

AIR CONDITIONER  
**Wall Mounted type**

REFRIGERANT **R410A**  
**INVERTER**

# DESIGN & TECHNICAL MANUAL

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INDOOR



UIWH18ASJ  
UIWH24ASJ  
UIWH30AXJ  
UIWH36AXJ

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OUTDOOR



ROSH18ASJ  
ROSH24ASJ



ROSH30AXJ  
ROSH36AXJ

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# 1. INDOOR UNIT

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**WALL MOUNTED TYPE :**

**UIWH18ASJ**

**UIWH24ASJ**

**UIWH30AXJ**

**UIWH36AXJ**

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## 1. INDOOR UNIT

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# 1. SPECIFICATIONS

Type				WALL MOUNTED INVERTER HEAT PUMP				
Model name				UIWH18ASJ	UIWH24ASJ	UIWH30AXJ	UIWH36AXJ	
Power source				208/230V ~ 60Hz				
Available voltage range				187-253V				
Capacity	Cooling	Rated	kW	5.28	7.03	8.79	9.70	
			Btu/h	18,000	24,000	30,000	33,000	
		Min-Max	kW	0.90 - 5.28	0.90 - 7.30	2.90 - 9.50	2.90 - 10.00	
			Btu/h	3,100 - 19,000	3,100 - 25,000	9,900 - 32,400	9,900 - 34,100	
	Heating	Rated	kW	5.28	7.03	8.79	9.96	
			Btu/h	18,000	24,000	30,000	34,000	
		Min-Max	kW	2.05 - 5.86	2.20 - 7.91	2.34 - 9.70	2.99 - 10.26	
			Btu/h	7,000 - 20,000	7,500-27,000	8,000 - 33,000	10,200-35,000	
Input power	Cooling	Rated	kW	1.44	2.40	3.16	3.88	
		Max		1.63	2.50	3.42	4.01	
	Heating	Rated		1.285	1.925	2.80	3.39	
		Max		2.06	2.54	3.28	3.50	
Current	Cooling	Rated	A	6.4	10.5	13.8	17.0	
	Heating		5.8	8.5	12.3	14.8		
EER	Cooling		kW/kW	3.67	2.93	2.78	2.50	
			Btu/hW	12.5	10.0	9.5	8.5	
COP	Heating		kW/kW	4.11	3.65	3.14	2.94	
			Btu/hW	14.0	12.5	10.7	10.0	
SEER	Cooling		Btu/hW	19.0	18.0	16.5	15.5	
HSPF	Heating		Btu/hW	10.6	10.6	9.0	9.0	
POWER FACTOR	Cooling		%	98	99	99	99	
	Heating		96	98	99	99		
Moisture removal			pints/h (l/h)	4.0 (1.9)	6.3 (3.0)	9.7 (4.6)	10.1 (4.8)	
Maximum operating current *1	Cooling		A	8.3	11.8	16.8	18.0	
	Heating		11.8	13.8	18.8	18.8		
Fan	Airflow rate	Cooling	High	CFM (m <sup>3</sup> /h)	541 (920)	659 (1,120)	659 (1,120)	694 (1,180)
			Med		435 (740)	530 (900)	530 (900)	530 (900)
			Low		365 (620)	435 (740)	435 (740)	435 (740)
			Quiet		306 (520)	365 (620)	365 (620)	365 (620)
		Heating	High		541 (920)	647 (1,100)	677 (1,150)	694 (1,180)
			Med		435 (740)	530 (900)	530 (900)	530 (900)
			Low		365 (620)	435 (740)	435 (740)	435 (740)
			Quiet		318 (540)	365 (620)	365 (620)	365 (620)
	Type × Q'ty				Cross flow fan × 1			
	Motor output			W	42	42	42	65
Sound pressure level *2	Cooling		High	dB(A)	42	47	47	50
			Med		35	41	42	42
			Low		31	35	37	37
			Quiet		26	31	32	32
	Heating		High		43	47	49	50
			Med		36	42	42	42
			Low		33	36	37	37
			Quiet		28	33	33	33
Heat exchanger type	Dimensions (H × W × D)		in. (mm)	Main:14-14/16 x 32-12/16 x 1-1/16 (378×832×26.6) Sub: 3-5/16 x 32-12/16 x 8/16 (84×832×13.3)				
	Fin pitch		FPI	Main:21, Sub:18				
	Rows x Stages			Main:2×18, Sub1:1×4, Sub2:1×4				
	Pipe type			Copper				
	Fin type			Aluminum				
Enclosure	Material			Polystyrene				
	Color			WHITE Approximate color of MUNSELL N9.25/				
Dimensions (H×W×D)	Net		mm	320 × 998 × 238				
			inch	12-10/16 × 39-5/16 × 9-6/16				
	Gross		mm	329 × 1090 × 420				
			inch	12-15/16 × 42-15/16 × 16-9/16				
Weight	Net		lbs. (kg)	31 (14)				
	Gross			40 (18)				
Connection pipe	Size	Liquid	in. (mm)	Ø 1/4 (Ø 6.35)		Ø 3/8 (Ø 9.52)		
		Gas		Ø 1/2 (Ø 12.70)		Ø 5/8 (Ø 15.88)		
	Method				Flare			
Operation range	Cooling		°F (°C)	64 to 90 (18 to 32)				
			%RH	80 or less				
	Heating		°F (°C)	88 (30) or less				
Remote controller type				Wireless				
Drain pipe	Material			PVC				
	Size		mm (Reference in.)	Ø12 (15/32) (I.D.) Ø16 (5/8) (O.D.)				

NOTE :

• Specifications are based on the following conditions.

Cooling : Indoor temperature of 80°F (26.67°C) DB / 67°F (19.44°C) WB, and outdoor temperature of 95°F (35°C) DB / 75°F (23.9°C) WB.

Heating : Indoor temperature of 70°F (21.11°C) DB / 59°F (15°C) WB, and outdoor temperature of 47°F (8.33°C) DB / 43°F (6.11°C) WB.

Pipe length : 24ft.7in (7.5m), Height difference:0 m. (Outdoor unit-Indoor unit)

• The protective function might work when using it outside the operation range.

\*1: The maximum current is the maximum value when operated within the operation range.

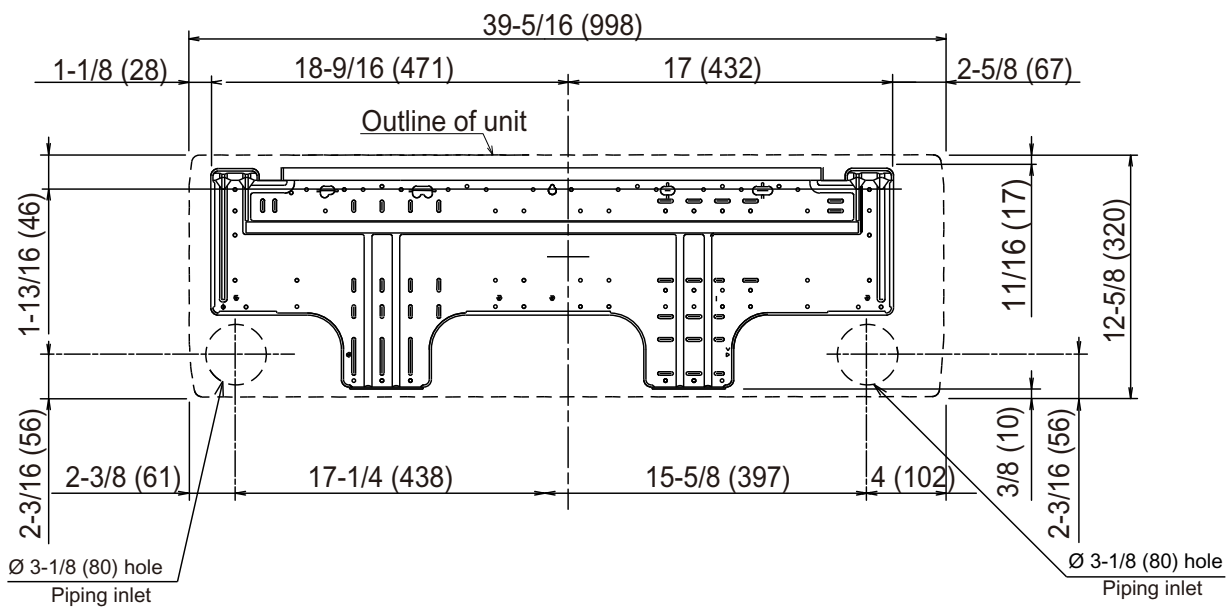
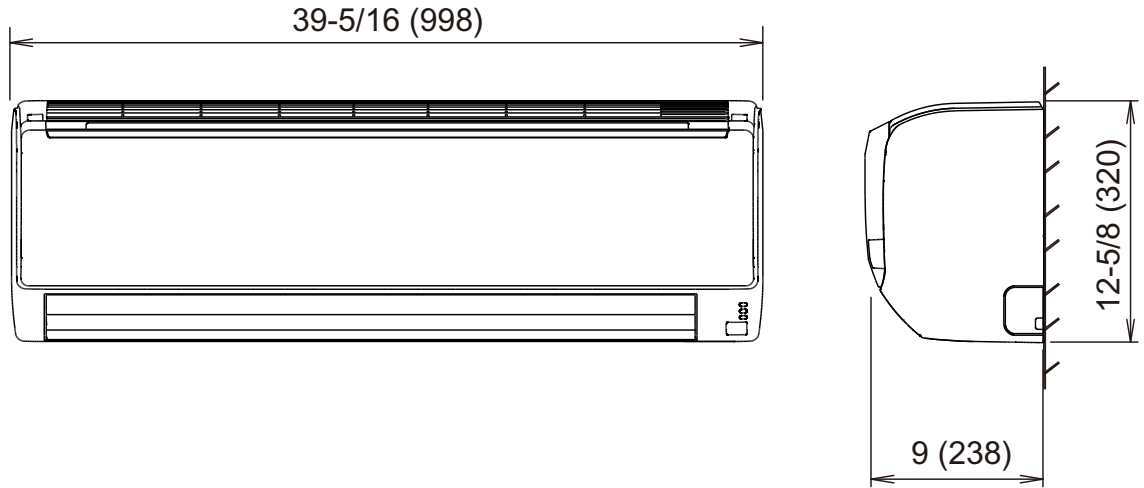
\*2: These are the measured values in the manufacturer's anechoic chamber.

Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.

## 2. DIMENSIONS

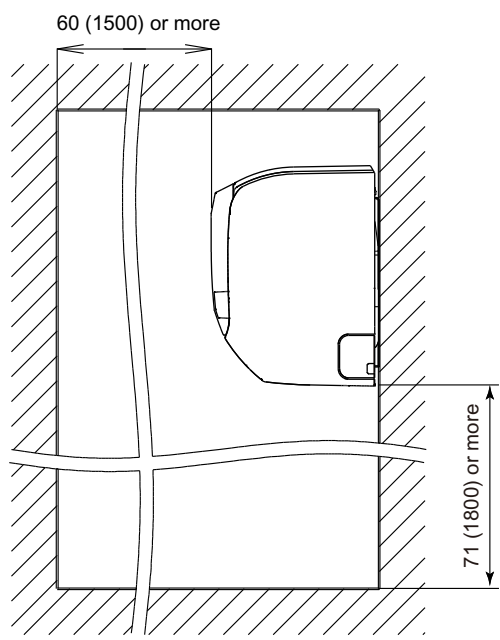
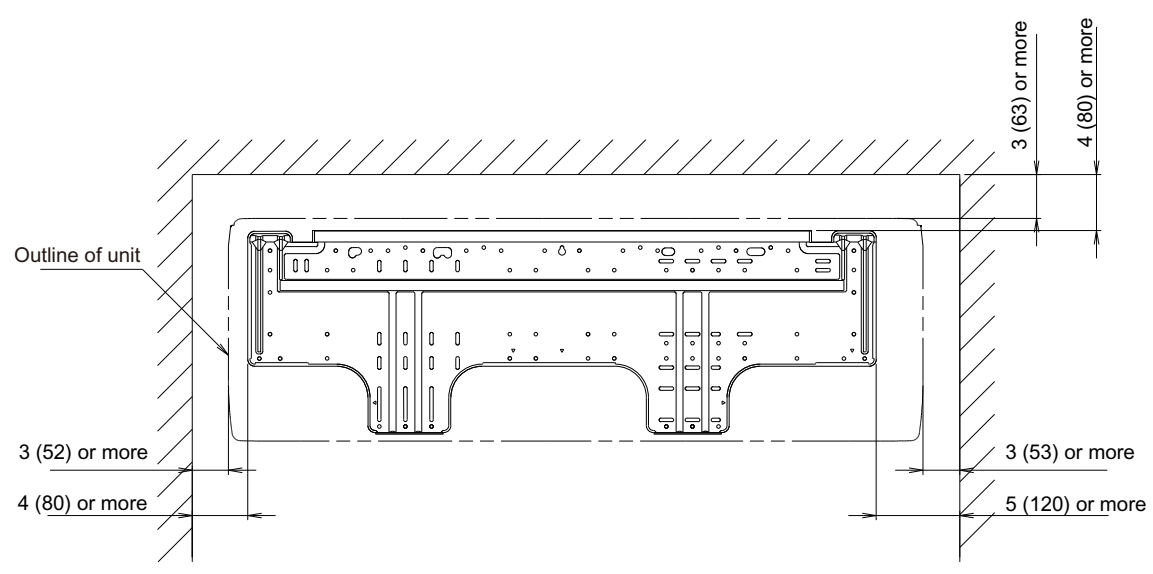
■ MODEL: UIWH18ASJ, UIWH24ASJ, UIWH30AXJ, UIWH36AXJ

Unit : in (mm)



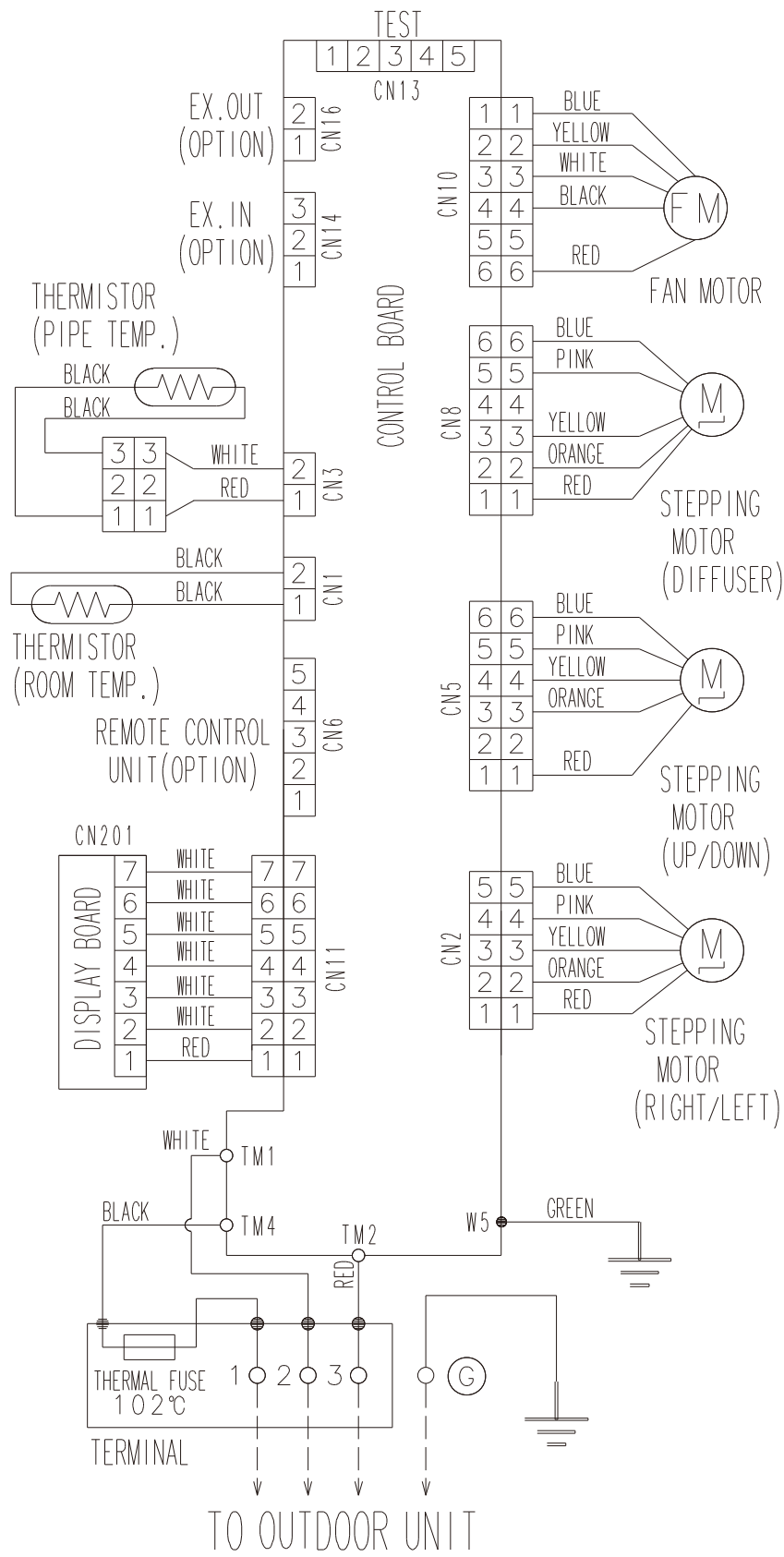
# ■ INSTALLATION PLACE

Unit : in (mm)



### 3. WIRING DIAGRAMS

#### ■ MODEL: UIWH18ASJ, UIWH24ASJ, UIWH30AXJ, UIWH36AXJ



# 4. CAPACITY TABLE

## 4-1. COOLING CAPACITY

### ■ MODEL: UIWH18ASJ

AFR	541
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		Indoor temperature																	
		64°FDB			70°FDB			75°FDB			80°FDB			85°FDB			90°FDB		
		54°FWB			60°FWB			63°FWB			67°FWB			71°FWB			73°FWB		
Outdoor temperature	°FDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	14	15.8	11.8	0.50	17.6	13.1	0.50	19.4	14.5	0.53	20.0	14.9	0.51	21.2	15.8	0.51	22.4	16.7	0.53
	23	15.5	11.6	0.54	17.3	12.9	0.54	19.1	14.2	0.57	19.7	14.6	0.56	20.8	15.5	0.56	22.0	16.4	0.58
	32	15.3	11.4	0.56	17.0	12.7	0.56	18.8	14.0	0.59	19.4	14.4	0.58	20.5	15.3	0.58	21.7	16.2	0.59
	41	15.1	11.2	0.57	16.8	12.5	0.57	18.5	13.8	0.60	19.1	14.2	0.59	20.2	15.1	0.59	21.3	15.9	0.61
	50	14.8	11.0	0.58	16.5	12.3	0.59	18.2	13.5	0.62	18.7	14.0	0.60	19.9	14.8	0.60	21.0	15.6	0.62
	59	14.6	10.8	0.62	16.2	12.1	0.62	17.9	13.3	0.66	18.4	13.7	0.64	19.5	14.5	0.64	20.7	15.4	0.66
	67	16.7	13.3	1.00	18.6	13.4	1.02	20.5	14.6	1.04	21.2	15.8	1.04	22.4	15.7	1.05	23.7	16.8	1.06
	77	16.0	12.7	1.13	17.8	12.8	1.14	19.6	13.9	1.17	20.2	15.0	1.17	21.4	15.0	1.18	22.6	16.0	1.19
	87	15.2	12.0	1.26	17.0	12.1	1.27	18.7	13.2	1.30	19.3	14.3	1.31	20.5	14.2	1.32	21.6	15.2	1.33
	95	14.2	11.3	1.39	15.8	11.4	1.42	17.4	12.4	1.43	18.0	13.4	1.44	19.1	13.3	1.45	20.2	14.2	1.46
	104	12.9	9.9	1.37	14.4	10.0	1.39	15.8	10.9	1.42	16.3	11.8	1.42	17.3	11.7	1.43	18.3	12.5	1.45
115	12.0	9.1	1.34	13.4	9.1	1.37	14.8	9.9	1.39	15.2	10.7	1.39	16.1	10.7	1.42	17.0	11.4	1.43	

AFR : Air flow rate (CFM)  
 TC : Total capacity (kBtu/h)  
 SHC : Sensible Heat capacity (kBtu/h)  
 IP : Input Power (kW)

AFR	920
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		Indoor temperature																	
		17.8°CDB			21.1°CDB			23.9°CDB			26.7°CDB			29.4°CDB			32.2°CDB		
		12.2°CWB			15.6°CWB			17.2°CWB			19.4°CWB			21.7°CWB			22.8°CWB		
Outdoor temperature	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	-10.0	4.63	3.45	0.50	5.16	3.85	0.50	5.69	4.24	0.53	5.86	4.37	0.51	6.20	4.62	0.51	6.56	4.89	0.53
	-5.0	4.56	3.39	0.54	5.08	3.78	0.54	5.60	4.16	0.57	5.77	4.29	0.56	6.11	4.54	0.56	6.46	4.80	0.58
	0.0	4.49	3.34	0.56	5.00	3.72	0.56	5.51	4.10	0.59	5.68	4.23	0.58	6.01	4.48	0.58	6.36	4.74	0.59
	5.0	4.41	3.29	0.57	4.92	3.67	0.57	5.42	4.04	0.60	5.59	4.16	0.59	5.92	4.41	0.59	6.25	4.66	0.61
	10.0	4.34	3.23	0.58	4.84	3.60	0.59	5.33	3.97	0.62	5.49	4.09	0.60	5.82	4.34	0.60	6.15	4.58	0.62
	15.0	4.27	3.18	0.62	4.76	3.54	0.62	5.24	3.90	0.66	5.40	4.02	0.64	5.73	4.26	0.64	6.05	4.50	0.66
	19.4	4.90	3.91	1.00	5.46	3.93	1.02	6.02	4.28	1.04	6.21	4.63	1.04	6.58	4.60	1.05	6.95	4.91	1.06
	25.0	4.68	3.72	1.13	5.21	3.75	1.14	5.75	4.08	1.17	5.92	4.40	1.17	6.27	4.39	1.18	6.63	4.68	1.19
	30.6	4.47	3.52	1.26	4.98	3.55	1.27	5.49	3.87	1.30	5.66	4.18	1.31	5.99	4.17	1.32	6.34	4.44	1.33
	35.0	4.17	3.31	1.39	4.64	3.34	1.42	5.11	3.64	1.43	5.28	3.93	1.44	5.59	3.91	1.45	5.91	4.17	1.46
	40.0	3.78	2.92	1.37	4.21	2.93	1.39	4.64	3.20	1.42	4.78	3.45	1.42	5.07	3.44	1.43	5.35	3.66	1.45
46.1	3.52	2.66	1.34	3.92	2.67	1.37	4.32	2.92	1.39	4.45	3.14	1.39	4.73	3.13	1.42	4.99	3.34	1.43	

AFR : Air flow rate (m³/h)  
 TC : Total capacity (kW)  
 SHC : Sensible Heat capacity (kW)  
 IP : Input Power (kW)



# MODEL: UIWH24ASJ

AFR	659
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		Indoor temperature																	
		64°FDB			70°FDB			75°FDB			80°FDB			85°FDB			90°FDB		
		54°FWB			60°FWB			63°FWB			67°FWB			71°FWB			73°FWB		
Outdoor temperature	°FDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	14	21.1	14.9	0.83	23.5	16.6	0.84	25.9	18.3	0.88	26.6	18.9	0.86	28.2	20.0	0.86	29.8	21.2	0.89
	23	20.7	14.7	0.90	23.1	16.3	0.90	25.5	18.0	0.95	26.2	18.6	0.93	27.8	19.7	0.93	29.4	20.8	0.96
	32	20.4	14.5	0.93	22.7	16.1	0.94	25.1	17.8	0.99	25.8	18.3	0.96	27.3	19.4	0.96	28.9	20.5	0.99
	41	20.1	14.2	0.95	22.4	15.9	0.95	24.7	17.5	1.00	25.4	18.0	0.98	26.9	19.1	0.98	28.5	20.2	1.01
	50	19.7	14.0	0.97	22.0	15.6	0.98	24.3	17.2	1.03	25.0	17.7	1.00	26.5	18.8	1.01	28.0	19.8	1.04
	59	19.7	13.7	1.04	21.9	15.3	1.04	24.2	16.9	1.10	24.9	17.4	1.07	26.4	18.4	1.07	27.9	19.5	1.10
	67	22.3	16.9	1.67	24.8	17.0	1.71	27.4	18.5	1.73	28.2	20.0	1.73	29.9	19.9	1.75	31.6	21.3	1.77
	77	21.3	16.1	1.88	23.7	16.2	1.90	26.1	17.7	1.94	26.9	19.1	1.94	28.5	19.0	1.96	30.2	20.2	1.98
	87	20.2	15.3	2.10	22.5	15.4	2.12	24.8	16.8	2.16	25.5	18.1	2.18	27.0	18.0	2.20	28.6	19.2	2.22
	95	19.0	14.3	2.32	21.1	14.4	2.36	23.3	15.7	2.38	24.0	17.0	2.40	25.4	16.9	2.42	26.9	18.0	2.44
	104	17.1	12.6	2.28	19.1	12.7	2.32	21.0	13.9	2.36	21.6	14.9	2.36	22.9	14.9	2.38	24.2	15.8	2.42
115	16.1	11.5	2.24	17.9	11.5	2.28	19.7	12.6	2.32	20.3	13.6	2.32	21.6	13.5	2.36	22.7	14.4	2.38	

AFR : Air flow rate (CFM)  
 TC : Total capacity (kBtu/h)  
 SHC : Sensible Heat capacity (kBtu/h)  
 IP : Input Power (kW)

AFR	1,120
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		Indoor temperature																	
		17.8°CDB			21.1°CDB			23.9°CDB			26.7°CDB			29.4°CDB			32.2°CDB		
		12.2°CWB			15.6°CWB			17.2°CWB			19.4°CWB			21.7°CWB			22.8°CWB		
Outdoor temperature	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	-10.0	6.17	4.38	0.83	6.88	4.88	0.84	7.58	5.38	0.88	7.81	5.54	0.86	8.27	5.87	0.86	8.74	6.20	0.89
	-5.0	6.08	4.30	0.90	6.77	4.79	0.90	7.46	5.28	0.95	7.69	5.44	0.93	8.14	5.76	0.93	8.61	6.09	0.96
	0.0	5.98	4.24	0.93	6.66	4.72	0.94	7.34	5.21	0.99	7.57	5.37	0.96	8.02	5.68	0.96	8.47	6.01	0.99
	5.0	5.88	4.17	0.95	6.55	4.65	0.95	7.23	5.12	1.00	7.45	5.28	0.98	7.89	5.60	0.98	8.34	5.91	1.01
	10.0	5.79	4.10	0.97	6.45	4.57	0.98	7.11	5.04	1.03	7.33	5.19	1.00	7.76	5.50	1.01	8.20	5.81	1.04
	15.0	5.77	4.03	1.04	6.43	4.49	1.04	7.09	4.95	1.10	7.31	5.10	1.07	7.75	5.40	1.07	8.19	5.71	1.10
	19.4	6.54	4.96	1.67	7.28	4.99	1.71	8.03	5.43	1.73	8.28	5.87	1.73	8.77	5.84	1.75	9.27	6.23	1.77
	25.0	6.24	4.72	1.88	6.95	4.75	1.90	7.66	5.18	1.94	7.89	5.59	1.94	8.36	5.57	1.96	8.84	5.93	1.98
	30.6	5.91	4.47	2.10	6.59	4.50	2.12	7.27	4.91	2.16	7.48	5.30	2.18	7.93	5.29	2.20	8.39	5.63	2.22
	35.0	5.56	4.20	2.32	6.19	4.23	2.36	6.82	4.61	2.38	7.03	4.99	2.40	7.45	4.96	2.42	7.88	5.29	2.44
	40.0	5.01	3.70	2.28	5.58	3.71	2.32	6.14	4.06	2.36	6.33	4.38	2.36	6.72	4.36	2.38	7.09	4.64	2.42
46.1	4.71	3.37	2.24	5.23	3.38	2.28	5.77	3.70	2.32	5.95	3.98	2.32	6.32	3.97	2.36	6.67	4.23	2.38	

AFR : Air flow rate (m³/h)  
 TC : Total capacity (kW)  
 SHC : Sensible Heat capacity (kW)  
 IP : Input Power (kW)

# MODEL: UIWH30AXJ

AFR	659
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		Indoor temperature																	
		64°FDB			70°FDB			75°FDB			80°FDB			85°FDB			90°FDB		
		54°FWB			60°FWB			63°FWB			67°FWB			71°FWB			73°FWB		
Outdoor temperature	°FDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	14	25.7	18.3	0.80	28.6	18.4	0.81	31.5	20.1	0.82	32.5	21.7	0.83	34.5	21.6	0.84	36.4	23.0	0.84
	23	25.7	18.7	0.93	28.6	18.8	0.94	31.5	20.5	0.95	32.5	22.1	0.96	34.5	22.0	0.97	36.4	23.5	0.98
	32	25.7	19.0	1.05	28.6	19.2	1.07	31.5	20.9	1.08	32.5	22.6	1.09	34.4	22.5	1.10	36.4	23.9	1.11
	41	25.7	18.3	1.17	28.6	18.4	1.19	31.5	20.1	1.21	32.5	21.7	1.22	34.4	21.6	1.23	36.4	23.0	1.24
	50	25.6	18.7	1.33	28.5	18.8	1.35	31.4	20.5	1.37	32.4	22.1	1.37	34.3	22.0	1.39	36.3	23.5	1.40
	59	25.1	18.2	1.47	28.0	18.4	1.49	30.8	20.0	1.51	31.8	21.6	1.52	33.7	21.5	1.53	35.6	22.9	1.55
	67	24.4	18.0	1.71	27.2	18.2	1.74	30.0	19.8	1.76	30.9	21.4	1.77	32.8	21.3	1.79	34.7	22.7	1.81
	77	26.3	19.1	2.45	29.3	19.2	2.49	32.4	20.9	2.53	33.4	22.6	2.54	35.4	22.5	2.57	37.4	24.0	2.59
	87	25.1	18.4	2.74	27.9	18.5	2.79	30.8	20.2	2.83	31.7	21.8	2.84	33.6	21.7	2.87	35.5	23.1	2.90
	95	23.7	17.6	3.05	26.4	17.7	3.10	29.1	19.4	3.14	30.0	20.9	3.16	31.8	20.8	3.19	33.6	22.2	3.22
	104	22.1	16.8	3.35	24.7	16.9	3.40	27.2	18.4	3.45	28.0	19.9	3.47	29.7	19.8	3.50	31.4	21.1	3.54
115	16.9	14.0	2.80	18.8	14.1	2.84	20.7	15.4	2.88	21.3	16.6	2.90	22.6	16.6	2.93	23.9	17.7	2.96	

AFR : Air flow rate (CFM)  
 TC : Total capacity (kBtu/h)  
 SHC : Sensible Heat capacity (kBtu/h)  
 IP : Input Power (kW)

AFR	1,120
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		Indoor temperature																	
		17.8°CDB			21.1°CDB			23.9°CDB			26.7°CDB			29.4°CDB			32.2°CDB		
		12.2°CWB			15.6°CWB			17.2°CWB			19.4°CWB			21.7°CWB			22.8°CWB		
Outdoor temperature	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	-10.0	7.53	5.37	0.80	8.39	5.40	0.81	9.25	5.89	0.82	9.53	6.36	0.83	10.10	6.34	0.84	10.68	6.75	0.84
	-5.0	7.53	5.48	0.93	8.38	5.51	0.94	9.24	6.01	0.95	9.53	6.49	0.96	10.10	6.46	0.97	10.67	6.88	0.98
	0.0	7.52	5.58	1.05	8.38	5.61	1.07	9.24	6.12	1.08	9.52	6.61	1.09	10.09	6.59	1.10	10.66	7.02	1.11
	5.0	7.52	5.36	1.17	8.37	5.40	1.19	9.23	5.88	1.21	9.52	6.35	1.22	10.09	6.33	1.23	10.66	6.74	1.24
	10.0	7.50	5.47	1.33	8.35	5.51	1.35	9.21	6.01	1.37	9.49	6.49	1.37	10.06	6.46	1.39	10.63	6.88	1.40
	15.0	7.36	5.35	1.47	8.20	5.38	1.49	9.03	5.87	1.51	9.31	6.34	1.52	9.87	6.31	1.53	10.43	6.72	1.55
	19.4	7.16	5.29	1.71	7.98	5.32	1.74	8.80	5.80	1.76	9.07	6.27	1.77	9.61	6.24	1.79	10.16	6.65	1.81
	25.0	7.72	5.60	2.45	8.60	5.63	2.49	9.48	6.14	2.53	9.77	6.63	2.54	10.36	6.60	2.57	10.95	7.03	2.59
	30.6	7.35	5.39	2.74	8.19	5.42	2.79	9.02	5.91	2.83	9.30	6.39	2.84	9.86	6.36	2.87	10.42	6.78	2.90
	35.0	6.94	5.17	3.05	7.74	5.20	3.10	8.53	5.67	3.14	8.79	6.12	3.16	9.32	6.10	3.19	9.84	6.50	3.22
	40.0	6.49	4.93	3.35	7.23	4.95	3.40	7.97	5.40	3.45	8.22	5.84	3.47	8.71	5.81	3.50	9.20	6.19	3.54
46.1	4.94	4.12	2.80	5.51	4.14	2.84	6.07	4.52	2.88	6.26	4.88	2.90	6.63	4.86	2.93	7.01	5.17	2.96	

AFR : Air flow rate (m³/h)  
 TC : Total capacity (kW)  
 SHC : Sensible Heat capacity (kW)  
 IP : Input Power (kW)

# MODEL: UIWH36AXJ

AFR	694
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		Indoor temperature																	
		64°FDB			70°FDB			75°FDB			80°FDB			85°FDB			90°FDB		
		54°FWB			60°FWB			63°FWB			67°FWB			71°FWB			73°FWB		
Outdoor temperature	°FDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	14	27.6	19.9	1.01	30.8	20.0	1.03	33.9	21.9	1.04	35.0	23.6	1.05	37.1	23.5	1.06	39.2	25.1	1.07
	23	27.6	20.3	1.17	30.8	20.4	1.19	33.9	22.3	1.21	34.9	24.1	1.21	37.0	24.0	1.22	39.1	25.5	1.24
	32	27.6	20.7	1.33	30.7	20.8	1.35	33.9	22.7	1.37	34.9	24.5	1.38	37.0	24.4	1.39	39.1	26.0	1.41
	41	27.6	19.9	1.48	30.7	20.0	1.51	33.9	21.8	1.53	34.9	23.6	1.54	37.0	23.5	1.55	39.1	25.0	1.57
	50	27.5	20.3	1.68	30.6	20.4	1.70	33.8	22.3	1.73	34.8	24.0	1.74	36.9	23.9	1.76	39.0	25.5	1.77
	59	27.3	20.2	1.85	30.4	20.3	1.88	33.6	22.1	1.91	34.6	23.9	1.92	36.7	23.8	1.94	38.7	25.4	1.96
	67	26.3	19.6	2.16	29.3	19.7	2.20	32.3	21.5	2.23	33.3	23.2	2.24	35.3	23.1	2.27	37.3	24.6	2.29
	77	28.3	20.8	3.10	31.6	20.9	3.15	34.8	22.8	3.20	35.9	24.6	3.21	38.0	24.5	3.25	40.2	26.1	3.28
	87	27.0	20.0	3.47	30.0	20.1	3.52	33.1	21.9	3.58	34.1	23.7	3.60	36.2	23.6	3.63	38.2	25.1	3.67
	95	25.5	19.2	3.86	28.4	19.3	3.92	31.3	21.0	3.98	33.0	21.8	3.88	34.2	22.6	4.04	36.1	24.1	4.08
	104	23.8	18.2	4.23	26.5	18.3	4.30	29.2	20.0	4.37	30.1	21.6	4.39	31.9	21.5	4.43	33.8	22.9	4.48
115	18.1	15.2	3.54	20.2	15.3	3.59	22.3	16.7	3.65	22.9	18.0	3.67	24.3	17.9	3.70	25.7	19.1	3.74	

AFR : Air flow rate (CFM)  
 TC : Total capacity (kBtu/h)  
 SHC : Sensible Heat capacity (kBtu/h)  
 IP : Input Power (kW)

AFR	1,180
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		Indoor temperature																	
		17.8°CDB			21.1°CDB			23.9°CDB			26.7°CDB			29.4°CDB			32.2°CDB		
		12.2°CWB			15.6°CWB			17.2°CWB			19.4°CWB			21.7°CWB			22.8°CWB		
Outdoor temperature	°CDB	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP	TC	SHC	IP
	-10.0	8.10	5.84	1.01	9.02	5.88	1.03	9.94	6.41	1.04	10.25	6.92	1.05	10.86	6.89	1.06	11.48	7.34	1.07
	-5.0	8.09	5.95	1.17	9.01	5.99	1.19	9.94	6.53	1.21	10.24	7.05	1.21	10.86	7.02	1.22	11.47	7.48	1.24
	0.0	8.09	6.06	1.33	9.01	6.10	1.35	9.93	6.65	1.37	10.24	7.18	1.38	10.85	7.15	1.39	11.47	7.62	1.41
	5.0	8.08	5.83	1.48	9.00	5.87	1.51	9.92	6.40	1.53	10.23	6.91	1.54	10.84	6.88	1.55	11.46	7.33	1.57
	10.0	8.06	5.95	1.68	8.98	5.98	1.70	9.90	6.53	1.73	10.21	7.05	1.74	10.82	7.02	1.76	11.43	7.48	1.77
	15.0	8.01	5.92	1.85	8.92	5.95	1.88	9.83	6.49	1.91	10.14	7.01	1.92	10.75	6.98	1.94	11.35	7.44	1.96
	19.4	7.70	5.75	2.16	8.58	5.78	2.20	9.46	6.30	2.23	9.75	6.81	2.24	10.33	6.78	2.27	10.92	7.22	2.29
	25.0	8.30	6.08	3.10	9.25	6.12	3.15	10.19	6.67	3.20	10.51	7.21	3.21	11.14	7.18	3.25	11.77	7.65	3.28
	30.6	7.90	5.86	3.47	8.80	5.89	3.52	9.70	6.43	3.58	10.00	6.94	3.60	10.60	6.91	3.63	11.20	7.36	3.67
	35.0	7.47	5.61	3.86	8.32	5.65	3.92	9.17	6.16	3.98	9.70	6.39	3.88	10.02	6.62	4.04	10.58	7.06	4.08
	40.0	6.98	5.35	4.23	7.77	5.38	4.30	8.57	5.87	4.37	8.83	6.33	4.39	9.36	6.31	4.43	9.89	6.72	4.48
46.1	5.31	4.45	3.54	5.92	4.48	3.59	6.52	4.89	3.65	6.73	5.28	3.67	7.13	5.26	3.70	7.53	5.60	3.74	

AFR : Air flow rate (m³/h)  
 TC : Total capacity (kW)  
 SHC : Sensible Heat capacity (kW)  
 IP : Input Power (kW)

# 4-2. HEATING CAPACITY

## ■ MODEL: UIWH18ASJ

AFR	541
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			Indoor temperature							
			60°FDB		65°FDB		70°FDB		75°FDB	
Outdoor temperature	°FDB	°FWB	TC	IP	TC	IP	TC	IP	TC	IP
	5	3	16.2	1.98	15.8	2.01	15.4	2.18	14.6	2.14
	14	12	17.3	1.87	16.9	1.90	16.5	2.13	15.6	2.02
	23	19	18.1	1.81	17.7	1.84	17.2	2.05	16.3	1.96
	32	28	18.2	1.81	17.8	1.85	17.3	1.95	16.5	1.96
	41	37	19.9	1.92	19.4	1.95	19.0	2.00	18.0	2.08
	47	43	21.0	1.98	20.5	2.01	20.0	2.06	19.0	2.14
	50	47	23.2	2.01	22.7	2.04	22.1	2.09	21.0	2.17
	59	50	24.0	2.05	23.4	2.09	22.9	2.10	21.8	2.22

AFR : Air flow rate (CFM)  
TC : Total capacity (kBtu/h)  
IP : Input Power (kW)

AFR	920
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			Indoor temperature							
			15.6°CDB		18.3°CDB		21.1°CDB		23.9°CDB	
Outdoor temperature	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP
	-15.0	-16.1	4.73	1.98	4.64	2.01	4.51	2.18	4.29	2.14
	-10.0	-11.1	5.08	1.87	4.95	1.90	4.83	2.13	4.59	2.02
	-5.0	-7.2	5.30	1.81	5.17	1.84	5.03	2.05	4.78	1.96
	0.0	-2.2	5.35	1.81	5.22	1.85	5.08	1.95	4.83	1.96
	5.0	2.8	5.84	1.92	5.69	1.95	5.57	2.00	5.27	2.08
	8.3	6.1	6.16	1.98	6.01	2.01	5.86	2.06	5.57	2.14
	10.0	8.3	6.79	2.01	6.65	2.04	6.47	2.09	6.16	2.17
	15.0	10.0	7.04	2.05	6.87	2.09	6.72	2.10	6.38	2.22

AFR : Air flow rate (m<sup>3</sup>/h)  
TC : Total capacity (kW)  
IP : Input Power (kW)

## ■ MODEL: UIWH24ASJ

AFR	647
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			Indoor temperature							
			60°FDB		65°FDB		70°FDB		75°FDB	
Outdoor temperature	°FDB	°FWB	TC	IP	TC	IP	TC	IP	TC	IP
	5	3	21.8	2.44	21.4	2.48	20.8	2.69	19.8	2.64
	14	12	23.4	2.30	22.8	2.34	22.3	2.62	21.1	2.49
	23	19	24.4	2.23	23.8	2.27	23.2	2.53	22.0	2.41
	32	28	24.6	2.23	24.1	2.28	23.4	2.40	22.3	2.42
	41	37	26.9	2.37	26.2	2.41	25.6	2.46	24.3	2.56
	47	43	28.4	2.44	27.7	2.48	27.0	2.54	25.6	2.64
	50	47	31.3	2.48	30.6	2.52	29.8	2.58	28.4	2.68
	59	50	32.4	2.53	31.6	2.57	31.0	2.59	29.4	2.73

AFR : Air flow rate (CFM)  
TC : Total capacity (kBtu/h)  
IP : Input Power (kW)

AFR	1,100
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			Indoor temperature							
			15.6°CDB		18.3°CDB		21.1°CDB		23.9°CDB	
Outdoor temperature	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP
	-15.0	-16.1	6.39	2.44	6.26	2.48	6.09	2.69	5.79	2.64
	-10.0	-11.1	6.85	2.30	6.69	2.34	6.52	2.62	6.19	2.49
	-5.0	-7.2	7.15	2.23	6.99	2.27	6.79	2.53	6.46	2.41
	0.0	-2.2	7.22	2.23	7.05	2.28	6.85	2.40	6.52	2.42
	5.0	2.8	7.88	2.37	7.68	2.41	7.52	2.46	7.12	2.56
	8.3	6.1	8.31	2.44	8.11	2.48	7.91	2.54	7.52	2.64
	10.0	8.3	9.17	2.48	8.97	2.52	8.74	2.58	8.31	2.68
	15.0	10.0	9.50	2.53	9.27	2.57	9.07	2.59	8.61	2.73

AFR : Air flow rate (m<sup>3</sup>/h)  
TC : Total capacity (kW)  
IP : Input Power (kW)

## MODEL: UIWH30AXJ

AFR	677
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		Indoor temperature								
		60°FDB		65°FDB		70°FDB		75°FDB		
Outdoor temperature	°FDB	°FWB	TC	IP	TC	IP	TC	IP	TC	IP
	5	3	23.2	3.78	22.7	3.86	22.1	3.94	21.0	4.10
	14	12	25.0	3.78	24.4	3.86	23.8	3.93	22.6	4.09
	23	19	28.8	3.79	28.1	3.87	27.5	3.95	26.1	4.11
	32	28	31.6	3.76	30.9	3.84	30.1	3.91	28.6	4.07
	41	37	34.6	3.80	33.8	3.88	32.9	3.96	31.3	4.12
	47	43	34.7	3.15	33.8	3.21	33.0	3.28	31.4	3.41
	50	47	35.7	3.14	34.8	3.20	34.0	3.27	32.3	3.40
59	50	34.4	2.74	33.6	2.80	32.8	2.86	31.1	2.97	

AFR : Air flow rate (CFM)  
TC : Total capacity (kBtu/h)  
IP : Input Power (kW)

AFR	1,150
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		Indoor temperature								
		15.6°CDB		18.3°CDB		21.1°CDB		23.9°CDB		
Outdoor temperature	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP
	-15.0	-16.1	6.81	3.78	6.65	3.86	6.48	3.94	6.16	4.10
	-10.0	-11.1	7.33	3.78	7.15	3.86	6.98	3.93	6.63	4.09
	-5.0	-7.2	8.45	3.79	8.25	3.87	8.05	3.95	7.65	4.11
	0.0	-2.2	9.27	3.76	9.05	3.84	8.83	3.91	8.38	4.07
	5.0	2.8	10.14	3.80	9.90	3.88	9.66	3.96	9.17	4.12
	8.3	6.1	10.16	3.15	9.91	3.21	9.70	3.28	9.19	3.41
	10.0	8.3	10.46	3.14	10.21	3.20	9.96	3.27	9.47	3.40
15.0	10.0	10.09	2.74	9.85	2.80	9.61	2.86	9.13	2.97	

AFR : Air flow rate (m<sup>3</sup>/h)  
TC : Total capacity (kW)  
IP : Input Power (kW)

## MODEL: UIWH36AXJ

AFR	694
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		Indoor temperature								
		60°FDB		65°FDB		70°FDB		75°FDB		
Outdoor temperature	°FDB	°FWB	TC	IP	TC	IP	TC	IP	TC	IP
	5	3	24.6	4.04	24.1	4.12	23.5	4.20	22.3	4.28
	14	12	26.5	4.03	25.9	4.11	25.3	4.20	24.0	4.28
	23	19	30.6	4.05	29.9	4.13	29.1	4.22	27.7	4.28
	32	28	33.5	4.01	32.7	4.09	31.9	4.18	30.3	4.28
	41	37	36.7	4.06	35.8	4.14	34.9	4.23	33.2	4.28
	47	43	36.8	3.36	35.9	3.43	35.0	3.50	33.3	3.64
	50	47	37.9	3.35	37.0	3.42	36.1	3.49	34.3	3.63
59	50	36.5	2.92	35.6	2.99	34.8	3.05	33.0	3.17	

AFR : Air flow rate (CFM)  
TC : Total capacity (kBtu/h)  
IP : Input Power (kW)

AFR	1,180
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		Indoor temperature								
		15.6°CDB		18.3°CDB		21.1°CDB		23.9°CDB		
Outdoor temperature	°CDB	°CWB	TC	IP	TC	IP	TC	IP	TC	IP
	-15.0	-16.1	7.22	4.04	7.05	4.12	6.88	4.20	6.53	4.28
	-10.0	-11.1	7.77	4.03	7.59	4.11	7.40	4.20	7.03	4.28
	-5.0	-7.2	8.96	4.05	8.75	4.13	8.54	4.22	8.11	4.28
	0.0	-2.2	9.83	4.01	9.59	4.09	9.36	4.18	8.89	4.28
	5.0	2.8	10.75	4.06	10.50	4.14	10.24	4.23	9.73	4.28
	8.3	6.1	10.77	3.36	10.51	3.43	10.26	3.50	9.75	3.64
	10.0	8.3	11.10	3.35	10.83	3.42	10.57	3.49	10.04	3.63
15.0	10.0	10.70	2.92	10.45	2.99	10.19	3.05	9.68	3.17	

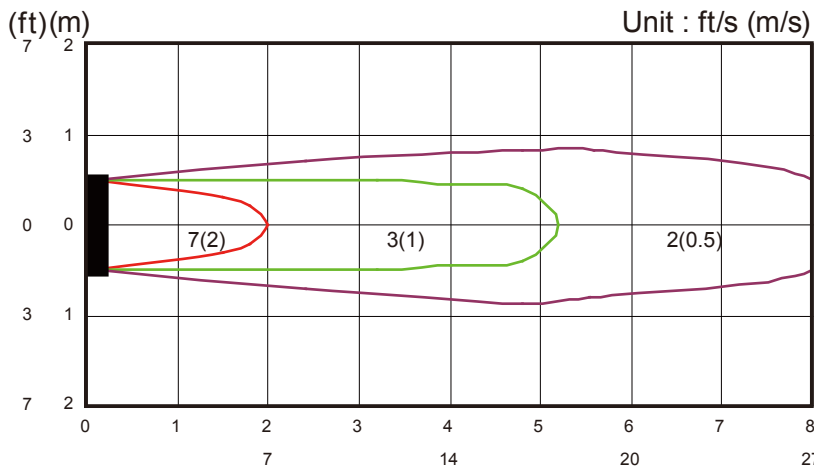
AFR : Air flow rate (m<sup>3</sup>/h)  
TC : Total capacity (kW)  
IP : Input Power (kW)

# 5. FAN PERFORMANCE

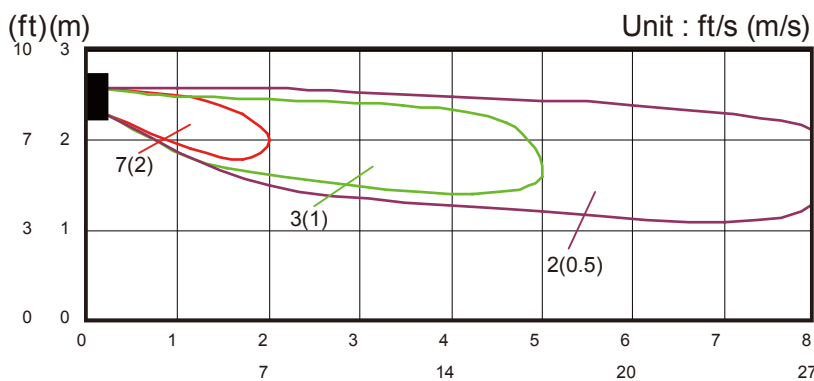
## 5-1. AIR VELOCITY DISTRIBUTION

■ MODEL: UIWH18ASJ

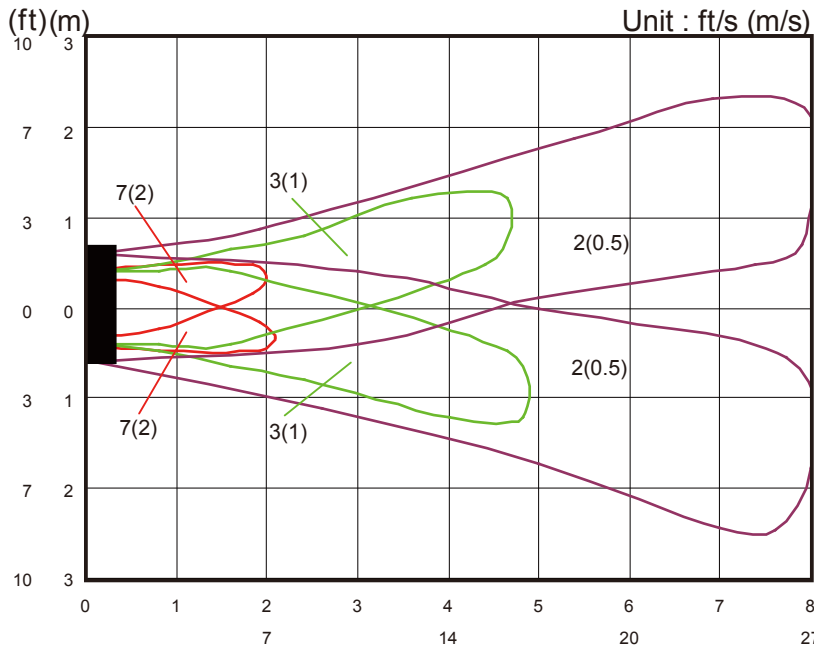
Conditions:  
Fan speed : High  
Operation mode : FAN  
Voltage : 230V



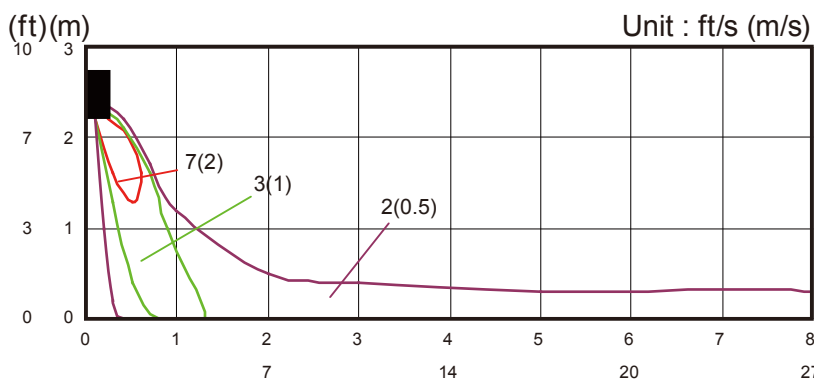
TOP VIEW  
Vertical airflow direction louver : Up  
Horizontal airflow direction louver : Center



SIDE VIEW  
Vertical airflow direction louver : Up  
Horizontal airflow direction louver : Center



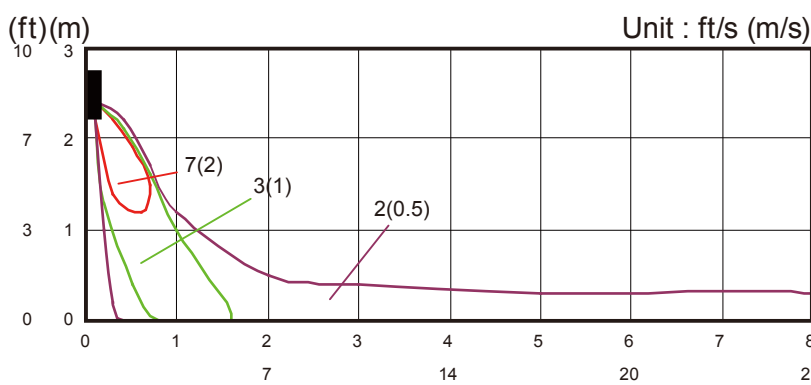
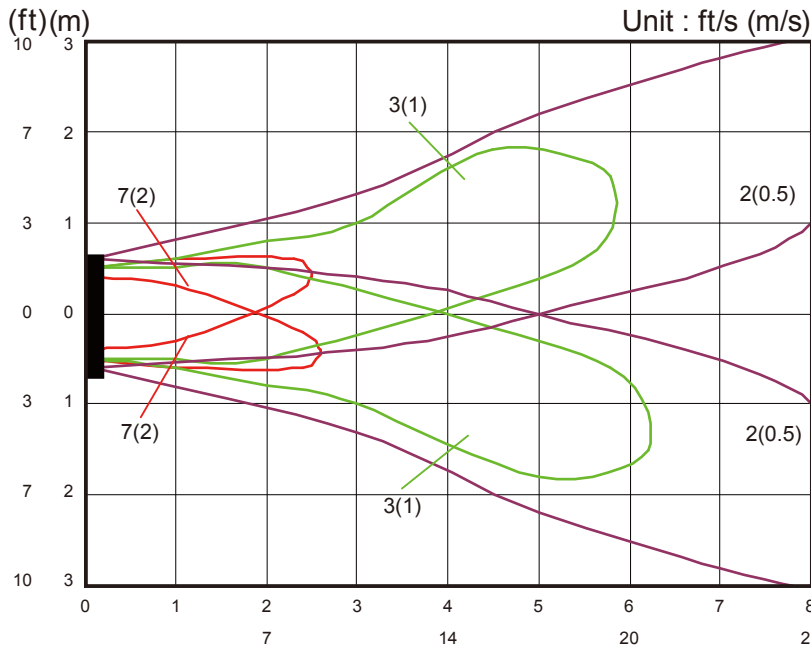
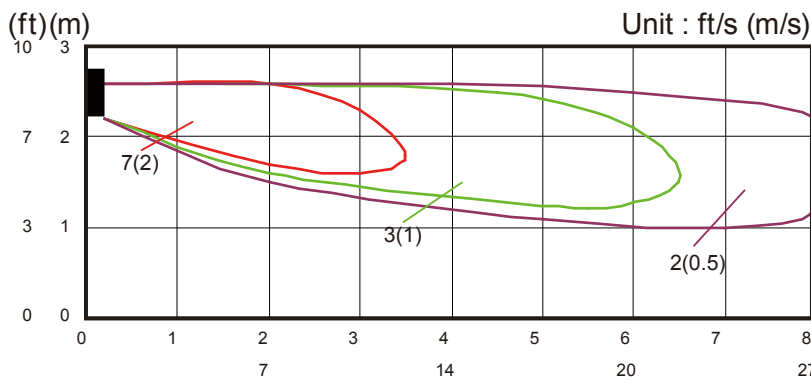
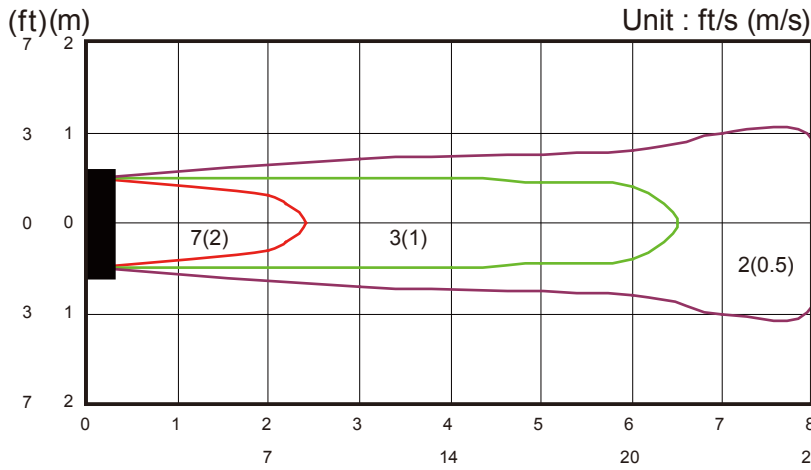
TOP VIEW  
Vertical airflow direction louver : Up  
Horizontal airflow direction louver : Right & Left



SIDE VIEW  
Vertical airflow direction louver : Down  
Horizontal airflow direction louver : Center

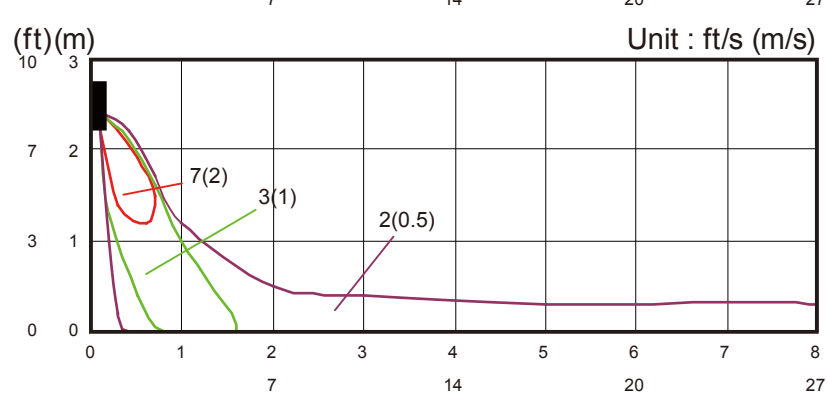
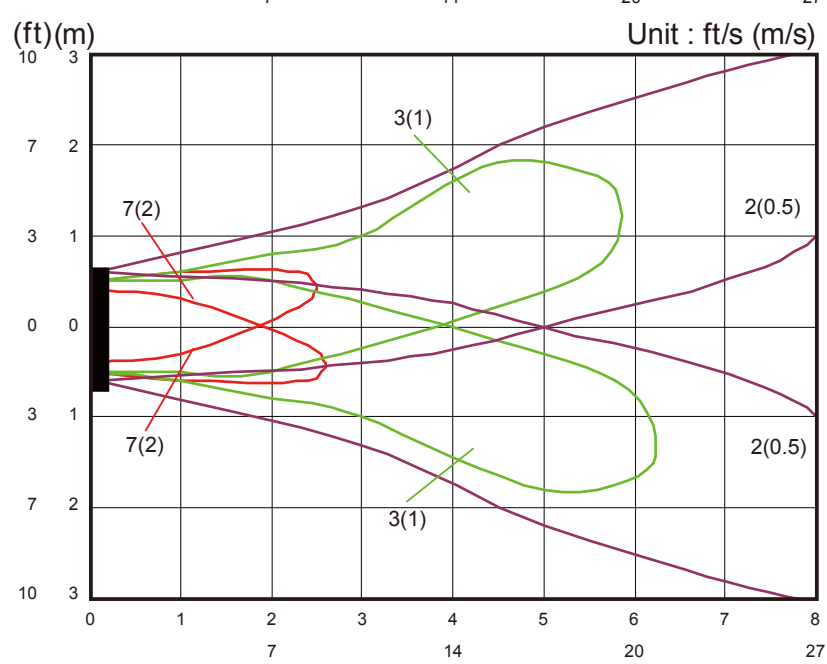
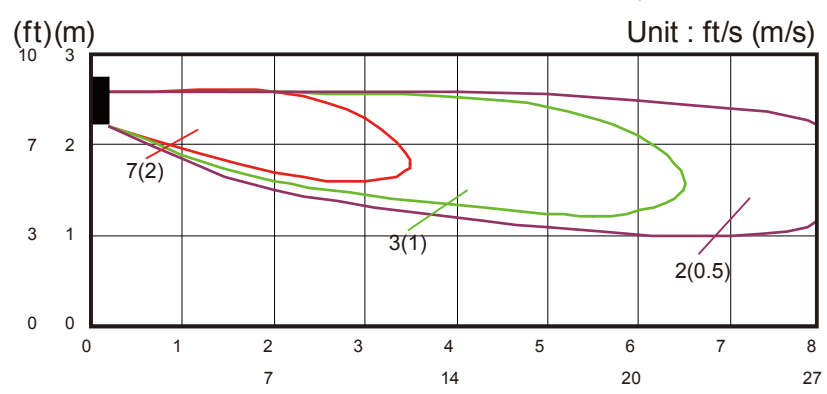
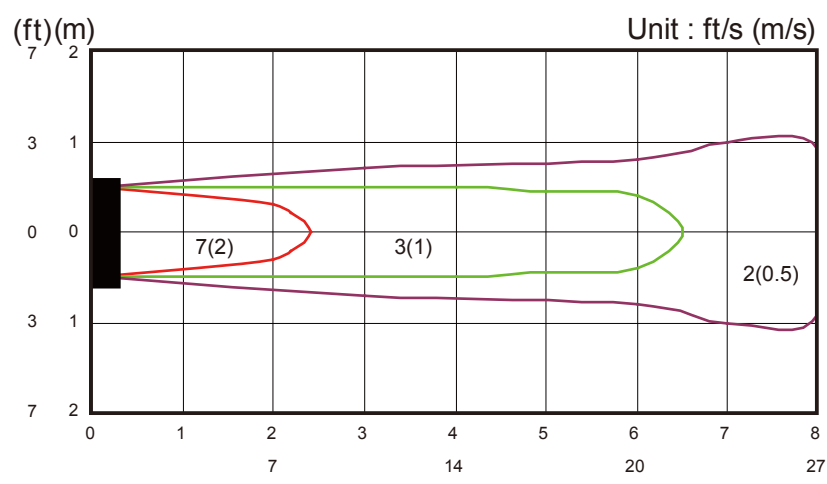
# MODEL: UIWH24ASJ

Conditions:  
 Fan speed : High  
 Operation mode : FAN  
 Voltage : 230V



Conditions:  
Fan speed : High  
Operation mode : FAN  
Voltage : 230V

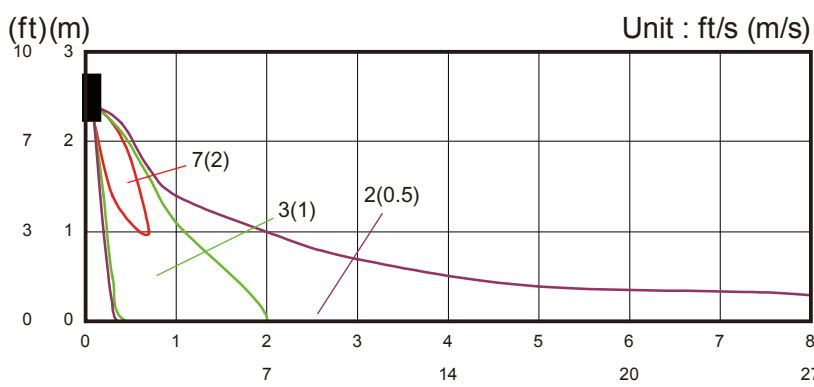
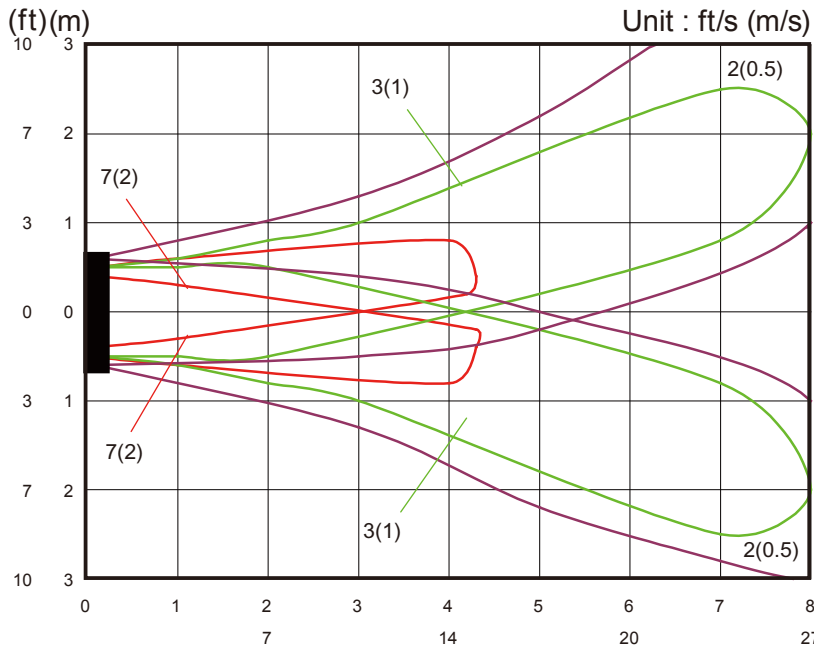
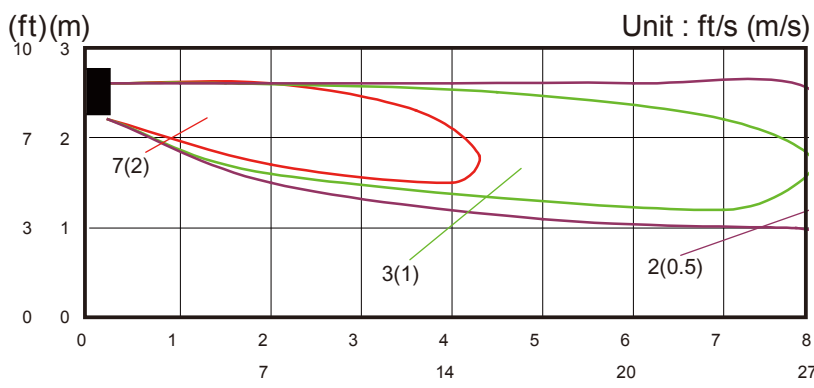
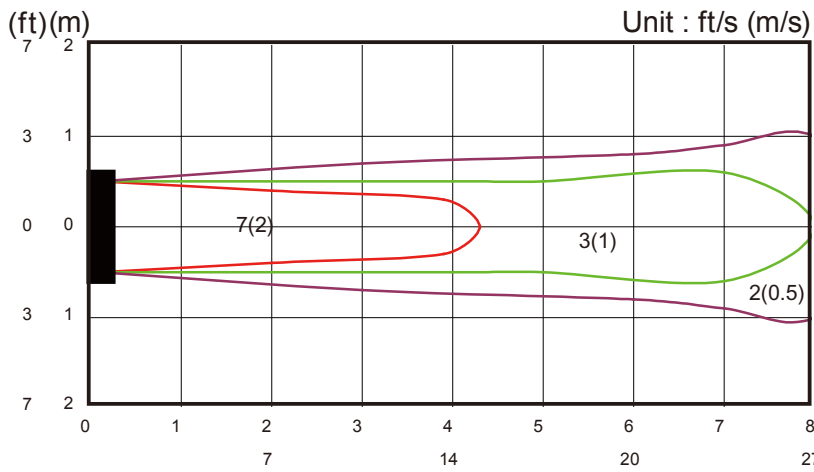
# MODEL: UIWH30AXJ





# MODEL: UIWH36AXJ

Conditions:  
 Fan speed : High  
 Operation mode : FAN  
 Voltage : 230V



## 5-2. AIR FLOW

### ■ MODEL: UIWH18ASJ

#### ● Cooling

Fan speed	Air flow	
HIGH	920	m <sup>3</sup> /h
	256	l/s
	541	CFM
MED	740	m <sup>3</sup> /h
	206	l/s
	435	CFM
LOW	620	m <sup>3</sup> /h
	172	l/s
	365	CFM
QUIET	520	m <sup>3</sup> /h
	144	l/s
	306	CFM

#### ● Heating

Fan speed	Air flow	
HIGH	920	m <sup>3</sup> /h
	256	l/s
	541	CFM
MED	740	m <sup>3</sup> /h
	206	l/s
	435	CFM
LOW	620	m <sup>3</sup> /h
	172	l/s
	365	CFM
QUIET	540	m <sup>3</sup> /h
	150	l/s
	318	CFM

**MODEL: UIWH24ASJ****● Cooling**

Fan speed	Air flow	
HIGH	1120	m <sup>3</sup> /h
	311	l/s
	659	CFM
MED	900	m <sup>3</sup> /h
	250	l/s
	530	CFM
LOW	740	m <sup>3</sup> /h
	206	l/s
	435	CFM
QUIET	620	m <sup>3</sup> /h
	172	l/s
	365	CFM

**● Heating**

Fan speed	Air flow	
HIGH	1100	m <sup>3</sup> /h
	306	l/s
	647	CFM
MED	900	m <sup>3</sup> /h
	250	l/s
	530	CFM
LOW	740	m <sup>3</sup> /h
	206	l/s
	435	CFM
QUIET	620	m <sup>3</sup> /h
	172	l/s
	365	CFM

■ **MODEL: UIWH30AXJ**

● **Cooling**

Fan speed	Air flow	
HIGH	1120	m <sup>3</sup> /h
	311	l/s
	659	CFM
MED	900	m <sup>3</sup> /h
	250	l/s
	530	CFM
LOW	740	m <sup>3</sup> /h
	206	l/s
	435	CFM
QUIET	620	m <sup>3</sup> /h
	172	l/s
	365	CFM

● **Heating**

Fan speed	Air flow	
HIGH	1150	m <sup>3</sup> /h
	319	l/s
	677	CFM
MED	900	m <sup>3</sup> /h
	250	l/s
	530	CFM
LOW	740	m <sup>3</sup> /h
	206	l/s
	435	CFM
QUIET	620	m <sup>3</sup> /h
	172	l/s
	365	CFM

**MODEL: UIWH36AXJ****● Cooling**

Fan speed	Air flow	
HIGH	1180	m <sup>3</sup> /h
	328	l/s
	694	CFM
MED	900	m <sup>3</sup> /h
	250	l/s
	530	CFM
LOW	740	m <sup>3</sup> /h
	206	l/s
	435	CFM
QUIET	620	m <sup>3</sup> /h
	172	l/s
	365	CFM

**● Heating**

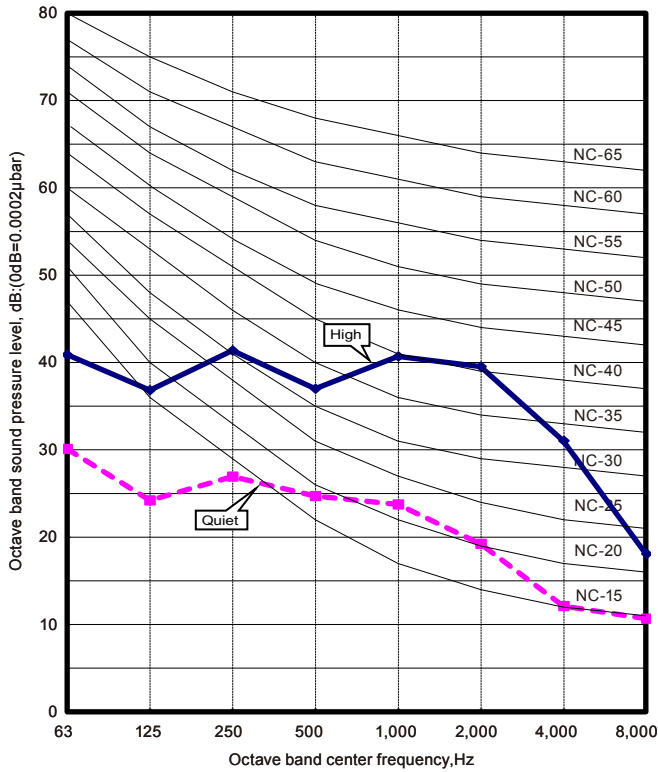
Fan speed	Air flow	
HIGH	1180	m <sup>3</sup> /h
	328	l/s
	694	CFM
MED	900	m <sup>3</sup> /h
	250	l/s
	530	CFM
LOW	740	m <sup>3</sup> /h
	206	l/s
	435	CFM
QUIET	620	m <sup>3</sup> /h
	172	l/s
	365	CFM

# 6. OPERATION NOISE

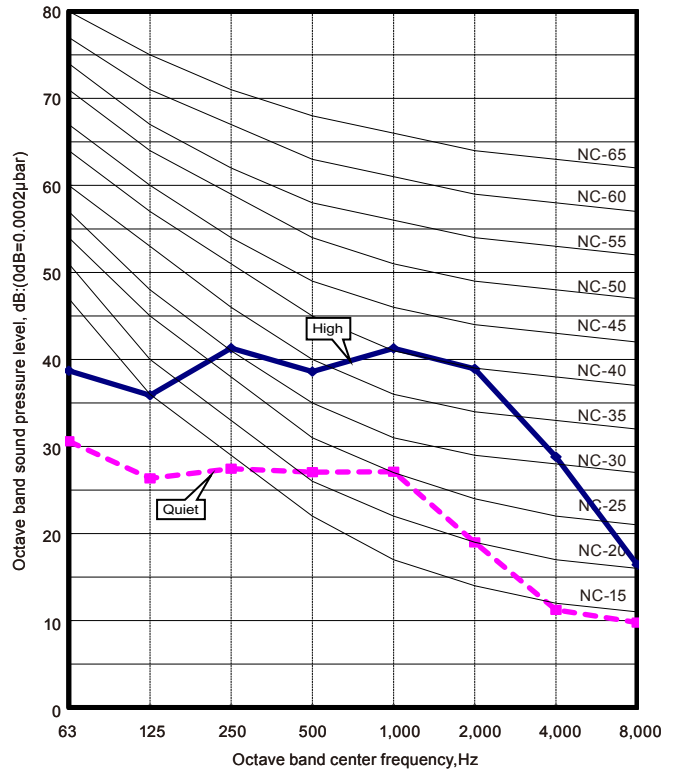
## 6-1. NOISE LEVEL CURVE

### MODEL: UIWH18ASJ

#### ● Cooling

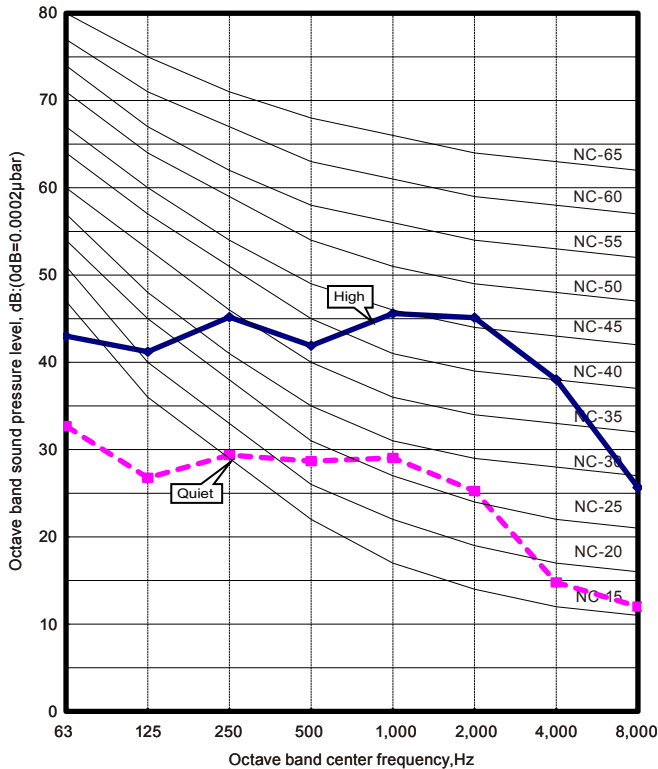


#### ● Heating

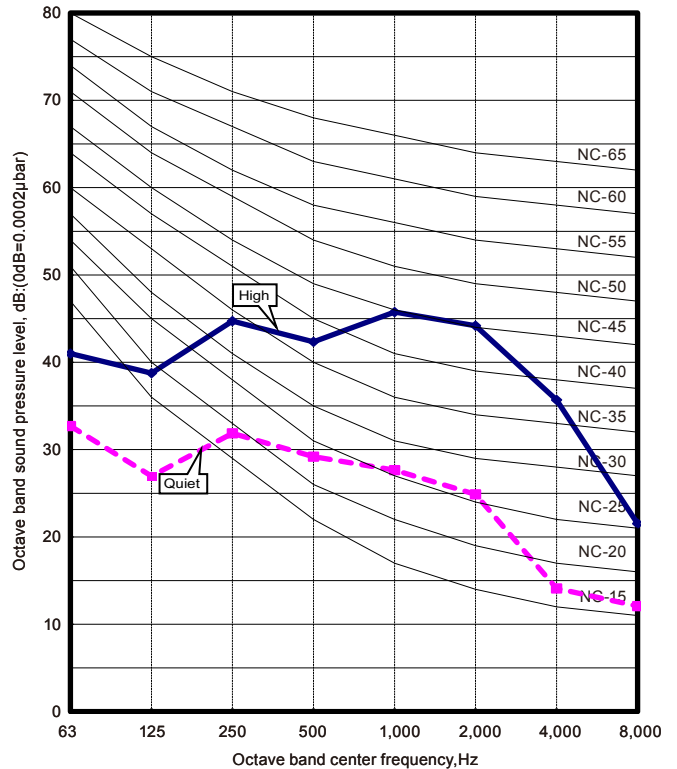


### MODEL: UIWH24ASJ

#### ● Cooling

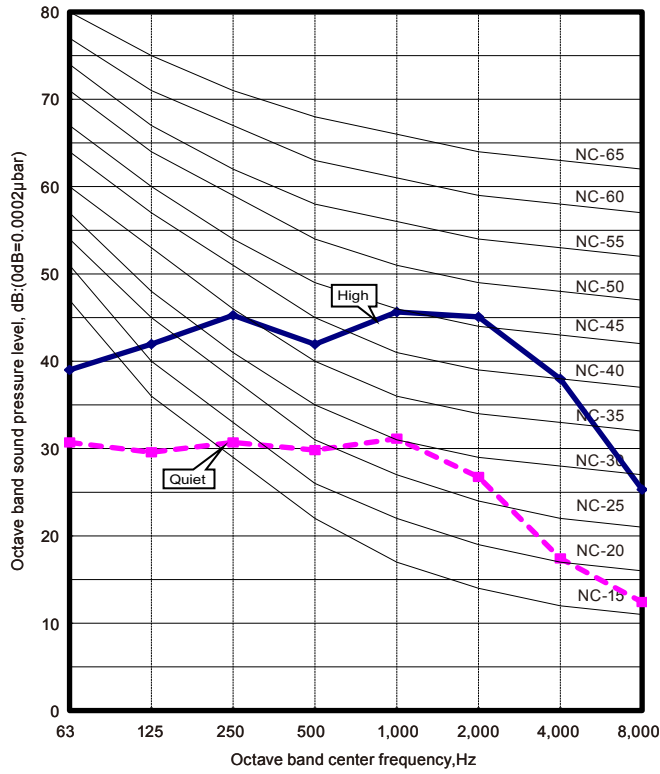


#### ● Heating

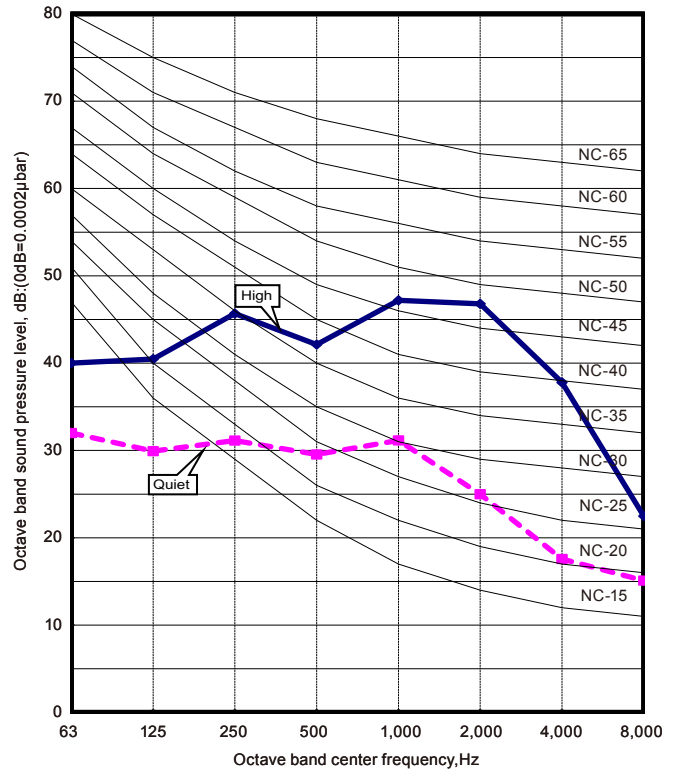


## MODEL: UIWH30AXJ

### ● Cooling

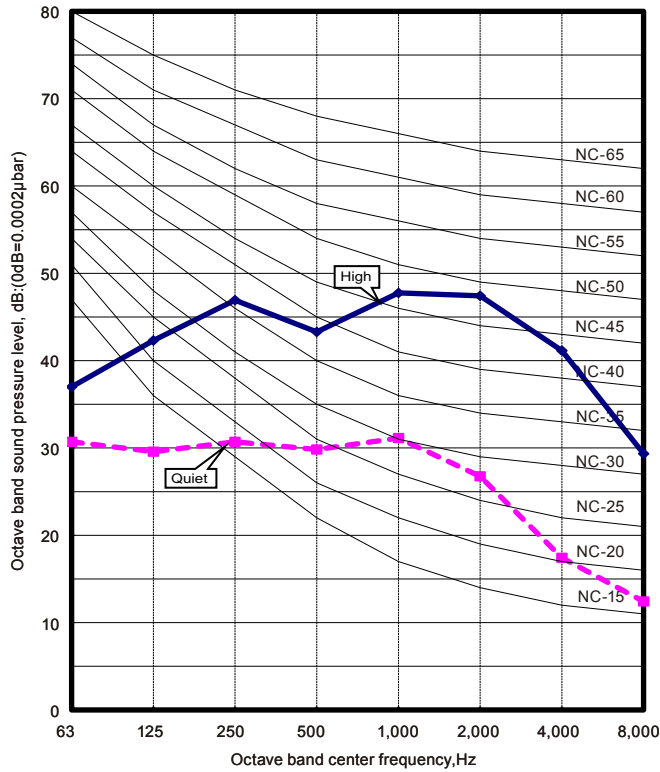


### ● Heating

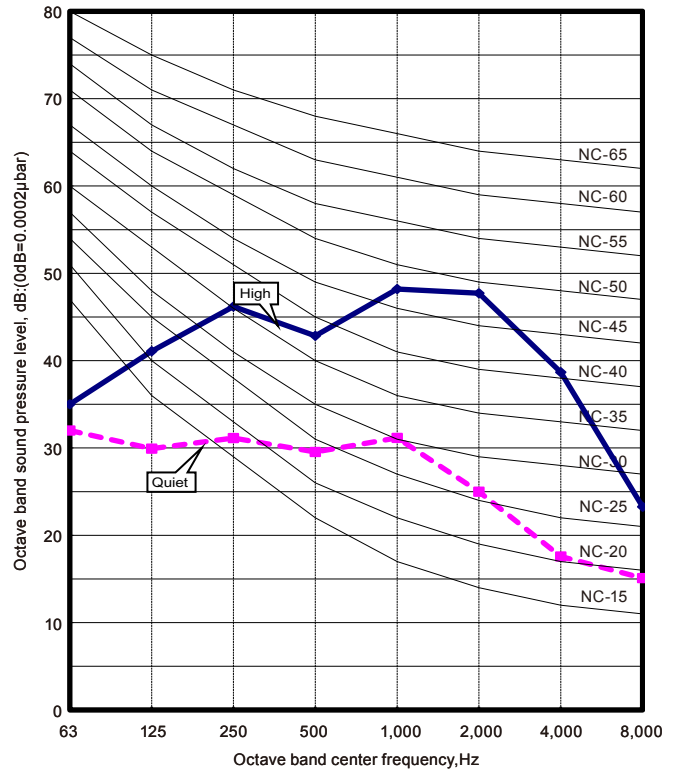


## MODEL: UIWH36AXJ

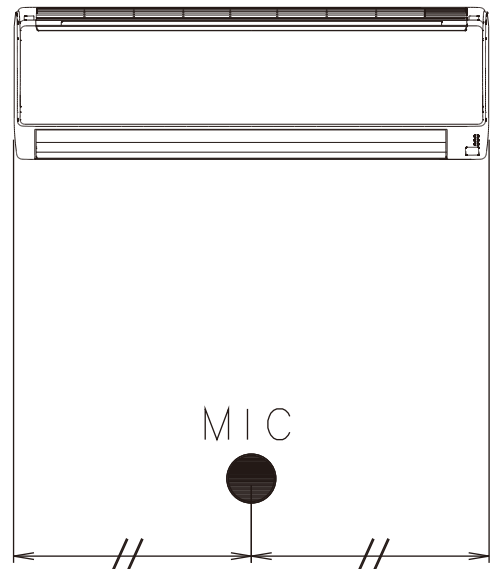
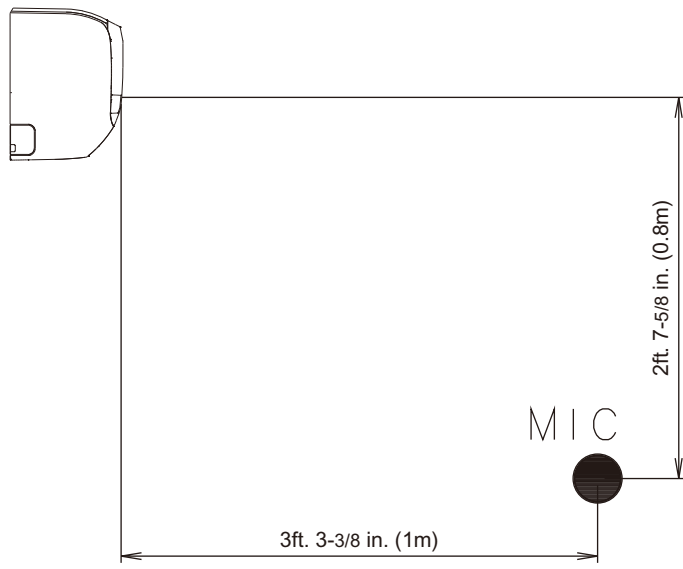
### ● Cooling



### ● Heating



## 6-2. SOUND LEVEL CHECK POINT





## 7. SAFETY DEVICES

	Protection form	Model			
		UIWH18ASJ	UIWH24ASJ	UIWH30AXJ	UIWH36AXJ
Circuit protection	Current fuse (PCB)	3.15A 250V			
Terminal protection	Current fuse	3A 250V			
Fan motor protection	Thermal protection program	302±27°F (150±15°C) OFF 248±27°F (120±15°C) ON			

## 8. EXTERNAL INPUT & OUTPUT

Connector	INPUT	OUTPUT	REMARKS
CN14	Control input	-	See external input/output settings for details.
CN16	-	Operation status output	

### 8-1. EXTERNAL INPUT

#### ■ CONTROL INPUT (Operation/Stop or Forced stop)

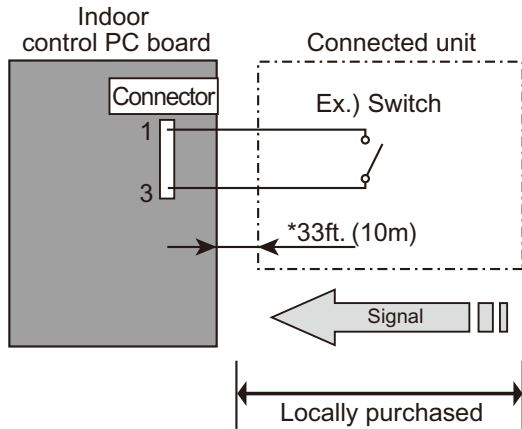
The air conditioner can be remotely operated by means of the following on-site work.

"Operation/Stop" mode or "Forced stop" mode can be selected with function setting of indoor unit.

Operation is started at the following contents by adding the contact input of a commercial ON/OFF switch to a connector on the external control PC board and turning it ON.

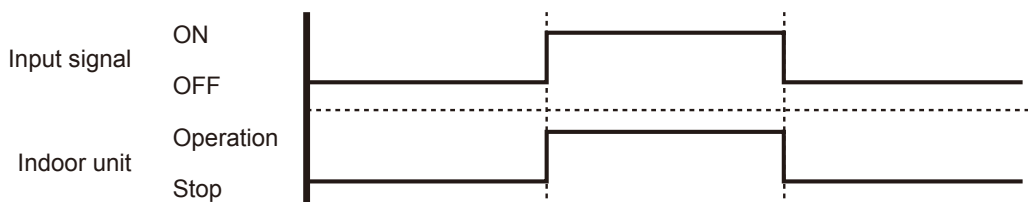
	Initial starting after power turned on	Starting other than at the left
Operation mode	Auto changeover	Mode at previous operation
Set temperature	76°F (24°C)	Temperature at previous operation
Air flow mode	AUTO	Mode at previous operation
Air direction (swing)	Standard air direction (swing OFF)	Air direction at previous operation

#### ● Circuit diagram example

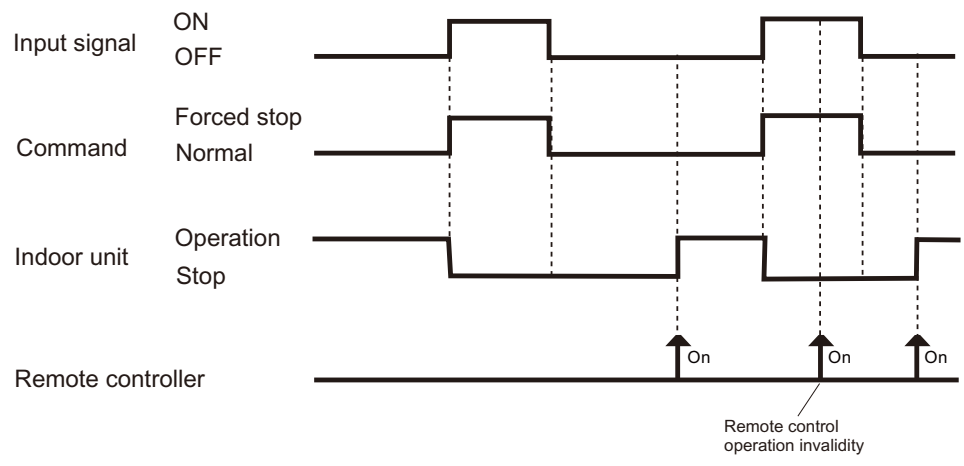


\* Make the distance from the PC board to the connected unit within 33ft. (10m).  
Contact capacity : 24VDC or more, 10mA or more.  
Please use the non-polar relays and switches.

#### ● When function setting is "Operation/Stop" mode



● When function setting is "Forced stop" mode



● Parts (Optional)

Parts name	Model name
External connect kit	RXXWZX

Wire (External input) : RXXWZX

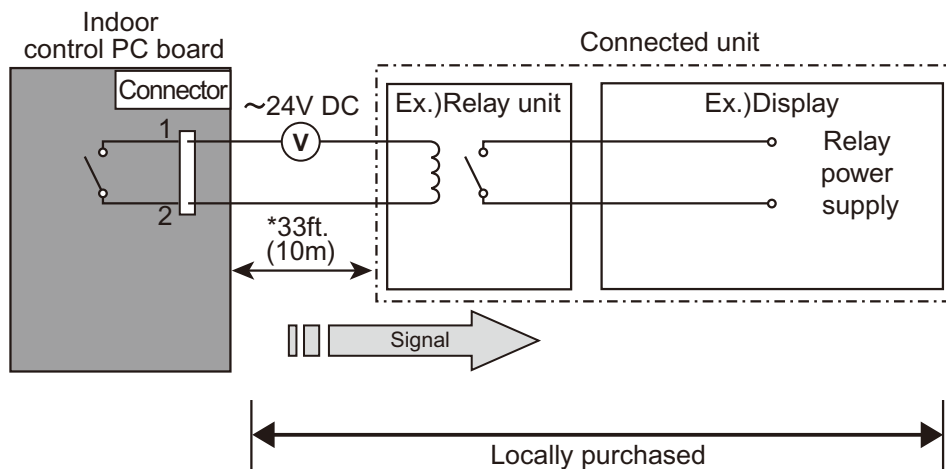


## 8-2. EXTERNAL OUTPUT

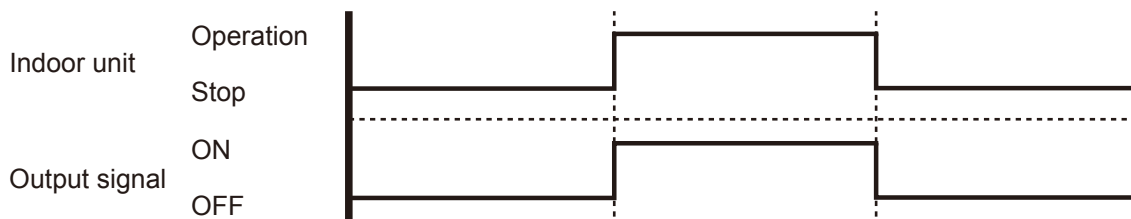
### ■ OPERATION STATUS OUTPUT

An air conditioner operation status signal can be output.

#### ● Circuit diagram example



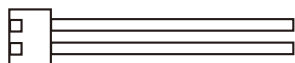
\* Make the distance from the PC board to the connected unit within 33ft. (10m).  
Relay spec. : Max.24VDC, 10mA to less than 500mA.



#### ● Parts (Optional)

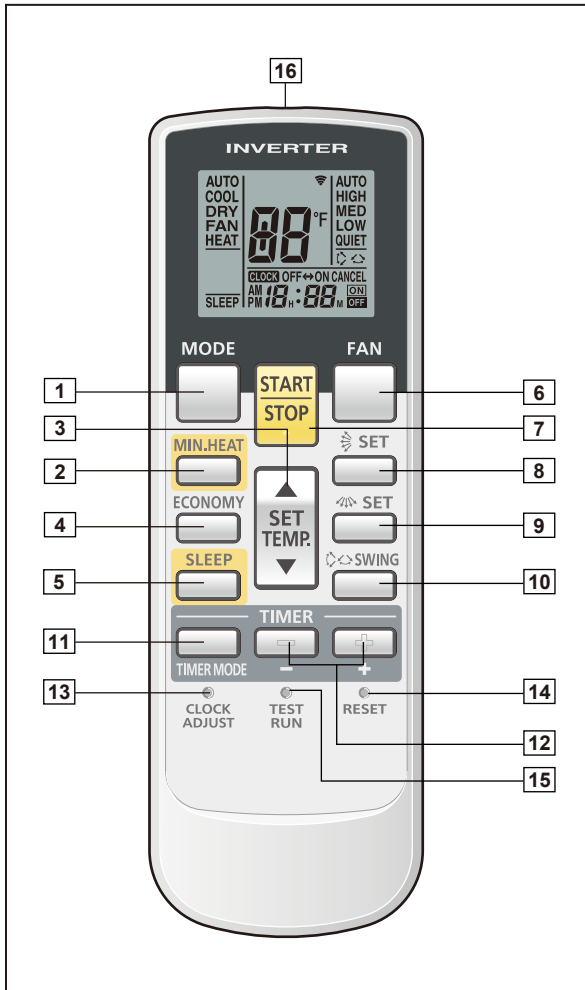
Parts name	Model name
External connect kit	RXXWZX

Wire (External input) : RXXWZX

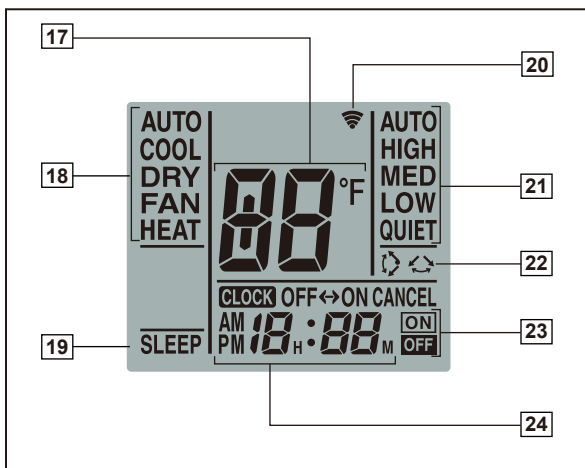


# 9. WIRELESS REMOTE CONTROLLER

## FUNCTIONS



Display panel



- 1 MODE button**  
Selects the operating mode (AUTO, COOL, DRY, FAN, HEAT). /Start / end R.C. custom code change. (Max 4 types)
- 2 MIN.HEAT button**
- 3 SET TEMP. button (▲ / ▼)**  
Set remote controller custom code buttons  
Sets the indoor temp./ Sets R.C. custom code.
- 4 ECONOMY button**
- 5 SLEEP button**  
Pressed to select sleep timer.
- 6 FAN button**  
Selects the fan speed (AUTO, HIGH, MED, LOW, QUIET).
- 7 START/STOP button**  
Pressed to start and stop operation.
- 8 SET button (Vertical)**  
Air flow direction vertical set button.
- 9 SET button (Horizontal)**  
Air flow direction horizontal set button.
- 10 SWING button**  
Air flow direction swing button.
- 11 TIMER MODE button**  
Pressed to select the timer mode. (OFF TIMER, ON TIMER, PROGRAM TIMER, TIMER RESET)
- 12 TIMER SET ( + / - ) button**  
Sets the current time and on-off time.
- 13 CLOCK ADJUST button**  
Sets the current time.
- 14 RESET button**  
Used when replacing batteries.
- 15 TEST RUN button**  
Used when testing the air conditioner after installation.
- 16 Signal transmitter**
- 17 Temperature indicator**
- 18 Mode indicator**
- 19 Sleep indicator**
- 20 Transmit indicator**
- 21 Fan speed indicator**
- 22 Swing indicator**
- 23 Timer mode indicator**
- 24 Clock indicator**

Note: Functions will be different due to type of indoor unit.  
For details, please see operation manual.

## 10. FUNCTION SETTING

### 10-1. INDOOR UNIT (Setting by remote controller)

- The function settings of the control of the indoor unit can be changed by this procedure according to the installation conditions. Incorrect settings can cause the indoor unit malfunction.
- After the power is turned on, perform the "FUNCTION SETTING" according to the installation conditions using the remote controller.
- The settings may be selected between the following two: Function Number or Setting Value.
- Settings will not be changed if invalid numbers or setting values are selected.

#### ■ FUNCTION SETTING METHOD (for Wireless remote controller)

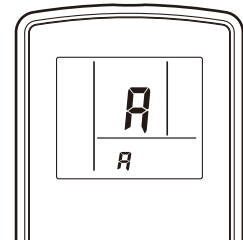
##### Entering the Function Setting Mode

- While pressing the FAN button and SET TEMP. (▲) simultaneously, press the RESET button to enter the function setting mode.

##### STEP 1

##### Setting the Remote controller Custom Code

Use the following steps to select the custom code of the remote controller. (Note that the air conditioner cannot receive a signal code if the air conditioner has not been set for the matching custom code.) The custom codes that are set through this process are applicable only to the signals in the FUNCTION SETTING. For details on how to set the custom codes through the normal process, refer to "REMOTE CONTROLLER CUSTOM CODE".



1. Press the SET TEMP. (▲) (▼) button to change the custom code between  $A \rightarrow b \rightarrow \bar{c} \rightarrow d$ . Match the code on the display to the air conditioner custom code. (initially set to  $A$ )  
(If the custom code does not need to be selected, press the MODE button and proceed to STEP 2.)
2. Press the TIMER MODE button and check that the indoor unit can receive signals at the displayed custom code.
3. Press the MODE button to accept the custom code, and proceed to STEP 2.

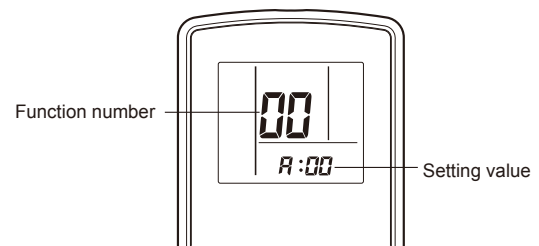
The air conditioner custom code is set to A prior to shipment.

The remote controller resets to custom code A when the batteries in the remote controller are replaced. If you use a custom code other than custom code A, reset the custom code after replacing the batteries. If you do not know the air conditioner custom code setting, try each of the custom codes ( $A \rightarrow b \rightarrow \bar{c} \rightarrow d$ ) until you find the code which operates the air conditioner.

##### STEP 2

##### Selecting the Function Number and Setting Value

1. Press the SET TEMP. (▲) (▼) buttons to select the function number.  
(Press the MODE button to switch between the left and right digits.)
2. Press the FAN button to proceed to setting the value.  
Press the FAN button again to return to the function number selection.)
3. Press the SET TEMP. (▲) (▼) buttons to select the setting value.  
(Press the MODE button to switch between the left and right digits.)
4. Press the TIMER MODE button, and START/STOP button, in the order listed to confirm the settings.
5. Press the RESET button to cancel the function setting mode.
6. After completing the FUNCTION SETTING, be sure to turn off the power and turn it on again.



##### ⚠ CAUTION

After turning off the power, wait 30 seconds or more before turning on it again. The FUNCTION SETTING doesn't become effective if it doesn't do so.

## FUNCTION DETAILS

Functions	
1)	Filter sign
2)	Room temperature control for indoor unit sensor
3)	Auto restart
4)	Room temperature sensor switching
5)	Remote controller custom code
6)	External input control
7)	Room temperature sensor switching (Aux.)
8)	Room temperature control for wired remote controller sensor
9)	Fixed operation mode switching
10)	Heat Insulation condition (building insulation)

### 1) Filter sign

Select appropriate intervals for displaying the filter sign on the indoor unit according to the estimated amount of dust in the air of the room.

If the indication is not required, select "No indication" (03).

(◆... Factory setting)

Function number	Setting value	Setting description
11	00	Standard (400 hours)
	01	Long interval (1000 hours)
	02	Short interval (200 hours)
	03	No indication ◆

### 2) Room temperature control for indoor unit sensor

Refer to Function 95, before performing this setting.

Depending on the installed environment, correction of the room temperature sensor may be required. Select the appropriate control setting according to the installed environment.

The temperature correction values show the difference from the Standard setting "00" (manufacturer's recommended value).

\*When Function 95-01(High insulation) is set, the Standard setting "00" will be the same as No correction "01" [0.0°F (0.0°C)].

(◆... Factory setting)

Function number	Setting value	Setting description	
30 (For cooling)	31 (For heating)	00	Standard setting* ◆
		01	No correction 0.0°F (0.0°C)
		02	-1°F (-0.5°C)
		03	-2°F (-1.0°C)
		04	-3°F (-1.5°C)
		05	-4°F (-2.0°C)
		06	-5°F (-2.5°C)
		07	-6°F (-3.0°C)
		08	-7°F (-3.5°C)
		09	-8°F (-4.0°C)
		10	+1°F (+0.5°C)
		11	+2°F (+1.0°C)
		12	+3°F (+1.5°C)
		13	+4°F (+2.0°C)
		14	+5°F (+2.5°C)
		15	+6°F (+3.0°C)
		16	+7°F (+3.5°C)
17	+8°F (+4.0°C)		

More Cooling  
Less Heating

Less Cooling  
More Heating

### 3) Auto restart

Enable or disable automatic restart after a power interruption.

(◆... Factory setting)

Function number	Setting value	Setting description
40	00	Enable
	01	Disable

\*Auto restart is an emergency function such as for power outage etc.  
Do not attempt to use this function in normal operation.  
Be sure to operate the unit by remote controller or external device.

### 4) Room temperature sensor switching

(Only for Wired remote controller)

When using the Wired remote controller temperature sensor, change the setting to "Both" (01).

(◆... Factory setting)

Function number	Setting value	Setting description
42	00	Indoor unit
	01	Both

00: Sensor on the indoor unit is active.

01: Sensors on both indoor unit and wired remote controller are active.

\*Remote controller sensor must be turned on by using the remote controller.

### 5) Remote controller custom code

(Only for wireless remote controller)

The indoor unit custom code can be changed.

Select the appropriate custom code.

(◆... Factory setting)

Function number	Setting value	Setting description
44	00	A
	01	B
	02	C
	03	D

### 6) External input control

"Operation/Stop" mode or "Forced stop" mode can be selected.

(◆... Factory setting)

Function number	Setting value	Setting description
46	00	Operation/Stop mode
	01	(Setting prohibited)
	02	Forced stop mode

### 7) Room temperature sensor switching (Aux.)

To use the temperature sensor on the wired remote controller only, change the setting to "Wired remote controller" (01). This function will only work if the function setting 42 is set at "Both" (01)

(◆... Factory setting)

Function number	Setting value	Setting description
48	00	Both
	01	Wired remote controller



### 8) Room temperature control for wired remote controller sensor

Refer to Function 95, before performing this setting.

Depending on the installed environment, correction of the wired remote controller temperature sensor may be required. Select the appropriate control setting according to the installed environment.

To change this setting, set Function 42 to Both "01".

Ensure that the Thermo Sensor icon is displayed on the remote controller screen.

(◆... Factory setting)

Function number		Setting value	Setting description	
92 (For cooling)	93 (For heating)	00	No correction 0.0°F(0.0°C)	◆
		01	No correction 0.0°F (0.0°C)	
		02	-1°F (-0.5°C)	More Cooling Less Heating
		03	-2°F (-1.0°C)	
		04	-3°F (-1.5°C)	
		05	-4°F (-2.0°C)	
		06	-5°F (-2.5°C)	
		07	-6°F (-3.0°C)	
		08	-7°F (-3.5°C)	
		09	-8°F (-4.0°C)	Less Cooling More Heating
		10	+1°F (+0.5°C)	
		11	+2°F (+1.0°C)	
		12	+3°F (+1.5°C)	
		13	+4°F (+2.0°C)	
		14	+5°F (+2.5°C)	
		15	+6°F (+3.0°C)	
		16	+7°F (+3.5°C)	
17	+8°F (+4.0°C)			

### 9) Fixed operation mode switching

Sets the operation mode to heat pump, heating only, or cooling only.

(◆... Factory setting)

Function number	Setting value	Setting description	
94	00	Heat pump	◆
	01	Heating only	
	02	Cooling only	

### 10) Heat Insulation condition (building insulation)

Heat insulation conditions differ according to the installed environment.

Standard insulation "00" allows system to rapidly respond to the cooling or heating load changes. High insulation "01" is when the heat insulation structure of the building is high and does not require system to rapidly respond to cooling or heating load changes.

When High insulation "01" is selected;

- Overheating (overcooling) is prevented at the start-up.
- All room temp. control settings (Function 30, 31, 92, 93) will reset to No correction [0.0°F (0.0°C)].

(◆... Factory setting)

Function number	Setting value	Setting description	
95	00	Standard insulation	◆
	01	High insulation	

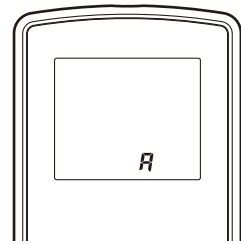
**NOTE:**

When changing Function 95, perform this setting before other Room temp. control settings (Function 30, 31, 92, 93). If Function 95 is not set first, Room temperature control settings (Function 30, 31, 92, 93) will be reset and you must re-do them again.

## ■ REMOTE CONTROLLER CUSTOM CODE SETTING

Use the following steps to select the custom code of the remote controller. (Note that the air conditioner cannot receive a signal if the air conditioner has not been set for the matching custom code.)

1. Press the START/STOP button until only the clock is displayed on the remote controller display.
2. Press the MODE button for at least five seconds to display the current custom code (initially set to **A**).
3. Press the SET TEMP. (**▲**) (**▼**) button to change the custom code between **A** → **b** → **c** → **d**.  
Match the code on the display to the air conditioner custom code.
4. Press the MODE button again to return to the clock display. The custom code will be changed.

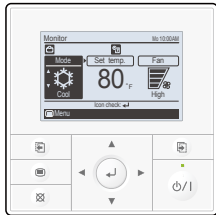
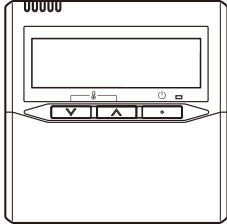

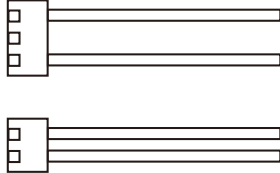


If no buttons are pressed within 30 seconds after the custom code is displayed, the system returns to the original clock display. In this case, start again from step 1.

The air conditioner custom code is set to A prior to shipment.  
Contact your retailer to change the custom code.

The remote controller resets to custom code A when the batteries in the remote controller are replaced. If you use a custom code other than custom code A, reset the custom code after replacing the batteries. If you do not know the air conditioner custom code setting, try each of the custom codes (**A** → **b** → **c** → **d**) until you find the code which operates the air conditioner.

# 11. OPTIONAL PARTS

Exterior	Parts name	Model No.	Summary
	Wired remote controller	UXRVNUM	Large and full-dot liquid crystal screen, wide and large keys easy to press, user-intuitive arrow key.
	Wired remote controller	UXRNNUM	Unit control is performed by wired remote controller.
	Simple remote controller	UXRSNUM	Compact remote controller concentrates on the basic functions such as Start/Stop, Fan Control, Temperature Setting and Operation mode.
	External connect kit	RXXWZX	Use to connect with various peripheral devices and air conditioner PC board.

## **2. OUTDOOR UNIT**

---

**SINGLE TYPE :**

**ROSH18ASJ**

**ROSH24ASJ**

**ROSH30AXJ**

**ROSH36AXJ**

# CONTENTS

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## 2. OUTDOOR UNIT

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# 1. SPECIFICATION

OUTDOOR UNIT  
ROSH18-36A

OUTDOOR UNIT  
ROSH18-36A

Type			INVERTER HEAT PUMP						
Model name			ROSH18ASJ	ROSH24ASJ	ROSH30AXJ	ROSH36AXJ			
Power source			208 / 230V ~ 60Hz						
Available voltage range			187 - 253V						
Starting current			A	6.4	10.5	13.8	17.0		
Fan	Airflow rate	Cooling	CFM (m <sup>3</sup> /h)	1,206 (2,050)	1,457 (2,475)	2,119 (3,600)			
		Heating		1,083 (1,840)	1,407 (2,355)	2,119 (3,600)			
	Type × Q'ty		Propeller fan × 1						
	Motor output		W	49		100			
Sound pressure level		Cooling	dB (A)	51	54	52			
		Heating		50	55				
Heat exchanger type		Dimensions (H × W × D)	in.	23-2/16 × 34-11/16 × 1-7/16		31-7/16 × 35-7/16 × 1-7/16			
			mm	588 × 881 × 36.4		798 × 900 × 36.4			
		Fin pitch	FPI	20					
		Rows × Stages	2 × 28		2 × 38				
		Pipe type	Copper						
Compressor		Type × Q'ty	Rotary × 1						
		Motor output	W	1,000	2,100				
Refrigerant		Type	R410A						
		Charge	lbs.oz.	3lbs.1oz.		4lbs.10.1oz.			
			kg	1.40		2.10			
Refrigerant oil		Type	FREOL α68SZ		POE (RB68)				
Enclosure		Material	Steel						
		Color	Beige Approximate color of MUNSELL 10YR7.5/1.0						
Dimensions (H × W × D)		Net	in.	24 - 7/16 × 31 - 2/16 × 11 - 7/16		32-11/16 × 35-7/16 × 13			
			mm	620 × 790 × 290		830 × 900 × 330			
		Gross	in.	28 - 1/16 × 37-3/16 × 15 - 9/16		39-6/16 × 41-5/16 × 17-8/16			
			mm	713 × 945 × 395		1000 × 1050 × 445			
Weight		Net	lbs.(kg)	86 (39)		134 (61)			
				Gross	93 (42)		152 (69)		
Connention pipe		Size	Liquid	in. (mm)	Ø 1/4 (Ø 6.35)		Ø 3/8 (Ø 9.52)		
					Gas	Ø 1/2 (Ø 12.70)		Ø 5/8 (Ø 15.88)	
		Method				Flare			
		Pre - charge length			ft. (m)	49 (15)		65 (20)	
		Max. length				65 (20)		164 (50)	
		Max. height difference				49 (15)		98 (30)	
Operation range		Cooling	°F (°C)	14 to 115 (-10 to 46)					
		Heating		5 to 75 (-15 to 24)					

Note :

Specifications are based on the following conditions.

Cooling : Indoor temperature of 80°F (26.67°C) DB / 67°F (19.44°C) WB, and outdoor temperature of 95°F (35°C) DB / 75°F (23.9°C) WB.

Heating : Indoor temperature of 70°F (21.11°C) DB / 59°F (15°C) WB, and outdoor temperature of 47°F (8.33°C) DB / 43°F (6.11°C) WB.

Pipe length : 24ft.7in (7.5m), Height difference:0 m. (Outdoor unit - Indoor unit)

The protective function might work when using it outside the operation range.

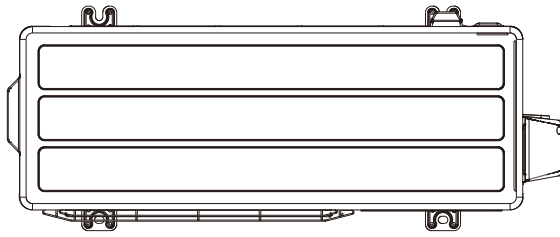
## 2. DIMENSIONS

### MODEL: ROSH18ASJ, ROSH24ASJ

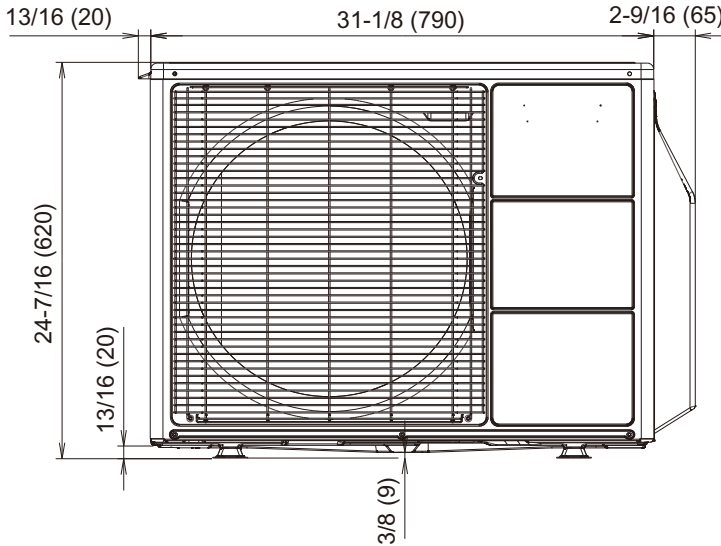
Unit : in. (mm)

OUTDOOR UNIT  
ROSH18-36A

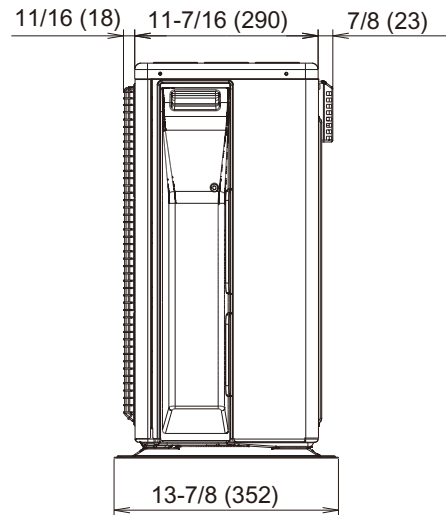
OUTDOOR UNIT  
ROSH18-36A



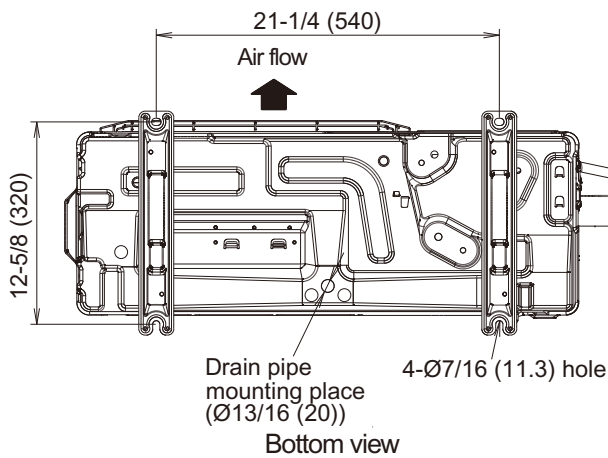
Top view



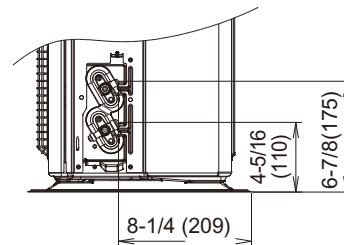
Front view



Side view

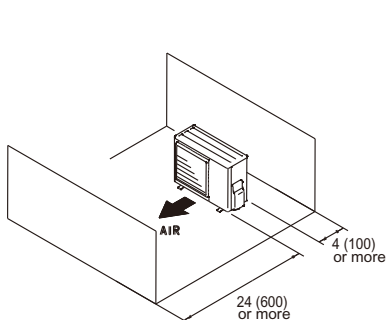


Bottom view

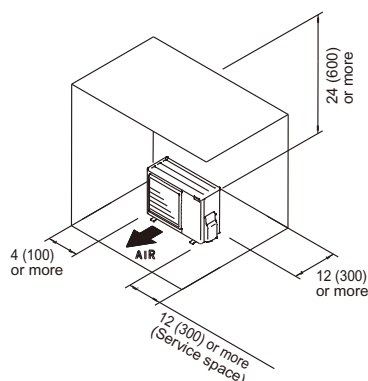


### INSTALLATION PLACE

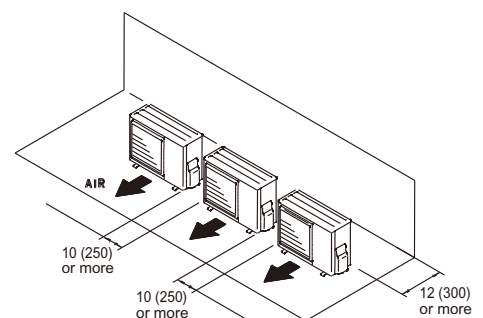
When there are obstacles at the back or front sides.



When there are obstacles at the back, side(s), and top.



When there are obstacles at the back, side with the installation of more than one unit.

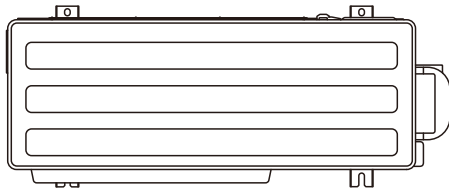


# MODEL: ROSH30AXJ, ROSH36AXJ

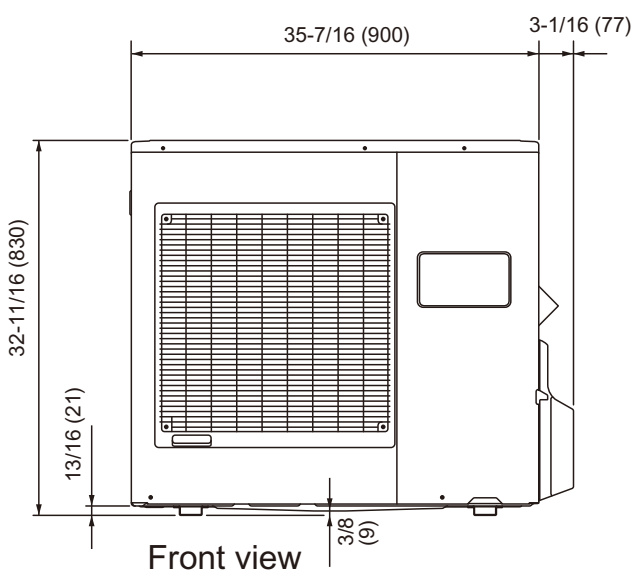
Unit : in. (mm)

OUTDOOR UNIT  
ROSH18-36A

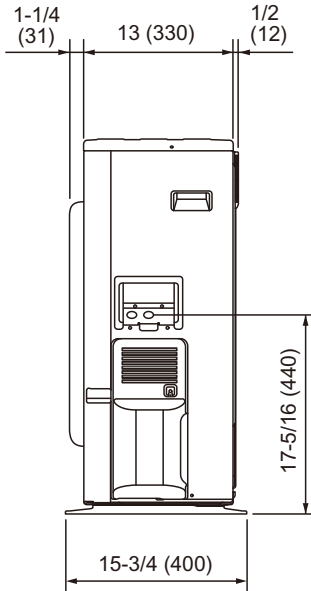
OUTDOOR UNIT  
ROSH18-36A



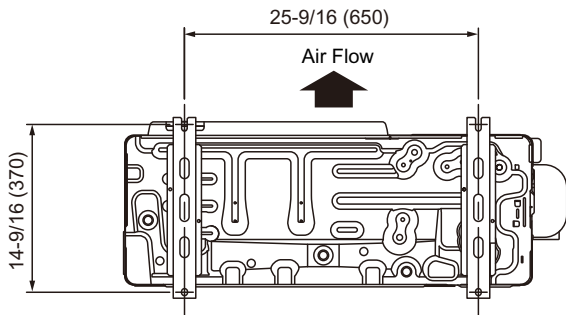
Top view



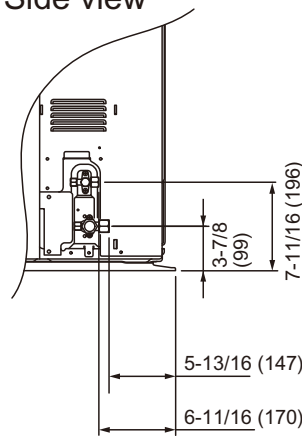
Front view



Side view

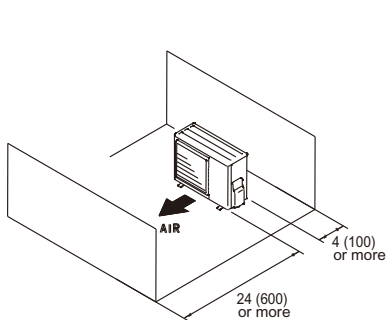


Bottom view

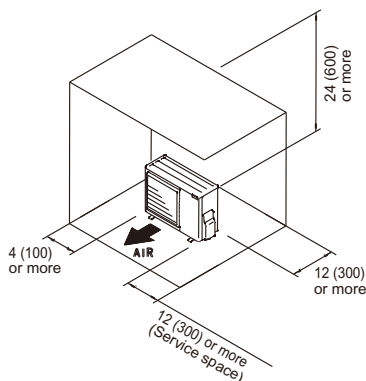


## INSTALLATION PLACE

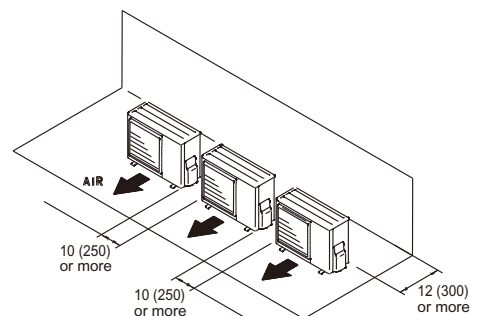
When there are obstacles at the back or front sides.



When there are obstacles at the back, side(s), and top.



When there are obstacles at the back, side with the installation of more than one unit.



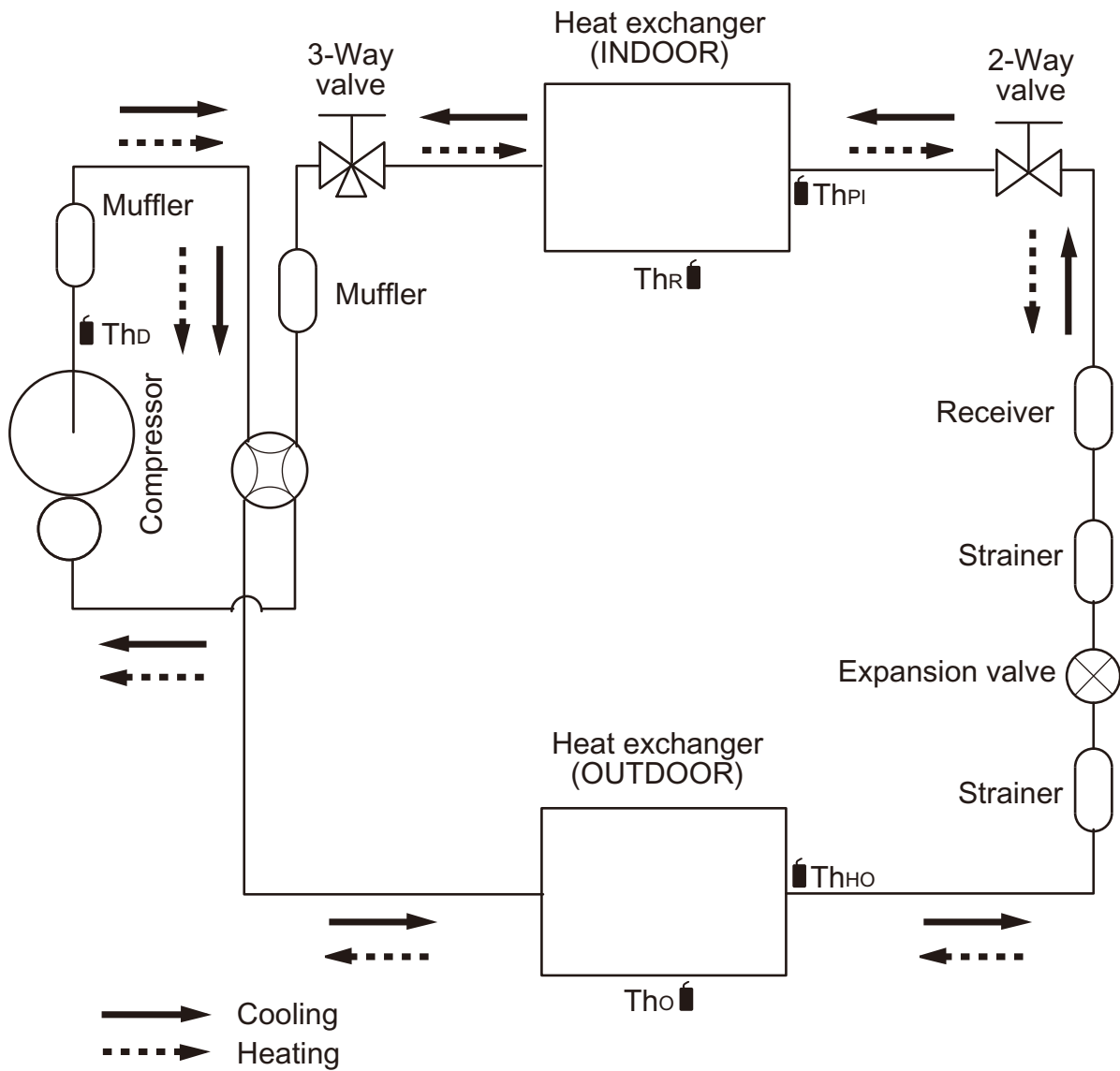


### 3. REFRIGERANT CIRCUIT

■ MODEL: ROSH18ASJ, ROSH24ASJ

OUTDOOR UNIT  
ROSH18-36A

OUTDOOR UNIT  
ROSH18-36A



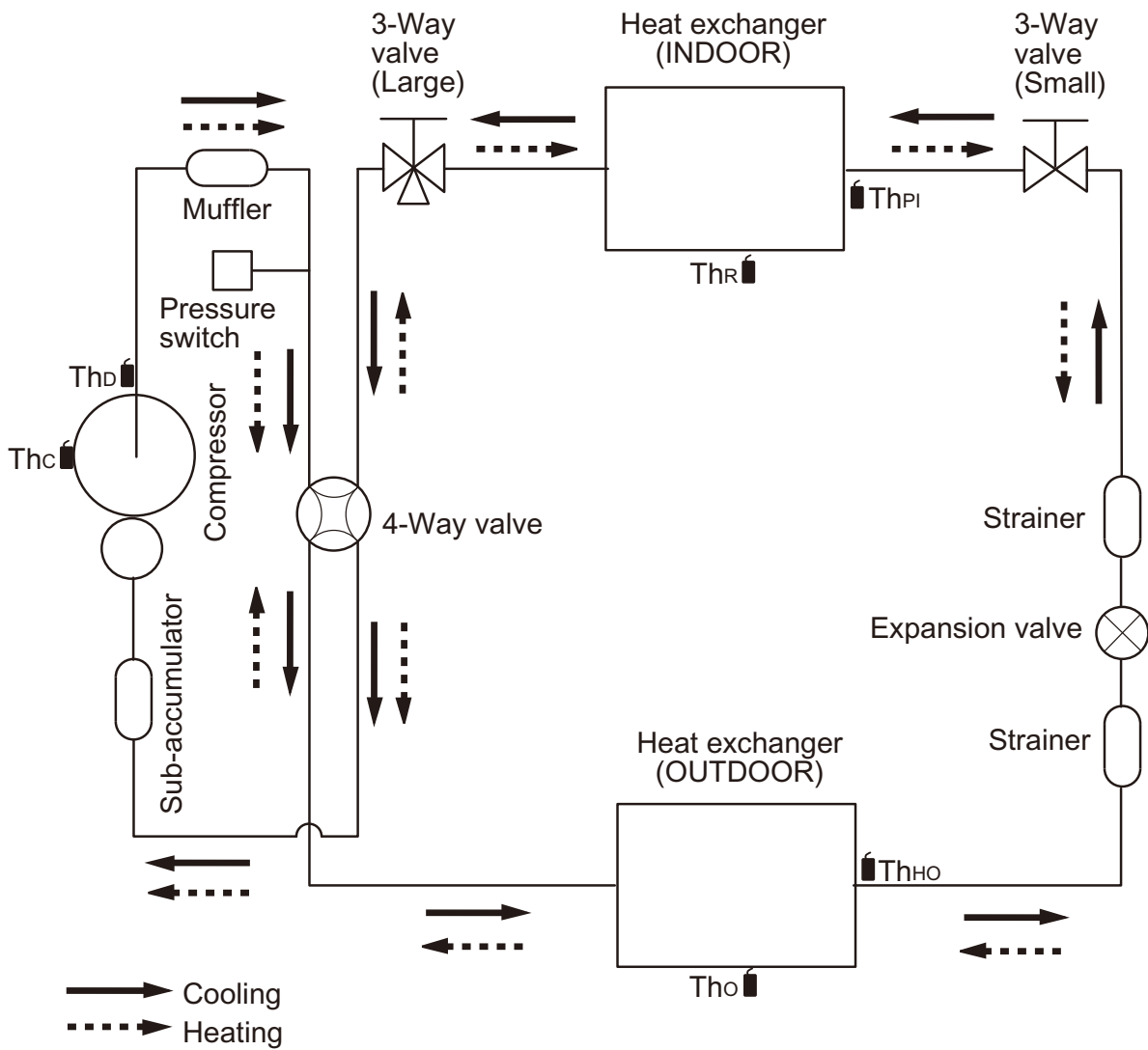
- $Th_D$  Thermistor (Discharge Temp.)
- $Th_O$  Thermistor (Outdoor Temp.)
- $Th_{HO}$  Thermistor (Heat Exchanger Out Temp.)
- $Th_R$  Thermistor (Room Temp.)
- $Th_{PI}$  Thermistor (Pipe Temp.)

Refrigerant pipe diameter  
 Liquid: 1/4" (6.35 mm)  
 Gas: 1/2" (12.70 mm)

■ MODEL: ROSH30AXJ, ROSH36AXJ

OUTDOOR UNIT  
ROSH18-36A

OUTDOOR UNIT  
ROSH18-36A



- Thc Thermistor (Compressor Temp.)
- Thd Thermistor (Discharge Temp.)
- Tho Thermistor (Outdoor Temp.)
- ThHo Thermistor (Heat Exchanger Out Temp.)
- ThR Thermistor (Room Temp.)
- ThPi Thermistor (Pipe Temp.)

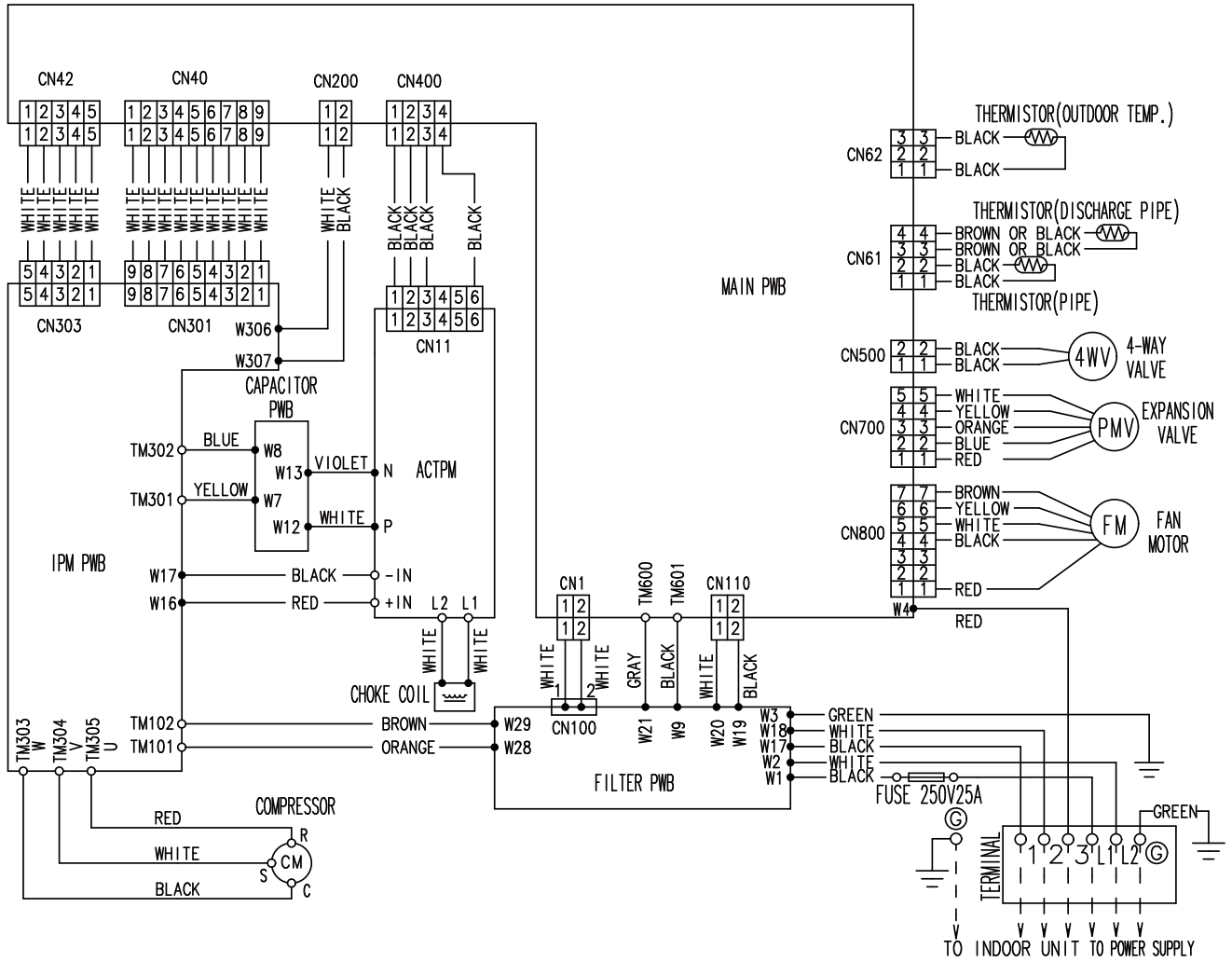
Refrigerant pipe diameter  
 Liquid: 3/8" (9.52 mm)  
 Gas: 5/8" (15.88 mm)

# 4. WIRING DIAGRAMS

## MODEL: ROSH18ASJ, ROSH24ASJ

OUTDOOR UNIT  
ROSH18-36A

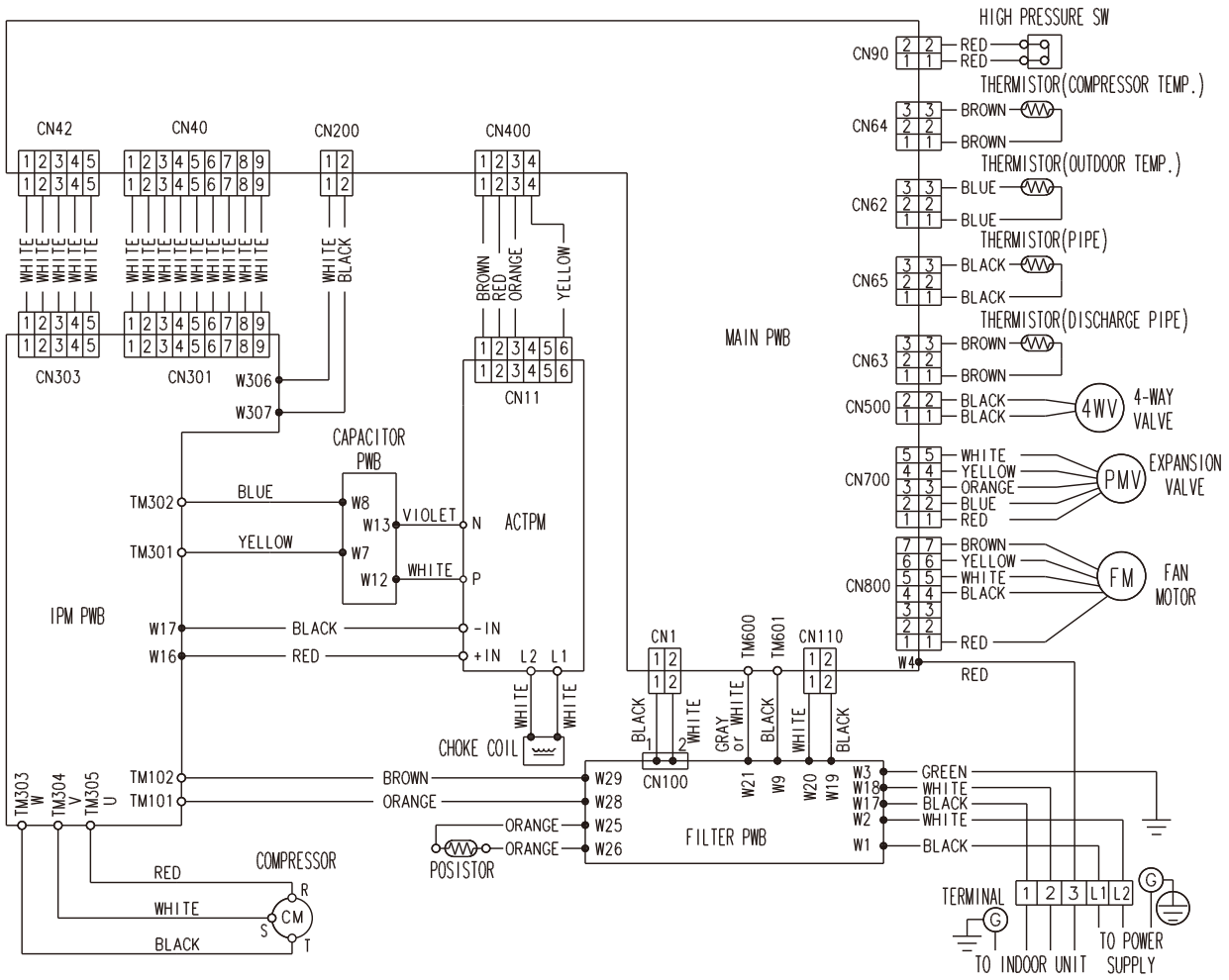
OUTDOOR UNIT  
ROSH18-36A



# MODEL: ROSH30AXJ, ROSH36AXJ

OUTDOOR UNIT  
ROSH18-36A

OUTDOOR UNIT  
ROSH18-36A



# 5. CAPACITY COMPENSATION RATE FOR PIPE LENGTH AND HEIGHT DIFFERENCE

## MODEL: ROSH18ASJ, ROSH24ASJ

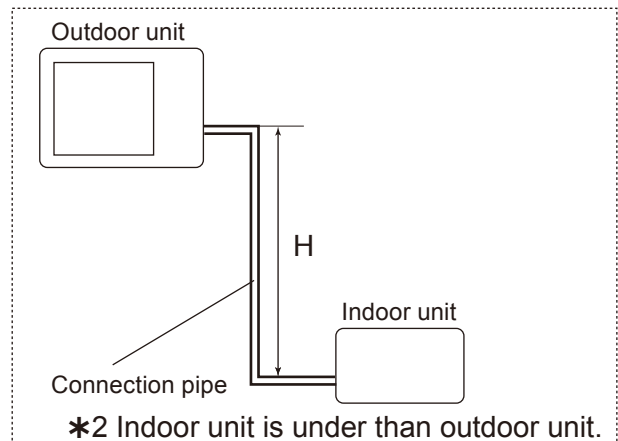
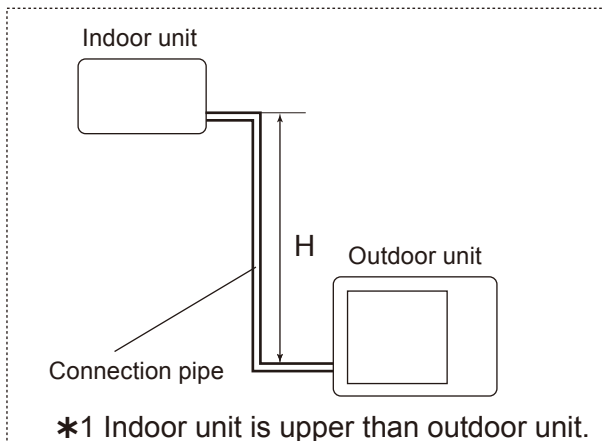
OUTDOOR UNIT  
ROSH18-36A

OUTDOOR UNIT  
ROSH18-36A

COOLING				Pipe length (m)				
				5m	7.5m	10m	15m	20m
				17ft.	25ft.	33ft.	50ft.	67ft.
Height difference H	*1 Indoor unit is upper than outdoor unit.	15m	50ft.	-	-	-	0.951	0.950
		10m	33ft.	-	-	0.979	0.967	0.966
		7.5m	25ft.	-	0.988	0.983	0.971	0.970
		5m	17ft.	0.994	0.992	0.987	0.975	0.974
		0m	0ft.	1.002	1.000	0.995	0.983	0.982
	*2 Indoor unit is under than outdoor unit	-5m	-17ft.	1.002	1.000	0.995	0.983	0.982
		-7.5m	-25ft.	-	1.000	0.995	0.983	0.982
		-10m	-33ft.	-	-	0.995	0.983	0.982
		-15m	-50ft.	-	-	-	0.983	0.982

HEATING				Pipe length (m)				
				5m	7.5m	10m	15m	20m
				17ft.	25ft.	33ft.	50ft.	67ft.
Height difference H	*1 Indoor unit is upper than outdoor unit.	15m	50ft.	-	-	-	0.994	0.979
		10m	33ft.	-	-	1.012	0.994	0.979
		7.5m	25ft.	-	1.000	1.012	0.994	0.979
		5m	17ft.	0.969	1.000	1.012	0.994	0.979
		0m	0ft.	0.969	1.000	1.012	0.994	0.979
	*2 Indoor unit is under than outdoor unit	-5m	-17ft.	0.964	0.995	1.007	0.989	0.974
		-7.5m	-25ft.	-	0.993	1.004	0.986	0.972
		-10m	-33ft.	-	-	1.002	0.984	0.969
		-15m	-50ft.	-	-	-	0.974	0.959

Height difference H



# MODEL: ROSH30AXJ, ROSH36AXJ

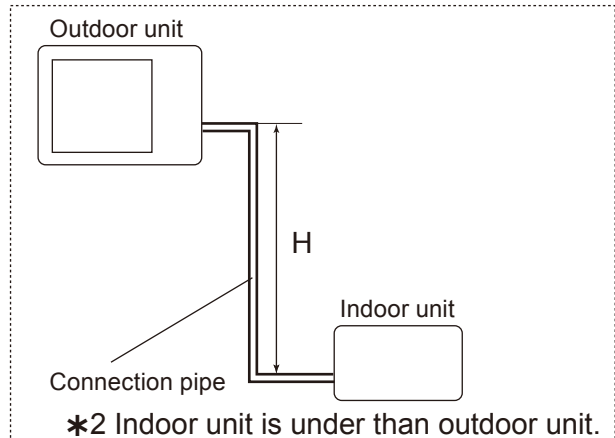
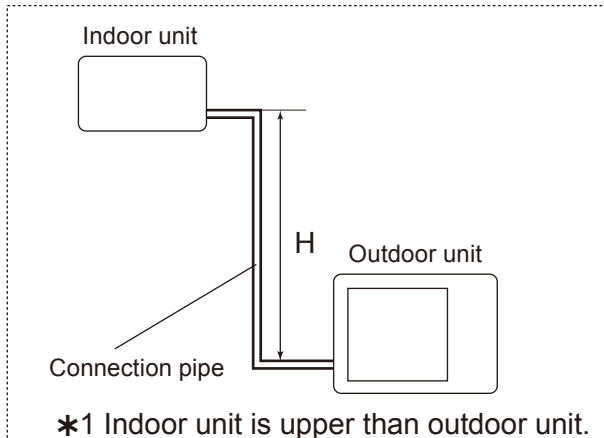
OUTDOOR UNIT  
ROSH18-36A

OUTDOOR UNIT  
ROSH18-36A

COOLING				Pipe length							
				5m	7.5m	10m	20m	30m	40m	50m	
				16ft.	25ft.	33ft.	66ft.	99ft.	131ft.	164ft.	
Height difference H	*1 Indoor unit is upper than outdoor unit.	30m	99ft.	-	-	-	-	0.932	0.929	0.924	
		20m	66ft.	-	-	-	0.945	0.947	0.945	0.940	
		10m	33ft.	-	-	0.984	0.961	0.963	0.960	0.956	
		7.5m	25ft.	-	0.988	0.988	0.965	0.967	0.964	0.959	
		5m	16ft.	0.990	0.992	0.992	0.968	0.971	0.968	0.963	
	*2 Indoor unit is under than outdoor unit	0m	0ft.	0.998	1.000	1.000	0.976	0.979	0.976	0.971	
		-5m	-16ft.	0.998	1.000	1.000	0.976	0.979	0.976	0.971	
		-7.5m	-25ft.	-	1.000	1.000	0.976	0.979	0.976	0.971	
		-10m	-33ft.	-	-	1.000	0.976	0.979	0.976	0.971	
		-20m	-66ft.	-	-	-	0.976	0.979	0.976	0.971	
-30m	-99ft.	-	-	-	-	0.979	0.976	0.971			

HEATING				Pipe length							
				5m	7.5m	10m	20m	30m	40m	50m	
				16ft.	25ft.	33ft.	66ft.	99ft.	131ft.	164ft.	
Height difference H	*1 Indoor unit is upper than outdoor unit.	30m	99ft.	-	-	-	-	0.816	0.756	0.686	
		20m	66ft.	-	-	-	0.872	0.816	0.756	0.686	
		10m	33ft.	-	-	0.991	0.872	0.816	0.756	0.686	
		7.5m	25ft.	-	1.000	0.991	0.872	0.816	0.756	0.686	
		5m	16ft.	0.986	1.000	0.991	0.872	0.816	0.756	0.686	
	*2 Indoor unit is under than outdoor unit	0m	0ft.	0.986	1.000	0.991	0.872	0.816	0.756	0.686	
		-5m	-16ft.	0.981	0.995	0.986	0.868	0.812	0.752	0.683	
		-7.5m	-25ft.	-	0.993	0.983	0.866	0.810	0.750	0.681	
		-10m	-33ft.	-	-	0.981	0.864	0.808	0.748	0.679	
		-20m	-66ft.	-	-	-	0.855	0.799	0.740	0.672	
-30m	-99ft.	-	-	-	-	0.791	0.733	0.665			

Height difference H



## 6. ADDITIONAL CHARGE CALCULATION

### ■ MODEL: ROSH18ASJ, ROSH24ASJ

Refrigerant type		R410A
Refrigerant amount	lbs. oz.	3lbs. 1oz.
	g	1400

#### ● REFRIGERANT CHARGE

Total pipe length	ft.	49 or less	66 (MAX)	0.22oz./ft. (20g/m)
	m	15 or less	20 (MAX)	
Additional charge	oz.	0	3.5	
	g	0	100	

### ■ MODEL: ROSH30AXJ, ROSH36AXJ

Refrigerant type		R410A
Refrigerant amount	lbs. oz.	4lbs. 10.1oz.
	g	2100

#### ● REFRIGERANT CHARGE

Total pipe length	ft.	66 or less	98	131	164	0.43oz./ft. (40g/m)
	m	20 or less	30	40	50 (MAX)	
Additional charge	oz.	0	14.1	28.2	42.3	
	g	0	400	800	1200	

## 7. AIR FLOW

### ■ MODEL: ROSH18ASJ

#### ● Cooling

Air flow	
2050	m <sup>3</sup> /h
569	l/s
1206	CFM

#### ● Heating

Air flow	
1840	m <sup>3</sup> /h
511	l/s
1083	CFM

### ■ MODEL: ROSH24ASJ

#### ● Cooling

Air flow	
2475	m <sup>3</sup> /h
688	l/s
1457	CFM

#### ● Heating

Air flow	
2355	m <sup>3</sup> /h
654	l/s
1407	CFM



■ **MODEL: ROSH30AXJ**

● **Cooling**

Air flow	
3600	m <sup>3</sup> /h
1000	l/s
2119	CFM

● **Heating**

Air flow	
3600	m <sup>3</sup> /h
1000	l/s
2119	CFM

■ **MODEL: ROSH36AXJ**

● **Cooling**

Air flow	
3600	m <sup>3</sup> /h
1000	l/s
2119	CFM

● **Heating**

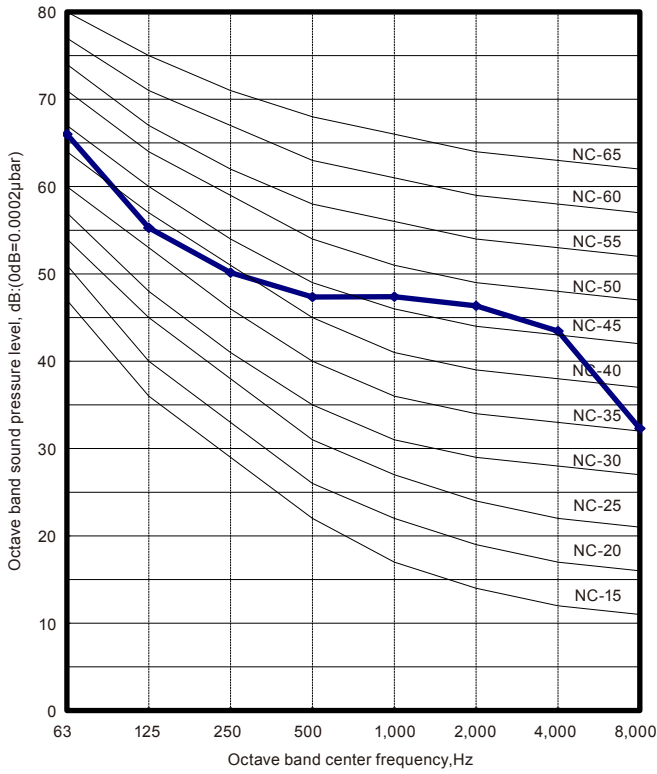
Air flow	
3600	m <sup>3</sup> /h
1000	l/s
2119	CFM

# 8. OPERATION NOISE

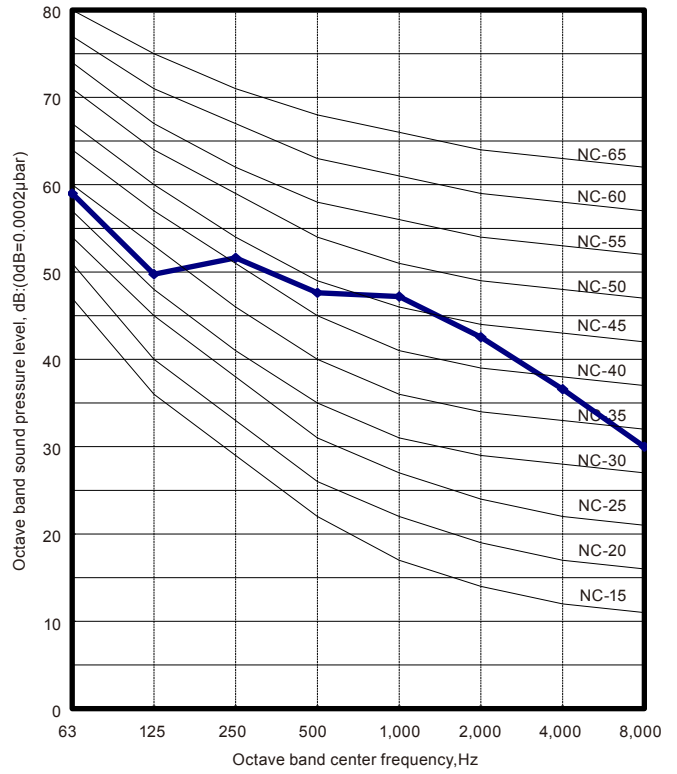
## 8-1. NOISE LEVEL CURVE

### MODEL: ROSH18ASJ

#### ● Cooling

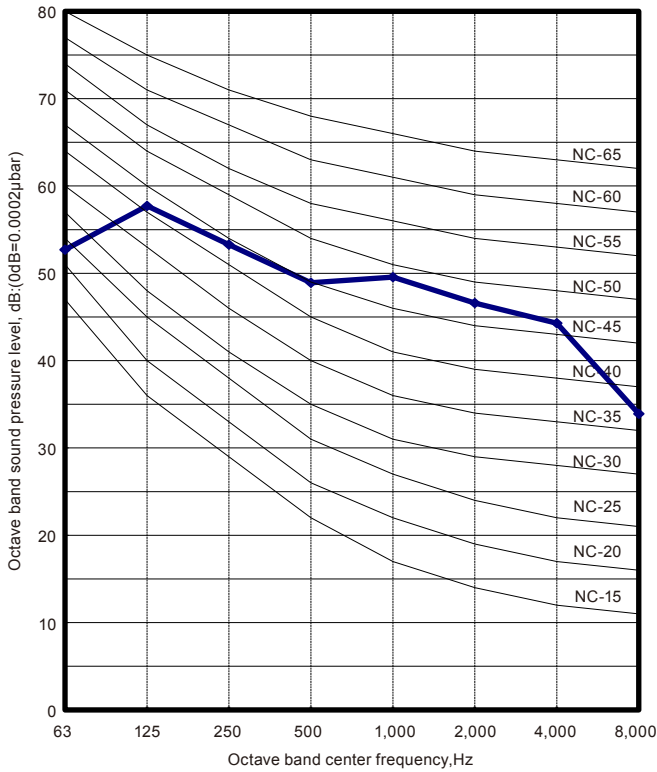


#### ● Heating

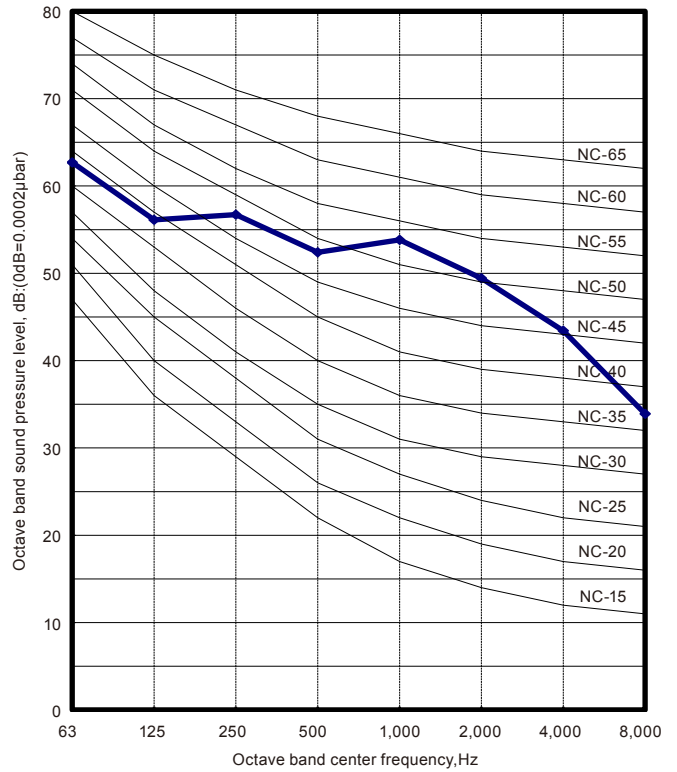


### MODEL: ROSH24ASJ

#### ● Cooling

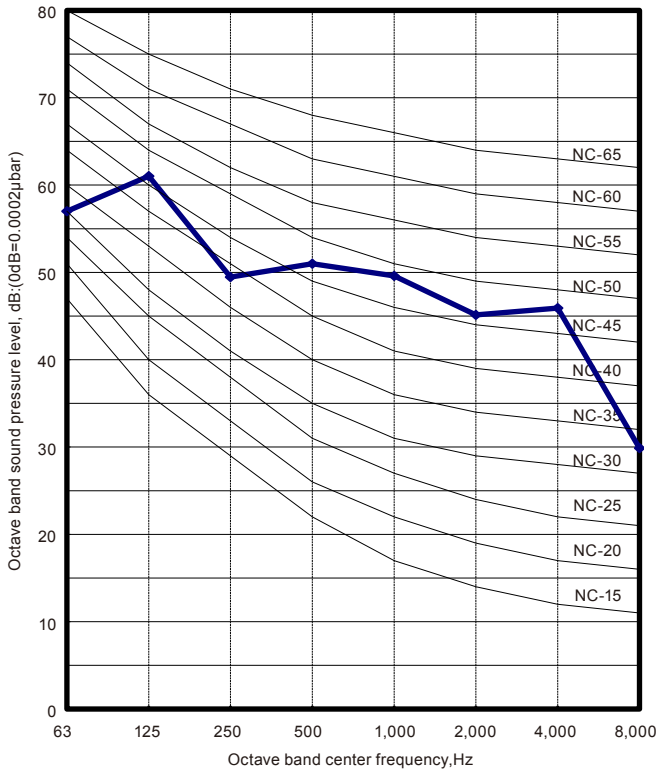


#### ● Heating

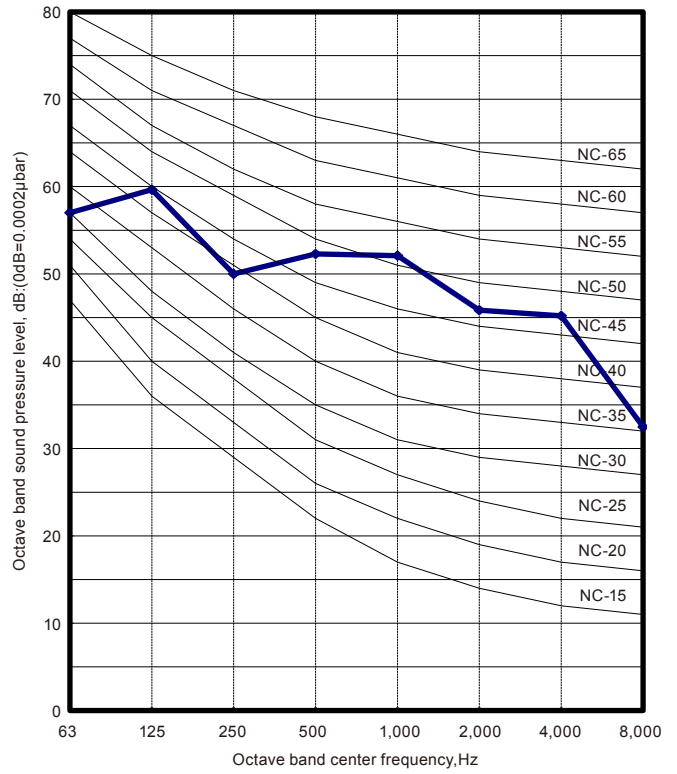


## MODEL: ROSH30AXJ

### Cooling

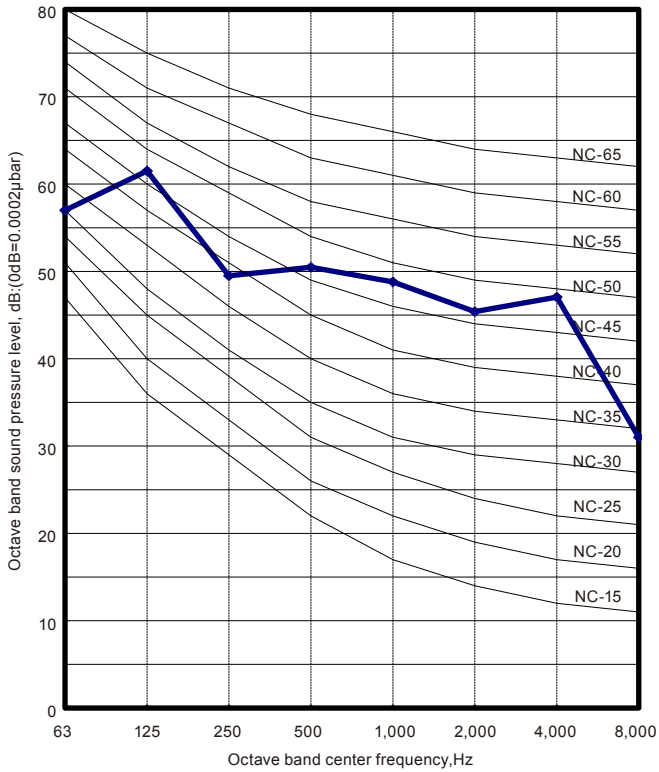


### Heating

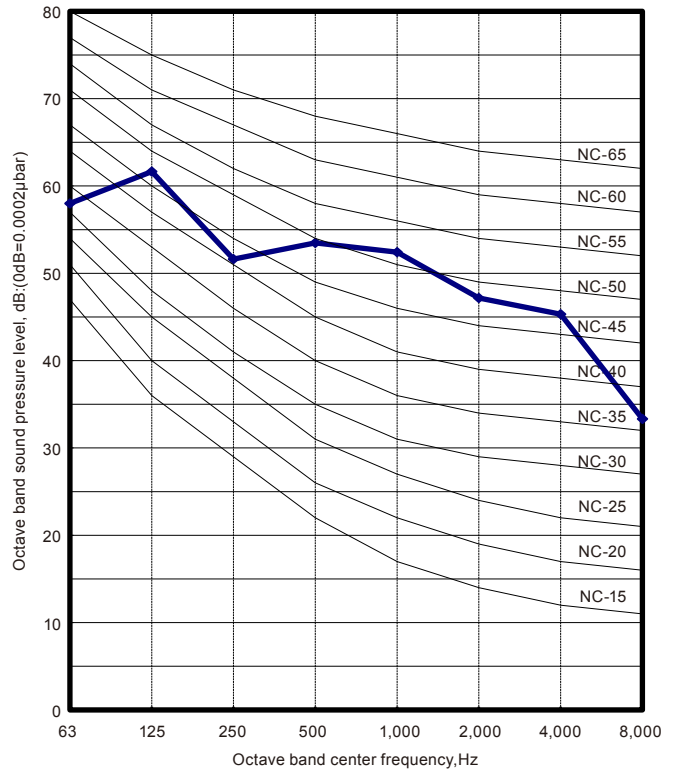


## MODEL: ROSH36AXJ

### Cooling

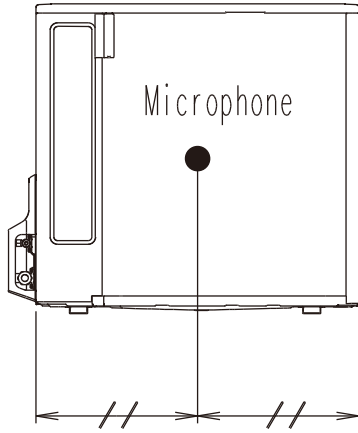
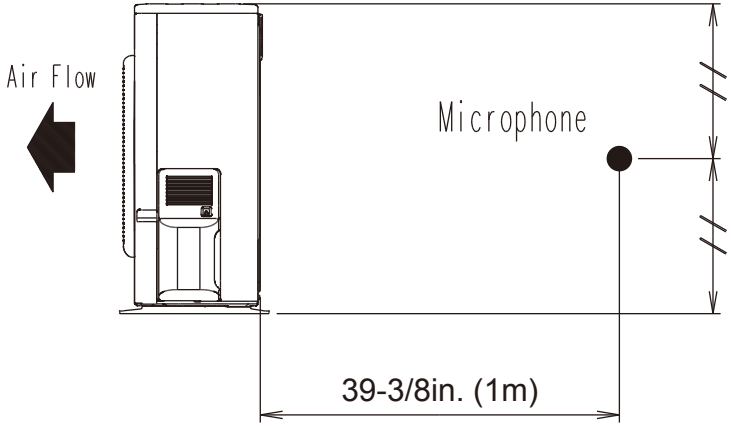


### Heating



# 8-2. SOUND LEVEL CHECK POINT

OUTDOOR UNIT  
ROSH18-36A



OUTDOOR UNIT  
ROSH18-36A

## 9. ELECTRIC CHARACTERISTICS

Model name			ROSH18ASJ	ROSH24ASJ	ROSH30AXJ	ROSH36AXJ
Power supply	Voltage	V	208 / 230 ~			
	Frequency	Hz	60			
MCA		A	14.6	17.1	23.3	
Starting current		A	6.4	10.5	13.8	17.0
Wiring spec. *1	MAX. CKT. BKR	A	15	20	30	
	Power cable	AWG	14	12	10	
	Connection cable *2	AWG	14			
	Limited wiring length : ft. (m)		68 (21)		167 (51)	

\*1 : Selected sample based on Japan Electrotechnical Standards and Codes Committee E0005.

\*2 : Limit voltage drop to less than 2%. Increase conductor size if voltage drop is 2% or more.

MCA : Min Circuit Amp (Calculation based on UL1995)

MAX. CKT. BKR : Maximum Circuit Breaker

# 10. SAFETY DEVICES

OUTDOOR UNIT  
ROSH18-36A

OUTDOOR UNIT  
ROSH18-36A

	Protection form	Model			
		ROSH18ASJ	ROSH24ASJ	ROSH30AXJ	ROSH36AXJ
Circuit protection	Current fuse (NEAR THE TERMINAL)	5A 250V			
	Current fuse (MAIN PRINTED CIRCUIT BOARD)	3.15A 250V x 2			
Fan motor protection	Thermal protection program	OFF : 212±27°F (100±15°C) ON : 203±18°F (95±10°C)		OFF : 302±27°F (150±15°C) ON : 248±27°F (120±15°C)	
High Pressure Protection	Pressure Switch	OFF : 4.2±0.1MPa ON : 3.2±0.15MPa			
Compressor protection	Thermal protection program (COMPRESSOR TEMP.)	-		OFF : 226°F (108°C) ON : 176°F (80°C)	
	Thermal protection program (DISCHARGE TEMP.)	OFF : 230 °F (110 °C) ON : After 7 minutes			
	Thermal protection program (OUTDOOR TEMP.) (Cooling/Dry mode)	OFF : 5°F (-15°C) ON : 14°F (-10°C)		OFF : -13°F (-25°C) ON : -4°F (-20°C)	