

VRF

Technical Data Book

DVM Indoor Unit PAC for Global
(INV, R410A, HP)



Model : AM140*NPDKH/** (50/60Hz)
AM280*NPDKH/** (50Hz)

History

Version	Modification	Date	Remark
Ver.1.0	Release DVM Indoor PAC for Global (INV, R410A, 50/60Hz, HP) TDB	'15. 11. 03	
Ver.1.1	1. Modification of AM140JNPDKH/TK Power Supply Specification - Rating Voltage in 'Nomenclature' : 50 → 50/60 Hz (p.3) - Power Supply in 'Specifications' : 50 → 50/60 Hz (p.5) 2. Addition of Description in Dimensional drawing page (p.8~9)	'16. 07. 08	
Ver.2.0	Added the 2019 new line up (AM***RNPDKH/EU)	'19.07.12	
Ver.2.1	Modified the NR Curve of Sound Pressure level	'22.09.08	

Nomenclature

Indoor Units

Model Names

AM

(1)

140

(2)

J

(3)

N

(4)

P

(5)

D

(6)

K

(7)

H

(8)

/

TK

Buyer

(1) Classification

AM	DVM
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(2) Capacity

x 1/10 kW (3 digits)

(3) Version

E	2012
F	2013
H	2014
J	2015
R	2019

(4) Product Type

X	Outdoor Unit
N	Indoor Unit

(5) Product Notation

P	PAC
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(6) Feature

F	Flagship
P	Premium
D	Deluxe



(7) Rating Voltage

K	1Ø, 220~240V, 50/60Hz
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(8) Mode

H	Heat Pump (R410A)
R	Heat Recovery (R410A)

Line up

Capacity (kW)	14.0	28.0
PAC		
모델명	AM140JNPDKH/TK AM140RNPDKH/EU	AM280JNPDKH/TK AM280RNPDKH/EU

PAC

1 Specifications

2 Capacity table

3 Dimensional drawing

4 Electrical wiring diagram

5 Sound pressure level

Specifications

Floor standing

Type			Floor Standing		Floor Standing	
Model			AM140*NPDKH/**		AM280*NPDKH/**	
Power Supply			Ø, #, V, Hz	1,2,220-240,50/60		1,2,220-240,50
Mode			-	HP/HR		HP/HR
Performance	Capacity (Nominal)	Cooling	kW	14.00		28.00
			Btu/h	47,800		95,500
		Heating	kW	16.00		31.50
			Btu/h	54,600		107,500
Power	Power Input (Nominal)	Cooling	W	190.00		955.00
		Heating	W	190.00		955.00
	Current Input (Nominal)	Cooling	A	0.90		4.73
		Heating	A	0.90		4.73
Fan	Motor	Type	-	Sirocco Fan		Sirocco Fan
		Output x n	w	154 x 1		700 x 1
	Air Flow Rate	H/M/L (UL)	CMM	35.00 / 30.50 / 27.50		70.00 / 60.00 / 50.00
			l/s	583.33 / 508.33 / 458.33		1,166.67 / 1,000.00 / 833.33
	External Pressure	Min/Std/Max	mmAq	-		-
Pa			-		-	
Piping Connections	Liquid Pipe	Ø, mm	9.52		9.52	
		Ø, inch	3/8"		3/8"	
	Gas Pipe	Ø, mm	15.88		22.22	
		Ø, inch	5/8"		7/8"	
Drain Pipe	Ø, mm	ID18 HOSE		VP25 (OD 32, ID 25)		
Field Wiring	Power Source Wire	mm ²	2.5		2.5	
	Transmission Cable	mm ²	VCTF 0.75 - 1.50		VCTF 0.75 - 1.50	
Refrigerant	Type	-	R410A		R410A	
	Control Method	-	EEV INCLUDED		EEV INCLUDED	
Sound	Pressure	High / Low	dB(A)	54 / 47		58 / 54
	Power	Cooling		-		-
Dimension	Net Weight		kg	48.00		115.00
	Shipping Weight		kg	55.00		130.00
	Net Dimensions (WxHxD)		mm	610 x 1,850 x 400		1,100 x 1,800 x 485
	Shipping Dimensions (WxHxD)		mm	705 x 1,963 x 493		1,177 x 1,950 x 563
Panel Size	Panel model		-	-		-
	Panel Net Weight		kg	-		-
	Shipping Weight		kg	-		-
	Net Dimensions (WxHxD)		mm	-		-
	Shipping Dimensions (WxHxD)		mm	-		-
Additional Accessories	Drain Pump	Drain Pump	- / Model	-		-
		Max. lifting Height / Displacement	mm/liter/h	-		-
	Air Filter		-	-		-

* Specifications may be subject to change without prior notice.

1) Nominal cooling capacities are based on;

- Indoor temperature : 27°C DB, 19°C WB

- Outdoor temperature : 35°C DB, 24°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

2) 46°C cooling capacities are based on;

- Indoor temperature : 29°C DB, 19°C WB

- Outdoor temperature : 46°C DB, 24°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound pressure was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

4) In case of AM280JNPDKH/TK, it operates with only 50Hz power supply.

Capacity table

Floor standing

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Model	Outdoor Air Temp. (°C, DB)	Indoor temperature													
		20 (°C, DB)		23 (°C, DB)		26 (°C, DB)		27 (°C, DB)		28 (°C, DB)		30 (°C, DB)		32 (°C, DB)	
		14 (°C, WB)	16 (°C, WB)	18 (°C, WB)	19 (°C, WB)	20 (°C, WB)	22 (°C, WB)	24 (°C, WB)	TC(kW)	SHC(kW)	TC(kW)	SHC(kW)	TC(kW)	SHC(kW)	TC(kW)
AM140*NPKH/**	10	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.60	10.90	15.70	11.00	16.80	10.90
	12	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.60	10.90	16.70	10.80
	14	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.60	10.90	16.70	10.80
	16	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.60	10.90	16.60	10.70
	18	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.50	10.80	16.60	10.70
	20	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.50	10.80	16.50	10.60
	21	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.50	10.80	16.50	10.60
	23	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.50	10.80	16.50	10.60
	25	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.50	10.80	16.50	10.60
	27	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.50	10.80	16.50	10.60
	29	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.50	10.80	16.50	10.60
	31	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.50	10.80	16.50	10.60
	33	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.50	10.80	16.50	10.60
	35	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.50	10.80	16.50	10.60
	37	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.50	10.80	15.40	10.70	16.30	10.50
	39	9.70	8.58	11.40	9.69	13.10	10.50	14.00	10.80	14.40	10.70	15.10	10.50	15.90	10.30
AM280*NPKH/**	10	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.60	32.70	23.00	34.70	23.20
	12	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.10	34.70	23.40
	14	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.10	34.70	23.00
	16	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.10	34.70	23.30
	18	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.00	34.70	23.10
	20	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.00	34.30	23.00
	21	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.00	34.30	22.90
	23	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.20	33.70	22.60
	25	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.00	33.70	22.80
	27	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.00	33.70	22.80
	29	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.00	33.70	22.80
	31	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.20	33.70	22.80
	33	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.80	32.70	23.50	33.70	22.80
	35	19.70	17.60	23.30	19.60	26.50	21.20	28.00	21.80	29.90	22.60	32.70	23.50	33.70	23.00
	37	19.40	17.30	23.00	19.30	26.30	20.90	28.00	21.80	29.70	22.70	32.20	23.10	33.20	22.50
	39	19.20	17.10	22.70	19.10	26.30	20.90	27.90	21.60	29.50	22.50	31.80	23.40	32.80	22.40

Capacity table

Floor standing

Heating

TC : Total Capacity

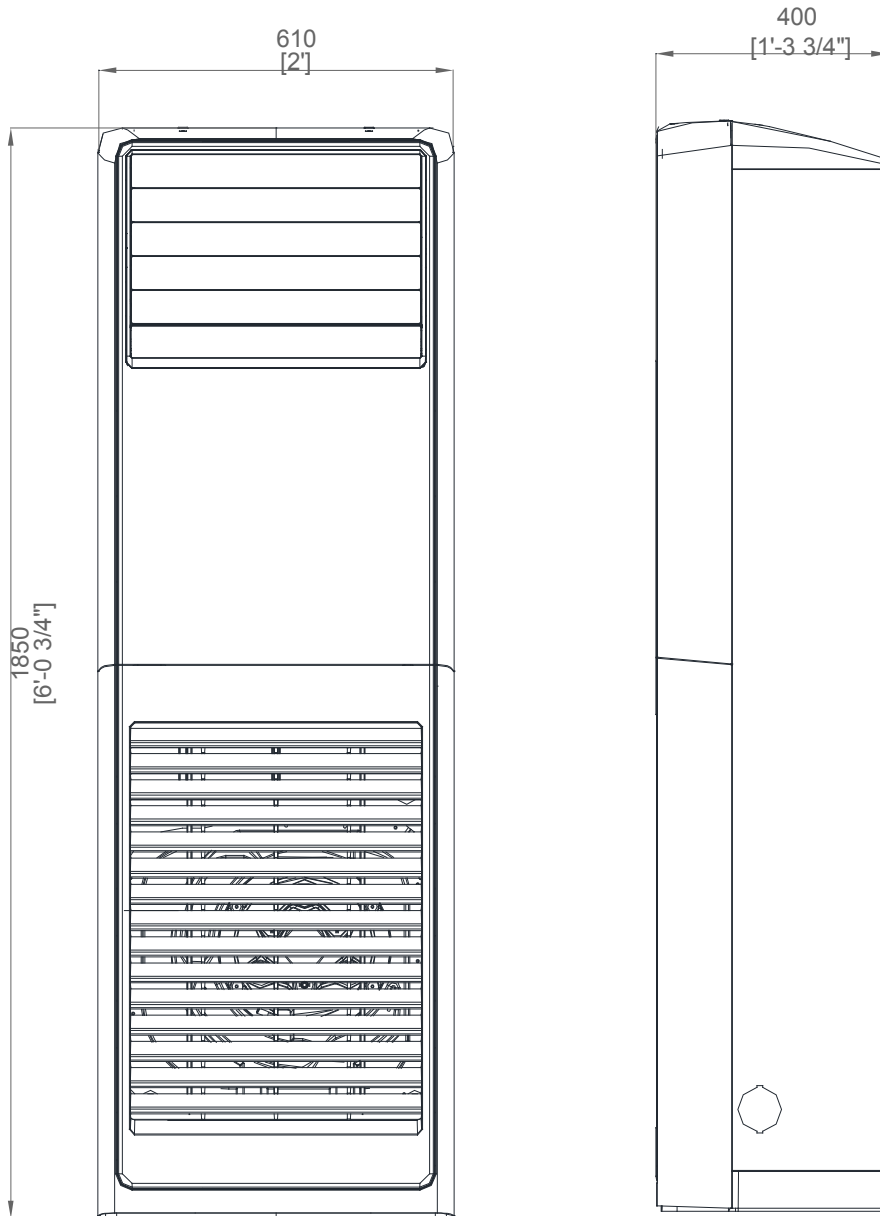
Model	Outdoor Air Temp. (°C)		Indoor temperature				
	DB	WB	16 (°C, WB)	18 (°C, WB)	20 (°C, WB)	22 (°C, WB)	24 (°C, WB)
AM140*NPKH/**			TC(kW)	TC(kW)	TC(kW)	TC(kW)	TC(kW)
	-20	-20	9.54	9.53	9.41	9.41	9.31
	-19	-19	9.74	9.66	9.48	9.48	9.34
	-17	-17	10.19	9.98	9.68	9.63	9.41
	-15	-15	10.75	10.46	10.17	9.88	9.58
	-13	-13	11.10	10.88	10.66	10.44	10.14
	-10	-11	11.58	11.45	11.25	11.12	10.90
	-10	-10	11.82	11.70	11.52	11.38	11.17
	-8	-9	12.05	11.90	11.75	11.55	11.30
	-7	-8	12.40	12.20	12.10	11.80	11.50
	-5	-6	13.10	12.90	12.70	12.30	12.00
	-3	-4	13.80	13.60	13.40	12.90	12.40
	0	-1	14.40	14.20	14.00	13.40	12.80
	3	2	15.10	14.90	14.70	14.10	13.50
	5	4	15.80	15.60	15.30	14.40	13.50
	7	6	16.50	16.20	16.00	14.80	13.50
	9	8	17.00	16.50	16.00	14.80	13.50
	11	10	17.50	16.70	16.00	14.80	13.50
	13	12	18.00	17.00	16.00	14.80	13.50
	15	14	18.50	17.20	16.00	14.80	13.50
AM280*NPKH/**	-20	-20	25.40	24.40	23.00	22.00	21.10
	-19	-19	25.60	24.60	23.20	22.30	21.60
	-17	-17	26.20	25.10	23.70	23.00	22.60
	-15	-15	27.20	26.10	24.70	23.90	23.50
	-13	-13	28.40	27.30	25.80	24.90	24.50
	-10	-11	30.40	29.20	27.50	26.40	26.00
	-10	-10	31.10	29.80	28.10	27.00	26.60
	-8	-9	31.40	30.10	28.40	27.40	26.90
	-7	-8	31.80	30.50	28.80	27.90	27.30
	-5	-6	32.70	31.50	29.70	29.00	28.10
	-3	-4	33.50	32.20	30.40	29.80	28.70
	0	-1	34.30	33.10	31.10	30.40	29.30
	3	2	35.00	33.70	31.50	30.40	29.50
	5	4	35.30	33.70	31.50	30.40	29.50
	7	6	35.70	33.70	31.50	30.40	29.50
	9	8	35.70	33.70	31.50	30.40	29.50
	11	10	35.70	33.70	31.50	30.40	29.50
	13	12	35.70	33.70	31.50	30.40	29.50
	15	14	35.70	33.70	31.50	30.40	29.50

Dimensional drawing

Floor standing

AM140*NPDKH/**

Units : mm / inches



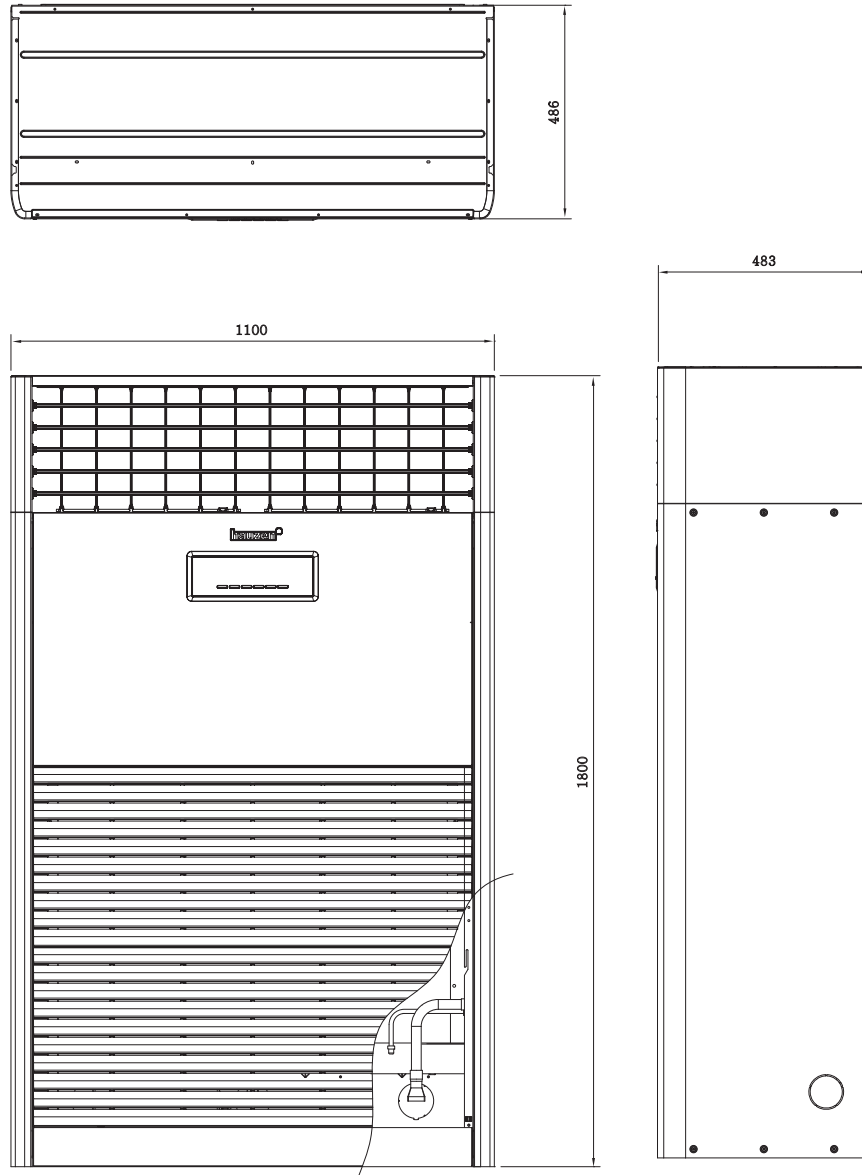
No.	Name	Description
1	Refrigerant gas pipe	Ø15.88 Flare
2	Refrigerant liquid pipe	Ø9.52 Flare
3	Drain pipe connection	-

Dimensional drawing

Floor standing

AM280*NPDKH/**

(단위 : mm)

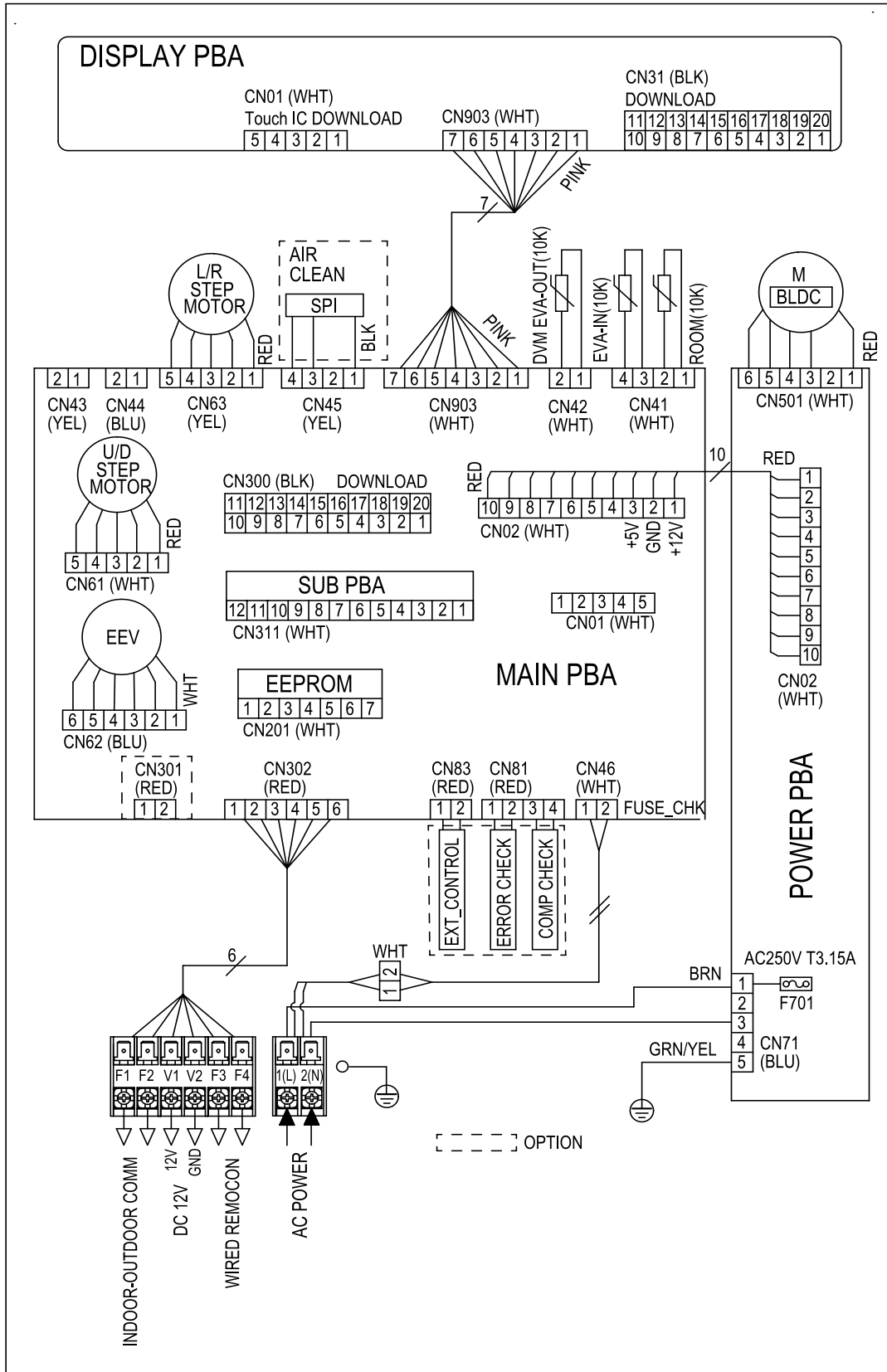


Name	Description
Refrigerant gas pipe	Φ22.22 Flare
Refrigerant liquid pipe	Φ9.52 Flare
Drain pipe connection	VP25 (OD 32, ID 25)

Electrical wiring diagram

Floor standing

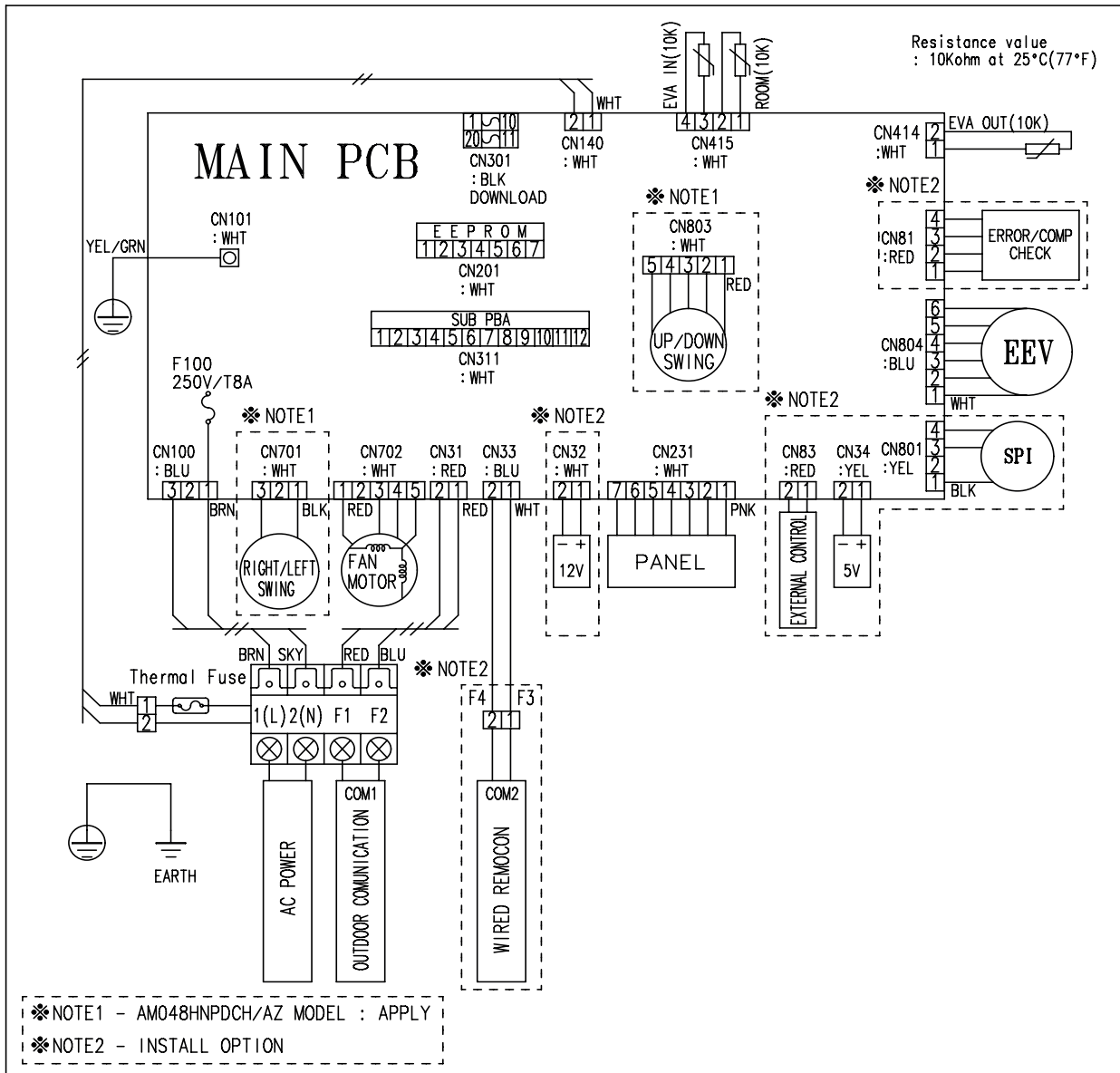
AM140*NPDKH/**



Electrical wiring diagram

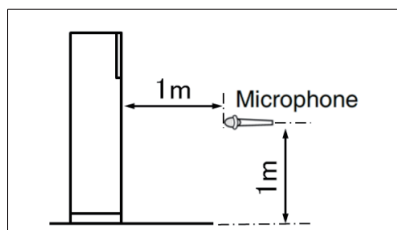
Floor standing

AM280*NPDKH/**



Sound pressure level

Floor standing



Unit: dB(A)

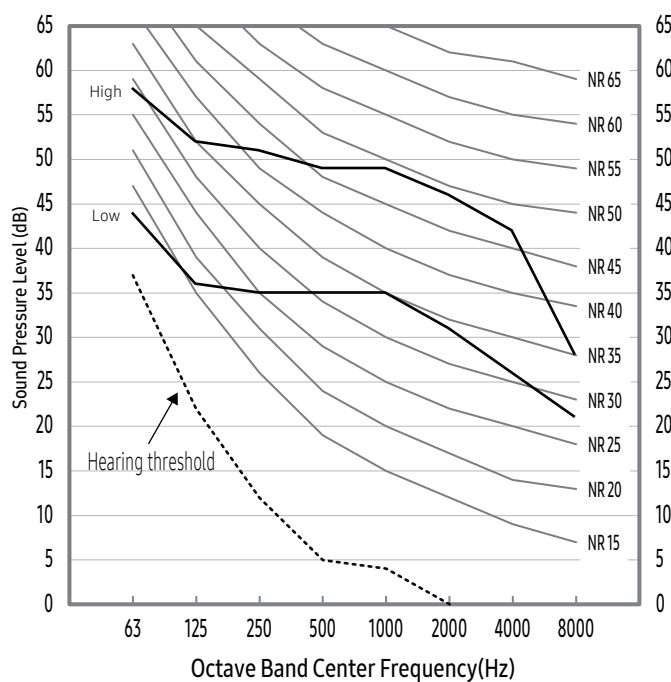
Model	High	Low
AM140 *NPDKH/ **	54	47
AM280 *NPDKH/ **	58	54

Note

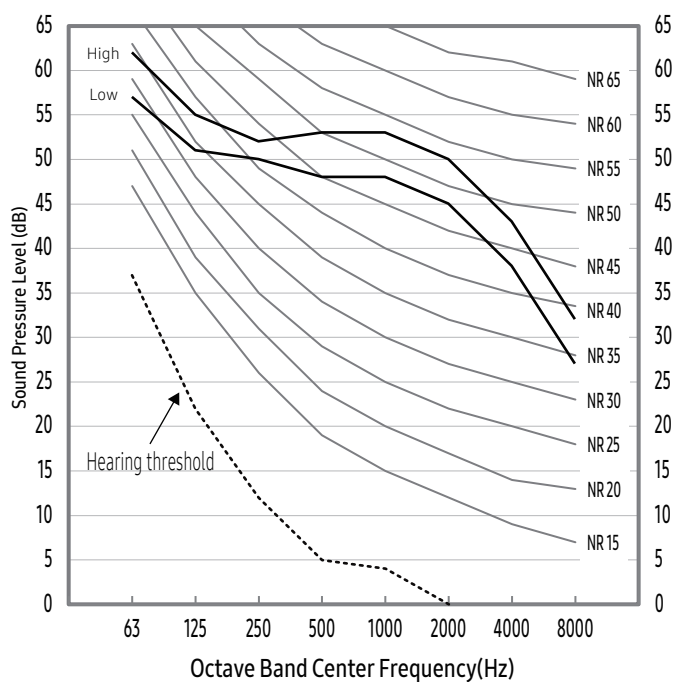
Measuring place: Anechoic chamber (conversion value)
 These operation values were obtained in an anechoic room.
 Sound pressure level will vary depending on factors such as the construction of the particular room where the equipment is installed.
 Operation sound level may differ depending on operation and ambient conditions.

NR curve

1) AM140*NPDKH/**



2) AM280*NPDKH/**



SAMSUNG

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Ver.2.1

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