1. List of functions

Category	Function	ARNU18GTL*2, ARNU24GTL*2
Air flow	Air supply outlet	2
	Airflow direction control(left & right)	-
	Airflow direction control(up & down)	Auto
	Auto swing(left & right)	-
	Auto swing(up & down)	O
	Airflow steps(fan/cool/heat)	4 / 5 / 4
	Chaos swing	X
	Chaos wind(auto wind)	O
	Jet cool(Power wind)	O
	Swirl wind	-
Air purifying	Deodorizing filter	X
	Plasma air purifier	Option
	Prefilter(washable / anti-fungus)	O
Installation	Drain pump	O
	E.S.P. control	O
	Electric heater(operation)	X
	High ceiling operation	O
Reliability	Hot start	O
	Self diagnosis	O
	Soft dry operation	O
Convenience	Auto changeover	O(Heat recovery)
	Auto cleaning	X
	Auto operation(artificial intelligence)	O(Heat pump or Cooling only)
	Auto restart operation	O
	Child lock	O
	Forced operation	O
	Group control	O
	Sleep mode	O
	Timer(on/off)	O
	Timer(weekly)	O
	Two thermistor control	O
Individual control	Wide wired remote controller	Accessory
	Deluxe wired remote controller	Accessory
	Simple wired remote controller	Accessory
	Wired remote controller(for hotel use)	Accessory
	Wireless remote controller(simple)	X
	Wireless LCD remote control	Accessory
Special function kit	Zone control	-
	CTIE	-
	Electro thermostat	-

O : Applied X : Not applied – : No relation

Option : Model name & price are different according to options, and assembled in factory with main unit.

Accessory : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

2. Specifications

* Model Name
A:Basic, C:Plasma

Type			2Way Ceiling Cassette
Model		Unit	ARNU18GTL*2
Cooling Capacity		kW	5.6
		kcal/h	4,800
		Btu/h	19,100
Heating Capacity		kW	6.3
		kcal/h	5,400
		Btu/h	21,500
Casing			Galvanized Steel Plate
Dimensions (WxHxD)	Body	mm	830 x 225 x 550
		inch	32-11/16 x 8-27/32 x 21-21/32
	Front Panel	mm	1,050 x 28.5 x 640
		inch	41-11/32 x 1-1/8 x 25-3/16
Coil	Rows x Columns x FPI		2 x 11 x 20
	Face Area	m^3	0.13
Fan	Type		Cross Flow Fan
	Motor Output x Number	W	20 x 2
	Running Current	A	0.18 x 2
	Air Flow Rate(H / M / L)	CMM	13 / 12 / 10
		cfm	459 / 424 / 353
	Drive		Direct
	Motor type		BLDC
Temperature Control			Microprocessor, Thermostat for cooling and heating
Sound Absorbing Thermal Insulation Material			Foamed polystrene
Safety Device			Fuse
Pipe Connections	Liquid Side	mm(inch)	Ø6.35(1/4)
	Gas Side	mm(inch)	Ø12.7(1/2)
	Drain Pipe(Internal Dia.)	mm(inch)	25(1)
Net Weight	Body	kg(lbs)	22(48.5)
Noise Level(Sound Press, 1.5m, H / M / L)		dB(A)	40 / 36 / 32
Power Supply		Ø, V, Hz	1, 220-240, 50
			1, 220, 60
Refrigerant Control			EEV
Power cable			CV1.5 x 3C
Transmission cable			CVV-SB 1.0~1.5 x 2C
Panel Color			Morning fog
Panel Name(Accessory)			PT-HL*

Notes:-

1. Capacities are based on the following conditions:
   - Cooling
     - Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
     - Outdoor temp. 35°C[95°F]DB/ 24°C[75.2°F]WB
     - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
   - Heating
     - Indoor temp. 20°C[68°F]DB/ 15°C[59°F]WB
     - Outdoor temp. 7°C[44.6°F]DB/ 6°C[42.8°F]WB
     - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are Net Capacities
3. Due to our policy of innovation some specifications may be changed without prior notification
4. To be added for more available Models
5. EEV : Electronic Expansion Valve
6. Anechoic chamber conversion value is measured at 1.5 m downward from unit centre.
   The values depends on the ambient conditions and values are normally higher in actual operation.

Conversion Formula
kcal/h= kW x 860
Btu/h = kW x 3412
cfm = m^3/min x 35.3
l/s = CMM x 1000/60

2. Specifications

* Model Name
A:Basic, C:Plasma

Type			2Way Ceiling Cassette
Model		Unit	ARNU24GTL*2
Cooling Capacity		kW	7.1
		kcal/h	6,100
		Btu/h	24,200
Heating Capacity		kW	8.0
		kcal/h	6,900
		Btu/h	27,300
Casing			Galvanized Steel Plate
Dimensions (WxHxD)	Body	mm	830 x 225 x 550
		inch	32-11/16 x 8-27/32 x 21-21/32
	Front Panel	mm	1,050 x 28.5 x 640
		inch	41-11/32 x 1-1/8 x 25-3/16
Coil	Rows x Columns x FPI		2 x 11 x 20
	Face Area	m^3	0.13
Fan	Type		Cross Flow Fan
	Motor Output x Number	W	20 x 2
	Running Current	A	0.18 x 2
	Air Flow Rate(H / M / L)	CMM	17 / 15 / 13
		cfm	601 / 530 / 459
	Drive		Direct
	Motor type		BLDC
Temperature Control			Microprocessor, Thermostat for cooling and heating
Sound Absorbing Thermal Insulation Material			Foamed polystrene
Safety Device			Fuse
Pipe Connections	Liquid Side	mm(inch)	Ø9.52(3/8)
	Gas Side	mm(inch)	Ø15.88(5/8)
	Drain Pipe(Internal Dia.)	mm(inch)	25(1)
Net Weight	Body	kg(lbs)	22(48.5)
Noise Level(Sound Press, 1.5m, H / M / L)		dB(A)	42 / 38 / 34
Power Supply		Ø, V, Hz	1, 220-240, 50
			1, 220, 60
Refrigerant Control			EEV
Power cable			CV1.5 x 3C
Transmission cable			CVV-SB 1.0~1.5 x 2C
Panel Color			Morning fog
Panel Name(Accessory)			PT-HL*

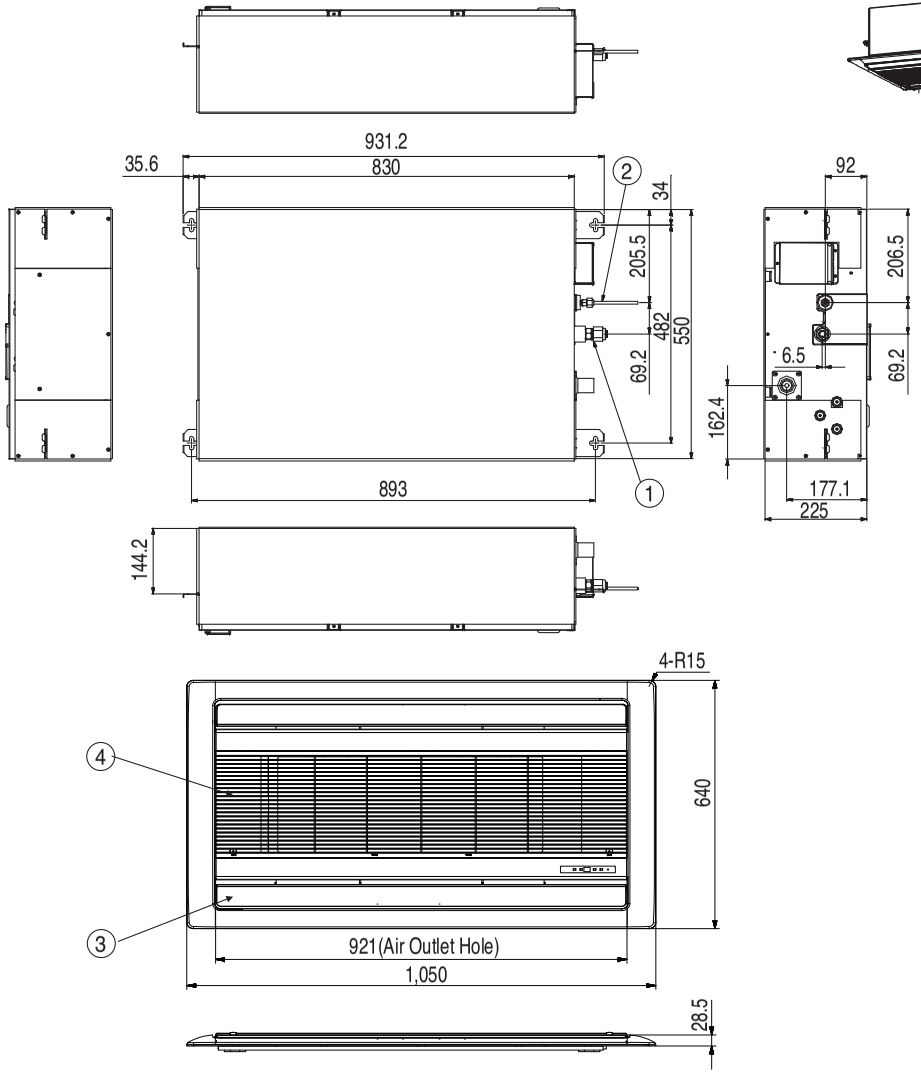
Notes:-

1. Capacities are based on the following conditions:
   - Cooling
     - Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
     - Outdoor temp. 35°C[95°F]DB/ 24°C[75.2°F]WB
     - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
   - Heating
     - Indoor temp. 20°C[68°F]DB/ 15°C[59°F]WB
     - Outdoor temp. 7°C[44.6°F]DB/ 6°C[42.8°F]WB
     - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are Net Capacities
3. Due to our policy of innovation some specifications may be changed without prior notification
4. To be added for more available Models
5. EEV : Electronic Expansion Valve
6. Anechoic chamber conversion value is measured at 1.5 m downward from unit centre.
   The values depends on the ambient conditions and values are normally higher in actual operation.

Conversion Formula
kcal/h= kW x 860
Btu/h = kW x 3412
cfm = m^3/min x 35.3
l/s = CMM x 1000/60

Ceiling Cassette 2-way

ARNU18GTL*2
ARNU24GTL*2



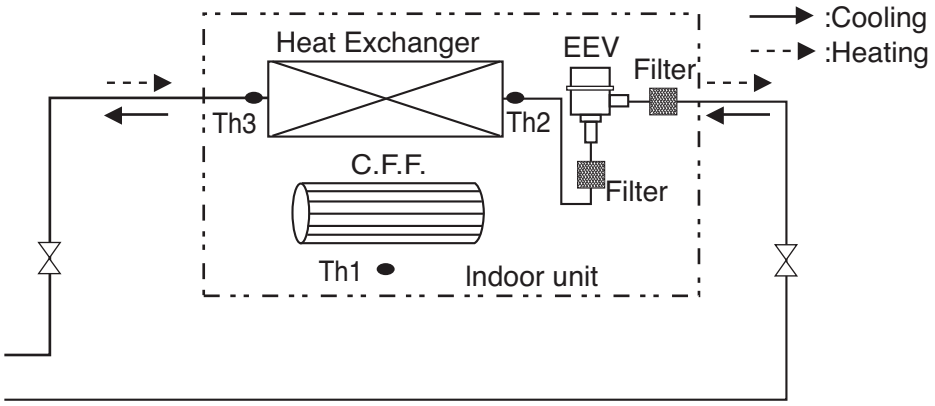
(unit : mm)

Number	Name	Descripition
1	Liquid pipe connection	Unit size(18k):ø6.35
		Unit size(24k):ø9.52
2	Gas pipe connection	Unit size(18k):ø12.7
		Unit size(24k):ø15.88
3	Air suction grill	
4	Air discharge grill	

▣ Note

1. Unit should be installed in compliance with the installation manual in the product box.
2. Unit shall be grounded in accordance with the local regulations or applicable national codes.

4. Piping Diagrams



Refrigerant pipe connection port diameter

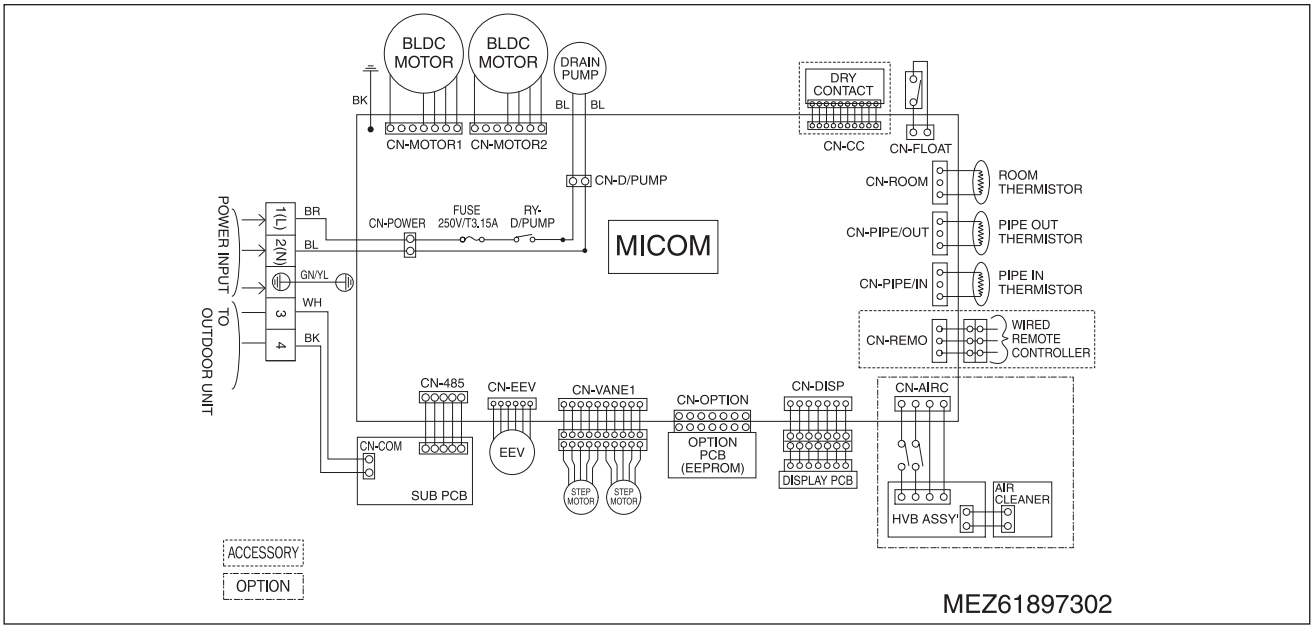
[Unit: mm(inch)]

Model	Gas	Liquid
ARNU18GTL*2	Ø12.7(1/2)	Ø6.35(1/4)
ARNU24GTL*2	Ø15.88(5/8)	Ø9.52(3/8)

LOC.	Description
Th1	Room thermistor
Th2	Pipe in thermistor
Th3	Pipe out thermistor

5. Wiring Diagrams

TL Chassis



MEZ61897302

CONNECTOR NUMBER	SPEC	DESCRIPTION
CN-POWER	AC Power supply	AC Power line input for indoor controller
CN-MOTOR1	Fan motor output	Motor output of BLDC
CN-MOTOR2	Fan motor output	Motor output of BLDC
CN-D/PUMP	Drain pump output	AC output for drain pump
CN-485	Communication	Connection between indoor and outdoor
CN-DISP	Display	Display of indoor status
CN-EEV	EEV Output	EEV Control output
CN-VANE2	Step motor	Step motor output
CN-FLOAT	Float switch input	Float switch sensing
CN-PIPE/IN	Suction pipe sensor	Pipe in thermistor
CN-PIPE/OUT	Discharge pipe sensor	Pipe out thermistor
CN-ROOM	Room sensor	Room air thermistor
CN-REMO	Remote controller	Remote control line

Dip Switch Setting		Off	On	Remarks
SW3	GROUP	Master	Slave	Group Control setting using Wired Remote Controller
SW4	DRY CONTACT	Variable	Auto	Old Dry Contact Mode Setting 1. Variable : Auto/Manual Mode can be chosen by Wide wired remote controller or Wireless remote controller (When shipped from Factory → Manual Mode) 2. Auto : For Dry Contact, it is always Auto mode.
SW5	EXTRA 1	Off	On	1. Duct model -. OFF : Default(not operate continuosly) -. ON : Fan operate continuosly 2. Cassette Model : No Function 3. Ceiling Suspended Model -. OFF : Ceiling(default) -. ON : Floor

⚠ CAUTION

For Multi V Model, Dip Switch 1,2,6,7,8 must be set OFF
That dip switch is used for the other model.

6. Capacity Tables

6.1 Cooling Capacity

Cooling capacity

Capacity Index	Outdoor air temp. (DB, °C)	Indoor air temp. (DB/WB, °C)													
		20		23		26		27		28		30		32	
		14		16		18		19		20		22		24	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
5.6	10	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.7	4.2	7.4	4.2
	12	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.7	4.2	7.3	4.1
	14	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.7	4.2	7.2	4.1
	16	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.7	4.2	7.1	4.0
	18	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.7	4.2	7.0	4.0
	20	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.7	4.2	6.9	3.9
	21	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.7	4.2	6.8	3.9
	23	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.7	4.2	6.7	3.8
	25	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.6	4.2	6.6	3.8
	27	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.4	4.1	6.6	3.7
	29	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.4	4.0	6.5	3.7
	31	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.3	3.9	6.4	3.6
	33	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.2	3.9	6.3	3.6
	35	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	6.0	4.0	6.0	3.8	6.2	3.5
	37	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	5.8	3.9	5.9	3.7	6.1	3.5
	39	3.8	3.2	4.5	3.6	5.2	3.9	5.6	3.9	5.7	3.9	5.8	3.7	6.0	3.4

Notes:
TC: Total Capacity(kW)
SHC: Sensible Heat Capacity(kW)

6. Capacity Tables

Cooling capacity

Capacity Index	Outdoor air temp. (DB, °C)	Indoor air temp. (DB/WB, °C)													
		20		23		26		27		28		30		32	
		14		16		18		19		20		22		24	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
7.1	10	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.5	5.3	9.3	5.3
	12	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.5	5.3	9.2	5.2
	14	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.5	5.3	9.1	5.2
	16	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.5	5.3	9.0	5.1
	18	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.5	5.3	8.8	5.0
	20	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.5	5.3	8.7	5.0
	21	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.5	5.3	8.7	4.9
	23	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.5	5.3	8.5	4.9
	25	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.4	5.3	8.4	4.8
	27	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.2	5.1	8.3	4.7
	29	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.1	5.1	8.2	4.7
	31	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	8.0	5.0	8.1	4.6
	33	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	7.8	4.9	7.9	4.5
	35	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.1	7.7	4.8	7.8	4.4
	37	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.4	5.0	7.5	4.7	7.7	4.4
	39	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.2	4.9	7.4	4.6	7.6	4.3

Notes:
TC: Total Capacity(kW)

SHC: Sensible Heat Capacity(kW)

6. Capacity Tables

6.2 Heating Capacity

Heating capacity

Capacity Index	Outdoor air temp.		Indoor air temp. (DB, °C)					
			16	18	20	21	22	24
	DB(°C)	WB(°C)	TC	TC	TC	TC	TC	TC
			kW	kW	kW	kW	kW	kW
5.6	-19.8	-20.0	4.2	4.2	4.2	4.2	4.2	4.2
	-18.8	-19.0	4.3	4.3	4.3	4.3	4.3	4.3
	-16.7	-17.0	4.6	4.6	4.6	4.6	4.6	4.5
	-14.7	-15.0	4.9	4.8	4.3	4.8	4.8	4.8
	-12.6	-13.0	5.1	5.1	4.5	5.0	5.0	5.0
	-10.5	-11.0	5.4	5.4	4.8	5.4	5.3	5.3
	-9.5	-10.0	5.4	5.4	4.9	5.4	5.4	5.4
	-8.5	-9.1	5.5	5.5	5.0	5.5	5.5	5.4
	-7.0	-7.6	5.7	5.7	5.1	5.6	5.6	5.5
	-5.0	-5.6	6.0	6.0	5.4	5.8	5.8	5.5
	-3.0	-3.7	6.2	6.2	5.5	6.1	5.9	5.5
	0.0	-0.7	6.6	6.6	5.8	6.1	5.9	5.5
	3.0	2.2	7.0	6.7	6.2	6.1	5.9	5.5
	5.0	4.1	7.1	6.7	6.3	6.1	5.9	5.5
	7.0	6.0	7.2	6.7	6.3	6.1	5.9	5.5
	9.0	7.9	7.2	6.7	6.3	6.1	5.9	5.5
	11.0	9.8	7.2	6.7	6.3	6.1	5.9	5.5
	13.0	11.8	7.2	6.7	6.3	6.1	5.9	5.5
	15.0	13.7	7.2	6.7	6.3	6.1	5.9	5.5

Notes:
TC: Total Capacity(kW)

6. Capacity Tables

Heating capacity

Capacity Index	Outdoor air temp.		Indoor air temp. (DB, °C)					
			16	18	20	21	22	24
	DB(°C)	WB(°C)	TC	TC	TC	TC	TC	TC
			kW	kW	kW	kW	kW	kW
7.1	-19.8	-20.0	5.4	5.4	5.4	5.3	5.3	5.3
	-18.8	-19.0	5.5	5.5	5.5	5.5	5.4	5.4
	-16.7	-17.0	5.8	5.8	5.8	5.8	5.8	5.8
	-14.7	-15.0	6.2	6.1	5.5	6.1	6.1	6.1
	-12.6	-13.0	6.5	6.5	5.8	6.4	6.4	6.4
	-10.5	-11.0	6.8	6.8	6.0	6.8	6.7	6.7
	-9.5	-10.0	6.9	6.9	6.2	6.9	6.9	6.8
	-8.5	-9.1	7.0	7.0	6.3	7.0	7.0	6.8
	-7.0	-7.6	7.3	7.3	6.5	7.1	7.1	7.0
	-5.0	-5.6	7.6	7.6	6.8	7.4	7.4	7.0
	-3.0	-3.7	7.9	7.9	7.0	7.7	7.5	7.0
	0.0	-0.7	8.4	8.4	7.4	7.8	7.5	7.0
	3.0	2.2	8.9	8.6	7.8	7.8	7.5	7.0
	5.0	4.1	9.0	8.6	8.0	7.8	7.5	7.0
	7.0	6.0	9.2	8.6	8.0	7.8	7.5	7.0
	9.0	7.9	9.2	8.6	8.0	7.8	7.5	7.0
	11.0	9.8	9.2	8.6	8.0	7.8	7.5	7.0
	13.0	11.8	9.2	8.6	8.0	7.8	7.5	7.0
	15.0	13.7	9.2	8.6	8.0	7.8	7.5	7.0

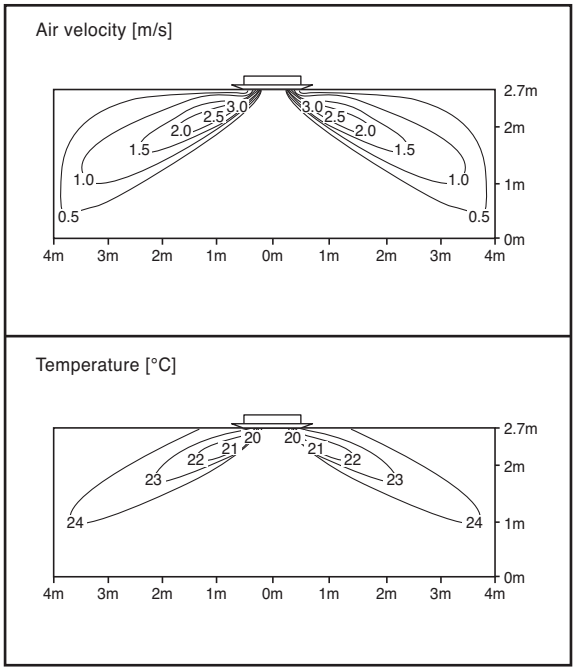
Notes:
TC: Total Capacity(kW)

7. Air Velocity and Temperature Distribution(Reference Data)

ARNU24GTL*2

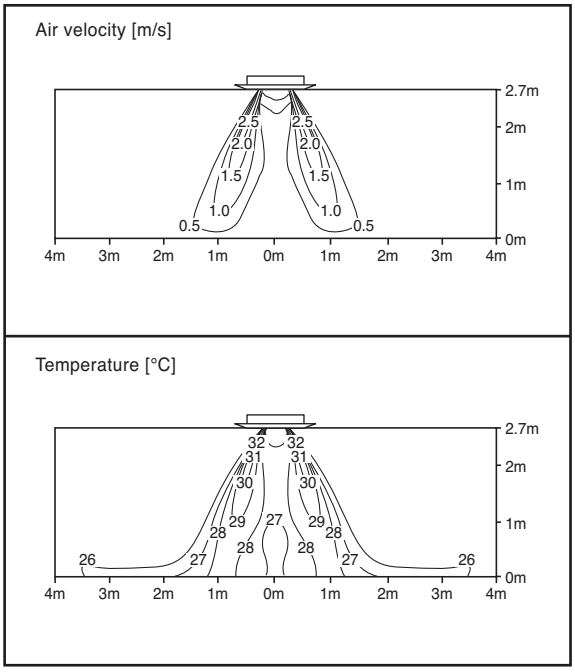
Cooling

Discharge angle: 40°



Heating

Discharge angle: 60°



8. Electric Characteristics

Units					Power Supply		IFM		Input(W)	
Model	Type	Hz	Volts	Voltage Range	MCA	MFA	kW	FLA	Cooling	Heating
ARNU18GTL*2	TL	50	220-240	Max:264	0.52	15	0.04	0.41	70	70
ARNU24GTL*2	TL			Min:198	0.52	15	0.04	0.41	70	70
ARNU18GTL*2	TL	60	220	Max:242	0.52	15	0.04	0.41	70	70
ARNU24GTL*2	TL			Min:198	0.52	15	0.04	0.41	70	70

Symbols:

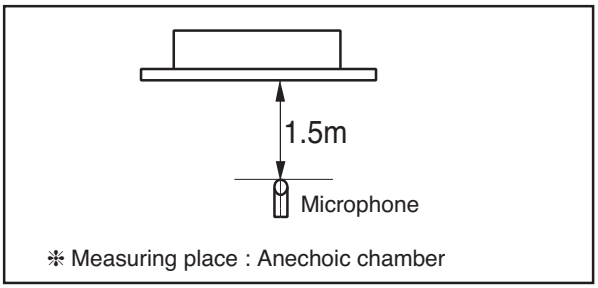
MCA : Minimum Circuit Amperes (A)
MFA : Maximum Fuse Amperes(see note 5)
kW : Fan Motor Rated Output(kW)
FLA : Full Load Amperes(A)
IFM : Indoor Fan Motor

Note :

1. Voltage Range
   Units are suitable for use on electrical system where voltage supplied to unit terminals is not below or above the listed range limits.
2. Maximum allowable voltage unbalance between phase is 2%.
3. MCA/MFA
   MCA = 1.25 x FLA
   MFA ≤ 4 x FLA
   (Next lower standard fuse rating. Minimum 15A)
4. Select wire size based on the larger value on the MCA.
5. Instead of fuse, use Circuit Breaker.

9. Sound Levels

Overall

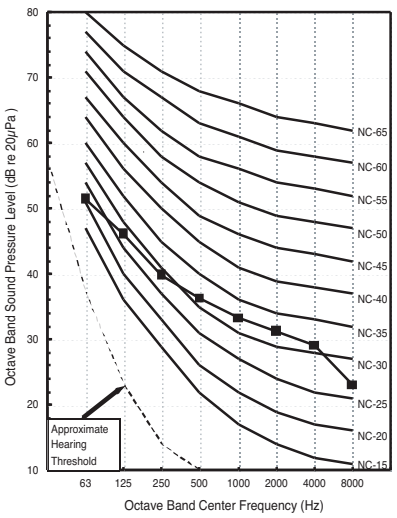


Notes:
1. Sound measured at 1.5m away from the center of the unit
2. Operating condition
   - Power source : 220-240V 50Hz / 220V 60Hz
   - Cooling : Indoor temperature (27°C DB, 19°C WB), Outdoor temperature (35°C DB, 24°C WB)
   - Heating : Indoor temperature (20°C DB, 15°C WB), Outdoor temperature (7°C DB, 6°C WB)
3. Reference accoustic pressure 0dB = 20μPa
4. Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment in installed.

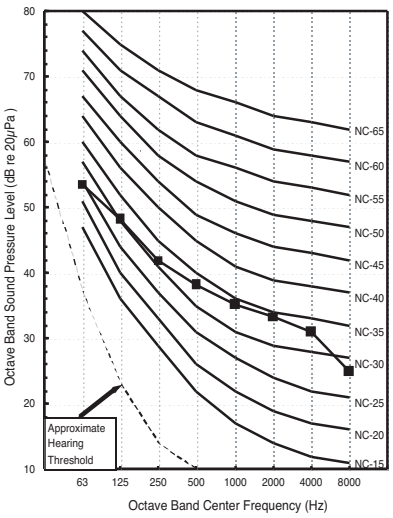
Model	Sound Levels dB(A)		
	H	M	L
ARNU18GTL*2	40	36	32
ARNU24GTL*2	42	38	34

Sound Pressure Level

ARNU18GTL*2

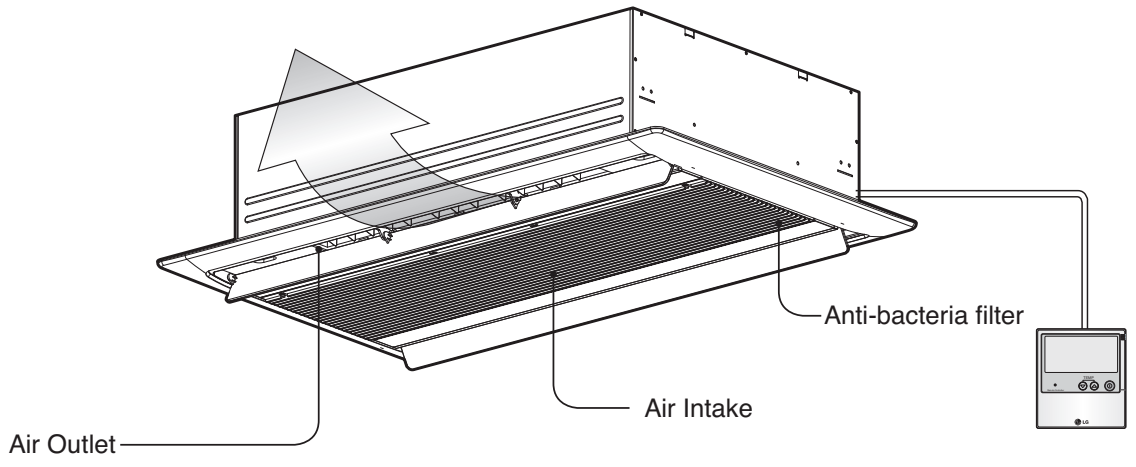


ARNU24GTL*2



10. Installation

- Please read the instruction sheets completely before installing the product.
- When the power cord is damaged, replacement work shall be performed by authorized personnel only.
- Installation work must be performed in accordance with the national wiring standards by authorized personnel only.



Required Parts

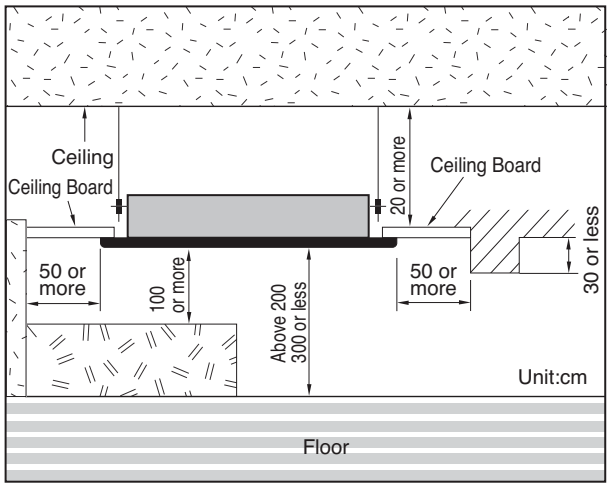
- Connecting cable
- Pipes: Gas side
  Liquid side
- Hanging Bolt
  (W 3/8 or M10 length 650mm)
- Insulated drain hose
- Additional Drain hose

Required Tools

- Level
- Screw driver
- Electric drill
- Hole core drill
- Flaring Tool set
- Torque Wrenches
- Hexagonal Wrench
- Gas-leak detector
- Thermometer

10.1 Selection of the best location

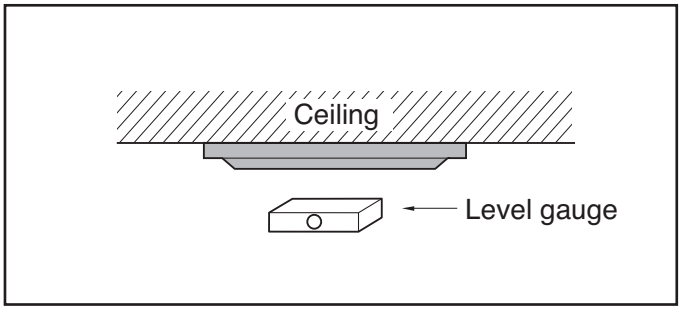
- There should not be any heat source or steam near the unit.
- There should not be any obstacles to the air circulation.
- A place where air circulation in the room will be good.
- A place where drainage can be easily obtained.
- A place where noise prevention is taken into consideration.
- Do not install the unit near the door way.
- Ensure the spaces indicated by arrows from the wall, ceiling, or other obstacles.
- The indoor unit must have sufficient maintenance space.

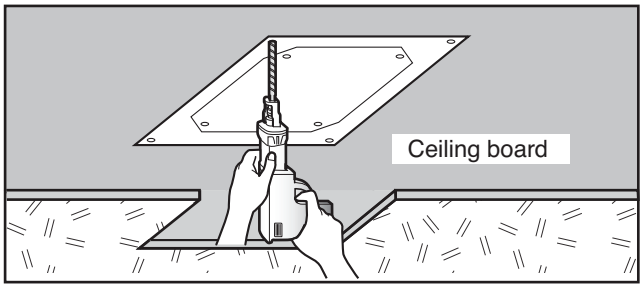


10. Installation

10.2 Ceiling opening dimensions and hanging bolt location

• The dimensions of the paper pattern for installation are the same as those of the ceiling opening dimensions.





• Select and mark the position for fixing bolts and piping hole.
• Decide the position for fixing bolts slightly tilted to the drain direction after considering the direction of drain hose.
• Drill the hole for anchor bolt on the wall.

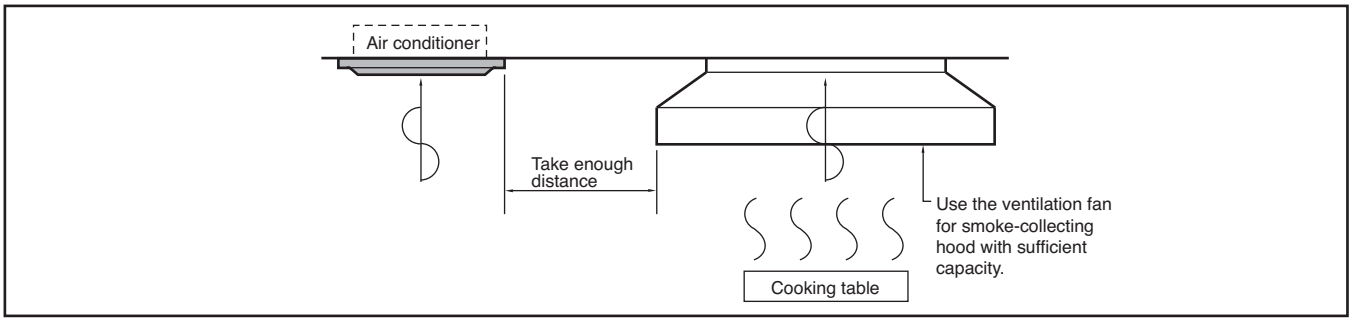
⚠ CAUTION

• This air-conditioner uses a drain pump.
• Install the unit horizontally using a level gauge.
• During the installation, care should be taken not to damage electric wires.

NOTE:

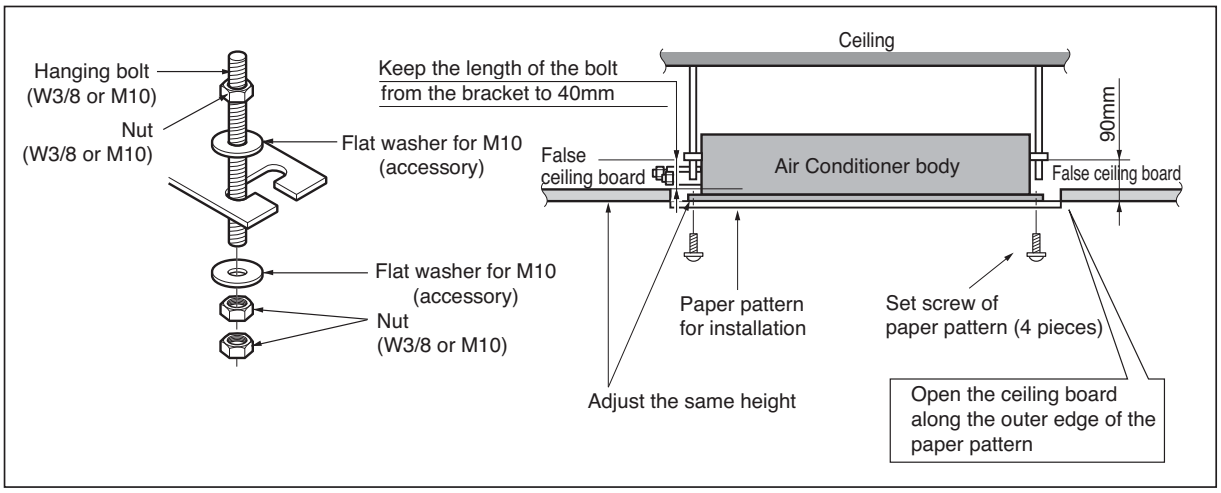
• Avoid the following installation location.

1. Such places as restaurants and kitchen where considerable amount of oil steam and flour is generated.
   These may cause heat exchange efficiency reduction, or water drops, drain pump mal-function.
   In these cases, take the following actions;
   • Make sure that ventilation fan is enough to cover all noxious gases from this place.
   • Ensure enough distance from the cooking room to install the air conditioner in such a place where it may not suck oily steam.



2. Avoid installng air conditioner in such places where cooking oil or iron powder is generated.
3. Avoid places where inflammable gas is generated.
4. Avoid place where noxious gas is generated.
5. Avoid places near high frequency generators.

10. Installation



- The following parts are locally purchased.

① Hanging Bolt - W 3/8 or M10
② Nut - W 3/8 or M10
③ Spring Washer - M10
④ Plate Washer - M10

⚠ CAUTION

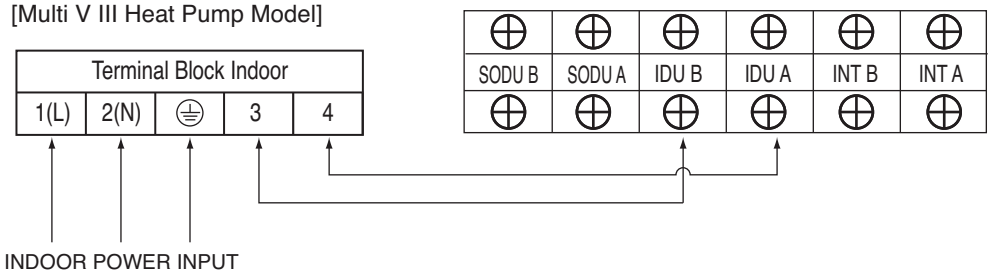
- Tighten the nut and bolt to prevent the unit from falling.

10.3 Wiring Connection

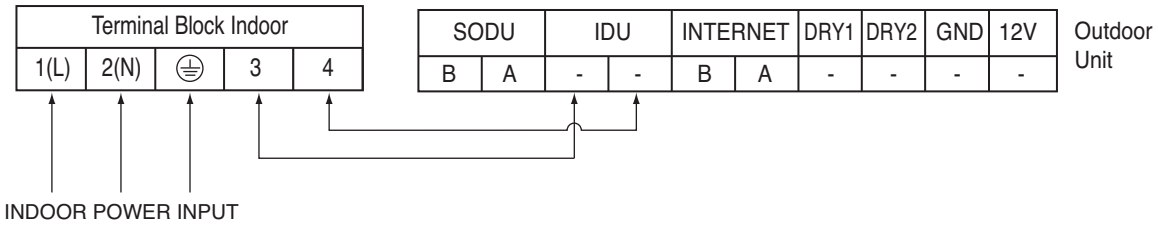
Connect the wires to the terminals on the control board individually according to the outdoor unit connection.

- Ensure that the color of the wires of outdoor unit and the terminal No. are the same as those of indoor unit respectively.

[Multi V III Heat Pump Model]



[Except Multi VIII Heat Pump Model]



⚠ WARNING

Make sure that the screws of the terminal are not loose.

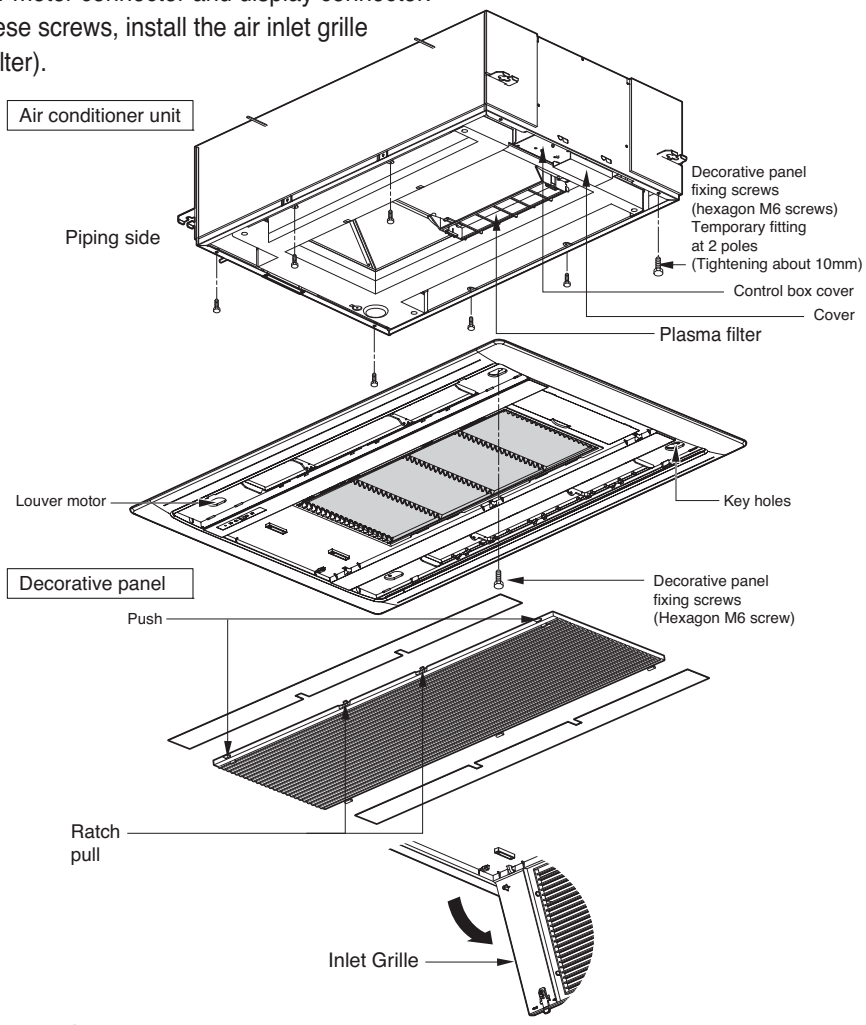
10. Installation

10.4 Installation of Decoration Panel

The decoration panel has its installation direction.

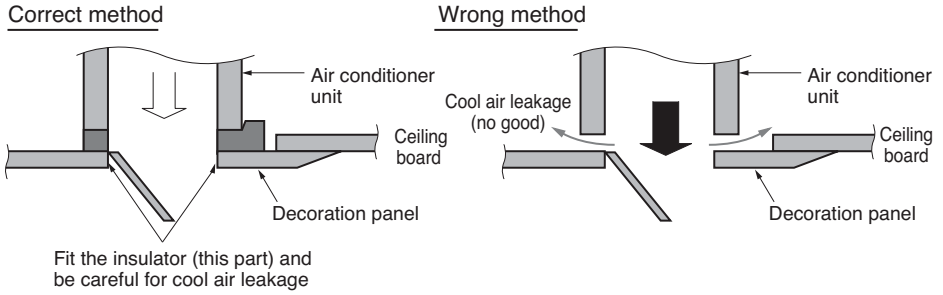
Before installing the decoration panel, always remove the paper template.

1. Temporarily fix two decoration panel fixing screws (hexagon M5 screw) on the unit body. (Tighten by amount 10mm in length.)
   The fixing screws (hexagon M5 screw) are included in the indoor unit box.
2. Remove the air inlet grille from the decoration panel. (Remove the hook for the air inlet grille cord.)
3. Hook the decoration panel key hole (⊂⊃) on the screws fixed in step above, and slide the panel so that the screws reach the key hole edge.
4. Retighten completely two temporarily fixed screws and other two screws. (Total 4 screws)
5. Connect the louver motor connector and display connector.
6. After tightening these screws, install the air inlet grille (including the air filter).



⚠ CAUTION

Install the decoration panel otherwise cool air leakage causes condensation.
⇨ Water drops fall.



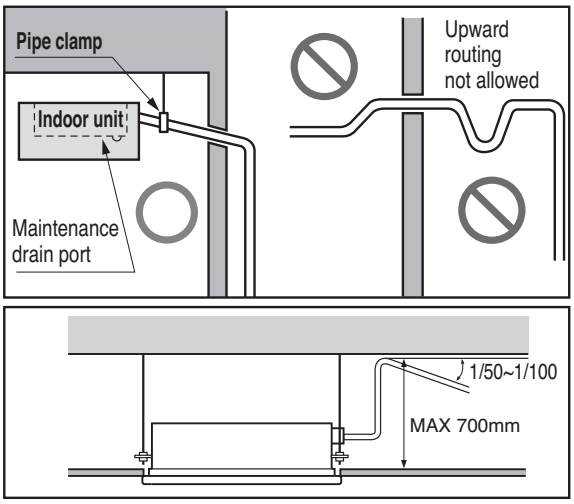
10.5 Indoor Unit Drain Piping

- Drain piping must have down-slope (1/50 to 1/100): Make sure not to provide up-and-down slope to prevent reversal flow.
- During drain piping connection, be careful not to exert extra force on the drain port on the indoor unit.
- The outside diameter of the drain connection on the indoor unit is 32mm.

Piping material: Polyvinyl chloride pipe inner diameter Ø 25mm and pipe fittings

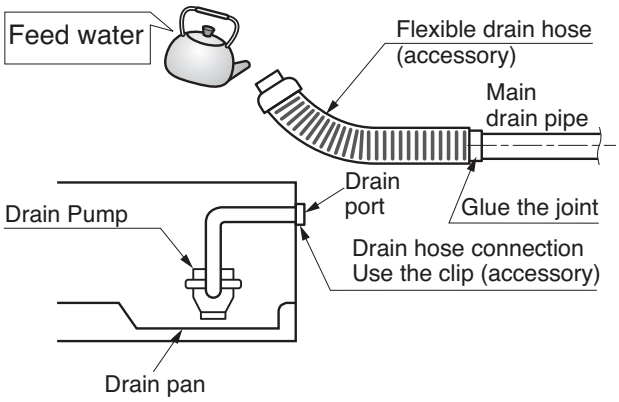
- Make sure to install heat insulation on the drain piping.

Heat insulation material: Polyethylene foam with thickness more than 8 mm.



Drain test

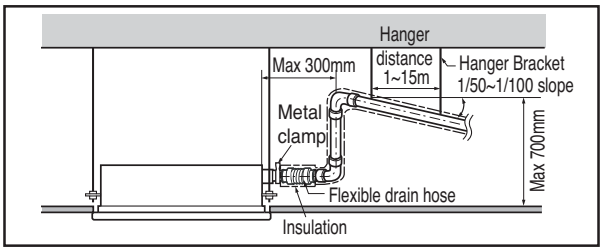
The air conditioner uses a drain pump to drain water.
Use the following procedure to test the drain pump operation:



- Connect the main drain pipe to the exterior and leave it provisionally until the test comes to an end.
- Feed water to the flexible drain hose and check the piping for leakage.
- Make sure to check the drain pump for normal operating and noise when electrical wiring is complete.
- When the test is complete, connect the flexible drain hose to the drain port on the indoor unit.

⚠ CAUTION

The supplied flexible drain hose should not be strained.
A strained hose may cause leakage of water.



10. Installation

⚠ CAUTION

After the confirmation of the above conditions, prepare the wiring as follows:

1) Never fail to have separate power specially for the air conditioner. As for the method of wiring, follow the circuit diagram pasted on the inside of control box cover.

2) Provide a circuit breaker switch between power source and the unit.

3) The screw which fasten the wiring in the casing of electrical fittings are liable to come loose from vibrations to which the unit is subjected during the course of transportation. Check them and make sure that they are all tightly fastened. (If they are loose, it could give rise to burn-out of the wires.)

4) Confirm the specification of power source

5) Confirm that electrical capacity is sufficient.

6) Be sure that the starting voltage is maintained at more than 90 percent of the rated voltage marked on the name plate.

7) Confirm that the cable thickness is as specified in the power sources specification.
(Particularly note the relation between cable length and thickness.)

8) Do not install the leakage breaker in a place which is wet or moist.
Water or moist may cause short circuit.

9) The following troubles would be caused by voltage drop-down.

- Vibration of a magnetic switch, damage on the contact point there of, fuse breaking, disturbance to the normal function of a over-load protection device.
- Proper starting power is not given to the compressor.

HAND OVER

Teach the customer the operation and maintenance procedures, using the operation manual.
(air filter cleaning, temperature control, etc.)

WIRED REMOTE CONTROLLER INSTALLATION

- Since the room temperature sensor is in the remote controller, the remote controller box should be installed in a place away from direct sunlight, high humidity and direct supply of cold air to maintain proper space temperature.
  Install the remote controller about 5ft(1.5m) above the floor in an area with good air circulation at an average temperature.

Do not install the remote controller where it can be affected by:

- Drafts, or dead spots behind doors and in corners.
- Hot or cold air from ducts.
- Radiant heat from sun or appliances.
- Concealed pipes and chimneys.
- Uncontrolled areas such as an outside wall behind the remote controller.
- This remote controller is equipped with a seven segment LED. display. For proper display of the remote controller LED's, the remote controller should be installed properly as shown in Fig.1.
  (The standard height is 1.2~1.5 m from floor level.)

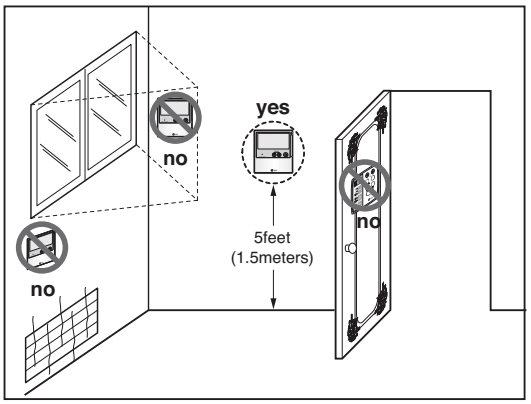
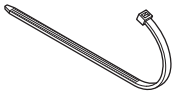
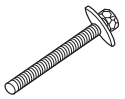


Fig.1 Typical locations for remote controller

11. Accessories

Standard Accessories

Name	Clamp metal	Drain hose	Insulation for fitting	Washer for hanging bracket	Clamp (Tie Wrap)	Bolt	(Other)
Quantity	2 EA	1 EA	1 set	8 EA	4 EA	4 EA	• Paper pattern for installation • Owner's manual • Installation manual
Shape			 for gas pipe for liquid pipe				

• Screws for fixing panels are attached to decoration panel.

⚠ CAUTION

• Use only those accessories (Standard or optional) which have designated specifications.