

HSP Duct

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1 Specifications

HSP Duct

1) Technical specifications

Model				AM112FNHDEH***	AM128FNHDEH***	AM140FNHDEH***	AM220FNHDEH***	AM280FNHDEH***	
Power Supply			Ø, #, V, Hz	1, 2, 220~240, 50	1, 2, 220~240, 50	1, 2, 220~240, 50	1, 2, 220~240, 50	1, 2, 220~240, 50	
Mode*1)			–	HP / HR	HP / HR	HP / HR	HP/HR	HP/HR	
Performance	Capacity (Nominal)	Cooling ²⁾	kW	11.2	12.8	14.0	22.4	28.0	
			Btu/h	38,200	43,700	47,800	76,400	95,500	
		Heating ³⁾	kW	12.5	13.8	16.0	25.0	31.5	
			Btu/h	42,700	47,100	57,300	85,300	107,500	
Power	Power Input (Nominal)	Cooling ²⁾	W	305	333	385	530	790	
				Heating ³⁾	305	333	385	530	790
	Current Input (Nominal)	Cooling ²⁾			A	3.6	3.75	3.9	3.8
				Heating ³⁾		3.6	3.75	3.9	3.8
Fan	Motor	Type	–			Sirocco Fan / AC	Sirocco Fan / AC	Sirocco Fan / AC	Sirocco Fan
		Output	W	–		–	–	400	400
		Number of unit	EA	2	2	2	1	1	
	Air Flow Rate	H/M/L (UL)	CMM	32 / 27 / 23	35 / 31 / 26	39 / 33 / 28	58.00/52.00/47.00	72.00/65.00/58.00	
			l/s	533.33/450.00/383.33	583.33/516.67/466.67	650.00/550.00/466.67	966.67/866.67/783.33	1,200.00/1,083.33/966.67	
	External Pressure	Min / Std / Max	mmAq	5 / 10 / 20	5 / 10 / 20	5 / 10 / 20	5.00/15.00/25.00	5.00/15.00/28.00	
			Pa	49 / 98.1 / 196.1	49 / 98.1 / 196.1	49 / 98.1 / 196.1	49.03/147.10/245.17	49.03/147.10/274.59	
			WG	–	–	–	–	–	
Option Code			–	010054-13598F-207070-331110	010054-135AC4-207070-331110	010054-135E09-207C7C-331110	011054-1950E8-20DCDC-331110	011054-19545B-231C1C-331110	
Piping Connections	Liquid Pipe	Ø, mm	9.52	9.52	9.52	9.52	9.52		
		Ø, inch	3/8	3/8	3/8	3/8	3/8		
	Gas Pipe	Ø, mm	15.88	15.88	15.88	19.05	22.23		
		Ø, inch	5/8	5/8	5/8	3/4	7/8		
	Drain Pipe	Ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)		
Field Wiring	Power Source Wire	Below 20m / over 20m	mm ²	1.5 / 2.5	1.5 / 2.5	1.5 / 2.5	1.5 / 2.5	1.5 / 2.5	
	Transmission Cable		mm ²	0.75~1.5	0.75~1.5	0.75~1.5	0.75~1.5	0.75~1.5	
Refrigerant	Type		–	R410A	R410A	R410A	R410A	R410A	
	Control Method		–	EEV	EEV	EEV	EEV INCLUDED	EEV INCLUDED	
Sound	Sound Pressure	High / Mid / Low ⁴⁾	dBA	43 / 41 / 39	45 / 43 / 42	46 /45 / 44	45 / 43 / 41	48 / 46 / 43	
Dimensions	Net Weight		kg	57.0	57.0	57.0	89.0	89.0	
	Shipping Weight		kg	64.0	64.0	64.0	99.0	99.0	
	Net Dimensions (W×H×D)		mm	1,200 x 360 x 650	1,200 x 360 x 650	1,200 x 360 x 650	1240 x 470 x 1040	1240 x 470 x 1040	
	Shipping Dimensions (W×H×D)		mm	1,447 x 425 x 769	1,447 x 425 x 769	1,447 x 425 x 769	1507 x 558 x 1155	1507 x 558 x 1155	
Panel Size	Panel model		–	–	–	–	–	–	
	Panel Net Weight		kg	–	–	–	–	–	
	Shipping Weight		kg	–	–	–	–	–	
	Net Dimensions (W×H×D)		mm	–	–	–	–	–	
	Shipping Dimensions (W×H×D)		mm	–	–	–	–	–	
Additional Accessories	Drain pump	Drain pump	– / Model	Optional / MDP-M075SGU2	Optional / MDP-M075SGU2	Optional / MDP-M075SGU2	MDP-N047SNC1D	MDP-N047SNC1D	
		Max. lifting Height / Displacement	mm/liter/h	750 / 24	750 / 24	750 / 24	750 / 24	750 / 24	
	Air Filter		–	Long life filter	Long life filter	Long life 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

HSP Duct

1) Cooling

TC : Total Capacity(kW), SHC : Sensible Heat Capacity(kW)

Model	Outdoor temperature (°C, DB)	Indoor temperature °C, WB)													
		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
112	10	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.5	8.3	13.6	8.4
	12	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.5	8.3	13.6	8.4
	14	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.5	8.3	13.5	8.3
	16	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.5	8.3	13.5	8.3
	18	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.4	8.2	13.4	8.3
	20	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.4	8.2	13.4	8.3
	21	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.4	8.2	13.4	8.3
	23	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.4	8.2	13.4	8.3
	25	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.4	8.2	13.4	8.3
	27	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.4	8.2	13.4	8.3
	29	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.4	8.2	13.4	8.3
	31	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.4	8.2	13.4	8.3
	33	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.4	8.2	13.4	8.3
	35	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.4	8.2	13.4	8.3
	37	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.7	8.6	12.3	8.2	13.2	8.2
	39	8.5	7.0	9.3	7.5	10.7	8.3	11.2	8.5	11.6	8.5	12.1	8.0	13.0	8.0
42	8.5	7.0	9.3	7.5	10.7	8.3	10.9	8.3	11.3	8.3	11.6	7.7	12.6	7.8	
44	8.5	7.0	9.3	7.5	10.7	8.3	10.9	8.3	11.3	8.3	11.6	7.7	12.4	7.7	
128	10	9.7	8.0	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.3	9.8	15.4	9.8
	12	9.7	8.0	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.3	9.8	15.3	9.7
	14	9.7	8.0	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.3	9.8	15.3	9.7
	16	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.2	9.6
	18	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.1	9.6
	20	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.1	9.6
	21	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.1	9.6
	23	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.1	9.6
	25	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.1	9.6
	27	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.1	9.6
	29	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.1	9.6
	31	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.1	9.6
	33	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.1	9.6
	35	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.3	10.0	14.2	9.7	15.1	9.6
	37	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.2	9.9	14.0	9.6	14.9	9.4
	39	9.7	8.2	10.4	8.3	12.0	8.9	12.8	10.0	13.1	9.8	13.8	9.4	14.5	9.2
42	9.7	8.2	10.4	8.3	12.0	8.9	12.4	9.7	12.7	9.5	13.2	9.0	13.7	8.7	
44	9.7	8.2	10.4	8.3	12.0	8.9	12.4	9.7	12.7	9.5	13.2	9.0	13.7	8.7	
140	10	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.7	11.3	15.7	11.0	16.8	10.9
	12	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.6	10.9	16.7	10.9
	14	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.6	10.9	16.7	10.9
	16	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.6	10.9	16.6	10.8
	18	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.5	10.9	16.6	10.8
	20	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.5	10.9	16.5	10.7
	21	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.5	10.9	16.5	10.7
	23	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.5	10.9	16.5	10.7
	25	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.5	10.9	16.5	10.7
	27	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.5	10.9	16.5	10.7
	29	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.5	10.9	16.5	10.7
	31	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.5	10.9	16.5	10.7
	33	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.5	10.9	16.5	10.7
	35	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.5	10.9	16.5	10.7
	37	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.6	11.2	15.4	10.8	16.3	10.6
	39	10.5	9.1	11.6	9.9	13.3	10.9	14.0	11.2	14.5	11.2	15.1	10.6	15.9	10.3
42	10.5	9.1	11.6	9.9	13.3	10.9	13.6	10.9	14.1	10.9	14.4	10.1	15.0	9.8	
44	10.5	9.1	11.6	9.9	13.3	10.9	13.6	10.9	14.1	10.9	14.4	10.1	15.0	9.8	
220	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	15.0	13.2	17.8	14.7	20.7	16.2	21.9	16.7	23.3	17.5	25.2	18.1	25.7	17.3	
44	14.8	13.0	17.5	14.5	20.4	15.9	21.6	16.4	22.9	17.3	24.8	17.9	25.3	17.0	
46	14.5	12.7	17.2	14.2	20.0	15.6	21.2	16.1	22.5	16.9	24.4	17.5	24.8	16.6	
280	10	19.7	17.6	23.3	19.6	26.5	21.2	28.0	21.8	29.9	22.6	32.7	23.0	34.7	23.2
	12	19.7	17.6	23.3	19.6	26.5	21.2	28.0	21.8	29.9	22.8	32.7	23.1	34.7	23.4
	14	19.7	17.6	23.3	19.6	26.5	21.2	28.0	21.8	29.9	22.8	32.7	23.1	34.7	23.0
	16	19.7	17.6	23.3	19.6	26.5	21.2	28.0	21.8	29.9	22.8	32.7	23.1	34.7	23.3
	18	19.7	17.6	23.3	19.6	26.5	21.2	28.0	21.8	29.9	22.8	32.7	23.0	34.7	23.1
	20	19.7	17.6	23.3	19.6	26.5	21.2	28.0	21.8	29.9	22.8	32.7	23.0	34.3	23.0
	21	19.7	17.6	23.3	19.6	26.5	21.2	28.0	21.8	29.9	22.8	32.7	23.0	34.3	22.9

2 Capacity table

HSP Duct

2) Heating

TC : Total Capacity(kW)

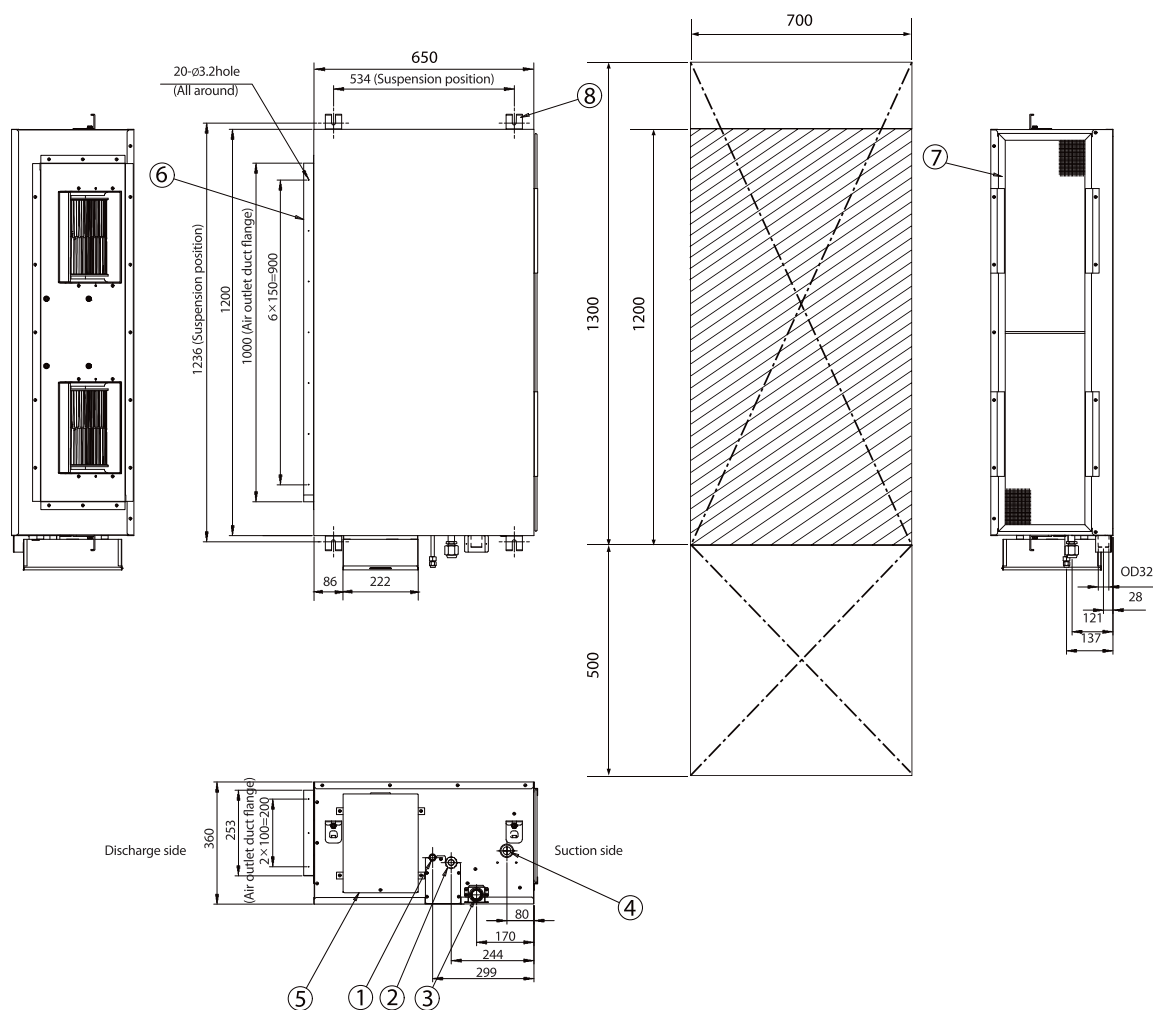
Model	Outdoor temperature (°C, DB)		Indoor temperature (°C, DB)				
			16.0	18.0	20.0	22.0	24.0
			TC	TC	TC	TC	TC
	DB	WB	kW	kW	kW	kW	kW
112	-20	-21	7.2	6.9	6.6	6.5	6.5
	-17	-18	8.0	7.6	7.4	7.3	7.3
	-15	-16	8.4	8.1	7.9	7.7	7.5
	-12	-13	8.8	8.6	8.4	8.2	8.1
	-10	-11	9.2	9.0	8.9	8.8	8.7
	-7	-8	9.7	9.6	9.4	9.2	9.0
	-5	-6	10.2	10.1	9.9	9.6	9.3
	-3	-4	10.7	10.6	10.5	10.1	9.7
	0	-1	11.3	11.1	11.1	10.5	10.0
	3	2.2	11.8	11.6	11.5	11.0	10.6
	5	4.1	12.3	12.2	12.0	11.3	10.6
	7	6	12.9	12.7	12.5	11.5	10.6
	9	7.9	13.3	12.9	12.5	11.5	10.6
	11	9.8	13.7	13.1	12.5	11.5	10.6
	13	12	14.0	13.3	12.5	11.5	10.6
128	15	14	14.4	13.5	12.5	11.5	10.6
	-20	-21	7.9	7.7	7.3	7.2	7.2
	-17	-18	8.8	8.5	8.1	8.0	8.0
	-15	-16	9.2	9.0	8.7	8.5	8.2
	-12	-13	9.7	9.5	9.3	9.1	8.9
	-10	-11	10.1	10.0	9.9	9.7	9.6
	-7	-8	10.7	10.6	10.4	10.2	10.0
	-5	-6	11.3	11.1	11.0	10.7	10.3
	-3	-4	11.9	11.7	11.5	11.1	10.7
	0	-1	12.4	12.3	12.1	11.6	11.0
	3	2.2	13.0	12.9	12.7	12.2	11.7
	5	4.1	13.6	13.4	13.2	12.4	11.7
	7	6	14.2	14.0	13.8	12.7	11.7
	9	7.9	14.6	14.2	13.8	12.7	11.7
	11	9.8	15.1	14.4	13.8	12.7	11.7
	13	12	15.5	14.7	13.8	12.7	11.7
140	15	14	15.9	14.9	13.8	12.7	11.7
	-20	-21	9.2	8.9	8.5	8.4	8.4
	-17	-18	10.2	9.8	9.4	9.3	9.3
	-15	-16	10.7	10.4	10.1	9.8	9.5
	-12	-13	11.2	11.0	10.8	10.6	10.3
	-10	-11	11.7	11.6	11.4	11.3	11.1
	-7	-8	12.4	12.2	12.1	11.8	11.5
	-5	-6	13.1	12.9	12.7	12.3	12.0
	-3	-4	13.8	13.6	13.4	12.9	12.4
	0	-1	14.4	14.2	14.0	13.4	12.8
	3	2.2	15.1	14.9	14.7	14.1	13.5
	5	4.1	15.8	15.6	15.3	14.4	13.5
	7	6	16.5	16.2	16.0	14.8	13.5
	9	7.9	17.0	16.5	16.0	14.8	13.5
	11	9.8	17.5	16.7	16.0	14.8	13.5
	13	12	18.0	17.0	16.0	14.8	13.5
220	15	14	18.5	17.2	16.0	14.8	13.5
	-20	-21	20.3	19.5	18.4	17.5	16.8
	-17	-18	20.8	20.0	18.9	18.4	18.2
	-15	-16	21.6	20.7	19.6	19.1	18.8
	-12	-13	23.0	22.1	20.9	20.2	20.0
	-10	-11	24.7	23.7	22.4	21.4	21.1
	-7	-8	25.4	24.4	23.0	22.3	22.0
	-5	-6	26.2	25.2	23.7	23.2	22.6
	-3	-4	26.8	25.8	24.3	24.1	23.1
	0	-1	27.4	26.5	24.9	24.3	23.7
	3	2	28.0	27.0	25.0	24.4	23.6
	5	4	28.3	27.0	25.0	24.4	23.6
	7	6	28.8	27.0	25.0	24.4	23.6
	9	8	28.8	27.0	25.0	24.4	23.6
	11	10	28.8	27.0	25.0	24.4	23.6
	13	12	28.8	27.0	25.0	24.4	23.6
	15	14	28.8	27.0	25.0	24.4	23.6
280	-20	-21	25.4	24.4	23.0	21.9	21.0
	-17	-18	26.0	25.0	23.6	22.9	22.5
	-15	-16	27.0	25.9	24.5	23.8	23.3
	-12	-13	28.8	27.7	26.1	25.2	24.8
	-10	-11	30.9	29.7	28.0	26.8	26.4
	-7	-8	31.8	30.5	28.8	27.9	27.3
	-5	-6	32.7	31.5	29.7	29.0	28.1
	-3	-4	33.5	32.2	30.4	29.8	28.7
	0	-1	34.3	33.1	31.1	30.4	29.3
	3	2	35.0	33.7	31.5	30.4	29.5
	5	4	35.3	33.7	31.5	30.4	29.5
	7	6	35.7	33.7	31.5	30.4	29.5
	9	8	35.7	33.7	31.5	30.4	29.5
	11	10	35.7	33.7	31.5	30.4	29.5
	13	12	35.7	33.7	31.5	30.4	29.5
	15	14	35.7	33.7	31.5	30.4	29.5

3 Dimensional drawing

HSP Duct

1) AM112/128/140FNHDEH***

Unit:mm



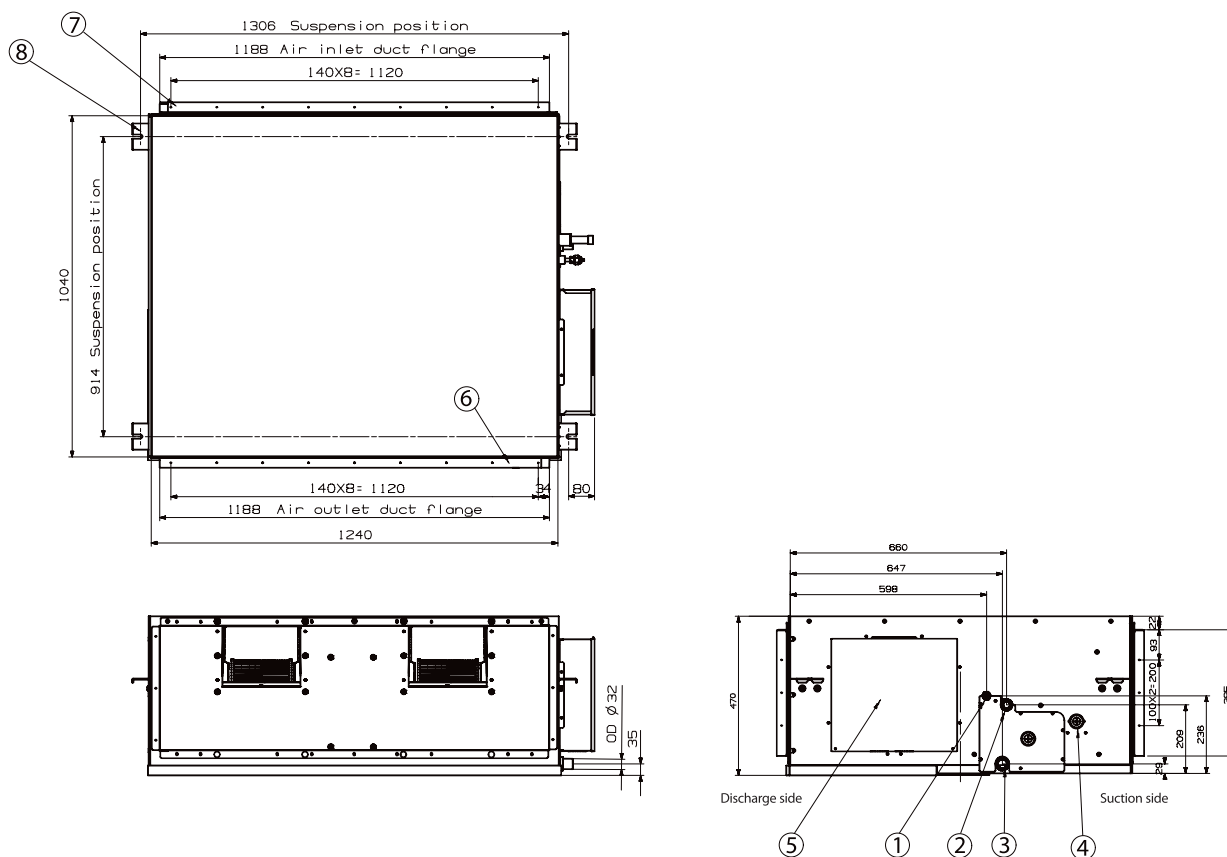
No.	Name	Description
①	Liquid pipe connection	Ø9.52 (3/8")
②	Gas pipe connection	Ø15.88 (5/8")
③	Drain pipe connection without optional drain pump kits	VP25 (OD 32, ID 25)
④	Drain pipe connection with optional drain pump kits	VP25 (OD 32, ID 25)
⑤	Power supply/Communication connection	
⑥	Air discharge grille flange	
⑦	Suction flange	
⑧	Hook	3/8" or M10

3 Dimensional drawing

HSP Duct

2) AM220/280FNHDEI***

Unit:mm

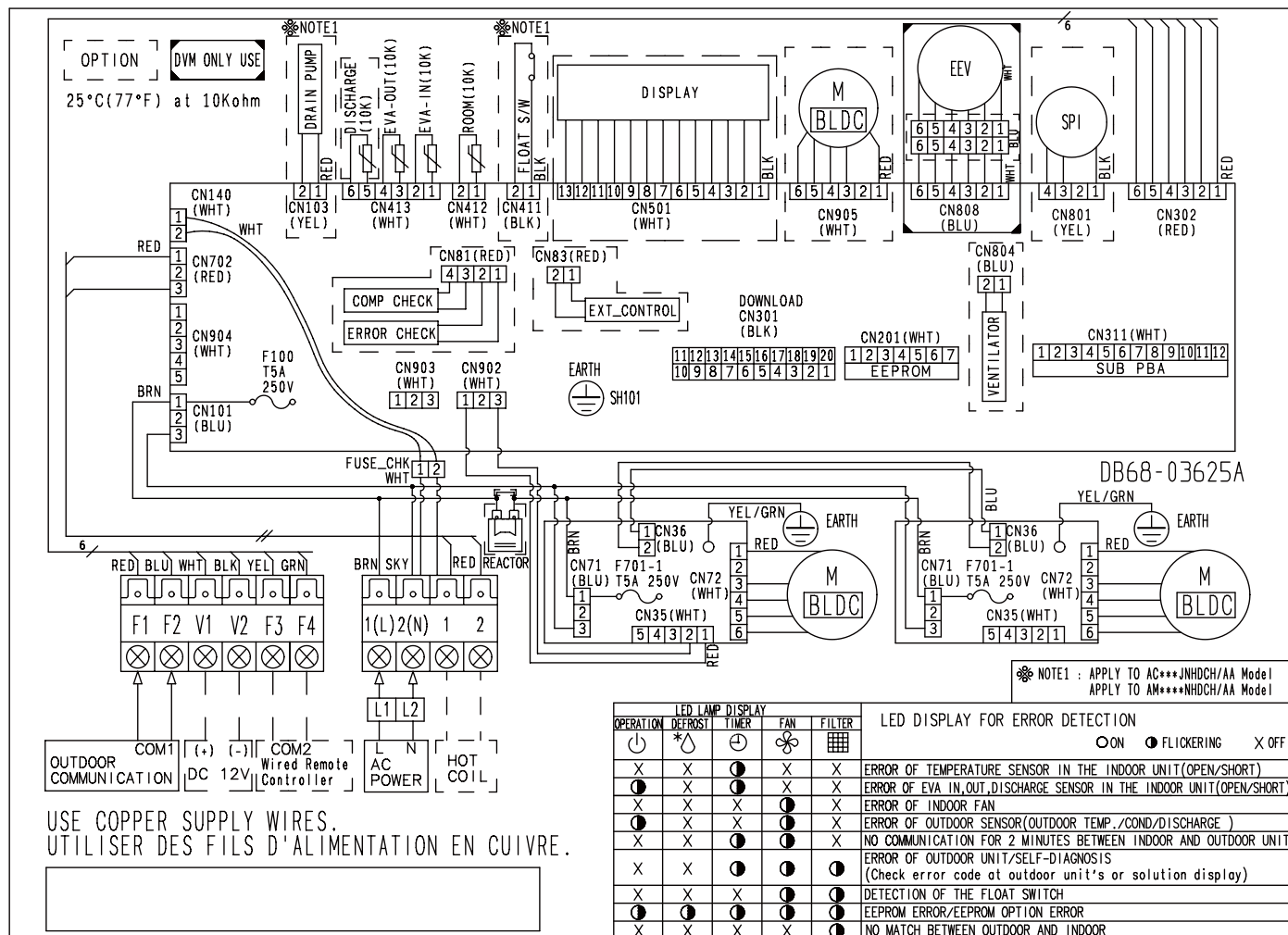


No.	Name	Description
①	Liquid pipe connection	Ø9.52 (3/8")
②	Gas pipe connection	AM220*** : Ø19.05 (3/4") AM280*** : Ø22.22 (7/8")
③	Drain pipe connection without optional drain pump kits	VP25 (OD 32, ID 25)
④	Drain pipe connection with optional drain pump kits	VP25 (OD 32, ID 25)
⑤	Power supply/Communication connection	
⑥	Air discharge grille flange	
⑦	Suction flange	
⑧	Hook	3/8" or M10

4 Electrical Wiring Diagram

HSP Duct

AM112/128/140FNHDEH/EU



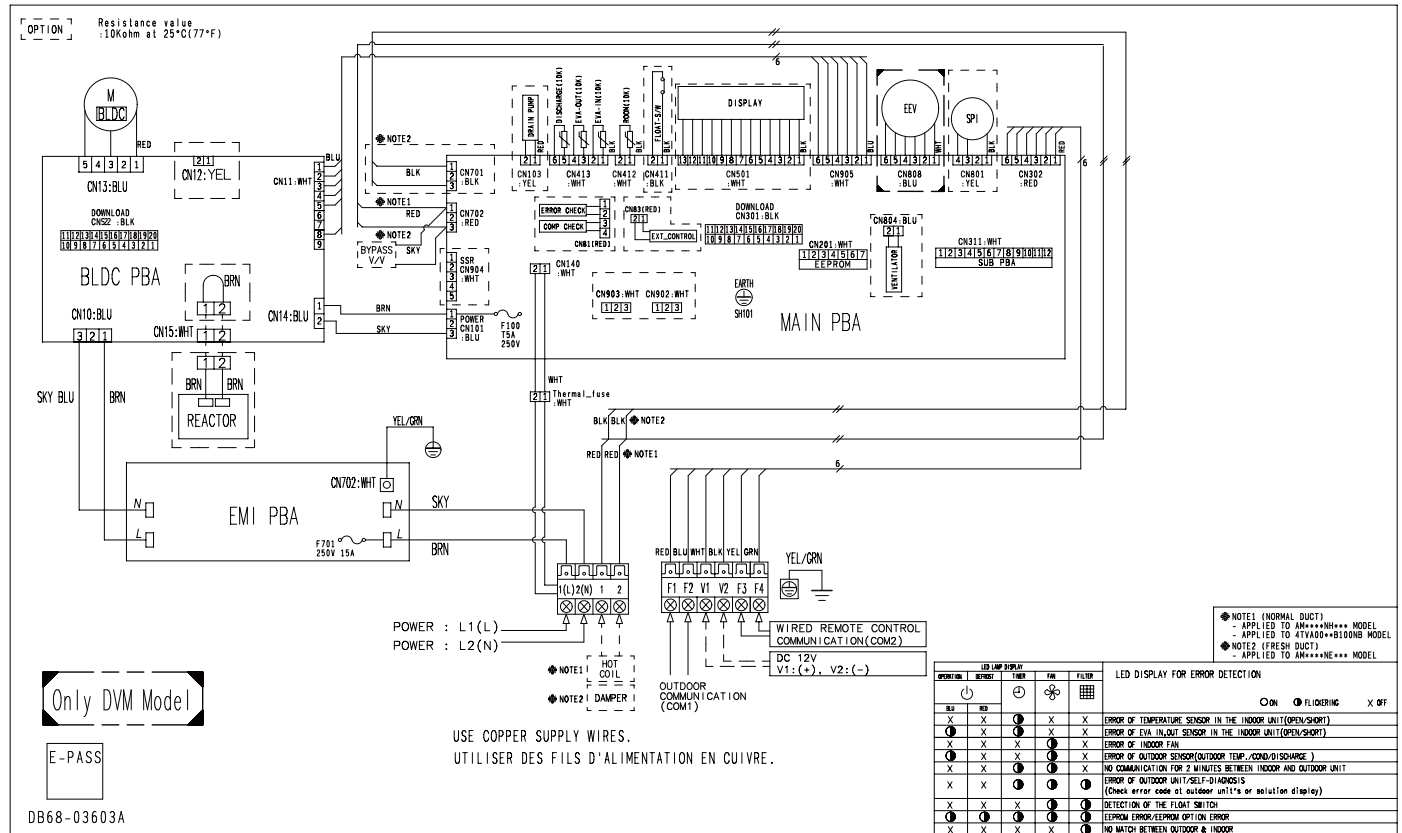
NOTE

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

4 Electrical Wiring Diagram

HSP Duct

AM220/280FNHDEH/EU



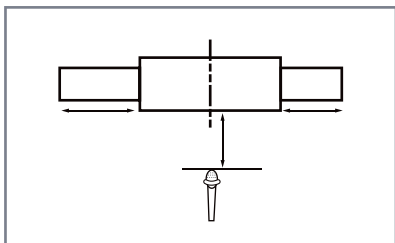
NOTE

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

HSP Duct

1) Operation sound level



Unit : dB(A)

Model	High	Low
AM112FNHDEH***	43	39
AM128FNHDEH***	45	42
AM140FNHDEH***	46	44
AM220FNHDEH***	45	41
AM280FNHDEH***	48	43

☒ 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.

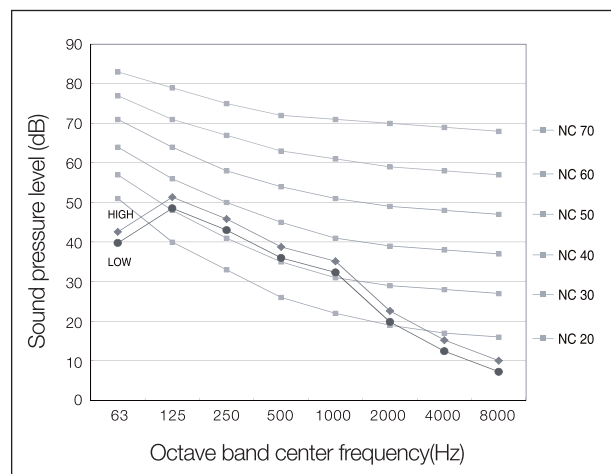
Sound pressure level may differ depending on operation condition.

dBA = A-weighted sound pressure level

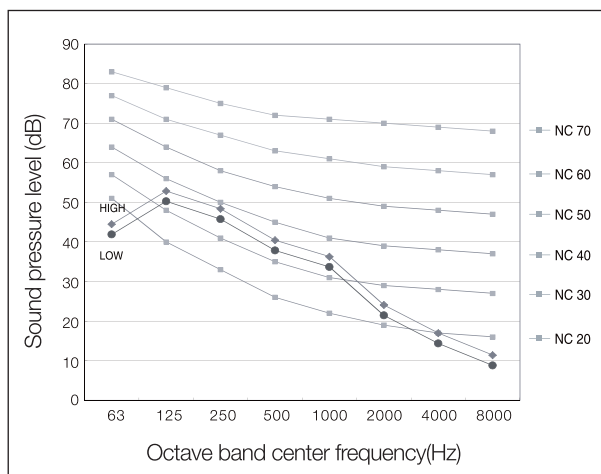
Reference acoustic pressure 0 dB= 20 uPa

2) NC curves

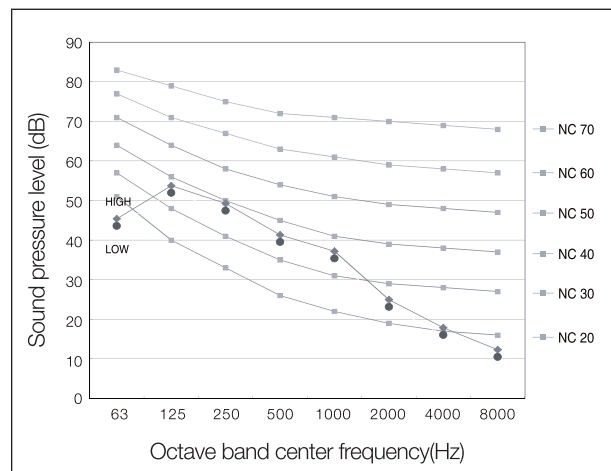
(1) AM112FNHDEH***



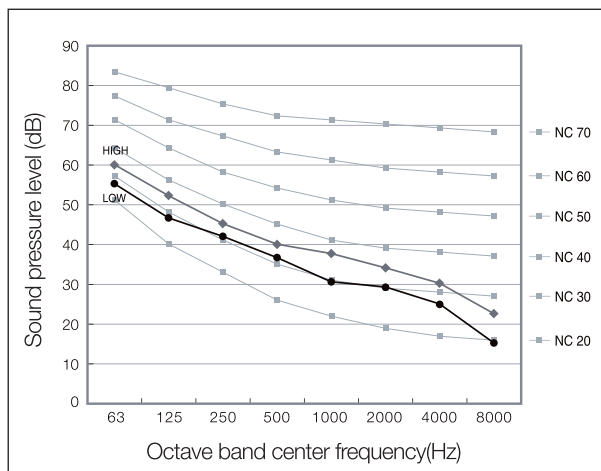
(2) AM128FNHDEH***



3) AM140FNHDEH***



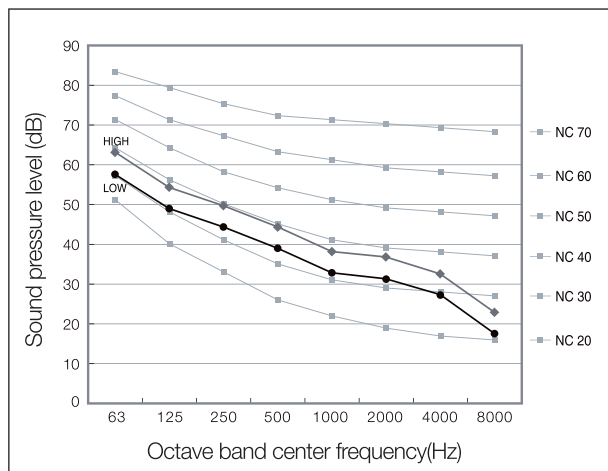
(4) AM220FNHDEH***



5 Sound pressure level

HSP Duct

(5) AM280FNHDEH ***

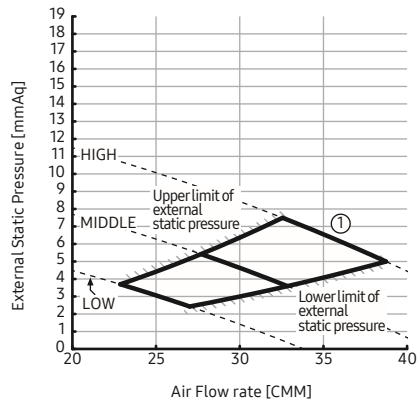


6 Fan Characteristics

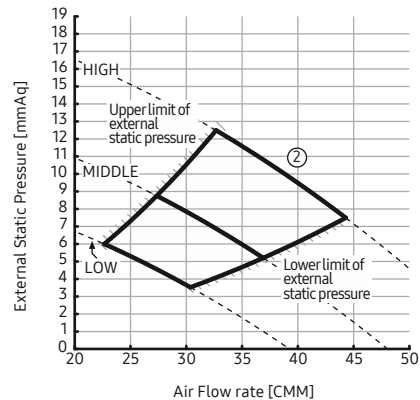
HSP Duct

1) AM112FNHDEH/EU

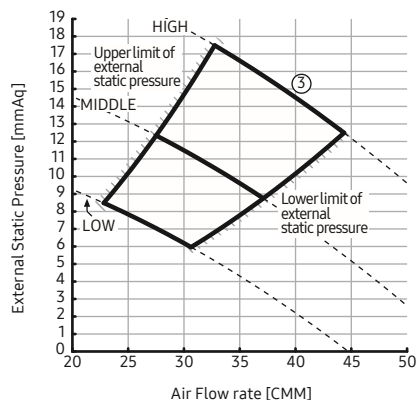
①	External Static Pressure(mmAq)	Option Code
	$5 < SP \leq 7.5$	010054-1355E8-207070-331110



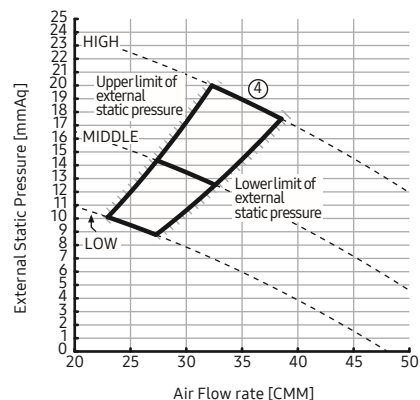
②	External Static Pressure(mmAq)	Option Code
	$7.5 < SP \leq 12.5$	010054-13598F-207070-331110



③	External Static Pressure(mmAq)	Option Code
	$12.5 < SP \leq 17.5$	010054-135E19-207070-331110



④	External Static Pressure(mmAq)	Option Code
	$17.5 < SP \leq 20$	010054-135F70-207070-331110



NOTE

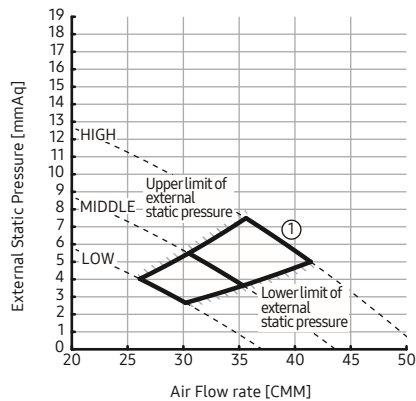
1. ESP = External Static Pressuer
2. The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect teh actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

6 Fan Characteristics

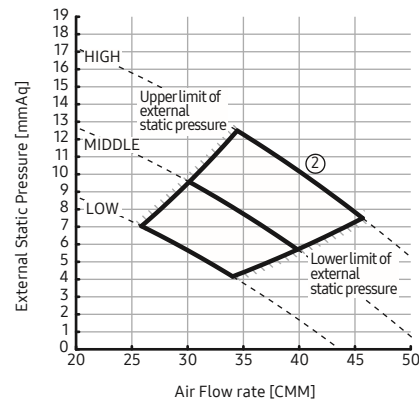
HSP Duct

2) AM128FNHDEH/EU

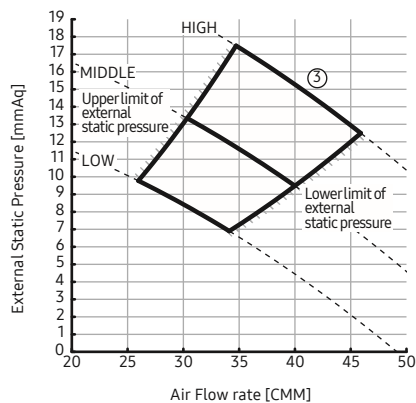
①	External Static Pressure(mmAq)	Option Code
	$5 < SP \leq 7.5$	010054-13591C-208080-331110



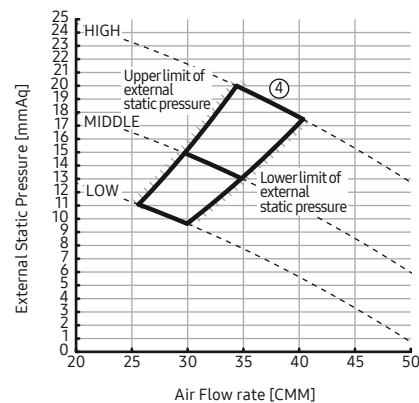
②	External Static Pressure(mmAq)	Option Code
	$7.5 < SP \leq 12.5$	010054-135AC4-208080-331110



③	External Static Pressure(mmAq)	Option Code
	$12.5 < SP \leq 17.5$	010054-135E4E-208080-331110



④	External Static Pressure(mmAq)	Option Code
	$17.5 < SP \leq 20$	010054-135F95-208080-331110



NOTE

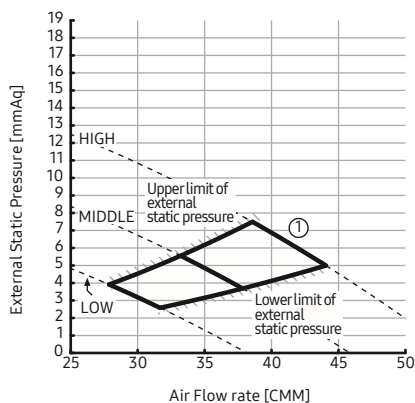
1. ESP = External Static Pressuer
2. The graphs display the available external static pressure range of installed indoor units.
Therefore, they do not reflect teh actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

6 Fan Characteristics

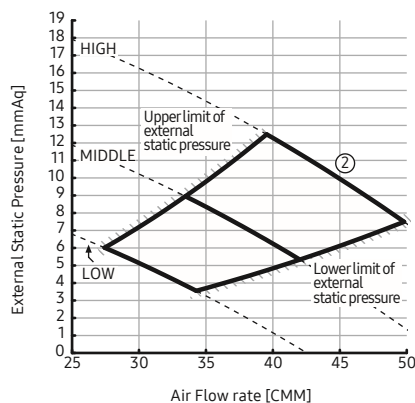
HSP Duct

3) AM140FNHDEH/EU

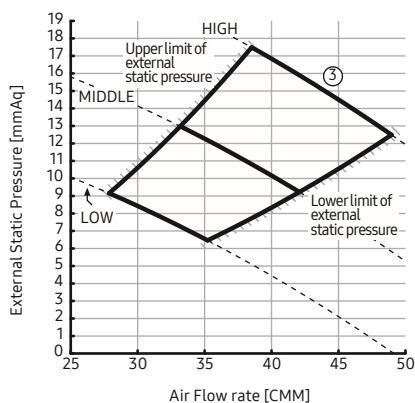
①	External Static Pressure(mmAq)	Option Code
	$5 < SP \leq 7.5$	010054-13595E-208C8C-331110



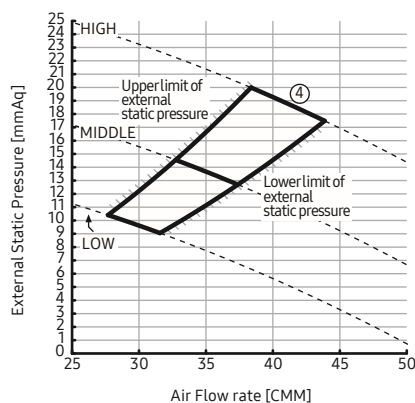
②	External Static Pressure(mmAq)	Option Code
	$7.5 < SP \leq 12.5$	010054-135E09-208C8C-331110



③	External Static Pressure(mmAq)	Option Code
	$12.5 < SP \leq 17.5$	010054-135F71-208C8C-331110



④	External Static Pressure(mmAq)	Option Code
	$17.5 < SP \leq 20$	010054-135FB7-208C8C-331110



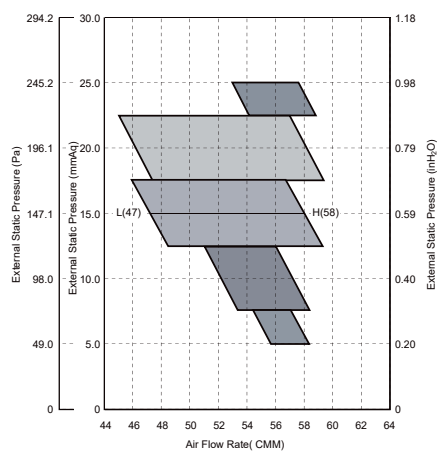
NOTE

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.

6 Fan Characteristics

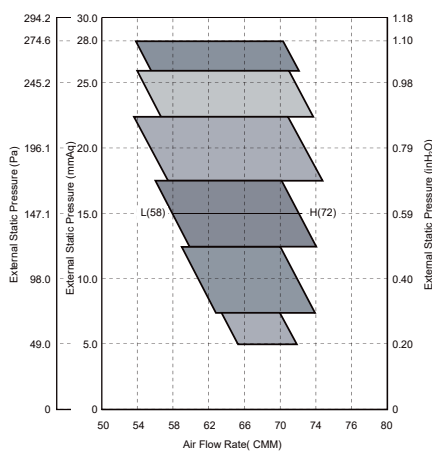
HSP Duct

4) AM220FNHDEH/EU



ESP (mmAq)	Option code
5	011054-195097-20DCDC-331110
10	011054-1950C7-20DCDC-331110
15	011054-1950E8-20DCDC-331110
20	011054-19544D-20DCDC-331110
25	011054-19549F-20DCDC-331110

5) AM280FNHDEH/EU



ESP (mmAq)	Option code
5	011054-195407-231C1C-331110
10	011054-195429-231C1C-331110
15	011054-19545B-231C1C-331110
20	011054-19549E-231C1C-331110
25	011054-1955D1-231C1C-331110
28	011054-1955F3-231C1C-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.

Big Duct

- 1 *Specifications*
- 2 *Capacity Table*
- 3 *Dimensional Drawing*
- 4 *Electrical Wiring Diagram*
- 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		1,2,220-240,50	
Mode			-	HP/HR		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		340.00		530.00	
	Current Input (Nominal)	Cooling	A	1.90		2.90	
		Heating		1.90		2.90	
Fan	Motor	Type	-	Sirocco		Sirocco	
		Output x n	w	630 x 1		630 x 1	
	Air Flow Rate	H/M/L (UL)	CMM	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 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		mm²	-		-	
	Transmission Cable		mm²	0.75 - 1.50		0.75 - 1.50	
Refrigerant	Type		-	R410A		R410A	
	Control Method		-	EEV(O)		EEV(O)	
Sound	Pressure	High / Mid / Low	dB(A)	43 / 39 / 35		44 / 40 / 36	
	Power	Cooling		80		81	
Dimension	Net Weight		kg	82.5		82.5	
	Shipping Weight		kg	92.0		92.0	
	Net Dimensions (WxHxD)		mm	1,350 x 450 x 910		1,350 x 450 x 910	
	Shipping Dimensions (WxHxD)		mm	1,612 x 519 x 984		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		MDP-G075SP	
		Internal	-	MDP-G075SQ		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

Model	Outdoor temperature (°C, DB)	Indoor temperature (°C, WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
		TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW	TC kW	SHC kW
18.00	10	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	22.31	12.94
	12	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	22.31	12.94
	14	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	22.31	12.94
	16	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	22.31	12.94
	18	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	22.21	12.88
	20	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	21.90	12.70
	21	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	21.92	12.71
	23	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	21.61	12.53
	25	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	21.54	12.49
	27	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	21.54	12.49
	29	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	21.54	12.49
	31	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	21.54	12.49
	33	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	21.54	12.49
	35	12.76	10.21	15.02	11.42	17.05	12.79	18.00	13.50	19.10	12.41	21.06	12.64	21.54	12.49
	37	12.58	10.06	14.81	11.26	16.90	12.68	18.00	13.50	19.00	12.35	20.77	12.46	21.23	12.31
	39	12.42	9.94	14.62	11.11	16.90	12.68	17.90	13.42	19.00	12.35	20.52	12.31	20.96	12.16
	42	12.19	9.75	14.35	10.91	16.59	12.45	17.57	13.18	18.66	12.13	20.15	12.09	20.57	11.93
	44	12.01	9.61	14.14	10.75	16.35	12.27	17.32	12.99	18.39	11.95	19.86	11.92	20.27	11.75
	46	11.78	9.43	13.87	10.54	16.04	12.03	16.99	12.75	18.05	11.73	19.49	11.69	19.87	11.53
22.40	10	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	27.53	15.69
	12	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	27.53	15.69
	14	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	27.53	15.69
	16	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	27.53	15.69
	18	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	27.53	15.69
	20	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	27.24	15.53
	21	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	27.19	15.50
	23	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	26.77	15.26
	25	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	26.77	15.26
	27	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	26.77	15.26
	29	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	26.77	15.26
	31	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	26.77	15.26
	33	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	26.77	15.26
	35	15.96	11.97	18.75	13.68	21.24	15.29	22.40	15.68	23.79	16.18	25.99	15.85	26.77	15.26
	37	15.74	11.80	18.48	13.49	21.01	15.13	22.40	15.68	23.69	16.11	25.63	15.63	26.39	15.04
	39	15.54	11.66	18.25	13.32	21.01	15.13	22.30	15.61	23.54	16.00	25.32	15.44	26.06	14.85
	42	15.26	11.44	17.92	13.08	20.63	14.85	21.90	15.33	23.12	15.72	24.86	15.17	25.57	14.58
	44	15.04	11.28	17.66	12.89	20.34	14.64	21.59	15.11	22.79	15.50	24.51	14.95	25.20	14.36
	46	14.76	11.07	17.32	12.65	19.95	14.37	21.19	14.83	22.37	15.21	24.06	14.67	24.71	14.09

2 Capacity table

Big Duct

Heating

TC : Total Capacity

Model	Outdoor temperature (°C)		Indoor temperature (°C, DB)				
			16.0	18.0	20.0	22.0	24.0
	DB	WB	TC	TC	TC	TC	TC
18.00	-20	-21	16.32	15.73	14.90	14.20	13.67
	-17	-18	16.69	16.09	15.23	14.87	14.72
	-15	-16	17.26	16.64	15.75	15.41	15.19
	-12	-13	18.35	17.68	16.74	16.23	16.09
	-10	-11	19.62	18.90	17.89	17.13	16.92
	-7	-8	20.16	19.42	18.38	17.83	17.59
	-5	-6	20.74	19.98	18.90	18.51	18.07
	-3	-4	21.20	20.42	19.32	19.15	18.45
	0	-1	21.67	20.98	19.75	19.34	18.84
	3	2	22.11	21.36	20.00	19.40	18.81
	5	4	22.35	21.36	20.00	19.40	18.81
	7	6	22.69	21.36	20.00	19.40	18.81
	9	8	22.69	21.36	20.00	19.40	18.81
	11	10	22.69	21.36	20.00	19.40	18.81
	13	12	22.69	21.36	20.00	19.40	18.81
	15	14	22.69	21.36	20.00	19.40	18.81
22.40	-20	-21	20.33	19.58	18.52	17.63	16.96
	-17	-18	20.80	20.03	18.94	18.42	18.10
	-15	-16	21.52	20.73	19.60	19.11	18.70
	-12	-13	22.90	22.05	20.85	20.17	19.84
	-10	-11	24.51	23.60	22.32	21.40	21.10
	-7	-8	25.20	24.26	22.94	22.25	21.75
	-5	-6	25.94	24.97	23.61	23.10	22.36
	-3	-4	26.53	25.54	24.14	23.73	22.84
	0	-1	27.12	26.23	24.68	24.17	23.34
	3	2	27.68	26.69	25.00	24.17	23.48
	5	4	27.93	26.69	25.00	24.17	23.48
	7	6	28.23	26.69	25.00	24.17	23.48
	9	8	28.23	26.69	25.00	24.17	23.48
	11	10	28.23	26.69	25.00	24.17	23.48
	13	12	28.23	26.69	25.00	24.17	23.48
	15	14	28.23	26.69	25.00	24.17	23.48

3 Dimensional drawing

Big Duct

AM180JNHFKH/EU, AM224JNHFKH/EU

Units : mm / inches

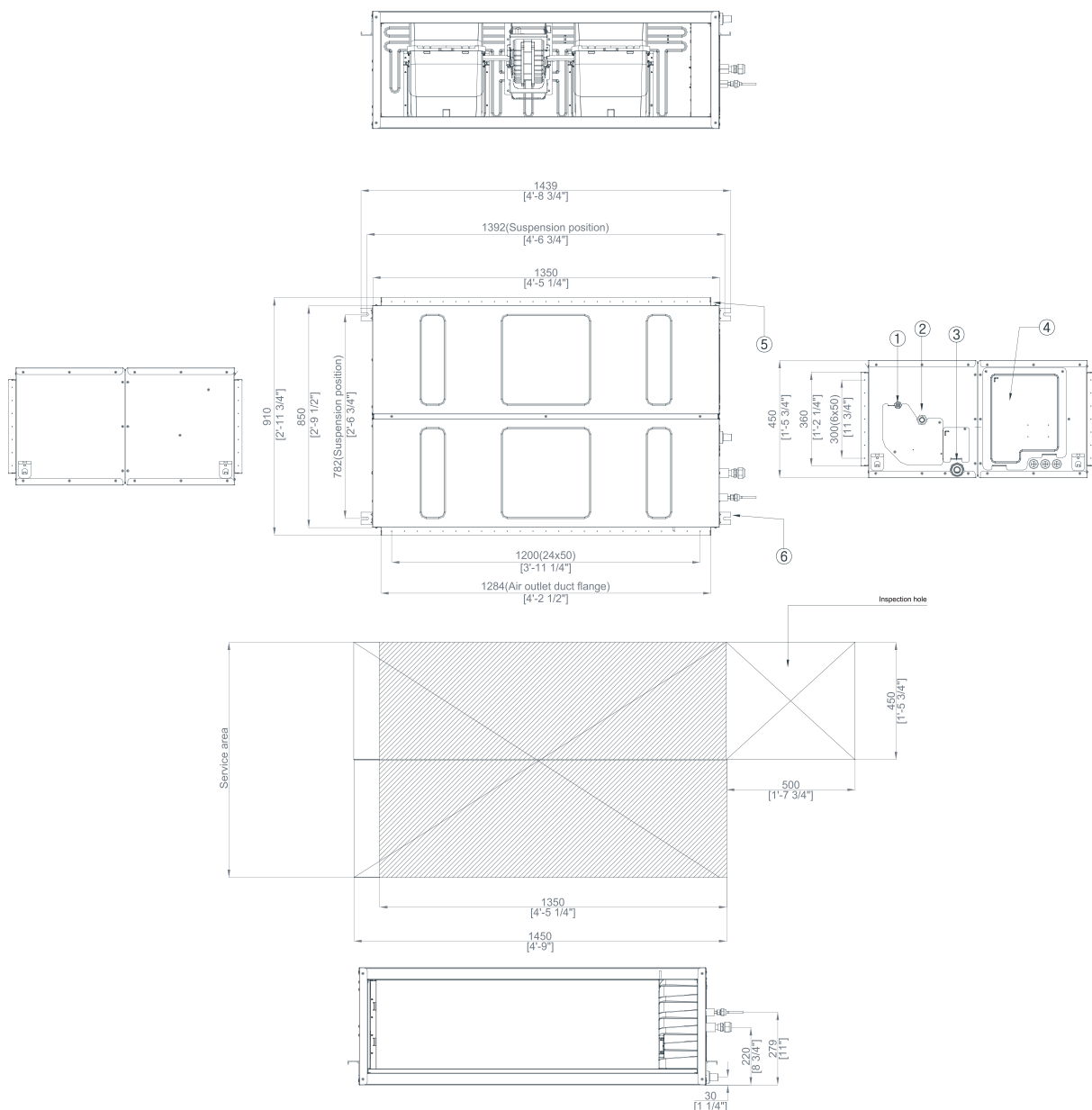


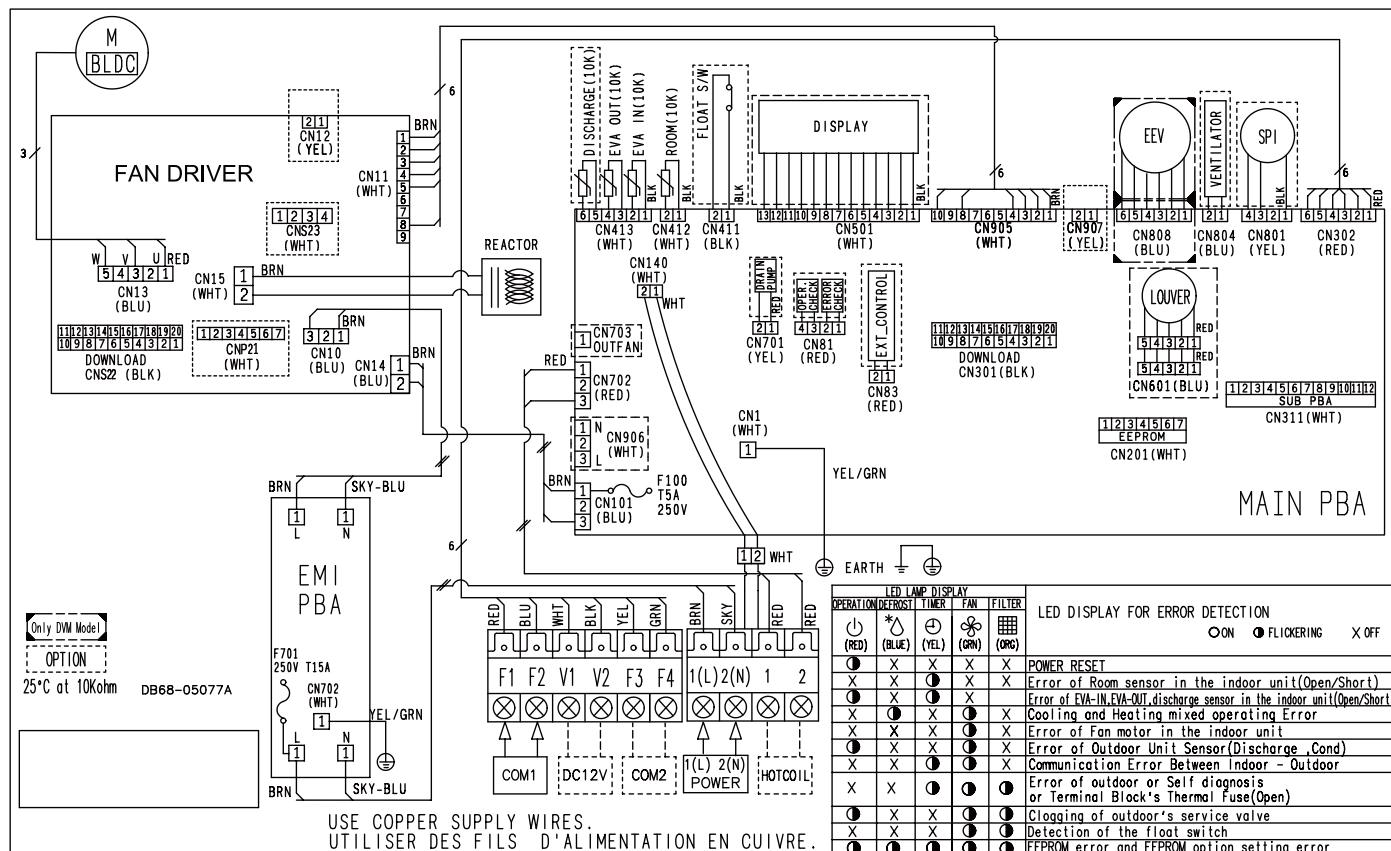
Table of descriptions

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

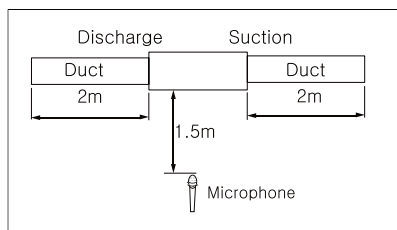


NOTE

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)

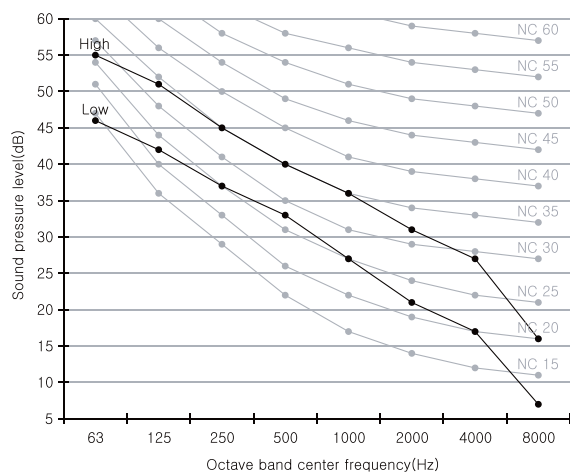
Model	High	Low
AM180JNHFKH/EU	43	35
AM224JNHFKH/EU	44	36

Note

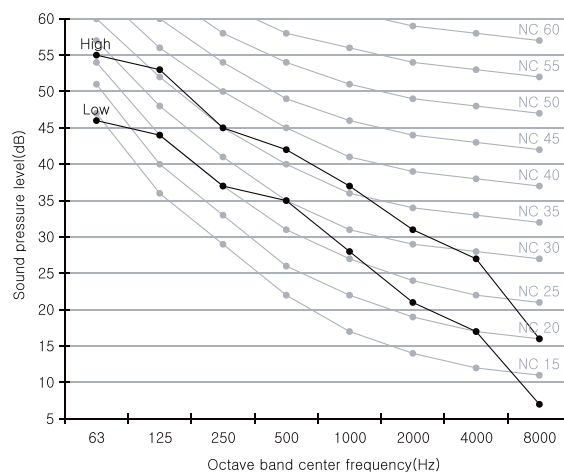
Specifications may be subject to change without prior notice.
Sound pressure level is obtained in an anechoic room.
Sound pressure level is a relative value, depending on the distance and acoustic environment.
Sound pressure level may differ depending on operation condition.
dBA = A-weighted sound pressure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

NC curve

1) AM180JNHFKH/EU



2) AM224JNHFKH/EU



6 Sound power level

Big Duct

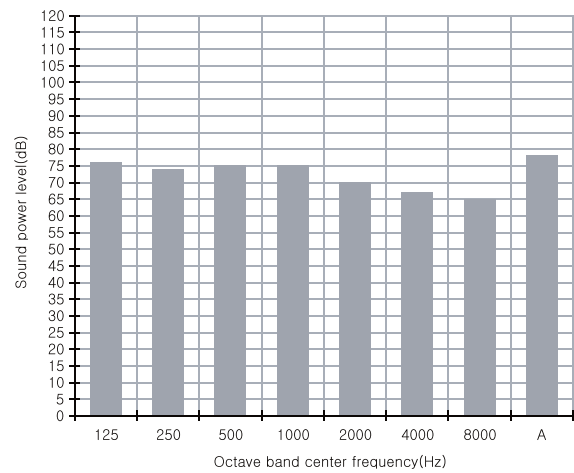
Note

- . 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

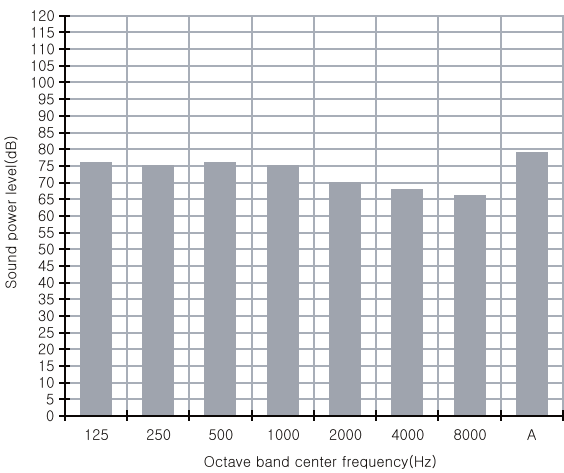
Unit: dB(A)

Model	Power
AM180JNHFKH/EU	80
AM224JNHFKH/EU	81

1)AM180JNHFKH/EU



2)AM224JNHFKH/EU

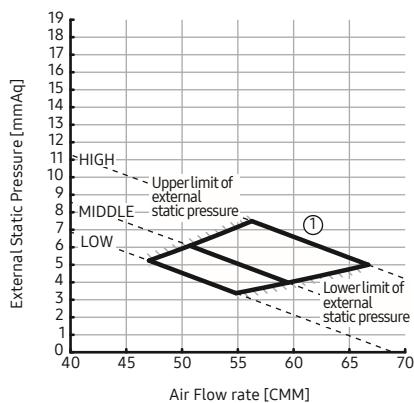


7 Fan Characteristics

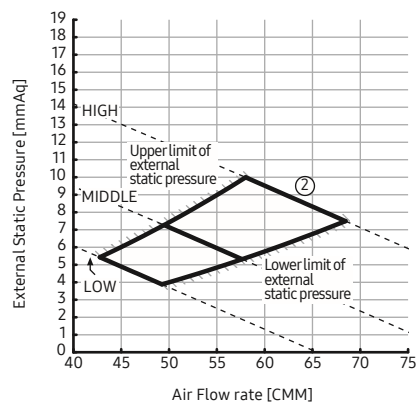
HSP Duct

1) AM180JNHFKH/EU

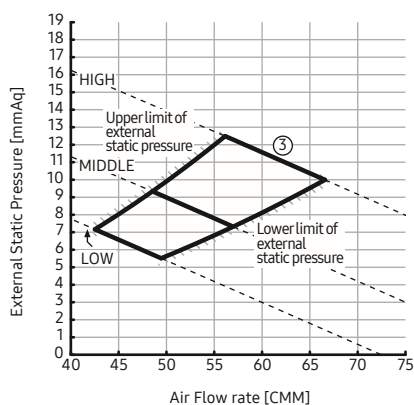
①	External Static Pressure(mmAq)	Option Code
	$5 < SP \leq 7.5$	12074-1C5080-20B4B4-331110



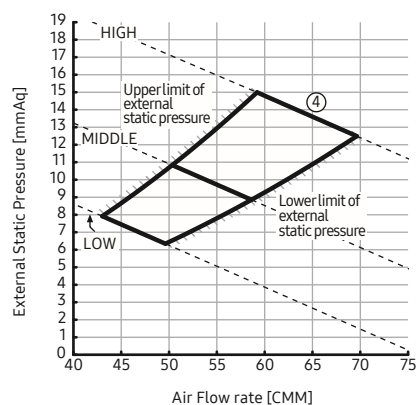
②	External Static Pressure(mmAq)	Option Code
	$7.5 < SP \leq 10$	12074-1C50A1-20B4B4-33111



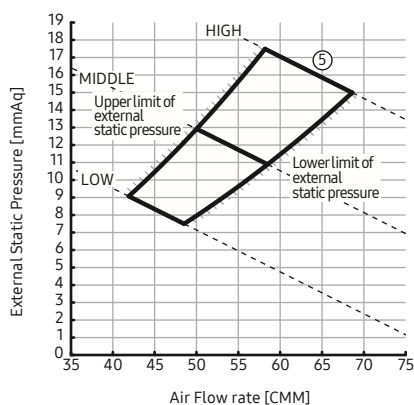
③	External Static Pressure(mmAq)	Option Code
	$10 < SP \leq 12.5$	12074-1C50D3-20B4B4-331110



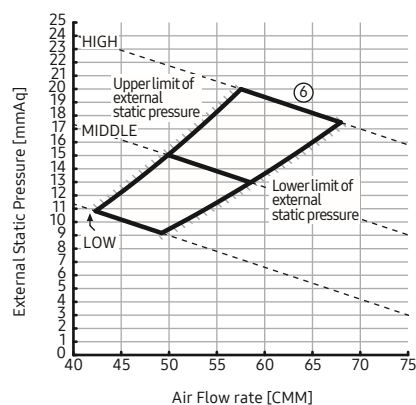
④	External Static Pressure(mmAq)	Option Code
	$12.5 < SP \leq 15$	12074-1C50F5-20B4B4-331110



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

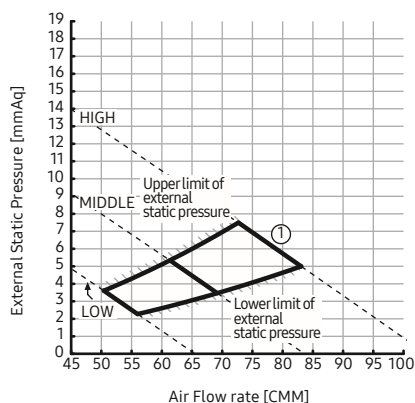
1. ESP = External Static Pressuer
2. The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect teh actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

7 Fan Characteristics

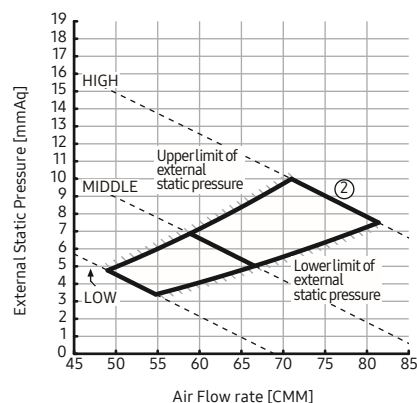
HSP Duct

2) AM224JNHFKH/EU

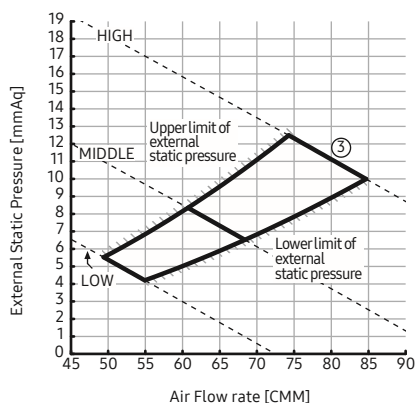
①	External Static Pressure(mmAq)	Option Code
	$5 < SP \leq 7.5$	12074-1C50C0-20E0E0-331110



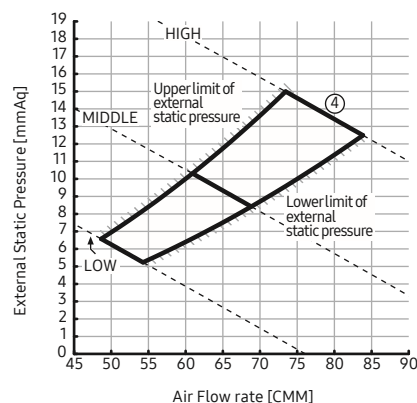
②	External Static Pressure(mmAq)	Option Code
	$7.5 < SP \leq 10$	12074-1C50E3-20E0E0-331110



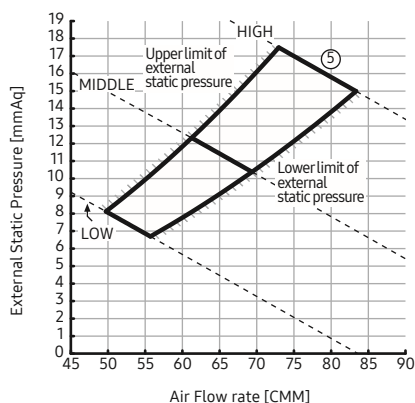
③	External Static Pressure(mmAq)	Option Code
	$10 < SP \leq 12.5$	12074-1C50F5-20E0E0-331110



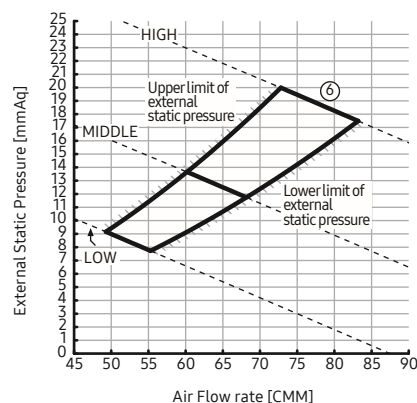
④	External Static Pressure(mmAq)	Option Code
	$12.5 < SP \leq 15$	12074-1C5436-20E0E0-331110



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.