

# VRF

## Technical Data Book

Duct for Latin America

(Drain pump integrated, R410A, 50/60Hz, HP/HR)



Model : AM012~048KNHPKH/AZ  
AM007~048KNLDCH/AZ  
AM018~048KNMDCH/AZ  
AM054KNMDCH1AZ

# Nomenclature

## Indoor Units

### Model Names

AM	036	K	N	H	P	K	H	/	AZ
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

### (1) Classification

AM	VRF
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### (2) Capacity

kBTu/h (3 digits)
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### (3) Version

F	2013
H	2014
J	2015
K	2016

### (4) Product Type

N	Indoor Unit (NASA)
X	Outdoor Unit (NASA)

### (5) Product Notation

1	1Way Cassette
2	2Way Cassette
4	4Way Cassette S
N	4Way Cassette(600x600)
L	LSP Duct
M	MSP Duct
H	HSP Duct
T	Neo Forte
Q	Neo Forte(EEV)
C	Ceiling
J	Console
F	Floor Standing
K	ERV Plus
B	Hydro Unit

### (6) Feature

F	Flagship
P	Premium
D	Deluxe
S	Standard

### (7) Rating Voltage

C	208~230V, 60Hz, 1Φ
K	220~240V, 50/60Hz, 1Φ

### (8) Mode

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

# 1 Specifications

## MSP Duct

Type			MSP DUCT	MSP DUCT	MSP DUCT	
Model			AM036KNMDCH/AZ	AM048KNMDCH/AZ	AM054KNMDCH1AZ	
Power Supply		Φ, #, V, Hz	1,2,208-230,60	1,2,208-230,60	1,2,208-230,60	
Mode		-	HP/HR	HP/HR	HP/HR	
Performance	Capacity (Nominal)	Cooling	kW	10.55	14.07	15.83
			Btu/h	36,000	48,000	54,000
		Heating	kW	11.72	15.83	17.58
			Btu/h	40,000	54,000	60,000
Power	Power Input (Nominal)	Cooling	W	290.00	430.00	540.00
		Heating		290.00	430.00	540.00
	Current Input (Nominal)	Cooling	A	1.60	2.45	2.51
		Heating		1.60	2.45	2.51
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor	Output x n	W	180 x 1	218 x 1	370 x 1
	Air Flow Rate	H/M/L (UL)	CMM	27.01/25.00/22.99	35.00/32.99/29.99	43.00/38.00/30.50
			l/s	450.22/416.71/383.21	583.31/549.80/499.77	716.67/633.33/508.33
	External Static Pressure	Min / Std / Max	mmAq	6.10/7.87/9.91	6.10/7.87/9.91	4.00/8.00/14.00
			Pa	59.82/77.18/97.18	59.82/77.18/97.18	39.23/78.45/137.29
Piping Connections	Liquid Pipe		Φ,mm	9.52	9.52	9.52
			Φ, inch	3/8"	3/8"	3/8"
	Gas Pipe		Φ,mm	15.88	15.88	15.88
			Φ, inch	5/8"	5/8"	5/8"
Drain Pipe		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	
Field Wiring	Power Source Wire		mm <sup>2</sup>	AWG 14	AWG 14	1.5 ~ 2.5
	Transmission Cable		mm <sup>2</sup>	2 X 16 AWG SHIELDED	2 X 16 AWG SHIELDED	0.75 ~ 1.50
Refrigerant	Type		-	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound Data	Sound Pressure Level	High / Mid / Low	dB(A)	41 / 38 / 35	42 / 39 / 36	45 / 43 / 40
	Sound Power Level	Cooling		61	62	63
Dimensions	Net Weight		kg	36.0	48.5	50.5
	Shipping Weight		kg	41.0	57.0	59.0
	Net Dimensions (WxHxD)		mm	1150 x 320 x 480	1200 x 360 x 650	1200 x 360 x 650
	Shipping Dimensions (WxHxD)		mm	1420 x 400 x 595	1456 x 434 x 778	1480 x 420 x 790
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	-	Drain Pump Included	Drain Pump Included	Drain Pump Included
		Max. lifting Height	mm	-	-	-
	Air Filter		-	-	-	-

### NOTE

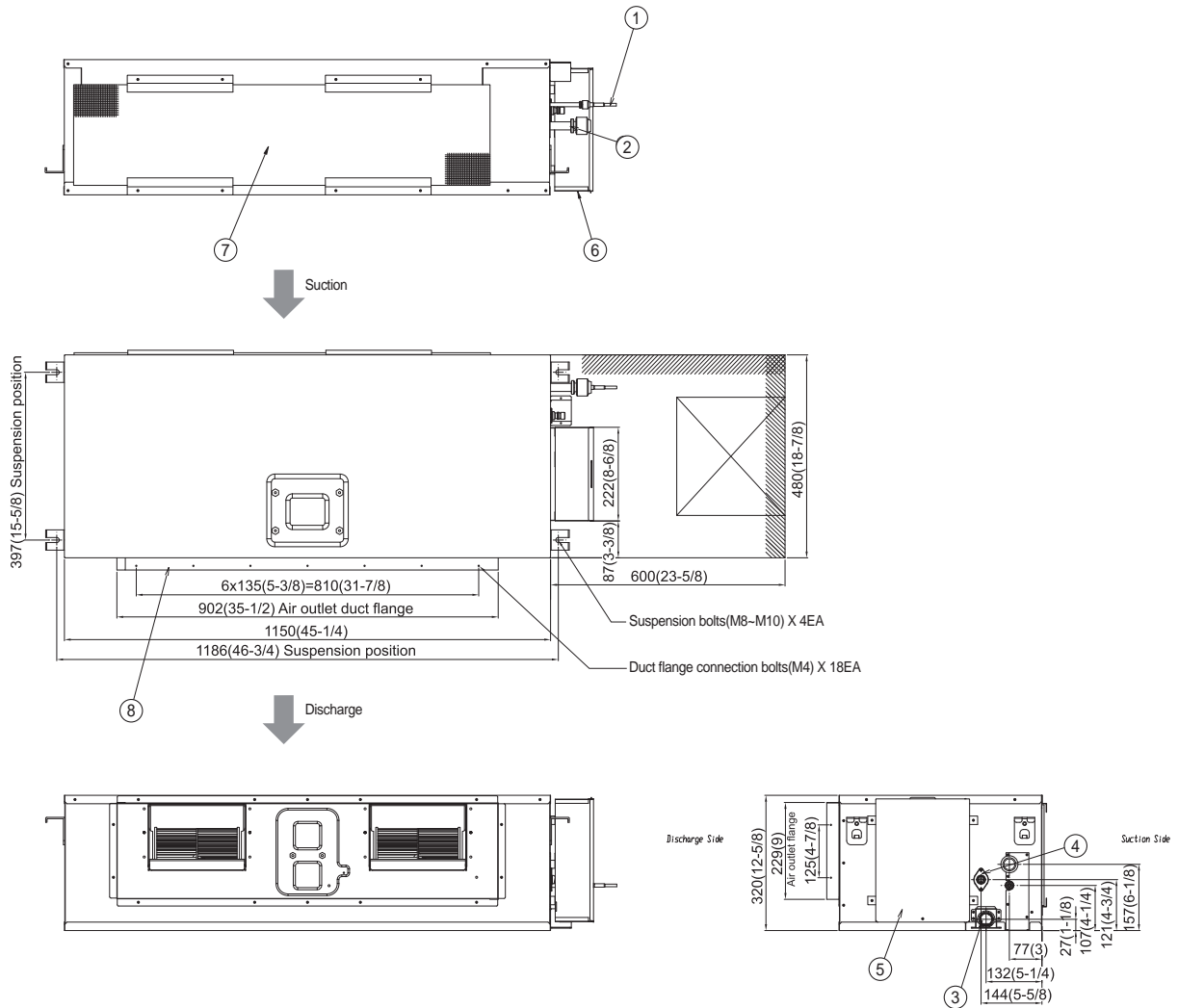
- 1) Mode : HP(Heat Pump), HR(Heat Recovery)
- 2) Nominal Capacity are based on (Equivalent refrigerant piping : 25ft , Level differences : 0ft);
  - Cooling : Indoor temperature : 80°F DB, 67°F WB / Outdoor temperature : 95°F DB, 75°F WB
  - Heating : Indoor temperature : 70°F DB, 60°F WB / Outdoor temperature : 47°F DB, 43°F WB
- 3) Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- 4) These products contain R410A which is fluorinated greenhouse gas.
- 5) Specifications may be subject to change without prior notice.

# 3 Dimensional Drawing

## MSP Duct

AM030/036KNMDCH/AZ

[Unit: mm(inch)]

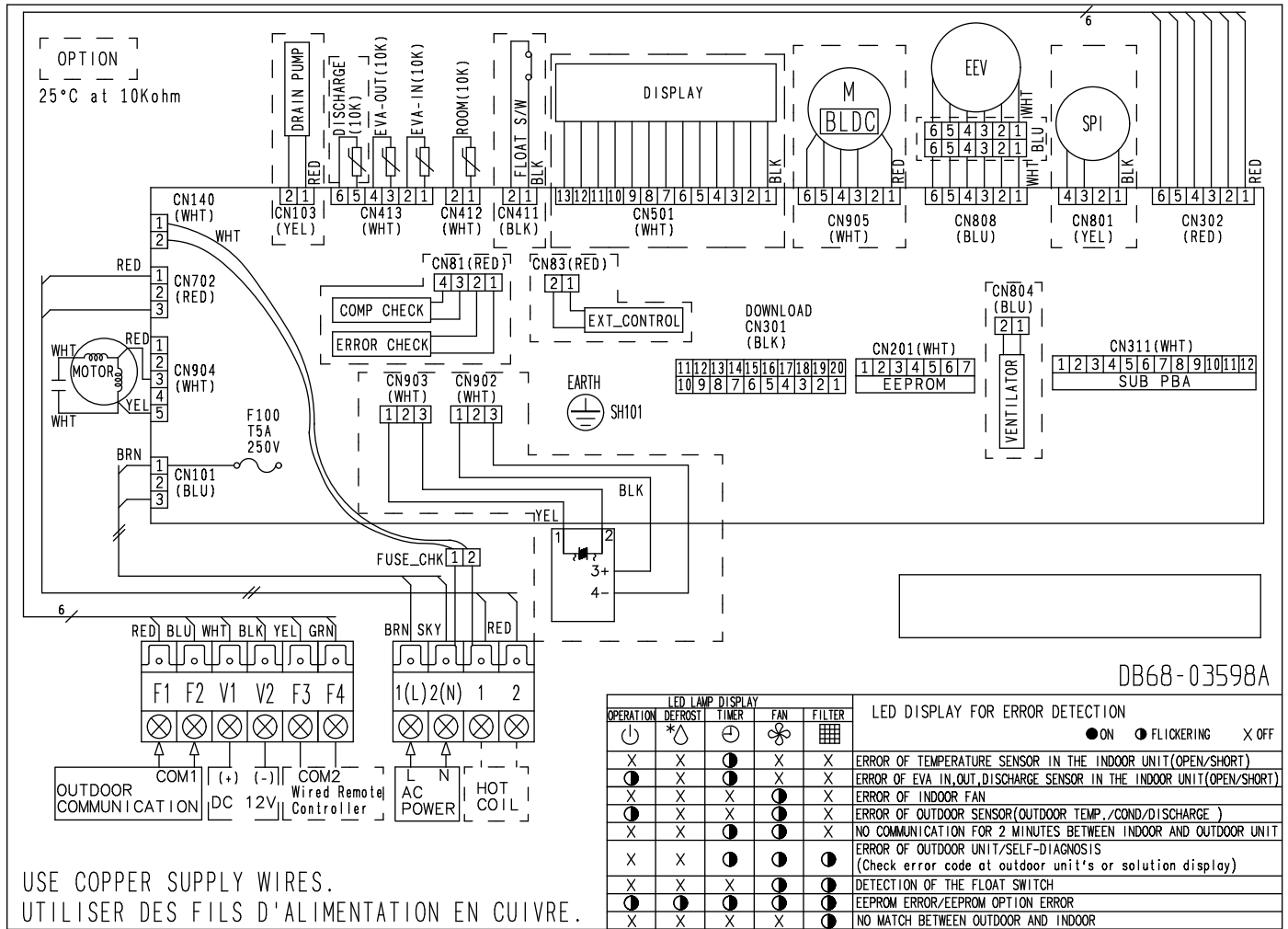


No.	Name	Description	
		30.0 MBH	36.0 MBH
①	Liquid pipe connection	Ø9.52(3/8") Flare	
②	Gas pipe connection	Ø15.88(5/8") Flare	
③	Drain pipe connection without optional drain pump	N/A	
④	Drain pipe connection with integrated drain pump	VP25 (OD 32, ID 25) / VP25 (OD 1 1/4", ID 1")	
⑤	Control unit	-	
⑥	Conduit for power supply & communication wiring	-	
⑦	Return air side	-	
⑧	Air outlet duct flange	-	

# 4 Electrical Wiring Diagram

## MSP Duct

AM018/024/030/036/048KNMDCH/AZ, AM054KNMDCH1AZ



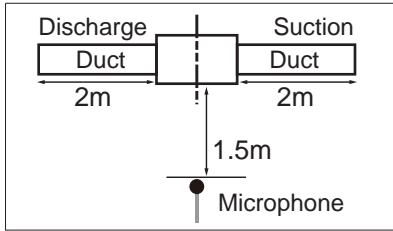
ROOM(10K)	Thermistor ROOM(10K)	EEV	electronic expansion valve	EVA-IN(10K)	Thermistor EVA IN(10K)
DISCHARGE(10K)	Thermistor DISCHARGE(10K)	SPI	S-Plasma ion	EVA-OUT(10K)	Thermistor EVA OUT(10K)

### NOTE

1. This wiring diagram applies only to the indoor unit.
2. Symbols show as follow;  
BLK : black, RED : red, BLU : blue, WHT:white, YEL : yellow, BRN : brown, SKY : sky-blue, GRN : green
3. For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remotecontroller transmission F3-F4.
4. Protective earth(screw)

# 5 Sound Pressure Level

## MSP Duct



Unit: dB(A)

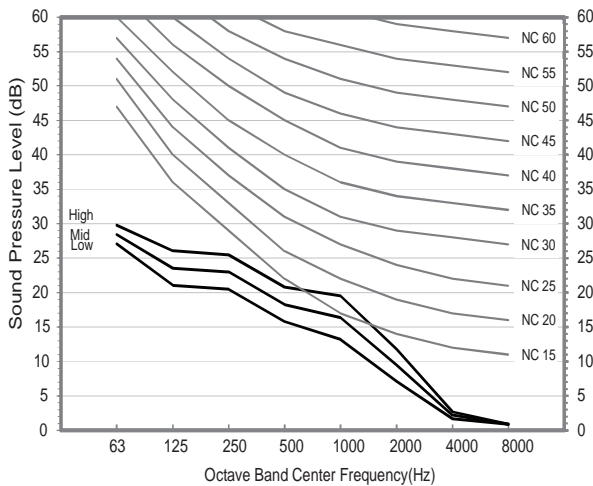
Model	High	Low
AM018KNMDCH/AZ	34	29
AM024KNMDCH/AZ	36	30
AM030KNMDCH/AZ	36	31
<b>AM036KNMDCH/AZ</b>	<b>41</b>	<b>35</b>

### Note

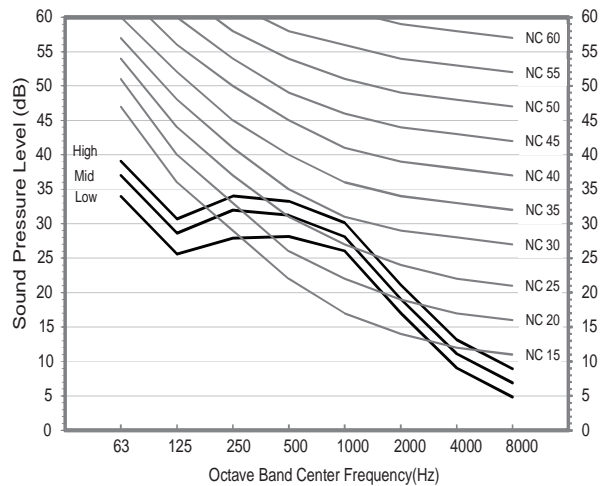
Specifications may be subject to change without prior notice.  
 Sound pressure level is obtained in an anechoic room.  
 Sound pressure level is a relative value, depending on the distance and acoustic environment.  
 Sound pressure level may differ depending on operation condition.  
 dBA = A-weighted sound pressure level  
 Reference acoustic pressure 0 dB= 20 uPa

## NC curve

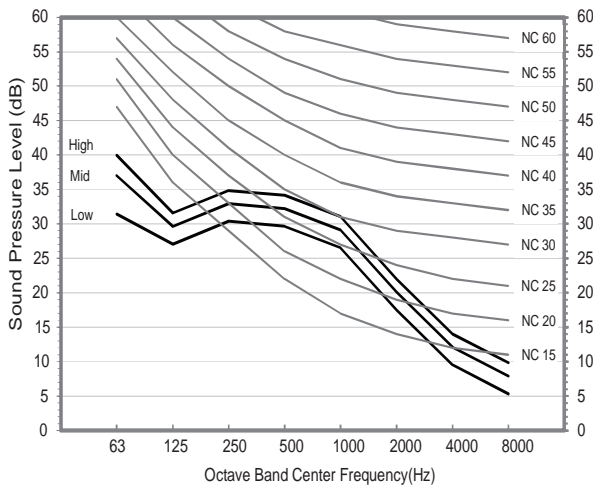
1) AM018KNMDCH/AZ



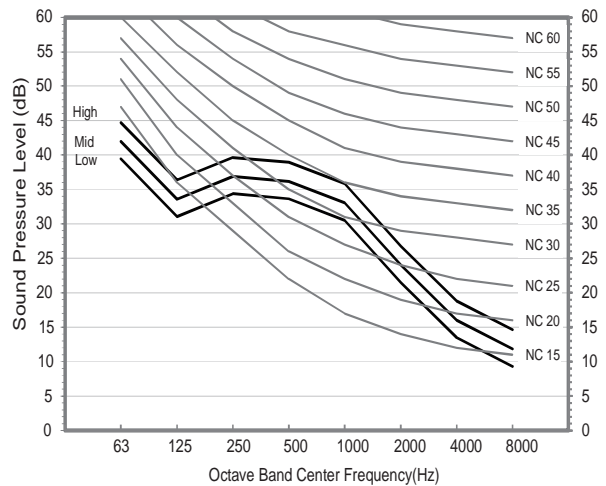
2) AM024KNMDCH/AZ



3) AM030KNMDCH/AZ



4) AM036KNMDCH/AZ



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