.940	0.928
		-10	-	-	0.988	0.978	0.968	0.958	0.948	0.938	0.926
		-20	-	-	-	0.968	0.958	0.948	0.938	0.929	0.916
		-30	-	-	-	-	0.948	0.939	0.929	0.919	0.907

Height difference H



8. PIPE SIZE SELECTION & LIMITATION

■ MODEL : AO*G60LATT



Pipe diameter [mm (in.)]	Liquid pipes	9.52 (3/8)		12.70 (1/2)	
	Gas pipes	15.88 (5/8)	19.05 (3/4)	15.88 (5/8)	19.05 (3/4)
Piping length [m (m)]	Max. piping length < L1 > (Max. chargeless length)	75 [30]	50 [30]	35 [15]	35 [15]

* The figures enclosed by a thick-lined frame indicate the standard pipe diameter and max. piping length.

OUTDOOR UNIT
AO*G60LATT

OUTDOOR UNIT
AO*G60LATT

9. ADDITIONAL CHARGE CALCULATION

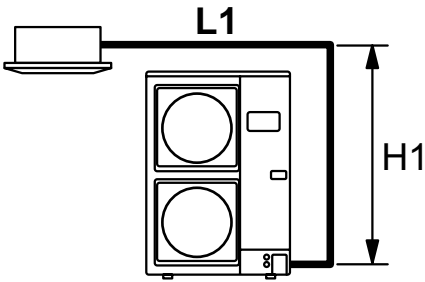
■ MODEL : AO*G60LATT

Refrigerant type	R410A	
Refrigerant amount	g	3,450

■ IF ADDITIONAL REFRIGERANT IS REQUIRED

- When the piping is longer than chargeless piping length, additional charging is necessary.
- For the additional amount, see the table below.

Additional charging amount



L1 > Chargeless piping length

Refrigerant pipe size [mm (in.)]			Additional charging amount [g]					Rate [g/m]
Standard	Piping length		30 m or less	40 m	50 m	60 m	70 m	
	Liquid	9.52 (3/8)	None	500	1,000	1,500	2,000	50
	Gas	15.88 (5/8)						
Size up	Piping length		30 m or less	40 m	50 m			50
	Liquid	9.52 (3/8)	None	500	1,000			
	Gas	19.05 (3/4)						
	Piping length		15 m or less	25 m	35 m			100
	Liquid	12.70 (1/2)	None	1,000	2,000			
	Gas	15.88 (5/8) 19.05 (3/4)						

10. AIRFLOW

■ MODEL: AO*G60LATT

● Cooling

	Number of rotations (r.p.m.)	Airflow	
Upper fan	900	m³/h	6900
		l/s	1917
Lower fan	800	CFM	4062

● Heating

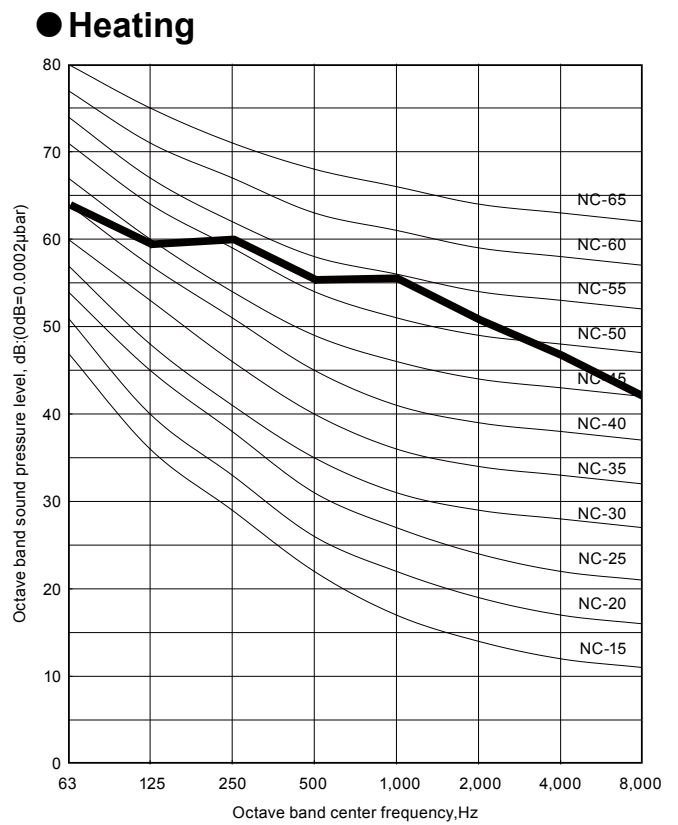
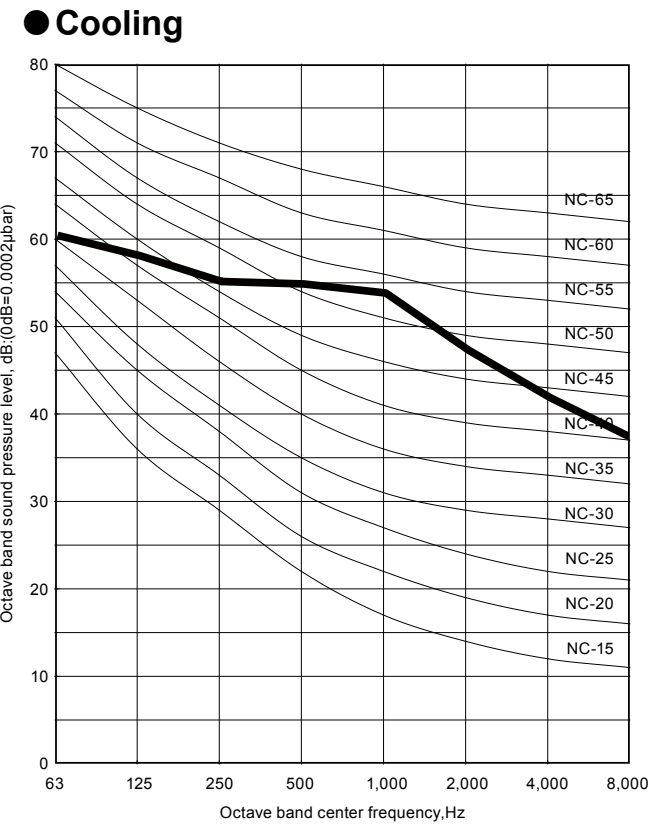
	Number of rotations (r.p.m.)	Airflow	
Upper fan	900	m³/h	7300
		l/s	2028
Lower fan	900	CFM	4294

11. OPERATION NOISE

11-1. NOISE LEVEL CURVE

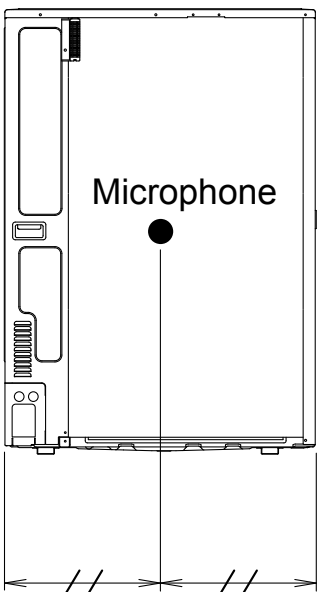
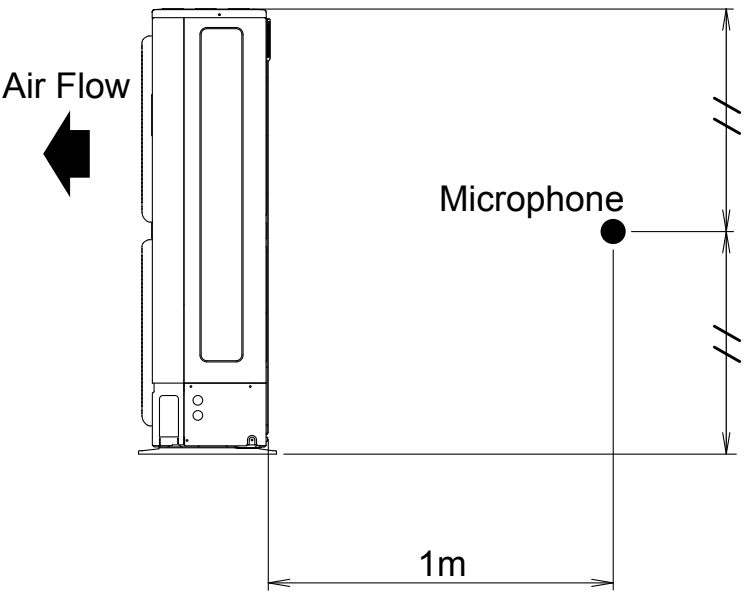
■ MODEL: AO*G60LATT

OUTDOOR UNIT
AO*G60LATT



OUTDOOR UNIT
AO*G60LATT

11-2. SOUND LEVEL CHECK POINT



12. ELECTRIC CHARACTERISTICS

Model name			AO*G60LATT
Power supply	Voltage	V	3N~ 400
	Frequency	Hz	50
*1) Max. operating current		A	12.5
*2) Wiring spec.	Main fuse (Circuit breaker)	A	16
	Current		
	Power cable	mm ²	2.5 (Min)

*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)

13. SAFETY DEVICES

	Protection form		Model
			AO*G60LATT
Circuit protection	Current fuse (Main PCB)		250V 5A
	Current fuse (Main PCB)		250V 3.15A
	Current fuse (Main PCB)		250V 10A
	Protector (Filter PCB)		500V 15A
Fan motor protection	Thermal protector		OFF:150±15°C ON:120±15°C
Compressor protection	Thermal protection program (Compressor temp.)		OFF:110°C ON:80°C
	Thermal protection program (Discharge temp.)		OFF : 115°C ON : After 7 minutes
High pressure protection	Thermal protection program (Heat exchanger temp.)	Cooling	OFF : 68°C ON : 63°C
	Pressure sensor	Heating	OFF:4.1MPa ON : After 3 minutes
Low pressure protection	Pressure sensor	Cooling	OFF:0.12MPa or less (for 5 minutes) ON : After 7 minutes

14. EXTERNAL INPUT & OUTPUT

Input	Output	Connector	Remarks
Low noise mode	—	CN19	See external input/output settings for details.
Peak cut mode	—	CN19	
—	Error status	CN18	
—	Compressor status	CN18	

14-1. EXTERNAL INPUT

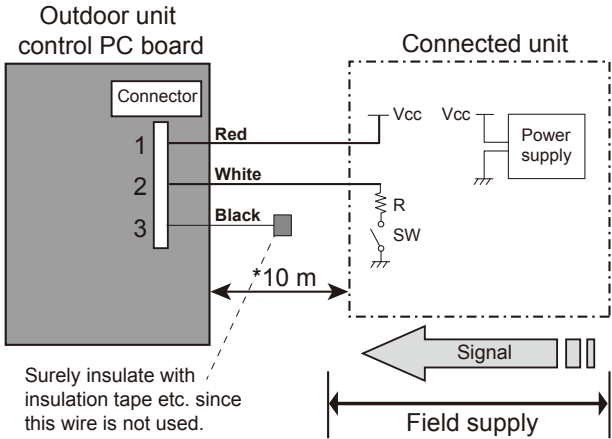
ON/OFF of the "Low noise mode" and "Peak cut mode" functions can be specified by external signal.

■ LOW NOISE MODE

- The following reduces the operating sound of the outdoor unit from the normal sound. The air conditioner is set to the "Low noise mode" when closing the contact input of a commercial timer or ON/OFF switch to a connector on the outdoor control PC board.

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

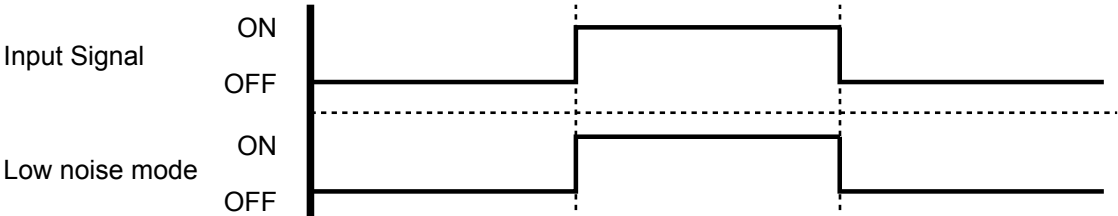
● Circuit diagram example



- 1) Power supply
 - Voltage (Chart sign=Vcc) : DC 5V to 24V
 - The current capacity : About 100mA
- 2) Switch (Chart sign=SW)
 - Toggle switch or Rocker switch, etc : Switch which maintains the states.
 - Prepare switches which are enough capable for DC 10mA current or more
- 3) Resistance (Chart sign=R)
 - Adjust the resistance for current to about DC 10mA(Example)
 - In case of Vcc=DC 5V : Rated resistance value 470Ω 1/4W
 - In case of Vcc=DC 12V : Rated resistance value 1kΩ 1/4W
 - In case of Vcc=DC 24V : Rated resistance value 2.2kΩ 1/4W

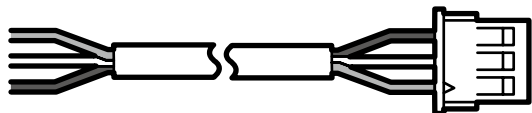
* Make the distance from the PC board to the connected unit within 10 m.

- Use the following parts and construct a circuit as shown above.
 - Input Signal...ON : Low noise mode, Input Signal...OFF : Normal operation
- * Set the "Low noise mode" type by "Push switch" on the outdoor control PC board.



● Parts (Optional)

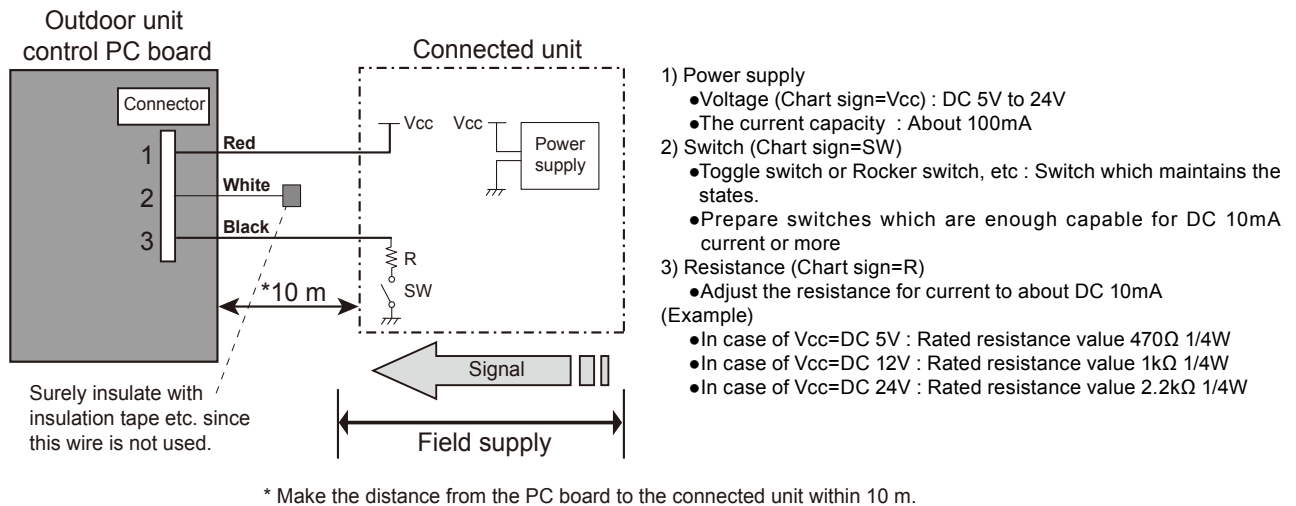
Parts name	Model name
External connect kit	UTY-XWZXZ2



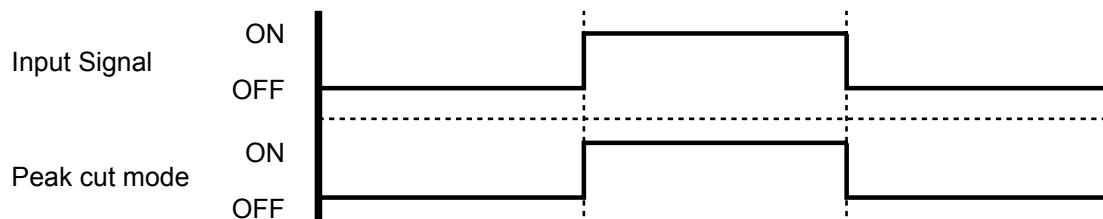
■ PEAK CUT MODE

- Operation that suppressed the current value can be performed by means of the following on-site work. The air conditioner is set to the Peak cut mode when closing the contact input of a commercial ON/OFF switch to a connector on the outdoor control PC board.

● Circuit diagram example

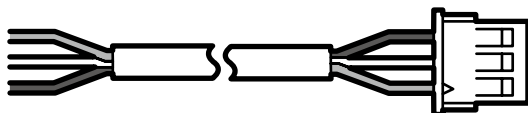


- Use the following parts and construct a circuit as shown above.
- Input Signal...ON : Peak cut mode, Input Signal...OFF : Normal operation
- *Set the "Peak cut mode" level, refer to "15.FUNCTION SETTING".



● Parts (Optional)

Parts name	Model name
External connect kit	UTY-XWZXZ2

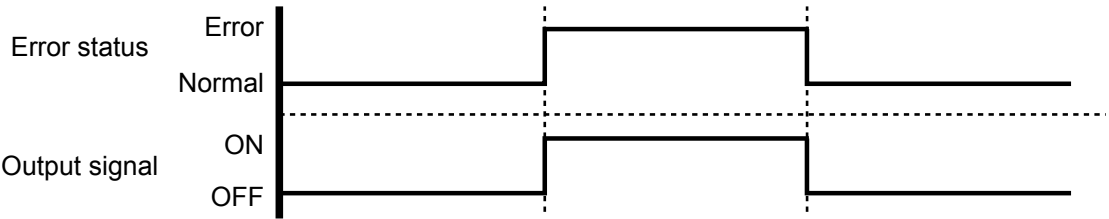
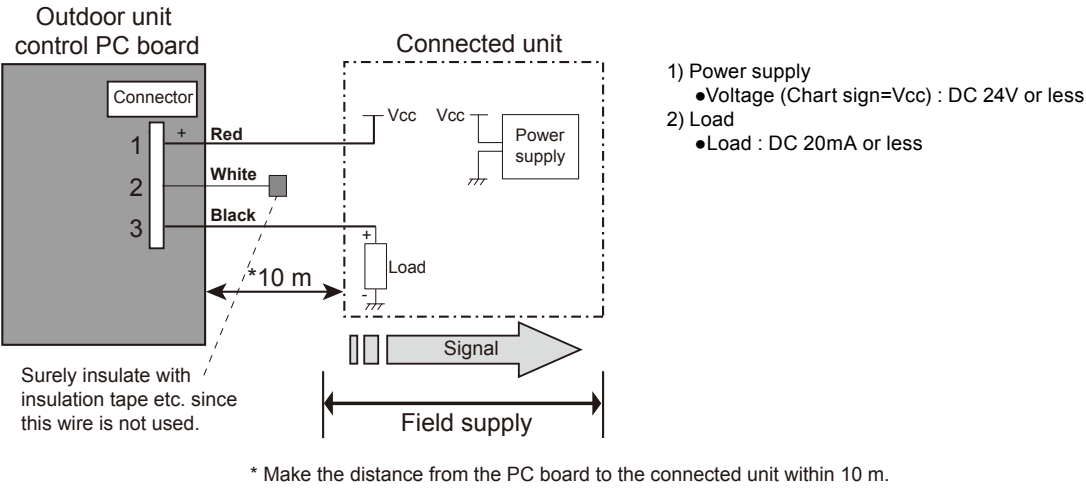


14-2. EXTERNAL OUTPUT

■ ERROR STATUS OUTPUT

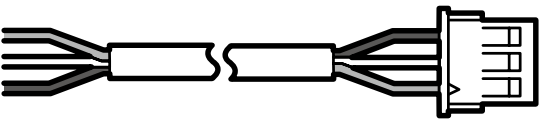
• An air conditioner error status signal is produced when a malfunction occurs.

● Circuit diagram example



● Parts (Optional)

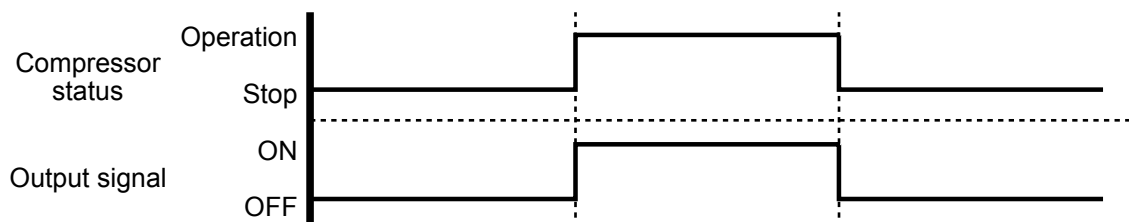
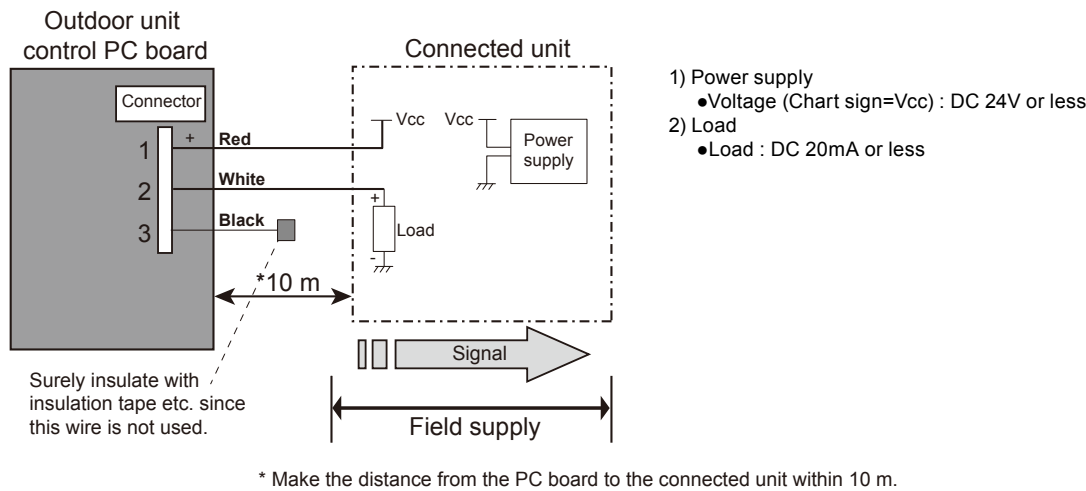
Parts name	Model name
External connect kit	UTY-XWZXZ2



COMPRESSOR STATUS OUTPUT

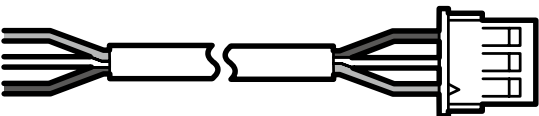
• Compressor operation status signal is produced when the compressor is running.

Circuit diagram example



Parts (Optional)

Parts name	Model name
External connect kit	UTY-XWZXZ2



15. FUNCTION SETTING

15-1. OUTDOOR UNIT

⚠ WARNING

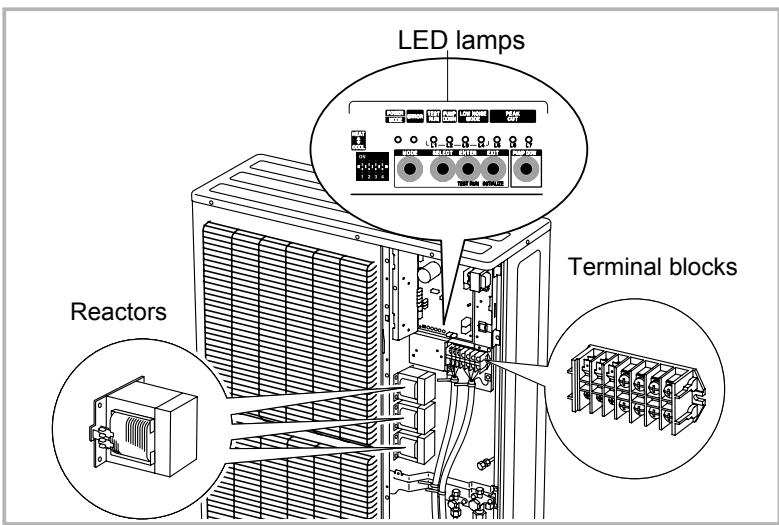
Never touch electrical components such as the terminal blocks or reactor except the switch on the display board. It may cause a serious accident such as electric shock.

⚠ CAUTION

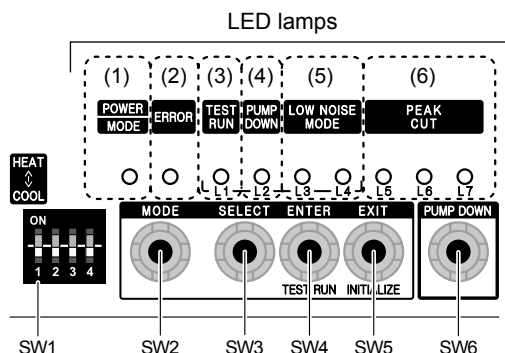
Discharge the static electricity from your body before setting up the push buttons.
Never touch the terminals or the patterns on the parts that are mounted on the board.

15-1-1. FIELD SETTING SWITCHES

The positions of the switches on the outdoor unit control board are shown in the figure below.



FUNCTIONS



Display lamp		Function or operation method
(1) POWER / MODE	Green	Lights on while power on Local setting in outdoor unit or error code is displayed with blink.
(2) ERROR	Red	Blinks during abnormal air-conditioner operation.
(3) TEST RUN (L1)	Orange	Lights on during test operation.
(4) PUMP DOWN (L2)	Orange	Lights on during pump down operation.
(5) LOW NOISE MODE (L3, L4)	Orange	Lights on during "Low noise" function when local setting is activated. (Lighting pattern of L3 and L4 indicates low noise level) ⇒ See page (02-23).
(6) PEAK CUT MODE (L5, L6, L7)	Orange	Lights on during "Peak cut" function when local setting is activated. (Lighting pattern of L5, L6 and L7 indicates peak cut level) ⇒ See page (02-24).

Switch		Function or operation method
SW1	DIP switch	For selecting cooling or heating during test operation. Positions 2 to 4 of Dip switch are not used.
SW2	Push switch	To switch between "Local setting" and "Error code display".
SW3	Push switch	To switch between the individual "Local settings" and the "Error code displays".
SW4	Push switch	To fix the individual "Local settings" and the "Error code displays".
SW5	Push switch	EXIT
SW6	Push switch	To start the pump down operation.

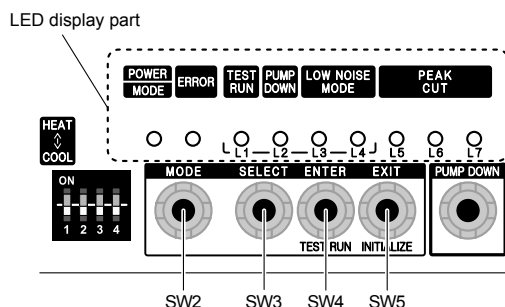
- Dip switches 1 to 4 at shipment from the factory are set as follows.

Switch			
1	2	3	4
COOL	OFF	OFF	OFF

15-1-2. SETTING METHOD

※ Stop the operation of air conditioner before this setting.

■ LOW NOISE MODE



(1) Switch to “Local setting mode” by pressing [MODE] switch (SW2) for 3 seconds or more.

(2) Confirm (POWER / MODE) blinks 9 times, and press [ENTER] switch (SW4).

POWER MODE	ERROR	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3) (L4)	PEAK CUT (L5) (L6) (L7)
Blinks (9 times)	○	○	○	○ ○	○ ○ ○

Sign “○” : Lights off

(3) Press [SELECT] switch (SW3), and adjust LED display as shown below. (Current setting is displayed)

	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3) (L4)
LOW NOISE MODE	○	○	○ Blink

(4) Press [ENTER] switch (SW4).

	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3) (L4)
LOW NOISE MODE	○	○	○ ●

Sign “●” : Lights on

(5) Press [SELECT] switch (SW3), and adjust LED display as shown in below figure.

	PEAK CUT (L5) (L6) (L7)
Level 1 ... Rated noise value -2dB	○ ○ Blink
Level 2 ... Rated noise value -4dB	○ Blink ○

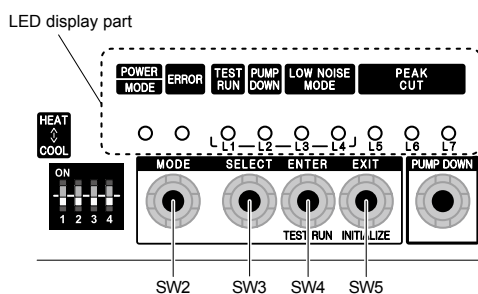
(6) Press [ENTER] switch (SW4) and fix it.

	PEAK CUT (L5) (L6) (L7)
Level 1 ... Rated noise value -2dB	○ ○ ●
Level 2 ... Rated noise value -4dB	○ ● ○

(7) Return to “Operating status display (Normal operation)” by pressing [EXIT] switch (SW5).

- In case of missing how many times [SELECT] and [ENTER] switch are pressed, restart from the beginning of operation procedure after returning to “Operation status display (normal operation)” by pressing the [EXIT] switch once.

■ PEAK CUT MODE



(1) Switch to “Local setting mode” by pressing [MODE] switch (SW2) for 3 seconds or more.

(2) Confirm (POWER / MODE) blinks 9 times, and press [ENTER] switch (SW4).

POWER MODE	ERROR	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3) (L4)	PEAK CUT (L5) (L6) (L7)
Blinks (9 times)	○	○	○	○	○

Sign “○” : Lights off

(3) Press [SELECT] switch (SW3), and adjust LED display as shown below. (Current setting is displayed)

	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3) (L4)
PEAK CUT MODE	○	○	Blink ○

(4) Press [ENTER] switch (SW4).

	TEST RUN (L1)	PUMP DOWN (L2)	LOW NOISE (L3) (L4)
PEAK CUT MODE	○	○	● ○

Sign “●” : Lights on

(5) Press [SELECT] switch (SW3), and adjust LED display as shown in below figure.

	PEAK CUT (L5) (L6) (L7)
0% of rated input ratio	○ ○ Blink
50% of rated input ratio	○ Blink ○
75% of rated input ratio	○ Blink Blink
100% of rated input ratio	Blink ○ ○

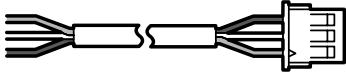
(6) Press [ENTER] switch (SW4) and fix it.

	PEAK CUT (L5) (L6) (L7)
0% of rated input ratio	○ ○ ●
50% of rated input ratio	○ ● ○
75% of rated input ratio	○ ● ●
100% of rated input ratio	● ○ ○

(7) Return to “Operating status display (Normal operation)” by pressing [EXIT] switch (SW5).

- When pressed number is lost during operation, restart from the beginning of operation procedure after returning to “Operation status display (normal operation)” by pressing the [EXIT] switch once.

16. OPTIONAL PARTS

Exterior	Parts name	Model No.	Summary
	External connect kit	UTY-XWZXZ2	Use to operate the External input and output function of Outdoor unit.