

VLOC

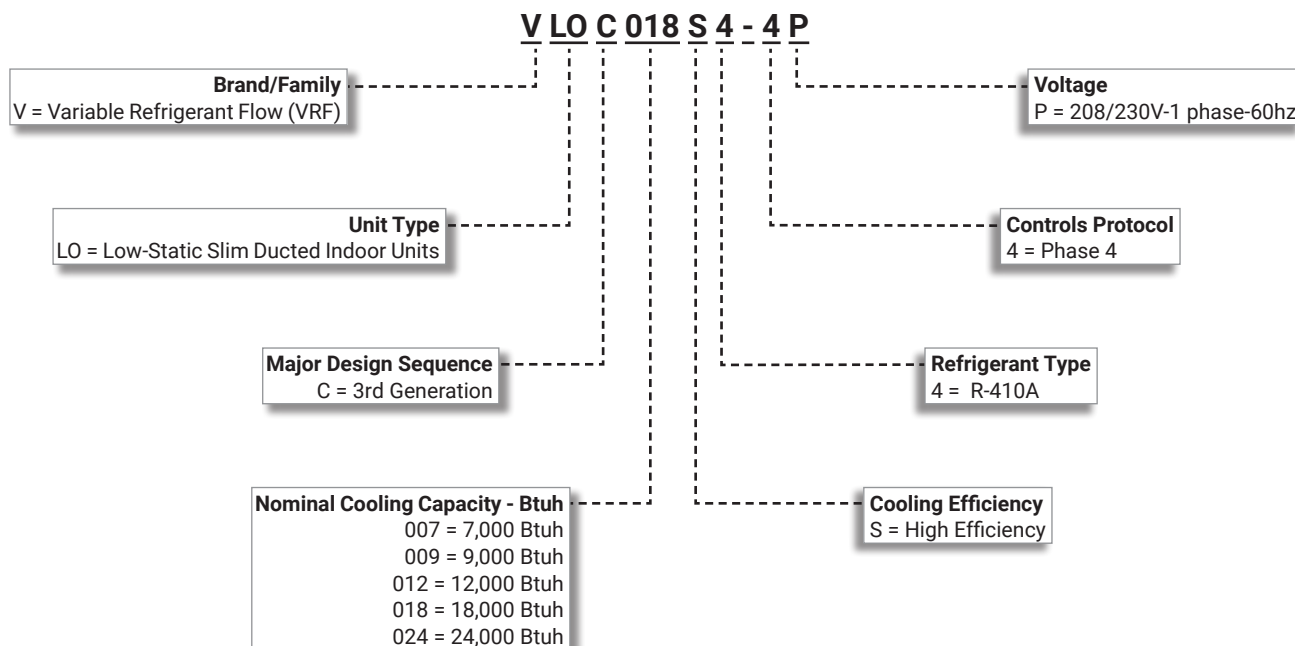
Low-Static Concealed Slim Ducted Indoor Units | **R-410A** | 60Hz

7,000 to 24,000 Btuh

COMMERCIAL PRODUCT SPECIFICATIONS (EHB)



MODEL NUMBER IDENTIFICATION



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Specification

Duct

Type				Slim Duct	Slim Duct	Slim Duct
Model Name				VLOC007S4-4P	VLOC009S4-4P	VLOC012S4-4P
Power Supply			Φ, #, V, Hz	1,2,208~230,60	1,2,208~230,60	1,2,208~230,60
Mode			-	HP / HR	HP / HR	HP / HR
Performance	Capacity	Cooling	kW	2.2	2.8	3.5
			Btu/h	7,500	9,500	12,000
			US RT	0.62	0.79	1.00
		Cooling (SH)	kW	1.5	1.9	2.5
			Btu/h	5,200	6,600	8,400
		Heating	kW	2.5	3.1	4.0
			Btu/h	8,500	10,500	13,500
			US RT	0.71	0.87	1.12
Power	Power Input	Cooling	W	35	39	50
		Heating		35	39	50
	Current Input	Cooling	A	0.30	0.33	0.42
		Heating		0.30	0.33	0.42
	Current	MCA	A	0.52	0.57	0.73
		MOP		15.0	15.0	15.0
Heat exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al	Al
		Tube	-	Cu	Cu	Cu
	Fin Treatment		-	Green Hydrophile	Green Hydrophile	Green Hydrophile
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Quantity		EA	1	1	1
	Air Flow Rate	High/Mid/Low	m³/min	12.0/10.0/8.0	13.0/11.0/10.0	14.5/13.0/11.0
			ft³/min	424/353/283	459/388/353	512/459/388
			l/s	200/167/133	217/183/167	242/217/183
	External Pressure	Min/Std/Max	mmAq	0/1/4	0/1/4	0/1/4
			Pa	0/9.81/39.23	0/9.81/39.23	0/9.81/39.23
			In Wg	0/0.04/0.16	0/0.04/0.16	0/0.04/0.16
Fan Motor	Type		-	BLDC	BLDC	BLDC
	Output x n		W	84 x 1	84 x 1	84 x 1
Piping Connections	Liquid Pipe		Type	Flare	Flare	Flare
			Φ, mm (inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
	Gas Pipe		Type	Flare	Flare	Flare
			Φ, mm (inch)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)
	Drain Pipe		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Wiring connections	Power Source Wire	Min.	AWG	16	16	16
		Min.	AWG	16	16	16
	Communication	Remark	-	F1,F2	F1,F2	F1,F2

Specification

Slim Duct

Type			Slim Duct	Slim Duct	Slim Duct
Model Name			VLOC007S4-4P	VLOC009S4-4P	VLOC012S4-4P
Refrigerant	Type	-	R410A	R410A	R410A
	Control Method	-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure Level	High/Mid/Low	26/24/21	27/25/23	29/27/24
	Sound Power	Cooling	43	44	46
Dimensions	Net Weight		kg	22.0	22.0
			lbs	48.5	48.5
	Shipping Weight		kg	25.6	25.6
			lbs	56.4	56.4
	Net Dimensions (W×H×D)		mm	1,100x199x440	1,100x199x440
			inch	43-5/16 x 7-13/16 x 17-5/16	43-5/16 x 7-13/16 x 17-5/16
	Shipping Dimensions (W×H×D)		mm	1,351x280x544	1,351x280x544
			inch	53-1/8 x 11 x 21-7/16	53-1/8 x 11 x 21-7/16
Casing	Material	-	Steel	Steel	Steel
Additional Accessories	Drain Pump	Model	-	Integral	Integral
		Max. lifting Height / Displacement	in / gal/h	29.53 / 6.34	29.53 / 6.34
	Air Filter		-	FB-SLIM3	FB-SLIM3

NOTE

- Specification may be subject to change without prior notice.
- 1) Performances are based on the following test conditions.
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
 - Equivalent refrigerant piping length 5m(16.4ft), Level differences : 0m(0ft)
- 2) Select wire size based on the value of MCA
- 3) Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level / Reference acoustic pressure 0 dB = 20uPa
- 4) Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level
 - Reference power : 1pW / Measured according to ISO 3741
- 5) These products contain R410A which is fluorinated greenhouse gas.

1. Specification

Slim Duct

Type				Slim Duct	Slim Duct
Model Name				VLOC018S4-4P	VLOC024S4-4P
Power Supply			Φ, #, V, Hz	1,2,208~230,60	1,2,208~230,60
Mode			-	HP / HR	HP / HR
Performance	Capacity	Cooling	kW	5.3	7.0
			Btu/h	18,000	24,000
			US RT	1.50	2.00
		Cooling (SH)	kW	3.7	4.9
			Btu/h	12,600	16,800
			Heating	kW	5.9
		Btu/h		20,000	27,000
		US RT		1.67	2.25
Power	Power Input	Cooling	W	72	80
		Heating		72	80
	Current Input	Cooling	A	0.60	0.68
		Heating		0.60	0.68
	Current	MCA	A	0.98	1.09
		MOP		15.0	15.0
Heat exchanger	Type		-	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al
		Tube	-	Cu	Cu
	Fin Treatment		-	Green Hydrophile	Green Hydrophile
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Quantity		EA	1	1
	Air Flow Rate	High/Mid/Low	m³/min	18.0/16.0/15.0	19.0/17.0/15.0
			ft³/min	636/565/530	671/600/530
			l/s	300/267/250	317/283/250
	External Pressure	Min/Std/Max	mmAq	0/1/4	0/1/4
			Pa	0/9.81/39.23	0/9.81/39.23
			In Wg	0/0.04/0.16	0/0.04/0.16
Fan Motor	Type		-	BLDC	BLDC
	Output x n		W	84 x 1	84 x 1
Piping Connections	Liquid Pipe		Type	Flare	Flare
			Φ, mm (inch)	6.35 (1/4)	9.52 (3/8)
	Gas Pipe		Type	Flare	Flare
			Φ, mm (inch)	12.7 (1/2)	15.88 (5/8)
	Drain Pipe		Φ,mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Wiring connections	Power Source Wire	Min.	AWG	16	16
	Communication	Min.	AWG	16	16
		Remark	-	F1,F2	F1,F2

Specification

Slim Duct

Type			Slim Duct		Slim Duct	
Model Name			VLOC018S4-4P		VLOC024S4-4P	
Refrigerant	Type	-	R410A		R410A	
	Control Method	-	EEV INCLUDED		EEV INCLUDED	
Sound	Sound Pressure Level	High/Mid/Low	dB(A)	34/32/30	35/33/30	
	Sound Power	Cooling		51	52	
Dimensions	Net Weight		kg	22.0	22.0	
			lbs	48.5	48.5	
	Shipping Weight		kg	25.6	25.6	
			lbs	56.4	56.4	
	Net Dimensions (W×H×D)		mm	1,100x199x440	1,100x199x440	
			inch	43-5/16 x 7-13/16 x 17-5/16	43-5/16 x 7-13/16 x 17-5/16	
	Shipping Dimensions (W×H×D)		mm	1,351x280x544	1,351x280x544	
			inch	53-1/8 x 11 x 21-7/16	53-1/8 x 11 x 21-7/16	
Casing	Material		-	Steel	Steel	
Additional Accessories	Drain Pump	Model	-	Integral	Integral	
		Max. lifting Height / Displacement	in / gal/h	29.53 / 6.34	29.53 / 6.34	
	Air Filter		-	FB-SLIM3	FB-SLIM3	

NOTE

- Specification may be subject to change without prior notice.
- 1) Performances are based on the following test conditions.
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB, Outdoor temperature : 95°F(35°C) DB, 75°F(23.9°C) WB
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB, Outdoor temperature : 47°F(8.3°C) DB, 43°F(6.1°C) WB
 - Equivalent refrigerant piping length 5m(16.4ft), Level differences : 0m(0ft)
- 2) Select wire size based on the value of MCA
- 3) Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level / Reference acoustic pressure 0 dB = 20uPa
- 4) Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level
 - Reference power : 1pW / Measured according to ISO 3741
- 5) These products contain R410A which is fluorinated greenhouse gas.

Summary Table

Slim Duct

Performance Characteristics

Model Code	Fan Speed	Nominal Capacity(Btu/h)			Airflow [CFM]	Sound Pressure [dBA]	Sound Power [dBA]	Static Pressure (Min/Std/Max) [inAq]
		Cooling	Sensible	Heating				
VLOC007S4-4P	High	7,500	5,200	8,500	424	26	43	0/0.04/0.16
	Mid	5,400	4,100	7,800	283	24	-	
	Low	4,200	3,300	6,900	283	21	-	
VLOC009S4-4P	High	9,500	6,600	10,500	459	27	44	0/0.04/0.16
	Mid	6,800	5,200	9,700	388	25	-	
	Low	5,600	4,500	9,200	353	23	-	
VLOC012S4-4P	High	12,000	8,400	13,500	512	29	46	0/0.04/0.16
	Mid	8,700	6,700	12,800	459	27	-	
	Low	6,800	5,600	11,800	388	24	-	
VLOC018S4-4P	High	18,000	12,600	20,000	636	34	51	0/0.04/0.16
	Mid	12,700	9,900	18,900	565	32	-	
	Low	10,200	8,600	18,300	530	30	-	
VLOC024S4-4P	High	24,000	16,800	27,000	671	35	52	0/0.04/0.16
	Mid	16,700	13,200	25,500	600	33	-	
	Low	13,300	11,300	24,600	530	30	-	

NOTE

- Sound data is based on cooling operation.

Electric Characteristics

Model Code	Power Supply (Ø, #, V, Hz)	Power Input (W)	Current Input (A)	MCA (A)	MOP (A)	FLA (A)
VLOC007S4-4P	1,2,208-230,60	35.0	0.30	0.52	15	0.41
VLOC009S4-4P		39.0	0.33	0.57	15	0.45
VLOC012S4-4P		50.0	0.42	0.73	15	0.58
VLOC018S4-4P		72.0	0.60	0.98	15	0.78
VLOC024S4-4P		80.0	0.68	1.09	15	0.87

NOTE

- MCA : Minimum circuit amperes
- MOP : Maximum Overcurrent Protective Device
- Select wire size based on the value of MCA

Capacity Table

Slim Duct

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Capacity Index (MBH)	Outdoor Air Temp. (°F, WB)	Indoor temperature (°F, WB)													
		57		61		64		67		70		72		75	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h
007	50	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,400	6,100	8,700	5,900	8,900	5,500
	54	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,400	6,100	8,700	5,900	8,900	5,500
	58	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,400	6,000	8,700	5,900	8,900	5,500
	60	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,900	8,600	5,700	8,900	5,500
	64	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	67	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	70	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	73	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	77	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	80	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	84	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	88	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	92	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	95	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	99	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,500	5,700	8,900	5,500
	103	5,200	4,300	6,200	5,000	7,300	5,800	7,500	5,800	8,200	5,800	8,400	5,600	8,600	5,200
	107	5,200	4,300	6,200	5,000	7,200	5,800	7,400	5,700	8,100	5,700	8,300	5,500	8,400	5,100
	111	5,200	4,300	6,200	5,000	7,000	5,600	7,200	5,600	7,800	5,500	7,900	5,300	8,100	4,900
	115	5,200	4,300	6,100	5,000	6,900	5,500	7,000	5,400	7,500	5,300	7,700	5,100	7,800	4,700
	118	5,100	4,300	6,000	4,900	6,800	5,400	6,800	5,300	7,300	5,200	7,500	5,000	7,600	4,600
	120	5,100	4,300	6,000	4,900	6,700	5,300	6,800	5,200	7,200	5,100	7,300	4,900	7,500	4,500
009	50	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,100	7,500	11,600	7,500
	54	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	58	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	60	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	64	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	67	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	70	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	73	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	77	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	80	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	84	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	88	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	92	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	95	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	11,000	7,400	11,300	7,200
	99	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,500	7,500	10,900	7,400	11,300	7,100
	103	6,600	6,000	7,900	6,700	9,100	7,200	9,500	7,400	10,300	7,200	10,600	7,000	10,900	6,800
	107	6,600	6,000	7,900	6,700	9,000	7,100	9,400	7,300	10,200	7,200	10,400	6,900	10,800	6,700
	111	6,600	6,000	7,900	6,700	8,800	6,900	9,100	7,100	9,800	6,900	10,000	6,600	10,400	6,400
	115	6,600	6,000	7,800	6,600	8,600	6,800	8,800	6,900	9,400	6,700	9,700	6,400	10,000	6,200
	118	6,500	5,900	7,700	6,600	8,500	6,700	8,700	6,800	9,200	6,500	9,400	6,200	9,800	6,000
	120	6,500	5,900	7,700	6,500	8,400	6,600	8,600	6,700	9,100	6,400	9,200	6,100	9,500	5,900

Capacity Table

Slim Duct

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Capacity Index (MBH)	Outdoor Air Temp. (°F, WB)	Indoor temperature (°F, WB)													
		57		61		64		67		70		72		75	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h
012	50	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,900	9,100	14,500	8,900
	54	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,900	9,100	14,400	8,900
	58	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,900	9,100	14,400	8,900
	60	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,900	9,100	14,400	8,900
	64	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,800	9,000	14,200	8,700
	67	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,800	9,000	14,200	8,600
	70	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,800	9,000	14,200	8,600
	73	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,800	9,000	14,200	8,600
	77	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,800	9,000	14,200	8,600
	80	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,800	9,000	14,200	8,600
	84	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,800	9,000	14,200	8,600
	88	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,800	9,000	14,200	8,600
	92	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,800	9,000	14,200	8,600
	95	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,300	9,200	13,800	9,000	14,200	8,600
	99	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,000	9,000	13,500	8,800	14,100	8,500
	103	8,500	7,100	9,800	8,100	11,600	8,900	12,000	9,100	13,000	8,900	13,400	8,600	13,800	8,200
	107	8,500	7,100	9,800	8,100	11,500	8,800	11,900	9,000	12,800	8,800	13,200	8,500	13,500	8,100
	111	8,500	7,100	9,800	8,100	11,200	8,600	11,500	8,700	12,400	8,500	12,700	8,200	13,000	7,800
	115	8,500	7,100	9,700	8,000	11,000	8,400	11,200	8,500	11,900	8,200	12,200	7,900	12,600	7,600
	118	8,400	7,000	9,600	7,900	10,800	8,300	10,900	8,300	11,700	8,000	11,900	7,700	12,300	7,300
	120	8,300	7,000	9,500	7,900	10,700	8,200	10,800	8,200	11,500	7,900	11,700	7,500	12,000	7,200
018	50	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	20,100	14,200	21,000	14,100	21,700	13,900
	54	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	20,100	14,100	20,900	14,100	21,700	13,900
	58	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,800	13,900	21,600	13,800
	60	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,500	13,500
	64	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,400	13,300
	67	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,400	13,300
	70	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,400	13,300
	73	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,400	13,300
	77	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,400	13,300
	80	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,400	13,300
	84	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,400	13,300
	88	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,400	13,300
	92	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,400	13,300
	95	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,900	14,000	20,700	13,800	21,400	13,300
	99	12,700	11,000	14,900	12,600	17,400	13,400	18,000	13,800	19,600	13,700	20,300	13,400	21,000	13,000
	103	12,700	11,000	14,900	12,600	17,300	13,400	18,000	13,800	19,600	13,700	20,200	13,300	20,700	12,700
	107	12,700	11,000	14,900	12,600	17,200	13,300	17,800	13,700	19,400	13,500	19,900	13,100	20,300	12,500
	111	12,700	11,000	14,900	12,600	16,800	13,000	17,300	13,200	18,700	13,000	19,100	12,600	19,600	12,000
	115	12,700	11,000	14,700	12,500	16,400	12,700	16,800	12,800	18,000	12,600	18,500	12,100	19,000	11,700
	118	12,600	10,900	14,600	12,400	16,200	12,500	16,400	12,600	17,600	12,300	18,000	11,800	18,400	11,300
	120	12,500	10,800	14,500	12,300	16,000	12,400	16,300	12,500	17,300	12,000	17,600	11,600	18,000	11,100

Capacity Table

Slim Duct

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Capacity Index (MBH)	Outdoor Air Temp. (°F, WB)	Indoor temperature (°F, WB)													
		57		61		64		67		70		72		75	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h	Btu/h
024	50	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,900	19,400	28,000	19,200	29,000	18,600
	54	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,700	19,200	27,800	19,000	28,900	18,600
	58	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,800	18,900	28,800	18,500
	60	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,700	18,400
	64	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,600	18,300
	67	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,600	18,300
	70	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,600	18,300
	73	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,600	18,300
	77	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,600	18,300
	80	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,600	18,300
	84	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,600	18,300
	88	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,600	18,300
	92	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,600	18,300
	95	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,600	19,200	27,700	18,900	28,600	18,300
	99	16,900	14,700	19,700	17,000	23,200	17,900	24,000	18,300	26,300	18,800	27,200	18,500	28,000	17,900
	103	16,900	14,700	19,700	17,000	23,100	17,900	24,000	18,300	26,000	18,600	26,800	18,100	27,500	17,500
	107	16,900	14,700	19,700	17,000	23,000	17,800	23,800	18,100	25,700	18,300	26,400	17,900	27,100	17,200
	111	16,900	14,700	19,700	17,000	22,400	17,300	23,000	17,600	24,800	17,700	25,400	17,200	26,100	16,600
	115	16,800	14,700	19,500	16,800	21,900	16,900	22,300	17,000	23,900	17,100	24,500	16,600	25,300	16,100
	118	16,700	14,600	19,300	16,600	21,600	16,700	21,900	16,700	23,400	16,700	23,900	16,200	24,500	15,600
	120	16,500	14,400	19,200	16,500	21,400	16,500	21,700	16,500	22,900	16,400	23,400	15,800	24,000	15,300

NOTE

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

Capacity Table

Slim Duct

Heating

TC : Total Capacity(kW)

Capacity Index (MBH)	Outdoor Air Temp.(°F)		Indoor temperature (°F, WB)				
			61	65	70	72	75
	DB	WB	TC Btu/h	TC Btu/h	TC Btu/h	TC Btu/h	TC Btu/h
007	-12.6	-13.0	4,800	4,800	4,800	4,800	4,800
	-7.1	-7.6	5,100	5,100	5,100	5,100	5,100
	-3.6	-4.0	5,400	5,400	5,400	5,400	5,400
	-1.8	-2.2	5,500	5,500	5,500	5,500	5,500
	2.0	1.0	5,700	5,700	5,700	5,700	5,700
	6.0	5.0	6,100	5,800	5,800	5,800	5,700
	10.0	9.0	6,300	6,300	6,300	6,200	6,000
	13.0	12.0	6,900	6,900	6,700	6,600	6,600
	17.0	15.0	7,500	7,400	7,000	6,900	6,900
	19.0	18.0	8,100	7,800	7,400	7,100	7,100
	23.0	21.0	8,400	8,100	7,900	7,700	7,700
	26.0	24.0	8,800	8,600	8,200	8,000	7,900
	30.0	28.0	9,100	8,900	8,400	8,200	7,900
	35.0	32.0	9,300	9,000	8,500	8,200	7,900
	39.0	36.0	9,600	9,200	8,500	8,100	7,900
	44.0	40.0	10,000	9,500	8,500	8,100	7,900
	47.0	43.0	10,000	9,500	8,500	8,100	7,900
	51.0	47.0	10,600	9,500	8,500	8,100	7,900
	54.0	50.0	10,600	9,500	8,500	8,100	7,900
	57.0	53.0	10,600	9,500	8,500	8,100	7,900
	60.0	56.0	10,600	9,500	8,500	8,100	7,900
009	-12.6	-13.0	5,900	5,900	5,900	6,000	6,300
	-7.1	-7.6	6,300	6,300	6,300	6,300	6,400
	-3.6	-4.0	6,500	6,500	6,500	6,500	6,500
	-1.8	-2.2	6,600	6,600	6,600	6,600	6,500
	2.0	1.0	6,900	6,900	6,800	6,800	6,600
	6.0	5.0	7,200	7,100	6,900	6,900	6,600
	10.0	9.0	7,500	7,500	7,300	7,200	7,100
	13.0	12.0	7,900	7,800	7,800	7,700	7,500
	17.0	15.0	8,300	8,100	8,100	8,000	7,800
	19.0	18.0	8,700	8,400	8,300	8,200	8,000
	23.0	21.0	9,000	8,900	8,600	8,600	8,300
	26.0	24.0	9,500	9,300	9,000	8,900	8,600
	30.0	28.0	9,900	9,600	9,400	9,200	8,900
	35.0	32.0	10,200	9,900	9,600	9,400	9,100
	39.0	36.0	10,500	10,400	9,800	9,600	9,300
	44.0	40.0	11,100	10,800	10,300	9,900	9,300
	47.0	43.0	11,400	11,000	10,500	10,100	9,400
	51.0	47.0	11,900	11,300	10,500	10,100	9,400
	54.0	50.0	12,100	11,300	10,500	10,100	9,400
	57.0	53.0	12,300	11,500	10,500	10,100	9,400
	60.0	56.0	12,600	11,500	10,500	10,100	9,400

Capacity Table

Slim Duct

Heating

TC : Total Capacity(kW)

Capacity Index (MBH)	Outdoor Air Temp.(°F)		Indoor temperature (°F, WB)				
			61	65	70	72	75
	DB	WB	TC Btu/h	TC Btu/h	TC Btu/h	TC Btu/h	TC Btu/h
012	-12.6	-13.0	7,300	7,800	7,500	7,600	8,100
	-7.1	-7.6	8,000	8,200	7,900	7,900	8,100
	-3.6	-4.0	8,500	8,400	8,100	8,100	8,100
	-1.8	-2.2	8,700	8,500	8,200	8,200	8,100
	2.0	1.0	9,200	8,800	8,500	8,500	8,200
	6.0	5.0	9,500	9,100	8,800	8,800	8,600
	10.0	9.0	9,800	9,400	9,200	9,100	9,000
	13.0	12.0	10,100	10,000	9,800	9,600	9,600
	17.0	15.0	10,500	10,500	10,200	10,100	10,000
	19.0	18.0	10,900	10,800	10,500	10,500	10,200
	23.0	21.0	11,400	11,200	10,900	10,800	10,500
	26.0	24.0	11,800	11,700	11,300	11,100	10,800
	30.0	28.0	12,300	12,300	11,800	11,600	11,100
	35.0	32.0	12,800	12,700	12,200	12,000	11,500
	39.0	36.0	13,400	13,000	12,600	12,300	12,000
	44.0	40.0	13,800	13,800	13,100	12,700	12,000
	47.0	43.0	14,500	14,400	13,500	12,900	12,100
	51.0	47.0	14,900	14,400	13,500	12,900	12,100
	54.0	50.0	15,500	14,700	13,500	12,900	12,100
	57.0	53.0	15,800	14,700	13,500	12,900	12,100
	60.0	56.0	16,100	14,900	13,500	12,900	12,100
018	-12.6	-13.0	12,300	11,800	11,700	11,700	11,700
	-7.1	-7.6	12,700	12,300	12,100	12,000	12,000
	-3.6	-4.0	13,000	12,700	12,400	12,300	12,300
	-1.8	-2.2	13,100	12,900	12,500	12,400	12,400
	2.0	1.0	13,400	13,300	12,800	12,600	12,600
	6.0	5.0	14,000	13,700	13,200	13,000	12,700
	10.0	9.0	14,500	14,100	13,800	13,700	13,400
	13.0	12.0	15,100	14,900	14,500	14,400	14,300
	17.0	15.0	15,700	15,500	15,100	15,000	14,800
	19.0	18.0	16,200	15,900	15,700	15,500	15,000
	23.0	21.0	17,000	16,600	16,300	16,000	15,500
	26.0	24.0	17,700	17,300	16,900	16,600	16,100
	30.0	28.0	18,400	18,000	17,600	17,100	16,500
	35.0	32.0	19,100	18,800	18,100	17,700	17,000
	39.0	36.0	19,600	19,600	18,900	18,400	17,700
	44.0	40.0	20,700	20,400	19,500	18,800	17,700
	47.0	43.0	21,500	21,200	20,000	19,100	17,800
	51.0	47.0	22,300	21,600	20,000	19,100	17,800
	54.0	50.0	22,900	21,700	20,000	19,100	17,800
	57.0	53.0	23,400	22,000	20,000	19,100	17,800
	60.0	56.0	24,000	22,300	20,000	19,100	17,800

Capacity Table

Slim Duct

Heating

TC : Total Capacity(kW)

Capacity Index (MBH)	Outdoor Air Temp.(°F)		Indoor temperature (°F, WB)				
			61	65	70	72	75
	DB	WB	TC Btu/h	TC Btu/h	TC Btu/h	TC Btu/h	TC Btu/h
024	-12.6	-13.0	16,200	16,600	16,100	16,000	16,000
	-7.1	-7.6	16,900	17,000	16,500	16,300	16,300
	-3.6	-4.0	17,300	17,200	16,700	16,600	16,600
	-1.8	-2.2	17,500	17,300	16,800	16,700	16,700
	2.0	1.0	18,000	17,700	17,100	17,000	16,900
	6.0	5.0	18,800	18,400	17,700	17,400	17,100
	10.0	9.0	19,500	19,100	18,600	18,300	18,100
	13.0	12.0	20,400	20,100	19,600	19,400	19,300
	17.0	15.0	21,200	20,800	20,300	20,100	20,000
	19.0	18.0	21,800	21,400	20,900	20,700	20,400
	23.0	21.0	22,600	22,500	21,800	21,500	21,000
	26.0	24.0	23,800	23,500	22,700	22,200	21,600
	30.0	28.0	24,800	24,400	23,500	23,000	22,300
	35.0	32.0	25,700	25,300	24,400	23,800	23,000
	39.0	36.0	26,700	26,300	25,300	24,900	24,000
	44.0	40.0	28,000	27,600	26,300	25,300	24,100
	47.0	43.0	28,900	28,500	27,000	25,800	24,100
	51.0	47.0	30,000	28,900	27,000	25,800	24,100
	54.0	50.0	30,700	29,400	27,000	25,800	24,100
	57.0	53.0	31,500	29,600	27,000	25,800	24,100
	60.0	56.0	32,100	29,900	27,000	25,800	24,100

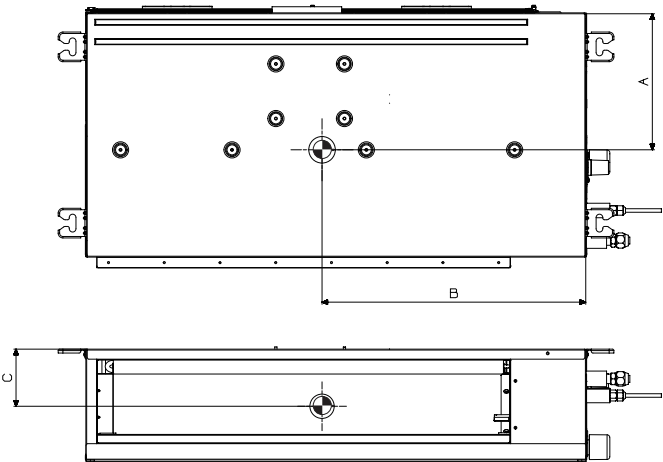
NOTE

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

Center of Gravity

Slim Duct

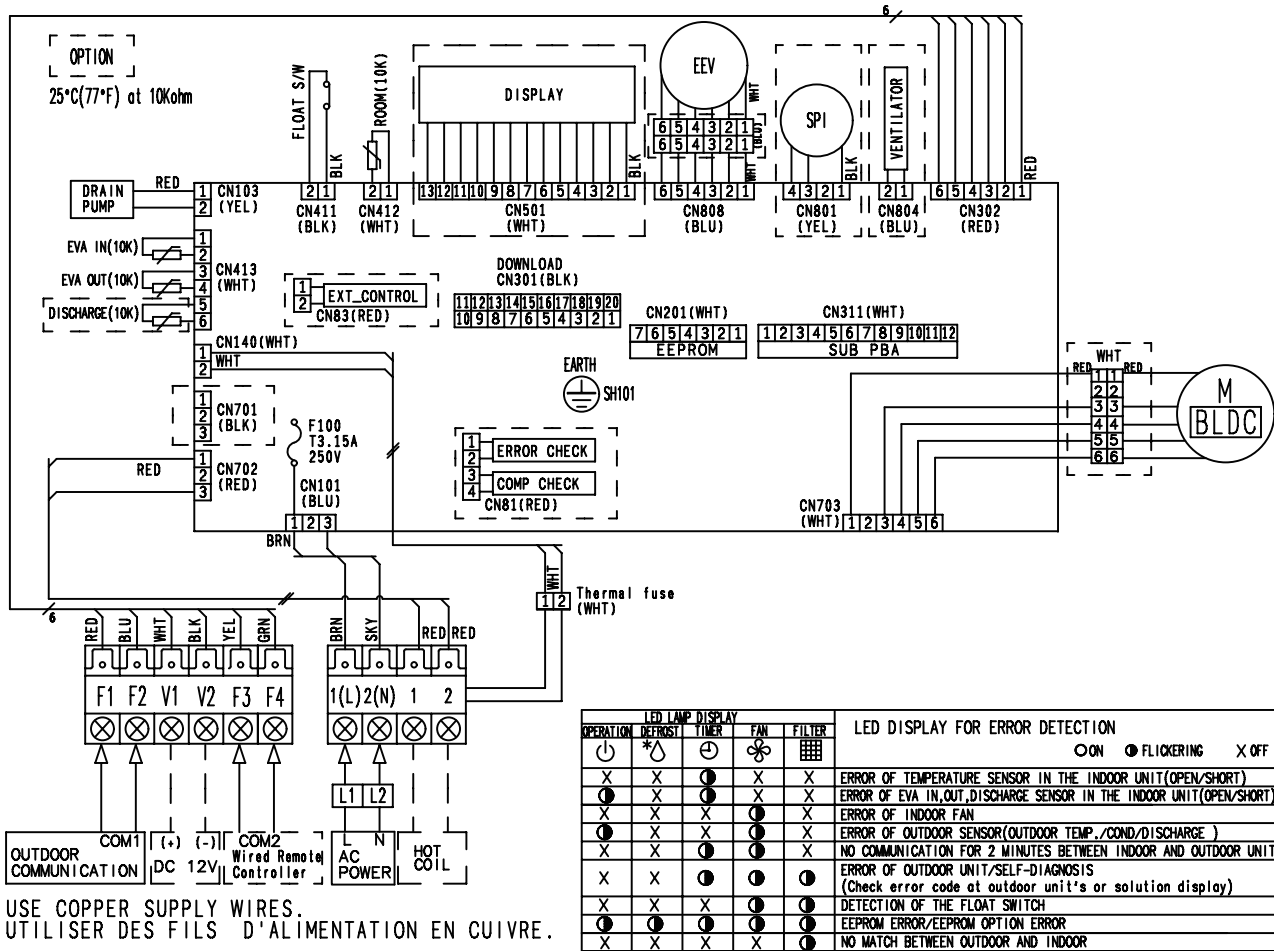
Unit: mm [inch]



Model	A	B	C
VLOC***S4-4P	240 [9-7/16]	540 [21-1/4]	100 [3-15/16]

Electrical Wiring Diagram

VLOC***S4-4P



F100	FUSE	EEV	Electronic Expansion Valve	EVA-IN(10K)	Thermistor EVA IN(10K)
M[BLDC]	Motor (IDU fan)	SPI	S-Plasma ion	EVA-OUT(10K)	Thermistor EVA OUT(10K)
Thermal Fuse	Terminal Block Thermal Fuse	ROOM(10K)	Thermistor ROOM(10K)	DISCHARGE(10K)	Thermistor DISCHARGE(10K)

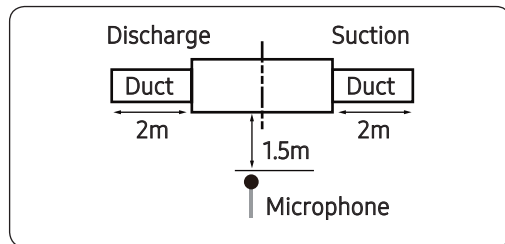
NOTE

- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, SKY: skyblue: GRN: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- ⊕ Protective earth(screw), □ : connector, $\frac{N}{\text{---}}$: The wire quantity

Sound Data

Slim Duct

Sound pressure level

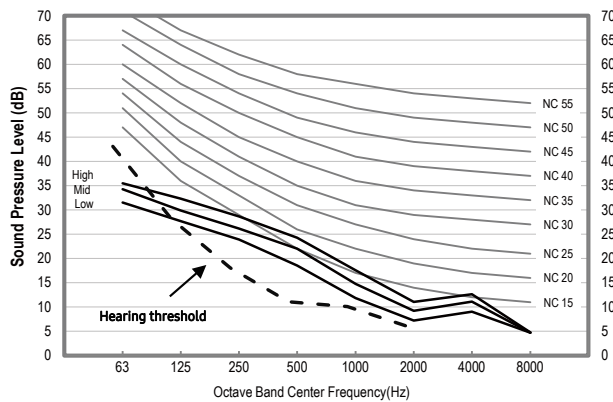


Unit: dB(A)

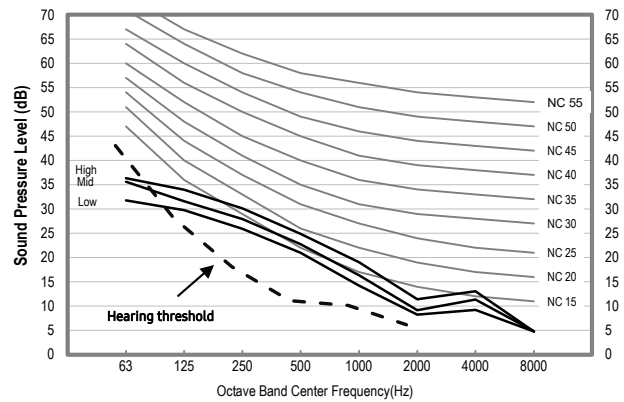
MODEL	High	Mid	Low
VLOC007S4-4P	26	24	21
VLOC009S4-4P	27	25	23
VLOC012S4-4P	29	27	24
VLOC018S4-4P	34	32	30

• NC Curve

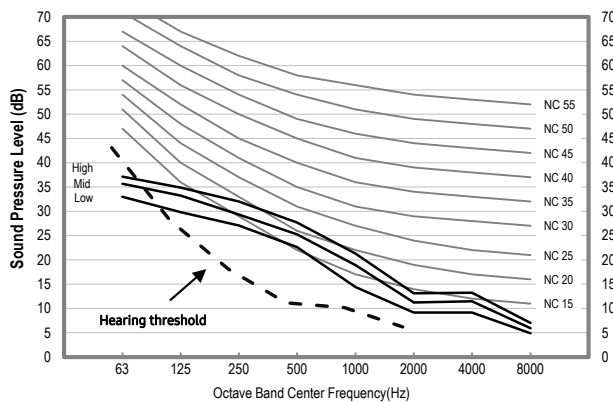
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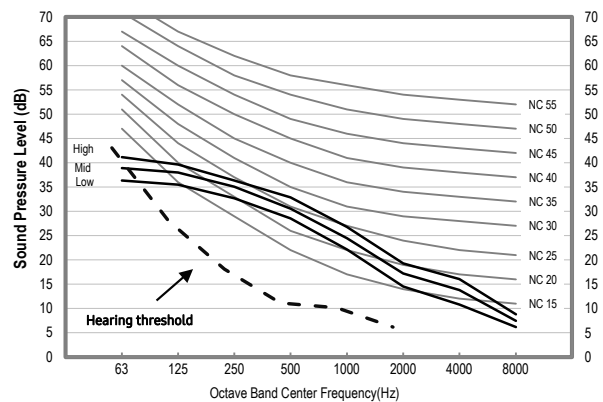
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3) VLOC012S4-4P



4) VLOC018S4-4P



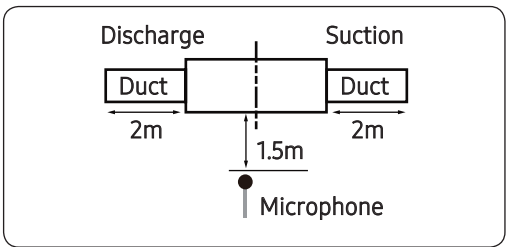
NOTE

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

Sound Data

Slim Duct

Sound pressure level

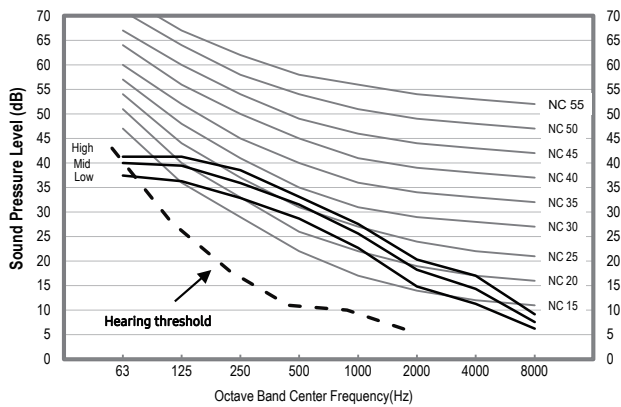


Unit: dB(A)

MODEL	High	Mid	Low
VLOC024S4-4P	35	33	30

- NC Curve

1) VLOC024S4-4P



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

Sound Data

Slim Duct

Sound Power level

NOTE

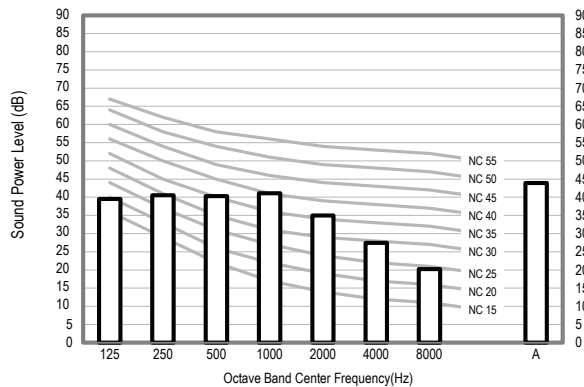
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

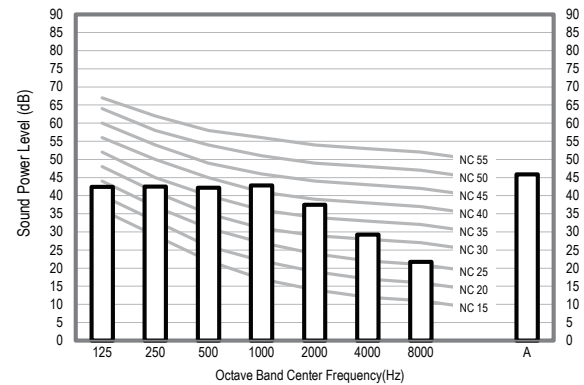
Model	Power
VLOC007S4-4P	43
VLOC009S4-4P	44
VLOC012S4-4P	46
VLOC018S4-4P	51

• NC Curve

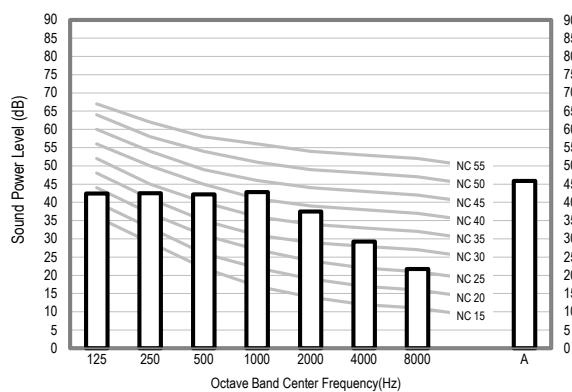
1) VLOC007S4-4P



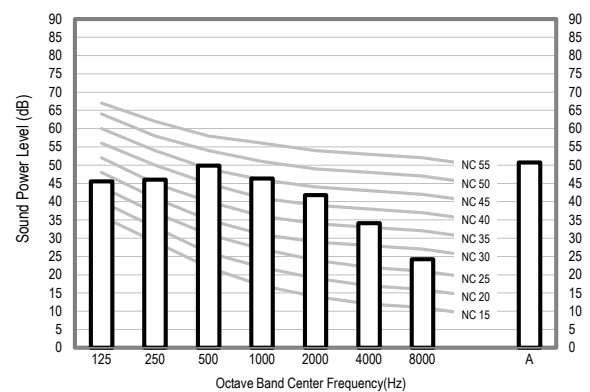
2) VLOC009S4-4P



3) VLOC012S4-4P



4) VLOC018S4-4P



Sound Data

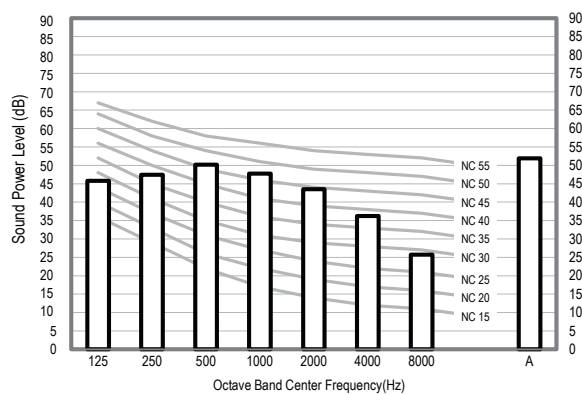
Slim Duct

Sound Power level

 NOTE

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

1) VLOC024S4-4P



Unit: dB(A)

Model	Power
VLOC024S4-4P	52

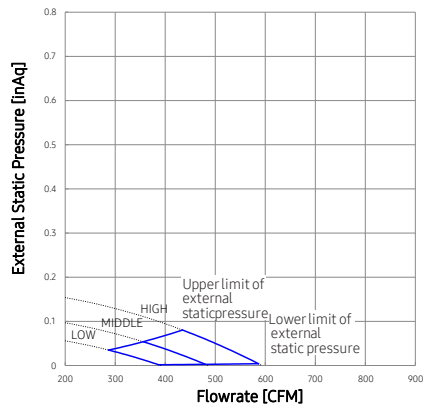
Fan Characteristics

Slim Duct

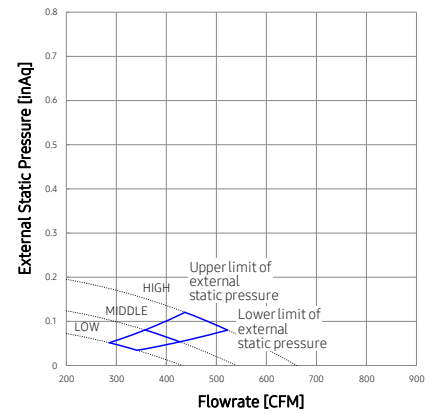
1) VLOC007S4-4P

External Static Pressure(inAq)	Option Code	Air Flow [CFM]		
		High	Mid	Low
$0 < SP \leq 0.08$	010054-1C543C-201616-331110	424	353	283

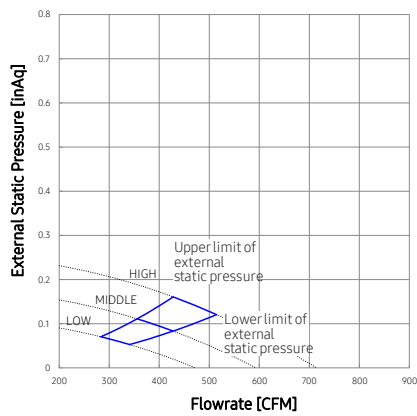
①	External Static Pressure(inAq)	Option Code
	$0 < SP \leq 0.08$	010054-1C543C-201616-331110



②	External Static Pressure(inAq)	Option Code
	$0.08 < P \leq 0.12$	010054-1C55D5-201616-331110



③	External Static Pressure(inAq)	Option Code
	$0.12 < SP \leq 0.16$	010054-1C592A-201616-331110



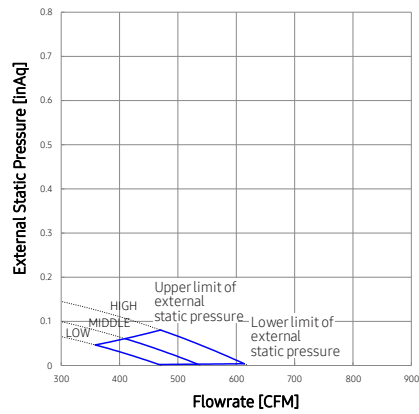
Fan Characteristics

Slim Duct

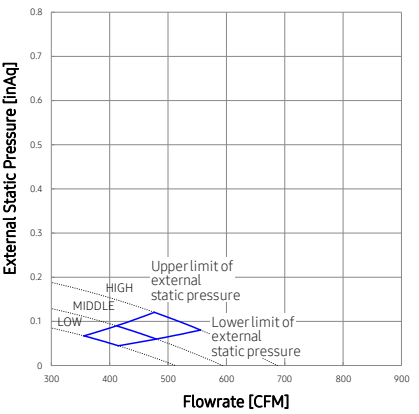
2) VLOC009S4-4P

External Static Pressure _e [inAq]	Option Code	Air Flow [CMM]		
		High	Mid	Low
0 < SP ≤ 0.08	010054-1C545E-201C1C-331110	459	388	353

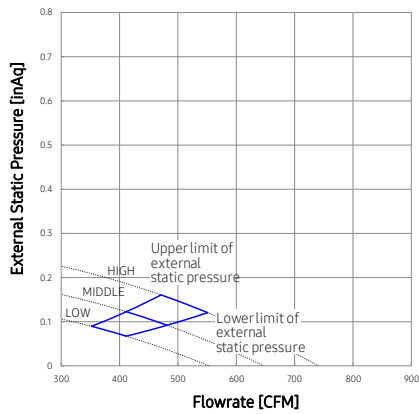
①	External Static Pressure _e [inAq]	Option Code
	0 < SP ≤ 0.08	010054-1C545E-201C1C-331110



②	External Static Pressure _e [inAq]	Option Code
	0.08 < P ≤ 0.12	010054-1C55F6-201C1C-331110



③	External Static Pressure _e [inAq]	Option Code
	0.12 < SP ≤ 0.16	010054-1C594C-201C1C-331110



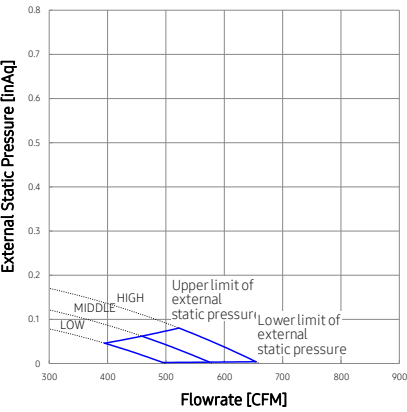
Fan Characteristics

Slim Duct

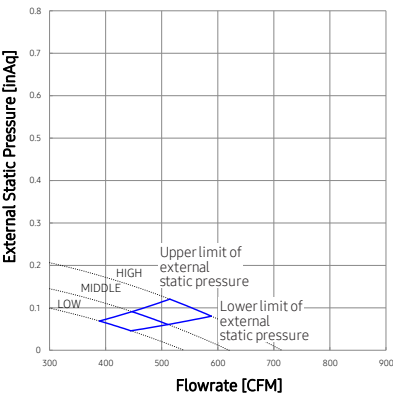
3) VLOC012S4-4P

External Static Pressure _e [inAq]	Option Code	Air Flow [CMM]		
		High	Mid	Low
0 < SP ≤ 0.08	010054-1C5580-202323-331110	512	459	388

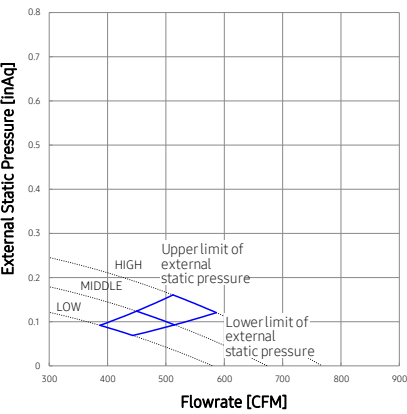
①	External Static Pressure _e [inAq]	Option Code
	0 < SP ≤ 0.08	010054-1C5580-202323-331110



②	External Static Pressure _e [inAq]	Option Code
	0.08 < P ≤ 0.12	010054-1C5918-202323-331110



③	External Static Pressure _e [inAq]	Option Code
	0.12 < SP ≤ 0.16	010054-1C597D-202323-331110



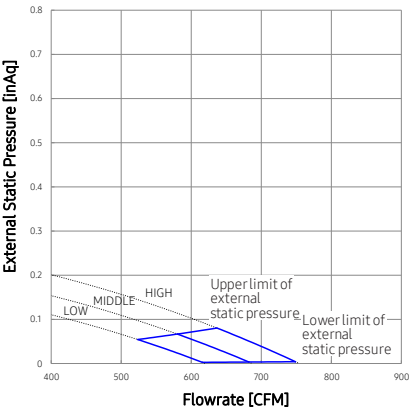
Fan Characteristics

Slim Duct

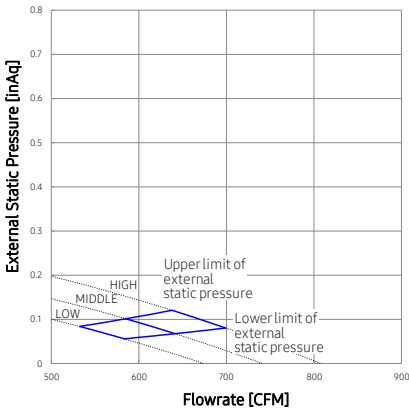
4) VLOC018S4-4P

External Static Pressure(inAq)	Option Code	Air Flow [CMM]		
		High	Mid	Low
0< SP ≤0.08	010054-1C591A-203434-331110	636	565	530

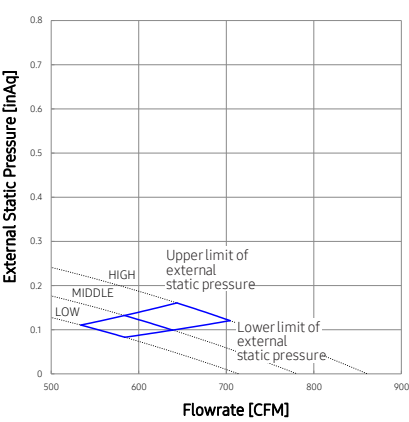
①	External Static Pressure(inAq)	Option Code
	0< SP ≤0.08	010054-1C591A-203434-331110



②	External Static Pressure(inAq)	Option Code
	0.08 < P ≤ 0.12	010054-1C5A92-203434-331110



③	External Static Pressure(inAq)	Option Code
	0.12 < SP ≤0.16	010054-1C5AD6-203434-331110



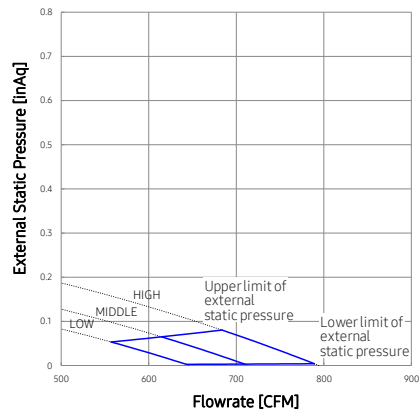
Fan Characteristics

Slim Duct

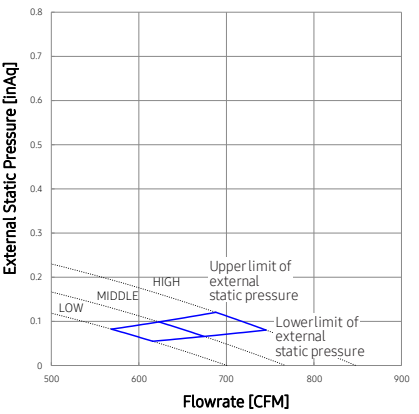
5) VLOC024S4-4P

External Static Pressure(inAq)	Option Code	Air Flow [CMM]		
		High	Mid	Low
0< SP ≤0.08	010054-1C593B-204848-331110	671	600	530

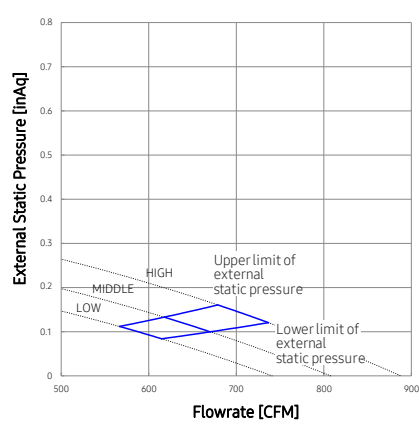
①	External Static Pressure(inAq)	Option Code
	0< SP ≤0.08	010054-1C593B-204848-331110



②	External Static Pressure(inAq)	Option Code
	0.08 < P ≤ 0.12	010054-1C5AB4-204848-331110



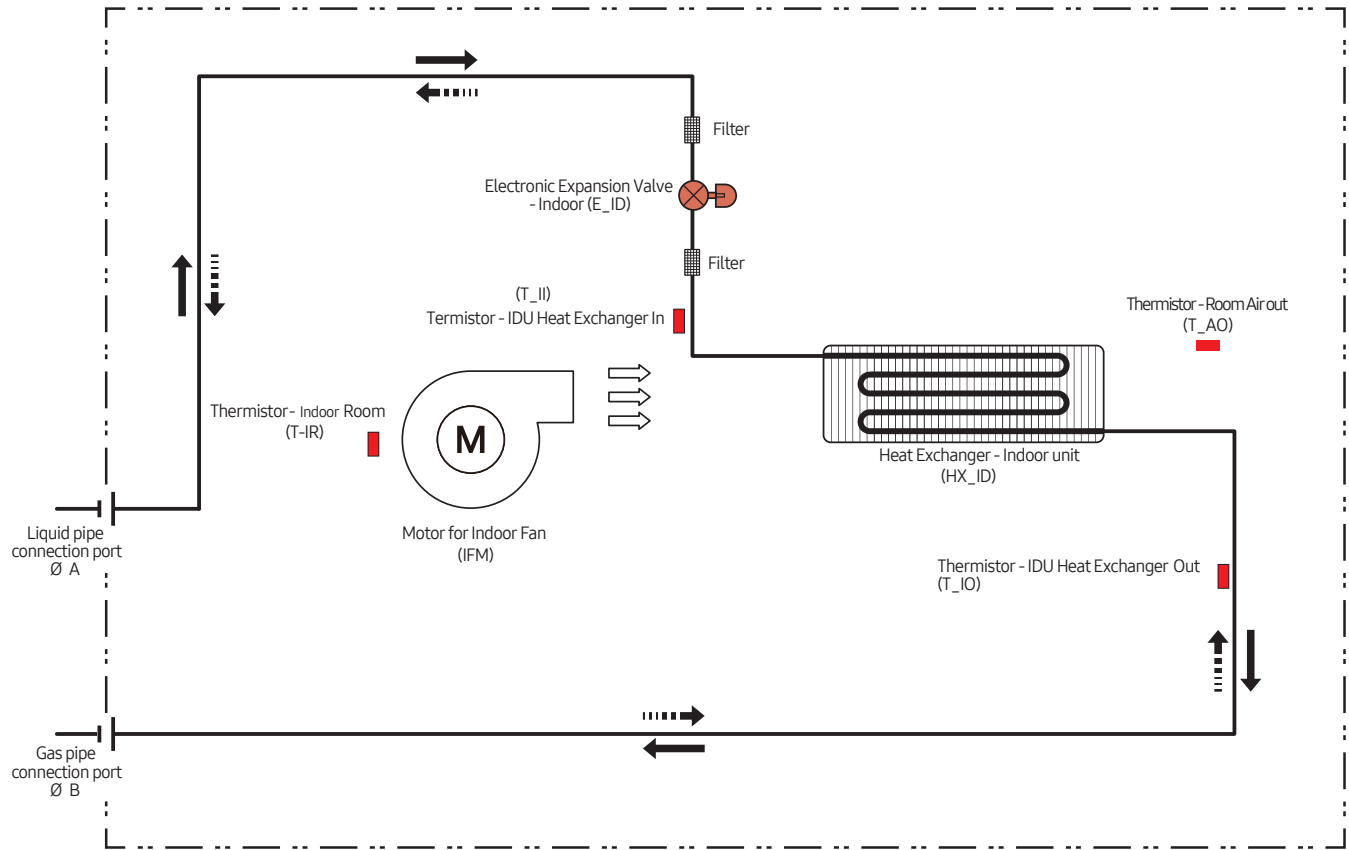
③	External Static Pressure(inAq)	Option Code
	0.12 < SP ≤0.16	010054-1C5AF7-204848-331110



Piping Diagram

Slim Duct

EEV included Model



Refrigerant flow	
Cooling	Heating

Unit : mm (inch)

MODEL	A	B
VLOC007S4-4P	6.35 (1/4)	12.7 (1/2)
VLOC009S4-4P		
VLOC012S4-4P		
VLOC018S4-4P		
VLOC024S4-4P	9.52 (3/8)	15.88 (5/8)

Installation Clearances

Slim Duct

Deciding on where to install the indoor unit

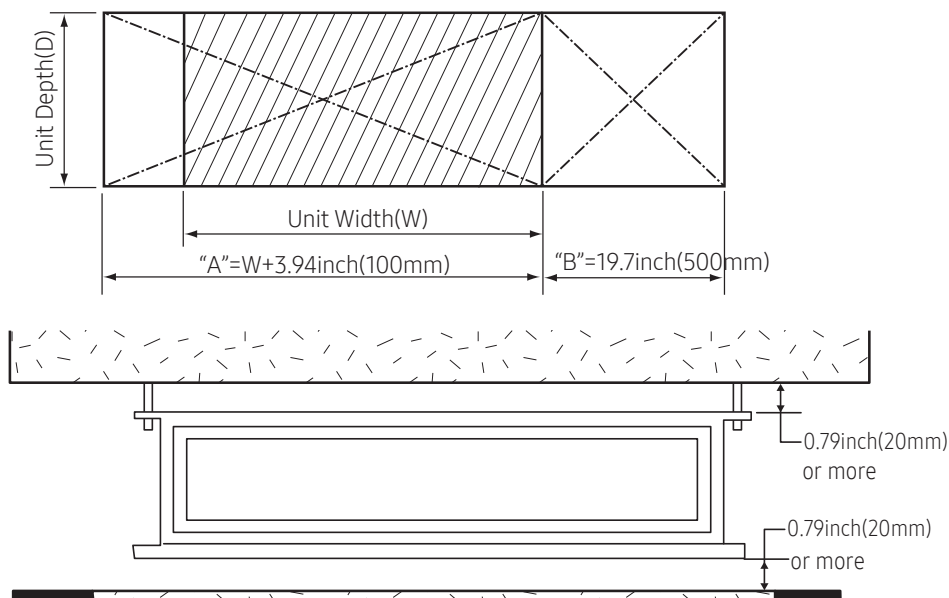
Indoor unit

- ◆ There must be no obstacles near the air inlet and outlet.
- ◆ Install the indoor unit on a ceiling that can support its weight.
- ◆ Maintain sufficient clearance around the indoor unit.
- ◆ Make sure that the water dripping from the drain hose runs away correctly and safely.
- ◆ The indoor unit must be installed in this way, that they are out of public access. (Not touchable by the users)
- ◆ After connecting a chamber, insulate the connection part between the indoor unit and the chamber with t10 or thicker insulation. Otherwise, there can be air leak or dew from the connection part.

Space requirements for installation & service

Construction Standard for Inspection Hole

- 1) In case, the ceiling is tex tile, Inspection hole dose not need.
- 2) In case, the ceiling is plaster board, Inspection hole depends on Inside height of the ceiling.
 - a. Height is more than 1.64ft(0.5m) : Only "B" [Inspection for PBA] is applied.
 - b. Height is less than 1.64ft(0.5m) : Both "A"&"B" are applied.
 - c. "A"&"B" are inspection holes .



- Minimum 0.79 inch (20mm) of space between the ceiling and the bottom of indoor unit is required to prevent vibration noise that may bother the occupant. An access opening must be installed for service and maintenance.
- It is possible to install the unit at an height between 7.3~8.3ft (2.2~2.5m) from the ground if the unit has a duct that is 11.81 inch (300mm) minimum or a protective grille to prevent fan blower contact.



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NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability.
Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury.
Installation and service must be performed by a qualified installer and servicing agency.

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