

# Indoor Slim 1way

## Body = 135mm

Ideal type for any small and shallow void space H

## Lighter Indoor Unit

The first to apply ABS cabinets into its indoor units. It's slim lightweight design makes installation and maintenance a breeze.

## Quiet Operation

Samsung's new blade design drastically reduces noise levels, so you can relax in peace and quiet.

## Check Valve Inside Drain Pump

Samsung's air conditioners are equipped with a check valve built directly into the drain pump to prevent water from flowing backwards.



# 1 Slim 1 way cassette

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# 1 Slim 1 way cassette

## 1-1. Specifications

### 1) Technical specifications

Model Name	Indoor Unit			AC026FB1DEH/EU	AC035FB1DEH/EU		
	Outdoor Unit			AC026FCADEH/EU	AC035FCADEH/EU		
System	Mode			HEAT PUMP	HEAT PUMP		
	Capacity	Cooling (Min / Std / Max)		kW	0.98/2.60/3.50	0.98/3.50/4.10	
				Btu/h	3,300/8,900/11,900	3,300/11,900/14,000	
		Heating (Min / Std / Max)		kW	0.95/3.30/4.60	0.95/4.00/4.75	
				Btu/h	3,200/11,300/15,700	3,200/13,600/16,200	
	Power	Power Input (Nominal)	Cooling (Min / Std / Max)	kW	0.25/0.74/1.12	0.25/1.16/1.42	
			Heating (Min / Std / Max)		0.21/0.91/1.30	0.21/1.16/1.39	
		Current Input (Nominal)	Cooling (Min / Std / Max)	A	1.60/3.40/5.20	1.60/5.40/6.60	
			Heating (Min / Std / Max)		1.40/4.30/6.40	1.40/5.50/6.80	
		MCA			A	10.30 (MCA)	10.30 (MCA)
		MFA			A	12.50	12.50
	Energy Efficiency	EER (Nominal Cooling)		-	3.51	3.02	
		COP (Nominal Heating)		-	3.63	3.45	
		SEER (Cooling Energy Grade)		-	SEER 5.60 (A+)	SEER 5.40 (A)	
		SCOP (Heating Energy Grade)		-	SCOP 3.80 (A)	SCOP 3.80 (A)	
		Pdesighn		kW	2.5	2.5	
	Piping Connections	Liquid Pipe		Ø, mm	6.35	6.35	
				Ø, inch	1/4"	1/4"	
		Gas Pipe		Ø, mm	9.52	9.52	
				Ø, inch	3/8"	3/8"	
Installation Limitation		Max. Length (Outdoor to indoor)		m	20(25)	20(25)	
		Max. Height (Between ID/OD)		m	15(15)	15(15)	
Field Wiring	Power Source Wire		-	1.5 ~ 1.5	1.5 ~ 1.5		
	Transmission Cable		-	0.75 ~ 1.25	0.75 ~ 1.25		
Refrigerant	Type		-	R410A	R410A		
	Control Method		-	-	-		
	Factory Charging		kg	0.95	0.95		
Indoor Unit	Power Supply		Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50		
	Fan	Type		-	Crossflow Fan	Crossflow Fan	
		Motor	Output		W	20.00	20.00
			Number of Unit		EA	1.00	1.00
		Air Flow Rate	High / Mid / Low		CMM	8.00/7.00/6.00	9.50/8.00/6.50
					l/s	133.33/116.67/100.00	158.33/133.33/108.33
	External Static Pressure	Min / Std / Max		mmAq	-	-	
				Pa	-	-	
	Drain	Drain Pipe		Ø, mm	VP20 (OD 26, ID 20)	VP20 (OD 26, ID 20)	
	Sound	Sound Pressure		High / Mid / Low	dB(A)	30.00/27.5/25.0	33.00/30.0/27.0
		Sound Power			dB(A)	52	55
	External Dimension	Net Weight		kg	9.90	9.90	
		Shipping Weight		kg	12.50	12.50	
		Net Dimensions (WxHxD)		mm	970 x 135 x 410	970 x 135 x 410	
		Shipping Dimensions (WxHxD)		mm	1173 x 231 x 487	1173 x 231 x 487	
		Panel model		-	PSSMA	PSSMA	
	Panel Size	Panel Net Weight		kg	3.10	3.10	
		Shipping Weight		kg	4.50	4.50	
		Net Dimensions (WxHxD)		mm	1180 x 25 x 460	1180 x 25 x 460	
		Shipping Dimensions (WxHxD)		mm	1259 x 144 x 539	1259 x 144 x 539	
Additional Accessories	Drain pump	Drain pump	-	-	-		
		Max. Lifting Height / Displacement	mm/liter/h	-	-		
Air Filter				-	-		
Outdoor Unit	Power Supply		Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50		
	Compressor	Type		-	Single BLDC Rotary	Single BLDC Rotary	
		Model		-	UG4C090LUDJR	UG4C090LUDJR	
		Output		kW	0.86	0.86	
		Oil	Type		-	POE	POE
	Initial Charge		cc	320.00	320.00		
	Fan	Air Flow Rate	Cooling	CMM	29.00	30.00	
				l/s	483.33	500.00	
	Sound	Sound Pressure		Cooling / Heating	dB(A)	47.0 / 47.0	47.0 / 47.0
		Sound Power			dB(A)	60	62
	External Dimension	Net Weight		kg	33.00	33.00	
		Shipping Weight		kg	37.00	37.00	
		Net Dimensions (WxHxD)		mm	790 x 548 x 285	790 x 548 x 285	
		Shipping Dimensions (WxHxD)		mm	926 x 655 x 382	926 x 655 x 382	
	Operating Temp. Range	Cooling		°C	-10~46	-10~46	
		Heating		°C	-15~24	-15~24	

## 1-2. Capacity tables

### 1) AC026FCADDEH/EU + AC026FB1DEH/EU

#### (1) Cooling

TC(Total Capacity, kW), SHC(Sensible Heat Capacity, kW), PI(Power Input, kW)

Indoor Temperature(°C)		Outdoor Temperature (°C, DB)											
		-15			21			35			46		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	3.37	2.52	0.40	3.32	2.49	0.86	2.42	1.81	0.69	2.42	1.81	1.16
16	22	3.45	2.59	0.41	3.40	2.55	0.89	2.48	1.86	0.70	2.48	1.86	1.19
18	25	3.53	2.65	0.42	3.48	2.61	0.91	2.54	1.90	0.72	2.54	1.90	1.22
19	27	3.62	2.72	0.43	3.57	2.68	0.93	2.60	1.95	0.74	2.60	1.95	1.25
22	30	3.71	2.78	0.44	3.66	2.74	0.95	2.66	2.00	0.76	2.66	2.00	1.28
24	32	3.80	2.85	0.45	3.74	2.81	0.98	2.73	2.04	0.78	2.73	2.04	1.31

#### (2) Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temperature(°C)		Outdoor Temperature (°C, DB)							
		-15		-10		7		24	
DB		TC	PI	TC	PI	TC	PI	TC	PI
16		2.36	1.12	2.77	1.09	3.37	0.93	3.59	0.98
18		2.33	1.11	2.75	1.08	3.33	0.92	3.56	0.97
20		2.31	1.10	2.72	1.07	3.30	0.91	3.52	0.96
21		2.29	1.09	2.69	1.06	3.27	0.90	3.48	0.95
22		2.26	1.08	2.67	1.05	3.23	0.89	3.45	0.94
24		2.24	1.07	2.64	1.04	3.20	0.88	3.42	0.93

### 2) AC035FCADDEH/EU + AC035FB1DEH/EU

#### (1) Cooling

TC(Total Capacity, kW), SHC(Sensible Heat Capacity, kW), PI(Power Input, kW)

Indoor Temperature(°C)		Outdoor Temperature (°C, DB)											
		-15			21			35			46		
WB	DB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	3.95	2.96	0.75	3.86	2.89	1.12	3.25	2.44	1.08	2.79	2.09	1.30
16	22	4.05	3.04	0.77	3.95	2.96	1.15	3.33	2.50	1.10	2.86	2.14	1.33
18	25	4.15	3.11	0.79	4.05	3.04	1.18	3.42	2.56	1.13	2.93	2.20	1.37
19	27	4.25	3.19	0.81	4.15	3.11	1.21	3.50	2.63	1.16	3.00	2.25	1.40
22	30	4.35	3.26	0.83	4.25	3.19	1.24	3.58	2.69	1.19	3.07	2.30	1.43
24	32	4.46	3.34	0.85	4.35	3.26	1.27	3.67	2.75	1.22	3.15	2.36	1.47

#### (2) Heating

TC(Total Capacity, kW), PI(Power Input, kW)

Indoor Temperature(°C)		Outdoor Temperature (°C, DB)							
		-15		-10		7		24	
DB		TC	PI	TC	PI	TC	PI	TC	PI
16		2.56	1.44	3.38	1.41	4.08	1.18	4.36	1.26
18		2.54	1.42	3.34	1.39	4.04	1.17	4.31	1.25
20		2.51	1.41	3.31	1.38	4.00	1.16	4.27	1.24
21		2.48	1.40	3.28	1.37	3.96	1.15	4.23	1.23
22		2.46	1.38	3.24	1.35	3.92	1.14	4.19	1.22
24		2.44	1.37	3.21	1.34	3.88	1.13	4.14	1.20

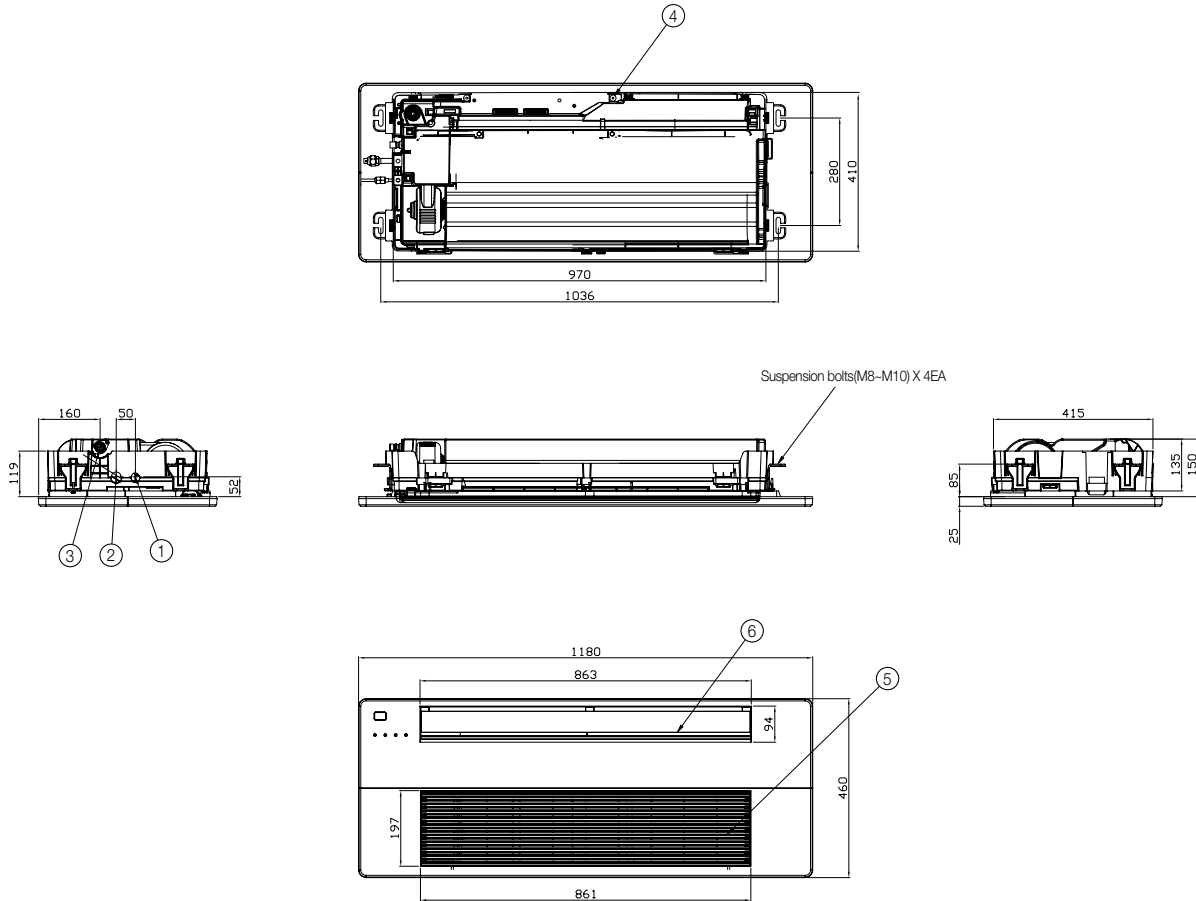
#### Note

- ◆ Ratings shown are net capacities.
- ◆ Capacities are based on following conditions;
  - Equivalent refrigerant piping length : 5m / Level difference : 0m.

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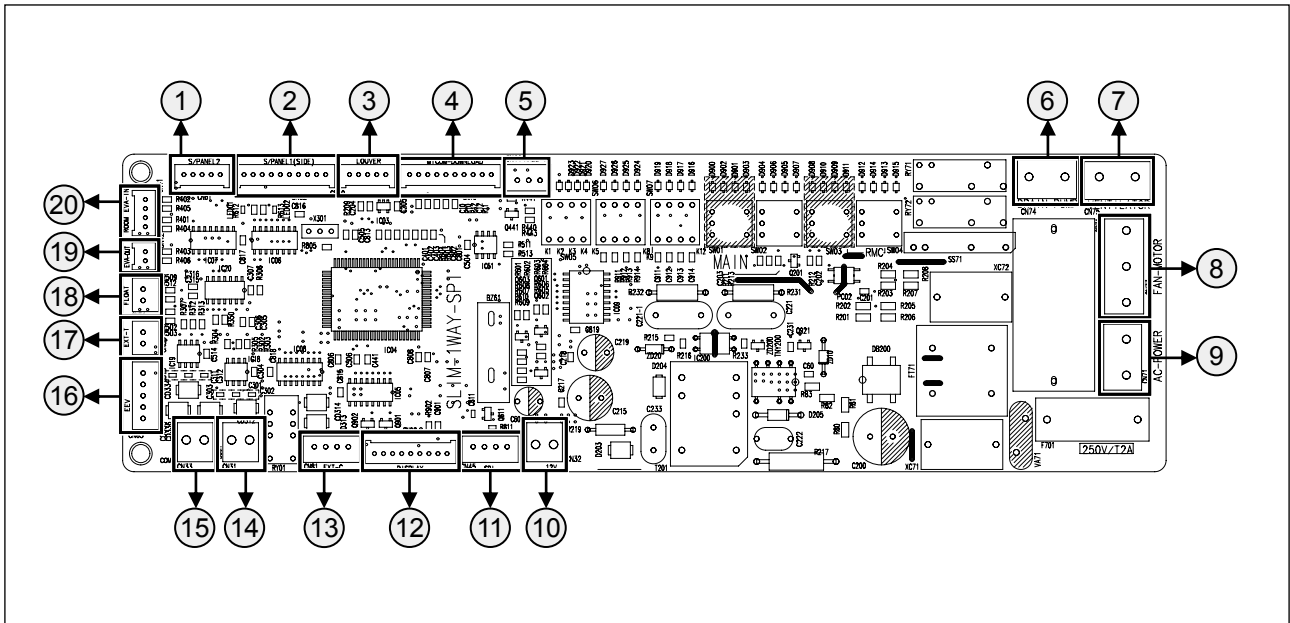
## 1-3. Dimensional drawing

Unit:mm



No.	Name	Description	
		2.6kW	3.5kW
①	Liquid pipe connection	Ø6.35mm (1/4") Flare	
②	Gas pipe connection	Ø9.52mm (3/8") Flare	
③	Drain pipe connection	VP20 (OD26, ID20)	
④	Conduit for power supply & communication wiring	-	
⑤	Air inlet grille	-	
⑥	Air outlet louver	-	

## 1-4. PCB connector lay-out



### ↘ AC

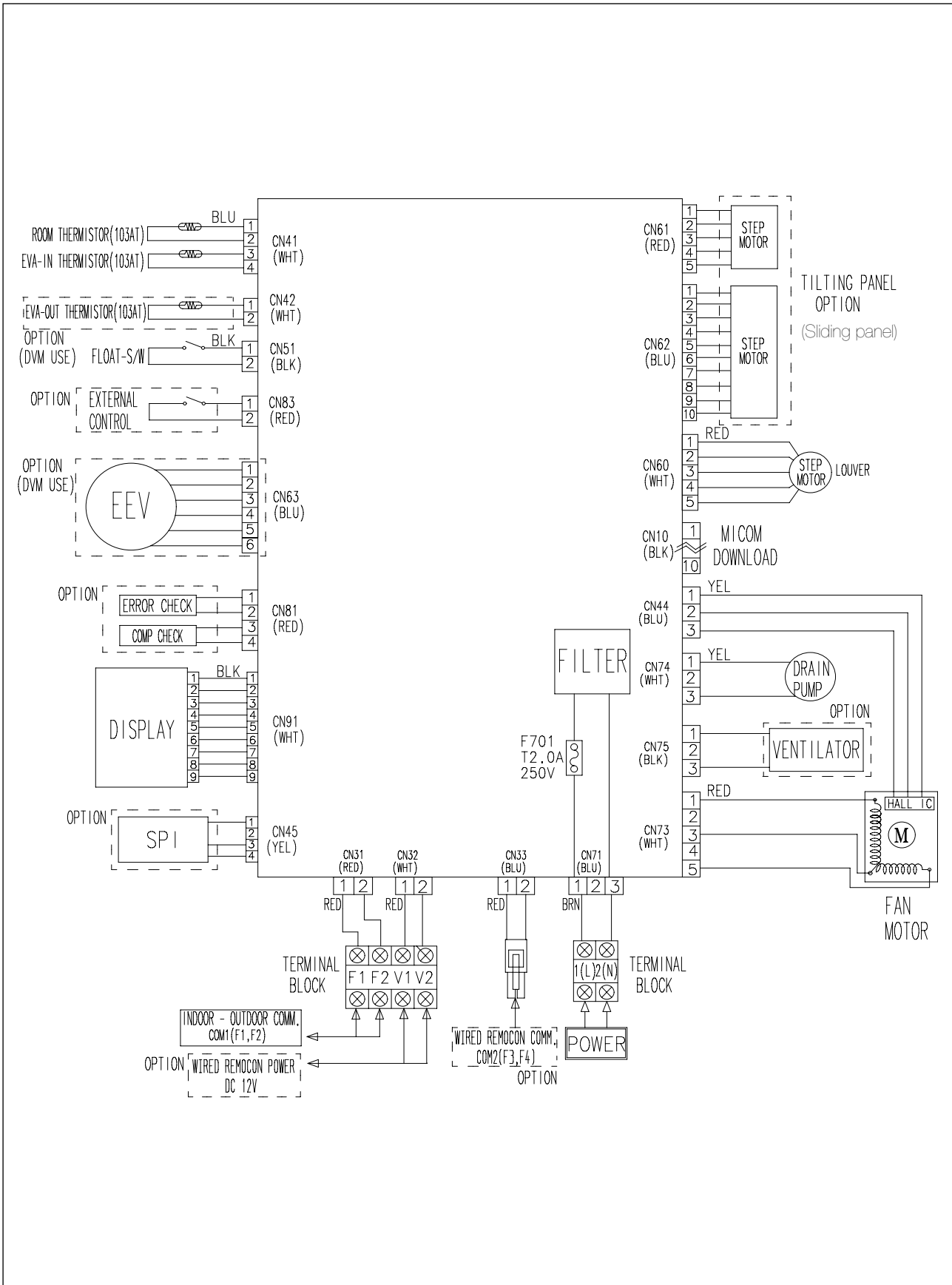
No.	CN #	Color	Function
⑥	CN74	WHT	Drain Pump
⑦	CN75	BLK	Ventilator
⑧	CN73	WHT	Fan Motor
⑨	CN71	BLU	AC POWER Input

### ↘ DC

No.	CN #	Color	Function
①	CN61	RED	Sliding Panel2 (Option : Sliding Panel)
②	CN62	BLU	Sliding Panel1 (Option : Sliding Panel)
③	CN60	WHT	Louver
④	CN10	BLK	Micom-Download
⑤	CN44	BLU	Hall-IC(RPM Feedback)
⑩	CN32	WHT	DC12V
⑪	CN45	YEL	SPi
⑫	CN91	WHT	Panel Display
⑬	CN81	RED	Error Check, Oper. Check
⑭	CN31	RED	COM1
⑮	CN33	BLU	COM2
⑯	CN63	BLU	EEV(Only for DVM)
⑰	CN83	RED	External Control(On/Off)
⑱	CN51	BLK	Float switch sensor
⑲	CN42	WHT	EVA OUT Temp. sensor
⑳	CN41	WHT	Indoor Unit Temp. sensor (Room,EVA IN)

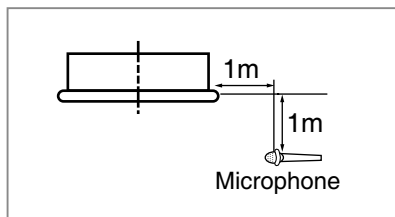
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## 1-5. Electrical wiring diagram



## 1-6. Sound pressure level

### 1) Operation sound level



Unit : dB(A)

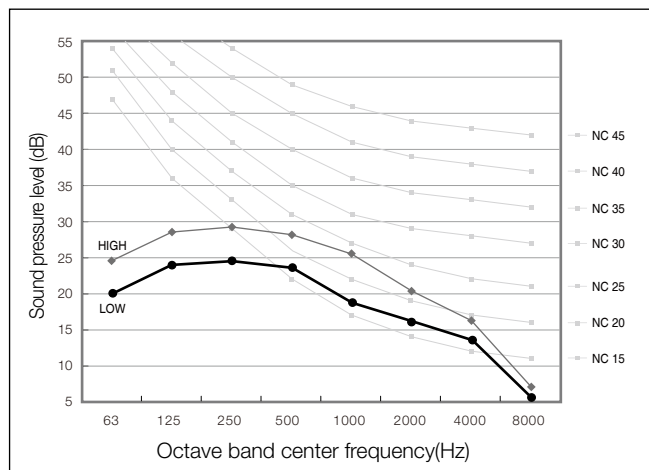
Model	High	Low
AC026FB1DEH/EU	30	25
AC035FB1DEH/EU	33	27

**Note**

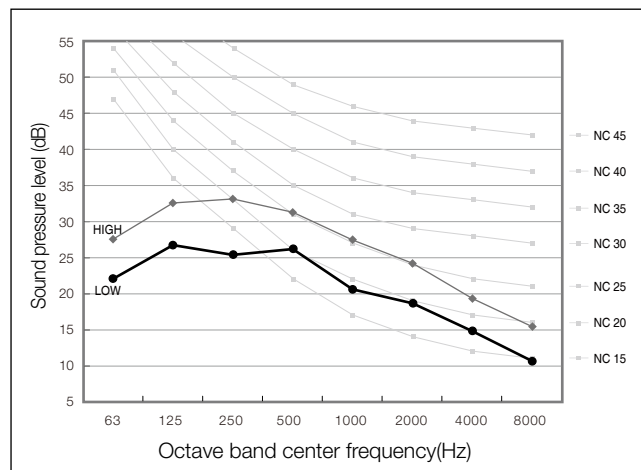
- ◆ These operation values were obtained in an anechoic room. Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.
- ◆ Operation sound level may differ depending on operation and ambient conditions.

### 2) NC curves

(1) AC026FB1DEH/EU



(2) AC035FB1DEH/EU





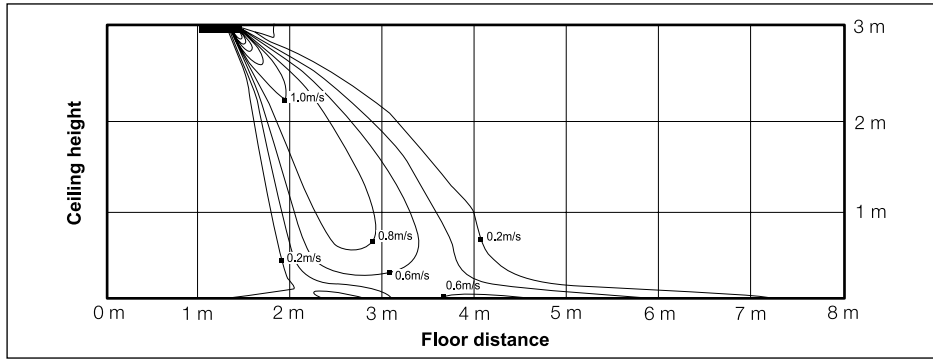
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## 1-7. Temperature and air flow distribution

### 1) AC035FB1DEH/EU

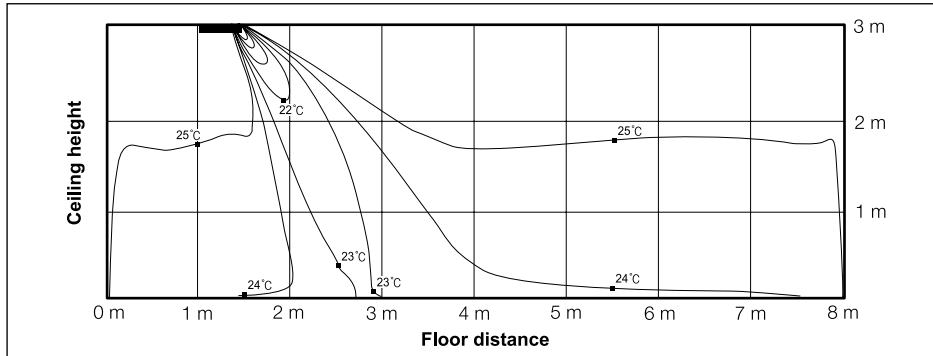
#### (1) Cooling air velocity distribution

◆ Discharge angle : 60°



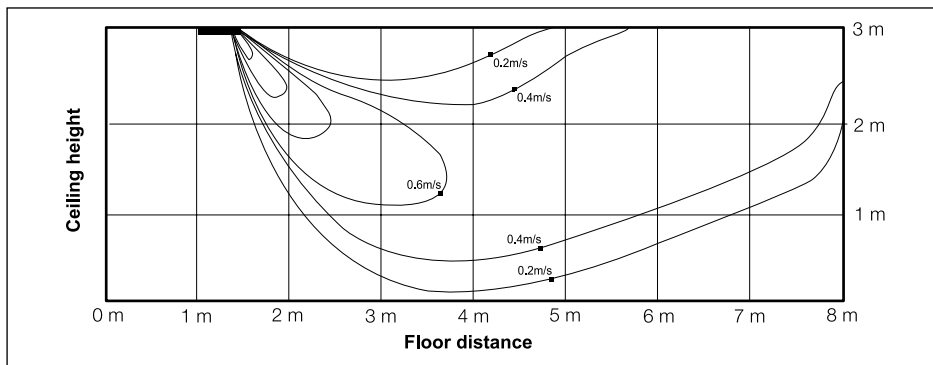
#### (2) Cooling temperature distribution

◆ Discharge angle : 60°



#### (3) Heating air velocity distribution

◆ Discharge angle : 60°



#### (4) Heating temperature distribution

◆ Discharge angle : 60°

