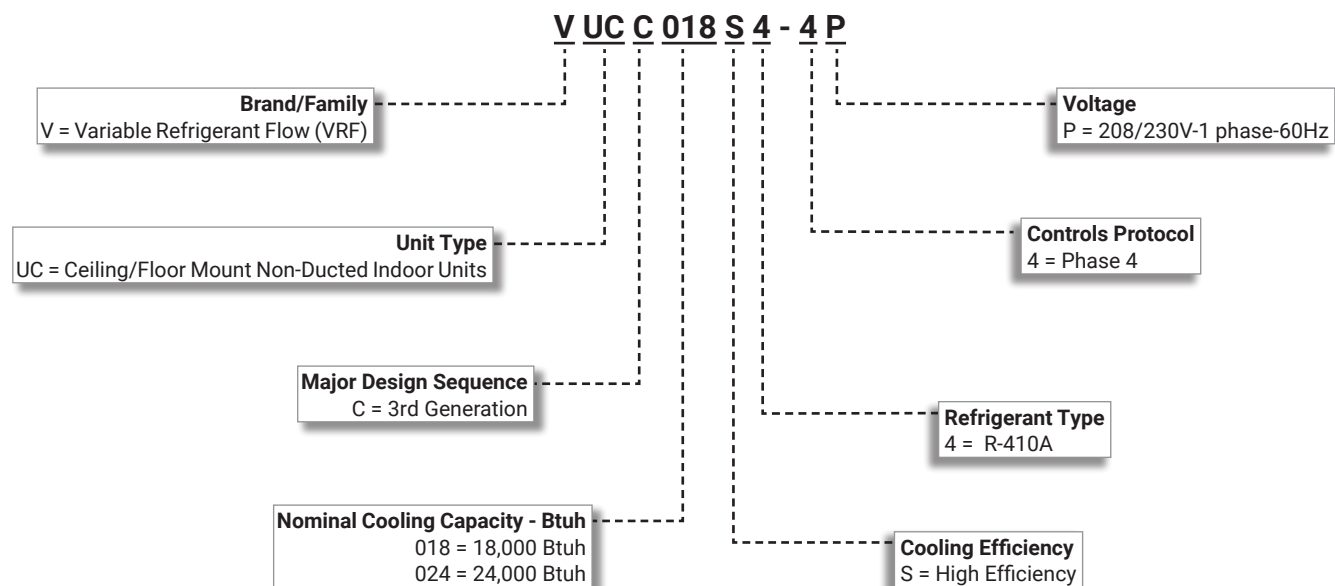


VUCC018-024High Efficiency Ceiling/Floor Mount Indoor Units | **R-410A** | 60Hz

18,000 to 24,000 Btuh

**COMMERCIAL
PRODUCT SPECIFICATIONS (EHB)****MODEL NUMBER IDENTIFICATION**

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Specification

Ceiling

Type				Ceiling	Ceiling
Model Name				VUCC018S4-4P	VUCC024S4-4P
Power Supply			Φ, #, V, Hz	1,2,208-230,60	1,2,208-230,60
Performance	Capacity	Cooling	kW	5.3	7.0
			Btu/h	18,000	24,000
		Heating	kW	5.9	7.9
			Btu/h	20,000	27,000
Power	Power Input	Cooling	W	50	51
		Heating		50	51
	Current Input	Cooling	A	0.43	0.47
		Heating		0.43	0.47
	Current	MCA	A	0.64	0.65
		MOP		15	15
Heat exchanger	Type		-	Fin & Tube	Fin & Tube
	Material	Fin	-	AL	AL
		Tube	-	CU	CU
	Fin Treatment		-	NEO SILICA	NEO SILICA
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Quantity		EA	2	3
	Air Flow Rate	H/M/L	m³/min	12.6 / 11.3 / 10.0	18.4 / 16.4 / 14.3
			ft³/min	445 / 399 / 353	650 / 579 / 505
Fan Motor	Type		-	BLDC	BLDC
	Output x n		W	40	153
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	6.35 (1/4)	9.52 (3/8)
	Gas Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	12.7 (1/2)	15.88 (5/8)
Drain Pipe		Φ,mm	ID 18 hose	VP25 (OD 25, ID 20)	
Wiring connections	Power Source Wire	Min.	mm²	1.5	1.5
	Communication	Min.	mm²	0.75	0.75
		Remark	-	F1, F2	F1, F2
Refrigerant	Type		-	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure Level	H/M/L	dB(A)	41 / 39 / 36	37 / 35 / 33
	Sound Power Level	Cooling		60	56
Dimensions	Net Weight		kg	20.8	33.3
			lbs	45.9	73.4
	Shipping Weight		kg	26.4	39.2
			lbs	58.2	86.4
	Net Dimensions (W×H×D)		mm	1,000×200×650	1,350×235×675
			inch	39-3/8 × 7-7/8 × 25-9/16	53-1/8 × 9-1/4 × 26-9/16
	Shipping Dimensions (W×H×D)		mm	1,080×300×730	1,440×320×760
			inch	42-1/2 × 11-13/16 × 28-3/4	56-11/16 × 12-5/8 × 29-15/16
Additional Accessories	Drain Pump	External Model	-	-	-
		Internal Model	-	-	-
		Max. lifting Height / Displacement	mm / Liter/h	-	-

- 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 pipe length 25ft(7.5m), Level differences 0ft(0m)
- 2) 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
- 3) 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
- 4) These products contain R410A which is fluorinated greenhouse gas.
- 5) Select wire size based on the value of MCA

Performance Characteristics/Electrical Characteristics

Ceilig/Floor-Mount

Performance Characteristics

Model Code	Nominal Capacity [Btu/h]			Fan Speed	Airflow [CFM]	Sound Pressure [dBA]	Sound Power [dBA]
	Cooling	Sensible	Heating				
VUCC018S4-4P	18,000	12,500	20000	High	445	41	60
	16,100	11,000	17,900	Mid	399	39	-
	14,200	9,900	15,800	Low	353	36	-
VUCC024S4-4P	24,000	16,900	27,000	High	650	37	56
	21,300	15,000	24,000	Mid	579	35	-
	18,600	13,100	20,900	Low	505	33	-

Electrical Characteristics

Model Code	Power Supply (Φ, #, V, Hz)	Power Input (W)	Current Input (A)	MCA (A)	MOP (A)	FLA (A)
VUCC018S4-4P	1, 2, 208-230, 60	50	0.43	0.64	15	0.51
VUCC024S4-4P	1, 2, 208-230, 60	51	0.47	0.65	15	0.52

NOTE

- MCA : Minimum circuit amperes
- MOP : Maximum Over current Protective Device (A)
- FLA: Full load amperes
- Select wire size based on the value of MCA

Capacity Table

Ceiling/Floor-Mount

Heating

TC : Total Capacity

Capacity Index	Outdoor Air Temp. (°F)		Indoor temperature (°F,DB)						
			57	61	65	70	72	75	80.6
	DB	WB	TC	TC	TC	TC	TC	TC	TC
018	-13	-13	12,400	12,400	11,800	11,900	11,700	11,700	11,400
	-8	-8	12,600	12,400	12,100	12,100	11,900	11,900	11,700
	-3.6	-4	12,900	12,900	12,600	12,400	12,200	12,200	11,900
	-1.8	-2	13,100	13,100	12,900	12,600	12,400	12,400	12,100
	2	1	13,200	13,200	13,200	12,700	12,600	12,600	12,300
	6	5	13,900	13,900	13,600	13,100	12,900	12,600	12,600
	10	9	14,500	14,500	14,200	13,900	13,900	13,600	13,300
	13	12	15,200	15,200	15,200	14,700	14,500	14,500	14,000
	17	15	16,000	15,700	15,500	15,200	15,000	14,700	14,200
	19	18	16,700	16,200	15,900	15,700	15,500	14,900	14,400
	23	21	18,000	17,200	16,900	16,400	16,200	15,500	15,000
	26	24	18,700	17,900	17,500	17,200	16,900	16,200	15,100
	30	28	18,800	18,300	18,000	17,500	17,200	16,400	15,600
	35	32	19,100	18,800	18,500	17,900	17,500	16,500	15,500
	39	36	19,500	19,500	19,500	18,800	18,500	17,500	16,500
	44	40	20,800	20,500	20,200	19,300	18,800	17,500	16,500
	47	43	21,800	21,500	21,200	20,000	19,200	17,500	16,500
	51	47	22,600	22,100	21,500	20,000	19,200	17,500	16,500
	54	50	23,600	22,800	21,800	20,000	19,200	17,500	16,500
	57	53	23,800	23,500	22,100	20,000	19,200	17,500	16,500
024	60	56	24,400	24,100	22,500	20,000	19,200	17,500	16,500
	64	62	24,400	24,100	22,500	20,000	19,200	17,800	16,700
	68	65.3	24,600	24,100	22,500	20,250	19,500	18,000	16,700
	72	68.7	24,600	24,100	22,800	20,500	19,500	18,300	17,000
	75	72.3	24,600	24,400	23,000	20,750	19,700	18,300	17,000
	-13	-13	15,900	15,900	15,500	15,500	15,200	15,200	14,900
	-8	-8	16,200	15,900	15,900	15,900	15,500	15,500	15,200
	-3.6	-4	16,500	16,500	16,500	16,200	15,900	15,900	15,500
	-1.8	-2	16,900	16,900	16,900	16,500	16,200	16,200	15,900
	2	1	17,200	17,200	16,900	16,500	16,200	16,200	15,900
	6	5	17,900	17,900	17,600	17,200	16,500	16,200	16,200
	10	9	18,900	18,900	18,600	18,200	17,900	17,600	17,200
	13	12	19,900	19,900	19,600	19,200	18,900	18,900	18,200
	17	15	20,600	20,300	19,900	19,600	19,200	18,900	18,200
	19	18	21,300	20,600	20,300	19,900	19,600	19,200	18,600
	23	21	21,900	20,900	20,600	20,300	19,900	19,600	18,900
	26	24	23,000	21,900	21,900	21,600	20,900	20,300	18,900
	30	28	24,000	23,300	23,000	22,600	21,600	20,900	19,900
	35	32	24,600	24,300	24,000	23,600	22,600	23,000	21,600
	39	36	25,700	25,700	25,300	24,600	24,000	23,000	21,600
	44	40	27,000	26,700	26,300	26,000	24,300	23,000	21,600
	47	43	28,000	27,700	27,300	27,000	25,000	23,000	21,600
	51	47	29,400	28,700	27,700	27,000	25,000	23,000	21,600
	54	50	30,400	29,400	28,400	27,000	25,000	23,000	21,600
	57	53	30,700	30,400	28,700	27,000	25,000	23,000	21,600
	60	56	31,400	31,100	29,000	27,000	25,000	23,000	21,600
	64	62	31,400	31,100	29,000	27,000	25,000	23,300	21,900
	68	65.3	31,700	31,100	29,000	27,300	25,300	23,600	21,900
	72	68.7	31,700	31,100	29,400	27,700	25,300	24,000	22,300
	75	72.3	32,100	31,400	29,700	28,000	25,700	24,000	22,300

NOTE

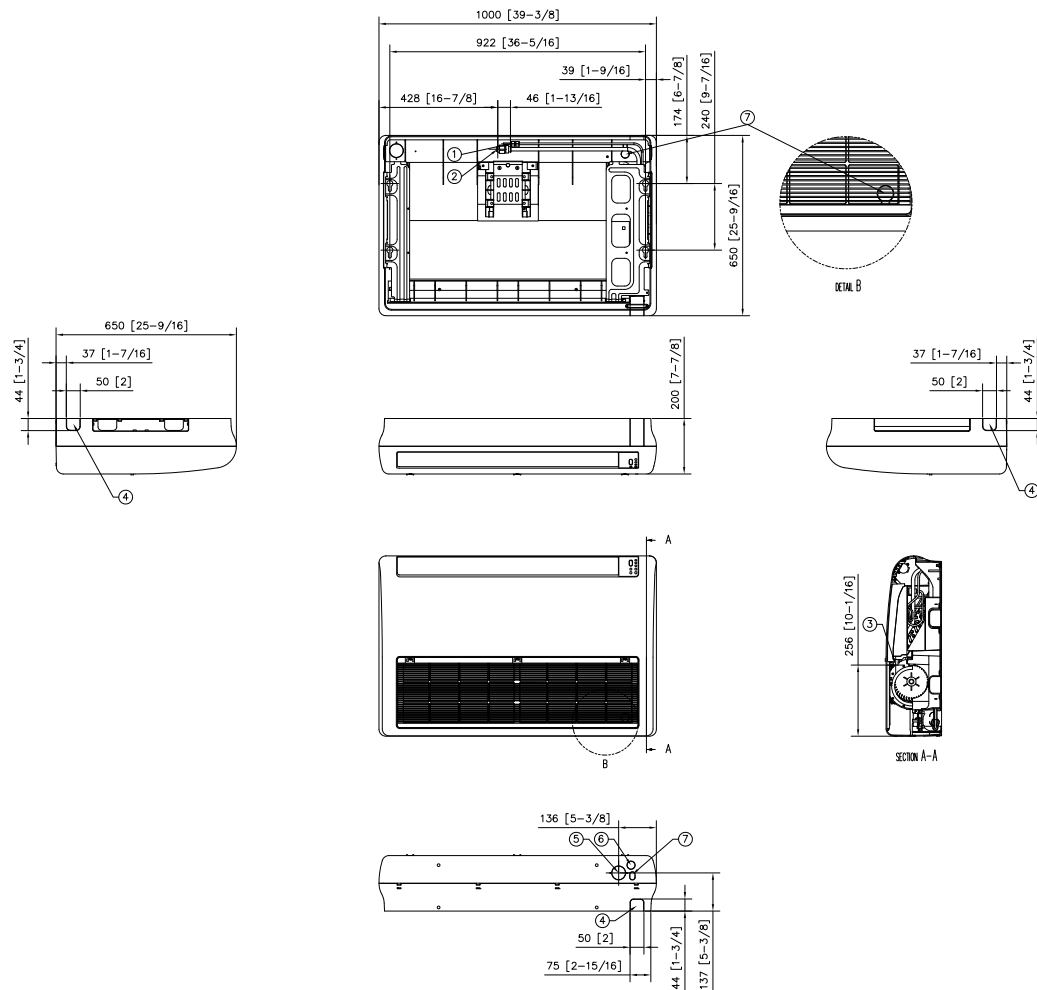
The performance table shows the average value of each conditions.

Dimensional Drawing

Ceiling/Floor-Mount

VUCC018S4-4P

Units : mm [inches]



No.	Name	Description
1	Refrigerant liquid pipe	Φ6.35(1/4)
2	Refrigerant gas pipe	Φ12.7(1/2)
3	Condensate drain	ID18mm [11/16inch] Hose
4	Knockout hole for piping	
5	Knockout hole for fresh air intake	Φ50 [2]
6	Knockout hole for drain pipe	
7	Knockout hole for wiring	

NOTE

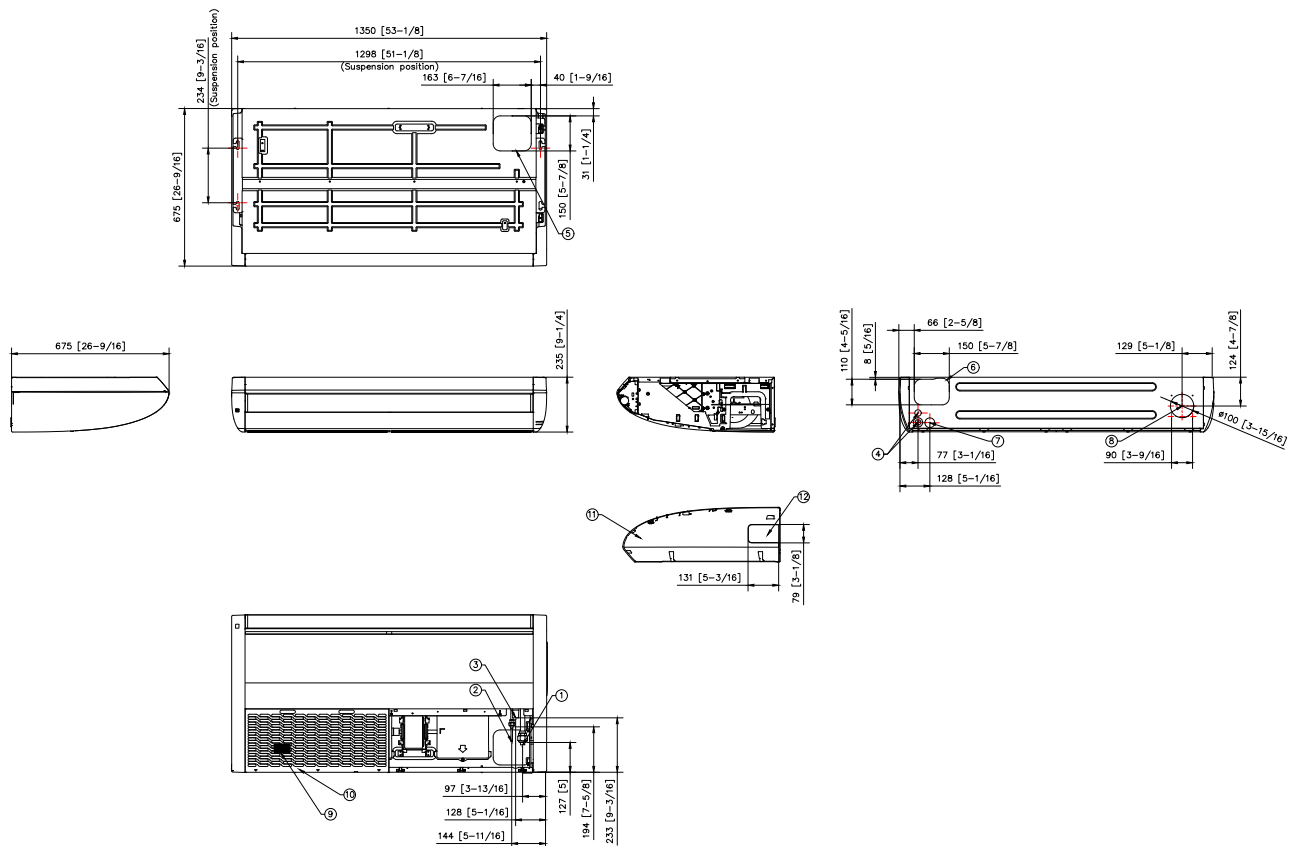
- As for suspension bolt, please use M8 ~ M10.
(Procured at local site)

Dimensional Drawing

Ceiling/Floor-Mount

VUCC024S4-4P

Units : mm [inches]



No.	Name	Description
1	Refrigerant gas pipe	$\Phi 15.88$ (5/8)
2	Refrigerant liquid pipe	$\Phi 9.52$ (3/8)
3	Condensate drain	VP25 (OD 25, ID 20)
4	Conduit hole	$\Phi 28$ (1-1/8)
5	Knockout hole for upper piping arrangement	
6	Knockout hole for rear piping arrangement	
7	Knockout hole for drain pipe arrangement	
8	Knockout hole for fresh air intake	$\Phi 42$ ($\Phi 1$ -5/16)
9	Air filter	
10	Air suction grille	
11	Cover side	
12	Knockout hole for side piping arrangement	

NOTE

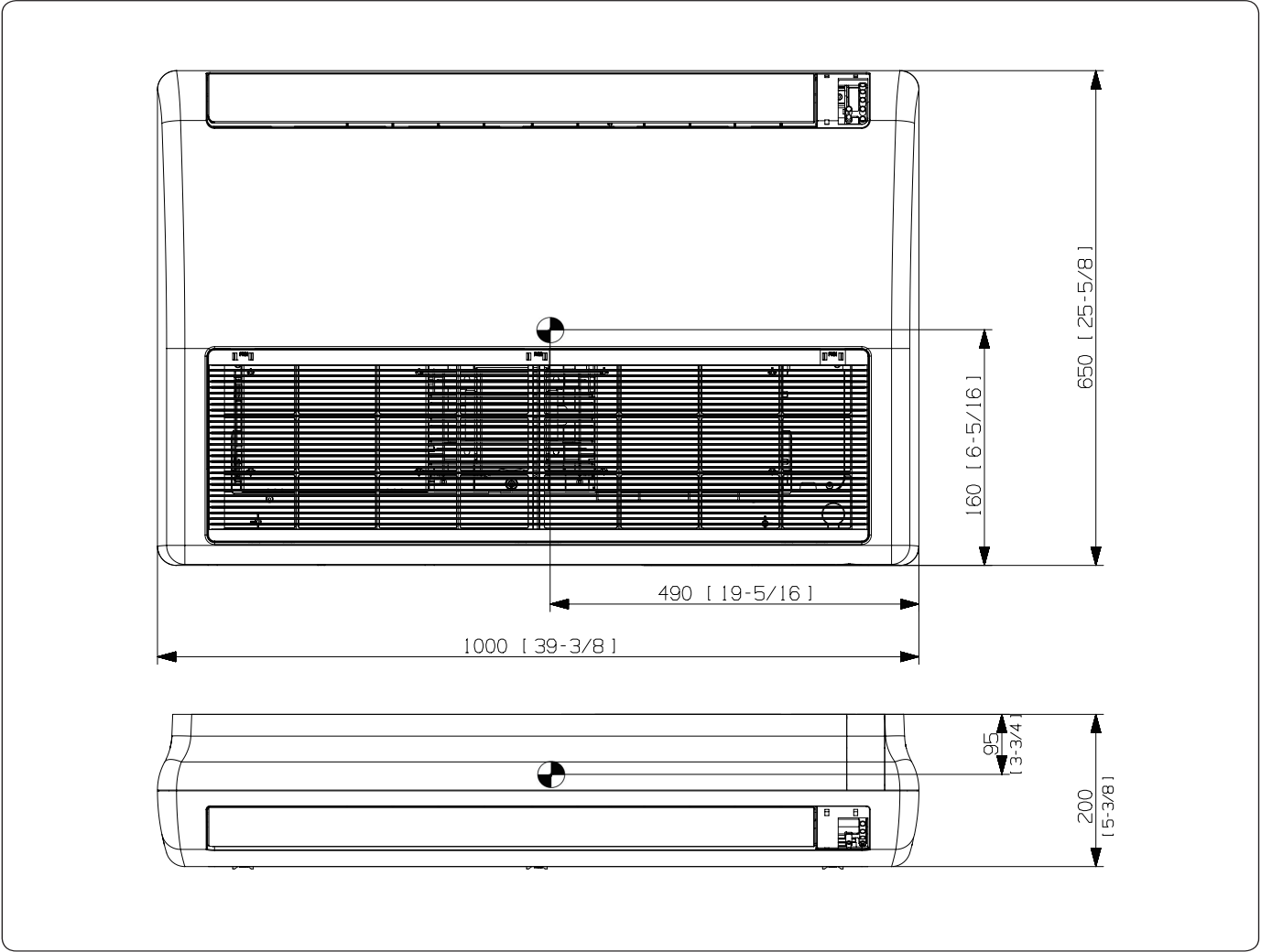
- As for suspension bolt, please use M8 ~ M10.
(Procured at local site)

Center of Gravity

Ceiling/Floor-Mount

VUCC018S4-4P

Units : mm [inches]

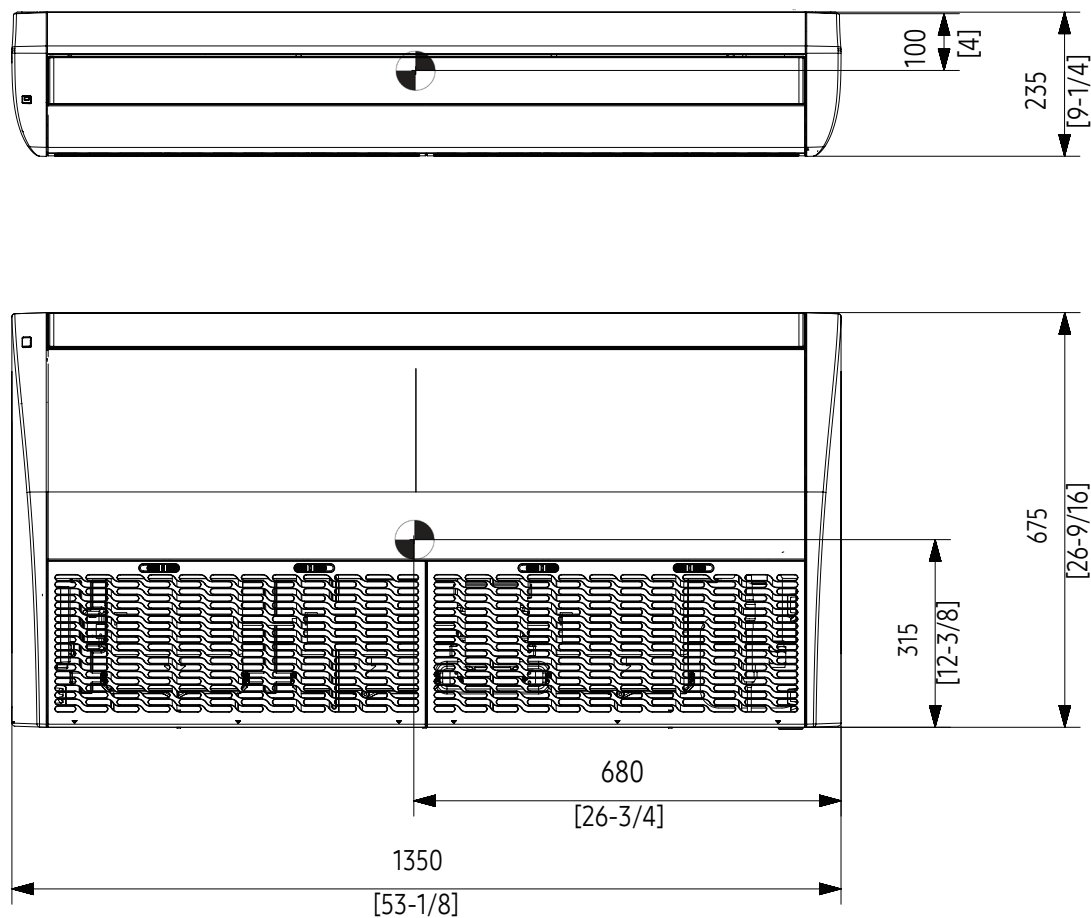


Center of Gravity

Ceiling/Floor-Mount

VUCC024S4-4P

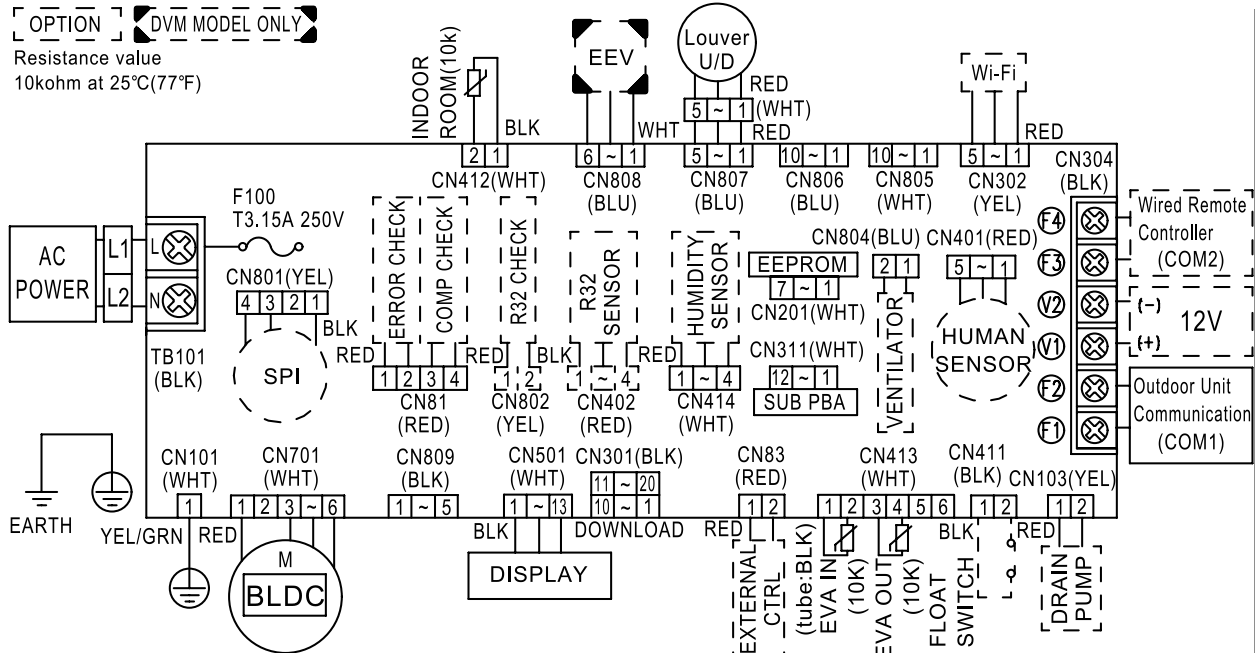
Units : mm [inches]



Electrical Wiring Diagram

Ceiling/Floor-Mount

VUCC018S4-4P



F100	Fuse	INDOOR ROOM(10K)	Thermistor - Indoor Room
EEV	Electronic Expansion Valve	EVA IN (10K)	Thermistor - IDU heat exchanger In
SPI	S-Plasma ion	EVA OUT (10K)	Thermistor - IDU heat exchanger Out
M-BLDC	Motor for Indoor Fan	EEPROM	EEPROM SUB PBA
DISPLAY	Panel LED display	SUB PBA	SUB PBA for wired remote control communication
ERROR CHECK	Contact output port for error check	VENTILATOR	Contact output port for Ventilator control
COMP CHECK	Contact output port for compressor operation check	EXTERNAL CTRL	Input port for external contact control

NOTE

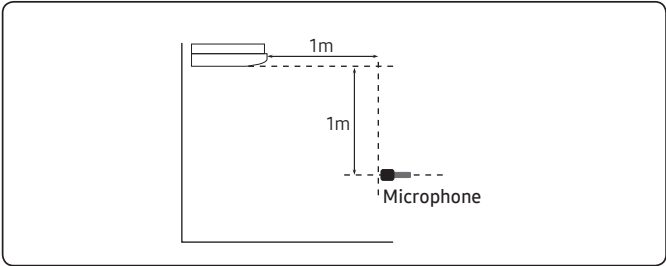
- This wiring diagram applies only to the Indoor unit.
- Symbols show as follow :
BLK: black, RED: red, BLU: blue, WHT white, YEL: yellow, BRN: brown, SKY: skyblue: GRN: green
- For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
- ⏏ Protective earth(screw), □ : connector, $\frac{1}{2}$: The wire quantity

Sound Data

Ceiling/Floor-Mount

Sound Pressure level

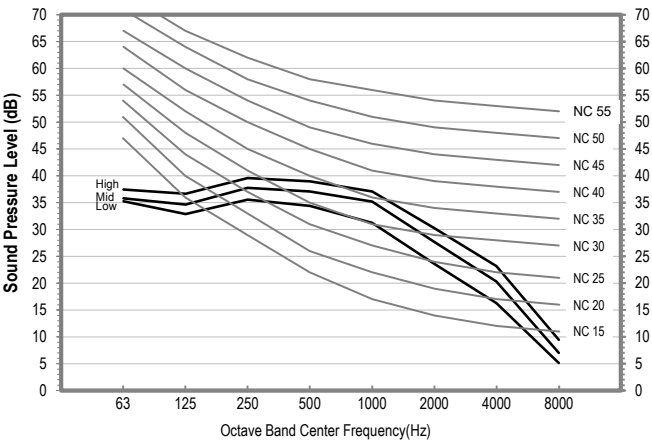
Unit: dB(A)



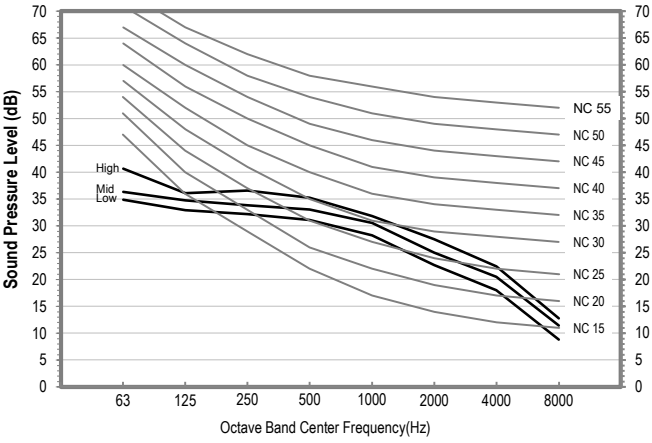
Model	High	MID	LOW
VUCC018S4-4P	41	39	36
VUCC024S4-4P	37	35	33

• NC Curve

1) VUCC018S4-4P



2) VUCC024S4-4P



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

Ceiling/Floor-Mount

Sound Power level



NOTE

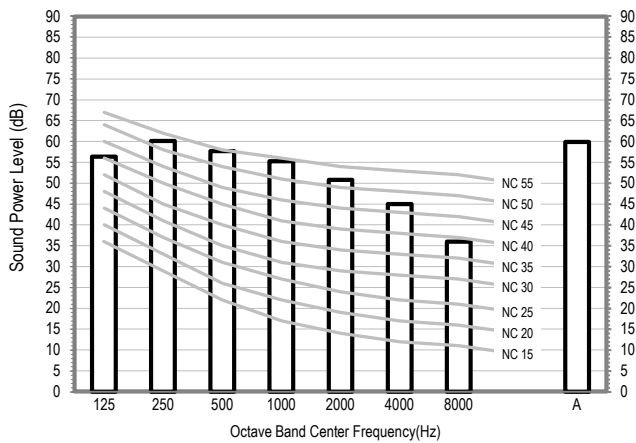
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Unit: dB(A)

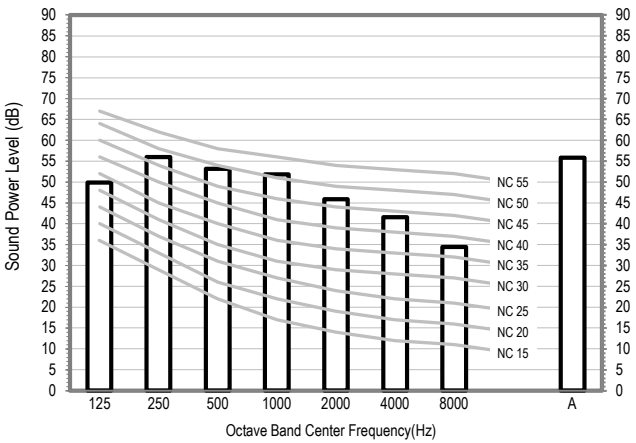
Model	Power
VUCC018S4-4P	60
VUCC024S4-4P	56

- NC Curve

1) VUCC018S4-4P



2) VUCC024S4-4P

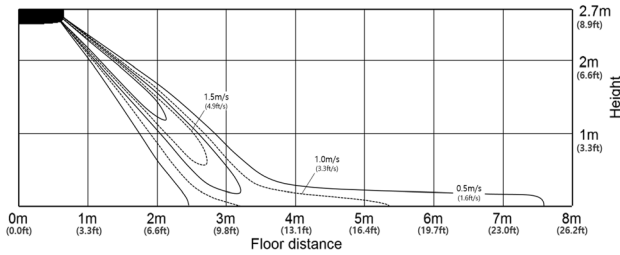


Temperature and air flow distribution

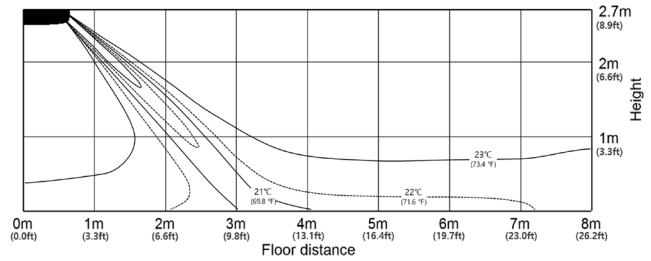
Ceiling/Floor-Mount

VUCC018S4-4P

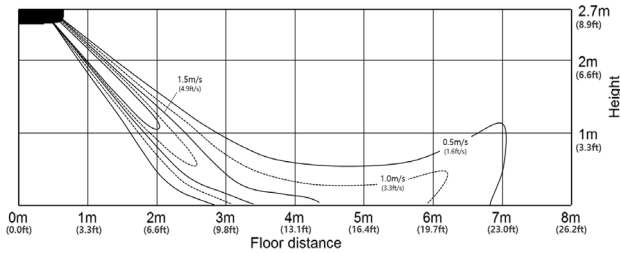
- Cooling Air Velocity distribution
(Discharge angle : 50 degree)



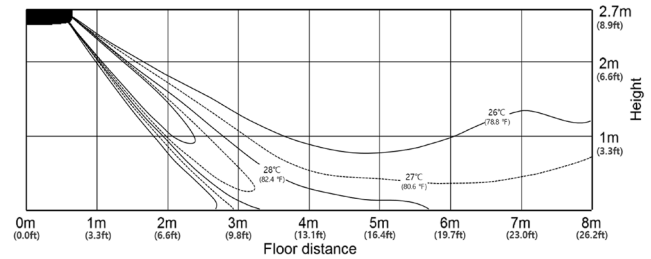
- Cooling temperature distribution
(Discharge angle : 50 degree)



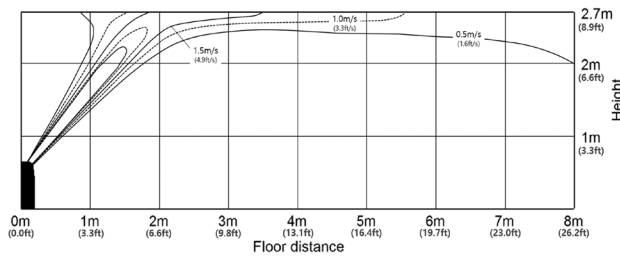
- Heating Air Velocity distribution
(Discharge angle : 40 degree)



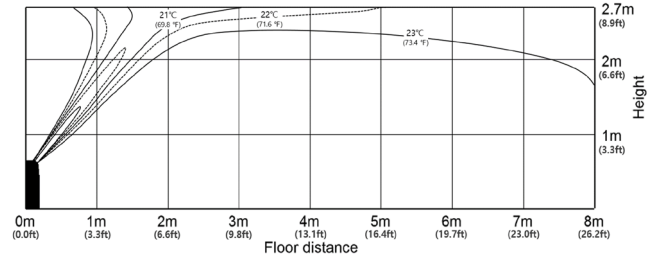
- Heating temperature distribution
(Discharge angle : 40 degree)



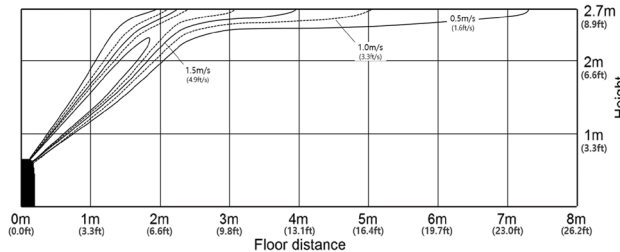
- Cooling Air Velocity distribution
(Discharge angle : 50 degree)



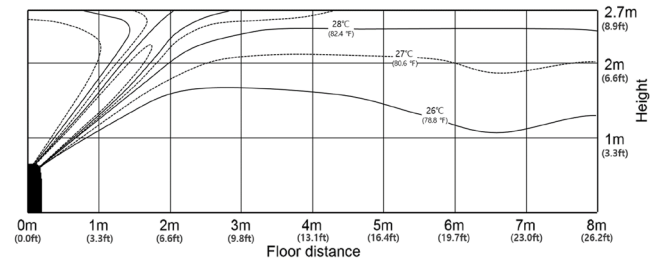
- Cooling temperature distribution
(Discharge angle : 50 degree)



- Heating Air Velocity distribution
(Discharge angle : 40 degree)



- Heating temperature distribution
(Discharge angle : 40 degree)

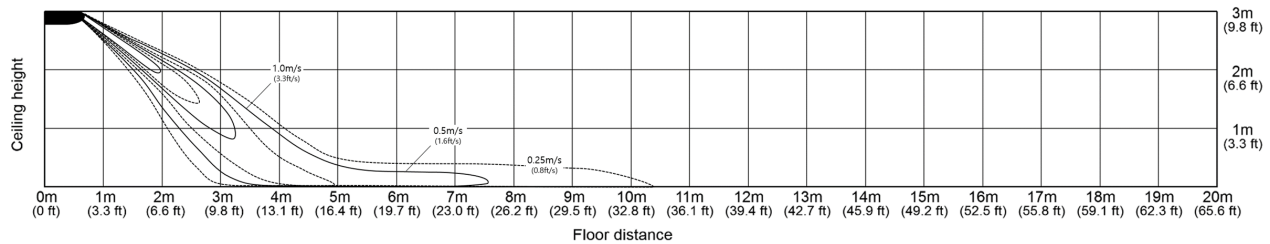


Temperature and air flow distribution

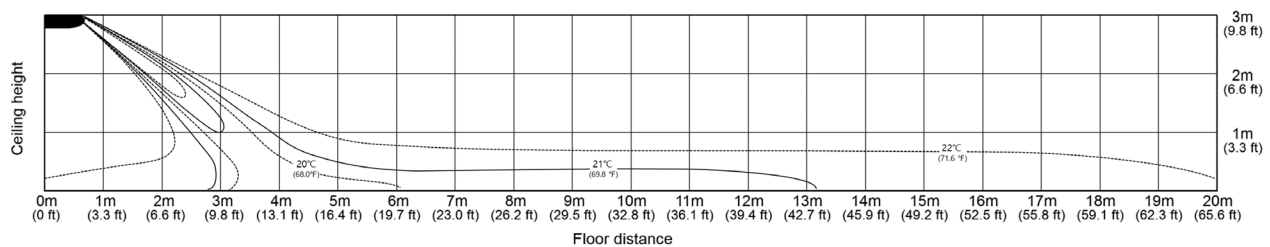
Ceiling/Floor-Mount

VUCC024S4-4P

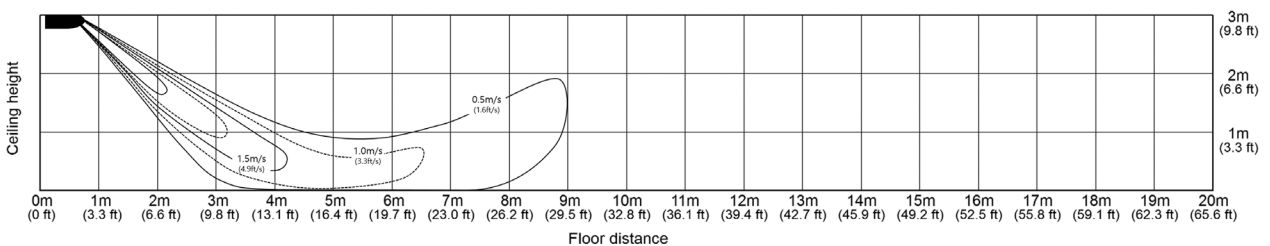
- Cooling Air Velocity distribution
(Discharge angle : 32 degree)



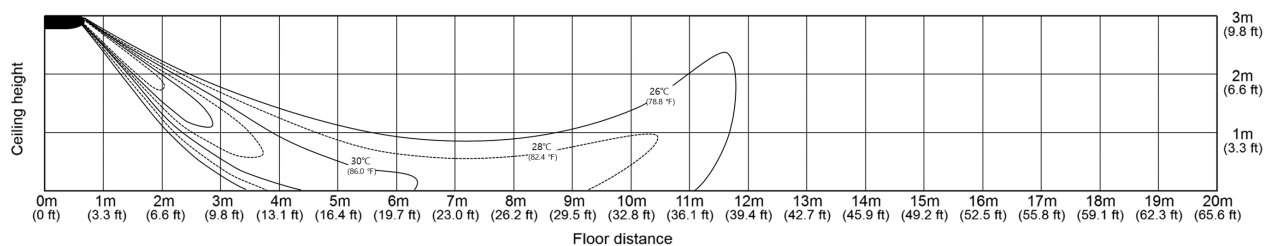
- Cooling temperature distribution
(Discharge angle : 32 degree)



- Cooling Air Velocity distribution
(Discharge angle : 43 degree)



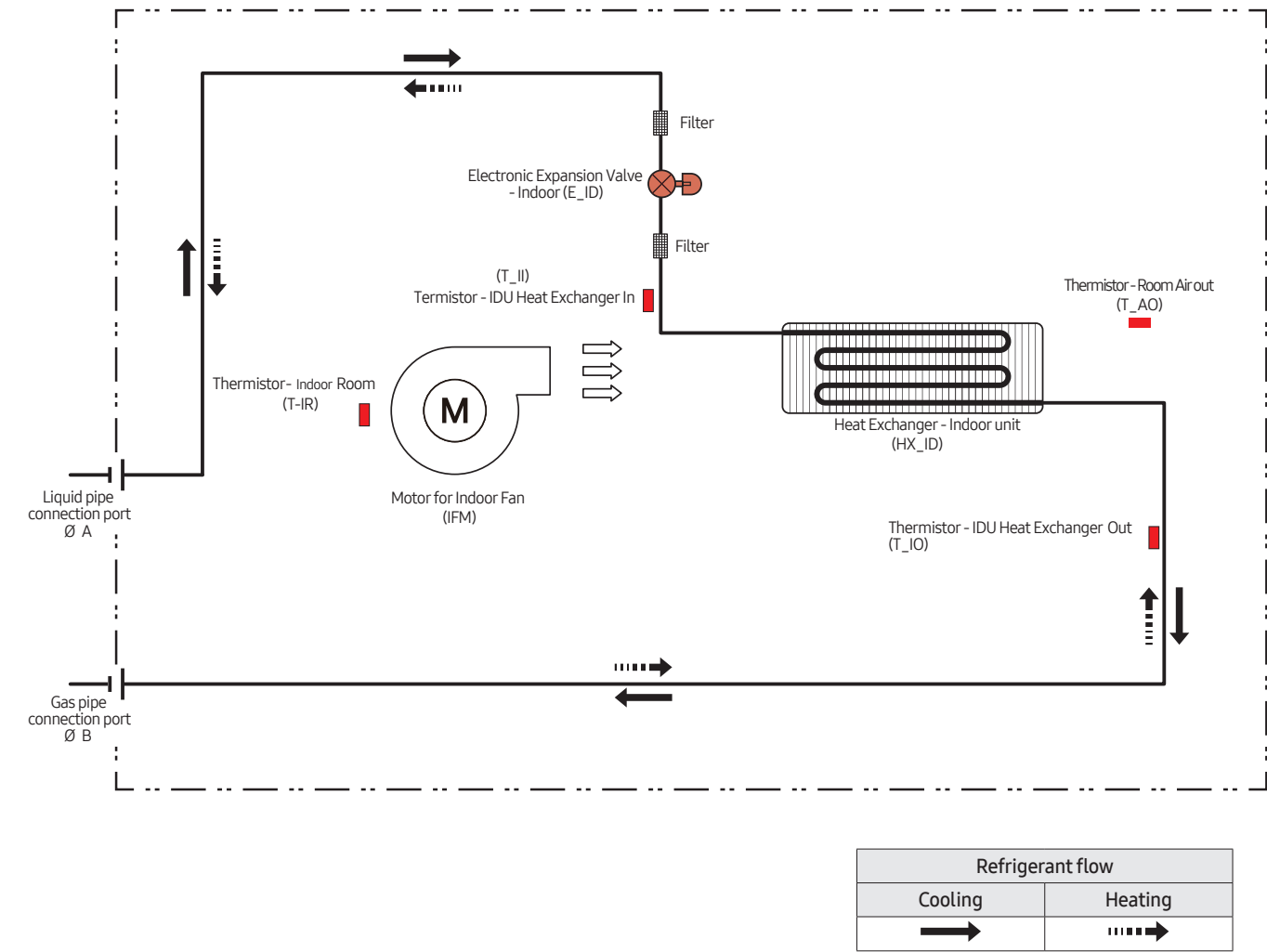
- Cooling temperature distribution
(Discharge angle : 43 degree)



Piping Diagram

Ceiling/Floor-Mount

EEV included Model



Unit : mm (inch)

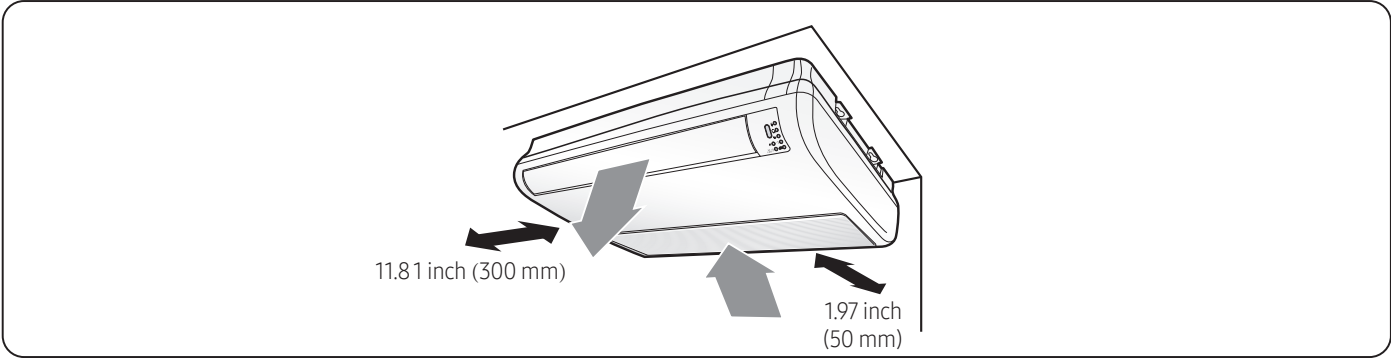
Model	A	B
VUCC018S4-4P	6.35 (1/4)	12.7 (1/2)
VUCC024S4-4P	9.52 (3/8)	15.88 (5/8)

Installation clearances

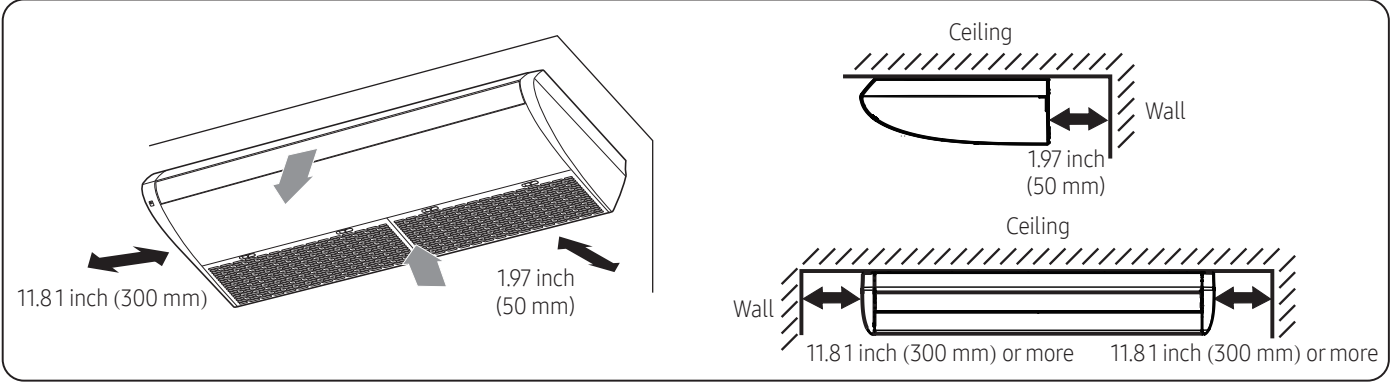
Ceiling/Floor-Mount

Ceiling installation

VUCC018S4-4P

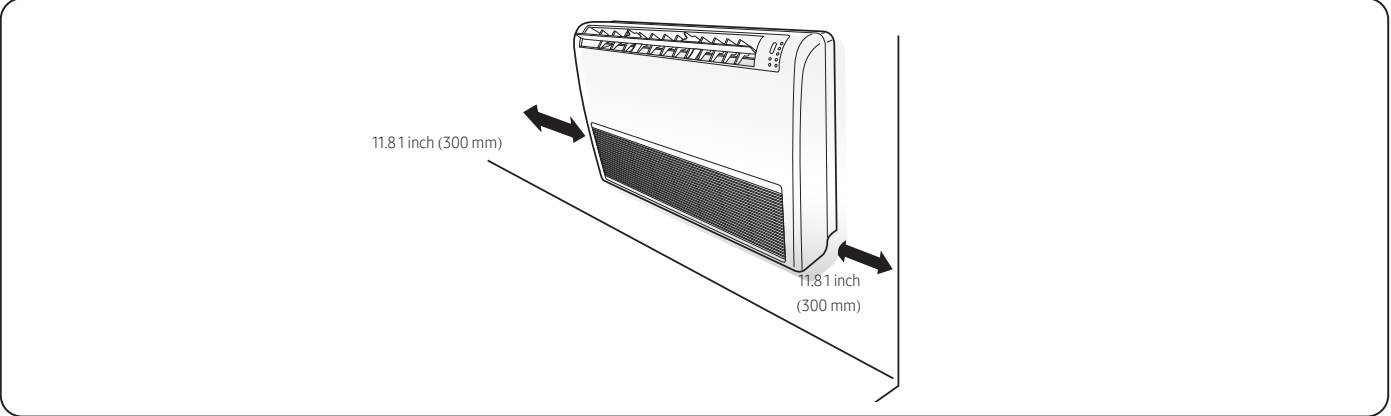


VUCC024S4-4P



Floor installation

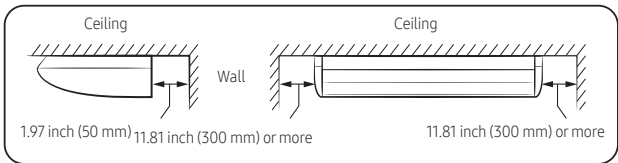
VUCC018S4-4P



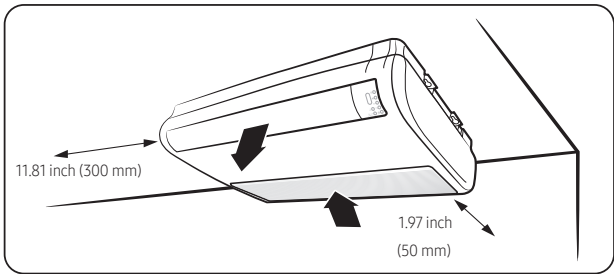
Installation clearances

Ceiling

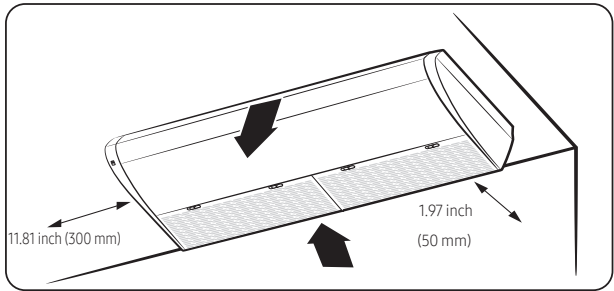
Spacing requirements



VUCC018S4-4P



VUCC024S4-4P





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Contact us at 1-800-4-LENNOX

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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