

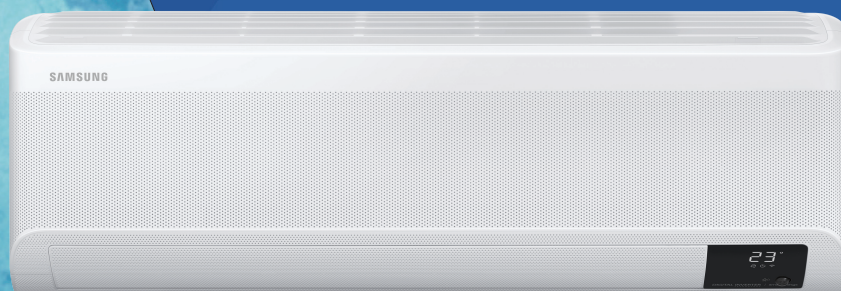
SAMSUNG

RAC

Technical

Data Book

RAC for Ukraine
(INV, R32, 50Hz, HP)



Model : AR**BX***WKNUA (Indoor Unit)
AR**BX***WKXUA (Outdoor Unit)

History

Version	Modification	Date	Remark
Ver.1.0	Released 2022 QMD RAC TDB for Ukraine	21. 11. 26	

Nomenclature

Model Name

AR

09

B

X

F

A

M

WK

N

UA

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

(9)

Buyer

(1) Classification

AR	RAC
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(2) Capacity

x1000 Btu/h

(3) Year

B	2022
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(4) Product Type

S	INVERTER HP R410A
X	INVERTER HP R32

(5) Characteristics

A	Motion Detect Sensor + PM1.0 Filter + PM1.0 Sensor+Wi-Fi
C	Motion Detect Sensor +Wi-Fi + Tri-care Filter
E	Wi-Fi + Tri-care Filter
F	Wi-Fi
G	Tri-care Filter
H	-

(6) Design Segment

A	Wind-Free GEO
C	Wind-Free AIRISE
Y	GEO
Z	AIRISE

(7) Version

A-Z (1 digit)

(8) Color

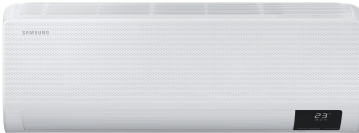
WK	DA White
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(9) Set

N	Indoor Unit
X	Outdoor Unit
/	Set

Line-up

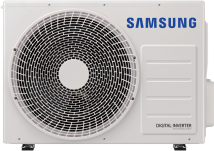
Indoor Unit

Design	Image	
Wind-Free GEO		
Wind-Free AIRISE		

Design	Capacity (kBtu/h)			
	9	12	18	24
Wind-Free GEO	●	●	●	●
Wind-Free AIRISE	●	●	●	●

Line-up

Outdoor Unit

Design	Capacity (kBtu/h)			
	9	12	18	24
Wind-Free GEO				
Wind-Free AIRISE				

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1. Specification

Wind-Free GEO

Model Name		Indoor Unit			AR09BXFAMWKNUA		AR12BXFAMWKNUA			
		Outdoor Unit			AR09BXFAMWKXUA		AR12BXFAMWKXUA			
System	Mode				Heat Pump		Heat Pump			
	Performance	Capacity (Min/Std/Max)	Cooling	kW	0.9 / 2.5 / 3.35		0.9 / 3.5 / 4.0			
				Btu/h	3,071 / 8,530 / 11,431		3,071 / 11,942 / 13,649			
			Heating	kW	0.9 / 3.2 / 4.5		0.9 / 3.5 / 5.0			
				Btu/h	3,071 / 10,919 / 15,355		3,071 / 11,942 / 17,061			
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.205 / 0.7 / 1.03		0.205 / 1.22 / 1.4			
			Heating	kW	0.2 / 0.84 / 1.27		0.2 / 0.94 / 1.45			
		Current Input (Min/Std/Max)	Cooling	A	1.3 / 3.6 / 4.7		1.3 / 5.6 / 6.3			
			Heating	A	1.4 / 4 / 5.6		1.4 / 4.5 / 6.4			
	Efficiency	EER	Cooling	W/W	3.57		2.87			
		COP	Heating	W/W	3.81		3.72			
		Energy Grade	Cooling	-	SEER : A++		SEER : A++			
			Heating	-	SCOP : A+ / B		SCOP : A+ / B			
	Piping Connections	Liquid Pipe		Type	Flare connection		Flare connection			
				Φ, mm (inch)	6.35 (1/4)		6.35 (1/4)			
		Gas Pipe		Type	Flare connection		Flare connection			
				Φ, mm (inch)	9.52 (3/8)		9.52 (3/8)			
		Heat Insulation		-	Both liquid and gas pipes		Both liquid and gas pipes			
		Installation Limitation	Max. Length (Outdoor to indoor)	m	15		15			
			Max. Height (Between ID/OD)	m	8		8			
		Wiring connections	Power Source Wire		mm²	1.5		1.5		
			Communication	Min.	mm²	0.75		0.75		
				Remark	-	F1, F2		F1, F2		
	Refrigerant	Type		-	R32		R32			
		Factory Charging		kg	0.7		0.7			
				tCO2e	0.47		0.47			
Indoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50		1, 2, 220-240, 50			
	Heat Exchanger	Type		-	F&T		F&T			
		Material	Fin	-	Al		Al			
			Tube	-	Cu		Cu			
		Fin Treatment		-	NGS(Neo-Green)		NGS(Neo-Green)			
	Fan	Type		-	Cross Flow		Cross Flow			
		Quantity		EA	1		1			
				Air Flow Rate	Cooling (T/H/M/L)	m³/min	10.5 / 10 / 9.5 / 8.5		10.9 / 10.5 / 9.5 / 8.5	
						l/s	175 / 167 / 158 / 142		182 / 175 / 158 / 142	
				Heating (T/H/M/L)	m³/min	11.4 / 10.9 / 10.5 / 9.5		11.9 / 11.4 / 10.5 / 9.5		
			l/s		190 / 182 / 175 / 158		198 / 190 / 175 / 158			
	Fan Motor	Type		-	BLDC		BLDC			
		Output		W x n	27 x 1		27 x 1			
	Drain	Drain Pipe		Φ, mm	16.3, 550		16.3, 550			
	Sound	Sound Pressure Level	H / Silent	dB(A)	37 / 19		38 / 19			
		Sound Power Level	Cooling	dB(A)	54		56			
	External Dimension	Net Weight		kg	9.2		8.9			
		Shipping Weight		kg	10.5		10.5			
		Net Dimensions (WxHxD)		mm	820 x 299 x 215		820 x 299 x 215			
		Shipping Dimensions (WxHxD)		mm	880 x 290 x 375		880 x 290 x 375			
	Casing	Material		-	HIPS		HIPS			
	Control System	Infrared remote control		-	Included		Included			
		Wired remote control		-	-		-			
	Drain Pump	Drain Pump		-	-		-			
		Max. lifting Height / Displacement		mm / Liter/h	-		-			
	Additional Accessories	Drain Pump	External Model	-	-		-			
			Internal Model	-	-		-			
			Max. lifting Height / Displacement	mm / Liter/h	-		-			
		Easy Filter Plus		-	Removable / Washable		Removable / Washable			
		Tri-Care Filter		-	-		-			
		Motion Detect Sensor		-	-		-			
	Wi-Fi		-	-		-				

1. Specification

Wind-Free GEO

Model Name		Indoor Unit		AR09BXFAMWKNUA	AR12BXFAMWKNUA
		Outdoor Unit		AR09BXFAMWKXUA	AR12BXFAMWKXUA
Outdoor Unit	Power Supply	Ø, #, V, Hz		1, 2, 220-240, 50	1, 2, 220-240, 50
	Heat Exchanger	Type	-	F&T	F&T
		Material	Fin	Al	Al
			Tube	Cu	Cu
		Fin Treatment	-	NGS(Neo-Green)	NGS(Neo-Green)
	Compressor	Model Name		UB1AR5090FJ6	UB1AR5090FJ6
		Type	-	BLDC ROTARY	BLDC ROTARY
		Output	kW	2.8	2.8
		Oil	Type	POE	POE
			Initial charge	260	260
	Fan	Type	-	Propeller	Propeller
		Discharge direction	-	Front	Front
		Quantity	EA	1	1
		Air Flow Rate	m³/min	28	28
			l/s	467	467
	Fan Motor	Type	-	BLDC	BLDC
		Output	W x n	40 x 1	40 x 1
	Sound	Sound Pressure Level	Cooling	dB(A)	46
		Sound Power Level	Cooling	dB(A)	63
	External Dimension	Net Weight	kg	23.0	23.0
		Shipping Weight	kg	25.0	25.0
		Net Dimensions (WxHxD)	mm	660 x 475 x 242	660 x 475 x 242
		Shipping Dimensions (WxHxD)	mm	778 x 550 x 331	778 x 550 x 331
	Casing	Material	Body	-	EGI Steel Plate / PP
	Operating Temp. Range	Cooling	°C	-10 ~ 46	-10 ~ 46
		Heating	°C	-15 ~ 24	-15 ~ 24



NOTE

- Specifications may be subject to change without prior notice.
- Nominal cooling capacities are based on;
Indoor temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
 - Nominal heating capacities are based on;
Indoor temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
 - Sound pressure was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
 - These products contain R410A/R32 which is fluorinated greenhouse gas.

1. Specification

Wind-Free GEO

Model Name		Indoor Unit			AR18BXFAMWKNUA	AR24BXFAMWKNUA	
		Outdoor Unit			AR18BXFAMWKXUA	AR24BXFAMWKXUA	
System	Mode			-	Heat Pump	Heat Pump	
	Performance	Capacity (Min/Std/Max)	Cooling	kW	1.6 / 5.0 / 6.7	1.4 / 6.5 / 7.6	
				Btu/h	5,459 / 17,061 / 22,861	4,777 / 22,179 / 25,932	
			Heating	kW	1.3 / 6.0 / 8.0	1.2 / 7.4 / 9.4	
				Btu/h	4,436 / 20,473 / 27,297	4,095 / 25,250 / 32,074	
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.32 / 1.39 / 2.18	0.3 / 1.95 / 2.6	
			Heating	kW	0.27 / 1.7 / 2.5	0.27 / 2.35 / 3.3	
		Current Input (Min/Std/Max)	Cooling	A	2 / 6.4 / 10	2 / 8.8 / 11.5	
			Heating	A	1.7 / 7.8 / 11.5	1.7 / 10.5 / 14.5	
	Efficiency	EER	Cooling	W/W	3.60	3.33	
		COP	Heating	W/W	3.53	3.15	
		Energy Grade	Cooling	-	SEER : A++	SEER : A++	
			Heating	-	SCOP : A / B	SCOP : A / B	
	Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	
				Φ, mm (inch)	6.35 (1/4)	6.35 (1/4)	
		Gas Pipe		Type	Flare connection	Flare connection	
				Φ, mm (inch)	12.7 (1/2)	15.88 (5/8)	
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	
		Installation Limitation	Max. Length (Outdoor to indoor)	m	30	30	
			Max. Height (Between ID/OD)	m	15	15	
		Wiring connections	Power Source Wire		mm²	1.5	1.5
			Communication	Min.	mm²	0.75	0.75
				Remark	-	F1, F2	F1, F2
	Refrigerant	Type		-	R32	R32	
		Factory Charging		kg	1.3	1.15	
				tCO2e	0.88	0.78	
Indoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50	
	Heat Exchanger	Type		-	F&T	F&T	
		Material	Fin	-	Al	Al	
			Tube	-	Cu	Cu	
		Fin Treatment		-	NGS(Neo-Green)	NGS(Neo-Green)	
	Fan	Type		-	Cross Flow	Cross Flow	
		Quantity		EA	1	1	
		Air Flow Rate	Cooling (T/H/M/L)	m³/min	16.5 / 15.8 / 14.4 / 13	17.2 / 15.8 / 14.4 / 13	
				l/s	275 / 263 / 240 / 217	287 / 263 / 240 / 217	
			Heating (T/H/M/L)	m³/min	16.5 / 15.8 / 14.4 / 13	17.9 / 16.5 / 15.1 / 13.7	
				l/s	275 / 263 / 240 / 217	298 / 275 / 252 / 228	
	Fan Motor	Type		-	BLDC	BLDC	
		Output		W x n	27 x 1	27 x 1	
	Drain	Drain Pipe		Φ, mm	16.3, 550	16.3, 550	
	Sound	Sound Pressure Level	H / Silent	dB(A)	41 / 25	45 / 26	
		Sound Power Level	Cooling	dB(A)	58	62	
	External Dimension	Net Weight		kg	11.5	11.5	
		Shipping Weight		kg	13.2	13.2	
		Net Dimensions (WxHxD)		mm	1,055 x 299 x 215	1,055 x 299 x 215	
		Shipping Dimensions (WxHxD)		mm	1,115 x 290 x 375	1,115 x 290 x 375	
	Casing	Material		-	HIPS	HIPS	
	Control System	Infrared remote control		-	Included	Included	
		Wired remote control		-	-	-	
	Drain Pump	Drain Pump		-	-	-	
		Max. lifting Height / Displacement		mm / Liter/h	-	-	
	Additional Accessories	Drain Pump	External Model	-	-	-	
			Internal Model	-	-	-	
			Max. lifting Height / Displacement	mm / Liter/h	-	-	
		Easy Filter Plus		-	Removable / Washable	Removable / Washable	
		Tri-Care Filter		-	-	-	
		Motion Detect Sensor		-	-	-	
	Wi-Fi		-	-	-		

1. Specification

Wind-Free GEO

Model Name			Indoor Unit		AR18BXFAMWKNUA	AR24BXFAMWKNUA	
			Outdoor Unit		AR18BXFAMWKXUA	AR24BXFAMWKXUA	
Outdoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50	
	Heat Exchanger	Type		-	F&T	F&T	
		Material	Fin	-	Al	Al	
			Tube	-	Cu	Cu	
		Fin Treatment		-	NGS(Neo-Green)	NGS(Neo-Green)	
	Compressor	Model Name			UB9TK3150FE4	UB9TK2150FE4	
		Type		-	BLDC ROTARY	BLDC ROTARY	
		Output		kW	4.69	4.57	
		Oil	Type	-	POE	POE	
			Initial charge	cc	500	570	
	Fan	Type		-	Propeller	Propeller	
		Discharge direction		-	Front	Front	
		Quantity		EA	1	1	
		Air Flow Rate			m³/min	50	50
					l/s	833	833
	Fan Motor	Type		-	BLDC	BLDC	
		Output		W x n	40 x 1	125 x 1	
	Sound	Sound Pressure Level	Cooling	dB(A)	51	54	
			Sound Power Level	Cooling	dB(A)	65	68
		External Dimension	Net Weight		kg	39.8	43.4
	Shipping Weight		kg	43.1	46.5		
	Net Dimensions (WxHxD)		mm	880 x 638 x 310	880 x 638 x 310		
	Shipping Dimensions (WxHxD)		mm	1,023 x 724 x 413	1,023 x 724 x 413		
	Casing	Material	Body	-	EGI Steel Plate / PP	EGI Steel Plate / PP	
	Operating Temp. Range	Cooling		℃	-10 ~ 46	-10 ~ 46	
		Heating		℃	-15 ~ 24	-15 ~ 24	



NOTE

- Specifications may be subject to change without prior notice.
- 1) Nominal cooling capacities are based on;
Indoor temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
- 2) Nominal heating capacities are based on;
Indoor temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
- 3) Sound pressure was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- 4) These products contain R410A/R32 which is fluorinated greenhouse gas.

1. Specification

Wind-Free AIRISE

Model Name		Indoor Unit			AR09BXHCNWKNUA	AR12BXHCNWKNUA	
		Outdoor Unit			AR09BXHCNWKXUA	AR12BXHCNWKXUA	
System	Mode			-	Heat Pump	Heat Pump	
	Performance	Capacity (Min/Std/Max)	Cooling	kW	0.9 / 2.5 / 3.35	0.9 / 3.5 / 4.0	
				Btu/h	3,071 / 8,530 / 11,431	3,071 / 11,942 / 13,649	
			Heating	kW	0.9 / 3.2 / 4.5	0.9 / 3.5 / 5.0	
				Btu/h	3,071 / 10,919 / 15,355	3,071 / 11,942 / 17,061	
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.205 / 0.7 / 1.03	0.205 / 1.22 / 1.4	
			Heating	kW	0.2 / 0.84 / 1.27	0.2 / 0.94 / 1.45	
		Current Input (Min/Std/Max)	Cooling	A	1.3 / 3.6 / 4.7	1.3 / 5.6 / 6.3	
			Heating	A	1.4 / 4 / 5.6	1.4 / 4.5 / 6.4	
	Efficiency	EER	Cooling	W/W	3.57	2.87	
		COP	Heating	W/W	3.81	3.72	
		Energy Grade	Cooling	-	SEER : A++	SEER : A++	
			Heating	-	SCOP : A+ / B	SCOP : A+ / B	
	Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	
				Φ, mm (inch)	6.35 (1/4)	6.35 (1/4)	
		Gas Pipe		Type	Flare connection	Flare connection	
				Φ, mm (inch)	9.52 (3/8)	9.52 (3/8)	
		Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	
		Installation Limitation	Max. Length (Outdoor to indoor)	m	15	15	
			Max. Height (Between ID/OD)	m	8	8	
		Wiring connections	Power Source Wire		mm²	1.5	1.5
			Communication	Min.	mm²	0.75	0.75
				Remark	-	F1, F2	F1, F2
	Refrigerant	Type		-	R32	R32	
		Factory Charging		kg	0.7	0.7	
				tCO2e	0.47	0.47	
Indoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50	
	Heat Exchanger	Type		-	F&T	F&T	
		Material	Fin	-	Al	Al	
			Tube	-	Cu	Cu	
		Fin Treatment		-	NGS(Neo-Green)	NGS(Neo-Green)	
	Fan	Type		-	Cross Flow	Cross Flow	
		Quantity		EA	1	1	
		Air Flow Rate	Cooling (T/H/M/L)	m³/min	10.5 / 10 / 9.5 / 8.5	10.9 / 10.5 / 9.5 / 8.5	
				l/s	175 / 167 / 158 / 142	182 / 175 / 158 / 142	
			Heating (T/H/M/L)	m³/min	11.4 / 10.9 / 10.5 / 9.5	11.9 / 11.4 / 10.5 / 9.5	
				l/s	190 / 182 / 175 / 158	198 / 190 / 175 / 158	
	Fan Motor	Type		-	BLDC	BLDC	
		Output		W x n	27 x 1	27 x 1	
	Drain	Drain Pipe		Φ, mm	16.3, 550	16.3, 550	
	Sound	Sound Pressure Level	H / Silent	dB(A)	37 / 19	38 / 19	
		Sound Power Level	Cooling	dB(A)	54	56	
	External Dimension	Net Weight		kg	9.2	8.9	
		Shipping Weight		kg	10.5	10.5	
		Net Dimensions (WxHxD)		mm	820 x 299 x 215	820 x 299 x 215	
		Shipping Dimensions (WxHxD)		mm	880 x 290 x 375	880 x 290 x 375	
	Casing	Material		-	HIPS	HIPS	
	Control System	Infrared remote control		-	Included	Included	
		Wired remote control		-	-	-	
	Drain Pump	Drain Pump		-	-	-	
		Max. lifting Height / Displacement		mm / Liter/h	-	-	
	Additional Accessories	Drain Pump	External Model	-	-	-	
			Internal Model	-	-	-	
			Max. lifting Height / Displacement	mm / Liter/h	-	-	
					-	-	
		Easy Filter Plus		-	Removable / Washable	Removable / Washable	
		Tri-Care Filter		-	-	-	
		Motion Detect Sensor		-	-	-	
	Wi-Fi		-	-	-		

1. Specification

Wind-Free AIRISE

Model Name		Indoor Unit		AR09BXHCNWKNUA	AR12BXHCNWKNUA		
		Outdoor Unit		AR09BXHCNWKXUA	AR12BXHCNWKXUA		
Outdoor Unit	Power Supply		Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50		
	Heat Exchanger	Type		-	F&T	F&T	
		Material	Fin	-	Al	Al	
			Tube	-	Cu	Cu	
		Fin Treatment		-	NGS(Neo-Green)	NGS(Neo-Green)	
	Compressor	Model Name			UB1AR5090FJ6	UB1AR5090FJ6	
		Type		-	BLDC ROTARY	BLDC ROTARY	
		Output		kW	2.8	2.8	
		Oil	Type	-	POE	POE	
			Initial charge	cc	260	260	
	Fan	Type		-	Propeller	Propeller	
		Discharge direction		-	Front	Front	
		Quantity		EA	1	1	
		Air Flow Rate			m³/min	28	28
					l/s	467	467
	Fan Motor	Type		-	BLDC	BLDC	
		Output		W x n	40 x 1	40 x 1	
	Sound	Sound Pressure Level	Cooling	dB(A)	46	47	
		Sound Power Level	Cooling	dB(A)	63	64	
	External Dimension	Net Weight		kg	23.0	23.0	
		Shipping Weight		kg	25.0	25.0	
		Net Dimensions (WxHxD)		mm	660 x 475 x 242	660 x 475 x 242	
		Shipping Dimensions (WxHxD)		mm	778 x 550 x 331	778 x 550 x 331	
	Casing	Material	Body	-	EGI Steel Plate / PP	EGI Steel Plate / PP	
	Operating Temp. Range	Cooling		℃	-10 ~ 46	-10 ~ 46	
Heating		℃	-15 ~ 24	-15 ~ 24			



NOTE

- Specifications may be subject to change without prior notice.
- Nominal cooling capacities are based on;
Indoor temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
 - Nominal heating capacities are based on;
Indoor temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
 - Sound pressure was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
 - These products contain R410A/R32 which is fluorinated greenhouse gas.

1. Specification

Wind-Free AIRISE

Model Name		Indoor Unit			AR18BXHCNWKNUA	AR24BXHCNWKNUA		
		Outdoor Unit			AR18BXHCNWKXUA	AR24BXHCNWKXUA		
System	Mode				Heat Pump	Heat Pump		
	Performance	Capacity (Min/Std/Max)	Cooling	kW	1.6 / 5.0 / 6.7	1.4 / 6.5 / 7.6		
				Btu/h	5,459 / 17,061 / 22,861	4,777 / 22,179 / 25,932		
			Heating	kW	1.3 / 6.0 / 8.0	1.2 / 7.4 / 9.4		
				Btu/h	4,436 / 20,473 / 27,297	4,095 / 25,250 / 32,074		
	Power	Power Input (Min/Std/Max)	Cooling	kW	0.32 / 1.39 / 2.18	0.3 / 1.95 / 2.6		
			Heating	kW	0.27 / 1.7 / 2.5	0.27 / 2.35 / 3.3		
		Current Input (Min/Std/Max)	Cooling	A	2 / 6.4 / 10	2 / 8.8 / 11.5		
			Heating	A	1.7 / 7.8 / 11.5	1.7 / 10.5 / 14.5		
	Efficiency	EER	Cooling	W/W	3.60	3.33		
		COP	Heating	W/W	3.53	3.15		
		Energy Grade	Cooling	-	SEER : A++	SEER : A++		
			Heating	-	SCOP : A / B	SCOP : A / B		
	Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection		
				Φ, mm (inch)	6.35 (1/4)	6.35 (1/4)		
		Gas Pipe		Type	Flare connection	Flare connection		
				Φ, mm (inch)	12.7 (1/2)	15.88 (5/8)		
		Heat Insulation			-	Both liquid and gas pipes	Both liquid and gas pipes	
		Installation Limitation	Max. Length (Outdoor to indoor)	m	30	30		
			Max. Height (Between ID/OD)	m	15	15		
		Wiring connections	Power Source Wire			mm²	1.5	1.5
			Communication	Min.	mm²	0.75	0.75	
				Remark	-	F1, F2	F1, F2	
	Refrigerant	Type		-	R32	R32		
		Factory Charging		kg	1.3	1.15		
				tCO2e	0.88	0.78		
Indoor Unit	Power Supply			Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50		
	Heat Exchanger	Type		-	F&T	F&T		
		Material	Fin	-	Al	Al		
			Tube	-	Cu	Cu		
		Fin Treatment		-	NGS(Neo-Green)	NGS(Neo-Green)		
	Fan	Type		-	Cross Flow	Cross Flow		
		Quantity		EA	1	1		
		Air Flow Rate	Cooling (T/H/M/L)	m³/min	16.5 / 15.8 / 14.4 / 13	17.2 / 15.8 / 14.4 / 13		
				l/s	275 / 263 / 240 / 217	287 / 263 / 240 / 217		
			Heating (T/H/M/L)	m³/min	16.5 / 15.8 / 14.4 / 13	17.9 / 16.5 / 15.1 / 13.7		
				l/s	275 / 263 / 240 / 217	298 / 275 / 252 / 228		
	Fan Motor	Type		-	BLDC	BLDC		
		Output		W x n	27 x 1	27 x 1		
	Drain	Drain Pipe		Φ, mm	16.3, 550	16.3, 550		
	Sound	Sound Pressure Level	H / Silent	dB(A)	41 / 25	45 / 26		
		Sound Power Level	Cooling	dB(A)	58	62		
	External Dimension	Net Weight		kg	11.5	11.5		
		Shipping Weight		kg	13.2	13.2		
		Net Dimensions (WxHxD)		mm	1,055 x 299 x 215	1,055 x 299 x 215		
		Shipping Dimensions (WxHxD)		mm	1,115 x 290 x 375	1,115 x 290 x 375		
	Casing	Material		-	HIPS	HIPS		
	Control System	Infrared remote control		-	Included	Included		
		Wired remote control		-	-	-		
	Drain Pump	Drain Pump		-	-	-		
		Max. lifting Height / Displacement		mm / Liter/h	-	-		
	Additional Accessories	Drain Pump	External Model	-	-	-		
			Internal Model	-	-	-		
			Max. lifting Height / Displacement	mm / Liter/h	-	-		
		Easy Filter Plus		-	Removable / Washable	Removable / Washable		
		Tri-Care Filter		-	-	-		
		Motion Detect Sensor		-	-	-		
	Wi-Fi		-	-	-			

1. Specification

Wind-Free AIRISE

Model Name		Indoor Unit		AR18BXHCNWKNUA	AR24BXHCNWKNUA		
		Outdoor Unit		AR18BXHCNWKXUA	AR24BXHCNWKXUA		
Outdoor Unit	Power Supply		Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50		
	Heat Exchanger	Type		-	F&T	F&T	
		Material	Fin	-	Al	Al	
			Tube	-	Cu	Cu	
		Fin Treatment		-	NGS(Neo-Green)	NGS(Neo-Green)	
	Compressor	Model Name			UB9TK3150FE4	UB9TK2150FE4	
		Type		-	BLDC ROTARY	BLDC ROTARY	
		Output		kW	4.69	4.57	
		Oil	Type	-	POE	POE	
			Initial charge	cc	500	570	
	Fan	Type		-	Propeller	Propeller	
		Discharge direction		-	Front	Front	
		Quantity		EA	1	1	
		Air Flow Rate			m³/min	50	50
					l/s	833	833
	Fan Motor	Type		-	BLDC	BLDC	
		Output		W x n	40 x 1	125 x 1	
	Sound	Sound Pressure Level	Cooling	dB(A)	51	54	
			Sound Power Level	Cooling	dB(A)	65	68
		External Dimension	Net Weight		kg	39.8	43.4
	Shipping Weight		kg	43.1	46.5		
	Net Dimensions (WxHxD)		mm	880 x 638 x 310	880 x 638 x 310		
	Shipping Dimensions (WxHxD)		mm	1,023 x 724 x 413	1,023 x 724 x 413		
	Casing	Material	Body	-	EGI Steel Plate / PP	EGI Steel Plate / PP	
	Operating Temp. Range	Cooling		℃	-10 ~ 46	-10 ~ 46	
		Heating		℃	-15 ~ 24	-15 ~ 24	



NOTE

- Specifications may be subject to change without prior notice.
- Nominal cooling capacities are based on;
Indoor temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
 - Nominal heating capacities are based on;
Indoor temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 5m, Level differences: 0 m
 - Sound pressure was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
 - These products contain R410A/R32 which is fluorinated greenhouse gas.

2. Capacity Table

Wind-Free GEO

AR09BXFAMWKNUA + AR09BXFAMWKXUA

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
-10	2.51	2.09	0.71	2.61	2.18	0.74	2.81	2.30	0.77	2.97	2.38	0.79	3.06	2.42	0.79	3.26	2.51	0.80	3.50	2.61	0.80
0	2.55	2.13	0.62	2.67	2.23	0.64	2.88	2.36	0.67	3.06	2.45	0.69	3.15	2.49	0.69	3.37	2.59	0.70	3.62	2.70	0.69
10	2.66	2.22	0.60	2.78	2.32	0.63	3.01	2.46	0.66	3.18	2.55	0.68	3.28	2.59	0.68	3.51	2.69	0.68	3.76	2.80	0.68
20	2.75	2.29	0.67	2.87	2.39	0.70	3.09	2.53	0.73	3.27	2.62	0.75	3.37	2.66	0.75	3.60	2.76	0.76	3.85	2.88	0.75
25	2.76	2.30	0.73	2.88	2.40	0.76	3.10	2.53	0.80	3.28	2.62	0.82	3.38	2.67	0.82	3.60	2.76	0.83	3.85	2.88	0.82
32	2.71	2.26	0.85	2.83	2.36	0.89	3.05	2.49	0.93	3.22	2.57	0.95	3.32	2.62	0.96	3.53	2.71	0.96	3.78	2.82	0.96
35	2.67	2.22	0.91	2.79	2.32	0.95	3.00	2.45	1.00	2.50	2.00	0.70	3.26	2.57	1.02	3.47	2.67	1.03	3.72	2.78	1.03
40	2.55	2.12	1.04	2.66	2.22	1.08	2.86	2.34	1.13	3.02	2.42	1.15	3.12	2.46	1.16	3.32	2.55	1.17	3.56	2.66	1.16
43	2.45	2.04	1.12	2.55	2.13	1.16	2.75	2.25	1.21	2.91	2.33	1.24	3.00	2.37	1.25	3.20	2.46	1.26	3.44	2.56	1.25
46	2.32	1.93	1.21	2.42	2.02	1.25	2.61	2.14	1.31	2.76	2.22	1.33	2.85	2.25	1.34	3.05	2.34	1.35	3.28	2.44	1.35

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
-15	2.21	1.01	2.14	1.00	2.12	1.00	2.12	1.00	2.12	1.01	2.15	1.03
-10	2.68	1.09	2.66	1.09	2.65	1.10	2.64	1.10	2.63	1.11	2.60	1.13
-5	2.96	1.06	2.99	1.08	2.99	1.09	2.97	1.10	2.95	1.11	2.85	1.13
0	3.10	0.98	3.18	1.00	3.20	1.03	3.18	1.04	3.13	1.05	2.98	1.06
2	3.13	0.93	3.24	0.97	3.26	0.99	3.24	1.00	3.19	1.01	3.01	1.03
5	3.18	0.87	3.32	0.91	3.35	0.94	3.32	0.95	3.27	0.96	3.05	0.97
7	3.21	0.83	3.37	0.87	3.20	0.84	3.38	0.92	3.32	0.93	3.08	0.94
10	3.27	0.77	3.46	0.82	3.51	0.86	3.48	0.88	3.41	0.89	3.14	0.90
15	3.43	0.73	3.68	0.80	3.76	0.84	3.72	0.85	3.64	0.86	3.31	0.87
20	3.74	0.79	4.05	0.86	4.15	0.91	4.11	0.92	4.01	0.93	3.64	0.94
24	4.13	0.92	4.50	1.00	4.61	1.05	4.57	1.07	4.47	1.08	4.05	1.08

NOTE

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

2. Capacity Table

Wind-Free GEO

AR12BXFAMWKNUA + AR12BXFAMWKXUA

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
-10	3.29	2.73	0.99	3.38	2.85	1.03	3.65	3.01	1.07	3.89	3.12	1.09	4.03	3.17	1.10	4.31	3.29	1.11	4.60	3.43	1.11
0	3.39	2.83	0.89	3.51	2.96	0.93	3.80	3.13	0.97	4.06	3.24	0.99	4.20	3.30	0.99	4.49	3.43	1.00	4.79	3.57	1.00
10	3.47	2.90	0.87	3.59	3.03	0.92	3.89	3.20	0.96	4.16	3.32	0.97	4.30	3.38	0.98	4.60	3.51	0.98	4.90	3.65	0.98
20	3.46	2.88	0.94	3.57	3.01	0.99	3.87	3.18	1.04	4.13	3.30	1.05	4.27	3.35	1.06	4.56	3.48	1.06	4.85	3.62	1.06
25	3.39	2.83	1.01	3.51	2.96	1.06	3.80	3.12	1.11	4.05	3.23	1.13	4.18	3.29	1.13	4.47	3.41	1.14	4.76	3.55	1.13
32	3.23	2.69	1.14	3.33	2.81	1.19	3.60	2.97	1.25	3.84	3.07	1.27	3.97	3.12	1.28	4.24	3.24	1.28	4.51	3.37	1.28
35	3.13	2.60	1.21	3.22	2.72	1.27	3.48	2.87	1.33	3.50	2.80	1.22	3.84	3.02	1.36	4.10	3.13	1.36	4.37	3.26	1.36
40	2.90	2.42	1.35	2.99	2.53	1.41	3.23	2.67	1.47	3.45	2.76	1.50	3.57	2.81	1.50	3.81	2.91	1.51	4.06	3.03	1.51
43	2.74	2.28	1.44	2.81	2.38	1.50	3.04	2.52	1.57	3.25	2.60	1.60	3.36	2.65	1.60	3.60	2.75	1.62	3.84	2.86	1.62
46	2.54	2.12	1.54	2.61	2.22	1.61	2.83	2.34	1.68	3.02	2.42	1.71	3.13	2.47	1.72	3.36	2.56	1.73	3.59	2.67	1.73

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
-15	2.59	1.20	2.50	1.19	2.47	1.19	2.47	1.20	2.49	1.21	2.53	1.24
-10	3.07	1.23	3.02	1.23	2.99	1.23	2.98	1.23	2.97	1.24	2.95	1.26
-5	3.33	1.17	3.32	1.17	3.30	1.18	3.28	1.18	3.25	1.19	3.17	1.20
0	3.45	1.06	3.48	1.07	3.47	1.08	3.44	1.08	3.40	1.09	3.27	1.10
2	3.48	1.01	3.53	1.02	3.52	1.04	3.49	1.04	3.44	1.05	3.29	1.05
5	3.50	0.93	3.59	0.96	3.59	0.97	3.55	0.98	3.50	0.98	3.31	0.99
7	3.52	0.89	3.62	0.91	3.50	0.94	3.60	0.94	3.54	0.94	3.33	0.95
10	3.56	0.83	3.69	0.87	3.71	0.89	3.68	0.90	3.61	0.90	3.37	0.91
15	3.70	0.80	3.89	0.85	3.93	0.88	3.89	0.89	3.81	0.90	3.53	0.90
20	3.99	0.87	4.24	0.93	4.30	0.97	4.27	0.99	4.18	1.00	3.86	1.01
24	4.39	1.02	4.68	1.10	4.77	1.15	4.73	1.17	4.64	1.18	4.29	1.19



NOTE

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

2. Capacity Table

Wind-Free GEO

AR18BXFAMWKNUA + AR18BXFAMWKXUA

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
-10	5.01	4.38	0.64	5.33	4.55	0.74	5.87	4.82	0.86	6.26	5.01	0.92	6.47	5.11	0.94	6.91	5.31	0.95	7.40	5.51	0.94
0	5.00	4.37	0.70	5.33	4.54	0.81	5.86	4.81	0.94	6.25	5.00	0.99	6.45	5.09	1.01	6.89	5.29	1.02	7.36	5.49	0.99
10	4.85	4.25	0.73	5.17	4.41	0.85	5.69	4.67	0.98	6.07	4.85	1.04	6.27	4.95	1.06	6.69	5.14	1.06	7.15	5.33	1.03
20	4.60	4.03	0.76	4.90	4.18	0.90	5.40	4.43	1.06	5.76	4.61	1.12	5.95	4.70	1.14	6.36	4.88	1.15	6.79	5.07	1.11
25	4.44	3.89	0.80	4.74	4.04	0.95	5.22	4.28	1.12	5.57	4.45	1.19	5.75	4.54	1.21	6.15	4.72	1.22	6.57	4.90	1.18
32	4.20	3.68	0.90	4.48	3.82	1.07	4.94	4.05	1.26	5.27	4.21	1.34	5.44	4.30	1.36	5.82	4.47	1.37	6.22	4.64	1.34
35	4.09	3.59	0.97	4.37	3.72	1.14	4.81	3.95	1.34	5.00	4.00	1.39	5.30	4.19	1.45	5.67	4.35	1.46	6.06	4.52	1.43
40	3.91	3.42	1.10	4.17	3.55	1.29	4.59	3.76	1.51	4.89	3.92	1.60	5.06	3.99	1.63	5.40	4.15	1.65	5.78	4.31	1.61
43	3.80	3.32	1.20	4.05	3.45	1.40	4.45	3.65	1.63	4.75	3.80	1.73	4.91	3.87	1.76	5.24	4.03	1.78	5.61	4.18	1.75
46	3.69	3.22	1.32	3.92	3.34	1.53	4.32	3.54	1.77	4.60	3.68	1.87	4.75	3.76	1.91	5.08	3.90	1.94	5.43	4.05	1.91

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
-15	5.58	1.85	4.90	1.79	4.58	1.85	4.56	1.92	4.63	2.03	5.07	2.34
-10	5.43	1.98	4.87	1.93	4.57	1.97	4.52	2.04	4.54	2.13	4.80	2.41
-5	5.52	2.01	5.10	1.96	4.84	2.01	4.77	2.07	4.74	2.15	4.83	2.41
0	5.79	1.96	5.51	1.93	5.29	1.98	5.20	2.04	5.14	2.12	5.07	2.36
2	5.92	1.93	5.70	1.90	5.50	1.96	5.41	2.02	5.33	2.10	5.20	2.33
5	6.12	1.88	6.00	1.86	5.83	1.92	5.74	1.98	5.64	2.06	5.42	2.29
7	6.25	1.85	6.20	1.84	6.00	1.70	5.96	1.96	5.85	2.04	5.57	2.27
10	6.43	1.80	6.48	1.80	6.38	1.88	6.28	1.94	6.15	2.02	5.80	2.24
15	6.62	1.74	6.85	1.78	6.83	1.87	6.74	1.94	6.58	2.03	6.11	2.25
20	6.60	1.75	7.03	1.83	7.10	1.94	7.01	2.02	6.84	2.11	6.25	2.34
24	6.38	1.83	6.96	1.94	7.12	2.08	7.04	2.16	6.86	2.26	6.19	2.50

NOTE

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

2. Capacity Table

Wind-Free GEO

AR24BXFAMWKNUA + AR24BXFAMWKXUA

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
-10	6.74	5.60	1.10	7.07	5.80	1.27	7.57	6.13	1.46	7.95	6.37	1.54	8.17	6.49	1.56	8.69	6.73	1.58	9.35	6.98	1.57
0	6.19	5.18	1.03	6.54	5.39	1.22	7.07	5.74	1.42	7.47	5.98	1.50	7.70	6.11	1.52	8.24	6.36	1.53	8.90	6.62	1.50
10	6.26	5.24	1.11	6.62	5.45	1.32	7.15	5.80	1.54	7.56	6.04	1.62	7.79	6.17	1.64	8.32	6.42	1.65	8.98	6.68	1.61
20	6.49	5.41	1.29	6.84	5.61	1.53	7.36	5.95	1.78	7.75	6.19	1.87	7.97	6.31	1.90	8.48	6.56	1.91	9.12	6.81	1.86
25	6.52	5.43	1.41	6.86	5.62	1.67	7.37	5.95	1.93	7.74	6.18	2.03	7.96	6.30	2.06	8.45	6.54	2.07	9.07	6.78	2.03
32	6.33	5.26	1.60	6.66	5.45	1.88	7.12	5.75	2.17	7.48	5.97	2.29	7.68	6.08	2.32	8.14	6.31	2.34	8.73	6.53	2.30
35	6.14	5.10	1.69	6.45	5.27	1.98	6.90	5.57	2.28	6.50	5.20	1.95	7.43	5.89	2.44	7.88	6.11	2.46	8.46	6.32	2.42
40	5.61	4.66	1.83	5.89	4.82	2.14	6.31	5.10	2.47	6.62	5.30	2.61	6.80	5.40	2.65	7.23	5.60	2.68	7.77	5.81	2.64
43	5.14	4.28	1.92	5.42	4.44	2.24	5.81	4.70	2.59	6.10	4.89	2.73	6.28	4.98	2.77	6.68	5.18	2.81	7.21	5.37	2.77
46	4.56	3.81	2.01	4.82	3.96	2.35	5.18	4.20	2.71	5.46	4.38	2.86	5.62	4.47	2.90	6.01	4.66	2.94	6.52	4.84	2.91

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
-15	6.94	2.44	6.07	2.35	5.66	2.43	5.63	2.53	5.70	2.67	6.15	3.06
-10	6.45	2.66	5.83	2.59	5.55	2.67	5.53	2.76	5.58	2.89	5.89	3.26
-5	6.53	2.70	6.16	2.65	6.00	2.73	5.98	2.82	6.00	2.94	6.16	3.28
0	7.00	2.61	6.87	2.58	6.81	2.67	6.79	2.76	6.78	2.88	6.78	3.20
2	7.26	2.56	7.22	2.54	7.19	2.63	7.17	2.72	7.15	2.84	7.08	3.16
5	7.67	2.47	7.77	2.46	7.79	2.57	7.77	2.66	7.72	2.78	7.55	3.09
7	7.96	2.41	8.13	2.42	7.40	2.35	8.17	2.62	8.10	2.74	7.85	3.05
10	8.35	2.33	8.66	2.36	8.76	2.48	8.73	2.58	8.64	2.70	8.27	3.00
15	8.85	2.27	9.35	2.34	9.52	2.49	9.47	2.59	9.33	2.71	8.76	3.02
20	8.96	2.35	9.65	2.46	9.87	2.64	9.80	2.75	9.60	2.88	8.83	3.19
24	8.65	2.56	9.48	2.71	9.74	2.92	9.65	3.04	9.40	3.18	8.45	3.49



NOTE

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

2. Capacity Table

Wind-Free AIRISE

AR09BXHCNWKNUA + AR09BXHCNWKXUA

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
-10	2.51	2.09	0.71	2.61	2.18	0.74	2.81	2.30	0.77	2.97	2.38	0.79	3.06	2.42	0.79	3.26	2.51	0.80	3.50	2.61	0.80
0	2.55	2.13	0.62	2.67	2.23	0.64	2.88	2.36	0.67	3.06	2.45	0.69	3.15	2.49	0.69	3.37	2.59	0.70	3.62	2.70	0.69
10	2.66	2.22	0.60	2.78	2.32	0.63	3.01	2.46	0.66	3.18	2.55	0.68	3.28	2.59	0.68	3.51	2.69	0.68	3.76	2.80	0.68
20	2.75	2.29	0.67	2.87	2.39	0.70	3.09	2.53	0.73	3.27	2.62	0.75	3.37	2.66	0.75	3.60	2.76	0.76	3.85	2.88	0.75
25	2.76	2.30	0.73	2.88	2.40	0.76	3.10	2.53	0.80	3.28	2.62	0.82	3.38	2.67	0.82	3.60	2.76	0.83	3.85	2.88	0.82
32	2.71	2.26	0.85	2.83	2.36	0.89	3.05	2.49	0.93	3.22	2.57	0.95	3.32	2.62	0.96	3.53	2.71	0.96	3.78	2.82	0.96
35	2.67	2.22	0.91	2.79	2.32	0.95	3.00	2.45	1.00	2.50	2.00	0.70	3.26	2.57	1.02	3.47	2.67	1.03	3.72	2.78	1.03
40	2.55	2.12	1.04	2.66	2.22	1.08	2.86	2.34	1.13	3.02	2.42	1.15	3.12	2.46	1.16	3.32	2.55	1.17	3.56	2.66	1.16
43	2.45	2.04	1.12	2.55	2.13	1.16	2.75	2.25	1.21	2.91	2.33	1.24	3.00	2.37	1.25	3.20	2.46	1.26	3.44	2.56	1.25
46	2.32	1.93	1.21	2.42	2.02	1.25	2.61	2.14	1.31	2.76	2.22	1.33	2.85	2.25	1.34	3.05	2.34	1.35	3.28	2.44	1.35

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
-15	2.21	1.01	2.14	1.00	2.12	1.00	2.12	1.00	2.12	1.01	2.15	1.03
-10	2.68	1.09	2.66	1.09	2.65	1.10	2.64	1.10	2.63	1.11	2.60	1.13
-5	2.96	1.06	2.99	1.08	2.99	1.09	2.97	1.10	2.95	1.11	2.85	1.13
0	3.10	0.98	3.18	1.00	3.20	1.03	3.18	1.04	3.13	1.05	2.98	1.06
2	3.13	0.93	3.24	0.97	3.26	0.99	3.24	1.00	3.19	1.01	3.01	1.03
5	3.18	0.87	3.32	0.91	3.35	0.94	3.32	0.95	3.27	0.96	3.05	0.97
7	3.21	0.83	3.37	0.87	3.20	0.84	3.38	0.92	3.32	0.93	3.08	0.94
10	3.27	0.77	3.46	0.82	3.51	0.86	3.48	0.88	3.41	0.89	3.14	0.90
15	3.43	0.73	3.68	0.80	3.76	0.84	3.72	0.85	3.64	0.86	3.31	0.87
20	3.74	0.79	4.05	0.86	4.15	0.91	4.11	0.92	4.01	0.93	3.64	0.94
24	4.13	0.92	4.50	1.00	4.61	1.05	4.57	1.07	4.47	1.08	4.05	1.08

NOTE

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

2. Capacity Table

Wind-Free AIRISE

AR12BXHCNWKNUA + AR12BXHCNWKXUA

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
-10	3.29	2.73	0.99	3.38	2.85	1.03	3.65	3.01	1.07	3.89	3.12	1.09	4.03	3.17	1.10	4.31	3.29	1.11	4.60	3.43	1.11
0	3.39	2.83	0.89	3.51	2.96	0.93	3.80	3.13	0.97	4.06	3.24	0.99	4.20	3.30	0.99	4.49	3.43	1.00	4.79	3.57	1.00
10	3.47	2.90	0.87	3.59	3.03	0.92	3.89	3.20	0.96	4.16	3.32	0.97	4.30	3.38	0.98	4.60	3.51	0.98	4.90	3.65	0.98
20	3.46	2.88	0.94	3.57	3.01	0.99	3.87	3.18	1.04	4.13	3.30	1.05	4.27	3.35	1.06	4.56	3.48	1.06	4.85	3.62	1.06
25	3.39	2.83	1.01	3.51	2.96	1.06	3.80	3.12	1.11	4.05	3.23	1.13	4.18	3.29	1.13	4.47	3.41	1.14	4.76	3.55	1.13
32	3.23	2.69	1.14	3.33	2.81	1.19	3.60	2.97	1.25	3.84	3.07	1.27	3.97	3.12	1.28	4.24	3.24	1.28	4.51	3.37	1.28
35	3.13	2.60	1.21	3.22	2.72	1.27	3.48	2.87	1.33	3.50	2.80	1.22	3.84	3.02	1.36	4.10	3.13	1.36	4.37	3.26	1.36
40	2.90	2.42	1.35	2.99	2.53	1.41	3.23	2.67	1.47	3.45	2.76	1.50	3.57	2.81	1.50	3.81	2.91	1.51	4.06	3.03	1.51
43	2.74	2.28	1.44	2.81	2.38	1.50	3.04	2.52	1.57	3.25	2.60	1.60	3.36	2.65	1.60	3.60	2.75	1.62	3.84	2.86	1.62
46	2.54	2.12	1.54	2.61	2.22	1.61	2.83	2.34	1.68	3.02	2.42	1.71	3.13	2.47	1.72	3.36	2.56	1.73	3.59	2.67	1.73

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
-15	2.59	1.20	2.50	1.19	2.47	1.19	2.47	1.20	2.49	1.21	2.53	1.24
-10	3.07	1.23	3.02	1.23	2.99	1.23	2.98	1.23	2.97	1.24	2.95	1.26
-5	3.33	1.17	3.32	1.17	3.30	1.18	3.28	1.18	3.25	1.19	3.17	1.20
0	3.45	1.06	3.48	1.07	3.47	1.08	3.44	1.08	3.40	1.09	3.27	1.10
2	3.48	1.01	3.53	1.02	3.52	1.04	3.49	1.04	3.44	1.05	3.29	1.05
5	3.50	0.93	3.59	0.96	3.59	0.97	3.55	0.98	3.50	0.98	3.31	0.99
7	3.52	0.89	3.62	0.91	3.50	0.94	3.60	0.94	3.54	0.94	3.33	0.95
10	3.56	0.83	3.69	0.87	3.71	0.89	3.68	0.90	3.61	0.90	3.37	0.91
15	3.70	0.80	3.89	0.85	3.93	0.88	3.89	0.89	3.81	0.90	3.53	0.90
20	3.99	0.87	4.24	0.93	4.30	0.97	4.27	0.99	4.18	1.00	3.86	1.01
24	4.39	1.02	4.68	1.10	4.77	1.15	4.73	1.17	4.64	1.18	4.29	1.19

NOTE

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

2. Capacity Table

Wind-Free AIRISE

AR18BXHCNWKNUA + AR18BXHCNWKXUA

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
-10	5.01	4.38	0.64	5.33	4.55	0.74	5.87	4.82	0.86	6.26	5.01	0.92	6.47	5.11	0.94	6.91	5.31	0.95	7.40	5.51	0.94
0	5.00	4.37	0.70	5.33	4.54	0.81	5.86	4.81	0.94	6.25	5.00	0.99	6.45	5.09	1.01	6.89	5.29	1.02	7.36	5.49	0.99
10	4.85	4.25	0.73	5.17	4.41	0.85	5.69	4.67	0.98	6.07	4.85	1.04	6.27	4.95	1.06	6.69	5.14	1.06	7.15	5.33	1.03
20	4.60	4.03	0.76	4.90	4.18	0.90	5.40	4.43	1.06	5.76	4.61	1.12	5.95	4.70	1.14	6.36	4.88	1.15	6.79	5.07	1.11
25	4.44	3.89	0.80	4.74	4.04	0.95	5.22	4.28	1.12	5.57	4.45	1.19	5.75	4.54	1.21	6.15	4.72	1.22	6.57	4.90	1.18
32	4.20	3.68	0.90	4.48	3.82	1.07	4.94	4.05	1.26	5.27	4.21	1.34	5.44	4.30	1.36	5.82	4.47	1.37	6.22	4.64	1.34
35	4.09	3.59	0.97	4.37	3.72	1.14	4.81	3.95	1.34	5.00	4.00	1.39	5.30	4.19	1.45	5.67	4.35	1.46	6.06	4.52	1.43
40	3.91	3.42	1.10	4.17	3.55	1.29	4.59	3.76	1.51	4.89	3.92	1.60	5.06	3.99	1.63	5.40	4.15	1.65	5.78	4.31	1.61
43	3.80	3.32	1.20	4.05	3.45	1.40	4.45	3.65	1.63	4.75	3.80	1.73	4.91	3.87	1.76	5.24	4.03	1.78	5.61	4.18	1.75
46	3.69	3.22	1.32	3.92	3.34	1.53	4.32	3.54	1.77	4.60	3.68	1.87	4.75	3.76	1.91	5.08	3.90	1.94	5.43	4.05	1.91

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
-15	5.58	1.85	4.90	1.79	4.58	1.85	4.56	1.92	4.63	2.03	5.07	2.34
-10	5.43	1.98	4.87	1.93	4.57	1.97	4.52	2.04	4.54	2.13	4.80	2.41
-5	5.52	2.01	5.10	1.96	4.84	2.01	4.77	2.07	4.74	2.15	4.83	2.41
0	5.79	1.96	5.51	1.93	5.29	1.98	5.20	2.04	5.14	2.12	5.07	2.36
2	5.92	1.93	5.70	1.90	5.50	1.96	5.41	2.02	5.33	2.10	5.20	2.33
5	6.12	1.88	6.00	1.86	5.83	1.92	5.74	1.98	5.64	2.06	5.42	2.29
7	6.25	1.85	6.20	1.84	6.00	1.70	5.96	1.96	5.85	2.04	5.57	2.27
10	6.43	1.80	6.48	1.80	6.38	1.88	6.28	1.94	6.15	2.02	5.80	2.24
15	6.62	1.74	6.85	1.78	6.83	1.87	6.74	1.94	6.58	2.03	6.11	2.25
20	6.60	1.75	7.03	1.83	7.10	1.94	7.01	2.02	6.84	2.11	6.25	2.34
24	6.38	1.83	6.96	1.94	7.12	2.08	7.04	2.16	6.86	2.26	6.19	2.50

NOTE

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

2. Capacity Table

Wind-Free AIRISE

AR24BXHCNWKNUA + AR24BXHCNWKXUA

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	
-10	6.74	5.60	1.10	7.07	5.80	1.27	7.57	6.13	1.46	7.95	6.37	1.54	8.17	6.49	1.56	8.69	6.73	1.58	9.35	6.98	1.57	
0	6.19	5.18	1.03	6.54	5.39	1.22	7.07	5.74	1.42	7.47	5.98	1.50	7.70	6.11	1.52	8.24	6.36	1.53	8.90	6.62	1.50	
10	6.26	5.24	1.11	6.62	5.45	1.32	7.15	5.80	1.54	7.56	6.04	1.62	7.79	6.17	1.64	8.32	6.42	1.65	8.98	6.68	1.61	
20	6.49	5.41	1.29	6.84	5.61	1.53	7.36	5.95	1.78	7.75	6.19	1.87	7.97	6.31	1.90	8.48	6.56	1.91	9.12	6.81	1.86	
25	6.52	5.43	1.41	6.86	5.62	1.67	7.37	5.95	1.93	7.74	6.18	2.03	7.96	6.30	2.06	8.45	6.54	2.07	9.07	6.78	2.03	
32	6.33	5.26	1.60	6.66	5.45	1.88	7.12	5.75	2.17	7.48	5.97	2.29	7.68	6.08	2.32	8.14	6.31	2.34	8.73	6.53	2.30	
35	6.14	5.10	1.69	6.45	5.27	1.98	6.90	5.57	2.28	6.50	5.20	1.95	7.43	5.89	2.44	7.88	6.11	2.46	8.46	6.32	2.42	
40	5.61	4.66	1.83	5.89	4.82	2.14	6.31	5.10	2.47	6.62	5.30	2.61	6.80	5.40	2.65	7.23	5.60	2.68	7.77	5.81	2.64	
43	5.14	4.28	1.92	5.42	4.44	2.24	5.81	4.70	2.59	6.10	4.89	2.73	6.28	4.98	2.77	6.68	5.18	2.81	7.21	5.37	2.77	
46	4.56	3.81	2.01	4.82	3.96	2.35	5.18	4.20	2.71	5.46	4.38	2.86	5.62	4.47	2.90	6.01	4.66	2.94	6.52	4.84	2.91	

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
-15	6.94	2.44	6.07	2.35	5.66	2.43	5.63	2.53	5.70	2.67	6.15	3.06
-10	6.45	2.66	5.83	2.59	5.55	2.67	5.53	2.76	5.58	2.89	5.89	3.26
-5	6.53	2.70	6.16	2.65	6.00	2.73	5.98	2.82	6.00	2.94	6.16	3.28
0	7.00	2.61	6.87	2.58	6.81	2.67	6.79	2.76	6.78	2.88	6.78	3.20
2	7.26	2.56	7.22	2.54	7.19	2.63	7.17	2.72	7.15	2.84	7.08	3.16
5	7.67	2.47	7.77	2.46	7.79	2.57	7.77	2.66	7.72	2.78	7.55	3.09
7	7.96	2.41	8.13	2.42	7.40	2.35	8.17	2.62	8.10	2.74	7.85	3.05
10	8.35	2.33	8.66	2.36	8.76	2.48	8.73	2.58	8.64	2.70	8.27	3.00
15	8.85	2.27	9.35	2.34	9.52	2.49	9.47	2.59	9.33	2.71	8.76	3.02
20	8.96	2.35	9.65	2.46	9.87	2.64	9.80	2.75	9.60	2.88	8.83	3.19
24	8.65	2.56	9.48	2.71	9.74	2.92	9.65	3.04	9.40	3.18	8.45	3.49

NOTE

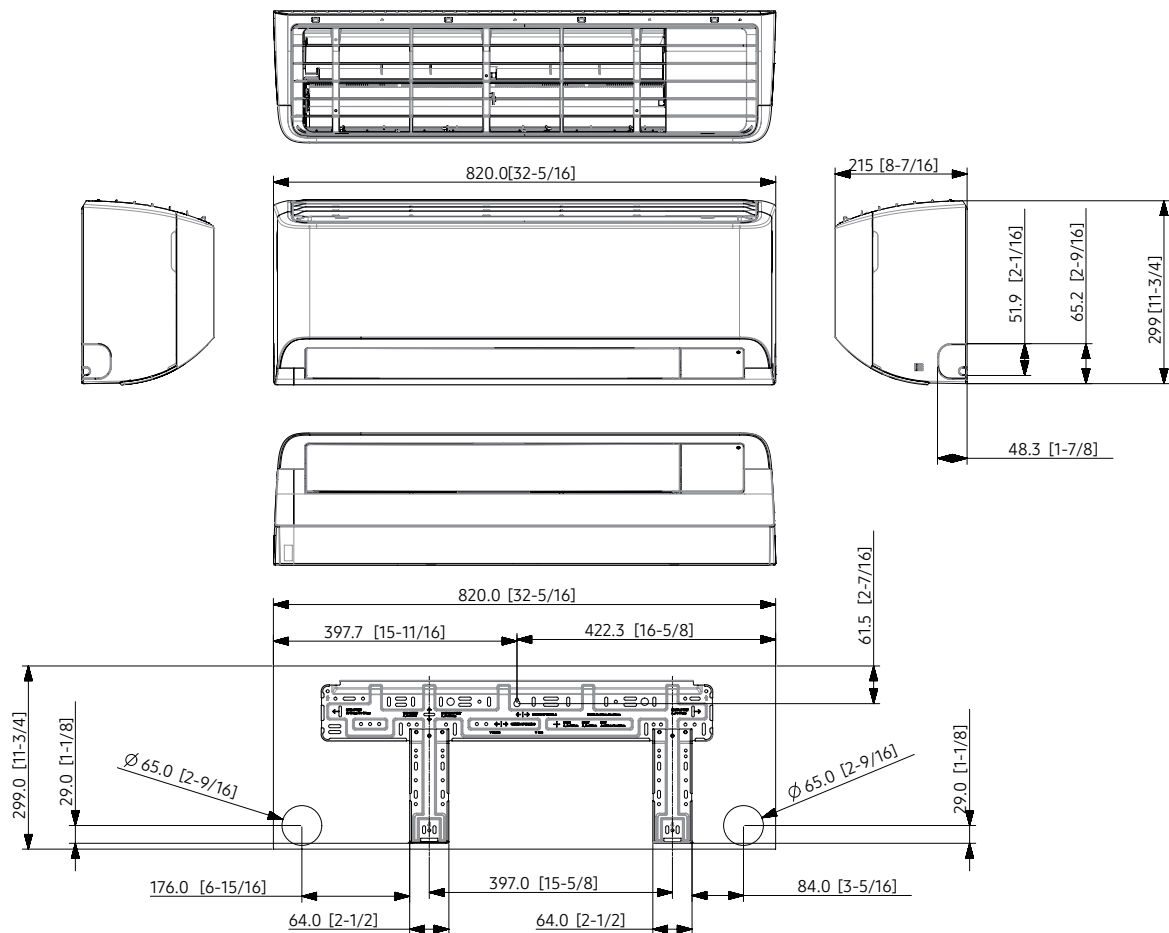
- The performance table shows the average value of each conditions.

3. Dimensional Drawing

Indoor units

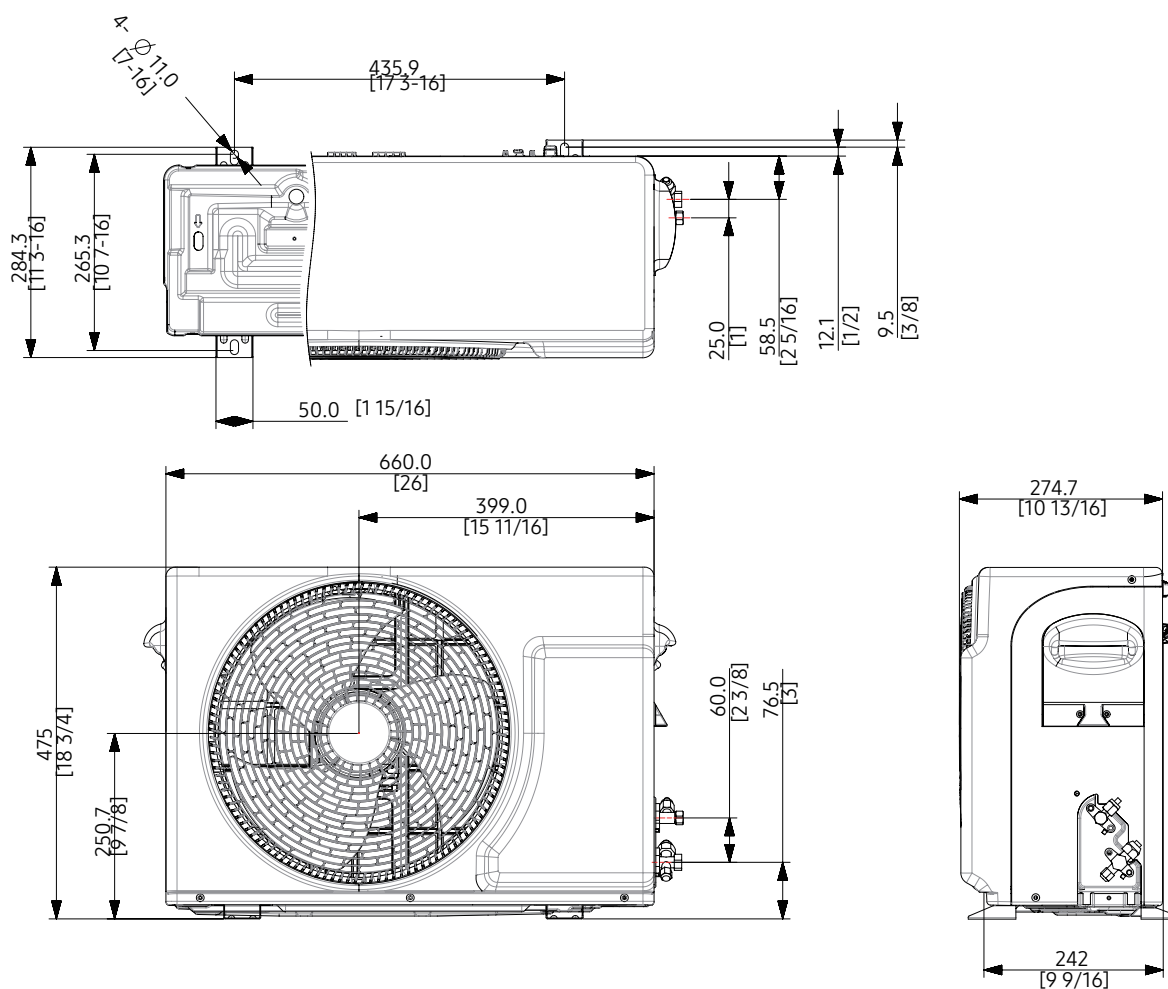
Wind-Free GEO : AR09BXFAMWKNUA, AR12BXFAMWKNUA
Wind-Free AIRISE : AR09BXHCNWKNUA, AR12BXHCNWKNUA

Unit: mm (inches)



Outdoor units

Unit: mm (inches)

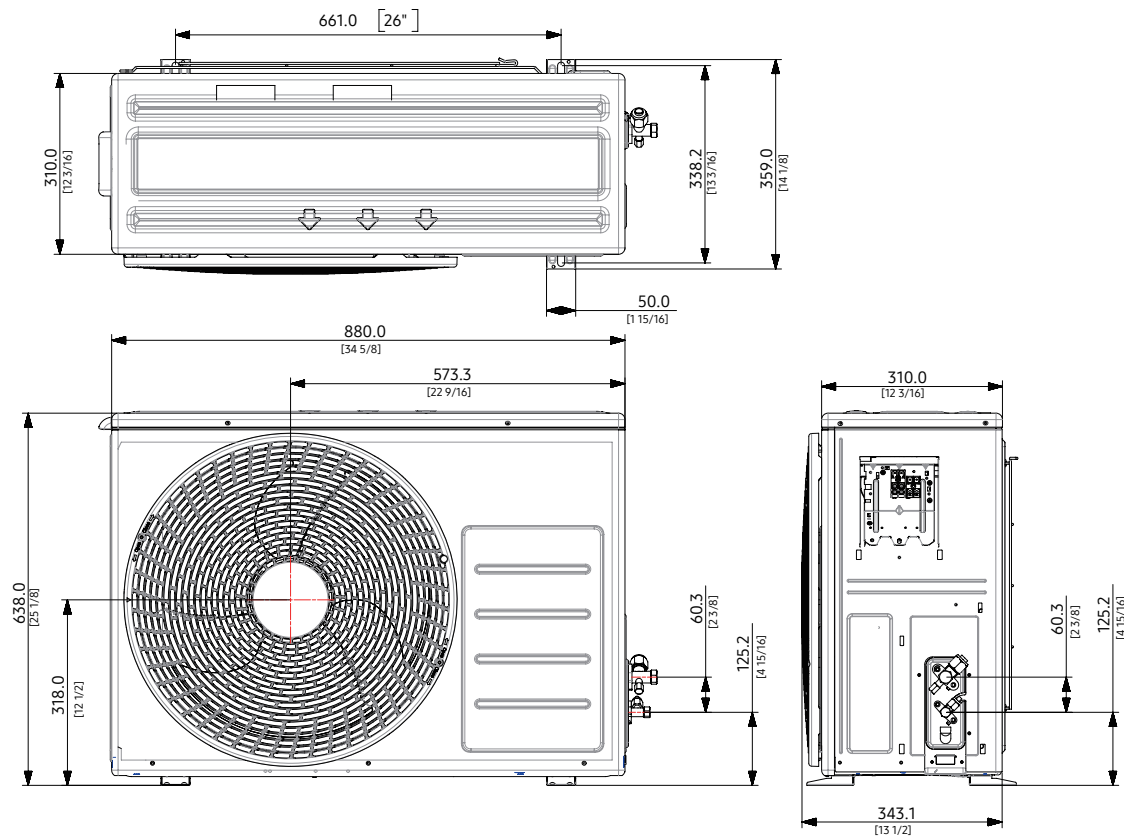


3. Dimensional Drawing

Outdoor units

Wind-Free GEO : AR18BXFAMWKXUA, AR24BXFAMWKXUA
Wind-Free AIRISE : AR18BXHCNWKXUA, AR24BXHCNWKXUA

Unit: mm (inches)

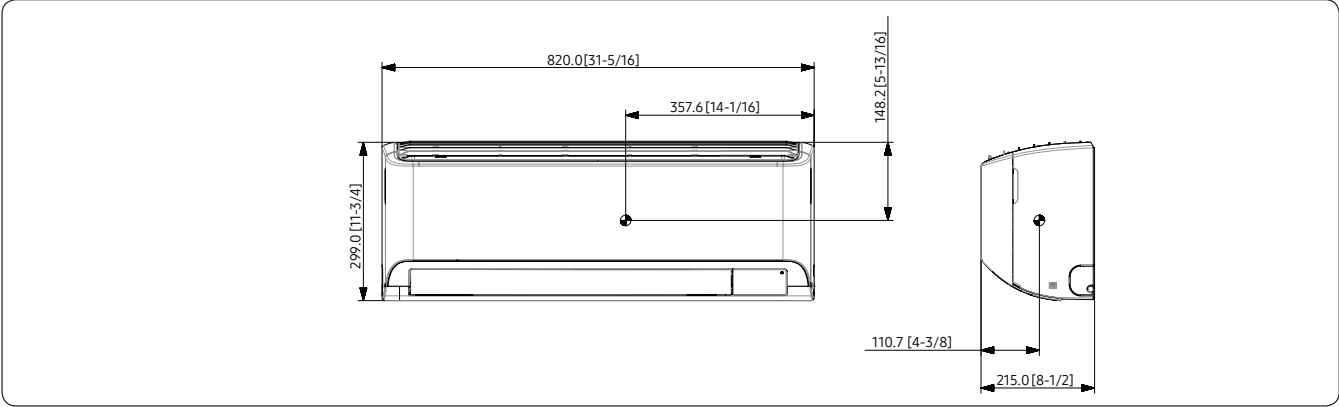


4. Center of Gravity

Indoor units

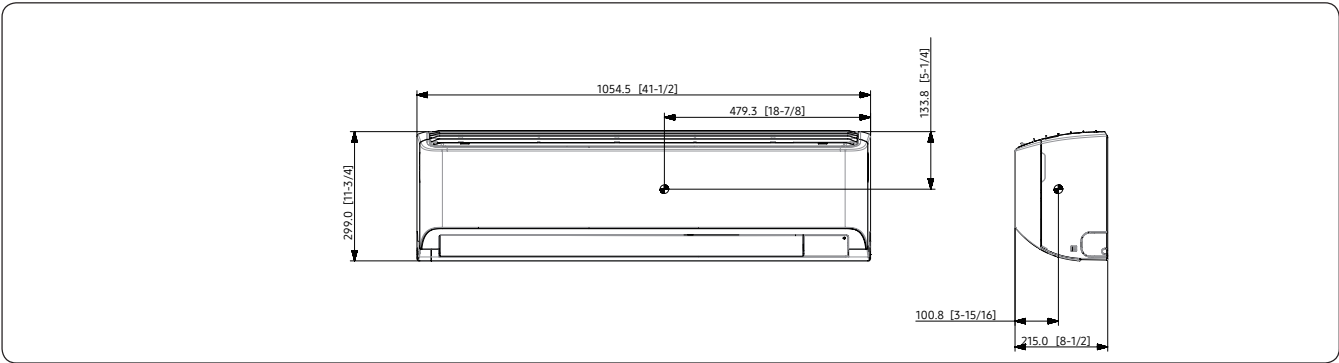
Wind-Free GEO : AR09BXFAMWKNUA, AR12BXFAMWKNUA
Wind-Free AIRISE : AR09BXHCNWKNUA, AR12BXHCNWKNUA

Unit: mm (inches)



Wind-Free GEO : AR18BXFAMWKNUA, AR24BXFAMWKNUA
Wind-Free AIRISE : AR18BXHCNWKNUA, AR24BXHCNWKNUA

Unit: mm (inches)

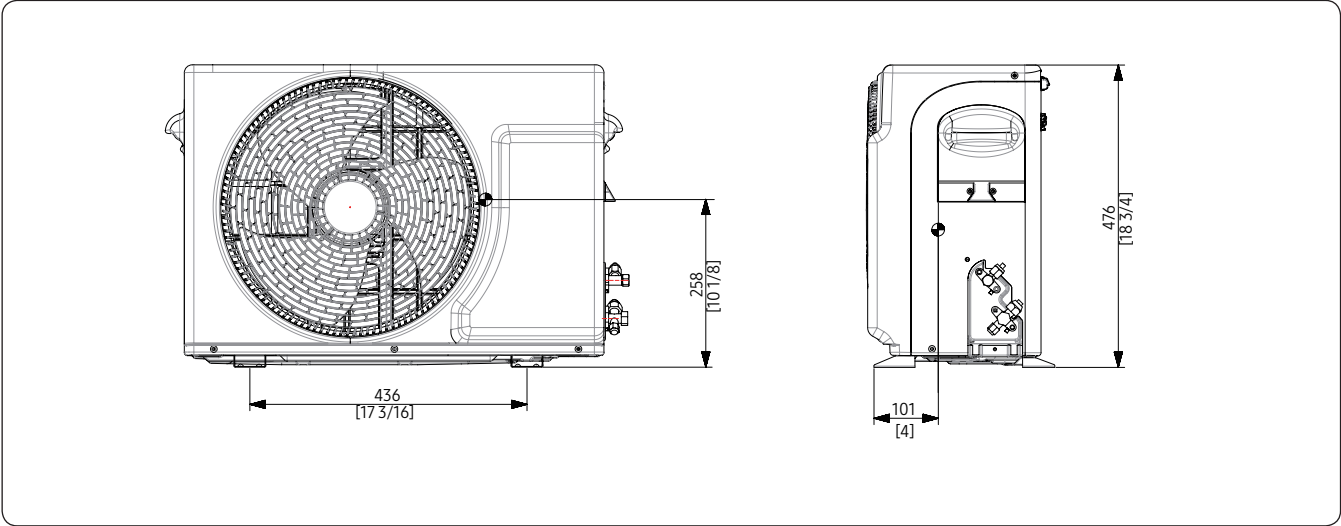


4. Center of Gravity

Outdoor units

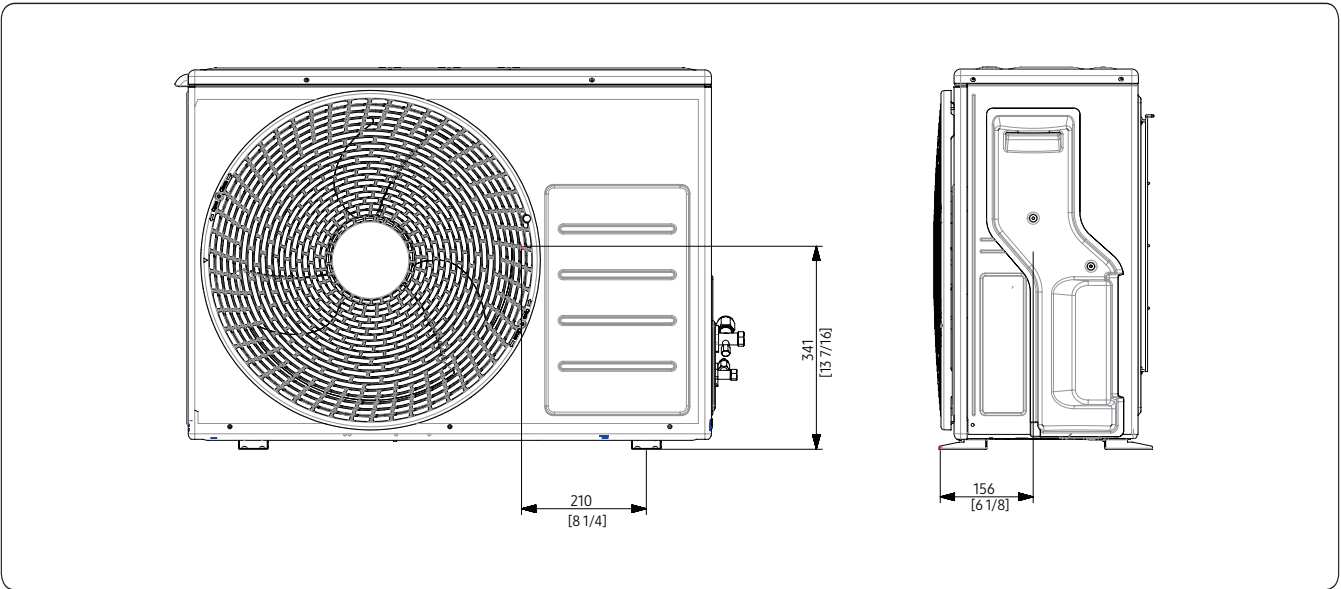
Wind-Free GEO : AR09BXFAMWKXUA, AR12BXFAMWKXUA
Wind-Free AIRISE : AR09BXHCNWKXUA, AR12BXHCNWKXUA

Unit: mm (inches)



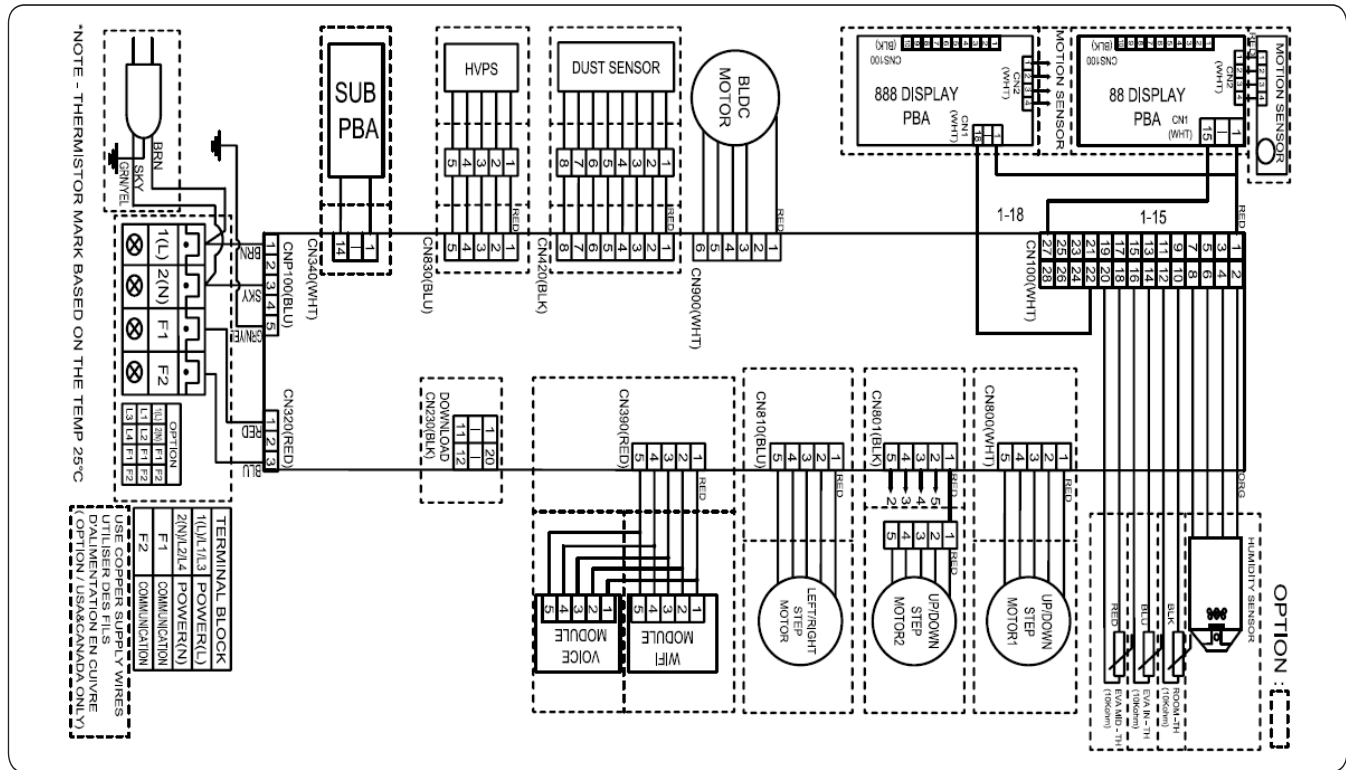
Wind-Free GEO : AR18BXFAMWKXUA, AR24BXFAMWKXUA
Wind-Free AIRISE : AR18BXHCNWKXUA, AR24BXHCNWKXUA

Unit: mm (inches)



5. Electrical Wiring Diagram

Indoor units



MOTION SENSOR	SENSOR(MOTION)	DISPLAY	Printed circuit board(DISPLAY BOARD)	DUST SNEOSOR	SENSOR(DUST)
ROOM TH	Thermistor(Room Temp. 10Kohm)	BLDC	Motor(BLDC FAN MOTOR)	HVPS	LOAD(HVPS MODULE)
EVA MID - TH	Thermistor(EVA MID Temp. 10Kohm)	UP/DOWN STEP MOTOR1	Motor(STEP MOTOR)	WIFI MODULE	LOAD(WIFI MODULE)
EVA IN - TH	Thermistor(EVA IN Temp. 10Kohm)	UP/DOWN STEP MOTOR2	Motor(STEP MOTOR)	SUB PBA	Printed circuit board(SUB BOARD)
HUMIDITY SENSOR	SENSOR(HUMIDITY)	LEFT/RIGHT STEP MOTOR	Motor(STEP MOTOR)		

NOTE

- This wiring diagram applies only to the indoor unit.
- Colors BLK : black, BRN : brown, SKY-BLU : sky-blue, GRN/YEL : green/yellow, RED : red, YEL : yellow, ORG : orange, BLU : blue, WHT:white
- ⊕ : Protective earth(screw)

- ## Outdoor units

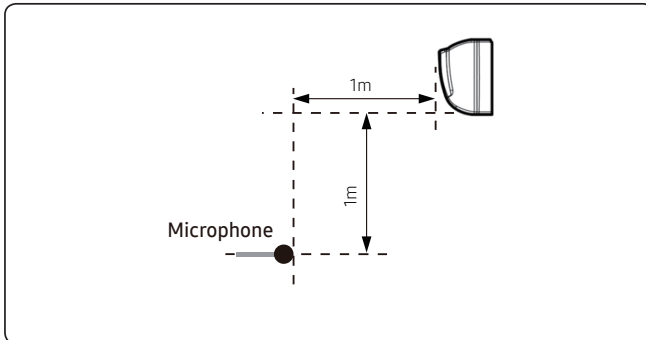
- ## Outdoor units

6. Sound Data

Indoor units

Sound Pressure level

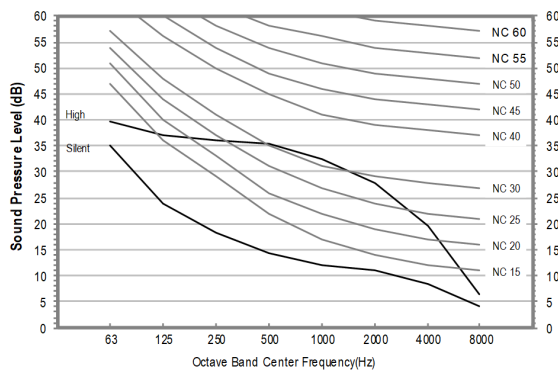
Unit: dB(A)



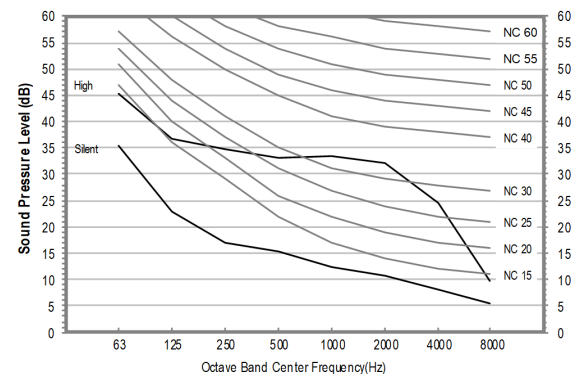
Model	Cooling	
	High	Silent
AR09BXFAMWKNUA	37	19
AR12BXFAMWKNUA	38	19
AR18BXFAMWKNUA	41	25
AR24BXFAMWKNUA	45	26

• NC Curve

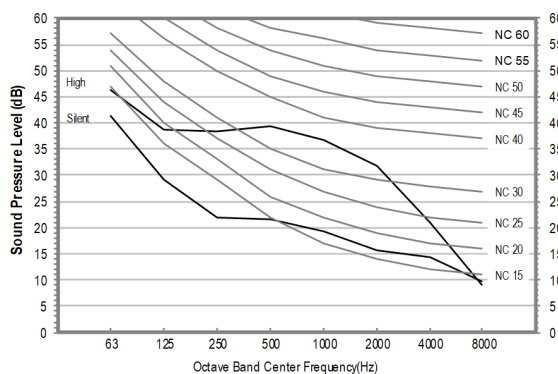
1) AR09BXFAMWKNUA



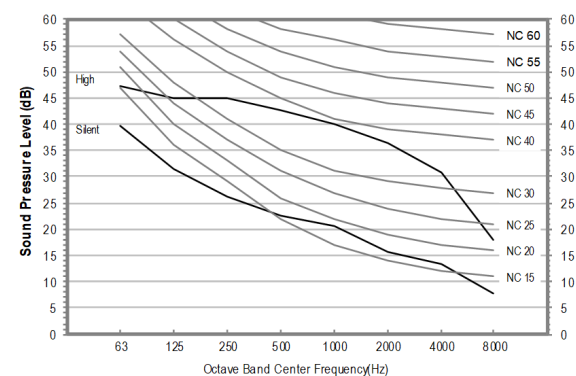
2) AR12BXFAMWKNUA



3) AR18BXFAMWKNUA



4) AR24BXFAMWKNUA



NOTE

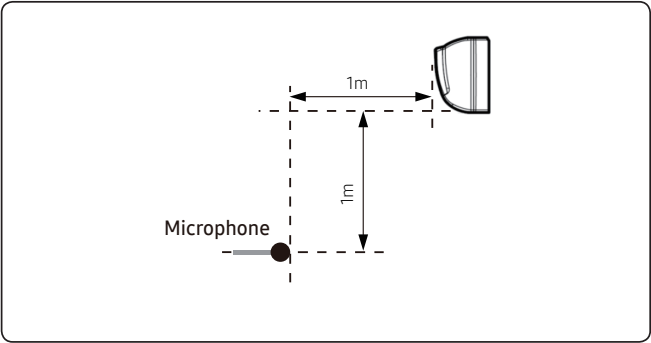
- Specifications may be subject to change without prior notice.
- Sound pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

6. Sound Data

Indoor units

Sound Pressure level

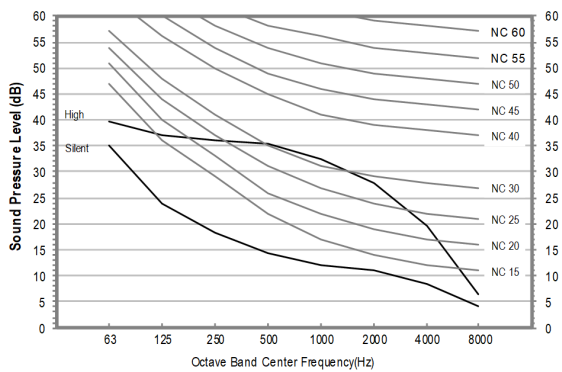
Unit: dB(A)



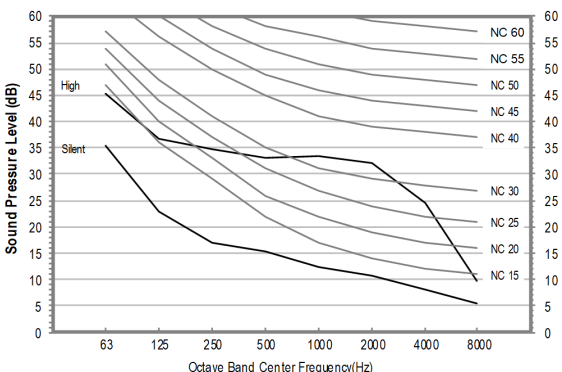
Model	Cooling	
	High	Silent
AR09BXHCNWKNUA	37	19
AR12BXHCNWKNUA	38	19
AR18BXHCNWKNUA	41	25
AR24BXHCNWKNUA	45	26

• NC Curve

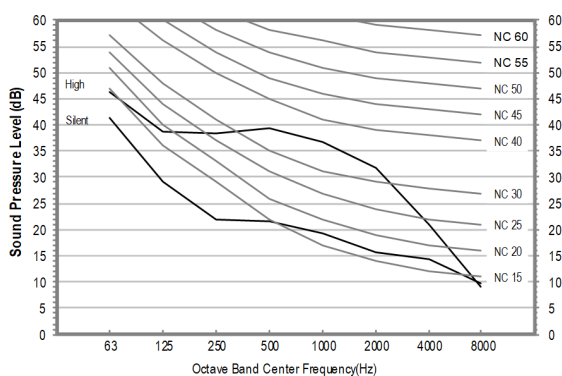
1) AR09BXHCNWKNUA



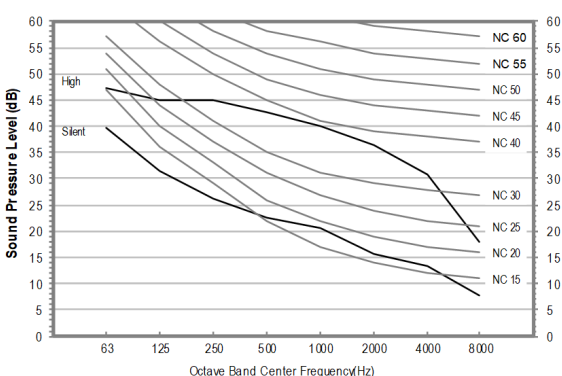
2) AR12BXHCNWKNUA



3) AR18BXHCNWKNUA



4) AR24BXHCNWKNUA



NOTE

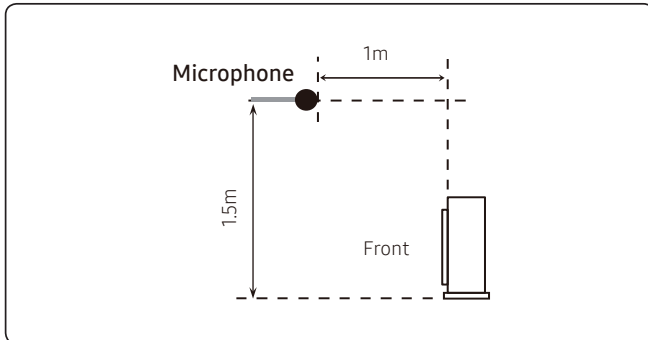
- Specifications may be subject to change without prior notice.
- Sound pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

6. Sound Data

Outdoor units

Sound Pressure level

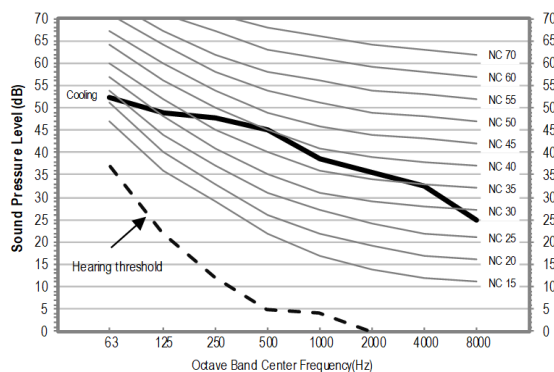
Unit: dB(A)



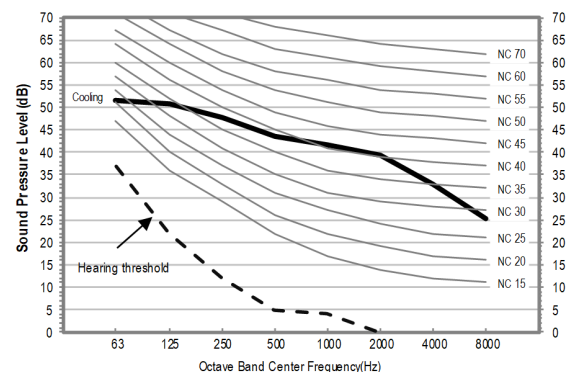
Model	Cooling
AR09BXFAMWKXUA	46
AR12BXFAMWKXUA	47
AR18BXFAMWKXUA	51
AR24BXFAMWKXUA	54

• NC Curve

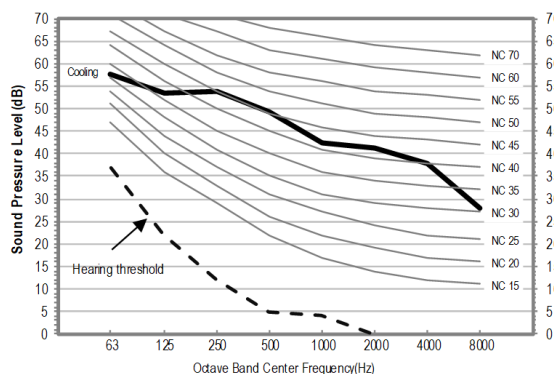
1) AR09BXFAMWKXUA



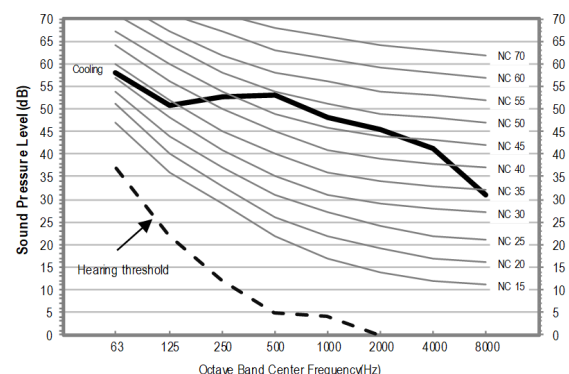
2) AR12BXFAMWKXUA



3) AR18BXFAMWKXUA



4) AR24BXFAMWKXUA



NOTE

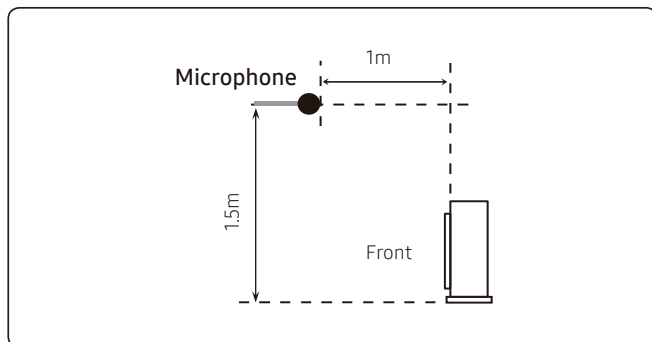
- Specifications may be subject to change without prior notice.
- Sound pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

6. Sound Data

Outdoor units

Sound Pressure level

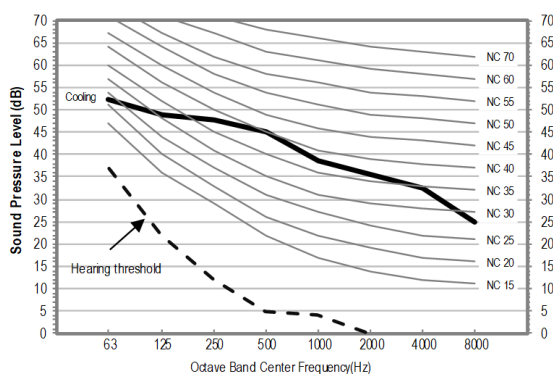
Unit: dB(A)



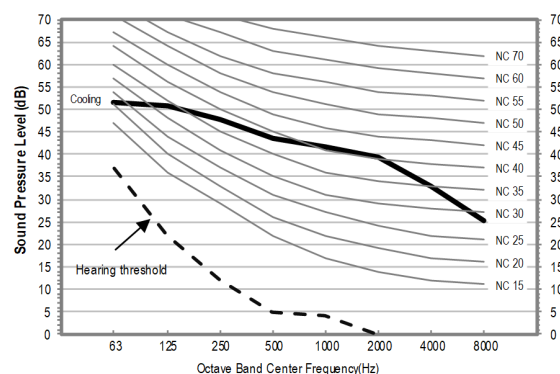
Model	Cooling
AR09BXHCNWKXUA	46
AR12BXHCNWKXUA	47
AR18BXHCNWKXUA	51
AR24BXHCNWKXUA	54

• NC Curve

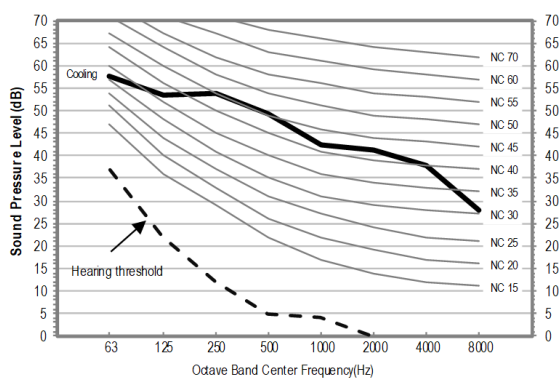
1) AR09BXHCNWKXUA



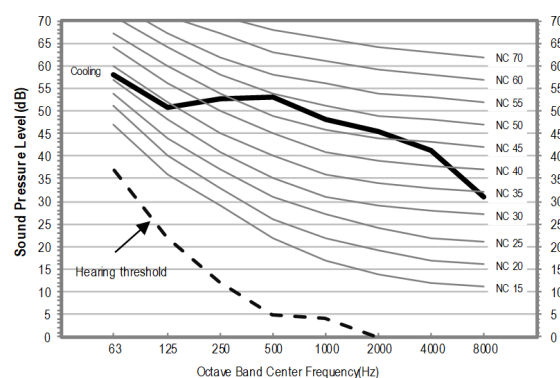
2) AR12BXHCNWKXUA



3) AR18BXHCNWKXUA



4) AR24BXHCNWKXUA



NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure Level
 - 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

6. Sound Data

Indoor units

Sound Power level

Unit: dB(A)

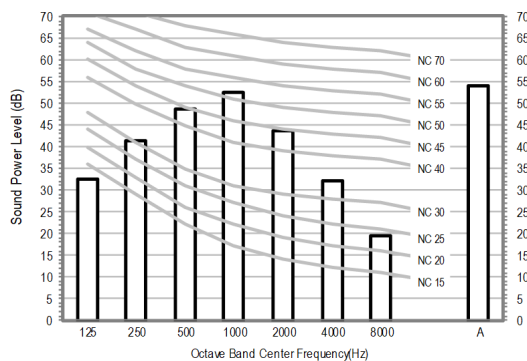
NOTE

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

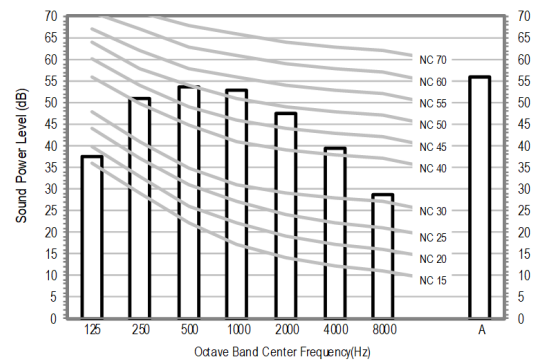
Model	Cooling
AR09BXFAMWKNUA	54
AR12BXFAMWKNUA	56
AR18BXFAMWKNUA	58
AR24BXFAMWKNUA	62

NC Curve

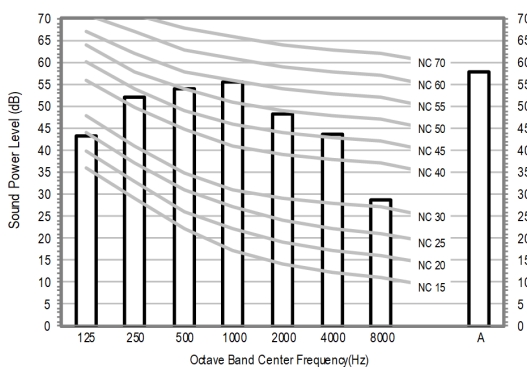
1) AR09BXFAMWKNUA



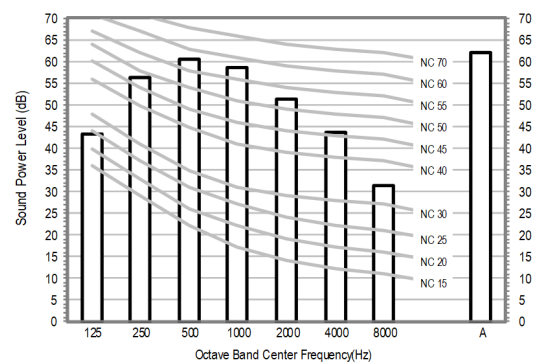
2) AR12BXFAMWKNUA



3) AR18BXFAMWKNUA



4) AR24BXFAMWKNUA



6. Sound Data

Indoor units

Sound Power level

Unit: dB(A)

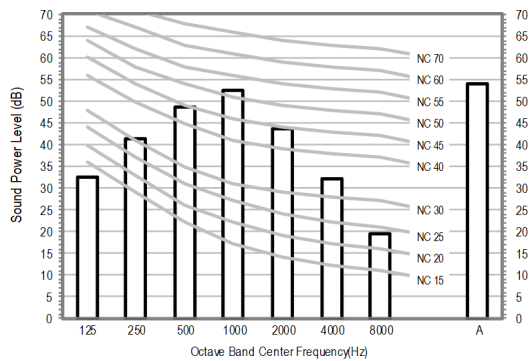
NOTE

- 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.

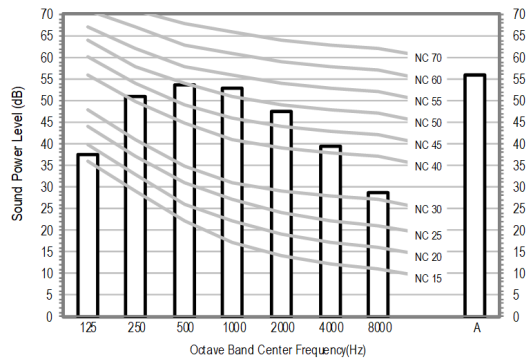
Model	Cooling
AR09BXHCNWKNUA	54
AR12BXHCNWKNUA	56
AR18BXHCNWKNUA	58
AR24BXHCNWKNUA	62

- NC Curve

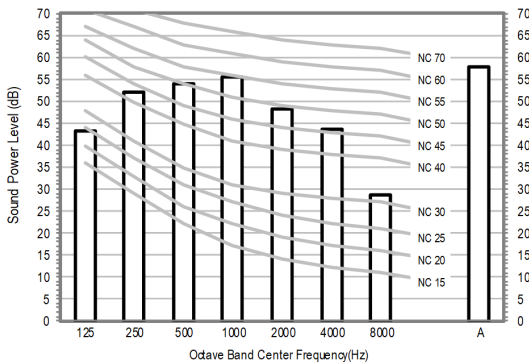
1) AR09BXHCNWKNUA



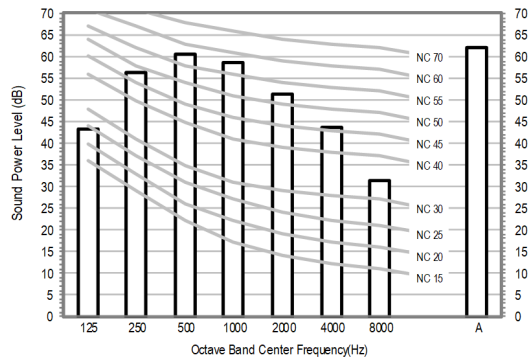
2) AR12BXHCNWKNUA



3) AR18BXHCNWKNUA



4) AR24BXHCNWKNUA



6. Sound Data

Outdoor units

Sound Power level

NOTE

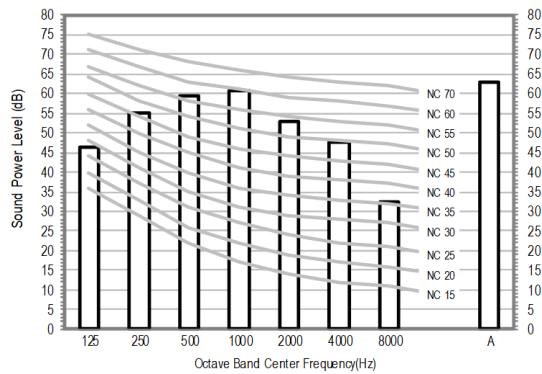
- Specifications may be subject to change without prior notice.
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level.
- Reference power : 1pW.
- Measured according to ISO 3741.

Unit: dB(A)

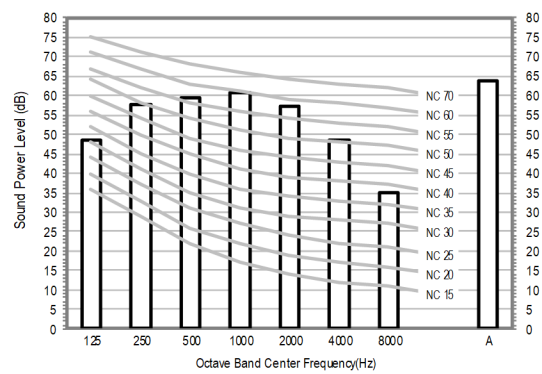
Model	Cooling
AR09BXFAMWKXUA	63
AR12BXFAMWKXUA	64
AR18BXFAMWKXUA	65
AR24BXFAMWKXUA	68

NC Curve

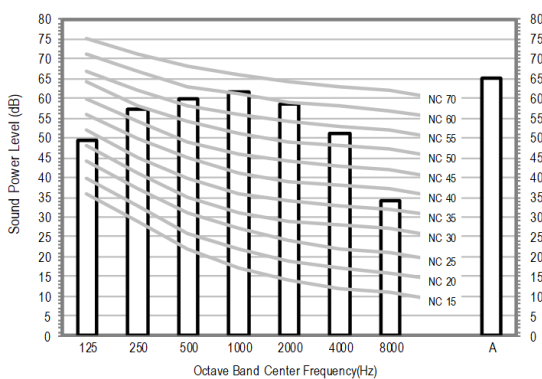
1) AR09BXFAMWKXUA



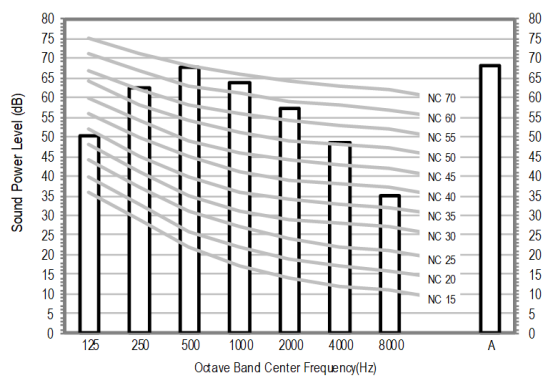
2) AR12BXFAMWKXUA



3) AR18BXFAMWKXUA



4) AR24BXFAMWKXUA



6. Sound Data

Outdoor units

Sound Power level

Unit: dB(A)

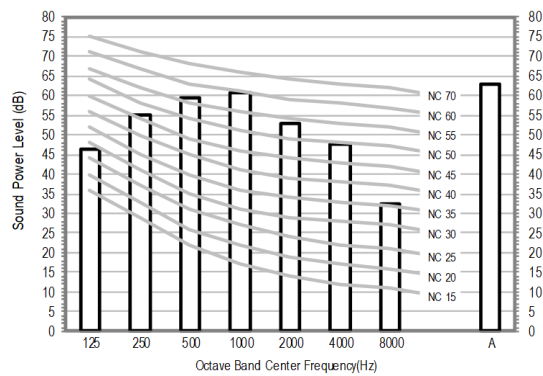
NOTE

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

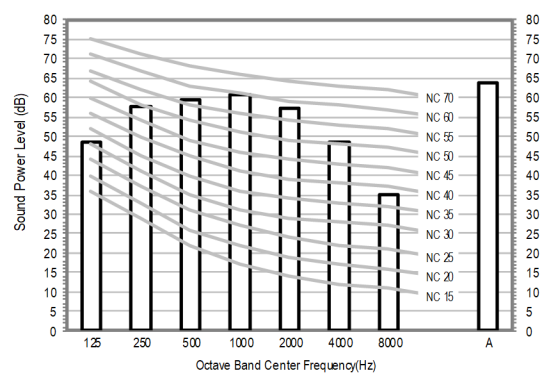
Model	Cooling
AR09BXHCNWKXUA	63
AR12BXHCNWKXUA	64
AR18BXHCNWKXUA	65
AR24BXHCNWKXUA	68

- NC Curve

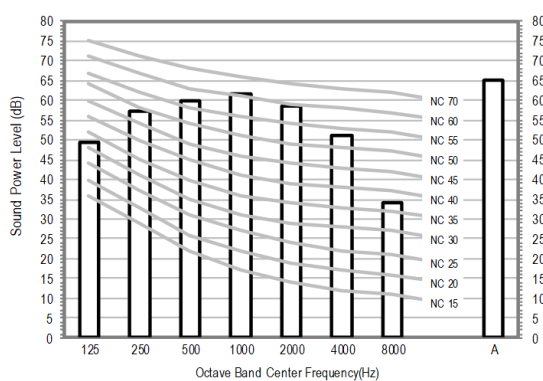
1) AR09BXHCNWKXUA



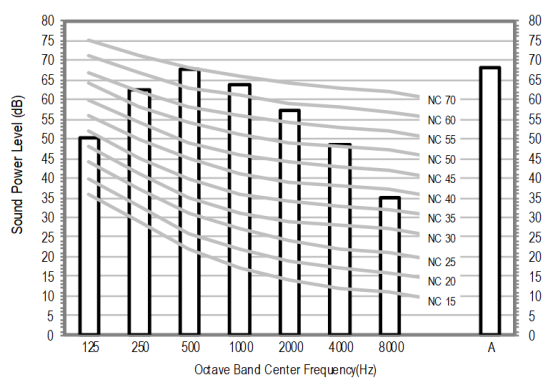
2) AR12BXHCNWKXUA



3) AR18BXHCNWKXUA



4) AR24BXHCNWKXUA

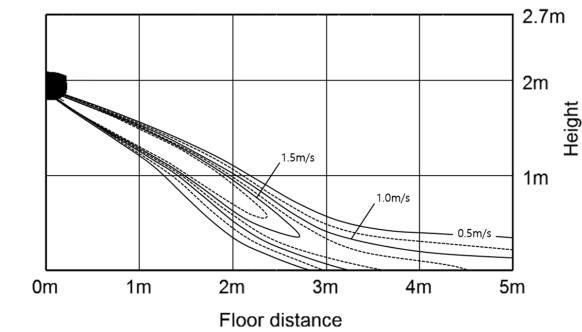


7. Temperature and air flow distribution

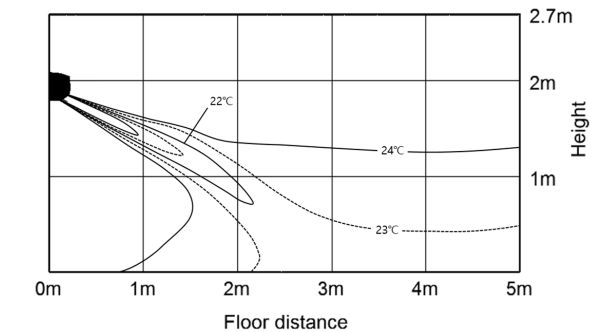
Wind-Free GEO

AR09BXFAMWKNUA

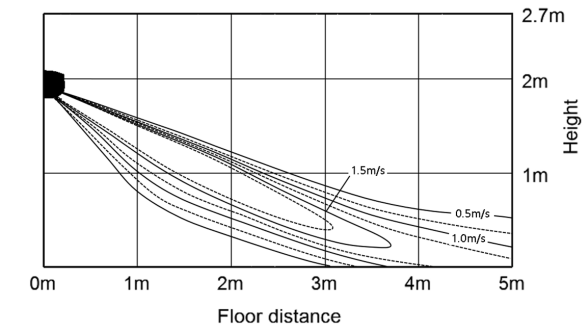
- Cooling air velocity distribution
(Discharge angle : 20 degree)



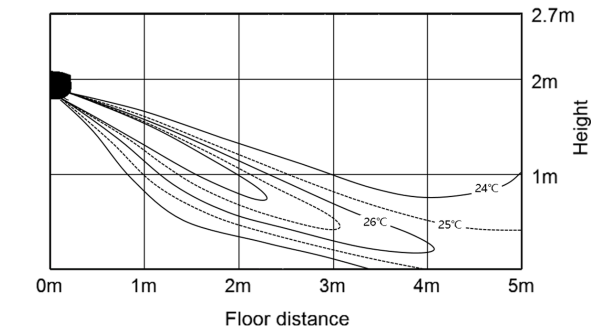
- Cooling Temperature distribution
(Discharge angle : 20 degree)



- Heating air velocity distribution
(Discharge angle : 30 degree)

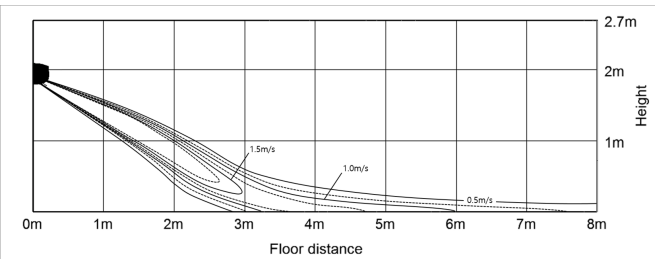


- Heating Temperature distribution
(Discharge angle : 30 degree)

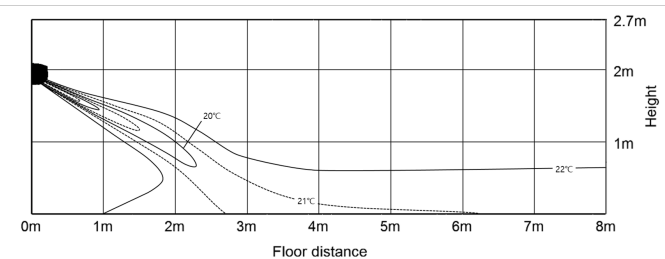


AR12BXFAMWKNUA

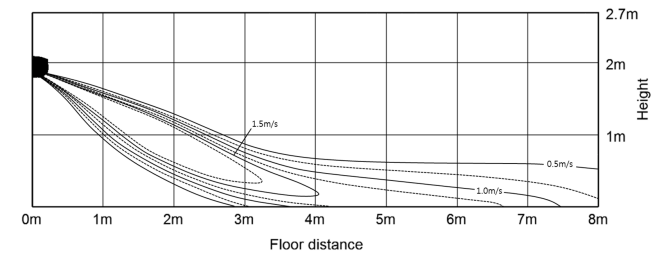
- Cooling air velocity distribution
(Discharge angle : 20 degree)



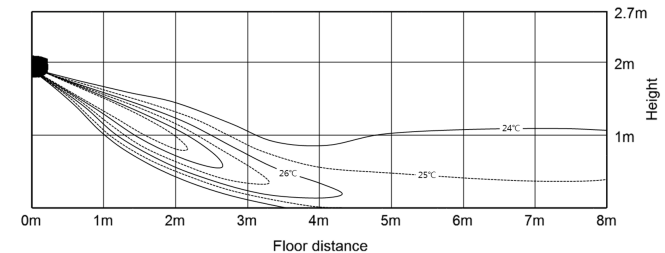
- Cooling Temperature distribution
(Discharge angle : 20 degree)



- Heating air velocity distribution
(Discharge angle : 30 degree)



- Heating Temperature distribution
(Discharge angle : 30 degree)



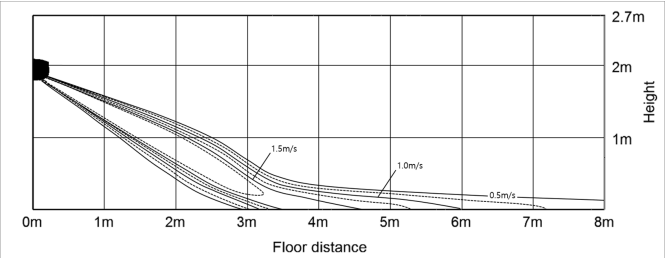
7. Temperature and air flow distribution

Wind-Free GEO

AR18BXFAMWKNUA

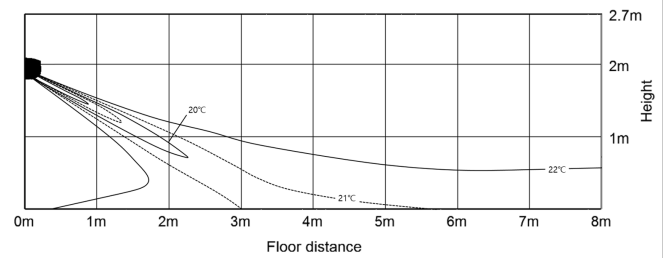
- Cooling air velocity distribution

(Discharge angle : 20 degree)



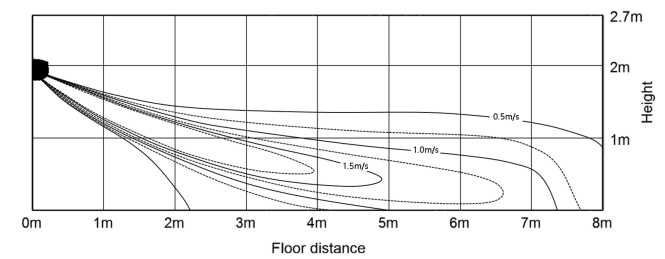
- Cooling Temperature distribution

(Discharge angle : 20 degree)



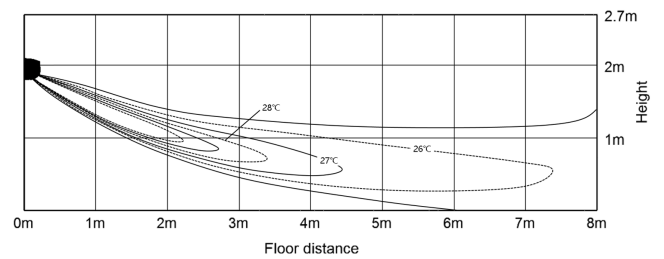
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

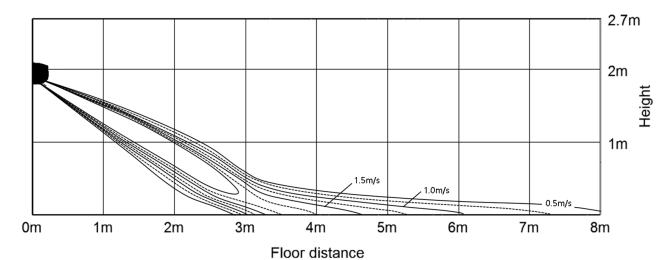
(Discharge angle : 30 degree)



AR24BXFAMWKNUA

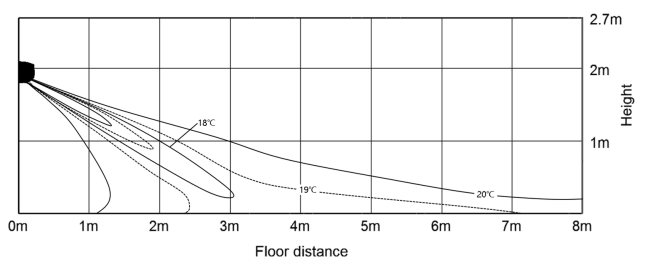
- Cooling air velocity distribution

(Discharge angle : 20 degree)



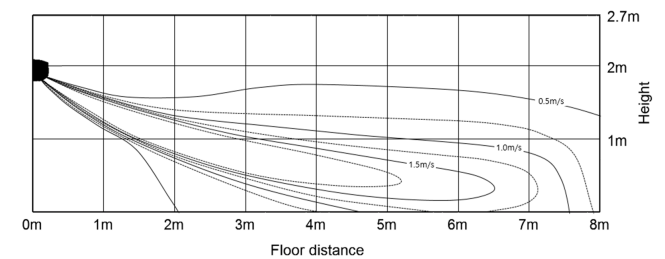
- Cooling Temperature distribution

(Discharge angle : 20 degree)



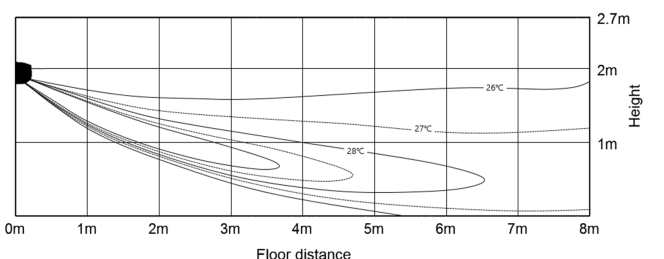
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

(Discharge angle : 30 degree)

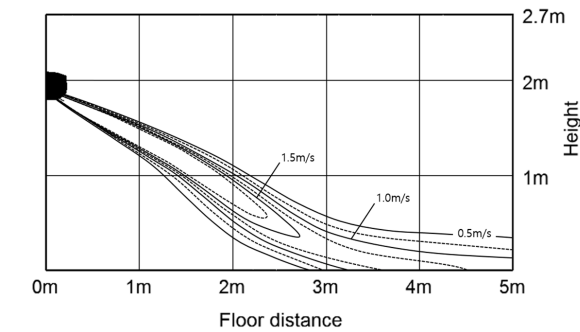


7. Temperature and air flow distribution

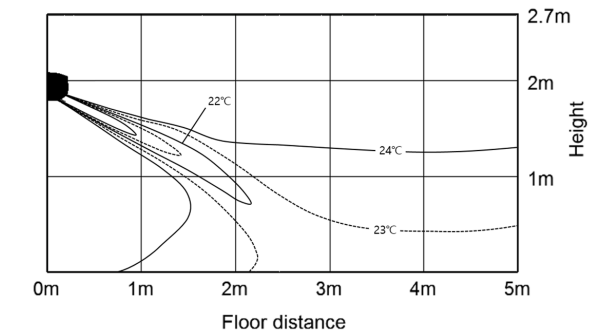
Wind-Free AIRISE

AR09BXHCNWKNUA

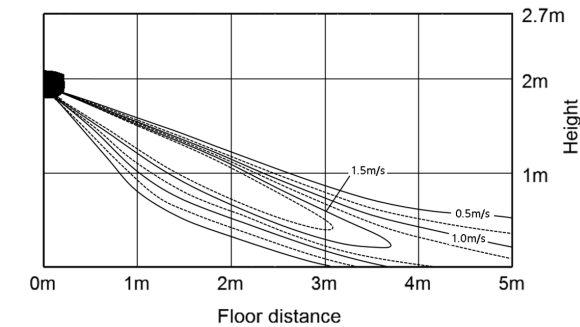
- Cooling air velocity distribution
(Discharge angle : 20 degree)



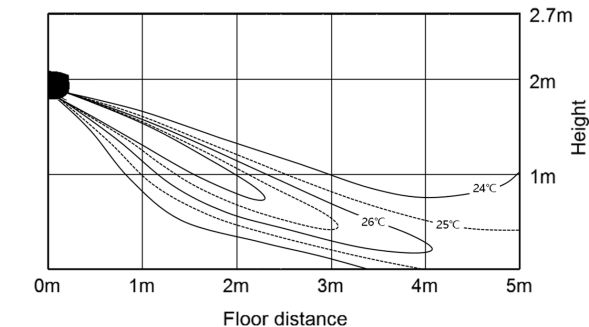
- Cooling Temperature distribution
(Discharge angle : 20 degree)



- Heating air velocity distribution
(Discharge angle : 30 degree)

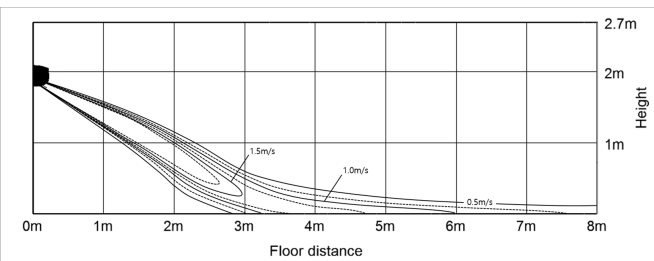


- Heating Temperature distribution
(Discharge angle : 30 degree)

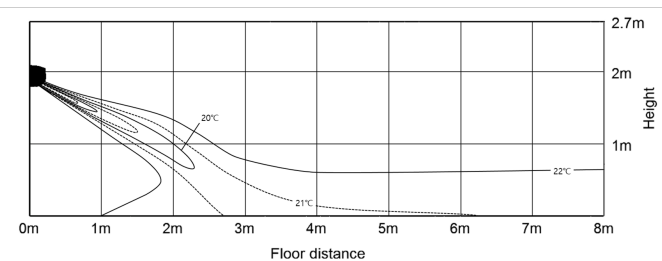


AR12BXHCNWKNUA

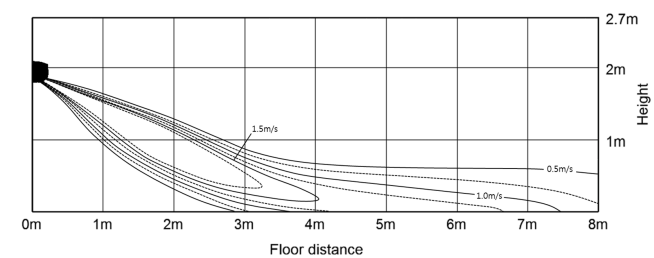
- Cooling air velocity distribution
(Discharge angle : 20 degree)



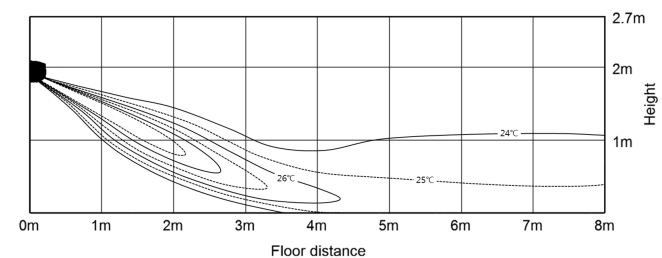
- Cooling Temperature distribution
(Discharge angle : 20 degree)



- Heating air velocity distribution
(Discharge angle : 30 degree)



- Heating Temperature distribution
(Discharge angle : 30 degree)



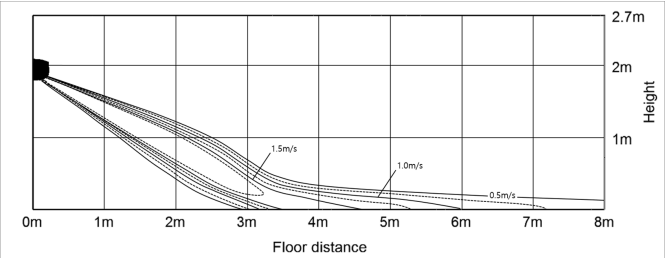
7. Temperature and air flow distribution

Wind-Free AIRISE

AR18BXHCNWKNUA

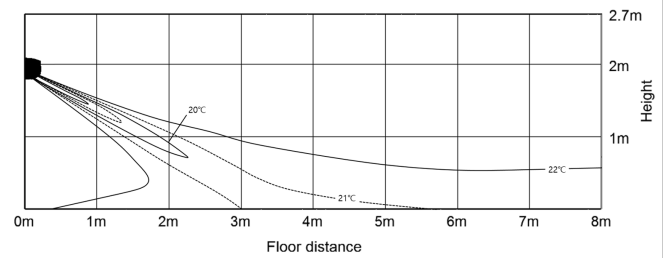
- Cooling air velocity distribution

(Discharge angle : 20 degree)



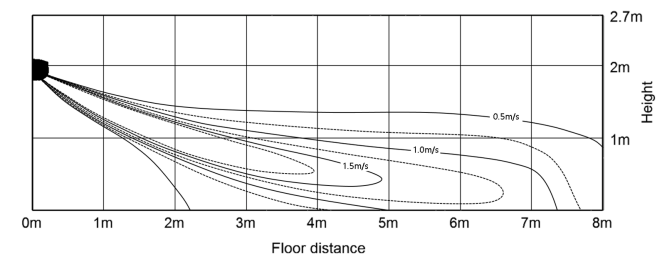
- Cooling Temperature distribution

(Discharge angle : 20 degree)



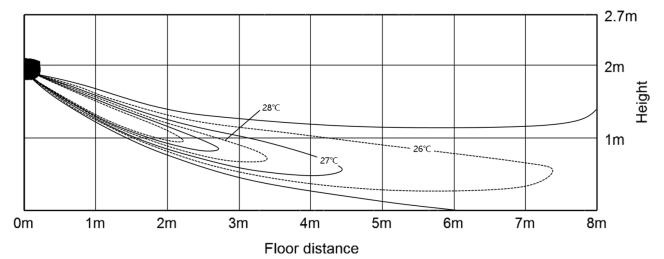
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

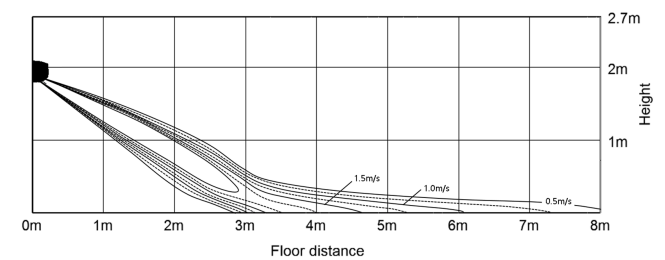
(Discharge angle : 30 degree)



AR24BXHCNWKNUA

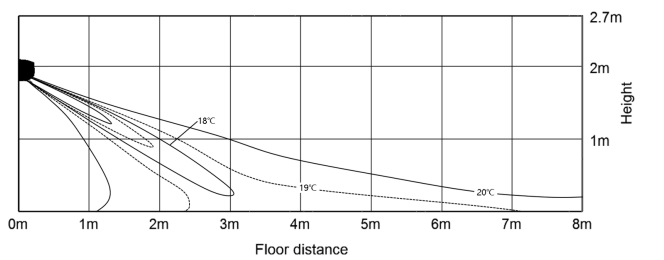
- Cooling air velocity distribution

(Discharge angle : 20 degree)



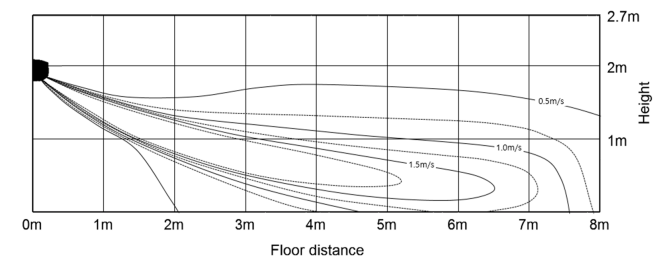
- Cooling Temperature distribution

(Discharge angle : 20 degree)



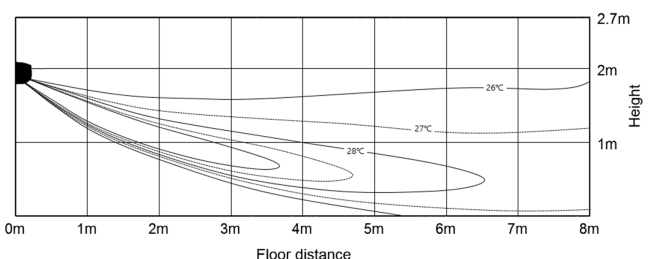
- Heating air velocity distribution

(Discharge angle : 30 degree)

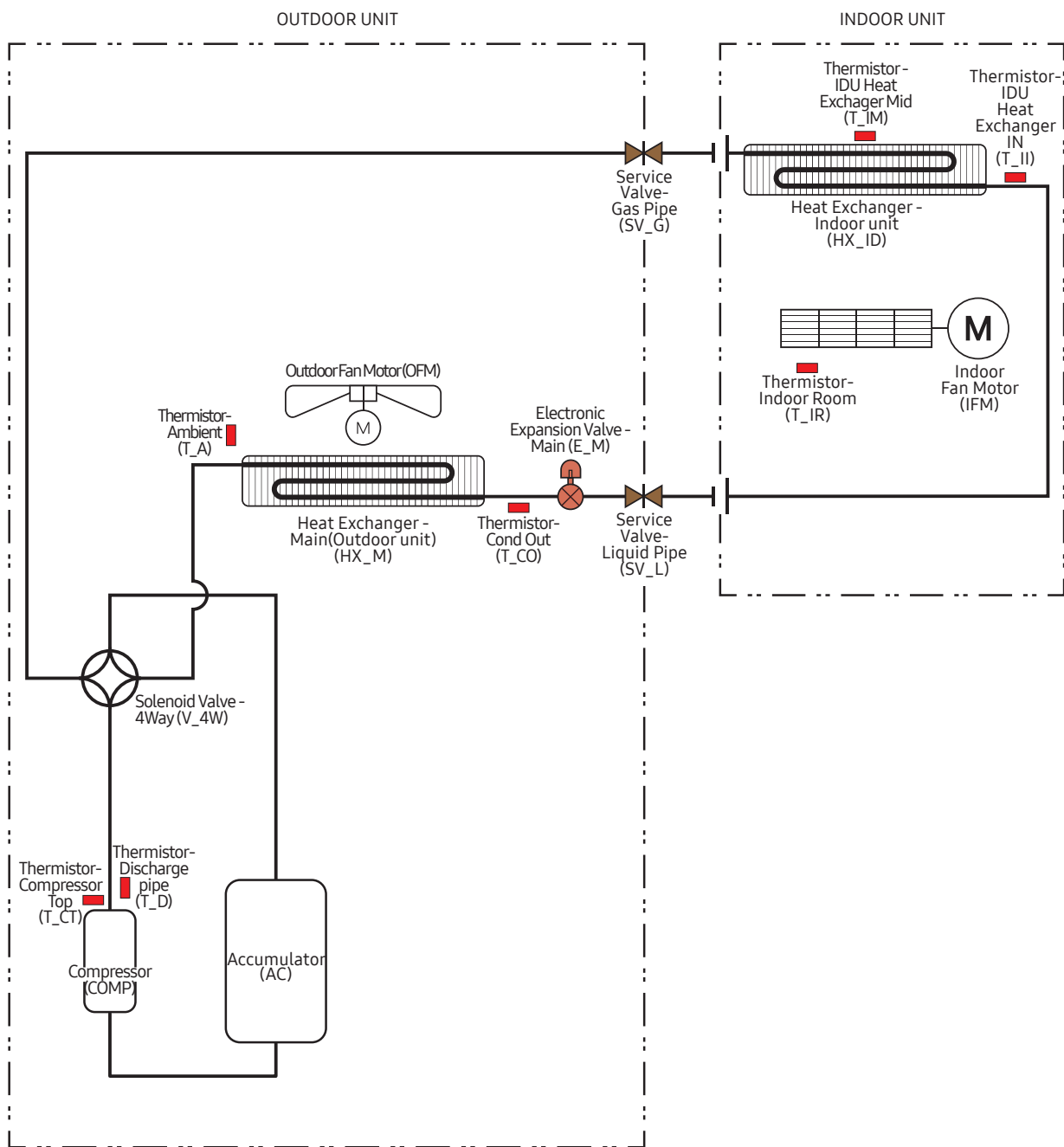


- Heating Temperature distribution

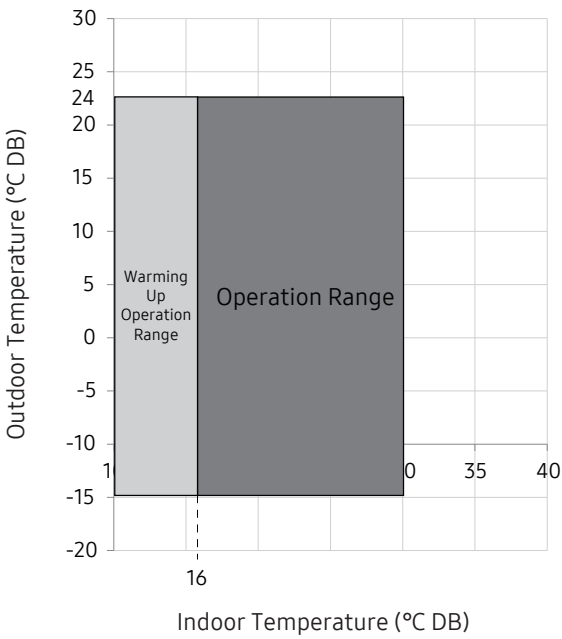
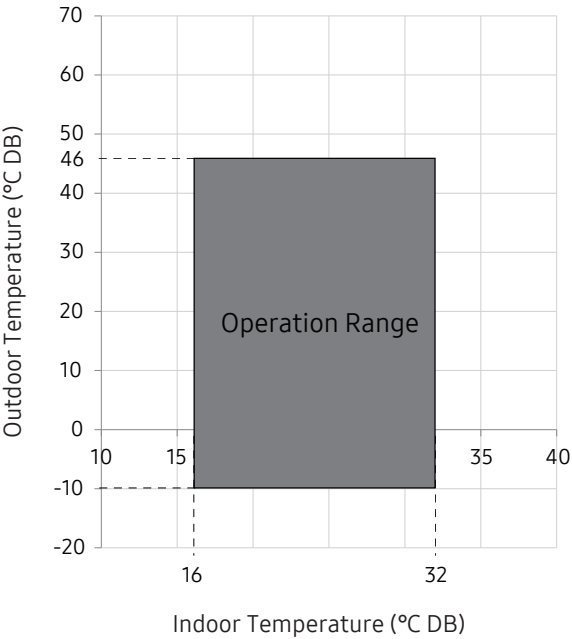
(Discharge angle : 30 degree)



8. Piping Diagram



9. Operation Limit



10. Capacity Correction

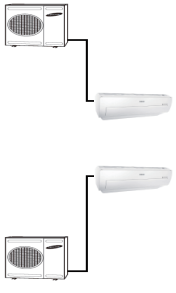
Outdoor units

AR09BXFAMWK/UA, AR12BXFAMWK/UA, AR09BXHCNWK/UA, AR12BXHCNWK/UA

Cooling

			Pipe Length (m)			
			5	10	12.5	15
	Level Difference (m)	8	-	0.96	0.94	0.91
		5	0.99	0.97	0.95	0.92
		0	1	0.98	0.96	0.93
		-5	0.99	0.97	0.95	0.92
		-8	-	0.96	0.94	0.91

Heating

			Pipe Length (m)			
			5	10	12.5	15
	Level Difference (m)	8	-	0.96	0.94	0.91
		5	0.99	0.97	0.95	0.92
		0	1	0.98	0.96	0.93
		-5	0.99	0.97	0.95	0.92
		-8	-	0.96	0.94	0.91

10. Capacity Correction

Outdoor units

AR18BXFAMWK/UA, AR24BXFAMWK/UA, AR18BXHCNWK/UA, AR24BXHCNWK/UA

Cooling

			Pipe Length (m)						
			5	10	12.5	15	20	25	30
 	Level Difference (m)	15	-	-	-	0.92	0.90	0.88	0.86
		10	-	0.95	0.94	0.93	0.91	0.89	0.87
		7	-	0.96	0.95	0.94	0.92	0.90	0.88
		5	0.99	0.97	0.96	0.95	0.93	0.91	0.89
		0	1	0.98	0.97	0.96	0.94	0.92	0.90
		-5	0.99	0.97	0.96	0.95	0.93	0.91	0.89
		-7	-	0.96	0.95	0.94	0.92	0.90	0.88
		-10	-	0.95	0.94	0.93	0.91	0.89	0.87
		-15	-	-	-	0.92	0.90	0.88	0.86

Heating

			Pipe Length (m)						
			5	10	12.5	15	20	25	30
 	Level Difference (m)	15	-	-	-	0.92	0.90	0.88	0.86
		10	-	0.95	0.94	0.93	0.91	0.89	0.87
		7	-	0.96	0.95	0.94	0.92	0.90	0.88
		5	0.99	0.97	0.96	0.95	0.93	0.91	0.89
		0	1	0.98	0.97	0.96	0.94	0.92	0.90
		-5	0.99	0.97	0.96	0.95	0.93	0.91	0.89
		-7	-	0.96	0.95	0.94	0.92	0.90	0.88
		-10	-	0.95	0.94	0.93	0.91	0.89	0.87
		-15	-	-	-	0.92	0.90	0.88	0.86



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