SAMSUNG

VRF Technical Data Book

Wall-Mounted Wind-Free™ for North America (R410A, 60Hz, HP)

Model : AM***TNVDCH/AA

History

Version	Modification	Date	Remark
Ver.1.0	Release Wall-Mounted Wind-Free™ TDB for North America	20.03.20	
Ver.1.1	Updated the Summary Table	20.08.24	

Nomenclature

Model Name

AM	005	T	N	V	D	C	H	/	AA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AM	DVM

(2) Capacity

X kBtulh (3 digits)

(3) Version

T	2020

(4) Product Type

N	Indoor Unit

(5) Product Notation

A	EEV NOT INCLUDED
V	EEV INCLUDED

(6) Feature

D	DELUXE

(7) Rating Voltage

C	1Ø, 208~230V, 60Hz

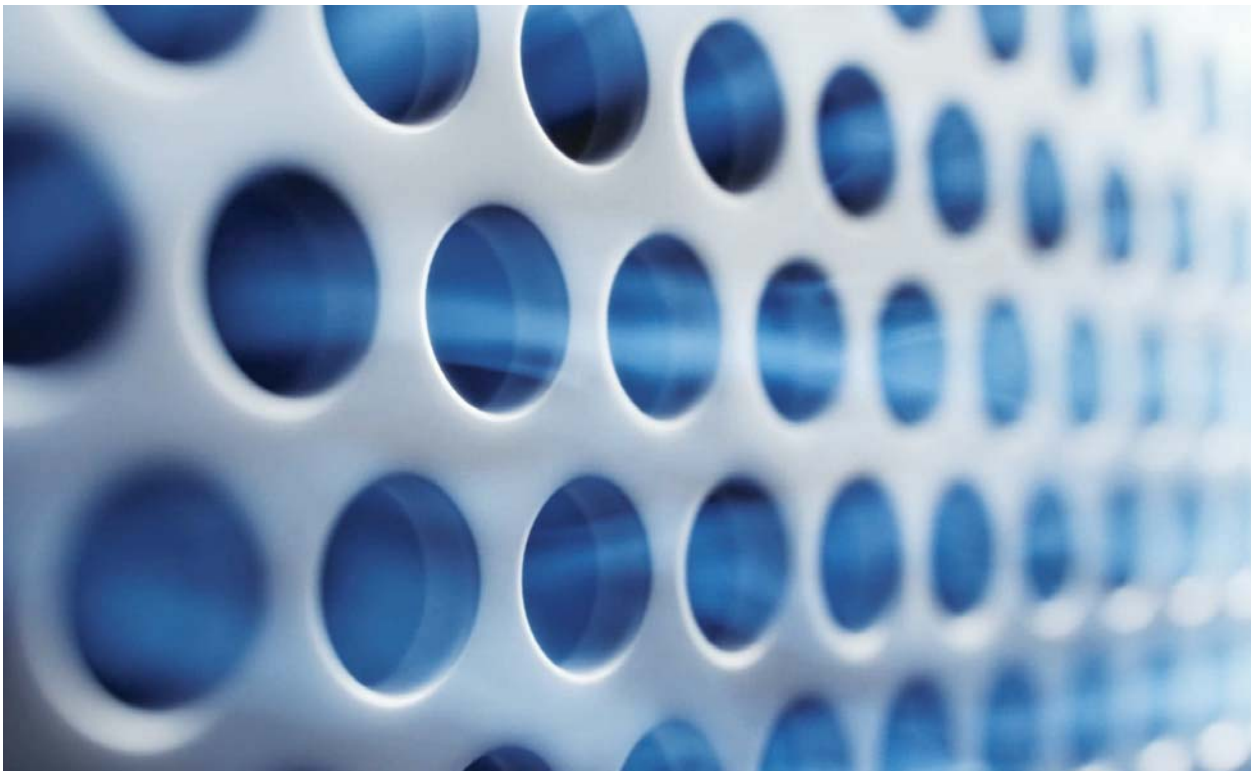
(8) Mode

H	Heat Pump (R410A)

Features & Benefits

Wind-Free™ Cooling

Get cool fast, stay cool without direct wind.



23,000 Micro air holes

Stay feeling comfortable cool with Wind-Free™ Cooling. It cools gently and quietly without the unpleasant feeling of cold wind on your skin, as it disperses air through 23,000 micro air holes. It creates a "Still Air" environment* with a very low air speed and much less noise**. Its advanced airflow structure also means it cools a wider and larger area more evenly.

* 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 draft s. ** Tested on the AR12TXCAAWKNEU model. Wind-Free™ mode generates only 23dB of noise, compared to 26dB with the Samsung conventional model.

Features & Benefits

Easy Filter Plus

Easy to clean filter.

Easy to detach

Easy to clean

Keep your air conditioner working efficiently with less effort. Unlike conventional filters that are often difficult to access, the Easy Filter Plus is located outside, on the top. So it can easily be taken out and cleaned – without having to open a cover or pull hard. It is also made of a dense mesh, so it's very effective at capturing dust, which keeps the Heat Exchanger clean and working efficiently.

Features & Benefits

4-Way Swing

Control the wind direction Up/Down, Left/Right using remote controller. Control the wind to your desired location.

* May differ based on the model & region.

Temperature Display

A numerical and intuitive icon display helps you to read the temperature and functions easily.

* The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE 55-2013 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

Line-up

Indoor Unit

Design	Image	
Wind-Free™		

Design	Type	Capacity (kBtu/h)							
		5	7	9	12	15	18	24	28
Wind-Free™	EEV	●	●	●	●	●	●	●	●

* The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE 55-2013 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

Contents

1. Specification

Wind-Free™

Model Name				AM005TNVDCH/AA	AM007TNVDCH/AA	AM009TNVDCH/AA
Power Supply			Φ, #, V, Hz	1, 2, 208~230V, 60Hz	1, 2, 208~230V, 60Hz	1, 2, 208~230V, 60Hz
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity	Cooling	kW	1.5	2.2	2.8
			Btu/h	5000	7500	9500
		Heating	kW	1.7	2.5	3.2
			Btu/h	5800	8500	10500
Power	Power Input	Cooling	W	20.0	24.0	30.0
		Heating		20.0	24.0	30.0
	Current Input	Cooling	A	0.13	0.16	0.20
		Heating		0.13	0.16	0.20
	Current	MCA	A	0.16	0.20	0.25
		MOP		15	15	15
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		-	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Quantity		ea	1	1	1
	Air Flow Rate	High/Mid/Low	CMM	4.9/4.5/4.1	5.7/5.0/4.5	8.5/7.7/6.9
			CFM	173.0/158.9/144.8	201.3/176.6/158.9	300.2/271.9/243.7
			l/s	81.7/75.0/68.3	95.0/83.3/75.0	141.7/128.3/115.0
Fan Motor	Type		-	BLDC	BLDC	BLDC
	Output x n		W	27 x 1	27 x 1	27 x 1
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection
			Φ, ㎜ (inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection
			Φ, ㎜ (inch)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)
	Drain Pipe		Φ,mm	16.3, 550	16.3, 550	16.3, 550
Wiring connections	Communication	Minimum	㎟	0.75	0.75	0.75
		Remark	-	F1, F2	F1, F2	F1, F2
Refrigerant	Type		-	R410A	R410A	R410A
	Electronic Expansion Valve		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure	High/Mid/Low/Windfree	dB(A)	31/30/27/26	34/32/30/27	34/33/32/26
	Sound Power	Cooling		50	51	52
Dimensions	Net Weight		kg (lbs)	9.0(19.8)	9.0(19.8)	9.5(20.9)
	Shipping Weight		kg (lbs)	10.5(23.1)	10.5(23.1)	11.0(24.3)
	Net Dimensions (W×H×D)		mm	820 x 299 x 215	820 x 299 x 215	820 x 299 x 215
			inch	32.3 x 11.8 x 8.5	32.3 x 11.8 x 8.5	32.3 x 11.8 x 8.5
	Shipping Dimensions (W×H×D)		mm	880 x 290 x 375	880 x 290 x 375	880 x 290 x 375
			inch	34.6 x 11.4 x 14.8	34.6 x 11.4 x 14.8	34.6 x 11.4 x 14.8
Additional Accessories	Drain pump		-	-	-	-
		Max. lifting Height / Displacement	mm / Liter/h	-	-	-
	EASY FILTER PLUS		-	○	○	○

NOTE

- Mode : HP(Heat Pump), HR(Heat Recovery)
- Nominal Cooling : Indoor temperature 26.7°CDB / 19.4°CWB(80°F DB/67°F WB), Outdoor temperature 35°CDB / 23.9°CWB(95°F DB/75°F WB), Refrigerant pipe length 7.5m(25ft), Level difference 0m(0ft).
- Nominal Heating : Indoor temperature 21.1°CDB / 15.6°CWB(70°F DB/60°F WB), Outdoor temperature 8.3°CDB / 6.1°CWB(47°F DB/43°F WB), Refrigerant pipe length 7.5m(25ft), Level difference 0m(0ft).
- Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- These products contain R410A which is fluorinated greenhouse gas.
- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA
- The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered “still air” as defined by ASHRAE 55-2013 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

1. Specification

Wind-Free™

Model Name				AM012TNVDCH/AA	AM015TNVDCH/AA	AM018TNVDCH/AA
Power Supply			Φ, #, V, Hz	1, 2, 208~230V, 60Hz	1, 2, 208~230V, 60Hz	1, 2, 208~230V, 60Hz
Mode			-	HP/HR	HP/HR	HP/HR
Performance	Capacity	Cooling	kW	3.6	4.5	5.6
			Btu/h	12000	15000	18000
		Heating	kW	4.0	5.0	6.3
			Btu/h	13500	17000	20000
Power	Power Input	Cooling	W	37.0	40.0	52.0
		Heating		37.0	40.0	52.0
	Current Input	Cooling	A	0.25	0.27	0.35
		Heating		0.25	0.27	0.35
	Current	MCA	A	0.31	0.34	0.44
		MOP		15	15	15
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		-	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Quantity		ea	1	1	1
	Air Flow Rate	High/Mid/Low	CMM	10.3/9.1/8.3	12.5/11.4/10.5	15.7/13.8/12.0
			CFM	363.8/321.4/293.1	441.5/402.6/370.8	554.5/487.4/423.8
			l/s	171.7/151.7/138.3	208.3/190.0/175.0	261.7/230.0/200.0
Fan Motor	Type		-	BLDC	BLDC	BLDC
	Output x n		W	27 x 1	27 x 1	27 x 1
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection
			Φ, ㎜ (inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection
			Φ, ㎜ (inch)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)
	Drain Pipe		Φ,mm	16.3, 550	16.3, 550	16.3, 550
Wiring connections	Communication	Minimum	㎟	0.75	0.75	0.75
		Remark	-	F1, F2	F1, F2	F1, F2
Refrigerant	Type		-	R410A	R410A	R410A
	Electronic Expansion Valve		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure	High/Mid/Low/Windfree	dB(A)	40/36/34/26	37/34/33/29	40/37/34/29
	Sound Power	Cooling		56	55	58
Dimensions	Net Weight		kg (lbs)	9.5(20.9)	12.0(26.5)	12.0(26.5)
	Shipping Weight		kg (lbs)	11.0(24.3)	14.0(30.9)	14.0(30.9)
	Net Dimensions (W×H×D)		mm	820 x 299 x 215	1,055 x 299 x 215	1,055 x 299 x 215
			inch	32.3 x 11.8 x 8.5	41.5 x 11.8 x 8.5	41.5 x 11.8 x 8.5
	Shipping Dimensions (W×H×D)		mm	880 x 290 x 375	1,115 x 290 x 375	1,115 x 290 x 375
			inch	34.6 x 11.4 x 14.8	43.9 x 11.4 x 14.8	43.9 x 11.4 x 14.8
Additional Accessories	Drain pump		-	-	-	-
		Max. lifting Height / Displacement	mm / Liter/h	-	-	-
	EASY FILTER PLUS		-	○	○	○

NOTE

- Mode : HP(Heat Pump), HR(Heat Recovery)
- Nominal Cooling : Indoor temperature 26.7°CDB / 19.4°CWB(80°F DB/67°F WB), Outdoor temperature 35°CDB / 23.9°CWB(95°F DB/75°F WB), Refrigerant pipe length 7.5m(25ft), Level difference 0m(0ft).
- Nominal Heating : Indoor temperature 21.1°CDB / 15.6°CWB(70°F DB/60°F WB), Outdoor temperature 8.3°CDB / 6.1°CWB(47°F DB/43°F WB), Refrigerant pipe length 7.5m(25ft), Level difference 0m(0ft).
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- The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered “still air” as defined by ASHRAE 55-2013 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

1. Specification

Wind-Free™

Model Name				AM024TNVDCH/AA	AM028TNVDCH/AA
Power Supply			Φ, #, V, Hz	1, 2, 208~230V, 60Hz	1, 2, 208~230V, 60Hz
Mode			-	HP/HR	HP/HR
Performance	Capacity	Cooling	kW	6.8	8.2
			Btu/h	23200	28000
		Heating	kW	7.0	8.5
			Btu/h	23800	29000
Power	Power Input	Cooling	W	60.0	65.0
		Heating		60.0	65.0
	Current Input	Cooling	A	0.40	0.43
		Heating		0.40	0.43
	Current	MCA	A	0.50	0.54
		MOP		15	15
Heat exchanger	Type		-	F&T	F&T
	Material	Fin	-	Al	Al
		Tube	-	Cu	Cu
	Fin Treatment		-	Green Hydrophile	Green Hydrophile
Fan	Type		-	Crossflow Fan	Crossflow Fan
	Quantity		ea	1	1
	Air Flow Rate	High/Mid/Low	CMM	16.8/15.0/13.2	17.5/15.6/13.8
			CFM	593.3/529.7/466.2	618.0/550.9/487.4
			l/s	280.0/250.0/220.0	291.7/260.0/230.0
Fan Motor	Type		-	BLDC	BLDC
	Output x n		W	27 x 1	27 x 1
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection
			Φ, ㎜ (inch)	9.52 (3/8)	9.52 (3/8)
	Gas Pipe		Type	Flare connection	Flare connection
			Φ, ㎜ (inch)	15.88 (5/8)	15.88 (5/8)
	Drain Pipe		Φ,mm	16.3, 550	16.3, 550
Wiring connections	Communication	Minimum	㎟	0.75	0.75
		Remark	-	F1, F2	F1, F2
Refrigerant	Type		-	R410A	R410A
	Electronic Expansion Valve		-	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure	High/Mid/Low/Windfree	dB(A)	43/40/37/29	46/45/43/30
	Sound Power	Cooling		62	64
Dimensions	Net Weight		kg (lbs)	12.0(26.5)	13.0(28.7)
	Shipping Weight		kg (lbs)	14.0(30.9)	15.0(33.1)
	Net Dimensions (W×H×D)		mm	1,055 x 299 x 215	1,055 x 299 x 215
			inch	41.5 x 11.8 x 8.5	41.5 x 11.8 x 8.5
	Shipping Dimensions (W×H×D)		mm	1,115 x 290 x 375	1,115 x 290 x 375
			inch	43.9 x 11.4 x 14.8	43.9 x 11.4 x 14.8
Additional Accessories	Drain pump		-	-	-
		Max. lifting Height / Displacement	mm / Liter/h	-	-
	EASY FILTER PLUS		-	○	○

NOTE

- Mode : HP(Heat Pump), HR(Heat Recovery)
- Nominal Cooling : Indoor temperature 26.7°CDB / 19.4°CWB(80°F DB/67°F WB), Outdoor temperature 35°CDB / 23.9°CWB(95°F DB/75°F WB), Refrigerant pipe length 7.5m(25ft), Level difference 0m(0ft).
- Nominal Heating : Indoor temperature 21.1°CDB / 15.6°CWB(70°F DB/60°F WB), Outdoor temperature 8.3°CDB / 6.1°CWB(47°F DB/43°F WB), Refrigerant pipe length 7.5m(25ft), Level difference 0m(0ft).
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- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA
- The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered “still air” as defined by ASHRAE 55-2013 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

2. Summary Table

Wind-Free™

Performance Characteristics

Model Code	Net Weight (lbs)	Fan Speed	Nominal Capacity			Airflow (CFM)	Sound Pressure	Sound Power
			Cooling	Sensible	Heating			
AM005TNVDCH/AA	19.8	High	5,000	3,400	5,800	173.0	31	50
		Mid	4,600	3,100	5,600	158.9	30	-
		Low	4,300	2,900	5,300	144.8	27	-
AM007TNVDCH/AA	19.8	High	7,500	5,000	8,500	201.3	34	51
		Mid	6,700	4,500	8,000	176.6	32	-
		Low	6,100	4,100	7,600	158.9	30	-
AM009TNVDCH/AA	20.9	High	9,500	6,400	10,500	300.2	34	52
		Mid	8,700	5,900	10,000	271.9	33	-
		Low	7,900	5,300	9,500	243.7	32	-
AM012TNVDCH/AA	20.9	High	12,000	8,000	13,500	363.8	40	56
		Mid	10,800	7,200	12,700	321.4	36	-
		Low	9,900	6,600	12,100	293.1	34	-
AM015TNVDCH/AA	26.5	High	15,000	10,100	17,000	441.5	37	55
		Mid	13,900	9,400	16,200	402.6	34	-
		Low	12,900	8,700	15,600	370.8	33	-
AM018TNVDCH/AA	26.5	High	18,000	12,100	20,000	554.5	40	58
		Mid	16,100	10,800	18,800	487.4	37	-
		Low	14,200	9,500	17,500	423.8	34	-
AM024TNVDCH/AA	26.5	High	23,200	15,700	23,800	593.3	43	62
		Mid	21,000	14,200	22,500	529.7	40	-
		Low	18,700	12,700	21,100	466.2	37	-
AM028TNVDCH/AA	28.7	High	28,000	18,800	29,000	618.0	46	64
		Mid	25,300	17,000	27,400	550.9	45	-
		Low	22,700	15,200	25,800	487.4	43	-

Electrical Characteristics

Model Code	Power Supply (Ø, #, V, Hz)	Power Input (W) (C / H)	Current Input (A) (C / H)	MCA (A)	MOP (A)	FLA (A)
AM005TNVDCH/AA	1, 2, 208~230, 60	20 / 20	0.13 / 0.13	0.16	15	0.13
AM007TNVDCH/AA	1, 2, 208~230, 60	24 / 24	0.16 / 0.16	0.20	15	0.16
AM009TNVDCH/AA	1, 2, 208~230, 60	30 / 30	0.20 / 0.20	0.25	15	0.20
AM012TNVDCH/AA	1, 2, 208~230, 60	37 / 37	0.25 / 0.25	0.31	15	0.25
AM015TNVDCH/AA	1, 2, 208~230, 60	40 / 40	0.27 / 0.27	0.34	15	0.27
AM018TNVDCH/AA	1, 2, 208~230, 60	52 / 52	0.35 / 0.35	0.44	15	0.35
AM024TNVDCH/AA	1, 2, 208~230, 60	60 / 60	0.40 / 0.40	0.50	15	0.40
AM028TNVDCH/AA	1, 2, 208~230, 60	65 / 65	0.43 / 0.43	0.54	15	0.43

NOTE

- MCA : Minimum circuit amperes
- MOP : Maximum overcurrent protective
- Select wire size based on the value of MCA

3. Capacity Table

Wind-Free™

Cooling

TC: Total Capacity, SHC: Sensible Heat Capacity

Capacity Index	Outdoor Air Temp. (°F, DB)	Indoor temperature													
		68(°F,DB)		73(°F,DB)		79(°F,DB)		80(°F,DB)		85(°F,DB)		87(°F,DB)		89(°F,DB)	
		57(°F,WB)		61(°F,WB)		64(°F,WB)		67(°F,WB)		70(°F,WB)		72(°F,WB)		75(°F,WB)	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH
5	50	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.7	3.7	6.0	3.4
	54	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.7	3.7	6.0	3.4
	58	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.7	3.7	6.0	3.4
	60	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	64	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	67	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	70	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	73	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	77	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	80	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	84	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	88	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	92	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	95	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	99	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	6.0	3.4
	103	3.3	3.1	4.0	3.4	4.7	3.4	5.0	3.4	5.3	3.4	5.3	3.7	5.7	3.1
	107	3.3	3.1	4.0	3.4	4.6	3.4	4.9	3.4	5.3	3.4	5.2	3.7	5.5	3.0
	111	3.3	3.1	4.0	3.4	4.5	3.3	4.8	3.2	5.1	3.3	5.0	3.5	5.3	2.9
	115	3.3	3.1	4.0	3.4	4.4	3.2	4.6	3.1	5.0	3.2	4.9	3.4	5.2	2.8
	118	3.3	3.0	3.9	3.3	4.4	3.2	4.5	3.1	4.9	3.1	4.7	3.3	5.0	2.7
	120	3.2	3.0	3.9	3.3	4.3	3.1	4.5	3.0	4.7	3.0	4.5	3.2	4.8	2.6
7.5	50	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.5	5.3	8.9	4.7
	54	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.5	5.3	8.9	4.7
	58	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.5	5.3	8.9	4.7
	60	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	64	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	67	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	70	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	73	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	77	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	80	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	84	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	88	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	92	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	95	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	99	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.9	4.7
	103	5.1	4.3	6.1	5.0	7.2	5.0	7.5	5.0	7.8	5.0	8.2	5.0	8.5	4.3
	107	5.1	4.3	6.1	5.0	7.1	5.0	7.4	4.9	7.7	4.9	8.0	4.9	8.3	4.2
	111	5.1	4.3	6.1	5.0	6.9	4.8	7.2	4.8	7.5	4.8	7.7	4.7	8.0	4.1
	115	5.1	4.3	6.1	5.0	6.8	4.8	6.9	4.6	7.3	4.7	7.5	4.6	7.8	4.0
	118	5.0	4.3	6.0	4.9	6.7	4.7	6.7	4.5	7.2	4.6	7.3	4.4	7.5	3.8
	120	5.0	4.2	5.9	4.8	6.5	4.6	6.7	4.5	6.9	4.4	7.0	4.3	7.2	3.7

3. Capacity Table

Wind-Free™

Cooling

TC: Total Capacity, SHC: Sensible Heat Capacity

Capacity Index	Outdoor Air Temp. (°F, DB)	Indoor temperature													
		68(°F,DB)		73(°F,DB)		79(°F,DB)		80(°F,DB)		85(°F,DB)		87(°F,DB)		89(°F,DB)	
		57(°F,WB)		61(°F,WB)		64(°F,WB)		67(°F,WB)		70(°F,WB)		72(°F,WB)		75(°F,WB)	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH
9.5	50	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.5	6.4
	54	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	58	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	60	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	64	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	67	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	70	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	73	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	77	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	80	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	84	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	88	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	92	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	95	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	99	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.5	6.4	11.2	6.1
	103	6.4	5.4	7.8	6.1	8.8	6.7	9.5	6.4	9.8	6.4	10.2	6.1	10.9	5.7
	107	6.4	5.4	7.8	6.1	8.8	6.7	9.4	6.3	9.7	6.3	10.0	6.0	10.6	5.6
	111	6.4	5.4	7.8	6.1	8.5	6.5	9.1	6.1	9.4	6.1	9.6	5.7	10.2	5.4
	115	6.4	5.4	7.7	6.0	8.4	6.4	8.8	5.9	9.2	6.0	9.3	5.5	9.9	5.2
	118	6.4	5.3	7.6	5.9	8.2	6.3	8.5	5.8	9.0	5.8	9.0	5.4	9.6	5.1
	120	6.3	5.2	7.5	5.9	8.1	6.2	8.5	5.7	8.7	5.7	8.7	5.2	9.2	4.9
12	50	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.3	7.7
	54	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.3	7.7
	58	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.3	7.7
	60	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.3	7.7
	64	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.3	7.7
	67	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.0	7.7
	70	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.0	7.7
	73	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.0	7.7
	77	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.0	7.7
	80	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.0	7.7
	84	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.0	7.7
	88	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.0	7.7
	92	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.0	7.7
	95	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.3	8.0	14.0	7.7
	99	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.0	7.7	14.0	7.7
	103	8.3	7.0	9.7	7.3	11.3	7.7	12.0	8.0	12.3	8.0	13.0	7.7	13.7	7.3
	107	8.3	7.0	9.7	7.3	11.3	7.6	11.8	7.9	12.2	7.9	12.8	7.5	13.3	7.1
	111	8.3	7.0	9.7	7.3	10.9	7.4	11.5	7.6	11.8	7.7	12.3	7.2	12.9	6.9
	115	8.3	7.0	9.6	7.3	10.8	7.3	11.1	7.4	11.5	7.5	11.9	7.0	12.5	6.7
	118	8.2	6.9	9.5	7.2	10.6	7.2	10.8	7.2	11.3	7.3	11.5	6.8	12.1	6.5
	120	8.1	6.8	9.3	7.1	10.3	7.0	10.7	7.1	10.9	7.1	11.1	6.5	11.6	6.2

3. Capacity Table

Wind-Free™

Cooling

TC: Total Capacity, SHC: Sensible Heat Capacity

Capacity Index	Outdoor Air Temp. (°F, DB)	Indoor temperature													
		68(°F,DB)		73(°F,DB)		79(°F,DB)		80(°F,DB)		85(°F,DB)		87(°F,DB)		89(°F,DB)	
		57(°F,WB)		61(°F,WB)		64(°F,WB)		67(°F,WB)		70(°F,WB)		72(°F,WB)		75(°F,WB)	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH
15	50	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.9	10.4	17.9	9.6
	54	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.9	10.4	17.9	9.6
	58	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.9	9.6
	60	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	64	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	67	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	70	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	73	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	77	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	80	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	84	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	88	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	92	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	95	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.6	10.1	17.7	9.3
	99	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.3	9.8	17.4	9.0
	103	10.4	8.0	12.3	9.0	14.2	9.8	15.0	10.1	15.5	10.1	16.3	9.8	17.1	8.8
	107	10.4	8.0	12.3	9.0	14.1	9.8	14.8	10.0	15.4	10.0	16.0	9.7	16.7	8.6
	111	10.4	8.0	12.3	9.0	13.7	9.5	14.3	9.6	14.9	9.7	15.4	9.3	16.1	8.3
	115	10.4	8.0	12.2	9.0	13.5	9.3	13.9	9.3	14.5	9.4	14.9	9.0	15.7	8.0
	118	10.3	7.9	12.1	8.8	13.3	9.2	13.5	9.1	14.2	9.2	14.5	8.7	15.1	7.8
	120	10.1	7.8	11.9	8.7	13.0	9.0	13.4	9.0	13.7	8.9	13.9	8.4	14.6	7.5
18	50	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	20.3	12.4	21.5	11.5
	54	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	20.3	12.4	21.5	11.5
	58	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.5	11.5
	60	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	64	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	67	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	70	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	73	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	77	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	80	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	84	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	88	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	92	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	95	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.9	12.1	21.2	11.1
	99	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.6	11.8	20.9	10.8
	103	12.5	9.6	14.8	10.8	17.0	11.8	18.0	12.1	18.6	12.1	19.6	11.8	20.6	10.5
	107	12.5	9.6	14.8	10.8	16.9	11.7	17.8	11.9	18.4	12.0	19.3	11.6	20.1	10.2
	111	12.5	9.6	14.8	10.8	16.5	11.4	17.2	11.6	17.9	11.6	18.5	11.1	19.4	9.9
	115	12.5	9.6	14.6	10.7	16.2	11.2	16.6	11.2	17.4	11.3	17.9	10.8	18.8	9.6
	118	12.4	9.4	14.5	10.6	15.9	11.0	16.2	10.9	17.0	11.0	17.4	10.4	18.2	9.3
	120	12.2	9.3	14.3	10.5	15.6	10.8	16.0	10.8	16.5	10.7	16.7	10.0	17.5	8.9

3. Capacity Table

Wind-Free™

Cooling

TC: Total Capacity, SHC: Sensible Heat Capacity

Capacity Index	Outdoor Air Temp. (°F, DB)	Indoor temperature													
		68(°F,DB)		73(°F,DB)		79(°F,DB)		80(°F,DB)		85(°F,DB)		87(°F,DB)		89(°F,DB)	
		57(°F,WB)		61(°F,WB)		64(°F,WB)		67(°F,WB)		70(°F,WB)		72(°F,WB)		75(°F,WB)	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH
24	50	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	26.0	16.0	27.8	14.9
	54	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	26.0	16.0	27.8	14.9
	58	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.8	14.9
	60	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	64	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	67	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	70	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	73	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	77	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	80	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	84	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	88	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	92	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	95	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.8	15.7	27.4	14.3
	99	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.2	15.1	26.8	14.0
	103	16.2	12.4	19.0	14.0	22.0	15.1	23.2	15.7	24.0	15.7	25.2	15.1	26.6	13.4
	107	16.2	12.4	19.0	14.0	21.9	15.0	22.9	15.5	23.8	15.5	24.8	14.9	25.9	13.1
	111	16.2	12.4	19.0	14.0	21.3	14.6	22.1	14.9	23.1	15.0	23.8	14.3	25.0	12.7
	115	16.2	12.4	18.8	13.9	21.0	14.4	21.5	14.5	22.4	14.6	23.0	13.9	24.4	12.4
	118	15.9	12.2	18.6	13.7	20.6	14.1	20.9	14.1	22.0	14.4	22.4	13.4	23.5	11.9
	120	15.7	12.0	18.3	13.5	20.1	13.9	20.6	13.9	21.3	13.9	21.5	12.9	22.6	11.4
28	50	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.4	19.1	33.5	17.8
	54	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.4	19.1	33.5	17.8
	58	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.5	17.8
	60	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	64	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	67	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	70	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	73	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	77	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	80	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	84	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	88	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	92	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	95	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	31.1	18.8	33.1	17.1
	99	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	30.4	18.1	32.4	16.8
	103	19.5	14.8	22.9	16.8	26.6	18.1	28.0	18.8	29.0	18.8	30.4	18.1	32.1	16.1
	107	19.5	14.8	22.9	16.8	26.4	18.0	27.6	18.6	28.7	18.6	29.9	17.8	31.3	15.7
	111	19.5	14.8	22.9	16.8	25.7	17.5	26.7	17.9	27.9	18.0	28.7	17.1	30.2	15.2
	115	19.5	14.8	22.7	16.6	25.3	17.2	25.9	17.4	27.0	17.5	27.7	16.6	29.4	14.8
	118	19.2	14.6	22.4	16.4	24.9	16.9	25.2	16.9	26.5	17.2	27.0	16.1	28.4	14.2
	120	18.9	14.4	22.1	16.2	24.3	16.6	24.9	16.7	25.7	16.6	25.9	15.4	27.3	13.7

3. Capacity Table

Wind-Free™

Heating

TC: Total Capacity

Capacity Index	Outdoor Air Temp. (°F)		Indoor temperature (°F, DB)				
			61.0	65.0	70.0	72.0	75.0
			TC	TC	TC	TC	TC
	DB	WB	MBH	MBH	MBH	MBH	MBH
5	-12.6	-13.0	2.9	2.9	2.9	2.9	2.9
	-7.1	-7.6	3.2	3.2	3.2	3.2	3.2
	-3.6	-4.0	3.4	3.4	3.4	3.4	3.4
	-1.8	-2.2	3.5	3.5	3.5	3.5	3.5
	2.0	1.0	3.8	3.8	3.8	3.8	3.8
	6.0	5.0	4.1	3.8	3.8	3.8	3.8
	10.0	9.0	4.1	4.0	4.0	4.0	4.0
	13.0	12.0	4.6	4.6	4.4	4.4	4.4
	17.0	15.0	4.9	4.8	4.5	4.5	4.5
	19.0	18.0	5.1	4.9	4.8	4.6	4.6
	23.0	21.0	5.5	5.1	5.1	4.8	4.8
	26.0	24.0	5.5	5.5	5.5	5.1	5.1
	30.0	28.0	5.8	5.8	5.5	5.5	5.1
	35.0	32.0	6.1	5.8	5.8	5.5	5.1
	39.0	36.0	6.1	6.1	5.8	5.5	5.1
	44.0	40.0	6.5	6.1	5.8	5.5	5.1
	47.0	43.0	6.5	6.1	5.8	5.5	5.1
	51.0	47.0	6.8	6.1	5.8	5.5	5.1
	54.0	50.0	6.8	6.1	5.8	5.5	5.1
	57.0	53.0	6.8	6.1	5.8	5.5	5.1
	60.0	56.0	6.8	6.1	5.8	5.5	5.1
7.5	-12.6	-13.0	4.6	4.6	4.6	4.6	4.6
	-7.1	-7.6	4.9	4.9	4.9	4.9	4.9
	-3.6	-4.0	5.1	5.1	5.1	5.1	5.1
	-1.8	-2.2	5.2	5.2	5.2	5.2	5.2
	2.0	1.0	5.5	5.4	5.4	5.4	5.4
	6.0	5.0	5.8	5.5	5.5	5.5	5.5
	10.0	9.0	6.1	6.0	6.0	6.0	5.7
	13.0	12.0	6.6	6.6	6.4	6.4	6.3
	17.0	15.0	7.0	6.9	6.6	6.5	6.5
	19.0	18.0	7.3	7.1	7.0	6.6	6.6
	23.0	21.0	7.8	7.5	7.5	6.8	6.8
	26.0	24.0	8.2	7.8	7.8	7.5	7.5
	30.0	28.0	8.5	8.5	8.2	7.8	7.5
	35.0	32.0	8.8	8.5	8.5	7.8	7.5
	39.0	36.0	9.2	8.8	8.5	7.8	7.5
	44.0	40.0	9.5	9.2	8.5	7.8	7.5
	47.0	43.0	9.5	9.2	8.5	7.8	7.5
	51.0	47.0	10.2	9.2	8.5	7.8	7.5
	54.0	50.0	10.2	9.2	8.5	7.8	7.5
	57.0	53.0	10.2	9.2	8.5	7.8	7.5
	60.0	56.0	10.2	9.2	8.5	7.8	7.5

3. Capacity Table

Wind-Free™

Heating

TC: Total Capacity

Capacity Index	Outdoor Air Temp. (°F)		Indoor temperature (°F, DB)				
			61.0	65.0	70.0	72.0	75.0
			TC	TC	TC	TC	TC
	DB	WB	MBH	MBH	MBH	MBH	MBH
9.5	-12.6	-13.0	5.7	5.7	5.7	5.7	6.2
	-7.1	-7.6	6.0	6.0	6.0	6.0	6.2
	-3.6	-4.0	6.3	6.3	6.3	6.3	6.2
	-1.8	-2.2	6.4	6.4	6.4	6.4	6.2
	2.0	1.0	6.6	6.6	6.6	6.6	6.2
	6.0	5.0	6.9	6.9	6.6	6.6	6.3
	10.0	9.0	7.2	7.2	7.1	6.8	6.8
	13.0	12.0	7.5	7.5	7.5	7.4	7.1
	17.0	15.0	7.7	7.6	7.6	7.6	7.3
	19.0	18.0	7.9	7.7	7.7	7.7	7.4
	23.0	21.0	8.2	7.9	7.9	7.9	7.5
	26.0	24.0	8.5	8.5	8.2	8.2	7.9
	30.0	28.0	9.2	8.9	8.9	8.5	8.2
	35.0	32.0	9.5	9.2	9.2	8.9	8.5
	39.0	36.0	9.8	9.8	9.5	9.2	8.9
	44.0	40.0	10.5	10.2	10.2	9.5	8.9
	47.0	43.0	10.8	10.5	10.5	9.8	8.9
	51.0	47.0	11.2	10.8	10.5	9.8	8.9
	54.0	50.0	11.5	10.8	10.5	9.8	8.9
	57.0	53.0	11.8	11.2	10.5	9.8	8.9
	60.0	56.0	12.1	11.2	10.5	9.8	8.9
12	-12.6	-13.0	7.0	7.6	7.2	7.2	7.8
	-7.1	-7.6	7.7	7.9	7.6	7.6	7.8
	-3.6	-4.0	8.1	8.1	7.8	7.8	7.8
	-1.8	-2.2	8.4	8.2	7.9	7.9	7.8
	2.0	1.0	8.8	8.5	8.2	8.2	7.8
	6.0	5.0	9.1	8.8	8.5	8.5	8.2
	10.0	9.0	9.4	9.0	9.0	8.7	8.6
	13.0	12.0	9.7	9.6	9.6	9.3	9.3
	17.0	15.0	9.9	9.9	9.8	9.6	9.5
	19.0	18.0	10.1	10.1	10.0	9.8	9.6
	23.0	21.0	10.5	10.5	10.1	10.1	9.8
	26.0	24.0	11.1	10.8	10.8	10.5	10.1
	30.0	28.0	11.5	11.5	11.1	10.8	10.5
	35.0	32.0	12.2	12.2	11.8	11.5	10.8
	39.0	36.0	12.8	12.5	12.5	11.8	11.5
	44.0	40.0	13.2	13.2	12.8	12.2	11.5
	47.0	43.0	13.8	13.8	13.5	12.5	11.5
	51.0	47.0	14.2	13.8	13.5	12.5	11.5
	54.0	50.0	14.9	14.2	13.5	12.5	11.5
	57.0	53.0	15.2	14.2	13.5	12.5	11.5
	60.0	56.0	15.5	14.5	13.5	12.5	11.5

3. Capacity Table

Wind-Free™

Heating

TC: Total Capacity

Capacity Index	Outdoor Air Temp. (°F)		Indoor temperature (°F, DB)				
			61.0	65.0	70.0	72.0	75.0
			TC	TC	TC	TC	TC
	DB	WB	MBH	MBH	MBH	MBH	MBH
15	-12.6	-13.0	10.2	9.5	9.8	9.6	9.6
	-7.1	-7.6	10.4	10.0	10.1	9.8	9.8
	-3.6	-4.0	10.6	10.3	10.3	10.0	10.0
	-1.8	-2.2	10.6	10.5	10.4	10.1	10.1
	2.0	1.0	10.9	10.8	10.6	10.3	10.3
	6.0	5.0	11.4	11.1	10.8	10.6	10.3
	10.0	9.0	11.8	11.5	11.2	11.2	10.9
	13.0	12.0	12.3	12.2	11.9	11.7	11.7
	17.0	15.0	12.5	12.5	12.3	12.0	11.9
	19.0	18.0	12.8	12.7	12.5	12.3	12.0
	23.0	21.0	13.2	13.0	13.0	12.7	12.1
	26.0	24.0	14.0	13.8	13.5	13.2	12.7
	30.0	28.0	14.6	14.3	14.3	13.8	13.2
	35.0	32.0	15.4	15.1	14.9	14.3	13.5
	39.0	36.0	15.9	15.9	15.6	15.1	14.3
	44.0	40.0	16.7	16.5	16.2	15.4	14.3
	47.0	43.0	17.5	17.3	17.0	15.6	14.3
	51.0	47.0	18.1	17.5	17.0	15.6	14.3
	54.0	50.0	18.6	17.8	17.0	15.6	14.3
	57.0	53.0	19.1	18.1	17.0	15.6	14.3
	60.0	56.0	19.7	18.4	17.0	15.6	14.3
18	-12.6	-13.0	11.9	11.0	11.6	11.2	11.2
	-7.1	-7.6	12.2	11.7	11.9	11.6	11.6
	-3.6	-4.0	12.4	12.1	12.1	11.8	11.8
	-1.8	-2.2	12.5	12.3	12.2	11.9	11.9
	2.0	1.0	12.8	12.7	12.4	12.1	12.1
	6.0	5.0	13.4	13.1	12.8	12.5	12.2
	10.0	9.0	13.8	13.5	13.2	13.1	12.8
	13.0	12.0	14.4	14.4	14.0	13.8	13.7
	17.0	15.0	14.8	14.7	14.4	14.1	14.0
	19.0	18.0	15.1	14.9	14.8	14.4	14.1
	23.0	21.0	15.6	15.2	15.2	14.9	14.3
	26.0	24.0	16.5	16.2	15.9	15.6	14.9
	30.0	28.0	17.1	16.8	16.8	16.2	15.6
	35.0	32.0	18.1	17.8	17.5	16.8	15.9
	39.0	36.0	18.7	18.7	18.4	17.8	16.8
	44.0	40.0	19.7	19.4	19.0	18.1	16.8
	47.0	43.0	20.6	20.3	20.0	18.4	16.8
	51.0	47.0	21.3	20.6	20.0	18.4	16.8
	54.0	50.0	21.9	21.0	20.0	18.4	16.8
	57.0	53.0	22.5	21.3	20.0	18.4	16.8
	60.0	56.0	23.2	21.6	20.0	18.4	16.8

3. Capacity Table

Wind-Free™

Heating

TC: Total Capacity

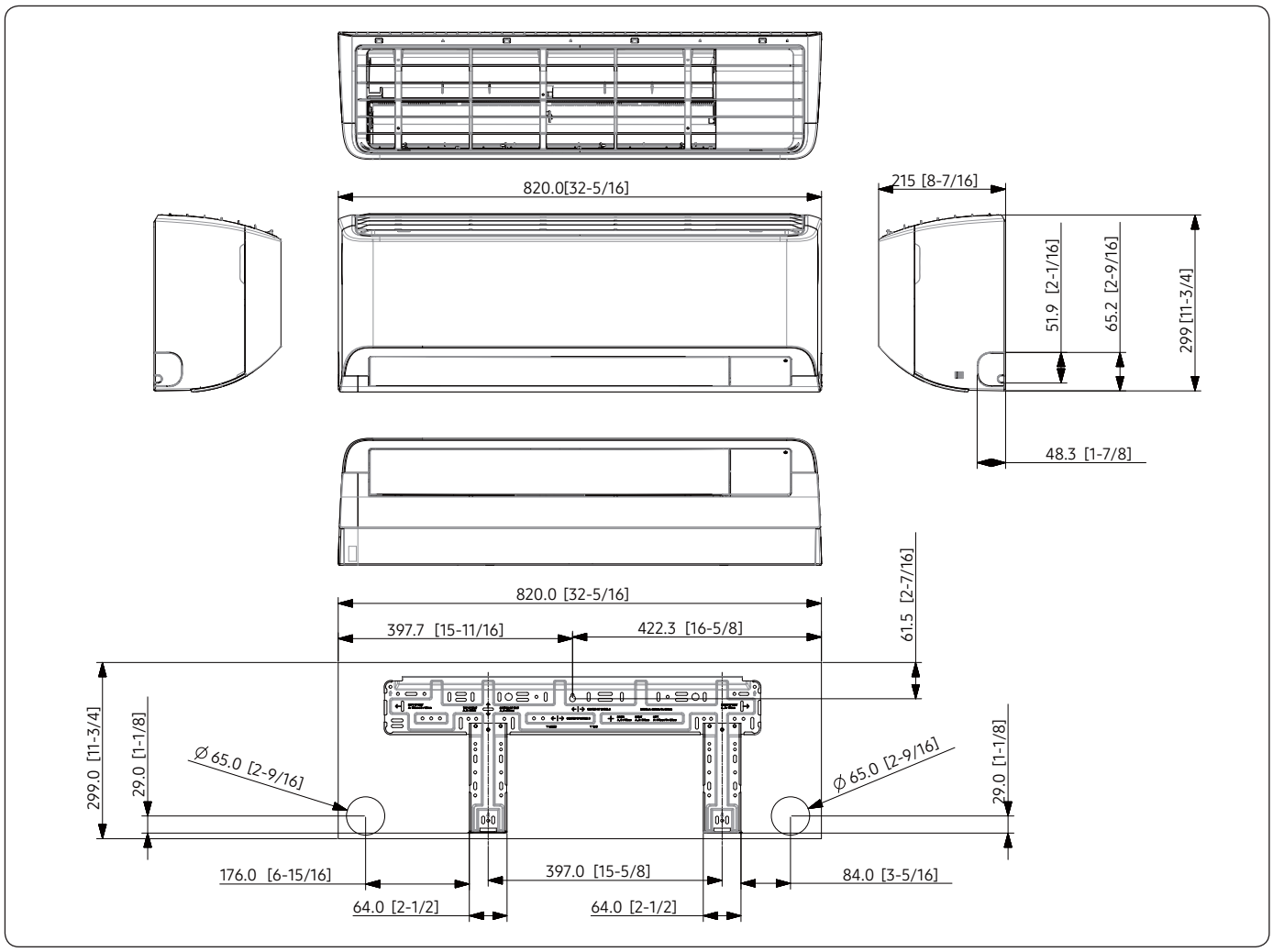
Capacity Index	Outdoor Air Temp. (°F)		Indoor temperature (°F, DB)				
			61.0	65.0	70.0	72.0	75.0
			TC	TC	TC	TC	TC
	DB	WB	MBH	MBH	MBH	MBH	MBH
24	-12.6	-13.0	14.2	13.1	13.8	13.3	13.3
	-7.1	-7.6	14.5	13.9	14.2	13.8	13.8
	-3.6	-4.0	14.8	14.4	14.4	14.0	14.0
	-1.8	-2.2	14.9	14.6	14.5	14.2	14.2
	2.0	1.0	15.2	15.1	14.8	14.4	14.4
	6.0	5.0	15.9	15.6	15.2	14.9	14.5
	10.0	9.0	16.4	16.1	15.7	15.6	15.2
	13.0	12.0	17.1	17.1	16.7	16.4	16.3
	17.0	15.0	17.6	17.5	17.1	16.8	16.7
	19.0	18.0	18.0	17.7	17.6	17.1	16.8
	23.0	21.0	18.6	18.1	18.1	17.7	17.0
	26.0	24.0	19.6	19.3	18.9	18.6	17.7
	30.0	28.0	20.3	20.0	20.0	19.3	18.6
	35.0	32.0	21.5	21.2	20.8	20.0	18.9
	39.0	36.0	22.3	22.3	21.9	21.2	20.0
	44.0	40.0	23.4	23.1	22.6	21.5	20.0
	47.0	43.0	24.5	24.2	23.8	21.9	20.0
	51.0	47.0	25.3	24.5	23.8	21.9	20.0
	54.0	50.0	26.1	25.0	23.8	21.9	20.0
	57.0	53.0	26.8	25.3	23.8	21.9	20.0
	60.0	56.0	27.6	25.7	23.8	21.9	20.0
28	-12.6	-13.0	17.5	15.8	16.3	16.5	16.5
	-7.1	-7.6	17.9	16.8	17.0	16.9	16.9
	-3.6	-4.0	18.1	17.5	17.4	17.1	17.1
	-1.8	-2.2	18.2	17.8	17.7	17.2	17.2
	2.0	1.0	18.6	18.5	18.1	17.5	17.4
	6.0	5.0	19.5	18.9	18.5	18.2	17.5
	10.0	9.0	20.0	19.6	19.2	19.2	18.5
	13.0	12.0	20.9	20.8	20.5	20.0	19.8
	17.0	15.0	21.4	21.3	21.0	20.4	20.2
	19.0	18.0	21.8	21.7	21.5	20.8	20.5
	23.0	21.0	22.5	22.2	22.2	21.5	20.8
	26.0	24.0	23.9	23.5	22.9	22.5	21.5
	30.0	28.0	24.9	24.6	24.6	23.5	22.5
	35.0	32.0	26.3	25.9	25.2	24.6	22.9
	39.0	36.0	27.3	27.3	26.6	25.9	24.6
	44.0	40.0	28.7	28.0	27.6	26.3	24.6
	47.0	43.0	30.0	29.3	29.0	26.6	24.6
	51.0	47.0	30.7	30.0	29.0	26.6	24.6
	54.0	50.0	31.7	30.4	29.0	26.6	24.6
	57.0	53.0	32.8	30.7	29.0	26.6	24.6
	60.0	56.0	33.4	31.4	29.0	26.6	24.6

4. Dimensional Drawing

Wind-Free™

AM005TNVDCH/AA, AM007TNVDCH/AA, AM009TNVDCH/AA, AM012TNVDCH/AA

Unit: mm (inches)

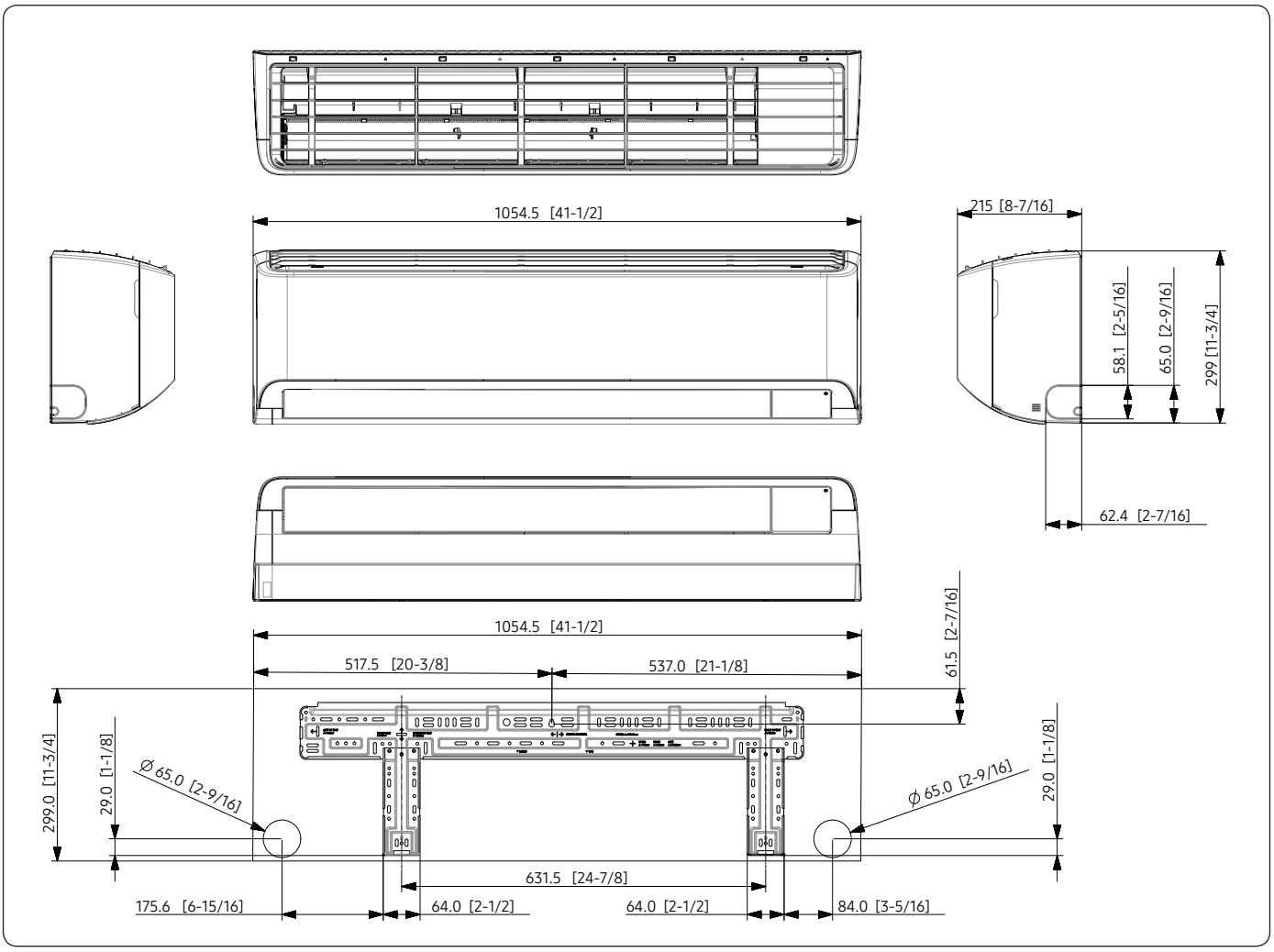


4. Dimensional Drawing

Wind-Free™

AM015TNVDCH/AA, AM018TNVDCH/AA, AM024TNVDCH/AA, AM028TNVDCH/AA

Unit: mm (inches)

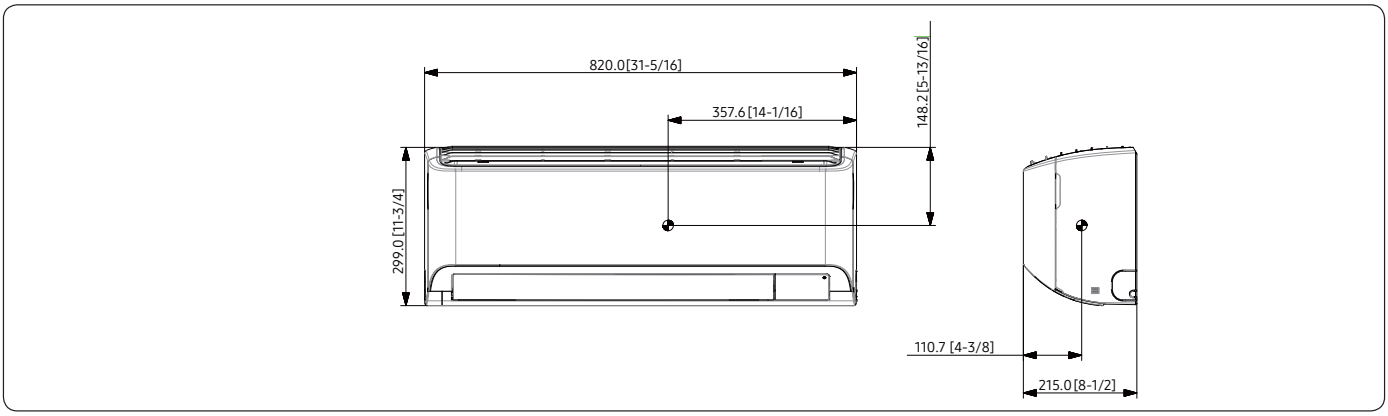


5. Center of Gravity

Wind-Free™

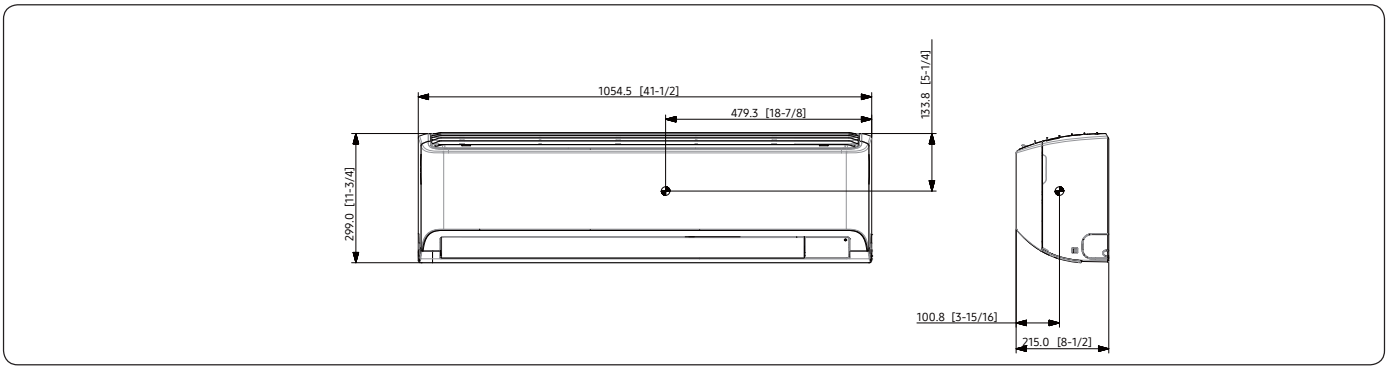
AM005TNVDCH/AA, AM007TNVDCH/AA, AM009TNVDCH/AA, AM012TNVDCH/AA

Unit: mm (inches)



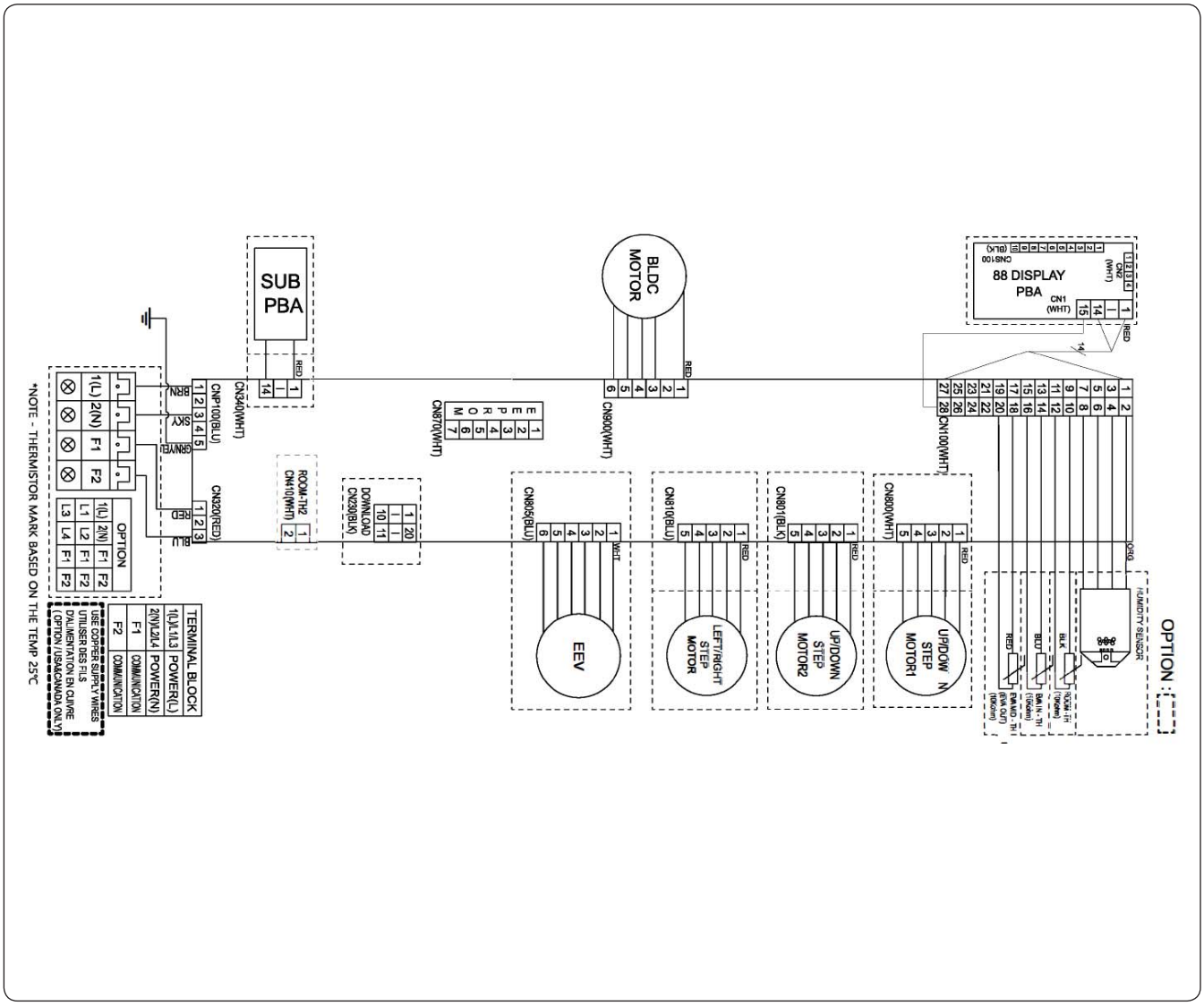
AM015TNVDCH/AA, AM018TNVDCH/AA, AM024TNVDCH/AA, AM028TNVDCH/AA

Unit: mm (inches)



6. Electrical Wiring Diagram

Wind-Free™



SUB PBA	Printed Circuit Board(SUB)	EEV	Electronic expansion valve	EVA-OUT(10K)	Thermistor EVA OUT(10K)
MOTOR	BLDC	ROOM(10K)	Thermistor ROOM In(10K)	EVA-IN(10K)	Thermistor EVA IN(10K)

NOTE

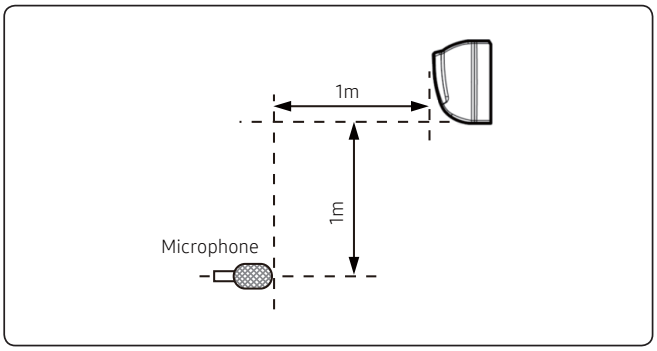
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
  BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, sky: sky blue, GRN: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- Protective earth(SCREW)

EARTH EARTH

7. Sound Data

Wind-Free™

Sound Pressure level

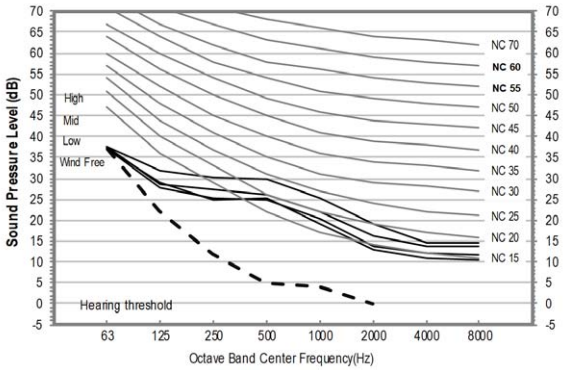


Unit: dB(A)

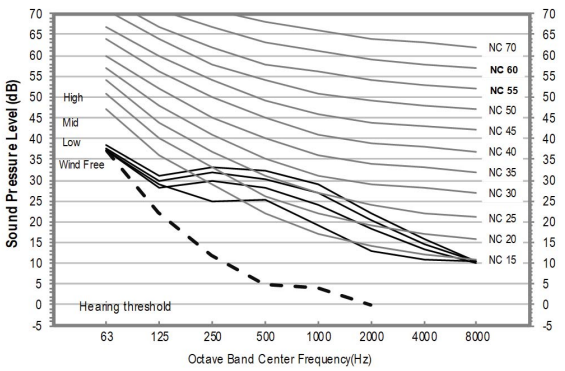
Model	High	Mid	Low	Wind-Free
AM005TNVDCH/AA	31	30	27	26
AM007TNVDCH/AA	34	32	30	27
AM009TNVDCH/AA	34	33	32	26
AM012TNVDCH/AA	40	36	34	26

- NC Curve

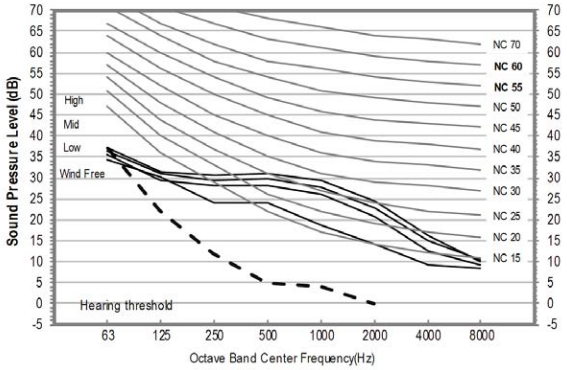
1) AM005TNVDCH/AA



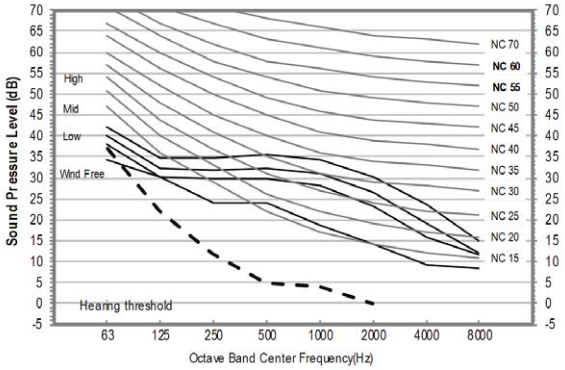
2) AM007TNVDCH/AA



3) AM009TNVDCH/AA



4) AM012TNVDCH/AA



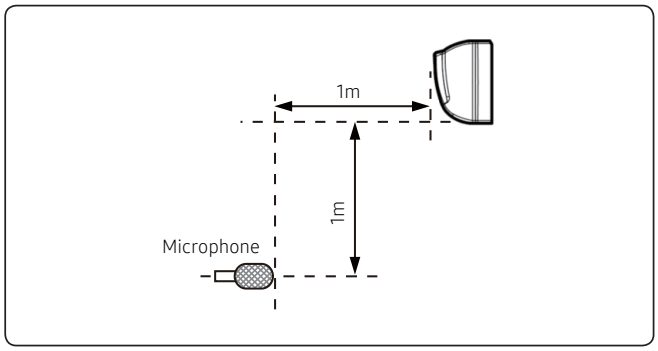
NOTE

- 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

Wind-Free™

Sound Pressure level

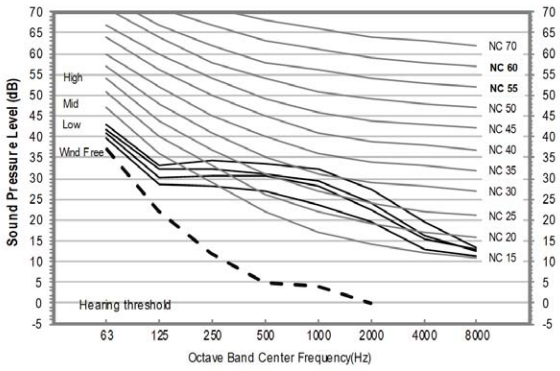


Unit: dB(A)

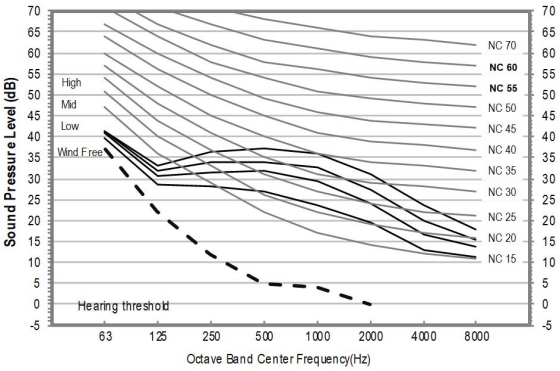
Model	High	Mid	Low	Wind-Free
AM015TNVDCH/AA	37	34	33	29
AM018TNVDCH/AA	40	37	34	29
AM024TNVDCH/AA	43	40	37	29
AM028TNVDCH/AA	46	45	43	30

- NC Curve

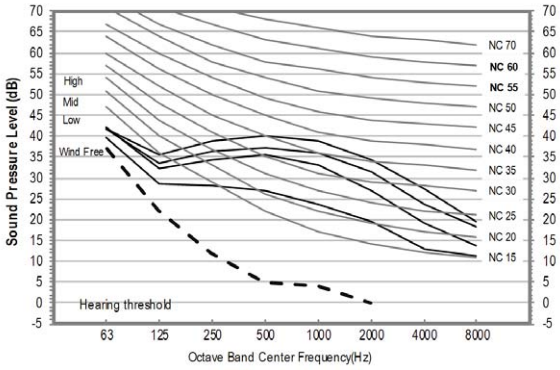
1) AM015TNVDCH/AA



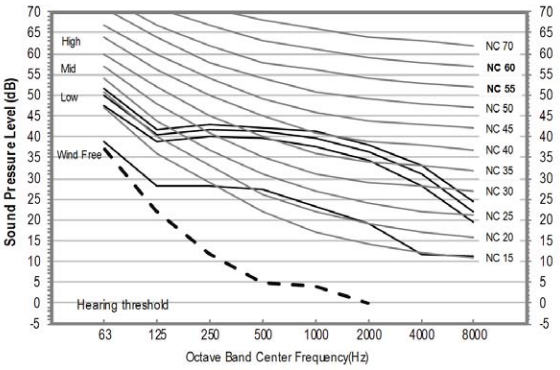
2) AM018TNVDCH/AA



3) AM024TNVDCH/AA



4) AM028TNVDCH/AA



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

Wind-Free™

Sound Power level

NOTE

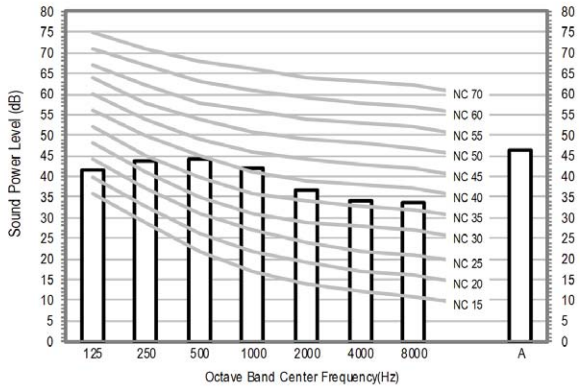
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

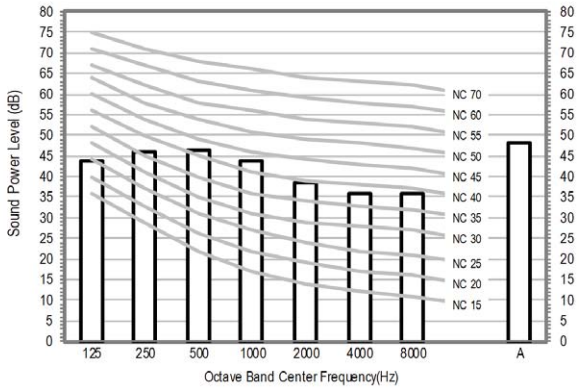
Model	Power
AM005TNVDCH/AA	50
AM007TNVDCH/AA	51
AM009TNVDCH/AA	52
AM012TNVDCH/AA	56

- NC Curve

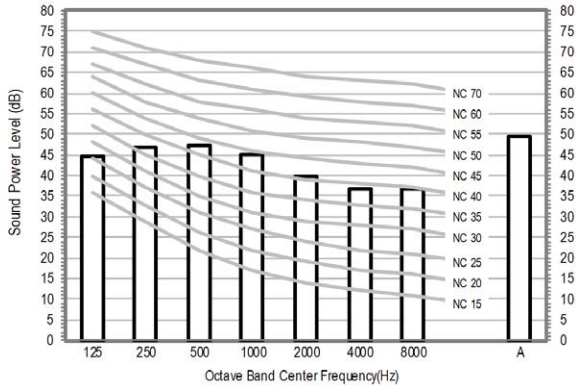
1) AM005TNVDCH/AA



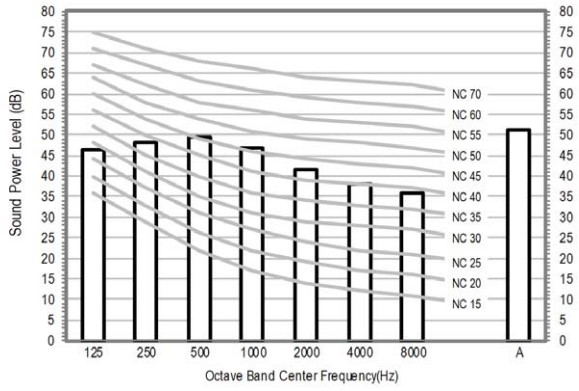
2) AM007TNVDCH/AA



3) AM009TNVDCH/AA



4) AM012TNVDCH/AA



7. Sound Data

Wind-Free™

Sound Power level

NOTE

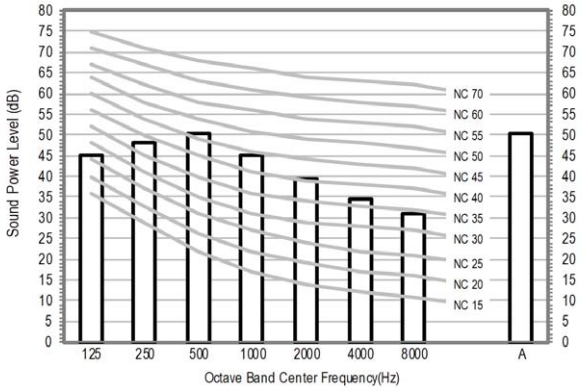
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

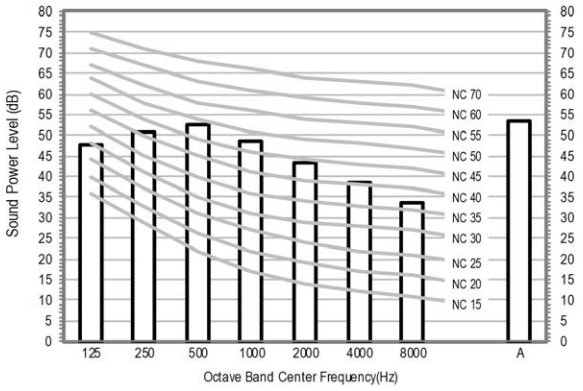
Model	Power
AM015TNVDCH/AA	55
AM018TNVDCH/AA	58
AM024TNVDCH/AA	62
AM028TNVDCH/AA	64

- NC Curve

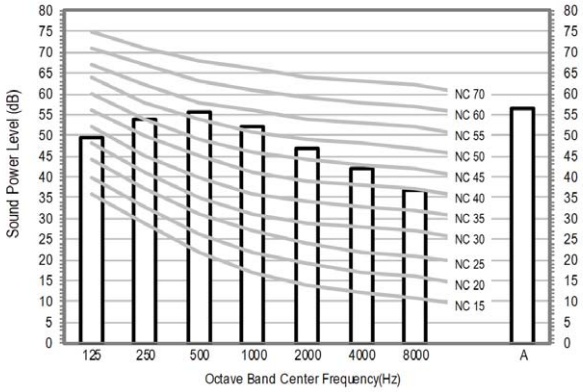
1) AM015TNVDCH/AA



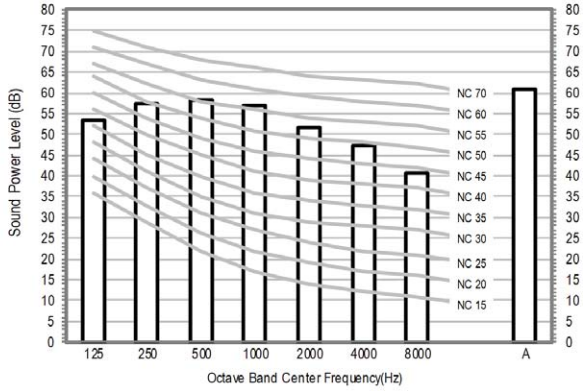
2) AM018TNVDCH/AA



3) AM024TNVDCH/AA



4) AM028TNVDCH/AA



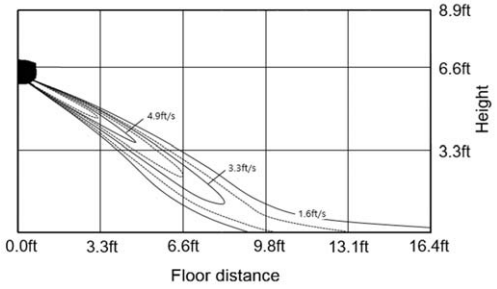
8. Temperature and air flow distribution

Wind-Free™

AM005TNVDCH/AA

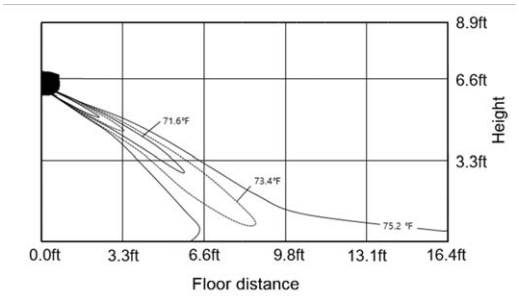
- Cooling air velocity distribution

(Discharge angle : 20 degree)



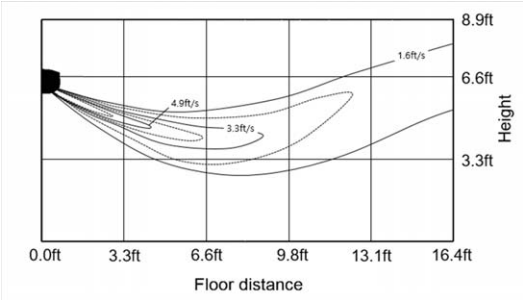
- Cooling Temperature distribution

(Discharge angle : 20 degree)



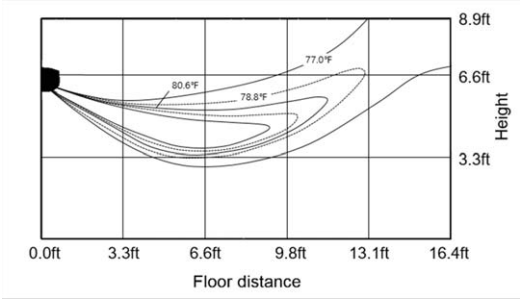
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

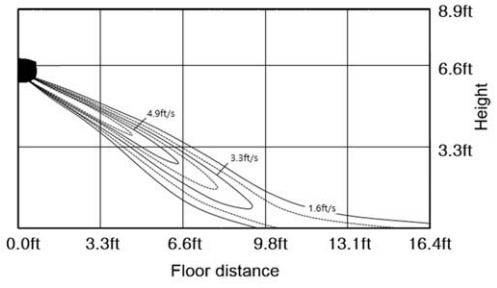
(Discharge angle : 30 degree)



AM007TNVDCH/AA

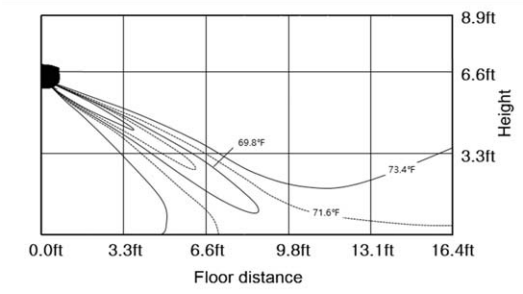
- Cooling air velocity distribution

(Discharge angle : 20 degree)



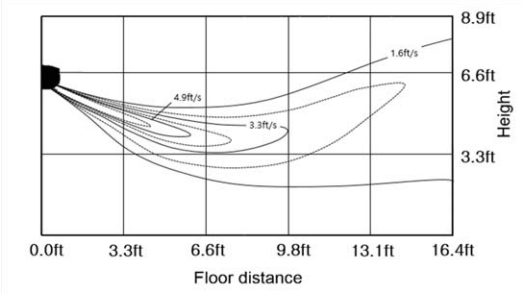
- Cooling Temperature distribution

(Discharge angle : 20 degree)



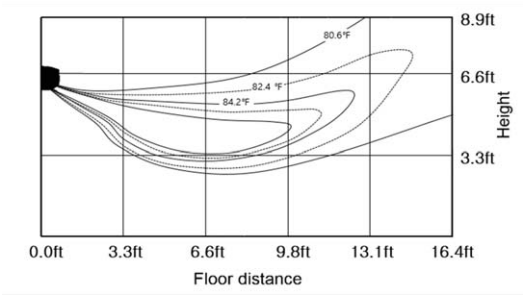
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

(Discharge angle : 30 degree)



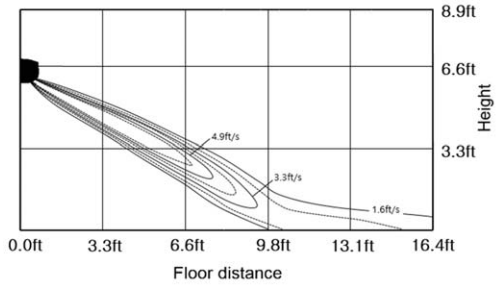
8. Temperature and air flow distribution

Wind-Free™

AM009TNVDCH/AA

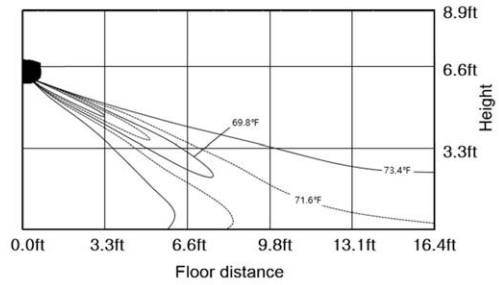
- Cooling air velocity distribution

(Discharge angle : 20 degree)



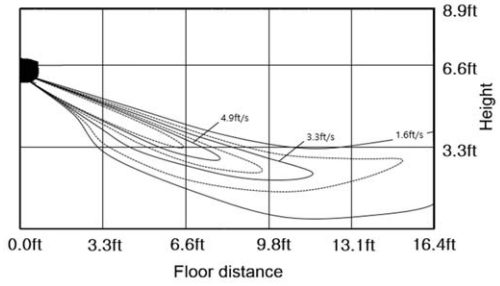
- Cooling Temperature distribution

(Discharge angle : 20 degree)



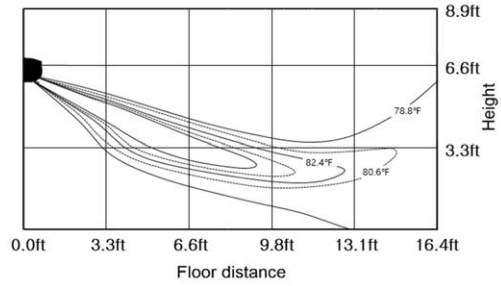
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

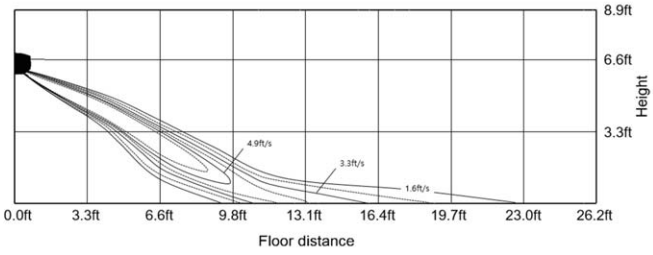
(Discharge angle : 30 degree)



AM012TNVDCH/AA

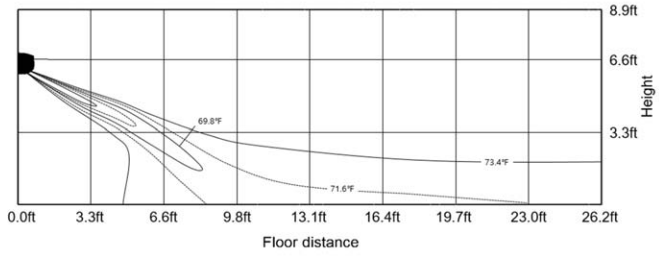
- Cooling air velocity distribution

(Discharge angle : 20 degree)



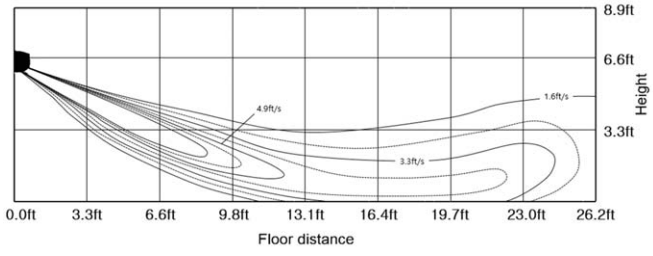
- Cooling Temperature distribution

(Discharge angle : 20 degree)



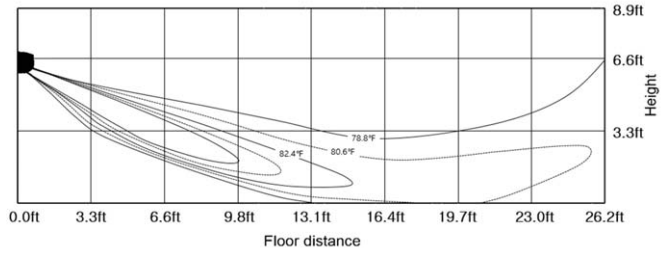
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

(Discharge angle : 30 degree)



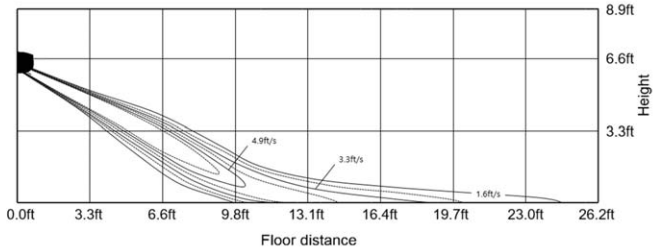
8. Temperature and air flow distribution

Wind-Free™

AM015TNVDCH/AA

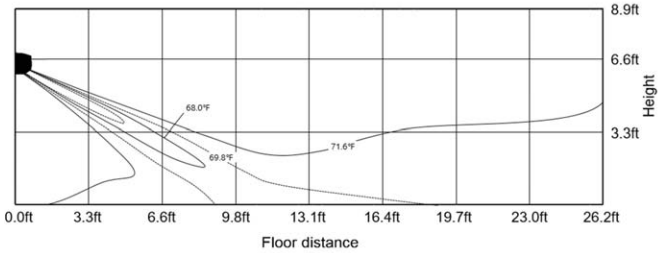
- Cooling air velocity distribution

(Discharge angle : 20 degree)



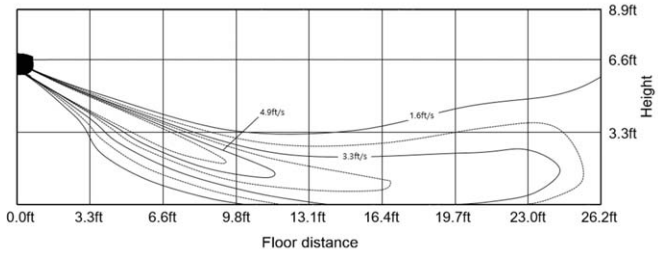
- Cooling Temperature distribution

(Discharge angle : 20 degree)



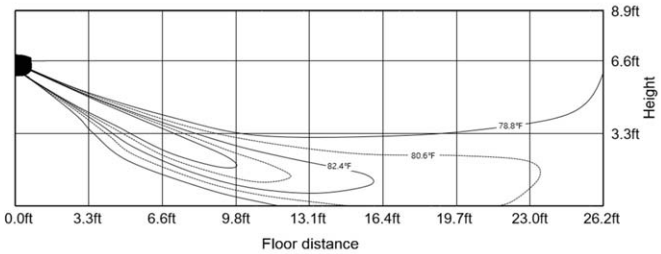
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

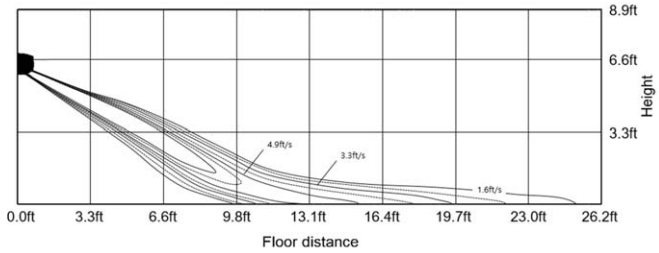
(Discharge angle : 30 degree)



AM018TNVDCH/AA

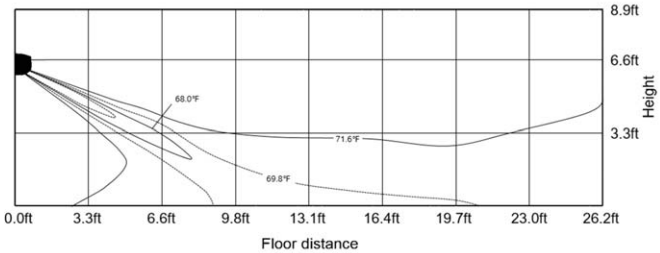
- Cooling air velocity distribution

(Discharge angle : 20 degree)



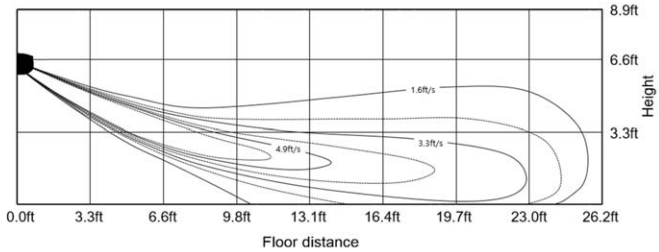
- Cooling Temperature distribution

(Discharge angle : 20 degree)



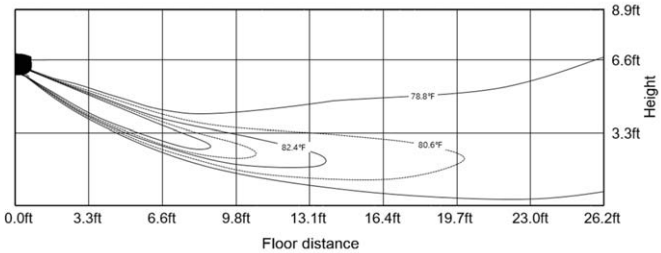
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

(Discharge angle : 30 degree)



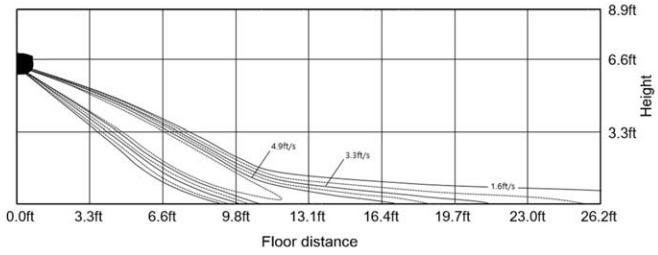
8. Temperature and air flow distribution

Wind-Free™

AM024TNVDCH/AA

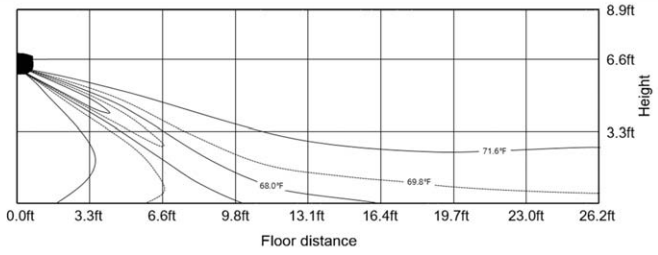
- Cooling air velocity distribution

(Discharge angle : 20 degree)



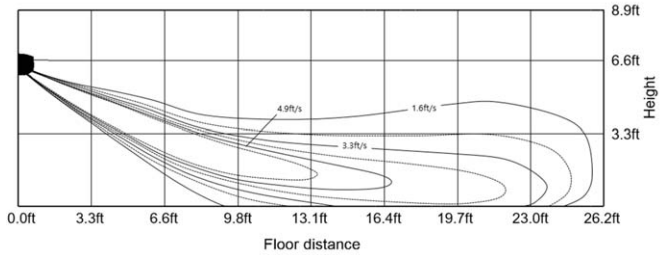
- Cooling Temperature distribution

(Discharge angle : 20 degree)



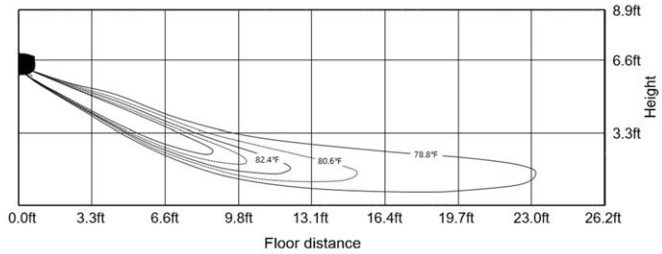
- Heating air velocity distribution

(Discharge angle : 30 degree)



- Heating Temperature distribution

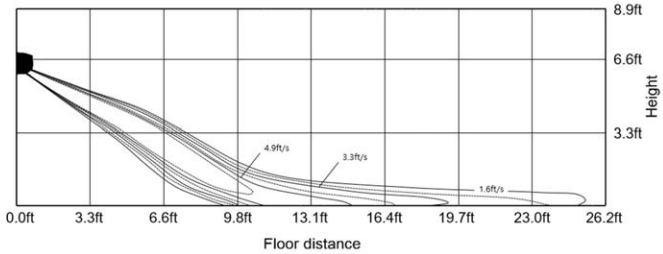
(Discharge angle : 30 degree)



AM028TNVDCH/AA

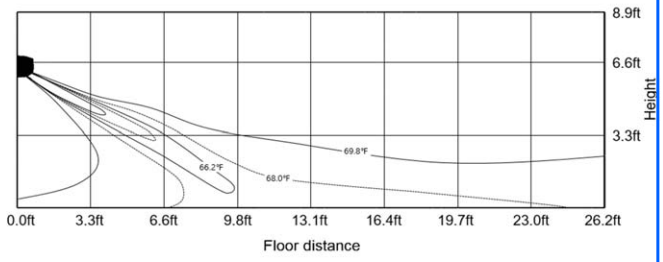
- Cooling air velocity distribution

(Discharge angle : 20 degree)



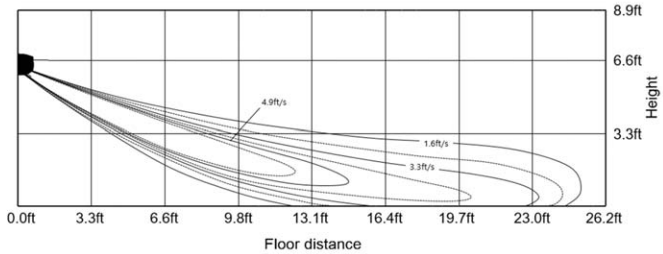
- Cooling Temperature distribution

(Discharge angle : 20 degree)



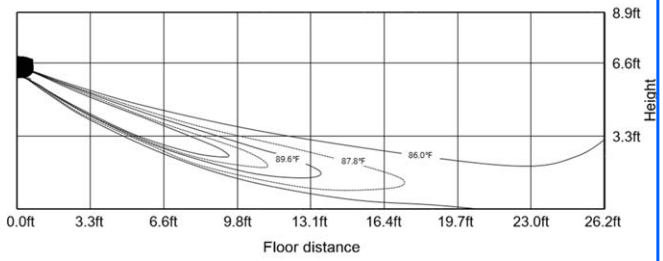
- Heating air velocity distribution

(Discharge angle : 30 degree)



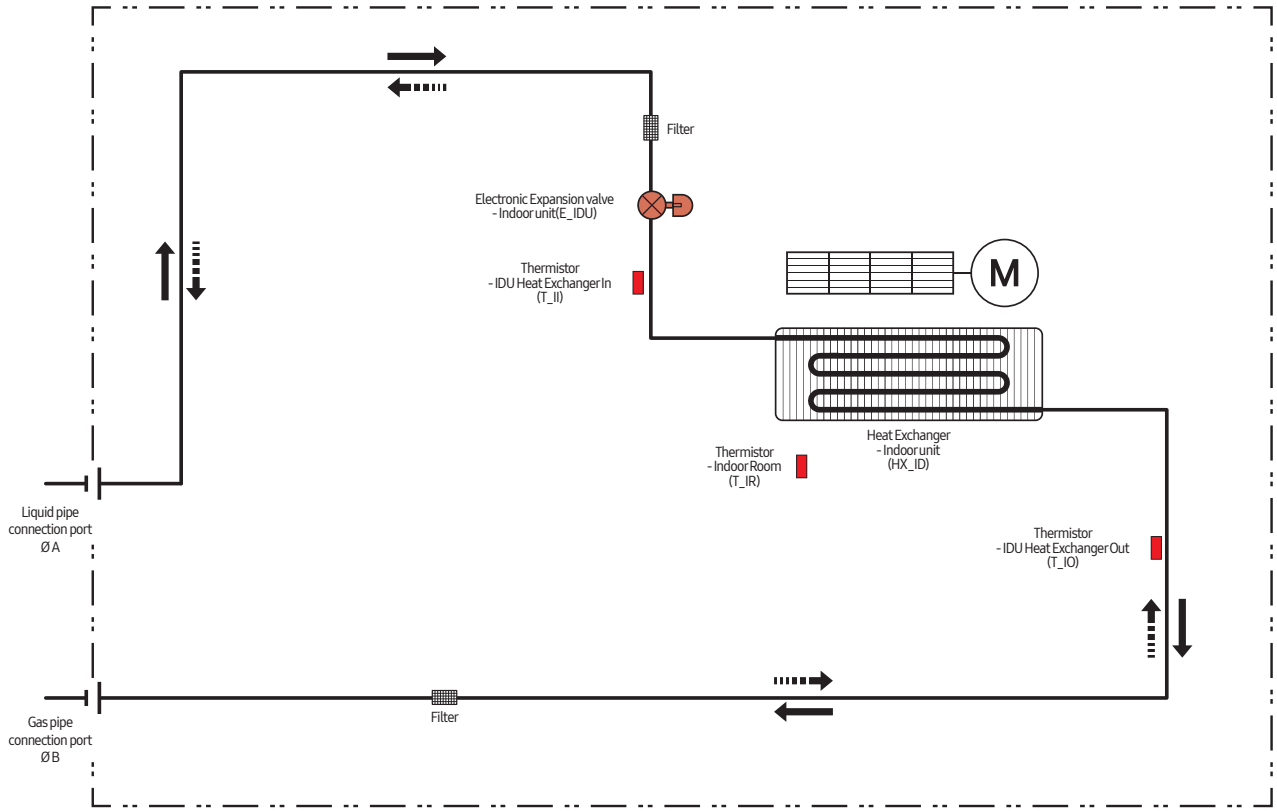
- Heating Temperature distribution

(Discharge angle : 30 degree)



9. Piping Diagram

EEV included Model



Refrigerant flow	
Cooling	Heating
→	⇢

10. Installation

Selecting the installation location

Indoor Unit

- Where airflow is not blocked.
- Where cool air can be distributed throughout the room.
- Install the refrigerant piping length and the height difference of both indoor and outdoor units as indicated in the installation diagram.
- Wall that prevents vibration and is strong enough to hold the product weight.
- Out of the direct sunlight.
- 1m or more away from the TV or radio (to prevent the screen from being distorted or noise from being generated).
- As far away as possible from fluorescent and incandescent lights (so that the remote control can be operated well).
- A place where the air filter can be replaced easily.

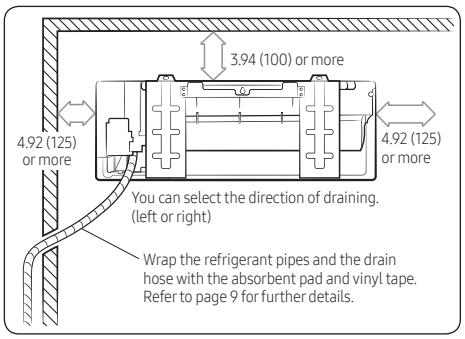
⚠ CAUTION

- Do not install the product with EEV (commercial model) in a quiet place such as bedroom, hotel, and hospital. If installation is required in a place, install the indoor unit that has no EEV along with the EEV kit.
- Avoid the following places to prevent malfunction of the unit.
  - Where there is machine oil
  - Salty environment such as the seaside areas
  - Where sulfide gas exists
  - Other special atmosphere areas

Space requirements for installation & service

Observe the clearances and maximum lengths as seen in the picture below when installing the air conditioner.

(Unit: inch (mm))



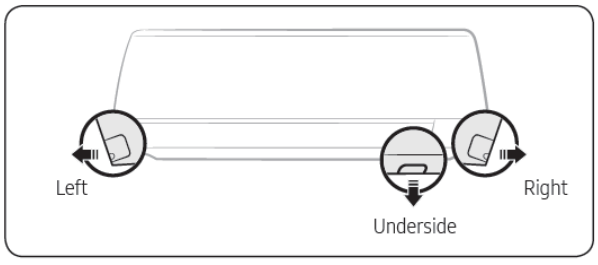
NOTE

- The appearance of the unit may be different from the diagram depending on the model.

Installing the indoor unit

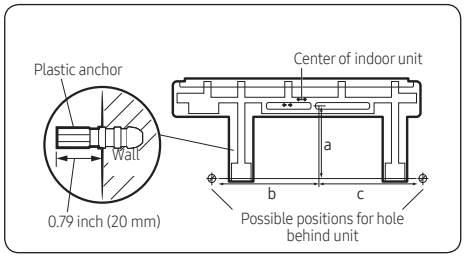
Before fixing the installation plate to the wall or window frame, you must determine the position of the 2.56 inch(65 mm) hole through which the cable, pipe and hose pass to connect the indoor unit to the outdoor unit.
When facing the wall, the pipe and cable can be connected from the:

- Right
- Left
- Underside (right)
- Rear (right or left)



1 Determine the position of the pipe and drain hose hole as seen in the picture and drill the hole with an inner diameter of 2.56 inch(65 mm) so that it slants slightly downwards.

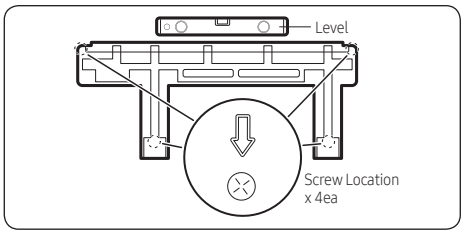
10. Installation



Pipe bundle hole: 2.56 inch (Ø65 mm) (Unit: inch (mm))

Model	a	b	c
005/007/009/012	6.50 (165)	12.01 (305)	16.38 (416)
015/018/024/028	5.91 (150)	12.01 (305)	25.61 (650.5)

2 If you fix the indoor unit to a wall, fix the installation plate to the wall giving attention to the weight of the indoor unit.



NOTE

- If you mount the plate to a concrete wall by using plastic anchors, make sure that gaps between the wall and the plate, created by projected anchor, are less than 0.79 inch (20 mm)

3 If you fix the indoor unit to a window frame, follow 4 to 6.

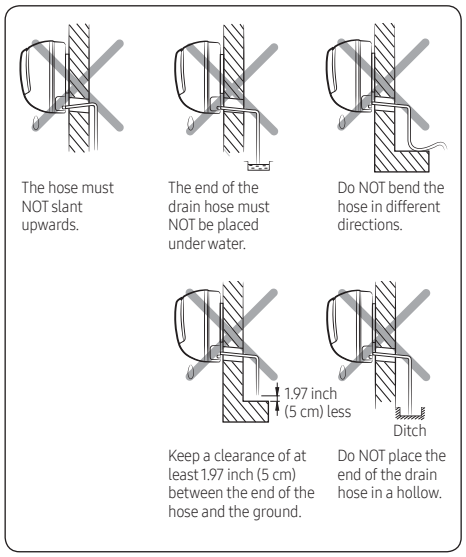
4 Determine the positions of the wooden uprights to be attached to the window frame.

5 Attach the wooden uprights to the window frame giving attention to the weight of the indoor unit.

6 Attach the installation plate to the wooden uprights using tapping screw.

Installing the drain hose

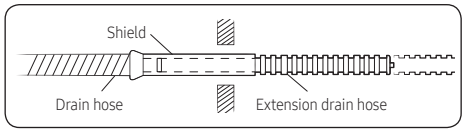
When installing the drain hose for the indoor unit, check if condensation draining is adequate. When passing the drain hose through the 2.56 inch (65 mm) hole drilled in the wall, check the following:



1 If necessary, connect the 6.56 ft (2 meter) extension drain hose to the drain hose.

2 If you use the extension drain hose, insulate the inside of the extension drain hose with a shield.

3 Fit the drain hose into 1 of 2 drain hose holes, then fix the end of the drain hose tightly with a clamp.



NOTE

- If you don't use the other drain hose hole, block it with a rubber stopper.

4 Pass the drain hose under the refrigerant pipe, keeping the drain hose tight.

5 Pass the drain hose through the hole in the wall. Check if it slants downwards as seen in the picture.

NOTE

- The hose will be fixed permanently into position after finishing the installation and the gas leak test; refer to page 9 for further details.
- DO NOT WALL UP THE DRAIN HOSE CONNECTION! Drain hose connection must be easy accessible and serviceable.

10. Installation

Connecting the power and communication cables

1 Before wiring work, you must turn off all power source.

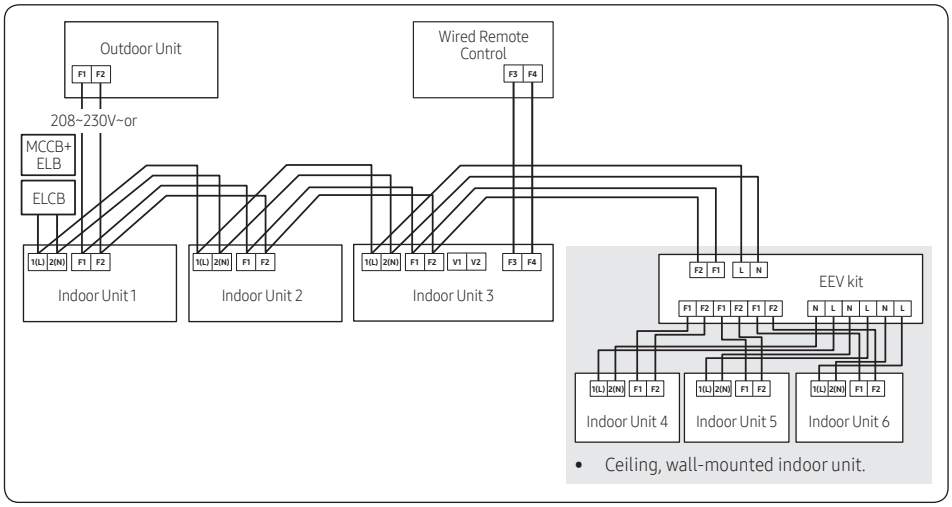
2 Indoor unit power should be supplied through the breaker (ELCB or MCCB+ELB) separated by the outdoor power.

- ELCB:Earth Leakage Circuit Breaker
- MCCB:Molded Case Circuit Breaker
- ELB:Earth Leakage Breaker

3 The power cable should be used only copper wires.

4 Connect the power cable (1(L), 2(N)) among the units within maximum length and communication cable (F1, F2) each.

5 Connect F3, F4(for communication) wires at the back side of the indoor unit when installing the wired remote control.



- ELCB : Essential Installation
- The EEV Kit is optional component.

⚠ WARNING

- Power off before connecting any wires;Indoor PBA will be damaged while V1, V2, F3, F4 short each other.
- You must connect the earth cable. If earthing is not complete, electric shock or fire may occur.

10. Installation

Specification of electronic wire

Power supply	MCCB	ELB or ELCB	Power cable	Earth cable	Communication cable
Min : 198V Max : 242V	XA	XA, 30 mmA, 0.1 s	0.0039 inch² (2.5 mm²)	0.0039 inch² (2.5 mm²)	0.0012 to 0.0023 inch² (0.75 to 1.5 mm²)

- Refer to the unit nameplate for rating current.
- Decide the capacity of ELCB(or MCCB+ELB) by below formula.
- Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F or IEC:60245 IEC 66 / CENELEC: H07RN-F)

The capacity of ELCB(or MCCB+ELB) X[A] = 1.25 X 1.1 X ∑Ai

- X : The capacity of ELCB(or MCCB+ELB).
- ∑Ai : Sum of Rating currents of each indoor unit.
- Refer to each installation manual about the rating current of indoor unit.

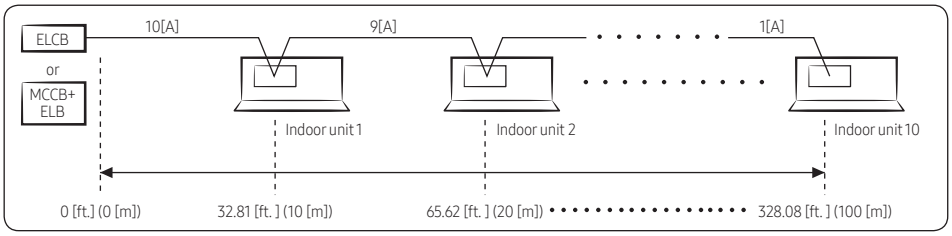
- Decide the power cable specification and maximum length within 10% power drop among indoor units.

$$\sum_{k=1}^{n} \left(\frac{Coef \times 35.6 \times L_k \times i_k}{1000 \times Ak} \right) < \text{10 \% of input voltage [V]}$$

- coef: 1.55
- Lk: Distance among each indoor unit [m(ft)],
  Ak: Power cable specification [mm² (inch²)]
  ik: Running current of each unit [A]

Example of Installation

- Total power cable length L = 328.08 [ft.] (100 [m]), Running current of each units 1[A]
- Total 10 indoor units were installed

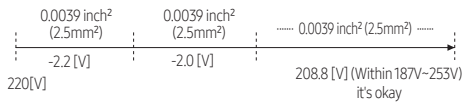


- Apply following equation.

$$\sum_{k=1}^{n} \left(\frac{Coef \times 35.6 \times L_k \times i_k}{1000 \times Ak} \right) < \text{10\% of input voltage [V]}$$

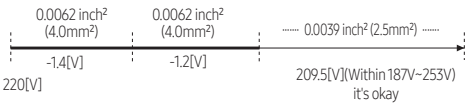
- Calculation

- Installing with 1 sort wire



- (2.2+2.0+1.8+1.5+1.3+1.1+0.9+0.7+0.4+0.2) = -11.2[V]

- Installing with 2 different sort wire.



- (1.4+1.2+1.8+1.5+1.3+1.1+0.9+0.7+0.4+0.2) = -10.5[V]

10. Installation

⚠ CAUTION

- Select the power cable in accordance with relevant local and national regulations.
- Wire size must comply with local and national code.
- For the power cable, use the grade of H07RN-F or H05RN-F materials.
- You should connect the power cable into the power cable terminal and fasten it with a clamp.
- The unbalanced power must be maintained within 10% of supply rating among whole indoor units.
- If the power is unbalanced greatly, it may shorten the life of the condenser. If the unbalanced power is exceeded over 10% of supply rating, the indoor unit is protected, stopped and the error mode indicates.
- To protect the product from water and possible shock, you should keep the power cable and the connection cord of the indoor and outdoor units in the iron pipe.
- Connect the power cable to the auxiliary circuit breaker. An all pole disconnection from the power supply must be incorporated in the fixed wiring (≥0.12inch (3mm)).
- You must keep the cable in a protection tube.
- Keep distances of 1.97 inch (50 mm) or more between power cable and communication cable.
- Maximum length of power cables are decided within 10% of power drop. If it exceeds, you must consider another power supplying method.
- The circuit breaker (ELCB or MCCB+ELB) should be considered more capacity if many indoor units are connected from one breaker.
- Use round pressure terminal for connections to the power terminal block.
- For wiring, use the designated power cable and connect it firmly, then secure to prevent out-side pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.
- Over-tightening the terminal screws may break them.
- See the table below for tightening torque for the terminal screws.

Tightening torque		
	N•m	ft•lb
M 3.5	0.8 ~ 1.2	0.59 ~ 0.89
M 4	1.2 ~ 1.8	0.89 ~ 1.33

(1 N•m = 10 kgf•cm)

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