

Specifications










Big Duct

- Equipped with two Sirocco fans direct driven by a single motor.
- Auto Restart function.
- Optional condensate drain pump.



Model			AM180JNHFKH/EU	AM224JNHFKH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	18	22.4
		Heating	kW	20	25
Power	Power Input (Nominal)	Cooling	W	340	530
		Heating	W	340	530
	Current Input (Nominal)	Cooling	A	1.90	2.90
		Heating	A	1.90	2.90
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan
	Airflow Rate	Output x n	W	630 x 1	630 x 1
		H/M/L (UL)	m ³ /min	58.00/50.00/43.00	72.00/61.00/50.00
			l/s	966.67/833.33/716.67	1,200.00/1,016.67/833.33
	External Static Pressure	Min/Std/Max	mmAq	5.00/7.34/20.00	5.00/7.34/20.00
Pa			49.00/71.93/196.00	49.00/71.93/196.00	
Piping Connections	Liquid Pipe	ø, mm	9.52	9.52	
		ø, inch	3/8	3/8	
	Gas Pipe	ø, mm	19.05	19.05	
		ø, inch	3/4	3/4	
	Drain Pipe	ø, mm	VP25 (OD 25, ID 20)	VP25 (OD 25, ID 20)	
	Field Wiring	Power Source Wire	mm ²	-	-
Transmission Cable		mm ²	0.75-1.50	0.75-1.50	
Refrigerant	Type	-	R410A(Fluorinated greenhouse gas, GWP=2,088)	R410A(Fluorinated greenhouse gas, GWP=2,088)	
	Control Method	-	EEV(O)	EEV(O)	
Sound ²	Sound Pressure	(H/M/L)	dB(A)	43/39/35	44/40/36
Dimensions	Net Weight		kg	82.5	82.5
	Net Dimensions (W x H x D)		mm	1,350 x 450 x 910	1,350 x 450 x 910
Additional Accessories	Drain Pump	Internal	-	MDP-G075SP	MDP-G075SP
		External	-	MDP-G075SQ	MDP-G075SQ

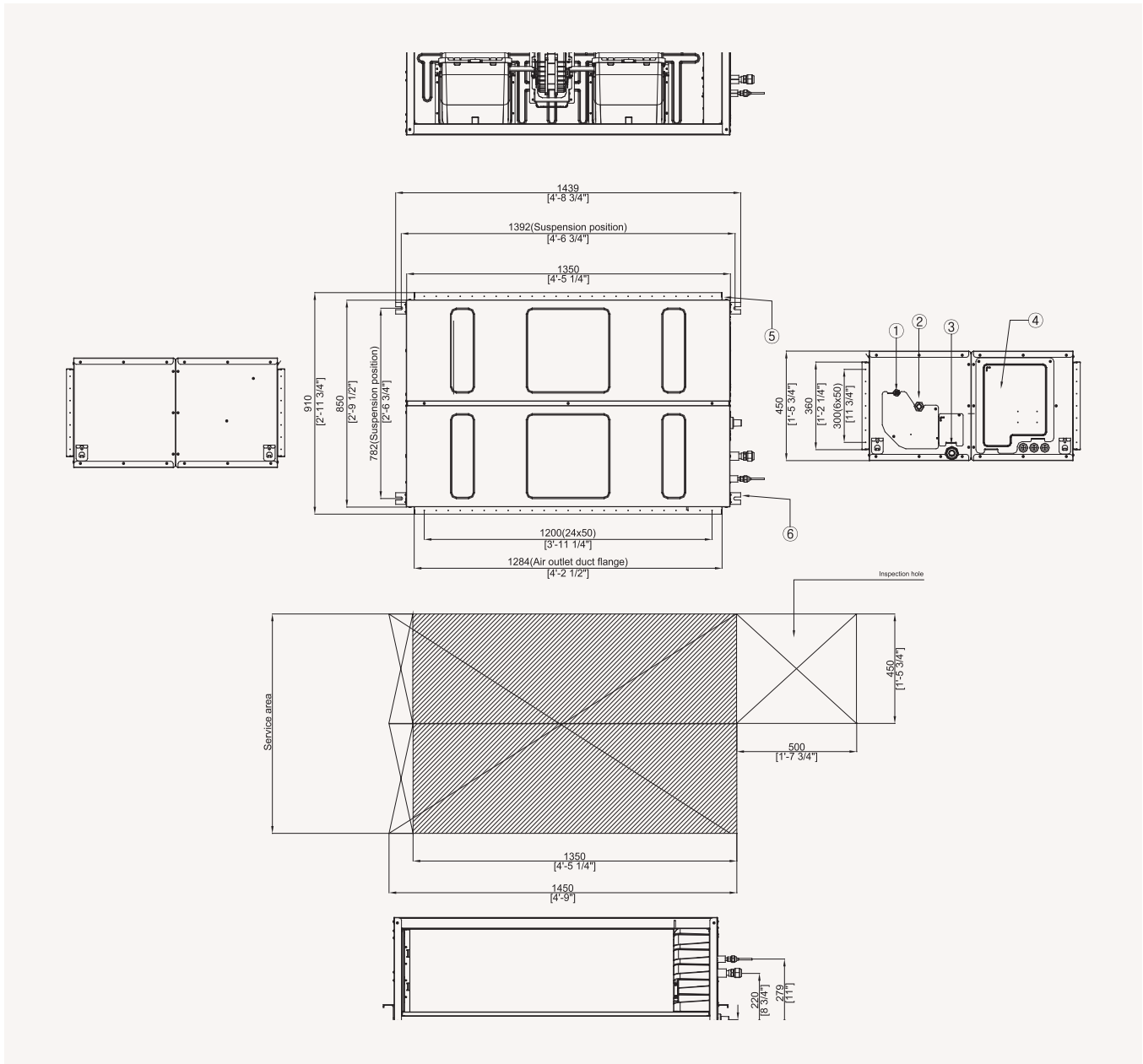
Accessories

								
External Drain Pump	Built-in Drain Pump	Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	Wireless Receiver Kit	External Room Sensor
MDP-G075SP	MDP-G075SQ	AR-EH03E (to be matched with MRK-A10N)	MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRK-A10N (to be matched with AR-EH03E)	MRW-TA

Dimensional drawings

Big Duct

AM180JNHFKH/EU, AM224JNHFKH/EU



NO	Name
1	Liquid pipe connection
2	Gas pipe connection
3	Drain pipe connection
4	Power wiring conduits
5	Air discharge flange
6	Hook

Big Duct

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- 5 *Sound Pressure Level*
- 6 *Sound Power Level*
- 7 *Fan Characteristics*

1 Specifications

Big Duct

Type			HSP Duct		HSP Duct	
Model			AM180JNHFKH/EU		AM224JNHFKH/EU	
Power Supply			Ø, #, V, Hz	1,2,220-240,50		
Mode			-	HP/HR		
Performance	Capacity (Nominal)	Cooling	kW	18.00	22.40	
			Btu/h	61,400	76,400	
		Heating	kW	20.00	25.00	
			Btu/h	68,200	85,300	
Power	Power Input (Nominal)	Cooling	W	340.00	530.00	
		Heating	W	340.00	530.00	
	Current Input (Nominal)	Cooling	A	1.90	2.90	
		Heating	A	1.90	2.90	
Fan	Motor	Type	-	Sirocco		
		Output x n	w	630 x 1		
	Air Flow Rate	H/M/L (UL)	CMM	58.00 / 50.00 / 43.00		
			l/s	966.67 / 833.33 / 716.67		
	External Pressure	Min/Std/Max	mmAq	5.00 / 7.34 / 20.00		
Pa			49.00 / 71.93 / 196.00			
Piping Connections	Liquid Pipe	Ø, mm	9.52			
		Ø, inch	3/8"			
	Gas Pipe	Ø, mm	19.05			
		Ø, inch	3/4"			
	Drain Pipe	Ø, mm	VP25 (OD 25,ID 20)			
Field Wiring	Power Source Wire	mm ²	-			
	Transmission Cable	mm ²	0.75 - 1.50			
Refrigerant	Type	-	R410A			
	Control Method	-	EEV(O)			
Sound	Pressure	High / Mid / Low	dB(A)	43 / 39 / 35		
	Power	Cooling		80		
Dimension	Net Weight		kg	82.5		
	Shipping Weight		kg	92.0		
	Net Dimensions (WxHxD)		mm	1,350 x 450 x 910		
	Shipping Dimensions (WxHxD)		mm	1,612 x 519 x 984		
Panel Size	Panel model		-	-		
	Panel Net Weight		kg	-		
	Shipping Weight		kg	-		
	Net Dimensions (WxHxD)		mm	-		
	Shipping Dimensions (WxHxD)		mm	-		
Additional Accessories	Drain Pump	External	-	MDP-G075SP		
		Internal	-	MDP-G075SQ		
	Air Filter		-	-		

* Specifications may be subject to change without prior notice for product improvement.

*1) Mode

- HP : Heat Pump, HR : Heat Recovery

*2) 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

*3) Nominal heating capacities are based on;

- Indoor temperature : 20°C DB, 15°C WB

- Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

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

*5) These products contain R410A which is fluorinated greenhouse gas.

* Heat Exchanger type : Fin & Tube (Fin : Al, Tube : Cu)

2 Capacity table

Big Duct

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Capacity Index	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	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
180	10	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	22.3	14.3
	12	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	22.3	14.3
	14	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	22.3	14.2
	16	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	22.3	14.0
	18	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	22.1	14.0
	20	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	22.0	13.9
	21	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	22.0	13.9
	23	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	21.8	13.9
	25	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	21.7	13.9
	27	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	21.6	13.9
	29	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	21.6	13.9
	31	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	21.6	13.9
	33	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	21.6	13.9
	35	12.7	10.8	15.0	12.2	17.0	13.1	18.0	13.5	19.1	13.8	21.1	14.0	21.6	13.9
	37	12.5	10.7	14.8	12.0	17.0	13.0	18.0	13.5	18.9	13.8	20.9	13.9	21.4	13.8
	39	12.3	10.7	14.5	12.0	17.0	13.0	17.9	13.4	18.9	13.8	20.7	13.8	21.1	13.6
42	12.3	10.7	14.5	11.8	16.8	12.9	17.7	13.2	18.8	13.8	20.3	13.6	20.5	13.4	
44	12.3	10.7	14.5	11.8	16.4	12.6	17.1	12.8	18.3	13.4	19.5	13.5	19.8	13.2	
46	12.3	10.7	14.4	11.7	16.1	12.4	16.6	12.4	17.7	13.0	18.9	13.3	19.3	12.7	
48	12.1	10.5	14.2	11.6	15.8	12.2	16.1	12.1	17.4	12.8	18.3	12.9	18.6	12.2	
224	10	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.7	26.4	18.1	27.9	18.3
	12	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.2	27.9	18.4
	14	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.2	27.9	18.1
	16	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.2	27.9	18.3
	18	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.2	27.8	18.1
	20	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.2	27.4	18.0
	21	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.2	27.5	18.0
	23	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.3	27.1	17.7
	25	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.2	27.0	17.8
	27	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.2	27.0	17.8
	29	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.2	27.0	17.8
	31	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.3	27.0	17.8
	33	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.8	26.4	18.5	27.0	17.8
	35	15.8	13.8	18.7	15.4	21.2	16.6	22.4	17.1	23.9	17.7	26.4	18.5	27.0	18.0
	37	15.5	13.6	18.4	15.2	21.1	16.5	22.4	17.1	23.7	17.7	26.0	18.2	26.6	17.6
	39	15.3	13.5	18.1	15.0	21.1	16.5	22.3	17.0	23.7	17.7	25.7	18.4	26.2	17.5
42	15.3	13.5	18.1	15.0	20.9	16.4	22.0	16.8	23.4	17.5	25.3	18.1	25.5	17.1	
44	15.3	13.5	18.1	15.0	20.4	15.9	21.3	16.2	22.8	17.0	24.2	17.4	24.7	16.5	
46	15.3	13.5	17.9	14.9	20.0	15.7	20.6	15.7	22.1	16.5	23.5	16.8	24.0	16.0	
48	15.1	13.3	17.7	14.7	19.7	15.4	20.1	15.3	21.6	16.2	22.8	16.3	23.2	15.5	

2 Capacity table

Big Duct

Heating

TC : Total Capacity

Capacity Index	Outdoor Air Temp. (°C)		Indoor temperature (°C,DB)				
			16(°C,DB)	18(°C,DB)	20(°C,DB)	22(°C,DB)	24(°C,DB)
	DB	WB	TC kW	TC kW	TC kW	TC kW	TC kW
180	-19.8	-20.0	16.3	15.6	14.7	14.0	13.5
	-18.8	-19.0	16.4	15.8	14.9	14.3	13.9
	-16.7	-17.0	16.7	16.1	15.2	14.8	14.6
	-14.7	-15.0	17.4	16.7	15.8	15.4	15.1
	-12.6	-13.0	18.2	17.5	16.5	16.0	15.8
	-10.5	-11.0	19.4	18.6	17.6	16.9	16.7
	-9.5	-10.0	19.9	19.1	18.0	17.2	17.0
	-8.5	-9.1	20.0	19.2	18.2	17.5	17.2
	-7.0	-7.6	20.2	19.4	18.4	17.8	17.6
	-5.0	-5.6	20.8	20.0	19.0	18.6	18.0
	-3.0	-3.7	21.2	20.4	19.4	19.2	18.4
	0.0	-0.7	21.6	21.0	19.8	19.4	18.8
	3.0	2.2	22.2	21.4	20.0	19.4	18.8
	5.0	4.1	22.4	21.4	20.0	19.4	18.8
	7.0	6.0	22.6	21.4	20.0	19.4	18.8
9.0	7.9	22.6	21.4	20.0	19.4	18.8	
11.0	9.8	22.6	21.4	20.0	19.4	18.8	
13.0	11.8	22.6	21.4	20.0	19.4	18.8	
15.0	13.7	22.6	21.4	20.0	19.4	18.8	
224	-19.8	-20.0	20.3	19.5	18.4	17.6	16.9
	-18.8	-19.0	20.5	19.7	18.6	17.9	17.4
	-16.7	-17.0	20.9	20.1	19.0	18.5	18.3
	-14.7	-15.0	21.7	20.8	19.7	19.2	18.9
	-12.6	-13.0	22.7	21.8	20.6	20.0	19.8
	-10.5	-11.0	24.3	23.3	22.0	21.1	20.8
	-9.5	-10.0	24.8	23.8	22.5	21.6	21.3
	-8.5	-9.1	25.1	24.1	22.7	21.9	21.6
	-7.0	-7.6	25.4	24.4	23.0	22.3	22.0
	-5.0	-5.6	26.2	25.2	23.7	23.2	22.6
	-3.0	-3.7	26.8	25.8	24.3	24.1	23.1
	0.0	-0.7	27.4	26.5	24.9	24.3	23.7
	3.0	2.2	28.0	27.0	25.0	24.4	23.6
	5.0	4.1	28.3	27.0	25.0	24.4	23.6
	7.0	6.0	28.8	27.0	25.0	24.4	23.6
9.0	7.9	28.8	27.0	25.0	24.4	23.6	
11.0	9.8	28.8	27.0	25.0	24.4	23.6	
13.0	11.8	28.8	27.0	25.0	24.4	23.6	
15.0	13.7	28.8	27.0	25.0	24.4	23.6	

3 Dimensional drawing

Big Duct

AM180JNHFKH/EU, AM224JNHFKH/EU

Units : mm / inches

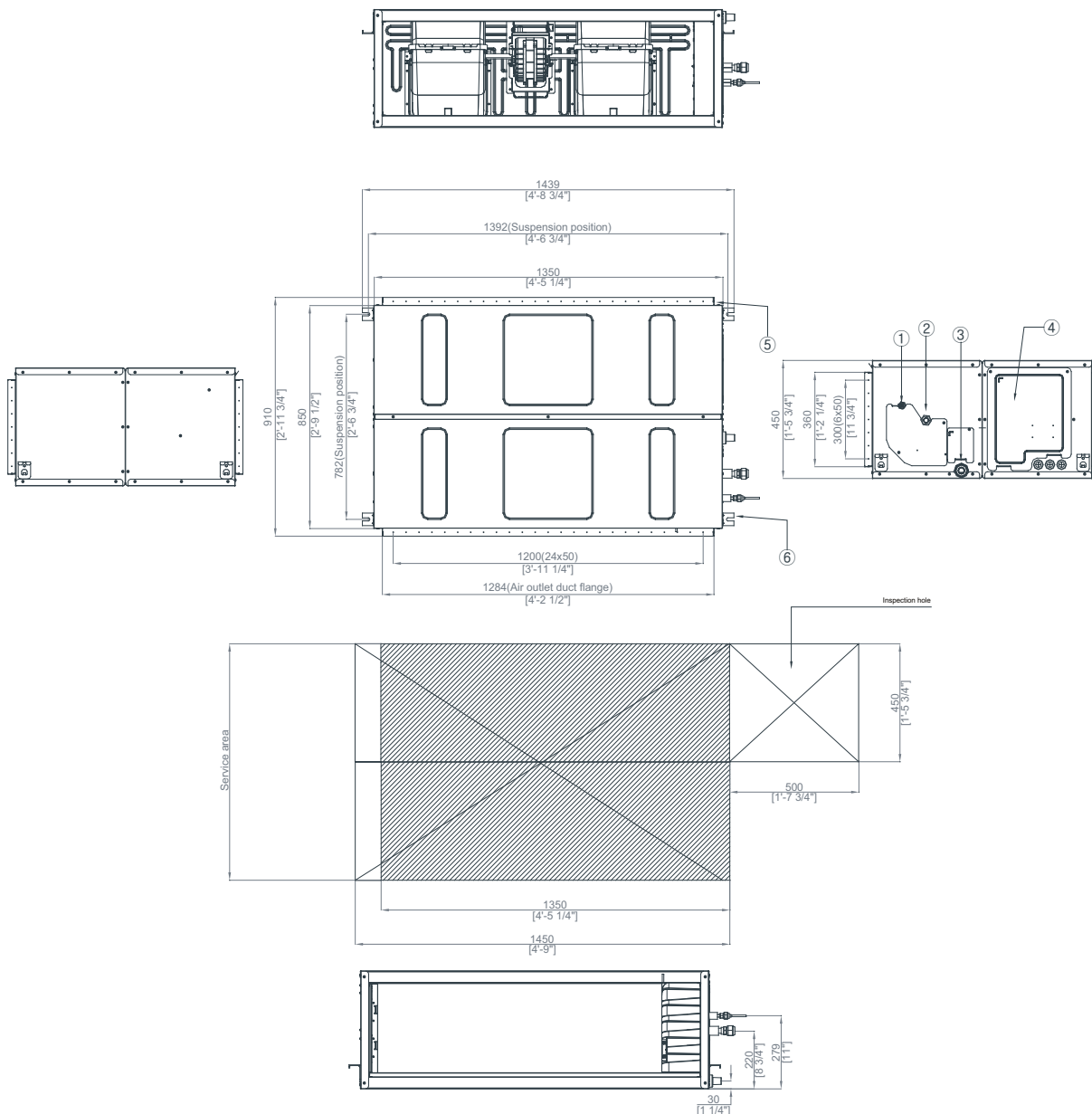


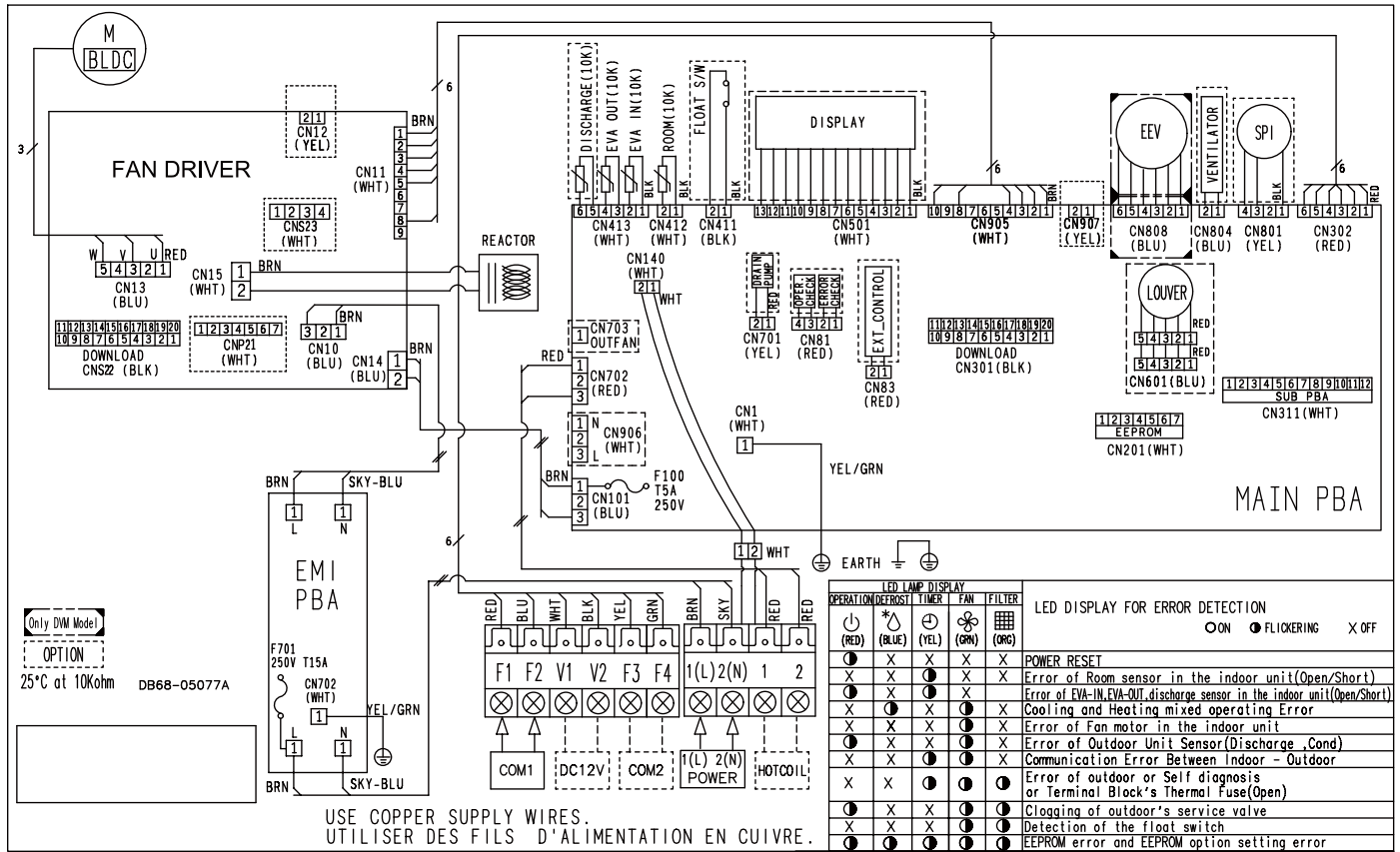
Table of descriptions

1	Liquid pipe connection	7	
2	Gas pipe connection	8	
3	Drain pipe connection	9	
4	Power supply connection	10	
5	Air discharge flange	11	
6	Hook	12	

4 Electrical Wiring Diagram

Big Duct

AM180/224JNHFKH/EU

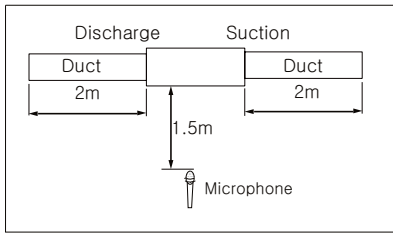


NOTE

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), : Connector, n : The wire quantity

5 Sound pressure level

Big Duct



Unit: dB(A)

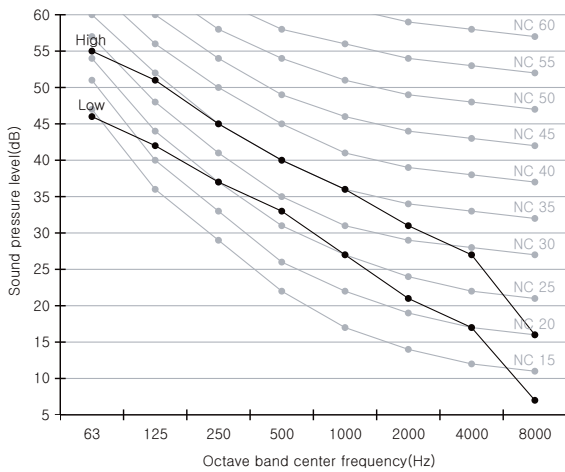
Model	High	Low
AM180JNHFKH/EU	43	35
AM224JNHFKH/EU	44	36

Note

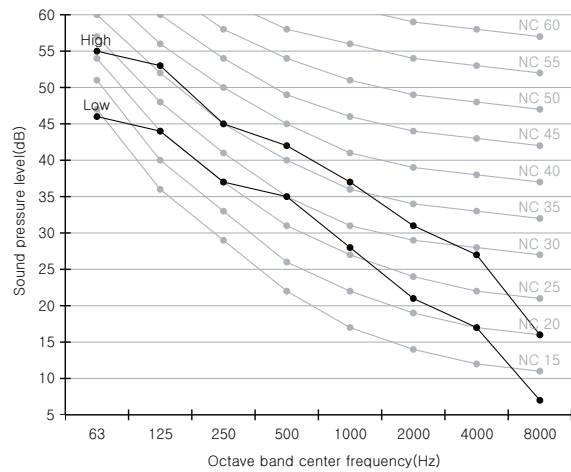
Specifications may be subject to change without prior notice.
 Sound pressure level is obtained in an anechoic room.
 Sound pressure level is a relative value, depending on the distance and acoustic environment.
 Sound pressure level may differ depending on operation condition.
 dBA = A-weighted sound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

NC curve

1) AM180JNHFKH/EU



2) AM224JNHFKH/EU



6 Sound power level

Big Duct

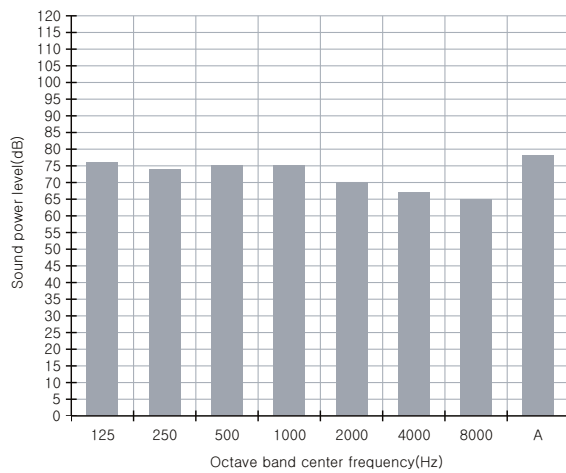
Note

- . Specifications may be subject to change without prior notice.
- . Sound power level is an absolute value that a sound source generates.
- . dBA = A-weighted sound power level.
- . Reference power : 1pW.
- . Measured according to ISO 3741

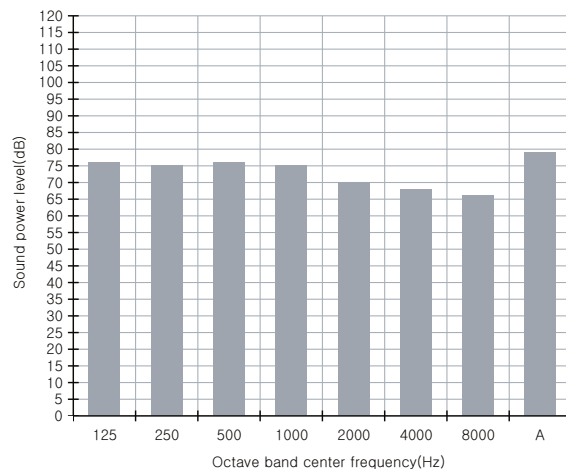
Unit: dB(A)

Model	Power
AM180JNHFKH/EU	80
AM224JNHFKH/EU	81

1)AM180JNHFKH/EU



2)AM224JNHFKH/EU

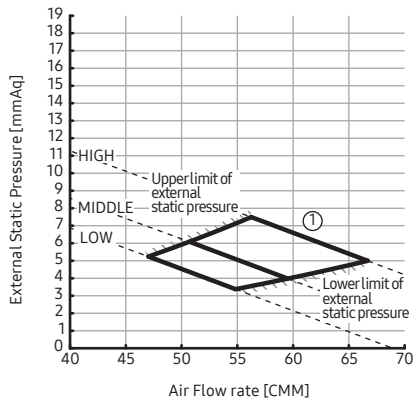


7 Fan Characteristics

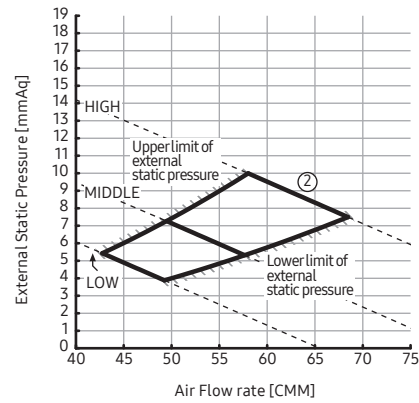
Big Duct

1) AM180JNHFKH/EU

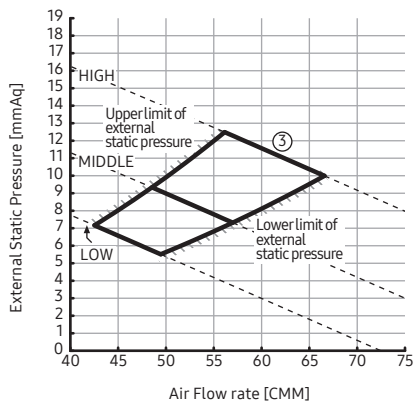
①	External Static Pressure(mmAq)	Option Code
	$5 < SP \leq 7.5$	12074-1C5080-20B4B4-331110



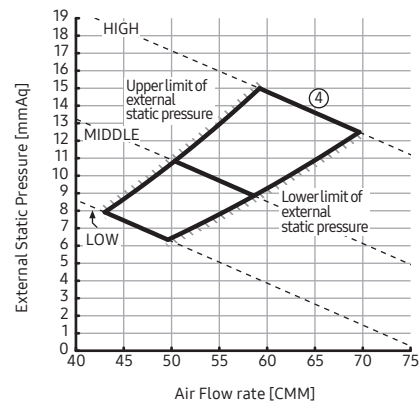
②	External Static Pressure(mmAq)	Option Code
	$7.5 < SP \leq 10$	12074-1C50A1-20B4B4-33111



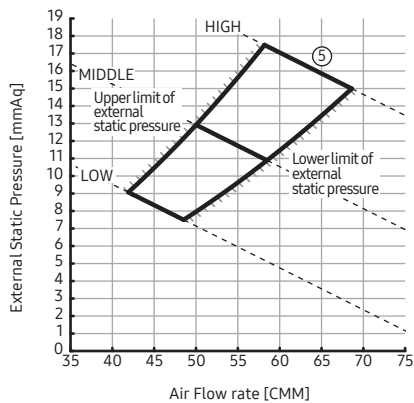
③	External Static Pressure(mmAq)	Option Code
	$10 < SP \leq 12.5$	12074-1C50D3-20B4B4-331110



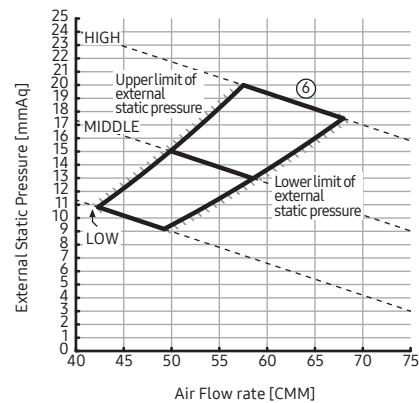
④	External Static Pressure(mmAq)	Option Code
	$12.5 < SP \leq 15$	12074-1C50F5-20B4B4-331110



⑤	External Static Pressure(mmAq)	Option Code
	$15 < SP \leq 17.5$	12074-1C5437-20B4B4-331110



⑥	External Static Pressure(mmAq)	Option Code
	$17.5 < SP \leq 20$	12074-1C5448-20B4B4-331110



NOTE

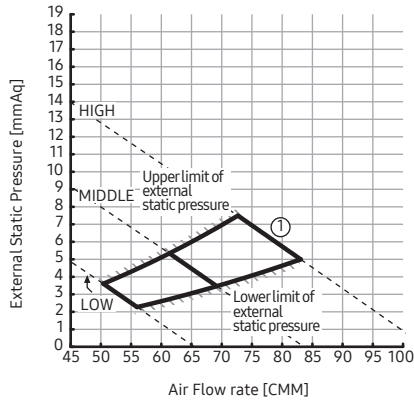
- ESP = External Static Pressuer
- The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect teh actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

7 Fan Characteristics

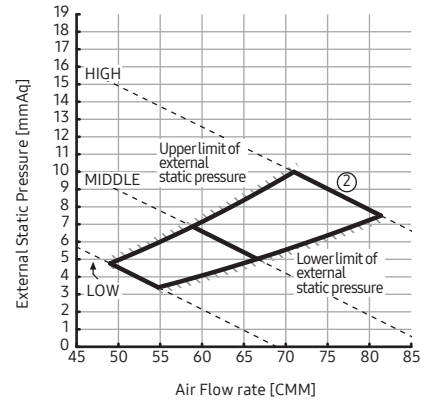
Big Duct

2) AM224JNHFKH/EU

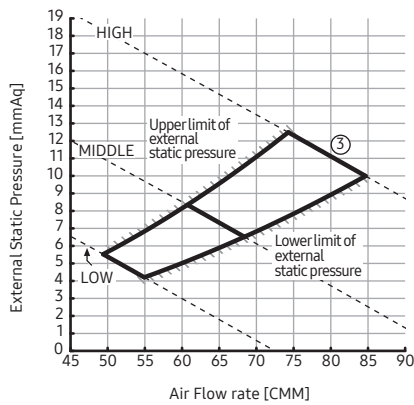
①	External Static Pressure(mmAq)	Option Code
	$5 < SP \leq 7.5$	12074-1C50C0-20E0E0-331110



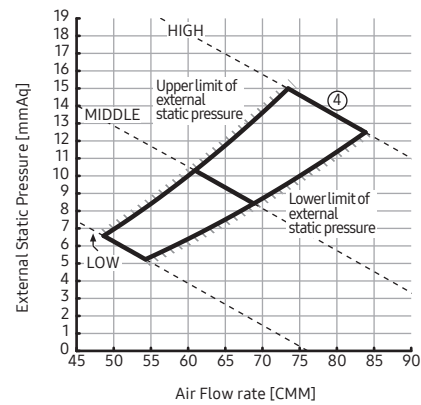
②	External Static Pressure(mmAq)	Option Code
	$7.5 < SP \leq 10$	12074-1C50E3-20E0E0-331110



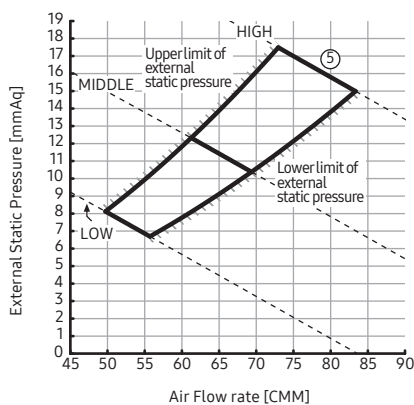
③	External Static Pressure(mmAq)	Option Code
	$10 < SP \leq 12.5$	12074-1C50F5-20E0E0-331110



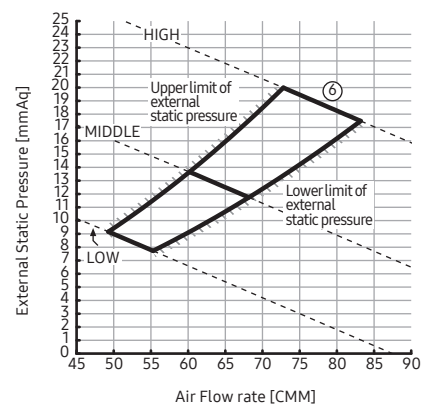
④	External Static Pressure(mmAq)	Option Code
	$12.5 < SP \leq 15$	12074-1C5436-20E0E0-331110



⑤	External Static Pressure(mmAq)	Option Code
	$15 < SP \leq 17.5$	12074-1C5458-20E0E0-331110



⑥	External Static Pressure(mmAq)	Option Code
	$17.5 < SP \leq 20$	12074-1C548E-20E0E0-331110



NOTE

1. ESP = External Static Pressuer
2. The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect teh actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.