

Ceiling Mounted Cassette (1-Way)

- 1. List of functions**
- 2. Specifications**
- 3. Dimensions**
- 4. Piping Diagrams**
- 5. Wiring Diagrams**
- 6. Capacity Tables**
- 7. Air Velocity and Temperature Distribution**
- 8. Electric Characteristics**
- 9. Sound Levels**
- 10. Installation**

1. List of functions

Category	Function	ARNU07GTU*4, ARNU09GTU*4, ARNU12GTU*4, ARNU18GTT*4, ARNU24GTT*4
Air flow	Air supply outlet	1
	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	O(C4 Model only), X(A4 Model)
	Prefilter(washable / anti-fungus)	O
Installation	Drain pump	O
	E.S.P. control*	X
	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
	External On/Off	O
Individual control	Wide wired remote controller (RS2)	PQRCVSL0/PQRCVSL0QW
	Wide wired remote controller (RS2 Plus)	PREMTB001/PREMTBB01
	Premium wired remote controller	PREMTA000/PREMTA000A/PREMTA000B
	Simple wired remote controller	PQRCVCL0Q(W)
	Wired remote controller(for hotel use)	PQRCHCA0Q(W)
	Wireless LCD remote control	PQWRH(C)Q0FDB
Special function kit	Zone control	-
	CTIE	-
	Electro thermostat	-
	Remote temperature sensor	PQRSTA0
	Group control wire	PZCWRCG3
	Dry contact	PDRYCB000/PDRYCB300/PDRYCB400/PDRYCB500

Note

- O : Applied
X : Not Applied
Accessory model name : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.
- Some functions can be limited by remote controller.
- In case of ducted type indoor units using the wireless remote controller, it needs to connect the wired remote controller for received the signal of that.
- In case of cassette type indoor units, Plasma kit and Auto Elevation Grille functions are not applicable at the same time.
- * : These functions need to connect the wired remote controller.

2. Specifications

* Model Name (A:Basic, C:Plasma)

Type			1Way Ceiling Mounted Cassette	
Model		Unit	ARNU07GTU*4	ARNU09GTU*4
Cooling Capacity		kW	2.2	2.8
		kcal/h	1,900	2,400
		Btu/h	7,500	9,600
Heating Capacity		kW	2.5	3.2
		kcal/h	2,200	2,800
		Btu/h	8,500	10,900
Power Input (H / M / L)		W	20 / 18 / 16	22 / 20 / 18
Casing			Galvanized Steel Plate	Galvanized Steel Plate
Dimensions (WxHxD)	Body	mm	860 x 132 x 450	860 x 132 x 450
		inch	33-27/32 x 5-3/16 x 17-23/32	33-27/32 x 5-3/16 x 17-23/32
	Front Panel	mm	1,100 x 34 x 500	1,100 x 34 x 500
		inch	43-5/16 x 1-11/32 x 19-11/16	43-5/16 x 1-11/32 x 19-11/16
Coil	Rows x Columns x FPI		2 x 12 x 18	2 x 12 x 18
	Face Area	m²	0.16	0.16
Fan	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output x Number	W	30	30
	Running Current	A	0.18	0.18
	Air Flow Rate (H / M / L)	m³/min	8.2 / 7.3 / 6.4	9.2 / 8.6 / 8.2
		ft³/min	289.5 / 257.7 / 225.9	324.7 / 303.6 / 289.5
	Drive		Direct	Direct
Motor type		BLDC	BLDC	
Temperature Control			Microprocessor, Thermostat for cooling and heating	
Sound Absorbing Thermal Insulation Material			Foamed polystyrene	Foamed polystyrene
Safety Device			Fuse	Fuse
Pipe Connections	Liquid Side	mm(inch)	Ø6.35(1/4)	Ø6.35(1/4)
	Gas Side	mm(inch)	Ø12.7(1/2)	Ø12.7(1/2)
	Drain Pipe(Internal Dia.)	mm(inch)	25(1)	25(1)
Net Weight	Body	kg(lbs)	13.6(30.0)	13.6(30.0)
Sound Pressure Levels (H / M / L)		dB(A)	32 / 29 / 25	35 / 34 / 32
Sound Power Levels (H / M / L)		dB(A)	47 / 44 / 41	50 / 48 / 47
Power Supply		Ø, V, Hz	1, 220-240, 50	1, 220-240, 50
			1, 220, 60	1, 220, 60
Refrigerant Control			EEV	EEV
Transmission cable			1.0~1.5 x 2C	1.0~1.5 x 2C
Panel Color			Noble White	Noble White
Panel Name(Accessory)			PT-UUC(Grill), PT-UUD(Panel)	

Note

1. Due to our policy of innovation some specifications may be changed without notification.
2. Wiring cable size must comply with the applicable local and national code. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.
3. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.
Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.
Therefore, these values can be increased owing to ambient conditions during operation.
4. Capacities are net capacities and based on the following conditions. Refer to the Outdoor Unit Specifications for calculating the real capacity.
 - Cooling : Indoot Ambient Temp. 27°CDB / 19°CWB, Outdoor Ambient Temp. 35°CDB / 24°CWB
 - Heating : Indoot Ambient Temp. 20°CDB / 15°CWB, Outdoor Ambient Temp. 7°CDB / 6°CWB
 - Interconnected Pipe is standard length and difference of Elevation (Outdoor ~ Indoor Unit) is Zero.

2. Specifications

* Model Name (A:Basic, C:Plasma)

Type			1Way Ceiling Mounted Cassette
Model		Unit	ARNU12GTU*4
Cooling Capacity		kW	3.6
		kcal/h	3,100
		Btu/h	12,300
Heating Capacity		kW	4.0
		kcal/h	3,400
		Btu/h	13,600
Power Input (H / M / L)		W	24 / 22 / 20
Casing			Galvanized Steel Plate
Dimensions (WxHxD)	Body	mm	860 x 132 x 450
		inch	33-27/32 x 5-3/16 x 17-23/32
	Front Panel	mm	1,100 x 34 x 500
		inch	43-5/16 x 1-11/32 x 19-11/16
Coil	Rows x Columns x FPI		2 x 12 x 18
	Face Area	m²	0.16
Fan	Type		Cross Flow Fan
	Motor Output x Number	W	30
	Running Current	A	0.18
	Air Flow Rate (H / M / L)	m³/min	10 / 9.2 / 8.2
		ft³/min	353 / 324.8 / 289.5
	Drive		Direct
Motor type		BLDC	
Temperature Control			Microprocessor, Thermostat for cooling and heating
Sound Absorbing Thermal Insulation Material			Foamed polystyrene
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)	13.6(30.0)
Sound Pressure Levels (H / M / L)		dB(A)	38 / 35 / 32
Sound Power Levels (H / M / L)		dB(A)	52 / 50 / 47
Power Supply		Ø, V, Hz	1, 220-240, 50
			1, 220, 60
Refrigerant Control			EEV
Transmission cable			1.0~1.5 x 2C
Panel Color			Noble White
Panel Name(Accessory)			PT-UTC(Grill), PT-UTD(Panel)

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Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.
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 - Cooling : Indoot Ambient Temp. 27°CDB / 19°CWB, Outdoor Ambient Temp. 35°CDB / 24°CWB
 - Heating : Indoot Ambient Temp. 20°CDB / 15°CWB, Outdoor Ambient Temp. 7°CDB / 6°CWB
 - Interconnected Pipe is standard length and difference of Elevation (Outdoor ~ Indoor Unit) is Zero.

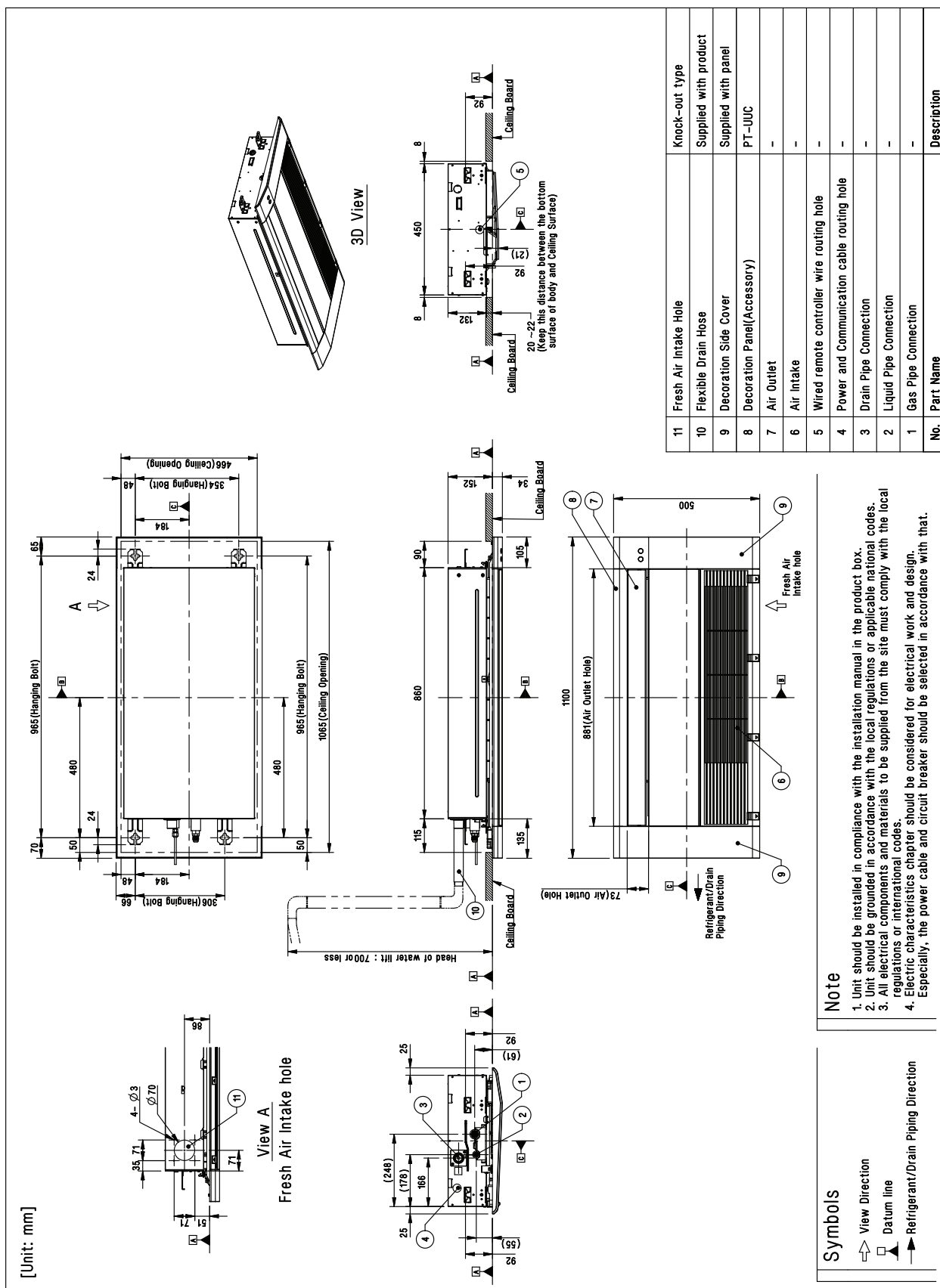
2. Specifications

* Model Name (A:Basic, C:Plasma)

Type			1Way Ceiling Mounted Cassette	
Model		Unit	ARNU18GTT*4	ARNU24GTT*4
Cooling Capacity		kW	5.6	7.1
		kcal/h	4,800	6,100
		Btu/h	19,100	24,200
Heating Capacity		kW	6.3	7.1
		kcal/h	5,400	6,100
		Btu/h	21,500	24,200
Power Input (H / M / L)		W	38 / 28 / 24	51 / 33 / 26
Casing			Galvanized Steel Plate	Galvanized Steel Plate
Dimensions (WxHxD)	Body	mm	1,180 x 132 x 450	1,180 x 132 x 450
		inch	46-15/32 x 5-3/16 x 17-23/32	46-15/32 x 5-3/16 x 17-23/32
	Front Panel	mm	1,420 x 34 x 500	1,420 x 34 x 500
		inch	55-29/32 x 1-11/32 x 19-11/16	55-29/32 x 1-11/32 x 19-11/16
Coil	Rows x Columns x FPI		2 x 12 x 18	2 x 12 x 18
	Face Area	m²	0.24	0.24
Fan	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output x Number	W	30	30
	Running Current	A	0.30	0.30
	Air Flow Rate (H / M / L)	m³/min	13.3 / 12.1 / 10.9	14.6 / 13.3 / 11.5
		ft³/min	515.4 / 427.1 / 384.8	575.4 / 469.5 / 406
	Drive		Direct	Direct
	Motor type		BLDC	BLDC
Temperature Control			Microprocessor, Thermostat for cooling and heating	
Sound Absorbing Thermal Insulation Material			Foamed polystyrene	Foamed polystyrene
Safety Device			Fuse	Fuse
Pipe Connections	Liquid Side	mm(inch)	Ø6.35(1/4)	Ø9.52(3/8)
	Gas Side	mm(inch)	Ø12.7(1/2)	Ø15.88(5/8)
	Drain Pipe(Internal Dia.)	mm(inch)	25(1)	25(1)
Net Weight	Body	kg(lbs)	15.6(34.4)	15.6(34.4)
Sound Pressure Levels (H / M / L)		dB(A)	40 / 37 / 35	43 / 40 / 36
Sound Power Levels (H / M / L)		dB(A)	56 / 51 / 48	59 / 53 / 50
Power Supply		Ø, V, Hz	1, 220-240, 50	1, 220-240, 50
			1, 220, 60	1, 220, 60
Refrigerant Control			EEV	EEV
Transmission cable			1.0~1.5 x 2C	1.0~1.5 x 2C
Panel Color			Noble White	Noble White
Panel Name(Accessory)			PT-UTC(Grill), PT-UTD(Panel)	
Note				
1. Due to our policy of innovation some specifications may be changed without notification.				
2. Wiring cable size must comply with the applicable local and national code. And “Electric characteristics” chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.				
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4. Capacities are net capacities and based on the following conditions. Refer to the Outdoor Unit Specifications for calculating the real capacity.				
• Cooling : Indoot Ambient Temp. 27°CDB / 19°CWB, Outdoor Ambient Temp. 35°CDB / 24°CWB				
• Heating : Indoot Ambient Temp. 20°CDB / 15°CWB, Outdoor Ambient Temp. 7°CDB / 6°CWB				
• Interconnected Pipe is standard length and difference of Elevation (Outdoor ~ Indoor Unit) is Zero.				

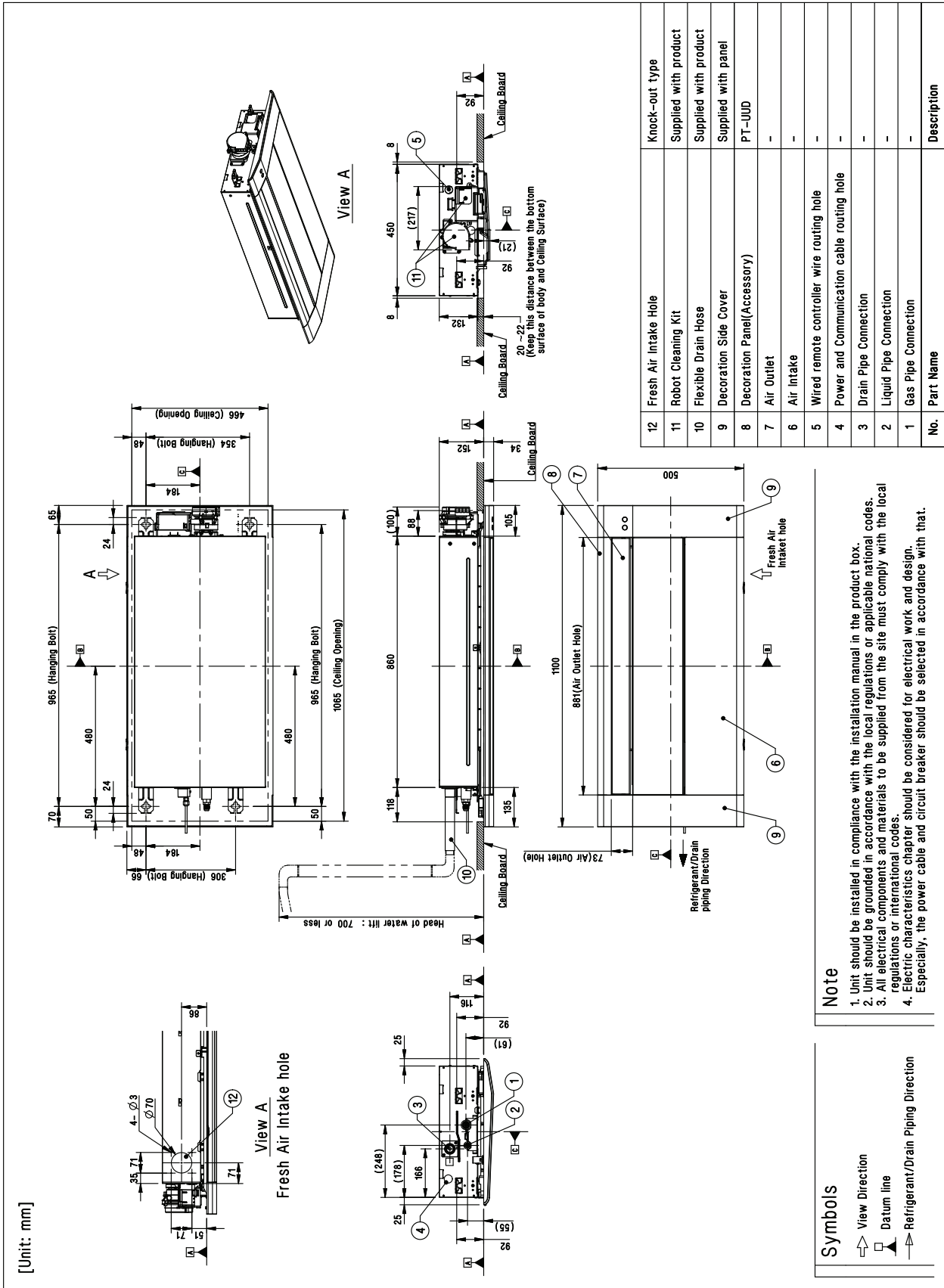
3. Dimensions

ARNU07GTU*4 / ARNU09GTU*4 / ARNU12GTU*4



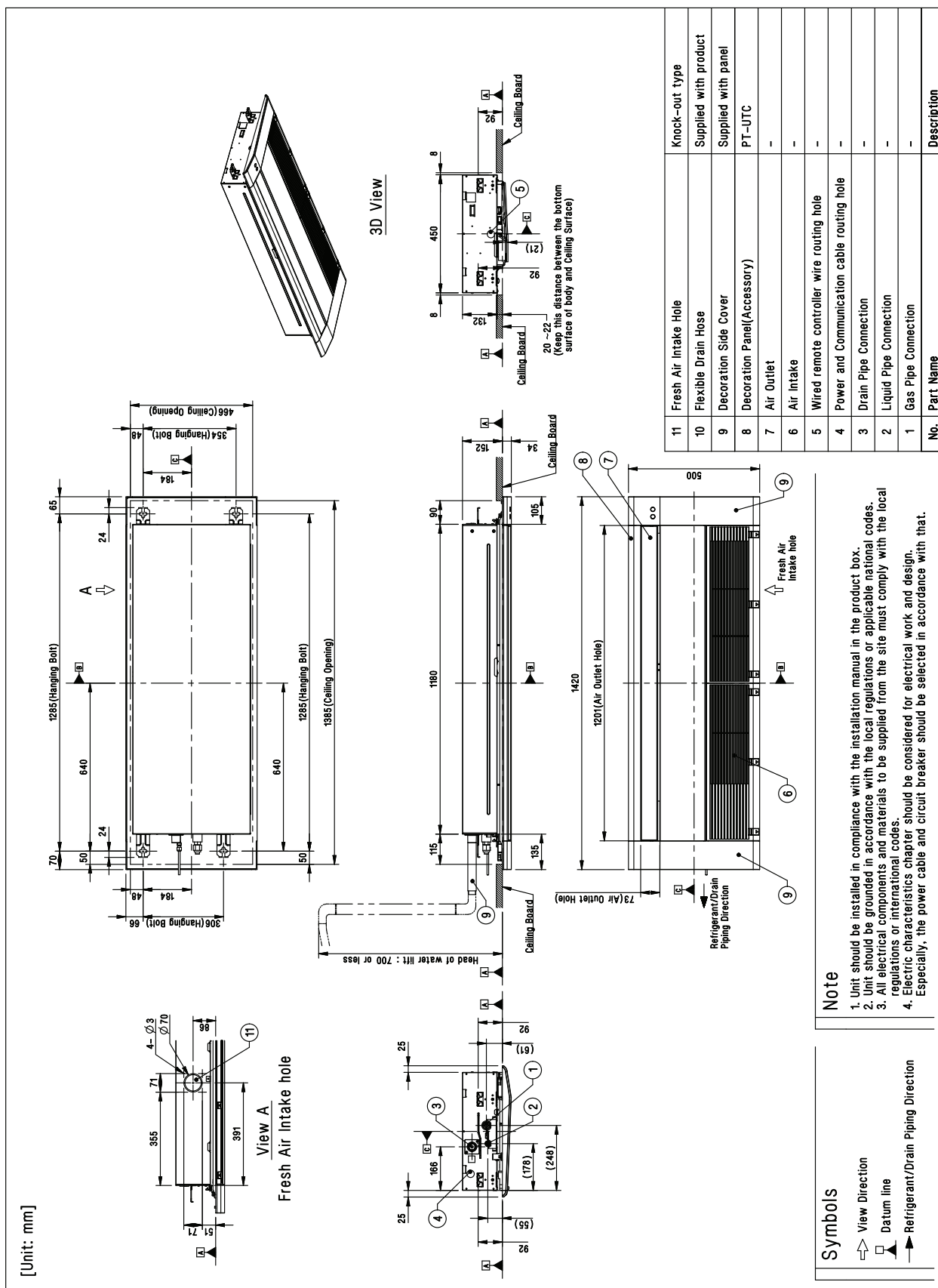
3. Dimensions

ARNU07GTU*4 / ARNU09GTU*4 / ARNU12GTU*4

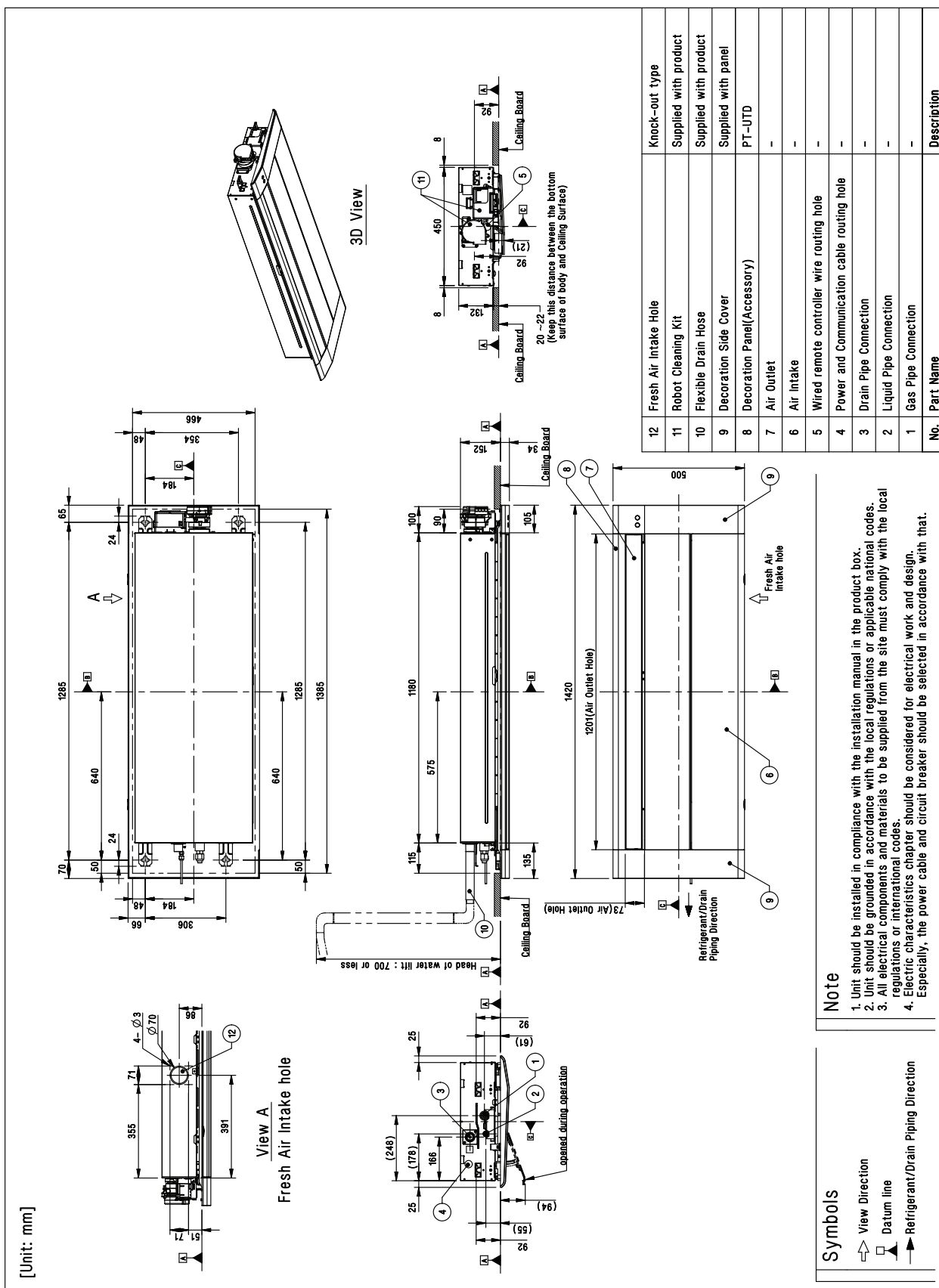


3. Dimensions

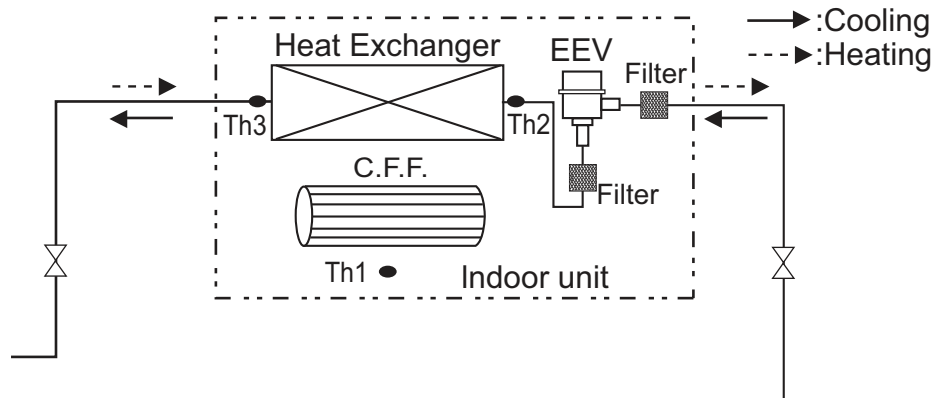
ARNU18GTT*4 / ARNU24GTT*4



ARNU18GTT*4 / ARNU24GTT*4



4. Piping Diagrams



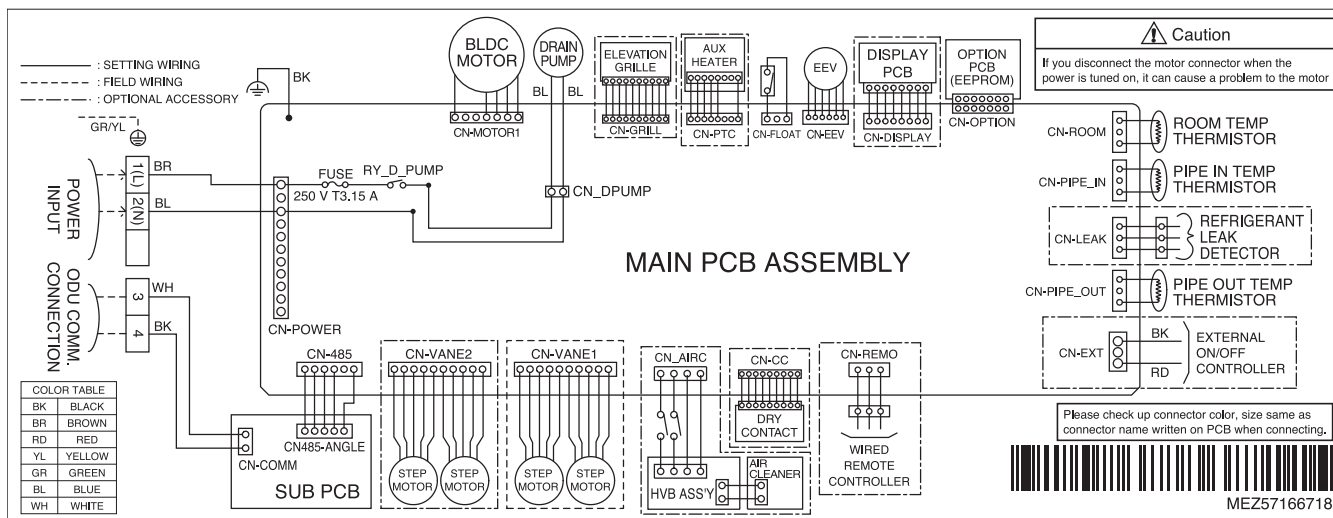
◆ Refrigerant pipe connection port diameter

Model	Gas [mm(inch)]	Liquid [mm(inch)]
ARNU07GTU*4	Ø12.7(1/2)	Ø6.35(1/4)
ARNU09GTU*4		
ARNU12GTU*4		
ARNU18GTT*4		
ARNU24GTT*4	Ø15.88(5/8)	Ø9.52(3/8)

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

5. Wiring Diagrams

TU, TT Chassis



CONNECTOR NUMBER	LOCATION POINT	FUNCTION
CN-MOTOR1	Fan motor output	Motor output of BLDC
CN_DPUMP	Drain pump output	AC output for drain pump
CN-GRILL	Elevation grill	Elevation grill line
CN-PTC	Aux heater	Aux heater line
CN-LEAK	Refrigerant leak detector	Refrigerant leak detector line
CN-AIRC	Air cleaner	Air cleaner line
CN-DISPLAY	Display	Display of indoor status
CN-OPTION	Option pwb.	Communication between main and option
CN-EEV	EEV Output	EEV Control output
CN-FLOAT	Float switch input	Float switch sensing
CN-ROOM	Room sensor	Room air thermistor
CN-PIPE_IN	Suction pipe sensor	Pipe in thermistor
CN-PIPE_OUT	Discharge pipe sensor	Pipe out thermistor
CN-REMO	Remote controller	Remote control line
CN-CC	Dry contact	Dry contact line
CN-COMM	Communication	Communication between indoor and outdoor
CN-VANE1	Step motor	Step motor output
CN-VANE2	Step motor	Step motor output
CN-485	Communication	Connection between indoor and outdoor
CN-EXT	External On/Off	External On/Off signal input

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 continuously) -. ON : Fan operate continuously 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

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
2.2	10	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.6	1.7	2.9	1.7
	12	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.6	1.7	2.9	1.7
	14	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.6	1.7	2.8	1.7
	16	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.6	1.7	2.8	1.6
	18	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.6	1.7	2.7	1.6
	20	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.6	1.7	2.7	1.6
	21	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.6	1.7	2.7	1.6
	23	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.6	1.7	2.6	1.6
	25	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.6	1.7	2.6	1.5
	27	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.5	1.7	2.6	1.5
	29	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.5	1.6	2.5	1.5
	31	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.5	1.6	2.5	1.5
	33	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.4	1.6	2.4	1.4
	35	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.4	1.7	2.4	1.6	2.4	1.4
2.8	37	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.3	1.6	2.3	1.5	2.4	1.4
	39	1.5	1.3	1.8	1.4	2.0	1.6	2.2	1.6	2.2	1.6	2.3	1.5	2.4	1.4
	10	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.4	2.2	3.7	2.1
	12	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.4	2.2	3.6	2.1
	14	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.4	2.2	3.6	2.1
	16	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.4	2.2	3.5	2.0
	18	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.4	2.2	3.5	2.0
	20	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.4	2.2	3.4	2.0
	21	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.4	2.2	3.4	2.0
	23	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.4	2.2	3.4	2.0
	25	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.3	2.1	3.3	1.9
	27	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.2	2.1	3.3	1.9
	29	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.2	2.0	3.2	1.9
	31	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.2	2.0	3.2	1.8
3.6	33	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.1	2.0	3.1	1.8
	35	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	3.0	2.1	3.0	2.0	3.1	1.8
	37	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	2.9	2.0	3.0	1.9	3.0	1.8
	39	1.9	1.6	2.2	1.8	2.6	2.0	2.8	2.0	2.8	2.0	2.9	1.9	3.0	1.7
	10	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.3	2.8	4.7	2.8
	12	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.3	2.8	4.7	2.8
	14	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.3	2.8	4.6	2.7
	16	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.3	2.8	4.6	2.7
	18	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.3	2.8	4.5	2.7
	20	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.3	2.8	4.4	2.6
	21	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.3	2.8	4.4	2.6
	23	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.3	2.8	4.3	2.5
	25	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.3	2.8	4.3	2.5
	27	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.2	2.7	4.2	2.5
	29	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.1	2.7	4.2	2.4
5.6	31	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.1	2.6	4.1	2.4
	33	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	4.0	2.6	4.0	2.3
	35	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	3.9	2.5	4.0	2.3
	37	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.8	2.6	3.8	2.5	3.9	2.3
	39	2.4	2.1	2.9	2.3	3.3	2.5	3.6	2.6	3.7	2.5	3.8	2.4	3.9	2.2
	10	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.7	4.2	7.3	4.1
	12	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.7	4.2	7.3	4.1
	14	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.7	4.2	7.2	4.1
	16	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.7	4.2	7.1	4.0
	18	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.7	4.2	6.9	4.0
	20	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.7	4.2	6.9	3.9
	21	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.7	4.2	6.9	3.9
	23	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.7	4.2	6.7	3.8
	25	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.6	4.1	6.6	3.7
	27	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.5	4.1	6.5	3.7
	29	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.4	4.0	6.5	3.7
	31	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.3	3.9	6.4	3.6
	33	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.2	3.9	6.2	3.5
	35	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	6.0	4.1	6.1	3.8	6.2	3.5
	37	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	5.8	3.9	5.9	3.7	6.1	3.4
	39	3.8	3.2	4.5	3.5	5.2	3.8	5.6	3.9	5.7	3.8	5.8	3.7	6.0	3.4

6. Capacity Tables

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
7.1	10	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	8.5	5.4	9.3	5.3
	12	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	8.5	5.4	9.2	5.3
	14	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	8.5	5.4	9.1	5.2
	16	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	8.5	5.4	9.0	5.1
	18	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	8.5	5.4	8.8	5.1
	20	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	8.5	5.4	8.7	5.0
	21	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	8.5	5.4	8.7	5.0
	23	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	8.5	5.4	8.5	4.9
	25	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	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	5.2	8.2	5.2	8.3	4.8
	29	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	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	5.2	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	5.2	7.8	5.0	7.9	4.5
	35	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	7.7	4.9	7.8	4.5
	37	4.8	4.1	5.7	4.5	6.6	4.9	7.1	5.0	7.4	5.0	7.5	4.8	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	4.7	7.6	4.3

Note

1. TC: Total Capacity(kW), SHC: Sensible Heat Capacity(kW)
2. Capacity tables show the average value of conditions which may occur.
3. Refer to Capacity tables and correction factor in the outdoor unit PDB for the actual performance data of each indoor unit and outdoor unit combination.

6. Capacity Tables

ARNU18GTT*4 / ARNU24GTT*4

6.2 Heating Capacity

Capacity Index	Outdoor air temp.		Indoor air temp. (DB, °C)					
	DB(°C)	WB(°C)	16	18	20	21	22	24
			TC kW	TC kW	TC kW	TC kW	TC kW	TC kW
2.2	-24.8	-25.0	1.4	1.4	1.4	1.4	1.4	1.4
	-21.8	-22.0	1.7	1.7	1.7	1.7	1.7	1.7
	-19.8	-20.0	1.8	1.8	1.8	1.8	1.8	1.8
	-18.8	-19.0	1.9	1.9	1.9	1.9	1.9	1.9
	-16.7	-17.0	2.0	2.0	2.0	2.0	2.0	2.0
	-14.7	-15.0	2.1	2.1	2.1	2.1	2.1	2.0
	-12.6	-13.0	2.2	2.2	2.2	2.2	2.1	2.1
	-10.5	-11.0	2.3	2.3	2.2	2.2	2.2	2.2
	-9.5	-10.0	2.3	2.3	2.3	2.3	2.3	2.2
	-8.5	-9.1	2.3	2.3	2.3	2.3	2.3	2.2
	-7.0	-7.6	2.4	2.4	2.4	2.4	2.3	2.2
	-5.0	-5.6	2.5	2.5	2.5	2.4	2.3	2.2
	-3.0	-3.7	2.6	2.6	2.5	2.4	2.3	2.2
	0.0	-0.7	2.7	2.6	2.5	2.4	2.3	2.2
	3.0	2.2	2.7	2.7	2.5	2.4	2.3	2.2
	5.0	4.1	2.8	2.7	2.5	2.4	2.3	2.2
	7.0	6.0	2.8	2.7	2.5	2.4	2.3	2.2
	9.0	7.9	2.8	2.7	2.5	2.4	2.3	2.2
2.8	-24.8	-25.0	1.9	1.9	1.8	1.8	1.8	1.8
	-21.8	-22.0	2.2	2.2	2.2	2.2	2.2	2.2
	-19.8	-20.0	2.4	2.4	2.3	2.3	2.3	2.3
	-18.8	-19.0	2.4	2.4	2.4	2.4	2.4	2.4
	-16.7	-17.0	2.5	2.5	2.5	2.5	2.5	2.5
	-14.7	-15.0	2.7	2.7	2.6	2.6	2.6	2.6
	-12.6	-13.0	2.8	2.8	2.8	2.8	2.7	2.7
	-10.5	-11.0	2.9	2.9	2.9	2.9	2.9	2.8
	-9.5	-10.0	3.0	3.0	2.9	2.9	2.9	2.8
	-8.5	-9.1	3.0	3.0	3.0	3.0	3.0	2.8
	-7.0	-7.6	3.1	3.1	3.1	3.1	3.0	2.8
	-5.0	-5.6	3.2	3.2	3.2	3.1	3.0	2.8
	-3.0	-3.7	3.4	3.3	3.2	3.1	3.0	2.8
	0.0	-0.7	3.4	3.3	3.2	3.1	3.0	2.8
	3.0	2.2	3.5	3.4	3.2	3.1	3.0	2.8
	5.0	4.1	3.6	3.4	3.2	3.1	3.0	2.8
	7.0	6.0	3.6	3.4	3.2	3.1	3.0	2.8
	9.0	7.9	3.6	3.4	3.2	3.1	3.0	2.8
	11.0	9.8	3.6	3.4	3.2	3.1	3.0	2.8
3.6	-24.8	-25.0	2.3	2.3	2.3	2.3	2.3	2.3
	-21.8	-22.0	2.8	2.8	2.8	2.8	2.8	2.8
	-19.8	-20.0	2.9	2.9	2.9	2.9	2.9	2.9
	-18.8	-19.0	3.0	3.0	3.0	3.0	3.0	3.0
	-16.7	-17.0	3.1	3.1	3.1	3.1	3.1	3.1
	-14.7	-15.0	3.3	3.3	3.3	3.3	3.3	3.3
	-12.6	-13.0	3.5	3.4	3.4	3.4	3.4	3.4
	-10.5	-11.0	3.6	3.6	3.6	3.6	3.6	3.5
	-9.5	-10.0	3.7	3.7	3.7	3.7	3.7	3.5
	-8.5	-9.1	3.8	3.8	3.7	3.7	3.7	3.5
	-7.0	-7.6	3.9	3.9	3.9	3.8	3.7	3.5
	-5.0	-5.6	4.0	4.0	4.0	3.9	3.7	3.5
	-3.0	-3.7	4.2	4.1	4.0	3.9	3.7	3.5
	0.0	-0.7	4.3	4.1	4.0	3.9	3.7	3.5
	3.0	2.2	4.4	4.3	4.0	3.9	3.7	3.5
	5.0	4.1	4.5	4.3	4.0	3.9	3.7	3.5
	7.0	6.0	4.5	4.3	4.0	3.9	3.7	3.5
	9.0	7.9	4.5	4.3	4.0	3.9	3.7	3.5
	11.0	9.8	4.5	4.3	4.0	3.9	3.7	3.5
	13.0	11.8	4.5	4.3	4.0	3.9	3.7	3.5
	15.0	13.7	4.5	4.3	4.0	3.9	3.7	3.5

6. Capacity Tables

ARNU18GTT*4 / ARNU24GTT*4

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	-24.8	-25.0	3.6	3.6	3.6	3.6	3.6	3.6
	-21.8	-22.0	4.4	4.4	4.4	4.4	4.4	4.4
	-19.8	-20.0	4.6	4.6	4.6	4.6	4.6	4.6
	-18.8	-19.0	4.8	4.7	4.7	4.7	4.7	4.7
	-16.7	-17.0	5.0	5.0	5.0	4.9	4.9	4.9
	-14.7	-15.0	5.2	5.2	5.2	5.2	5.2	5.2
	-12.6	-13.0	5.5	5.4	5.4	5.4	5.4	5.4
	-10.5	-11.0	5.7	5.7	5.7	5.7	5.7	5.5
	-9.5	-10.0	5.8	5.8	5.8	5.8	5.8	5.5
	-8.5	-9.1	5.9	5.9	5.9	5.9	5.9	5.5
	-7.0	-7.6	6.1	6.1	6.1	6.0	5.9	5.5
	-5.0	-5.6	6.3	6.3	6.3	6.1	5.9	5.5
	-3.0	-3.7	6.6	6.5	6.3	6.1	5.9	5.5
	0.0	-0.7	6.7	6.5	6.3	6.1	5.9	5.5
	3.0	2.2	6.9	6.7	6.3	6.1	5.9	5.5
	5.0	4.1	7.0	6.7	6.3	6.1	5.9	5.5
	7.0	6.0	7.1	6.7	6.3	6.1	5.9	5.5
	9.0	7.9	7.1	6.7	6.3	6.1	5.9	5.5
	11.0	9.8	7.1	6.7	6.3	6.1	5.9	5.5
	13.0	11.8	7.1	6.7	6.3	6.1	5.9	5.5
	15.0	13.7	7.1	6.7	6.3	6.1	5.9	5.5
7.1	-24.8	-25.0	4.1	4.1	4.1	4.1	4.1	4.1
	-21.8	-22.0	5.0	5.0	4.9	4.9	4.9	4.9
	-19.8	-20.0	5.2	5.2	5.2	5.2	5.2	5.2
	-18.8	-19.0	5.4	5.3	5.3	5.3	5.3	5.3
	-16.7	-17.0	5.6	5.6	5.6	5.6	5.6	5.6
	-14.7	-15.0	5.9	5.9	5.9	5.9	5.9	5.8
	-12.6	-13.0	6.2	6.1	6.1	6.1	6.1	6.1
	-10.5	-11.0	6.4	6.4	6.4	6.4	6.4	6.2
	-9.5	-10.0	6.5	6.5	6.5	6.5	6.5	6.2
	-8.5	-9.1	6.7	6.7	6.6	6.6	6.6	6.2
	-7.0	-7.6	6.9	6.8	6.8	6.8	6.6	6.2
	-5.0	-5.6	7.1	7.1	7.1	6.9	6.6	6.2
	-3.0	-3.7	7.5	7.3	7.1	6.9	6.6	6.2
	0.0	-0.7	7.6	7.3	7.1	6.9	6.6	6.2
	3.0	2.2	7.8	7.6	7.1	6.9	6.6	6.2
	5.0	4.1	7.9	7.6	7.1	6.9	6.6	6.2
	7.0	6.0	8.0	7.6	7.1	6.9	6.6	6.2
	9.0	7.9	8.0	7.6	7.1	6.9	6.6	6.2
	11.0	9.8	8.0	7.6	7.1	6.9	6.6	6.2
	13.0	11.8	8.0	7.6	7.1	6.9	6.6	6.2
	15.0	13.7	8.0	7.6	7.1	6.9	6.6	6.2

Note

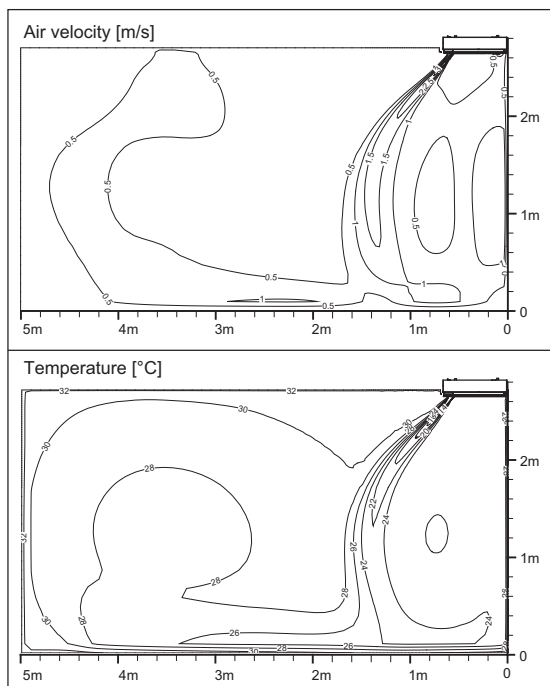
1. TC: Total Capacity(kW)
2. Capacity tables show the average value of conditions which may occur.
3. In the range beyond the operation limit of the outdoor unit, continuous operation and performance can not be guaranteed. When selecting the outdoor units, avoid the air temperature range that is not guaranteed continuous operation.
4. In accordance with operation limits of outdoor unit, applicable range of capacity tables is different.
5. Refer to Capacity tables and correction factor in the outdoor unit PDB for the actual performance data of each indoor unit and outdoor unit combination.

7. Air Velocity and Temperature Distribution

◆ ARNU07GTU*4

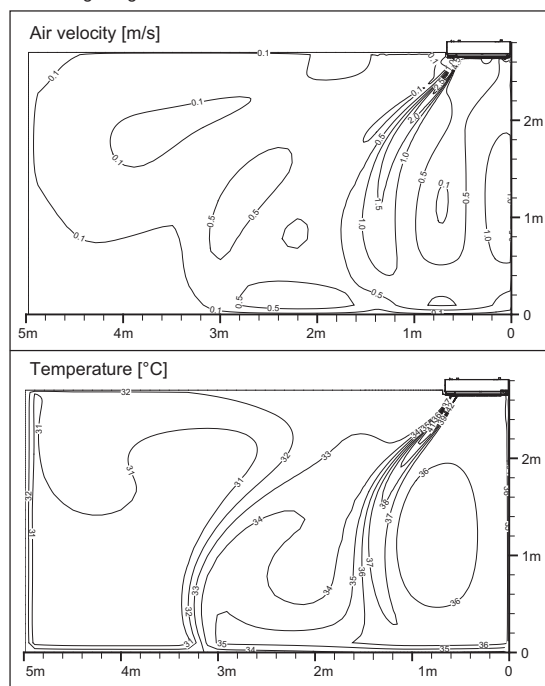
Cooling

Discharge angle: 50°



Heating

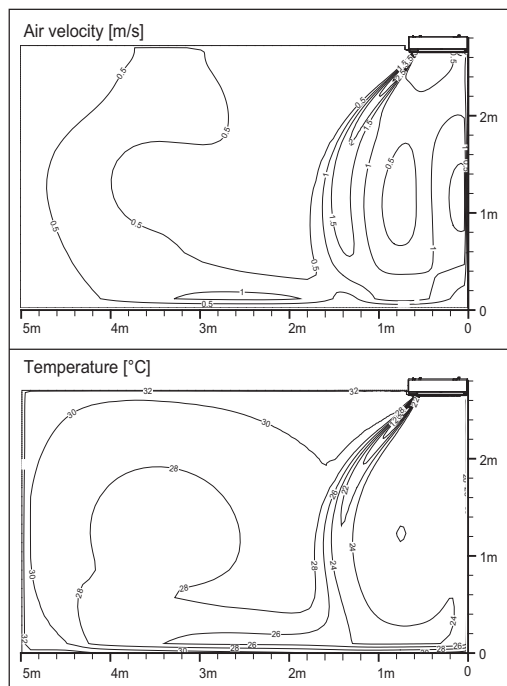
Discharge angle: 60°



◆ ARNU09GTU*4

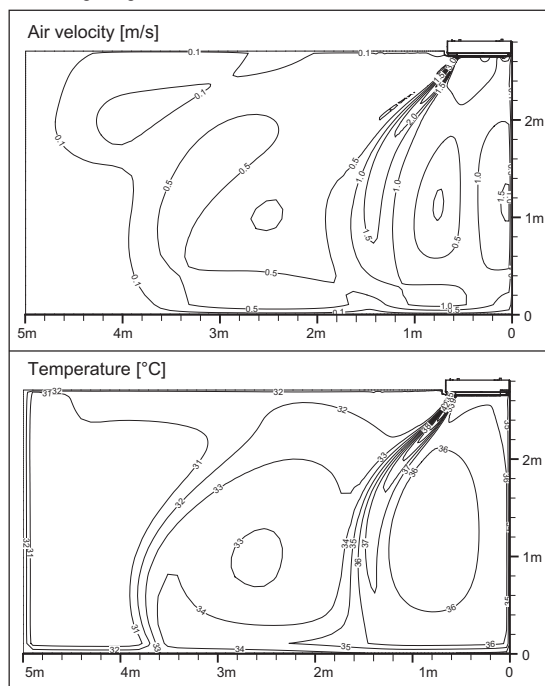
Cooling

Discharge angle: 50°



Heating

Discharge angle: 60°



Note

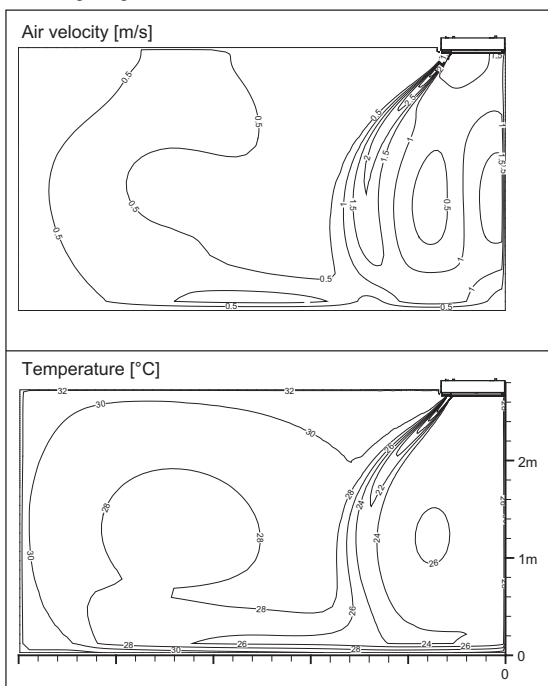
The standard setup height is 2.7m. Shown here is the measurement distribution at the ceiling height of 2.7m. Fan operating mode is high.

7. Air Velocity and Temperature Distribution

◆ ARNU12GTU*4

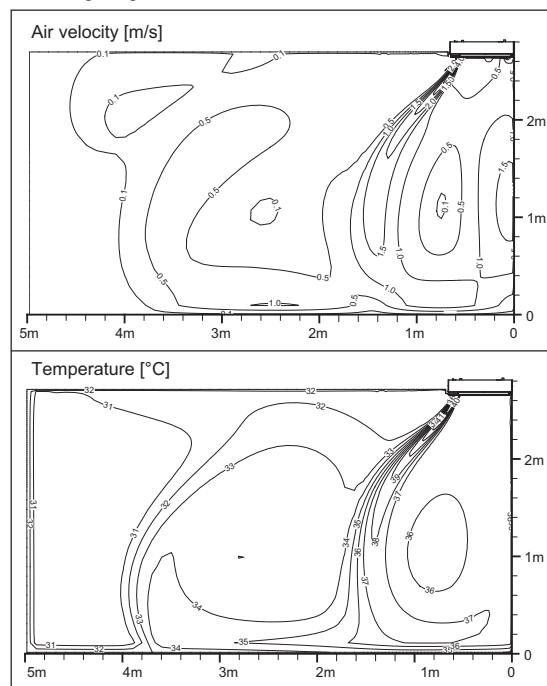
Cooling

Discharge angle: 50°



Heating

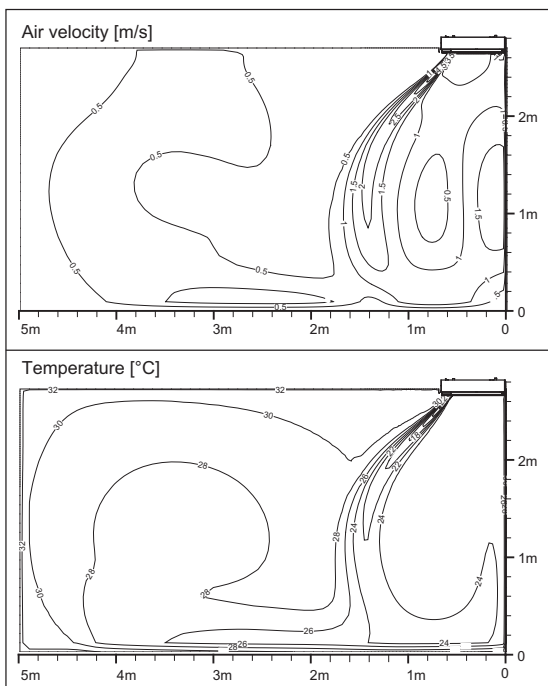
Discharge angle: 60°



◆ ARNU18GTT*4

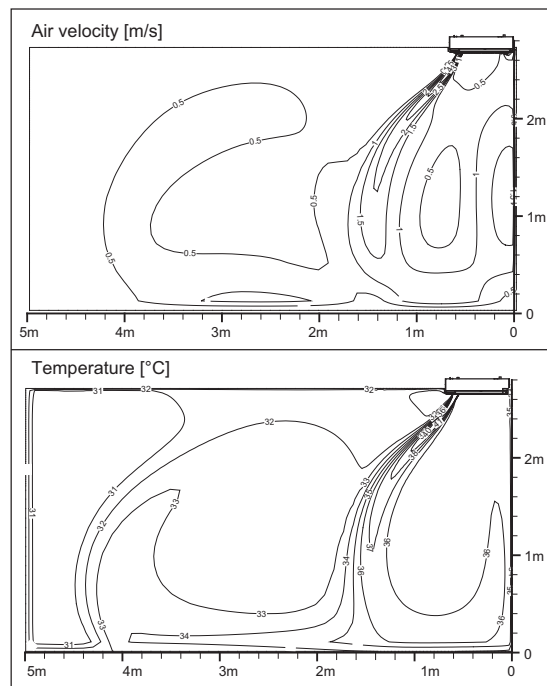
Cooling

Discharge angle: 50°



Heating

Discharge angle: 60°



Note

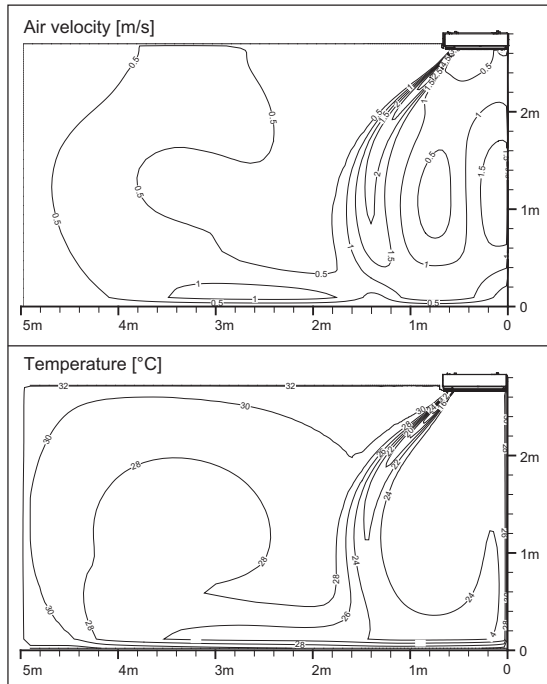
The standard setup height is 2.7m. Shown here is the measurement distribution at the ceiling height of 2.7m. Fan operating mode is high.

7. Air Velocity and Temperature Distribution

◆ ARNU24GTT*4

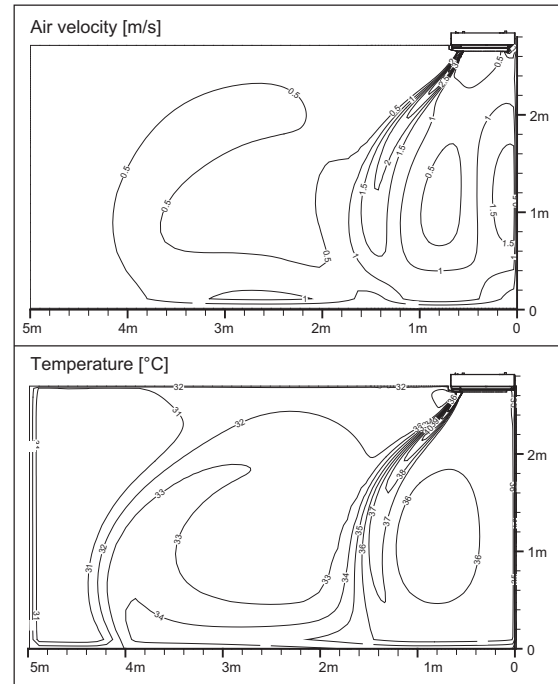
Cooling

Discharge angle: 50°



Heating

Discharge angle: 60°



Note

The standard setup height is 2.7m. Shown here is the measurement distribution at the ceiling height of 2.7m. Fan operating mode is high.

8. Electric Characteristics

Units					Power Supply		IFM		PI	
Model	Type	Hz	Volts	Voltage Range	MCA	MFA	kW	FLA	Cooling	Heating
ARNU07GTU*4	TU	50	220-240	Max:264 Min:198	0.23	15	0.03	0.18	40	40
ARNU09GTU*4	TU				0.23	15	0.03	0.18	40	40
ARNU12GTU*4	TU				0.23	15	0.03	0.18	40	40
ARNU18GTT*4	TT				0.38	15	0.03	0.30	70	70
ARNU24GTT*4	TT				0.38	15	0.03	0.30	70	70
ARNU07GTU*4	TU	60	220	Max:242 Min:198	0.23	15	0.03	0.18	40	40
ARNU09GTU*4	TU				0.23	15	0.03	0.18	40	40
ARNU12GTU*4	TU				0.23	15	0.03	0.18	40	40
ARNU18GTT*4	TT				0.23	15	0.03	0.30	70	70
ARNU24GTT*4	TT				0.38	15	0.03	0.30	70	70

Symbols

MCA : Minimum Circuit Amperes (A)

MFA : Maximum Fuse Amperes (A)

kW : Fan Motor Rated Output (kW)

FLA : Full Load Amperes (A)

IFM : Indoor Fan Motor

PI : Maximum Power Input (W)

Note

1. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above the listed range limits.

2. Maximum allowable voltage unbalance between phases is 2%.

3. MCA/MFA

$MCA = 1.25 \times FLA$

$MFA \leq 4 \times FLA$

(Next lower standard fuse rating. Minimum 15A)

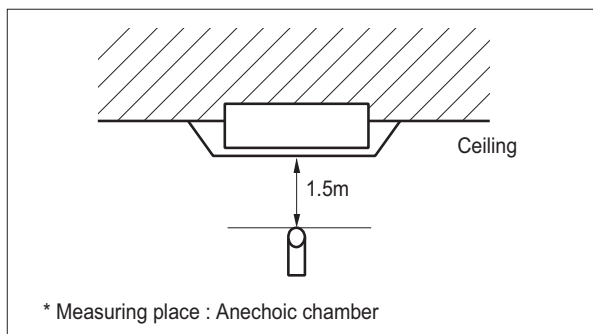
4. Select wire size based on the MCA

5. Instead of fuse, use Circuit Breaker.

9. Sound Levels

9.1 Sound Pressure Levels

Overall

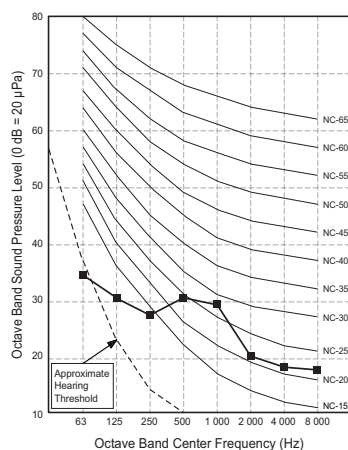


Note

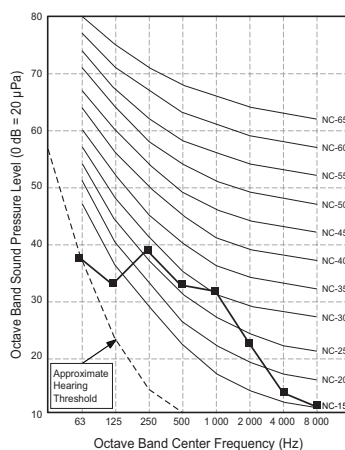
1. Sound measured at some distance away from the center of the unit.
2. Data is valid at free field condition.
3. Reference acoustic pressure $0\text{dB} = 20\mu\text{Pa}$.
4. Data is valid at nominal operation condition.
Refer to the Model Specifications for nominal conditions (Power source and Ambient temperature, etc)
5. Sound levels can be increased in accordance with installation and operating conditions. (Static pressure mode, used air guide, Room target temperature setting, etc)
6. Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of particular room in which the equipment is installed.

Model	Sound Pressure Levels [dB(A)]		
	H	M	L
ARNU07GTU*4	32	29	25
ARNU09GTU*4	35	34	32
ARNU12GTU*4	38	35	32
ARNU18GTT*4	40	37	35
ARNU24GTT*4	43	40	36

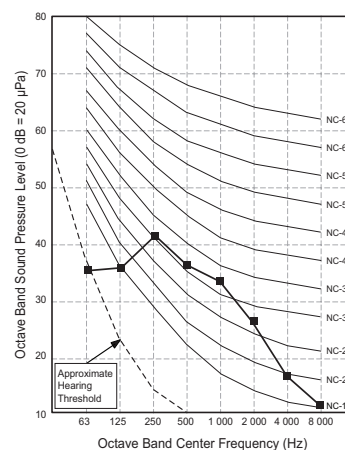
ARNU07GTU*4



ARNU09GTU*4

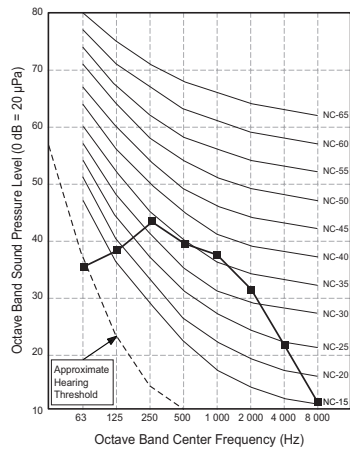


ARNU12GTU*4

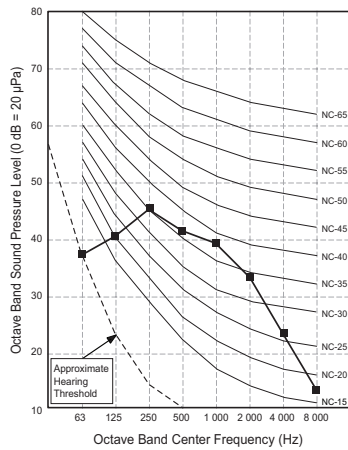


9. Sound Levels

ARNU18GTT*4



ARNU24GTT*4



9. Sound Levels

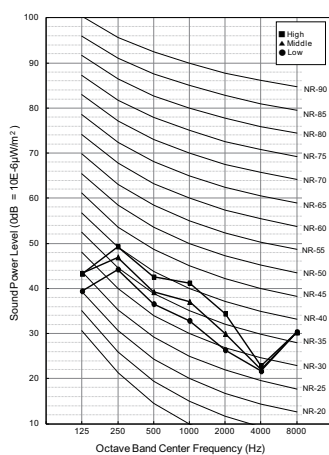
9.2 Sound Power Levels

Note

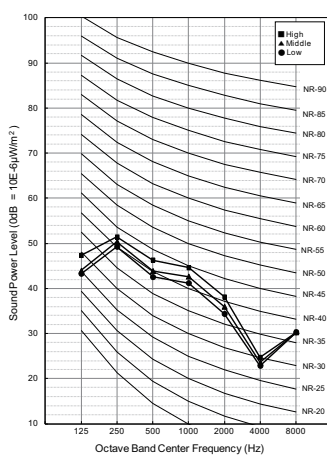
- Data is valid at diffuse field condition
- Data is valid at nominal operating condition
- Sound level can be increased in static pressure mode or used air guide.
- Sound power level is measured on the rated condition in the reverberation rooms.
- Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of particular room in which the equipment is installed.
- Reference acoustic intensity $0\text{dB} = 10\text{E-}6\mu\text{W/m}^2$

Model	Sound Power Levels [dB(A)]		
	H	M	L
ARNU07GTU*4	47	44	41
ARNU09GTU*4	50	48	47
ARNU12GTU*4	52	50	47
ARNU18GTT*4	56	51	48
ARNU24GTT*4	59	53	50

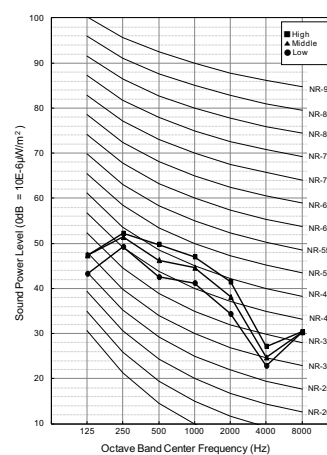
ARNU07GTU*4



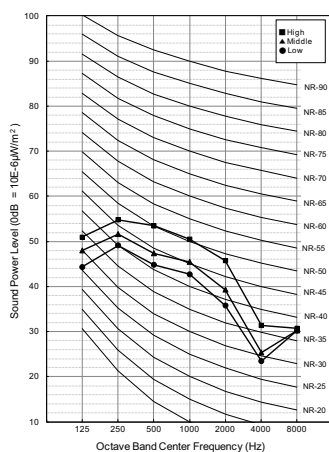
ARNU09GTU*4



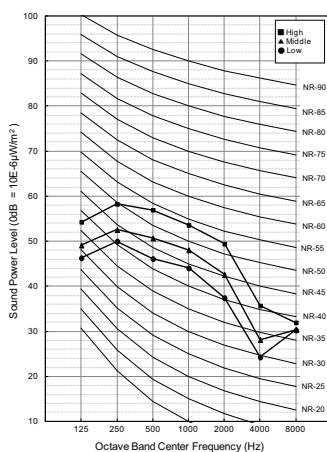
ARNU12GTU*4



ARNU18GTT*4

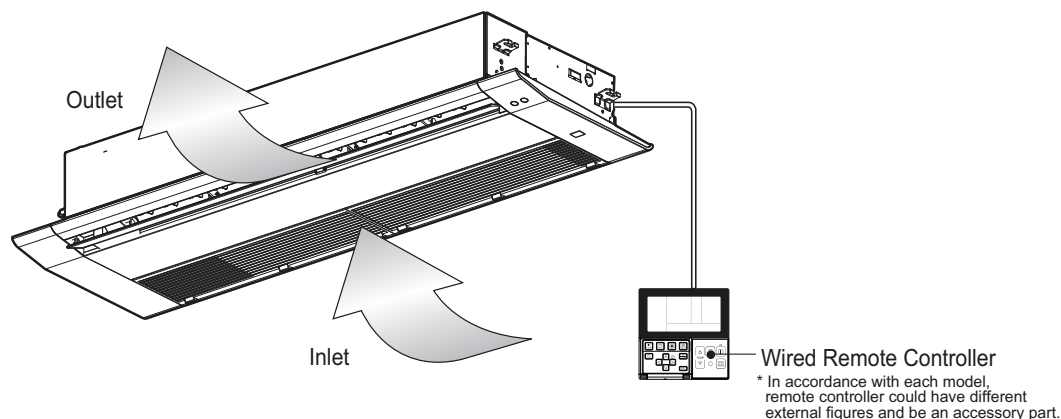


ARNU24GTT*4



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



10.1 Selection of the best location

- The place where room air circulation is good.
- Do not install the unit near the door.
- There should not be any obstacles to the air circulation or installation. Ensure the spaces from the wall, ceiling, or other obstacles.
- The place where the indoor unit can be connected with outdoor unit easily.
- The place where the unit is leveled.
- The place shall allow easy water drainage.
- The place where bear a load exceeding four times of the indoor unit weight.
- The mounting ceiling or wall should be solid enough to protect it from the vibration.
- The place where the unit is not affected by an electrical noise.
- The place where noise prevention is taken into consideration.
- The place where the maintenance space for product is sufficient. (The servicing inspection hole of the ceiling should be larger than the indoor unit.)
- The selection of the servicing inspection hole should be approved by the customer.
- There should not be any heat source or steam near the unit. 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;