

VRF

Technical Data Book

DVM IDU Big Ceiling for NA
(R410A, 60Hz, H/P)



Model : AM036JNCDC/AA
AM048JNCDC/AA

Nomenclature

Indoor Units

Model Names

AM	OH	J	N	C	D	C	H	/	AA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AM	DVM
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(2) Capacity

x 1000 BTU/h (3 digits)

(3) Version

F	2013
H	2014
J	2015
K	2016

(4) Product Type

X	Outdoor unit
N	Indoor unit

(5) Product Notation

1	1Way Cassette
2	2Way Cassette
N	4Way Cassette S (600 x 600)
4	4Way Cassette S
L	LSP Duct (Slim Duct)
M	MSP Duct
H	HSP Duct
E	OAP Duct
C	Ceiling
J	Console
F	Concealed Floor Standing
Z	Vertical AHU
T	NEO FORTE
Q	NEO FORTE (EEV)

(6) Feature

D	Deluxe
S	Standard

(7) Rating Voltage

C	1Ø, 208~230V, 60Hz
F	3Ø, 208~230V, 60Hz
J	3Ø, 460V, 60Hz

(8) Mode

H	Heat Pump (R410A)
R	Heat Recovery (R410A)
C	Cooling only (R410A)

Ceiling

1 Specifications

2 Capacity table

3 Dimensional drawing

4 Electrical wiring diagram

5 Sound pressure level

6 Sound power level

***7 Temperature and air flow
distribution***

1 Specifications

Ceiling

Type				Ceiling	Ceiling
Model Name				AM036JNCDCH/AA	AM048JNCDCH/AA
Power Supply			Ø, #, V, Hz	1,2,208-230,60	1,2,208-230,60
Mode				HP/HR	HP/HR
Performance	Ton			3.00	4.00
	Capacity (Nominal)	Cooling	kW	10.55	14.07
			Btu/h	36,000	48,000
			US RT	3.00	4.00
	Capacity (Nominal)	Heating	kW	11.72	15.83
			Btu/h	40,000	54,000
US RT			3.33	4.50	
Power	Power Input (Nominal)	Cooling	W	92.00	160.00
		Heating		80.00	160.00
	Current Input (Nominal)	Cooling	A	0.94	1.45
		Heating		0.83	1.45
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan
		Output x n	W	260 x 1	355 x 1
	Air Flow	H/M/L (UL)	CFM	1,035.00 / 844.00 / 653.00	1,286.00 / 1,088.00 / 918.00
	External Pressure	Min / Std / Max	Pa	-	-
In Wg			-	-	
Piping Connections	Liquid Pipe	Ø, mm	9.52	9.52	
		Ø, inch	3/8"	3/8"	
	Gas Pipe	Ø, mm	15.88	15.88	
		Ø, inch	5/8"	5/8"	
Drain Pipe	Ø, mm	VP25 (OD 25, ID 20)	VP25 (OD 25, ID 20)		
Field Wiring	Power Source Wire		mm ²	1.5 - 2.5	1.5 - 2.5
	Transmission Cable		mm ²	0.75 - 1.50	0.75 - 1.50
Refrigerant	Type		-	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Sound	Pressure	High / Mid / Low	dB(A)	45.0 / 41.0 / 37.0	
	Power	Cooling		61.0	63.0
Dimensions	Net Weight		kg	33.50	42.50
			lbs	73.85	93.70
	Shipping Weight		kg	39.50	48.50
			lbs	87.08	106.92
	Net Dimensions (WxHxD)		mm	1,350 x 235 x 675	1,650 x 235 x 675
			inch	53.15 x 9.25 x 26.57	64.96 x 9.25 x 26.57
Shipping Dimensions (WxHxD)		mm	1,439 x 758 x 321	1,739 x 758 x 321	
		inch	56.65 x 29.84 x 12.64	68.46 x 29.84 x 12.64	
Panel Size	Panel Model		-	-	-
	Panel Net Weight		kg	-	-
			lbs	-	-
	Shipping Weight		kg	-	-
			lbs	-	-
	Net Dimensions (WxHxD)		mm	-	-
			inch	-	-
	Shipping Dimensions (WxHxD)		mm	-	-
inch			-	-	
Additional Accessories	Drain pump	Drain pump	-	-	
		Max. lifting Height / Displacement	mm / liter / h	-	
	Air Filter		-	-	-

- Nominal capacity are based on (Refrigerant Piping 25ft , Level Differences 0ft);

.Cooling : Indoor temperature 80°F DB, 67°F WB / Outdoor temperature 95°F DB, 75°F WB

.Heating : Indoor temperature 70°F DB, 60°F WB / Outdoor temperature 47°F DB, 43°F WB

- Sound pressure was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

- Specifications are subject to change without prior notice for product improvement.

2 Capacity table

Ceiling

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Model	Outdoor temperature (°F, DB)	Indoor temperature (°F, WB)													
		57.0		61.0		64.0		67.0		70.0		72.0		75.0	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
AM036JNCDC/AA	50.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.28	25.40	39.87	25.40	42.24	25.40
	54.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.28	25.40	39.87	25.40	42.24	25.40
	58.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.28	25.40	39.82	25.36	41.88	25.03
	60.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.28	25.40	39.83	25.36	41.94	25.10
	64.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.13	25.40	39.55	25.33	41.66	24.83
	67.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.11	25.40	39.52	25.33	41.63	24.79
	70.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.11	25.40	39.52	25.33	41.63	24.79
	73.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.11	25.40	39.52	25.33	41.63	24.79
	77.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.11	25.40	39.52	25.33	41.63	24.79
	80.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.11	25.40	39.52	25.33	41.63	24.79
	84.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.11	25.40	39.52	25.33	41.63	24.79
	88.0	24.12	20.45	29.04	22.95	32.73	25.01	36.00	25.40	38.11	25.40	39.52	25.33	41.63	24.79
	92.0	24.12	20.08	29.04	22.60	32.73	25.01	36.00	25.40	38.11	25.40	39.52	25.33	41.63	24.79
	95.0	24.12	20.13	29.04	22.65	32.73	25.01	36.00	25.40	38.11	25.40	39.52	25.33	41.63	24.79
	99.0	24.12	20.13	29.04	22.65	32.73	25.01	36.00	25.40	37.91	25.20	39.12	24.97	40.94	24.44
103.0	24.12	20.13	29.04	22.65	32.73	24.92	35.83	25.44	37.33	24.83	38.35	24.61	39.87	24.08	
AM048JNCDC/AA	50.0	32.42	26.24	38.79	29.30	43.54	32.06	48.15	32.90	51.34	32.71	53.40	32.63	56.49	33.20
	54.0	32.42	26.24	38.79	29.30	43.54	32.06	47.98	32.90	50.96	32.92	53.02	32.93	56.12	32.87
	58.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	51.00	32.90	53.06	32.90	56.16	32.90
	60.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	51.00	32.90	53.03	32.87	55.91	32.65
	64.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.83	32.73	52.76	32.59	55.82	32.56
	67.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.81	32.71	52.70	32.53	55.59	32.32
	70.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.81	32.71	52.69	32.52	55.50	32.23
	73.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.81	32.71	52.69	32.52	55.50	32.23
	77.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.81	32.71	52.69	32.52	55.50	32.23
	80.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.81	32.71	52.69	32.52	55.50	32.23
	84.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.81	32.71	52.69	32.52	55.50	32.23
	88.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.81	32.71	52.69	32.52	55.50	32.23
	92.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.81	32.71	52.69	32.52	55.50	32.23
	95.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.81	32.71	52.69	32.52	55.50	32.23
	99.0	32.42	26.24	38.79	29.30	43.54	32.06	48.00	32.90	50.60	32.50	52.27	32.10	54.77	31.49
103.0	32.42	26.24	38.79	29.30	43.54	32.06	47.82	32.53	49.75	31.91	51.03	31.67	53.22	30.75	

2 Capacity table

Ceiling

Heating

TC : Total Capacity

Model	Outdoor temperature (°F)		Indoor temperature (°F, DB)				
			61.0	65.0	70.0	72.0	75.0
	DB	WB	TC	TC	TC	TC	TC
AM036JNCDCH/AA	-3.6	-4.0	24.90	24.80	24.50	24.50	24.50
	-1.8	-2.0	25.60	25.30	24.80	24.70	24.60
	2.0	1.0	26.80	26.10	25.30	25.10	24.80
	6.0	5.0	28.20	27.20	26.30	25.90	25.40
	10.0	9.0	29.30	28.50	27.60	27.30	27.00
	13.0	12.0	30.40	29.70	29.10	28.80	28.50
	17.0	15.0	31.40	30.80	30.20	29.90	29.50
	19.0	18.0	32.40	31.90	31.00	30.70	30.10
	23.0	21.0	33.70	33.30	32.20	31.70	30.90
	26.0	24.0	35.20	34.80	33.70	33.00	32.00
	30.0	28.0	36.80	36.30	35.20	34.30	33.10
	35.0	32.0	38.20	37.60	36.40	35.40	34.10
	39.0	36.0	39.50	38.80	37.60	36.70	35.60
	44.0	40.0	41.50	41.00	39.10	37.70	35.60
	47.0	43.0	43.20	42.50	40.00	38.20	35.70
	51.0	47.0	44.80	43.10	40.00	38.20	35.70
	54.0	50.0	45.90	43.60	40.00	38.20	35.70
	57.0	53.0	46.70	44.10	40.00	38.20	35.70
60.0	56.0	47.80	44.50	40.00	38.20	35.70	
AM048JNCDCH/AA	-3.6	-4.0	33.59	33.48	33.15	33.11	32.80
	-1.8	-2.0	34.36	33.96	33.41	33.36	32.93
	2.0	1.0	35.67	34.84	33.92	33.78	33.17
	6.0	5.0	37.80	36.67	35.25	34.68	33.80
	10.0	9.0	39.24	38.41	37.36	36.92	36.06
	13.0	12.0	40.65	40.09	39.25	38.96	38.28
	17.0	15.0	42.10	41.54	40.72	40.36	39.66
	19.0	18.0	43.49	42.78	41.90	41.34	40.47
	23.0	21.0	45.47	44.70	43.45	42.75	41.87
	26.0	24.0	47.59	46.81	45.32	44.44	43.20
	30.0	28.0	49.60	48.82	47.16	46.08	44.47
	35.0	32.0	51.27	50.49	48.73	47.55	45.79
	39.0	36.0	53.17	52.38	50.61	49.43	47.66
	44.0	40.0	56.05	55.16	52.46	50.59	47.73
	47.0	43.0	58.15	56.99	54.00	51.61	47.80
	51.0	47.0	60.16	57.95	54.00	51.61	47.80
	54.0	50.0	61.65	58.49	54.00	51.61	47.80
	57.0	53.0	63.08	59.24	54.00	51.61	47.80
60.0	56.0	64.57	59.76	54.00	51.61	47.80	

3 Dimensional drawing

Ceiling

AM036JNCDCH/AA

Units : mm/inches

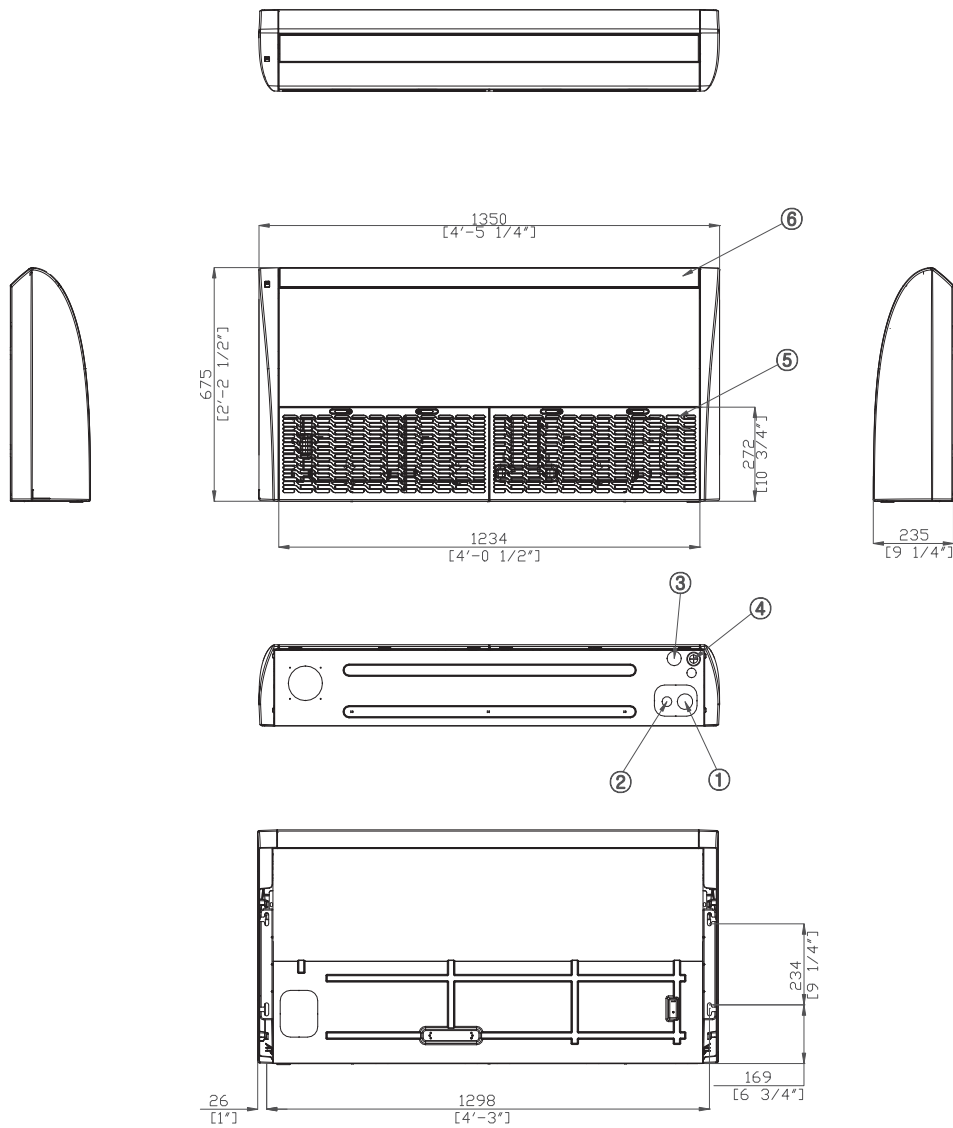


Table of descriptions

1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Condensate drain	9	
4	Power&Comm. wiring conduits	10	
5	Air Inlet grille	11	
6	Air Outlet grille	12	

3 Dimensional drawing

Ceiling

AM048JNCDCH/AA

Units : mm/inches

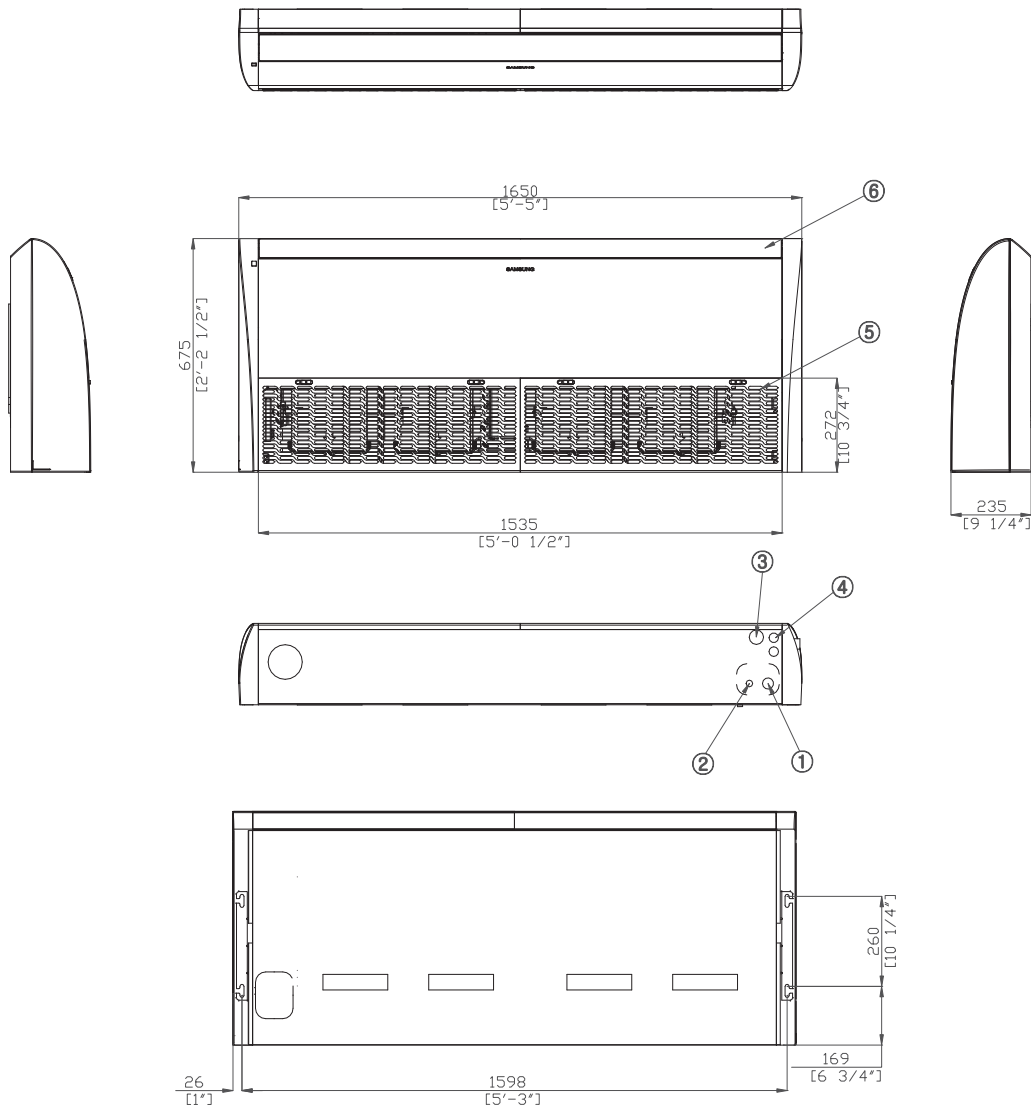


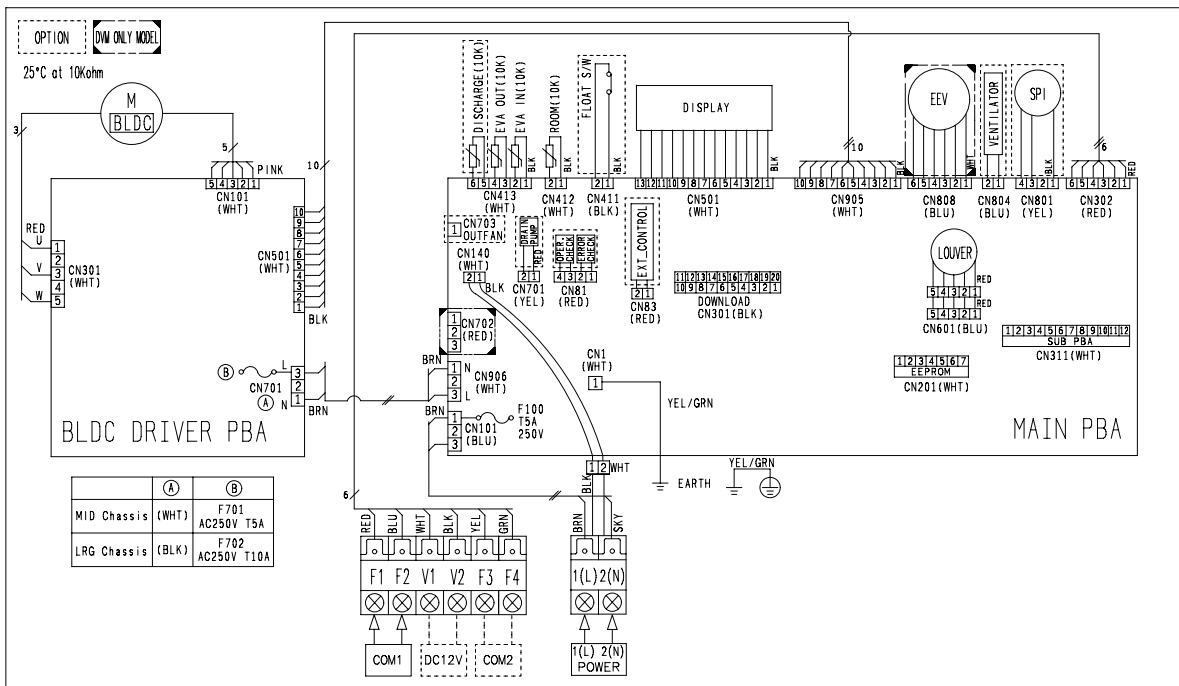
Table of descriptions

1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Condensate drain	9	
4	Power&Comm. wiring conduits	10	
5	Air Inlet grille	11	
6	Air Outlet grille	12	

4 Electrical wiring diagram

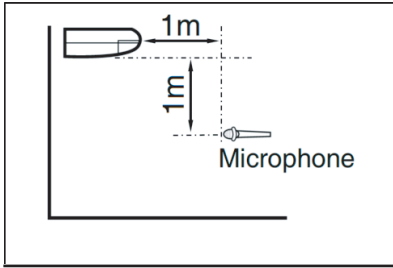
Ceiling

AM036JNCDCH/AA, AM048JNCDCH/AA



5 Sound pressure level

Ceiling



Unit: dB(A)

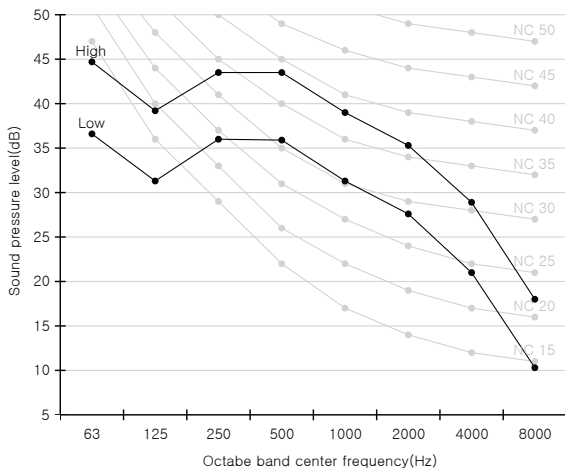
Model	High	Low
AM036JNCDCH/AA	45.0	37.0
AM048JNCDCH/AA	46.0	38.0

Note

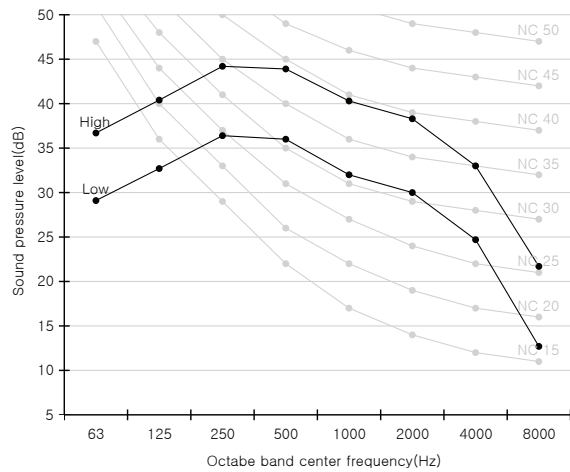
- These operation values were obtained in an anechoic room. - Sound pressure level will vary depending on a factors such as the construction of the particular room where the equipment is installed.
- Operation sound level may differ depending on operation and ambient conditions.

NC curve

1) AM036JNCDCH/AA



2) AM048JNCDCH/AA



6 Sound power level

Ceiling

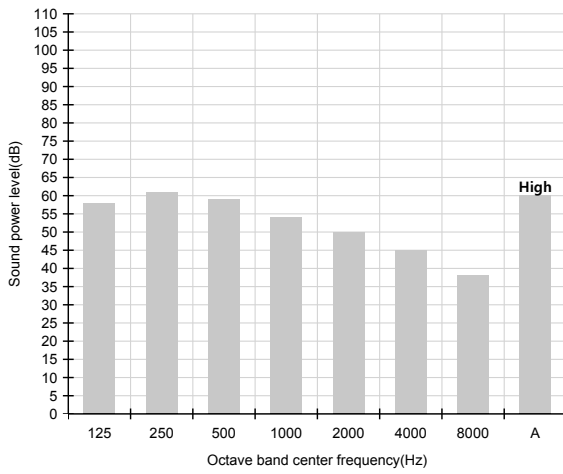
Note

- dBA = A-Weighted sound power level.
- Reference power : 1pW
- Measured according to ISO 3741.

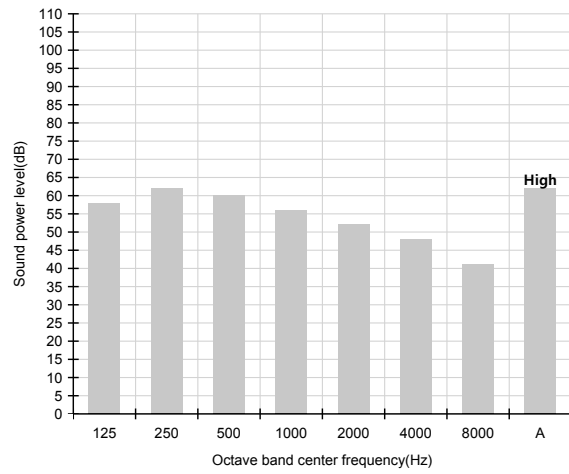
Unit: dB(A)

Model	Power
AM036JNCDCH/AA	61.0
AM048JNCDCH/AA	63.0

1)AM036JNCDCH/AA



2)AM048JNCDCH/AA



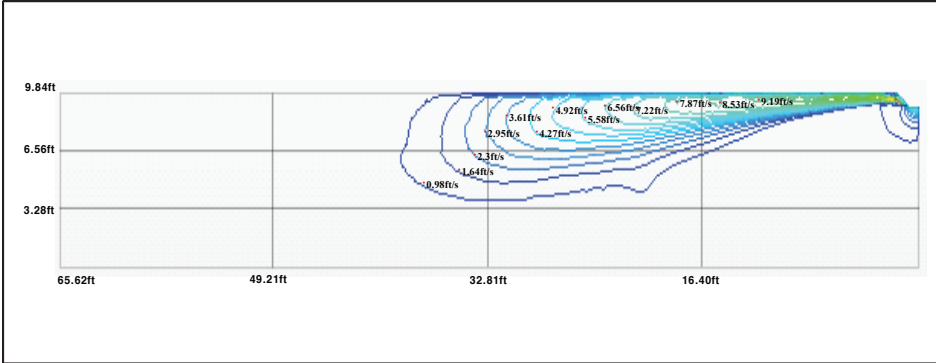
7 Temperature and air flow distribution

Ceiling

AM036JNCDCH/AA

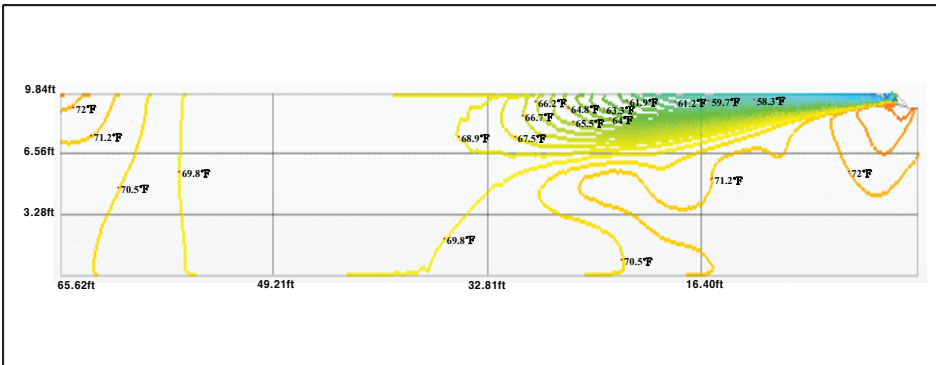
(1) Cooling air velocity distribution

Discharge angle : 101°



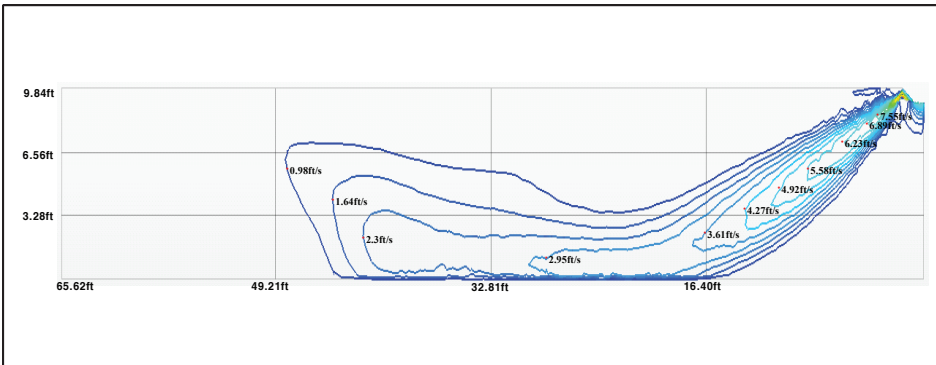
(2) Cooling temperature distribution

Discharge angle : 101°



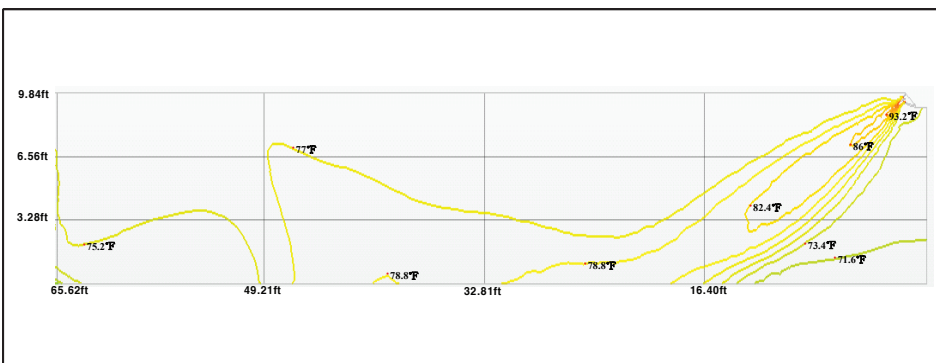
(3) Heating air velocity distribution

Discharge angle : 90°



(4) Heating temperature distribution

Discharge angle : 90°



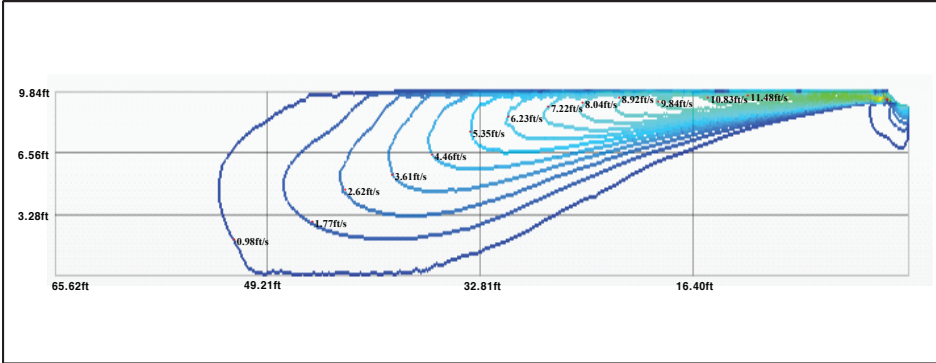
7 Temperature and air flow distribution

Ceiling

AM048JNCDCH/AA

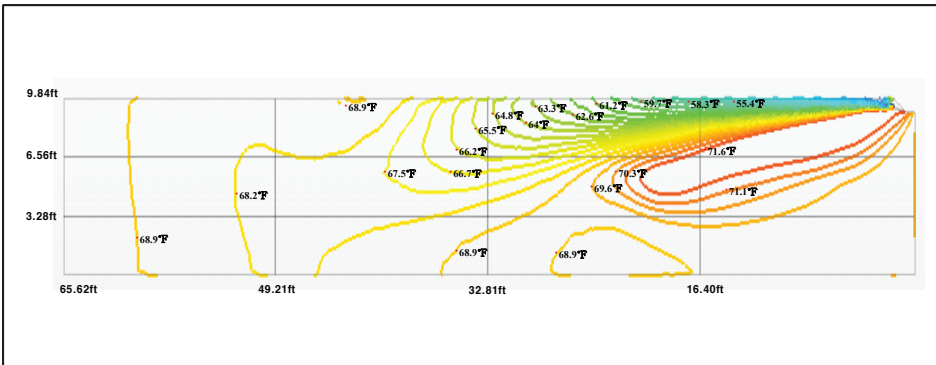
(1) Cooling air velocity distribution

Discharge angle : 101°



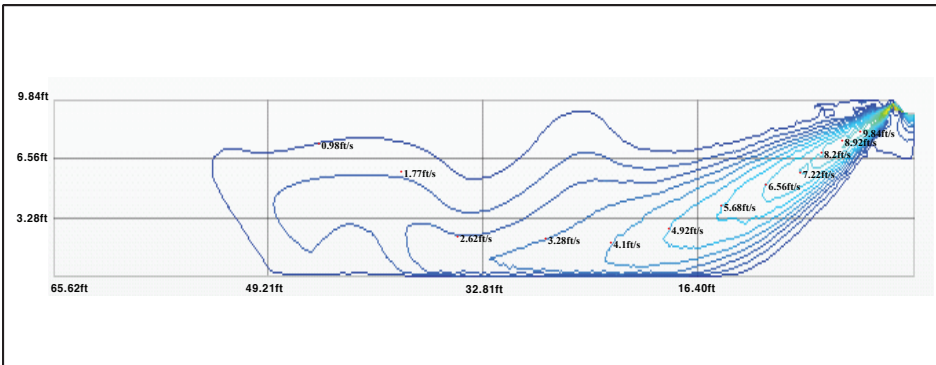
(2) Cooling temperature distribution

Discharge angle : 101°



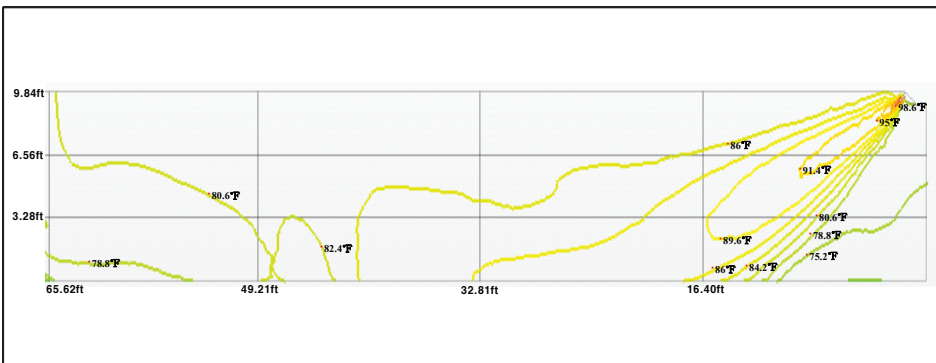
(3) Heating air velocity distribution

Discharge angle : 90°



(4) Heating temperature distribution

Discharge angle : 90°



SAMSUNG

2015.06
Ver 1.0

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