

SAMSUNG

Smart Airconditioning Solutions



Medium Static Pressure (MSP) Duct Inverter

- Cooling from 0.98kW to 16.12kW; heating from 0.99kW to 19.34kW
- Samsung's Smart Digital Inverter saves both energy and money
- Air flow rates from 5.8 CMM up to 49 CMM
- Compact dimension of internal unit fitment
- Max pipe length to outdoor unit 20m to 50m (model dependent)
- EER up to 10.63 (model dependent)
- Available models: 3.5kW; 5.2kW; 7.1kW; 10kW; 14kW only.



1. Specification

MSP Duct

System	Model Name	Indoor Unit		AC035RNMDKG/EU	AC052RNMDKG/EU	AC071RNMDKG/EU	
		Outdoor Unit		AC035RXADKG/EU	AC052RXADKG/EU	AC071RXADKG/EU	
	Mode		-	HEAT PUMP	HEAT PUMP	HEAT PUMP	
	Performance	Capacity (Min/Std/Max)	Cooling	kW	0.80 / 3.50 / 4.40	1.20 / 5.00 / 6.50	1.50 / 6.80 / 8.70
				Btu/h	2,730 / 11,940 / 15,010	4,100 / 17,060 / 22,180	5,120 / 23,200 / 29,690
			Heating	kW	1.10 / 4.00 / 4.70	1.10 / 6.00 / 7.20	1.90 / 8.00 / 9.00
				Btu/h	3,750 / 13,650 / 16,040	3,750 / 20,470 / 24,570	6,480 / 27,300 / 30,710
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.20 / 1.02 / 1.36	0.35 / 1.60 / 2.20	0.35 / 2.32 / 3.60
			Heating	kW	0.24 / 1.15 / 1.80	0.26 / 1.64 / 2.70	0.35 / 2.50 / 3.95
		Current Input (Min/Std/Max)	Cooling	A	1.4 / 5.0 / 6.2	2.1 / 7.2 / 10.0	2.0 / 10.4 / 16.0
			Heating	A	1.3 / 5.4 / 10.5	1.7 / 7.4 / 12.0	2.0 / 10.8 / 17.0
		Current	MCA	A	12.5	19.0	19.0
			MFA	A	13.8	20.9	20.9
	Efficiency	EER	Cooling	-	3.43	3.13	2.93
		COP	Heating	-	3.48	3.66	3.20
		SEER (Cooling Energy Grade)		-	6.4 (A++)	6.3 (A++)	6.1 (A++)
		SCOP (Heating Energy Grade)		-	4.1 (A+)	4.1 (A+)	4.0 (A+)
		Pdesignh		kW	2.0	2.4	3.7
	Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection
				Φ, mm (inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
		Gas Pipe		Type	Flare connection	Flare connection	Flare connection
				Φ, mm (inch)	9.52 (3/8)	12.7 (1/2)	15.88 (5/8)
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes
		Piping length (ODU-IDU)	Standard	m	5	5	5
Max.			m	20	30	50	
Elevation			m	15	20	30	
Chargeless			m	20	10	15	
Wiring connections	Communication	Min.	mm²	0.75	0.75	0.75	
		Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charging		kg	0.9	1.2	1.7	
			tCO ₂ e	0.61	0.81	1.15	

1. Specification

MSP Duct

Indoor Unit	Model Name		Indoor Unit		AC035RNMDKG/EU		AC052RNMDKG/EU		AC071RNMDKG/EU		
			Outdoor Unit		AC035RXADKG/EU		AC052RXADKG/EU		AC071RXADKG/EU		
	Power Supply				Ø, #, V, Hz	1,2,220-240,50		1,2,220-240,50		1,2,220-240,50	
	Heat Exchanger	Type			-	F&T		F&T		F&T	
		Material	Fin		-	Al		Al		Al	
			Tube		-	Cu		Cu		Cu	
		Fin Treatment			-	Green Hydrophile		Green Hydrophile		Green Hydrophile	
	Fan	Type			-	Sirocco		Sirocco		Sirocco	
		Quantity			EA	2		2		2	
		Air Flow Rate	Cooling (H/M/L)	m³/min	10.4 / 9.2 / 8.0		14.5 / 12.0 / 9.5		17.0 / 14.0 / 11.0		
				l/s	173.3 / 153.3 / 133.3		241.6 / 200 / 158.3		283.3 / 233.3 / 183.3		
			Heating (H/M/L)	m³/min	10.4 / 9.2 / 8.0		14.5 / 12.0 / 9.5		17.0 / 14.0 / 11.0		
				l/s	173.3 / 153.3 / 133.3		241.6 / 200 / 158.3		283.3 / 233.3 / 183.3		
		External Static Pressure	Min/Std/Max	mmAq	0.0 / 2.5 / 15.0		0.0 / 3.0 / 15.0		0.0 / 3.0 / 15.0		
	Pa			0.0 / 25.0 / 147.0		0.0 / 29.0 / 147.0		0.0 / 29.0 / 147.0			
	Fan Motor	Type			-	BLDC		BLDC		BLDC	
		Output			W x n	153		153		153	
	Drain	Drain Pipe			Φ, mm	VP-25(OD32, ID25)		VP-25(OD32, ID25)		VP-25(OD32, ID25)	
	Sound	Sound Pressure Level	High/Mid/Low/(Silent)	dB(A)	28 / 25 / 22		29 / 26 / 23		30 / 27 / 24		
		Sound Power Level			dB(A)	52		55		56	
	External Dimension	Net Weight			kg	26.5		26.5		26.5	
		Shipping Weight			kg	30.5		30.5		30.5	
		Net Dimensions (WxHxD)			mm	850 x 250 x 700		850 x 250 x 700		850 x 250 x 700	
		Shipping Dimensions (WxHxD)			mm	1,064 x 320 x 784		1,064 x 320 x 784		1,064 x 320 x 784	
	Casing	Material			-	EGI Steel Plate		EGI Steel Plate		EGI Steel Plate	
	Control System	Infrared remote control			-	AR-EH03E		AR-EH03E		AR-EH03E	
		Wired remote control			-	MWR-WE13N MWR-WG00*N		MWR-WE13N MWR-WG00*N		MWR-WE13N MWR-WG00*N	
	Drain Pump	Drain Pump			-	-		-		-	
		Max. lifting Height / Displacement			mm / Liter / h	-		-		-	
	Additional Accessories	Drain Pump	External Model	-	MDP-G075SP		MDP-G075SP		MDP-G075SP		
			Internal Model	-	MDP-G075SQ		MDP-G075SQ		MDP-G075SQ		
			Max. lifting Height / Displacement	mm / Liter / h	750/24		750/24		750/24		
			Air Filter			-	Removable / Washable		Removable / Washable		Removable / Washable
		Virus Doctor			-	Option		Option		Option	

1. Specification

MSP Duct

Outdoor Unit	Model Name	Indoor Unit		AC035RNMDKG/EU	AC052RNMDKG/EU	AC071RNMDKG/EU	
		Outdoor Unit		AC035RXADKG/EU	AC052RXADKG/EU	AC071RXADKG/EU	
	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
		Fin Treatment		-	Anti-Corrosion	Anti-Corrosion	Anti-Corrosion
	Compressor	Model Name			UB9AK5090FER	UB9TK3150FE4	UB4TN8200FE4
		Type		-	Single BLDC	Twin BLDC	Twin BLDC
		Output		kW	0.86	1.51	1.89
		Oil	Type	-	POE	POE	POE
			Initial charge	cc	320	500	650
	Fan	Type		-	Propeller	Propeller	Propeller
		Discharge direction		-	Front	Front	Front
		Quantity		EA	1	1	1
		Air Flow Rate		m³/min	30	40	51
				l/s	500	667	850
	Fan Motor	Type		-	BLDC Motor	BLDC Motor	BLDC Motor
		Output		W x n	40 x 1	125 x 1	125 x 1
	Sound	Sound Pressure Level	Cooling	dB(A)	48	48	49
			Heating	dB(A)	48	48	51
		Sound Power Level		dB(A)	61	62	65
	External Dimension	Net Weight		kg	32.5	43.5	51.0
		Shipping Weight		kg	35.5	46.5	55.0
		Net Dimensions (WxHxD)		mm	790 x 548 x 285	880 x 638 x 310	880 x 798 x 310
		Shipping Dimensions (WxHxD)		mm	913 x 622 x 371	1,023 x 742 x 413	1,023 x 896 x 413
	Casing	Material	Body	-	EGI Steel Plate	EGI Steel Plate	EGI Steel Plate
Operating Temp. Range	Cooling		°C	-15 ~ 46	-15 ~ 50	-15 ~ 50	
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24	



NOTE

- Specification may be subject to change without prior notice.
- 1) Performances are based on the following test conditions.
 - Cooling : Indoor temperature 27°C DB, 19°C WB, Outdoor temperature 35°C DB, 24°C WB
 - Heating : Indoor temperature 20°C DB, 15°C WB, Outdoor temperature 7°C DB, 6°C WB
 - Equivalent refrigerant pipe length 5m, Level differences 0m
- 2) Select wire size based on the value of MCA
- 3) 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 = 20uPa
- 4) 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
- 5) These products contain R32(GWP=675) which is fluorinated greenhouse gas.
- 6) 'MWR-WG00*N' is new wired remote control type(Graphic).
If you need the latest control system information, please refer to SAC control TDB.

1. Specification

MSP Duct

System	Model Name	Indoor Unit			AC100RNMDKG/EU	AC100RNMDKG/EU	AC120RNMDKG/EU
		Outdoor Unit			AC100RXADKG/EU	AC100RXADNG/EU	AC120RXADKG/EU
	Mode			-	HEAT PUMP	HEAT PUMP	HEAT PUMP
	Performance	Capacity (Min/Std/Max)	Cooling	kW	3.0 / 10.0 / 12.0	3.0 / 10.0 / 12.0	3.0 / 12.0 / 13.5
				Btu/h	10,240 / 34,120 / 41,000	10,240 / 34,120 / 41,000	10,240 / 41,000 / 46,100
			Heating	kW	2.2 / 11.2 / 15.5	2.2 / 11.2 / 15.5	2.5 / 13.2 / 17.0
				Btu/h	7,500 / 38,210 / 52,900	7,500 / 38,210 / 52,900	8,530 / 45,040 / 58,000
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.60 / 3.44 / 4.70	0.60 / 3.42 / 4.70	0.90 / 4.50 / 5.30
			Heating	kW	0.46 / 3.50 / 5.40	0.46 / 3.42 / 5.40	0.70 / 3.86 / 5.60
		Current Input (Min/Std/Max)	Cooling	A	3.0 / 15.2 / 20.4	1.5 / 5.3 / 7.1	5.0 / 19.7 / 24.0
			Heating	A	2.5 / 15.4 / 23.0	1.2 / 5.3 / 8.4	4.0 / 17.1 / 26.0
		Current	MCA	A	26.5	18.6	26.5
			MFA	A	30.0	18.6	30.0
	Efficiency	EER	Cooling	-	2.90	2.92	2.66
		COP	Heating	-	3.20	3.27	3.42
		SEER (Cooling Energy Grade)		-	5.9 (A+)	5.9 (A+)	5.8 (A+)
		SCOP (Heating Energy Grade)		-	4.0 (A+)	4.0 (A+)	4.0 (A+)
		Pdesignh		kW	5.2	5.2	6.5
	Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection
				Φ, mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
		Gas Pipe		Type	Flare connection	Flare connection	Flare connection
				Φ, mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes
		Piping length (ODU-IDU)	Standard	m	5	5	5
			Max.	m	50	50	50
			Elevation	m	30	30	30
			Chargeless	m	30	30	30
	Wiring connections	Communication	Min.	mm²	0.75	0.75	0.75
Remark			-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charging		kg	2.7	2.7	2.7	
			tCO₂e	1.82	1.82	1.82	

1. Specification

MSP Duct

Indoor Unit	Model Name		Indoor Unit		AC100RNMDKG/EU	AC100RNMDKG/EU	AC120RNMDKG/EU
			Outdoor Unit		AC100RXADKG/EU	AC100RXADNG/EU	AC120RXADKG/EU
	Power Supply			Ø, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
	Heat Exchanger	Type		-	F&T	F&T	F&T
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
		Fin Treatment		-	Green Hydrophile	Green Hydrophile	Green Hydrophile
	Fan	Type		-	Sirocco	Sirocco	Sirocco
		Quantity		EA	3	3	3
		Air Flow Rate	Cooling (H/M/L)	m³/min	28.0 / 25.0 / 22.0	28.0 / 25.0 / 22.0	33.0 / 28.0 / 23.0
				l/s	467 / 417 / 367	467 / 417 / 367	550 / 467 / 383
			Heating (H/M/L)	m³/min	28.0 / 25.0 / 22.0	28.0 / 25.0 / 22.0	33.0 / 28.0 / 23.0
				l/s	467 / 417 / 367	467 / 417 / 367	550 / 467 / 383
		External Static Pressure	Min/Std/Max	mmAq	0.0 / 4.0 / 15.0	0.0 / 4.0 / 15.0	0.0 / 5.2 / 15.0
				Pa	0.0 / 39.2 / 147.0	0.0 / 39.2 / 147.0	0.0 / 51.0 / 147.0
	Fan Motor	Type		-	BLDC	BLDC	BLDC
		Output		W x n	153 x 1	153 x 1	244 x 1
	Drain	Drain Pipe		Φ, mm	VP-25(OD32, ID25)	VP-25(OD32, ID25)	VP-25(OD32, ID25)
	Sound	Sound Pressure Level	High/Mid/Low/(Silent)	dB(A)	34 / 32 / 30	34 / 32 / 30	37 / 34 / 30
		Sound Power Level		dB(A)	58	58	62
	External Dimension	Net Weight		kg	34.0	34.0	38.5
		Shipping Weight		kg	39.0	39.0	45.0
		Net Dimensions (WxHxD)		mm	1,200 x 250 x 700	1,200 x 250 x 700	1,300 x 300 x 700
		Shipping Dimensions (WxHxD)		mm	1,429 x 320 x 779	1,429 x 320 x 779	1,529 x 370 x 779
	Casing	Material		-	GI Steel Plate	GI Steel Plate	GI Steel Plate
	Control System	Infrared remote control		-	AR-EH03E	AR-EH03E	AR-EH03E
		Wired remote control		-	MWR-WE13N MWR-WG00*N	MWR-WE13N MWR-WG00*N	MWR-WE13N MWR-WG00*N
	Drain Pump	Drain Pump		-	-	-	-
		Max. lifting Height / Displacement		mm / Liter / h	-	-	-
	Additional Accessories	Drain Pump	External Model	-	MDP-G075SP	MDP-G075SP	MDP-G075SP
			Internal Model	-	MDP-G075SQ	MDP-G075SQ	MDP-G075SQ
			Max. lifting Height / Displacement	mm / Liter / h	750 / 24	750 / 24	750 / 24
		Air Filter		-	Removable / Washable	Removable / Washable	Removable / Washable
		Virus Doctor		-	Option	Option	Option

1. Specification

MSP Duct

Outdoor Unit	Model Name		Indoor Unit	AC100RNMDKG/EU	AC100RNMDKG/EU	AC120RNMDKG/EU
			Outdoor Unit	AC100RXADKG/EU	AC100RXADNG/EU	AC120RXADKG/EU
	Power Supply		Ø, #, V, Hz	1, 2, 220-240, 50	3, 4, 380-415, 50	1, 2, 220-240, 50
	Heat Exchanger	Type		-	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al
			Tube	-	Cu	Cu
		Fin Treatment		-	Anti-Corrosion	Anti-Corrosion
	Compressor	Model Name		-	UB8TN8300FJU	UB8TN8300FJU
		Type		-	Twin BLDC	Twin BLDC
		Output		kW	2.91	4.25
		Oil	Type	-	POE	POE
			Initial charge	cc	1,200	1,700
	Fan	Type		-	Propeller	Propeller
		Discharge direction		-	Front	Front
		Quantity		EA	1	1
		Air Flow Rate	m ³ /min		72	72
			l/s		1,200	1,200
	Fan Motor	Type		-	BLDC Motor	BLDC Motor
		Output		W x n	125 x 1	125 x 1
	Sound	Sound Pressure Level	Cooling	dB(A)	52	54
			Heating	dB(A)	54	56
		Sound Power Level		dB(A)	69	70
	External Dimension	Net Weight		kg	75.0	81.0
		Shipping Weight		kg	80.0	86.0
		Net Dimensions (WxHxD)		mm	940 x 998 x 330	940 x 998 x 330
		Shipping Dimensions (WxHxD)		mm	995 x 1,096 x 426	995 x 1,096 x 426
	Casing	Material	Body	-	EGI Steel Plate	EGI Steel Plate
	Operating Temp. Range	Cooling		°C	-15 ~ 50	-15 ~ 50
		Heating		°C	-20 ~ 24	-20 ~ 24

NOTE

- Specification may be subject to change without prior notice.
- 1) Performances are based on the following test conditions.
 - Cooling : Indoor temperature 27°C DB, 19°C WB, Outdoor temperature 35°C DB, 24°C WB
 - Heating : Indoor temperature 20°C DB, 15°C WB, Outdoor temperature 7°C DB, 6°C WB
 - Equivalent refrigerant pipe length 5m, Level differences 0m
- 2) Select wire size based on the value of MCA
- 3) 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 = 20uPa
- 4) 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
- 5) These products contain R32(GWP=675) which is fluorinated greenhouse gas.
- 6) 'MWR-WG00*N' is new wired remote control type(Graphic).
If you need the latest control system information, please refer to SAC control TDB.

1. Specification

MSP Duct

System	Model Name	Indoor Unit		AC120RNMDKG/EU	AC140RNMDKG/EU	AC140RNMDKG/EU
		Outdoor Unit		AC120RXADNG/EU	AC140RXADKG/EU	AC140RXADNG/EU
	Mode			-	HEAT PUMP	HEAT PUMP
	Performance	Capacity (Min/Std/Max)	Cooling	kW	3.0 / 12.0 / 13.5	3.5 / 13.4 / 15.5
				Btu/h	10,240 / 41,000 / 46,100	11,940 / 45,720 / 52,900
			Heating	kW	2.5 / 13.2 / 17.0	3.5 / 15.5 / 18.0
				Btu/h	8,530 / 45,040 / 58,000	11,940 / 52,900 / 61,420
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.90 / 4.48 / 5.50	0.80 / 4.62 / 6.45
			Heating	kW	0.70 / 3.79 / 6.40	0.70 / 4.64 / 7.36
		Current Input (Min/Std/Max)	Cooling	A	1.9 / 6.9 / 10.0	3.7 / 20.0 / 28.0
			Heating	A	1.5 / 5.9 / 12.0	3.5 / 20.0 / 32.0
		Current	MCA	A	18.6	34.5
			MFA	A	18.6	40.0
	Efficiency	EER	Cooling	-	2.67	2.90
		COP	Heating	-	3.48	3.34
		SEER (Cooling Energy Grade)		-	5.8 (A+)	6.0 (-)
		SCOP (Heating Energy Grade)		-	4.0 (A+)	4.0 (-)
		Pdesignh		kW	6.5	8.4
	Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection
				Φ, mm (inch)	9.52 (3/8)	9.52 (3/8)
		Gas Pipe		Type	Flare connection	Flare connection
				Φ, mm (inch)	15.88 (5/8)	15.88 (5/8)
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes
		Piping length (ODU-IDU)	Standard	m	5	5
			Max.	m	50	75
			Elevation	m	30	30
	Chargeless		m	30	30	
	Wiring connections	Communication	Min.	mm²	0.75	0.75
Remark			-	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	
	Factory Charging		kg	2.7	2.9	
			tCO ₂ e	1.82	1.96	

1. Specification

MSP Duct

Indoor Unit	Model Name		Indoor Unit		AC120RNMDKG/EU		AC140RNMDKG/EU		AC140RNMDKG/EU			
			Outdoor Unit		AC120RXADNG/EU		AC140RXADKG/EU		AC140RXADNG/EU			
	Power Supply			Ø, #, V, Hz		1,2,220-240,50		1,2,220-240,50		1,2,220-240,50		
	Heat Exchanger	Type		-		F&T		F&T		F&T		
		Material	Fin		-		Al		Al		Al	
			Tube		-		Cu		Cu		Cu	
		Fin Treatment		-		Green Hydrophile		Green Hydrophile		Green Hydrophile		
	Fan	Type		-		Sirocco		Sirocco		Sirocco		
		Quantity		EA		3		3		3		
		Air Flow Rate	Cooling (H/M/L)	m³/min		33.0 / 28.0 / 23.0		33.0 / 28.0 / 23.0		33.0 / 28.0 / 23.0		
				l/s		550 / 467 / 383		550 / 467 / 383		550 / 467 / 383		
			Heating (H/M/L)	m³/min		33.0 / 28.0 / 23.0		33.0 / 28.0 / 23.0		33.0 / 28.0 / 23.0		
				l/s		550 / 467 / 383		550 / 467 / 383		550 / 467 / 383		
		External Static Pressure	Min/Std/Max	mmAq		0.0 / 5.2 / 15.0		0.0 / 5.2 / 15.0		0.0 / 5.2 / 15.0		
				Pa		0.0 / 51.0 / 147.0		0.0 / 51.0 / 147.0		0.0 / 51.0 / 147.0		
	Fan Motor	Type		-		BLDC		BLDC		BLDC		
		Output		W x n		244 x 1		244 x1		244 x1		
	Drain	Drain Pipe		Φ, mm		VP-25(OD32, ID25)		VP-25(OD32, ID25)		VP-25(OD32, ID25)		
	Sound	Sound Pressure Level	High/Mid/Low/(Silent)	dB(A)		37 / 34 / 30		37 / 34 / 30		37 / 34 / 30		
		Sound Power Level		dB(A)		62		62		62		
	External Dimension	Net Weight		kg		38.5		38.5		38.5		
		Shipping Weight		kg		45.0		45.0		45.0		
		Net Dimensions (WxHxD)		mm		1,300 x 300 x 700		1,300 x 300 x 700		1,300 x 300 x 700		
		Shipping Dimensions (WxHxD)		mm		1,529 x 370 x 779		1,529 x 370 x 779		1,529 x 370 x 779		
	Casing	Material		-		GI Steel Plate		GI Steel Plate		GI Steel Plate		
	Control System	Infrared remote control		-		AR-EH03E		AR-EH03E		AR-EH03E		
		Wired remote control		-		MWR-WE13N MWR-WG00*N		MWR-WE13N MWR-WG00*N		MWR-WE13N MWR-WG00*N		
	Drain Pump	Drain Pump		-		-		-		-		
		Max. lifting Height / Displacement		mm / Liter / h		-		-		-		
	Additional Accessories	Drain Pump	External Model	-		MDP-G075SP		MDP-G075SP		MDP-G075SP		
			Internal Model	-		MDP-G075SQ		MDP-G075SQ		MDP-G075SQ		
			Max. lifting Height / Displacement	mm / Liter / h		750 / 24		750 / 24		750 / 24		
		Air Filter		-		Removable / Washable		Removable / Washable		Removable / Washable		
		Virus Doctor		-		Option		Option		Option		

1. Specification

MSP Duct

Outdoor Unit	Model Name	Indoor Unit		AC120RNMDKG/EU	AC140RNMDKG/EU	AC140RNMDKG/EU	
		Outdoor Unit		AC120RXADNG/EU	AC140RXADKG/EU	AC140RXADNG/EU	
	Power Supply			Ø, #, V, Hz	3, 4, 380-415, 50	1, 2, 220-240, 50	3, 4, 380-415, 50
	Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
		Material	Fin	-	Al	Al	Al
			Tube	-	Cu	Cu	Cu
		Fin Treatment		-	Anti-Corrosion	Anti-Corrosion	Anti-Corrosion
	Compressor	Model Name			UB5TN5450FJX	UB5TN5450FJX	UB5TN5450FJX
		Type		-	Twin BLDC	Twin BLDC	Twin BLDC
		Output		kW	4.25	4.25	4.25
		Oil	Type	-	POE	POE	POE
			Initial charge	cc	1,700	1,700	1,700
	Fan	Type		-	Propeller	Propeller	Propeller
		Discharge direction		-	Front	Front	Front
		Quantity		EA	1	2	2
		Air Flow Rate		m³/min	72	110	110
				l/s	1,200	1,833	1,833
	Fan Motor	Type		-	BLDC Motor	BLDC Motor	BLDC Motor
		Output		W x n	125 x 1	125 x 2	125 x 2
	Sound	Sound Pressure Level	Cooling	dB(A)	54	53	53
Heating			dB(A)	56	54	54	
Sound Power Level		dB(A)	70	69	69		
External Dimension	Net Weight		kg	80.0	91.5	90.5	
	Shipping Weight		kg	85.0	100.0	99.0	
	Net Dimensions (WxHxD)		mm	940 x 998 x 330	940 x 1,210 x 330	940 x 1,210 x 330	
	Shipping Dimensions (WxHxD)		mm	995 x 1,096 x 426	995 x 1,388 x 426	995 x 1,388 x 426	
Casing	Material	Body	-	EGI Steel Plate	EGI Steel Plate	EGI Steel Plate	
Operating Temp. Range	Cooling		°C	-15 ~ 50	-15 ~ 50	-15 ~ 50	
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24	



NOTE

- Specification may be subject to change without prior notice.
- 1) Performances are based on the following test conditions.
 - Cooling : Indoor temperature 27°C DB, 19°C WB, Outdoor temperature 35°C DB, 24°C WB
 - Heating : Indoor temperature 20°C DB, 15°C WB, Outdoor temperature 7°C DB, 6°C WB
 - Equivalent refrigerant pipe length 5m, Level differences 0m
- 2) Select wire size based on the value of MCA
- 3) 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 = 20uPa
- 4) 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
- 5) These products contain R32(GWP=675) which is fluorinated greenhouse gas.
- 6) 'MWR-WG00*N' is new wired remote control type(Graphic).
If you need the latest control system information, please refer to SAC control TDB.

2. Summary Table

MSP Duct

Performance Characteristics

Model Code	Net Weight (kg)	Capacity			Fan Speed	Airflow (CMM)	Sound Pressure Level (dBA)	Sound Power Level (dBA)
			Cooling (kW)	Heating (kW)				
AC035RNMDKG/EU	25.8	Max.	4.40	4.70	High	10.4	28	52
		Std.	3.50	4.00	Mid	9.2	25	
		Min.	0.80	1.10	Low	8.0	22	
AC052RNMDKG/EU	25.8	Max.	6.50	7.20	High	14.5	29	55
		Std.	5.00	6.00	Mid	12.0	26	
		Min.	1.20	1.10	Low	9.5	23	
AC071RNMDKG/EU	25.8	Max.	8.70	9.00	High	17.0	30	56
		Std.	6.80	8.00	Mid	14.0	27	
		Min.	1.50	1.90	Low	11.0	24	
AC100RNMDKG/EU	33.5	Max.	12.00	15.50	High	28.0	34	58
		Std.	10.00	11.20	Mid	25.0	32	
		Min.	3.00	2.20	Low	22.0	30	
AC120RNMDKG/EU	38.5	Max.	13.50	17.00	High	33.0	37	62
		Std.	12.00	13.20	Mid	28.0	34	
		Min.	3.00	2.50	Low	23.0	30	
AC140RNMDKG/EU	38.5	Max.	15.50	18.00	High	33.0	37	62
		Std.	13.40	15.50	Mid	28.0	34	
		Min.	3.50	3.50	Low	23.0	30	

NOTE

- Sound data is based on cooling operation.

Electric Characteristics

Model		Outdoor Unit				Input Current (Amperes)				Power Supply	
Indoor Unit	Outdoor Unit	Rated	Voltage range			Outdoor Unit		Indoor Unit	Total	MCA(A)	MFA(A)
		Hz	Volts	Min.	Max.	Cooling	Heating				
AC035RNMDKG/EU	AC035RXADKG/EU	50	220 to 240	198	264	10	10	2.5	12.5	12.5	13.8
AC052RNMDKG/EU	AC052RXADKG/EU	50	220 to 240	198	264	16.5	16.5	2.5	19.0	19.0	20.9
AC071RNMDKG/EU	AC071RXADKG/EU	50	220 to 240	198	264	16.5	16.5	2.5	19.0	19.0	20.9
AC100RNMDKG/EU	AC100RXADKG/EU	50	220 to 240	198	264	25.5	25.5	1.0	26.5	26.5	30.0
AC100RNMDKG/EU	AC100RXADNG/EU	50	380 to 415	342	456.5	17.6	17.6	1.0	18.6	18.6	18.6
AC120RNMDKG/EU	AC120RXADKG/EU	50	220 to 240	198	264	25.5	25.5	1.0	26.5	26.5	30.0
AC120RNMDKG/EU	AC120RXADNG/EU	50	380 to 415	342	456.5	17.6	17.6	1.0	18.6	18.6	18.6
AC140RNMDKG/EU	AC140RXADKG/EU	50	220 to 240	198	264	33.5	33.5	1.0	34.5	34.5	40.0
AC140RNMDKG/EU	AC140RXADNG/EU	50	380 to 415	342	456.5	17.6	17.6	1.0	18.6	18.6	18.6

NOTE

- MCA : Minimum circuit amperes
- MFA : Maximum fuse amperes
- Select wire size based on the value of MCA

3. Capacity Table

MSP Duct

(1) AC035RNMDKG/EU+AC035RXADKG/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	3.4	2.7	0.73	3.6	2.8	0.74	3.7	2.9	0.76	3.9	3.0	0.78	3.9	2.9	0.78	4.1	2.9	0.79	4.3	2.9	0.81
21	3.3	2.6	0.77	3.4	2.7	0.78	3.6	2.7	0.80	3.7	2.8	0.82	3.7	2.8	0.82	3.9	2.8	0.83	4.1	2.7	0.85
35	3.1	2.5	0.96	3.3	2.5	0.98	3.4	2.6	1.00	3.5	2.7	1.02	3.6	2.7	1.03	3.7	2.6	1.04	3.9	2.6	1.06
46	2.6	2.4	0.86	2.8	2.4	0.88	2.9	2.5	0.90	3.0	2.6	0.92	3.0	2.5	0.93	3.2	2.5	0.94	3.3	2.5	0.96

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	2.8	1.53	2.8	1.51	2.8	1.50	2.7	1.48	2.7	1.47	2.7	1.45
-15	3.5	1.76	3.5	1.74	3.5	1.73	3.4	1.71	3.4	1.69	3.4	1.67
-5	4.0	1.64	4.0	1.63	3.9	1.61	3.9	1.59	3.8	1.58	3.8	1.56
0	4.2	1.41	4.1	1.39	4.1	1.38	4.0	1.37	4.0	1.35	4.0	1.34
7	4.1	1.17	4.0	1.16	4.0	1.15	4.0	1.14	3.9	1.13	3.9	1.12
24	5.3	1.35	5.3	1.34	5.2	1.32	5.1	1.31	5.1	1.30	5.0	1.28

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

MSP Duct

(2) AC052RNMDKG/EU+AC052RXADKG/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	4.9	3.8	1.14	5.1	3.9	1.17	5.3	4.1	1.19	5.5	4.2	1.22	5.6	4.1	1.23	5.9	4.1	1.24	6.2	4.0	1.27
21	4.6	3.6	1.20	4.9	3.8	1.23	5.1	3.9	1.25	5.3	4.0	1.28	5.4	4.0	1.29	5.6	3.9	1.31	5.9	3.8	1.33
35	4.4	3.5	1.51	4.7	3.6	1.54	4.9	3.7	1.57	5.0	3.8	1.60	5.1	3.8	1.62	5.4	3.7	1.63	5.6	3.6	1.66
46	3.8	3.2	1.36	4.0	3.3	1.38	4.1	3.4	1.41	4.3	3.5	1.44	4.3	3.5	1.45	4.6	3.5	1.47	4.8	3.4	1.50
50	2.9	2.6	1.20	3.0	2.6	1.23	3.2	2.7	1.25	3.3	2.8	1.28	3.3	2.8	1.29	3.5	2.7	1.31	3.7	2.7	1.33

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	4.2	2.17	4.2	2.15	4.1	2.13	4.1	2.11	4.1	2.09	4.0	2.07
-15	5.3	2.51	5.3	2.48	5.2	2.46	5.2	2.44	5.1	2.41	5.1	2.39
-5	6.0	2.34	5.9	2.32	5.9	2.30	5.8	2.27	5.8	2.25	5.7	2.23
0	6.2	2.01	6.2	1.99	6.1	1.97	6.1	1.95	6.0	1.93	5.9	1.91
7	6.1	1.67	6.1	1.66	6.0	1.64	5.9	1.62	5.9	1.61	5.8	1.59
24	8.0	1.92	7.9	1.90	7.8	1.89	7.7	1.87	7.6	1.85	7.6	1.83

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

MSP Duct

(3) AC071RNMDKG/EU+AC071RXADKG/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	6.6	4.9	1.66	7.0	5.1	1.69	7.3	5.2	1.73	7.5	5.4	1.76	7.6	5.3	1.78	8.0	5.3	1.80	8.4	5.2	1.83
21	6.3	4.7	1.75	6.6	4.8	1.78	6.9	5.0	1.82	7.1	5.1	1.86	7.3	5.1	1.87	7.6	5.0	1.89	8.0	4.9	1.93
35	6.0	4.5	2.18	6.3	4.6	2.23	6.6	4.8	2.27	6.8	4.9	2.32	6.9	4.9	2.34	7.3	4.8	2.37	7.6	4.7	2.41
46	5.1	4.2	1.97	5.4	4.4	2.01	5.6	4.5	2.05	5.8	4.6	2.09	5.9	4.6	2.11	6.2	4.5	2.13	6.5	4.4	2.17
50	3.9	3.3	1.75	4.1	3.5	1.78	4.3	3.6	1.82	4.4	3.7	1.86	4.5	3.6	1.87	4.7	3.6	1.89	5.0	3.5	1.93

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	5.6	3.32	5.6	3.28	5.5	3.25	5.5	3.22	5.4	3.19	5.4	3.15
-15	7.1	3.83	7.0	3.79	7.0	3.75	6.9	3.71	6.8	3.68	6.8	3.64
-5	8.0	3.57	7.9	3.54	7.8	3.50	7.8	3.47	7.7	3.43	7.6	3.40
0	8.3	3.06	8.2	3.03	8.2	3.00	8.1	2.97	8.0	2.94	7.9	2.91
7	8.2	2.55	8.1	2.53	8.0	2.50	7.9	2.48	7.8	2.45	7.8	2.43
24	10.6	2.93	10.5	2.90	10.4	2.88	10.3	2.85	10.2	2.82	10.1	2.79

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

MSP Duct

(4) AC100RNMDKG/EU+AC100RXADKG/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	9.8	7.5	2.46	10.3	7.8	2.51	10.7	8.0	2.56	11.0	8.3	2.61	11.2	8.2	2.64	11.8	8.1	2.67	12.4	7.9	2.72
21	9.3	7.2	2.59	9.8	7.4	2.64	10.2	7.6	2.70	10.5	7.9	2.75	10.7	7.8	2.78	11.2	7.7	2.81	11.8	7.6	2.86
35	8.8	6.8	3.24	9.3	7.1	3.30	9.7	7.3	3.37	10.0	7.5	3.44	10.2	7.4	3.47	10.7	7.4	3.51	11.2	7.2	3.58
46	7.5	6.4	3.40	7.9	6.6	3.47	8.2	6.8	3.54	8.5	7.0	3.61	8.7	6.9	3.65	9.1	6.9	3.68	9.6	6.7	3.76
50	5.8	5.0	2.82	6.1	5.2	2.87	6.3	5.4	2.93	6.5	5.5	2.99	6.6	5.5	3.02	7.0	5.4	3.05	7.3	5.3	3.11

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	7.9	4.64	7.8	4.60	7.7	4.55	7.7	4.50	7.6	4.46	7.5	4.41
-15	9.9	5.00	9.8	4.95	9.7	4.90	9.6	4.85	9.6	4.80	9.5	4.75
-5	11.2	5.36	11.1	5.30	11.0	5.25	10.9	5.20	10.8	5.15	10.7	5.09
0	11.7	4.28	11.5	4.24	11.4	4.20	11.3	4.16	11.2	4.12	11.1	4.08
7	11.4	3.57	11.3	3.54	11.2	3.50	11.1	3.47	11.0	3.43	10.9	3.40
24	14.9	4.11	14.7	4.07	14.6	4.03	14.4	3.98	14.3	3.94	14.1	3.91

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

MSP Duct

(5) AC100RNMDKG/EU+AC100RXADNG/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	9.8	7.5	2.45	10.3	7.8	2.50	10.7	8.0	2.55	11.0	8.3	2.60	11.2	8.2	2.63	11.8	8.1	2.65	12.4	7.9	2.70
21	9.3	7.2	2.58	9.8	7.4	2.63	10.2	7.6	2.68	10.5	7.9	2.74	10.7	7.8	2.76	11.2	7.7	2.79	11.8	7.6	2.85
35	8.8	6.8	3.22	9.3	7.1	3.28	9.7	7.3	3.35	10.0	7.5	3.42	10.2	7.4	3.45	10.7	7.4	3.49	11.2	7.2	3.56
46	7.8	6.6	3.54	8.2	6.8	3.61	8.5	7.0	3.69	8.8	7.2	3.76	9.0	7.2	3.80	9.4	7.1	3.84	9.9	7.0	3.91
50	6.4	5.6	3.15	6.7	5.8	3.22	7.0	5.9	3.28	7.2	6.1	3.35	7.3	6.1	3.39	7.7	6.0	3.42	8.1	5.9	3.49

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	7.9	4.54	7.8	4.49	7.7	4.45	7.7	4.40	7.6	4.36	7.5	4.31
-15	9.9	4.88	9.8	4.84	9.7	4.79	9.6	4.74	9.6	4.69	9.5	4.65
-5	11.2	5.23	11.1	5.18	11.0	5.13	10.9	5.08	10.8	5.03	10.7	4.98
0	11.7	4.19	11.5	4.15	11.4	4.10	11.3	4.06	11.2	4.02	11.1	3.98
7	11.4	3.49	11.3	3.45	11.2	3.42	11.1	3.39	11.0	3.35	10.9	3.32
24	14.9	4.01	14.7	3.97	14.6	3.93	14.4	3.89	14.3	3.85	14.1	3.82

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

MSP Duct

(6) AC120RNMDKG/EU+AC120RXADKG/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	11.7	9.1	3.22	12.3	9.3	3.28	12.8	9.6	3.35	13.2	9.9	3.42	13.5	9.8	3.45	14.2	9.7	3.49	14.9	9.5	3.56
21	11.1	8.6	3.39	11.7	8.9	3.46	12.2	9.2	3.53	12.6	9.5	3.60	12.9	9.4	3.64	13.5	9.3	3.67	14.2	9.1	3.75
35	10.6	8.2	4.24	11.2	8.5	4.32	11.6	8.7	4.41	12.0	9.0	4.50	12.2	8.9	4.55	12.9	8.8	4.59	13.5	8.6	4.68
46	9.0	7.7	3.81	9.5	7.9	3.89	9.9	8.1	3.97	10.2	8.4	4.05	10.4	8.3	4.09	10.9	8.2	4.13	11.5	8.1	4.21
50	6.9	6.1	3.39	7.3	6.2	3.46	7.6	6.4	3.53	7.8	6.6	3.60	8.0	6.6	3.64	8.4	6.5	3.67	8.8	6.4	3.75

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	9.3	5.12	9.2	5.07	9.1	5.02	9.0	4.97	8.9	4.92	8.8	4.87
-15	11.7	5.51	11.6	5.46	11.5	5.40	11.4	5.35	11.3	5.30	11.1	5.24
-5	13.2	5.71	13.1	5.65	12.9	5.60	12.8	5.54	12.7	5.49	12.6	5.43
0	13.7	4.73	13.6	4.68	13.5	4.63	13.3	4.59	13.2	4.54	13.1	4.49
7	13.5	3.94	13.3	3.90	13.2	3.86	13.1	3.82	12.9	3.78	12.8	3.75
24	17.5	4.53	17.3	4.48	17.2	4.44	17.0	4.39	16.8	4.35	16.7	4.31

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

MSP Duct

(7) AC120RNMDKG/EU+AC120RXADNG/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	11.7	9.1	3.20	12.3	9.3	3.27	12.8	9.6	3.34	13.2	9.9	3.40	13.5	9.8	3.44	14.2	9.7	3.47	14.9	9.5	3.54
21	11.1	8.6	3.37	11.7	8.9	3.44	12.2	9.2	3.51	12.6	9.5	3.58	12.9	9.4	3.62	13.5	9.3	3.66	14.2	9.1	3.73
35	10.6	8.2	4.22	11.2	8.5	4.30	11.6	8.7	4.39	12.0	9.0	4.48	12.2	8.9	4.52	12.9	8.8	4.57	13.5	8.6	4.66
46	9.0	7.5	3.79	9.5	7.8	3.87	9.9	8.0	3.95	10.2	8.2	4.03	10.4	8.2	4.07	10.9	8.1	4.11	11.5	7.9	4.19
50	6.9	5.9	3.37	7.3	6.1	3.44	7.6	6.3	3.51	7.8	6.5	3.58	8.0	6.4	3.62	8.4	6.3	3.66	8.8	6.2	3.73

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	9.3	5.03	9.2	4.98	9.1	4.93	9.0	4.88	8.9	4.83	8.8	4.78
-15	11.7	5.41	11.6	5.36	11.5	5.31	11.4	5.25	11.3	5.20	11.1	5.15
-5	13.2	5.61	13.1	5.55	12.9	5.50	12.8	5.44	12.7	5.39	12.6	5.33
0	13.7	4.64	13.6	4.59	13.5	4.55	13.3	4.50	13.2	4.46	13.1	4.41
7	13.5	3.87	13.3	3.83	13.2	3.79	13.1	3.75	12.9	3.71	12.8	3.68
24	17.5	4.45	17.3	4.40	17.2	4.36	17.0	4.31	16.8	4.27	16.7	4.23

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

MSP Duct

(8) AC140RNMDKG/EU+AC140RXADKG/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	13.1	9.9	3.30	13.8	10.2	3.37	14.3	10.5	3.44	14.8	10.8	3.51	15.1	10.7	3.55	15.8	10.6	3.58	16.6	10.4	3.65
21	12.4	9.4	3.48	13.1	9.7	3.55	13.6	10.0	3.62	14.1	10.3	3.70	14.4	10.2	3.73	15.1	10.1	3.77	15.8	9.9	3.85
35	11.9	8.9	4.35	12.5	9.2	4.44	13.0	9.5	4.53	13.4	9.8	4.62	13.7	9.7	4.67	14.4	9.6	4.71	15.1	9.4	4.81
46	10.1	8.4	3.91	10.6	8.6	3.99	11.0	8.9	4.07	11.4	9.2	4.16	11.6	9.1	4.20	12.2	9.0	4.24	12.8	8.8	4.33
50	7.7	6.6	3.48	8.1	6.8	3.55	8.4	7.0	3.62	8.7	7.2	3.70	8.9	7.2	3.73	9.3	7.1	3.77	9.8	6.9	3.85

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	10.3	5.21	10.2	5.16	10.1	5.10	10.0	5.05	9.9	5.00	9.8	4.95
-15	13.8	6.15	13.6	6.09	13.5	6.03	13.4	5.97	13.2	5.91	13.1	5.85
-5	15.5	6.63	15.3	6.56	15.2	6.50	15.0	6.43	14.9	6.37	14.7	6.30
0	16.1	5.68	16.0	5.62	15.8	5.57	15.7	5.51	15.5	5.46	15.3	5.40
7	15.8	4.73	15.7	4.69	15.5	4.64	15.3	4.59	15.2	4.55	15.0	4.50
24	20.6	5.44	20.4	5.39	20.2	5.34	19.9	5.28	19.7	5.23	19.6	5.18

NOTE

- The performance table shows the average value of each conditions.

3. Capacity Table

MSP Duct

(9) AC140RNMDKG/EU+AC140RXADNG/EU

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)																				
	20 / 14			22 / 16			25 / 18			27 / 19			28 / 20			30 / 22			32 / 24		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15	13.1	9.9	3.30	13.8	10.2	3.37	14.3	10.5	3.44	14.8	10.8	3.51	15.1	10.7	3.55	15.8	10.6	3.58	16.6	10.4	3.65
21	12.4	9.4	3.48	13.1	9.7	3.55	13.6	10.0	3.62	14.1	10.3	3.70	14.4	10.2	3.73	15.1	10.1	3.77	15.8	9.9	3.85
35	11.9	8.9	4.35	12.5	9.2	4.44	13.0	9.5	4.53	13.4	9.8	4.62	13.7	9.7	4.67	14.4	9.6	4.71	15.1	9.4	4.81
46	10.1	8.4	3.91	10.6	8.6	3.99	11.0	8.9	4.07	11.4	9.2	4.16	11.6	9.1	4.20	12.2	9.0	4.24	12.8	8.8	4.33
50	7.7	6.6	3.48	8.1	6.8	3.55	8.4	7.0	3.62	8.7	7.2	3.70	8.9	7.2	3.73	9.3	7.1	3.77	9.8	6.9	3.85

Heating

TC : Total Capacity, PI : Power Input

Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB)											
	16		18		20		21		22		24	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-20	10.3	5.06	10.2	5.01	10.1	4.96	10.0	4.91	9.9	4.86	9.8	4.81
-15	13.8	5.98	13.6	5.92	13.5	5.86	13.4	5.80	13.2	5.75	13.1	5.69
-5	15.5	6.44	15.3	6.38	15.2	6.31	15.0	6.25	14.9	6.19	14.7	6.13
0	16.1	5.52	16.0	5.47	15.8	5.41	15.7	5.36	15.5	5.30	15.3	5.25
7	15.8	4.60	15.7	4.56	15.5	4.51	15.3	4.46	15.2	4.42	15.0	4.38
24	20.6	5.29	20.4	5.24	20.2	5.19	19.9	5.13	19.7	5.08	19.6	5.03

NOTE

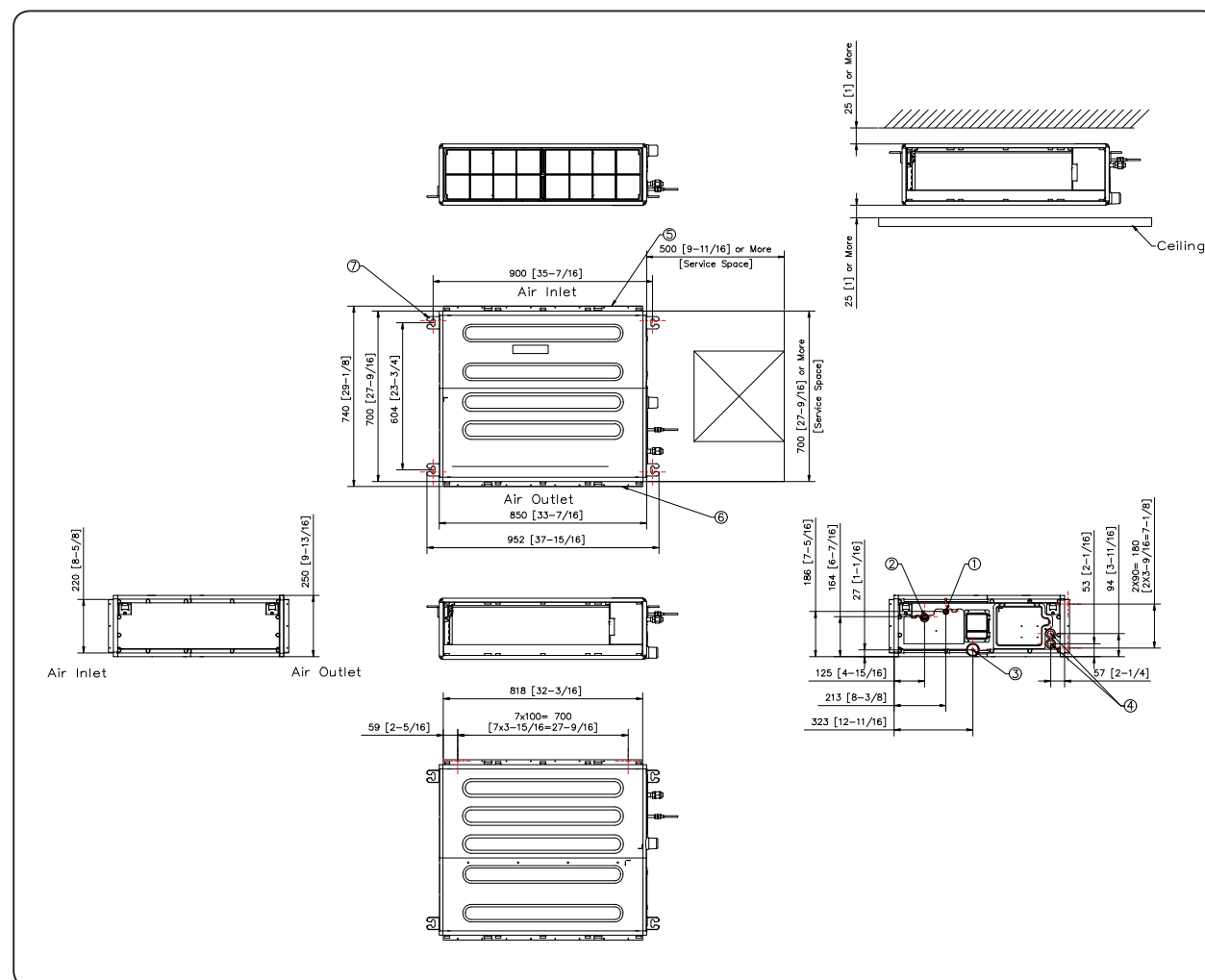
- The performance table shows the average value of each conditions.

4. Dimensional Drawing

MSP Duct

AC035/052/071RNMDKG/EU

Units : mm [inches]



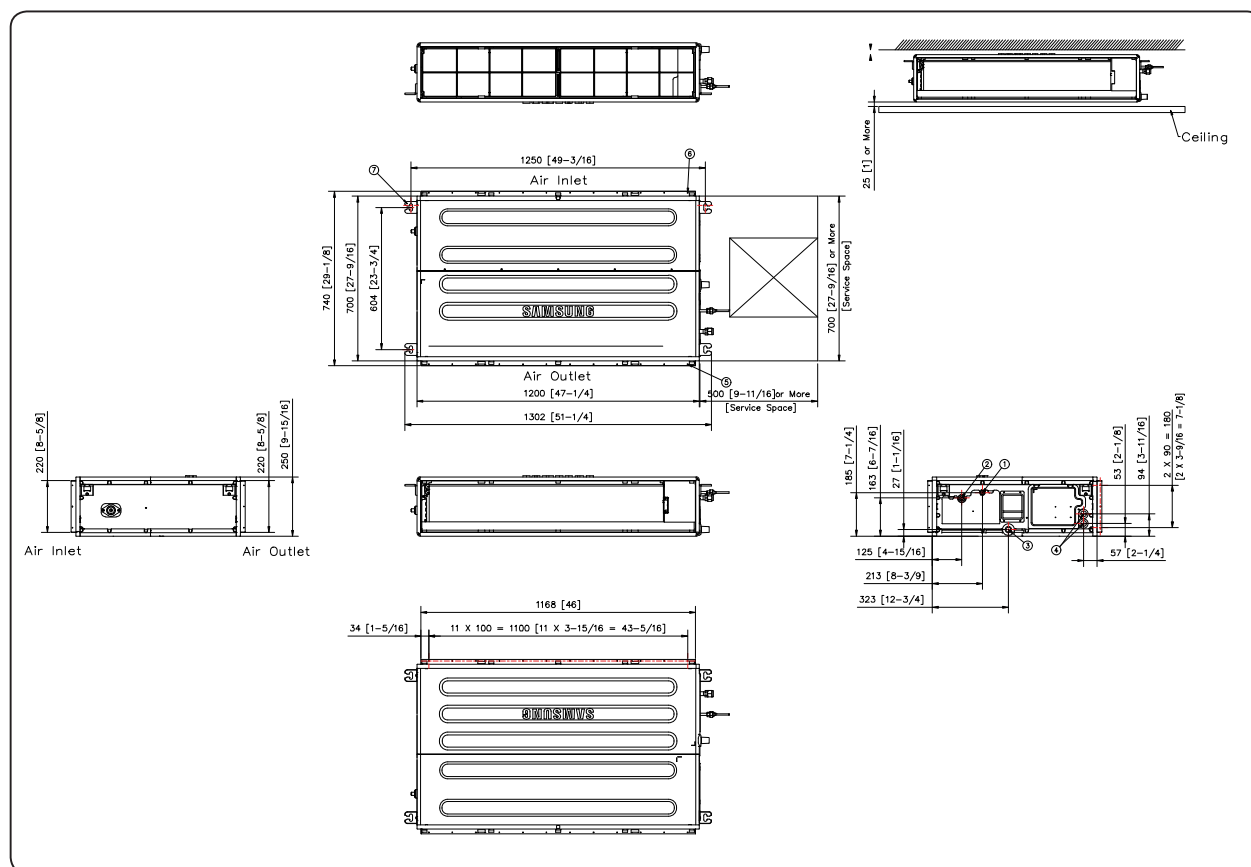
No.	Name	Description		
		AC035RNMDKG/EU	AC052RNMDKG/EU	AC071RNMDKG/EU
1	Liquid pipe connection	Φ6.35(1/4)		
2	Gas pipe connection	Φ9.52(3/8)	Φ12.7(1/2)	Φ15.88(5/8)
3	Drain pipe connection	VP-25(OD32, ID25)		
4	Power supply & Communication wiring conduit			
5	Air suction flange			
6	Air discharge flange			
7	Hook	Use M8~M10 bolt(4ea)		

4. Dimensional Drawing

MSP Duct

AC100RNMDKG/EU

Units : mm [inches]



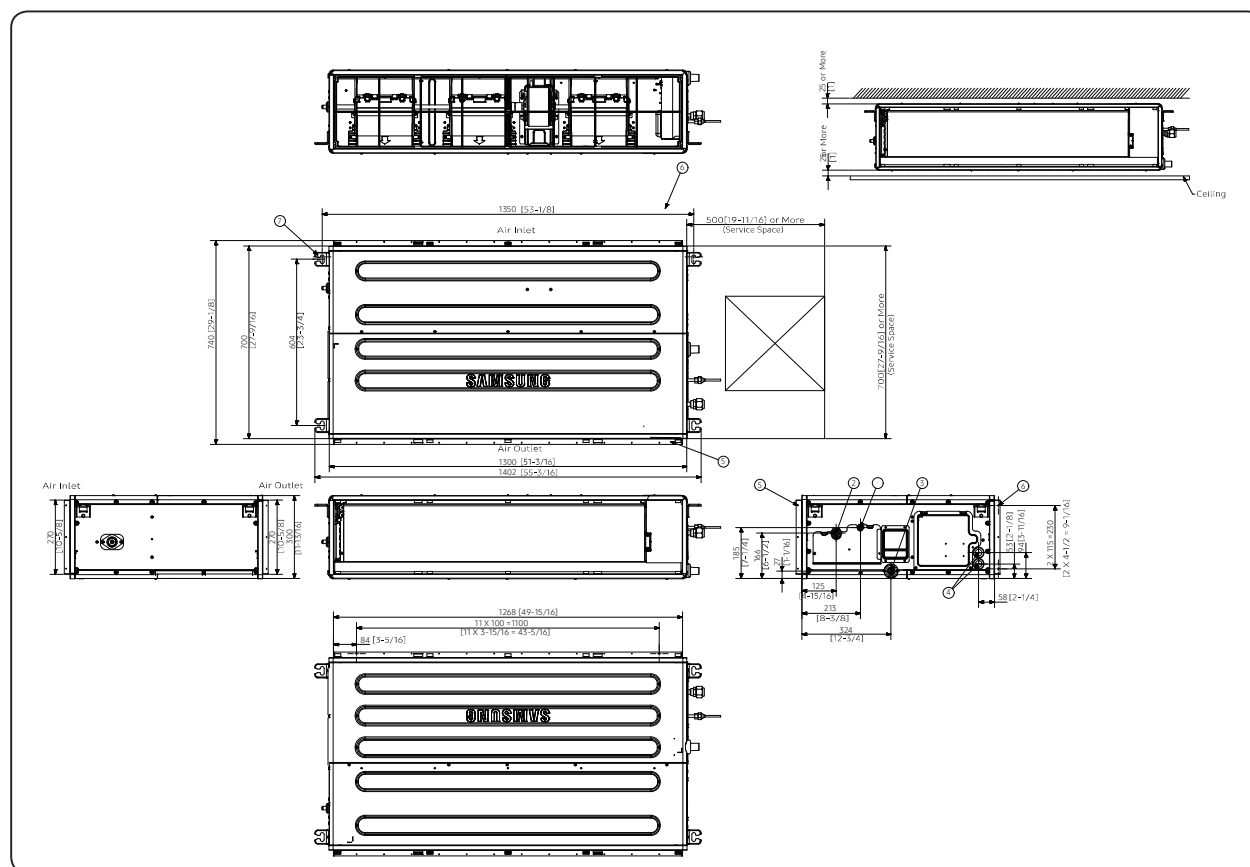
No.	Name	Description
1	Liquid pipe connection	Ø9.52 (3/8)
2	Gas pipe connection	Ø15.88 (5/8)
3	Drain pipe	VP25(OD32, ID25)
4	Power & Communication Conduits	
5	Air suction flange	
6	Air discharge flange	
7	Hook	Use M8~M10 bolt (4ea)

4. Dimensional Drawing

MSP Duct

AC120/140RNMDKG/EU

Units : mm [inches]



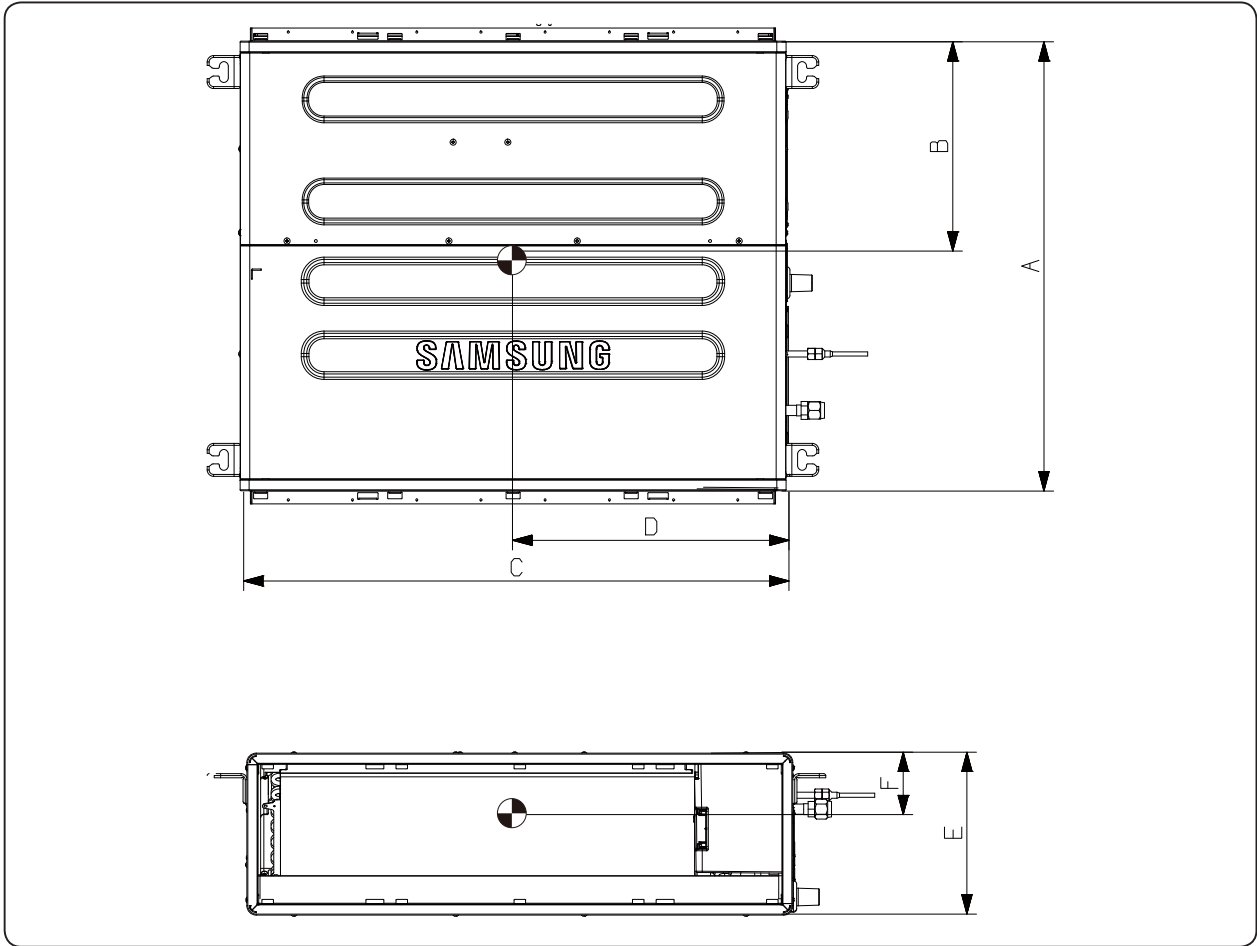
No.	Name	Description
1	Liquid pipe connection	Ø9.52 (3/8)
2	Gas pipe connection	Ø15.88 (5/8)
3	Drain pipe	VP25(OD32, ID25)
4	Power & Communication Conduits	
5	Air suction flange	
6	Air discharge flange	
7	Hook	Use M8-M10 bolt (4ea)

5. Center of Gravity

MSP Duct

AC035/052/071/100/120/140RNMDKG/EU

Units : mm [inches]

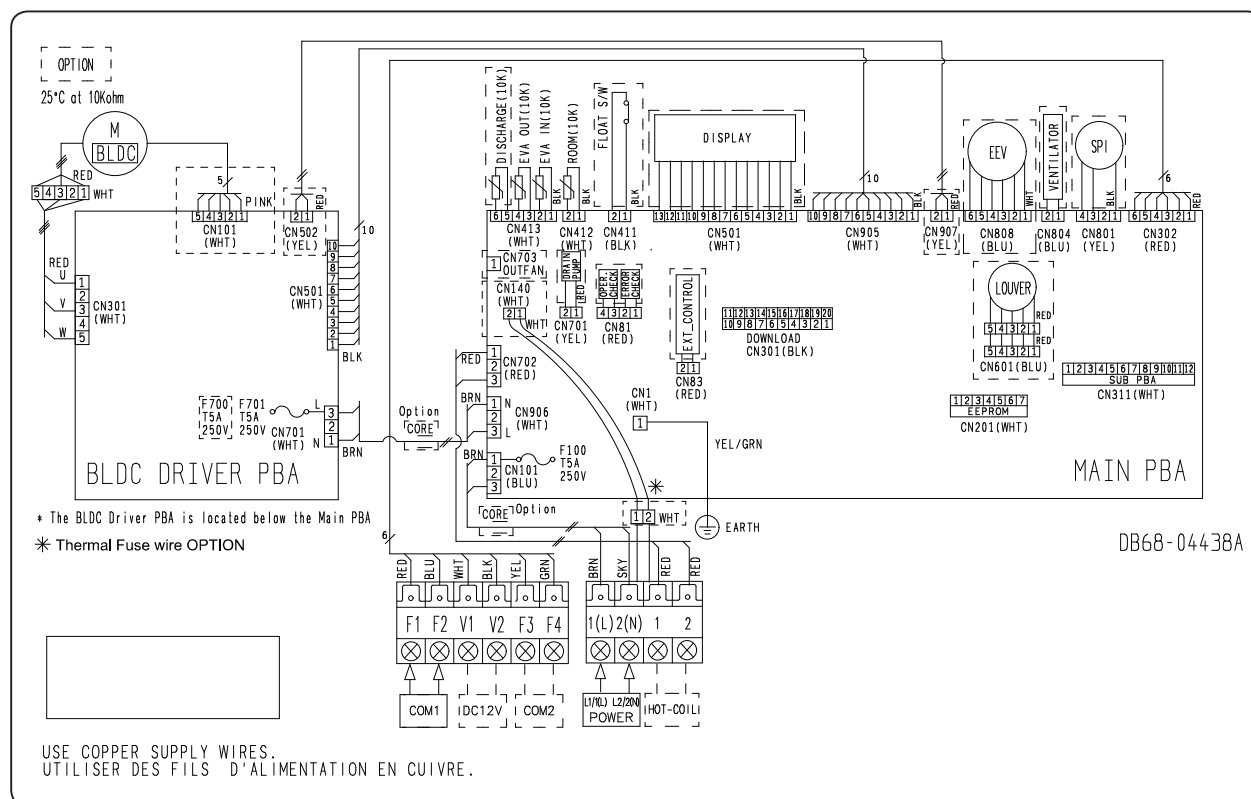


	A	B	C	D	E	F
~7.1kW	700 [27-9/16]	335 [14]	900 [35-7/16]	405 [15-15/16]	250 [9-13/16]	125 [4-15/16]
9.0kW ~ 10kW	700 [27-9/16]	265 [10-7/16]	1250 [49-3/16]	565 [18-5/16]	250 [9-13/16]	125 [4-15/16]
12kW ~ 14kW	700 [27-9/16]	265 [10-7/16]	1350 [53-1/8]	650 [25-5/8]	300 [11-13/16]	150 [5-15/16]

6. Electrical Wiring Diagram

MSP Duct

AC035/052/071/100/120/140RNMDKG/EU



SPI	S-Plasma ion	EEV	Electronic Expansion Valve	ROOM	Thermistor ROOM in (10K)
M-BLDC	BLDC Motor	EVA-IN	Thermistor EVA IN(10K)	EVA-OUT	Thermistor EVA OUT(10K)

NOTE

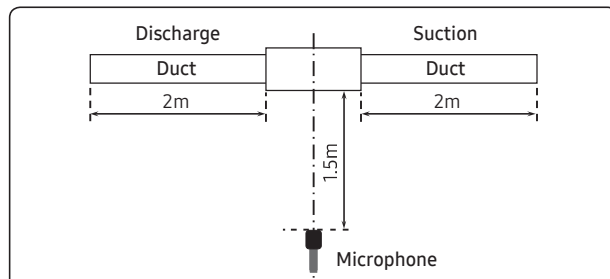
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- ⏏ Protective earth(screw)

7. Sound Data

MSP Duct

Sound Pressure Level

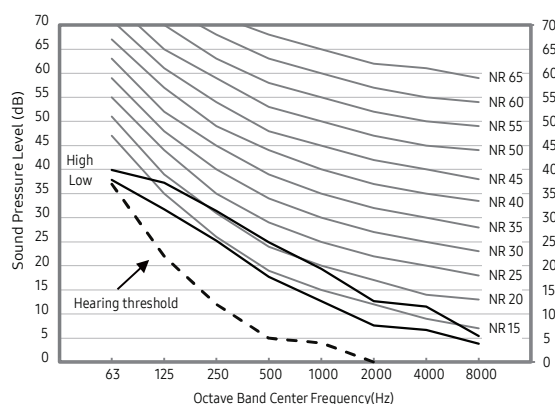
Unit: dB(A)



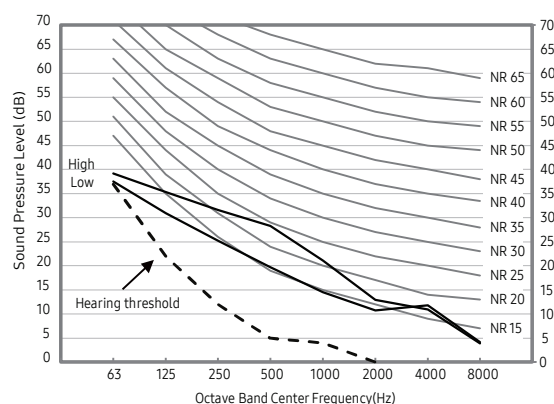
Model	HIGH	MID	LOW
AC035RNMDKG/EU	28	25	22
AC052RNMDKG/EU	29	26	23
AC071RNMDKG/EU	30	27	24
AC100RNMDKG/EU	34	32	30

NR Curve

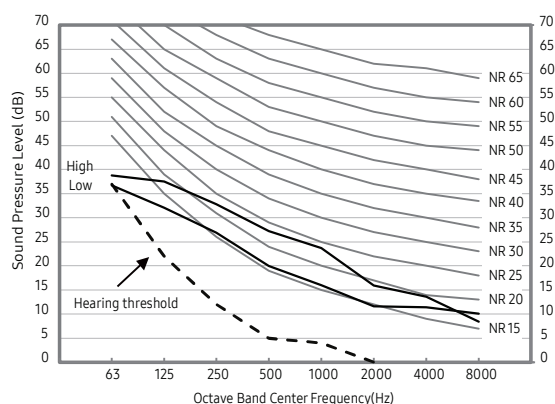
1) AC035RNMDKG/EU



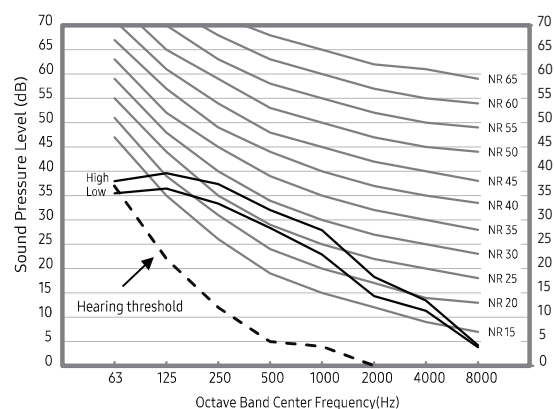
2) AC052RNMDKG/EU



3) AC071RNMDKG/EU



4) AC100RNMDKG/EU



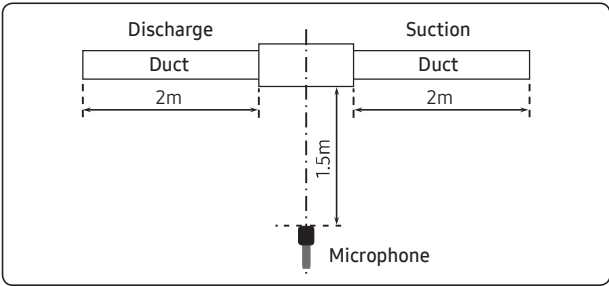
NOTE

- 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.
 - dB(A) = A weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20μPa

7. Sound Data

MSP Duct

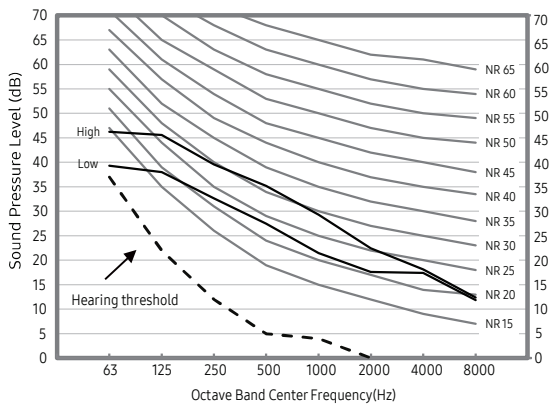
Sound Pressure level



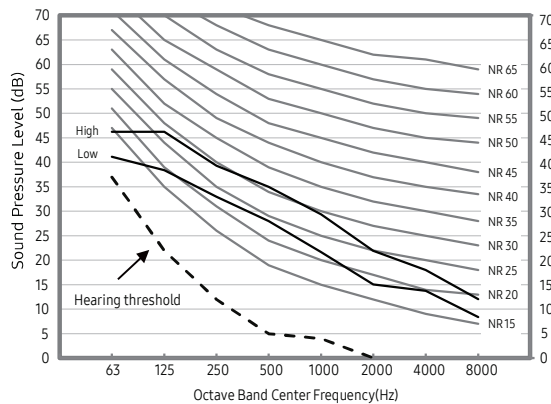
Unit: dB(A)

Model	HIGH	MID	LOW
AC120RNMDKG/EU	37	34	30
AC140RNMDKG/EU	37	34	30

- NR Curve
5) AC120RNMDKG/EU



- 6) AC140RNMDKG/EU



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 = 20μPa

7. Sound Data

MSP Duct

Sound Power level

NOTE

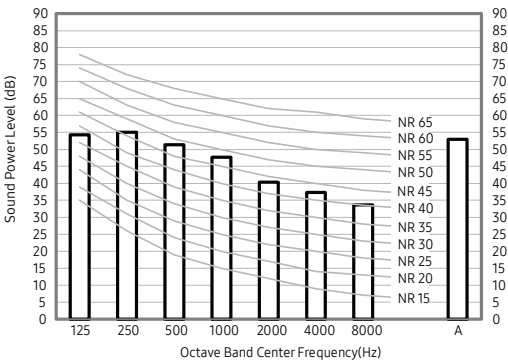
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

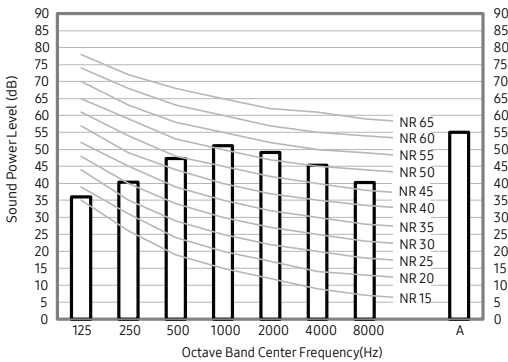
Model	Power
AC035RNMDKG/EU	52
AC052RNMDKG/EU	55
AC071RNMDKG/EU	56
AC100RNMDKG/EU	58

- NR Curve

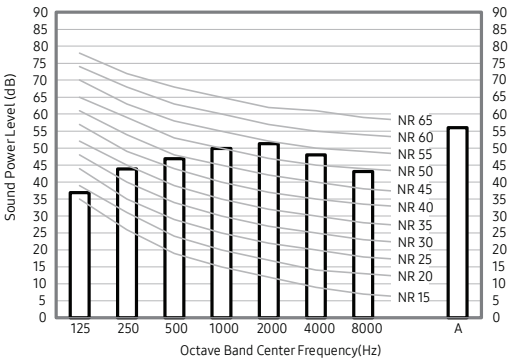
1) AC035RNMDKG/EU



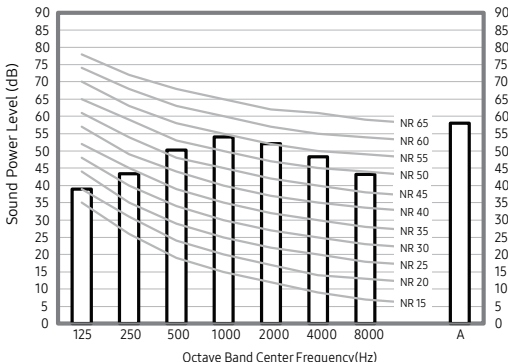
2) AC052RNMDKG/EU



3) AC071RNMDKG/EU



4) AC100RNMDKG/EU



7. Sound Data

MSP Duct

Sound Power level

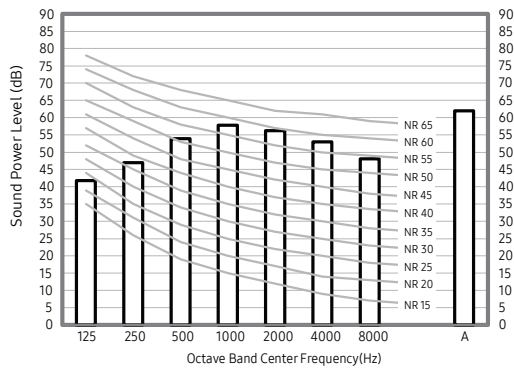


- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

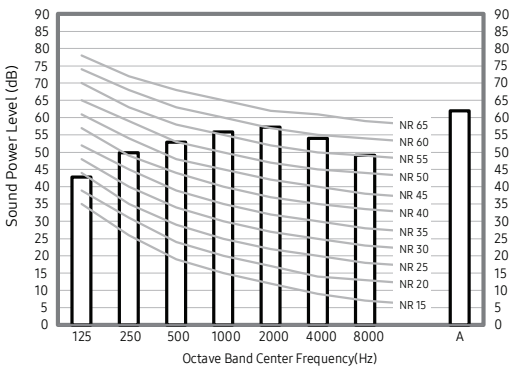
Unit: dB(A)

Model	Power
AC120RNMDKG/EU	62
AC140RNMDKG/EU	62

- NR Curve
 - 5) AC120RNMDKG/EU



- 6) AC140RNMDKG/EU

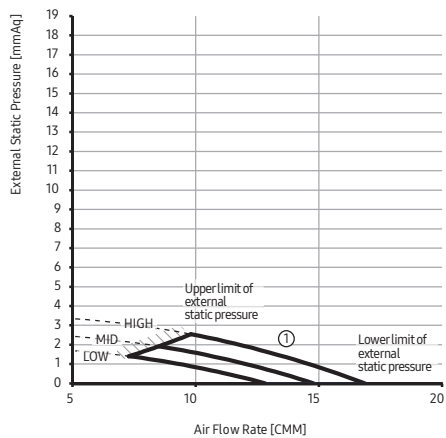


8. Fan Characteristics

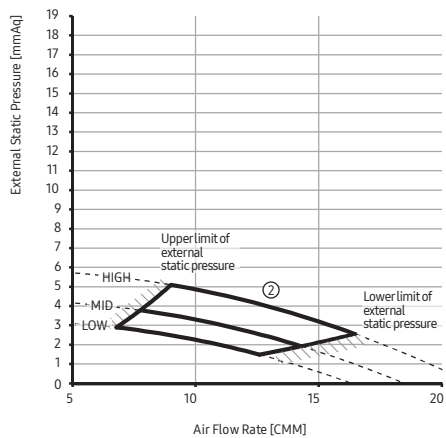
MSP Duct

1) AC035RNMDKG/EU

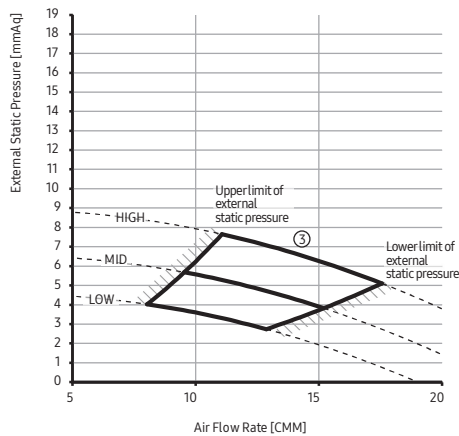
①	External Static Pressure(mmAq)	Option Code
	0≤SP≤2.5	01B17C-1C5080-272328-372008



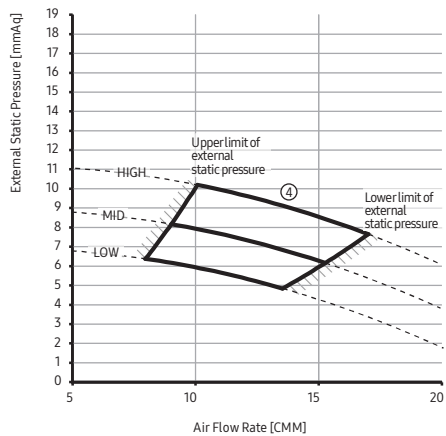
②	External Static Pressure(mmAq)	Option Code
	2.5<SP≤5	01B17C-1C5407-272328-372008



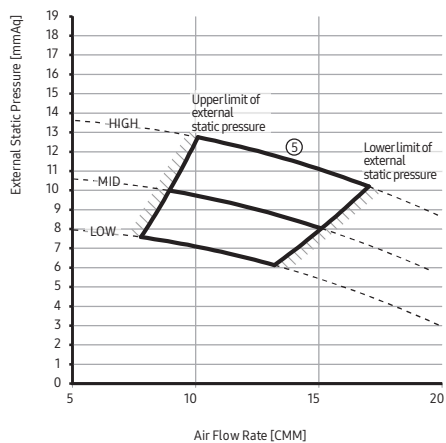
③	External Static Pressure(mmAq)	Option Code
	5<SP≤7.5	01B17C-1C548C-272328-372008



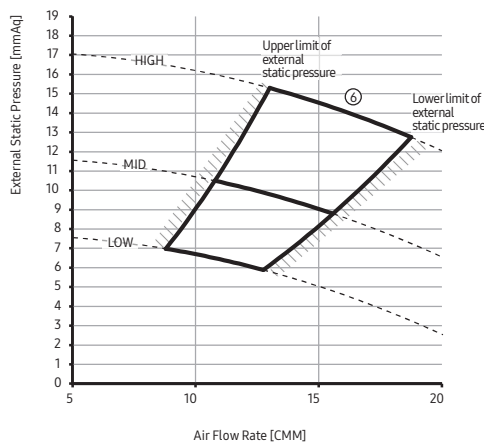
④	External Static Pressure(mmAq)	Option Code
	7.5<SP≤10	01B17C-1C55D3-272328-372008



⑤	External Static Pressure(mmAq)	Option Code
	10<SP≤12.5	01B17C-1C5926-272328-372008



⑥	External Static Pressure(mmAq)	Option Code
	12.5<SP≤15	01B17C-1C5998-272328-372008

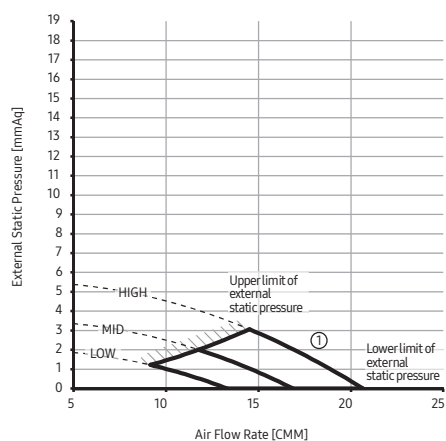


8. Fan Characteristics

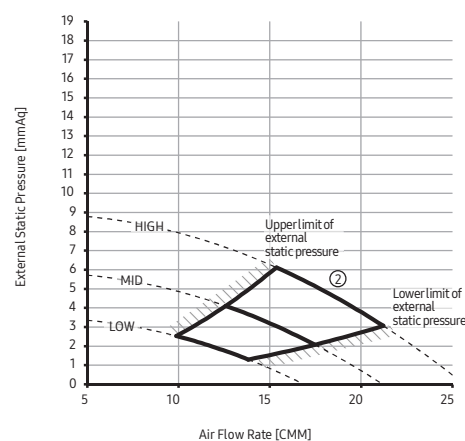
MSP Duct

2) AC052RNMDKG/EU

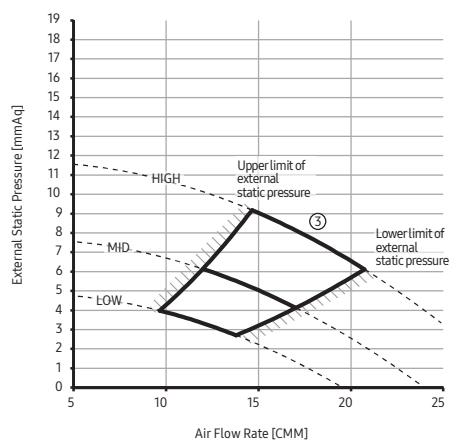
①	External Static Pressure(mmAq)	Option Code
	0 ≤ SP ≤ 3	01B17C-1C50F1-27343C-374000



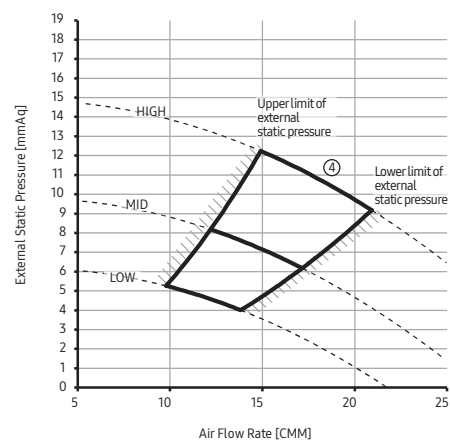
②	External Static Pressure(mmAq)	Option Code
	3 < SP ≤ 6	01B17C-1C5488-27343C-374000



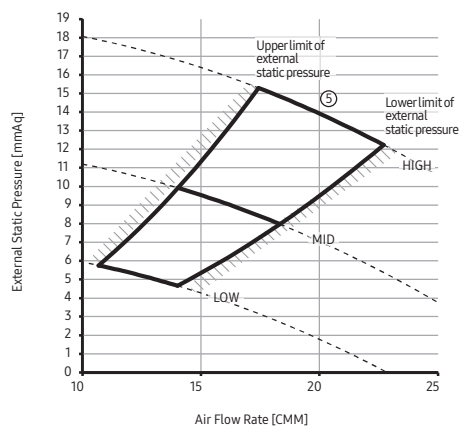
③	External Static Pressure(mmAq)	Option Code
	6 < SP ≤ 9	01B17C-1C54ED-27343C-374000



④	External Static Pressure(mmAq)	Option Code
	9 < SP ≤ 12	01B17C-1C5941-27343C-374000



⑤	External Static Pressure(mmAq)	Option Code
	12 < SP ≤ 15	01B17C-1C59B3-27343C-374000

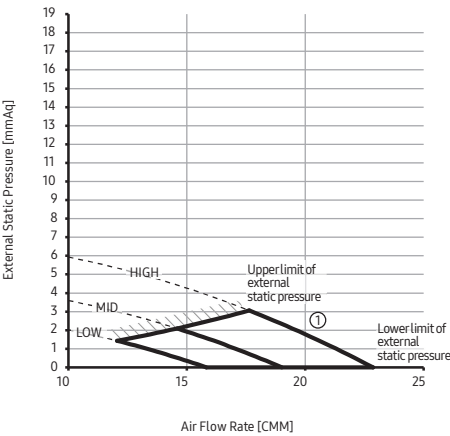


8. Fan Characteristics

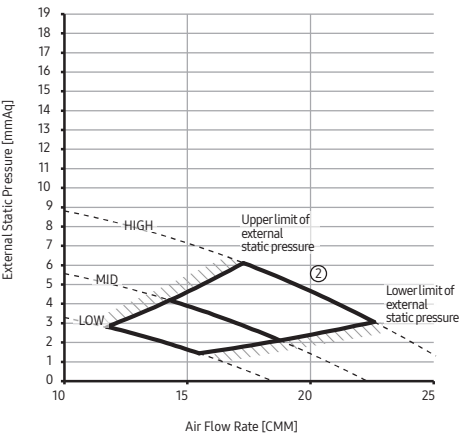
MSP Duct

3) AC071RNMDKG/EU

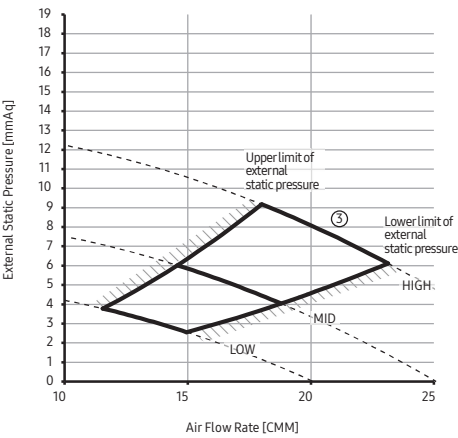
①	External Static Pressure(mmAq)	Option Code
	0 ≤ SP ≤ 3	01B17C-1C5436-274750-376000



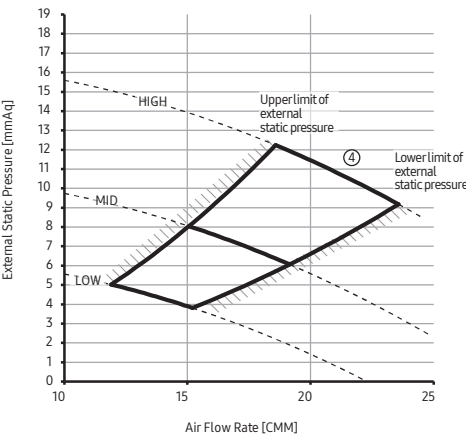
②	External Static Pressure(mmAq)	Option Code
	3 < SP ≤ 6	01B17C-1C54AB-274750-376000



③	External Static Pressure(mmAq)	Option Code
	6 < SP ≤ 9	01B17C-1C581E-274750-376000



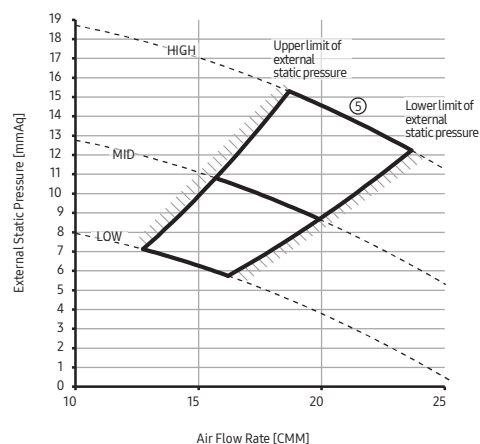
④	External Static Pressure(mmAq)	Option Code
	9 < SP ≤ 12	01B17C-1C5972-274750-376000



8. Fan Characteristics

MSP Duct

⑤	External Static Pressure(mmAq)	Option Code
	12< SP ≤15	01B17C-1C59C8-274750-376000



NOTE

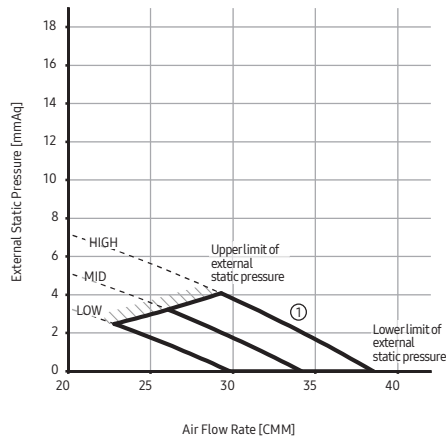
- Adjust option code according to the actual installation condition (external static pressure).
- The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

8. Fan Characteristics

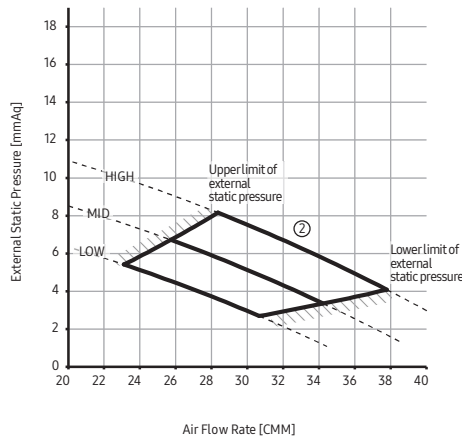
MSP Duct

4) AC100RNMDKG/EU

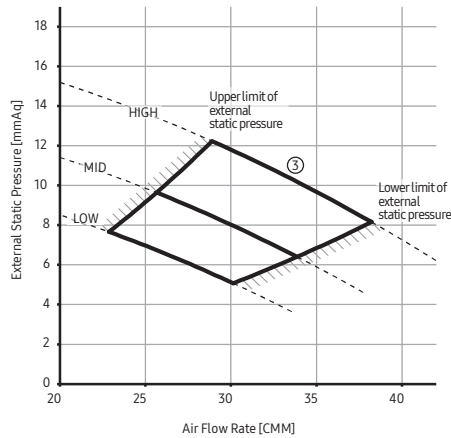
①	External Static Pressure(mmAq)	Option Code
	0 ≤ SP ≤ 4	01B17C-1C549F-276470-375020



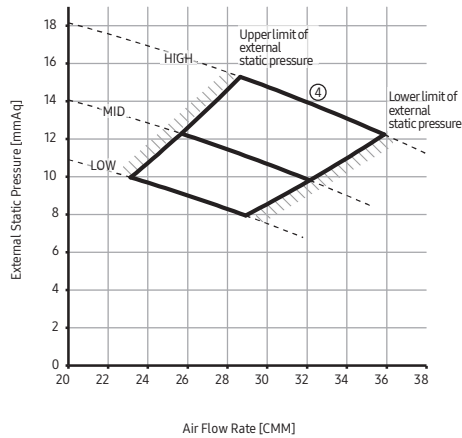
②	External Static Pressure(mmAq)	Option Code
	4 < SP ≤ 8	01B17C-1C5917-276470-375020



③	External Static Pressure(mmAq)	Option Code
	8 < SP ≤ 12	01B17C-1C599C-276470-375020



④	External Static Pressure(mmAq)	Option Code
	12 < SP ≤ 15	01B17C-1C5AE1-276470-375020

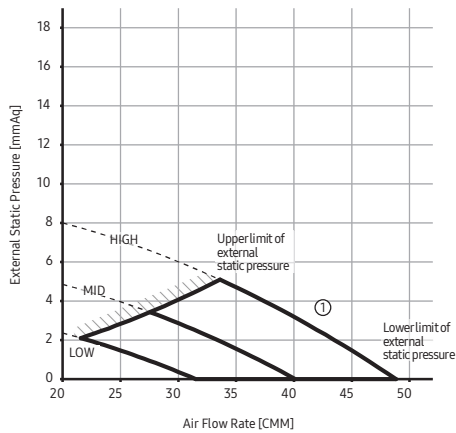


8. Fan Characteristics

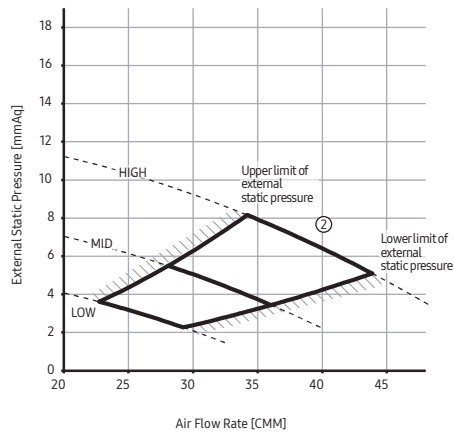
MSP Duct

5) AC120RNMDKG/EU

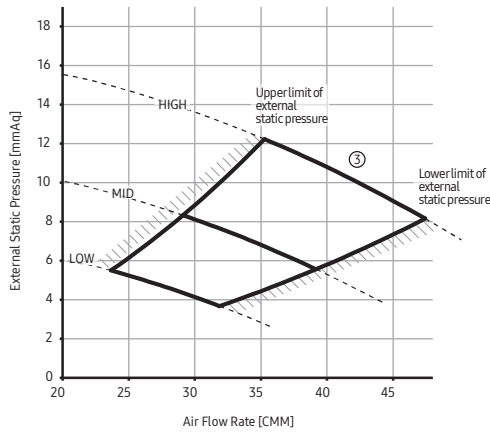
①	External Static Pressure(mmAq)	Option Code
	0 ≤ SP ≤ 4	01B17C-1C5424-277882-374040



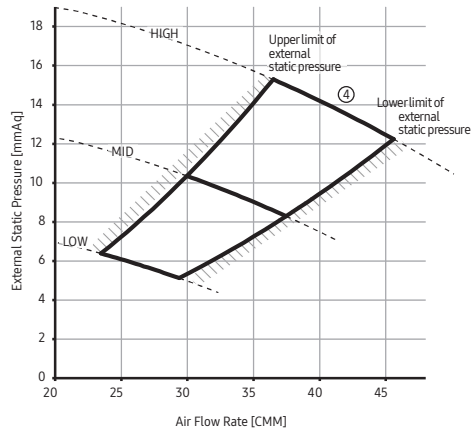
②	External Static Pressure(mmAq)	Option Code
	4 < SP ≤ 8	01B17C-1C5489-277882-374040



③	External Static Pressure(mmAq)	Option Code
	8 < SP ≤ 12	01B17C-1C54FE-277882-374040



④	External Static Pressure(mmAq)	Option Code
	12 < SP ≤ 15	01B17C-1C5940-277882-374040

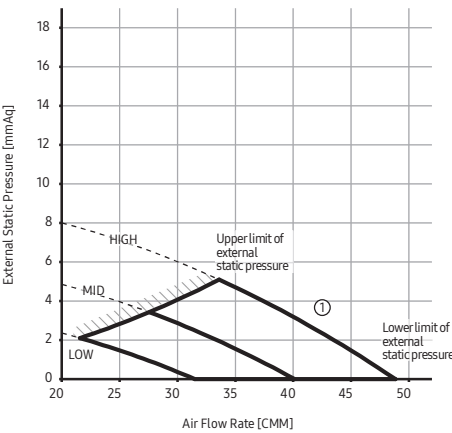


8. Fan Characteristics

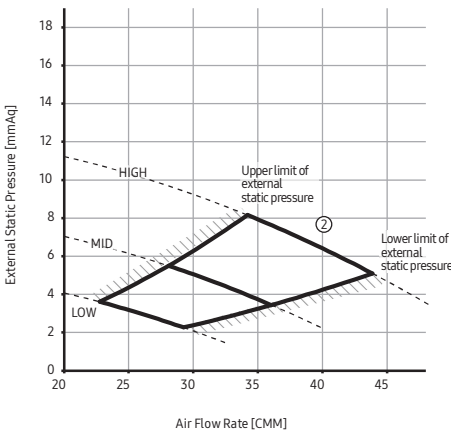
MSP Duct

6) AC140RNMDKG/EU

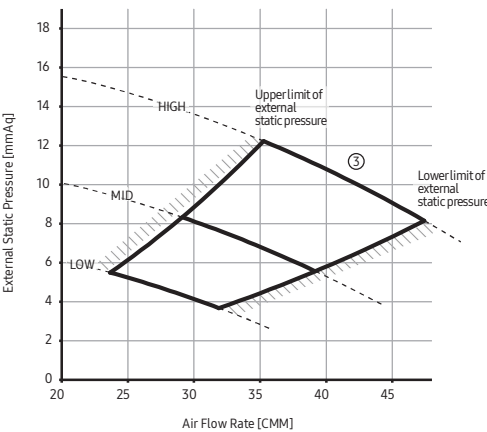
①	External Static Pressure(mmAq)	Option Code
	0 ≤ SP ≤ 4	01B17C-1C5424-278CA0-374045



②	External Static Pressure(mmAq)	Option Code
	4 < SP ≤ 8	01B17C-1C5489-278CA0-374045



③	External Static Pressure(mmAq)	Option Code
	8 < SP ≤ 12	01B17C-1C54FE-278CA0-374045



④	External Static Pressure(mmAq)	Option Code
	12 < SP ≤ 15	01B17C-1C5940-278CA0-374045

