



## 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

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.	mm <sup>2</sup>	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 <sub>2</sub> e		0.61	0.81	1.15	

# 1. Specification

## MSP Duct

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)	m <sup>3</sup> /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)	m <sup>3</sup> /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
	Infrared remote control		-	AR-EH03E	AR-EH03E	AR-EH03E
Control System	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		m <sup>3</sup> /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		-	EGI Steel Plate	EGI Steel Plate	EGI Steel Plate	
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

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.	mm <sup>2</sup>	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	
			tCO <sub>2</sub> e	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)		m <sup>3</sup> /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)		m <sup>3</sup> /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		Ø, 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		
			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		
Internal Model					-	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

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	Fin & Tube
	Material	Fin	-	Al	Al	Al
		Tube	-	Cu	Cu	Cu
	Fin Treatment		-	Anti-Corrosion	Anti-Corrosion	Anti-Corrosion
Compressor	Model Name		-	UB8TN8300FJU	UB8TN8300FJU	UB5TN5450FJX
	Type		-	Twin BLDC	Twin BLDC	Twin BLDC
	Output		kW	2.91	2.91	4.25
	Oil	Type	-	POE	POE	POE
		Initial charge	cc	1,200	1,200	1,700
Outdoor Unit	Fan	Type		-	Propeller	Propeller
		Discharge direction		-	Front	Front
		Quantity		EA	1	1
		Air Flow Rate		m <sup>3</sup> /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	52	
		Heating	dB(A)	54	54	
	Sound Power Level		dB(A)	69	69	
External Dimension	Net Weight		kg	75.0	74.0	
	Shipping Weight		kg	80.0	79.0	
	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		°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	HEAT PUMP	
	Performance	Capacity (Min/Std/Max)	Cooling	kW	3.0 / 12.0 / 13.5	3.5 / 13.4 / 15.5	3.5 / 13.4 / 15.5	
				Btu/h	10,240 / 41,000 / 46,100	11,940 / 45,720 / 52,900	11,940 / 45,720 / 52,900	
			Heating	kW	2.5 / 13.2 / 17.0	3.5 / 15.5 / 18.0	3.5 / 15.5 / 18.0	
				Btu/h	8,530 / 45,040 / 58,000	11,940 / 52,900 / 61,420	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	0.80 / 4.62 / 6.60	
			Heating	kW	0.70 / 3.79 / 6.40	0.70 / 4.64 / 7.36	0.70 / 4.51 / 7.50	
		Current Input (Min/Std/Max)	Cooling	A	1.9 / 6.9 / 10.0	3.7 / 20.0 / 28.0	2.1 / 7.1 / 10.5	
			Heating	A	1.5 / 5.9 / 12.0	3.5 / 20.0 / 32.0	1.9 / 7.0 / 12.0	
		Current	MCA	A	18.6	34.5	18.6	
			MFA	A	18.6	40.0	18.6	
	Efficiency	EER	Cooling	-	2.67	2.90	2.90	
		COP	Heating	-	3.48	3.34	3.43	
		SEER (Cooling Energy Grade)		-	5.8 (A+)	6.0 (-)	6.0 (-)	
		SCOP (Heating Energy Grade)		-	4.0 (A+)	4.0 (-)	4.0 (-)	
		Pdesignh		kW	6.5	8.4	8.4	
	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	Max.	m	5	5	5
				Elevation	m	50	75	75
	Chargeless			m	30	30	30	
	Chargeless			m	30	30	30	
Wiring connections	Communication	Min.	mm <sup>2</sup>	0.75	0.75	0.75		
		Remark	-	F1, F2	F1, F2	F1, F2		
Refrigerant	Type		-	R32	R32	R32		
	Factory Charging		kg	2.7	2.9	2.9		
tCO <sub>2</sub> e			1.82	1.96	1.96			

# 1. Specification

## MSP Duct

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)	m <sup>3</sup> /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)	m <sup>3</sup> /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 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)	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
					Tube	-	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
	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		m <sup>3</sup> /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	
					Heating	dB(A)	56	
			Sound Power Level		dB(A)	70	69	69
	External Dimension		Net Weight		kg	80.0	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	
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.

## 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

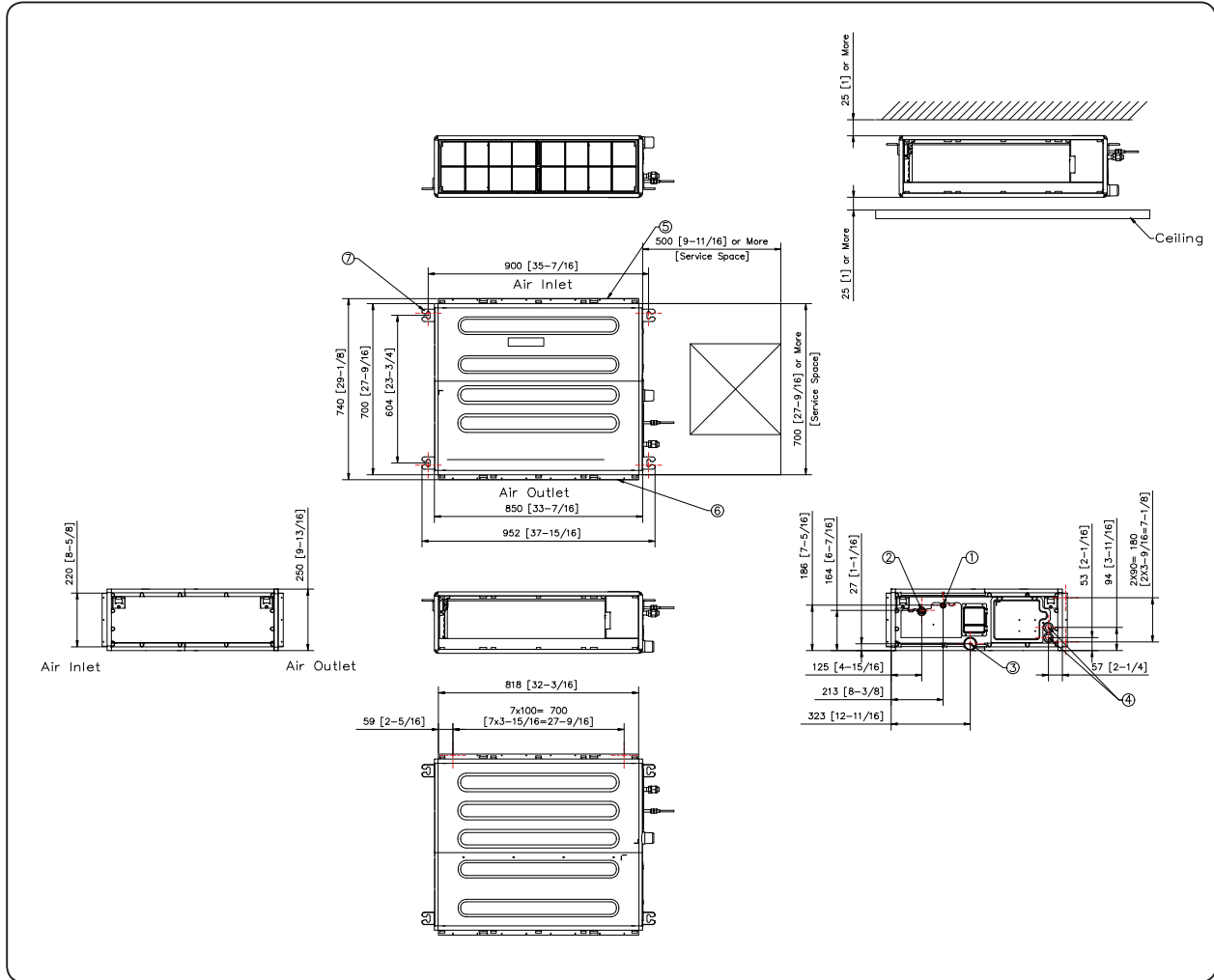
- The performance table shows the average value of each conditions.

# 4. Dimensional Drawing

## MSP Duct

AC035/052/071RNMDKG/EU

Units : mm [inches]



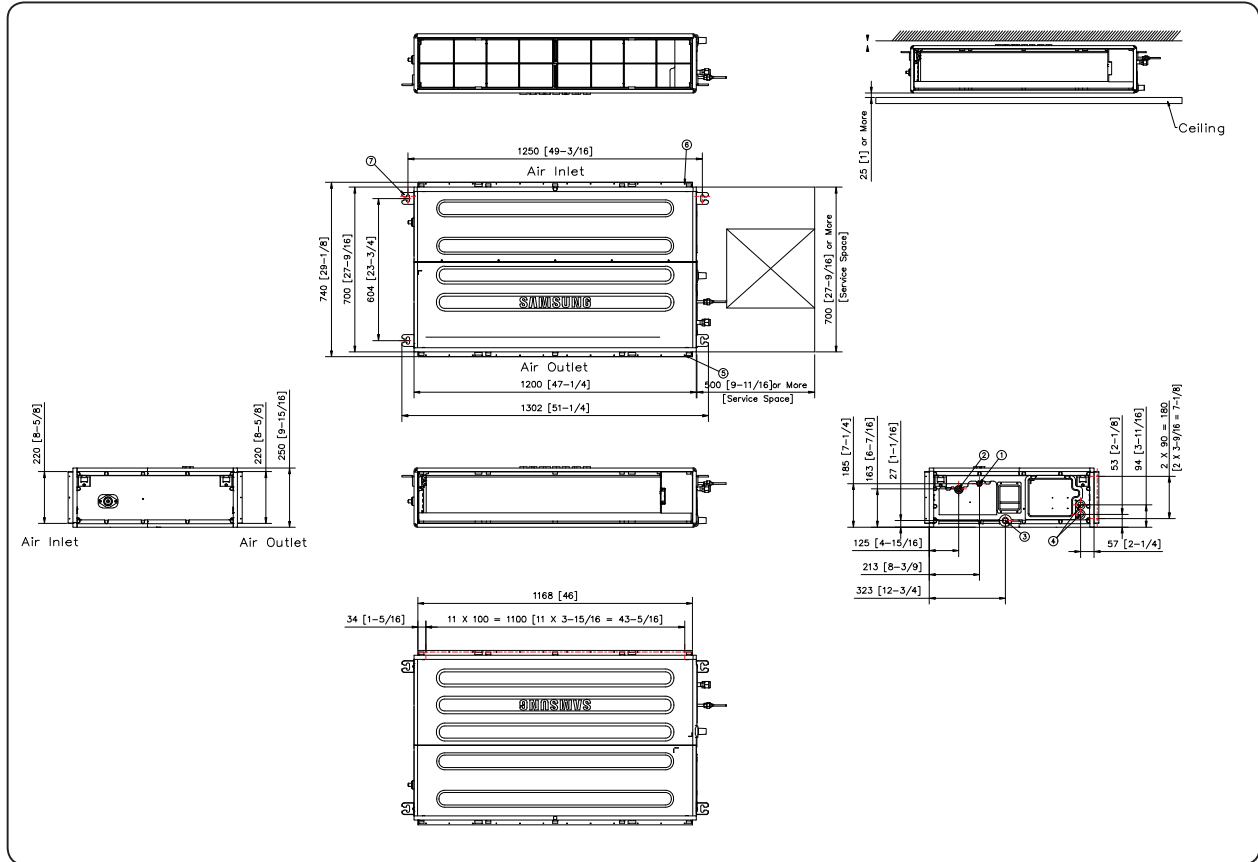
No.	Name	Description		
		AC035RNMDKG/EU	AC052RNMDKG/EU	AC071RNMDKG/EU
1	Liquid pipe connection		Φ6.35(1/4)	
2	Gas pipe connection	Φ9.52(3/8)	Φ12.7(1/2)	Φ15.88(5/8)
3	Drain pipe connection		VP-25(OD32, ID25)	
4	Power supply & Communication wiring conduit			
5	Air suction flange			
6	Air discharge flange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

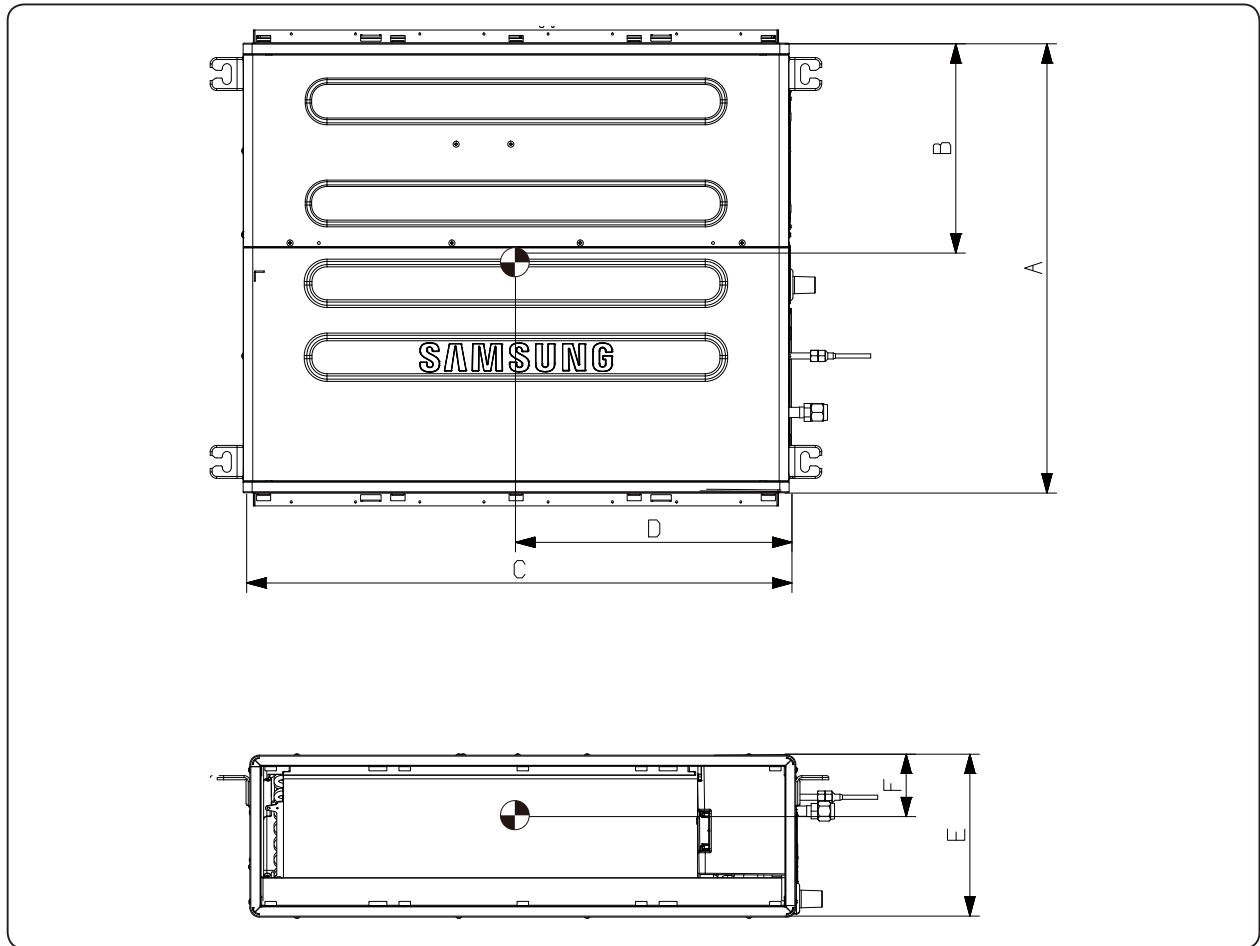


# 5. Center of Gravity

MSP Duct

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

Units : mm [inches]

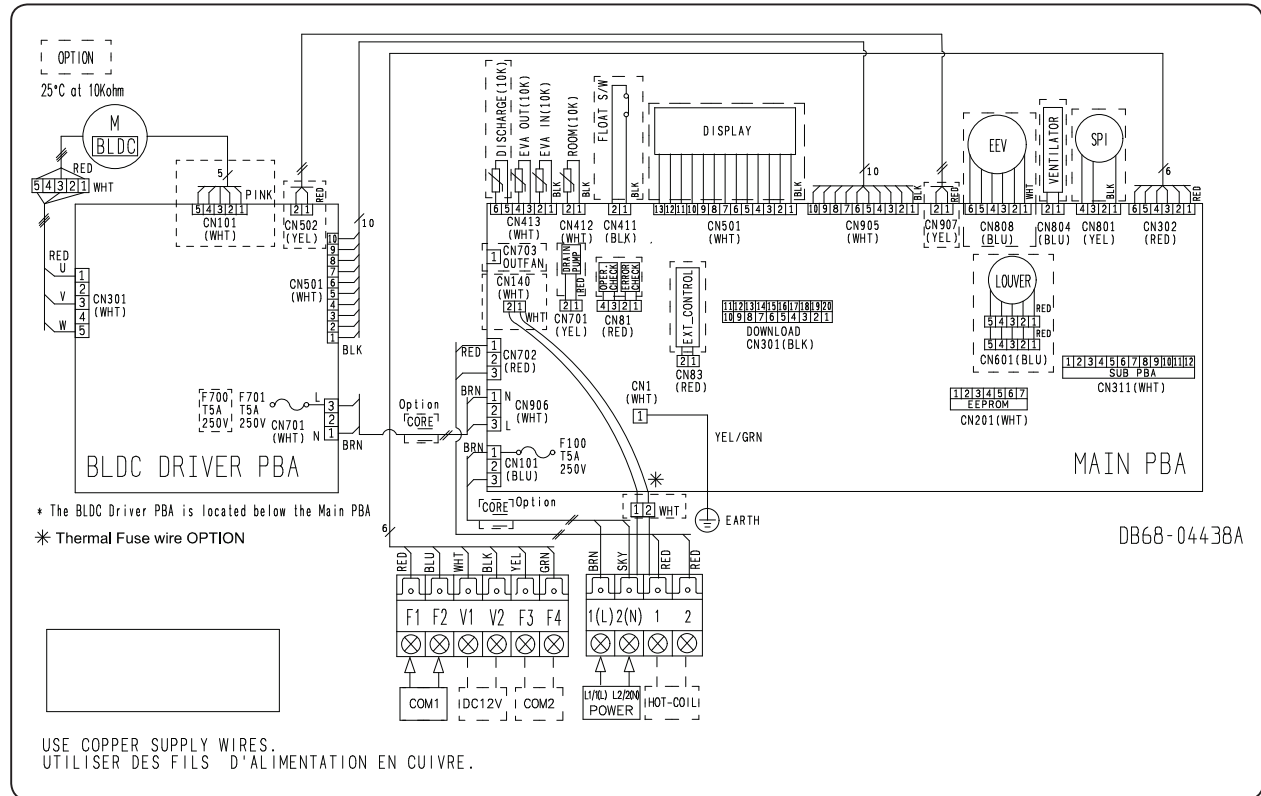


	A	B	C	D	E	F
~7.1kW	700 [27-9/16]	335 [14]	900 [35-7/16]	405 [15-15/16]	250 [9-13/16]	125 [4-15/16]
9.0kW ~ 10kW	700 [27-9/16]	265 [10-7/16]	1250 [49-3/16]	565 [18-5/16]	250 [9-13/16]	125 [4-15/16]
12kW ~ 14kW	700 [27-9/16]	265 [10-7/16]	1350 [53-1/8]	650 [25-5/8]	300 [11-13/16]	150 [5-15/16]

# 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

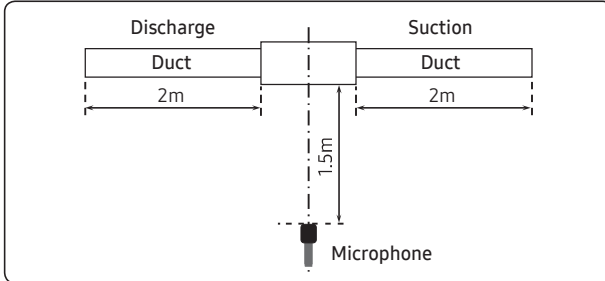
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :  
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue: grn: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- Protective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

# 7. Sound Data

## MSP Duct

### Sound Pressure Level

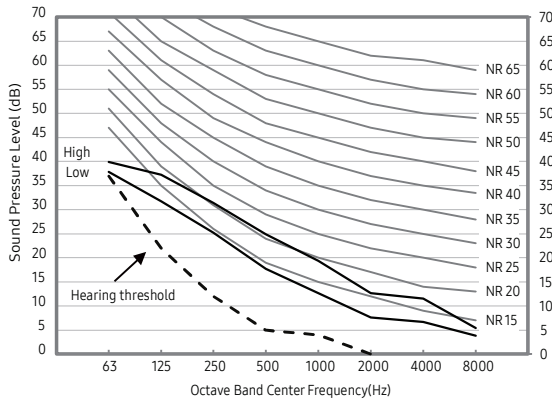
Unit: dB(A)



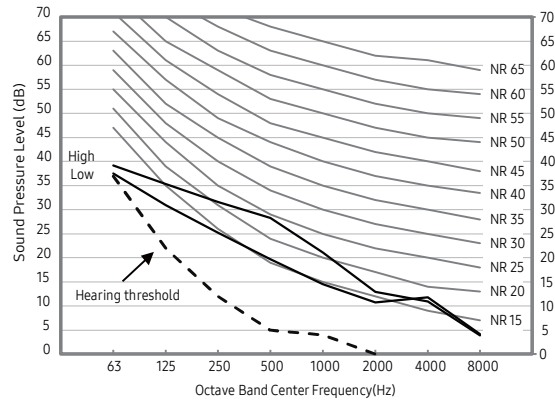
Model	HIGH	MID	LOW
AC035RNMDKG/EU	28	25	22
AC052RNMDKG/EU	29	26	23
AC071RNMDKG/EU	30	27	24
AC100RNMDKG/EU	34	32	30

- NR Curve

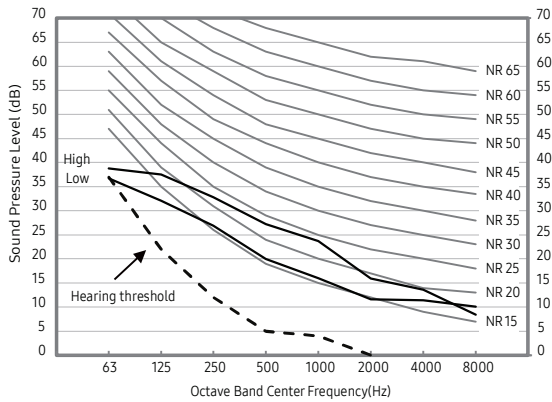
1) AC035RNMDKG/EU



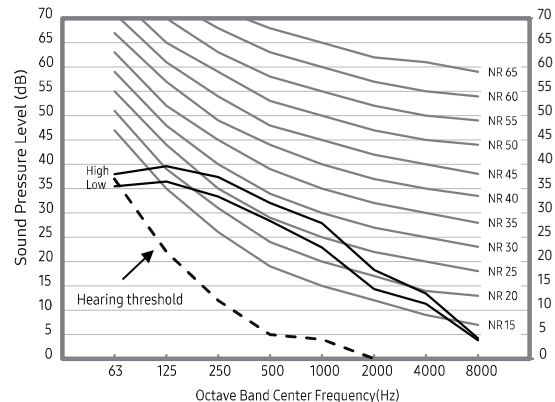
2) AC052RNMDKG/EU



3) AC071RNMDKG/EU



4) AC100RNMDKG/EU



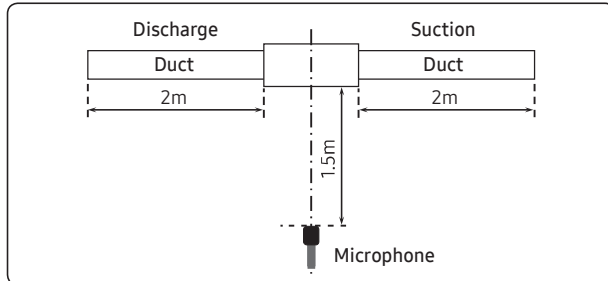
**NOTE**

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

# 7. Sound Data

## MSP Duct

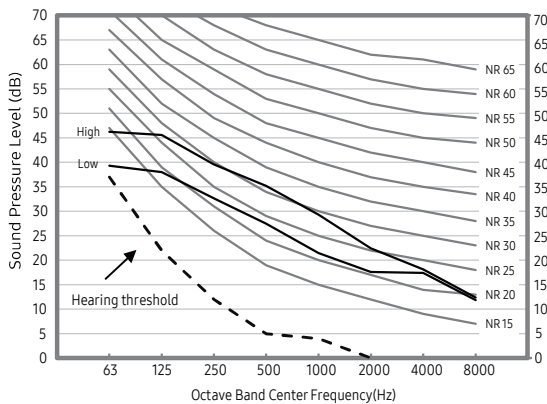
### Sound Pressure level



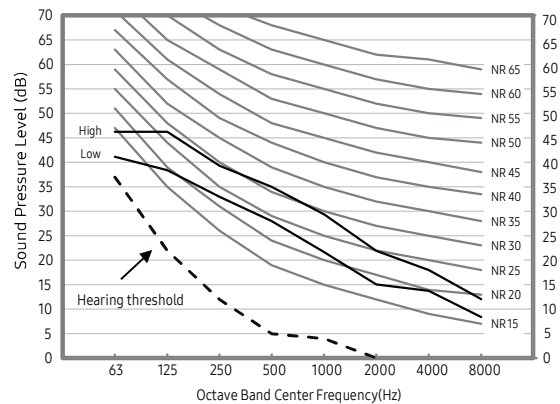
Unit: dB(A)

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**

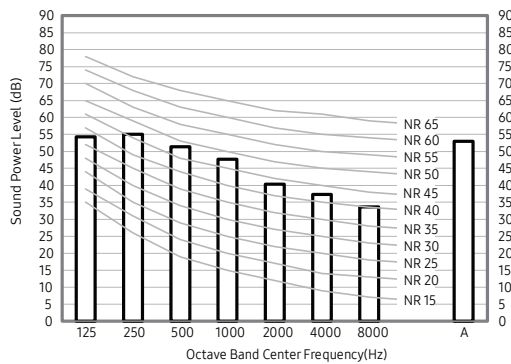
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

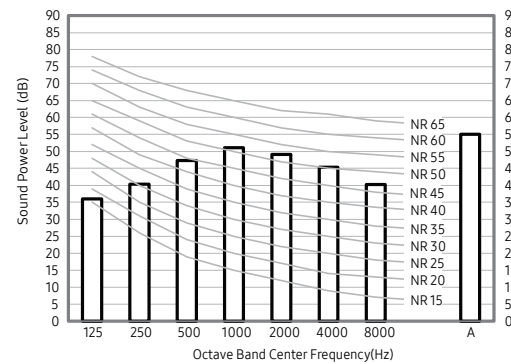
Model	Power
AC035RNMDKG/EU	52
AC052RNMDKG/EU	55
AC071RNMDKG/EU	56
AC100RNMDKG/EU	58

• NR Curve

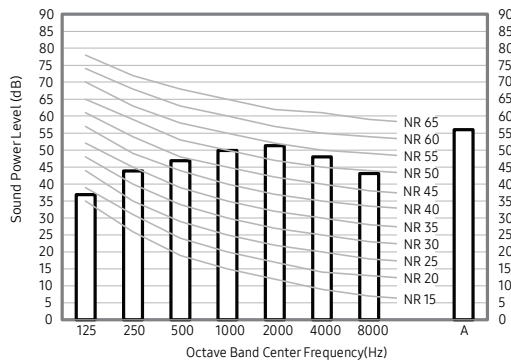
1) AC035RNMDKG/EU



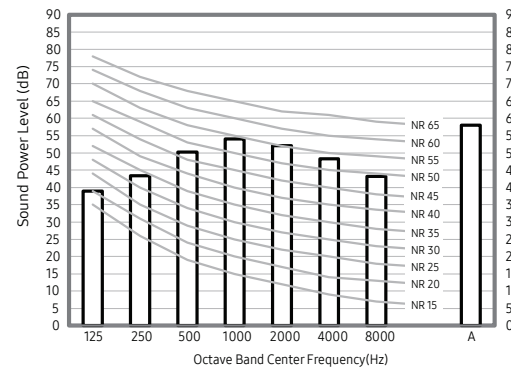
2) AC052RNMDKG/EU



3) AC071RNMDKG/EU



4) AC100RNMDKG/EU



# 7. Sound Data

## MSP Duct

### Sound Power level

**NOTE**

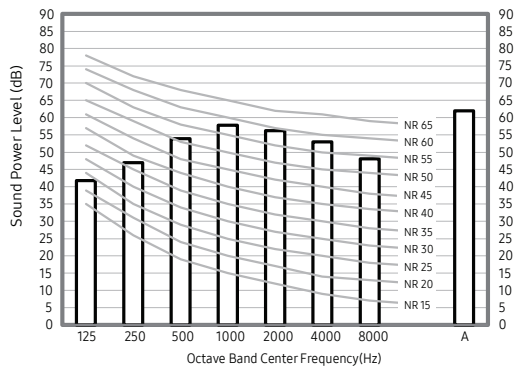
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

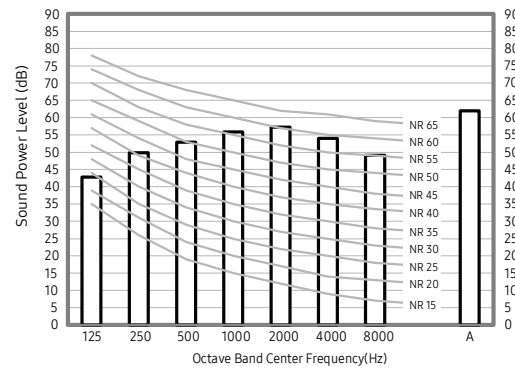
Model	Power
AC120RNMDKG/EU	62
AC140RNMDKG/EU	62

• NR Curve

5) AC120RNMDKG/EU



6) AC140RNMDKG/EU

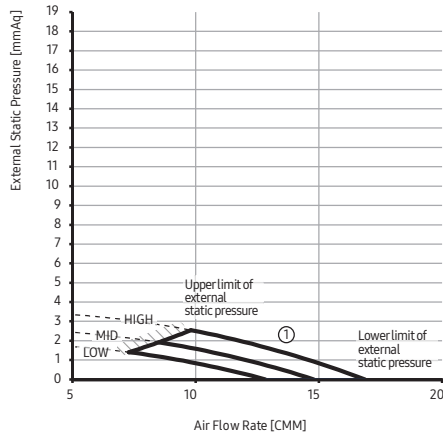


# 8. Fan Characteristics

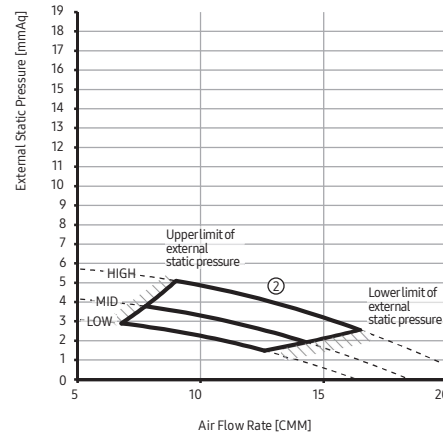
## MSP Duct

### 1) AC035RNMDKG/EU

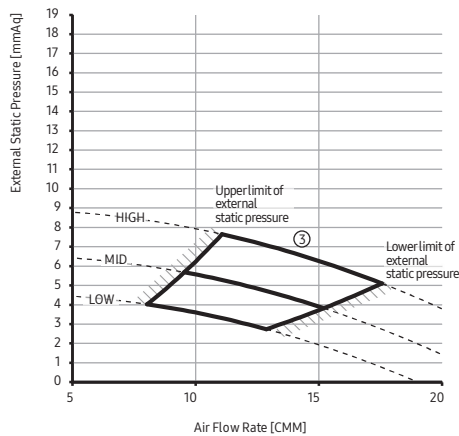
①	External Static Pressure(mmAq)	Option Code
	0≤SP≤2.5	01B17C-1C5080-272328-372008



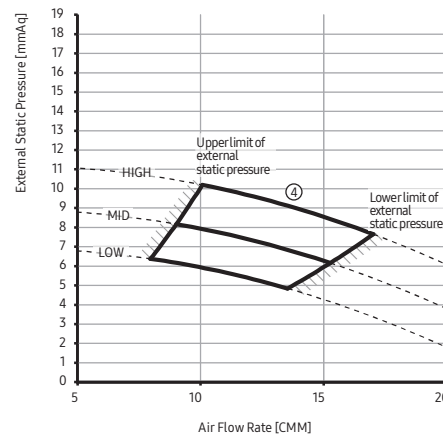
②	External Static Pressure(mmAq)	Option Code
	2.5<SP≤5	01B17C-1C5407-272328-372008



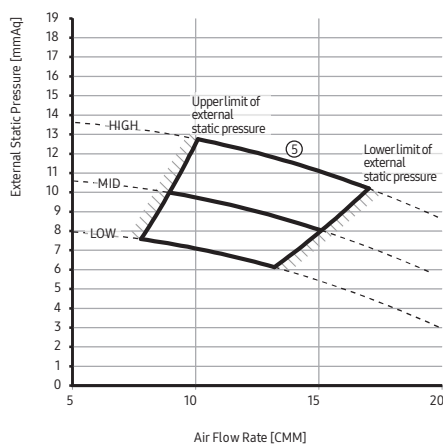
③	External Static Pressure(mmAq)	Option Code
	5<SP≤7.5	01B17C-1C548C-272328-372008



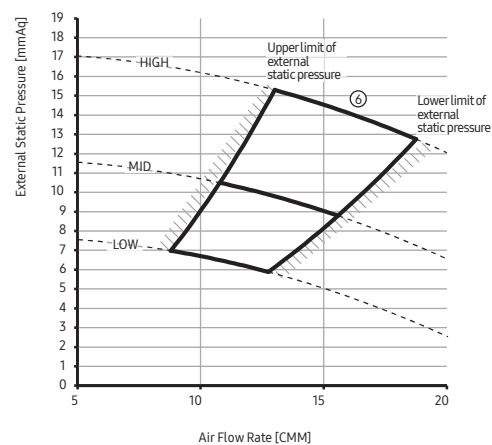
④	External Static Pressure(mmAq)	Option Code
	7.5<SP≤10	01B17C-1C55D3-272328-372008



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

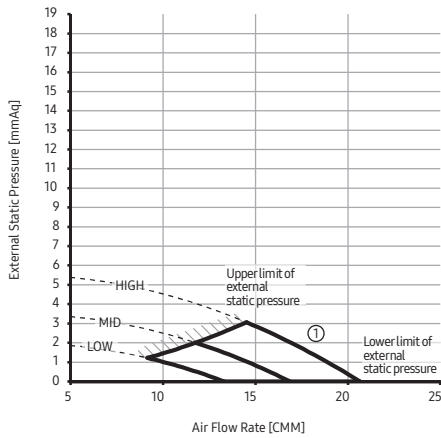


# 8. Fan Characteristics

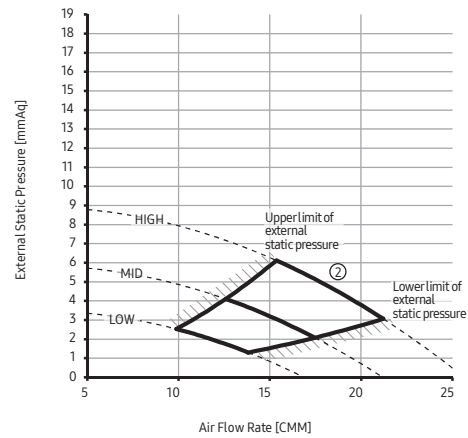
## MSP Duct

2) AC052RNMDKG/EU

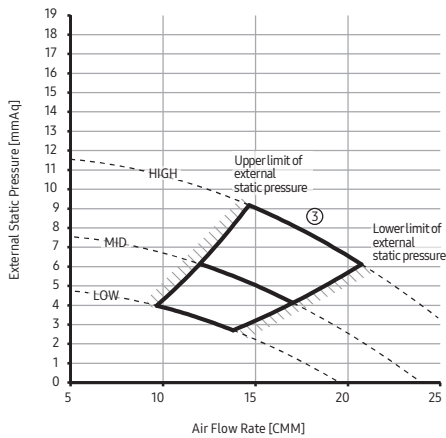
①	External Static Pressure(mmAq)	Option Code
	0 ≤ SP ≤ 3	01B17C-1C50F1-27343C-374000



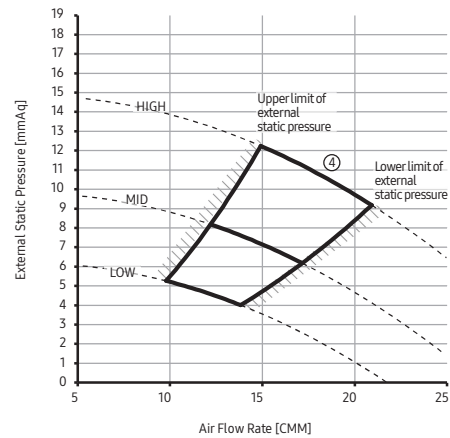
②	External Static Pressure(mmAq)	Option Code
	3 < SP ≤ 6	01B17C-1C5488-27343C-374000



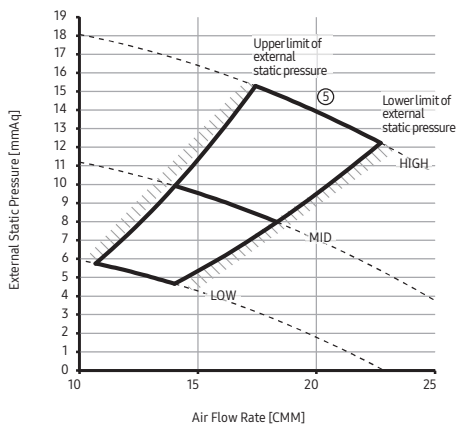
③	External Static Pressure(mmAq)	Option Code
	6 < SP ≤ 9	01B17C-1C54ED-27343C-374000



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

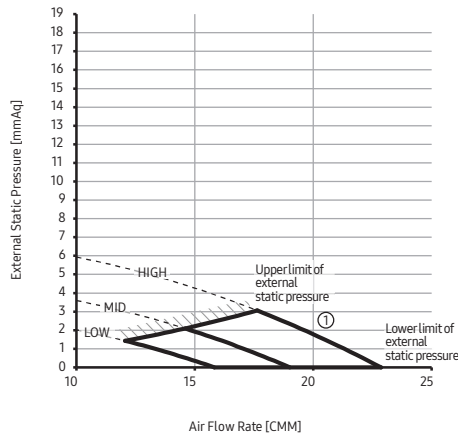


# 8. Fan Characteristics

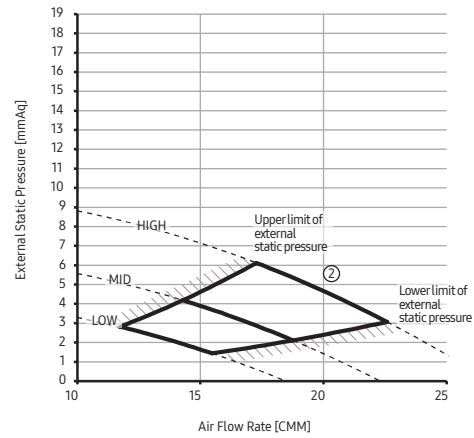
## MSP Duct

### 3) AC071RNMDKG/EU

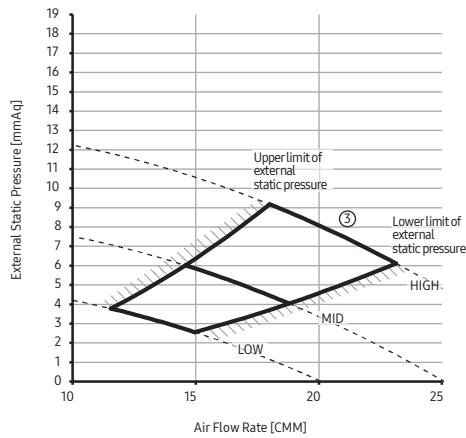
External Static Pressure(mmAq)	Option Code
0 ≤ SP ≤ 3	01B17C-1C5436-274750-376000



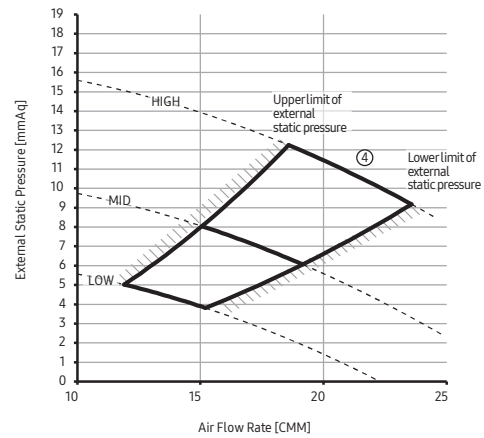
External Static Pressure(mmAq)	Option Code
3 < SP ≤ 6	01B17C-1C54AB-274750-376000



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



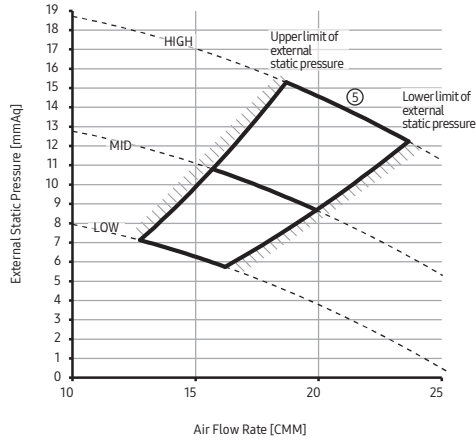
External Static Pressure(mmAq)	Option Code
9 < SP ≤ 12	01B17C-1C5972-274750-376000



# 8. Fan Characteristics

## MSP Duct

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



### NOTE

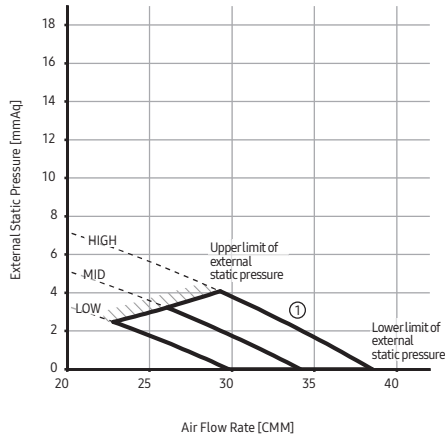
- Adjust option code according to the actual installation condition (external static pressure).
- The graphs display the available external static pressure range of installed indoor units. Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted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

# 8. Fan Characteristics

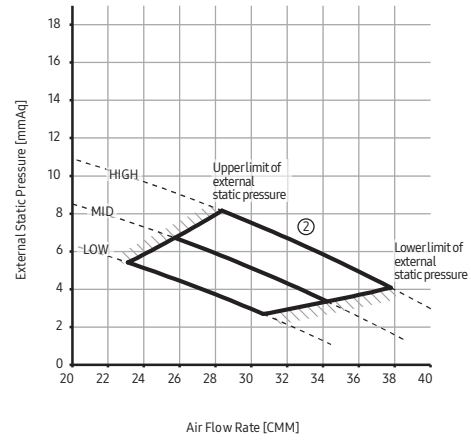
## MSP Duct

### 4) AC100RNMDKG/EU

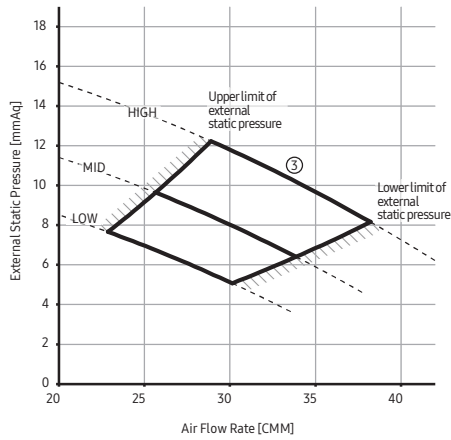
External Static Pressure(mmAq)	Option Code
$0 \leq SP \leq 4$	01B17C-1C549F-276470-375020



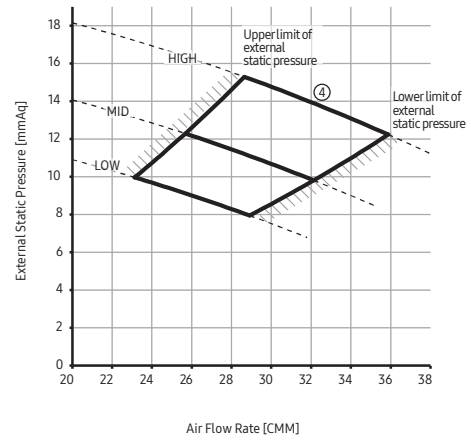
External Static Pressure(mmAq)	Option Code
$4 < SP \leq 8$	01B17C-1C5917-276470-375020



External Static Pressure(mmAq)	Option Code
$8 < SP \leq 12$	01B17C-1C599C-276470-375020



External Static Pressure(mmAq)	Option Code
$12 < SP \leq 15$	01B17C-1C5AE1-276470-375020

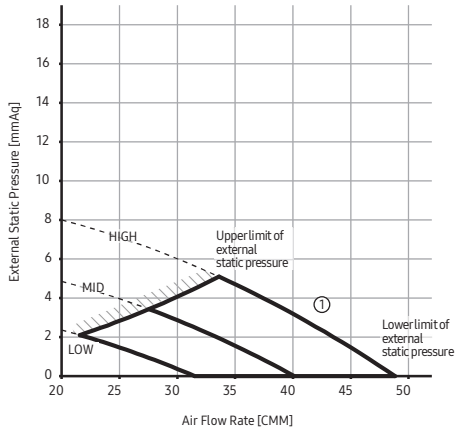


# 8. Fan Characteristics

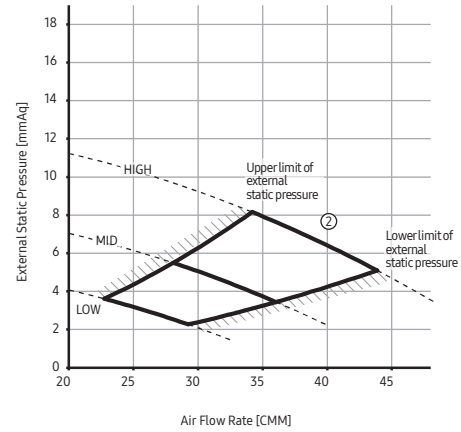
## MSP Duct

### 5) AC120RNMDKG/EU

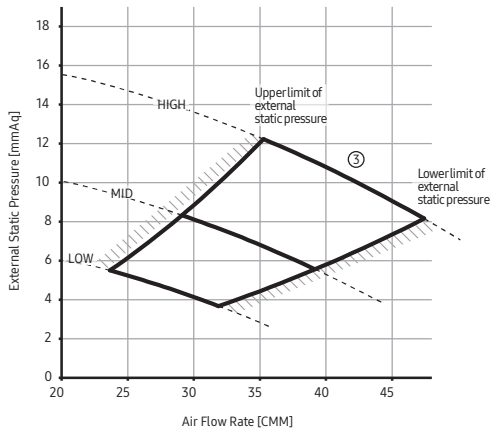
①	External Static Pressure(mmAq)	Option Code
	$0 \leq SP \leq 4$	01B17C-1C5424-277882-374040



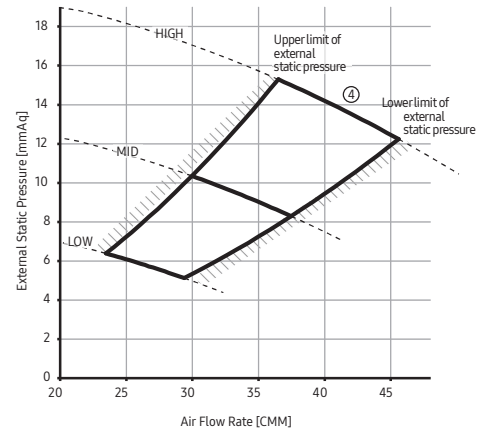
②	External Static Pressure(mmAq)	Option Code
	$4 < SP \leq 8$	01B17C-1C5489-277882-374040



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



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

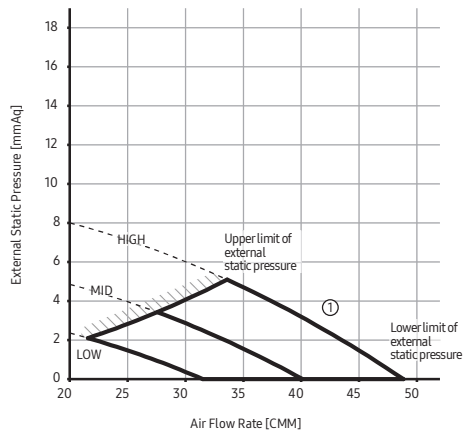


# 8. Fan Characteristics

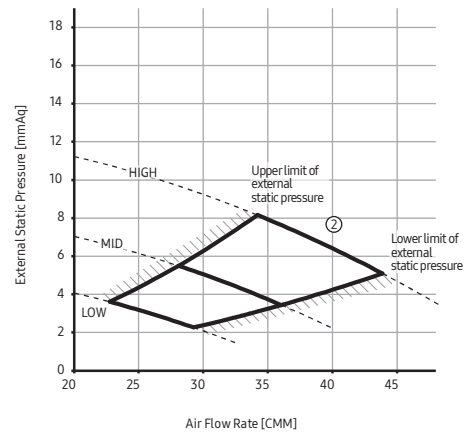
## MSP Duct

### 6) AC140RNMDKG/EU

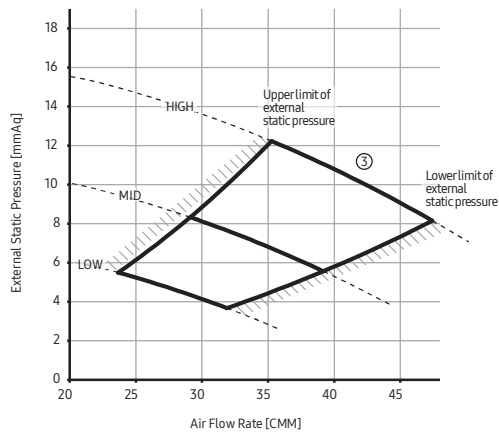
①	External Static Pressure(mmAq)	Option Code
	0 ≤ SP ≤ 4	01B17C-1C5424-278CA0-374045



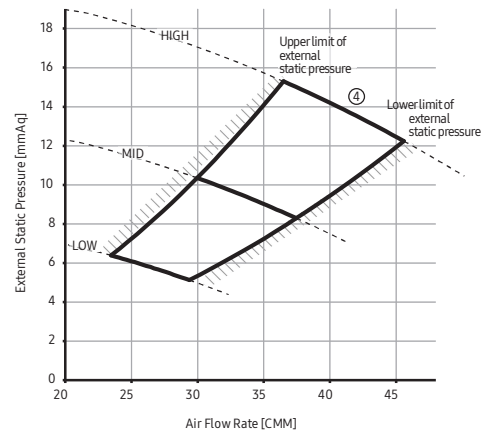
②	External Static Pressure(mmAq)	Option Code
	4 < SP ≤ 8	01B17C-1C5489-278CA0-374045



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



# Wall Mounted Type (Wind-Free™)

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1. Specification	162
2. Summary Table	168
3. Capacity Table	169
4. Dimensional Drawing	173
5. Center of Gravity	175
6. Electrical Wiring Diagram	176
7. Sound Data	177
8. Temperature and air flow distribution	179

## Features & Benefits

### Wall Mounted Type (Wind-Free™)

# Stay comfortably cool without feeling cold

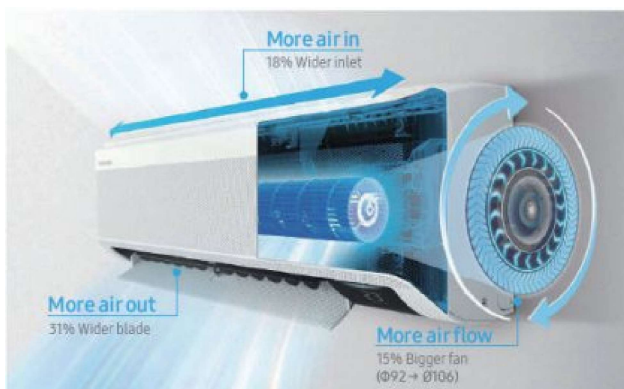
## Wind-Free™ Cooling

Stay comfortable cool with Wind-Free™ Cooling. It gently and quietly disperses air through 23,000 micro air holes, so there is no unpleasant feeling of cold wind on your skin. Its advanced airflow also cools a wider and larger area more evenly. And it uses 77% less energy than Fast Cooling (\*).



- (\*) Tested on the AR07T9170HA3 model, based on the power consumption of Fast Cooling mode vs. Wind-Free™ Cooling mode.
- ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) defines "Still Air" as air currents at speeds below 0.15m/s which lacks the presence of cold drafts.
  - Tested on the AR12TXCAAWKNEU model. Wind-Free™ mode generates only 23dB of noise, compared to 26dB with the Samsung conventional model.

## Powerful & Farther air flow



※ Compare to Boracay model