

Digital Inverter 3 series

Engineering  
Data Book

## Outdoor Unit

RAV-SM563AT-E

RAV-SM803AT-E

RAV-SM1103AT-E1

RAV-SM1403AT-E1

RAV-SM1603AT-E

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## Appendix

Ceiling(7series) Type

# 1. Line up




1-1. Single Line-up

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# 1-1. Single Line-up

## Outdoor unit line-up

Model name	RAV-SM563AT-E	RAV-SM803AT-E	RAV-SM1103AT-E1	RAV-SM1403AT-E1	RAV-SM1603AT-E
Appearance					

## Indoor unit line-up

Capacity type (HP equivalent)			56	80	110	140	160
			2.0	3.0	4.0	5.0	6.0
4-way Cassette	RAV-SM**4UT-E		✓	✓	✓	✓	✓
	RAV-SM**4UTP-E		✓	✓	✓	✓	✓
Compact 4-way Cassette (600*600)	RAV-SM**4MUT-E		✓				
Ducted	RAV-SM**6BT-E		✓	✓	✓	✓	✓
Slim Duct	RAV-SM**4SDT-E		✓				
Under Ceiling	RAV-SM**4CT-E		✓	✓	✓	✓	
High Wall	RAV-SM**6KRT-E		✓	✓			

## 1-2. Twin Line-up

### Outdoor unit line-up (Twin system)


Model name	RAV-SM1103AT-E1	RAV-SM1403AT-E1	RAV-SM1603AT-E
Appearance			

### Indoor unit line-up

Capacity type			56	80	
(HP equivalent)			2.0	3.0	
Indoor unit		unit			Outdoor unit
4-way Cassette	RAV-SM564UT-E	2	✓		RAV-SM1103AT-E1
4-way Cassette	RAV-SM564UTP-E	2	✓		
Compact 4-way Cassette (600*600)	RAV-SM564MUT-E	2	✓		
Ducted	RAV-SM566BT-E	2	✓		
Slim Duct	RAV-SM564SDT-E	2	✓		
Under Ceiling	RAV-SM564CT-E	2	✓		
High Wall	RAV-SM566KRT-E	2	✓		
4-way Cassette	RAV-SM804UT-E	2		✓	RAV-SM1403AT-E1 RAV-SM1603AT-E
Ducted	RAV-SM806BT-E	2		✓	
Under Ceiling	RAV-SM804CT-E	2		✓	
High Wall	RAV-SM806KRT-E	2		✓	

## 1-3. Triple Line-up

### Outdoor unit line-up (Triple system)

Model name	RAV-SM1603AT-E
Appearance	

### Indoor unit line-up

Capacity type			56	
(HP equivalent)			2.0	
Indoor unit		unit		Outdoor unit
4-way Cassette	RAV-SM564UT-E	3	✓	RAV-SM1603AT-E
	RAV-SM564UTP-E	3	✓	
Compact 4-way Cassette (600*600)	RAV-SM564MUT-E	3	✓	
Ducted	RAV-SM566BT-E	3	✓	
Slim Duct	RAV-SM564SDT-E	3	✓	
Under Ceiling	RAV-SM564CT-E	3	✓	
High Wall	RAV-SM566KRT-E	3	✓	

## 2. Indoor Unit

### 2-1. 4-way Cassette Type

2-1-1. Specifications

2-1-2. Dimension

2-1-3. Wiring diagrams

2-1-4. Sensible capacity table

2-1-5. Part load performance

2-1-6. Air throw distance chart

2-1-7. Sound characteristics (NC curve)

## 2-1-1. Specifications

&lt;Single type&gt;

Model	Indoor unit		RAV-SM	564UT-E	804UT-E	1104UT-E	1404UT-E	1604UT-E
	Outdoor unit		RAV-SM	563AT-E	803AT-E	1103AT-E1	1403AT-E1	1603AT-E
Cooling capacity			(kW)	5.3 (1.5 – 5.6)	6.7 (1.5 – 8.0)	10.0 (3.0 – 11.2)	12.5 (3.0 – 13.2)	14.0 (3.0 – 16.0)
Heating capacity			(kW)	5.6 (1.5 – 6.3)	8.0 (1.5 – 9.0)	11.2 (3.0 – 13.0)	14.0 (3.0 – 16.0)	16.0 (3.0 – 18.0)
Power supply			1 phase 230V (220 – 240V) 50Hz					
Electrical characteristics	Cooling	Running current (A)	7.89 – 7.24	10.11 – 9.26	14.42 – 13.22	17.53 – 16.07	21.48 – 19.69	
		Power consumption (kW)	1.65	2.09	3.11	3.74	4.49	
		Power factor (%)	95	94	98	97	95	
		EER	3.21	3.21	3.22	3.21	3.12	
		Energy efficiency class *	A	A	A	A	B	
	Heating	Running current (A)	6.89 – 6.32	10.65 – 9.76	13.59 – 12.46	17.81 – 16.32	21.20 – 19.43	
		Power consumption (kW)	1.44	2.21	2.93	3.80	4.43	
		Power factor (%)	95	94	98	98	95	
		COP	3.89	3.62	3.82	3.68	3.61	
		Energy efficiency class *	A	A	A	A	A	
Maximum current (A)			12.3	14.3	20.5	20.5	29.7	
Appearance	Main unit		Zinc hot dipping steel plate					
	Ceiling panel (Sold separately)	Model	RBC-U31PG (W, WS)-E, RBC-U31PGS (W, WS)-E					
		Panel color	W: Moon-white (2.5GY 9.0/0.5), WS: Stripe-white (2.5GY 9.0/0.5, (Gray: 8B 3/0.3))					
Outer dimension	Main unit	Height (mm)	256	256	319	319	319	
		Width (mm)	840	840	840	840	840	
		Depth (mm)	840	840	840	840	840	
	Ceiling panel (Sold separately)	Height (mm)	30	30	30	30	30	
		Width (mm)	950	950	950	950	950	
		Depth (mm)	950	950	950	950	950	
Total weight	Main unit (kg)		20	20	24	24	24	
	Ceiling panel (Sold separately) (kg)		4.2	4.2	4.2	4.2	4.2	
Heat exchanger			Finned tube					
Fan unit	Fan		Turbo fan					
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	17.5/14.5/ 13.0	20.5/16.0/ 13.5	33.5/24.0/ 19.5	35.0/24.0/ 20.5	35.5/25.0/ 21.0	
	Motor (W)		14	30	68	72	72	
Air filter			Standard filter attached (Long life filter)					
Controller (Sold separately)			RBC-AMT32E, AMS41E, AS21E2, AX31U (W)-E					
Connecting pipe	Gas side (mm)	12.7	15.9	15.9	15.9	15.9		
	Liquid side (mm)	6.4	9.5	9.5	9.5	9.5		
	Drain port (mm)	VP25						
Sound pressure level	H/M/L (dB•A)	32/29/28	35/31/28	43/38/33	44/38/34	45/40/36		
Sound power level	H/M/L (dB•A)	47/44/43	50/46/43	58/53/48	59/53/49	60/55/51		

\* : IEC standard

Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

The refrigerant pipe length is 7.5 m(56Type is 5m), height difference is 0m.

The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.



## &lt;Twin type/Triple type&gt;

Model	Indoor unit 1	RAV-SM	564UT-E	804UT-E	804UT-E	564UT-E	
	Indoor unit 2	RAV-SM	564UT-E	804UT-E	804UT-E	564UT-E	
	Indoor unit 3	RAV-SM	—	—	—	564UT-E	
	Outdoor unit	RAV-SM	1103AT-E1	1403AT-E1	1603AT-E	1603AT-E	
Cooling capacity		(kW)	10.0 (3.0 – 11.2)	12.5 (3.0 – 13.2)	14.0 (3.0 – 16.0)	14.0 (3.0 – 16.0)	
Heating capacity		(kW)	11.2 (3.0 – 13.0)	14.0 (3.0 – 16.0)	16.0 (3.0 – 18.0)	16.0 (3.0 – 18.0)	
Power supply			1 phase 230V (220 – 240V) 50Hz				
Electrical characteristics	Cooling	Running current (A)	14.42 – 13.22	19.17 – 17.57	21.48 – 19.69	21.20 – 19.43	
		Power consumption (kW)	3.11	4.09	4.49	4.49	
		Power factor (%)	98	97	95	95	
		EER	3.22	3.06	3.12	3.12	
		Energy efficiency class *	A	B	B	B	
	Heating	Running current (A)	13.59 – 12.46	18.74 – 17.18	21.48 – 19.69	21.20 – 19.43	
		Power consumption (kW)	2.93	3.80	4.43	4.43	
		Power factor (%)	98	92	95	95	
		COP	3.82	3.68	3.61	3.61	
		Energy efficiency class *	A	A	A	A	
Maximum current		(A)	20.6	20.3	29.8	30.2	
Indoor unit							
Fan unit	Fan		Turbo fan				
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	17.5/14.5/ 13.0	20.5/16.0/ 13.5	20.5/16.0/ 13.5	17.5/14.5/ 13.0	
	Motor		(W)	14	20	30	14
Sound pressure level		H/M/L (dB/A)	32/29/28	35/31/28	35/31/28	32/29/28	
Sound power level		H/M/L (dB/A)	47/44/43	50/46/43	50/46/43	47/44/43	
Outdoor unit							
Refrigerant pipe	Standard length		(m)	7.5	7.5	7.5	7.5
	Max. total length		(m)	50	50	50	50
	Refrigerant charging amount (Charge-less up to 30m)			40g/m (31m to 50m)			
	Height difference	Outdoor lower	(m)	30	30	30	30
Outdoor higher		(m)	30	30	30	30	
Fan unit	Fan		Propeller fan				
	Standard air flow		(m <sup>3</sup> /min.)	75	75	103	103
	Motor		(W)	100	100	100 + 100	100 + 100
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	15.9	15.9
		Sub	(mm)	12.7	15.9	15.9	12.7
	Liquid side	Main	(mm)	9.5	9.5	9.5	9.5
		Sub	(mm)	6.4	9.5	9.5	6.4
Sound pressure level		Cooling/Heating (dB/A)	53/54	54/54	51/53	51/53	
Sound power level		Cooling/Heating (dB/A)	70/71	71/71	68/70	68/70	

\* : IEC standard

## Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

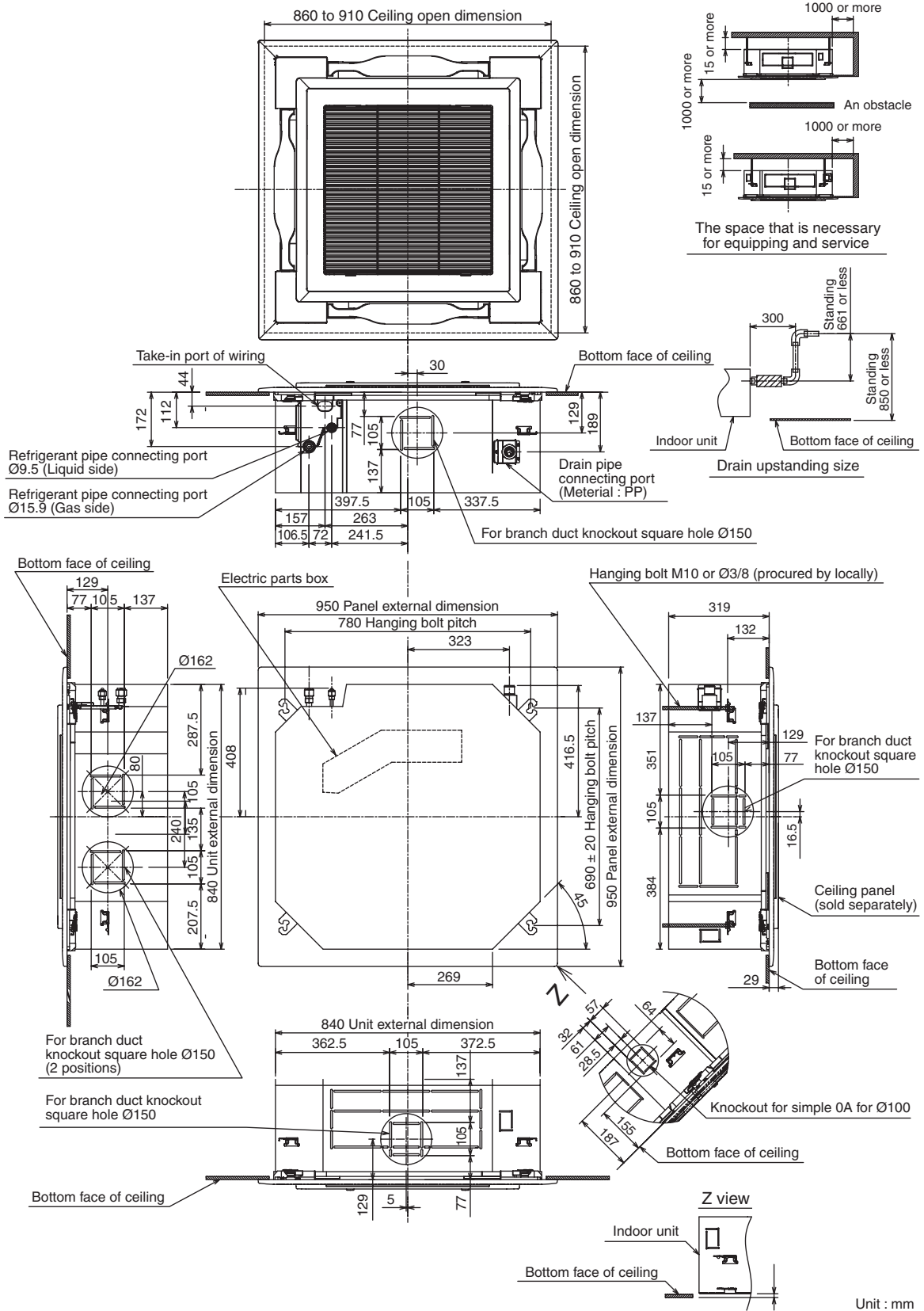
The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.





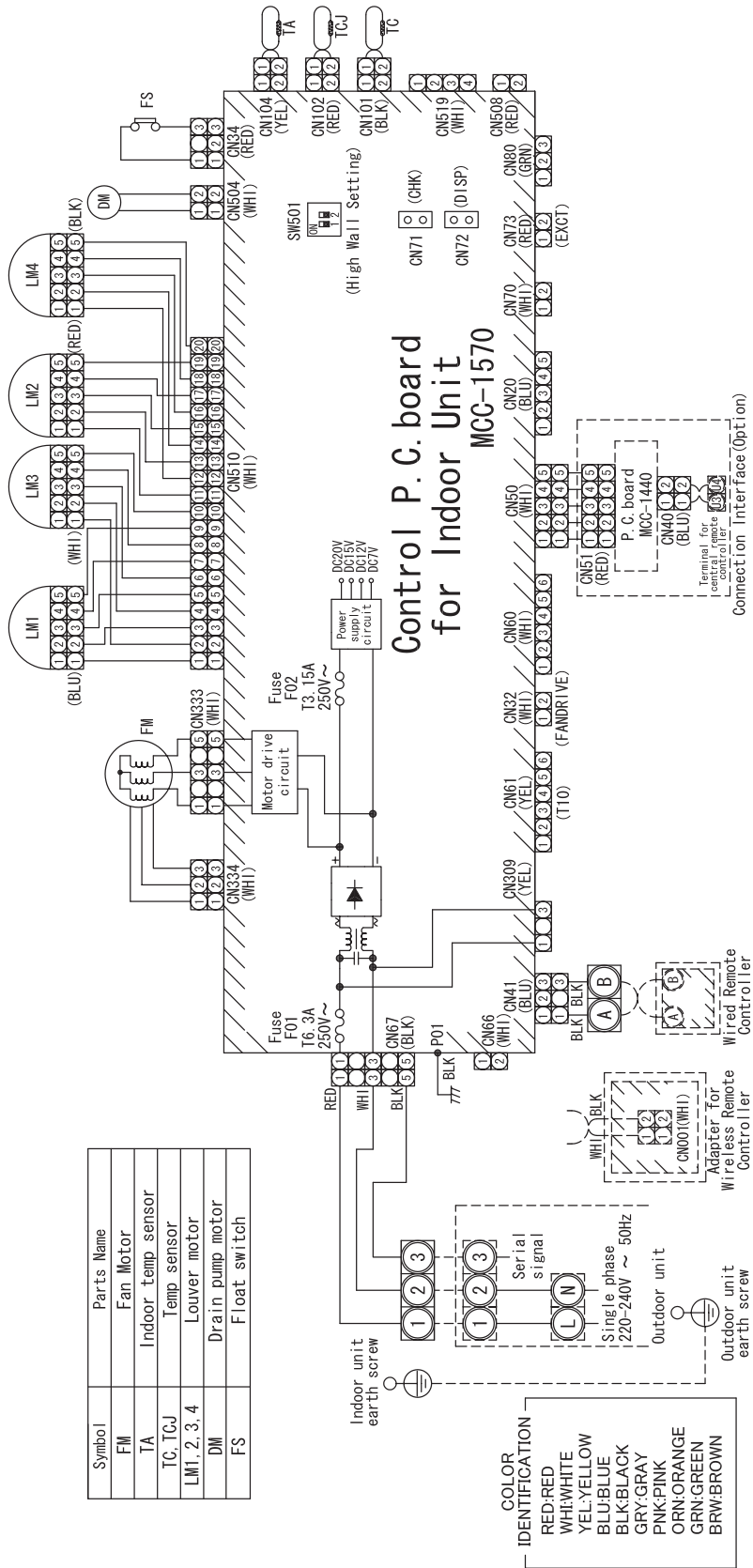


RAV-SM1604UT-E



### 2-1-3. Wiring diagrams

#### RAV-SM564UT-E/RAV-SM804UT-E/SM1104UT-E/RAV-SM1404UT-E/RAV-SM1604UT-E



## 2-1-4. Sensible capacity table

### Digital Inverter 3 Series Sensible Heat Capacity : RAV-SM\*\*\*UT-E

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
564	10.0	5.0	3.5	5.2	3.7	5.5	3.9	5.7	4.0	5.9	4.1	6.1	4.3	6.2	4.4	6.6	4.6	6.9	4.8
	12.0	4.9	3.5	5.2	3.7	5.5	3.8	5.7	4.0	5.8	4.1	6.0	4.2	6.2	4.4	6.6	4.6	6.9	4.8
	14.0	4.9	3.5	5.2	3.6	5.4	3.8	5.6	3.9	5.8	4.1	6.0	4.2	6.2	4.3	6.5	4.6	6.8	4.8
	16.0	4.9	3.4	5.1	3.6	5.4	3.8	5.6	3.9	5.8	4.1	5.9	4.2	6.1	4.3	6.5	4.5	6.8	4.8
	18.0	4.8	3.4	5.1	3.6	5.3	3.8	5.5	3.9	5.7	4.0	5.9	4.1	6.1	4.3	6.4	4.5	6.7	4.7
	20.0	4.8	3.4	5.1	3.5	5.3	3.7	5.5	3.9	5.7	4.0	5.8	4.1	6.0	4.2	6.4	4.5	6.7	4.7
	21.0	4.8	3.4	5.0	3.5	5.3	3.7	5.5	3.8	5.7	4.0	5.8	4.1	6.0	4.2	6.3	4.5	6.6	4.7
	23.0	4.7	3.3	5.0	3.5	5.2	3.7	5.4	3.8	5.6	3.9	5.8	4.0	5.9	4.2	6.3	4.4	6.6	4.6
	25.0	4.7	3.3	4.9	3.5	5.2	3.6	5.4	3.8	5.5	3.9	5.7	4.0	5.9	4.1	6.2	4.4	6.5	4.6
	27.0	4.6	3.2	4.9	3.4	5.1	3.6	5.3	3.7	5.5	3.8	5.6	4.0	5.8	4.1	6.1	4.3	6.4	4.5
	29.0	4.6	3.2	4.8	3.4	5.0	3.5	5.2	3.7	5.4	3.8	5.6	3.9	5.7	4.0	6.1	4.3	6.3	4.4
	31.0	4.5	3.2	4.7	3.3	5.0	3.5	5.1	3.6	5.3	3.7	5.5	3.8	5.6	4.0	6.0	4.2	6.2	4.4
	33.0	4.4	3.1	4.7	3.3	4.9	3.4	5.1	3.6	5.2	3.7	5.4	3.8	5.5	3.9	5.9	4.1	6.1	4.3
	35.0	4.4	3.1	4.6	3.2	4.8	3.4	5.0	3.5	5.1	3.6	5.3	3.7	5.5	3.8	5.8	4.1	6.0	4.2
37.0	4.3	3.0	4.5	3.2	4.7	3.3	4.9	3.4	5.1	3.5	5.2	3.7	5.3	3.8	5.7	4.0	5.9	4.2	
39.0	4.2	2.9	4.4	3.1	4.6	3.2	4.8	3.4	4.9	3.5	5.1	3.6	5.2	3.7	5.5	3.9	5.8	4.1	

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
804	10.0	6.3	4.2	6.6	4.4	6.9	4.6	7.2	4.8	7.4	4.9	7.7	5.1	7.9	5.2	8.3	5.5	8.7	5.8
	12.0	6.3	4.1	6.6	4.4	6.9	4.6	7.1	4.7	7.4	4.9	7.6	5.0	7.8	5.2	8.3	5.5	8.7	5.7
	14.0	6.2	4.1	6.5	4.3	6.9	4.5	7.1	4.7	7.3	4.9	7.6	5.0	7.8	5.2	8.2	5.5	8.6	5.7
	16.0	6.2	4.1	6.5	4.3	6.8	4.5	7.1	4.7	7.3	4.8	7.5	5.0	7.7	5.1	8.2	5.4	8.6	5.7
	18.0	6.1	4.1	6.4	4.3	6.8	4.5	7.0	4.6	7.2	4.8	7.5	4.9	7.7	5.1	8.1	5.4	8.5	5.6
	20.0	6.1	4.0	6.4	4.2	6.7	4.4	6.9	4.6	7.2	4.8	7.4	4.9	7.6	5.0	8.1	5.3	8.4	5.6
	21.0	6.0	4.0	6.4	4.2	6.7	4.4	6.9	4.6	7.1	4.7	7.4	4.9	7.6	5.0	8.0	5.3	8.4	5.6
	23.0	6.0	4.0	6.3	4.2	6.6	4.4	6.8	4.5	7.1	4.7	7.3	4.8	7.5	5.0	7.9	5.3	8.3	5.5
	25.0	5.9	3.9	6.2	4.1	6.5	4.3	6.8	4.5	7.0	4.6	7.2	4.8	7.4	4.9	7.8	5.2	8.2	5.4
	27.0	5.8	3.9	6.1	4.1	6.5	4.3	6.7	4.4	6.9	4.6	7.1	4.7	7.3	4.8	7.8	5.1	8.1	5.4
	29.0	5.8	3.8	6.1	4.0	6.4	4.2	6.6	4.4	6.8	4.5	7.0	4.7	7.2	4.8	7.6	5.1	8.0	5.3
	31.0	5.7	3.8	6.0	4.0	6.3	4.2	6.5	4.3	6.7	4.5	6.9	4.6	7.1	4.7	7.5	5.0	7.9	5.2
	33.0	5.6	3.7	5.9	3.9	6.2	4.1	6.4	4.2	6.6	4.4	6.8	4.5	7.0	4.6	7.4	4.9	7.8	5.1
	35.0	5.5	3.6	5.8	3.8	6.1	4.0	6.3	4.2	6.5	4.3	6.7	4.4	6.9	4.6	7.3	4.8	7.6	5.1
37.0	5.4	3.6	5.7	3.8	6.0	3.9	6.2	4.1	6.4	4.2	6.6	4.4	6.8	4.5	7.2	4.7	7.5	5.0	
39.0	5.3	3.5	5.6	3.7	5.8	3.9	6.0	4.0	6.3	4.1	6.4	4.3	6.6	4.4	7.0	4.6	7.3	4.9	

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1104	10.0	9.4	7.5	9.9	7.9	10.4	8.3	10.7	8.6	11.1	8.9	11.4	9.1	11.8	9.4	12.5	10.0	13.0	10.4
	12.0	9.3	7.5	9.8	7.9	10.3	8.2	10.7	8.5	11.0	8.8	11.4	9.1	11.7	9.3	12.4	9.9	12.9	10.4
	14.0	9.3	7.4	9.8	7.8	10.2	8.2	10.6	8.5	11.0	8.8	11.3	9.0	11.6	9.3	12.3	9.8	12.9	10.3
	16.0	9.2	7.4	9.7	7.8	10.2	8.1	10.5	8.4	10.9	8.7	11.2	9.0	11.5	9.2	12.2	9.8	12.8	10.2
	18.0	9.1	7.3	9.6	7.7	10.1	8.1	10.4	8.4	10.8	8.6	11.1	8.9	11.4	9.2	12.1	9.7	12.7	10.1
	20.0	9.1	7.2	9.5	7.6	10.0	8.0	10.4	8.3	10.7	8.6	11.0	8.8	11.3	9.1	12.0	9.6	12.6	10.1
	21.0	9.0	7.2	9.5	7.6	10.0	8.0	10.3	8.3	10.7	8.5	11.0	8.8	11.3	9.0	12.0	9.6	12.5	10.0
	23.0	8.9	7.1	9.4	7.5	9.9	7.9	10.2	8.2	10.6	8.4	10.9	8.7	11.2	8.9	11.8	9.5	12.4	9.9
	25.0	8.8	7.1	9.3	7.4	9.8	7.8	10.1	8.1	10.4	8.4	10.8	8.6	11.1	8.8	11.7	9.4	12.2	9.8
	27.0	8.7	7.0	9.2	7.3	9.6	7.7	10.0	8.0	10.3	8.3	10.6	8.5	10.9	8.7	11.6	9.3	12.1	9.7
	29.0	8.6	6.9	9.1	7.2	9.5	7.6	9.8	7.9	10.2	8.1	10.5	8.4	10.8	8.6	11.4	9.1	11.9	9.6
	31.0	8.5	6.8	8.9	7.1	9.4	7.5	9.7	7.8	10.0	8.0	10.3	8.3	10.6	8.5	11.3	9.0	11.8	9.4
	33.0	8.4	6.7	8.8	7.0	9.2	7.4	9.6	7.6	9.9	7.9	10.2	8.1	10.5	8.4	11.1	8.9	11.6	9.3
	35.0	8.2	6.6	8.6	6.9	9.1	7.3	9.4	7.5	9.7	7.8	10.0	8.0	10.3	8.2	10.9	8.7	11.4	9.1
37.0	8.1	6.4	8.5	6.8	8.9	7.1	9.2	7.4	9.5	7.6	9.8	7.8	10.1	8.1	10.7	8.5	11.2	8.9	
39.0	7.9	6.3	8.3	6.6	8.7	7.0	9.0	7.2	9.3	7.5	9.6	7.7	9.9	7.9	10.5	8.4	10.9	8.8	

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1404	10.0	11.3	9.0	11.9	9.5	12.4	10.0	12.9	10.3	13.3	10.7	13.7	11.0	14.1	11.3	14.9	12.0	15.6	12.5
	12.0	11.2	9.0	11.8	9.4	12.4	9.9	12.8	10.2	13.2	10.6	13.6	10.9	14.0	11.2	14.8	11.9	15.5	12.4
	14.0	11.1	8.9	11.7	9.4	12.3	9.8	12.7	10.2	13.2	10.5	13.5	10.8	13.9	11.1	14.8	11.8	15.4	12.3
	16.0	11.0	8.8	11.6	9.3	12.2	9.8	12.6	10.1	13.1	10.5	13.5	10.8	13.8	11.1	14.7	11.7	15.3	12.3
	18.0	11.0	8.8	11.5	9.2	12.1	9.7	12.5	10.0	13.0	10.4	13.3	10.7	13.7	11.0	14.5	11.6	15.2	12.2
	20.0	10.9	8.7	11.4	9.2	12.0	9.6	12.4	9.9	12.9	10.3	13.2	10.6	13.6	10.9	14.4	11.5	15.1	12.1
	21.0	10.8	8.7	11.4	9.1	12.0	9.6	12.4	9.9	12.8	10.2	13.2	10.5	13.6	10.8	14.4	11.5	15.0	12.0
	23.0	10.7	8.6	11.3	9.0	11.8	9.5	12.3	9.8	12.7	10.1	13.0	10.4	13.4	10.7	14.2	11.4	14.9	11.9
	25.0	10.6	8.5	11.1	8.9	11.7	9.4	12.1	9.7	12.5	10.0	12.9	10.3	13.3	10.6	14.1	11.2	14.7	11.8
	27.0	10.5	8.4	11.0	8.8	11.6	9.2	12.0	9.6	12.4	9.9	12.7	10.2	13.1	10.5	13.9	11.1	14.5	11.6
	29.0	10.3	8.3	10.9	8.7	11.4	9.1	11.8	9.4	12.2	9.8	12.6	10.1	12.9	10.3	13.7	11.0	14.3	11.5
	31.0	10.2	8.1	10.7	8.6	11.2	9.0	11.6	9.3	12.0	9.6	12.4	9.9	12.8	10.2	13.5	10.8	14.1	11.3
	33.0	10.0	8.0	10.5	8.4	11.1	8.9	11.5	9.2	11.9	9.5	12.2	9.8	12.6	10.0	13.3	10.6	13.9	11.1
	35.0	9.9	7.9	10.4	8.3	10.9	8.7	11.3	9.0	11.7	9.3	12.0	9.2	12.3	9.9	13.1	10.5	13.4	10.5
37.0	9.7	7.7	10.2	8.1	10.7	8.5	11.1	8.8	11.4	9.1	11.8	9.4	12.1	9.7	12.8	10.3	13.4	10.7	
39.0	9.5	7.6	10.0	8.0	10.5	8.4	10.8	8.7	11.2	9.0	11.5	9.2	11.9	9.5	12.6</				

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1604	10.0	13.1	9.3	13.8	9.8	14.5	10.3	15.0	10.6	15.5	11.0	16.0	11.3	16.5	11.6	17.4	12.3	18.2	12.9
	12.0	13.1	9.2	13.7	9.7	14.4	10.2	14.9	10.6	15.4	10.9	15.9	11.2	16.4	11.6	17.3	12.3	18.1	12.8
	14.0	13.0	9.2	13.7	9.7	14.3	10.1	14.8	10.5	15.4	10.9	15.8	11.2	16.3	11.5	17.2	12.2	18.0	12.7
	16.0	12.9	9.1	13.6	9.6	14.2	10.1	14.7	10.4	15.2	10.8	15.7	11.1	16.1	11.4	17.1	12.1	17.9	12.6
	18.0	12.8	9.0	13.5	9.5	14.1	10.0	14.6	10.3	15.1	10.7	15.6	11.0	16.0	11.3	17.0	12.0	17.7	12.5
	20.0	12.7	9.0	13.3	9.4	14.0	9.9	14.5	10.3	15.0	10.6	15.4	10.9	15.9	11.2	16.8	11.9	17.6	12.4
	21.0	12.6	8.9	13.3	9.4	13.9	9.9	14.4	10.2	14.9	10.6	15.4	10.9	15.8	11.2	16.7	11.8	17.5	12.4
	23.0	12.5	8.8	13.2	9.3	13.8	9.8	14.3	10.1	14.8	10.5	15.2	10.8	15.7	11.1	16.6	11.7	17.3	12.3
	25.0	12.4	8.7	13.0	9.2	13.7	9.7	14.1	10.0	14.6	10.3	15.1	10.6	15.5	10.9	16.4	11.6	17.1	12.1
	27.0	12.2	8.6	12.8	9.1	13.5	9.5	14.0	9.9	14.4	10.2	14.9	10.5	15.3	10.8	16.2	11.5	16.9	12.0
	29.0	12.1	8.5	12.7	9.0	13.3	9.4	13.8	9.7	14.3	10.1	14.7	10.4	15.1	10.7	16.0	11.3	16.7	11.8
	31.0	11.9	8.4	12.5	8.8	13.1	9.3	13.6	9.6	14.0	9.9	14.5	10.2	14.9	10.5	15.8	11.1	16.5	11.7
	33.0	11.7	8.3	12.3	8.7	12.9	9.1	13.4	9.5	13.8	9.8	14.2	10.1	14.6	10.4	15.5	11.0	16.2	11.5
	35.0	11.5	8.1	12.1	8.6	12.7	9.0	13.1	9.3	13.6	9.6	14.0	9.9	14.4	10.2	15.3	10.8	16.0	11.3
	37.0	11.3	8.0	11.9	8.4	12.5	8.8	12.9	9.1	13.3	9.4	13.7	9.7	14.1	10.0	15.0	10.6	15.6	11.1
	39.0	11.1	7.8	11.6	8.2	12.2	8.6	12.6	8.9	13.1	9.2	13.5	9.5	13.8	9.8	14.7	10.4	15.3	10.8

TC:Total Capacity [kW]  
SHC:Sensible Heat Capacity [kW]



## 2-1-5. Part load performance

### Combination

Indoor unit : RAV-SM564UT-E

Outdoor unit : RAV-SM563AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	350	1500	350
RATING	5300	1650	5600	1440

Q: Capacity in W  
W: Power Consumption in W

### Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	5040	4540	4030	3530	3020	2520	2020	1510	1430	1430
	W	1770	1520	1290	1080	890	710	550	400	380	380
35	Q	5300	4770	4240	3710	3180	2650	2120	1590	1500	1500
	W	1650	1416	1203	1008	830	665	512	370	350	350
30	Q	5520	4970	4410	3860	3310	2760	2210	1660	1560	1560
	W	1520	1310	1110	930	770	610	470	340	320	320
25	Q	5700	5130	4560	3990	3420	2850	2280	1710	1610	1610
	W	1410	1210	1030	860	710	570	440	320	300	300
20	Q	5850	5260	4680	4090	3510	2920	2340	1750	1650	1650
	W	1310	1130	960	800	660	530	410	290	280	280

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6750	6080	5400	4730	4050	3380	2700	2030	1810	1810
	W	1590	1410	1240	1060	890	740	580	430	390	390
10	Q	6130	5520	4910	4290	3680	3070	2450	1840	1640	1640
	W	1500	1340	1170	1000	850	700	550	410	370	370
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	1440	1280	1120	960	810	670	530	390	350	350
5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1400	1400
	W	1400	1240	1090	930	780	650	510	380	340	340
2	Q	4680	4210	3750	3280	2810	2340	1870	1400	1250	1250
	W	1330	1180	1030	890	750	620	490	360	320	320
0	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1180	1050	920	790	660	550	430	320	290	290
-5	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1180	1050	920	790	660	550	430	320	290	290
-7	Q	3440	3090	2750	2410	2060	1720	1380	1030	920	920
	W	1140	1020	890	760	640	530	420	310	280	280
-10	Q	3150	2830	2520	2200	1890	1570	1260	940	840	840
	W	1100	970	850	730	620	510	400	300	270	270
-15	Q	2650	2390	2120	1860	1590	1330	1060	800	710	710
	W	1030	920	800	690	580	480	380	280	250	250

## Combination

Indoor unit : RAV-SM804UT-E

Outdoor unit : RAV-SM803AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	450	1500	450
RATING	6700	2090	8000	2210

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	6370	5730	5100	4460	3820	3190	2550	1910	1430	1430
	W	2240	1860	1530	1250	1000	780	590	420	480	480
35	Q	6700	6030	5360	4690	4020	3350	2680	2010	1500	1500
	W	2090	1733	1425	1162	932	729	552	391	450	450
30	Q	6970	6280	5580	4880	4180	3490	2790	2090	1560	1560
	W	1930	1600	1320	1070	860	670	510	360	420	420
25	Q	7200	6480	5760	5040	4320	3600	2880	2160	1610	1610
	W	1790	1480	1220	1000	800	630	470	330	390	390
20	Q	7390	6650	5910	5170	4430	3700	2960	2220	1650	1650
	W	1660	1380	1130	920	740	580	440	310	360	360

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	9650	8680	7720	6750	5790	4820	3860	2890	1930	1810
	W	2440	2140	1860	1590	1330	1080	850	630	410	500
10	Q	8760	7880	7010	6130	5260	4380	3500	2630	1750	1640
	W	2310	2030	1770	1500	1260	1020	800	600	390	470
7	Q	8000	7200	6400	5600	4800	4000	3200	2400	1600	1500
	W	2210	1940	1690	1440	1210	980	770	570	370	450
5	Q	7460	6720	5970	5220	4480	3730	2990	2240	1490	1400
	W	2140	1880	1640	1400	1170	950	750	550	360	440
2	Q	6690	6020	5350	4680	4010	3340	2680	2010	1340	1250
	W	2040	1790	1560	1330	1120	900	710	530	340	410
0	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	1810	1590	1380	1180	990	800	630	470	300	370
-5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	1810	1590	1380	1180	990	800	630	470	300	370
-7	Q	4910	4420	3930	3440	2950	2460	1960	1470	980	920
	W	1750	1540	1340	1140	960	780	610	450	290	360
-10	Q	4500	4050	3600	3150	2700	2250	1800	1350	900	840
	W	1680	1480	1290	1100	920	750	590	430	280	340
-15	Q	3790	3410	3030	2650	2280	1900	1520	1140	760	710
	W	1590	1390	1210	1030	870	700	550	410	270	320

## Combination

Indoor unit : RAV-SM1104UT-E

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3110	11200	2930

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3340	2770	2280	1860	1490	1160	880	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3110	2578	2121	1729	1387	1085	821	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	2710	2710
	W	2870	2380	1960	1600	1280	1000	760	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	2800	2800
	W	2670	2210	1820	1480	1190	930	700	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	2870	2870
	W	2470	2050	1690	1370	1100	860	650	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3230	2830	2470	2110	1760	1430	1120	830	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3060	2690	2340	2000	1670	1360	1070	780	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2930	2570	2240	1910	1600	1300	1020	750	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	2840	2490	2170	1850	1550	1260	990	730	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2700	2370	2070	1760	1480	1200	940	690	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2400	2100	1830	1560	1310	1060	840	610	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2400	2100	1830	1560	1310	1060	840	610	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2330	2040	1780	1520	1270	1030	810	600	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2230	1960	1700	1450	1220	990	780	570	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2100	1840	1610	1370	1150	930	730	540	430	430

## Combination

Indoor unit : RAV-SM1404UT-E

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12000	3740	14000	3800

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11410	10270	9130	7990	6850	5710	4560	3420	2850	2850
	W	4010	3330	2740	2230	1790	1400	1060	750	700	700
35	Q	12000	10800	9600	8400	7200	6000	4800	3600	3000	3000
	W	3740	3100	2551	2079	1668	1305	987	699	650	650
30	Q	12490	11240	9990	8740	7500	6250	5000	3750	3120	3120
	W	3460	2860	2360	1920	1540	1210	910	650	600	600
25	Q	12900	11610	10320	9030	7740	6450	5160	3870	3230	3230
	W	3210	2660	2190	1780	1430	1120	850	600	560	560
20	Q	13240	11910	10590	9270	7940	6620	5290	3970	3310	3310
	W	2970	2460	2030	1650	1330	1040	780	560	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3620	3620
	W	4190	3680	3200	2730	2280	1860	1470	1070	720	720
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3290	3290
	W	3970	3490	3030	2590	2160	1770	1390	1010	680	680
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	3800	3340	2900	2480	2070	1690	1330	970	650	650
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2800	2800
	W	3680	3240	2810	2400	2010	1640	1290	940	630	630
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2510	2510
	W	3500	3080	2670	2290	1910	1560	1230	890	600	600
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3110	2740	2380	2030	1700	1380	1090	790	530	530
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3110	2740	2380	2030	1700	1380	1090	790	530	530
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1840	1840
	W	3020	2650	2300	1970	1640	1340	1060	770	520	520
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1690	1690
	W	2890	2540	2210	1890	1580	1290	1010	740	490	490
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1420	1420
	W	2730	2400	2080	1780	1490	1210	950	700	470	470

## Combination

Indoor unit : RAV-SM1604UT-E

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4490	16000	4430

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	4820	3670	3020	2460	1970	1550	1170	830	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4490	3421	2814	2294	1840	1440	1089	772	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4150	3160	2600	2120	1700	1330	1010	710	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	3850	2930	2410	1970	1580	1230	930	660	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3570	2720	2240	1820	1460	1140	870	610	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	4880	3540	3080	2620	2210	1800	1410	1040	820	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4630	3350	2920	2490	2090	1700	1340	980	770	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4430	3210	2790	2380	2000	1630	1280	940	740	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4290	3110	2700	2310	1940	1580	1240	910	720	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4080	2960	2570	2190	1840	1500	1180	870	680	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3520	2550	2220	1890	1590	1290	1020	750	590	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3370	2440	2120	1810	1520	1240	970	720	560	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3180	2300	2000	1710	1440	1170	920	670	530	470

## Combination

Indoor unit : RAV-SM564UT-E(Twin)

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3110	11200	2930

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3340	2770	2280	1860	1490	1160	880	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3110	2578	2121	1729	1387	1085	821	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	2710	2710
	W	2870	2380	1960	1600	1280	1000	760	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	2800	2800
	W	2670	2210	1820	1480	1190	930	700	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	2870	2870
	W	2470	2050	1690	1370	1100	860	650	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3230	2830	2470	2110	1760	1430	1120	830	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3060	2690	2340	2000	1670	1360	1070	780	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2930	2570	2240	1910	1600	1300	1020	750	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	2840	2490	2170	1850	1550	1260	990	730	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2700	2370	2070	1760	1480	1200	940	690	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2400	2100	1830	1560	1310	1060	840	610	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2400	2100	1830	1560	1310	1060	840	610	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2330	2040	1780	1520	1270	1030	810	600	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2230	1960	1700	1450	1220	990	780	570	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2100	1840	1610	1370	1150	930	730	540	430	430

## Combination

Indoor unit : RAV-SM804UT-E(Twin)

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12500	4090	14000	3800

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11890	10700	9510	8320	7130	5940	4760	3570	2850	2850
	W	4390	3640	2990	2440	1950	1530	1160	820	700	700
35	Q	12500	11250	10000	8750	7500	6250	5000	3750	3000	3000
	W	4090	3390	2790	2270	1820	1430	1080	760	650	650
30	Q	13010	11710	10410	9110	7810	6510	5210	3900	3120	3120
	W	3780	3130	2580	2100	1680	1320	1000	700	600	600
25	Q	13440	12090	10750	9410	8060	6720	5380	4030	3230	3230
	W	3510	2910	2390	1950	1560	1230	930	650	560	560
20	Q	13790	12410	11030	9650	8270	6890	5520	4140	3310	3310
	W	3250	2690	2220	1800	1450	1140	860	600	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3620	3620
	W	4190	3680	3200	2730	2280	1860	1470	1070	720	720
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3290	3290
	W	3970	3490	3030	2590	2160	1770	1390	1010	680	680
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	3800	3340	2900	2480	2070	1690	1330	970	650	650
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2800	2800
	W	3680	3240	2810	2400	2010	1640	1290	940	630	630
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2510	2510
	W	3500	3080	2670	2290	1910	1560	1230	890	600	600
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3110	2740	2380	2030	1700	1380	1090	790	530	530
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3110	2740	2380	2030	1700	1380	1090	790	530	530
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1840	1840
	W	3020	2650	2300	1970	1640	1340	1060	770	520	520
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1690	1690
	W	2890	2540	2210	1890	1580	1290	1010	740	490	490
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1420	1420
	W	2730	2400	2080	1780	1490	1210	950	700	470	470

## Combination

Indoor unit : RAV-SM804UT-E(Twin)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4490	16000	4430

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	4820	3670	3020	2460	1970	1550	1170	830	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4490	3421	2814	2294	1840	1440	1089	772	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4150	3160	2600	2120	1700	1330	1010	710	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	3850	2930	2410	1970	1580	1230	930	660	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3570	2720	2240	1820	1460	1140	870	610	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	4880	3540	3080	2620	2210	1800	1410	1040	820	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4630	3350	2920	2490	2090	1700	1340	980	770	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4430	3210	2790	2380	2000	1630	1280	940	740	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4290	3110	2700	2310	1940	1580	1240	910	720	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4080	2960	2570	2190	1840	1500	1180	870	680	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3520	2550	2220	1890	1590	1290	1020	750	590	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3370	2440	2120	1810	1520	1240	970	720	560	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3180	2300	2000	1710	1440	1170	920	670	530	470



## Combination

Indoor unit : RAV-SM564UT-E(Triple)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4490	16000	4430

Q: Capacity in W  
W: Power Consumption in W

## Cooling

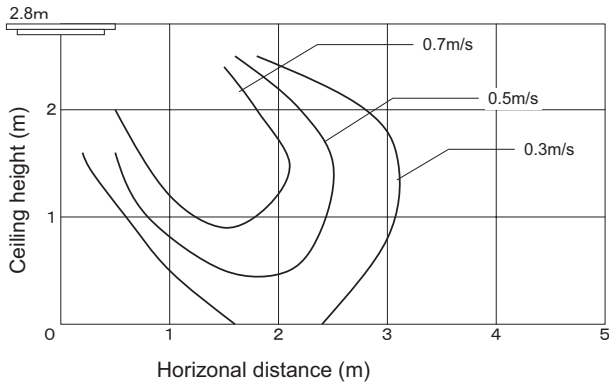
Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	4820	3670	3020	2460	1970	1550	1170	830	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4490	3421	2814	2294	1840	1440	1089	772	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4150	3160	2600	2120	1700	1330	1010	710	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	3850	2930	2410	1970	1580	1230	930	660	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3570	2720	2240	1820	1460	1140	870	610	520	520

## Heating

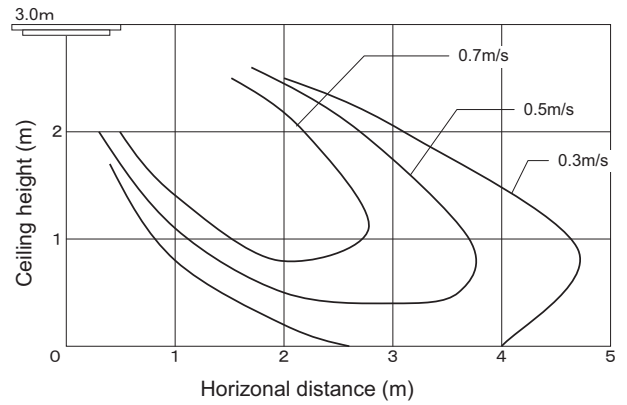
Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	4880	3540	3080	2620	2210	1800	1410	1040	820	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4630	3350	2920	2490	2090	1700	1340	980	770	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4430	3210	2790	2380	2000	1630	1280	940	740	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4290	3110	2700	2310	1940	1580	1240	910	720	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4080	2960	2570	2190	1840	1500	1180	870	680	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3520	2550	2220	1890	1590	1290	1020	750	590	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3370	2440	2120	1810	1520	1240	970	720	560	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3180	2300	2000	1710	1440	1170	920	670	530	470

## 2-1-6. Air throw distance chart

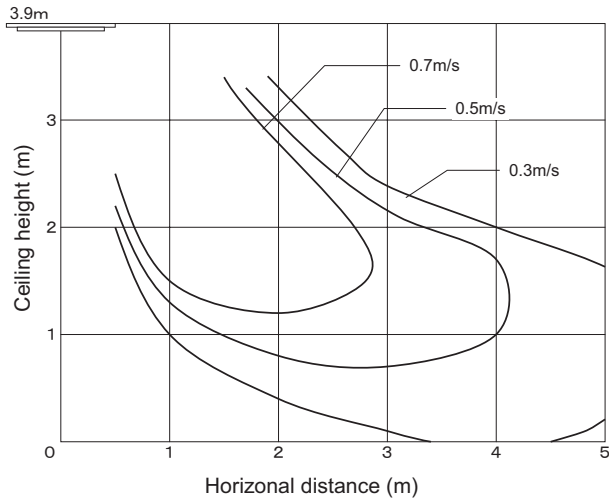
**RAV-SM564UT-E**



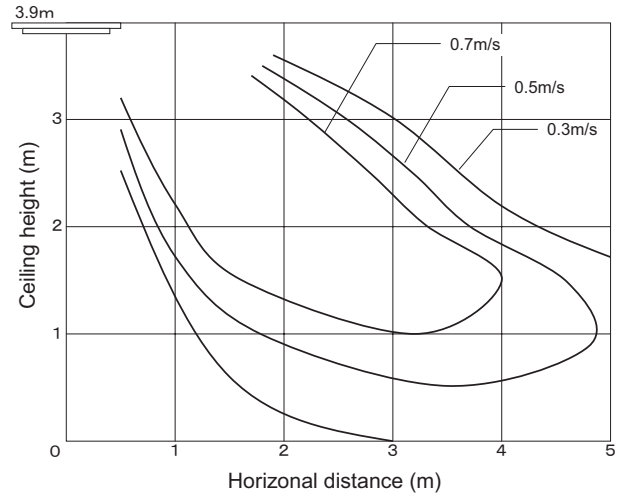
**RAV-SM804UT-E**



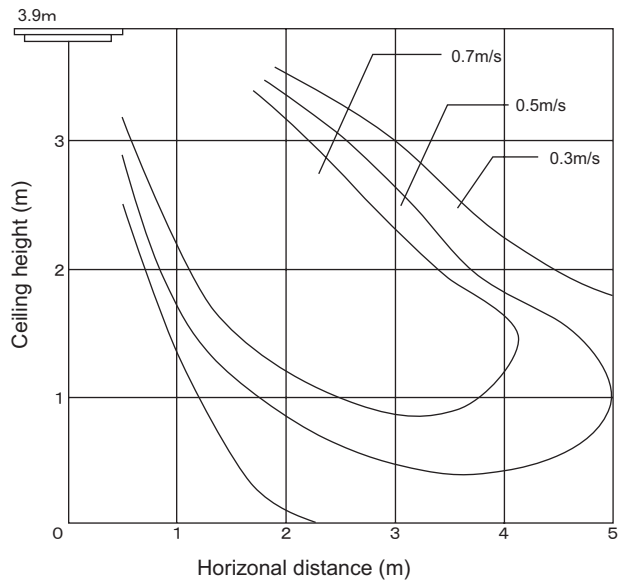
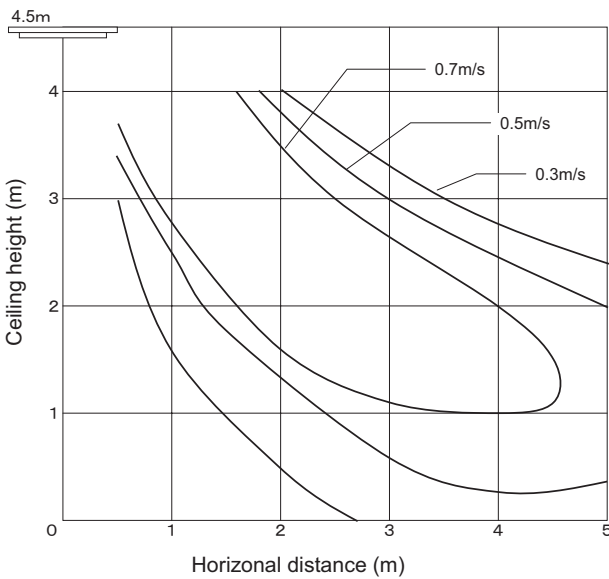
**RAV-SM1104UT-E**



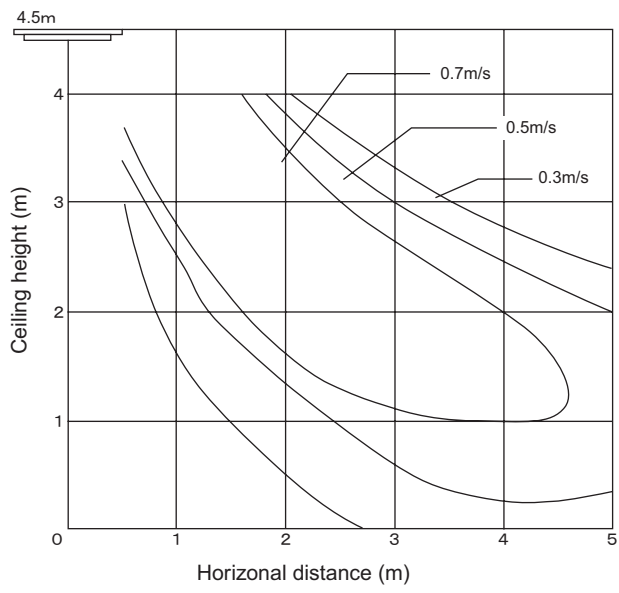
**RAV-SM1404UT-E**



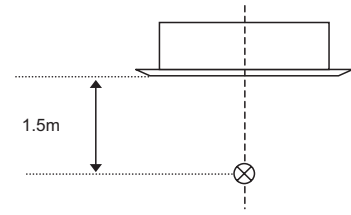
**RAV-SM1104UT-E, RAV-SM1404UT-E (High ceiling) RAV-SM1604UT-E**



RAV-SM1604UT-E (High ceiling)

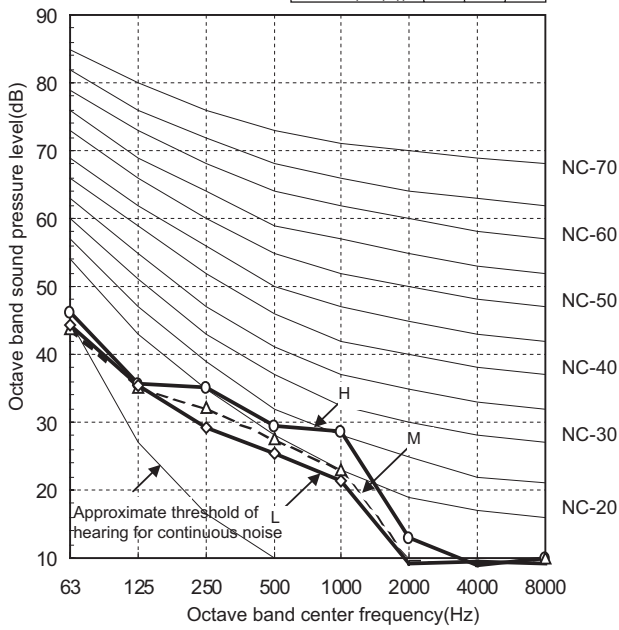


### 2-1-7. Sound characteristics (NC curve)



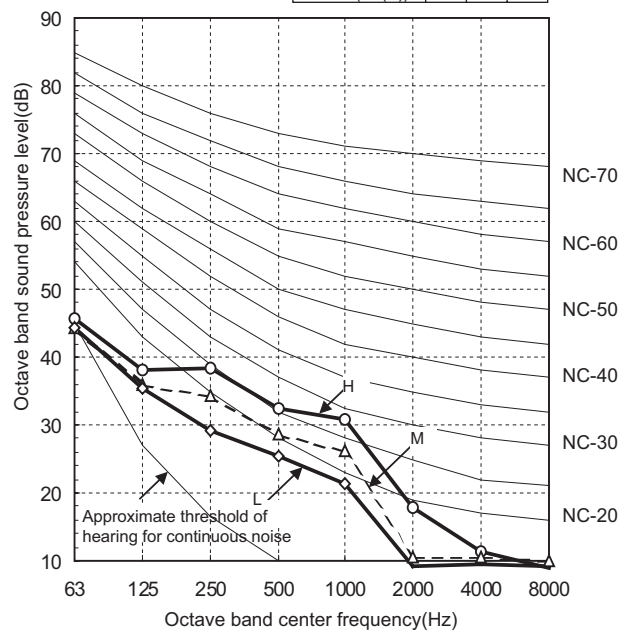
**RAV-SM564UT-E**

Fan tap	H	M	L
Sound pressure level (dB(A))	32	29	28



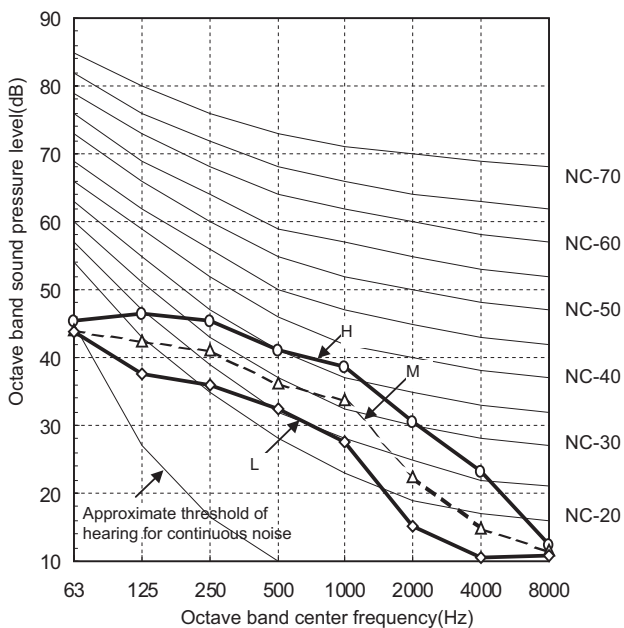
**RAV-SM804UT-E**

Fan tap	H	M	L
Sound pressure level (dB(A))	35	31	28



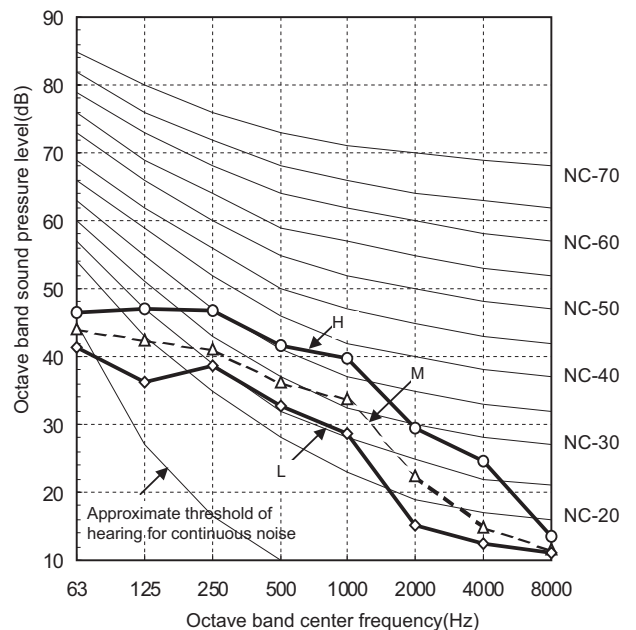
**RAV-SM1104UT-E**

Fan tap	H	M	L
Sound pressure level (dB(A))	43	38	33



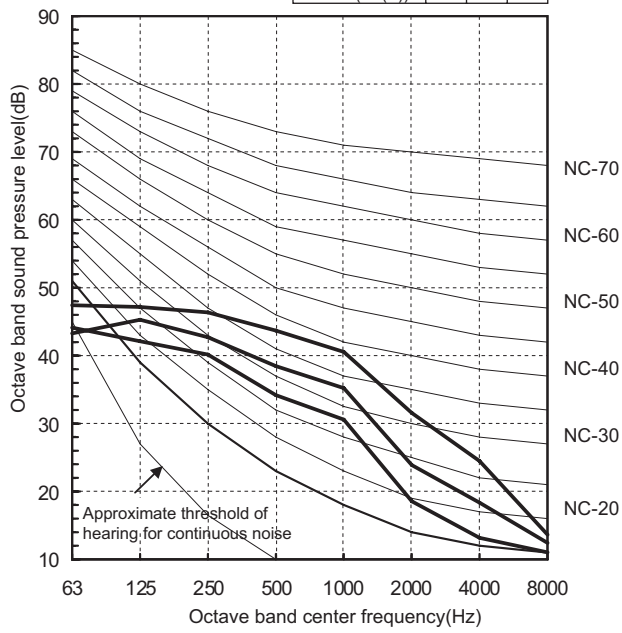
**RAV-SM1404UT-E**

Fan tap	H	M	L
Sound pressure level (dB(A))	44	38	34



**RAV-SM1604UT-E**

Fan tap	H	M	L
Sound pressure level (dB(A))	45	40	36



## 2-2. 4-way Cassette Type

2-2-1. Specifications

2-2-2. Dimension

2-2-3. Wiring diagrams

2-2-4. Sensible capacity table

2-2-5. Part load performance

2-2-6. Air throw distance chart

2-2-7. Sound characteristics (NC curve)

## 2-2-1. Specifications

&lt;Single type&gt;

Model	Indoor unit		RAV-SM	564UTP-E	804UTP-E	1104UTP-E	1404UTP-E	1604UTP-E
	Outdoor unit		RAV-SM	563AT-E	803AT-E	1103AT-E1	1403AT-E1	1603AT-E
Cooling capacity			(kW)	5.3 (1.5 – 5.6)	6.7 (1.5 – 8.0)	10.0 (3.0 – 11.2)	12.5 (3.0 – 13.2)	14.0 (3.0 – 16.0)
Heating capacity			(kW)	5.6 (1.5 – 6.3)	8.0 (1.5 – 9.0)	11.2 (3.0 – 13.0)	14.0 (3.0 – 16.0)	16.0 (3.0 – 18.0)
Power supply			1 phase 230V (220 – 240V) 50Hz					
Electrical characteristics	Cooling	Running current (A)	7.89 – 7.24	10.11 – 9.26	14.42 – 13.22	17.53 – 16.07	21.48 – 19.69	
		Power consumption (kW)	1.65	2.09	3.11	3.74	4.49	
		Power factor (%)	95	94	98	97	95	
		EER	3.21	3.21	3.22	3.21	3.12	
		Energy efficiency class *	A	A	A	A	B	
	Heating	Running current (A)	6.89 – 6.32	10.65 – 9.76	13.59 – 12.46	17.81 – 16.32	21.20 – 19.43	
		Power consumption (kW)	1.44	2.21	2.93	3.80	4.43	
		Power factor (%)	95	94	98	98	95	
		COP	3.89	3.62	3.82	3.68	3.61	
		Energy efficiency class *	A	A	A	A	A	
Maximum current (A)			12.3	14.3	20.5	20.5	29.7	
Appearance	Main unit		Zinc hot dipping steel plate					
	Ceiling panel (Sold separately)	Model	RBC-U31PG (W, WS)-E, RBC-U31PGS (W, WS)-E					
		Panel color	W: Moon-white (2.5GY 9.0/0.5), WS: Stripe-white (2.5GY 9.0/0.5, (Gray: 8B 3/0.3))					
Outer dimension	Main unit	Height (mm)	256	256	319	319	319	
		Width (mm)	840	840	840	840	840	
		Depth (mm)	840	840	840	840	840	
	Ceiling panel (Sold separately)	Height (mm)	30	30	30	30	30	
		Width (mm)	950	950	950	950	950	
		Depth (mm)	950	950	950	950	950	
Total weight	Main unit (kg)		20	20	24	24	24	
	Ceiling panel (Sold separately) (kg)		4.2	4.2	4.2	4.2	4.2	
Heat exchanger			Finned tube					
Fan unit	Fan		Turbo fan					
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	17.5/14.5/ 13.0	20.5/16.0/ 13.5	33.5/24.0/ 19.5	35.0/24.0/ 20.5	35.5/25.0/ 21.0	
	Motor (W)		14	30	68	72	72	
Air filter			Standard filter attached (Long life filter)					
Controller (Sold separately)			RBC-AMT32E, AMS41E, AS21E2, AX31U (W)-E					
Connecting pipe	Gas side (mm)	12.7	15.9	15.9	15.9	15.9		
	Liquid side (mm)	6.4	9.5	9.5	9.5	9.5		
	Drain port (mm)	VP25						
Sound pressure level	H/M/L (dB•A)	32/29/28	35/31/28	43/38/33	44/38/34	45/40/36		
Sound power level	H/M/L (dB•A)	47/44/43	50/46/43	58/53/48	59/53/49	60/55/51		

\*: IEC standard

Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

The refrigerant pipe length is 7.5 m(56Type is 5m), height difference is 0m.

The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

## &lt;Twin type/Triple type&gt;

Model	Indoor unit 1	RAV-SM	564UTP-E	804UTP-E	804UTP-E	564UTP-E
	Indoor unit 2	RAV-SM	564UTP-E	804UTP-E	804UTP-E	564UTP-E
	Indoor unit 3	RAV-SM	—	—	—	564UTP-E
	Outdoor unit	RAV-SM	1103AT-E1	1403AT-E1	1603AT-E	1603AT-E
Cooling capacity		(kW)	10.0 (3.0 – 11.2)	12.5 (3.0 – 13.2)	14.0 (3.0 – 16.0)	14.0 (3.0 – 16.0)
Heating capacity		(kW)	11.2 (3.0 – 13.0)	14.0 (3.0 – 16.0)	16.0 (3.0 – 18.0)	16.0 (3.0 – 18.0)
Power supply			1 phase 230V (220 – 240V) 50Hz			
Electrical characteristics	Cooling	Running current (A)	14.42 – 13.22	19.17 – 17.57	21.48 – 19.69	21.20 – 19.43
		Power consumption (kW)	3.11	4.09	4.49	4.49
		Power factor (%)	98	97	95	95
		EER	3.22	3.06	3.12	3.12
		Energy efficiency class *	A	B	B	B
	Heating	Running current (A)	13.59 – 12.46	18.74 – 17.18	21.48 – 19.69	21.20 – 19.43
		Power consumption (kW)	2.93	3.80	4.43	4.43
		Power factor (%)	98	92	95	95
		COP	3.82	3.68	3.61	3.61
		Energy efficiency class *	A	A	A	A
Maximum current (A)			20.6	20.3	29.8	30.2
Indoor unit						
Fan unit	Fan		Turbo fan			
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	17.5/14.5/ 13.0	20.5/16.0/ 13.5	20.5/16.0/ 13.5	17.5/14.5/ 13.0
	Motor (W)		14	20	30	14
Sound pressure level		H/M/L (dB/A)	32/29/28	35/31/28	35/31/28	32/29/28
Sound power level		H/M/L (dB/A)	47/44/43	50/46/43	50/46/43	47/44/43
Outdoor unit						
Refrigerant pipe	Standard length (m)		7.5	7.5	7.5	7.5
	Max. total length (m)		50	50	50	50
	Refrigerant charging amount (Charge-less up to 30m)		40g/m (31m to 50m)			
	Height difference	Outdoor lower (m)	30	30	30	30
Outdoor higher (m)		30	30	30	30	
Fan unit	Fan		Propeller fan			
	Standard air flow (m <sup>3</sup> /min.)		75	75	103	103
	Motor (W)		100	100	100 + 100	100 + 100
Connecting pipe	Gas side	Main (mm)	15.9	15.9	15.9	15.9
		Sub (mm)	12.7	15.9	15.9	12.7
	Liquid side	Main (mm)	9.5	9.5	9.5	9.5
		Sub (mm)	6.4	9.5	9.5	6.4
Sound pressure level		Cooling/Heating (dB/A)	53/54	54/54	51/53	51/53
Sound power level		Cooling/Heating (dB/A)	70/71	71/71	68/70	68/70

\* : IEC standard

## Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

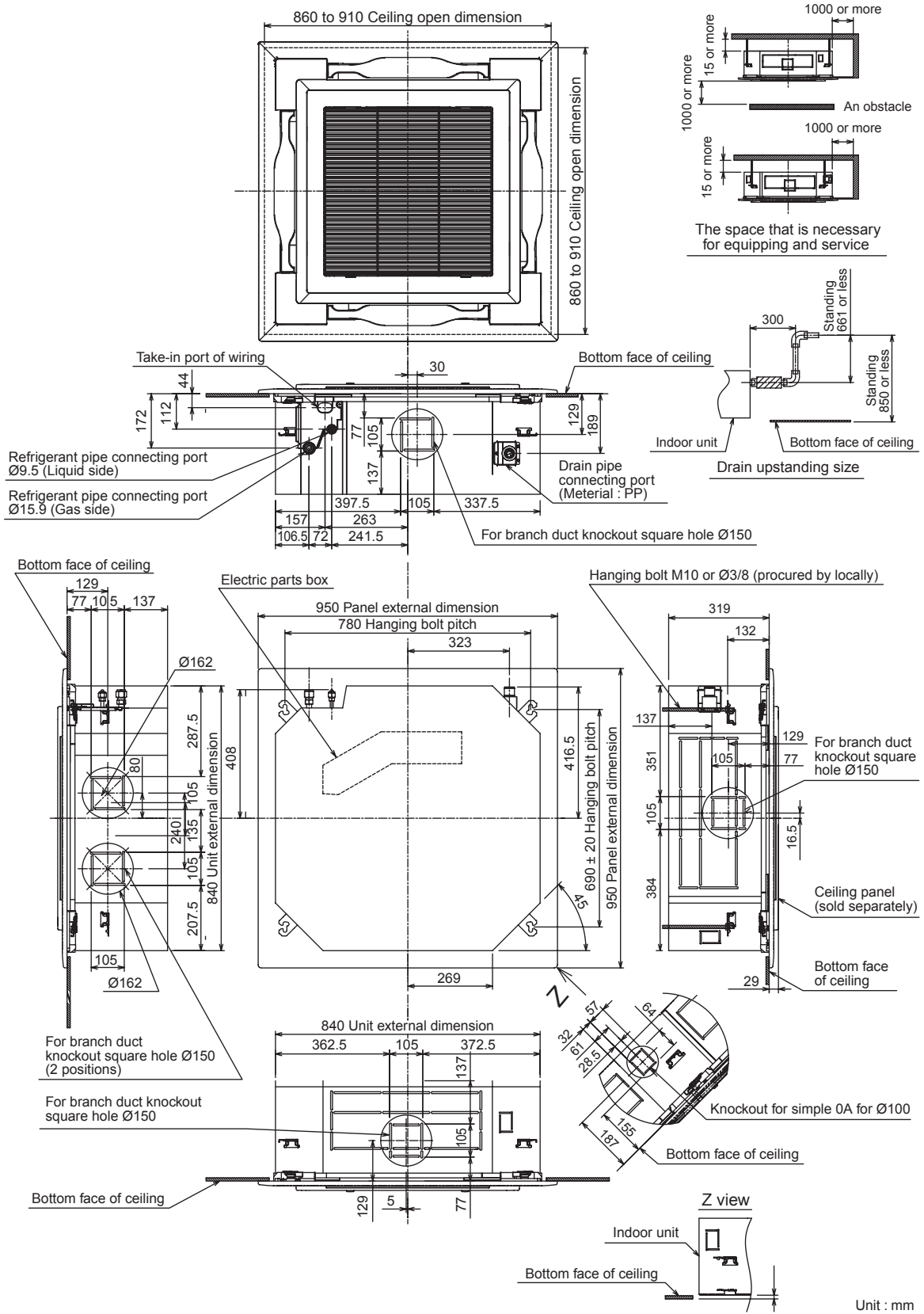








RAV-SM1604UTP-E





## 2-2-4. Sensible capacity table

Digital Inverter 3 Series Sensible Heat Capacity : RAV-SM\*\*\*UTP-E

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
564	10.0	5.0	3.5	5.2	3.7	5.5	3.9	5.7	4.0	5.9	4.1	6.1	4.3	6.2	4.4	6.6	4.6	6.9	4.8
	12.0	4.9	3.5	5.2	3.7	5.5	3.8	5.7	4.0	5.8	4.1	6.0	4.2	6.2	4.4	6.6	4.6	6.9	4.8
	14.0	4.9	3.5	5.2	3.6	5.4	3.8	5.6	3.9	5.8	4.1	6.0	4.2	6.2	4.3	6.5	4.6	6.8	4.8
	16.0	4.9	3.4	5.1	3.6	5.4	3.8	5.6	3.9	5.8	4.1	5.9	4.2	6.1	4.3	6.5	4.5	6.8	4.8
	18.0	4.8	3.4	5.1	3.6	5.3	3.8	5.5	3.9	5.7	4.0	5.9	4.1	6.1	4.3	6.4	4.5	6.7	4.7
	20.0	4.8	3.4	5.1	3.5	5.3	3.7	5.5	3.9	5.7	4.0	5.8	4.1	6.0	4.2	6.4	4.5	6.7	4.7
	21.0	4.8	3.4	5.0	3.5	5.3	3.7	5.5	3.8	5.7	4.0	5.8	4.1	6.0	4.2	6.3	4.5	6.6	4.7
	23.0	4.7	3.3	5.0	3.5	5.2	3.7	5.4	3.8	5.6	3.9	5.8	4.0	5.9	4.2	6.3	4.4	6.6	4.6
	25.0	4.7	3.3	4.9	3.5	5.2	3.6	5.4	3.8	5.5	3.9	5.7	4.0	5.9	4.1	6.2	4.4	6.5	4.6
	27.0	4.6	3.2	4.9	3.4	5.1	3.6	5.3	3.7	5.5	3.8	5.6	4.0	5.8	4.1	6.1	4.3	6.4	4.5
	29.0	4.6	3.2	4.8	3.4	5.0	3.5	5.2	3.7	5.4	3.8	5.6	3.9	5.7	4.0	6.1	4.3	6.3	4.4
	31.0	4.5	3.2	4.7	3.3	5.0	3.5	5.1	3.6	5.3	3.7	5.5	3.8	5.6	4.0	6.0	4.2	6.2	4.4
	33.0	4.4	3.1	4.7	3.3	4.9	3.4	5.1	3.6	5.2	3.7	5.4	3.8	5.5	3.9	5.9	4.1	6.1	4.3
	35.0	4.4	3.1	4.6	3.2	4.8	3.4	5.0	3.5	5.1	3.6	5.3	3.7	5.5	3.8	5.8	4.1	6.0	4.2
37.0	4.3	3.0	4.5	3.2	4.7	3.3	4.9	3.4	5.1	3.5	5.2	3.7	5.3	3.8	5.7	4.0	5.9	4.2	
39.0	4.2	2.9	4.4	3.1	4.6	3.2	4.8	3.4	4.9	3.5	5.1	3.6	5.2	3.7	5.5	3.9	5.8	4.1	

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
804	10.0	6.3	4.2	6.6	4.4	6.9	4.6	7.2	4.8	7.4	4.9	7.7	5.1	7.9	5.2	8.3	5.5	8.7	5.8
	12.0	6.3	4.1	6.6	4.4	6.9	4.6	7.1	4.7	7.4	4.9	7.6	5.0	7.8	5.2	8.3	5.5	8.7	5.7
	14.0	6.2	4.1	6.5	4.3	6.9	4.5	7.1	4.7	7.3	4.9	7.6	5.0	7.8	5.2	8.2	5.5	8.6	5.7
	16.0	6.2	4.1	6.5	4.3	6.8	4.5	7.1	4.7	7.3	4.8	7.5	5.0	7.7	5.1	8.2	5.4	8.6	5.7
	18.0	6.1	4.1	6.4	4.3	6.8	4.5	7.0	4.6	7.2	4.8	7.5	4.9	7.7	5.1	8.1	5.4	8.5	5.6
	20.0	6.1	4.0	6.4	4.2	6.7	4.4	6.9	4.6	7.2	4.8	7.4	4.9	7.6	5.0	8.1	5.3	8.4	5.6
	21.0	6.0	4.0	6.4	4.2	6.7	4.4	6.9	4.6	7.1	4.7	7.4	4.9	7.6	5.0	8.0	5.3	8.4	5.6
	23.0	6.0	4.0	6.3	4.2	6.6	4.4	6.8	4.5	7.1	4.7	7.3	4.8	7.5	5.0	7.9	5.3	8.3	5.5
	25.0	5.9	3.9	6.2	4.1	6.5	4.3	6.8	4.5	7.0	4.6	7.2	4.8	7.4	4.9	7.8	5.2	8.2	5.4
	27.0	5.8	3.9	6.1	4.1	6.5	4.3	6.7	4.4	6.9	4.6	7.1	4.7	7.3	4.8	7.8	5.1	8.1	5.4
	29.0	5.8	3.8	6.1	4.0	6.4	4.2	6.6	4.4	6.8	4.5	7.0	4.7	7.2	4.8	7.6	5.1	8.0	5.3
	31.0	5.7	3.8	6.0	4.0	6.3	4.2	6.5	4.3	6.7	4.5	6.9	4.6	7.1	4.7	7.5	5.0	7.9	5.2
	33.0	5.6	3.7	5.9	3.9	6.2	4.1	6.4	4.2	6.6	4.4	6.8	4.5	7.0	4.6	7.4	4.9	7.8	5.1
	35.0	5.5	3.6	5.8	3.8	6.1	4.0	6.3	4.2	6.5	4.3	6.7	4.4	6.9	4.6	7.3	4.8	7.6	5.1
37.0	5.4	3.6	5.7	3.8	6.0	3.9	6.2	4.1	6.4	4.2	6.6	4.4	6.8	4.5	7.2	4.7	7.5	5.0	
39.0	5.3	3.5	5.6	3.7	5.8	3.9	6.0	4.0	6.3	4.1	6.4	4.3	6.6	4.4	7.0	4.6	7.3	4.9	

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1104	10.0	9.4	7.5	9.9	7.9	10.4	8.3	10.7	8.6	11.1	8.9	11.4	9.1	11.8	9.4	12.5	10.0	13.0	10.4
	12.0	9.3	7.5	9.8	7.9	10.3	8.2	10.7	8.5	11.0	8.8	11.4	9.1	11.7	9.3	12.4	9.9	12.9	10.4
	14.0	9.3	7.4	9.8	7.8	10.2	8.2	10.6	8.5	11.0	8.8	11.3	9.0	11.6	9.3	12.3	9.8	12.9	10.3
	16.0	9.2	7.4	9.7	7.8	10.2	8.1	10.5	8.4	10.9	8.7	11.2	9.0	11.5	9.2	12.2	9.8	12.8	10.2
	18.0	9.1	7.3	9.6	7.7	10.1	8.1	10.4	8.4	10.8	8.6	11.1	8.9	11.4	9.2	12.1	9.7	12.7	10.1
	20.0	9.1	7.2	9.5	7.6	10.0	8.0	10.4	8.3	10.7	8.6	11.0	8.8	11.3	9.1	12.0	9.6	12.6	10.1
	21.0	9.0	7.2	9.5	7.6	10.0	8.0	10.3	8.3	10.7	8.5	11.0	8.8	11.3	9.0	12.0	9.6	12.5	10.0
	23.0	8.9	7.1	9.4	7.5	9.9	7.9	10.2	8.2	10.6	8.4	10.9	8.7	11.2	8.9	11.8	9.5	12.4	9.9
	25.0	8.8	7.1	9.3	7.4	9.8	7.8	10.1	8.1	10.4	8.4	10.8	8.6	11.1	8.8	11.7	9.4	12.2	9.8
	27.0	8.7	7.0	9.2	7.3	9.6	7.7	10.0	8.0	10.3	8.3	10.6	8.5	10.9	8.7	11.6	9.3	12.1	9.7
	29.0	8.6	6.9	9.1	7.2	9.5	7.6	9.8	7.9	10.2	8.1	10.5	8.4	10.8	8.6	11.4	9.1	11.9	9.6
	31.0	8.5	6.8	8.9	7.1	9.4	7.5	9.7	7.8	10.0	8.0	10.3	8.3	10.6	8.5	11.3	9.0	11.8	9.4
	33.0	8.4	6.7	8.8	7.0	9.2	7.4	9.6	7.6	9.9	7.9	10.2	8.1	10.5	8.4	11.1	8.9	11.6	9.3
	35.0	8.2	6.6	8.6	6.9	9.1	7.3	9.4	7.5	9.7	7.8	10.0	8.0	10.3	8.2	10.9	8.7	11.4	9.1
37.0	8.1	6.4	8.5	6.8	8.9	7.1	9.2	7.4	9.5	7.6	9.8	7.8	10.1	8.1	10.7	8.5	11.2	8.9	
39.0	7.9	6.3	8.3	6.6	8.7	7.0	9.0	7.2	9.3	7.5	9.6	7.7	9.9	7.9	10.5	8.4	10.9	8.8	

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1404	10.0	11.3	9.0	11.9	9.5	12.4	10.0	12.9	10.3	13.3	10.7	13.7	11.0	14.1	11.3	14.9	12.0	15.6	12.5
	12.0	11.2	9.0	11.8	9.4	12.4	9.9	12.8	10.2	13.2	10.6	13.6	10.9	14.0	11.2	14.8	11.9	15.5	12.4
	14.0	11.1	8.9	11.7	9.4	12.3	9.8	12.7	10.2	13.2	10.5	13.5	10.8	13.9	11.1	14.8	11.8	15.4	12.3
	16.0	11.0	8.8	11.6	9.3	12.2	9.8	12.6	10.1	13.1	10.5	13.5	10.8	13.8	11.1	14.7	11.7	15.3	12.3
	18.0	11.0	8.8	11.5	9.2	12.1	9.7	12.5	10.0	13.0	10.4	13.3	10.7	13.7	11.0	14.5	11.6	15.2	12.2
	20.0	10.9	8.7	11.4	9.2	12.0	9.6	12.4	9.9	12.9	10.3	13.2	10.6	13.6	10.9	14.4	11.5	15.1	12.1
	21.0	10.8	8.7	11.4	9.1	12.0	9.6	12.4	9.9	12.8	10.2	13.2	10.5	13.6	10.8	14.4	11.5	15.0	12.0
	23.0	10.7	8.6	11.3	9.0	11.8	9.5	12.3	9.8	12.7	10.1	13.0	10.4	13.4	10.7	14.2	11.4	14.9	11.9
	25.0	10.6	8.5	11.1	8.9	11.7	9.4	12.1	9.7	12.5	10.0	12.9	10.3	13.3	10.6	14.1	11.2	14.7	11.8
	27.0	10.5	8.4	11.0	8.8	11.6	9.2	12.0	9.6	12.4	9.9	12.7	10.2	13.1	10.5	13.9	11.1	14.5	11.6
	29.0	10.3	8.3	10.9	8.7	11.4	9.1	11.8	9.4	12.2	9.8	12.6	10.1	12.9	10.3	13.7	11.0	14.3	11.5
	31.0	10.2	8.1	10.7	8.6	11.2	9.0	11.6	9.3	12.0	9.6	12.4	9.9	12.8	10.2	13.5	10.8	14.1	11.3
	33.0	10.0	8.0	10.5	8.4	11.1	8.9	11.5	9.2	11.9	9.5	12.2	9.8	12.6	10.0	13.3	10.6	13.9	11.1
	35.0	9.9	7.9	10.4	8.3	10.9	8.7	11.3	9.0	11.7	9.3	12.0	9.2	12.3	9.9	13.1	10.5	13.4	10.5
37.0	9.7	7.7	10.2	8.1	10.7	8.5	11.1	8.8	11.4	9.1	11.8	9.4	12.1	9.7	12.8	10.3	13.4	10.7	
39.0	9.5	7.6	10.0	8.0	10.5	8.4	10.8	8.7	11.2	9.0	11.5	9.2	11.9	9.5	12.6	10.0	13.1	10.5	

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1604	10.0	13.1	9.3	13.8	9.8	14.5	10.3	15.0	10.6	15.5	11.0	16.0	11.3	16.5	11.6	17.4	12.3	18.2	12.9
	12.0	13.1	9.2	13.7	9.7	14.4	10.2	14.9	10.6	15.4	10.9	15.9	11.2	16.4	11.6	17.3	12.3	18.1	12.8
	14.0	13.0	9.2	13.7	9.7	14.3	10.1	14.8	10.5	15.4	10.9	15.8	11.2	16.3	11.5	17.2	12.2	18.0	12.7
	16.0	12.9	9.1	13.6	9.6	14.2	10.1	14.7	10.4	15.2	10.8	15.7	11.1	16.1	11.4	17.1	12.1	17.9	12.6
	18.0	12.8	9.0	13.5	9.5	14.1	10.0	14.6	10.3	15.1	10.7	15.6	11.0	16.0	11.3	17.0	12.0	17.7	12.5
	20.0	12.7	9.0	13.3	9.4	14.0	9.9	14.5	10.3	15.0	10.6	15.4	10.9	15.9	11.2	16.8	11.9	17.6	12.4
	21.0	12.6	8.9	13.3	9.4	13.9	9.9	14.4	10.2	14.9	10.6	15.4	10.9	15.8	11.2	16.7	11.8	17.5	12.4
	23.0	12.5	8.8	13.2	9.3	13.8	9.8	14.3	10.1	14.8	10.5	15.2	10.8	15.7	11.1	16.6	11.7	17.3	12.3
	25.0	12.4	8.7	13.0	9.2	13.7	9.7	14.1	10.0	14.6	10.3	15.1	10.6	15.5	10.9	16.4	11.6	17.1	12.1
	27.0	12.2	8.6	12.8	9.1	13.5	9.5	14.0	9.9	14.4	10.2	14.9	10.5	15.3	10.8	16.2	11.5	16.9	12.0
	29.0	12.1	8.5	12.7	9.0	13.3	9.4	13.8	9.7	14.3	10.1	14.7	10.4	15.1	10.7	16.0	11.3	16.7	11.8
	31.0	11.9	8.4	12.5	8.8	13.1	9.3	13.6	9.6	14.0	9.9	14.5	10.2	14.9	10.5	15.8	11.1	16.5	11.7
	33.0	11.7	8.3	12.3	8.7	12.9	9.1	13.4	9.5	13.8	9.8	14.2	10.1	14.6	10.4	15.5	11.0	16.2	11.5
	35.0	11.5	8.1	12.1	8.6	12.7	9.0	13.1	9.3	13.6	9.6	14.0	9.9	14.4	10.2	15.3	10.8	16.0	11.3
	37.0	11.3	8.0	11.9	8.4	12.5	8.8	12.9	9.1	13.3	9.4	13.7	9.7	14.1	10.0	15.0	10.6	15.6	11.1
	39.0	11.1	7.8	11.6	8.2	12.2	8.6	12.6	8.9	13.1	9.2	13.5	9.5	13.8	9.8	14.7	10.4	15.3	10.8

TC: Total Capacity [kW]  
 SHC: Sensible Heat Capacity [kW]

## 2-2-5. Part load performance

### Combination

Indoor unit : RAV-SM564UTP-E

Outdoor unit : RAV-SM563AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	350	1500	350
RATING	5300	1650	5600	1440

Q: Capacity in W  
W: Power Consumption in W

### Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	5040	4540	4030	3530	3020	2520	2020	1510	1430	1430
	W	1770	1520	1290	1080	890	710	550	400	380	380
35	Q	5300	4770	4240	3710	3180	2650	2120	1590	1500	1500
	W	1650	1416	1203	1008	830	665	512	370	350	350
30	Q	5520	4970	4410	3860	3310	2760	2210	1660	1560	1560
	W	1520	1310	1110	930	770	610	470	340	320	320
25	Q	5700	5130	4560	3990	3420	2850	2280	1710	1610	1610
	W	1410	1210	1030	860	710	570	440	320	300	300
20	Q	5850	5260	4680	4090	3510	2920	2340	1750	1650	1650
	W	1310	1130	960	800	660	530	410	290	280	280

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6750	6080	5400	4730	4050	3380	2700	2030	1810	1810
	W	1590	1410	1240	1060	890	740	580	430	390	390
10	Q	6130	5520	4910	4290	3680	3070	2450	1840	1640	1640
	W	1500	1340	1170	1000	850	700	550	410	370	370
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	1440	1280	1120	960	810	670	530	390	350	350
5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1400	1400
	W	1400	1240	1090	930	780	650	510	380	340	340
2	Q	4680	4210	3750	3280	2810	2340	1870	1400	1250	1250
	W	1330	1180	1030	890	750	620	490	360	320	320
0	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1180	1050	920	790	660	550	430	320	290	290
-5	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1180	1050	920	790	660	550	430	320	290	290
-7	Q	3440	3090	2750	2410	2060	1720	1380	1030	920	920
	W	1140	1020	890	760	640	530	420	310	280	280
-10	Q	3150	2830	2520	2200	1890	1570	1260	940	840	840
	W	1100	970	850	730	620	510	400	300	270	270
-15	Q	2650	2390	2120	1860	1590	1330	1060	800	710	710
	W	1030	920	800	690	580	480	380	280	250	250



## Combination

Indoor unit : RAV-SM804UTP-E

Outdoor unit : RAV-SM803AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	450	1500	450
RATING	6700	2090	8000	2210

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	6370	5730	5100	4460	3820	3190	2550	1910	1430	1430
	W	2240	1860	1530	1250	1000	780	590	420	480	480
35	Q	6700	6030	5360	4690	4020	3350	2680	2010	1500	1500
	W	2090	1733	1425	1162	932	729	552	391	450	450
30	Q	6970	6280	5580	4880	4180	3490	2790	2090	1560	1560
	W	1930	1600	1320	1070	860	670	510	360	420	420
25	Q	7200	6480	5760	5040	4320	3600	2880	2160	1610	1610
	W	1790	1480	1220	1000	800	630	470	330	390	390
20	Q	7390	6650	5910	5170	4430	3700	2960	2220	1650	1650
	W	1660	1380	1130	920	740	580	440	310	360	360

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	9650	8680	7720	6750	5790	4820	3860	2890	1930	1810
	W	2440	2140	1860	1590	1330	1080	850	630	410	500
10	Q	8760	7880	7010	6130	5260	4380	3500	2630	1750	1640
	W	2310	2030	1770	1500	1260	1020	800	600	390	470
7	Q	8000	7200	6400	5600	4800	4000	3200	2400	1600	1500
	W	2210	1940	1690	1440	1210	980	770	570	370	450
5	Q	7460	6720	5970	5220	4480	3730	2990	2240	1490	1400
	W	2140	1880	1640	1400	1170	950	750	550	360	440
2	Q	6690	6020	5350	4680	4010	3340	2680	2010	1340	1250
	W	2040	1790	1560	1330	1120	900	710	530	340	410
0	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	1810	1590	1380	1180	990	800	630	470	300	370
-5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	1810	1590	1380	1180	990	800	630	470	300	370
-7	Q	4910	4420	3930	3440	2950	2460	1960	1470	980	920
	W	1750	1540	1340	1140	960	780	610	450	290	360
-10	Q	4500	4050	3600	3150	2700	2250	1800	1350	900	840
	W	1680	1480	1290	1100	920	750	590	430	280	340
-15	Q	3790	3410	3030	2650	2280	1900	1520	1140	760	710
	W	1590	1390	1210	1030	870	700	550	410	270	320

## Combination

Indoor unit : RAV-SM1104UTP-E

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3110	11200	2930

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3340	2770	2280	1860	1490	1160	880	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3110	2578	2121	1729	1387	1085	821	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	2710	2710
	W	2870	2380	1960	1600	1280	1000	760	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	2800	2800
	W	2670	2210	1820	1480	1190	930	700	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	2870	2870
	W	2470	2050	1690	1370	1100	860	650	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3230	2830	2470	2110	1760	1430	1120	830	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3060	2690	2340	2000	1670	1360	1070	780	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2930	2570	2240	1910	1600	1300	1020	750	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	2840	2490	2170	1850	1550	1260	990	730	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2700	2370	2070	1760	1480	1200	940	690	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2400	2100	1830	1560	1310	1060	840	610	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2400	2100	1830	1560	1310	1060	840	610	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2330	2040	1780	1520	1270	1030	810	600	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2230	1960	1700	1450	1220	990	780	570	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2100	1840	1610	1370	1150	930	730	540	430	430

## Combination

Indoor unit : RAV-SM1404UTP-E

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12000	3740	14000	3800

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11410	10270	9130	7990	6850	5710	4560	3420	2850	2850
	W	4010	3330	2740	2230	1790	1400	1060	750	700	700
35	Q	12000	10800	9600	8400	7200	6000	4800	3600	3000	3000
	W	3740	3100	2551	2079	1668	1305	987	699	650	650
30	Q	12490	11240	9990	8740	7500	6250	5000	3750	3120	3120
	W	3460	2860	2360	1920	1540	1210	910	650	600	600
25	Q	12900	11610	10320	9030	7740	6450	5160	3870	3230	3230
	W	3210	2660	2190	1780	1430	1120	850	600	560	560
20	Q	13240	11910	10590	9270	7940	6620	5290	3970	3310	3310
	W	2970	2460	2030	1650	1330	1040	780	560	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3620	3620
	W	4190	3680	3200	2730	2280	1860	1470	1070	720	720
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3290	3290
	W	3970	3490	3030	2590	2160	1770	1390	1010	680	680
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	3800	3340	2900	2480	2070	1690	1330	970	650	650
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2800	2800
	W	3680	3240	2810	2400	2010	1640	1290	940	630	630
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2510	2510
	W	3500	3080	2670	2290	1910	1560	1230	890	600	600
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3110	2740	2380	2030	1700	1380	1090	790	530	530
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3110	2740	2380	2030	1700	1380	1090	790	530	530
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1840	1840
	W	3020	2650	2300	1970	1640	1340	1060	770	520	520
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1690	1690
	W	2890	2540	2210	1890	1580	1290	1010	740	490	490
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1420	1420
	W	2730	2400	2080	1780	1490	1210	950	700	470	470

## Combination

Indoor unit : RAV-SM1604UTP-E

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4490	16000	4430

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	4820	3670	3020	2460	1970	1550	1170	830	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4490	3421	2814	2294	1840	1440	1089	772	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4150	3160	2600	2120	1700	1330	1010	710	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	3850	2930	2410	1970	1580	1230	930	660	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3570	2720	2240	1820	1460	1140	870	610	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	4880	3540	3080	2620	2210	1800	1410	1040	820	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4630	3350	2920	2490	2090	1700	1340	980	770	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4430	3210	2790	2380	2000	1630	1280	940	740	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4290	3110	2700	2310	1940	1580	1240	910	720	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4080	2960	2570	2190	1840	1500	1180	870	680	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3520	2550	2220	1890	1590	1290	1020	750	590	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3370	2440	2120	1810	1520	1240	970	720	560	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3180	2300	2000	1710	1440	1170	920	670	530	470

## Combination

Indoor unit : RAV-SM564UTP-E(Twin)

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3110	11200	2930

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3340	2770	2280	1860	1490	1160	880	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3110	2578	2121	1729	1387	1085	821	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	2710	2710
	W	2870	2380	1960	1600	1280	1000	760	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	2800	2800
	W	2670	2210	1820	1480	1190	930	700	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	2870	2870
	W	2470	2050	1690	1370	1100	860	650	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3230	2830	2470	2110	1760	1430	1120	830	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3060	2690	2340	2000	1670	1360	1070	780	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2930	2570	2240	1910	1600	1300	1020	750	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	2840	2490	2170	1850	1550	1260	990	730	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2700	2370	2070	1760	1480	1200	940	690	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2400	2100	1830	1560	1310	1060	840	610	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2400	2100	1830	1560	1310	1060	840	610	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2330	2040	1780	1520	1270	1030	810	600	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2230	1960	1700	1450	1220	990	780	570	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2100	1840	1610	1370	1150	930	730	540	430	430

## Combination

Indoor unit : RAV-SM804UTP-E(Twin)

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12500	4090	14000	3800

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11890	10700	9510	8320	7130	5940	4760	3570	2850	2850
	W	4390	3640	2990	2440	1950	1530	1160	820	700	700
35	Q	12500	11250	10000	8750	7500	6250	5000	3750	3000	3000
	W	4090	3390	2790	2270	1820	1430	1080	760	650	650
30	Q	13010	11710	10410	9110	7810	6510	5210	3900	3120	3120
	W	3780	3130	2580	2100	1680	1320	1000	700	600	600
25	Q	13440	12090	10750	9410	8060	6720	5380	4030	3230	3230
	W	3510	2910	2390	1950	1560	1230	930	650	560	560
20	Q	13790	12410	11030	9650	8270	6890	5520	4140	3310	3310
	W	3250	2690	2220	1800	1450	1140	860	600	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3620	3620
	W	4190	3680	3200	2730	2280	1860	1470	1070	720	720
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3290	3290
	W	3970	3490	3030	2590	2160	1770	1390	1010	680	680
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	3800	3340	2900	2480	2070	1690	1330	970	650	650
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2800	2800
	W	3680	3240	2810	2400	2010	1640	1290	940	630	630
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2510	2510
	W	3500	3080	2670	2290	1910	1560	1230	890	600	600
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3110	2740	2380	2030	1700	1380	1090	790	530	530
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3110	2740	2380	2030	1700	1380	1090	790	530	530
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1840	1840
	W	3020	2650	2300	1970	1640	1340	1060	770	520	520
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1690	1690
	W	2890	2540	2210	1890	1580	1290	1010	740	490	490
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1420	1420
	W	2730	2400	2080	1780	1490	1210	950	700	470	470

## Combination

Indoor unit : RAV-SM804UTP-E(Twin)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4490	16000	4430

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	4820	3670	3020	2460	1970	1550	1170	830	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4490	3421	2814	2294	1840	1440	1089	772	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4150	3160	2600	2120	1700	1330	1010	710	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	3850	2930	2410	1970	1580	1230	930	660	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3570	2720	2240	1820	1460	1140	870	610	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	4880	3540	3080	2620	2210	1800	1410	1040	820	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4630	3350	2920	2490	2090	1700	1340	980	770	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4430	3210	2790	2380	2000	1630	1280	940	740	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4290	3110	2700	2310	1940	1580	1240	910	720	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4080	2960	2570	2190	1840	1500	1180	870	680	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3520	2550	2220	1890	1590	1290	1020	750	590	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3370	2440	2120	1810	1520	1240	970	720	560	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3180	2300	2000	1710	1440	1170	920	670	530	470

## Combination

Indoor unit : RAV-SM564UTP-E(Triple)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4490	16000	4430

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	4820	3670	3020	2460	1970	1550	1170	830	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4490	3421	2814	2294	1840	1440	1089	772	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4150	3160	2600	2120	1700	1330	1010	710	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	3850	2930	2410	1970	1580	1230	930	660	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3570	2720	2240	1820	1460	1140	870	610	520	520

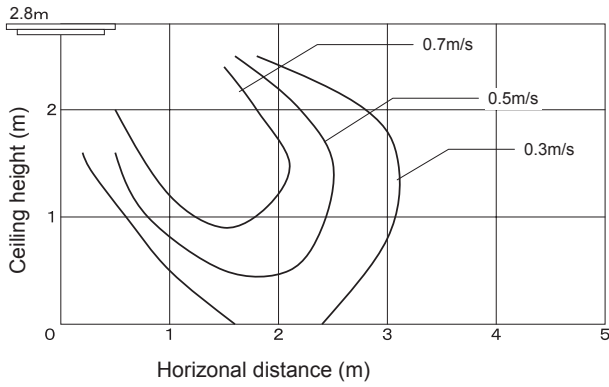
## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	4880	3540	3080	2620	2210	1800	1410	1040	820	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4630	3350	2920	2490	2090	1700	1340	980	770	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4430	3210	2790	2380	2000	1630	1280	940	740	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4290	3110	2700	2310	1940	1580	1240	910	720	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4080	2960	2570	2190	1840	1500	1180	870	680	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3630	2630	2290	1950	1640	1330	1050	770	610	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3520	2550	2220	1890	1590	1290	1020	750	590	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3370	2440	2120	1810	1520	1240	970	720	560	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3180	2300	2000	1710	1440	1170	920	670	530	470

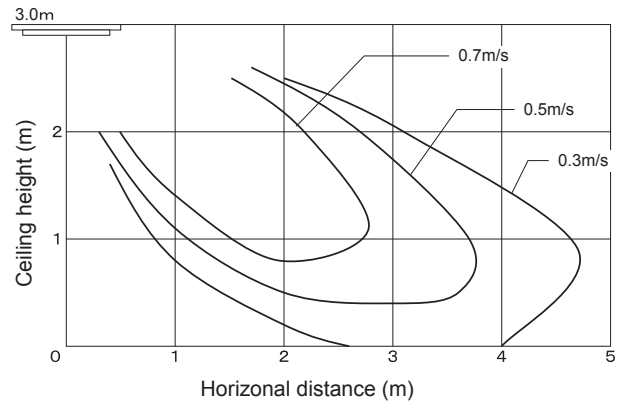


### 2-2-6. Air throw distance chart

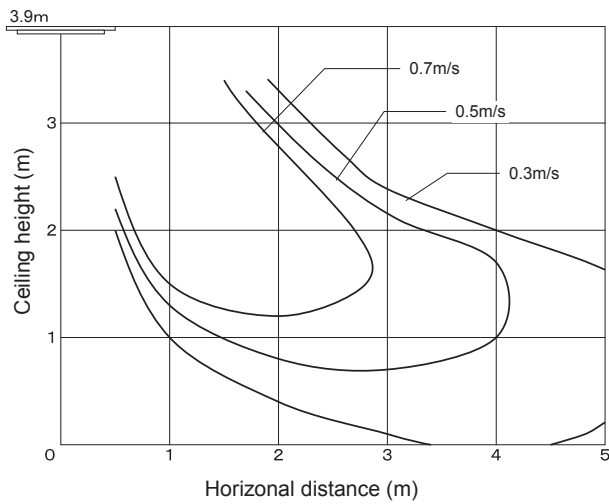
RAV-SM564UTP-E



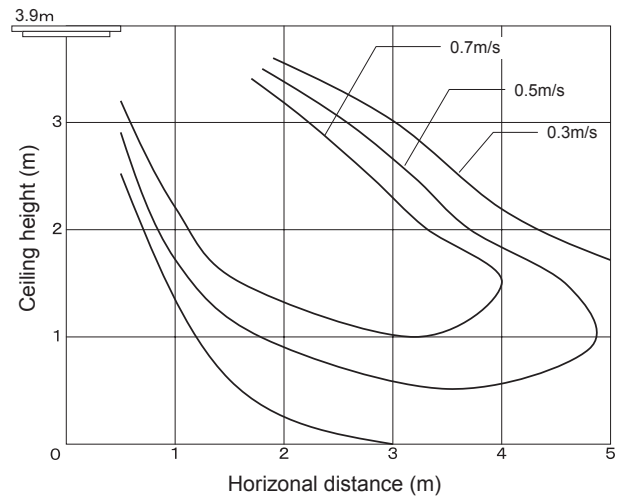
RAV-SM804UTP-E



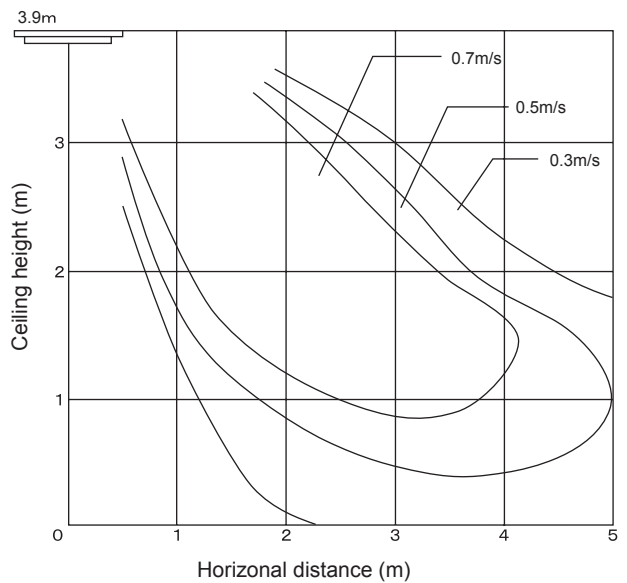
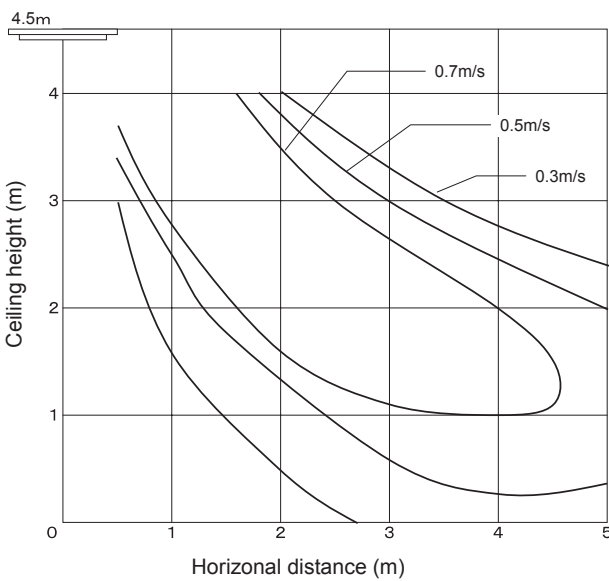
RAV-SM1104UTP-E



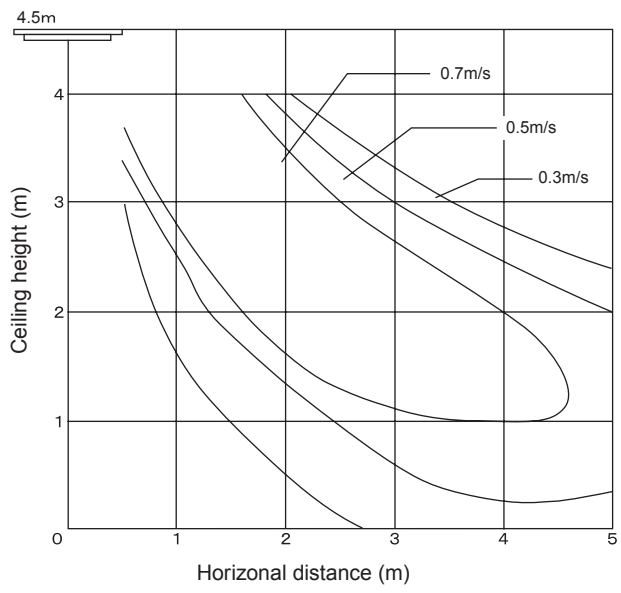
RAV-SM1404UTP-E



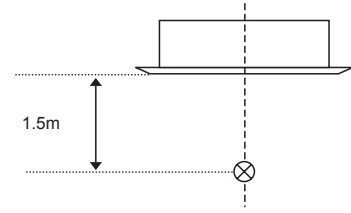
RAV-SM1104UTP-E, RAV-SM1404UTP-E (High ceiling) RAV-SM1604UTP-E



RAV-SM1604UTP-E (High ceiling)

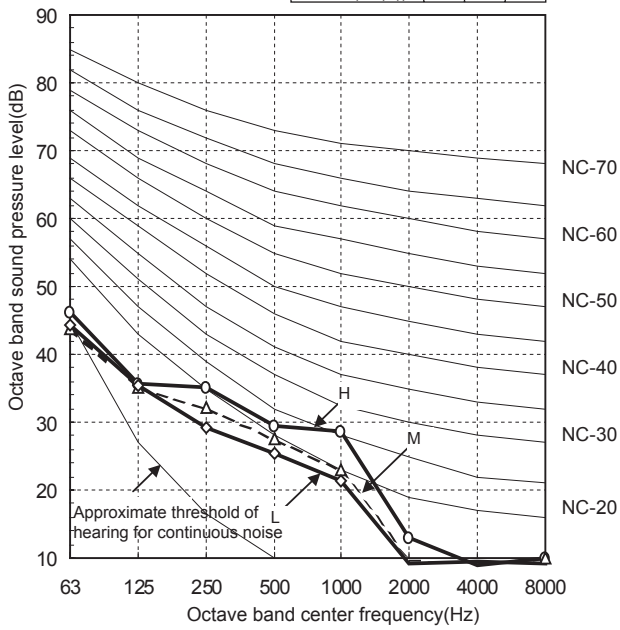


### 2-2-7. Sound characteristics (NC curve)



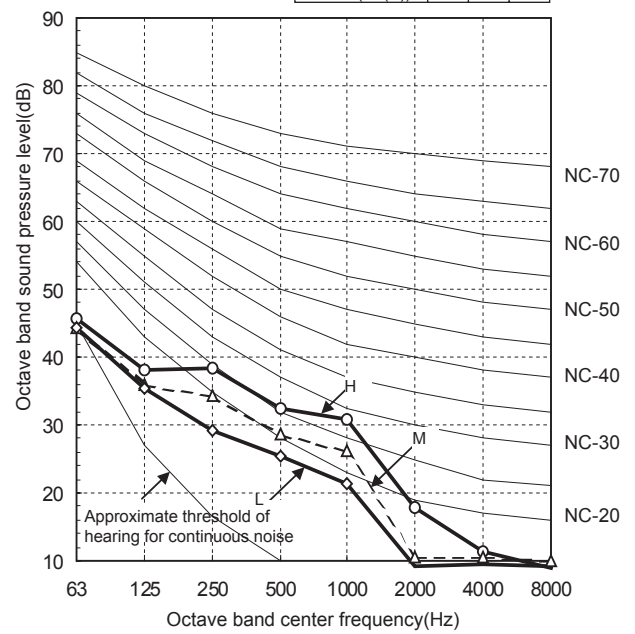
RAV-SM564UTP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	32	29	28



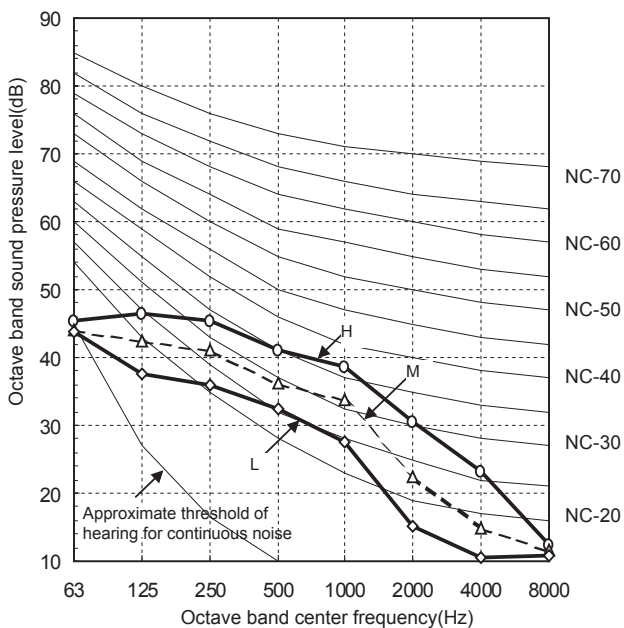
RAV-SM804UTP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	35	31	28



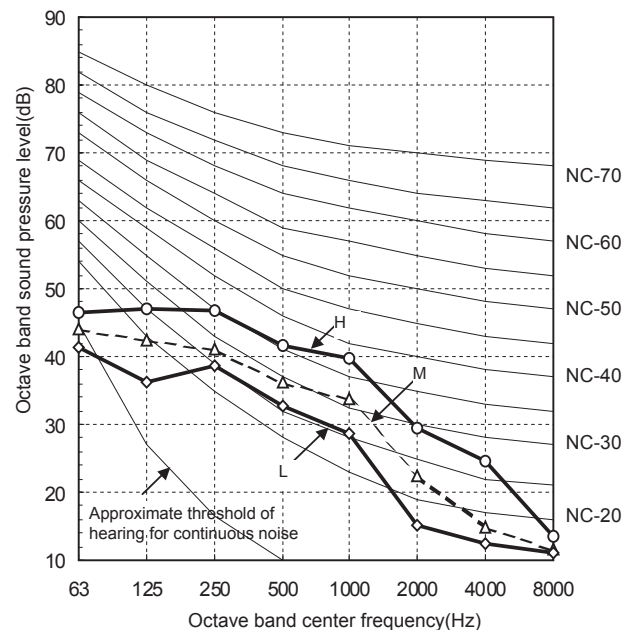
RAV-SM1104UTP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	43	38	33



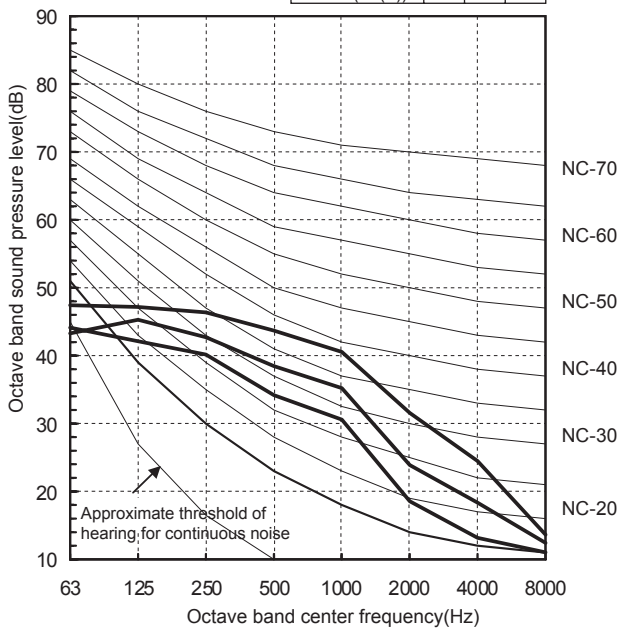
RAV-SM1404UTP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	44	38	34



RAV-SM1604UTP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	45	40	36



## 2-3. Compact 4-way Cassette Type

2-3-1. Specifications

2-3-2. Dimension

2-3-3. Wiring diagrams

2-3-4. Sensible capacity table

2-3-5. Part load performance

2-3-6. Air throw distance chart

2-3-7. Sound characteristics (NC curve)

## 2-3-1. Specifications

&lt;Single type&gt;

Model	Indoor unit		RAV-SM	564MUT-E
	Outdoor unit		RAV-SM	563AT-E
Cooling capacity			(kW)	5.0 (1.5 – 5.6)
Heating capacity			(kW)	5.6 (1.5 – 6.3)
Power supply				1 phase 230V (220 – 240V) 50Hz
Electrical characteristics	Cooling	Running current (A)		7.75 – 7.02
		Power consumption (kW)		1.61
		Power factor (%)		95
		EER		3.11
		Energy efficiency class *		B
	Heating	Running current (A)		7.72 – 7.04
		Power consumption (kW)		1.61
		Power factor (%)		95
		COP		3.48
		Energy efficiency class *		B
Maximum current (A)				12.53
Appearance	Main unit			Zinc hot dipping steel plate
	Ceiling panel (Sold separately)	Model		RBC-UM11PG(W)-E
		Panel color		
Outer dimension	Main unit	Height (mm)		268
		Width (mm)		575
		Depth (mm)		575
	Ceiling panel (Sold separately)	Height (mm)		27
		Width (mm)		700
		Depth (mm)		700
Total weight	Main unit (kg)			17
	Ceiling panel (Sold separately) (kg)			3
Heat exchanger				Finned tube
Fan unit	Fan			Tubo fan
	Standard air flow	H/M/L (m <sup>3</sup> /min.)		13.3/11.2/9.1
	Motor (W)			60
Air filter				Long life filter
Controller (Sold separately)				RBC-AMT32E, AMS41E, AS21E2
Connecting pipe	Gas side (mm)			12.7
	Liquid side (mm)			6.4
	Drain port (mm)			VP25
Sound pressure level		H/M/L (dB•A)		43/39/34
Sound power level		H/M/L (dB•A)		58/54/49

\*: IEC standard

Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

The refrigerant pipe length is 7.5 m(56Type is 5m), height difference is 0m.

The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

## &lt;Twin type/Triple type&gt;

Model	Indoor unit 1	RAV-SM	564MUT-E	564MUT-E	
	Indoor unit 2	RAV-SM	564MUT-E	564MUT-E	
	Indoor unit 3	RAV-SM	–	564MUT-E	
	Outdoor unit	RAV-SM	1103AT-E1	1603AT-E	
Cooling capacity		(kW)	10.0 (3.0 – 11.2)	14.0 (3.0 – 16.0)	
Heating capacity		(kW)	11.2 (3.0 – 13.0)	16.0 (3.0 – 18.0)	
Indoor unit					
Power supply		1 phase 230V (220 – 240V) 50Hz			
Electrical characteristics	Cooling	Running current	(A)	16.32 – 14.96	23.88 – 21.89
		Power consumption	(kW)	3.52	4.99
		Power factor	(%)	98	95
		EER		2.84	2.81
		Energy efficiency class *		C	C
	Heating	Running current	(A)	14.56 – 13.35	22.44 – 20.57
		Power consumption	(kW)	3.14	4.69
		Power factor	(%)	98	95
		COP		3.57	3.41
		Energy efficiency class *		B	B
Maximum current		(A)	20.7	30.6	
Fan unit	Fan		Turbo fan		
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	13.3/11.2/9.1	13.3/11.2/9.1	
	Motor		(W)	60	60
Sound pressure level		H/M/L (dB•A)	43/39/34	43/39/34	
Sound power level		H/M/L (dB•A)	58/54/49	58/54/49	
Outdoor unit					
Power supply		1 phase 230V (220 – 240V) 50Hz (Power exclusive to outdoor is required.)			
Refrigerant pipe	Standard length		(m)	7.5	7.5
	Max. total length		(m)	50	50
	Refrigerant charging amount (Charge-less up to 30m)		40g/m (31m to 50m)		
	Height difference	Outdoor lower	(m)	30	30
Outdoor higher		(m)	30	30	
Fan unit	Fan		Propeller fan		
	Standard air flow		(m <sup>3</sup> /min.)	75	103
	Motor		(W)	100	100 + 100
Connecting pipe	Gas side	Main	(mm)	15.9	15.9
		Sub	(mm)	12.7	15.9
	Liquid side	Main	(mm)	9.5	9.5
		Sub	(mm)	6.4	9.5
Sound pressure level		Cooling/Heating (dB•A)	53/54	51/53	
Sound power level		Cooling/Heating (dB•A)	70/71	68/70	

\* : IEC standard

## Note :

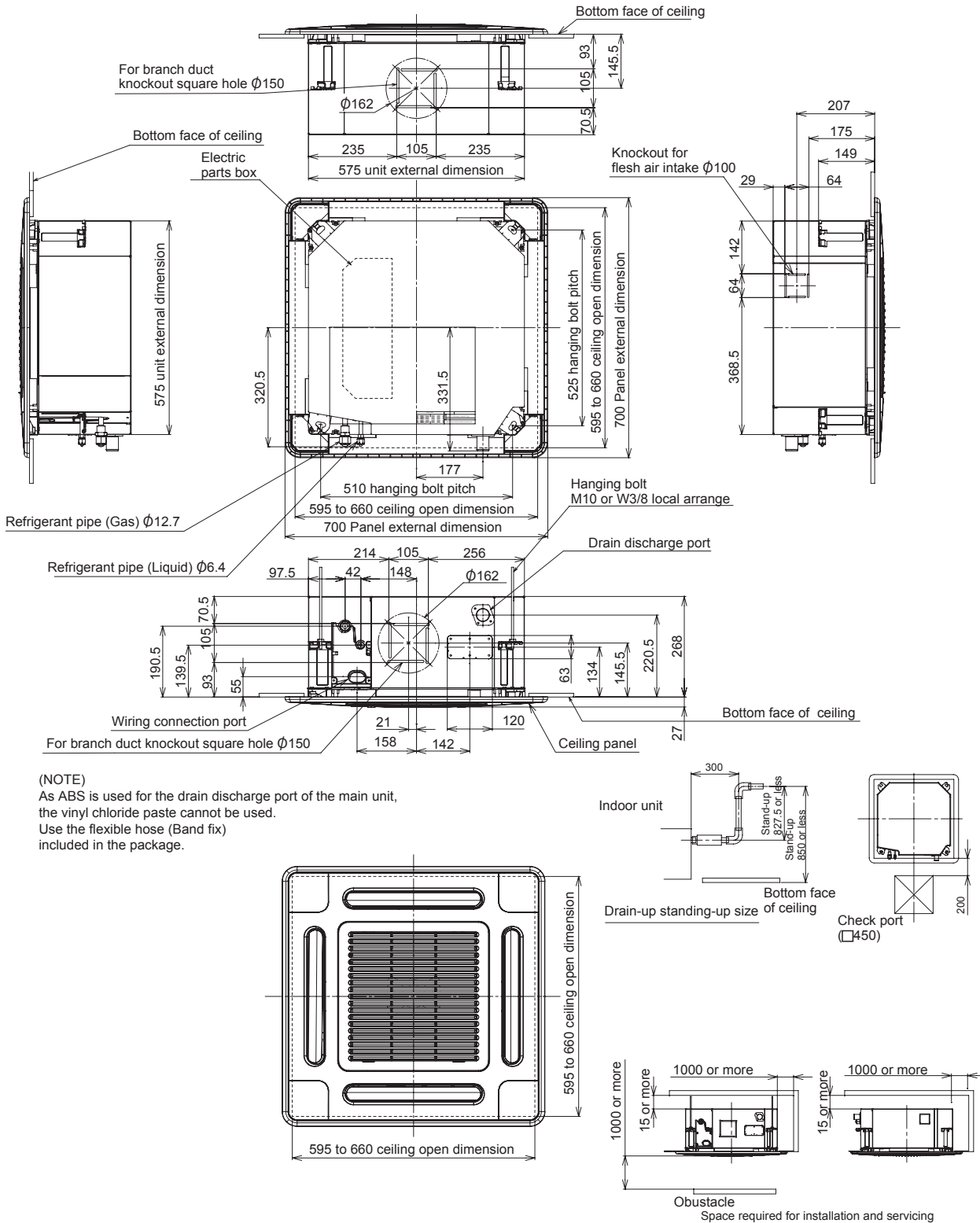
Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

### 2-3-2. Dimension

#### RAV-SM564MUT-E



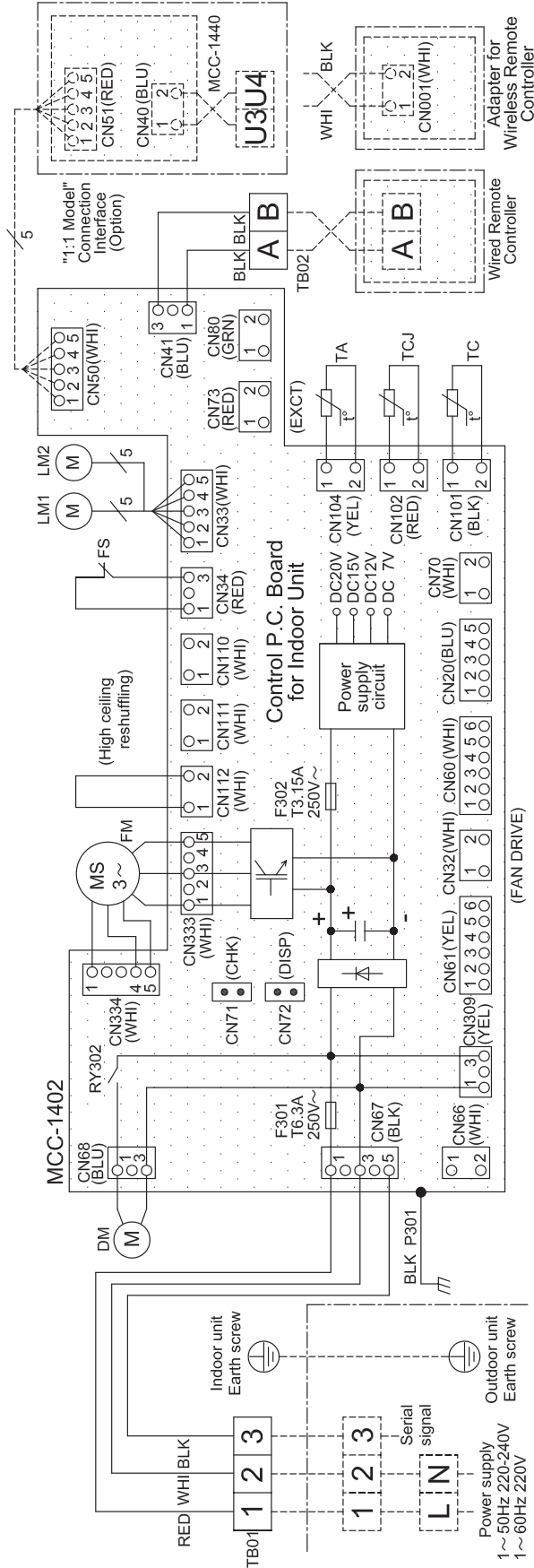
(NOTE)  
 As ABS is used for the drain discharge port of the main unit, the vinyl chloride paste cannot be used. Use the flexible hose (Band fix) included in the package.

Note: All dimensions are in mm.



### 2-3-3. Wiring diagrams

#### RAV-SM564MUT-E



1. Broken line indicate the wiring at site.  
Long dashed short dashed line indicate the accessories.
2. □ indicates the terminal block.  
—○— indicates the connection terminal.  
□○ indicates the connector on the control P.C. board.
3. ⊕ indicates the protection ground.
4. □□□□□ indicates the control P.C. board.

COLOR IDENTIFICATION-

RED	: RED
WHI	: WHITE
YEL	: YELLOW
BLU	: BLUE
BLK	: BLACK
GRY	: GRAY
PNK	: PINK
ORN	: ORANGE
BRW	: BROWN
GRN	: GREEN

Symbol	Parts Name
CN**	Connector
DM	Drain Pump Motor
F301,302	Fuse
FM	Fan Motor
FS	Floater Switch
LM1,2	Louver Motor
RY302	Drain Control Relay
TA	Indoor temp sensor
TB01,02	Terminal Block
TC,TCJ	Temp sensor

### 2-3-4. Sensible capacity table

#### Digital Inverter 3 Series Sensible Heat Capacity : RAV-SM\*\*\*MUT-E

unit size	outdoor air temp. CDB	indoor air temp.													
		14.0CWB 20.0CDB		16.0CWB 23.0CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
564	10.0	4.7	3.5	5.2	3.8	5.6	4.1	5.7	4.2	5.9	4.4	6.2	4.6	6.5	4.8
	12.0	4.7	3.5	5.2	3.8	5.5	4.1	5.7	4.2	5.8	4.3	6.2	4.6	6.5	4.8
	14.0	4.6	3.4	5.1	3.8	5.5	4.1	5.6	4.2	5.8	4.3	6.1	4.6	6.4	4.8
	16.0	4.6	3.4	5.1	3.8	5.4	4.0	5.6	4.1	5.8	4.3	6.1	4.5	6.4	4.7
	18.0	4.6	3.4	5.0	3.7	5.4	4.0	5.6	4.1	5.7	4.2	6.1	4.5	6.3	4.7
	20.0	4.5	3.4	5.0	3.7	5.4	4.0	5.5	4.1	5.7	4.2	6.0	4.4	6.3	4.6
	21.0	4.5	3.3	5.0	3.7	5.3	3.9	5.5	4.1	5.6	4.2	6.0	4.4	6.3	4.6
	23.0	4.5	3.3	4.9	3.6	5.3	3.9	5.4	4.0	5.6	4.1	5.9	4.4	6.2	4.6
	25.0	4.4	3.3	4.9	3.6	5.2	3.9	5.4	4.0	5.5	4.1	5.9	4.3	6.1	4.5
	27.0	4.4	3.2	4.8	3.6	5.2	3.8	5.3	3.9	5.5	4.0	5.8	4.3	6.0	4.5
	29.0	4.3	3.2	4.8	3.5	5.1	3.8	5.2	3.9	5.4	4.0	5.7	4.2	6.0	4.4
	31.0	4.2	3.1	4.7	3.5	5.0	3.7	5.2	3.8	5.3	3.9	5.6	4.2	5.9	4.4
	33.0	4.2	3.1	4.6	3.4	4.9	3.7	5.1	3.8	5.2	3.9	5.5	4.1	5.8	4.3
	35.0	4.1	3.0	4.5	3.4	4.9	3.6	5.0	3.7	5.1	3.8	5.4	4.0	5.7	4.2
	37.0	4.0	3.0	4.4	3.3	4.8	3.5	4.9	3.6	5.0	3.7	5.3	4.0	5.6	4.1
39.0	3.9	2.9	4.4	3.2	4.7	3.5	4.8	3.6	4.9	3.7	5.2	3.9	5.5	4.1	

TC:Total Capacity [kW]

SHC:Sensible Heat Capacity [kW]

## 2-3-5. Part load performance

### Combination

Indoor unit : RAV-SM564MUT-E

Outdoor unit : RAV-SM563AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	450	1500	450
RATING	5000	1610	5600	1610

Q: Capacity in W  
W: Power Consumption in W

### Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	4760	4280	3800	3330	2850	2380	1900	1430	1430	1430
	W	1730	1480	1260	1060	870	700	540	480	480	480
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1610	1381	1174	984	810	649	499	450	450	450
30	Q	5210	4680	4160	3640	3120	2600	2080	1560	1560	1560
	W	1490	1280	1080	910	750	600	460	420	420	420
25	Q	5380	4840	4300	3760	3230	2690	2150	1610	1610	1610
	W	1380	1180	1010	840	690	560	430	390	390	390
20	Q	5520	4960	4410	3860	3310	2760	2210	1650	1650	1650
	W	1280	1100	930	780	640	520	400	360	360	360

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6750	6080	5400	4730	4050	3380	2700	2030	1810	1810
	W	1780	1580	1380	1190	1000	830	650	470	500	500
10	Q	6130	5520	4910	4290	3680	3070	2450	1840	1640	1640
	W	1680	1490	1310	1130	950	780	620	450	470	470
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	1610	1430	1250	1080	910	750	590	430	450	450
5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1400	1400
	W	1560	1390	1210	1050	880	730	570	420	440	440
2	Q	4680	4210	3750	3280	2810	2340	1870	1400	1250	1250
	W	1480	1320	1150	1000	840	690	540	400	410	410
0	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1320	1170	1020	880	750	610	480	350	370	370
-5	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1320	1170	1020	880	750	610	480	350	370	370
-7	Q	3440	3090	2750	2410	2060	1720	1380	1030	920	920
	W	1280	1140	990	860	720	600	470	340	360	360
-10	Q	3150	2830	2520	2200	1890	1570	1260	940	840	840
	W	1230	1090	950	820	690	570	450	330	340	340
-15	Q	2650	2390	2120	1860	1590	1330	1060	800	710	710
	W	1160	1030	900	770	650	540	420	310	320	320

## Combination

Indoor unit : RAV-SM564MUT-E(Twin)

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3520	11200	3140

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3780	3130	2580	2100	1680	1320	1000	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3520	2918	2401	1957	1570	1228	929	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	3120	3120
	W	3250	2700	2220	1810	1450	1140	860	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	3230	3230
	W	3020	2500	2060	1680	1350	1050	800	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	3310	3310
	W	2800	2320	1910	1560	1250	980	740	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3460	3040	2650	2260	1890	1540	1210	880	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3280	2880	2510	2140	1790	1460	1150	840	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	3140	2760	2400	2050	1710	1400	1100	800	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	3040	2670	2330	1990	1660	1360	1070	780	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2900	2540	2210	1890	1580	1290	1010	740	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2570	2260	1970	1680	1400	1150	900	660	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2570	2260	1970	1680	1400	1150	900	660	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2490	2190	1910	1630	1360	1110	870	640	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2390	2100	1830	1560	1300	1070	840	610	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2250	1980	1720	1470	1230	1000	790	570	430	430

## Combination

Indoor unit : RAV-SM564MUT-E(Triple)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4990	16000	4690

Q: Capacity in W  
W: Power Consumption in W

## Cooling

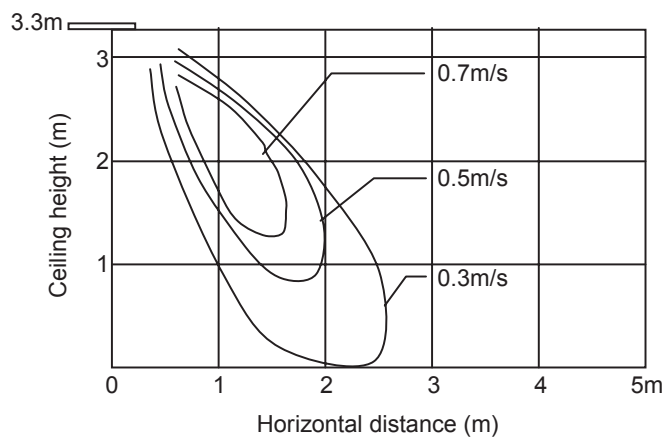
Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	5350	4440	3650	2980	2390	1870	1410	1000	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4990	4137	3403	2774	2226	1742	1317	933	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4610	3820	3140	2560	2060	1610	1220	860	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	4280	3550	2920	2380	1910	1490	1130	800	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3970	3290	2710	2210	1770	1380	1050	740	520	520

## Heating

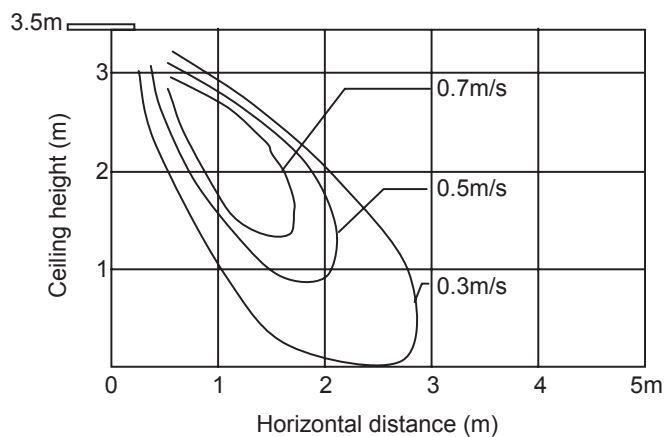
Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5170	4010	3500	2990	2500	2040	1600	1480	860	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4900	3800	3310	2830	2370	1930	1520	1400	820	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4690	3640	3170	2710	2270	1850	1450	1340	780	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4540	3530	3070	2630	2200	1790	1410	1300	760	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4320	3360	2920	2500	2090	1710	1340	1240	720	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3720	2890	2520	2150	1800	1470	1150	1060	620	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3570	2770	2410	2060	1730	1410	1100	1020	590	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3370	2610	2270	1940	1630	1330	1040	960	560	470

### 2-3-6. Air throw distance chart

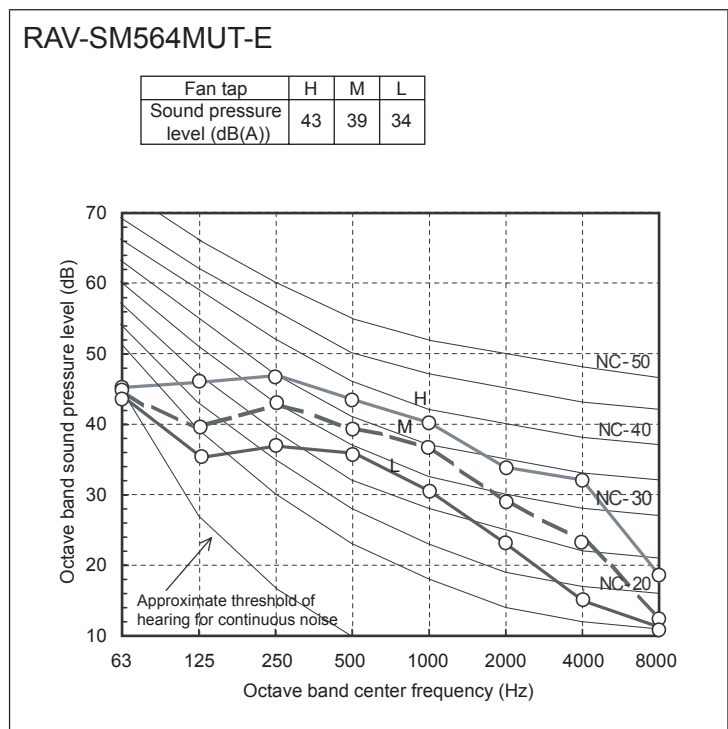
RAV-SM564MUT-E



RAV-SM564MUT-E (High ceiling)



### 2-3-7. Sound characteristics (NC curve)



## 2-4. Ducted (6 series) Type

2-4-1. Specifications

2-4-2. Dimension

2-4-3. Wiring diagrams

2-4-4. Sensible capacity table

2-4-5. Part load performance

2-4-6. Fan static characteristics

2-4-7. Sound characteristics (NC curve)



## 2-4-1. Specifications

&lt;Single type&gt;

Model	Indoor unit		RAV-SM	566BT-E	806BT-E	1106BT-E	1406BT-E	1606BT-E
	Outdoor unit		RAV-SM	563AT-E	803AT-E	1103AT-E1	1403AT-E1	1603AT-E
Cooling capacity			(kW)	5.0 (1.5 – 5.6)	6.7 (1.5 – 7.4)	10.0 (3.0 – 11.2)	12.1 (3.0 – 13.2)	14.0 (3.0 – 16.0)
Heating capacity			(kW)	5.6 (1.5 – 6.3)	8.0 (1.5 – 9.0)	11.2 (3.0 – 12.5)	13.4 (3.0 – 16.0)	16.0 (3.0 – 18.0)
Power supply			1 phase 230V (220 – 240V) 50Hz					
Electrical characteristics	Cooling	Running current	(A)	8.51 – 7.80	11.50 – 10.54	16.23 – 14.87	20.05 – 18.37	24.54 – 22.49
		Power consumption	(kW)	1.78	2.38	3.50	4.28	5.13
		Power factor	(%)	95	94	98	97	95
		EER		2.81	2.81	2.86	2.83	2.73
		Energy efficiency class *		C	C	C	C	D
	Heating	Running current	(A)	8.18 – 7.49	11.65 – 10.67	14.56 – 13.34	18.32 – 16.79	22.44 – 20.57
		Power consumption	(kW)	1.71	2.41	3.14	3.91	4.69
		Power factor	(%)	95	94	98	97	95
		COP		3.27	3.32	3.57	3.43	3.41
		Energy efficiency class *		C	C	B	B	B
Maximum current			(A)	13.0	15.4	22.0	22.3	32.3
Appearance	Main unit		Zinc hot dipping steel plate					
Outer dimension	Main unit	Height	(mm)	275	275	275	275	275
		Width	(mm)	700	1000	1400	1400	1400
		Depth	(mm)	750	750	750	750	750
Total weight	Main unit		(kg)	23	30	40	40	40
Heat exchanger			Finned tube					
Fan unit	Fan		Centrifugal					
	Standard air flow	H/M/L	(m <sup>3</sup> /min.)	13.3/10.5/ 8.0	20.0/15.5/ 12.0	35.0/27.5/ 21.0	35.0/27.5/ 21.0	35.0/27.5/ 21.0
	Motor		(W)	150	150	250	250	250
	External static pressure	Standard (Upper – Lower)	(Pa)	30 (120 – 30)	30 (120 – 30)	50 (120 – 30)	50 (120 – 30)	50 (120 – 30)
Air filter			Long life filter					
Controller (Sold separately)			RBC-AMT32E, AMS41E, AS21E2					
Connecting pipe	Gas side		(mm)	12.7	15.9	15.9	15.9	15.9
	Liquid side		(mm)	6.4	9.5	9.5	9.5	9.5
	Drain port		(mm)	VP25				
Sound pressure level	H/M/L		(dB•A)	33/29/25	34/30/26	40/36/33	40/36/33	40/36/33
Sound power level	H/M/L		(dB•A)	48/44/40	49/45/41	55/51/48	55/51/48	55/51/48

\*: IEC standard

Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

The refrigerant pipe length is 7.5 m(56Type is 5m), height difference is 0m.

The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

## &lt;Twin type/Triple type&gt;

Model	Indoor unit 1		RAV-SM	566BT-E	806BT-E	806BT-E	566BT-E
	Indoor unit 2		RAV-SM	566BT-E	806BT-E	806BT-E	566BT-E
	Indoor unit 3		RAV-SM	—	—	—	566BT-E
	Outdoor unit		RAV-SM	1103AT-E	1403AT-E1	1603AT-E	1603AT-E
Cooling capacity			(kW)	10.0 (3.0 – 11.2)	12.1 (3.0 – 13.2)	14.0 (3.0 – 16.0)	14.0 (3.0 – 16.0)
Heating capacity			(kW)	11.2 (3.0 – 12.5)	13.4 (3.0 – 16.0)	16.0 (3.0 – 18.0)	16.0 (3.0 – 18.0)
Power supply				1 phase 230V (220 – 240V) 50Hz			
Electrical characteristics	Cooling	Running current (A)		16.23 – 14.87	20.05 – 18.37	24.54 – 22.49	24.54 – 22.49
		Power consumption (kW)		3.50	4.28	5.13	5.13
		Power factor (%)		98	97	95	95
		EER		2.86	2.83	2.73	2.73
		Energy efficiency class *		C	C	D	D
	Heating	Running current (A)		14.56 – 13.34	18.32 – 16.79	22.44 – 20.57	22.44 – 20.57
		Power consumption (kW)		3.14	3.91	4.69	4.69
		Power factor (%)		98	97	95	95
		COP		3.57	3.43	3.41	3.41
		Energy efficiency class *		B	B	B	B
Maximum current (A)			22.0	22.3	32.0	32.0	
Indoor unit							
Fan unit	Fan		Centrifugal				
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	13.3/10.5/8.0	20.0/15.5/12.0	20.0/15.5/12.0	13.3/10.5/8.0	
	Motor (W)		150	150	150	150	
	External static pressure	Standard (Upper – Lower) (Pa)	30 (120 – 30)	30 (120 – 30)	30 (120 – 30)	30 (120 – 30)	
Sound pressure level		H/M/L (dB•A)	33/29/25	34/30/26	34/30/26	33/29/25	
Sound power level		H/M/L (dB•A)	48/44/40	49/45/41	49/45/41	48/44/40	
Outdoor unit							
Refrigerant pipe	Standard length (m)		7.5	7.5	7.5	7.5	
	Max. total length (m)		50	50	50	50	
	Refrigerant charging amount (Charge-less up to 30m)		40g/m (31m to 50m)				
	Height difference	Outdoor lower (m)	30	30	30	30	
Outdoor higher (m)		30	30	30	30		
Fan unit	Fan		Propeller fan				
	Standard air flow (m <sup>3</sup> /min.)		75	75	103	103	
	Motor (W)		100	100	100 + 100	100 + 100	
Connecting pipe	Gas side	Main (mm)	15.9	15.9	15.9	15.9	
		Sub (mm)	12.7	15.9	15.9	12.7	
	Liquid side	Main (mm)	9.5	9.5	9.5	9.5	
		Sub (mm)	6.4	9.5	9.5	6.4	
Sound pressure level		Cooling/Heating (dB•A)	53/54	54/54	51/53	51/53	
Sound power level		Cooling/Heating (dB•A)	70/71	71/71	68/70	68/70	

\* : IEC standard

## Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

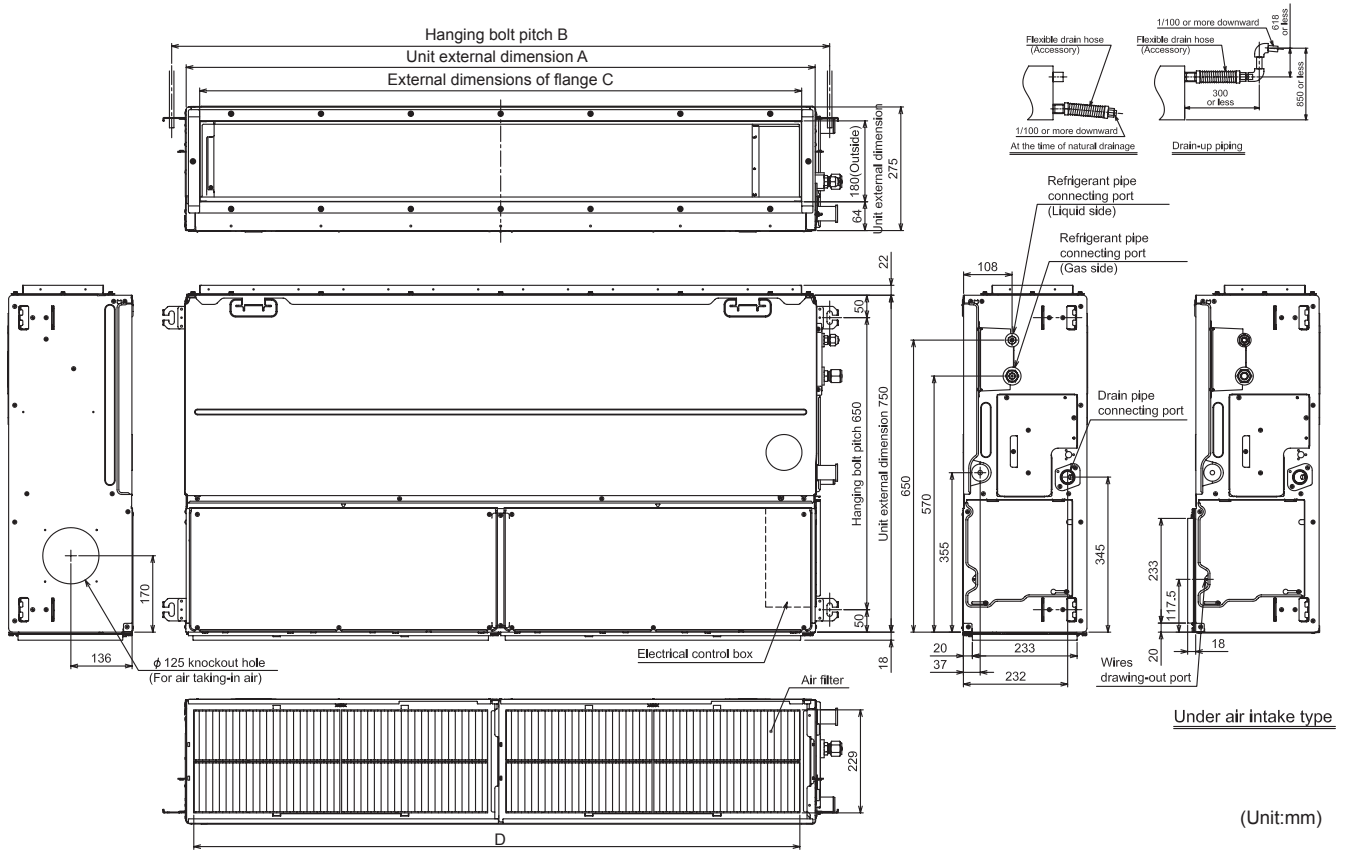
Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

### 2-4-2. Dimension

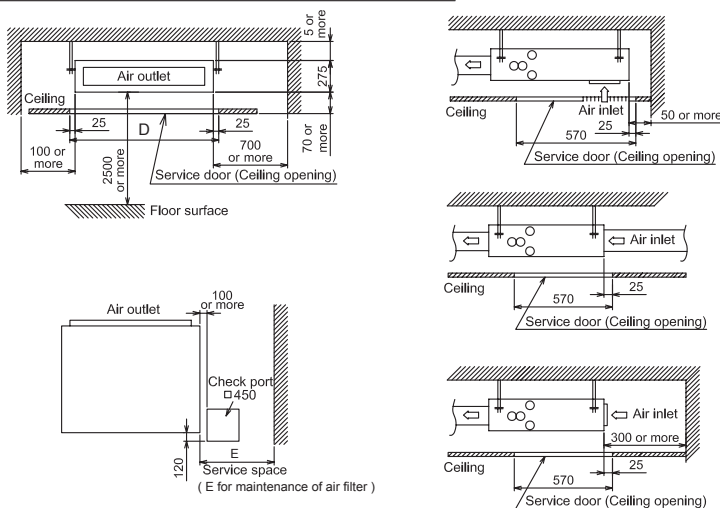
RAV-SM566BT-E/RAV-SM806BT-E/RAV-SM1106BT-E/RAV-SM1406BT-E/RAV-SM1606BT-E



### Dimension

	A	B	C	D
RAV-SM566BT-E	700	765	640	750
RAV-SM806BT-E	1000	1065	940	1050
RAV-SM1106BT-E RAV-SM1406BT-E RAV-SM1606BT-E	1400	1465	1340	1450

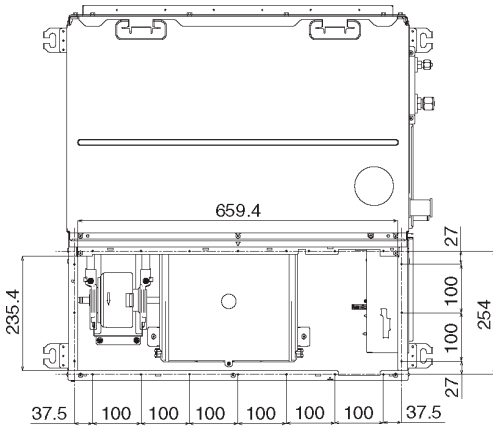
### Space required for installation and servicing



	E
RAV-SM566BT-E	700
RAV-SM806BT-E	500
RAV-SM1106BT-E RAV-SM1406BT-E RAV-SM1606BT-E	700

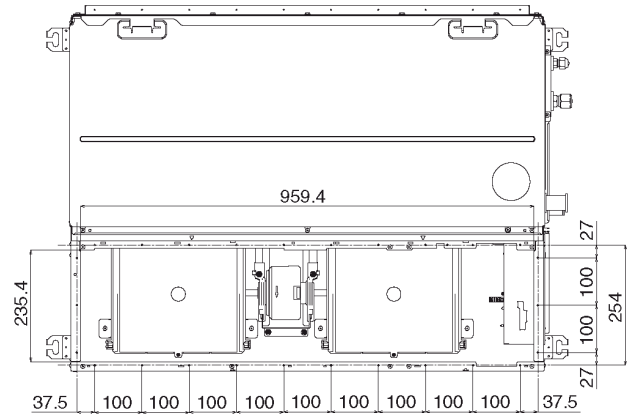
RAV-SM566BT-E

<Under air intake>

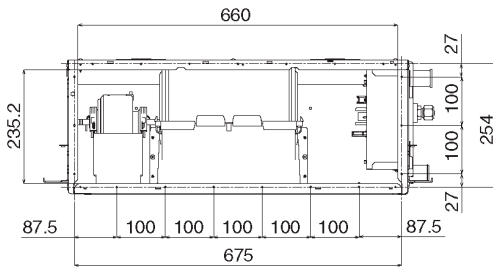


RAV-SM806BT-E

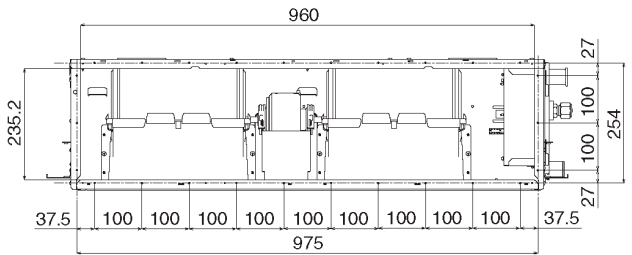
<Under air intake>



<Back air intake>

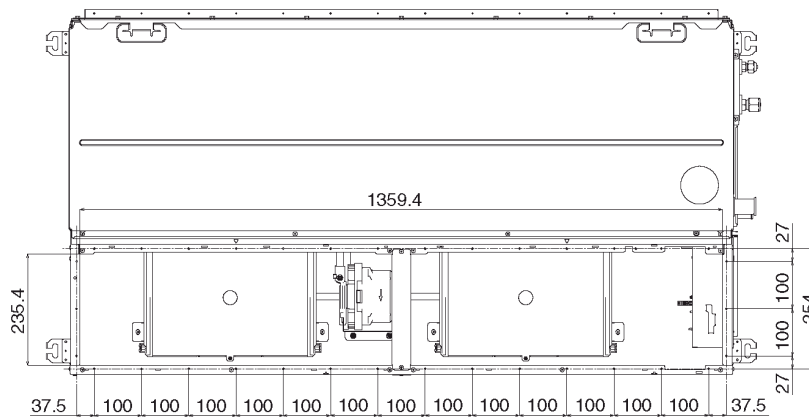


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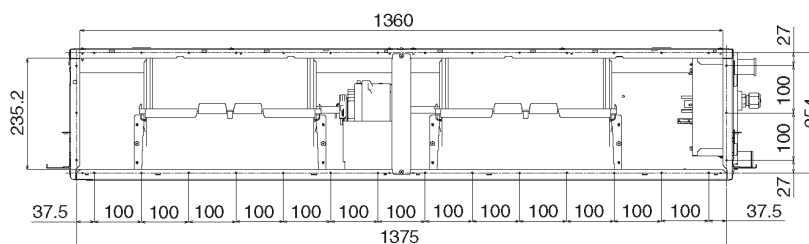


RAV-SM1106BT-E, RAV-SM1406BT-E, RAV-SM1606BT-E

<Under air intake>



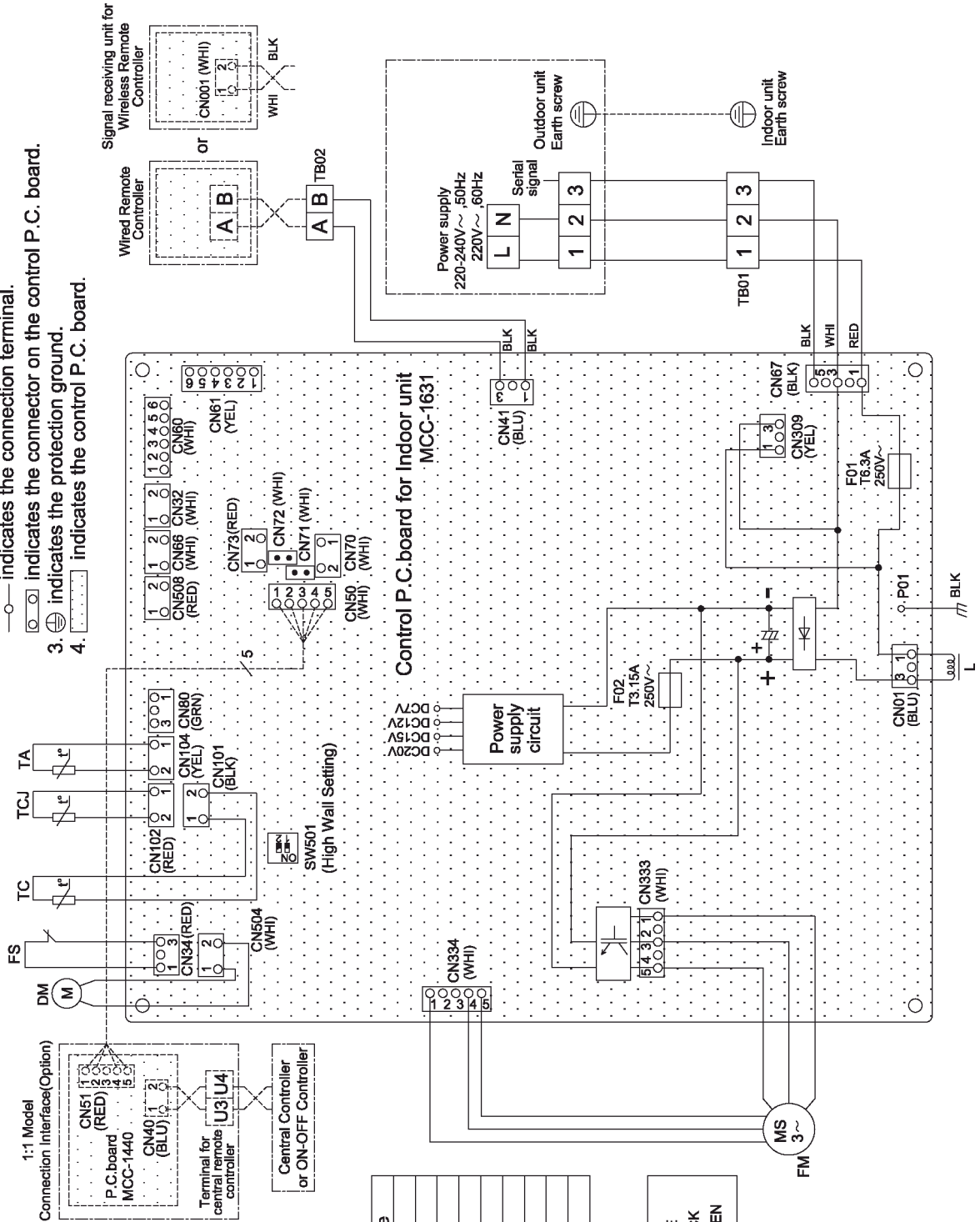
<Back air intake>



### 2-4-3. Wiring diagrams

RAV-SM566BT-E/RAV-SM806BT-E/RAV-SM1106BT-E/RAV-SM1406BT-E/RAV-SM1606BT-E

1. Broken line indicate the wiring at site.
- Long dashed short dashed line indicate the accessories.
2. indicates the terminal block.
3. indicates the connection terminal.
4. indicates the protection ground.
5. indicates the control P.C. board.



Symbol	Parts name
CN**	Connector
DM	Drain pump Motor
F01,02	Fuse
FM	Fan Motor
FS	Float Switch
L	Reactor
TA	Indoor temp.sensor
TB01,TB02	Terminal Block
TC,TCJ	Temp.sensor

Color Indication	
RED	: RED
BLU	: BLUE
WHI	: WHITE
BLK	: BLACK
YEL	: YELLOW
GRN	: GREEN

### 2-4-4. Sensible capacity table

Digital Inverter 3 Series Sensible Heat Capacity : RAV-SM\*\*\*BT-E

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
566	10.0	4.7	3.6	5.1	3.9	5.2	3.9	5.4	4.1	5.6	4.2	5.7	4.3	5.9	4.5	6.2	4.7	6.5	4.9
	12.0	4.7	3.5	5.0	3.8	5.2	3.9	5.3	4.1	5.5	4.2	5.7	4.3	5.8	4.4	6.2	4.7	6.5	4.9
	14.0	4.6	3.5	5.0	3.8	5.1	3.9	5.3	4.0	5.5	4.2	5.6	4.3	5.8	4.4	6.1	4.7	6.4	0.9
	16.0	4.6	3.5	5.0	3.8	5.1	3.9	5.3	4.0	5.4	4.1	5.6	4.3	5.8	4.4	6.1	4.6	6.4	4.9
	18.0	4.6	3.5	4.9	3.8	5.0	3.8	5.2	4.0	5.4	4.1	5.6	4.2	5.7	4.3	6.1	4.6	6.3	4.8
	20.0	4.5	3.4	4.9	3.7	5.0	3.8	5.2	3.9	5.4	4.1	5.5	4.2	5.7	4.3	6.0	4.6	6.3	4.8
	21.0	4.5	3.4	4.9	3.7	5.0	3.8	5.2	3.9	5.3	4.1	5.5	4.2	5.6	4.3	6.0	4.5	6.3	4.8
	23.0	4.4	3.4	4.8	3.7	4.9	3.7	5.1	3.9	5.3	4.0	5.4	4.1	5.6	4.2	5.9	4.5	6.2	4.7
	25.0	4.4	3.4	4.8	3.6	4.9	3.7	5.0	3.8	5.2	4.0	5.4	4.1	5.5	4.2	5.9	4.4	6.1	4.7
	27.0	4.4	3.3	4.7	3.6	4.8	3.7	5.0	3.8	5.2	3.9	5.3	4.0	5.5	4.2	5.8	4.4	6.0	4.6
	29.0	4.3	3.3	4.7	3.5	4.8	3.6	4.9	3.7	5.1	3.9	5.2	4.0	5.4	4.1	5.7	4.3	6.0	4.5
	31.0	4.2	3.2	4.6	3.5	4.7	3.6	4.9	3.7	5.0	3.8	5.2	3.9	5.3	4.0	5.6	4.3	5.9	4.5
	33.0	4.2	3.2	4.5	3.4	4.6	3.5	4.8	3.6	4.9	3.8	5.1	3.9	5.2	4.0	5.5	4.2	5.8	4.4
	35.0	4.1	3.8	4.4	3.8	4.5	3.8	4.7	3.8	4.9	3.8	5.0	3.8	5.1	3.8	5.4	3.8	5.7	3.8
	37.0	4.0	3.1	4.4	3.3	4.4	3.4	4.6	3.5	4.8	3.6	4.9	3.7	5.0	3.8	5.3	4.1	5.6	4.2
	39.0	3.9	3.0	4.3	3.2	4.4	3.3	4.5	3.4	4.7	3.5	4.8	3.7	4.9	3.8	5.2	4.0	5.5	4.2

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
806	10.0	6.3	4.9	6.8	5.3	7.0	5.4	7.2	5.6	7.5	5.8	7.6	6.0	7.8	6.1	8.3	6.4	8.7	6.7
	12.0	6.2	4.8	6.8	5.3	6.9	5.4	7.2	5.6	7.4	5.7	7.6	5.9	7.8	6.1	8.3	6.4	8.7	6.7
	14.0	6.2	4.8	6.7	5.2	6.9	5.3	7.1	5.5	7.4	5.7	7.5	5.9	7.7	6.1	8.2	6.3	8.6	6.6
	16.0	6.1	4.8	6.7	5.2	6.8	5.3	7.1	5.5	7.3	5.7	7.5	5.8	7.7	6.0	8.2	6.3	8.6	6.5
	18.0	6.1	4.7	6.6	5.1	6.8	5.2	7.0	5.4	7.3	5.6	7.5	5.8	7.6	6.0	8.1	6.2	8.5	6.5
	20.0	6.0	4.7	6.6	5.1	6.7	5.2	7.0	5.4	7.2	5.6	7.4	5.7	7.6	5.9	8.0	6.2	8.4	6.4
	21.0	6.0	4.7	6.5	5.1	6.7	5.2	6.9	5.4	7.2	5.6	7.4	5.7	7.5	5.9	8.0	6.2	8.4	6.4
	23.0	5.9	4.6	6.5	5.0	6.6	5.1	6.8	5.3	7.1	5.5	7.3	5.7	7.5	5.8	7.9	6.2	8.3	6.3
	25.0	5.9	4.6	6.4	5.0	6.5	5.1	6.8	5.3	7.0	5.4	7.2	5.6	7.5	5.8	7.8	6.1	8.2	6.2
	27.0	5.9	4.5	6.3	4.9	6.4	5.0	6.7	5.2	6.9	5.4	7.1	5.5	7.4	5.7	7.7	6.0	8.1	6.2
	29.0	5.8	4.5	6.2	4.8	6.3	4.9	6.6	5.1	6.8	5.3	7.0	5.5	7.3	5.6	7.6	6.0	8.0	6.1
	31.0	5.7	4.4	6.1	4.8	6.3	4.9	6.5	5.0	6.7	5.2	6.9	5.4	7.1	5.5	7.5	5.9	7.9	6.0
	33.0	5.6	4.3	6.0	4.7	6.1	4.8	6.4	5.0	6.6	5.1	6.8	5.3	7.0	5.4	7.5	5.8	7.7	6.2
	35.0	5.5	4.3	5.9	4.6	6.0	4.7	6.3	4.9	6.5	5.0	6.7	5.2	6.9	5.4	7.3	5.7	7.6	5.9
	37.0	5.4	4.2	5.9	4.5	5.9	4.6	6.1	4.8	6.4	5.0	6.6	5.1	6.8	5.2	7.2	5.6	7.5	5.8
	39.0	5.3	4.1	5.8	4.4	5.9	4.5	6.0	4.7	6.2	4.8	6.4	5.0	6.6	5.1	7.0	5.4	7.4	5.7

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1106	10.0	9.4	7.9	10.2	8.3	10.4	8.4	10.7	8.7	11.1	8.9	11.4	8.9	11.8	8.9	12.5	8.8	13.0	8.6
	12.0	9.3	7.8	10.1	8.2	10.3	8.3	10.7	8.6	11.0	8.8	11.4	8.8	11.7	8.8	12.4	8.7	12.9	8.5
	14.0	9.3	7.8	10.0	8.2	10.2	8.3	10.6	8.6	11.0	8.8	11.3	8.8	11.6	8.8	12.3	8.7	12.9	8.5
	16.0	9.2	7.7	10.0	8.1	10.2	8.2	10.5	8.5	10.9	8.7	11.2	8.7	11.5	8.7	12.2	8.6	12.8	8.4
	18.0	9.1	7.7	9.9	8.1	10.1	8.2	10.4	8.4	10.8	8.7	11.1	8.6	11.4	8.6	12.1	8.5	12.7	8.4
	20.0	9.1	7.6	9.8	8.0	10.0	8.1	10.4	8.4	10.7	8.6	11.0	8.6	11.3	8.6	12.0	8.5	12.6	8.3
	21.0	9.0	7.6	9.8	8.0	10.0	8.1	10.3	8.3	10.7	8.6	11.0	8.5	11.3	8.5	12.0	8.4	12.5	8.3
	23.0	8.9	7.5	9.7	7.9	9.9	8.0	10.2	8.3	10.6	8.5	10.8	8.5	11.2	8.4	11.8	8.4	12.4	8.2
	25.0	8.8	7.4	9.6	7.8	9.8	7.9	10.1	8.2	10.4	8.4	10.8	8.4	11.1	8.4	11.7	8.3	12.2	8.1
	27.0	8.7	7.4	9.4	7.7	9.6	7.8	10.0	8.1	10.3	8.3	10.6	8.3	10.9	8.3	11.6	8.2	12.1	8.0
	29.0	8.6	7.3	9.3	7.6	9.5	7.7	9.8	8.0	10.2	8.2	10.5	8.2	10.8	8.1	11.4	8.1	11.9	7.9
	31.0	8.5	7.2	9.2	7.5	9.4	7.6	9.7	7.9	10.0	8.1	10.3	8.0	10.6	8.0	11.3	8.0	11.8	7.8
	33.0	8.4	7.1	9.0	7.4	9.2	7.5	9.6	7.7	9.9	7.9	10.2	7.9	10.5	7.9	11.1	7.8	11.6	7.7
	35.0	8.2	6.9	8.9	7.3	9.1	7.4	9.4	7.6	9.7	7.8	10.0	7.8	10.3	7.8	10.9	7.7	11.4	7.6
	37.0	8.1	6.8	8.7	7.1	8.9	7.2	9.2	7.5	9.5	7.7	9.8	7.7	10.1	7.6	10.7	7.6	11.2	7.4
	39.0	7.9	6.7	8.5	7.0	8.7	7.1	9.0	7.3	9.3	7.5	9.6	7.5	9.9	7.5	10.5	7.4	10.9	7.3

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1406	10.0	11.3	9.1	12.3	9.6	12.6	9.7	13.0	10.1	13.5	10.3	13.8	10.2	14.2	10.2	15.1	10.1	15.8	10.0
	12.0	11.3	9.1	12.2	9.5	12.5	9.7	12.9	10.0	13.4	10.2	13.7	10.2	14.1	10.2	15.0	10.1	15.7	9.9
	14.0	11.2	9.0	12.1	9.5	12.4	9.6	12.9	10.0	13.3	10.1	13.6	10.1	14.0	10.1	14.9	10.1	15.6	9.9
	16.0	11.1	8.9	12.1	9.4	12.3	9.5	12.8	9.9	13.2	10.1	13.6	10.1	13.9	10.1	14.8	10.0	15.5	9.8
	18.0	11.0	8.9	12.0	9.3	12.2	9.5	12.7	9.8	13.1	10.1	13.5	10.1	13.8	10.0	14.6	9.9	15.3	9.7
	20.0	10.9	8.8	11.9	9.2	12.1	9.4	12.5	9.7	13.0	10.0	13.4	10.0	13.7	10.0	14.5	9.8	15.2	9.6
	21.0	10.9	8.7	11.8	9.2	12.0	9.3	12.5	9.7	12.9	9.9	13.3	9.9	13.6	9.9	14.5	9.8	15.1	9.6
	23.0	10.8	8.6	11.7	9.1	11.9	9.2	12.4	9.6	12.8	9.8	13.2	9.8	13.6	9.8	14.4	9.7	15.0	9.5
	25.0	10.6	8.5	11.5	9.0	11.8	9.1	12.2	9.5	12.7	9.7	13.0	9.7	13.4	9.7	14.1	9.6	14.8	9.4
	27.0	10.6	8.4	11.4	8.9	11.6	9.0	12.1	9.3	12.5	9.6	12.9	9.6	13.3	9.6	14.0	9.5	14.6	9.3
	29.0	10.5	8.3	11.5	8.8	11.5	8.9	11.9	9.2	12.3	9.5	12.7	9.5	13.1	9.4	13.8	9.3	14.4	9.1
	31.0	10.3	8.2	11.1	8.6	11.3	8.8	11.7	9.1	12.1	9.3	12.5	9.3	12.9	9.3	13.6	9.2	14.2	8.6
	33.0	10.1	8.1	10.9	8.5	11.1	8.6	11.5	8.9	11.9	9.2	12.3	9.2	12.7	9.1	13.4	9.0	14.0	8.8
	35.0	10.0	7.9	10.7	8.3	10.9	8.5	11.3	8.8	11.7	9.0	12.1	9.0	12.5	9.0	13.2	8.9	13.7	8.7
	37.0	9.8	7.9	10.6	8.2	10.7	8.3	11.1	8.6	11.5	8.8	11.9	8.8	12.2	8.8	13.0	8.7	13.6	8.5
	39.0	9.6	7.7	10.4	8.0	10.6	8.1	10.9	8.4	11.3	8.7	11.6	8.6	12.0	8.6	12.7	8.5	13.3	8.3

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1606	10.0	13.1	9.2	13.8	9.7	14.5	10.2	15.0	10.5	15.5	10.9	16.0	11.2	16.5	11.5	17.4	12.2	18.2	12.8
	12.0	13.1	9.1	13.7	9.6	14.4	10.1	14.9	10.5	15.4	10.8	15.9	11.1	16.4	11.5	17.3	12.1	18.1	12.7
	14.0	13.0	9.1	13.7	9.6	14.3	10.0	14.8	10.4	15.4	10.7	15.8	11.1	16.3	11.4	17.2	12.1	18.0	12.6
	16.0	12.9	9.0	13.6	9.5	14.2	10.0	14.7	10.3	15.2	10.7	15.7	11.0	16.1	11.3	17.1	12.0	17.9	12.5
	18.0	12.8	9.0	13.5	9.4	14.1	9.9	14.6	10.2	15.1	10.6	15.6	10.9	16.0	11.2	17.0	11.9	17.7	12.4
	20.0	12.7	8.9	13.3	9.3	14.0	9.8	14.5	10.2	15.0	10.5	15.4	10.8	15.9	11.1	16.8	11.8	17.6	12.3
	21.0	12.6	8.8	13.3	9.3	13.9	9.8	14.4	10.1	14.9	10.5	15.4	10.8	15.8	11.1	16.7	11.7	17.5	12.3
	23.0	12.5	8.8	13.2	9.2	13.8	9.7	14.3	10.0	14.8	10.3	15.2	10.7	15.7	11.0	16.6	11.6	17.3	12.1
	25.0	12.4	8.7	13.0	9.1	13.7	9.6	14.1	9.9	14.6	10.2	15.1	10.5	15.5	10.8	16.4	11.5	17.1	12.0
	27.0	12.2	8.5	12.8	9.0	13.5	9.4	14.0	9.8	14.4	10.1	14.9	10.4	15.3	10.7	16.2	11.3	16.9	11.9
	29.0	12.1	8.4	12.7	8.9	13.3	9.3	13.8	9.6	14.3	10.0	14.7	10.3	15.1	10.6	16.0	11.2	16.7	11.7
	31.0	11.9	8.3	12.5	8.7	13.1	9.2	13.6	9.5	14.0	9.8	14.5	10.1	14.9	10.4	15.8	11.0	16.5	11.5
	33.0	11.7	8.2	12.3	8.6	12.9	9.0	13.4	9.4	13.8	9.7	14.2	10.0	14.6	10.3	15.5	10.9	16.2	11.4
	35.0	11.5	8.0	12.1	8.5	12.7	8.9	13.1	9.2	13.6	9.5	14.0	9.8	14.4	10.1	15.3	10.7	16.0	11.2
37.0	11.3	7.9	11.9	8.3	12.5	8.7	12.9	9.0	13.3	9.3	13.7	9.6	14.1	9.9	15.0	10.5	15.6	11.0	
39.0	11.1	7.7	11.6	8.1	12.2	8.5	12.6	8.8	13.1	9.1	13.5	9.4	13.8	9.7	14.7	10.3	15.3	10.7	

TC: Total Capacity [kW]  
SHC: Sensible Heat Capacity [kW]

## 2-4-5. Part load performance

### Combination

Indoor unit : RAV-SM566BT-E

Outdoor unit : RAV-SM563AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	450	1500	450
RATING	5000	1780	5600	1710

Q: Capacity in W  
W: Power Consumption in W

### Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	4760	4280	3800	3330	2850	2380	1900	1430	1430	1430
	W	1910	1640	1390	1170	960	770	590	480	480	480
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1780	1530	1300	1090	890	720	550	450	450	450
30	Q	5210	4680	4160	3640	3120	2600	2080	1560	1560	1560
	W	1640	1410	1200	1000	830	660	510	420	420	420
25	Q	5380	4840	4300	3760	3230	2690	2150	1610	1610	1610
	W	1530	1310	1110	930	770	610	470	390	390	390
20	Q	5520	4960	4410	3860	3310	2760	2210	1650	1650	1650
	W	1420	1210	1030	860	710	570	440	360	360	360

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6750	6080	5400	4730	4050	3380	2700	2030	1810	1810
	W	1890	1680	1470	1260	1060	870	680	510	500	500
10	Q	6130	5520	4910	4290	3680	3070	2450	1840	1640	1640
	W	1790	1590	1390	1190	1000	830	650	480	470	470
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	1710	1520	1330	1140	960	790	620	460	450	450
5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1400	1400
	W	1660	1470	1290	1100	930	770	600	450	440	440
2	Q	4680	4210	3750	3280	2810	2340	1870	1400	1250	1250
	W	1580	1400	1230	1050	890	730	570	420	410	410
0	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1400	1240	1090	930	790	650	510	380	370	370
-5	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1400	1240	1090	930	790	650	510	380	370	370
-7	Q	3440	3090	2750	2410	2060	1720	1380	1030	920	920
	W	1360	1210	1060	910	760	630	490	370	360	360
-10	Q	3150	2830	2520	2200	1890	1570	1260	940	840	840
	W	1300	1160	1010	870	730	600	470	350	340	340
-15	Q	2650	2390	2120	1860	1590	1330	1060	800	710	710
	W	1230	1090	950	820	690	570	440	330	320	320



## Combination

Indoor unit : RAV-SM806BT-E

Outdoor unit : RAV-SM803AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	500	1500	500
RATING	6700	2380	8000	2410

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	6370	5740	5100	4470	3820	3190	2550	1920	1430	1430
	W	2550	2120	1740	1420	1140	890	680	610	540	540
35	Q	6700	6030	5360	4690	4020	3350	2680	2010	1500	1500
	W	2380	1970	1620	1320	1060	830	630	560	500	500
30	Q	6970	6280	5580	4880	4180	3490	2790	2100	1560	1560
	W	2200	1820	1500	1220	980	770	580	520	460	460
25	Q	7200	6480	5770	5040	4320	3610	2880	2160	1610	1610
	W	2040	1690	1390	1140	910	710	540	490	430	430
20	Q	7390	6650	5920	5170	4440	3700	2950	2220	1650	1650
	W	1890	1570	1290	1050	850	660	500	450	400	400

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	9650	8680	7720	6750	5790	4820	3860	2890	1930	1810
	W	2660	2340	2030	1730	1460	1180	930	680	560	550
10	Q	8760	7880	7010	6130	5260	4380	3500	2630	1750	1640
	W	2520	2220	1920	1640	1380	1120	880	650	530	520
7	Q	8000	7200	6400	5600	4800	4000	3200	2400	1600	1500
	W	2410	2120	1840	1570	1320	1070	840	620	510	500
5	Q	7460	6720	5970	5220	4480	3730	2990	2240	1490	1400
	W	2340	2050	1780	1520	1280	1040	810	600	490	480
2	Q	6690	6020	5350	4680	4010	3340	2680	2010	1340	1250
	W	2220	1950	1700	1450	1220	990	770	570	470	460
0	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	1970	1740	1510	1290	1080	880	690	510	420	410
-5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	1970	1740	1510	1290	1080	880	690	510	420	410
-7	Q	4910	4420	3930	3440	2950	2460	1960	1470	980	920
	W	1910	1680	1460	1250	1050	850	670	490	410	400
-10	Q	4500	4050	3600	3150	2700	2250	1800	1350	900	840
	W	1830	1610	1400	1190	1000	810	640	470	360	340
-15	Q	3790	3410	3030	2650	2280	1900	1520	1140	760	710
	W	1730	1520	1320	1130	950	770	600	440	370	360

## Combination

Indoor unit : RAV-SM1106BT-E

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3500	11200	3140

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3760	3120	2570	2080	1670	1310	990	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3500	2900	2390	1950	1560	1220	920	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	3120	3120
	W	3230	2680	2200	1800	1450	1130	860	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	3230	3230
	W	3000	2490	2040	1670	1340	1040	800	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	3310	3310
	W	2780	2310	1900	1540	1240	970	740	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3460	3040	2650	2260	1890	1540	1210	880	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3280	2880	2510	2140	1790	1460	1150	840	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	3140	2760	2400	2050	1710	1400	1100	800	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	3040	2670	2330	1990	1660	1360	1070	780	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2900	2540	2210	1890	1580	1290	1010	740	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2570	2260	1970	1680	1400	1150	900	660	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2570	2260	1970	1680	1400	1150	900	660	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2490	2190	1910	1630	1360	1110	870	640	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2390	2100	1830	1560	1300	1070	840	610	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2250	1980	1720	1470	1230	1000	790	570	430	430

## Combination

Indoor unit : RAV-SM1406BT-E

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12100	4280	13400	3910

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11510	10360	9210	8050	6900	5750	4610	3460	2850	2850
	W	4590	3810	3130	2560	2050	1610	1210	870	700	700
35	Q	12100	10890	9680	8470	7260	6050	4840	3630	3000	3000
	W	4280	3550	2920	2380	1910	1490	1130	810	650	650
30	Q	12600	11340	10080	8820	7560	6300	5040	3780	3120	3120
	W	3950	3280	2700	2200	1760	1380	1050	750	600	600
25	Q	13010	11700	10410	9110	7800	6510	5210	3900	3230	3230
	W	3670	3040	2500	2040	1640	1280	970	700	560	560
20	Q	13350	12010	10680	9340	8010	6670	5340	4010	3310	3310
	W	3400	2820	2320	1890	1520	1190	900	650	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16160	14540	12930	11310	9700	8080	6460	4840	3620	3620
	W	4310	3780	3290	2810	2360	1910	1500	1110	720	720
10	Q	14670	13210	11740	10270	8810	7340	5870	4400	3290	3290
	W	4080	3590	3110	2670	2230	1810	1430	1050	680	680
7	Q	13400	12060	10720	9380	8040	6700	5360	4020	3000	3000
	W	3910	3430	2980	2550	2130	1740	1370	1000	650	650
5	Q	12500	11260	10000	8750	7500	6250	5000	3750	2800	2800
	W	3790	3330	2880	2470	2070	1680	1330	970	630	630
2	Q	11200	10080	8960	7840	6720	5600	4480	3360	2510	2510
	W	3610	3160	2750	2350	1970	1600	1260	920	600	600
0	Q	8750	7880	7000	6130	5260	4370	3500	2620	1960	1960
	W	3200	2810	2440	2090	1750	1430	1120	810	530	530
-5	Q	8750	7880	7000	6130	5260	4370	3500	2620	1960	1960
	W	3200	2810	2440	2090	1750	1430	1120	810	530	530
-7	Q	8230	7410	6590	5760	4940	4120	3290	2470	1840	1840
	W	3100	2730	2370	2030	1700	1380	1090	800	520	520
-10	Q	7530	6790	6030	5270	4520	3770	3020	2260	1690	1690
	W	2980	2610	2270	1940	1620	1320	1040	760	490	490
-15	Q	6360	5710	5080	4450	3810	3180	2540	1910	1420	1420
	W	2800	2460	2130	1830	1530	1240	980	720	470	470

## Combination

Indoor unit : RAV-SM1606BT-E

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	5130	16000	4690

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	5510	4190	3450	2810	2250	1770	1340	950	800	800
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	5130	3910	3220	2620	2100	1650	1240	880	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4740	3610	2970	2420	1940	1520	1150	810	680	680
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	4400	3350	2750	2250	1810	1410	1060	750	640	640
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	4080	3110	2560	2080	1670	1300	990	700	590	590

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5170	4010	3500	2990	2500	2040	1600	1480	860	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4900	3800	3310	2830	2370	1930	1520	1400	820	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4690	3640	3170	2710	2270	1850	1450	1340	780	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4540	3530	3070	2630	2200	1790	1410	1300	760	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4320	3360	2920	2500	2090	1710	1340	1240	720	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3720	2890	2520	2150	1800	1470	1150	1060	620	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3570	2770	2410	2060	1730	1410	1100	1020	590	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3370	2610	2270	1940	1630	1330	1040	960	560	470

## Combination

Indoor unit : RAV-SM566BT-E(Twin)

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3500	11200	3140

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3760	3120	2570	2080	1670	1310	990	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3500	2900	2390	1950	1560	1220	920	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	3120	3120
	W	3230	2680	2200	1800	1450	1130	860	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	3230	3230
	W	3000	2490	2040	1670	1340	1040	800	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	3310	3310
	W	2780	2310	1900	1540	1240	970	740	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3460	3040	2650	2260	1890	1540	1210	880	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3280	2880	2510	2140	1790	1460	1150	840	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	3140	2760	2400	2050	1710	1400	1100	800	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	3040	2670	2330	1990	1660	1360	1070	780	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2900	2540	2210	1890	1580	1290	1010	740	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2570	2260	1970	1680	1400	1150	900	660	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2570	2260	1970	1680	1400	1150	900	660	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2490	2190	1910	1630	1360	1110	870	640	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2390	2100	1830	1560	1300	1070	840	610	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2250	1980	1720	1470	1230	1000	790	570	430	430

## Combination

Indoor unit : RAV-SM806BT-E(Twin)

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12100	4280	13400	3910

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11510	10360	9210	8050	6900	5750	4610	3460	2850	2850
	W	4590	3810	3130	2560	2050	1610	1210	870	700	700
35	Q	12100	10890	9680	8470	7260	6050	4840	3630	3000	3000
	W	4280	3550	2920	2380	1910	1490	1130	810	650	650
30	Q	12600	11340	10080	8820	7560	6300	5040	3780	3120	3120
	W	3950	3280	2700	2200	1760	1380	1050	750	600	600
25	Q	13010	11700	10410	9110	7800	6510	5210	3900	3230	3230
	W	3670	3040	2500	2040	1640	1280	970	700	560	560
20	Q	13350	12010	10680	9340	8010	6670	5340	4010	3310	3310
	W	3400	2820	2320	1890	1520	1190	900	650	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16160	14540	12930	11310	9700	8080	6460	4840	3620	3620
	W	4310	3780	3290	2810	2360	1910	1500	1110	720	720
10	Q	14670	13210	11740	10270	8810	7340	5870	4400	3290	3290
	W	4080	3590	3110	2670	2230	1810	1430	1050	680	680
7	Q	13400	12060	10720	9380	8040	6700	5360	4020	3000	3000
	W	3910	3430	2980	2550	2130	1740	1370	1000	650	650
5	Q	12500	11260	10000	8750	7500	6250	5000	3750	2800	2800
	W	3790	3330	2880	2470	2070	1680	1330	970	630	630
2	Q	11200	10080	8960	7840	6720	5600	4480	3360	2510	2510
	W	3610	3160	2750	2350	1970	1600	1260	920	600	600
0	Q	8750	7880	7000	6130	5260	4370	3500	2620	1960	1960
	W	3200	2810	2440	2090	1750	1430	1120	810	530	530
-5	Q	8750	7880	7000	6130	5260	4370	3500	2620	1960	1960
	W	3200	2810	2440	2090	1750	1430	1120	810	530	530
-7	Q	8230	7410	6590	5760	4940	4120	3290	2470	1840	1840
	W	3100	2730	2370	2030	1700	1380	1090	800	520	520
-10	Q	7530	6790	6030	5270	4520	3770	3020	2260	1690	1690
	W	2980	2610	2270	1940	1620	1320	1040	760	490	490
-15	Q	6360	5710	5080	4450	3810	3180	2540	1910	1420	1420
	W	2800	2460	2130	1830	1530	1240	980	720	470	470

## Combination

Indoor unit : RAV-SM806BT-E(Twin)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	5130	16000	4690

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	5510	4190	3450	2810	2250	1770	1340	950	800	800
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	5130	3910	3220	2620	2100	1650	1240	880	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4740	3610	2970	2420	1940	1520	1150	810	680	680
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	4400	3350	2750	2250	1810	1410	1060	750	640	640
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	4080	3110	2560	2080	1670	1300	990	700	590	590

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5170	4010	3500	2990	2500	2040	1600	1480	860	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4900	3800	3310	2830	2370	1930	1520	1400	820	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4690	3640	3170	2710	2270	1850	1450	1340	780	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4540	3530	3070	2630	2200	1790	1410	1300	760	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4320	3360	2920	2500	2090	1710	1340	1240	720	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3720	2890	2520	2150	1800	1470	1150	1060	620	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3570	2770	2410	2060	1730	1410	1100	1020	590	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3370	2610	2270	1940	1630	1330	1040	960	560	470

## Combination

Indoor unit : RAV-SM566BT-E(Triple)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	5130	16000	4690

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	5510	4190	3450	2810	2250	1770	1340	950	800	800
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	5130	3910	3220	2620	2100	1650	1240	880	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4740	3610	2970	2420	1940	1520	1150	810	680	680
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	4400	3350	2750	2250	1810	1410	1060	750	640	640
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	4080	3110	2560	2080	1670	1300	990	700	590	590

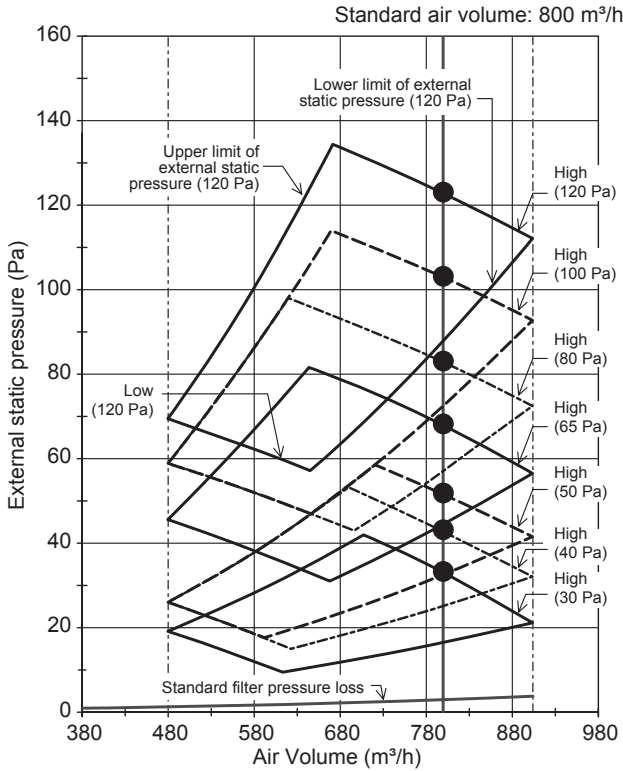
## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5170	4010	3500	2990	2500	2040	1600	1480	860	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4900	3800	3310	2830	2370	1930	1520	1400	820	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4690	3640	3170	2710	2270	1850	1450	1340	780	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4540	3530	3070	2630	2200	1790	1410	1300	760	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4320	3360	2920	2500	2090	1710	1340	1240	720	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3720	2890	2520	2150	1800	1470	1150	1060	620	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3570	2770	2410	2060	1730	1410	1100	1020	590	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3370	2610	2270	1940	1630	1330	1040	960	560	470

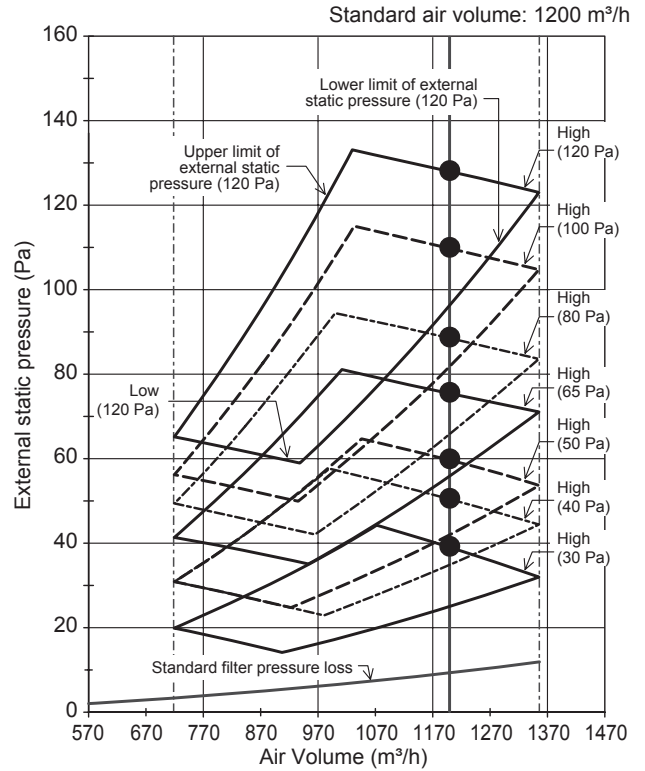


### 2-4-6. Fan static characteristics

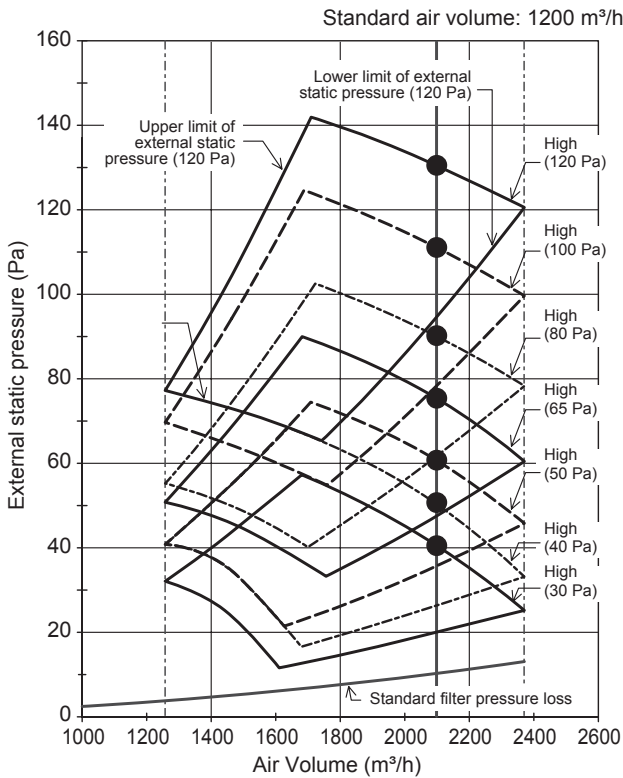
RAV-SM566BT-E



RAV-SM806BT-E

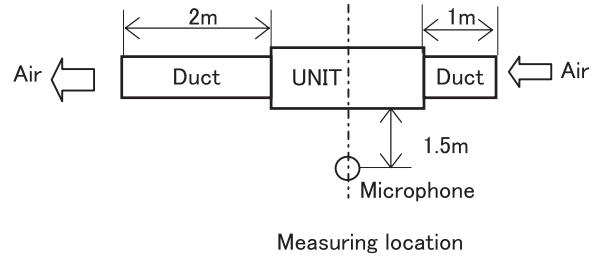


RAV-SM1106BT-E, RAV-SM1406BT-E,  
RAV-SM1606BT-E



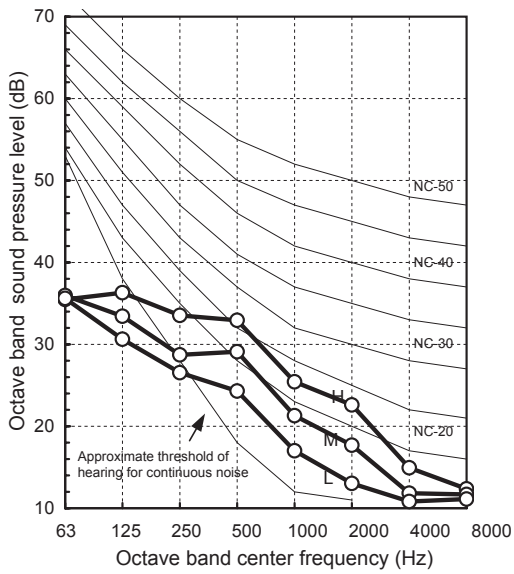
### 2-4-7. Sound characteristics (NC curve)

RAV-SM566BT-E



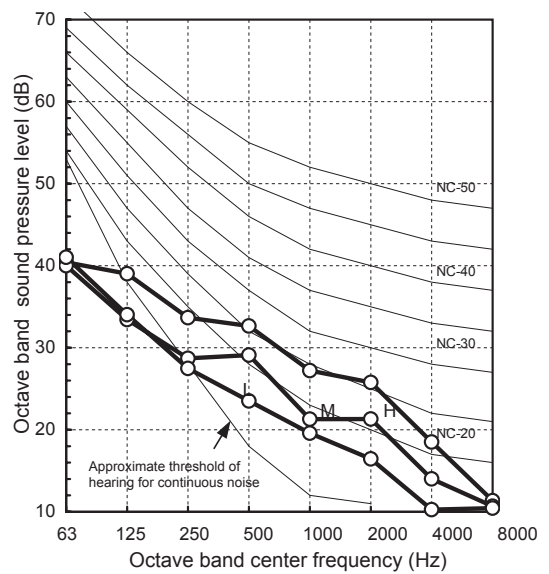
External static pressure 30Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	33	29	25



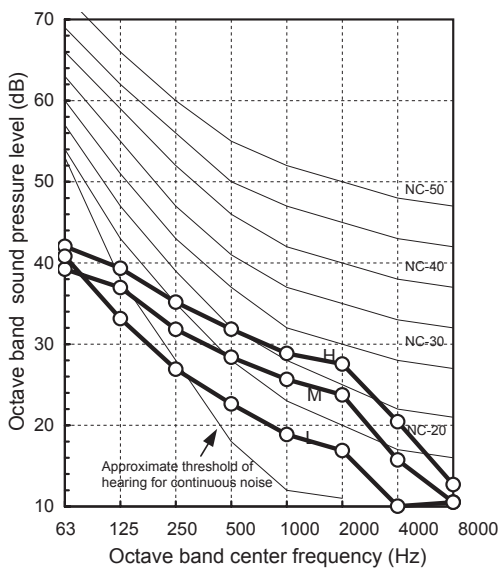
External static pressure 40Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	34	30	26



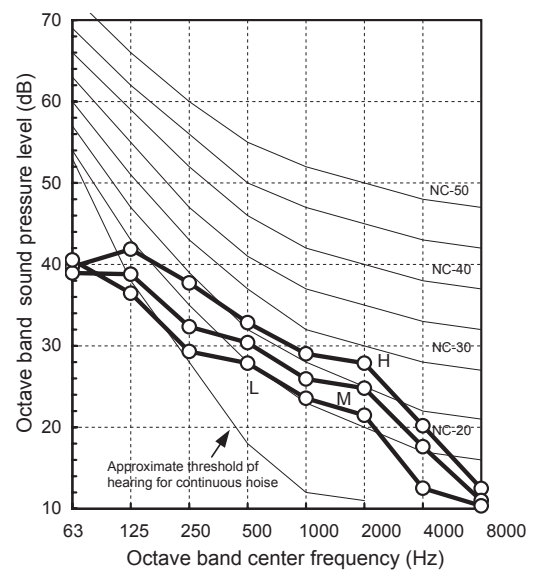
External static pressure 50Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	35	31	26



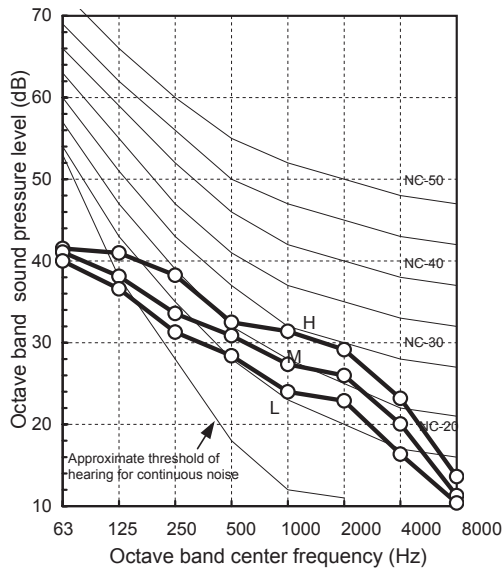
External static pressure 65Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	36	32	29



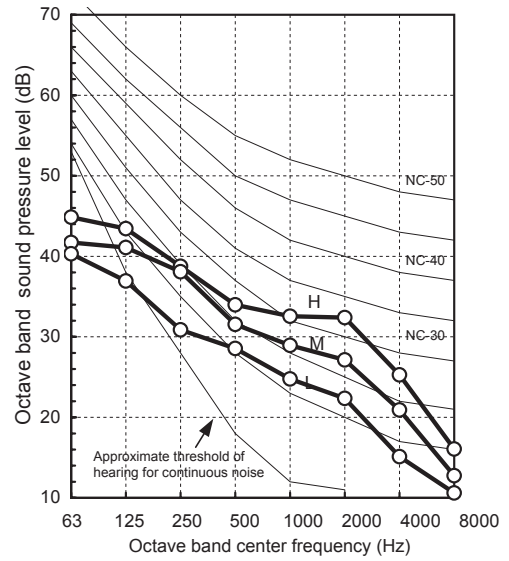
External static pressure 80Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	37	33	31



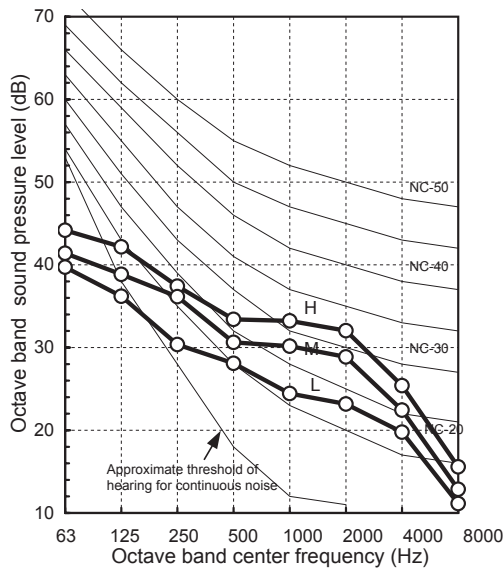
External static pressure 100Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	38	35	31



External static pressure 120Pa

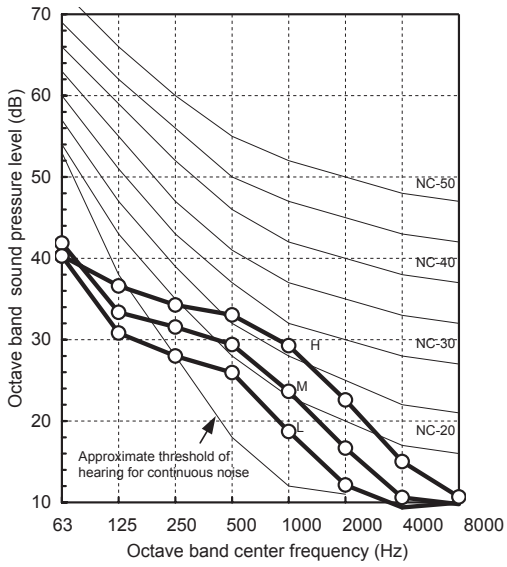
FAN tap	H	M	L
Sound pressure level (dB(A) )	39	35	31



RAV-SM806BT-E

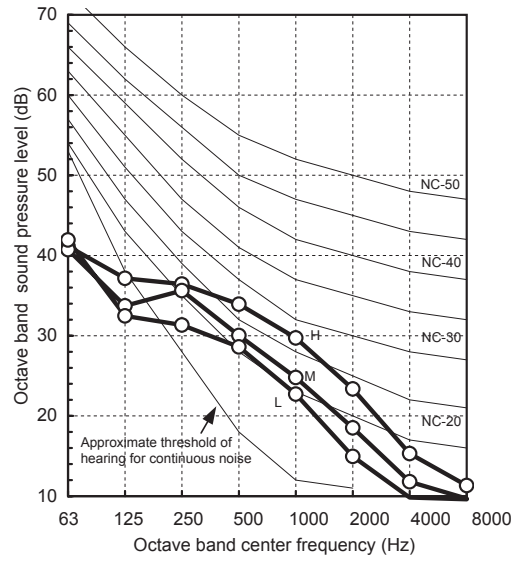
External static pressure 30Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	34	30	26



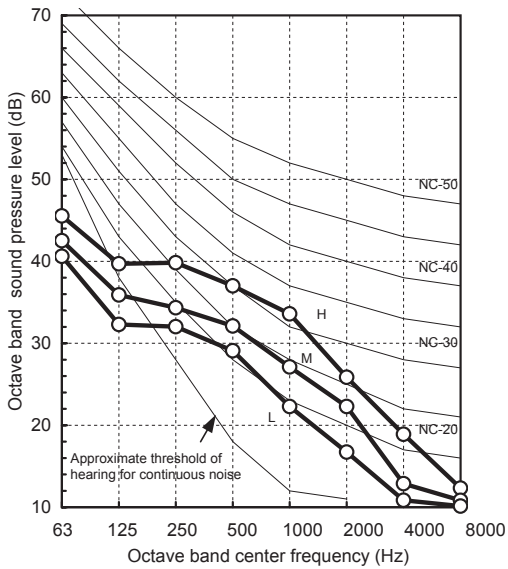
External static pressure 40Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	35	32	29



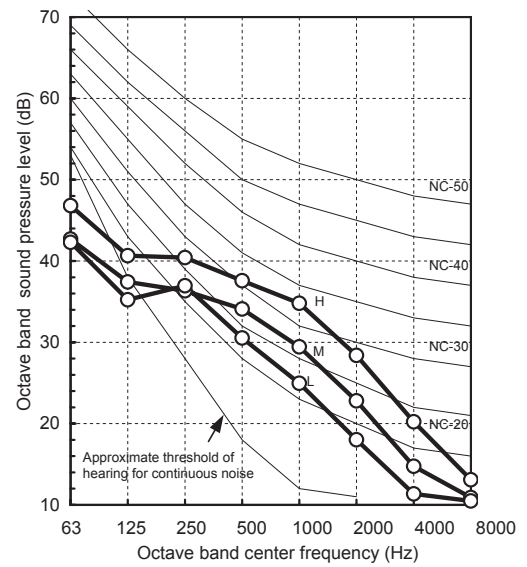
External static pressure 50Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	38	33	29



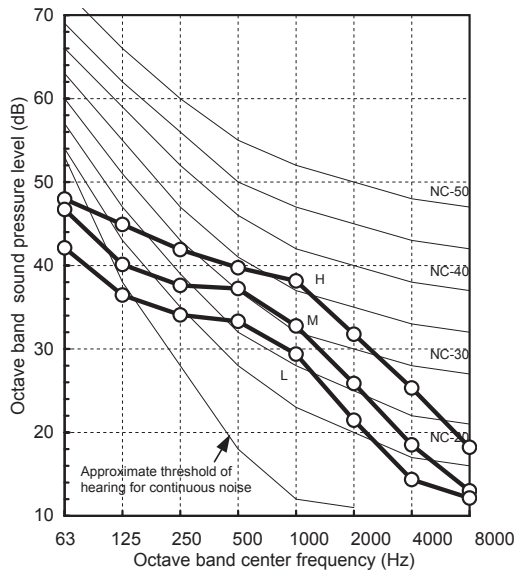
External static pressure 65Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	39	35	32



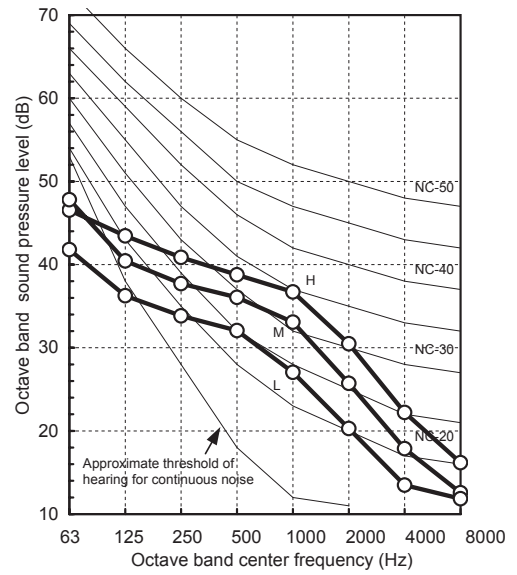
External static pressure 80Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	42	38	34



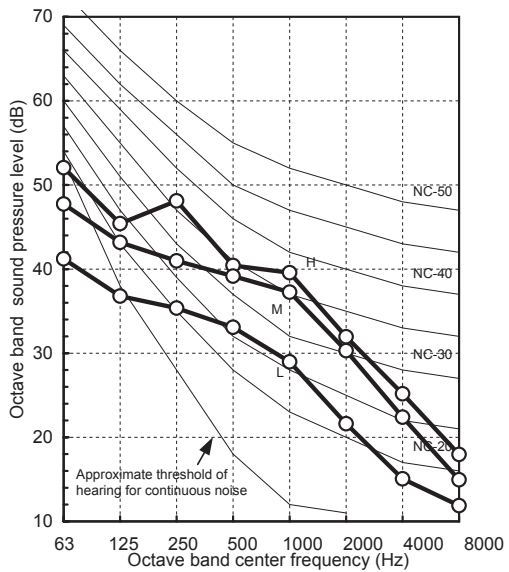
External static pressure 100Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	42	39	33



External static pressure 120Pa

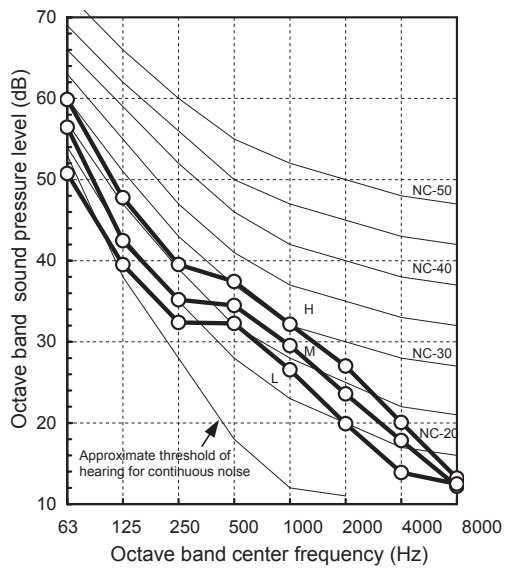
FAN tap	H	M	L
Sound pressure level (dB(A) )	44	41	34



RAV-SM1106BT-E, RAV-SM1406BT-E, RAV-SM1606BT-E

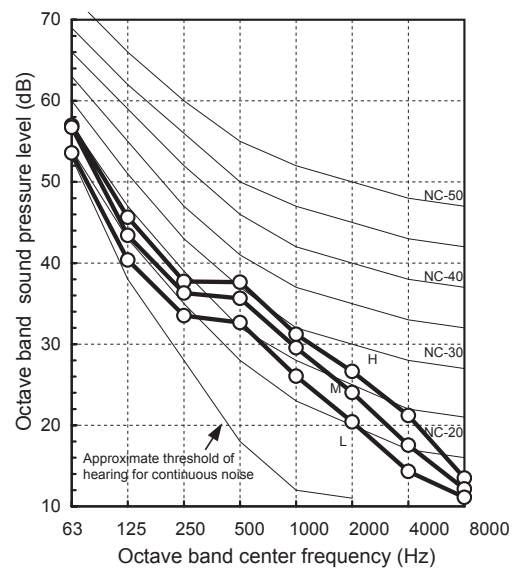
External static pressure 30Pa

FAN tap	H	M	L
Sound pressure level (dB(A))	39	36	33



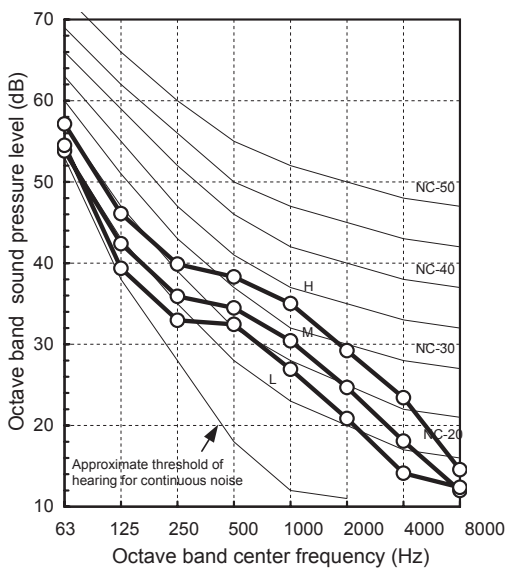
External static pressure 40Pa

FAN tap	H	M	L
Sound pressure level (dB(A))	39	36	33



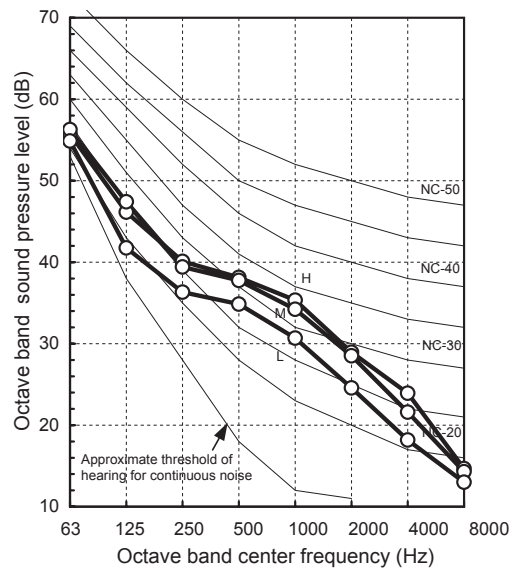
External static pressure 50Pa

FAN tap	H	M	L
Sound pressure level (dB(A))	40	36	33



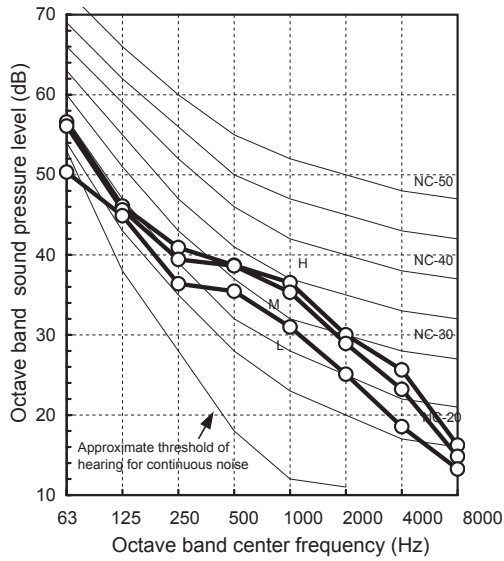
External static pressure 65Pa

FAN tap	H	M	L
Sound pressure level (dB(A))	41	39	36



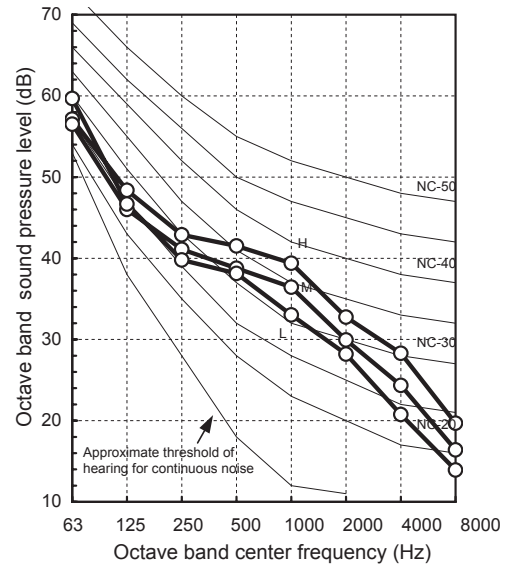
External static pressure 80Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	41	40	36



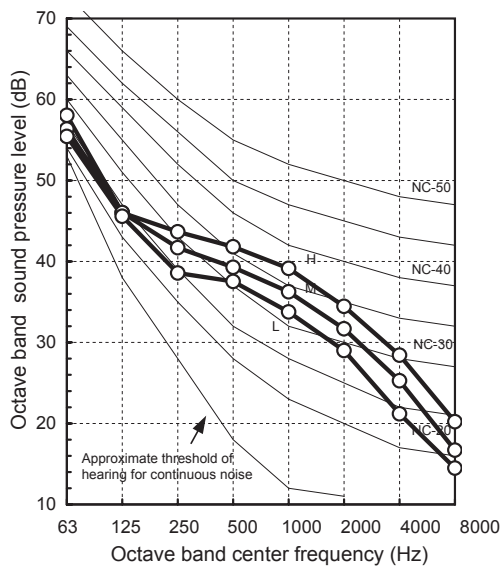
External static pressure 100Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	43	41	39



External static pressure 120Pa

FAN tap	H	M	L
Sound pressure level (dB(A) )	44	42	39



## 2-5. Slim Duct Type

2-5-1. Specifications

2-5-2. Dimension

2-5-3. Wiring diagrams

2-5-4. Sensible capacity table

2-5-5. Part load performance

2-5-6. Fan static characteristics

2-5-7. Sound characteristics (NC curve)



## 2-5-1. Specifications

&lt;Single type&gt;

Model	Indoor unit	RAV-SM	564SDT-E
	Outdoor unit	RAV-SM	563AT-E
Cooling capacity		(kW)	5.0 (1.5 – 5.6)
Heating capacity		(kW)	5.6 (1.5 – 6.3)
Power supply	1 phase 230V (220 – 240V) 50Hz		
Electrical characteristics	Cooling	Running current (A)	7.94 – 7.28
		Power consumption (kW)	1.66
		Power factor (%)	95
		EER	3.01
		Energy efficiency class *	B
	Heating	Running current (A)	7.61 – 6.97
		Power consumption (kW)	1.59
		Power factor (%)	95
		COP	3.52
		Energy efficiency class *	B
Maximum current (A)			12.6
Appearance	Main unit	Zinc hot dipping steel plate	
Outer dimension	Main unit	Height (mm)	210
		Width (mm)	845
		Depth (mm)	645
Total weight	Main unit	(kg)	22
Heat exchanger	Finned tube		
Fan unit	Fan		Centrifugal
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	13.0/11.3/9.7
	Motor (W)		60
	External static pressure	Standard (Upper – Lower) (Pa)	4 (24 – 0)
Air filter	Long life filter		
Controller (Sold separately)	RBC-AMT32E, AMS41E, AS21E2		
Connecting pipe	Gas side (mm)	12.7	
	Liquid side (mm)	6.4	
	Drain port (mm)	VP25	
Sound pressure level	Under air inlet	H/M/L (dB•A)	45/40/36
	Back air inlet	H/M/L (dB•A)	33/31/28
Sound power level	Under air inlet	H/M/L (dB•A)	60/55/51
	Back air inlet	H/M/L (dB•A)	48/46/43

\* : IEC standard

Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

The refrigerant pipe length is 7.5 m(56Type is 5m), height difference is 0m.

The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

## &lt;Twin type/Triple type&gt;

Model	Indoor unit 1	RAV-SM	564SDT-E	564SDT-E
	Indoor unit 2	RAV-SM	564SDT-E	564SDT-E
	Indoor unit 3	RAV-SM	—	564SDT-E
	Outdoor unit	RAV-SM	1103AT-E1	1603AT-E
Cooling capacity		(kW)	10.0 (3.0 – 11.2)	14.0 (3.0 – 16.0)
Heating capacity		(kW)	11.2 (3.0 – 12.5)	16.0 (3.0 – 18.0)
Power supply		1 phase 230V (220 – 240V) 50Hz		
Electrical characteristics	Cooling	Running current (A)	16.47 – 15.09	23.88 – 21.89
		Power consumption (kW)	3.55	4.99
		Power factor (%)	98	95
		EER	2.82	2.81
		Energy efficiency class *	C	C
	Heating	Running current (A)	14.56 – 13.35	22.44 – 20.57
		Power consumption (kW)	3.14	4.69
		Power factor (%)	98	95
		COP	3.57	3.41
		Energy efficiency class *	B	B
Maximum current		(A)	21.0	30.6
Indoor unit				
Fan unit	Fan Centrifugal			
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	13.0/11.3/9.7	13.0/11.3/9.7
	Motor	(W)	60	60
	External static pressure	Standard (Upper – Lower) (Pa)	4 (24 – 0)	4 (24 – 0)
Sound pressure level	Under air inlet	H/M/L (dB•A)	45/40/36	45/40/36
	Back air inlet	H/M/L (dB•A)	33/31/28	33/31/28
Sound power level	Under air inlet	H/M/L (dB•A)	60/55/51	60/55/51
	Back air inlet	H/M/L (dB•A)	48/46/43	48/46/43
Outdoor unit				
Refrigerant pipe	Standard length (m)		7.5	7.5
	Max. total length (m)		50	50
	Refrigerant charging amount (Charge-less up to 30m)		40g/m (31m to 50m)	
	Height difference	Outdoor lower (m)	30	30
Outdoor higher (m)		30	30	
Fan unit	Fan Propeller fan			
	Standard air flow (m <sup>3</sup> /min.)		75	103
	Motor (W)		100	100 + 100
Connecting pipe	Gas side	Main (mm)	15.9	15.9
		Sub (mm)	12.7	15.9
	Liquid side	Main (mm)	9.5	9.5
		Sub (mm)	6.4	9.5
Sound pressure level		Cooling/Heating (dB•A)	53/54	51/53
Sound power level		Cooling/Heating (dB•A)	70/71	68/70

\* : IEC standard

## Note :

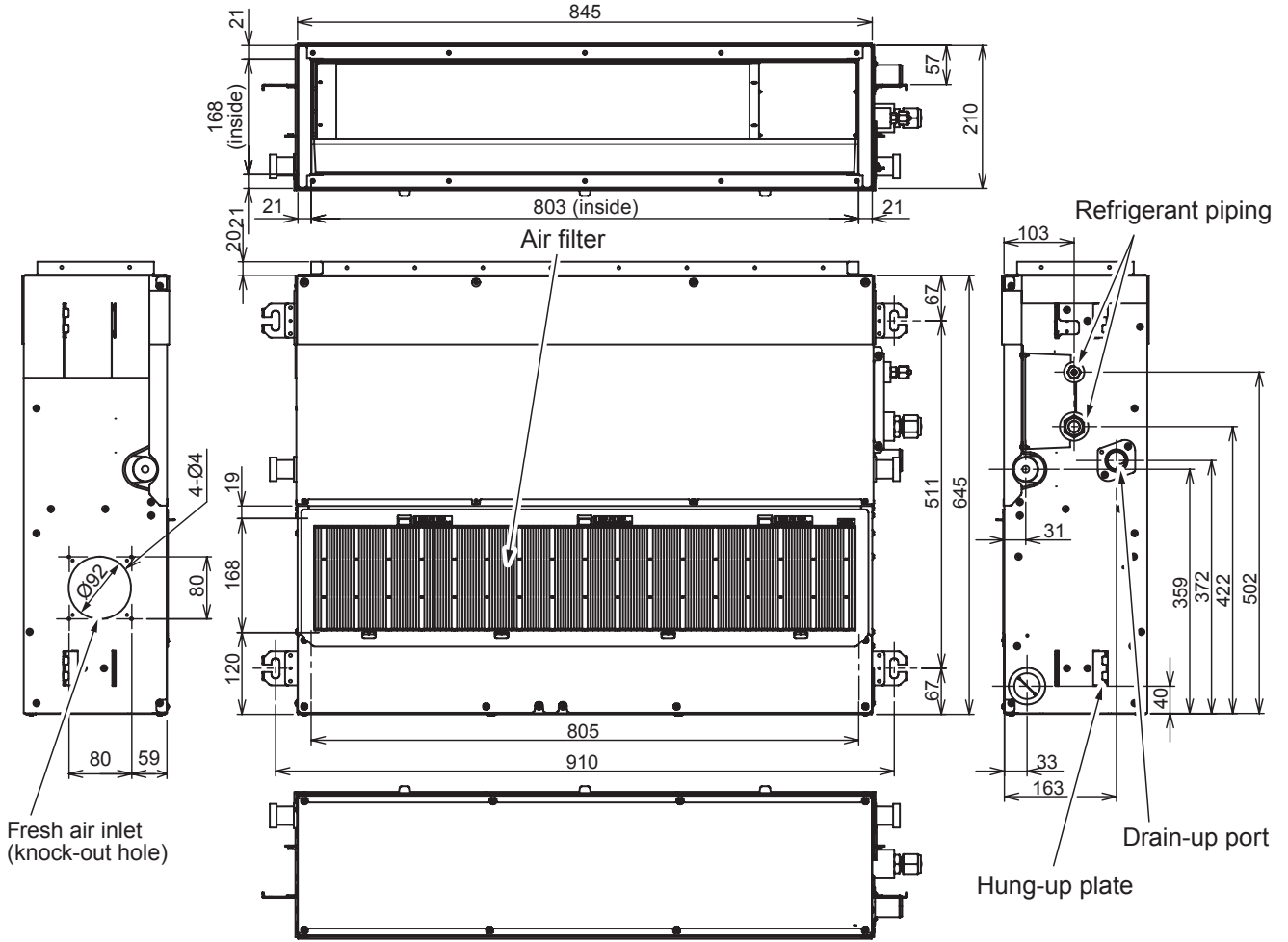
Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

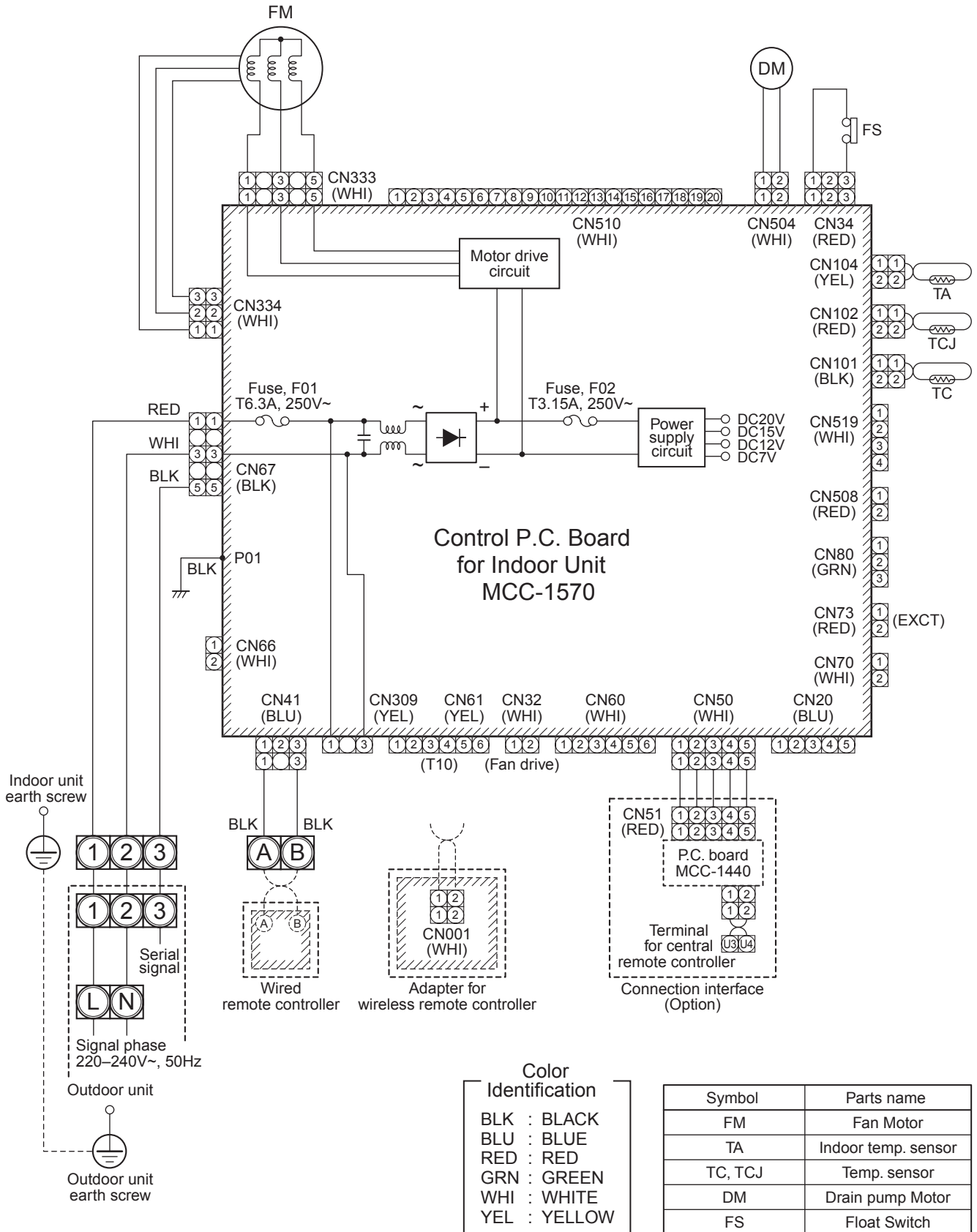
## 2-5-2. Dimension

RAV-SM564SDT-E



### 2-5-3. Wiring diagrams

RAV-SM564SDT-E



## 2-5-4. Sensible capacity table

Digital Inverter 3 Series Sensible Heat Capacity : RAV-SM\*\*\*SDT-E

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
564	10.0	4.7	3.4	4.9	3.6	5.2	3.7	5.4	3.8	5.6	3.9	5.7	3.9	5.9	3.9	6.2	3.8	6.5	3.8
	12.0	4.7	3.4	4.9	3.6	5.2	3.6	5.3	3.8	5.5	3.9	5.7	3.9	5.8	3.9	6.2	3.8	6.5	3.7
	14.0	4.6	3.4	4.9	3.6	5.1	3.6	5.3	3.7	5.5	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	16.0	4.6	3.4	4.8	3.5	5.1	3.6	5.3	3.7	5.4	3.8	5.6	3.8	5.8	3.8	6.1	3.8	6.4	3.7
	18.0	4.6	3.3	4.8	3.5	5.0	3.6	5.2	3.7	5.4	3.8	5.6	3.8	5.7	3.8	6.1	3.7	6.3	3.7
	20.0	4.5	3.3	4.8	3.5	5.0	3.5	5.2	3.7	5.4	3.8	5.5	3.7	5.7	3.7	6.0	3.7	6.3	3.6
	21.0	4.5	3.3	4.7	3.5	5.0	3.5	5.2	3.6	5.3	3.7	5.5	3.7	5.6	3.7	6.0	3.7	6.3	3.6
	23.0	4.5	3.3	4.7	3.4	4.9	3.5	5.1	3.6	5.3	3.7	5.4	3.7	5.6	3.7	5.9	3.6	6.2	3.6
	25.0	4.4	3.2	4.6	3.4	4.9	3.4	5.0	3.6	5.2	3.7	5.4	3.7	5.5	3.6	5.9	3.6	6.1	3.5
	27.0	4.4	3.2	4.6	3.4	4.8	3.4	5.0	3.5	5.2	3.6	5.3	3.6	5.5	3.6	5.8	3.6	6.0	3.5
	29.0	4.3	3.2	4.5	3.3	4.8	3.4	4.9	3.5	5.1	3.6	5.2	3.6	5.4	3.6	5.7	3.5	6.0	3.4
	31.0	4.2	3.1	4.5	3.3	4.7	3.3	4.9	3.4	5.0	3.5	5.2	3.5	5.3	3.5	5.6	3.5	5.9	3.4
	33.0	4.2	3.1	4.4	3.2	4.6	3.3	4.8	3.4	4.9	3.5	5.1	3.5	5.2	3.5	5.5	3.4	5.8	3.3
	35.0	4.1	3.0	4.3	3.2	4.5	3.2	4.7	3.3	4.9	3.4	5.0	3.4	5.1	3.4	5.4	3.4	5.7	3.3
	37.0	4.0	3.0	4.2	3.1	4.4	3.1	4.6	3.3	4.8	3.3	4.9	3.3	5.0	3.3	5.3	3.3	5.6	3.2
39.0	3.9	2.9	4.2	3.0	4.4	3.1	4.5	3.2	4.7	3.3	4.8	3.3	4.9	3.3	5.2	3.2	5.5	3.2	

TC:Total Capacity [kW]  
SHC:Sensible Heat Capacity [kW]

## 2-5-5. Part load performance

### Combination

Indoor unit : RAV-SM564SDT-E

Outdoor unit : RAV-SM563AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	380	1500	380
RATING	5000	1660	5600	1590

Q: Capacity in W  
W: Power Consumption in W

### Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	4760	4280	3800	3330	2850	2380	1900	1430	1430	1430
	W	1780	1480	1210	990	790	620	470	410	410	410
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1660	1376	1132	923	740	579	438	380	380	380
30	Q	5210	4680	4160	3640	3120	2600	2080	1560	1560	1560
	W	1530	1270	1050	850	680	540	400	350	350	350
25	Q	5380	4840	4300	3760	3230	2690	2150	1610	1610	1610
	W	1420	1180	970	790	630	500	380	330	330	330
20	Q	5520	4960	4410	3860	3310	2760	2210	1650	1650	1650
	W	1320	1090	900	730	590	460	350	300	300	300

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6750	6080	5400	4730	4050	3380	2700	2030	1810	1810
	W	1750	1540	1330	1150	960	780	610	450	420	420
10	Q	6130	5520	4910	4290	3680	3070	2450	1840	1640	1640
	W	1660	1460	1260	1090	910	740	570	430	400	400
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	1590	1400	1210	1040	870	710	550	410	380	380
5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1400	1400
	W	1540	1360	1170	1010	840	690	530	400	370	370
2	Q	4680	4210	3750	3280	2810	2340	1870	1400	1250	1250
	W	1470	1290	1120	960	800	650	510	380	350	350
0	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1300	1150	990	850	710	580	450	340	310	310
-5	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1300	1150	990	850	710	580	450	340	310	310
-7	Q	3440	3090	2750	2410	2060	1720	1380	1030	920	920
	W	1260	1110	960	830	690	560	440	330	300	300
-10	Q	3150	2830	2520	2200	1890	1570	1260	940	840	840
	W	1210	1070	920	790	660	540	420	310	290	290
-15	Q	2650	2390	2120	1860	1590	1330	1060	800	710	710
	W	1140	1000	870	750	620	510	390	290	270	270

## Combination

Indoor unit : RAV-SM564SDT-E(Twin)

Outdoor unit : RAV-SM1103AT-E, RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3520	11200	3140

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3810	3160	2600	2120	1700	1330	1010	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3550	2943	2421	1974	1583	1239	937	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	3120	3120
	W	3280	2720	2240	1820	1460	1140	870	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	3230	3230
	W	3040	2520	2070	1690	1360	1060	800	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	3310	3310
	W	2820	2340	1920	1570	1260	980	750	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3460	3040	2650	2260	1890	1540	1210	880	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3280	2880	2510	2140	1790	1460	1150	840	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	3140	2760	2400	2050	1710	1400	1100	800	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	3040	2670	2330	1990	1660	1360	1070	780	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2900	2540	2210	1890	1580	1290	1010	740	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2570	2260	1970	1680	1400	1150	900	660	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2570	2260	1970	1680	1400	1150	900	660	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2490	2190	1910	1630	1360	1110	870	640	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2390	2100	1830	1560	1300	1070	840	610	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2250	1980	1720	1470	1230	1000	790	570	430	430

## Combination

Indoor unit : RAV-SM564SDT-E(Triple)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4990	16000	4690

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	5350	4440	3650	2980	2390	1870	1410	1000	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4990	4137	3403	2774	2226	1742	1317	933	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4610	3820	3140	2560	2060	1610	1220	860	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	4280	3550	2920	2380	1910	1490	1130	800	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3970	3290	2710	2210	1770	1380	1050	740	520	520

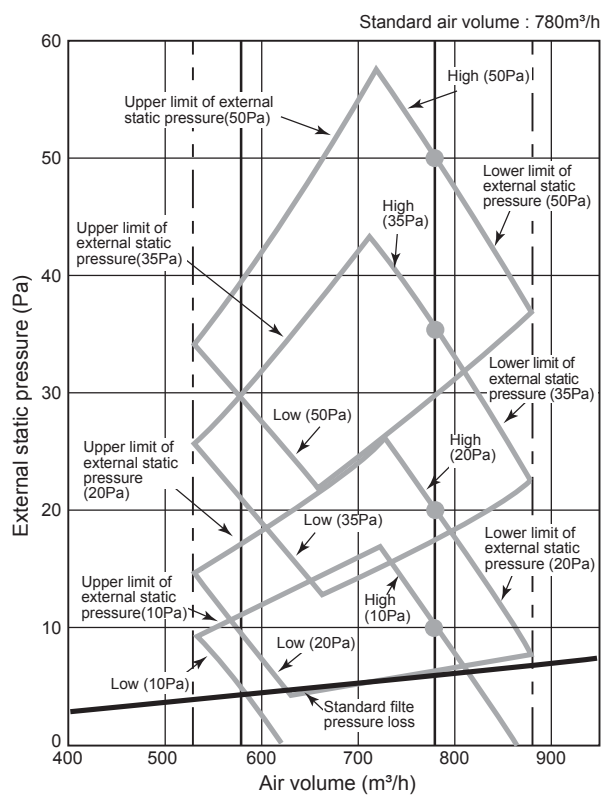
## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5170	4010	3500	2990	2500	2040	1600	1480	860	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4900	3800	3310	2830	2370	1930	1520	1400	820	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4690	3640	3170	2710	2270	1850	1450	1340	780	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4540	3530	3070	2630	2200	1790	1410	1300	760	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4320	3360	2920	2500	2090	1710	1340	1240	720	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3720	2890	2520	2150	1800	1470	1150	1060	620	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3570	2770	2410	2060	1730	1410	1100	1020	590	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3370	2610	2270	1940	1630	1330	1040	960	560	470



### 2-5-6. Fan static characteristics

#### RAV-SM564SDT-E

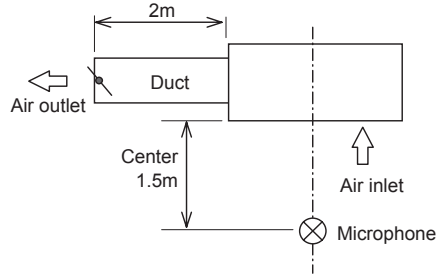


### 2-5-7. Sound characteristics (NC curve)

RAV-SM564SDT-E

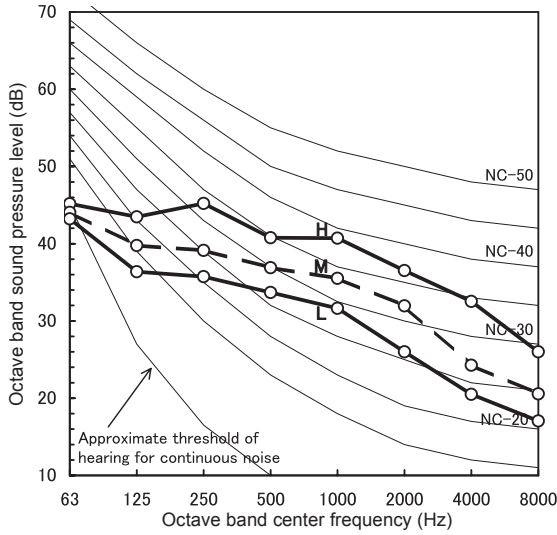
[Measuring location]

Under air intake



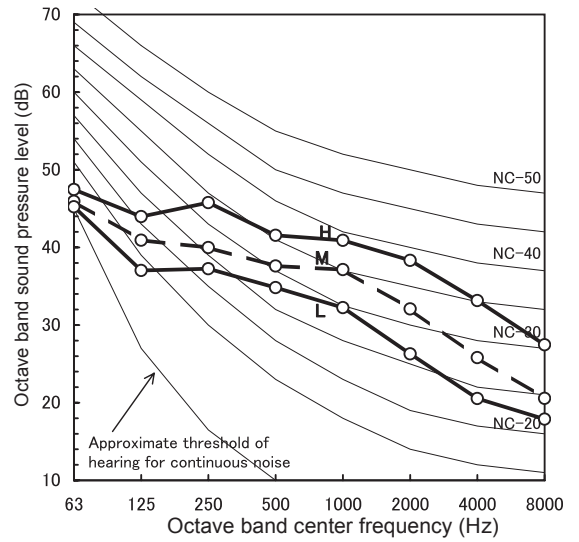
[External static pressure 10Pa]

Fan tap	H	M	L
Sound pressure level (dB(A))	45	40	36



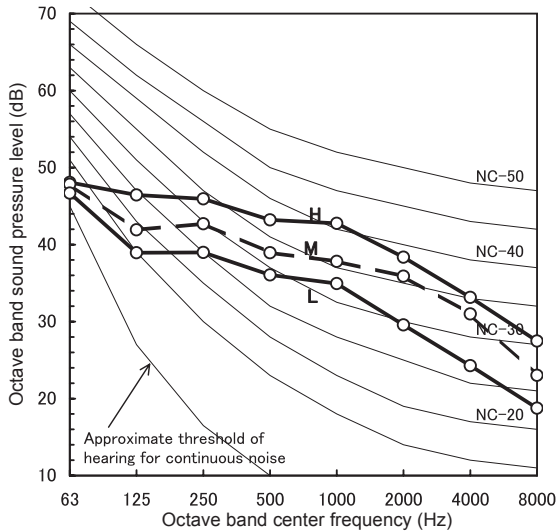
[External static pressure 20Pa]

Fan tap	H	M	L
Sound pressure level (dB(A))	46	41	37



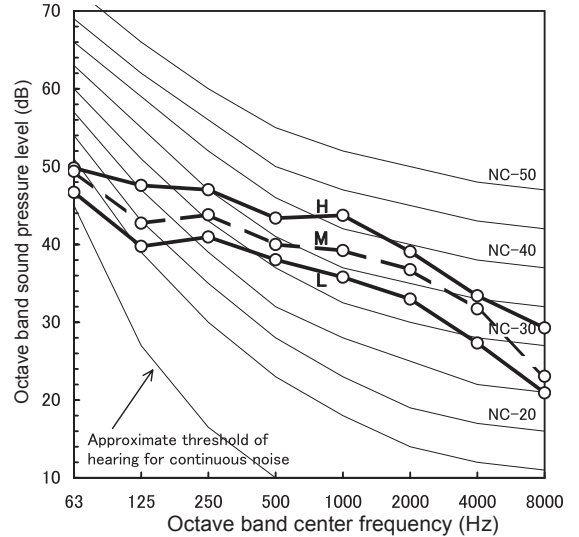
[External static pressure 35Pa]

Fan tap	H	M	L
Sound pressure level (dB(A))	47	43	39



[External static pressure 50Pa]

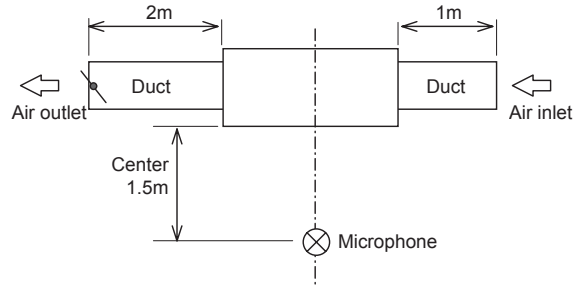
Fan tap	H	M	L
Sound pressure level (dB(A))	48	44	41



RAV-SM564SDT-E

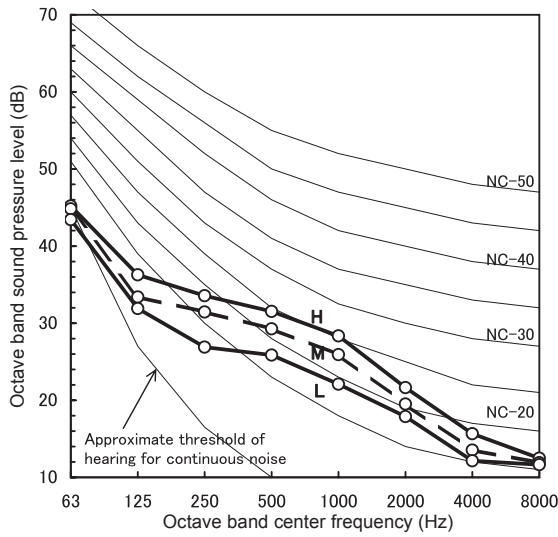
[Measuring location]

Back air intake



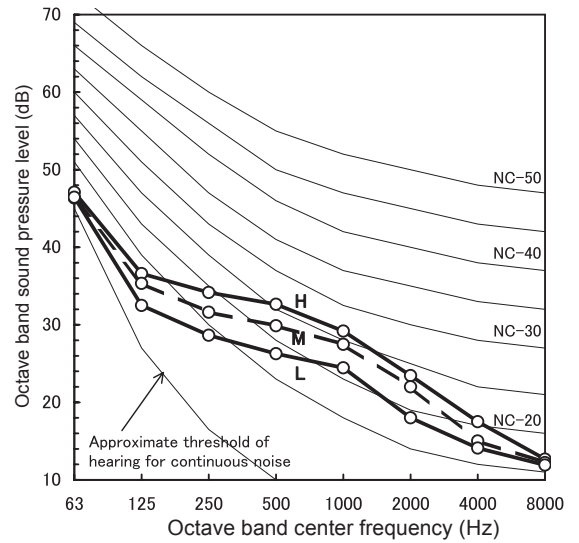
[External static pressure 10Pa]

Fan tap	H	M	L
Sound pressure level (dB(A))	33	31	28



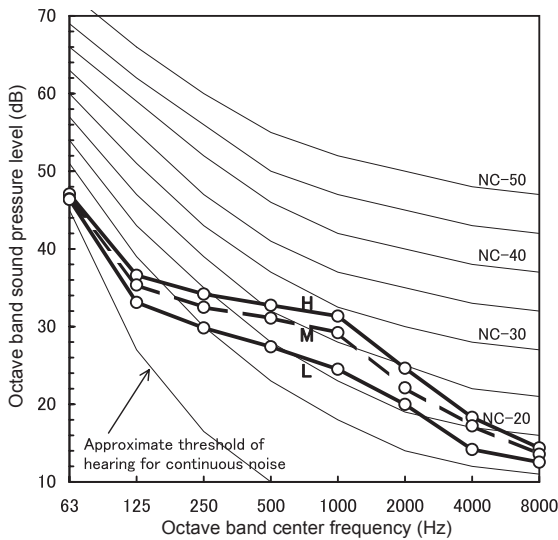
[External static pressure 20Pa]

Fan tap	H	M	L
Sound pressure level (dB(A))	34	32	29



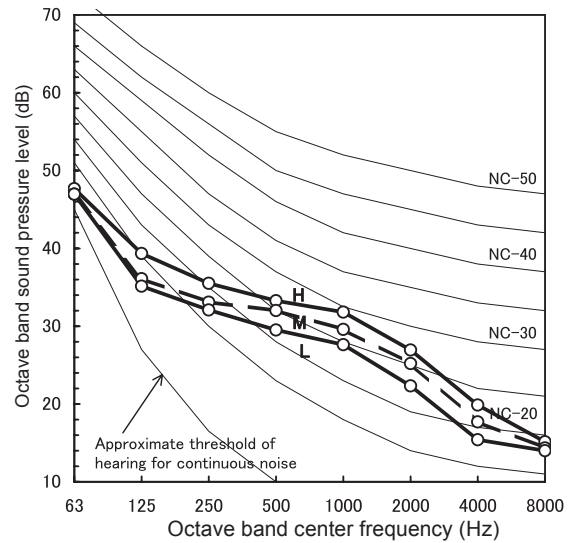
[External static pressure 35Pa]

Fan tap	H	M	L
Sound pressure level (dB(A))	35	33	30



[External static pressure 50Pa]

Fan tap	H	M	L
Sound pressure level (dB(A))	36	34	32



## 2-6. Ceiling Type

2-6-1. Specifications

2-6-2. Dimension

2-6-3. Wiring diagrams

2-6-4. Sensible capacity table

2-6-5. Part load performance

2-6-6. Air throw distance chart

2-6-7. Sound characteristics (NC curve)

## 2-6-1. Specifications

&lt;Single type&gt;

Model	Indoor unit		RAV-SM	564CT-E	804CT-E	1104CT-E	1404CT-E
	Outdoor unit		RAV-SM	563AT-E	803AT-E	1103AT-E1	1403AT-E1
Cooling capacity		(kW)		5.0 (1.5 – 5.6)	7.0 (1.5 – 7.4)	10.0 (3.0 – 11.2)	12.3 (3.0 – 13.2)
Heating capacity		(kW)		5.6 (1.5 – 6.3)	8.0 (1.5 – 9.0)	11.2 (3.0 – 12.5)	14.0 (3.0 – 16.0)
Power supply			1 phase 230V (220 – 240V) 50Hz				
Electrical characteristics	Cooling	Running current (A)		8.71 – 7.98	12.23 – 11.21	16.20 – 14.90	21.18 – 19.40
		Power consumption (kW)		1.82	2.53	3.51	4.52
		Power factor (%)		95	94	98	97
		EER		2.75	2.77	2.85	2.72
		Energy efficiency class *		D	D	C	D
	Heating	Running current (A)		7.85 – 7.19	11.94 – 10.95	14.84 – 13.61	19.40 – 17.78
		Power consumption (kW)		1.64	2.47	3.20	4.14
		Power factor (%)		95	94	98	97
		COP		3.41	3.24	3.50	3.38
		Energy efficiency class *		B	C	B	C
Maximum current (A)			12.5	14.9	21.0	21.0	
Appearance	Main unit		Shine white				
Outer dimension	Main unit	Height (mm)		210	210	210	210
		Width (mm)		910	1180	1595	1595
		Depth (mm)		680	680	680	680
Total weight	Main unit (kg)			21	25	33	33
Heat exchanger			Finned tube				
Fan unit	Fan		Centrifugal				
	Standard air flow	H/M/L (m <sup>3</sup> /min.)		13.0/11.2/10.0	18.5/16.7/14.6	27.5/24.0/21.2	30.0/26.0/23.1
	Motor (W)			60	60	120	120
Air filter			Attached main unit				
Controller (Sold separately)			RBC-AMT32E, AMS41E, AS21E2				
Connecting pipe	Gas side (mm)			12.7	15.9	15.9	15.9
	Liquid side (mm)			6.4	9.5	9.5	9.5
	Drain port (mm)			VP25			
Sound pressure level	H/M/L (dB·A)			36/33/30	38/36/33	41/38/35	43/40/37
Sound power level	H/M/L (dB·A)			51/48/45	53/51/48	56/53/50	58/55/52

\* : IEC standard

Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

The refrigerant pipe length is 7.5 m(56Type is 5m), height difference is 0m.

The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

## &lt;Twin type/Triple type&gt;

Model	Indoor unit 1	RAV-SM	564CT-E	804CT-E	804CT-E	564CT-E
	Indoor unit 2	RAV-SM	564CT-E	804CT-E	804CT-E	564CT-E
	Indoor unit 3	RAV-SM	—	—	—	564CT-E
	Outdoor unit	RAV-SM	1103AT-E1	1403AT-E1	1603AT-E	1603AT-E
Cooling capacity		(kW)	10.0 (3.0 – 11.2)	12.3 (3.0 – 13.2)	14.0 (3.0 – 16.0)	14.0 (3.0 – 16.0)
Heating capacity		(kW)	11.2 (3.0 – 12.5)	14.0 (3.0 – 16.0)	16.0 (3.0 – 18.0)	16.0 (3.0 – 18.0)
Power supply			1 phase 230V (220 – 240V) 50Hz			
Electrical characteristics	Cooling	Running current (A)	16.28 – 14.92	21.18 – 19.42	23.88 – 21.89	23.88 – 21.89
		Power consumption (kW)	3.51	4.52	4.99	4.99
		Power factor (%)	98	97	95	95
		EER	2.85	2.72	2.81	2.81
		Energy efficiency class *	C	D	C	C
	Heating	Running current (A)	14.84 – 13.61	19.40 – 17.78	22.44 – 20.57	22.44 – 20.57
		Power consumption (kW)	3.2	4.14	4.69	4.69
		Power factor (%)	98	97	95	95
		COP	3.50	3.38	3.41	3.41
		Energy efficiency class *	B	C	B	B
Maximum current (A)			20.6	21.5	31.0	30.6
Indoor unit						
Fan unit	Fan		Centrifugal			
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	13.0/11.2/10.0	18.5/16.7/14.6	18.5/16.7/14.6	13.0/11.2/10.0
	Motor (W)		60	60	60	60
Sound pressure level		H/M/L (dB•A)	36/33/30	38/36/33	38/36/33	36/33/30
Sound power level		H/M/L (dB•A)	51/48/45	53/51/48	53/51/48	51/48/45
Outdoor unit						
Standard length (m)			7.5	7.5	7.5	7.5
Max. total length (m)			50	50	50	50
Refrigerant pipe	Refrigerant charging amount (Charge-less up to 30m)		40g/m (31m to 50m)			
	Height difference	Outdoor lower (m)	30	30	30	30
		Outdoor higher (m)	30	30	30	30
Fan unit	Fan		Propeller fan			
	Standard air flow (m <sup>3</sup> /min.)		75	75	103	103
	Motor (W)		100	100	100 + 100	100 + 100
Connecting pipe	Gas side	Main (mm)	15.9	15.9	15.9	15.9
		Sub (mm)	12.7	15.9	15.9	12.7
	Liquid side	Main (mm)	9.5	9.5	9.5	9.5
		Sub (mm)	6.4	9.5	9.5	6.4
Sound pressure level		Cooling/Heating (dB•A)	53/54	54/54	51/53	51/53
Sound power level		Cooling/Heating (dB•A)	70/71	71/71	68/70	68/70

\* : IEC standard

## Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

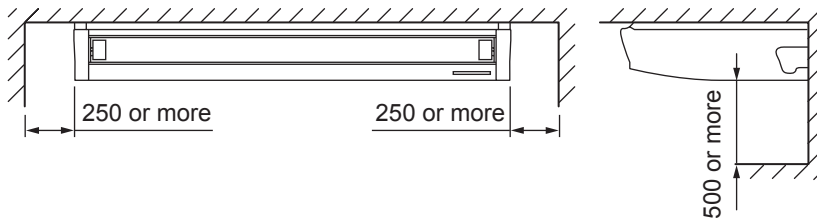
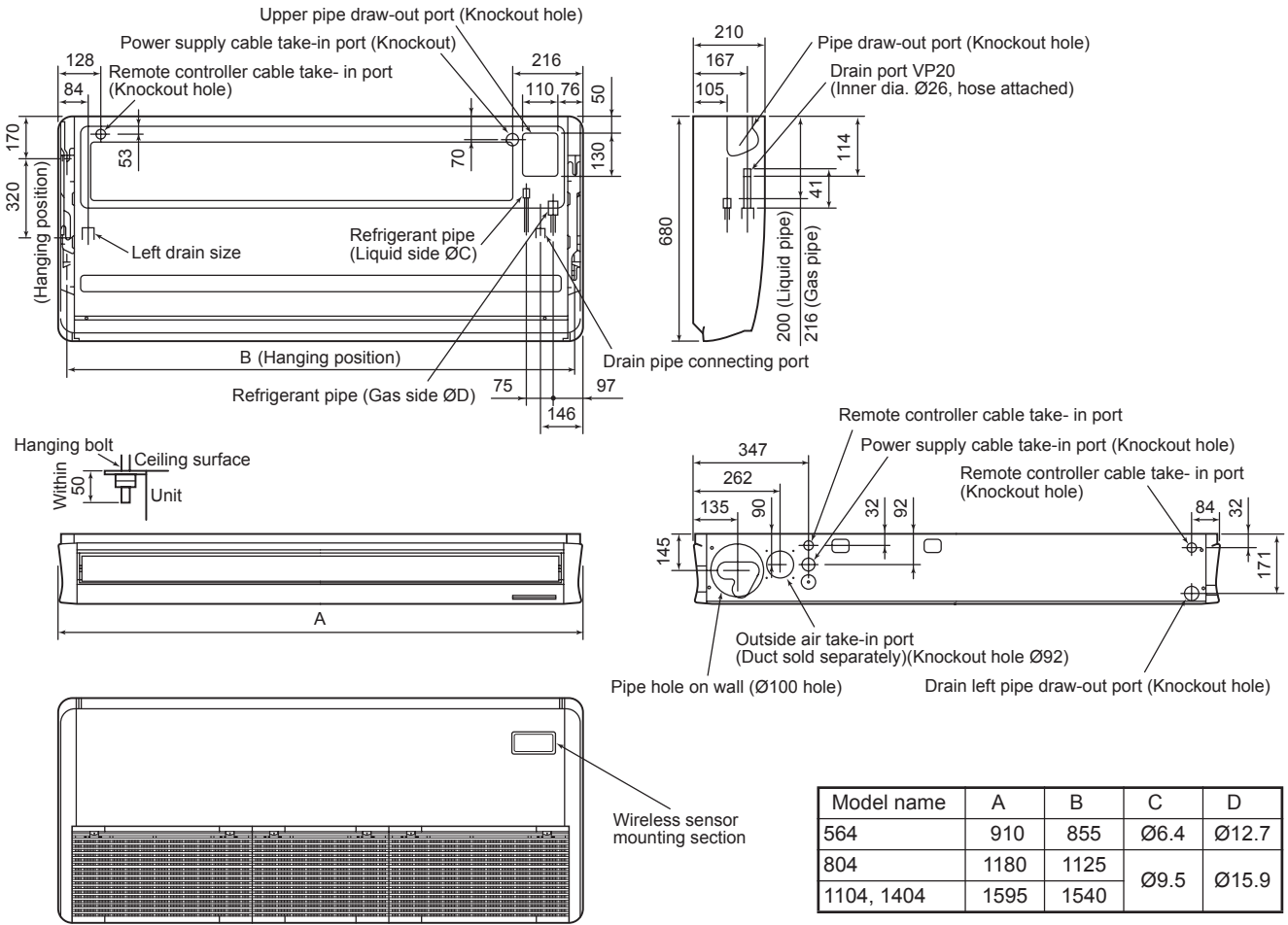
Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

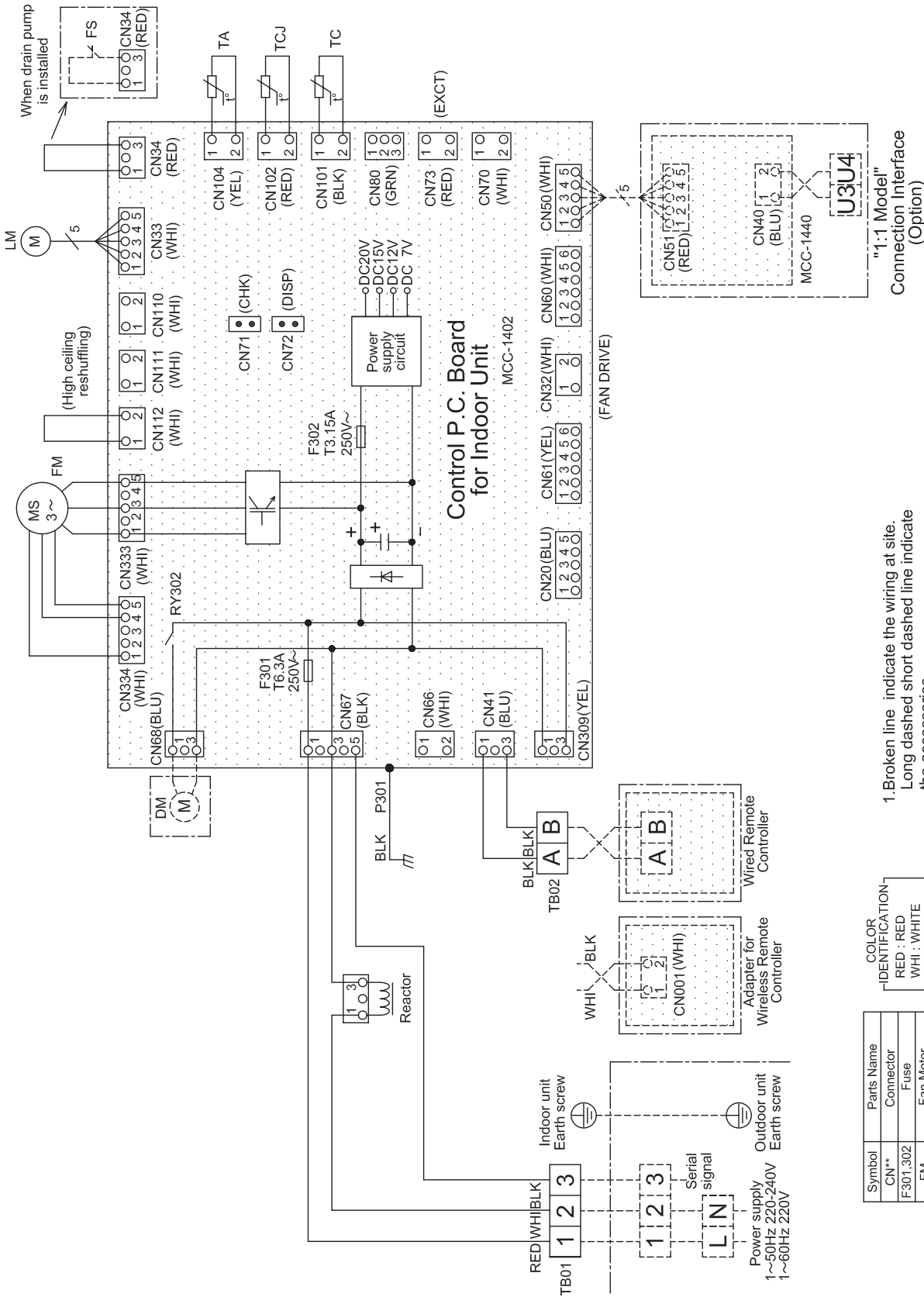
## 2-6-2. Dimension

RAV-SM564CT-E, RAV-SM804CT-E, RAV-SM1104CT-E, RAV-SM1404CT-E



### 2-6-3. Wiring diagrams

RAV-SM564CT-E, RAV-SM804CT-E, RAV-SM1104CT-E, RAV-SM1404CT-E



1. Broken line indicate the wiring at site.  
Long dashed short dashed line indicate the accessories.
2. indicates the terminal block.  
 indicates the connector terminal on the control P.C. board.
3. indicates the protection ground.
4. indicates the control P.C. board.
5. When installing the drain pump connect the float switch connector to CN34 connector.

COLOR IDENTIFICATION	
RED	: RED
WHI	: WHITE
YEL	: YELLOW
BLU	: BLUE
BLK	: BLACK
GRY	: GRAY
PNK	: PINK
ORN	: ORANGE
BRW	: BROWN
GRN	: GREEN

Symbol	Parts Name
CN**	Connector
F301,302	Fuse
FM	Fan Motor
LM	Louver Motor
RY302	Drain Control Relay
TA	Indoor temp sensor
TB01,02	Terminal Block
TC,TCJ	Temp sensor
DM	Drain Pump Motor
FS	Float Switch

Sold Separately



## 2-6-4. Sensible capacity table

Digital Inverter 3 Series Sensible Heat Capacity : RAV-SM\*\*\*CT-E

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
564	10.0	4.7	3.6	5.4	4.1	5.2	3.9	5.4	4.1	5.6	4.2	5.7	4.3	5.9	4.5	6.2	4.7	6.5	4.9
	12.0	4.7	3.5	5.3	4.1	5.2	3.9	5.3	4.1	5.5	4.2	5.7	4.3	5.8	4.4	6.2	4.7	6.5	4.9
	14.0	4.6	3.5	5.3	4.0	5.1	3.9	5.3	4.0	5.5	4.2	5.6	4.3	5.8	4.4	6.1	4.7	6.4	4.9
	16.0	4.6	3.5	5.3	4.0	5.1	3.9	5.3	4.0	5.4	4.1	5.6	4.3	5.8	4.4	6.1	4.6	6.4	4.9
	18.0	4.6	3.5	5.2	4.0	5.0	3.8	5.2	4.0	5.4	4.1	5.6	4.2	5.7	4.3	6.1	4.6	6.3	4.8
	20.0	4.5	3.4	5.2	3.9	5.0	3.8	5.2	3.9	5.4	4.1	5.5	4.2	5.7	4.3	6.0	4.6	6.3	4.8
	21.0	4.5	3.4	5.2	3.9	5.0	3.8	5.2	3.9	5.3	4.1	5.5	4.2	5.6	4.3	6.0	4.5	6.3	4.8
	23.0	4.5	3.4	5.1	3.9	4.9	3.7	5.1	3.9	5.3	4.0	5.4	4.1	5.6	4.2	5.9	4.5	6.2	4.7
	25.0	4.4	3.4	5.1	3.8	4.9	3.7	5.0	3.8	5.2	4.0	5.4	4.1	5.5	4.2	5.9	4.4	6.1	4.7
	27.0	4.4	3.3	5.0	3.8	4.8	3.7	5.0	3.8	5.2	3.9	5.3	4.0	5.5	4.2	5.8	4.4	6.0	4.6
	29.0	4.3	3.3	4.9	3.7	4.8	3.6	4.9	3.7	5.1	3.9	5.2	4.0	5.4	4.1	5.7	4.3	6.0	4.5
	31.0	4.2	3.2	4.9	3.7	4.7	3.6	4.9	3.7	5.0	3.8	5.2	3.9	5.3	4.0	5.6	4.3	5.9	4.5
	33.0	4.2	3.2	4.8	3.6	4.6	3.5	4.8	3.6	4.9	3.8	5.1	3.9	5.2	4.0	5.5	4.2	5.8	4.4
	35.0	4.1	3.1	4.7	3.6	4.5	3.4	4.7	3.6	4.9	3.7	5.0	3.8	5.1	3.9	5.4	4.1	5.7	4.3
	37.0	4.0	3.1	4.6	3.5	4.4	3.4	4.6	3.5	4.8	3.6	4.9	3.7	5.0	3.8	5.3	4.1	5.6	4.2
	39.0	3.9	3.0	4.5	3.4	4.4	3.3	4.5	3.4	4.7	3.5	4.8	3.7	4.9	3.8	5.2	4.0	5.5	4.2

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
804	10.0	6.6	4.9	7.5	5.6	7.3	5.4	7.5	5.6	7.8	5.8	8.0	5.9	8.2	6.1	8.7	6.5	9.1	6.8
	12.0	6.5	4.9	7.5	5.6	7.2	5.4	7.5	5.5	7.7	5.7	8.0	5.9	8.2	6.1	8.7	6.4	9.1	6.7
	14.0	6.5	4.8	7.4	5.5	7.2	5.3	7.4	5.5	7.7	5.7	7.9	5.9	8.1	6.0	8.6	6.4	9.0	6.7
	16.0	6.4	4.8	7.4	5.5	7.1	5.3	7.4	5.5	7.6	5.7	7.8	5.8	8.1	6.0	8.5	6.3	8.9	6.6
	18.0	6.4	4.7	7.3	5.4	7.1	5.2	7.3	5.4	7.6	5.6	7.8	5.8	8.0	5.9	8.5	6.3	8.9	6.6
	20.0	6.3	4.7	7.3	5.4	7.0	5.2	7.3	5.4	7.5	5.6	7.7	5.7	7.9	5.9	8.4	6.2	8.8	6.5
	21.0	6.3	4.7	7.2	5.4	7.0	5.2	7.2	5.4	7.5	5.5	7.7	5.7	7.9	5.9	8.4	6.2	8.8	6.5
	23.0	6.3	4.6	7.2	5.3	6.9	5.1	7.1	5.3	7.4	5.5	7.6	5.7	7.8	5.8	8.3	6.2	8.7	6.4
	25.0	6.2	4.6	7.1	5.3	6.8	5.1	7.1	5.3	7.3	5.4	7.5	5.6	7.7	5.7	8.2	6.1	8.6	6.4
	27.0	6.1	4.5	7.0	5.2	6.7	5.0	7.0	5.2	7.2	5.4	7.4	5.5	7.6	5.7	8.1	6.0	8.5	6.3
	29.0	6.0	4.5	6.9	5.1	6.7	4.9	6.9	5.1	7.1	5.3	7.3	5.4	7.5	5.6	8.0	5.9	8.4	6.2
	31.0	5.9	4.4	6.8	5.1	6.6	4.9	6.8	5.0	7.0	5.2	7.2	5.4	7.4	5.5	7.9	5.9	8.2	6.1
	33.0	5.8	4.3	6.7	5.0	6.5	4.8	6.7	5.0	6.9	5.1	7.1	5.3	7.3	5.4	7.8	5.8	8.1	6.0
	35.0	5.7	4.3	6.6	4.9	6.3	4.7	6.6	4.9	6.8	5.1	7.0	5.2	7.2	5.3	7.6	5.7	8.0	5.9
	37.0	5.6	4.2	6.5	4.8	6.2	4.6	6.4	4.8	6.7	5.0	6.9	5.1	7.1	5.2	7.5	5.6	7.8	5.8
	39.0	5.5	4.1	6.3	4.7	6.1	4.5	6.3	4.7	6.5	4.9	6.7	5.0	6.9	5.1	7.3	5.4	7.7	5.7

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1104	10.0	9.4	7.6	10.8	7.9	10.4	8.1	10.7	8.4	11.1	8.6	11.4	8.6	11.8	8.6	12.5	8.5	13.0	8.3
	12.0	9.3	7.5	10.7	7.8	10.3	8.0	10.7	8.3	11.0	8.5	11.4	8.5	11.7	8.5	12.4	8.4	12.9	8.2
	14.0	9.3	7.5	10.6	7.8	10.2	8.0	10.6	8.3	11.0	8.5	11.3	8.5	11.6	8.5	12.3	8.4	12.9	8.2
	16.0	9.2	7.4	10.6	7.7	10.2	7.9	10.5	8.2	10.9	8.4	11.2	8.4	11.5	8.4	12.2	8.3	12.8	8.1
	18.0	9.1	7.4	10.5	7.7	10.1	7.9	10.4	8.1	10.8	8.4	11.1	8.3	11.4	8.3	12.1	8.2	12.7	8.1
	20.0	9.1	7.3	10.4	7.6	10.0	7.8	10.4	8.1	10.7	8.3	11.0	8.3	11.3	8.3	12.0	8.2	12.6	8.0
	21.0	9.0	7.3	10.3	7.6	10.0	7.8	10.3	8.0	10.7	8.3	11.0	8.2	11.3	8.2	12.0	8.1	12.5	8.0
	23.0	8.9	7.2	10.2	7.5	9.9	7.7	10.2	8.0	10.6	8.2	10.9	8.2	11.2	8.1	11.8	8.1	12.4	7.9
	25.0	8.8	7.1	10.1	7.4	9.8	7.6	10.1	7.9	10.4	8.1	10.8	8.1	11.1	8.1	11.7	8.0	12.2	7.8
	27.0	8.7	7.1	10.0	7.3	9.6	7.5	10.0	7.8	10.3	8.0	10.6	8.0	10.9	8.0	11.6	7.9	12.1	7.7
	29.0	8.6	7.0	9.9	7.2	9.5	7.4	9.8	7.7	10.2	7.9	10.5	7.9	10.8	7.8	11.4	7.8	11.9	7.6
	31.0	8.5	6.9	9.7	7.1	9.4	7.3	9.7	7.6	10.0	7.8	10.3	7.7	10.6	7.7	11.3	7.7	11.8	7.5
	33.0	8.4	6.8	9.6	7.0	9.2	7.2	9.6	7.4	9.9	7.6	10.2	7.6	10.5	7.6	11.1	7.5	11.6	7.4
	35.0	8.2	6.6	9.4	6.9	9.1	7.1	9.4	7.3	9.7	7.5	10.0	7.5	10.3	7.5	10.9	7.4	11.4	7.3
	37.0	8.1	6.5	9.2	6.8	8.9	6.9	9.2	7.2	9.5	7.4	9.8	7.4	10.1	7.3	10.7	7.3	11.2	7.1
	39.0	7.9	6.4	9.0	6.6	8.7	6.8	9.0	7.0	9.3	7.2	9.6	7.2	9.9	7.2	10.5	7.1	10.9	7.0

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1404	10.0	11.5	9.3	13.2	9.7	12.8	9.9	13.2	10.3	13.7	10.5	14.1	10.5	14.5	10.5	15.3	10.4	16.0	10.2
	12.0	11.5	9.3	13.2	9.6	12.7	9.9	13.1	10.2	13.6	10.5	14.0	10.5	14.4	10.4	15.2	10.3	15.9	10.1
	14.0	11.4	9.2	13.1	9.6	12.6	9.8	13.0	10.1	13.5	10.4	13.9	10.4	14.3	10.4	15.1	10.3	15.8	10.0
	16.0	11.3	9.1	13.0	9.5	12.5	9.7	13.0	10.1	13.4	10.3	13.8	10.3	14.2	10.3	15.0	10.2	15.7	10.0
	18.0	11.2	9.1	12.9	9.4	12.4	9.6	12.8	10.0	13.3	10.3	13.7	10.2	14.1	10.2	14.9	10.1	15.6	9.9
	20.0	11.1	9.0	12.8	9.3	12.3	9.6	12.7	9.9	13.2	10.2	13.6	10.1	14.0	10.1	14.8	10.0	15.5	9.8
	21.0	11.1	8.9	12.7	9.3	12.3	9.5	12.7	9.9	13.1	10.1	13.5	10.1	13.9	10.1	14.7	10.0	15.4	9.8
	23.0	11.0	8.9	12.6	9.2	12.1	9.4	12.6	9.8	13.0	10.0	13.4	10.0	13.8	10.0	14.6	9.9	15.2	9.7
	25.0	10.9	8.8	12.4	9.1	12.0	9.3	12.4	9.7	12.8	9.9	13.2	9.9	13.6	9.9	14.4	9.8	15.1	9.6
	27.0	10.7	8.7	12.3	9.0	11.8	9.2	12.3	9.5	12.7	9.8	13.1	9.8	13.4	9.8	14.2	9.7	14.9	9.4
	29.0	10.6	8.5	12.1	8.9	11.7	9.1	12.1	9.4	12.5	9.7	12.9	9.6	13.3	9.6	14.0	9.5	14.7	9.3
	31.0	10.4	8.4	12.0	8.7	11.5	9.0	11.9	9.3	12.3	9.5	12.7	9.5	13.1	9.5	13.8	9.4	14.5	9.2
	33.0	10.3	8.3	11.8	8.6	11.3	8.8	11.7	9.1	12.2	9.4	12.5	9.4	12.9	9.3	13.6	9.2	14.3	9.0
	35.0	10.1	8.1	11.6	8.5	11.2	8.7	11.6	9.0	11.9	9.2	12.3	9.2	12.7	9.2	13.4	9.1	14.0	8.9
	37.0	9.9	8.0	11.4	8.3	10.9	8.5	11.3	8.8	11.7	9.0	12.1	9.0	12.4	9.0	13.1	8.9	13.7	8.7
	39.0	9.7	7.8	11.1	8.1	10.7	8.3	11.1	8.6	11.5	8.9	11.8	8.8	12.2	8.8	12.9	8.7	13.5	8.5

## 2-6-5. Part load performance

### Combination

Indoor unit : RAV-SM564CT-E

Outdoor unit : RAV-SM563AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	450	1500	450
RATING	5000	1820	5600	1640

Q: Capacity in W  
W: Power Consumption in W

### Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	4760	4280	3800	3330	2850	2380	1900	1430	1430	1430
	W	1950	1680	1420	1190	980	790	610	480	480	480
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1820	1562	1327	1112	915	733	564	450	450	450
30	Q	5210	4680	4160	3640	3120	2600	2080	1560	1560	1560
	W	1680	1440	1230	1030	850	680	520	420	420	420
25	Q	5380	4840	4300	3760	3230	2690	2150	1610	1610	1610
	W	1560	1340	1140	950	780	630	480	390	390	390
20	Q	5520	4960	4410	3860	3310	2760	2210	1650	1650	1650
	W	1450	1240	1050	880	730	580	450	360	360	360

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6750	6080	5400	4730	4050	3380	2700	2030	1810	1810
	W	1810	1600	1400	1210	1010	840	660	490	500	500
10	Q	6130	5520	4910	4290	3680	3070	2450	1840	1640	1640
	W	1710	1520	1330	1150	960	790	630	460	470	470
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	1640	1450	1270	1100	920	760	600	440	450	450
5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1400	1400
	W	1590	1410	1230	1070	890	740	580	430	440	440
2	Q	4680	4210	3750	3280	2810	2340	1870	1400	1250	1250
	W	1510	1340	1170	1010	850	700	550	410	410	410
0	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1340	1190	1040	900	750	620	490	360	370	370
-5	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1340	1190	1040	900	750	620	490	360	370	370
-7	Q	3440	3090	2750	2410	2060	1720	1380	1030	920	920
	W	1300	1150	1010	870	730	600	480	350	360	360
-10	Q	3150	2830	2520	2200	1890	1570	1260	940	840	840
	W	1250	1100	970	840	700	580	460	330	340	340
-15	Q	2650	2390	2120	1860	1590	1330	1060	800	710	710
	W	1180	1040	910	790	660	550	430	320	320	320

## Combination

Indoor unit : RAV-SM804CT-E

Outdoor unit : RAV-SM803AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	500	1500	500
RATING	7000	2530	8000	2470

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	6660	5990	5330	4660	3990	3330	2660	2000	1430	1430
	W	2710	2250	1850	1510	1210	950	720	510	540	540
35	Q	7000	6300	5600	4900	4200	3500	2800	2100	1500	1500
	W	2530	2097	1725	1407	1128	883	668	473	500	500
30	Q	7290	6560	5830	5100	4370	3640	2910	2190	1560	1560
	W	2340	1940	1590	1300	1040	820	620	440	460	460
25	Q	7530	6770	6020	5270	4520	3760	3010	2260	1610	1610
	W	2170	1800	1480	1210	970	760	570	410	430	430
20	Q	7720	6950	6180	5400	4630	3860	3090	2320	1650	1650
	W	2010	1670	1370	1120	900	700	530	380	400	400

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	9650	8680	7720	6750	5790	4820	3860	2890	1930	1810
	W	2720	2390	2070	1780	1490	1210	950	690	450	550
10	Q	8760	7880	7010	6130	5260	4380	3500	2630	1750	1640
	W	2580	2270	1960	1680	1410	1150	900	660	430	520
7	Q	8000	7200	6400	5600	4800	4000	3200	2400	1600	1500
	W	2470	2170	1880	1610	1350	1100	860	630	410	500
5	Q	7460	6720	5970	5220	4480	3730	2990	2240	1490	1400
	W	2390	2100	1820	1560	1310	1070	830	610	400	480
2	Q	6690	6020	5350	4680	4010	3340	2680	2010	1340	1250
	W	2280	2000	1730	1480	1240	1010	790	580	380	460
0	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	2020	1780	1540	1320	1110	900	700	520	340	410
-5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	2020	1780	1540	1320	1110	900	700	520	340	410
-7	Q	4910	4420	3930	3440	2950	2460	1960	1470	980	920
	W	1960	1720	1490	1280	1070	870	680	500	330	400
-10	Q	4500	4050	3600	3150	2700	2250	1800	1350	900	840
	W	1880	1650	1430	1230	1030	840	650	480	310	380
-15	Q	3790	3410	3030	2650	2280	1900	1520	1140	760	710
	W	1770	1560	1350	1160	970	790	620	450	290	360

## Combination

Indoor unit : RAV-SM1104CT-E

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3510	11200	3200

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3770	3120	2570	2090	1680	1310	990	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3510	2910	2394	1952	1565	1225	927	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	3120	3120
	W	3240	2690	2210	1800	1450	1130	860	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	3230	3230
	W	3010	2490	2050	1670	1340	1050	790	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	3310	3310
	W	2790	2310	1900	1550	1240	970	740	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3530	3100	2690	2300	1930	1570	1240	900	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3340	2940	2550	2180	1830	1480	1170	860	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	3200	2810	2440	2090	1750	1420	1120	820	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	3100	2720	2360	2030	1700	1380	1090	790	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2950	2590	2250	1930	1610	1310	1030	760	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2620	2300	2000	1710	1430	1160	920	670	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2620	2300	2000	1710	1430	1160	920	670	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2540	2230	1940	1660	1390	1130	890	650	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2440	2140	1860	1590	1330	1080	850	620	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2300	2020	1750	1500	1260	1020	800	590	430	430

## Combination

Indoor unit : RAV-SM1404CT-E

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12300	4520	14000	4140

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11700	10530	9360	8190	7020	5850	4680	3510	2850	2850
	W	4850	4020	3310	2700	2160	1690	1280	910	700	700
35	Q	12300	11070	9840	8610	7380	6150	4920	3690	3000	3000
	W	4520	3747	3083	2513	2016	1577	1193	845	650	650
30	Q	12800	11520	10240	8960	7680	6400	5120	3840	3120	3120
	W	4180	3460	2850	2320	1860	1460	1100	780	600	600
25	Q	13220	11900	10580	9260	7930	6610	5290	3970	3230	3230
	W	3870	3210	2640	2150	1730	1350	1020	720	560	560
20	Q	13570	12210	10850	9500	8140	6780	5430	4070	3310	3310
	W	3590	2980	2450	2000	1600	1250	950	670	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3620	3620
	W	4570	4000	3480	2980	2490	2030	1590	1170	720	720
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3290	3290
	W	4330	3790	3300	2820	2360	1920	1500	1110	680	680
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4140	3630	3160	2700	2260	1840	1440	1060	650	650
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2800	2800
	W	4010	3520	3060	2620	2190	1780	1400	1030	630	630
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2510	2510
	W	3820	3350	2910	2490	2080	1700	1330	980	600	600
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3390	2970	2590	2210	1850	1510	1180	870	530	530
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3390	2970	2590	2210	1850	1510	1180	870	530	530
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1840	1840
	W	3290	2880	2510	2140	1790	1460	1140	840	520	520
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1690	1690
	W	3150	2760	2400	2050	1720	1400	1100	810	490	490
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1420	1420
	W	2970	2600	2270	1940	1620	1320	1030	760	470	470

## Combination

Indoor unit : RAV-SM564CT-E(Twin)

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3510	11200	3200

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3770	3120	2570	2090	1680	1310	990	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3510	2910	2394	1952	1565	1225	927	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	3120	3120
	W	3240	2690	2210	1800	1450	1130	860	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	3230	3230
	W	3010	2490	2050	1670	1340	1050	790	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	3310	3310
	W	2790	2310	1900	1550	1240	970	740	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3530	3100	2690	2300	1930	1570	1240	900	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3340	2940	2550	2180	1830	1480	1170	860	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	3200	2810	2440	2090	1750	1420	1120	820	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	3100	2720	2360	2030	1700	1380	1090	790	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2950	2590	2250	1930	1610	1310	1030	760	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2620	2300	2000	1710	1430	1160	920	670	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2620	2300	2000	1710	1430	1160	920	670	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2540	2230	1940	1660	1390	1130	890	650	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2440	2140	1860	1590	1330	1080	850	620	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2300	2020	1750	1500	1260	1020	800	590	430	430

## Combination

Indoor unit : RAV-SM804CT-E(Twin)

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12300	4520	14000	4140

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11700	10530	9360	8190	7020	5850	4680	3510	2850	2850
	W	4850	4020	3310	2700	2160	1690	1280	910	700	700
35	Q	12300	11070	9840	8610	7380	6150	4920	3690	3000	3000
	W	4520	3747	3083	2513	2016	1577	1193	845	650	650
30	Q	12800	11520	10240	8960	7680	6400	5120	3840	3120	3120
	W	4180	3460	2850	2320	1860	1460	1100	780	600	600
25	Q	13220	11900	10580	9260	7930	6610	5290	3970	3230	3230
	W	3870	3210	2640	2150	1730	1350	1020	720	560	560
20	Q	13570	12210	10850	9500	8140	6780	5430	4070	3310	3310
	W	3590	2980	2450	2000	1600	1250	950	670	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3620	3620
	W	4570	4000	3480	2980	2490	2030	1590	1170	720	720
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3290	3290
	W	4330	3790	3300	2820	2360	1920	1500	1110	680	680
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4140	3630	3160	2700	2260	1840	1440	1060	650	650
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2800	2800
	W	4010	3520	3060	2620	2190	1780	1400	1030	630	630
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2510	2510
	W	3820	3350	2910	2490	2080	1700	1330	980	600	600
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3390	2970	2590	2210	1850	1510	1180	870	530	530
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3390	2970	2590	2210	1850	1510	1180	870	530	530
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1840	1840
	W	3290	2880	2510	2140	1790	1460	1140	840	520	520
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1690	1690
	W	3150	2760	2400	2050	1720	1400	1100	810	490	490
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1420	1420
	W	2970	2600	2270	1940	1620	1320	1030	760	470	470

## Combination

Indoor unit : RAV-SM804CT-E(Twin)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4990	16000	4690

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	5350	4440	3650	2980	2390	1870	1410	1000	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4990	4137	3403	2774	2226	1742	1317	933	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4610	3820	3140	2560	2060	1610	1220	860	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	4280	3550	2920	2380	1910	1490	1130	800	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3970	3290	2710	2210	1770	1380	1050	740	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5170	4010	3500	2990	2500	2040	1600	1480	860	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4900	3800	3310	2830	2370	1930	1520	1400	820	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4690	3640	3170	2710	2270	1850	1450	1340	780	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4540	3530	3070	2630	2200	1790	1410	1300	760	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4320	3360	2920	2500	2090	1710	1340	1240	720	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3720	2890	2520	2150	1800	1470	1150	1060	620	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3570	2770	2410	2060	1730	1410	1100	1020	590	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3370	2610	2270	1940	1630	1330	1040	960	560	470



## Combination

Indoor unit : RAV-SM564CT-E(Triple)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4990	16000	4690

Q: Capacity in W  
W: Power Consumption in W

## Cooling

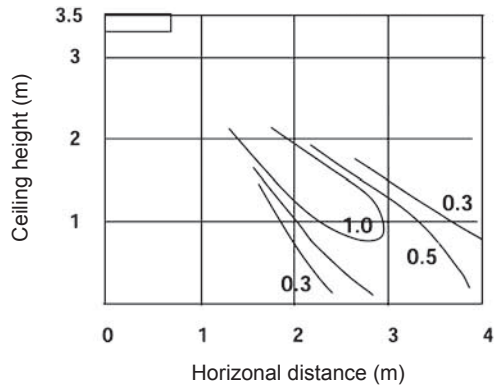
Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	5350	4440	3650	2980	2390	1870	1410	1000	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4990	4137	3403	2774	2226	1742	1317	933	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4610	3820	3140	2560	2060	1610	1220	860	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	4280	3550	2920	2380	1910	1490	1130	800	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3970	3290	2710	2210	1770	1380	1050	740	520	520

## Heating

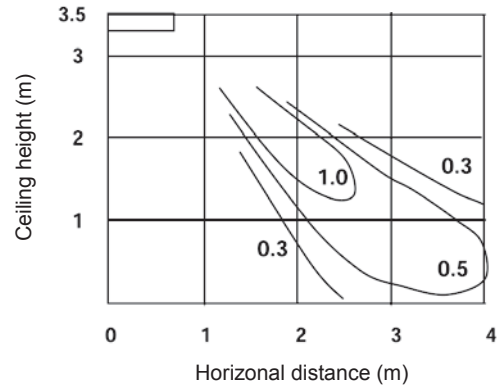
Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5170	4010	3500	2990	2500	2040	1600	1480	860	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4900	3800	3310	2830	2370	1930	1520	1400	820	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4690	3640	3170	2710	2270	1850	1450	1340	780	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4540	3530	3070	2630	2200	1790	1410	1300	760	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4320	3360	2920	2500	2090	1710	1340	1240	720	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3840	2980	2600	2220	1860	1520	1190	1100	640	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3720	2890	2520	2150	1800	1470	1150	1060	620	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3570	2770	2410	2060	1730	1410	1100	1020	590	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3370	2610	2270	1940	1630	1330	1040	960	560	470

### 2-6-6. Air throw distance chart

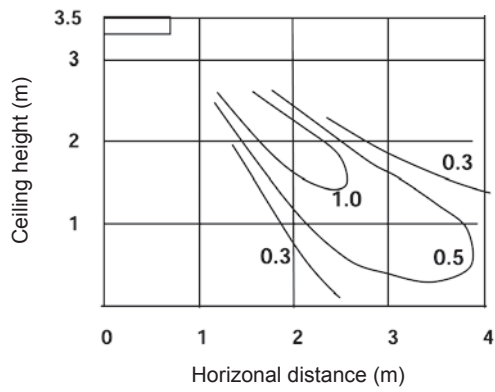
RAV-SM564CT-E



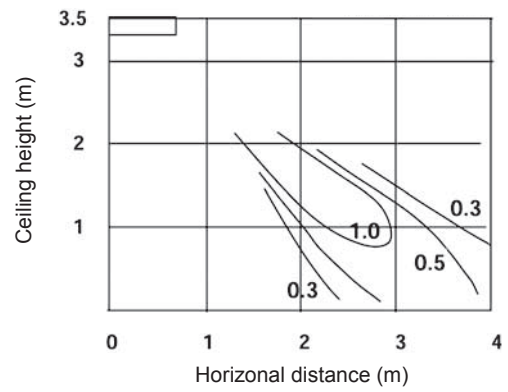
RAV-SM804CT-E



RAV-SM1104CT-E



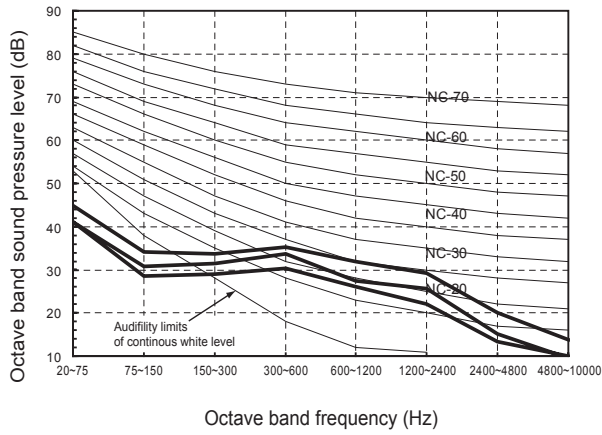
RAV-SM1404CT-E



### 2-6-7. Sound characteristics (NC curve)

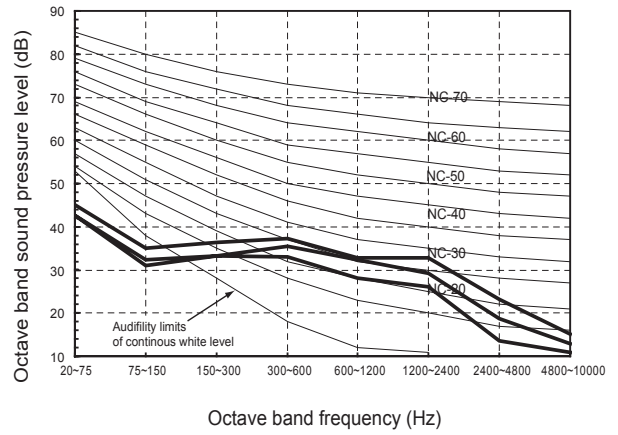
RAV-SM564CT-E

Fan tap	H	M	L
Sound pressure level (dB(A))	36	33	30



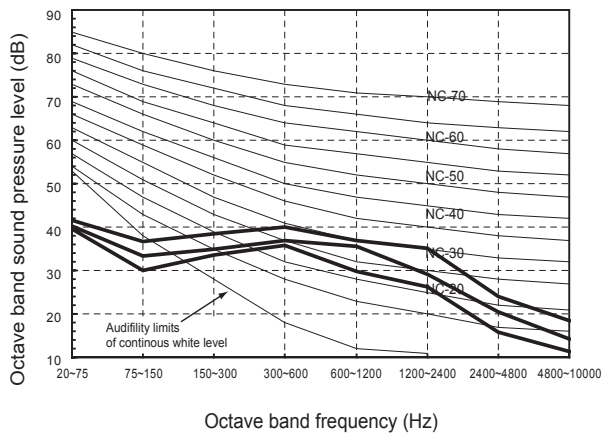
RAV-SM804CT-E

Fan tap	H	M	L
Sound pressure level (dB(A))	38	36	33



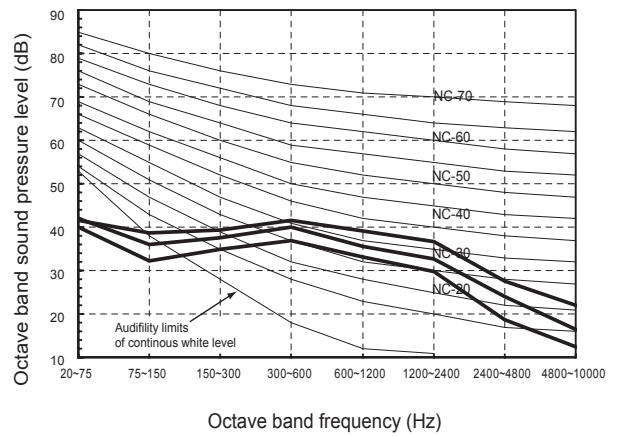
RAV-SM1104CT-E

Fan tap	H	M	L
Sound pressure level (dB(A))	41	38	35



RAV-SM1404CT-E

Fan tap	H	M	L
Sound pressure level (dB(A))	43	40	37



## 2-7. High Wall (6 series) Type

2-7-1. Specifications

2-7-2. Dimension

2-7-3. Wiring diagrams

2-7-4. Sensible capacity table

2-7-5. Part load performance

2-7-6. Air throw distance chart

2-7-7. Sound characteristics (NC curve)

## 2-7-1. Specifications

&lt;Single type&gt;

Model	Indoor unit	RAV-SM	566KRT-E	806KRT-E
	Outdoor unit	RAV-SM	563AT-E	803AT-E
Cooling capacity		(kW)	5.0 (1.5 – 5.6)	6.7 (1.5 – 7.0)
Heating capacity		(kW)	5.6 (1.5 – 6.3)	8.0 (1.5 – 9.0)
Power supply	1 phase 230V (220V – 240V) 50Hz			
Electrical characteristics	Cooling	Running current (A)	7.77 – 7.12	11.18 – 10.25
		Power consumption (kW)	1.66 (0.40 – 1.86)	2.37 (0.50 – 2.85)
		Power factor (%)	98	99
		EER	3.01	2.83
		Energy efficiency class *	B	C
	Heating	Running current (A)	7.60 – 6.96	11.88 – 10.89
		Power consumption (kW)	1.64 (0.40 – 2.40)	2.49 (0.50 – 3.46)
		Power factor (%)	98	99
		COP	3.41	3.21
		Energy efficiency class *	B	C
Maximum current (A)		12.3	14.7	
Appearance	Main unit		Pure white	
Outer dimension	Main unit	Height (mm)	320	320
		Width (mm)	1050	1050
		Depth (mm)	228	228
Total weight	Main unit	(kg)	12	12
Fan unit	Fan		Cross flow fan	
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	14.0/12.5/11.0	17.0/12.5/11.0
	Motor	(W)	30	30
Controller			WH-L11SE	
Connecting pipe	Gas side (mm)		12.7	15.9
	Liquid side (mm)		6.4	9.5
	Drain port (mm)		VP16	
Sound pressure level	H/M/L (dB•A)		42/39/36	47/41/36
Sound power level	H/M/L (dB•A)		57/54/51	62/56/51

\* : IEC standard

Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

The refrigerant pipe length is 7.5 m(56Type is 5m), height difference is 0m.

The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

## &lt;Twin type/Triple type&gt;

Model	Indoor unit 1	RAV-SM	566KRT-E	806KRT-E	806KRT-E	566KRT-E
	Indoor unit 2	RAV-SM	566KRT-E	806KRT-E	806KRT-E	566KRT-E
	Indoor unit 3	RAV-SM	—	—	—	566KRT-E
	Outdoor unit	RAV-SM	1103AT-E	1403AT-E1	1603AT-E	1603AT-E
Cooling capacity		(kW)	10.0 (3.0 – 11.2)	12.1 (3.0 – 13.0)	14.0 (3.0 – 16.0)	14.0 (3.0 – 16.0)
Heating capacity		(kW)	11.2 (3.0 – 12.5)	14.0 (3.0 – 16.0)	16.0 (3.0 – 18.0)	16.0 (3.0 – 18.0)
Power supply 1 phase 230V (220V – 240V) 50Hz						
Electrical characteristics	Cooling	Running current (A)	16.14 – 14.80	21.18 – 19.42	21.18 – 19.42	21.18 – 19.42
		Power consumption (kW)	3.48 (0.60 – 4.10)	4.57 (0.65 – 4.85)	4.57 (0.65 – 4.85)	4.57 (0.65 – 4.85)
		Power factor (%)	98	97	97	97
		EER	2.87	2.65	2.65	2.65
		Energy efficiency class *	C	D	D	D
	Heating	Running current (A)	14.56 – 13.35	19.87 – 18.21	19.87 – 18.21	19.87 – 18.21
		Power consumption (kW)	3.14 (0.60 – 4.00)	4.24 (0.65 – 4.60)	4.24 (0.65 – 4.60)	4.24 (0.65 – 4.60)
		Power factor (%)	98	97	97	97
		COP	3.57	3.30	3.30	3.30
		Energy efficiency class *	B	C	C	C
Maximum current		(A)	20.3	20.6	30.1	30.2
Indoor unit						
Appearance	Main unit		Pure white			
Outer dimension	Main unit	Height (mm)	320	320	320	320
		Width (mm)	1050	1050	1050	1050
		Depth (mm)	228	228	228	228
Total weight	Main unit (kg)		12	12	12	12
Fan unit	Fan		Cross flow fan			
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	14.0/12.5/ 11.0	17.0/12.5/ 11.0	17.0/12.5/ 11.0	14.0/12.5/ 11.0
	Motor (W)		30	30	30	30
Controller WH-L11SE						
Connecting pipe	Gas side	Main (mm)	15.9	15.9	15.9	15.9
		Sub (mm)	12.7	15.9	15.9	12.7
	Liquid side	Main (mm)	9.5	9.5	9.5	9.5
		Sub (mm)	6.4	9.5	9.5	6.4
	Drain port (mm)		VP16			
Sound pressure level	H/M/L (dB•A)	42/39/36	47/41/36	47/41/36	42/39/36	
Sound power level	H/M/L (dB•A)	57/54/51	62/56/51	62/56/51	57/54/51	

\*: IEC standard

## Note :

Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

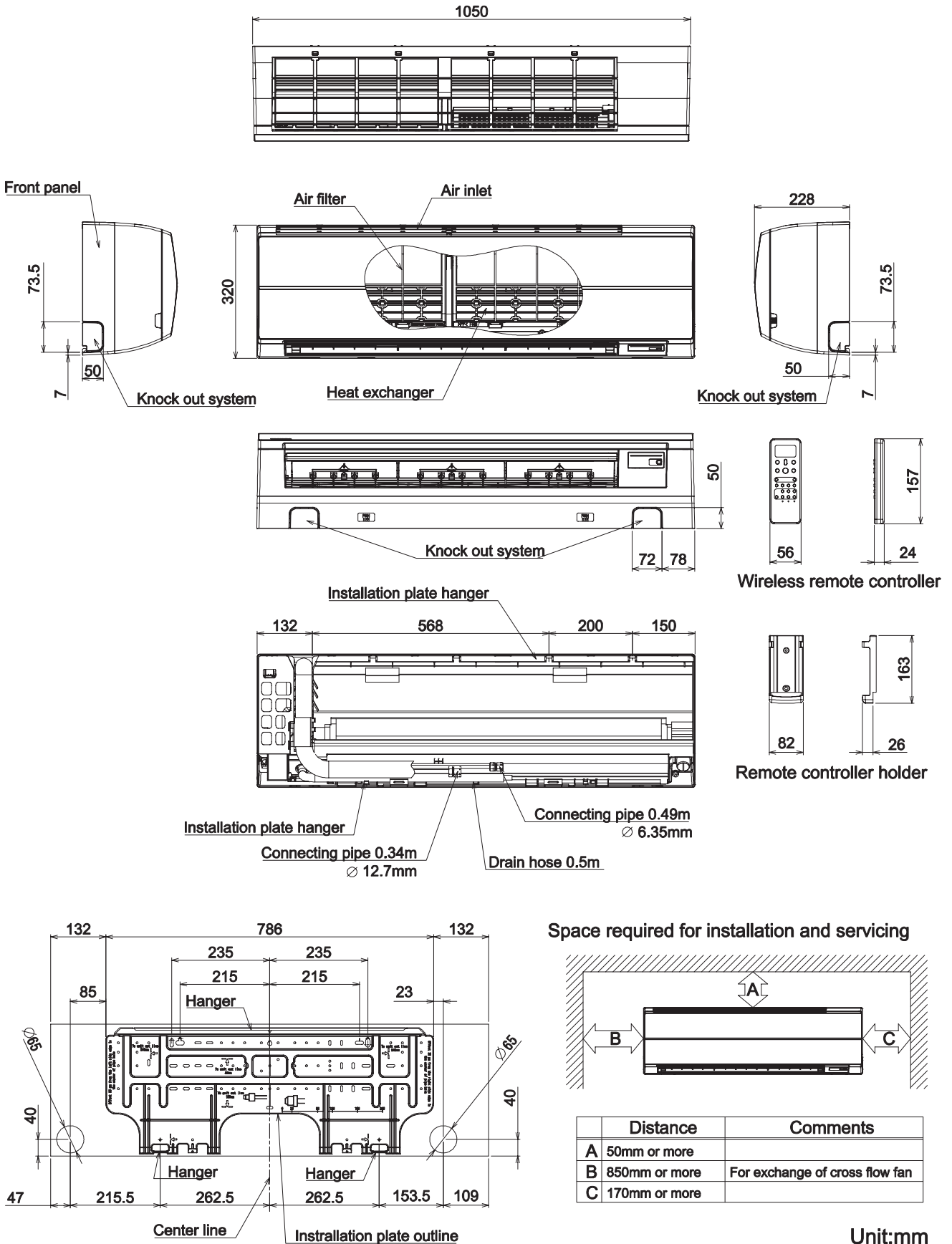
Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping.

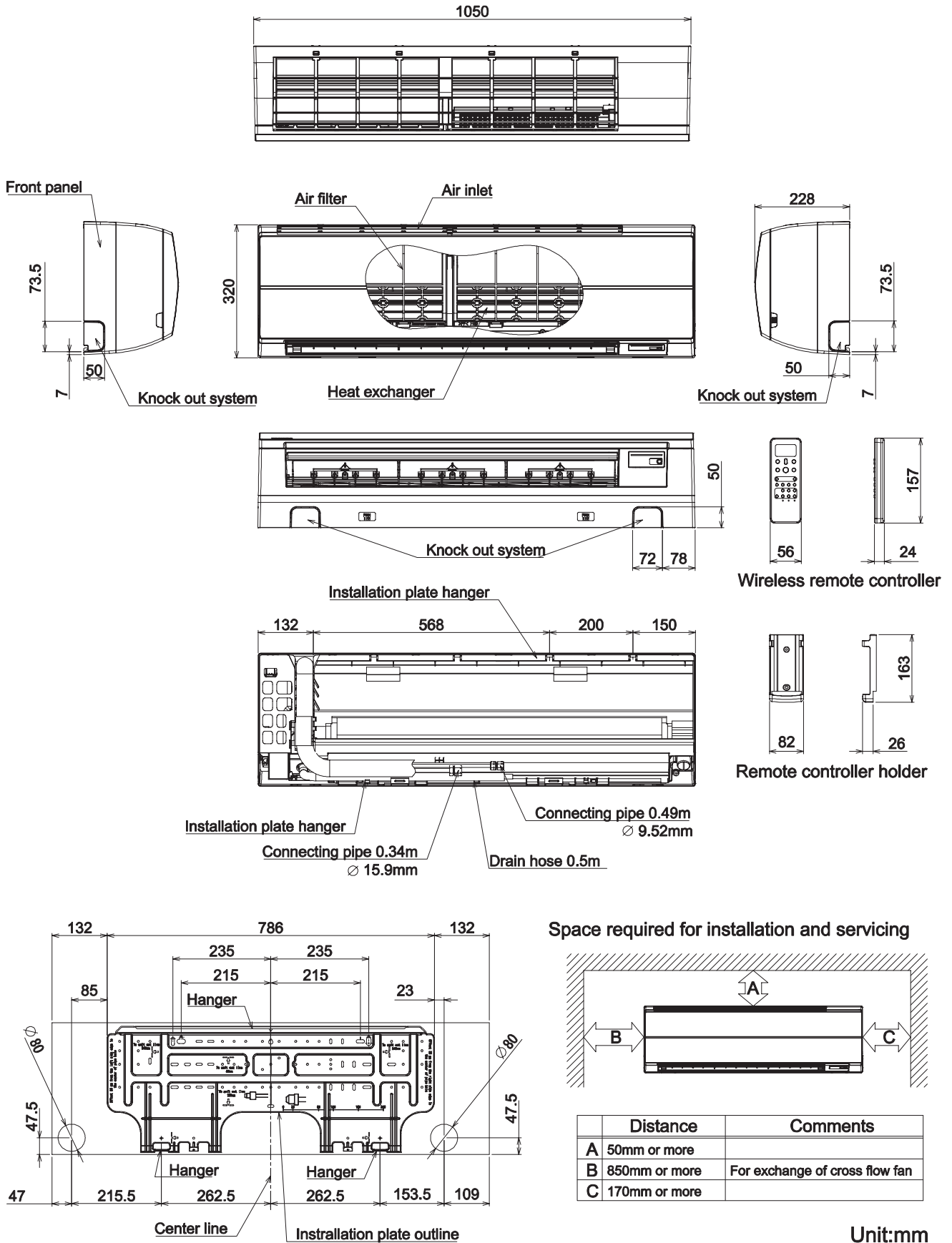
The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

## 2-7-2. Dimension

RAV-SM566KRT-E



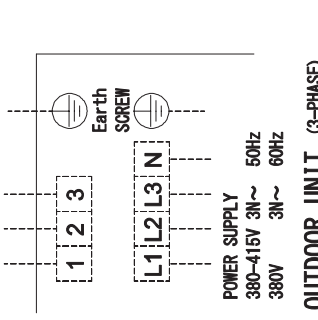
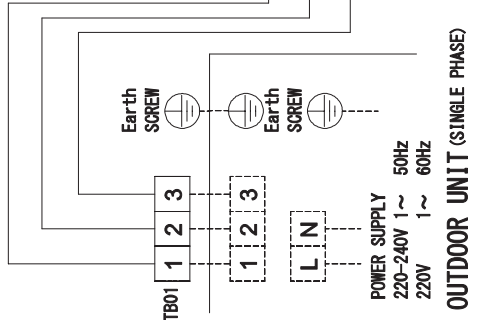
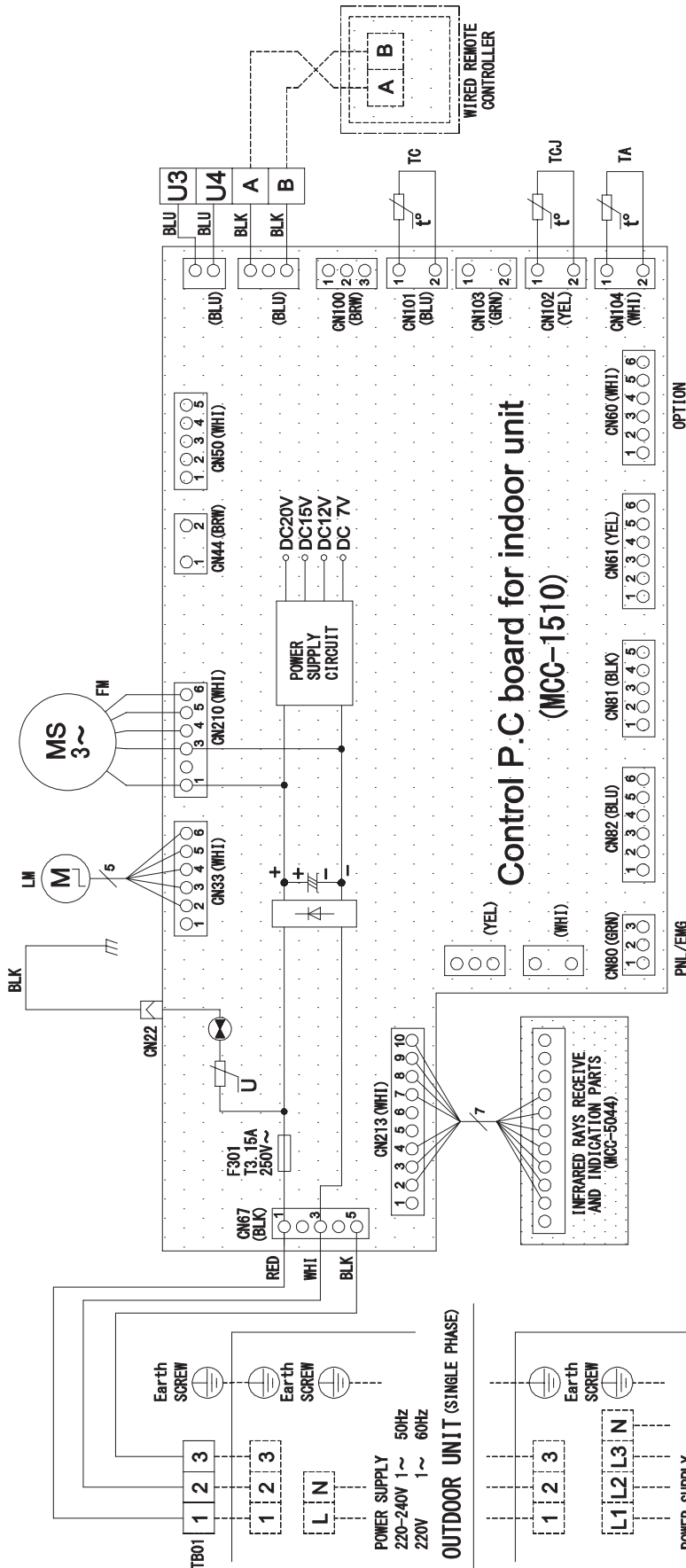
RAV-SM806KRT-E





### 2-7-3. Wiring diagrams

RAV-SM566KRT-E, RAV-SM806KRT-E



**COLOR IDENTIFICATION**

RED	: RED
WHI	: WHITE
YEL	: YELLOW
BLU	: BLUE
BLK	: BLACK
GRY	: GRAY
PNK	: PINK
ORN	: ORANGE
BRW	: BROWN
GRN	: GREEN

Symbol	Parts Name
CN**	Connector
F301	Fuse
FM	Fan Motor
LM	Louver Motor
TA	Indoor temp sensor
TB01,02	Terminal Block
TC,TCJ	Temp sensor

1. Broken line indicate the wiring at site. Long dashed short dashed line indicate the accessories.
2. indicates the terminal block.
3. indicates the connection terminal.
4. indicates the connector on the control P.C. board.
5. indicates the protection ground.
6. indicates the control P.C. board.

### 2-7-4. Sensible capacity table

Digital Inverter 3 Series Sensible Heat Capacity : RAV-SM\*\*\*KRT-E

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
566	10.0	4.7	3.4	4.9	3.6	5.2	3.7	5.4	3.9	5.6	4.0	5.7	4.1	5.9	4.2	6.2	4.5	6.5	4.7
	12.0	4.7	3.4	4.9	3.5	5.2	3.7	5.3	3.8	5.5	4.0	5.7	4.1	5.8	4.2	6.2	4.5	6.5	4.7
	14.0	4.6	3.3	4.9	3.5	5.1	3.7	5.3	3.8	5.5	3.9	5.6	4.1	5.8	4.2	6.1	4.4	6.4	4.6
	16.0	4.6	3.3	4.8	3.5	5.1	3.7	5.3	3.8	5.4	3.9	5.6	4.0	5.8	4.2	6.1	4.4	6.4	4.6
	18.0	4.6	3.3	4.8	3.5	5.0	3.6	5.2	3.8	5.4	3.9	5.6	4.0	5.7	4.1	6.1	4.4	6.3	4.6
	20.0	4.5	3.3	4.8	3.4	5.0	3.6	5.2	3.7	5.4	3.9	5.5	4.0	5.7	4.1	6.0	4.3	6.3	4.5
	21.0	4.5	3.2	4.7	3.4	5.0	3.6	5.2	3.7	5.3	3.8	5.5	4.0	5.6	4.1	6.0	4.3	6.3	4.5
	23.0	4.5	3.2	4.7	3.4	4.9	3.5	5.1	3.7	5.3	3.8	5.4	3.9	5.6	4.0	5.9	4.3	6.2	4.5
	25.0	4.4	3.2	4.6	3.3	4.9	3.5	5.0	3.6	5.2	3.8	5.4	3.9	5.5	4.0	5.9	4.2	6.1	4.4
	27.0	4.4	3.1	4.6	3.3	4.8	3.5	5.0	3.6	5.2	3.7	5.3	3.8	5.5	3.9	5.8	4.2	6.0	4.4
	29.0	4.3	3.1	4.5	3.3	4.8	3.4	4.9	3.5	5.1	3.7	5.2	3.8	5.4	3.9	5.7	4.1	6.0	4.3
	31.0	4.2	3.1	4.5	3.2	4.7	3.4	4.9	3.5	5.0	3.6	5.2	3.7	5.3	3.8	5.6	4.1	5.9	4.2
	33.0	4.2	3.0	4.4	3.2	4.6	3.3	4.8	3.4	4.9	3.6	5.1	3.7	5.2	3.8	5.5	4.0	5.8	4.2
	35.0	4.1	3.0	4.3	3.1	4.5	3.3	4.7	3.4	4.9	3.5	5.0	3.6	5.1	3.7	5.4	3.9	5.7	4.1
	37.0	4.0	2.9	4.2	3.1	4.4	3.2	4.6	3.3	4.8	3.4	4.9	3.5	5.0	3.6	5.3	3.8	5.6	4.0
	39.0	3.9	2.8	4.2	3.0	4.4	3.1	4.5	3.2	4.7	3.4	4.8	3.5	4.9	3.6	5.2	3.8	5.5	3.9

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
806	10.0	6.3	4.4	6.6	4.6	6.9	4.9	7.2	5.0	7.4	5.2	7.7	5.4	7.9	5.5	8.3	5.9	8.7	6.1
	12.0	6.3	4.4	6.6	4.6	6.9	4.8	7.1	5.0	7.4	5.2	7.6	5.3	7.8	5.5	8.3	5.8	8.7	6.1
	14.0	6.2	4.4	6.5	4.6	6.9	4.8	7.1	5.0	7.3	5.2	7.6	5.3	7.8	5.5	8.2	5.8	8.6	6.0
	16.0	6.2	4.3	6.5	4.6	6.8	4.8	7.1	4.9	7.3	5.1	7.5	5.3	7.7	5.4	8.2	5.7	8.6	6.0
	18.0	6.1	4.3	6.4	4.5	6.8	4.7	7.0	4.9	7.2	5.1	7.5	5.2	7.7	5.4	8.1	5.7	8.5	6.0
	20.0	6.1	4.3	6.4	4.5	6.7	4.7	6.9	4.9	7.2	5.0	7.4	5.2	7.6	5.3	8.1	5.6	8.4	5.9
	21.0	6.0	4.2	6.4	4.5	6.7	4.7	6.9	4.8	7.1	5.0	7.4	5.2	7.6	5.3	8.0	5.6	8.4	5.9
	23.0	6.0	4.2	6.3	4.4	6.6	4.6	6.8	4.8	7.1	5.0	7.3	5.1	7.5	5.3	7.9	5.6	8.3	5.8
	25.0	5.9	4.2	6.2	4.4	6.5	4.6	6.8	4.7	7.0	4.9	7.2	5.1	7.4	5.2	7.8	5.5	8.2	5.8
	27.0	5.8	4.1	6.1	4.3	6.5	4.5	6.7	4.7	6.9	4.8	7.1	5.0	7.3	5.1	7.8	5.4	8.1	5.7
	29.0	5.8	4.0	6.1	4.3	6.4	4.5	6.6	4.6	6.8	4.8	7.0	4.9	7.2	5.1	7.6	5.4	8.0	5.6
	31.0	5.7	4.0	6.0	4.2	6.3	4.4	6.5	4.6	6.7	4.7	6.9	4.9	7.1	5.0	7.5	5.3	7.9	5.5
	33.0	5.6	3.9	5.9	4.1	6.2	4.3	6.4	4.5	6.6	4.6	6.8	4.8	7.0	4.9	7.4	5.2	7.8	5.4
	35.0	5.5	3.9	5.8	4.1	6.1	4.3	6.3	4.4	6.5	4.6	6.7	4.7	6.9	4.8	7.3	5.1	7.6	5.4
	37.0	5.4	3.8	5.7	4.0	6.0	4.2	6.2	4.3	6.4	4.5	6.6	4.6	6.8	4.7	7.2	5.0	7.5	5.3
	39.0	5.3	3.7	5.6	3.9	5.8	4.1	6.0	4.2	6.3	4.4	6.4	4.5	6.6	4.6	7.0	4.9	7.3	5.1

TC:Total Capacity [kW]  
SHC:Sensible Heat Capacity [kW]

## 2-7-5. Part load performance

### Combination

Indoor unit : RAV-SM566KRT-E

Outdoor unit : RAV-SM563AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	400	1500	400
RATING	5000	1660	5600	1640

Q: Capacity in W  
W: Power Consumption in W

### Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	4760	4280	3800	3330	2850	2380	1900	1430	1430	1430
	W	1780	1530	1300	1090	900	720	550	430	430	430
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1660	1424	1210	1014	835	669	515	400	400	400
30	Q	5210	4680	4160	3640	3120	2600	2080	1560	1560	1560
	W	1530	1320	1120	940	770	620	480	370	370	370
25	Q	5380	4840	4300	3760	3230	2690	2150	1610	1610	1610
	W	1420	1220	1040	870	720	570	440	340	340	340
20	Q	5520	4960	4410	3860	3310	2760	2210	1650	1650	1650
	W	1320	1130	960	810	660	530	410	320	320	320

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6750	6080	5400	4730	4050	3380	2700	2030	1810	1810
	W	1810	1600	1400	1210	1010	840	660	490	440	440
10	Q	6130	5520	4910	4290	3680	3070	2450	1840	1640	1640
	W	1710	1520	1330	1150	960	790	630	460	420	420
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	1640	1450	1270	1100	920	760	600	440	400	400
5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1400	1400
	W	1590	1410	1230	1070	890	740	580	430	390	390
2	Q	4680	4210	3750	3280	2810	2340	1870	1400	1250	1250
	W	1510	1340	1170	1010	850	700	550	410	370	370
0	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1340	1190	1040	900	750	620	490	360	330	330
-5	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1340	1190	1040	900	750	620	490	360	330	330
-7	Q	3440	3090	2750	2410	2060	1720	1380	1030	920	920
	W	1300	1150	1010	870	730	600	480	350	320	320
-10	Q	3150	2830	2520	2200	1890	1570	1260	940	840	840
	W	1250	1100	970	840	700	580	460	330	300	300
-15	Q	2650	2390	2120	1860	1590	1330	1060	800	710	710
	W	1180	1040	910	790	660	550	430	320	290	290

## Combination

Indoor unit : RAV-SM806KRT-E

Outdoor unit : RAV-SM803AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	500	1500	500
RATING	6700	2370	8000	2490

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	6370	5730	5100	4460	3820	3190	2550	1910	1430	1430
	W	2540	2110	1730	1410	1130	890	670	480	540	540
35	Q	6700	6030	5360	4690	4020	3350	2680	2010	1500	1500
	W	2370	1965	1616	1318	1057	827	626	443	500	500
30	Q	6970	6280	5580	4880	4180	3490	2790	2090	1560	1560
	W	2190	1820	1490	1220	980	760	580	410	460	460
25	Q	7200	6480	5760	5040	4320	3600	2880	2160	1610	1610
	W	2030	1680	1390	1130	910	710	540	380	430	430
20	Q	7390	6650	5910	5170	4430	3700	2960	2220	1650	1650
	W	1880	1560	1280	1050	840	660	500	350	400	400

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	9650	8680	7720	6750	5790	4820	3860	2890	1930	1810
	W	2750	2410	2100	1790	1500	1220	960	710	460	550
10	Q	8760	7880	7010	6130	5260	4380	3500	2630	1750	1640
	W	2600	2290	1990	1690	1420	1160	910	670	440	520
7	Q	8000	7200	6400	5600	4800	4000	3200	2400	1600	1500
	W	2490	2190	1900	1620	1360	1110	870	640	420	500
5	Q	7460	6720	5970	5220	4480	3730	2990	2240	1490	1400
	W	2410	2120	1840	1570	1320	1080	840	620	410	480
2	Q	6690	6020	5350	4680	4010	3340	2680	2010	1340	1250
	W	2300	2020	1750	1490	1250	1020	800	590	390	460
0	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	2040	1790	1560	1330	1110	910	710	520	340	410
-5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	2040	1790	1560	1330	1110	910	710	520	340	410
-7	Q	4910	4420	3930	3440	2950	2460	1960	1470	980	920
	W	1980	1740	1510	1290	1080	880	690	510	330	400
-10	Q	4500	4050	3600	3150	2700	2250	1800	1350	900	840
	W	1890	1670	1450	1230	1030	840	660	490	320	380
-15	Q	3790	3410	3030	2650	2280	1900	1520	1140	760	710
	W	1790	1570	1360	1160	980	800	620	460	300	360

## Combination

Indoor unit : RAV-SM566KRT-E(Twin)

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3480	11200	3140

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3730	3100	2550	2080	1670	1300	990	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3480	2885	2373	1935	1552	1215	919	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	3120	3120
	W	3220	2670	2190	1790	1430	1120	850	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	3230	3230
	W	2980	2470	2030	1660	1330	1040	790	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	3310	3310
	W	2770	2290	1890	1540	1230	970	730	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3460	3040	2650	2260	1890	1540	1210	880	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3280	2880	2510	2140	1790	1460	1150	840	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	3140	2760	2400	2050	1710	1400	1100	800	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	3040	2670	2330	1990	1660	1360	1070	780	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2900	2540	2210	1890	1580	1290	1010	740	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2570	2260	1970	1680	1400	1150	900	660	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2570	2260	1970	1680	1400	1150	900	660	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2490	2190	1910	1630	1360	1110	870	640	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2390	2100	1830	1560	1300	1070	840	610	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2250	1980	1720	1470	1230	1000	790	570	430	430

## Combination

Indoor unit : RAV-SM806KRT-E(Twin)

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12100	4570	14000	4240

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11510	10360	9210	8050	6900	5750	4600	3450	2850	2850
	W	4900	4070	3340	2730	2190	1710	1290	920	700	700
35	Q	12100	10890	9680	8470	7260	6050	4840	3630	3000	3000
	W	4570	3789	3117	2541	2038	1595	1206	855	650	650
30	Q	12600	11340	10080	8820	7560	6300	5040	3780	3120	3120
	W	4220	3500	2880	2350	1880	1470	1110	790	600	600
25	Q	13010	11710	10410	9110	7800	6500	5200	3900	3230	3230
	W	3920	3250	2670	2180	1750	1370	1030	730	560	560
20	Q	13350	12010	10680	9340	8010	6670	5340	4000	3310	3310
	W	3630	3010	2480	2020	1620	1270	960	680	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3620	3620
	W	4680	4100	3570	3040	2560	2080	1630	1200	720	720
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3290	3290
	W	4430	3890	3390	2880	2420	1980	1550	1140	680	680
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4240	3720	3240	2760	2320	1890	1480	1090	650	650
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2800	2800
	W	4110	3600	3140	2670	2250	1830	1430	1060	630	630
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2510	2510
	W	3910	3430	2990	2540	2140	1740	1360	1000	600	600
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3470	3050	2650	2260	1900	1550	1210	890	530	530
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1960	1960
	W	3470	3050	2650	2260	1900	1550	1210	890	530	530
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1840	1840
	W	3370	2950	2570	2190	1840	1500	1180	870	520	520
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1690	1690
	W	3230	2830	2470	2100	1770	1440	1130	830	490	490
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1420	1420
	W	3040	2670	2320	1980	1660	1360	1060	780	470	470

## Combination

Indoor unit : RAV-SM806KRT-E(Twin)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	5100	16000	4980

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	5470	4540	3730	3040	2440	1910	1440	1020	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	5100	4228	3478	2836	2275	1780	1346	954	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4710	3910	3210	2620	2100	1640	1240	880	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	4370	3620	2980	2430	1950	1530	1150	820	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	4050	3360	2770	2250	1810	1420	1070	760	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5490	4820	4190	3580	3000	2450	1920	1400	920	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	5200	4570	3970	3400	2840	2320	1820	1330	870	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4980	4370	3800	3250	2720	2220	1740	1270	830	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4830	4230	3680	3150	2640	2150	1690	1230	800	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4590	4030	3500	3000	2510	2050	1600	1170	770	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	4080	3580	3110	2660	2230	1820	1430	1040	680	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	4080	3580	3110	2660	2230	1820	1430	1040	680	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3950	3470	3020	2580	2160	1760	1380	1010	660	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3790	3330	2890	2470	2070	1690	1320	970	630	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3570	3140	2730	2330	1950	1590	1250	910	600	470

## Combination

Indoor unit : RAV-SM566KRT-E(Triple)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	5100	16000	4980

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	5470	4540	3730	3040	2440	1910	1440	1020	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	5100	4228	3478	2836	2275	1780	1346	954	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4710	3910	3210	2620	2100	1640	1240	880	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	4370	3620	2980	2430	1950	1530	1150	820	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	4050	3360	2770	2250	1810	1420	1070	760	520	520

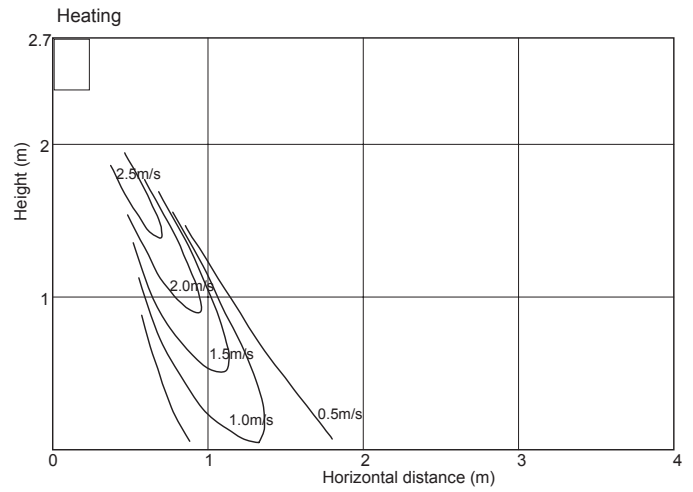
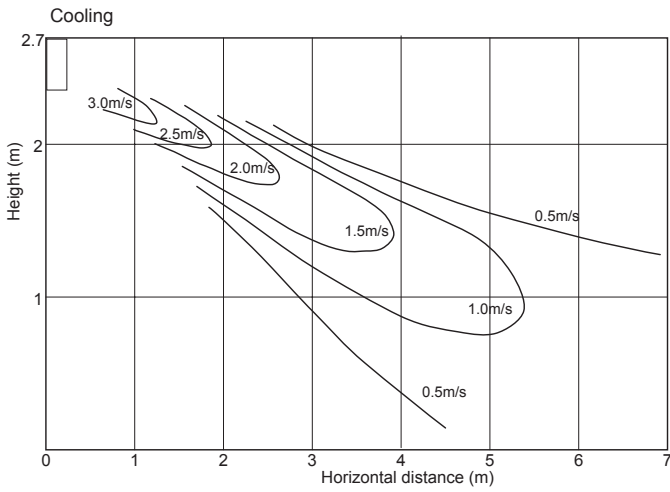
## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5490	4820	4190	3580	3000	2450	1920	1400	920	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	5200	4570	3970	3400	2840	2320	1820	1330	870	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4980	4370	3800	3250	2720	2220	1740	1270	830	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4830	4230	3680	3150	2640	2150	1690	1230	800	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4590	4030	3500	3000	2510	2050	1600	1170	770	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	4080	3580	3110	2660	2230	1820	1430	1040	680	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	4080	3580	3110	2660	2230	1820	1430	1040	680	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3950	3470	3020	2580	2160	1760	1380	1010	660	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3790	3330	2890	2470	2070	1690	1320	970	630	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3570	3140	2730	2330	1950	1590	1250	910	600	470

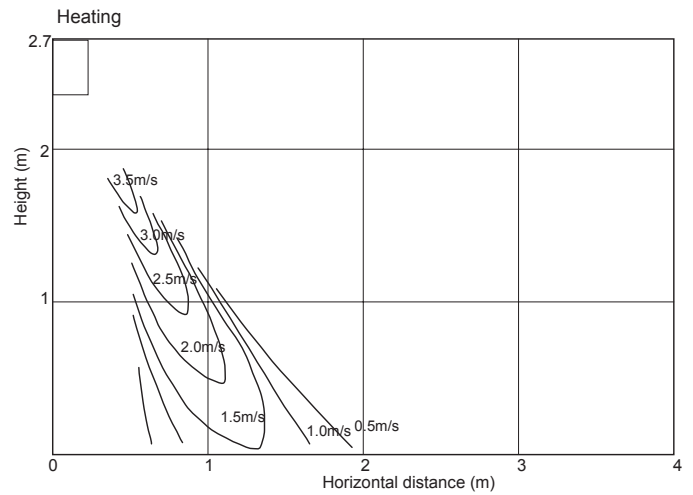
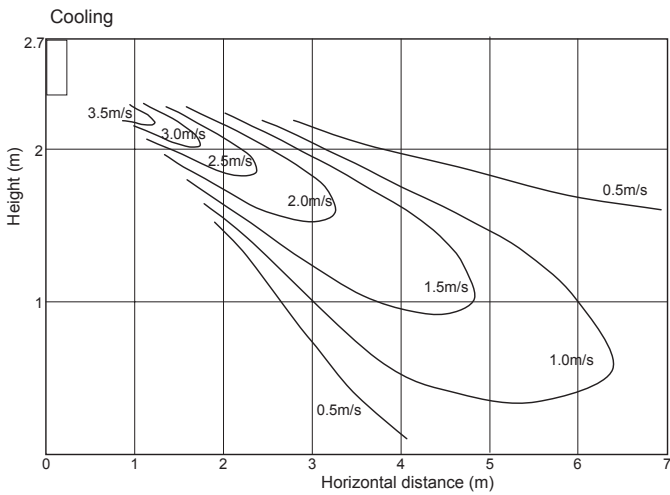


### 2-7-6. Air throw distance chart

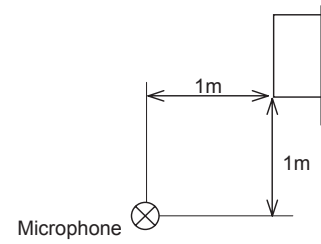
#### RAV-SM566KRT-E



#### RAV-SM806KRT-E

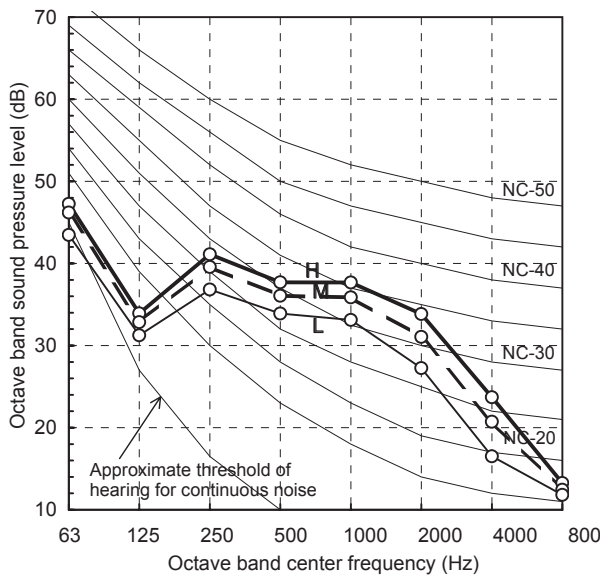


### 2-7-7. Sound characteristics (NC curve)



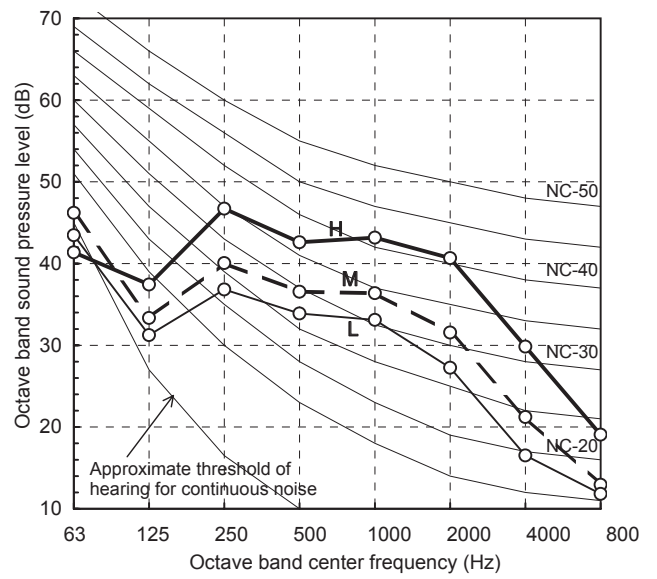
RAV-SM566KRT-E

Fan tap	H	M	L
Sound pressure level (dB(A))	42	39	36



RAV-SM806KRT-E

Fan tap	H	M	L
Sound pressure level (dB(A))	47	41	36



## 3. Outdoor Unit

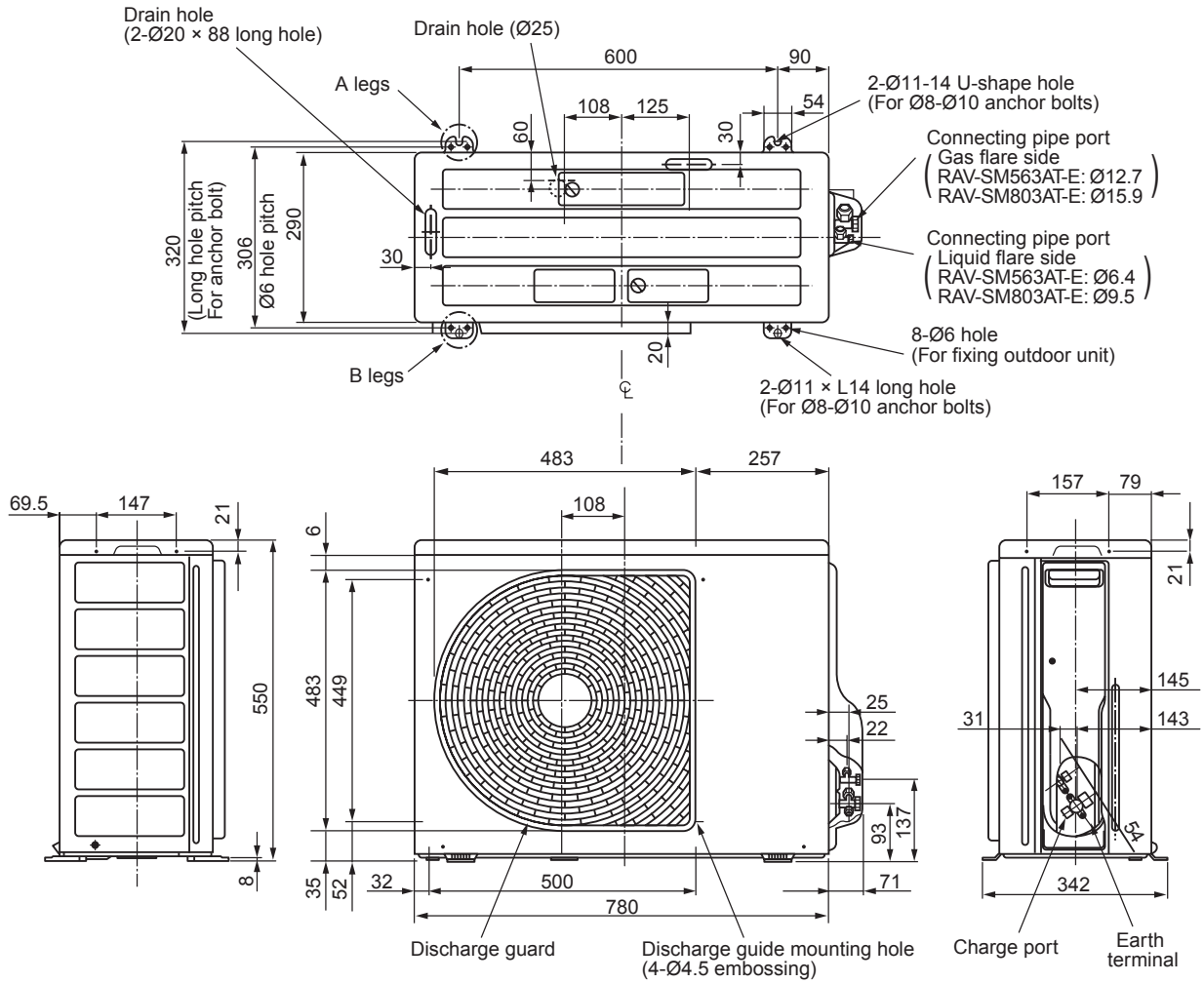
- 3-1. Specifications
- 3-2. Dimension
- 3-3. Wiring diagrams
- 3-4. Refrigerant cycle diagram
- 3-5. Sound characteristics (NC curve)
- 3-6. Connecting pipe length and lift difference between indoor units vs. capacity correction value

## 3-1. Specifications

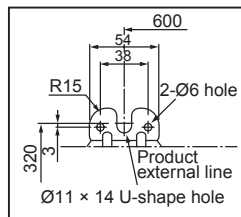
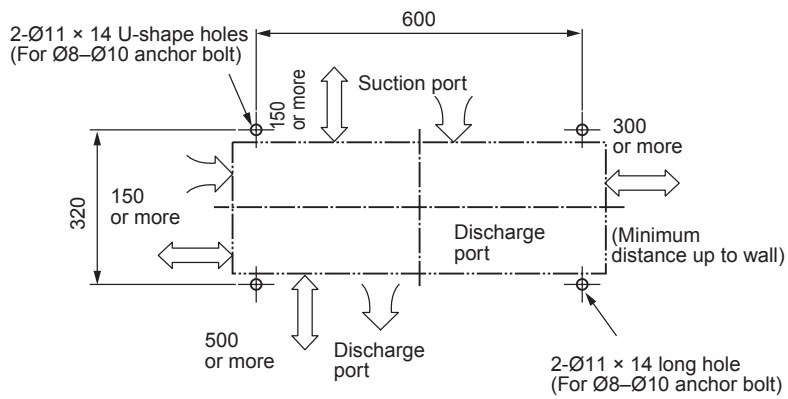
Model	Outdoor unit	RAV-SM	563AT-E	803AT-E	1103AT-E1	1403AT-E1	1603AT-E
Power supply		1 phase 230V (220 – 240V) 50Hz (Power exclusive to outdoor is required.)					
Compressor	Type	Hermetic compressor					
	Motor (kW)	1.1	1.6	2.5	3.0	3.8	
	Pole	4	4	4	4	4	
Refrigerant charged (kg)		1.0	1.7	2.8	2.8	3.1	
Refrigerant control		Pulse motor valve					
Inter connecting pipe	Standard length (m)	7.5	7.5	7.5	7.5	7.5	
	Max. total length (m)	30	30	50	50	50	
	Additional refrigerant charge under long piping connector		20g/m (21m to 30m)	40g/m (21m to 30m)	40g/m (31m to 50m)	40g/m (31m to 50m)	40g/m (31m to 50m)
	Height difference	Outdoor lower (m)	30	30	30	30	30
Outdoor higher (m)		30	30	30	30	30	
Outer dimension	Height (mm)	550	550	795	795	1340	
	Width (mm)	780	780	900	900	900	
	Depth (mm)	290	290	320	320	320	
Appearance		Silky shade (Muncel 1Y 8.5/0.5)					
Total weight (kg)		38	42	77	76	99	
Heat exchanger		Finned tube					
Fan unit	Fan	Propeller fan					
	Standard air flow (m <sup>3</sup> /min.)	40	45	75	75	103	
	Motor (W)	43	43	100	100	100 + 100	
Connecting pipe	Gas side (mm)	12.7	15.9	15.9	15.9	15.9	
	Liquid side (mm)	6.4	9.5	9.5	9.5	9.5	
Sound pressure level		Cooling/Heating (dB(A))	46/48	48/50	53/54	54/54	51/53
Sound power level		Cooling/Heating (dB(A))	63/65	65/67	70/71	71/71	68/70
Outside air temperature, Cooling (°C)		43 to –15°C					
Outside air temperature, Heating (°C)		15 to –15°C					

### 3-2. Dimension

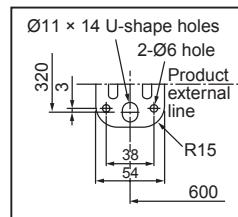
#### RAV-SM563AT-E, RAV-SM803AT-E



#### Space required for service

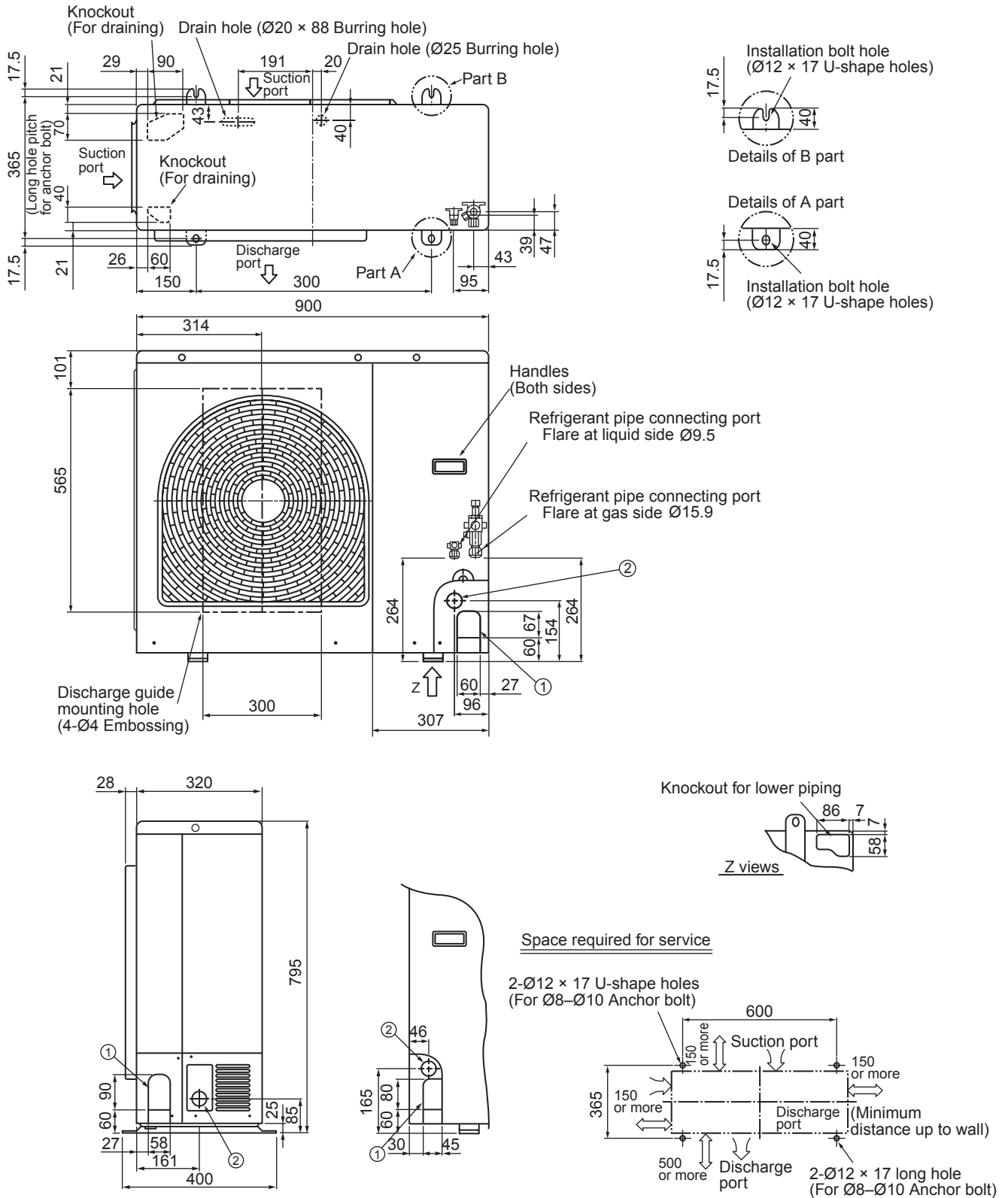


Details of A legs

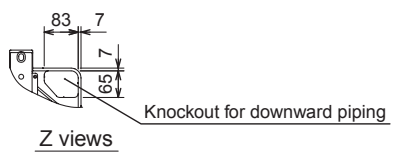
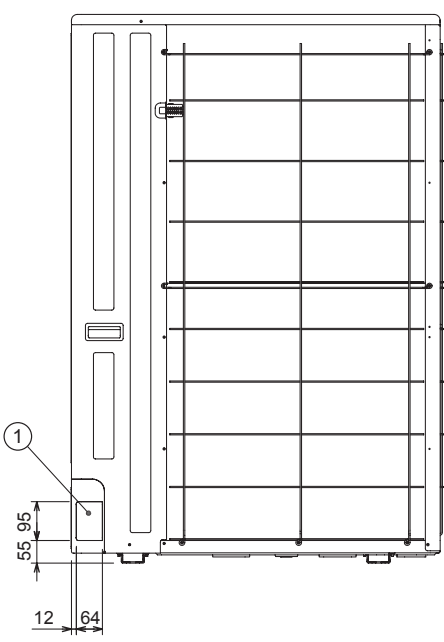
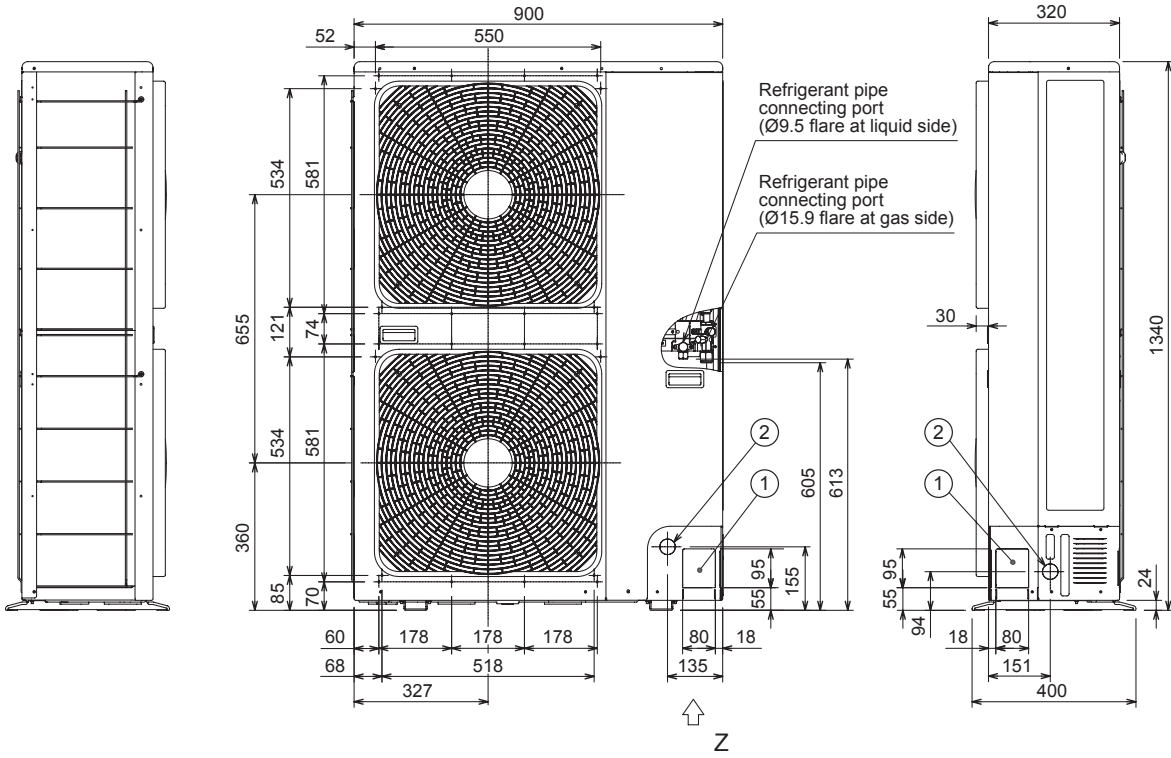
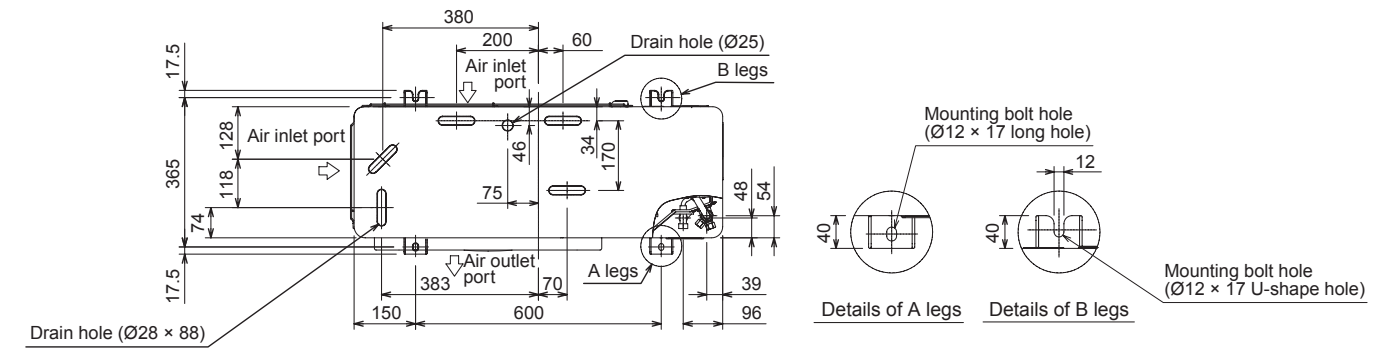


Details of B legs

RAV-SM1103AT-E1, RAV-SM1403AT-E1



RAV-SM1603AT-E

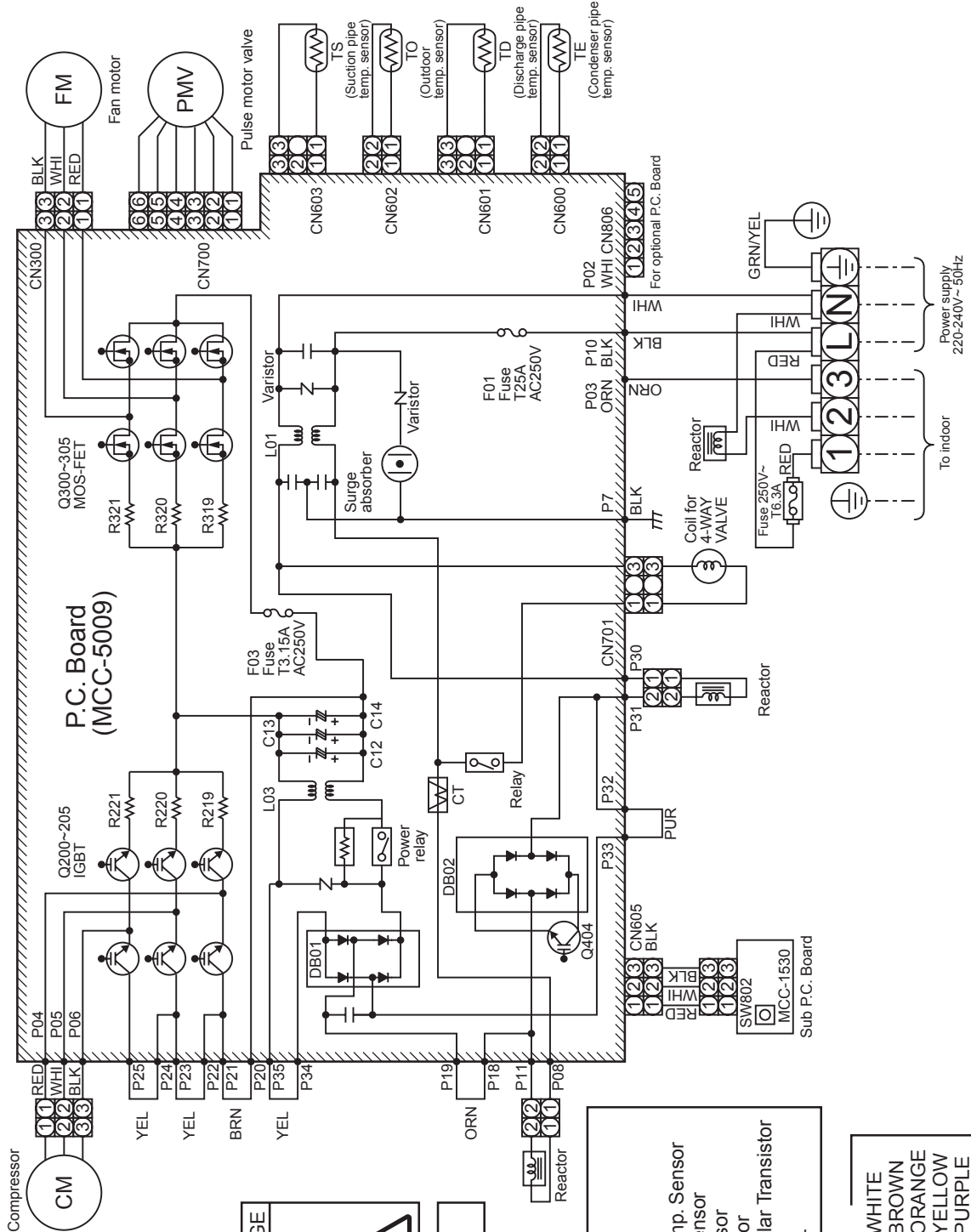


	Name	Note
①	Refrigerant piping hole Indoor/Outdoor unit connecting wire inlet hole	—
②	Power supply inlet hole	Ø38 Kockout hole

Unit : mm

### 3-3. Wiring diagrams

RAV-SM563AT-E, RAV-SM803AT-E



**CAUTION : HIGH VOLTAGE**  
 The high voltage circuit is incorporated.  
 Be careful to do the check service, as the electric shock may be caused in case of touching parts on the P.C. board by hand

The 4-way valve coil is turned on while the cooling operation

**NOTE**

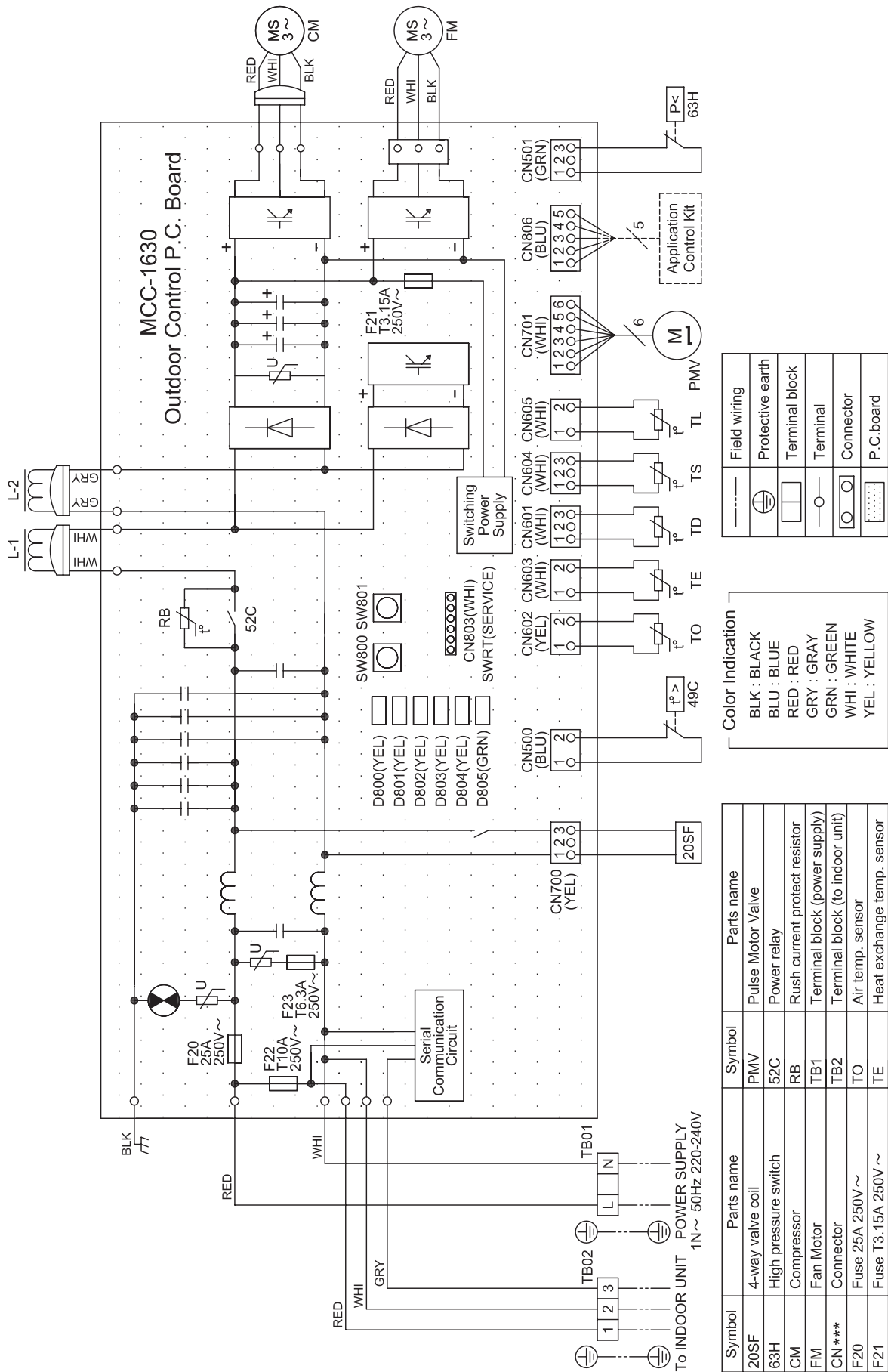
- CM : Compressor
- PMV : Pulse motor valve
- FM : Fan motor
- TE : Heat exchanger Temp. Sensor
- TD : Discharge Temp. Sensor
- TO : Outdoor Temp. Sensor
- TS : Suction Temp. Sensor
- IGBT : Insulated Gate Bipolar Transistor
- DB : Rectifier
- CT : Current Transformer

**Color Identification**

BLK	: BLACK	WHI	: WHITE
BLU	: BLUE	BRN	: BROWN
RED	: RED	ORN	: ORANGE
GRY	: GRAY	YEL	: YELLOW
PNK	: PINK	PUR	: PURPLE

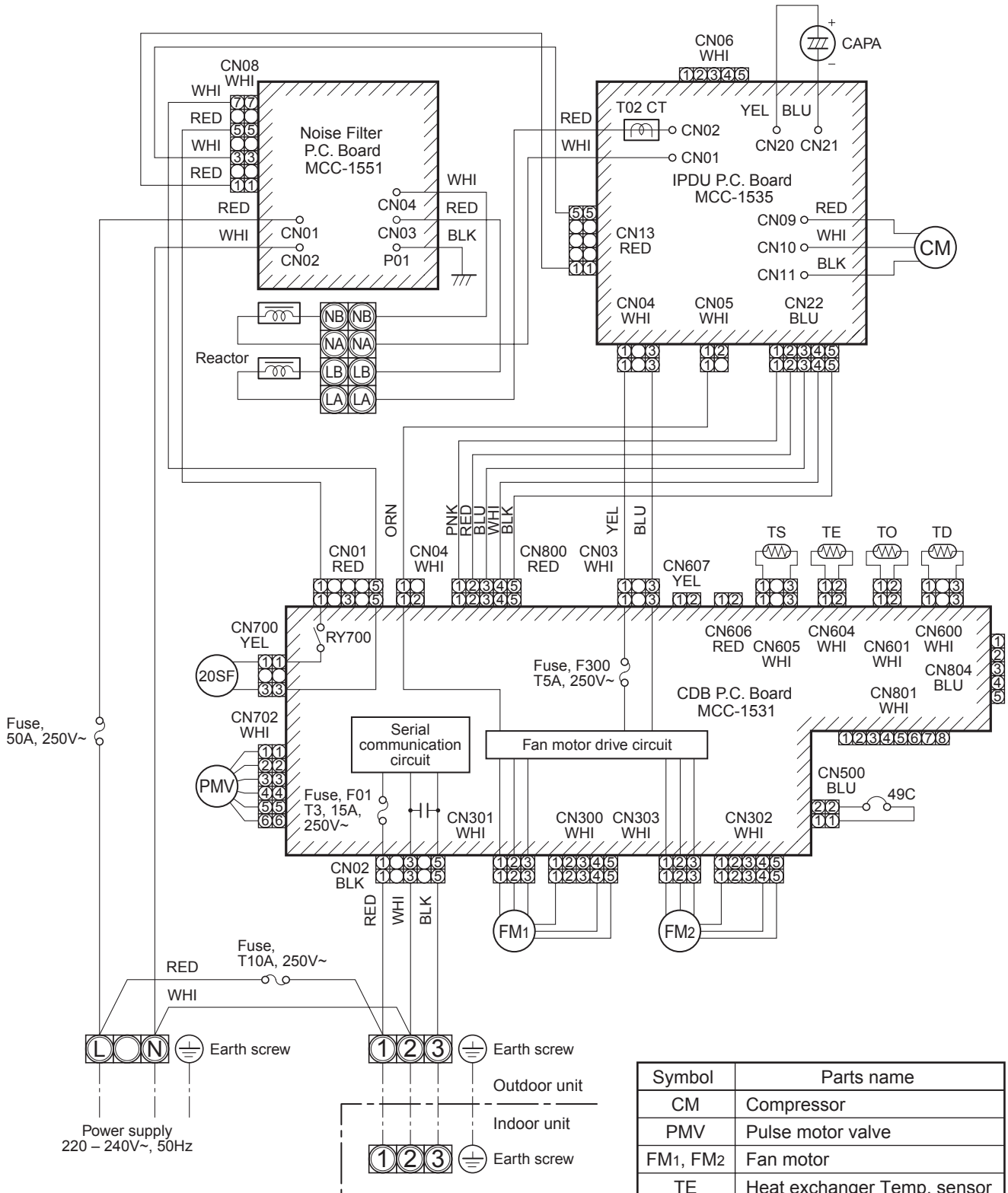


RAV-SM1103AT-E1, RAV-SM1403AT-E1



1. For D800 ~ D805 and SW800 ~ SW801, refer to the installation manual.

RAV-SM1603AT-E



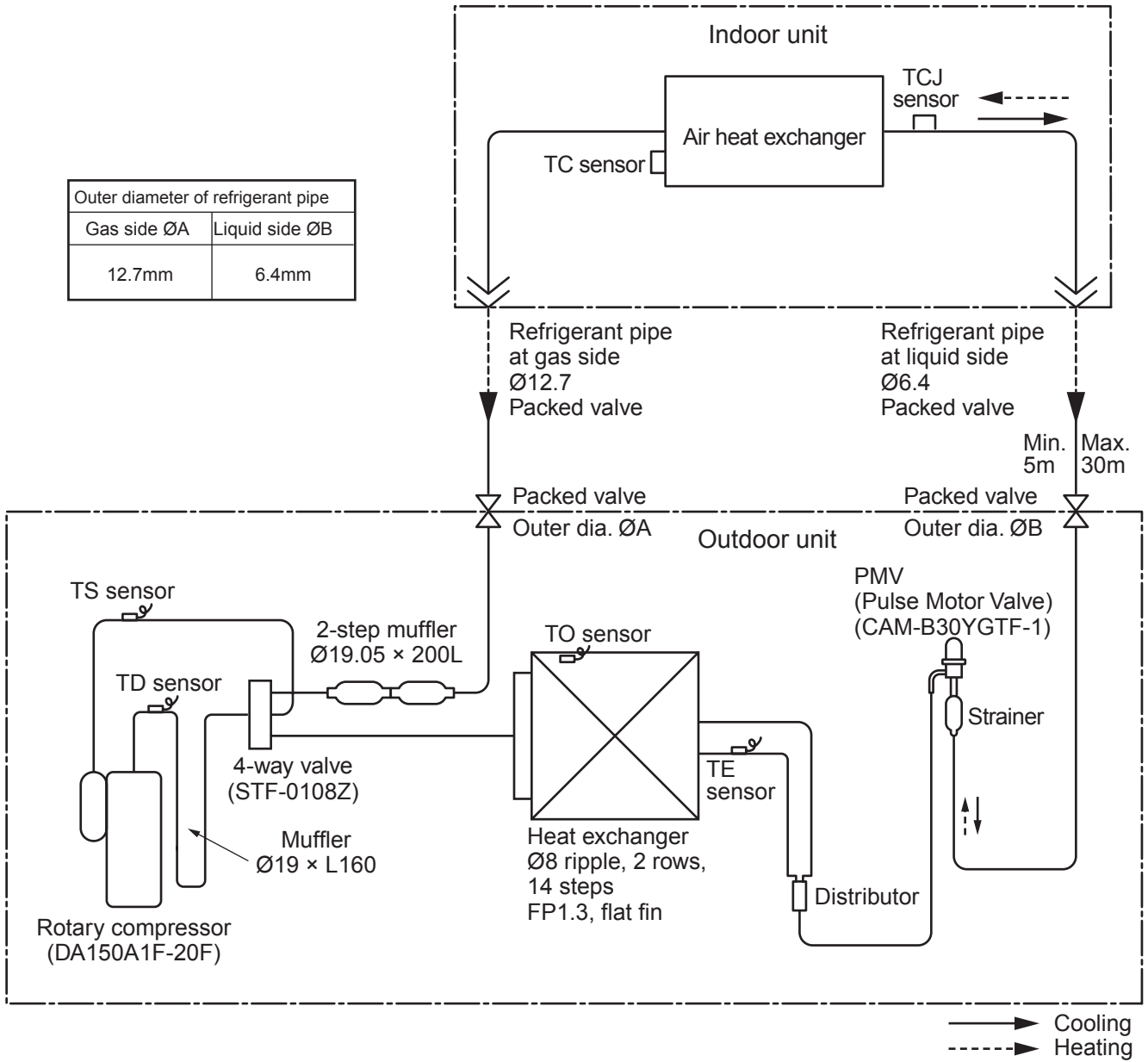
1. indicates the terminal block. Alphanumeric characters in the cycle indicate the terminal No.
2. The two-dot chain line indicates the wiring procured locally.
3. indicates the P.C. board.
4. For the indoor unit circuit, refer to the wiring diagram of the indoor unit.

Symbol	Parts name
CM	Compressor
PMV	Pulse motor valve
FM1, FM2	Fan motor
TE	Heat exchanger Temp. sensor
TD	Discharge Temp. sensor
TO	Outdoor Temp. sensor
TS	Suction Temp. sensor
49C	Compressor case thermostat
20SF	4-way valve coil
RY	Relay

### 3-4. Refrigerant cycle diagram

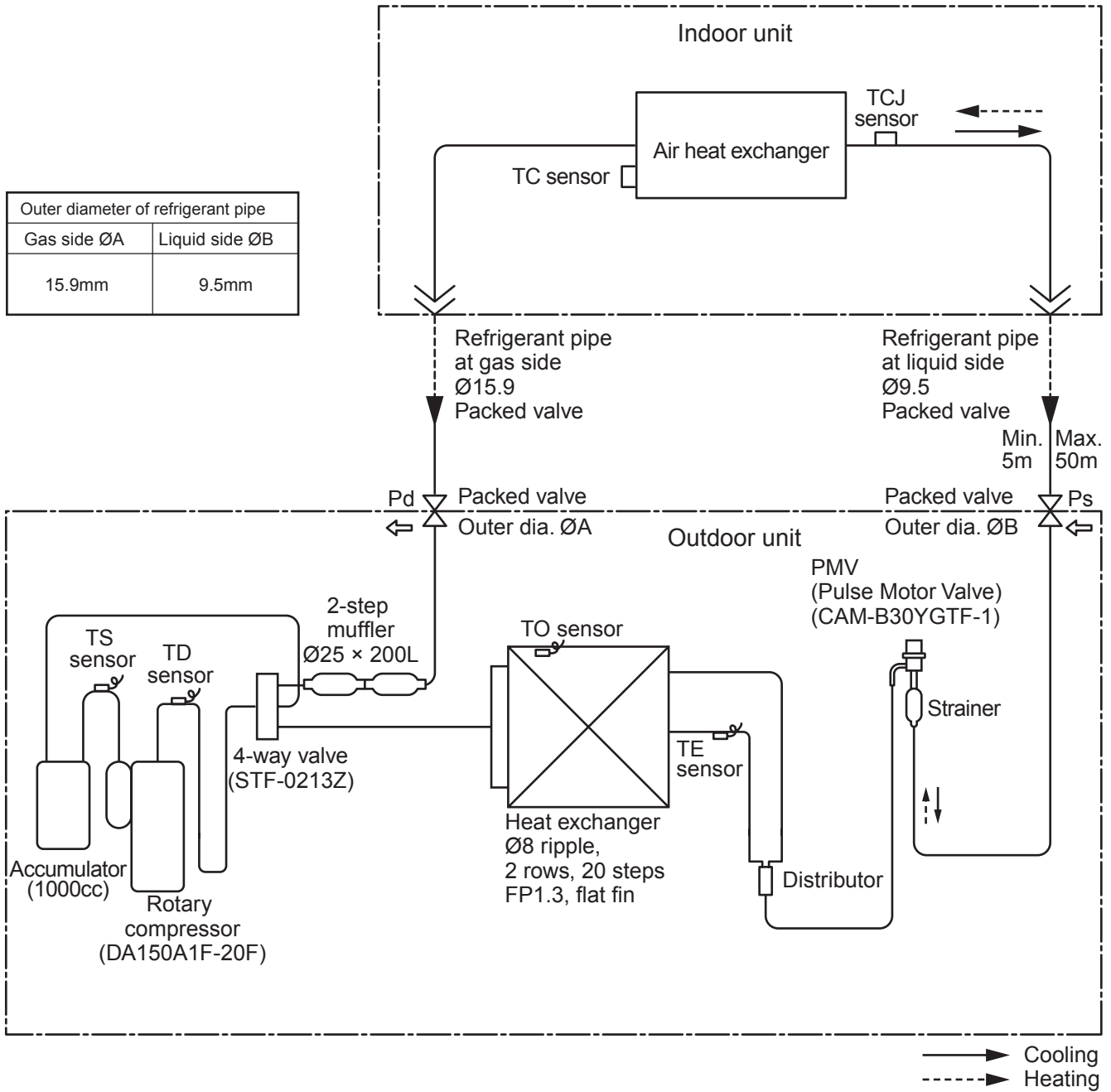
RAV-SM563AT-E

Outer diameter of refrigerant pipe	
Gas side ØA	Liquid side ØB
12.7mm	6.4mm



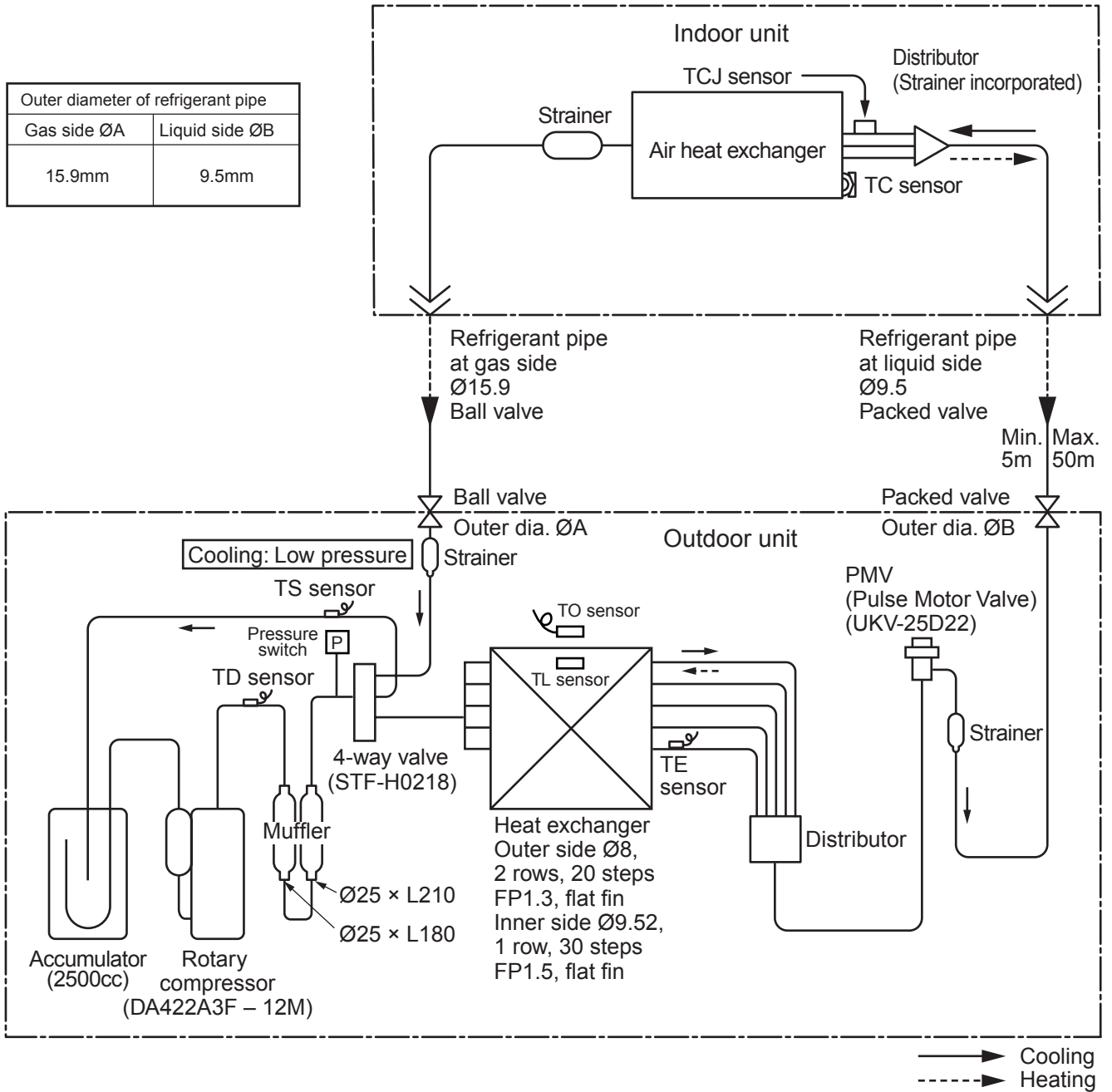
RAV-SM803AT-E

Outer diameter of refrigerant pipe	
Gas side ØA	Liquid side ØB
15.9mm	9.5mm

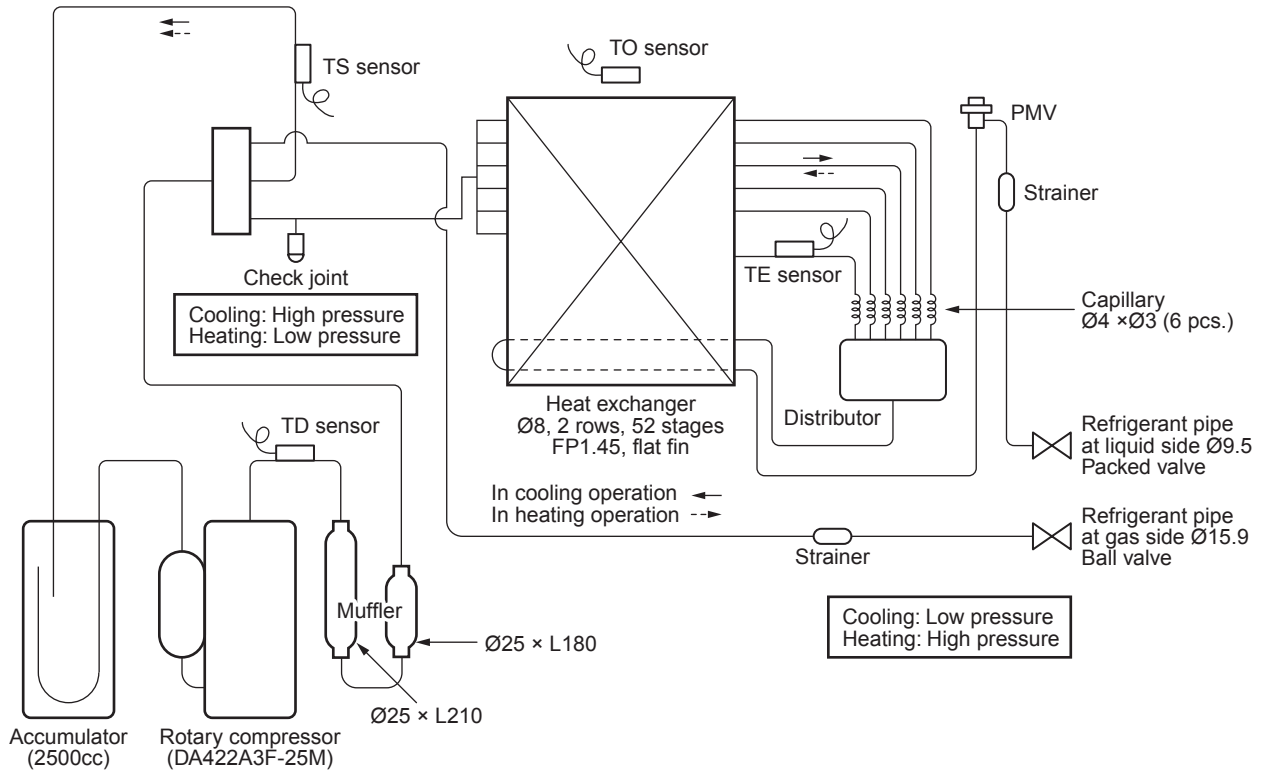


RAV-SM1103AT-E1, RAV-SM1403AT-E1

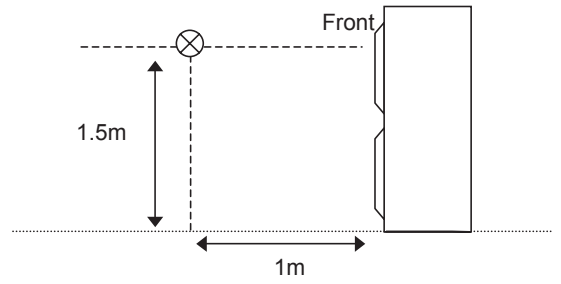
Outer diameter of refrigerant pipe	
Gas side ØA	Liquid side ØB
15.9mm	9.5mm



RAV-SM1603AT-E

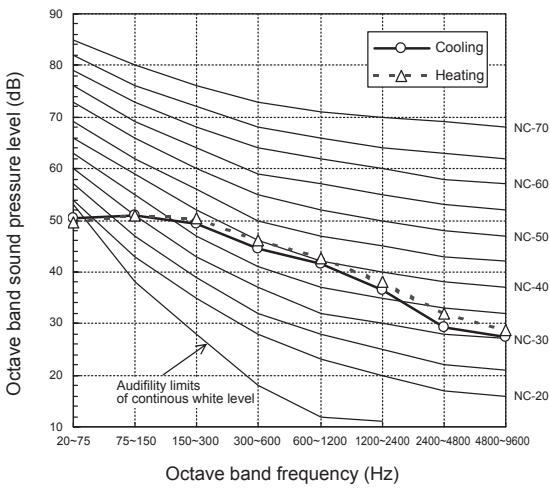


### 3-5. Sound characteristics (NC curve)



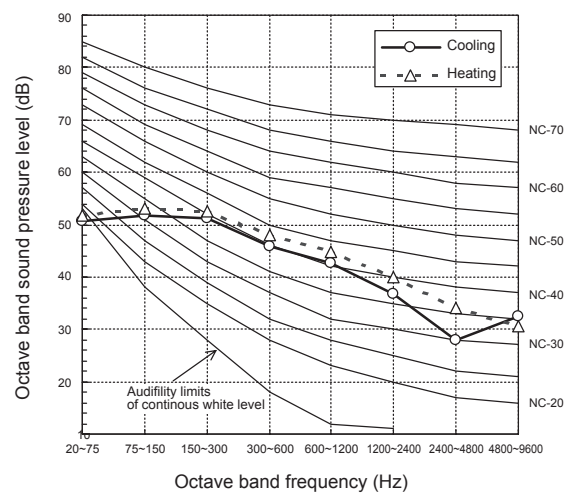
RAV-SM563AT-E

Sound pressure level (dB(A))	Cooling	Heating
	46	48



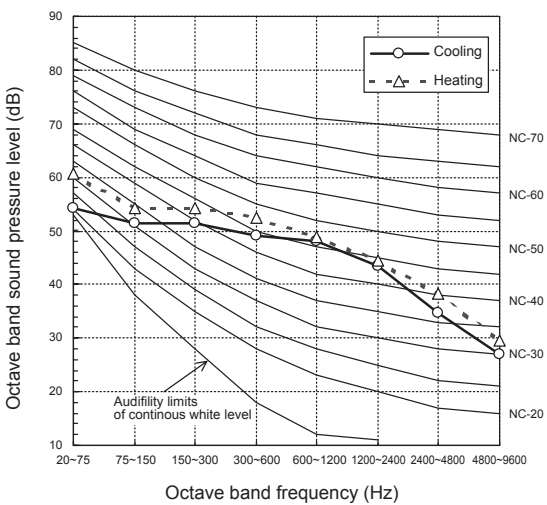
RAV-SM803AT-E

Sound pressure level (dB(A))	Cooling	Heating
	48	50



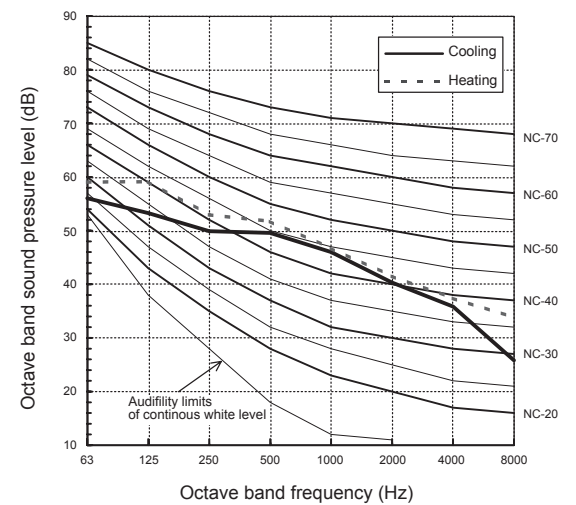
RAV-SM1103AT-E1, RAV-SM1403AT-E1

Sound pressure level (dB(A))	Cooling	Heating
	53	54



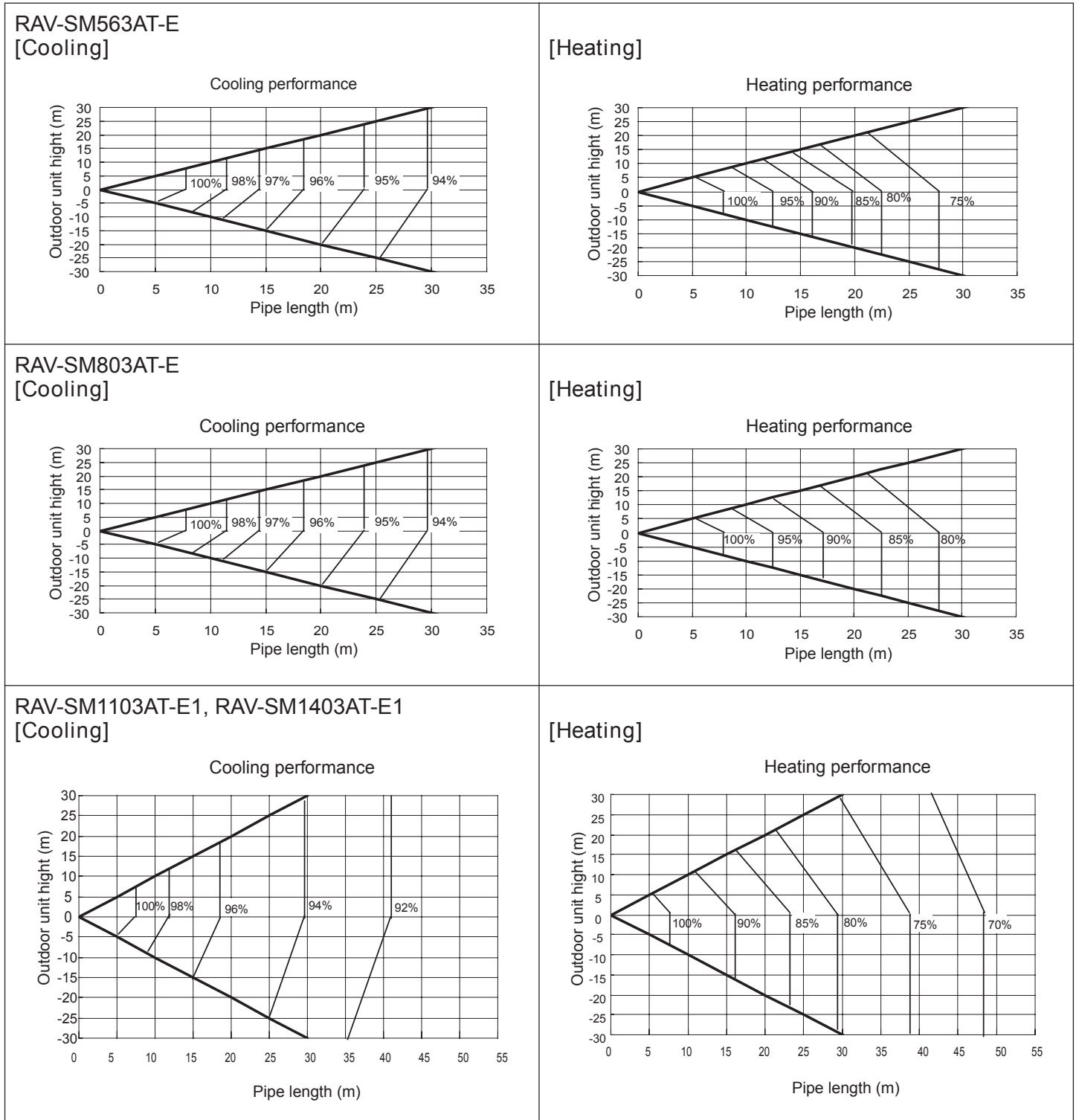
RAV-SM1603AT-E

Sound pressure level (dB(A))	Cooling	Heating
	51	53



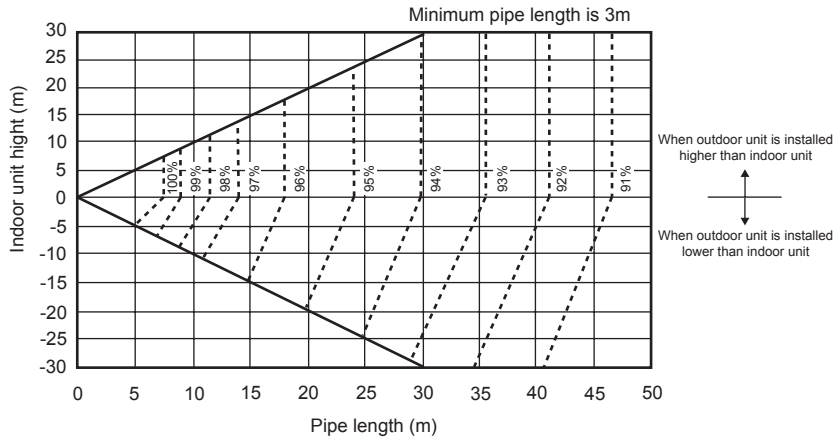
3-6. Connecting pipe length and lift capacity correction value

difference between indoor units vs.

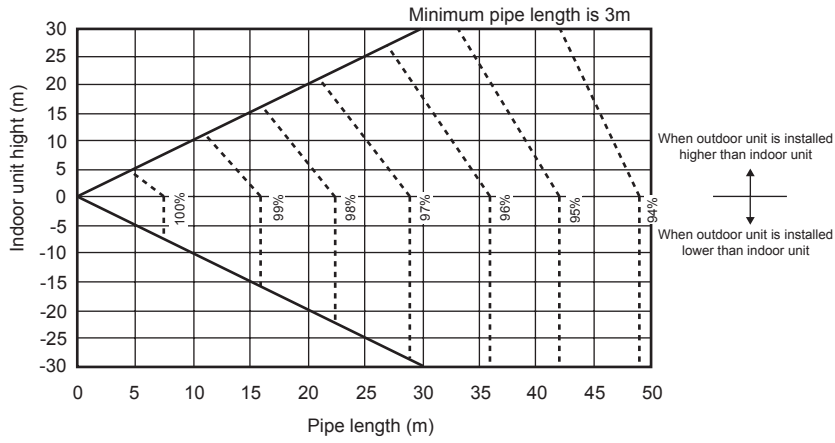




RAV-SM1603AT-E  
[Cooling]



[Heating]



# 4. Control

## Control

Parts name	Model name	Used with
Wired remote controller	RBC-AMS51E	All indoor units
	RBC-AMT32E	All indoor units
Simple wired controller	RBC-AS21E2	All indoor units
Wireless remote controller	RBC-AX32U(W)-E	4-way cassette (4 series) type
	RBC-AX32U(WS)-E	
	RBC-AX32CE2	Ceiling units
	TCB-AX32E2	All indoor units
Remote controller with weekly timer	RBC-AMS41E	All indoor units
Schedule timer	TCB-EXS21TLE	Wired remote controller
ON-OFF controller	TCB-CC163TLE2	Wired remote controller/Central remote controller
Central controller	TCB-SC642TLE2	All indoor units
	BMS-CM1280TLE	All indoor units
1:1 model connection interface	TCB-PCNT30TLE2	4 way cassette type / Compact 4-way cassette type / Ducted type Slim Duct type / Ceiling type
Terminal box	TCB-PX30MUE	Used with TCB-PCNT30TLE2
		4-way cassette (4 series) type / Compact 4-way cassette type

Energy Save operation (RBC-AMS51E/RBC-AMT32E/RBC-AMS41E)

The method to control power consumption by limiting the peak of the compressor's electric current.

= To control peak current by limiting \*\*% of the current release

		FCU only function	Combination function with CDU			
			Linked with A2A HEX by TCC link*1	DI ser3		
				Energy save operation (Limit the peak of electric current)	Night Operation by only New Controller *2	Frost Protection (8°C set temp. in heating mode)
4-way cassette type	RAV-SM**4UT-E	×	#	×	×	
Compact 4-way cassette type	RAV-SM**4MUT-E	OK	#	×	×	
Ducted type	RAV-SM**6BT-E	OK	#	×	×	
Slim duct type	RAV-SM**4SDT-E	×	#	×	×	
Ceiling type	RAV-SM**4CT-E	OK	#	×	×	
High Wall type	RAV-SM**6KRT-E	×	#	×	×	

\*1) A2A HEX: VN-M\*\*HE

\*2) New Controller : RBC-AMS51E-ES, RBC-AMS51E-EN

\*3) Only 75% :Even if save ratio is set over 50%, the save operation will be 75% automatically.

	RBC-AMS51E-ES/EN	RBC-AMT32E/RBC-AMS41E
#	0%, 50%, Option (Only 75%)*4	Option (Only 75%)*4
×	NA	NA

# 5. Accessory

## Accessories

Indoor unit type	Parts name	Model name	Indoor unit model name
4-way cassette type	Standard panel	RBC-U31PG(W)-E	RAV-SM**4UT-E
	MTO straight, white color panel	RBC-U31PGS(W)-E	
	Standard panel	RBC-U31PGS(WS)-E	
	Fresh air and filter chamber	TCB-GFC1602UE2	
	Fresh air inlet box	TCB-GB1602UE2	
	Auxiliary fresh air flange	TCB-FF101URE2	
	Spacer for height adjustment	TCB-SP1602UE	
	Air discharge direction kit	TCB-BC1602UE	
Compact 4way cassette type	Panel	RBC-UM11PG(W)E	RAV-SM**4MUT-E
Ducted type	Flange	TCB-SF56C6BE	RAV-SM566BT-E
		TCB-SF80C6BE	RAV-SM806BT-E
		TCB-SF160C6BE	RAV-SM1106BT-E / SM1406BT-E / SM1606BT-E
Ceiling type	Drain pump kit	TCB-DP22CE2	RAV-SM**4CT-E
	Elbow Piping Kit	TCB-KP12CE2	RAV-SM564CT-E
		TCB-KP22CE2	RAV-SM804CT-E / SM1104CT-E / SM1404CT-E

# 6. Appendix

## List of L/C models Combinations for ErPLot-10\*

### Single split

Indoor unit type	Indoor unit name	Outdoor unit name	HP	Rated Capacity (kW) Cooling / Heating	SEER	Energy Label	Pdesign C	SCOP (average)	Energy Label	Pdesign h (average)
4-way cassette	RAV-SM564UT-E	RAV-SM563AT-E	2	5.3/5.6	5.89	A+	5.3	4.51	A+	4.7
	RAV-SM564UTP-E	RAV-SM563AT-E	2	5.3/5.6	5.89	A+	5.3	4.51	A+	4.7
	RAV-SM804UT-E	RAV-SM803AT-E	3	6.7/8.0	5.63	A+	6.7	4.02	A+	6.8
	RAV-SM804UTP-E	RAV-SM803AT-E	3	6.7/8.0	5.63	A+	6.7	4.02	A+	6.8
	RAV-SM1104UT-E	RAV-SM1103AT-E1	4	10.0/11.2	5.58	A	10.0	3.54	A	7.1
	RAV-SM1104UTP-E	RAV-SM1103AT-E1	4	10.0/11.2	5.58	A	10.0	3.54	A	7.1
	RAV-SM1404UT-E	RAV-SM1403AT-E1	5	12.0/14.0	5.36	A	12.0	3.45	A	8.0
RAV-SM1404UTP-E	RAV-SM1403AT-E1	5	12.0/14.0	5.36	A	12.0	3.45	A	8.0	
Compact 4-way cassette	RAV-SM564MUT-E	RAV-SM563AT-E	2	5.0/5.6	5.48	A	5.0	4.16	A+	4.4
Ducted	RAV-SM566BT-E	RAV-SM563AT-E	2	5.0/5.6	4.80	B	5.0	3.98	A	4.4
	RAV-SM806BT-E	RAV-SM803AT-E	3	6.7/8.0	5.04	B	6.7	3.83	A	6.7
	RAV-SM1106BT-E	RAV-SM1103AT-E1	4	10.0/11.2	4.99	B	10.0	3.49	A	7.1
Slim duct	RAV-SM564SDT-E	RAV-SM563AT-E	2	5.0/5.6	5.06	B	5.0	3.82	A	4.4
Ceiling	RAV-SM564CT-E	RAV-SM563AT-E	2	5.0/5.6	4.97	B	5.0	4.11	A+	4.4
	RAV-SM804CT-E	RAV-SM803AT-E	3	7.0/8.0	4.71	B	7.0	3.90	A	6.7
	RAV-SM1104CT-E	RAV-SM1103AT-E1	4	10.0/11.2	4.92	B	10.0	3.52	A	7.1
High wall	RAV-SM566KRT-E	RAV-SM563AT-E	2	5.0/5.6	5.77	A+	5.0	4.00	A+	4.4
	RAV-SM806KRT-E	RAV-SM803AT-E	3	6.7/8.0	5.23	A	6.7	3.83	A	6.3

### Twin split

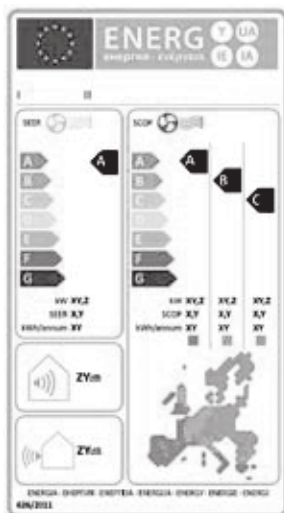
Indoor unit type	Indoor unit name	Outdoor unit name	HP	Rated Capacity (kW) Cooling / Heating	SEER	Energy Label	Pdesign C	SCOP (average)	Energy Label	Pdesign h (average)
4-way cassette	RAV-SM564UT-E*2	RAV-SM1103AT-E1	4	10.0/11.2	5.58	A	10.0	3.54	A	7.1
	RAV-SM564UTP-E*2	RAV-SM1103AT-E1	4	10.0/11.2	5.58	A	10.0	3.54	A	7.1
Compact 4-way cassette	RAV-SM564MUT-E*2	RAV-SM1103AT-E1	4	10.0/11.2	4.90	B	10.0	3.51	A	7.1
Ducted	RAV-SM566BT-E*2	RAV-SM1103AT-E1	4	10.0/11.2	4.99	B	10.0	3.49	A	7.1
Slim duct	RAV-SM564SDT-E*2	RAV-SM1103AT-E1	4	10.0/11.2	4.86	B	10.0	3.50	A	7.1
Ceiling	RAV-SM564CT-E*2	RAV-SM1103AT-E1	4	10.0/11.2	4.92	B	10.0	3.52	A	7.1
High wall	RAV-SM566KRT-E*2	RAV-SM1104AT-E1	4	10.0/11.2	4.92	B	10.0	3.53	A	7.1

\* ErP Lot-10

In Europe the nominal efficiency method is becoming outdated.

The Seasonal Energy Efficiency Ratio (SEER) and the Seasonal Coefficient Of Performance (SCOP) will be introduced. The SEER/SCOP measuring method is more reliable and better represent the performance of the units during the year. Instead of a single reference temperature condition, with this new method the air conditioning systems are evaluated at different operating conditions (partial load); where Toshiba inverter units are known for being extremely efficient.

The SEER/SCOP measurement applies only to air conditioners in single or multi split combinations with a cooling capacity below 12kW.







Energy Efficiency Class	SEER	SCOP
A+++	SEER ≥ 8.50	SCOP ≥ 5.10
A++	6.10 ≤ SEER < 8.50	4.60 ≤ SCOP < 5.10
A+	5.60 ≤ SEER < 6.10	4.00 ≤ SCOP < 4.60
A	5.10 ≤ SEER < 5.60	3.40 ≤ SCOP < 4.00
B	4.60 ≤ SEER < 5.10	3.10 ≤ SCOP < 3.40
C	4.10 ≤ SEER < 4.60	2.80 ≤ SCOP < 3.10
D	3.60 ≤ SEER < 4.10	2.50 ≤ SCOP < 2.80
E	3.10 ≤ SEER < 3.60	2.20 ≤ SCOP < 2.50
F	2.60 ≤ SEER < 3.10	1.90 ≤ SCOP < 2.20
G	SEER < 2.60	SCOP < 1.90

# Appendix

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# 1. Line up

## 1-1. Single Line-up

Model name	RAV-SM563AT-E	RAV-SM803AT-E	RAV-SM1103AT-E1	RAV-SM1403AT-E1	RAV-SM1603AT-E
Appearance					

Capacity type (HP equivalent)			56	80	110	140	160
			2.0	3.0	4.0	5.5	6.0
Under Ceiling	RAV-SM**7CTP-E		✓	✓	✓	✓	✓

## 1-2. Twin/Triple Line-up

### Twin system

Model name	RAV-SM1103AT-E1	RAV-SM1403AT-E1	RAV-SM1603AT-E
Appearance			

Capacity type (HP equivalent)			56	80	Outdoor unit
			2.0	3.0	
Indoor unit		unit			
Under Ceiling	RAV-SM567CTP-E	2	✓		RAV-SM1103AT-E1
Under Ceiling	RAV-SM807CTP-E	2		✓	RAV-SM1403AT-E1 RAV-SM1603AT-E
Under Ceiling	RAV-SM567CTP-E	3		✓	RAV-SM1603AT-E

## 2. Specifications

### <Single type>

Model	Indoor unit		RAV-SM	567CTP-E	807CTP-E	1107CTP-E	1407CTP-E	1607CTP-E	
	Outdoor unit		RAV-SM	563AT-E	803AT-E	1103AT-E1	1403AT-E1	1603AT-E	
Cooling capacity			(kW)	5.0 (1.5-5.6)	6.9 (1.5-7.4)	10.0 (3.0-11.2)	12.1 (3.0-13.2)	14.0 (3.0-16.0)	
Heating capacity			(kW)	5.6 (1.5-6.3)	8.0 (1.5-9.0)	11.2 (3.0-12.5)	12.8 (3.0-16.0)	16.0 (3.0-18.0)	
Power supply			1phase 230V(220-240V) 50Hz						
Electrical characteristics	Cooling	Running current (220V-240V)	(A)	7.46-6.84	11.51-10.55	14.42-13.22	20.67-18.94	22.25-20.39	
		Power consumption	(kW)	1.56	2.38	3.11	4.41	4.65	
		Power factor	(%)	95	94	98	97	95	
		EER		3.21	2.90	3.22	2.74	3.01	
	Heating	Running current (220V-240V)	(A)	6.89-6.32	10.35-9.49	13.64-12.50	15.84-14.52	22.06-20.22	
		Power consumption	(kW)	1.44	2.14	2.94	3.38	4.61	
		Power factor	(%)	95	94	98	97	95	
		COP		3.89	3.74	3.81	3.79	3.47	
	Maximum current			(A)	12.8	15.1	21.6	22.2	31.5
<b>Indoor unit</b>									
Outer dimension	Main unit	Height	(mm)	235	235	235	235	235	
		Width	(mm)	950	1270	1586	1586	1586	
		Depth	(mm)	690	690	690	690	690	
Total weight	Main unit			(kg)	23	29	35	35	35
Heat exchanger			Finned tube						
Fan unit	Fan			Centrifugal fan					
	Standard air flow	H/M/L	(m <sup>3</sup> /min.)	15.0/12.0/9.0	23.5/16.7/12.5	31.0/22.5/17.0	34.0/25.5/20.0	34.0/27.5/21.0	
	Motor			(W)	94	94	139	139	139
Air filter			Long life filter						
Controller	Attached remote controller		None						
Connecting pipe	Gas side		(mm)	12.7	15.9	15.9	15.9	15.9	
	Liquid side		(mm)	6.4	9.5	9.5	9.5	9.5	
	Drain port		(mm)	VP20					
Sound pressure level	H/M/L	(dB/A)		37/35/28	41/36/29	44/38/32	46/41/35	46/42/36	
Sound power level	H/M/L	(dB/A)		52/50/43	56/51/44	59/53/47	61/56/50	61/57/51	

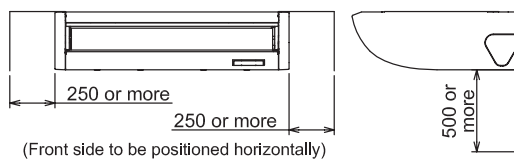
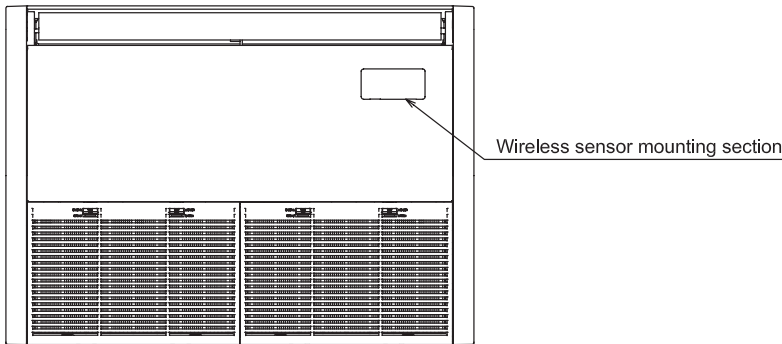
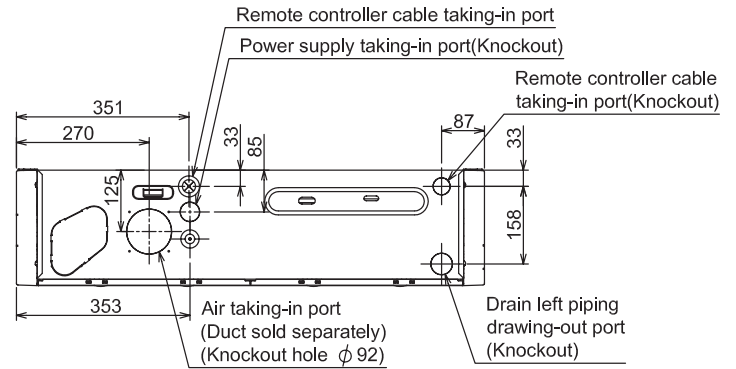
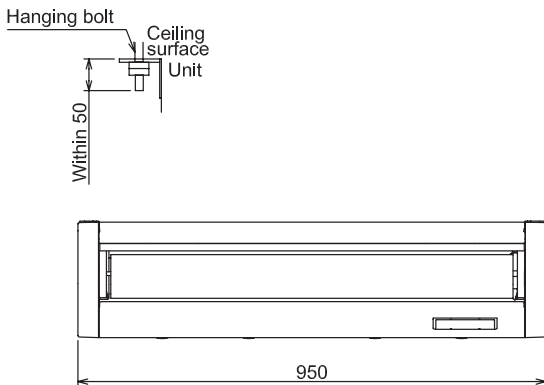
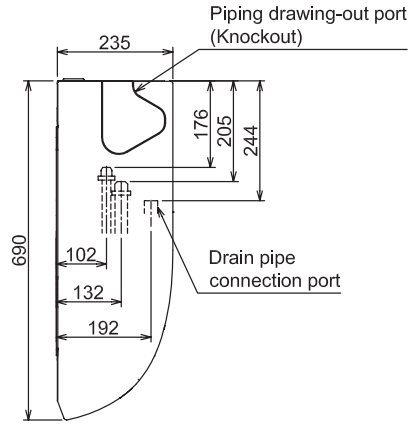
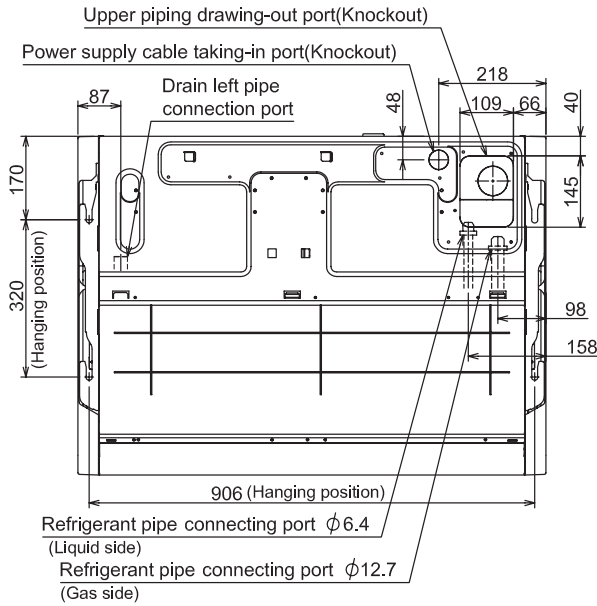
## &lt;Twin/Triple type&gt;

Model	Indoor unit 1	RAV-SM	567CTP-E	807CTP-E	807CTP-E	567CTP-E	
	Indoor unit 2	RAV-SM	567CTP-E	807CTP-E	807CTP-E	567CTP-E	
	Indoor unit 3	RAV-SM	-	-	-	567CTP-E	
	Outdoor unit	RAV-SM	1103AT-E1	1403AT-E1	1603AT-E	1603AT-E	
Cooling capacity		(kW)	10.0 (3.0-11.2)	12.1 (3.0-13.2)	14.0 (3.0-16.0)	14.0 (3.0-16.0)	
Heating capacity		(kW)	11.2 (3.0-12.5)	12.8 (3.0-16.0)	16.0 (3.0-18.0)	16.0 (3.0-18.0)	
Power supply		1phase 230V(220-240V) 50Hz					
Electrical characteristics	Cooling	Running current (220V-240V)	(A)	14.42-13.22	20.67-18.94	22.25-20.39	22.25-20.39
		Power consumption	(kW)	3.11	4.41	4.65	4.65
		Power factor	(%)	98	97	95	95
		EER		3.22	2.74	3.01	3.01
	Heating	Running current (220V-240V)	(A)	13.64-12.50	15.84-14.52	22.06-20.22	22.06-20.22
		Power consumption	(kW)	2.94	3.38	4.61	95
		Power factor	(%)	98	97	95	4.61
		COP		3.81	3.79	3.47	3.47
	Maximum current		(A)	21.6	22.2	31.8	31.7
	<b>Indoor unit</b>						
Fan unit	Fan		Centrifugal fan				
	Standard air flow	H/M/L (m <sup>3</sup> /min.)	15.0/12.0/9.0	23.5/16.7/12.5	23.5/16.7/12.5	15.0/12.0/9.0	
	Motor		(W)	94	94	94	94
Sound pressure level		H/M/L (dB/A)	37/35/28	41/36/29	41/36/29	37/35/28	
Sound power level		H/M/L (dB/A)	52/50/43	56/51/44	56/51/44	52/50/43	
<b>Outdoor unit</b>							
Fan unit	Fan		Propeller fan				
	Standard air flow	(m <sup>3</sup> /min.)	75	75	103	103	
	Motor		(W)	100	100	100+100	100+100
Sound pressure level	Cooling / Heating	(dB/A)	53/54	54/54	51/53	51/53	
Sound power level	Cooling / Heating	(dB/A)	70/71	70/71	68/70	68/70	
Standard pipe length (at rated performance)		(mm)	7.5	7.5	7.5	7.5	
Minimum pipe length		(mm)	5.0	5.0	5.0	5.0	
Maximum pipe length		(mm)	50.0	50.0	50.0	50.0	
Max-height difference		(mm)	30.0	30.0	30.0	30.0	
Charge less length		(mm)	30.0	30.0	30.0	30.0	
Additional refrigerant charge		(g/m)	40	40	40	40	
Branch-kit			RBC-TWP30E2	RBC-TWP50E2	RBC-TWP50E2	RBC-TRP100E	
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	15.9	15.9
		Sub	(mm)	12.7	15.9	15.9	12.7
	Liquid side	Main	(mm)	9.5	9.5	9.5	9.5
		Sub	(mm)	6.4	9.5	9.5	6.4
	Drain port		VP20				
Operation temperature range	Cooling	(CDB)	-15 to 43	-15 to 43	-15 to 43	-15 to 43	
	Heating	(CWB)	-15 to 15	-15 to 15	-15 to 15	-15 to 15	



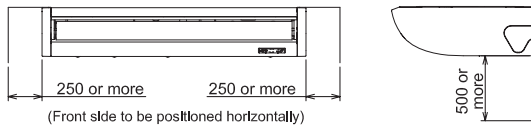
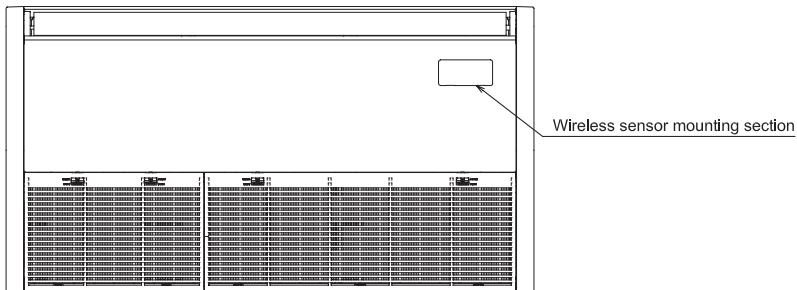
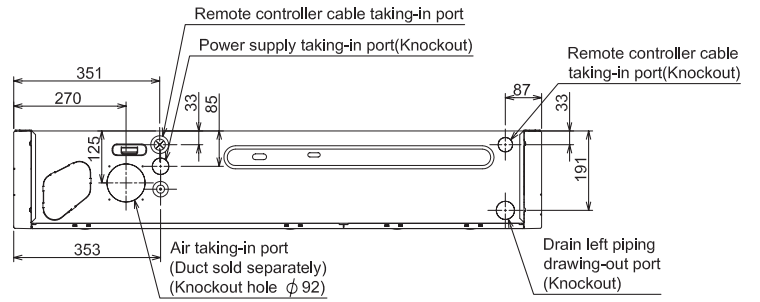
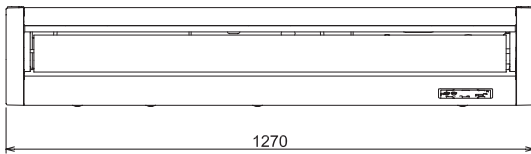
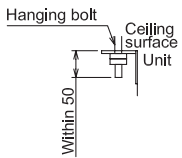
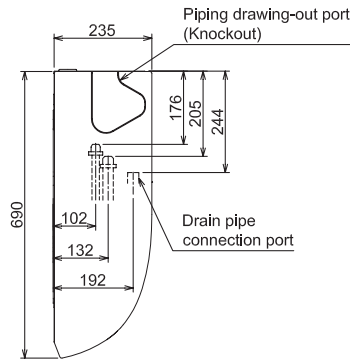
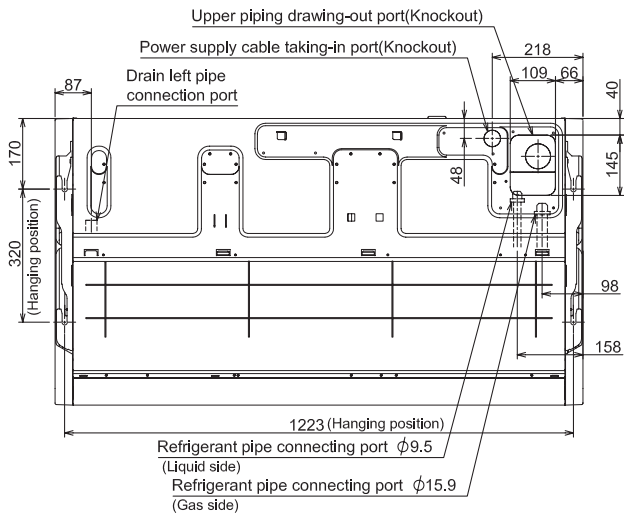
# 3. Dimension

## RAV-SM567CTP-E



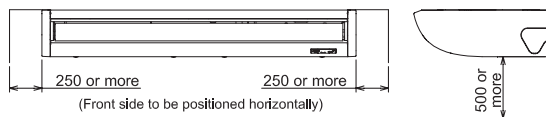
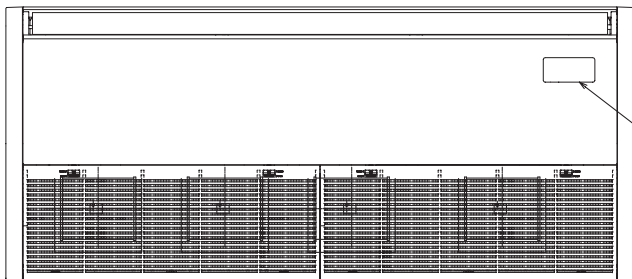
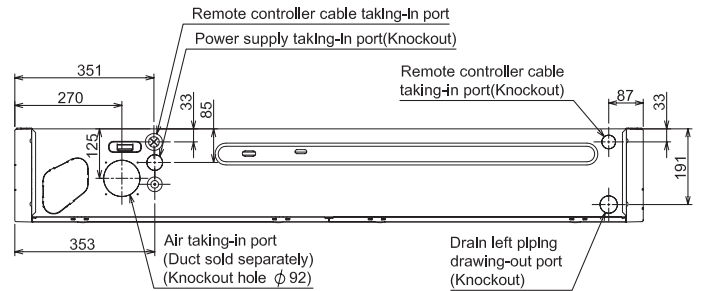
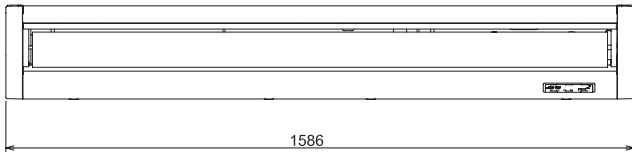
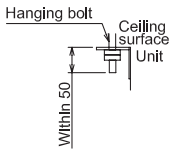
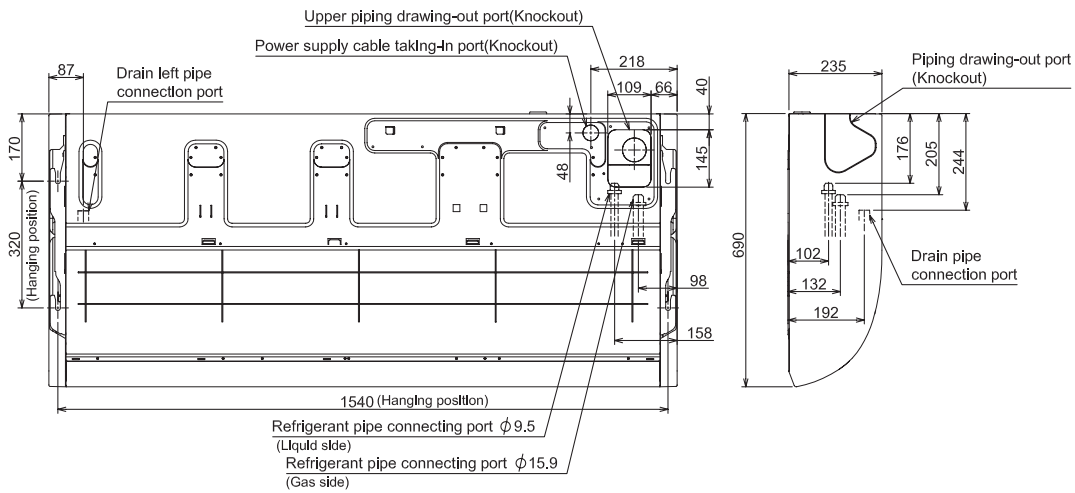
Space required for installation and servicing

RAV-SM807CTP-E



Space required for installation and servicing

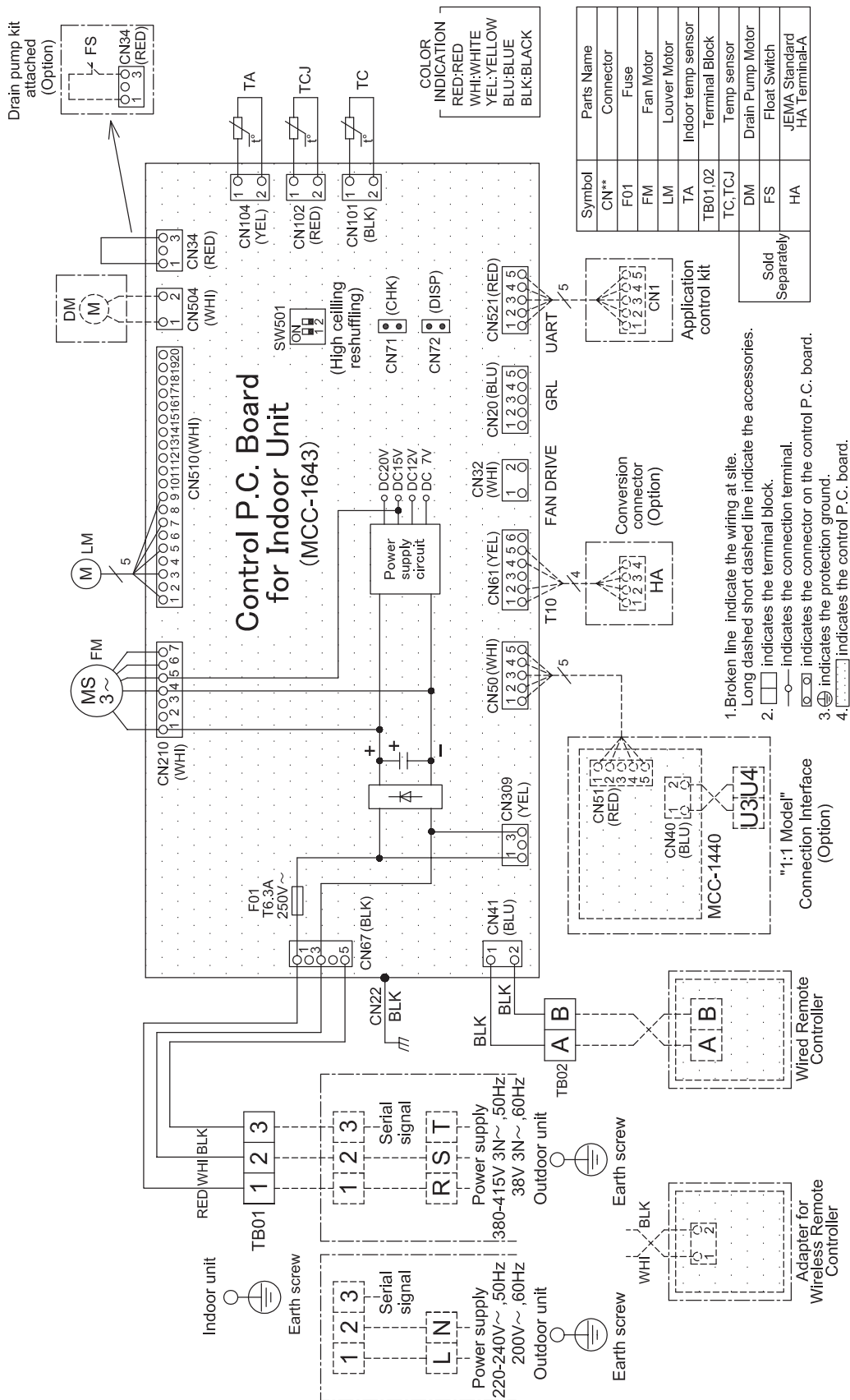
RAV-SM1107CTP-E, RAV-SM1407CTP-E, RAV-SM1607CTP-E



Space required for installation and servicing

# 4. Wiring Diagrams

RAV-SM567CTP-E, RAV-SM807CTP-E, RAV-SM1107CTP-E, RAV-SM1407CTP-E, RAV-SM1607CTP-E



# 5. Sensible Capacity Table

## Digital Inverter 3 Series Sensible Heat Capacity : RAV-SM\*\*\*CTP-E

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
567	10.0	4.7	3.5	4.9	3.7	5.2	3.9	5.4	4.0	5.6	4.2	5.7	4.3	5.9	4.4	6.2	4.7	6.5	4.9
	12.0	4.7	3.5	4.9	3.7	5.2	3.9	5.3	4.0	5.5	4.1	5.7	4.3	5.8	4.4	6.2	4.6	6.5	4.9
	14.0	4.6	3.5	4.9	3.7	5.1	3.8	5.3	4.0	5.5	4.1	5.6	4.2	5.8	4.4	6.1	4.6	6.4	4.8
	16.0	4.6	3.5	4.8	3.6	5.1	3.8	5.3	3.9	5.4	4.1	5.6	4.2	5.8	4.3	6.1	4.6	6.4	4.8
	18.0	4.6	3.4	4.8	3.6	5.0	3.8	5.2	3.9	5.4	4.1	5.6	4.2	5.7	4.3	6.1	4.5	6.3	4.8
	20.0	4.5	3.4	4.8	3.6	5.0	3.8	5.2	3.9	5.4	4.0	5.5	4.1	5.7	4.3	6.0	4.5	6.3	4.7
	21.0	4.5	3.4	4.7	3.6	5.0	3.7	5.2	3.9	5.3	4.0	5.5	4.1	5.6	4.2	6.0	4.5	6.3	4.7
	23.0	4.5	3.3	4.7	3.5	4.9	3.7	5.1	3.8	5.3	4.0	5.4	4.1	5.6	4.2	5.9	4.4	6.2	4.6
	25.0	4.4	3.3	4.6	3.5	4.9	3.7	5.0	3.8	5.2	3.9	5.4	4.0	5.5	4.1	5.9	4.4	6.1	4.6
	27.0	4.4	3.3	4.6	3.4	4.8	3.6	5.0	3.7	5.2	3.9	5.3	4.0	5.5	4.1	5.8	4.3	6.0	4.5
	29.0	4.3	3.2	4.5	3.4	4.8	3.6	4.9	3.7	5.1	3.8	5.2	3.9	5.4	4.0	5.7	4.3	6.0	4.5
	31.0	4.2	3.2	4.5	3.3	4.7	3.5	4.9	3.6	5.0	3.8	5.2	3.9	5.3	4.0	5.6	4.2	5.9	4.4
	33.0	4.2	3.1	4.4	3.3	4.6	3.5	4.8	3.6	4.9	3.7	5.1	3.8	5.2	3.9	5.5	4.2	5.8	4.3
	35.0	4.1	3.1	4.3	3.2	4.5	3.4	4.7	3.5	4.9	3.6	5.0	3.8	5.1	3.9	5.4	4.1	5.7	4.3
	37.0	4.0	3.0	4.2	3.2	4.4	3.3	4.6	3.5	4.8	3.6	4.9	3.7	5.0	3.8	5.3	4.0	5.6	4.2
	39.0	3.9	3.0	4.2	3.1	4.4	3.3	4.5	3.4	4.7	3.5	4.8	3.6	4.9	3.7	5.2	3.9	5.5	4.1

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
807	10.0	6.5	4.9	6.8	5.2	7.2	5.4	7.4	5.6	7.7	5.8	7.9	6.0	8.1	6.2	8.6	6.5	9.0	6.8
	12.0	6.4	4.9	6.8	5.1	7.1	5.4	7.4	5.6	7.6	5.8	7.8	6.0	8.1	6.1	8.5	6.5	8.9	6.8
	14.0	6.4	4.9	6.7	5.1	7.1	5.4	7.3	5.6	7.6	5.8	7.8	5.9	8.0	6.1	8.5	6.4	8.9	6.7
	16.0	6.4	4.8	6.7	5.1	7.0	5.3	7.3	5.5	7.5	5.7	7.7	5.9	8.0	6.0	8.4	6.4	8.8	6.7
	18.0	6.3	4.8	6.6	5.0	7.0	5.3	7.2	5.5	7.5	5.7	7.7	5.8	7.9	6.0	8.4	6.4	8.7	6.6
	20.0	6.3	4.8	6.6	5.0	6.9	5.2	7.1	5.4	7.4	5.6	7.6	5.8	7.8	5.9	8.3	6.3	8.7	6.6
	21.0	6.2	4.7	6.5	5.0	6.9	5.2	7.1	5.4	7.4	5.6	7.6	5.8	7.8	5.9	8.3	6.3	8.6	6.6
	23.0	6.2	4.7	6.5	4.9	6.8	5.2	7.0	5.4	7.3	5.5	7.5	5.7	7.7	5.9	8.2	6.2	8.5	6.5
	25.0	6.1	4.6	6.4	4.9	6.7	5.1	7.0	5.3	7.2	5.5	7.4	5.6	7.6	5.8	8.1	6.1	8.5	6.4
	27.0	6.0	4.6	6.3	4.8	6.6	5.1	6.9	5.2	7.1	5.4	7.3	5.6	7.5	5.7	8.0	6.1	8.3	6.3
	29.0	5.9	4.5	6.2	4.7	6.6	5.0	6.8	5.2	7.0	5.3	7.2	5.5	7.4	5.7	7.9	6.0	8.2	6.3
	31.0	5.9	4.4	6.2	4.7	6.5	4.9	6.7	5.1	6.9	5.3	7.1	5.4	7.3	5.6	7.8	5.9	8.1	6.2
	33.0	5.8	4.4	6.1	4.6	6.4	4.8	6.6	5.0	6.8	5.2	7.0	5.3	7.2	5.5	7.6	5.8	8.0	6.1
	35.0	5.7	4.3	6.0	4.5	6.3	4.8	6.5	4.9	6.7	5.1	6.9	5.2	7.1	5.4	7.5	5.7	7.9	6.0
	37.0	5.6	4.2	5.9	4.4	6.1	4.7	6.4	4.8	6.6	5.0	6.8	5.1	7.0	5.3	7.4	5.6	7.7	5.9
	39.0	5.4	4.1	5.7	4.4	6.0	4.6	6.2	4.7	6.4	4.9	6.6	5.0	6.8	5.2	7.2	5.5	7.6	5.7

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1107	10.0	9.4	7.1	9.9	7.5	10.4	7.9	10.7	8.2	11.1	8.4	11.4	8.7	11.8	8.9	12.5	9.5	13.0	9.9
	12.0	9.3	7.1	9.8	7.5	10.3	7.8	10.7	8.1	11.0	8.4	11.4	8.6	11.7	8.9	12.4	9.4	12.9	9.8
	14.0	9.3	7.0	9.8	7.4	10.2	7.8	10.6	8.1	11.0	8.3	11.3	8.6	11.6	8.8	12.3	9.3	12.9	9.8
	16.0	9.2	7.0	9.7	7.4	10.2	7.7	10.5	8.0	10.9	8.3	11.2	8.5	11.5	8.8	12.2	9.3	12.8	9.7
	18.0	9.1	6.9	9.6	7.3	10.1	7.7	10.4	7.9	10.8	8.2	11.1	8.5	11.4	8.7	12.1	9.2	12.7	9.6
	20.0	9.1	6.9	9.5	7.2	10.0	7.6	10.4	7.9	10.7	8.1	11.0	8.4	11.3	8.6	12.0	9.1	12.6	9.6
	21.0	9.0	6.9	9.5	7.2	10.0	7.6	10.3	7.8	10.7	8.1	11.0	8.3	11.3	8.6	12.0	9.1	12.5	9.5
	23.0	8.9	6.8	9.4	7.1	9.9	7.5	10.2	7.8	10.6	8.0	10.9	8.3	11.2	8.5	11.8	9.0	12.4	9.4
	25.0	8.8	6.7	9.3	7.1	9.8	7.4	10.1	7.7	10.4	7.9	10.8	8.2	11.1	8.4	11.7	8.9	12.2	9.3
	27.0	8.7	6.6	9.2	7.0	9.6	7.3	10.0	7.6	10.3	7.8	10.6	8.1	10.9	8.3	11.6	8.8	12.1	9.2
	29.0	8.6	6.5	9.1	6.9	9.5	7.2	9.8	7.5	10.2	7.7	10.5	8.0	10.8	8.2	11.4	8.7	11.9	9.1
	31.0	8.5	6.4	8.9	6.8	9.4	7.1	9.7	7.4	10.0	7.6	10.3	7.9	10.6	8.1	11.3	8.6	11.8	8.9
	33.0	8.4	6.3	8.8	6.7	9.2	7.0	9.6	7.3	9.9	7.5	10.2	7.7	10.5	8.0	11.1	8.4	11.6	8.8
	35.0	8.2	6.2	8.6	6.6	9.1	6.9	9.4	7.1	9.7	7.4	10.0	7.6	10.3	7.8	10.9	8.3	11.4	8.7
	37.0	8.1	6.1	8.5	6.4	8.9	6.8	9.2	7.0	9.5	7.2	9.8	7.5	10.1	7.7	10.7	8.1	11.2	8.5
	39.0	7.9	6.0	8.3	6.3	8.7	6.6	9.0	6.9	9.3	7.1	9.6	7.3	9.9	7.5	10.5	8.0	10.9	8.3

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1407	10.0	11.4	8.3	12.0	8.7	12.5	9.2	13.0	9.5	13.4	9.8	13.8	10.1	14.2	10.4	15.1	11.0	15.8	11.5
	12.0	11.3	8.2	11.9	8.7	12.5	9.1	12.9	9.4	13.4	9.7	13.7	10.0	14.1	10.3	15.0	10.9	15.7	11.4
	14.0	11.2	8.2	11.8	8.6	12.4	9.0	12.8	9.4	13.3	9.7	13.7	10.0	14.1	10.3	14.9	10.9	15.6	11.4
	16.0	11.1	8.1	11.7	8.6	12.3	9.0	12.7	9.3	13.2	9.6	13.6	9.9	14.0	10.2	14.8	10.8	15.5	11.3
	18.0	11.1	8.1	11.6	8.5	12.2	8.9	12.6	9.2	13.1	9.5	13.5	9.8	13.8	10.1	14.7	10.7	15.3	11.2
	20.0	11.0	8.0	11.5	8.4	12.1	8.8	12.5	9.2	13.0	9.5	13.3	9.7	13.7	10.0	14.5	10.6	15.2	11.1
	21.0	10.9	8.0	11.5	8.4	12.1	8.8	12.5	9.1	12.9	9.4	13.3	9.7	13.7	10.0	14.5	10.6	15.1	11.0
	23.0	10.8	7.9	11.4	8.3	11.9	8.7	12.4	9.0	12.8	9.3	13.2	9.6	13.5	9.9	14.3	10.5	15.0	10.9
	25.0	10.7	7.8	11.2	8.2	11.8	8.6	12.2	8.9	12.6	9.2	13.0	9.5	13.4	9.8	14.2	10.3	14.8	10.8
	27.0	10.6	7.7	11.1	8.1	11.7	8.5	12.1	8.8	12.5	9.1	12.9	9.4	13.2	9.6	14.0	10.2	14.6	10.7
	29.0	10.4	7.6	11.0	8.0	11.5	8.4	11.9	8.7	12.3	9.0	12.7	9.3	13.0	9.5	13.8	10.1	14.4	10.5
	31.0	10.3	7.5	10.8	7.9	11.3	8.3	11.7	8.6	12.1	8.9	12.5	9.1	12.9	9.4	13.6	9.9	14.2	10.4
	33.0	10.1	7.4	10.6	7.8	11.2	8.1	11.6	8.4	12.0	8.7	12.3	9.0	12.7	9.2	13.4	9.8	14.0	10.2
	35.0	9.9	7.3	10.5	7.6	11.0	8.0	11.4	8.3	11.8	8.6	12.1	8.8	12.4	9.1	13.2	9.6	13.8	10.1
	37.0	9.8	7.1	10.3	7.5	10.8	7.9	11.1	8.1	11.5	8.4	11.9	8.7	12.2	8.9	12.9	9.4	13.5	9.9
	39.0	9.6	7.0	10.0	7.3	10.5	7.7	10.9	8.0	11.3	8.2	11.6	8.5	12.0	8.7	12.7	9.2	13.2	9.7

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1607	10.0	13.1	9.2	13.8	9.7	14.5	10.2	15.0	10.5	15.5	10.9	16.0	11.2	16.5	11.5	17.4	12.2	18.2	12.8
	12.0	13.1	9.1	13.7	9.6	14.4	10.1	14.9	10.5	15.4	10.8	15.9	11.1	16.4	11.5	17.3	12.1	18.1	12.7
	14.0	13.0	9.1	13.7	9.6	14.3	10.0	14.8	10.4	15.4	10.7	15.8	11.1	16.3	11.4	17.2	12.1	18.0	12.6
	16.0	12.9	9.0	13.6	9.5	14.2	10.0	14.7	10.3	15.2	10.7	15.7	11.0	16.1	11.3	17.1	12.0	17.9	12.5
	18.0	12.8	9.0	13.5	9.4	14.1	9.9	14.6	10.2	15.1	10.6	15.6	10.9	16.0	11.2	17.0	11.9	17.7	12.4
	20.0	12.7	8.9	13.3	9.3	14.0	9.8	14.5	10.2	15.0	10.5	15.4	10.8	15.9	11.1	16.8	11.8	17.6	12.3
	21.0	12.6	8.8	13.3	9.3	13.9	9.8	14.4	10.1	14.9	10.5	15.4	10.8	15.8	11.1	16.7	11.7	17.5	12.3
	23.0	12.5	8.8	13.2	9.2	13.8	9.7	14.3	10.0	14.8	10.3	15.2	10.7	15.7	11.0	16.6	11.6	17.3	12.1
	25.0	12.4	8.7	13.0	9.1	13.7	9.6	14.1	9.9	14.6	10.2	15.1	10.5	15.5	10.8	16.4	11.5	17.1	12.0
	27.0	12.2	8.5	12.8	9.0	13.5	9.4	14.0	9.8	14.4	10.1	14.9	10.4	15.3	10.7	16.2	11.3	16.9	11.9
	29.0	12.1	8.4	12.7	8.9	13.3	9.3	13.8	9.6	14.3	10.0	14.7	10.3	15.1	10.6	16.0	11.2	16.7	11.7
	31.0	11.9	8.3	12.5	8.7	13.1	9.2	13.6	9.5	14.0	9.8	14.5	10.1	14.9	10.4	15.8	11.0	16.5	11.5
	33.0	11.7	8.2	12.3	8.6	12.9	9.0	13.4	9.4	13.8	9.7	14.2	10.0	14.6	10.3	15.5	10.9	16.2	11.4
	35.0	11.5	8.0	12.1	8.5	12.7	8.9	13.1	9.2	13.6	9.5	14.0	9.8	14.4	10.1	15.3	10.7	16.0	11.2
	37.0	11.3	7.9	11.9	8.3	12.5	8.7	12.9	9.0	13.3	9.3	13.7	9.6	14.1	9.9	15.0	10.5	15.6	11.0
	39.0	11.1	7.7	11.6	8.1	12.2	8.5	12.6	8.8	13.1	9.1	13.5	9.4	13.8	9.7	14.7	10.3	15.3	10.7

TC: Total Capacity [kW]  
 SHC: Sensible Heat Capacity [kW]

# 6. Part Load Performance

## Combination

Indoor unit : RAV-SM567CTP-E

Outdoor unit : RAV-SM563AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	450	1500	450
RATING	5000	1560	5600	1440

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	4760	4280	3800	3330	2850	2380	1900	1430	1430	1430
	W	1670	1440	1220	1020	840	680	520	480	480	480
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1560	1340	1140	950	780	630	480	450	450	450
30	Q	5210	4680	4160	3640	3120	2600	2080	1560	1560	1560
	W	1440	1240	1050	880	720	580	440	420	420	420
25	Q	5380	4840	4300	3760	3230	2690	2150	1610	1610	1610
	W	1340	1150	980	810	670	540	410	390	390	390
20	Q	5520	4960	4410	3860	3310	2760	2210	1650	1650	1650
	W	1240	1070	910	760	620	500	380	360	360	360

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6750	6080	5400	4730	4050	3380	2700	2030	1810	1810
	W	1590	1400	1240	1070	890	740	580	510	500	500
10	Q	6130	5520	4910	4290	3680	3070	2450	1840	1640	1640
	W	1500	1330	1170	1010	850	700	550	480	470	470
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	1440	1270	1120	970	810	670	530	460	450	450
5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1400	1400
	W	1400	1230	1090	940	780	650	510	450	440	440
2	Q	4680	4210	3750	3280	2810	2340	1870	1400	1250	1250
	W	1330	1170	1030	890	750	620	490	420	410	410
0	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1180	1040	920	790	660	550	430	380	370	370
-5	Q	3660	3290	2930	2560	2190	1830	1460	1100	980	980
	W	1180	1040	920	790	660	550	430	380	370	370
-7	Q	3440	3090	2750	2410	2060	1720	1380	1030	920	920
	W	1140	1010	890	770	640	530	420	370	360	360
-10	Q	3150	2830	2520	2200	1890	1570	1260	940	840	840
	W	1100	970	850	740	620	510	400	350	340	340
-15	Q	2650	2390	2120	1860	1590	1330	1060	800	710	710
	W	1030	910	800	700	580	480	380	330	320	320

## Combination

Indoor unit : RAV-SM807CTP-E

Outdoor unit : RAV-SM803AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	500	1500	500
RATING	6900	2380	8000	2140

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	6560	5910	5250	4590	3940	3280	2620	1970	1430	1430
	W	2550	2110	1740	1420	1140	890	680	560	540	540
35	Q	6900	6210	5520	4830	4140	3450	2760	2070	1500	1500
	W	2380	1970	1620	1320	1060	830	630	520	500	500
30	Q	7180	6460	5750	5030	4310	3590	2870	2150	1560	1560
	W	2200	1820	1500	1220	980	770	580	480	460	460
25	Q	7420	6680	5930	5190	4450	3710	2970	2230	1610	1610
	W	2040	1690	1390	1130	910	710	540	450	430	430
20	Q	7610	6850	6090	5330	4570	3810	3040	2280	1650	1650
	W	1890	1570	1290	1050	840	660	500	410	400	400

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	9650	8680	7720	6750	5790	4820	3860	2890	1930	1810
	W	2360	2070	1800	1530	1290	1050	830	610	560	550
10	Q	8760	7880	7010	6130	5260	4380	3500	2630	1750	1640
	W	2240	1960	1700	1450	1220	990	780	570	530	520
7	Q	8000	7200	6400	5600	4800	4000	3200	2400	1600	1500
	W	2140	1880	1630	1390	1170	950	750	550	510	500
5	Q	7460	6720	5970	5220	4480	3730	2990	2240	1490	1400
	W	2070	1820	1580	1350	1130	920	730	530	490	480
2	Q	6690	6020	5350	4680	4010	3340	2680	2010	1340	1250
	W	1970	1730	1500	1280	1080	880	690	510	470	460
0	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	1750	1540	1330	1140	960	780	610	450	420	410
-5	Q	5220	4700	4180	3660	3130	2610	2090	1570	1040	980
	W	1750	1540	1330	1140	960	780	610	450	420	410
-7	Q	4910	4420	3930	3440	2950	2460	1960	1470	980	920
	W	1700	1490	1290	1100	930	750	600	440	400	400
-10	Q	4500	4050	3600	3150	2700	2250	1800	1350	900	840
	W	1630	1430	1240	1060	890	720	570	420	390	380
-15	Q	3790	3410	3030	2650	2280	1900	1520	1140	760	710
	W	1540	1350	1170	1000	840	680	540	390	370	360



## Combination

Indoor unit : RAV-SM1107CTP-E

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3110	11200	2940

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3340	2770	2280	1860	1490	1170	880	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3110	2580	2120	1730	1390	1090	820	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	3120	3120
	W	2870	2380	1960	1600	1280	1010	760	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	3230	3230
	W	2670	2210	1820	1480	1190	930	700	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	3310	3310
	W	2470	2050	1690	1380	1100	870	650	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3240	2840	2470	2120	1780	1430	1140	830	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3070	2700	2340	2010	1680	1360	1080	780	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2940	2580	2240	1920	1610	1300	1030	750	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	2850	2500	2170	1860	1560	1260	1000	730	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2710	2380	2070	1770	1480	1200	950	690	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2410	2110	1830	1570	1320	1060	840	610	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2410	2110	1830	1570	1320	1060	840	610	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2330	2050	1780	1520	1280	1030	820	600	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2240	1960	1700	1460	1230	990	780	570	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2110	1850	1610	1380	1160	930	740	540	430	430

## Combination

Indoor unit : RAV-SM1407CTP-E / SM807CTP-E x2

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12100	4410	12800	3380

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11510	10360	9210	8060	6910	5750	4600	3450	2850	2850
	W	4730	3930	3230	2630	2110	1650	1240	880	700	700
35	Q	12100	10890	9680	8470	7260	6050	4840	3630	3000	3000
	W	4410	3660	3010	2450	1970	1540	1160	820	650	650
30	Q	12590	11330	10070	8810	7560	6300	5040	3780	3120	3120
	W	4080	3380	2780	2270	1820	1420	1070	760	600	600
25	Q	13010	11700	10400	9100	7800	6500	5200	3900	3220	3220
	W	3780	3130	2580	2100	1690	1320	990	700	560	560
20	Q	13350	12010	10680	9340	8010	6670	5340	4000	3310	3310
	W	3500	2910	2390	1950	1560	1220	920	650	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	15430	13890	12350	10800	9260	7720	6170	4630	3620	3620
	W	3730	3270	2850	2430	2040	1660	1300	960	720	720
10	Q	14020	12610	11210	9810	8410	7010	5610	4200	3290	3290
	W	3540	3100	2700	2300	1930	1570	1230	910	680	680
7	Q	12800	11520	10240	8960	7680	6400	5120	3840	3000	3000
	W	3380	2960	2580	2200	1850	1500	1180	870	650	650
5	Q	11940	10750	9550	8360	7160	5970	4780	3580	2800	2800
	W	3270	2870	2500	2130	1790	1450	1140	840	630	630
2	Q	10700	9630	8560	7490	6420	5350	4280	3210	2510	2510
	W	3120	2730	2380	2030	1710	1380	1090	800	600	600
0	Q	8360	7520	6690	5850	5010	4180	3340	2510	1960	1960
	W	2770	2420	2110	1800	1510	1230	970	710	530	530
-5	Q	8360	7520	6690	5850	5010	4180	3340	2510	1960	1960
	W	2770	2420	2110	1800	1510	1230	970	710	530	530
-7	Q	7860	7080	6290	5500	4720	3930	3150	2360	1840	1840
	W	2690	2350	2050	1750	1470	1190	940	690	520	520
-10	Q	7200	6480	5760	5040	4320	3600	2880	2160	1690	1690
	W	2570	2250	1960	1670	1410	1140	900	660	490	490
-15	Q	6070	5460	4860	4250	3640	3040	2430	1820	1420	1420
	W	2420	2120	1850	1580	1330	1080	850	620	470	470

## Combination

Indoor unit : RAV-SM1607CTP-E / SM807CTP-E x2 / SM567CTP-E x3

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4650	16000	4610

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	4990	4140	3420	2770	2220	1740	1320	930	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4650	3860	3220	2580	2070	1620	1230	870	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4300	3570	2950	2380	1910	1500	1140	800	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	3990	3310	2730	2210	1770	1390	1050	750	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3700	3070	2540	2050	1650	1290	980	690	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5080	4520	3710	3020	2410	1760	1320	940	780	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4820	4280	3510	2860	2290	1670	1250	890	740	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4610	4100	3360	2740	2190	1600	1200	850	710	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4470	3970	3260	2660	2120	1550	1160	820	690	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4250	3780	3100	2530	2020	1480	1110	780	650	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3780	3360	2750	2240	1790	1310	980	700	580	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3780	3360	2750	2240	1790	1310	980	700	580	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3660	3260	2670	2180	1740	1270	950	670	560	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3510	3120	2560	2090	1670	1220	910	650	540	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3310	2940	2410	1970	1570	1150	860	610	510	470

## Combination

Indoor unit : RAV-SM567CTP-E (Twin)

Outdoor unit : RAV-SM1103AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	600	3000	600
RATING	10000	3110	11200	2940

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9510	8560	7610	6660	5710	4760	3800	2850	2850	2850
	W	3340	2770	2280	1860	1490	1170	880	640	640	640
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	3000	3000
	W	3110	2580	2120	1730	1390	1090	820	600	600	600
30	Q	10410	9370	8330	7290	6250	5210	4160	3120	3120	3120
	W	2870	2380	1960	1600	1280	1010	760	550	550	550
25	Q	10750	9680	8600	7530	6450	5380	4300	3230	3230	3230
	W	2670	2210	1820	1480	1190	930	700	510	510	510
20	Q	11030	9930	8820	7720	6620	5520	4410	3310	3310	3310
	W	2470	2050	1690	1380	1100	870	650	480	480	480

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	3620	3620
	W	3240	2840	2470	2120	1780	1430	1140	830	660	660
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	3290	3290
	W	3070	2700	2340	2010	1680	1360	1080	780	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2940	2580	2240	1920	1610	1300	1030	750	600	600
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2800	2800
	W	2850	2500	2170	1860	1560	1260	1000	730	580	580
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2510	2510
	W	2710	2380	2070	1770	1480	1200	950	690	550	550
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2410	2110	1830	1570	1320	1060	840	610	490	490
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1960	1960
	W	2410	2110	1830	1570	1320	1060	840	610	490	490
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1840	1840
	W	2330	2050	1780	1520	1280	1030	820	600	480	480
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1690	1690
	W	2240	1960	1700	1460	1230	990	780	570	460	460
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1420	1420
	W	2110	1850	1610	1380	1160	930	740	540	430	430

## Combination

Indoor unit : RAV-SM807CTP-E (Twin)

Outdoor unit : RAV-SM1403AT-E1

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	12100	4410	12800	3380

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11510	10360	9210	8060	6910	5750	4600	3450	2850	2850
	W	4730	3930	3230	2630	2110	1650	1240	880	700	700
35	Q	12100	10890	9680	8470	7260	6050	4840	3630	3000	3000
	W	4410	3660	3010	2450	1970	1540	1160	820	650	650
30	Q	12590	11330	10070	8810	7560	6300	5040	3780	3120	3120
	W	4080	3380	2780	2270	1820	1420	1070	760	600	600
25	Q	13010	11700	10400	9100	7800	6500	5200	3900	3220	3220
	W	3780	3130	2580	2100	1690	1320	990	700	560	560
20	Q	13350	12010	10680	9340	8010	6670	5340	4000	3310	3310
	W	3500	2910	2390	1950	1560	1220	920	650	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	15430	13890	12350	10800	9260	7720	6170	4630	3620	3620
	W	3730	3270	2850	2430	2040	1660	1300	960	720	720
10	Q	14020	12610	11210	9810	8410	7010	5610	4200	3290	3290
	W	3540	3100	2700	2300	1930	1570	1230	910	680	680
7	Q	12800	11520	10240	8960	7680	6400	5120	3840	3000	3000
	W	3380	2960	2580	2200	1850	1500	1180	870	650	650
5	Q	11940	10750	9550	8360	7160	5970	4780	3580	2800	2800
	W	3270	2870	2500	2130	1790	1450	1140	840	630	630
2	Q	10700	9630	8560	7490	6420	5350	4280	3210	2510	2510
	W	3120	2730	2380	2030	1710	1380	1090	800	600	600
0	Q	8360	7520	6690	5850	5010	4180	3340	2510	1960	1960
	W	2770	2420	2110	1800	1510	1230	970	710	530	530
-5	Q	8360	7520	6690	5850	5010	4180	3340	2510	1960	1960
	W	2770	2420	2110	1800	1510	1230	970	710	530	530
-7	Q	7860	7080	6290	5500	4720	3930	3150	2360	1840	1840
	W	2690	2350	2050	1750	1470	1190	940	690	520	520
-10	Q	7200	6480	5760	5040	4320	3600	2880	2160	1690	1690
	W	2570	2250	1960	1670	1410	1140	900	660	490	490
-15	Q	6070	5460	4860	4250	3640	3040	2430	1820	1420	1420
	W	2420	2120	1850	1580	1330	1080	850	620	470	470

## Combination

Indoor unit : RAV-SM807CTP-E (Twin)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4650	16000	4610

Q: Capacity in W  
W: Power Consumption in W

## Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	4990	4140	3420	2770	2220	1740	1320	930	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4650	3860	3220	2580	2070	1620	1230	870	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4300	3570	2950	2380	1910	1500	1140	800	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	3990	3310	2730	2210	1770	1390	1050	750	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3700	3070	2540	2050	1650	1290	980	690	520	520

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5080	4520	3710	3020	2410	1760	1320	940	780	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4820	4280	3510	2860	2290	1670	1250	890	740	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4610	4100	3360	2740	2190	1600	1200	850	710	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4470	3970	3260	2660	2120	1550	1160	820	690	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4250	3780	3100	2530	2020	1480	1110	780	650	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3780	3360	2750	2240	1790	1310	980	700	580	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3780	3360	2750	2240	1790	1310	980	700	580	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3660	3260	2670	2180	1740	1270	950	670	560	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3510	3120	2560	2090	1670	1220	910	650	540	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3310	2940	2410	1970	1570	1150	860	610	510	470

## Combination

Indoor unit : RAV-SM567CTP-E (Triple)

Outdoor unit : RAV-SM1603AT-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3000	650	3000	650
RATING	14000	4650	16000	4610

Q: Capacity in W  
W: Power Consumption in W

## Cooling

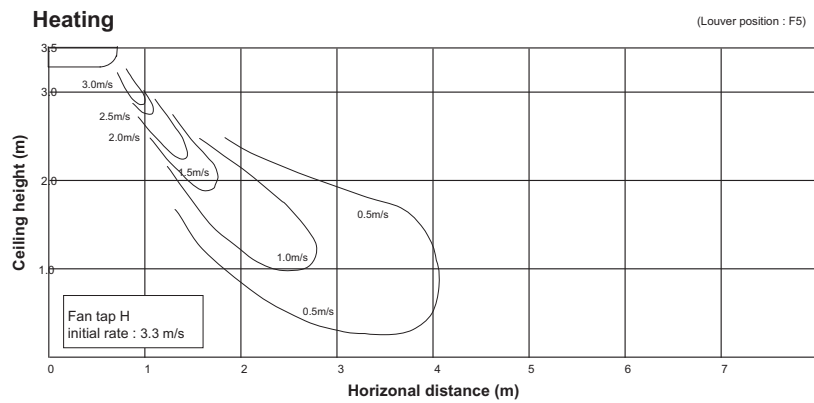
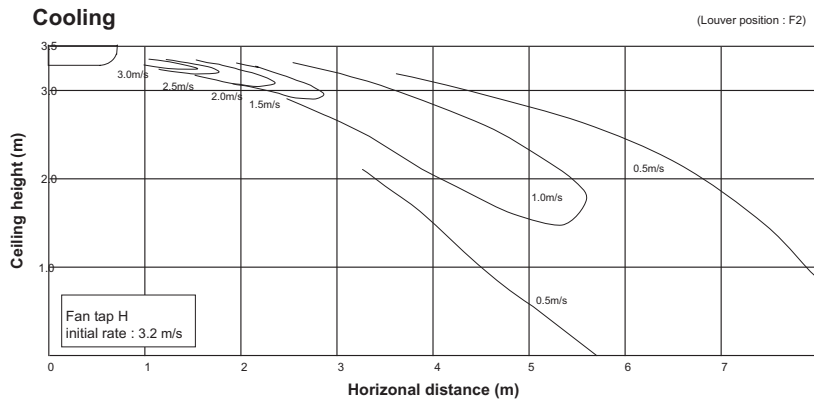
Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	13310	11980	10650	9320	7990	6660	5330	3990	2850	2850
	W	4990	4140	3420	2770	2220	1740	1320	930	700	700
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4650	3860	3220	2580	2070	1620	1230	870	650	650
30	Q	14570	13120	11660	10200	8740	7290	5830	4370	3120	3120
	W	4300	3570	2950	2380	1910	1500	1140	800	600	600
25	Q	15050	13550	12040	10540	9030	7530	6020	4520	3230	3230
	W	3990	3310	2730	2210	1770	1390	1050	750	560	560
20	Q	15440	13900	12350	10810	9270	7720	6180	4630	3310	3310
	W	3700	3070	2540	2050	1650	1290	980	690	520	520

## Heating

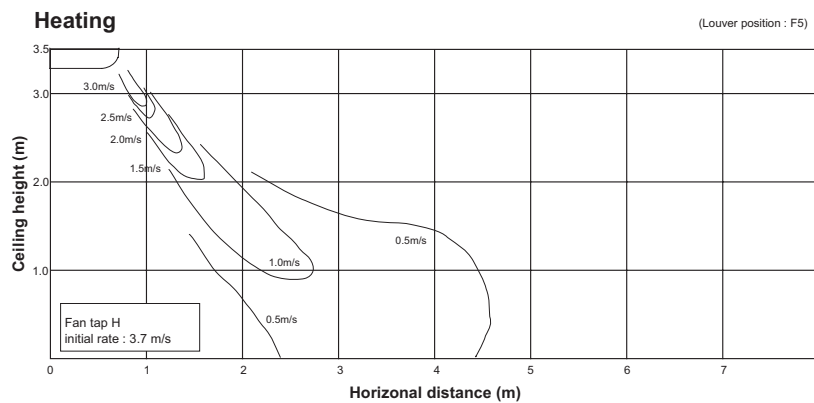
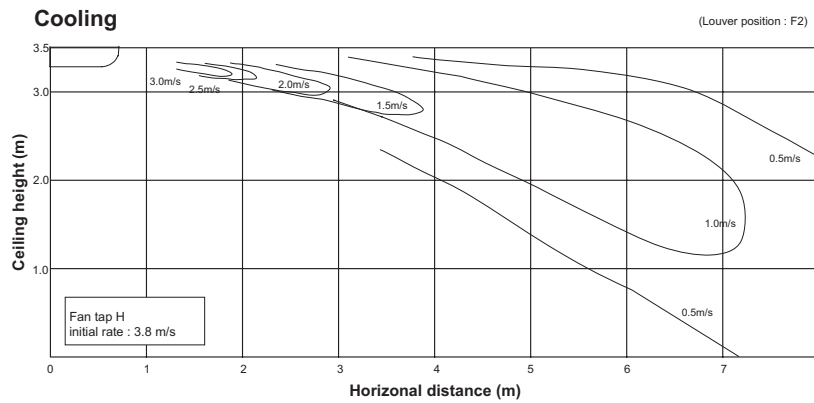
Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5080	4520	3710	3020	2410	1760	1320	940	780	720
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	3290
	W	4820	4280	3510	2860	2290	1670	1250	890	740	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4610	4100	3360	2740	2190	1600	1200	850	710	650
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2800
	W	4470	3970	3260	2660	2120	1550	1160	820	690	630
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2510
	W	4250	3780	3100	2530	2020	1480	1110	780	650	600
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3780	3360	2750	2240	1790	1310	980	700	580	530
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1960
	W	3780	3360	2750	2240	1790	1310	980	700	580	530
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3660	3260	2670	2180	1740	1270	950	670	560	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3510	3120	2560	2090	1670	1220	910	650	540	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3310	2940	2410	1970	1570	1150	860	610	510	470

# 7. Air Throw Distance Chart

## RAV-SM567CTP-E

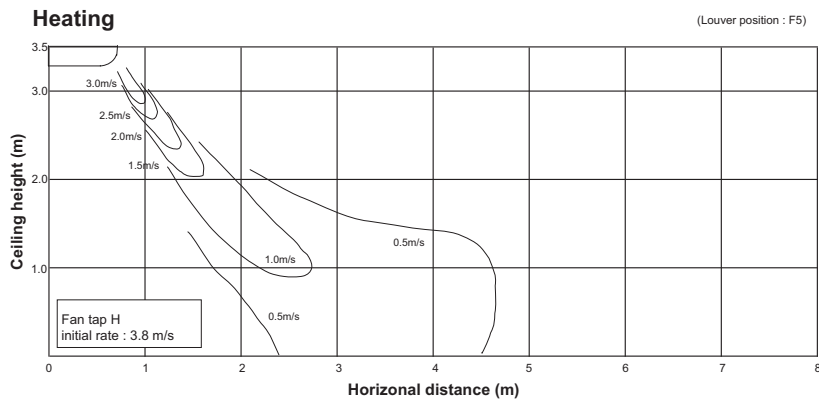
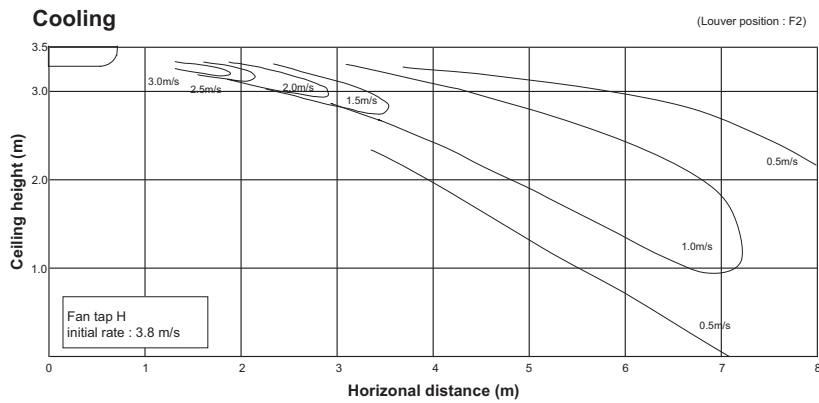


## RAV-SM807CTP-E

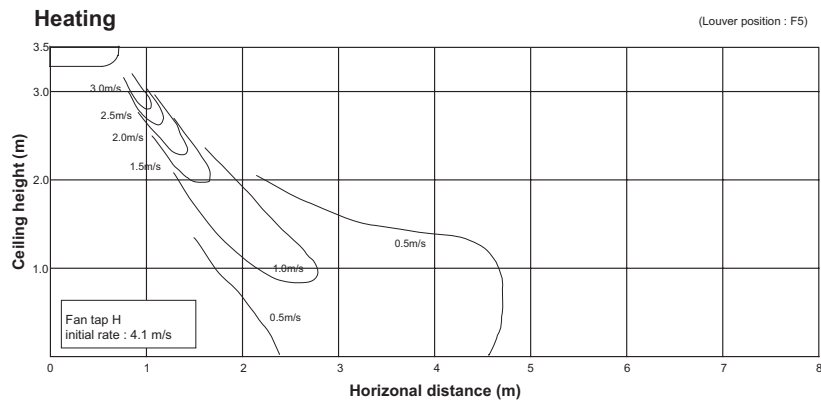
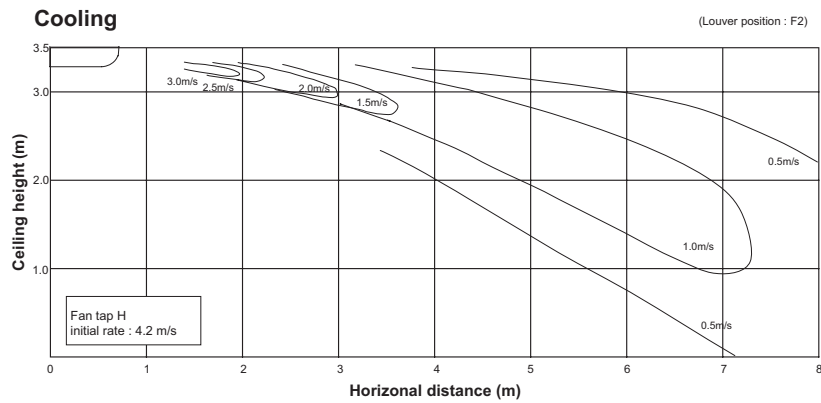




**RAV-SM1107CTP-E**



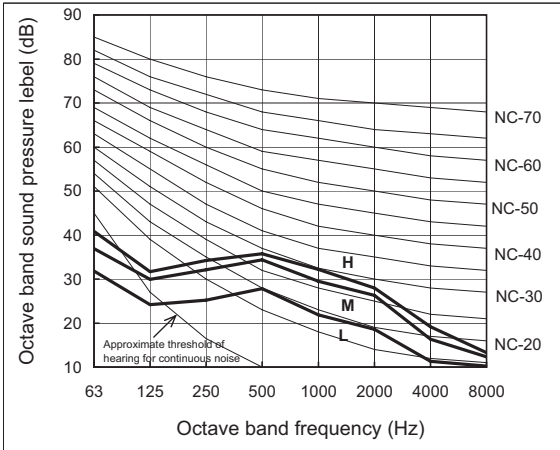
**RAV-SM1407CTP-E, RAV-SM1607CTP-E**



# 8. Sound Pressure Level Data

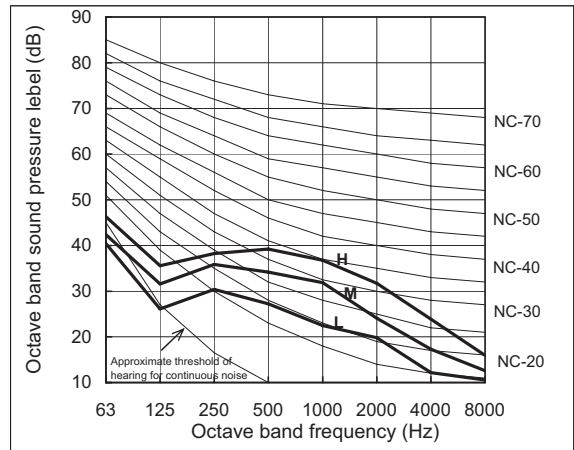
RAV-SM567CTP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	37	35	28



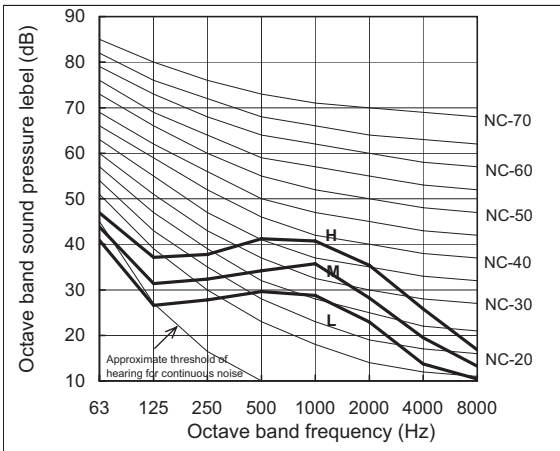
RAV-SM807CTP-E

Fan tap	H	M	L
Sound pressure level	41	36	29



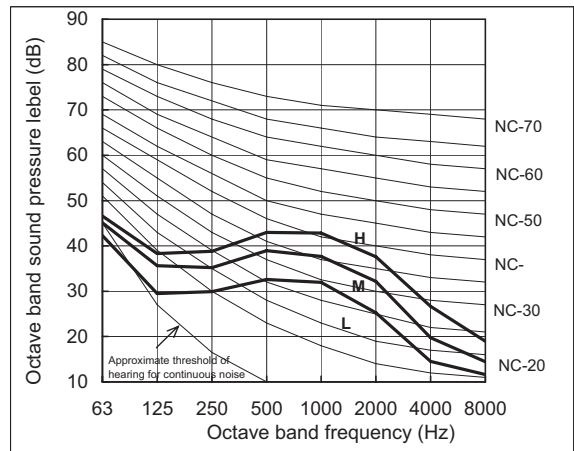
RAV-SM1107CTP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	44	38	32



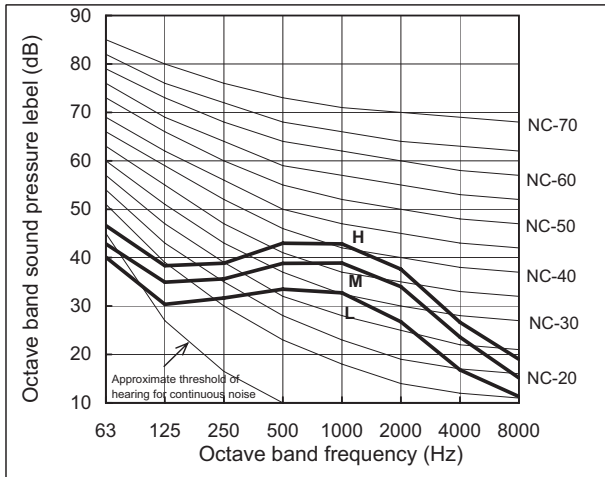
RAV-SM1407CTP-E

Fan tap	H	M	L
Sound pressure level	46	41	35



RAV-SM1607CTP-E

Fan tap	H	M	L
Sound pressure level (dB(A))	46	42	36



## 9. Accessory

Indoor unit type	Parts name	Model name	Indoor unit model name
Ceiling type	Drain pump kit	TCB-DP31CE	RAV-SM***7CTP*
	Elbow Piping Kit	TCB-KP13CE	RAV-SM567CTP*
		TCB-KP23CE	RAV-SM807CTP* to RAV-SM1607CTP*
	Wireless remote controller kit	RBC-AX33CE	RAV-SM***7CTP*
	Application control kit	TCB-PCUC1E	RAV-SM***7CTP*

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