

ARTCOOL (Mirror)

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1. List of functions

Category	Function	ARNU05GSJR4, ARNU07GSJR4, ARNU09GSJR4, ARNU12GSJR4, ARNU15GSJR4, ARNU18GSKR4, ARNU24GSKR4
Air Flow	Air Supply Outlet	1
	Airflow Direction Control (left & right)	Manual
	Airflow Direction Control (up & down)	Auto
	Auto Swing (left & right)	X
	Auto Swing (up & down)	Auto
	Airflow Steps (fan/cool/heat)	4 / 5 / 5
	Fan Speed Auto*	Advanced
	Power Cool/Heat	O / O
	Swirl Wind*	-
	Refresh Mode**	X
	Smart Mode**	X
	Indirect Wind*	O
	Direct Wind*	O
	Dry Operation	O
Air Purification	Air Purify	X
	Ionizer	O
	UV-C	X
	Pre-Filter	O
Reliability	Hot Start	O
	Self Diagnosis	O
Convenience	Auto Mode	O
	Auto Dry Operation	O
	Auto Restart	O
	Child Lock*	O
	Forced Operation	O
	Group Control*	O
	Sleep Timer	O
	Turn On/Off Reservation	O
	Schedule*	O
	Two Thermistor Control*	O
	External On/Off	O
Installation	Drain Pump	X
	E.S.P. Control*	X
	High Ceiling Operation*	-
Special Functions	Wi-Fi	O
	Auto Elevation Grille	X
	Human Detection Function**	X
	Floor Detection Function**	X

Note

- O : Applied, X : Not Applied, - : Unconfirmed or irrelevant
Embedded : A kit is provided by default for using this function when the product is manufactured.
Accessory : Ordered and purchased separately the accessory package referring to the model name provided and install at field. Accessory line-ups varies by region, so check your local catalogue or local sales material.
- Some functions can be limited by remote controller.
- In case of cassette type indoor units, Air Purification Kit and Auto Elevation Grille functions are not applicable at the same time.
- 'Auto Mode' varies depending on the outdoor unit type.
 - Auto Change Over(Heat Recovery Outdoor Unit)
 - Auto Mode Select(Heat Pump Outdoor Unit)
 - Auto Intensity Control(Cooling Only Outdoor Unit)
- * : These functions need to connect the wired remote controller.
- ** : This functions need to connect to the Standard III wired remote controller.

1. List of functions

■ Accessory Compatibility List

Category	Accessory Name	Model Name	Description	ARNU-GSJ(K)R4
Remote Controller	Wired - Premium	PREMTA000	-	O
		PREMTA000A	-	O
		PREMTA000B	-	O
	Wired - RS3 (Standard III)	PREMTB100	White	O
		PREMTBB10	Black	O
	Wired - RS2 (Standard II)	PREMTB001	White	O
		PREMTBB01	Black	O
	Wired - Simple	PQRCVCL0QW	White	O
		PQRCVCL0Q	Black	O
	Wired - Simple for Hotel	PQRCHCA0QW	White	O
		PQRCHCA0Q	Black	O
	Wireless	PQWRCQ0FDB	For Cooling only	O
		PQWRHQ0FDB	For Heat pump	O
		PWLSSB21C	For Cooling only	O
		PWLSSB21H	For Heat pump	O
Dry Contact	Simple	PDRYCB000	1 input port, AC 220 - 240V	O
		PDRYCB100	1 input port, AC 24V	O
	Communication	PDRYCB400	2 input port	O
		PDRYCB300	8 input port, For 3rd party Thermostat	O
		PDRYCB320	8 input port, For 3rd Party Thermostat (Analog Input)	O
		PDRYCB500	For 3rd Party Controller (Modbus RTU)	O
Integration Device	Remote Temperature sensor	PQRSTA0	-	X
	Group Control wire	PZCWRCG3	Cable Assembly for group control (Y-type cable : 0.25m, cable : 9.6m)	O
ETC	Extension wire	PZCWRC1	Extension wire for IDU-wired remote controller (9.6m)	O
	2-Remo Control Wire	PZCWRC2	-	O
	Wi-Fi Modem	PWFMDD200	-	Embedded
	Wi-Fi Extension cable	PWYREW000	USB Extension cable : 10 m	O
	Independent Power Module	PRIP0	-	O
	Multi-tenant Power Module	PINPMB001	-	O
	Refrigerant Leakage Detector	PRLDNVS0	For R410A only	O
	Human Detection Sensor	PTVSMA0	For Cassette 4-way	X
		PTVSAA0	For Cassette Dual Vane 4-way	X
	Floor Detection Sensor	PTFSMA0	-	X
	Auto Elevation Grille	PTEGM0	For TP/TN/TM	X
	Air Purification Kit	PTAHTP0	For Cassette 1-way	X
		PTAHMP0	For Cassette 4-way	X
		PTAHYP0	For Cassette Round	X
	EEV Kit	PRGK024A0	For Multi V Indoor Unit	O
	Auxiliary Heater Relay Kit	PRARS1	For Wall Mounted and Art Cool Indoor Units	O
		PRARH1	For Cassette and Duct Indoor Units	X
	Ventilation Kit	PTVK430	For TR/TQ/TP/TN/TM	X
		PTVK410 + PTVK420	For TP/TN/TM	X
	Cassette Cover	PTDCQ	For TR/TQ	X
		PTDCM	For TP/TN/TM	X
		PTDCA	For TM-A/TP-B	X

Note

1. O: Possible, X: Impossible, -: Not applicable, Embedded: Included with product.
2. If there is a difference in development time between the product and the remote controller, some functions cannot be operated.
3. If using Wi-Fi controller, Some advanced functions controlled by remote controller cannot be operated.
4. If you need more detail, please refer to the **BECON** PDB or the manual of product. (<http://partner.lge.com/global> : Home> Doc.Library> Product > Control(BECON))

2. Specifications

Type			ARTCOOL Mirror	
Model		Unit	ARNU05GSJR4	ARNU07GSJR4
Cooling Capacity		kW	1.6	2.2
		kcal/h	1,400	1,900
		Btu/h	5,500	7,500
Heating Capacity		kW	1.8	2.5
		kcal/h	1,500	2,200
		Btu/h	6,100	8,500
Power Input (H / M / L)		W	11 / 10 / 9	12 / 11 / 9
Dimensions (W×H×D)	Body	mm	837 × 308 × 192	837 × 308 × 192
		inch	32-15/16 × 12-1/8 × 7-9/16	32-15/16 × 12-1/8 × 7-9/16
	Shipping	mm	892 × 381 × 249	892 × 381 × 249
		inch	35-1/8 x 15 x 9-13/16	35-1/8 x 15 x 9-13/16
Coil	Rows × Columns × FPI		2 × 15 × 19	2 × 15 × 19
	Face Area	m²	0.19	0.19
Fan	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output × Number	W	30 × 1	30 × 1
	Air Flow Rate(H / M / L)	m³/min	6.8 / 6.5 / 5.9	7.2 / 6.8 / 5.9
		ft³/min	240 / 230 / 208	254 / 240 / 208
	Drive		Direct	Direct
	Motor type		BLDC	BLDC
Temperature Control			Microprocessor, Thermostat for cooling and heating	
Sound Absorbing Thermal Insulation Material			Foamed polystyrene	Foamed polystyrene
Air Filter			Resin Net(washable)	Resin Net(washable)
Safety Device			Fuse	Fuse
Pipe Connections	Liquid Side	mm (inch)	Ø 6.35 (1/4)	Ø 6.35 (1/4)
	Gas Side	mm (inch)	Ø 12.7 (1/2)	Ø 12.7 (1/2)
	Drain Pipe(ID)	mm (inch)	16 (5/8)	16 (5/8)
Weight	Body	kg (lbs)	9.2(20.2)	9.2(20.2)
	Shipping	kg (lbs)	12.0(26.5)	12.0(26.5)
Sound Pressure Levels (H / M / L)		dB(A)	30 / 29 / 28	32 / 30 / 28
Sound Power Levels (H / M / L)		dB(A)	45 / 43 / 42	46 / 45 / 42
Power Supply		Ø, V, Hz	1, 220 - 230 - 240, 50/60	1, 220 - 230 - 240, 50/60
Running Current by voltage	Rated	A	0.10 - 0.09 - 0.09	0.10 - 0.10 - 0.10
Maximum Running Current		A	0.25	0.25
Refrigerant	Type	-	R410A / R32	R410A / R32
	Additional Charging Amount (CF Value of IDU)	kg(each)	0.24 / 0.20	0.24 / 0.20
	Control	-	EEV	EEV
Transmission cable		mm²	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
Color			Mirror	Mirror

Note

- Due to our policy of innovation some specifications may be changed without notification.
- 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.
- 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 semi-anechoic rooms by ISO 9614 standard.
Therefore, these values can be increased owing to ambient conditions during operation.
- Capacities are net capacities and based on the following conditions. Refer to the Outdoor Unit Specifications for calculating the real capacity.
 - Cooling : Indoor Ambient Temp. 27°CDB / 19°CWB, Outdoor Ambient Temp. 35°CDB / 24°CWB
 - Heating : Indoor 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 0m.
- Refrigerant information (type, additional charging amount, etc.) must be applied by refrigerant type of the combined outdoor unit.
Adapt after checking the specifications of outdoor unit.

2. Specifications

Type			ARTCOOL Mirror	
Model		Unit	ARNU09GSJR4	ARNU12GSJR4
Cooling Capacity		kW	2.8	3.6
		kcal/h	2,400	3,100
		Btu/h	9,600	12,300
Heating Capacity		kW	3.2	4.0
		kcal/h	2,800	3,400
		Btu/h	10,900	13,600
Power Input (H / M / L)		W	13 / 12 / 9	15 / 13 / 11
Dimensions (W×H×D)	Body	mm	837 × 308 × 192	837 × 308 × 192
		inch	32-15/16 × 12-1/8 × 7-9/16	32-15/16 × 12-1/8 × 7-9/16
	Shipping	mm	892 × 381 × 249	892 × 381 × 249
		inch	35-1/8 × 15 × 9-13/16	35-1/8 × 15 × 9-13/16
Coil	Rows × Columns × FPI		2 × 15 × 19	2 × 15 × 19
	Face Area	m ²	0.19	0.19
Fan	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output × Number	W	30 × 1	30 × 1
	Air Flow Rate(H / M / L)	m ³ /min	7.8 / 7.2 / 5.9	8.5 / 7.8 / 6.8
		ft ³ /min	275 / 254 / 208	300 / 254 / 240
	Drive		Direct	Direct
		Motor type	BLDC	BLDC
Temperature Control			Microprocessor, Thermostat for cooling and heating	
Sound Absorbing Thermal Insulation Material			Foamed polystyrene	Foamed polystyrene
Air Filter			Resin Net(washable)	Resin Net(washable)
Safety Device			Fuse	Fuse
Pipe Connections	Liquid Side	mm (inch)	Ø 6.35 (1/4)	Ø 6.35 (1/4)
	Gas Side	mm (inch)	Ø 12.7 (1/2)	Ø 12.7 (1/2)
	Drain Pipe(ID)	mm (inch)	16 (5/8)	16 (5/8)
Weight	Body	kg (lbs)	9.2(20.2)	9.2(20.2)
	Shipping	kg (lbs)	12.0(26.5)	12.0(26.5)
Sound Pressure Levels (H / M / L)		dB(A)	34 / 32 / 28	37 / 34 / 30
Sound Power Levels (H / M / L)		dB(A)	48 / 46 / 42	51 / 48 / 45
Power Supply		Ø, V, Hz	1, 220 - 230 - 240, 50/60	1, 220 - 230 - 240, 50/60
Running Current by voltage	Rated	A	0.11 - 0.11 - 0.10	0.13 - 0.13 - 0.12
Maximum Running Current		A	0.25	0.25
Refrigerant	Type	-	R410A / R32	R410A / R32
	Additional Charging Amount (CF Value of IDU)	kg(each)	0.24 / 0.20	0.24 / 0.20
	Control	-	EEV	EEV
Transmission cable		mm ²	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
Color			Mirror	Mirror

Note

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- 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 semi-anechoic rooms by ISO 9614 standard.
Therefore, these values can be increased owing to ambient conditions during operation.
- Capacities are net capacities and based on the following conditions. Refer to the Outdoor Unit Specifications for calculating the real capacity.
 - Cooling : Indoor Ambient Temp. 27°CDB / 19°CWB, Outdoor Ambient Temp. 35°CDB / 24°CWB
 - Heating : Indoor 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 0m.
- Refrigerant information (type, additional charging amount, etc.) must be applied by refrigerant type of the combined outdoor unit.
Adapt after checking the specifications of outdoor unit.

2. Specifications

Type			ARTCOOL Mirror
Model		Unit	ARNU15GSJR4
Cooling Capacity		kW	4.5
		kcal/h	3,900
		Btu/h	15,400
Heating Capacity		kW	5.0
		kcal/h	4,300
		Btu/h	17,100
Power Input (H / M / L)		W	23 / 18 / 11
Dimensions (W×H×D)	Body	mm	837 × 308 × 192
		inch	32-15/16 × 12-1/8 × 7-9/16
	Shipping	mm	892 × 381 × 249
		inch	35-1/8 x 15 x 9-13/16
Coil	Rows × Columns × FPI		2 × 15 × 19
	Face Area	m²	0.19
Fan	Type		Cross Flow Fan
	Motor Output × Number	W	30 × 1
	Air Flow Rate(H / M / L)	m³/min	10.5 / 9.5 / 6.8
		ft³/min	371 / 336 / 240
	Drive		Direct
	Motor type		BLDC
Temperature Control			Microprocessor, Thermostat for cooling and heating
Sound Absorbing Thermal Insulation Material			Foamed polystyrene
Air Filter			Resin Net(washable)
Safety Device			Fuse
Pipe Connections	Liquid Side	mm (inch)	Ø 6.35 (1/4)
	Gas Side	mm (inch)	Ø 12.7 (1/2)
	Drain Pipe(ID)	mm (inch)	16 (5/8)
Weight	Body	kg (lbs)	9.2(20.2)
	Shipping	kg (lbs)	12.0(26.5)
Sound Pressure Levels (H / M / L)		dB(A)	42 / 39 / 32
Sound Power Levels (H / M / L)		dB(A)	55 / 52 / 44
Power Supply		Ø, V, Hz	1, 220 - 230 - 240, 50/60
Running Current by voltage	Rated	A	0.20 - 0.19 - 0.18
Maximum Running Current		A	0.25
Refrigerant	Type	-	R410A / R32
	Additional Charging Amount (CF Value of IDU)	kg(each)	0.24 / 0.20
	Control	-	EEV
Transmission cable		mm²	1.0 ~ 1.5 × 2C
Color			Mirror

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- 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 semi-anechoic rooms by ISO 9614 standard.
Therefore, these values can be increased owing to ambient conditions during operation.
- Capacities are net capacities and based on the following conditions. Refer to the Outdoor Unit Specifications for calculating the real capacity.
 - Cooling : Indoor Ambient Temp. 27°CDB / 19°CWB, Outdoor Ambient Temp. 35°CDB / 24°CWB
 - Heating : Indoor 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 0m.
- Refrigerant information (type, additional charging amount, etc.) must be applied by refrigerant type of the combined outdoor unit.
Adapt after checking the specifications of outdoor unit.

2. Specifications

Type			ARTCOOL Mirror	
Model		Unit	ARNU18GSKR4	ARNU24GSKR4
Cooling Capacity		kW	5.6	7.1
		kcal/h	4,800	6,100
		Btu/h	19,100	24,200
Heating Capacity		kW	6.3	7.5
		kcal/h	5,400	6,400
		Btu/h	21,500	25,600
Power Input (H / M / L)		W	32 / 26 / 16	39 / 26 / 16
Dimensions (W×H×D)	Body	mm	998 × 345 × 212	998 × 345 × 212
		inch	39-9/32 × 13-19/32 × 8-11/32	39-9/32 × 13-19/32 × 8-11/32
	Shipping	mm	1,063 × 420 × 274	1,063 × 420 × 274
		inch	41-27/32 × 16-17/32 × 10-25/32	41-27/32 × 16-17/32 × 10-25/32
Coil	Rows × Columns × FPI		2 × 16 × 20	2 × 16 × 20
	Face Area	m ²	0.25	0.25
Fan	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output × Number	W	58 × 1	58 × 1
	Air Flow Rate(H / M / L)	m ³ /min	14.0 / 12.0 / 10.5	15.2 / 12.7 / 10.5
		ft ³ /min	494 / 424 / 371	537 / 449 / 371
	Drive		Direct	Direct
		Motor type	BLDC	BLDC
Temperature Control			Microprocessor, Thermostat for cooling and heating	
Sound Absorbing Thermal Insulation Material			Foamed polystyrene	Foamed polystyrene
Air Filter			Resin Net(washable)	Resin Net(washable)
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(ID)	mm (inch)	16 (5/8)	16 (5/8)
Weight	Body	kg (lbs)	13.4(29.5)	13.4(29.5)
	Shipping	kg (lbs)	17.2(37.9)	17.2(37.9)
Sound Pressure Levels (H / M / L)		dB(A)	43 / 39 / 34	46 / 41 / 34
Sound Power Levels (H / M / L)		dB(A)	59 / 56 / 52	63 / 58 / 52
Power Supply		Ø, V, Hz	1, 220 - 230 - 240, 50/60	1, 220 - 230 - 240, 50/60
Running Current by voltage	Rated	A	0.33 - 0.31 - 0.30	0.40 - 0.38 - 0.37
Maximum Running Current		A	0.52	0.52
Refrigerant	Type	-	R410A / R32	R410A / R32
	Additional Charging Amount (CF Value of IDU)	kg(each)	0.28 / 0.23	0.28 / 0.23
	Control	-	EEV	EEV
Transmission cable		mm ²	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
Color			Mirror	Mirror

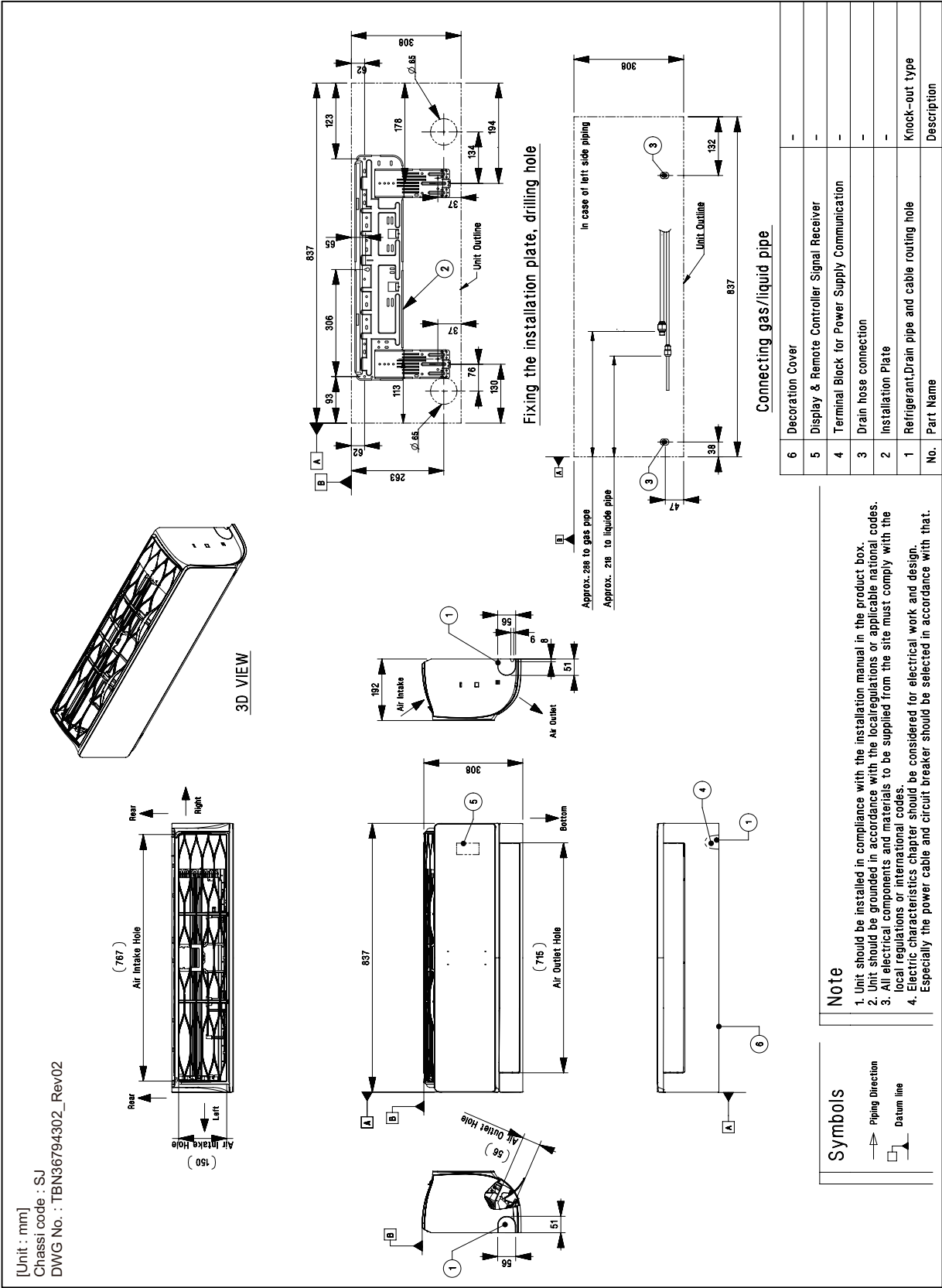
Note

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Sound power level is measured on the rated condition in the semi-anechoic rooms by ISO 9614 standard.
Therefore, these values can be increased owing to ambient conditions during operation.
- Capacities are net capacities and based on the following conditions. Refer to the Outdoor Unit Specifications for calculating the real capacity.
 - Cooling : Indoor Ambient Temp. 27°CDB / 19°CWB, Outdoor Ambient Temp. 35°CDB / 24°CWB
 - Heating : Indoor 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 0m.
- Refrigerant information (type, additional charging amount, etc.) must be applied by refrigerant type of the combined outdoor unit.
Adapt after checking the specifications of outdoor unit.

3. Dimensions

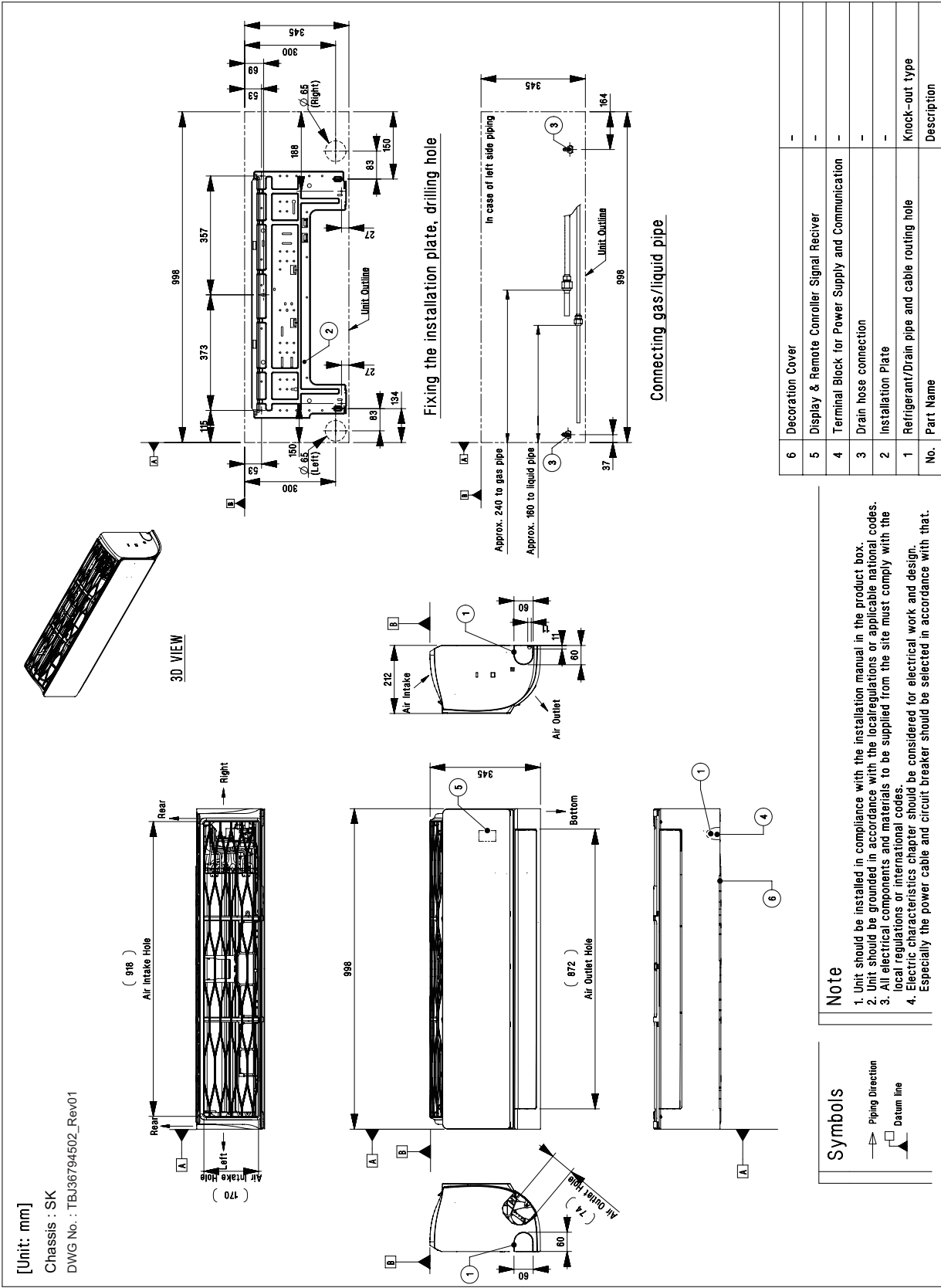
3.1 Dimensional Drawings

[SJ Chassis] ARNU05GSJR4 / ARNU07GSJR4 / ARNU09GSJR4 / ARNU12GSJR4
ARNU15GSJR4



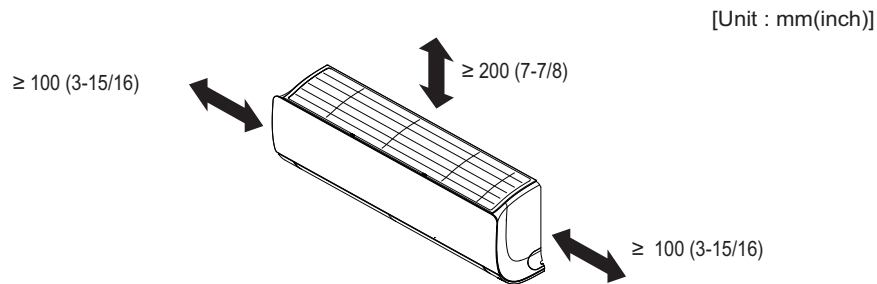
3. Dimensions

[SK Chassis] ARNU18GSKR4 / ARNU24GSKR4



3. Dimensions

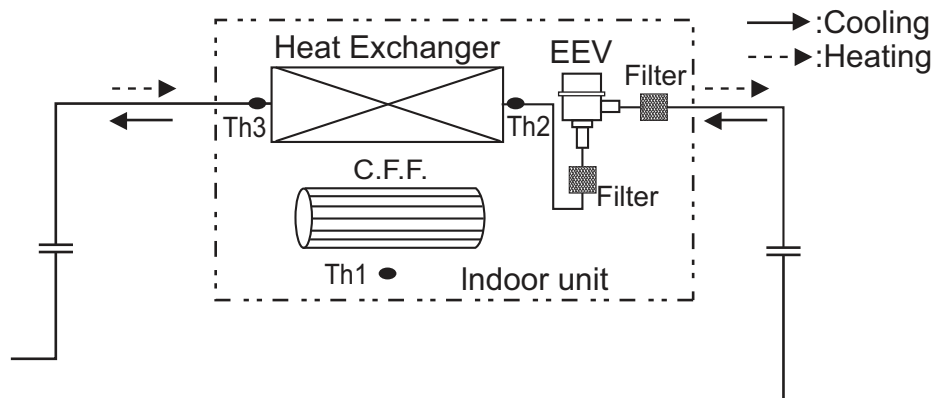
3.2 Installation Space



Note

- Places where products are installed should not be any obstacles to the air circulation or installation. Ensure the spaces from the wall, ceiling, or other obstacles.
- According to type of indoor unit, external appearance or installed structure could be different.
- According to product type, model line up, sales region..etc, applicability of each chassis could be different.

4. Piping Diagrams



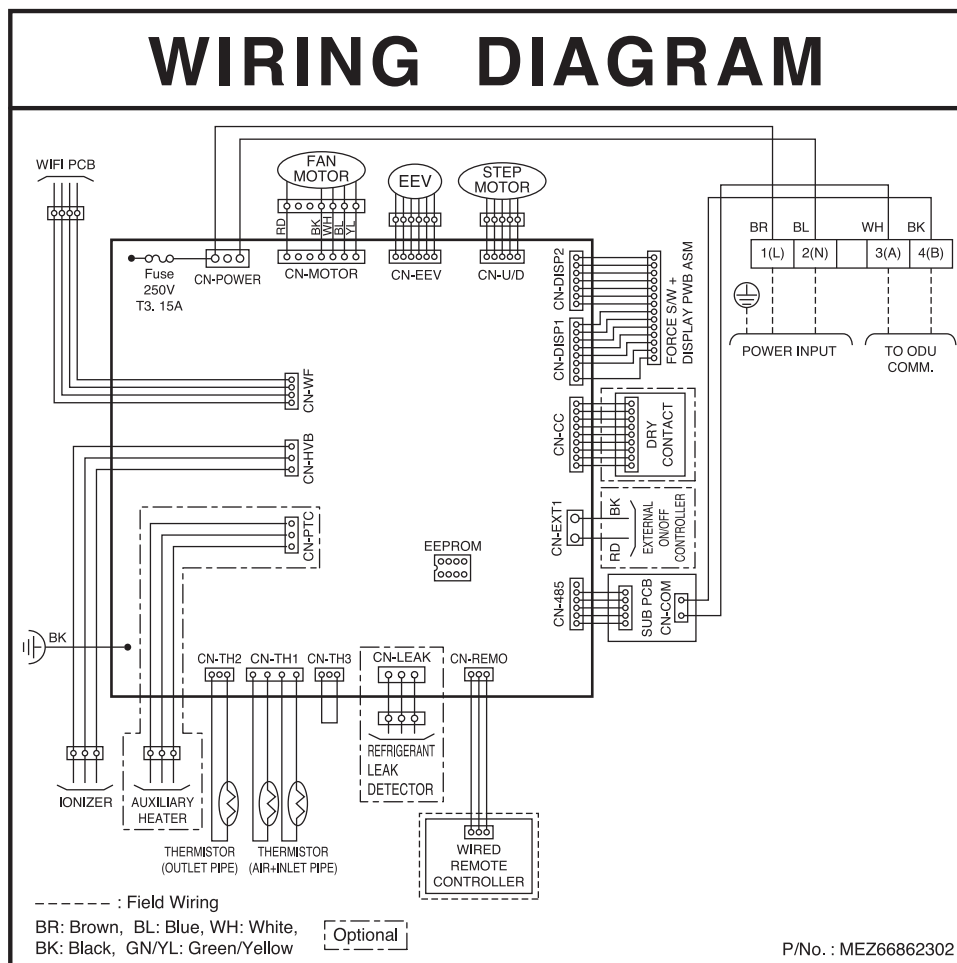
◆ Refrigerant pipe connection port diameter

Model	Gas [mm(inch)]	Liquid [mm(inch)]
ARNU05GSJR4	Ø12.7(1/2)	Ø6.35(1/4)
ARNU07GSJR4	Ø12.7(1/2)	Ø6.35(1/4)
ARNU09GSJR4	Ø12.7(1/2)	Ø6.35(1/4)
ARNU12GSJR4	Ø12.7(1/2)	Ø6.35(1/4)
ARNU15GSJR4	Ø12.7(1/2)	Ø6.35(1/4)
ARNU18GSKR4	Ø12.7(1/2)	Ø6.35(1/4)
ARNU24GSKR4	Ø15.88(5/8)	Ø9.52(3/8)

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

5. Wiring Diagrams

■ SJ/SK Chassis



CONNECTOR NUMBER	LOCATION POINT	FUNCTION
CN-POWER	AC Power supply	AC Power line input for indoor
CN-MOTOR	Fan motor output	Motor output of BLDC
CN-485	Communication	Connection between indoor
CN-DISP1	Display	Display of indoor status
CN-DISP2	Display	Display of indoor status
CN-EEV	EEV output	EEV Control output : connect to EEV directly or through IPM(Independent Power Module)
CN-U/D	Step motor	Step motor output
CN-TH1	Room/inlet pipe sensor	Room and inlet pipe thermistor
CN-TH2	Outlet pipe sensor	Outlet pipe thermistor
CN-REMO	Remote controller	Remote control line
CN-CC	Dry contact	Dry contact line
CN-EXT1	External On/Off	External On/Off signal input
CN-LEAK	Refrigerant leak detector	Refrigerant leak detector line
CN-PTC	Auxiliary heater	Auxiliary heater line
CN-WF	WIFI module	WIFI module connection line
CN-HVB	Ionizer module	Ionizer connection line

6. Capacity Tables

■ Cooling Capacity

Nominal Capacity (kBtu/h) [Capacity Index (kW)]	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
5 [1.6]	1.1	1.1	1.3	1.3	1.5	1.4	1.6	1.4	1.7	1.5	1.7	1.4	1.8	1.3
7 [2.2]	1.5	1.5	1.8	1.6	2.0	1.8	2.2	1.8	2.4	1.9	2.4	1.8	2.4	1.6
9 [2.8]	1.9	1.7	2.2	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.0	2.1	3.1	1.9
12 [3.6]	2.4	2.0	2.9	2.3	3.3	2.5	3.6	2.6	3.9	2.7	3.9	2.5	4.0	2.3
15 [4.5]	3.0	2.5	3.6	2.9	4.2	3.2	4.5	3.2	4.8	3.4	4.9	3.2	4.9	2.9
18 [5.6]	3.8	3.3	4.5	3.6	5.2	3.9	5.6	4.0	6.0	4.1	6.1	3.9	6.2	3.6
24 [7.1]	4.8	3.9	5.7	4.5	6.6	4.9	7.1	5.0	7.6	5.2	7.7	4.9	7.8	4.5

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.

■ Heating Capacity

Nominal Capacity (kBtu/h) [Capacity Index (kW)]	Indoor air temp. (DB, °C)					
	16	18	20	21	22	24
	TC	TC	TC	TC	TC	TC
5 [1.6]	2.0	1.9	1.8	1.7	1.7	1.6
7 [2.2]	2.8	2.7	2.5	2.4	2.3	2.2
9 [2.8]	3.6	3.4	3.2	3.1	3.0	2.8
12 [3.6]	4.5	4.3	4.0	3.9	3.7	3.5
15 [4.5]	5.6	5.3	5.0	4.8	4.7	4.4
18 [5.6]	7.1	6.7	6.3	6.1	5.9	5.5
24 [7.1]	8.5	8.0	7.5	7.3	7.0	6.5

Note

1. TC: Total 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.

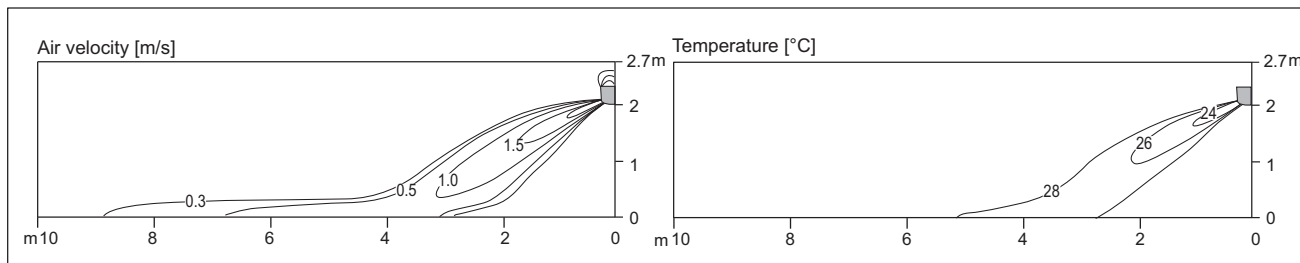
7. Air Velocity and Temperature Distribution

■ ARNU05GSJR4

◆ Cooling

Side View

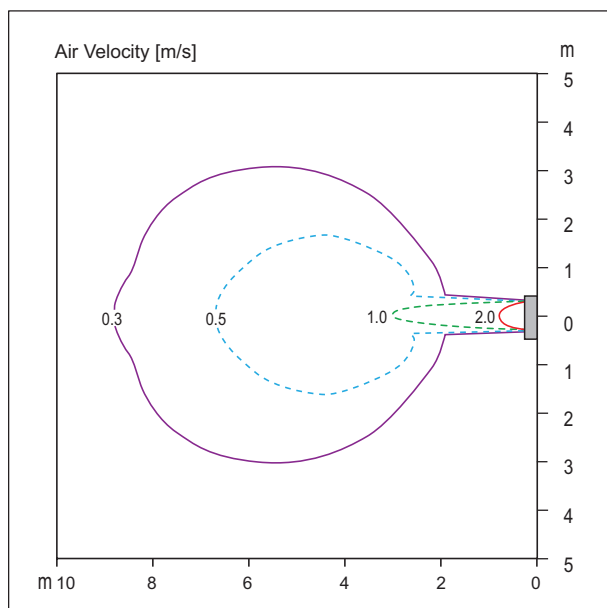
Discharge angle: 35°



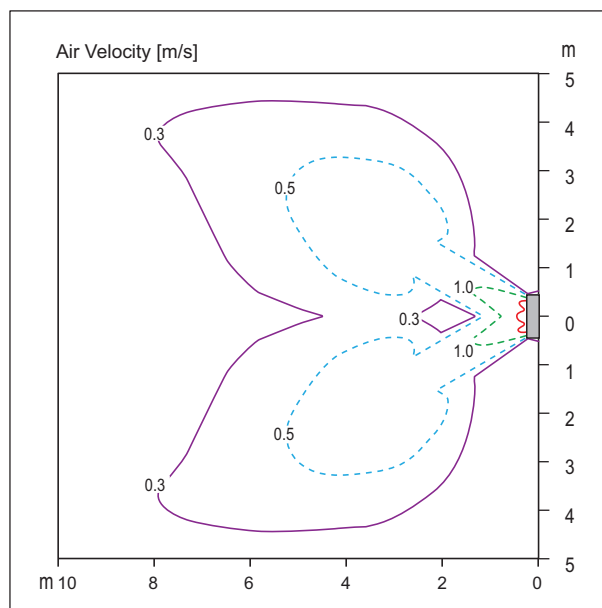
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 8.9m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 8m
- Fan speed : High

Note

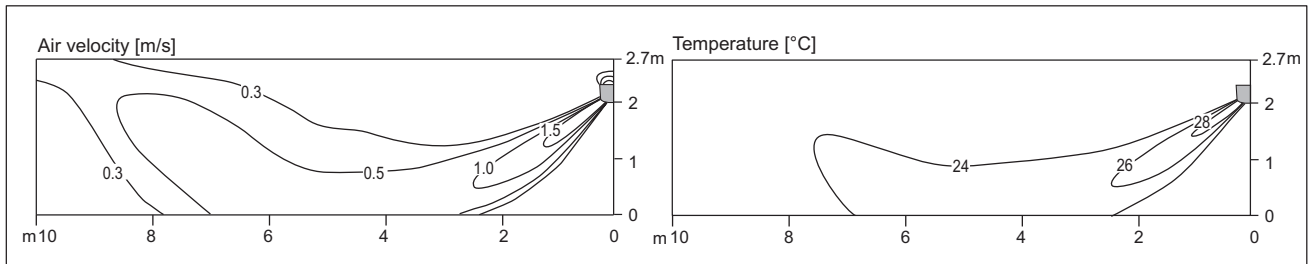
- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

7. Air Velocity and Temperature Distribution

◆ Heating

Side View

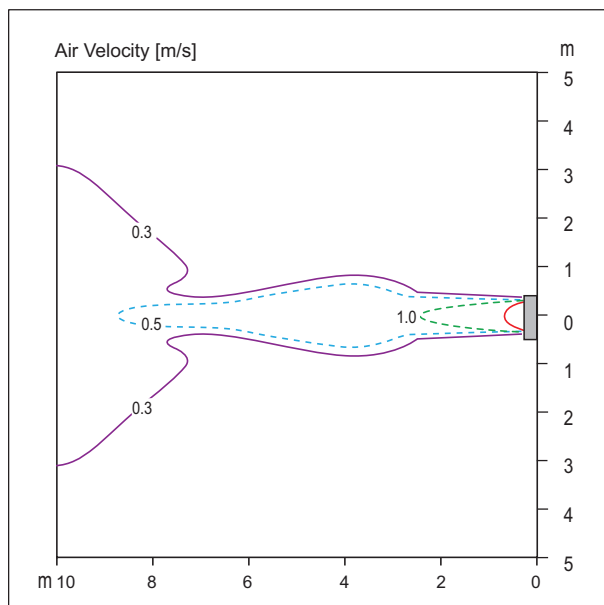
Discharge angle: 55°



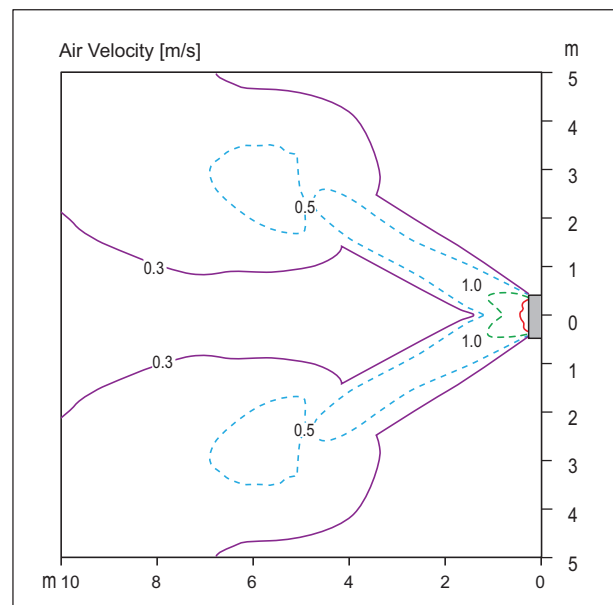
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 11.9m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 12.6m
- Fan speed : High

Note

- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

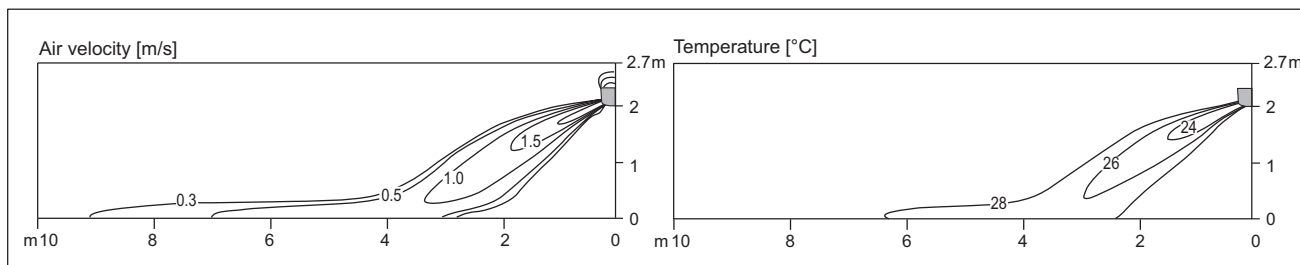
7. Air Velocity and Temperature Distribution

■ ARNU07GSJR4

◆ Cooling

Side View

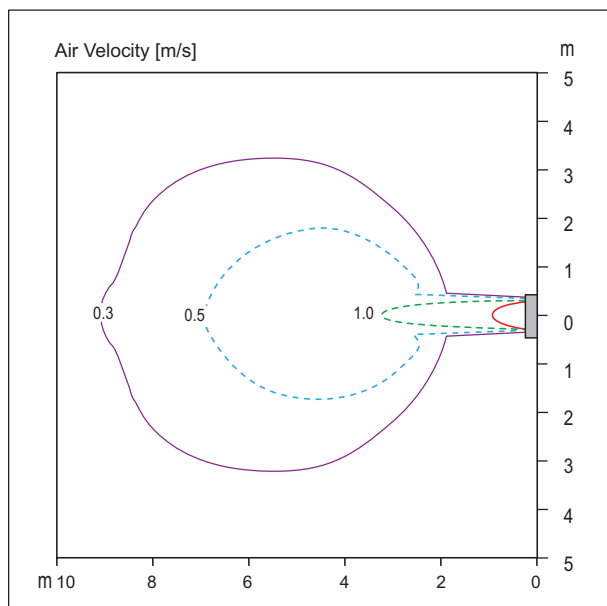
Discharge angle: 35°



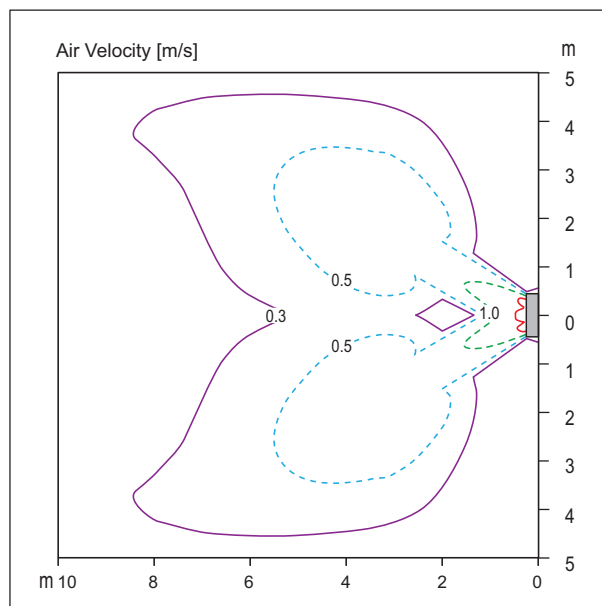
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 9.2m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 8.4m
- Fan speed : High

Note

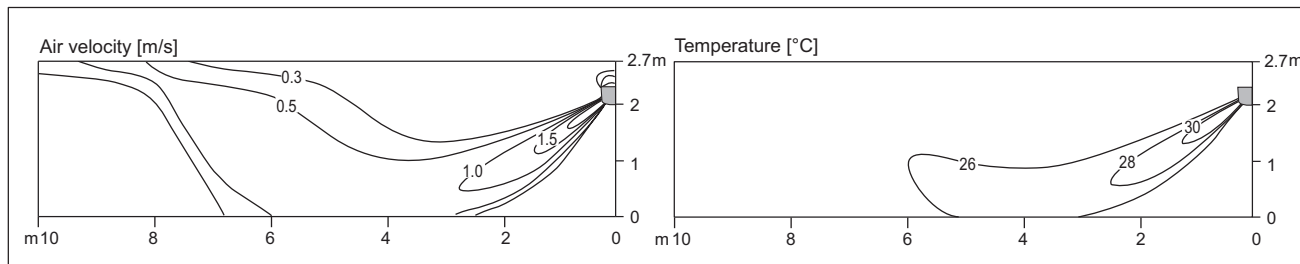
- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

7. Air Velocity and Temperature Distribution

◆ Heating

Side View

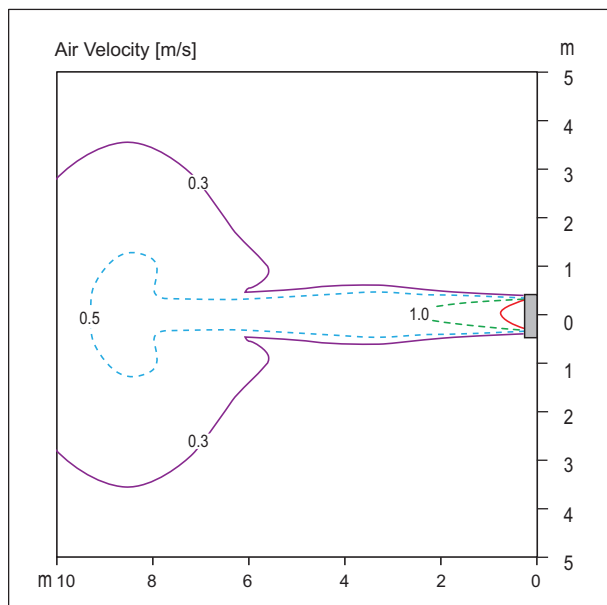
Discharge angle: 55°



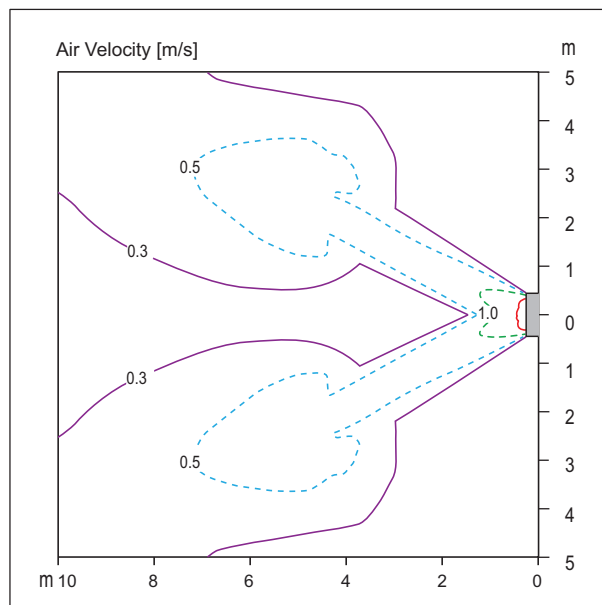
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 11m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 13.2m
- Fan speed : High

Note

- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

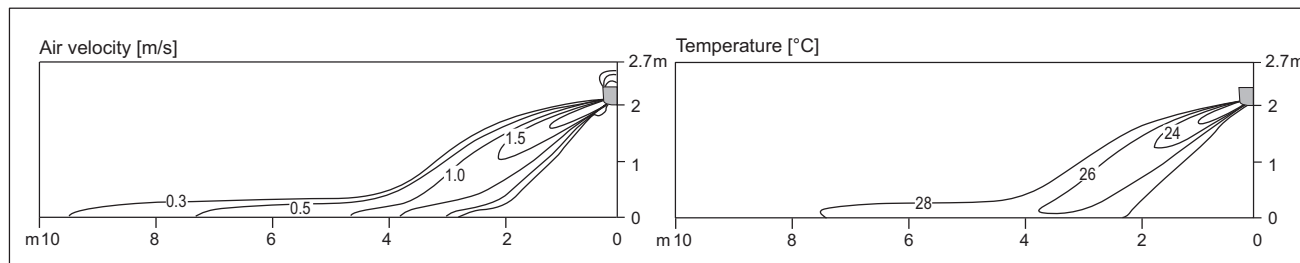
7. Air Velocity and Temperature Distribution

■ ARNU09GSJR4

◆ Cooling

Side View

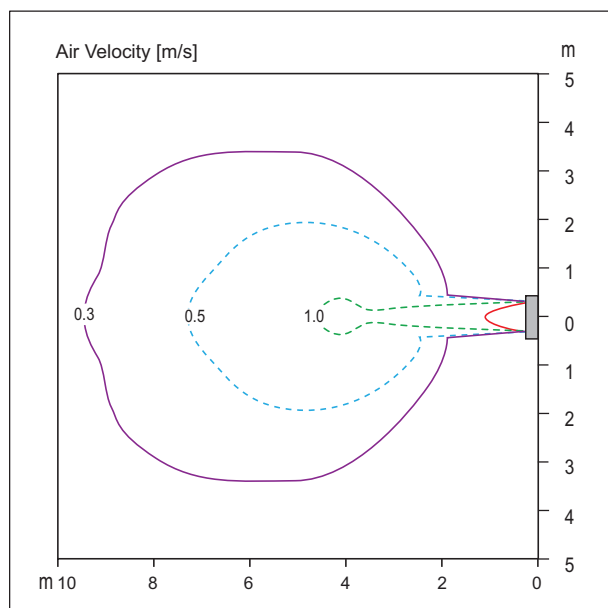
Discharge angle: 35°



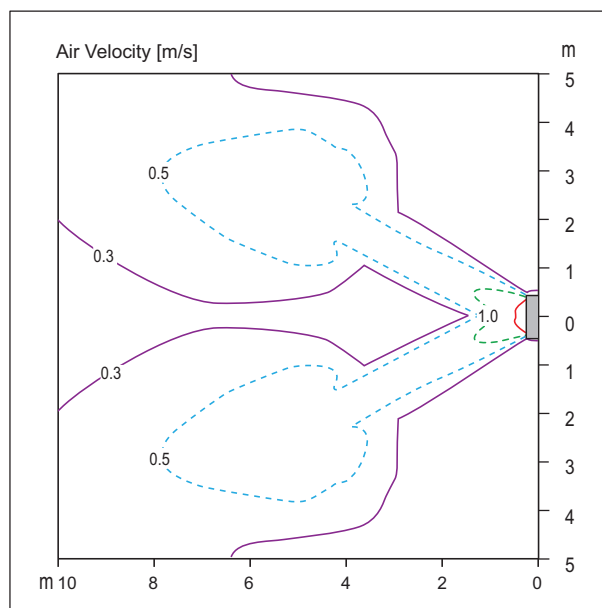
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 9.6m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 14m
- Fan speed : High

Note

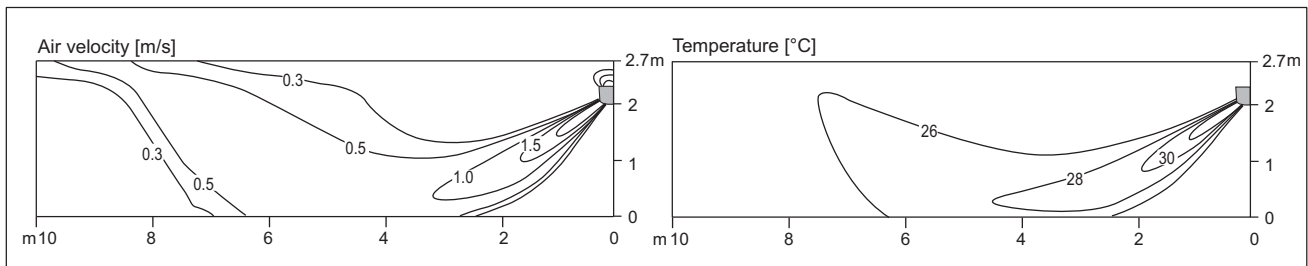
- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

7. Air Velocity and Temperature Distribution

◆ Heating

Side View

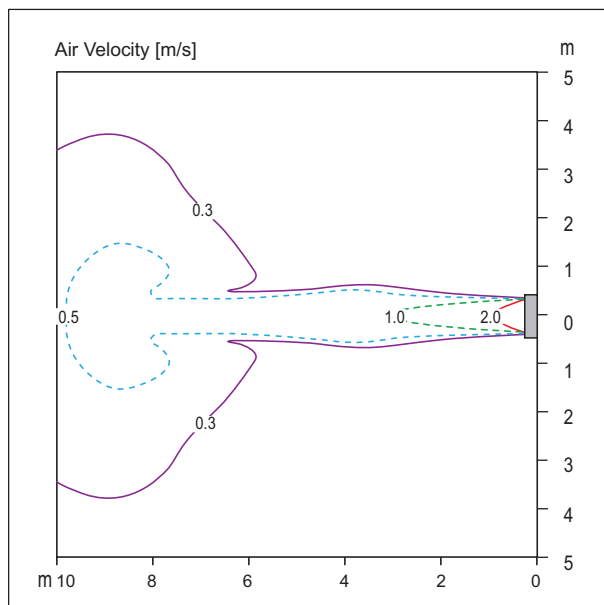
Discharge angle: 55°



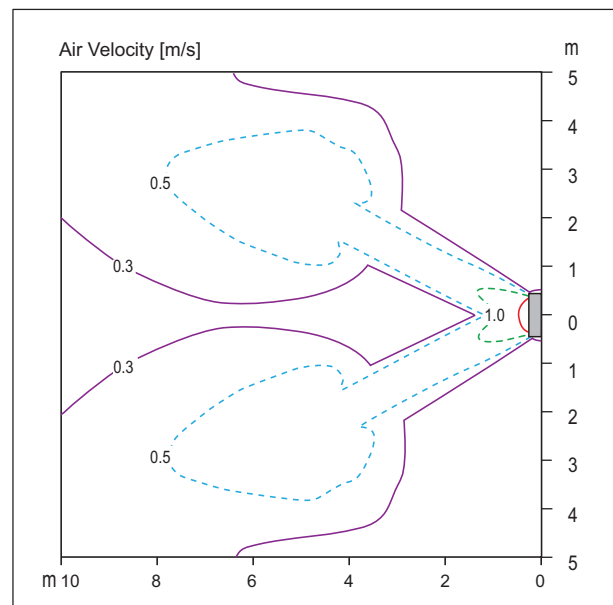
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 11.8m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 14m
- Fan speed : High

Note

- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

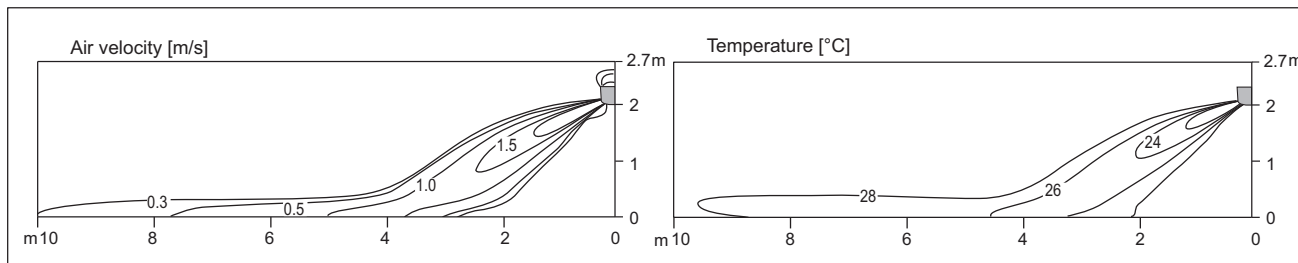
7. Air Velocity and Temperature Distribution

■ ARNU12GSJR4

◆ Cooling

Side View

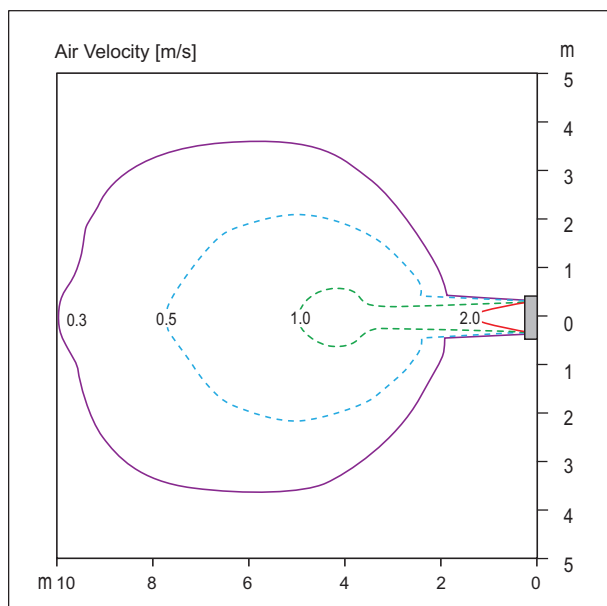
Discharge angle: 35°



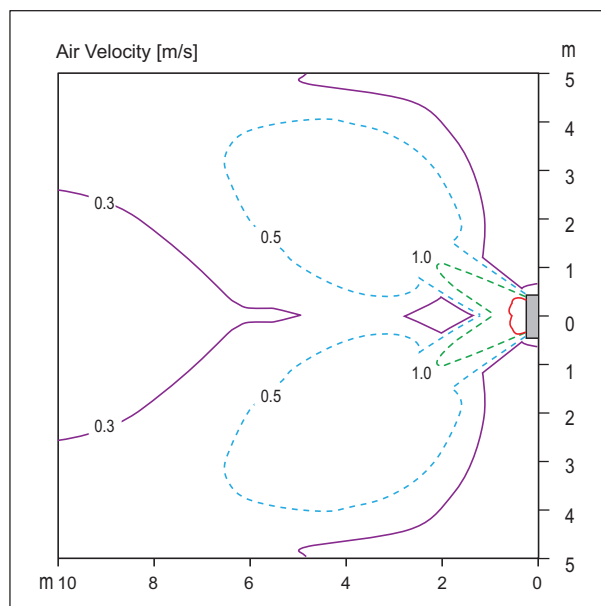
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 10m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 14.3m
- Fan speed : High

Note

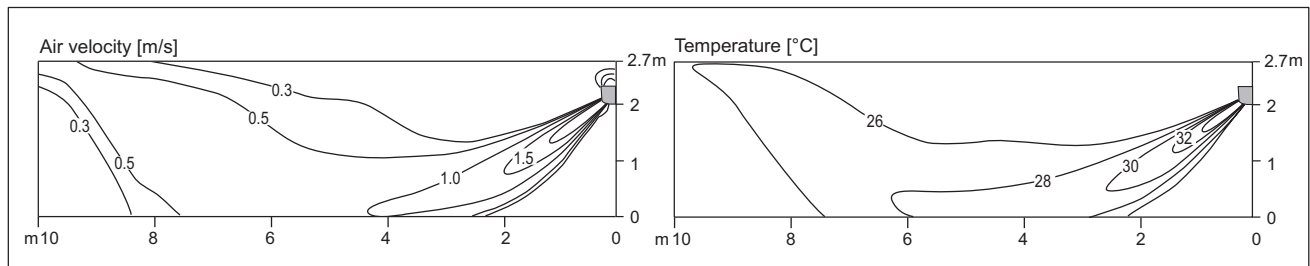
- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

7. Air Velocity and Temperature Distribution

◆ Heating

Side View

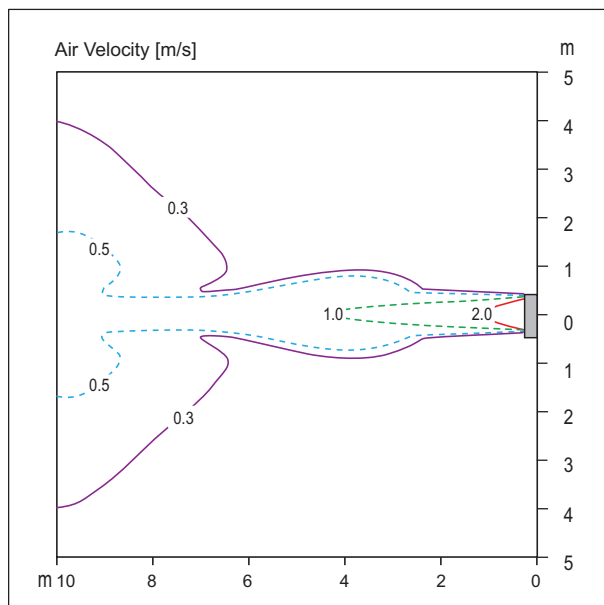
Discharge angle: 55°



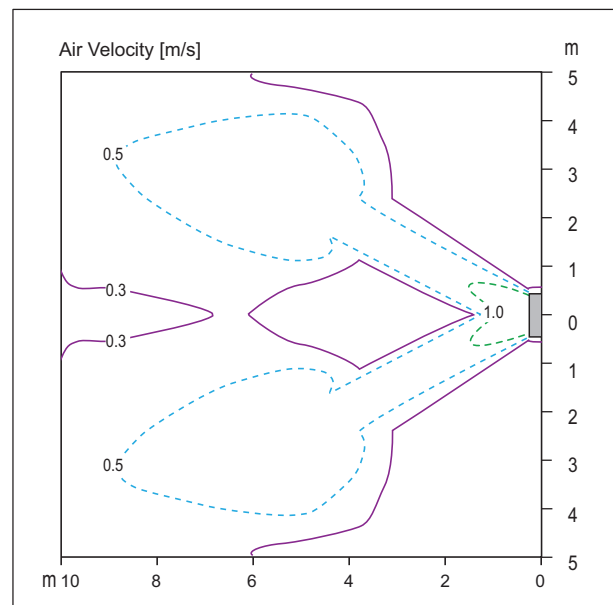
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 13m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 14.3m
- Fan speed : High

Note

- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

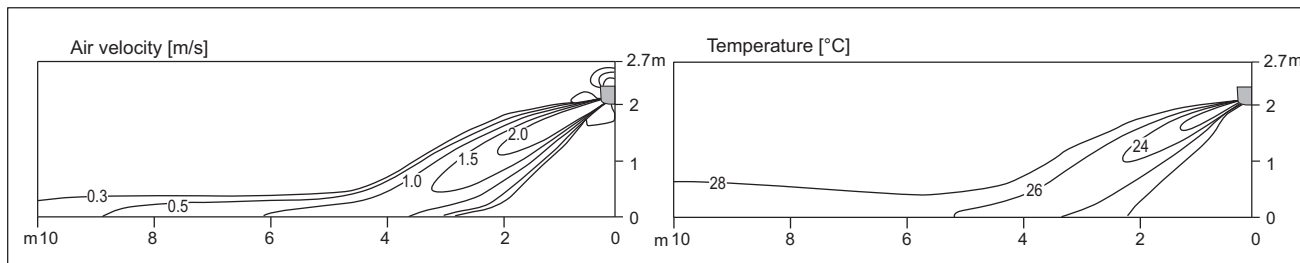
7. Air Velocity and Temperature Distribution

■ ARNU15GSJR4

◆ Cooling

Side View

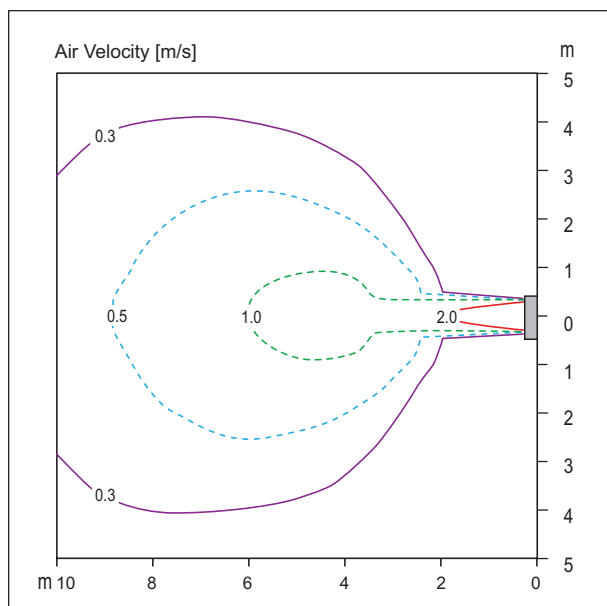
Discharge angle: 35°



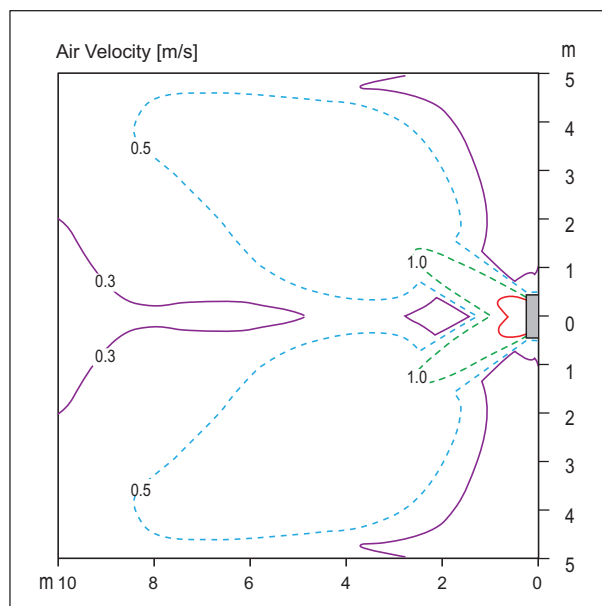
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 35°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 11.5m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 16.7m
- Fan speed : High

Note

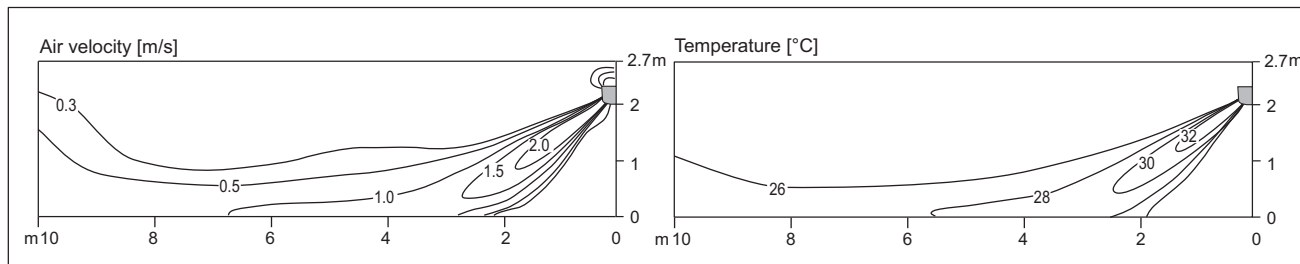
- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

7. Air Velocity and Temperature Distribution

◆ Heating

Side View

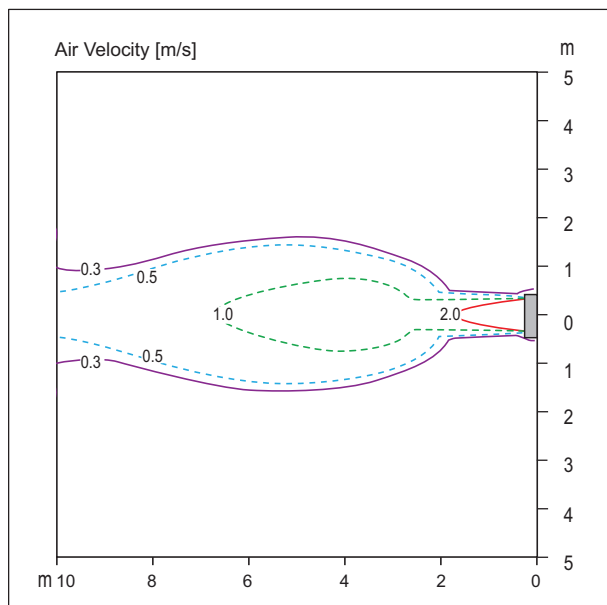
Discharge angle: 55°



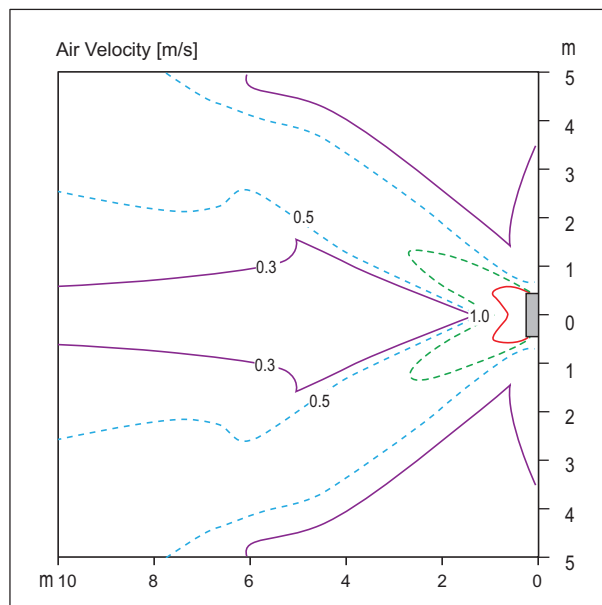
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 55°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 18m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 18.8m
- Fan speed : High

Note

- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

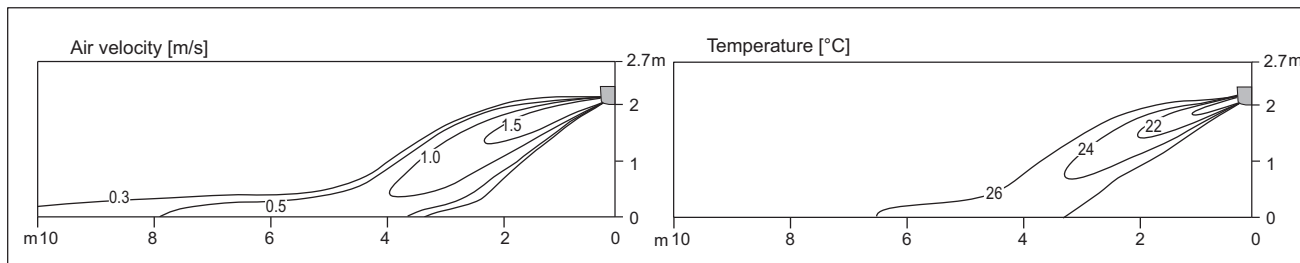
7. Air Velocity and Temperature Distribution

■ ARNU18GSKR4

◆ Cooling

Side View

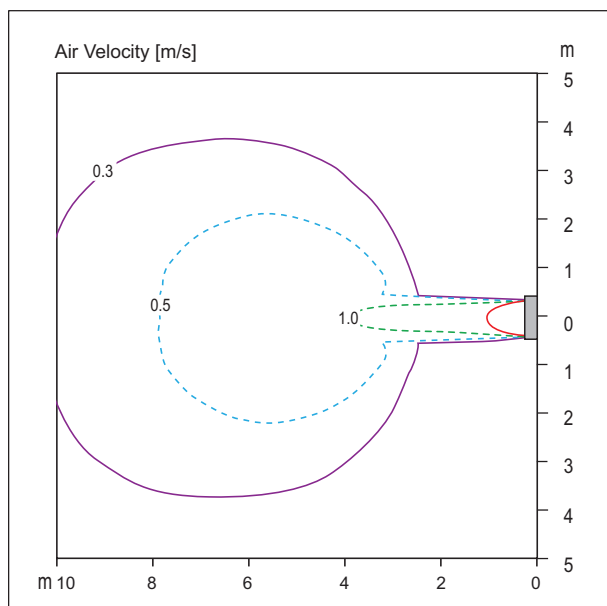
Discharge angle: 25°



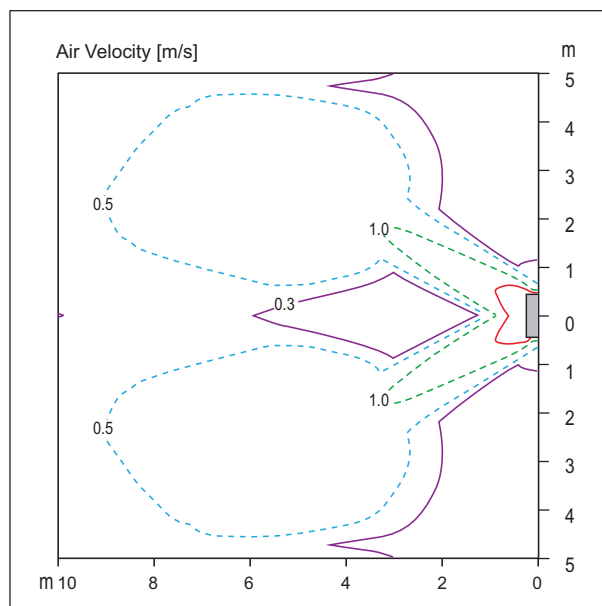
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 25°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 10.4m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 15.2m
- Fan speed : High

Note

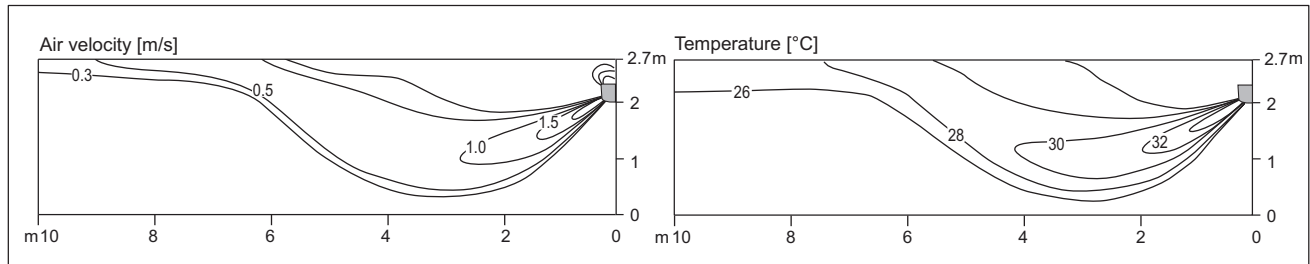
- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

7. Air Velocity and Temperature Distribution

◆ Heating

Side View

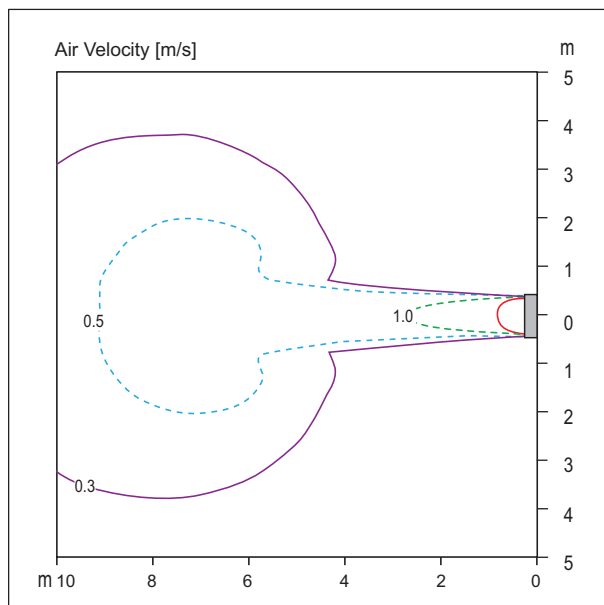
Discharge angle: 45°



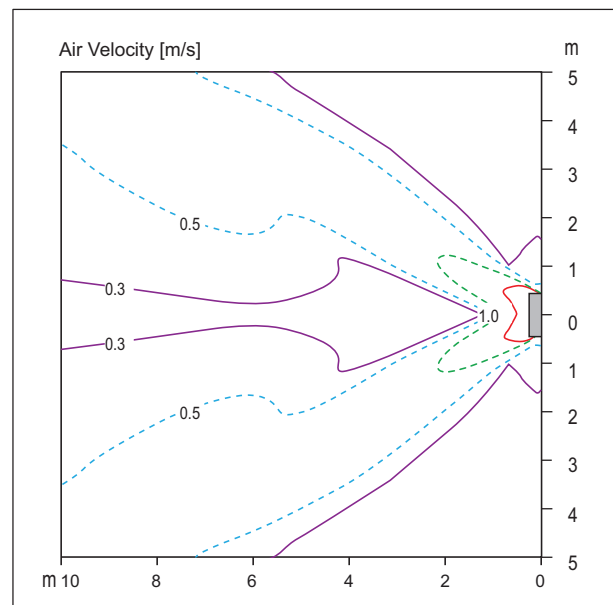
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 45°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 11.6m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 18.2m
- Fan speed : High

Note

- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

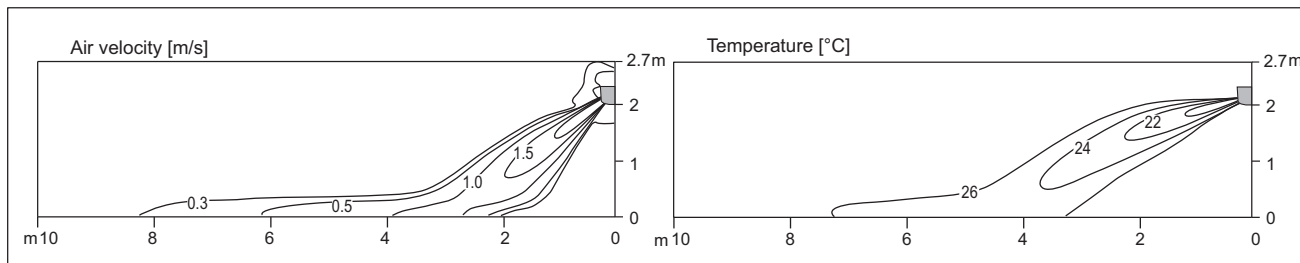
7. Air Velocity and Temperature Distribution

■ ARNU24GSKR4

◆ Cooling

Side View

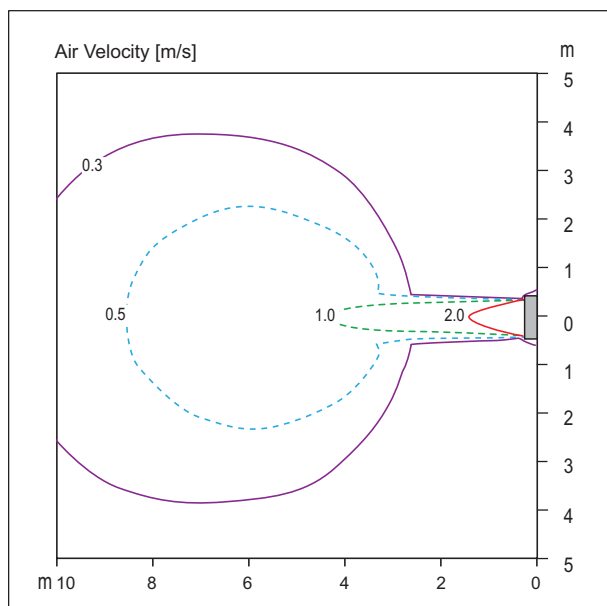
Discharge angle: 25°



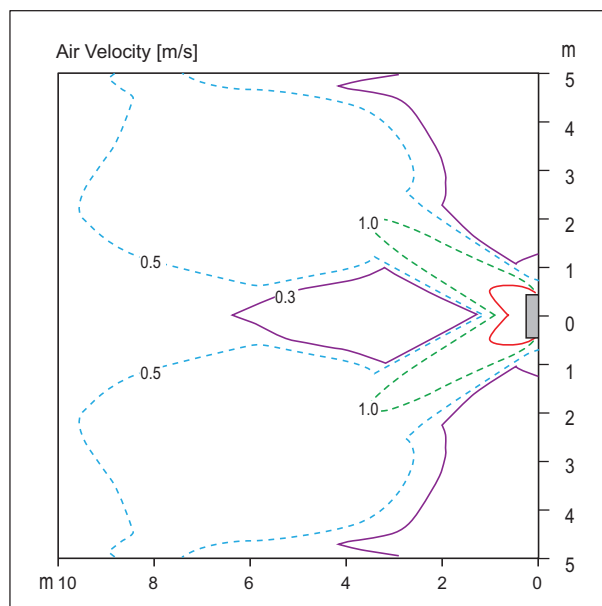
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 25°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 11.2m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 16.5m
- Fan speed : High

Note

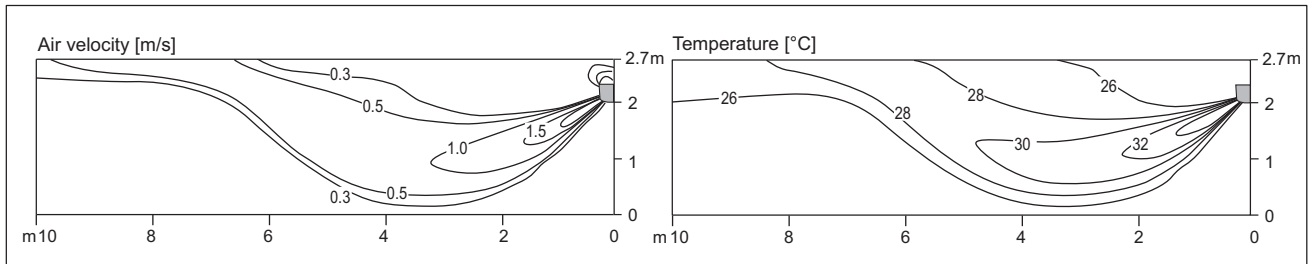
- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

7. Air Velocity and Temperature Distribution

◆ Heating

Side View

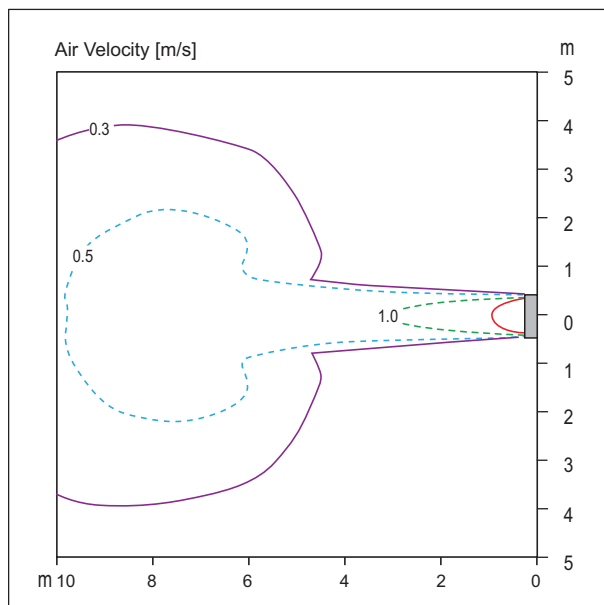
Discharge angle: 45°



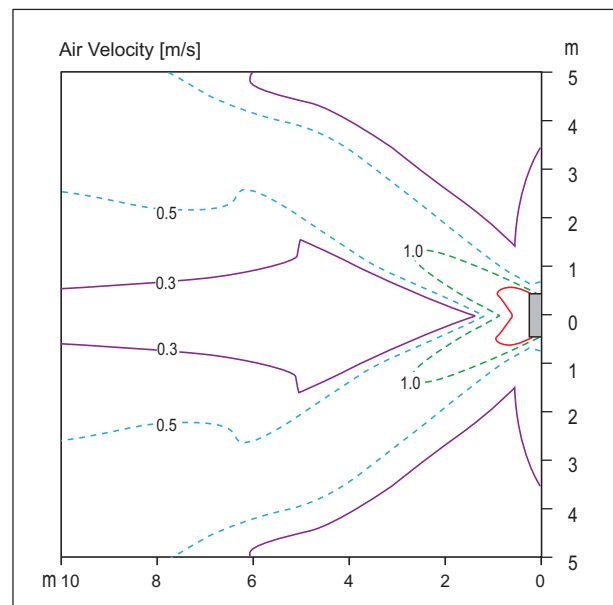
- Vertical Louver : Center
- Vertical Louver angle : 0°
- Fan speed : High

Top View

Discharge angle: 45°



- Vertical Louver : Center
- Vertical Louver angle : 0°
- Air speed 0.3m/s Range : 12.1m
- Fan speed : High



- Vertical Louver : Left & Right
- Vertical Louver angle : 50°
- Air speed 0.3m/s Range : 15.2m
- Fan speed : High

Note

- These figures are accordance with normal certain condition and environment.
(Airflow step is 'High', Air discharge angle is fixed as indicated angle.)
- Indoor airflow distribution under actual installation or operating conditions depends on ambient temperature, ceiling height, product installation direction / location, indoor / Heating load, and other obstacles, etc.

8. Electric Characteristics

Units					Power supply	IFM		PI	
Model	Type	Hz	Volts	Voltage range	MCA	kW	FLA	Cooling	Heating
ARNU05GSJR4	SJ	50	220-240	Max: 264 Min: 198	0.31	0.030	0.25	30.0	30.0
ARNU07GSJR4	SJ				0.31	0.030	0.25	30.0	30.0
ARNU09GSJR4	SJ				0.31	0.030	0.25	30.0	30.0
ARNU12GSJR4	SJ				0.31	0.030	0.25	30.0	30.0
ARNU15GSJR4	SJ				0.31	0.030	0.25	30.0	30.0
ARNU18GSKR4	SK				0.65	0.058	0.52	53.0	53.0
ARNU24GSKR4	SK				0.65	0.058	0.52	53.0	53.0
ARNU05GSJR4	SJ	60	220	Max: 242 Min: 198	0.31	0.030	0.25	30.0	30.0
ARNU07GSJR4	SJ				0.31	0.030	0.25	30.0	30.0
ARNU09GSJR4	SJ				0.31	0.030	0.25	30.0	30.0
ARNU12GSJR4	SJ				0.31	0.030	0.25	30.0	30.0
ARNU15GSJR4	SJ				0.31	0.030	0.25	30.0	30.0
ARNU18GSKR4	SK				0.65	0.058	0.52	53.0	53.0
ARNU24GSKR4	SK				0.65	0.058	0.52	53.0	53.0

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

$MCA = 1.25 \times FLA$

$MFA = 1.1 \times MCA, MFA \leq 4 \times FLA$

(If MFA is smaller than minimum standard value, Use minimum standard value in region for selecting circuit breaker.)

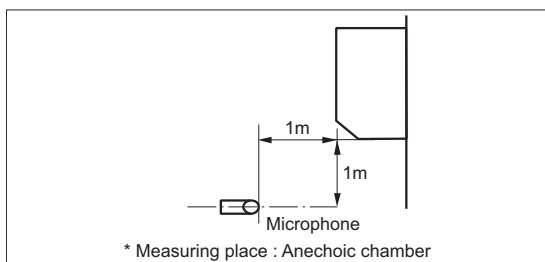
4. Select wire size based on the MCA

5. Instead of fuse, use Circuit Breaker.

9. Sound Levels

9.1 Sound Pressure Levels

Overall

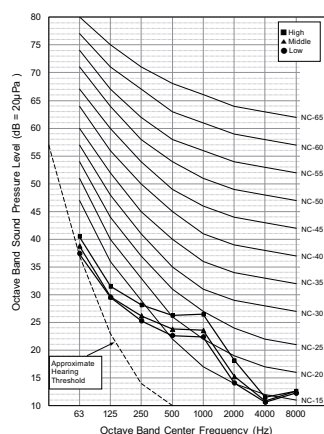


Note

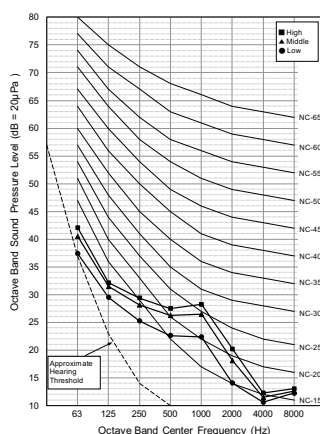
1. Sound measured at some distance away from the center of the unit.
2. Data is valid at free field condition.
3. Reference acoustic pressure 0dB = 20μPa.
4. Data is valid at nominal operation condition.
Refer to the Model Specifications for nominal conditions (Power source and Ambient temperature, etc)
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.
7. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.
Therefore, these values can be increased owing to ambient conditions during operation.

Model	Sound Pressure Levels [dB(A)]		
	High	Middle	Low
ARNU05GSJR4	30	29	28
ARNU07GSJR4	32	30	28
ARNU09GSJR4	34	32	28
ARNU12GSJR4	37	34	30
ARNU15GSJR4	42	39	32
ARNU18GSKR4	43	39	34
ARNU24GSKR4	46	41	34

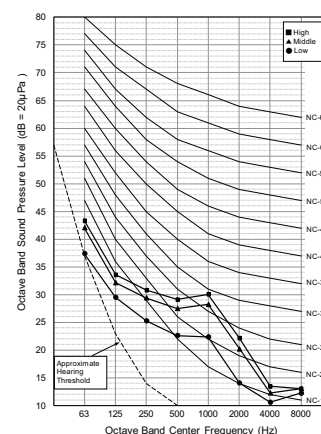
ARNU05GSJR4



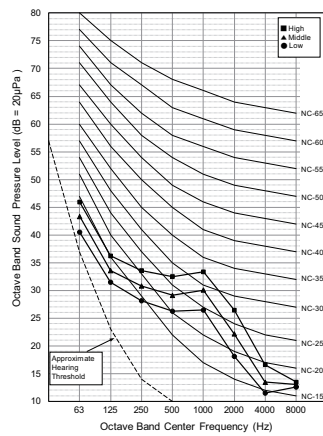
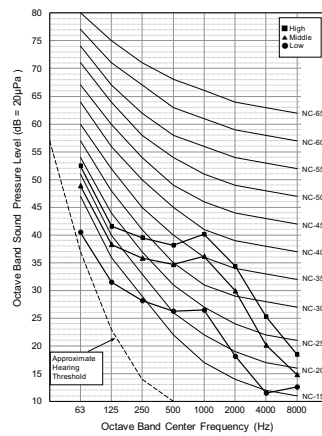
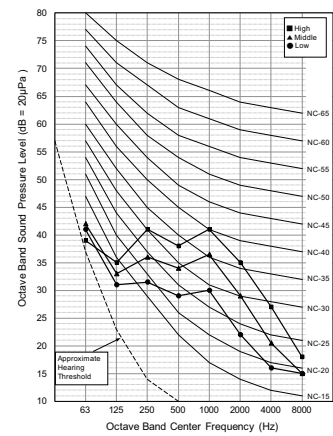
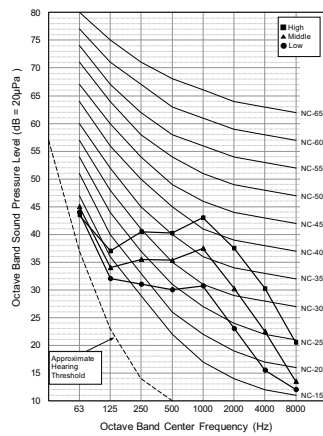
ARNU07GSJR4



ARNU09GSJR4



9. Sound Levels

ARNU12GSJR4**ARNU15GSJR4****ARNU18GSKR4****ARNU24GSKR4**

9. Sound Levels

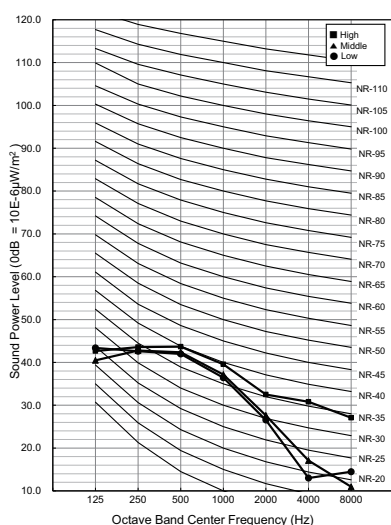
9.2 Sound Power Levels

Note

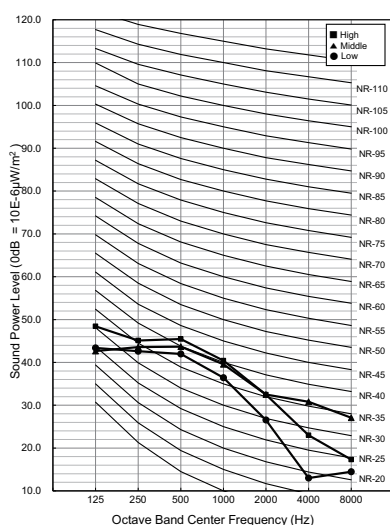
- Data is valid at diffuse field condition
- Data is valid at nominal operating condition
- Sound level can be increased in static pressure mode or used air guide.
- Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of particular room in which the equipment is installed.
- Reference acoustic intensity $0\text{dB} = 10\text{E-}6\mu\text{W/m}^2$
- Sound power level is measured on the rated condition in the semi-anechoic rooms by ISO 9614 standard. Therefore, these values can be increased owing to ambient conditions during operation.

Model	Sound Power Levels [dB(A)]		
	High	Middle	Low
ARNU05GSJR4	45	43	42
ARNU07GSJR4	46	45	42
ARNU09GSJR4	48	46	42
ARNU12GSJR4	51	48	45
ARNU15GSJR4	55	52	44
ARNU18GSKR4	59	56	52
ARNU24GSKR4	63	58	52

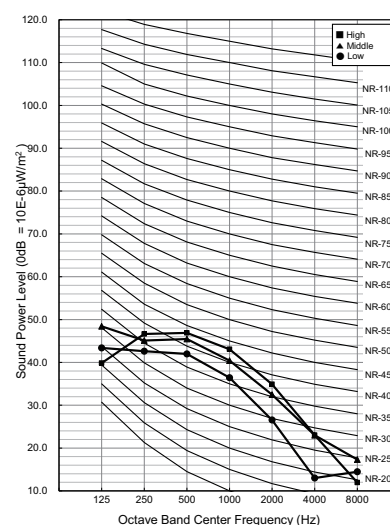
ARNU05GSJR4



ARNU07GSJR4

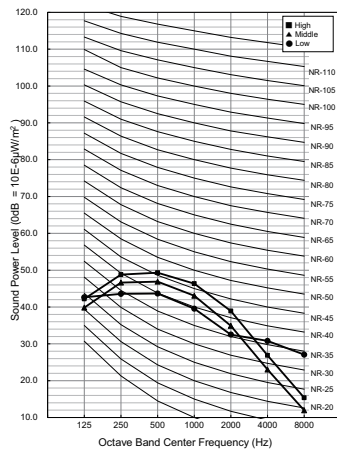


ARNU09GSJR4

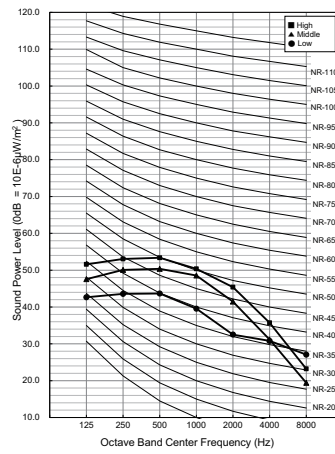


9. Sound Levels

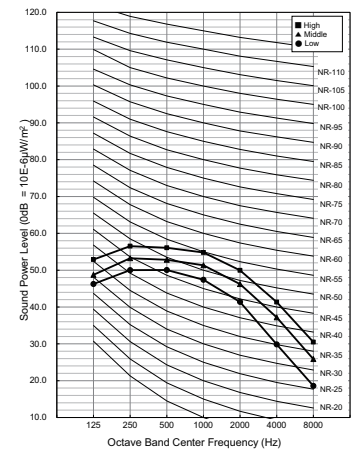
ARNU12GSJR4



ARNU15GSJR4



ARNU18GSKR4



ARNU24GSKR4

