

### ***Digital Inverter R32***

#### **1 Phase Model**

#### **Outdoor units**

**RAV-GM301ATP-E/TR**

**RAV-GM401ATP-E/TR**

**RAV-GM561ATP-E/TR**

**RAV-GM801ATP-E/TR**

**RAV-GM1101ATP-E/TR**

**RAV-GM1401ATP-E/TR**

**RAV-GM301ATJP-E**

**RAV-GM401ATJP-E**

**RAV-GM561ATJP-E**

**RAV-GM801ATJP-E**

**RAV-GM1101ATJP-E**

**RAV-GM1401ATJP-E**

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# 1. Line up

## 1-1. Single Line-up

### Outdoor unit line-up


Model name	RAV-GM301ATP-E RAV-GM401ATP-E RAV-GM561ATP-E RAV-GM801ATP-E RAV-GM1101ATP-E RAV-GM1401ATP-E	RAV-GM301ATJP-E RAV-GM401ATJP-E RAV-GM561ATJP-E RAV-GM801ATJP-E RAV-GM1101ATJP-E RAV-GM1401ATJP-E	RAV-GM301ATP-TR RAV-GM401ATP-TR RAV-GM561ATP-TR RAV-GM801ATP-TR RAV-GM1101ATP-TR RAV-GM1401ATP-TR
Appearance	 1, 1.5, 2 and 3 HP	 4 and 5 HP	

### Indoor unit line-up

Capacity Type	**	30	40	56	80	110	140
(HP equivalent)		1.0	1.5	2.0	3.0	4.0	5.0
4-way Cassette	 RAV-RM**1UTP-E/TR	-	-	56	80	110	140
Compact 4-way Cassette	 RAV-RM**1MUT-E/TR	30	40	56	-	-	-
Standard Duct	 RAV-RM**1BTP-E/TR	-	-	56	80	110	140
Slim Duct	 RAV-RM**1SDT-E/TR	30	40	56	-	-	-
Under Ceiling	 RAV-RM**1CTP-E/TR	-	40	56	80	110	140
High Wall	 RAV-RM**1KRTP-E/TR	30	40	56	80	-	-

## 1-2. Twin Line-up

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

Model name	RAV-GM1101ATP-E RAV-GM1401ATP-E	RAV-GM1101ATJP-E RAV-GM1401ATJP-E	RAV-GM1101ATP-TR RAV-GM1401ATP-TR
Appearance	 <p>4 and 5 HP</p>		

### Indoor unit line-up

Indoor Unit	Model name	Unit	HP equivalent	Capacity Type		Outdoor unit
				56	80	
4-way Cassette	RAV-RM561UTP-E/TR	2	2.0	56	-	RAV-GM1101ATP-E/TP
Compact 4-way Cassette	RAV-RM561MUT-E/TR	2	2.0	56	-	
Standard Duct	RAV-RM561BTP-E/TR	2	2.0	56	-	
Slim Duct	RAV-RM561SDT-E/TR	2	2.0	56	-	
Under Ceiling	RAV-RM561CTP-E/TR	2	2.0	56	-	
High Wall	RAV-RM561KRTP-E/TR	2	2.0	56	-	RAV-GM1401ATP-E/TP
4-way Cassette	RAV-RM801UTP-E/TR	2	3.0	-	80	
Standard Duct	RAV-RM801BTP-E/TR	2	3.0	-	80	
Under Ceiling	RAV-RM801CTP-E/TR	2	3.0	-	80	
High Wall	RAV-RM801KRTP-E/TR	2	3.0	-	80	

## **2. Indoor Units**

### **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**

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#### **2-1-6. Air Throw Distance Chart**

#### **2-1-7. Sound Characteristics (NC Curve)**

## 2-1-1. Specifications

### 4-way Cassette Type <Single Type>

Model		Indoor unit		RAV-RM561UTP-E/TR	RAV-RM801UTP-E/TR	RAV-RM1101UTP-E/TR	RAV-RM1401UTP-E/TR
		Outdoor unit	(RAV-GM***ATJP-E)	RAV-GM561ATP-E/TR	RAV-GM801ATP-E/TR	RAV-GM1101ATP-E/TR	RAV-GM1401ATP-E/TR
Cooling capacity				5.0 < 1.5 - 5.6 >	6.7 < 1.5 - 8.0 >	9.5 < 3.0 - 11.2 >	12.0 < 3.0 - 13.2 >
Heating capacity		(kW)		5.3 < 1.5 - 6.3 >	7.7 < 1.5 - 9.0 >	11.2 < 3.0 - 13.0 >	13.0 < 3.0 - 16.0 >
Power supply				1 phase 220V-240V/50Hz, 1phase 220V/60Hz			
Electrical characteristics	Cooling	Running current (A)		7.31 - 6.70	10.4 - 9.54	13.95-12.75	20.75-19.00
		Power consumption (kW)		1.56	2.22	2.87	3.57
		Power factor (%)		97	97	94	94
		EER		3.21	3.02	3.31	2.80
		SEER		6.34	5.81	6.15	5.71
	Heating	Running current (A)		6.37 - 5.84	9.98 - 9.15	14.20-13.00	16.65-15.30
		Power consumption (kW)		1.36	2.13	2.93	3.46
		Power factor (%)		97	97	94	94
		COP		3.90	3.62	3.82	3.76
		SCOP		4.60	4.42	4.28	4.29
Maximum current (A)				15.5	15.5	22.8	22.8
<b>Indoor unit</b>							
Appearance		Main unit		Zinc hot dipping steel plate			
		Ceiling panel (Sold separately)	Model	RBC-U31PGP(W)-E , RBC-U31PGSP(W)-E			
			Panel color	W: Moon-white(2.5GY 9.0/0.5)			
Outer dimension		Main unit (Sold separately)	Height (mm)	256		319	
			Width (mm)		840		
			Depth (mm)		840		
			Height (mm)		30		
			Width (mm)		950		
			Depth (mm)		950		
Total weight		Main unit (kg)		20.0		24.0	
		Ceiling panel (Sold separately) (kg)			4.2		
Fan unit		Fan		Turbo fan			
		Standard air flow	H/M/L (m3/h)	1050 / 870 / 780	1230 / 960 / 810	2010 / 1440 / 1170	2100 / 1440 / 1230
		Motor (W)		14	20	68	72
Air filter				Standard filter (Long life filter)			
Sound pressure level		H/M/L (dB)		32 / 29 / 28	35 / 31 / 28	43 / 38 / 33	44 / 38 / 34
Sound power level		H/M/L (dB)		47 / 44 / 43	50 / 46 / 43	58 / 53 / 48	59 / 53 / 49
Connecting pipe		Drain port		VP25			
<b>Outdoor unit</b>							
Air Flow (m3/h)				2,400	2,700	4,080	4,200
Outer dimension		Height (mm)		550		890	
		Width (mm)		780		900	
		Depth (mm)		290		320	
Total weight		Main unit (kg)		40	44	68	
Pipe		Min. length (m)		5.0			
		Max. total length (m)		30.0		50.0	
Flare Connections		Gas side (mm)		12.7	15.9		
		Liquid side (mm)		6.4	9.5		
Sound pressure level		Cooling/Heating (dB)		46 / 48	48 / 52	54 / 57	55 / 57
Sound power level		Cooling/Heating (dB)		63 / 65	65 / 69	70 / 74	70 / 74
Operating Range		Cooling (°C)		-15 / 46			
		Heating (°C)		-15 / 15			

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

\*2 : 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.

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

## 4-way Cassette (Twin System)

Model	Indoor unit 1		RAV-RM561UTP-E/TR	RAV-RM801UTP-E/TR
	Indoor unit 2		RAV-RM561UTP-E/TR	RAV-RM801UTP-E/TR
	Outdoor unit (RAV-GM***ATJP-E)		RAV-GM1101ATP-E/TR	RAV-GM1401ATP-E/TR
Cooling capacity		(kW)	9.5 < 3.0 - 11.2 >	12.0 < 3.0 - 13.2 >
Heating capacity		(kW)	11.2 < 3.0 - 13.0 >	13.0 < 3.0 - 16.0 >
Power supply			1 phase 220V-240V/50Hz, 1phase 220V/60Hz	
Electrical characteristics	Cooling	Running current (A)	13.95-12.73	20.74 - 19.02
		Power consumption (kW)	2.87	4.29
		Power factor (%)	94	94
		EER	3.31	2.80
		SEER	5.94	5.57
	Heating	Running current (A)	14.20-13.00	16.70-15.30
		Power consumption (kW)	2.93	3.46
		Power factor (%)	94	94
		COP	3.82	3.76
		SCOP	4.28	4.29
Maximum current (A)			22.8	22.8
<b>Indoor unit</b>				
Appearance	Main unit		Zinc hot dipping steel plate	
	Ceiling panel (Sold separately)	Model	RBC-U31PGP(W)-E , RBC-U31PGSP(W)-E	
		Panel color	W: Moon-white(2.5GY 9.0/0.5)	
Outer dimension	Main unit	Height (mm)	256	
		Width (mm)	840	
		Depth (mm)	840	
	Ceiling panel (Sold separately)	Height (mm)	30	
		Width (mm)	950	
		Depth (mm)	950	
Total weight	Main unit (kg)	20		
	Ceiling panel (Sold separately) (kg)	4.2		
Fan unit	Fan		Turbo fan	
	Standard air flow	H/M/L (m3/h)	1050 / 870 / 780	1230 / 960 / 810
	Motor (W)		14	20
Air filter		Standard filter (Long life filter)		
Sound pressure level		H/M/L (dB)	32 / 29 / 28	35 / 31 / 28
Sound power level		H/M/L (dB)	47 / 44 / 43	50 / 46 / 43
Connecting pipe	Drain port	VP25		
<b>Outdoor unit</b>				
Air Flow (m3/h)			4,080	4,200
Outer dimension	Height (mm)	890		
	Width (mm)	900		
	Depth (mm)	320		
Total weight	Main unit (kg)	68		
Pipe	Min. length (m)	5.0		
	Max. total length (m)	50.0		
Flare Connections	Main	Gas (mm)	15.9	
		Liquid (mm)	9.5	
	Branch	Gas (mm)	12.7	
		Liquid (mm)	6.4	
Sound pressure level	Cooling/Heating (dB)	54 / 57	55 / 57	
Sound power level	Cooling/Heating (dB)	70 / 74	70 / 74	
Operating Range	Cooling (°C)	-15 / 46		
	Heating (°C)	-15 / 15		

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

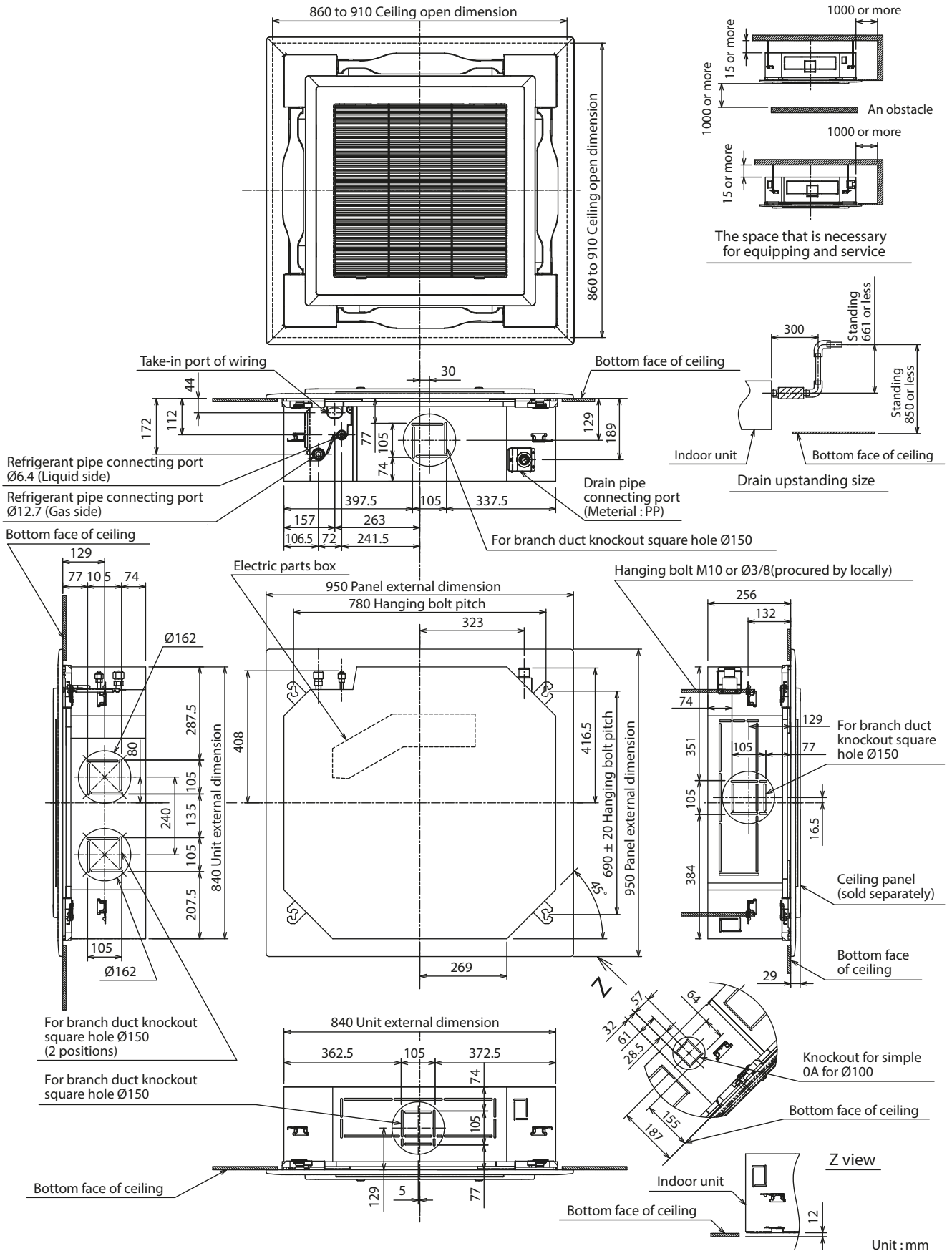
\*2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

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

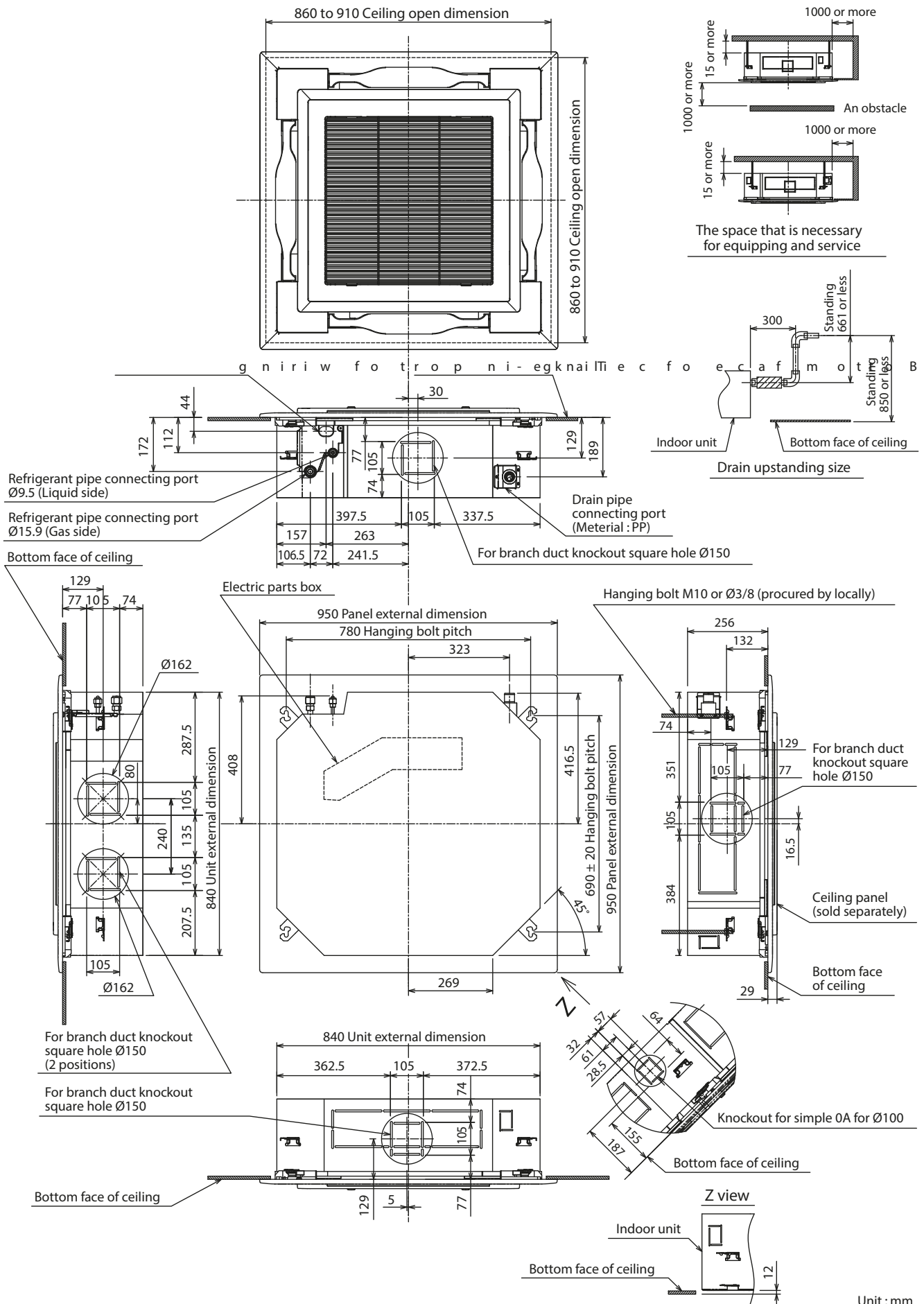
## 2-1-2. Dimension

### RAV-RM561UTP-E/TR



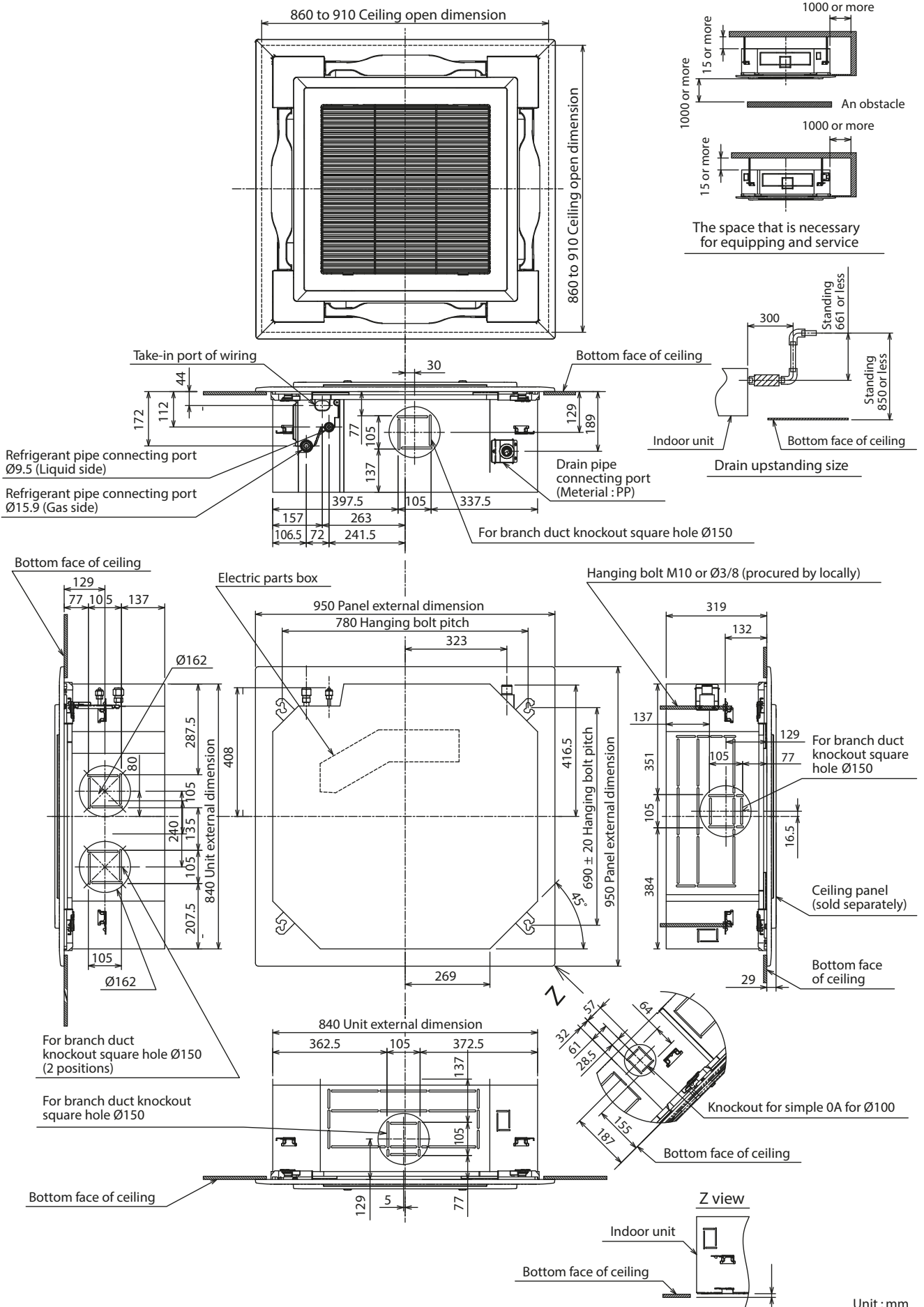


RAV-RM801UTP-E/TR



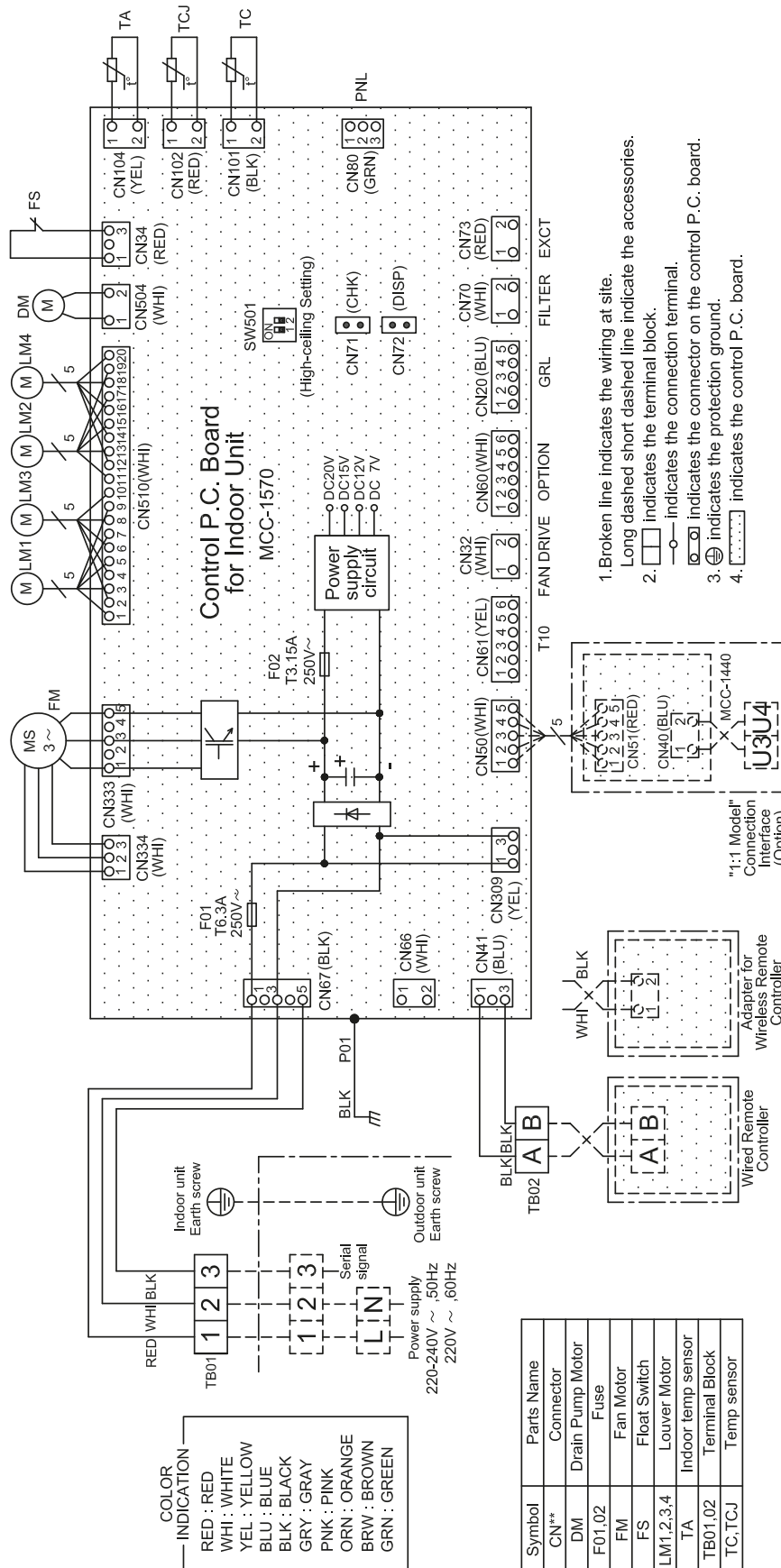
Unit : mm

RAV-RM1101UTP-E/TR and RAV-RM1401UTP-E/TR



## 2-1-3. Wiring Diagrams

RAV-RM561UTP-E/TR, RAV-RM801UTP-E/TR,  
RAV-RM1101UTP-E/TR and RAV-RM1401UTP-E/TR



## 2-1-4. Sensible Capacity Table

Digital Inverter R32 Sensible Heat Capacity : RAV-RM\*\*\*UTP-E/TR

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20.0CDB		21.5CDB		23.0CDB		24.5CDB		26.0CDB		27.0CDB		28.0CDB		30.0CDB		32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
561	10.0	4.7	3.6	4.9	3.8	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	4.9	3.7	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	4.9	3.7	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	4.8	3.7	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	4.8	3.7	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	4.8	3.6	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	4.7	3.6	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	4.7	3.6	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	4.6	3.5	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	4.6	3.5	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	4.5	3.4	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	4.5	3.4	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	4.4	3.3	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	4.3	3.3	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	4.2	3.2	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	4.2	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	

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20.0CDB		21.5CDB		23.0CDB		24.5CDB		26.0CDB		27.0CDB		28.0CDB		30.0CDB		32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
801	10.0	6.3	4.7	6.6	4.9	6.9	5.2	7.2	5.4	7.4	5.6	7.7	5.7	7.9	5.9	8.3	6.2	8.7	6.5
	12.0	6.3	4.7	6.6	4.9	6.9	5.2	7.1	5.3	7.4	5.5	7.6	5.7	7.8	5.8	8.3	6.2	8.7	6.5
	14.0	6.2	4.6	6.5	4.9	6.9	5.1	7.1	5.3	7.3	5.5	7.6	5.6	7.8	5.8	8.2	6.1	8.6	6.4
	16.0	6.2	4.6	6.5	4.8	6.8	5.1	7.1	5.3	7.3	5.4	7.5	5.6	7.7	5.8	8.2	6.1	8.6	6.4
	18.0	6.1	4.6	6.4	4.8	6.8	5.0	7.0	5.2	7.2	5.4	7.5	5.6	7.7	5.7	8.1	6.1	8.5	6.3
	20.0	6.1	4.5	6.4	4.8	6.7	5.0	6.9	5.2	7.2	5.4	7.4	5.5	7.6	5.7	8.1	6.0	8.4	6.3
	21.0	6.0	4.5	6.4	4.7	6.7	5.0	6.9	5.2	7.1	5.3	7.4	5.5	7.6	5.6	8.0	6.0	8.4	6.3
	23.0	6.0	4.5	6.3	4.7	6.6	4.9	6.8	5.1	7.1	5.3	7.3	5.4	7.5	5.6	7.9	5.9	8.3	6.2
	25.0	5.9	4.4	6.2	4.6	6.5	4.9	6.8	5.0	7.0	5.2	7.2	5.4	7.4	5.5	7.8	5.9	8.2	6.1
	27.0	5.8	4.4	6.1	4.6	6.5	4.8	6.7	5.0	6.9	5.2	7.1	5.3	7.3	5.5	7.8	5.8	8.1	6.0
	29.0	5.8	4.3	6.1	4.5	6.4	4.8	6.6	4.9	6.8	5.1	7.0	5.2	7.2	5.4	7.6	5.7	8.0	6.0
	31.0	5.7	4.2	6.0	4.5	6.3	4.7	6.5	4.9	6.7	5.0	6.9	5.2	7.1	5.3	7.5	5.6	7.9	5.9
	33.0	5.6	4.2	5.9	4.4	6.2	4.6	6.4	4.8	6.6	4.9	6.8	5.1	7.0	5.2	7.4	5.5	7.8	5.8
	35.0	5.5	4.1	5.8	4.3	6.1	4.5	6.3	4.7	6.5	4.9	6.7	5.0	6.9	5.1	7.3	5.4	7.6	5.7
37.0	5.4	4.0	5.7	4.2	6.0	4.4	6.2	4.6	6.4	4.8	6.6	4.9	6.8	5.0	7.2	5.3	7.5	5.6	
39.0	5.3	3.9	5.6	4.2	5.8	4.4	6.0	4.5	6.3	4.7	6.4	4.8	6.6	4.9	7.0	5.2	7.3	5.5	

		indoor air temp.																	
Unit size	Outdoor air temp. CDB	14.0 CWB		15.0 CWB		16.0 CWB		17.0 CWB		18.0 CWB		19.0 CWB		20.0 CWB		22.0 CWB		24.0 CWB	
		20.0 CDB		21.0 CDB		23.0 CDB		24.0 CDB		26.0 CDB		27.0 CDB		28.0 CDB		30.0 CDB		32.0 CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1101	10.0	9.09	7.83	9.41	8.00	10.04	8.34	10.28	8.52	10.75	8.87	11.07	8.85	11.39	8.85	12.06	8.77	12.61	8.60
	12.0	9.03	7.78	9.35	7.95	9.98	8.29	10.21	8.47	10.68	8.81	11.00	8.80	11.31	8.79	11.98	8.71	12.53	8.54
	14.0	8.97	7.72	9.28	7.90	9.90	8.23	10.14	8.40	10.61	8.75	10.92	8.73	11.23	8.73	11.89	8.65	12.44	8.48
	16.0	8.90	7.66	9.21	7.83	9.82	8.16	10.06	8.34	10.52	8.68	10.83	8.66	11.14	8.66	11.80	8.58	12.34	8.41
	18.0	8.82	7.59	9.12	7.76	9.74	8.09	9.97	8.26	10.43	8.60	10.73	8.59	11.04	8.58	11.69	8.50	12.23	8.34
	20.0	8.71	7.50	9.02	7.67	9.62	8.00	9.85	8.17	10.31	8.50	10.61	8.49	10.91	8.48	11.56	8.40	12.09	8.24
	21.0	8.68	7.48	8.99	7.65	9.59	7.97	9.82	8.14	10.27	8.47	10.57	8.46	10.87	8.45	11.52	8.37	12.05	8.21
	23.0	8.59	7.39	8.88	7.56	9.48	7.88	9.71	8.05	10.15	8.38	10.45	8.36	10.75	8.36	11.39	8.28	11.91	8.12
	25.0	8.49	7.31	8.79	7.48	9.38	7.79	9.60	7.96	10.04	8.28	10.34	8.27	10.63	8.26	11.26	8.19	11.78	8.03
	27.0	8.36	7.20	8.66	7.36	9.24	7.68	9.46	7.84	9.89	8.16	10.18	8.15	10.47	8.14	11.09	8.07	11.60	7.91
	29.0	8.24	7.09	8.53	7.26	9.10	7.56	9.32	7.72	9.75	8.04	10.03	8.03	10.32	8.02	10.93	7.95	11.43	7.79
	31.0	8.11	6.98	8.39	7.14	8.95	7.44	9.17	7.60	9.59	7.91	9.87	7.90	10.15	7.89	10.75	7.82	11.25	7.67
	33.0	7.97	6.86	8.24	7.01	8.80	7.31	9.00	7.46	9.42	7.77	9.70	7.76	9.97	7.75	10.56	7.68	11.05	7.53
	35.0	7.80	6.72	8.07	6.87	8.62	7.16	8.82	7.31	9.23	7.61	9.50	7.60	9.77	7.60	10.35	7.53	10.82	7.38
37.0	7.65	6.58	7.92	6.74	8.45	7.02	8.65	7.17	9.05	7.46	9.31	7.45	9.58	7.45	10.14	7.38	10.61	7.23	
39.0	7.48	6.44	7.74	6.58	8.26	6.86	8.45	7.01	8.84	7.29	9.10	7.28	9.36	7.28	9.91	7.21	10.37	7.07	

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20.0CDB		21.5CDB		23.0CDB		24.5CDB		26.0CDB		27.0CDB		28.0CDB		30.0CDB		32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1401	10.0	11.3	8.7	11.9	9.2	12.4	9.6	12.9	10.0	13.3	10.3	13.7	10.6	14.1	10.9	14.9	11.6	15.6	12.1
	12.0	11.2	8.7	11.8	9.1	12.4	9.6	12.8	9.9	13.2	10.3	13.6	10.6	14.0	10.9	14.8	11.5	15.5	12.0
	14.0	11.1	8.6	11.7	9.1	12.3	9.5	12.7	9.9	13.2	10.2	13.5	10.5	13.9	10.8	14.8	11.4	15.4	12.0
	16.0	11.0	8.6	11.6	9.0	12.2	9.5	12.6	9.8	13.1	10.1	13.5	10.4	13.8	10.7	14.7	11.4	15.3	11.9
	18.0	11.0	8.5	11.5	8.9	12.1	9.4	12.5	9.7	13.0	10.0	13.3	10.3	13.7	10.6	14.5	11.3	15.2	11.8
	20.0	10.9	8.4	11.4	8.9	12.0	9.3	12.4	9.6	12.9	10.0	13.2	10.3	13.6	10.6	14.4	11.2	15.1	11.7
	21.0	10.8	8.4	11.4	8.8	12.0	9.3	12.4	9.6	12.8	9.9	13.2	10.2	13.6	10.5	14.4	11.1	15.0	11.6
	23.0	10.7	8.3	11.3	8.7	11.8	9.2	12.3	9.5	12.7	9.8	13.0	10.1	13.4	10.4	14.2	11.0	14.9	11.5
	25.0	10.6	8.2	11.1	8.6	11.7	9.1	12.1	9.4	12.5	9.7	12.9	10.0	13.3	10.3	14.1	10.9	14.7	11.4
	27.0	10.5	8.1	11.0	8.5	11.6	9.0	12.0	9.3	12.4	9.6	12.7	9.9	13.1	10.2	13.9	10.8	14.5	11.3
	29.0	10.3	8.0	10.9	8.4	11.4	8.8	11.8	9.2	12.2	9.5	12.6	9.7	12.9	10.0	13.7	10.6	14.3	11.1
	31.0	10.2	7.9	10.7	8.3	11.2	8.7	11.6	9.0	12.0	9.3	12.4	9.6	12.8	9.9	13.5	10.5	14.1	10.9
	33.0	1																	

## 2-1-5. Part Load Performance

### Combination

Indoor unit : RAV-RM561UTP-E/TR

Outdoor unit : RAV-GM561ATP-E/TR, RAV-GM561ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	260	1500	260
RATING	5000	1560	5300	1360

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	4630	4180	3710	3240	2780	2320	1850	1390	1390	1390
	W	1710	1360	1090	870	680	530	390	280	280	280
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1560	1250	1000	790	630	480	360	260	260	260
30	Q	5270	4750	4220	3690	3170	2640	2110	1580	1580	1580
	W	1400	1120	900	710	560	430	320	230	230	230
25	Q	5510	4960	4400	3850	3310	2760	2200	1650	1650	1650
	W	1260	1000	800	640	510	390	290	210	210	210
20	Q	5660	5090	4530	3960	3400	2830	2260	1700	1700	1700
	W	1130	900	720	570	450	350	260	190	190	190

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6330	5700	5070	4430	3800	3170	2540	1900	1790	1790
	W	1440	1230	1020	830	660	510	390	290	280	280
10	Q	5750	5170	4600	4020	3450	2880	2300	1720	1630	1630
	W	1390	1180	990	800	640	500	370	280	270	270
7	Q	5300	4770	4240	3710	3180	2650	2120	1590	1500	1500
	W	1360	1160	970	790	620	490	370	270	260	260
5	Q	4080	3670	3270	2860	2450	2040	1640	1220	1160	1160
	W	1170	1000	830	680	540	420	310	230	220	220
2	Q	3990	3590	3190	2790	2390	2000	1600	1200	1130	1130
	W	1150	980	820	670	530	410	310	230	220	220
0	Q	3930	3540	3150	2750	2360	1970	1580	1180	1110	1110
	W	1140	970	810	660	520	410	310	230	220	220
-5	Q	3790	3410	3030	2650	2270	1900	1520	1140	1070	1070
	W	1110	950	790	640	510	400	300	220	210	210
-7	Q	3730	3360	2990	2610	2240	1870	1500	1120	1060	1060
	W	1100	940	780	640	510	390	300	220	210	210
-10	Q	3440	3100	2760	2410	2070	1720	1380	1030	980	980
	W	1060	910	760	610	490	380	290	210	200	200
-15	Q	2650	2390	2120	1860	1590	1330	1060	790	750	750
	W	950	810	680	550	440	340	260	190	180	180

## Combination

Indoor unit : RAV-RM801UTP-E/TR

Outdoor unit : RAV-GM801ATP-E/TR, RAV-GM801ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	260	1500	260
RATING	6700	2220	7700	2130

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	6330	5690	5060	4430	3800	3160	2530	1900	1420	1420
	W	2420	1970	1550	1190	890	660	500	370	280	280
35	Q	6700	6030	5360	4690	4020	3350	2680	2010	1500	1500
	W	2220	1810	1420	1090	820	610	460	340	260	260
30	Q	7080	6370	5670	4960	4250	3540	2830	2130	1590	1590
	W	2020	1650	1300	990	750	550	420	310	240	240
25	Q	7360	6620	5890	5150	4420	3680	2950	2210	1650	1650
	W	1830	1490	1170	900	680	500	380	280	220	220
20	Q	7470	6720	5980	5230	4480	3740	2990	2240	1670	1670
	W	1650	1340	1050	810	610	450	340	250	190	190

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	9100	8190	7280	6370	5460	4560	3640	2730	1820	1780
	W	2320	1940	1590	1280	1000	760	560	410	290	280
10	Q	8260	7440	6610	5780	4960	4130	3310	2470	1650	1610
	W	2210	1860	1520	1220	950	730	540	400	280	270
7	Q	7700	6930	6160	5390	4620	3850	3080	2310	1540	1500
	W	2130	1790	1460	1170	920	700	520	380	270	260
5	Q	5930	5340	4750	4150	3560	2970	2370	1780	1180	1160
	W	1830	1530	1260	1010	790	600	440	330	230	220
2	Q	5800	5220	4640	4060	3480	2900	2320	1740	1160	1130
	W	1800	1510	1240	990	780	590	440	320	230	220
0	Q	5710	5140	4570	4000	3430	2860	2290	1710	1140	1110
	W	1790	1500	1230	980	770	590	430	320	230	220
-5	Q	5510	4960	4410	3860	3310	2760	2200	1650	1100	1070
	W	1740	1460	1200	960	750	570	420	310	220	210
-7	Q	5420	4880	4340	3800	3250	2710	2170	1620	1080	1060
	W	1730	1450	1190	950	740	570	420	310	220	210
-10	Q	5010	4510	4010	3500	3000	2510	2000	1500	1000	980
	W	1660	1390	1140	920	720	550	400	300	210	200
-15	Q	3850	3470	3080	2700	2310	1930	1540	1150	770	750
	W	1490	1240	1020	820	640	490	360	270	190	180

## Combination

Indoor unit : RAV-RM1101UTP-E/TR

Outdoor unit : RAV-GM1101ATP-E/TR, RAV-GM1101ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	9500	2870	11200	2930

Q: Capacity in W

W: Power Consumption in W

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9000	8100	7200	6300	5400	4500	3600	2840	2840	2840
	W	3120	2490	2020	1630	1300	1010	790	650	650	650
35	Q	9500	8550	7600	6650	5700	4750	3800	3000	3000	3000
	W	2870	2290	1860	1500	1200	930	730	600	600	600
30	Q	9960	8960	7960	6970	5970	4980	3980	3140	3140	3140
	W	2600	2080	1690	1360	1090	840	660	540	540	540
25	Q	10340	9300	8270	7240	6200	5170	4130	3260	3260	3260
	W	2370	1890	1530	1240	990	770	600	490	490	490
20	Q	10610	9550	8490	7430	6370	5310	4240	3350	3350	3350
	W	2140	1710	1390	1120	890	690	540	450	450	450

## Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13410	12060	10730	9390	8050	6700	5360	4010	3590	3590
	W	3220	2760	2320	1890	1510	1190	920	710	660	660
10	Q	12190	10950	9750	8530	7310	6090	4870	3640	3260	3260
	W	3060	2630	2210	1800	1440	1130	870	680	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2930	2520	2120	1730	1380	1080	840	650	600	600
5	Q	8630	7760	6900	6040	5180	4310	3450	2580	2310	2310
	W	2510	2160	1820	1480	1180	930	720	560	520	520
2	Q	8440	7580	6750	5900	5060	4210	3370	2520	2260	2260
	W	2480	2130	1790	1460	1170	910	710	550	510	510
0	Q	8310	7470	6650	5820	4990	4150	3320	2490	2230	2230
	W	2460	2110	1770	1450	1160	910	700	550	500	500
-5	Q	8010	7200	6410	5610	4810	4000	3200	2400	2150	2150
	W	2400	2060	1730	1410	1130	880	680	530	490	490
-7	Q	7890	7090	6310	5520	4730	3940	3150	2360	2110	2110
	W	2370	2040	1710	1400	1120	880	680	530	490	490
-10	Q	7280	6550	5830	5100	4370	3640	2910	2180	1950	1950
	W	2290	1970	1650	1350	1080	840	650	510	470	470
-15	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	2040	1760	1480	1200	960	750	580	450	420	420

**Combination**

Indoor unit : RAV-RM1401UTP-E/TR

Outdoor unit : RAV-GM1401ATP-E/TR, RAV-GM1401ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	12000	4290	13000	3460

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	11370	10230	9100	7960	6820	5680	4550	3410	2840	2840
	W	4670	3770	2960	2270	1730	1300	990	750	650	650
35	Q	12000	10800	9600	8400	7200	6000	4800	3600	3000	3000
	W	4290	3470	2720	2090	1590	1200	910	690	600	600
30	Q	12580	11320	10060	8810	7550	6290	5040	3770	3140	3140
	W	3890	3150	2470	1900	1440	1090	830	630	540	540
25	Q	13050	11750	10450	9140	7830	6530	5230	3920	3260	3260
	W	3540	2860	2240	1730	1310	990	750	570	500	500
20	Q	13410	12070	10730	9390	8050	6700	5370	4020	3350	3350
	W	3200	2590	2030	1560	1180	890	680	510	450	450

**Heating**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	15570	14010	12460	10900	9340	7780	6230	4670	3590	3590
	W	3800	3190	2650	2180	1770	1390	1080	810	660	660
10	Q	14150	12730	11320	9900	8490	7070	5660	4240	3260	3260
	W	3610	3040	2530	2080	1680	1330	1020	770	630	630
7	Q	13000	11700	10400	9100	7800	6500	5200	3900	3000	3000
	W	3460	2910	2420	1990	1610	1270	980	740	600	600
5	Q	10010	9010	8010	7010	6010	5010	4010	3000	2310	2310
	W	2970	2500	2080	1710	1380	1090	840	640	520	520
2	Q	9790	8810	7830	6850	5870	4900	3920	2940	2260	2260
	W	2930	2460	2050	1690	1360	1080	830	630	510	510
0	Q	9650	8680	7720	6750	5790	4820	3860	2890	2230	2230
	W	2900	2440	2030	1670	1350	1060	820	620	500	500
-5	Q	9300	8370	7440	6510	5580	4650	3720	2790	2150	2150
	W	2830	2380	1980	1630	1320	1040	800	610	490	490
-7	Q	9160	8240	7330	6410	5500	4580	3660	2750	2110	2110
	W	2800	2350	1960	1610	1300	1030	790	600	490	490
-10	Q	8460	7610	6770	5920	5080	4230	3380	2540	1950	1950
	W	2700	2270	1890	1550	1250	990	760	580	470	470
-15	Q	6500	5850	5200	4550	3900	3250	2600	1950	1500	1500
	W	2410	2030	1690	1390	1120	890	680	520	420	420



## Combination

Indoor unit : RAV-RM561UTP-E/TR x 2 ( Twin System )

Outdoor unit : RAV-GM1101ATP-E/TR, RAV-GM1101ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	9500	2870	11200	2930

Q: Capacity in W

W: Power Consumption in W

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9000	8100	7200	6300	5400	4500	3600	2840	2840	2840
	W	3120	2490	2020	1630	1300	1010	790	650	650	650
35	Q	9500	8550	7600	6650	5700	4750	3800	3000	3000	3000
	W	2870	2290	1860	1500	1200	930	730	600	600	600
30	Q	9960	8960	7960	6970	5970	4980	3980	3140	3140	3140
	W	2600	2080	1690	1360	1090	840	660	540	540	540
25	Q	10340	9300	8270	7240	6200	5170	4130	3260	3260	3260
	W	2370	1890	1530	1240	990	770	600	490	490	490
20	Q	10610	9550	8490	7430	6370	5310	4240	3350	3350	3350
	W	2140	1710	1390	1120	890	690	540	450	450	450

## Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13410	12060	10730	9390	8050	6700	5360	4010	3590	3590
	W	3220	2760	2320	1890	1510	1190	920	710	660	660
10	Q	12190	10950	9750	8530	7310	6090	4870	3640	3260	3260
	W	3060	2630	2210	1800	1440	1130	870	680	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2930	2520	2120	1730	1380	1080	840	650	600	600
5	Q	8630	7760	6900	6040	5180	4310	3450	2580	2310	2310
	W	2510	2160	1820	1480	1180	930	720	560	520	520
2	Q	8440	7580	6750	5900	5060	4210	3370	2520	2260	2260
	W	2480	2130	1790	1460	1170	910	710	550	510	510
0	Q	8310	7470	6650	5820	4990	4150	3320	2490	2230	2230
	W	2460	2110	1770	1450	1160	910	700	550	500	500
-5	Q	8010	7200	6410	5610	4810	4000	3200	2400	2150	2150
	W	2400	2060	1730	1410	1130	880	680	530	490	490
-7	Q	7890	7090	6310	5520	4730	3940	3150	2360	2110	2110
	W	2370	2040	1710	1400	1120	880	680	530	490	490
-10	Q	7280	6550	5830	5100	4370	3640	2910	2180	1950	1950
	W	2290	1970	1650	1350	1080	840	650	510	470	470
-15	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	2040	1760	1480	1200	960	750	580	450	420	420

## Combination

Indoor unit : RAV-RM801UTP-E/TR x 2 ( Twin System )

Outdoor unit : RAV-GM1401ATP-E/TR, RAV-GM1401ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	12000	4290	13000	3460

Q: Capacity in W

W: Power Consumption in W

## Cooling

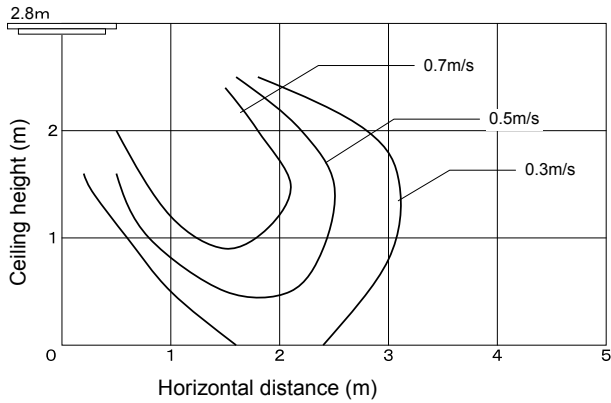
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11370	10230	9100	7960	6820	5680	4550	3410	2840	2840
	W	4670	3770	2960	2270	1730	1300	990	750	650	650
35	Q	12000	10800	9600	8400	7200	6000	4800	3600	3000	3000
	W	4290	3470	2720	2090	1590	1200	910	690	600	600
30	Q	12580	11320	10060	8810	7550	6290	5040	3770	3140	3140
	W	3890	3150	2470	1900	1440	1090	830	630	540	540
25	Q	13050	11750	10450	9140	7830	6530	5230	3920	3260	3260
	W	3540	2860	2240	1730	1310	990	750	570	500	500
20	Q	13410	12070	10730	9390	8050	6700	5370	4020	3350	3350
	W	3200	2590	2030	1560	1180	890	680	510	450	450

## Heating

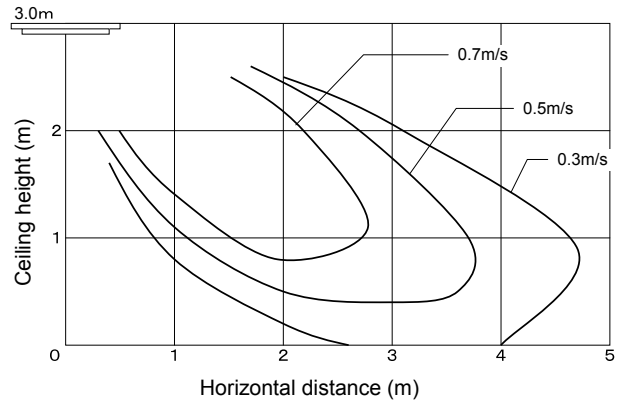
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	15570	14010	12460	10900	9340	7780	6230	4670	3590	3590
	W	3800	3190	2650	2180	1770	1390	1080	810	660	660
10	Q	14150	12730	11320	9900	8490	7070	5660	4240	3260	3260
	W	3610	3040	2530	2080	1680	1330	1020	770	630	630
7	Q	13000	11700	10400	9100	7800	6500	5200	3900	3000	3000
	W	3460	2910	2420	1990	1610	1270	980	740	600	600
5	Q	10010	9010	8010	7010	6010	5010	4010	3000	2310	2310
	W	2970	2500	2080	1710	1380	1090	840	640	520	520
2	Q	9790	8810	7830	6850	5870	4900	3920	2940	2260	2260
	W	2930	2460	2050	1690	1360	1080	830	630	510	510
0	Q	9650	8680	7720	6750	5790	4820	3860	2890	2230	2230
	W	2900	2440	2030	1670	1350	1060	820	620	500	500
-5	Q	9300	8370	7440	6510	5580	4650	3720	2790	2150	2150
	W	2830	2380	1980	1630	1320	1040	800	610	490	490
-7	Q	9160	8240	7330	6410	5500	4580	3660	2750	2110	2110
	W	2800	2350	1960	1610	1300	1030	790	600	490	490
-10	Q	8460	7610	6770	5920	5080	4230	3380	2540	1950	1950
	W	2700	2270	1890	1550	1250	990	760	580	470	470
-15	Q	6500	5850	5200	4550	3900	3250	2600	1950	1500	1500
	W	2410	2030	1690	1390	1120	890	680	520	420	420

## 2-1-6. Air Throw Distance Chart

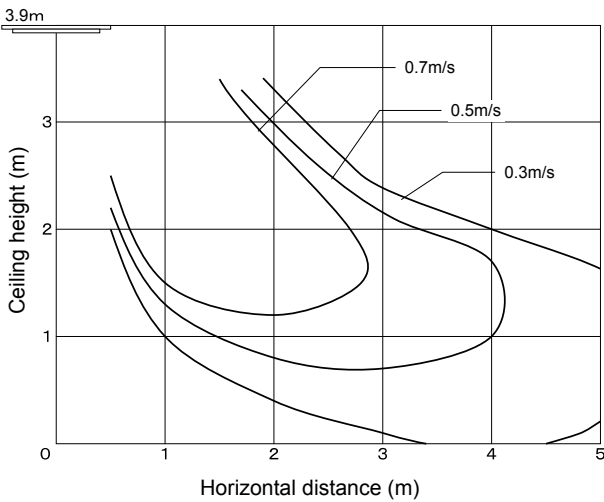
**RAV-RM561UTP-E/TR**



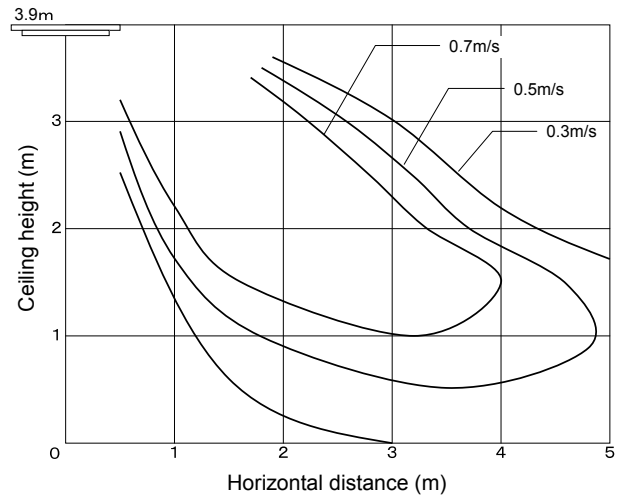
**RAV-RM801UTP-E/TR**



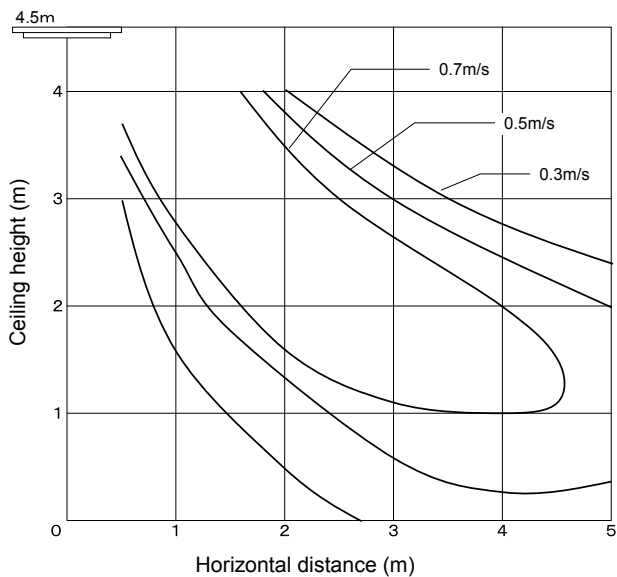
**RAV-RM1101UTP-E/TR**



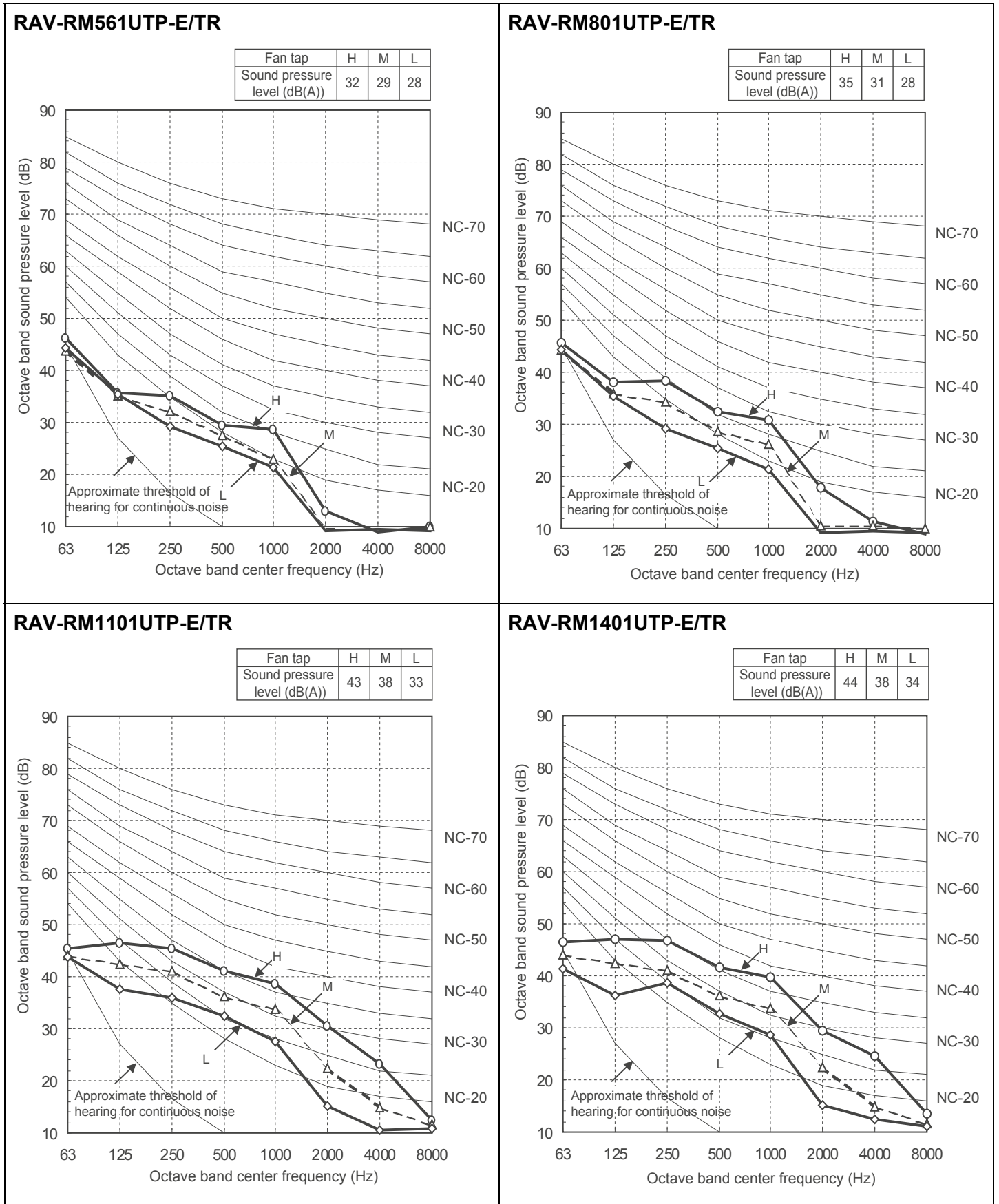
**RAV-RM1401UTP-E/TR**



**RAV-RM1101UTP-E/TR, RAV-RM1401UTP-E/TR (High ceiling)**



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



## **2-2. Compact 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

### Compact 4-way Cassette Type <Single Type>

Model		Indoor unit		RAV- RM301MUT-E/TR	RAV- RM401MUT-E/TR	RAV-RM561MUT-E/TR	
		Outdoor unit	(RAV-GM***ATJP-E)	RAV-GM301ATP-E/TR	RAV-GM401ATP-E/TR	RAV-GM561ATP-E/TR	
Cooling capacity		(kW)		2.5 < 0.9-3.0 >	3.6 < 0.9-4.0 >	5.0 < 1.5 - 5.6 >	
Heating capacity		(kW)		3.4 < 0.8-4.5 >	4.0 < 0.8-5.0 >	5.3 < 1.5 - 6.3 >	
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz					
Electrical characteristics	Cooling	Running current (A)		2.98-2.73	4.40-4.03	7.93-7.27	
		Power consumption (kW)		0.59	0.90	1.64	
		Power factor (%)		90	93	94	
		EER		4.24	4.00	3.05	
		SEER		5.94	5.76	5.69	
	Heating	Running current (A)		3.75-3.44	4.64-4.26	7.12 - 6.53	
		Power consumption (kW)		0.76	0.95	1.47	
		Power factor (%)		92	93	93	
		COP		4.47	4.21	3.61	
		SCOP		4.70	4.44	4.37	
Maximum current (A)				7.9	9.2	15.5	
<b>Indoor unit</b>							
Appearance		Main unit		Zinc hot dipping steel plate *Heat-insulating material attached to only upper plate			
		Ceiling panel (Sold separately)	Model	RBC-UM21PG(W)-E			
		Panel color		Gran White (Mansell 5PB9/1)			
Outer dimension		Main unit		Height (mm)	256	256	256
				Width (mm)	575	575	575
				Depth (mm)	575	575	575
		Ceiling panel (Sold separately)		Height (mm)	12	12	12
				Width (mm)	620	620	620
				Depth (mm)	620	620	620
Total weight		Main unit (kg)		15.0	15.0	15.0	
		Ceiling panel (Sold separately) (kg)		3.0	3.0	3.0	
Fan unit		Fan		Turbo fan			
		Standard air flow	H/M/L (m3/h)	640/520/440	660/552/468	798/672/546	
		Motor (W)		60			
Air filter		Standard filter (Long life filter)					
Sound pressure level		H/M/L (dB)		38/36/30	41/36/32	44/39/35	
Sound power level		H/M/L (dB)		53/51/45	56/51/47	59/54/50	
Connecting pipe		Drain port		VP20			
<b>Outdoor unit</b>							
Air Flow		(m3/h)		1,800	2,200	2,400	
Outer dimension		Height (mm)		550			
		Width (mm)		780			
		Depth (mm)		290			
Total weight		Main unit (kg)		33	39	40	
Pipe		Min. length (m)		2.0		5.0	
		Max. total length (m)		20.0		30.0	
Flare Connections		Gas side (mm)		9.5	12.7		
		Liquid side (mm)		6.4	6.4		
Sound pressure level		Cooling/Heating (dB)		46 / 47	49 / 50	46 / 48	
Sound power level		Cooling/Heating (dB)		61 / 62	64 / 65	63 / 65	
Operating Range		Cooling (°C)		-15 / 46			
		Heating (°C)		-15 / 15			

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

\*2 : 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.

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

## Compact 4-way Cassette (Twin System)

Model		Indoor unit 1		RAV-RM561MUT-E/TR	
		Indoor unit 2		RAV-RM561MUT-E/TR	
		Outdoor unit (RAV-GM***ATJP-E)		RAV-GM1101ATP-E/TR	
Cooling capacity		(kW)		9.5 < 3.0 - 11.2 >	
Heating capacity		(kW)		11.2 < 3.0 - 13.0 >	
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz			
Electrical characteristics	Cooling	Running current (A)		14.55-13.30	
		Power consumption (kW)		3.00	
		Power factor (%)		94	
		EER		3.17	
		SEER		5.50	
	Heating	Running current (A)		15.44 - 14.15	
		Power consumption (kW)		3.26	
		Power factor (%)		96	
		COP		3.44	
		SCOP		4.02	
Maximum current (A)		22.8			
<b>Indoor unit</b>					
Appearance		Main unit		Zinc hot dipping steel plate	
		Ceiling panel (Sold separately)		Model	RBC-UM21PG(W)-E
				Panel color	Gran White (Mansell 5PB9/1)
Outer dimension		Main unit		Height (mm)	256
				Width (mm)	575
				Depth (mm)	575
		Ceiling panel (Sold separately)		Height (mm)	12
				Width (mm)	620
				Depth (mm)	620
Total weight		Main unit (kg)		15	
		Ceiling panel (Sold separately) (kg)		3	
Fan unit		Fan		Turbo fan	
		Standard air flow	H/M/L (m3/h)	798/672/546	
		Motor (W)		60	
Air filter		Standard filter (Long life filter)			
Sound pressure level		H/M/L (dB)		44/39/35	
Sound power level		H/M/L (dB)		57/54/50	
Connecting pipe		Drain port		VP20	
<b>Outdoor unit</b>					
Air Flow		(m3/h)		4,080	
Outer dimension		Height (mm)		890	
		Width (mm)		900	
		Depth (mm)		320	
Total weight		Main unit (kg)		68	
Pipe		Min. length (m)		5.0	
		Max. total length (m)		50.0	
Flare Connections		Main		Gas (mm)	15.9
				Liquid (mm)	9.5
		Branch		Gas (mm)	12.7
				Liquid (mm)	6.4
Sound pressure level		Cooling / Heating (dB)		54 / 57	
Sound power level		Cooling/Heating (dB)		70 / 74	
Operating Range		Cooling (°C)		-15 / 46	
		Heating (°C)		-15 / 15	

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

\*2 : 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.

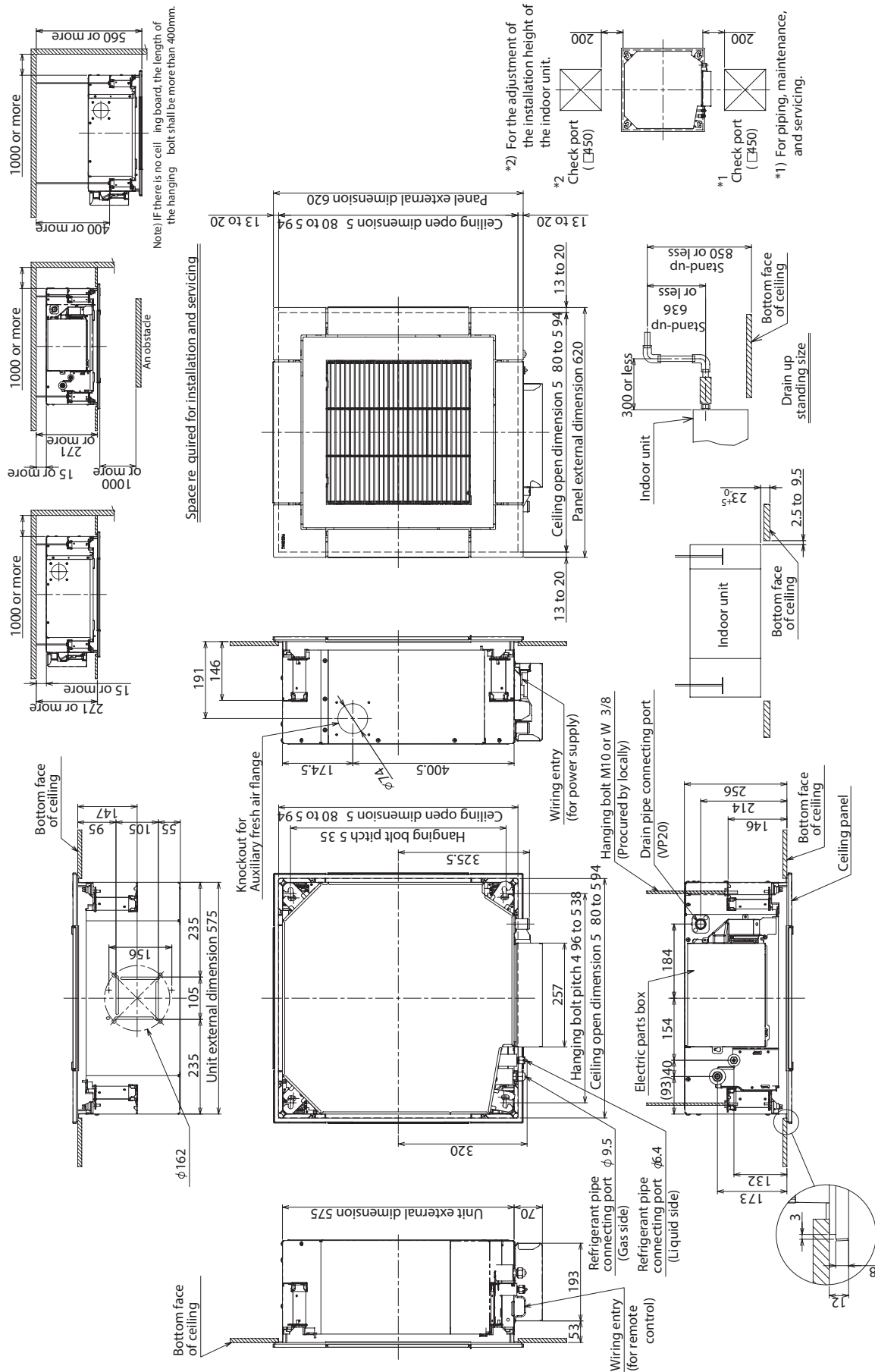
Note :

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

## 2-2-2. Dimension

### RAV-RM301MUT-E/TR



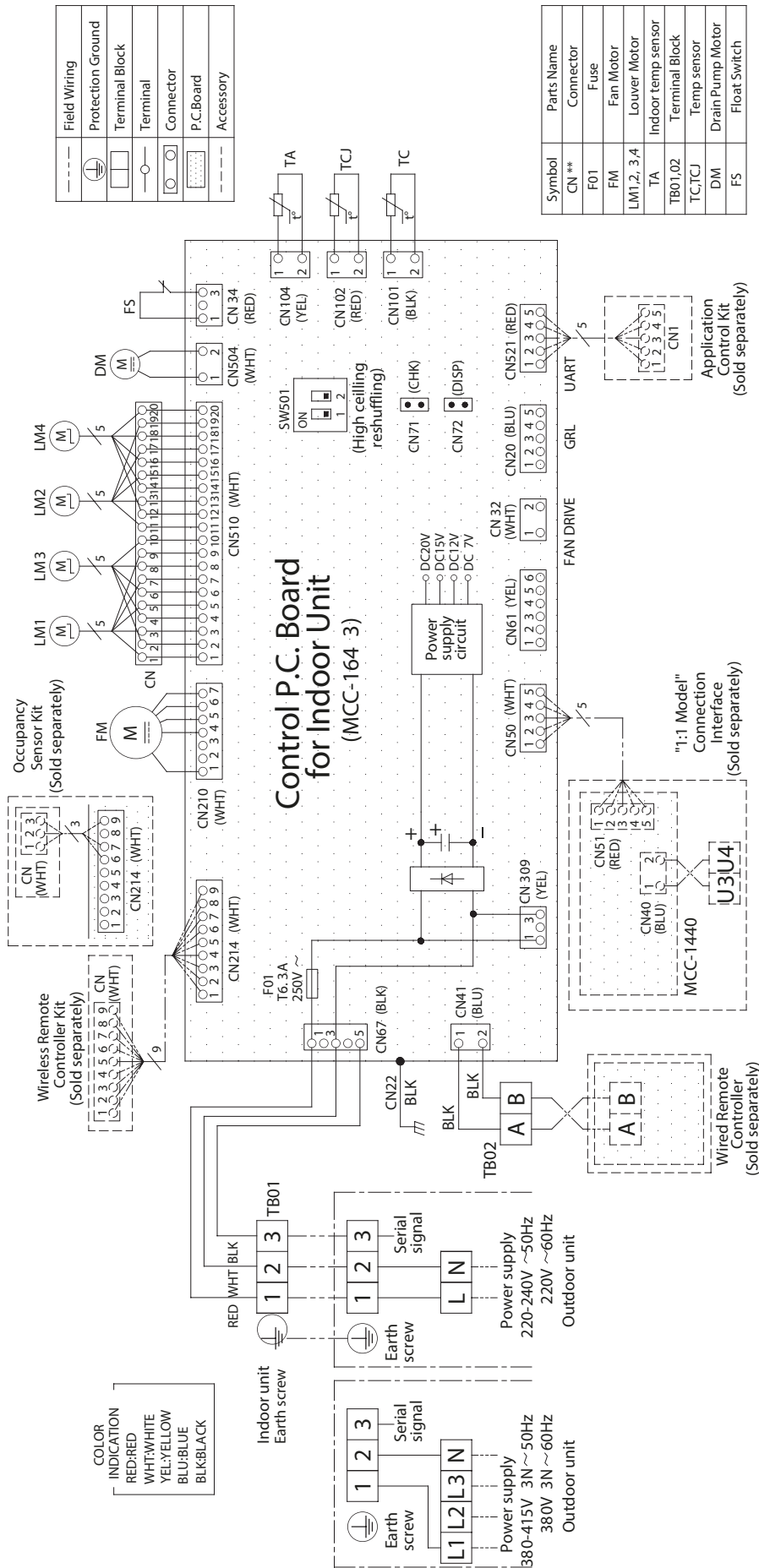
(Unit : mm)





## 2-2-3. Wiring Diagrams

### RAV-RM301MUT-E/TR, RAV-RM401MUT-E/TR and RAV-RM561MUT-E/TR



## 2-2-4. Sensible Capacity Table

### Digital Inverter R32 Sensible Heat Capacity : RAV-RM\*\*\*MUT-E/TR

		indoor air temp.																	
unit size	outdoor air temp . CDB	14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20.0CDB		21.5CDB		23.0CDB		24.5CDB		26.0CDB		27.0CDB		28.0CDB		30.0CDB		32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
301	10.0	2.46	2.07	2.55	2.12	2.72	2.20	2.78	2.25	2.91	2.34	3.00	2.34	3.08	2.33	3.26	2.31	3.41	2.26
	12.0	2.44	2.05	2.52	2.09	2.69	2.18	2.75	2.23	2.88	2.32	2.97	2.31	3.05	2.31	3.23	2.29	3.38	2.24
	14.0	2.41	2.03	2.49	2.07	2.66	2.16	2.72	2.20	2.85	2.29	2.93	2.29	3.02	2.29	3.20	2.26	3.34	2.21
	16.0	2.38	2.00	2.47	2.05	2.63	2.13	2.69	2.18	2.82	2.27	2.90	2.26	2.98	2.26	3.16	2.23	3.30	2.19
	18.0	2.35	1.98	2.44	2.02	2.60	2.11	2.66	2.15	2.78	2.24	2.87	2.24	2.95	2.23	3.12	2.21	3.26	2.16
	20.0	2.32	1.95	2.41	2.00	2.57	2.08	2.63	2.13	2.75	2.21	2.83	2.21	2.91	2.20	3.08	2.18	3.22	2.13
	21.0	2.31	1.94	2.39	1.98	2.55	2.07	2.61	2.11	2.73	2.20	2.81	2.19	2.89	2.19	3.06	2.16	3.20	2.12
	23.0	2.28	1.91	2.36	1.96	2.51	2.04	2.57	2.08	2.69	2.17	2.77	2.16	2.85	2.16	3.02	2.13	3.16	2.09
	25.0	2.24	1.88	2.32	1.92	2.47	2.00	2.53	2.05	2.65	2.13	2.73	2.13	2.80	2.12	2.97	2.10	3.10	2.05
	27.0	2.21	1.86	2.28	1.90	2.44	1.98	2.50	2.02	2.61	2.10	2.69	2.10	2.76	2.09	2.93	2.07	3.06	2.03
	29.0	2.17	1.83	2.25	1.87	2.40	1.95	2.46	1.99	2.57	2.07	2.64	2.06	2.72	2.06	2.88	2.04	3.01	1.99
	31.0	2.13	1.79	2.21	1.84	2.36	1.91	2.41	1.95	2.52	2.03	2.60	2.03	2.67	2.02	2.83	2.00	2.96	1.96
	33.0	2.10	1.76	2.17	1.80	2.31	1.88	2.37	1.92	2.48	2.00	2.55	1.99	2.62	1.99	2.78	1.97	2.91	1.92
	35.0	2.05	1.73	2.12	1.77	2.27	1.84	2.32	1.88	2.43	1.95	2.50	1.95	2.57	1.95	2.72	1.93	2.85	1.89
	37.0	2.01	1.69	2.08	1.73	2.22	1.80	2.28	1.84	2.38	1.92	2.45	1.91	2.52	1.91	2.67	1.89	2.79	1.85
	39.0	1.97	1.66	2.04	1.70	2.18	1.77	2.23	1.80	2.33	1.88	2.40	1.87	2.47	1.87	2.61	1.85	2.73	1.81

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20.0CDB		21.5CDB		23.0CDB		24.5CDB		26.0CDB		27.0CDB		28.0CDB		30.0CDB		32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
401	10.0	3.54	2.97	3.67	3.04	3.91	3.17	4.01	3.23	4.19	3.36	4.31	3.36	4.44	3.35	4.70	3.31	4.92	3.24
	12.0	3.51	2.94	3.63	3.01	3.87	3.13	3.97	3.20	4.15	3.33	4.27	3.32	4.39	3.32	4.65	3.28	4.87	3.21
	14.0	3.47	2.91	3.59	2.98	3.83	3.10	3.92	3.17	4.10	3.30	4.23	3.29	4.35	3.28	4.60	3.24	4.81	3.18
	16.0	3.43	2.88	3.55	2.94	3.79	3.06	3.88	3.13	4.06	3.26	4.18	3.25	4.30	3.24	4.55	3.21	4.76	3.14
	18.0	3.39	2.84	3.51	2.91	3.74	3.03	3.83	3.09	4.01	3.22	4.13	3.21	4.24	3.21	4.50	3.17	4.70	3.10
	20.0	3.35	2.81	3.46	2.87	3.70	2.99	3.78	3.05	3.96	3.18	4.08	3.17	4.19	3.17	4.44	3.13	4.64	3.06
	21.0	3.32	2.79	3.44	2.85	3.67	2.97	3.76	3.03	3.93	3.16	4.05	3.15	4.16	3.14	4.41	3.11	4.61	3.04
	23.0	3.28	2.75	3.39	2.81	3.62	2.93	3.71	2.99	3.88	3.11	3.99	3.10	4.10	3.10	4.35	3.06	4.55	3.00
	25.0	3.22	2.70	3.34	2.76	3.56	2.88	3.64	2.94	3.81	3.06	3.92	3.05	4.04	3.05	4.27	3.01	4.47	2.95
	27.0	3.18	2.67	3.29	2.73	3.51	2.84	3.59	2.90	3.76	3.02	3.87	3.01	3.98	3.01	4.22	2.97	4.41	2.91
	29.0	3.13	2.62	3.24	2.68	3.45	2.79	3.54	2.85	3.70	2.97	3.81	2.96	3.92	2.96	4.15	2.92	4.34	2.86
	31.0	3.07	2.58	3.18	2.64	3.39	2.75	3.47	2.80	3.63	2.92	3.74	2.91	3.85	2.91	4.08	2.87	4.26	2.81
	33.0	3.02	2.53	3.12	2.59	3.33	2.70	3.41	2.75	3.57	2.87	3.67	2.86	3.78	2.85	4.00	2.82	4.19	2.76
	35.0	2.96	2.48	3.06	2.54	3.27	2.64	3.34	2.70	3.50	2.81	3.60	2.80	3.70	2.80	3.92	2.76	4.10	2.71
	37.0	2.90	2.43	3.00	2.49	3.20	2.59	3.28	2.65	3.43	2.75	3.53	2.75	3.63	2.74	3.85	2.71	4.02	2.65
	39.0	2.84	2.38	2.94	2.43	3.14	2.54	3.21	2.59	3.36	2.70	3.46	2.69	3.56	2.68	3.77	2.65	3.94	2.60

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20.0CDB		21.5CDB		23.0CDB		24.5CDB		26.0CDB		27.0CDB		28.0CDB		30.0CDB		32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
561	10.0	4.7	3.5	4.9	3.7	5.2	3.8	5.4	4.0	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	4.9	3.6	5.2	3.8	5.3	3.9	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	4.9	3.6	5.1	3.8	5.3	3.9	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	4.8	3.6	5.1	3.8	5.3	3.9	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	4.8	3.6	5.0	3.7	5.2	3.9	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	4.8	3.5	5.0	3.7	5.2	3.8	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	4.7	3.5	5.0	3.7	5.2	3.8	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	4.7	3.5	4.9	3.6	5.1	3.8	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	4.6	3.4	4.9	3.6	5.0	3.7	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	4.6	3.4	4.8	3.6	5.0	3.7	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	4.5	3.4	4.8	3.5	4.9	3.6	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	4.5	3.3	4.7	3.5	4.9	3.6	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	4.4	3.3	4.6	3.4	4.8	3.5	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	4.3	3.2	4.5	3.4	4.7	3.5	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	4.2	3.1	4.4	3.3	4.6	3.4	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	4.2	3.1	4.4	3.2	4.5	3.3	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]

## 2-2-5. Part load performance

### Combination

Indoor unit : RAV-RM301MUT-E/TR

Outdoor unit : RAV-GM301ATP-E/TR, RAV-GM301ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	900	250	800	170
RATING	2500	590	3400	760

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	2320	2080	1850	1620	1390	1160	930	830	830	830
	W	640	580	510	450	390	340	300	270	270	270
35	Q	2500	2250	2000	1750	1500	1250	1000	900	900	900
	W	590	530	470	410	360	310	270	250	250	250
30	Q	2640	2370	2110	1840	1580	1320	1050	950	950	950
	W	530	480	420	370	320	280	240	230	230	230
25	Q	2730	2450	2180	1910	1640	1360	1090	980	980	980
	W	480	430	380	330	290	250	220	200	200	200
20	Q	2830	2550	2260	1980	1700	1420	1130	1020	1020	1020
	W	430	380	340	300	260	220	190	180	180	180

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	4100	3690	3280	2870	2460	2050	1640	1230	960	960
	W	860	750	660	550	450	360	280	200	190	190
10	Q	3660	3290	2930	2560	2200	1830	1460	1100	860	860
	W	800	690	610	510	420	340	260	190	180	180
7	Q	3400	3060	2720	2380	2040	1700	1360	1020	800	800
	W	760	660	580	490	400	320	250	180	170	170
5	Q	2580	2320	2060	1810	1550	1290	1030	770	610	610
	W	700	610	530	450	370	290	230	170	160	160
2	Q	2460	2210	1970	1720	1480	1230	980	740	580	580
	W	670	580	510	430	350	280	220	160	150	150
0	Q	2380	2140	1900	1670	1430	1190	950	710	560	560
	W	650	570	500	420	340	270	210	150	150	150
-5	Q	2180	1960	1740	1530	1310	1090	870	650	510	510
	W	610	530	460	390	320	260	200	140	140	140
-7	Q	2100	1890	1680	1470	1260	1050	840	630	490	490
	W	590	510	450	380	310	250	190	140	130	130
-10	Q	1910	1720	1530	1340	1150	960	760	570	450	450
	W	560	490	430	360	300	240	190	130	130	130
-15	Q	1470	1320	1180	1030	880	740	590	440	350	350
	W	500	430	380	320	260	210	160	120	110	110

## Combination

Indoor unit : RAV-RM401MUT-E/TR

Outdoor unit : RAV-GM401ATP-E/TR, RAV-GM401ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	900	180	800	140
RATING	3600	900	4000	950

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	3330	3000	2670	2330	2000	1670	1330	1000	830	830
	W	980	850	730	620	510	400	310	220	200	200
35	Q	3600	3240	2880	2520	2160	1800	1440	1080	900	900
	W	900	780	670	570	470	370	280	200	180	180
30	Q	3790	3410	3040	2660	2280	1900	1520	1140	950	950
	W	810	700	600	510	420	330	250	180	160	160
25	Q	3920	3530	3140	2750	2350	1960	1570	1180	980	980
	W	730	630	540	460	380	300	230	160	150	150
20	Q	4080	3670	3260	2850	2450	2040	1630	1220	1020	1020
	W	650	560	480	410	340	270	200	140	130	130

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	4820	4340	3860	3380	2890	2410	1930	1450	960	960
	W	1070	890	750	620	500	380	290	200	160	160
10	Q	4310	3880	3440	3010	2580	2150	1720	1290	860	860
	W	990	830	690	580	460	360	270	190	150	150
7	Q	4000	3600	3200	2800	2400	2000	1600	1200	800	800
	W	950	790	660	550	440	340	260	180	140	140
5	Q	3040	2730	2430	2120	1820	1520	1210	910	610	610
	W	870	720	610	500	400	310	240	170	130	130
2	Q	2890	2600	2320	2030	1740	1450	1160	870	580	580
	W	840	700	580	490	390	300	230	160	120	120
0	Q	2800	2520	2240	1960	1680	1400	1120	840	560	560
	W	820	680	570	470	380	290	220	150	120	120
-5	Q	2560	2310	2050	1800	1540	1280	1030	770	510	510
	W	760	630	530	440	350	270	210	140	110	110
-7	Q	2470	2220	1980	1730	1480	1240	990	740	490	490
	W	740	610	510	430	340	260	200	140	110	110
-10	Q	2250	2020	1800	1570	1350	1120	900	670	450	450
	W	700	590	490	410	330	250	190	130	100	100
-15	Q	1730	1560	1380	1210	1040	860	690	520	350	350
	W	630	520	430	360	290	220	170	120	90	90

## Combination

Indoor unit : RAV-RM561MUT-E/TR

Outdoor unit : RAV-GM561ATP-E/TR, RAV-GM561ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	1500	300	1500	300
RATING	5000	1640	5300	1470

Q: Capacity in W

W: Power Consumption in W

Cooling		Load(%)									
Outdoor temperature(°C)		100	90	80	70	60	50	40	30	20	10
40	Q	4820	4340	3860	3380	2890	2410	1930	1450	1450	1450
	W	1790	1450	1160	920	730	560	430	330	330	330
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1640	1330	1060	840	670	510	390	300	300	300
30	Q	5200	4680	4160	3640	3120	2600	2080	1560	1560	1560
	W	1490	1210	960	760	610	460	350	270	270	270
25	Q	5370	4830	4290	3760	3220	2680	2150	1610	1610	1610
	W	1350	1100	870	690	550	420	320	250	250	250
20	Q	5510	4960	4410	3860	3310	2760	2200	1650	1650	1650
	W	1220	990	790	620	500	380	290	220	220	220

## Heating

Heating		Load(%)									
Outdoor temperature(°C)		100	90	80	70	60	50	40	30	20	10
15	Q	6300	5670	5040	4410	3780	3150	2520	1890	1780	1780
	W	1580	1330	1110	890	690	540	410	300	320	320
10	Q	5720	5150	4570	4000	3430	2860	2290	1720	1620	1620
	W	1510	1280	1060	850	660	510	390	290	310	310
7	Q	5300	4770	4240	3710	3180	2650	2120	1590	1500	1500
	W	1470	1240	1030	830	640	500	380	280	300	300
5	Q	4080	3670	3260	2860	2450	2040	1630	1220	1150	1150
	W	1260	1060	880	710	550	430	330	240	260	260
2	Q	3990	3590	3190	2790	2390	2000	1600	1200	1130	1130
	W	1240	1050	870	700	540	420	320	240	250	250
0	Q	3930	3540	3140	2750	2360	1970	1570	1180	1110	1110
	W	1230	1040	860	700	540	420	320	230	250	250
-5	Q	3790	3410	3030	2650	2270	1900	1520	1140	1070	1070
	W	1200	1020	840	680	520	410	310	230	250	250
-7	Q	3730	3360	2980	2610	2240	1870	1490	1120	1060	1060
	W	1190	1010	830	670	520	410	310	230	240	240
-10	Q	3440	3100	2760	2410	2070	1720	1380	1030	970	970
	W	1150	970	800	650	500	390	300	220	230	230
-15	Q	2650	2390	2120	1860	1590	1330	1060	800	750	750
	W	1020	860	720	580	450	350	260	200	210	210

## Combination

Indoor unit : RAV-RM561MUT-E/TR x 2 ( Twin System )

Outdoor unit : RAV-GM1101ATP-E/TR, RAV-GM1101ATJP-E/TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	9500	3000	11200	3260

Q: Capacity in W

W: Power Consumption in W

### Cooling

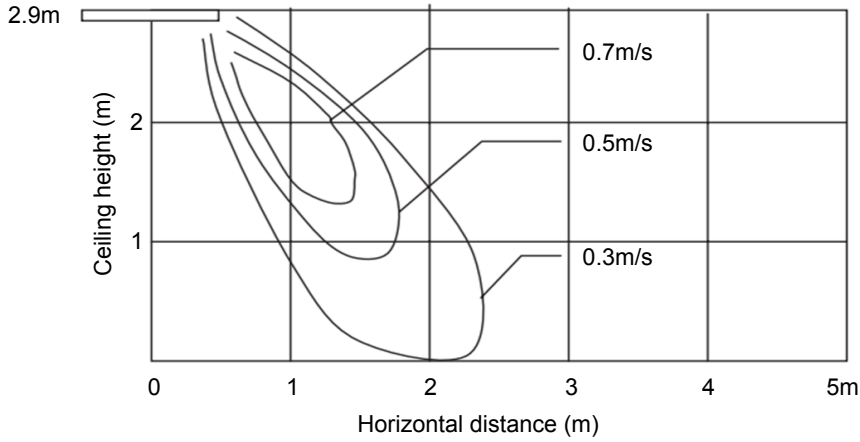
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9000	8100	7200	6300	5400	4500	3600	2840	2840	2840
	W	3260	2600	2120	1710	1360	1050	830	650	650	650
35	Q	9500	8550	7600	6650	5700	4750	3800	3000	3000	3000
	W	3000	2390	1950	1570	1250	970	760	600	600	600
30	Q	9960	8960	7960	6970	5970	4980	3980	3140	3140	3140
	W	2720	2170	1770	1420	1130	880	690	540	540	540
25	Q	10340	9300	8270	7240	6200	5170	4130	3260	3260	3260
	W	2470	1970	1610	1290	1030	800	630	490	490	490
20	Q	10610	9550	8490	7430	6370	5310	4240	3350	3350	3350
	W	2240	1780	1450	1170	930	720	570	450	450	450

### Heating

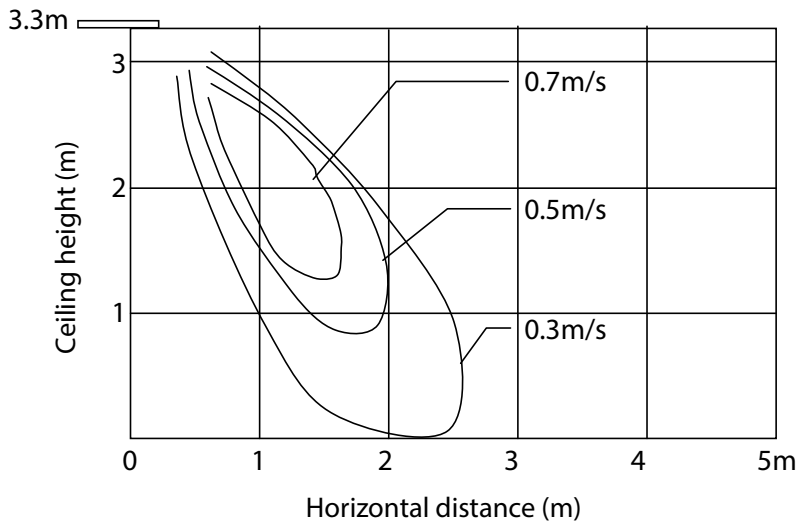
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10800	9450	8100	6750	5400	4050	3620	3620
	W	3680	3050	2560	2110	1710	1330	990	690	680	680
10	Q	12060	10850	9650	8440	7230	6030	4820	3620	3230	3230
	W	3410	2830	2380	1960	1580	1240	920	640	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	3260	2700	2270	1870	1510	1180	880	610	600	600
5	Q	8500	7650	6800	5950	5100	4250	3400	2550	2280	2280
	W	2990	2480	2080	1720	1390	1080	810	560	550	550
2	Q	8100	7290	6480	5670	4860	4050	3240	2430	2170	2170
	W	2880	2380	2000	1650	1330	1040	780	540	530	530
0	Q	7840	7060	6270	5490	4700	3920	3140	2350	2100	2100
	W	2800	2320	1950	1610	1300	1010	760	520	520	520
-5	Q	7180	6460	5740	5030	4310	3590	2870	2150	1920	1920
	W	2610	2160	1820	1500	1210	940	700	490	480	480
-7	Q	6920	6230	5530	4840	4150	3460	2770	2080	1850	1850
	W	2530	2100	1760	1450	1170	920	680	470	470	470
-10	Q	6290	5660	5030	4400	3780	3150	2520	1890	1690	1690
	W	2420	2000	1680	1390	1120	870	650	450	440	440
-15	Q	4840	4360	3870	3390	2910	2420	1940	1450	1300	1300
	W	2150	1780	1500	1230	990	780	580	400	400	400

## 2-2-6. Air Throw Distance Chart

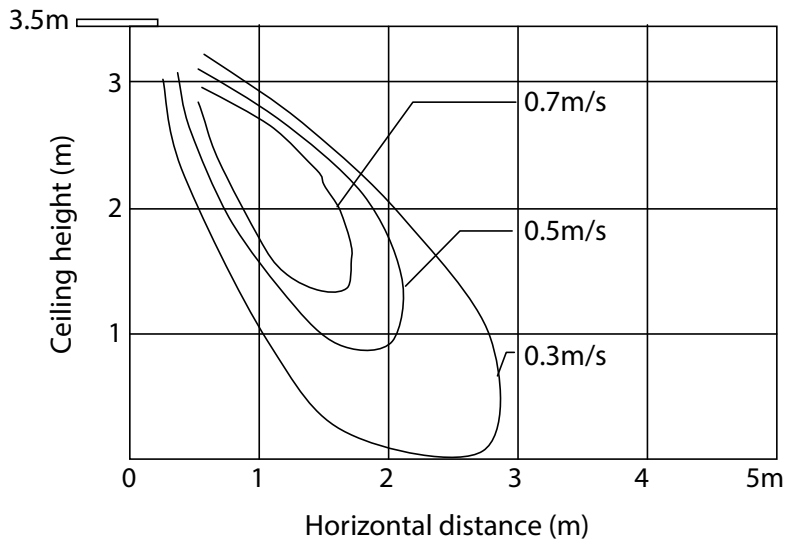
**RAV-RM301MUT-E/TR and RAV-RM401MUT-E/TR**



**RAV-RM561MUT-E/TR**

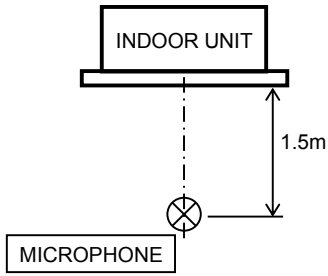


**RAV-RM561MUT-E/TR (High ceiling mode)**



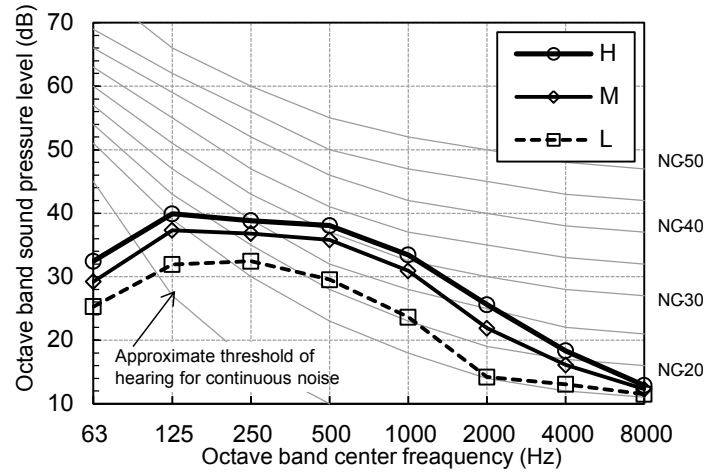


## 2-2-7. Sound Characteristics (NC curve)



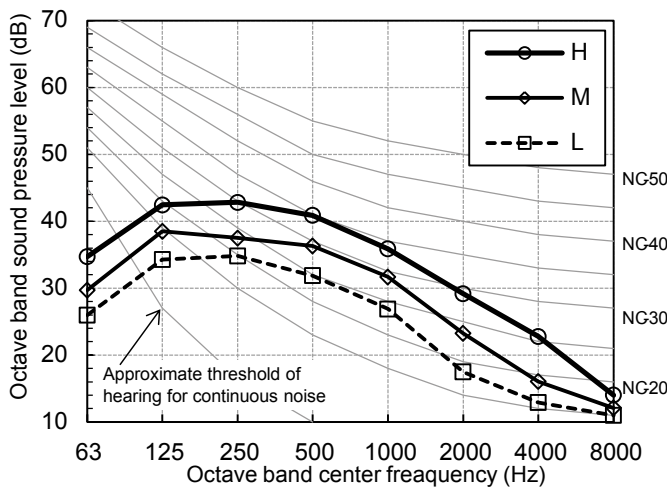
### RAV-RM301MUT-E/TR

Fan tap	H	M	L
Sound pressure level (dB(A))	38	36	30



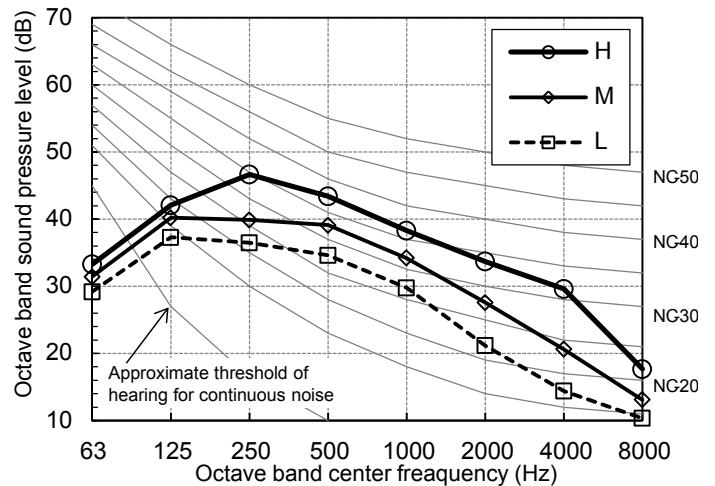
### RAV-RM401MUT-E/TR

Fan tap	H	M	L
Sound pressure level (dB(A))	41	36	32



### RAV-RM561MUT-E/TR

Fan tap	H	M	L
Sound pressure level (dB(A))	44	39	35



## **2-3. Slim Duct 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. Fan Static Characteristic**

### **2-3-7. Sound Characteristics (NC Curve)**

## 2-3-1. Specifications

### Slim Duct Type <Single Type>

Model		Indoor unit		RAV- RM301SDT-E/TR	RAV- RM401SDT-E/TR	RAV-RM561SDT-E/TR
		Outdoor unit	(RAV-GM***ATJP-E)	RAV-GM301ATP-E/TR	RAV-GM401ATP-E/TR	RAV-SM561ATP-E/TR
Cooling capacity		(kW)		2.5 < 0.9-3.0 >	3.6 < 0.9-4.0 >	5.0 < 1.5 - 5.6 >
Heating capacity		(kW)		3.4 < 0.8-4.5 >	4.0 < 0.8-5.0 >	5.3 < 1.5 - 6.3 >
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz				
Electrical characteristics	Cooling	Running current (A)		2.82-2.60	4.60-4.20	8.95 - 8.20
		Power consumption (kW)		0.56	0.93	1.91
		Power factor (%)		90	92	97
		EER		4.46	3.87	2.62
		SEER		6.29	5.86	5.14
	Heating	Running current (A)		4.20-3.85	4.75-4.35	7.03 - 6.44
		Power consumption (kW)		0.86	0.97	1.50
		Power factor (%)		93	93	97
		COP		3.95	4.12	3.53
		SCOP		4.60	4.01	4.16
Maximum current (A)				7.85	9.15	15.5
<b>Indoor unit</b>						
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			
Fan unit	Fan		Centrifugal fan			
	Standard air flow	H/M/L (m3/h)	660 / 560 / 480	690 / 600 / 522	780 / 678 / 582	
	Motor (W)		60			
External static pressure	Standard (Upper - Lower) (Pa)		5-15-30-45	5-15-30-45	4-14-29-44	
Air filter		Standard filter (Long life filter)				
Sound pressure level		H/M/L (dB)	39 / 36 / 33			45 / 40 / 36
Sound power level		H/M/L (dB)	54 / 51 / 48			60 / 55 / 51
Connecting pipe	Drain port		VP25			
<b>Outdoor unit</b>						
Air Flow (m3/h)				1800	2200	2,400
Outer dimension	Height (mm)		550			
	Width (mm)		780			
	Depth (mm)		290			
Total weight	Main unit (kg)		33	39	40	
Pipe	Min. length (m)		2.0			5.0
	Max. total length (m)		20.0			30.0
Flare Connections	Gas side (mm)		9.5		12.7	
	Liquid side (mm)		6.4		6.4	
Sound pressure level	Cooling/Heating (dB)		46 / 47	49 / 50	46 / 48	
Sound power level	Cooling/Heating (dB)		61 / 62	64 / 65	63 / 65	
Operating Range	Cooling (°C)		-15 / 46			
	Heating (°C)		-15 / 15			

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

\*2 : 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.

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

## Slim Duct (Twin System)

Model		Indoor unit 1		RAV-RM561SDT-E/TR
		Indoor unit 2		RAV-RM561SDT-E/TR
		Outdoor unit (RAV-GM***ATJP-E)		RAV-GM1101ATP-E/TR
Cooling capacity		(kW)		9.5 < 3.0 - 11.2 >
Heating capacity		(kW)		11.2 < 3.0 - 13.0 >
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz		
Electrical characteristics	Cooling	Running current (A)		14.70-13.40
		Power consumption (kW)		3.03
		Power factor (%)		94
		EER		3.14
		SEER		5.32
	Heating	Running current (A)		14.46 - 13.25
		Power consumption (kW)		2.99
		Power factor (%)		94
		COP		3.75
		SCOP		4.19
Maximum current (A)		22.8		
<b>Indoor unit</b>				
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	
Fan unit	Fan		Centrifugal fan	
	Standard air flow	H/M/L (m3/h)	780 / 678 / 582	
	Motor (W)		60	
External static pressure	Standard (Upper - Lower) (Pa)		4-14-29-44	
Air filter		Long life filter		
Sound pressure level		H/M/L (dB)	45 / 40 / 36	
Sound power level		H/M/L (dB)	60 / 55 / 51	
Connecting pipe	Drain port		VP25	
<b>Outdoor unit</b>				
Air Flow (m3/h)		4,080		
Outer dimension	Height (mm)		890	
	Width (mm)		900	
	Depth (mm)		320	
Total weight	Main unit (kg)		68	
Pipe	Min. length (m)		5	
	Max. total length (m)		50	
Flare Connections	Main	Gas (mm)	15.9	
		Liquid (mm)	9.5	
	Branch	Gas (mm)	12.7	
		Liquid (mm)	6.4	
Sound pressure level	Cooling / Heating (dB)		54 / 57	
Sound power level	Cooling/Heating (dB)		70 / 74	
Operating Range	Cooling (°C)		-15 / 46	
	Heating (°C)		-15 / 15	

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

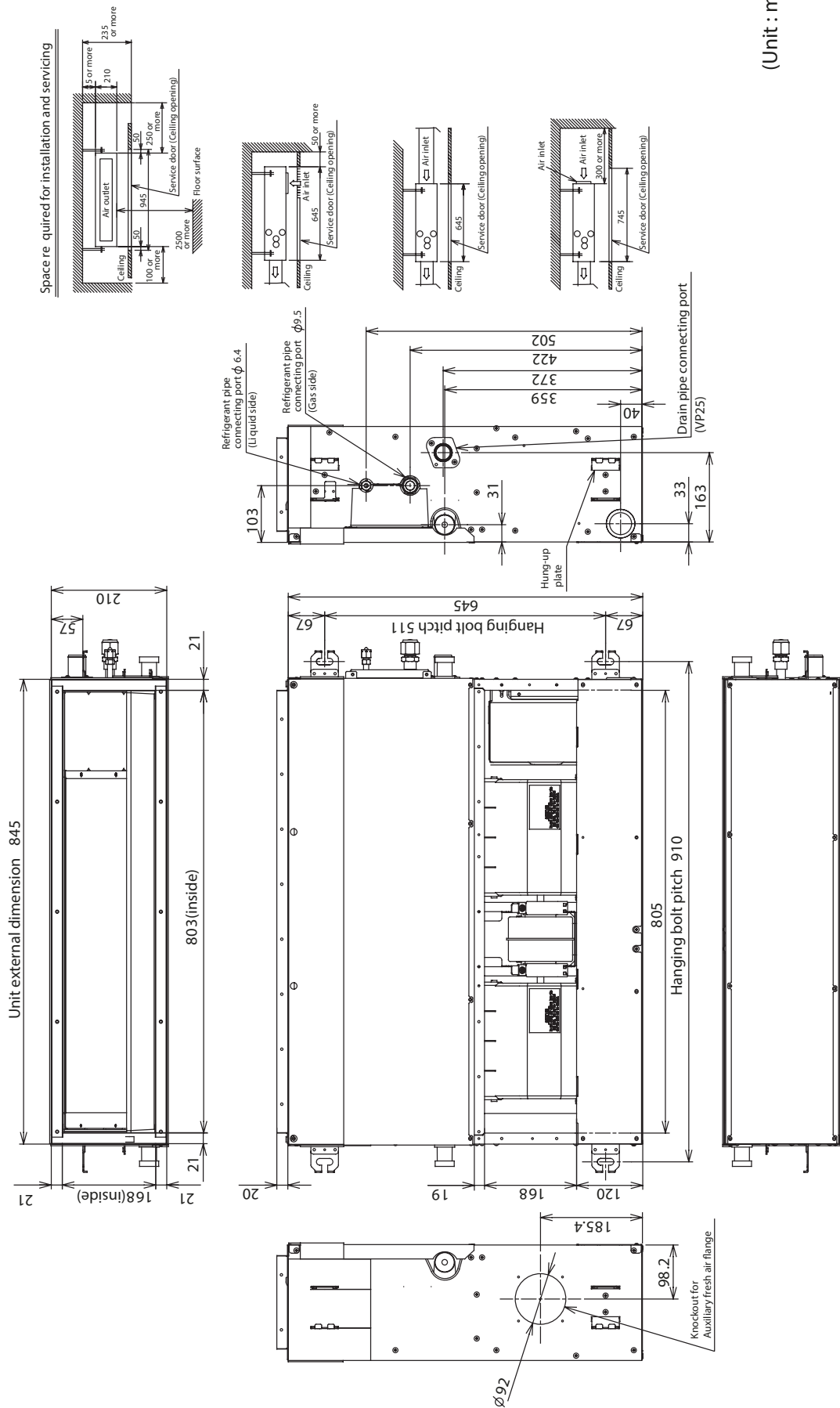
\*2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

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

## 2-3-2. Dimension

### RAV-RM301SDT-E/TR

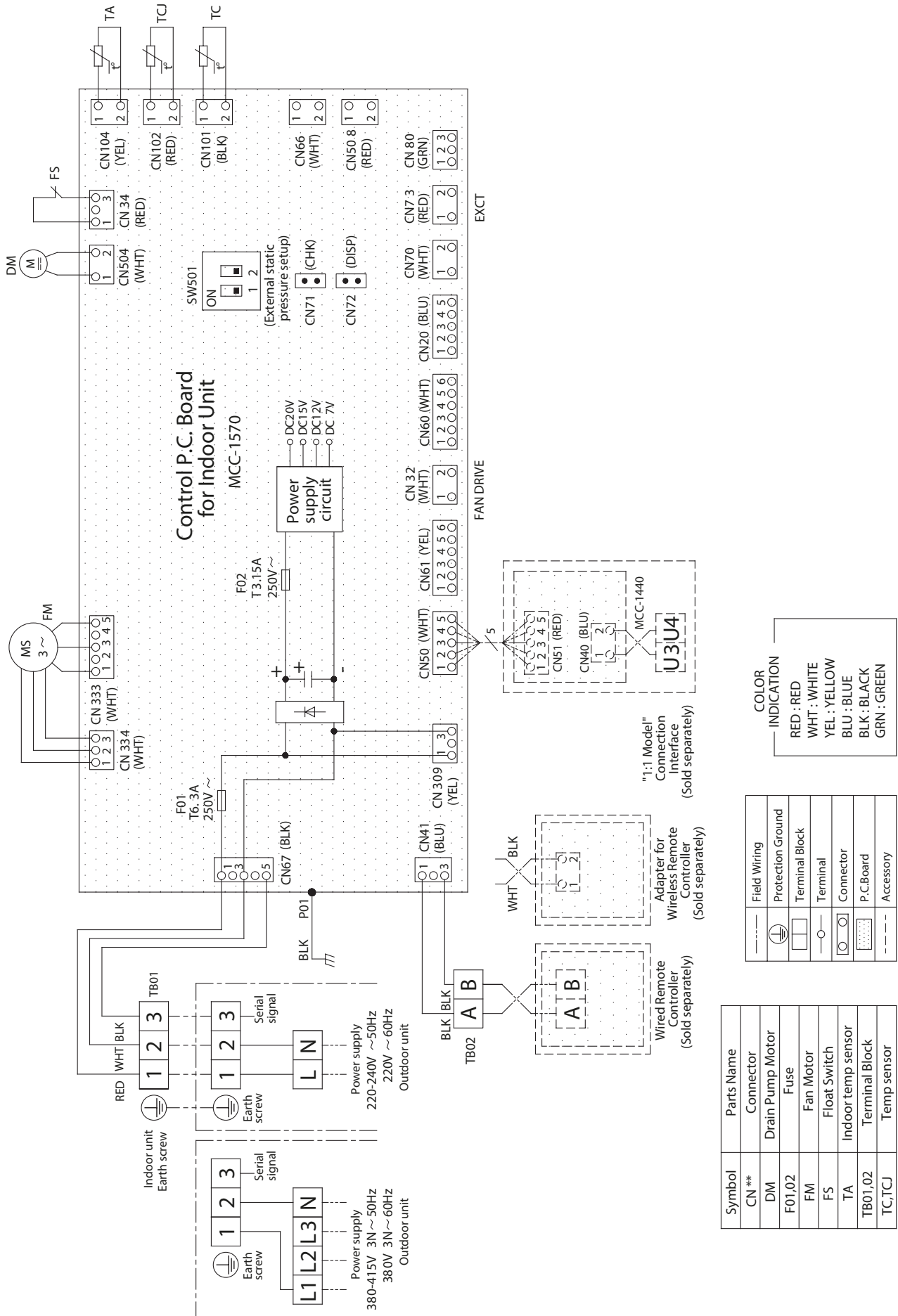


(Unit : mm)



### 2-3-3. Wiring Diagrams

#### RAV-RM301SDT-E/TR, RAV-RM401SDT-E/TR and RAV-RM561SDT-E/TR



# 2-3-4. Sensible Capacity Table

## Digital Inverter R32 Sensible Heat Capacity : RAV-RM\*\*\*SDT-E/TR

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
301	10.0	2.46	2.10	2.55	2.15	2.72	2.24	2.78	2.28	2.91	2.38	3.00	2.37	3.08	2.37	3.26	2.35	3.41	2.30
	12.0	2.44	2.08	2.52	2.13	2.69	2.21	2.75	2.26	2.88	2.35	2.97	2.35	3.05	2.35	3.23	2.32	3.38	2.28
	14.0	2.41	2.06	2.49	2.10	2.66	2.19	2.72	2.24	2.85	2.33	2.93	2.32	3.02	2.32	3.20	2.30	3.34	2.25
	16.0	2.38	2.03	2.47	2.08	2.63	2.17	2.69	2.21	2.82	2.30	2.90	2.30	2.98	2.30	3.16	2.27	3.30	2.23
	18.0	2.35	2.01	2.44	2.05	2.60	2.14	2.66	2.18	2.78	2.27	2.87	2.27	2.95	2.27	3.12	2.25	3.26	2.20
	20.0	2.32	1.98	2.41	2.03	2.57	2.11	2.63	2.16	2.75	2.25	2.83	2.24	2.91	2.24	3.08	2.22	3.22	2.17
	21.0	2.31	1.97	2.39	2.01	2.55	2.10	2.61	2.14	2.73	2.23	2.81	2.23	2.89	2.22	3.06	2.20	3.20	2.16
	23.0	2.28	1.94	2.36	1.99	2.51	2.07	2.57	2.11	2.69	2.20	2.77	2.19	2.85	2.19	3.02	2.17	3.16	2.13
	25.0	2.24	1.91	2.32	1.95	2.47	2.03	2.53	2.08	2.65	2.16	2.73	2.16	2.80	2.16	2.97	2.13	3.10	2.09
	27.0	2.21	1.88	2.28	1.93	2.44	2.01	2.50	2.05	2.61	2.13	2.69	2.13	2.76	2.13	2.93	2.11	3.06	2.06
	29.0	2.17	1.85	2.25	1.89	2.40	1.97	2.46	2.02	2.57	2.10	2.64	2.09	2.72	2.09	2.88	2.07	3.01	2.03
	31.0	2.13	1.82	2.21	1.86	2.36	1.94	2.41	1.98	2.52	2.06	2.60	2.06	2.67	2.06	2.83	2.04	2.96	2.00
	33.0	2.10	1.79	2.17	1.83	2.31	1.90	2.37	1.95	2.48	2.02	2.55	2.02	2.62	2.02	2.78	2.00	2.91	1.96
	35.0	2.05	1.75	2.12	1.79	2.27	1.87	2.32	1.91	2.43	1.98	2.50	1.98	2.57	1.98	2.72	1.96	2.85	1.92
37.0	2.01	1.72	2.08	1.76	2.22	1.83	2.28	1.87	2.38	1.95	2.45	1.94	2.52	1.94	2.67	1.92	2.79	1.88	
39.0	1.97	1.68	2.04	1.72	2.18	1.79	2.23	1.83	2.33	1.91	2.40	1.90	2.47	1.90	2.61	1.88	2.73	1.84	

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
401	10.0	3.54	3.02	3.67	3.09	3.91	3.22	4.01	3.29	4.19	3.42	4.31	3.42	4.44	3.41	4.70	3.38	4.92	3.31
	12.0	3.51	2.99	3.63	3.06	3.87	3.19	3.97	3.26	4.15	3.39	4.27	3.38	4.39	3.38	4.65	3.34	4.87	3.28
	14.0	3.47	2.96	3.59	3.03	3.83	3.15	3.92	3.22	4.10	3.35	4.23	3.35	4.35	3.34	4.60	3.31	4.81	3.24
	16.0	3.43	2.92	3.55	2.99	3.79	3.12	3.88	3.18	4.06	3.31	4.18	3.31	4.30	3.30	4.55	3.27	4.76	3.21
	18.0	3.39	2.89	3.51	2.96	3.74	3.08	3.83	3.14	4.01	3.27	4.13	3.27	4.24	3.26	4.50	3.23	4.70	3.17
	20.0	3.35	2.85	3.46	2.92	3.70	3.04	3.78	3.11	3.96	3.23	4.08	3.23	4.19	3.22	4.44	3.19	4.64	3.13
	21.0	3.32	2.83	3.44	2.90	3.67	3.02	3.76	3.08	3.93	3.21	4.05	3.20	4.16	3.20	4.41	3.17	4.61	3.11
	23.0	3.28	2.79	3.39	2.86	3.62	2.98	3.71	3.04	3.88	3.17	3.99	3.16	4.10	3.16	4.35	3.12	4.55	3.06
	25.0	3.22	2.75	3.34	2.81	3.56	2.93	3.64	2.99	3.81	3.11	3.92	3.11	4.04	3.10	4.27	3.07	4.47	3.01
	27.0	3.18	2.71	3.29	2.77	3.51	2.89	3.59	2.95	3.76	3.07	3.87	3.06	3.98	3.06	4.22	3.03	4.41	2.97
	29.0	3.13	2.67	3.24	2.73	3.45	2.84	3.54	2.90	3.70	3.02	3.81	3.01	3.92	3.01	4.15	2.98	4.34	2.92
	31.0	3.07	2.62	3.18	2.68	3.39	2.79	3.47	2.85	3.63	2.97	3.74	2.96	3.85	2.96	4.08	2.93	4.26	2.87
	33.0	3.02	2.57	3.12	2.63	3.33	2.74	3.41	2.80	3.57	2.91	3.67	2.91	3.78	2.91	4.00	2.88	4.19	2.82
	35.0	2.96	2.52	3.06	2.58	3.27	2.69	3.34	2.74	3.50	2.86	3.60	2.85	3.70	2.85	3.92	2.82	4.10	2.76
37.0	2.90	2.47	3.00	2.53	3.20	2.64	3.28	2.69	3.43	2.80	3.53	2.80	3.63	2.79	3.85	2.77	4.02	2.71	
39.0	2.84	2.42	2.94	2.48	3.14	2.58	3.21	2.63	3.36	2.74	3.46	2.74	3.56	2.73	3.77	2.71	3.94	2.65	

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
561	10.0	4.7	3.3	4.9	3.5	5.2	3.6	5.4	3.8	5.6	3.9	5.7	4.0	5.9	4.1	6.2	4.4	6.5	4.6
	12.0	4.7	3.3	4.9	3.4	5.2	3.6	5.3	3.7	5.5	3.9	5.7	4.0	5.8	4.1	6.2	4.3	6.5	4.5
	14.0	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
	16.0	4.6	3.2	4.8	3.4	5.1	3.6	5.3	3.7	5.4	3.8	5.6	3.9	5.8	4.0	6.1	4.3	6.4	4.5
	18.0	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	4.2	6.3	4.4
	20.0	4.5	3.2	4.8	3.3	5.0	3.5	5.2	3.6	5.4	3.8	5.5	3.9	5.7	4.0	6.0	4.2	6.3	4.4
	21.0	4.5	3.2	4.7	3.3	5.0	3.5	5.2	3.6	5.3	3.7	5.5	3.8	5.6	4.0	6.0	4.2	6.3	4.4
	23.0	4.5	3.1	4.7	3.3	4.9	3.5	5.1	3.6	5.3	3.7	5.4	3.8	5.6	3.9	5.9	4.1	6.2	4.3
	25.0	4.4	3.1	4.6	3.3	4.9	3.4	5.0	3.5	5.2	3.7	5.4	3.8	5.5	3.9	5.9	4.1	6.1	4.3
	27.0	4.4	3.1	4.6	3.2	4.8	3.4	5.0	3.5	5.2	3.6	5.3	3.7	5.5	3.8	5.8	4.0	6.0	4.2
	29.0	4.3	3.0	4.5	3.2	4.8	3.3	4.9	3.4	5.1	3.6	5.2	3.7	5.4	3.8	5.7	4.0	6.0	4.2
	31.0	4.2	3.0	4.5	3.1	4.7	3.3	4.9	3.4	5.0	3.5	5.2	3.6	5.3	3.7	5.6	3.9	5.9	4.1
	33.0	4.2	2.9	4.4	3.1	4.6	3.2	4.8	3.3	4.9	3.5	5.1	3.6	5.2	3.7	5.5	3.9	5.8	4.1
	35.0	4.1	2.9	4.3	3.0	4.5	3.2	4.7	3.3	4.9	3.4	5.0	3.5	5.1	3.6	5.4	3.8	5.7	4.0
37.0	4.0	2.8	4.2	3.0	4.4	3.1	4.6	3.2	4.8	3.3	4.9	3.4	5.0	3.5	5.3	3.7	5.6	3.9	
39.0	3.9	2.8	4.2	2.9	4.4	3.1	4.5	3.2	4.7	3.3	4.8	3.4	4.9	3.5	5.2	3.7	5.5	3.8	

TC: Total Capacity [kW]

SHC: Sensible Heat Capacity [kW]



## 2-3-5. Part load performance

### Combination

Indoor unit : RAV-RM301SDT-E/TR

Outdoor unit : RAV-GM301ATP-E/TR, RAV-GM301ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (WX)	Capacity Q (W)	Power consumption W (W)
Minimum	900	250	800	170
Rating	2500	560	3400	860

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	2320	2080	1850	1620	1390	1160	930	830	830	830
	W	610	550	480	430	370	330	280	270	270	270
35	Q	2500	2250	2000	1750	1500	1250	1000	900	900	900
	W	560	500	440	390	340	300	260	250	250	250
30	Q	2640	2370	2110	1840	1580	1320	1050	950	950	950
	W	500	450	400	350	310	270	230	230	230	230
25	Q	2730	2450	2180	1910	1640	1360	1090	980	980	980
	W	450	400	360	310	270	240	210	200	200	200
20	Q	2830	2550	2260	1980	1700	1420	1130	1020	1020	1020
	W	400	360	320	280	240	220	190	180	180	180

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	4100	3690	3280	2870	2460	2050	1640	1230	960	960
	W	970	850	750	620	510	410	320	230	190	190
10	Q	3660	3290	2930	2560	2200	1830	1460	1100	860	860
	W	900	790	690	580	470	380	290	210	180	180
7	Q	3400	3060	2720	2380	2040	1700	1360	1020	800	800
	W	860	750	660	550	450	360	280	200	170	170
5	Q	2580	2320	2060	1810	1550	1290	1030	770	610	610
	W	790	690	610	500	410	330	260	180	160	160
2	Q	2460	2210	1970	1720	1480	1230	980	740	580	580
	W	760	660	580	490	400	320	250	180	150	150
0	Q	2380	2140	1900	1670	1430	1190	950	710	560	560
	W	740	640	570	470	390	310	240	170	150	150
-5	Q	2180	1960	1740	1530	1310	1090	870	650	510	510
	W	690	600	530	440	360	290	220	160	140	140
-7	Q	2100	1890	1680	1470	1260	1050	840	630	490	490
	W	670	580	510	430	350	280	220	160	130	130
-10	Q	1910	1720	1530	1340	1150	960	760	570	450	450
	W	640	560	490	410	330	270	210	150	130	130
-15	Q	1470	1320	1180	1030	880	740	590	440	350	350
	W	570	490	430	360	300	240	180	130	110	110

## Combination

Indoor unit : RAV-RM401SDT-E/TR

Outdoor unit : RAV-GM401ATP-E/TR, RAV-GM401ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	900	180	800	140
Rating	3600	930	4000	970

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	3330	3000	2670	2330	2000	1670	1330	1000	830	830
	W	1020	890	750	640	520	420	320	230	200	200
35	Q	3600	3240	2880	2520	2160	1800	1440	1080	900	900
	W	930	810	690	590	480	380	290	210	180	180
30	Q	3790	3410	3040	2660	2280	1900	1520	1140	950	950
	W	840	730	620	530	430	340	260	190	160	160
25	Q	3920	3530	3140	2750	2350	1960	1570	1180	980	980
	W	750	650	560	480	390	310	230	170	150	150
20	Q	4080	3670	3260	2850	2450	2040	1630	1220	1020	1020
	W	670	580	500	430	350	270	210	150	130	130

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	4820	4340	3860	3380	2890	2410	1930	1450	960	960
	W	1100	900	770	630	510	400	290	200	160	160
10	Q	4310	3880	3440	3010	2580	2150	1720	1290	860	860
	W	1020	840	710	590	470	370	270	190	150	150
7	Q	4000	3600	3200	2800	2400	2000	1600	1200	800	800
	W	970	800	680	560	450	350	260	180	140	140
5	Q	3040	2730	2430	2120	1820	1520	1210	910	610	610
	W	890	730	620	510	410	320	240	170	130	130
2	Q	2890	2600	2320	2030	1740	1450	1160	870	580	580
	W	860	710	600	490	400	310	230	160	120	120
0	Q	2800	2520	2240	1960	1680	1400	1120	840	560	560
	W	830	690	580	480	390	300	220	150	120	120
-5	Q	2560	2310	2050	1800	1540	1280	1030	770	510	510
	W	780	640	540	450	360	280	210	140	110	110
-7	Q	2470	2220	1980	1730	1480	1240	990	740	490	490
	W	750	620	530	430	350	270	200	140	110	110
-10	Q	2250	2020	1800	1570	1350	1120	900	670	450	450
	W	720	590	500	420	330	260	190	130	100	100
-15	Q	1730	1560	1380	1210	1040	860	690	520	350	350
	W	640	530	450	370	300	230	170	120	90	90

## Combination

Indoor unit : RAV-RM561SDT-E/TR

Outdoor unit : RAV-GM561ATP-E/TR, RAV-GM561ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1500	320	1500	320
Rating	5000	1910	5300	1500

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	4630	4170	3710	3240	2780	2320	1850	1390	1390	1390
	W	2090	1670	1330	1060	840	650	480	350	350	350
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1910	1520	1220	970	770	590	430	320	320	320
30	Q	5270	4750	4220	3690	3170	2640	2110	1580	1580	1580
	W	1720	1370	1100	870	690	530	400	290	290	290
25	Q	5510	4960	4400	3850	3310	2760	2200	1650	1650	1650
	W	1540	1230	990	780	620	480	360	260	260	260
20	Q	5660	5090	4530	3960	3400	2830	2260	1700	1700	1700
	W	1380	1100	880	700	550	430	320	230	230	230

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6330	5700	5070	4430	3800	3170	2540	1900	1790	1790
	W	1580	1350	1130	920	730	580	450	350	340	340
10	Q	5750	5170	4600	4020	3450	2880	2300	1720	1630	1630
	W	1530	1310	1090	890	700	560	440	340	330	330
7	Q	5300	4770	4240	3710	3180	2650	2120	1590	1500	1500
	W	1500	1280	1070	870	690	550	430	330	320	320
5	Q	4080	3670	3270	2860	2450	2040	1640	1220	1160	1160
	W	1290	1100	920	750	590	470	370	280	270	270
2	Q	3990	3590	3190	2790	2390	2000	1600	1200	1130	1130
	W	1270	1080	900	740	580	470	360	280	270	270
0	Q	3930	3540	3150	2750	2360	1970	1580	1180	1110	1110
	W	1260	1070	900	730	580	460	360	280	270	270
-5	Q	3790	3410	3030	2650	2270	1900	1520	1140	1070	1070
	W	1230	1050	870	710	560	450	350	270	260	260
-7	Q	3730	3360	2990	2610	2240	1870	1500	1120	1060	1060
	W	1220	1040	870	700	560	450	350	270	260	260
-10	Q	3440	3100	2760	2410	2070	1720	1380	1030	980	980
	W	1170	1000	830	680	540	430	340	260	250	250
-15	Q	2650	2390	2120	1860	1590	1330	1060	790	750	750
	W	1050	890	750	610	480	380	300	230	220	220

## Combination

Indoor unit : RAV-RM561SDT-E/TR x 2 ( Twin system )

Outdoor unit : RAV-GM1101ATP-E/TR, RAV-GM1101ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	9500	3030	11200	2990

Q: Capacity in W

W: Power Consumption in W

## Cooling

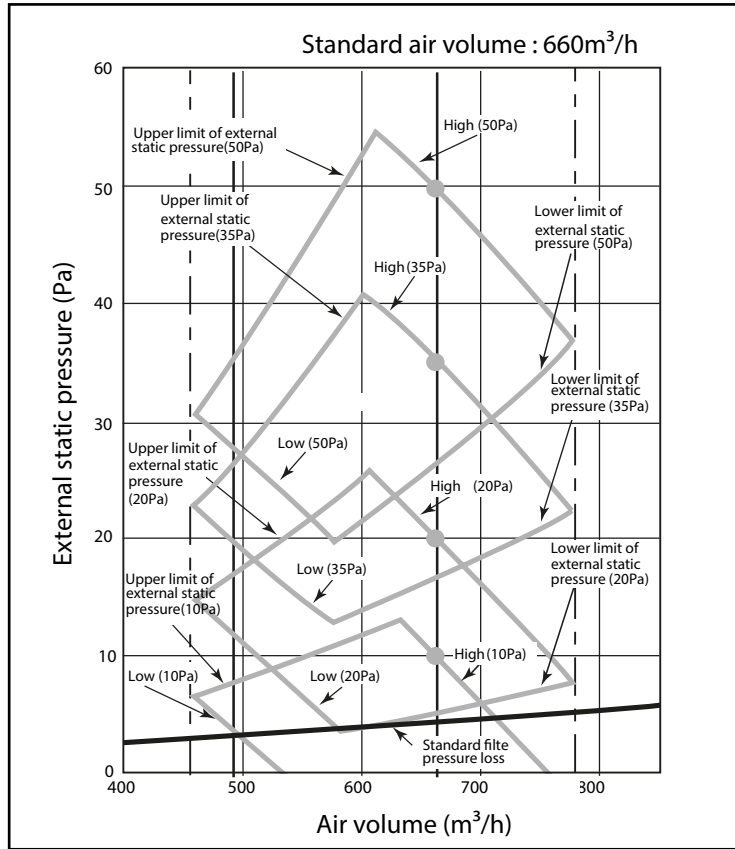
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9000	8100	7200	6300	5400	4500	3600	2840	2840	2840
	W	3290	2630	2140	1730	1370	1060	840	650	650	650
35	Q	9500	8550	7600	6650	5700	4750	3800	3000	3000	3000
	W	3030	2420	1970	1590	1260	980	770	600	600	600
30	Q	9960	8960	7960	6970	5970	4980	3980	3140	3140	3140
	W	2750	2200	1790	1440	1140	890	700	540	540	540
25	Q	10340	9300	8270	7240	6200	5170	4130	3260	3260	3260
	W	2500	2000	1620	1310	1040	810	630	490	490	490
20	Q	10610	9550	8490	7430	6370	5310	4240	3350	3350	3350
	W	2260	1800	1470	1180	940	730	570	450	450	450

## Heating

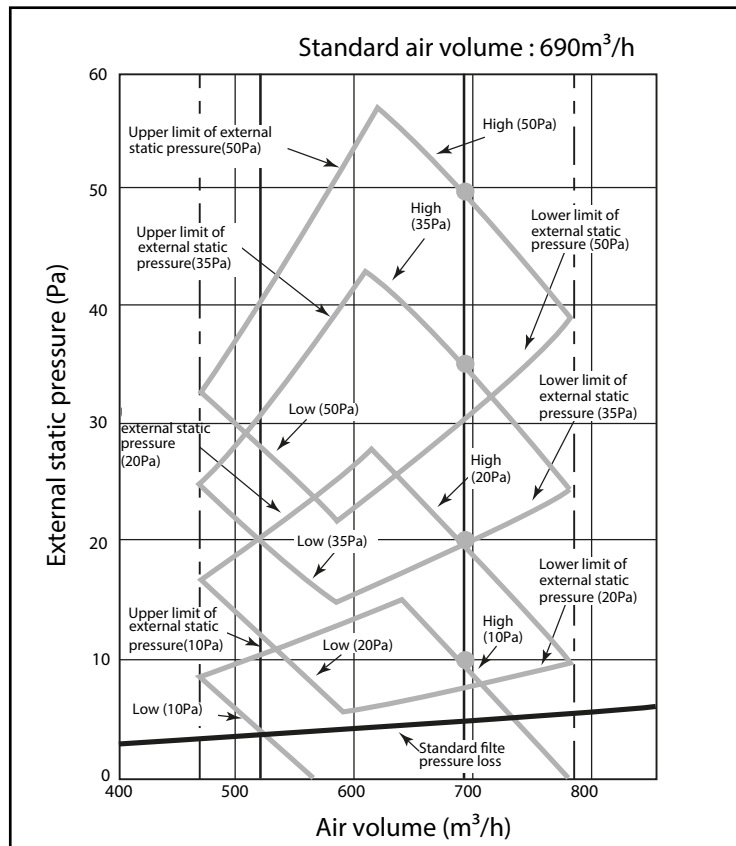
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13410	12060	10730	9390	8050	6700	5360	4020	3590	3590
	W	3280	2820	2370	1930	1540	1210	940	720	660	660
10	Q	12190	10950	9750	8530	7310	6090	4870	3660	3260	3260
	W	3120	2680	2250	1840	1470	1150	900	690	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2990	2570	2160	1760	1410	1100	860	660	600	600
5	Q	8630	7760	6900	6040	5180	4310	3450	2590	2310	2310
	W	2570	2210	1850	1510	1210	950	740	570	520	520
2	Q	8440	7580	6750	5900	5060	4210	3370	2530	2260	2260
	W	2530	2180	1830	1490	1190	930	730	560	510	510
0	Q	8310	7480	6650	5820	4990	4150	3320	2490	2230	2230
	W	2510	2150	1810	1480	1180	920	720	550	500	500
-5	Q	8010	7200	6410	5610	4810	4000	3200	2400	2150	2150
	W	2450	2100	1770	1440	1150	900	700	540	490	490
-7	Q	7890	7090	6310	5520	4730	3940	3150	2370	2110	2110
	W	2420	2080	1750	1430	1140	890	700	540	490	490
-10	Q	7280	6550	5830	5100	4370	3640	2910	2180	1950	1950
	W	2330	2010	1680	1370	1100	860	670	520	470	470
-15	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	2080	1790	1510	1230	980	770	600	460	420	420

### 2-3-6. Fan Static Characteristic

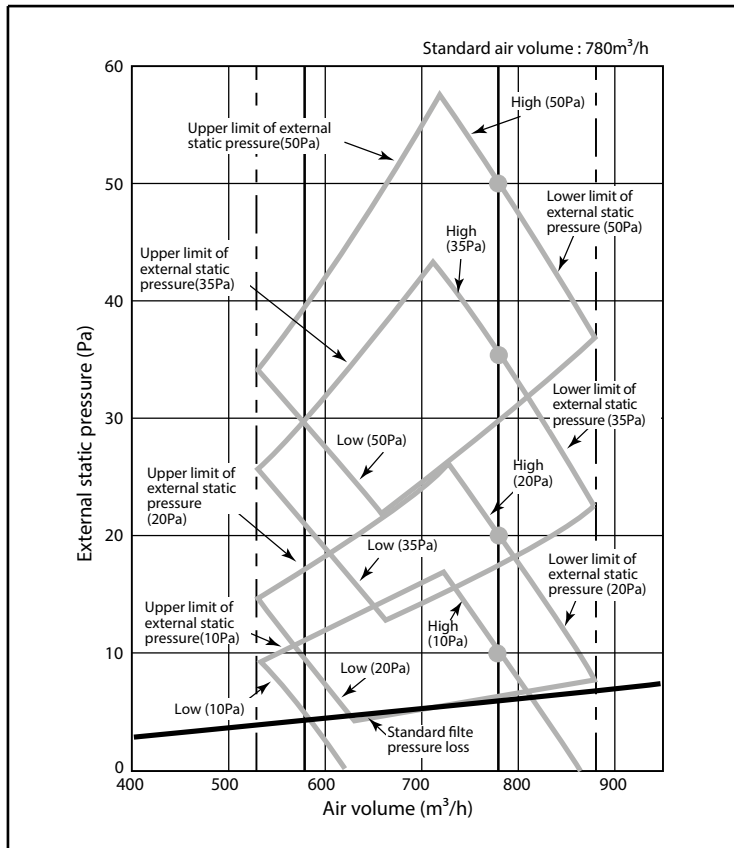
RAV-RM301SDT-E/TR



RAV-RM401SDT-E/TR

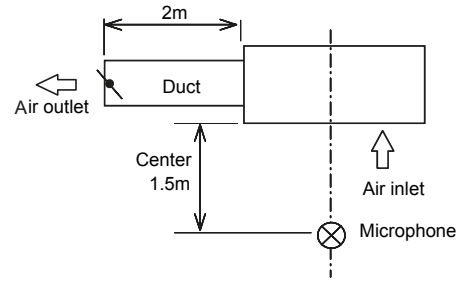


**RAV-RM561SDT-E/TR**



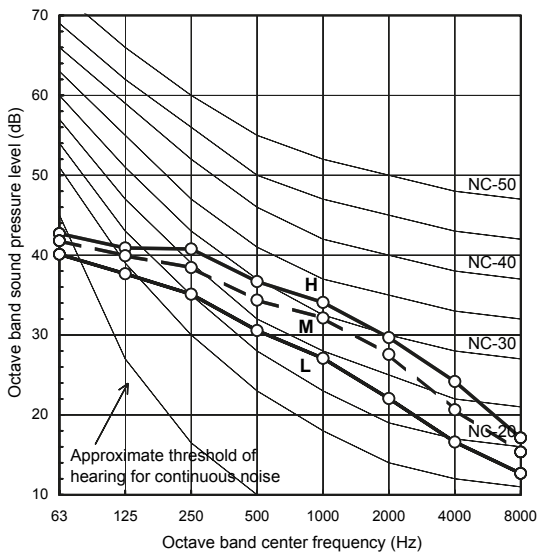
## 2-3-7. Sound Characteristics (NC curve)

RAV-RM301SDT-E/TR, RAV-RM401SDT-E/TR



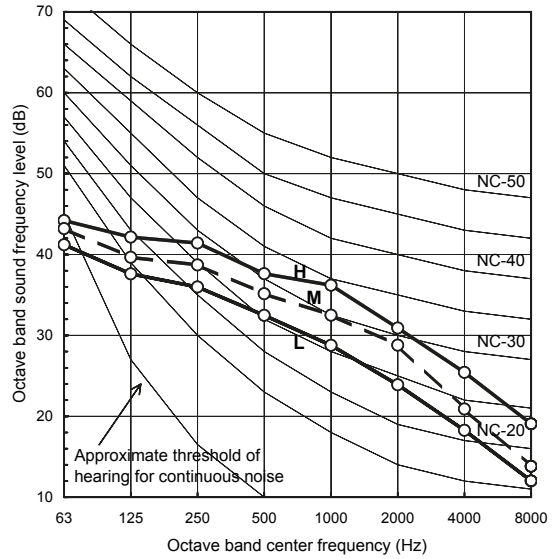
[External static pressure 10Pa]

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



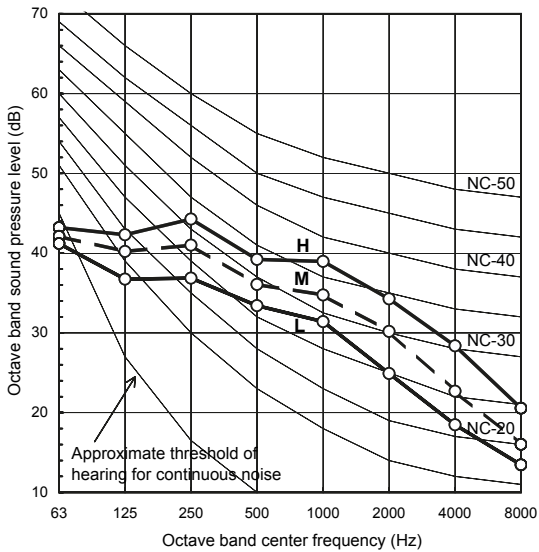
[External static pressure 20Pa]

Fan tap	H	M	L
Sound pressure level (dB(A))	40	37	34



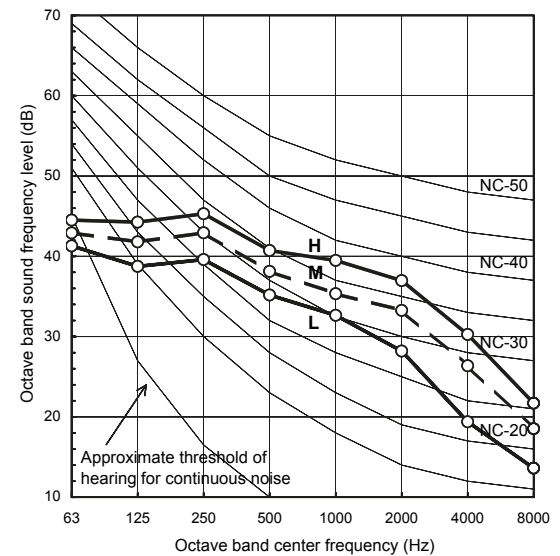
[External static pressure 35Pa]

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



[External static pressure 50Pa]

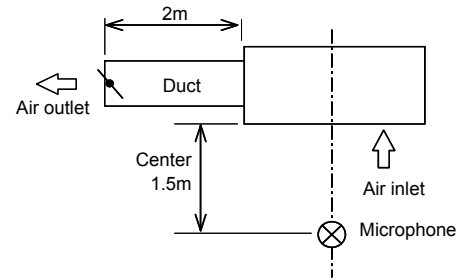
Fan tap	H	M	L
Sound pressure level (dB(A))	43	40	37



**RAV-RM561SDT-E/TR**

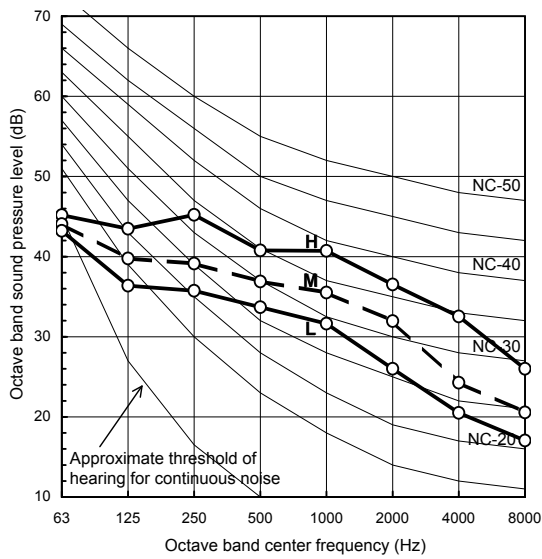
[Measuring location]

Under air intake



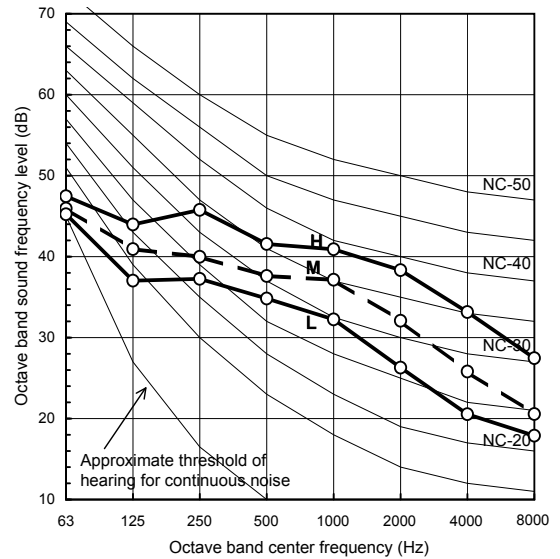
[External static pressure 10Pa]

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



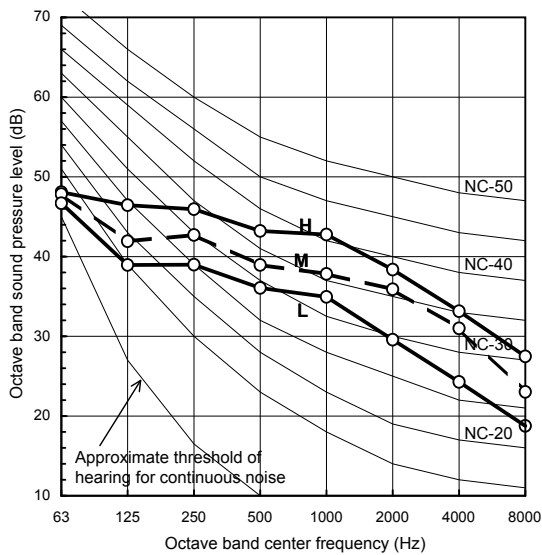
[External static pressure 20Pa]

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



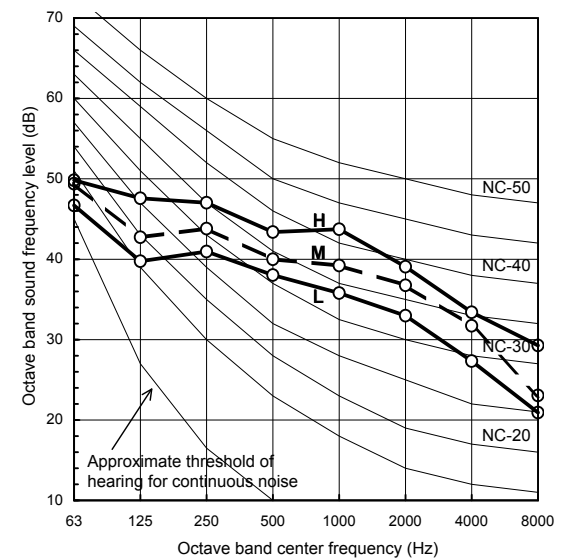
[External static pressure 35Pa]

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





## **2-4. Standard Duct 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 Characteristic**

### **2-4-7. Sound Characteristics (NC Curve)**

## 2-4-1. Specifications

### Standard Duct Type <Single Type>

Model		Indoor unit		RAV-RM561BTP-E/TR	RAV-RM801BTP-E/TR	RAV-RM1101BTP-E/TR	RAV-RM1401BTP-E/TR
		Outdoor unit	(RAV-GM***ATJP-E)	RAV-GM561ATP-E/TR	RAV-GM801ATP-E/TR	RAV-GM1101ATP-E/TR	RAV-GM1401ATP-E/TR
Cooling capacity		(kW)		5.0 < 1.5 - 5.6 >	6.7 < 1.5 - 7.4 >	9.5 < 3.0 - 11.2 >	12.1 < 3.0 - 13.2 >
Heating capacity		(kW)		5.3 < 1.5 - 6.3 >	7.7 < 1.5 - 9.0 >	11.2 < 3.0 - 13.0 >	13.0 < 3.0 - 16.0 >
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz					
Electrical characteristics	Cooling	Running current	(A)	8.58 - 7.86	11.20 - 10.20	14.50-13.20	21.40-19.60
		Power consumption	(kW)	1.83	2.38	2.99	4.42
		Power factor	(%)	97	97	94	94
		EER		2.73	2.82	3.18	2.74
		SEER		5.28	5.20	5.28	5.36
	Heating	Running current	(A)	7.59 - 6.96	10.90 - 9.97	14.50-13.30	17.40-15.90
		Power consumption	(kW)	1.62	2.32	2.99	3.60
		Power factor	(%)	97	97	94	94
		COP		3.27	3.32	3.75	3.61
		SCOP		4.08	4.13	4.19	4.19
Maximum current				15.5	15.5	22.8	22.8
<b>Indoor unit</b>							
Appearance	Main unit		Zinc hot dipping hot steel				
Outer dimension	Main unit	Height	(mm)	275			
		Width	(mm)	700	1,000	1,400	
		Depth	(mm)	750			
Total weight	Main unit		(kg)	23	30	40	
Fan unit	Fan		Centrifugal fan				
	Air Flow	H/M/L	(m3/h)	800 / 630 / 480	1200 / 930 / 720	2100 / 1650 / 1260	2100 / 1650 / 1260
	Motor		(W)	150		250	
Extarnal static pressure	Standard (Upper - Lower)		(Pa)	30 (120 - 30 )		50 (120 - 30 )	
Air filter		Standard filter (Long life filter)					
Sound pressure level	H/M/L		(dB)	33 / 29 / 25	34 / 30 / 26	40 / 36 / 33	40 / 36 / 33
Sound power level	H/M/L		(dB)	48 / 44 / 40	49 / 45 / 41	55 / 51 / 48	55 / 51 / 48
Connecting pipe	Drain port		VP25				
<b>Outdoor unit</b>							
Air Flow			(m3/h)	2,400	2,700	4,080	4,200
Outer dimension	Height	(mm)		550		890	
	Width	(mm)		780		900	
	Depth	(mm)		290		320	
Total weight	Main unit		(kg)	40	44	68	
Pipe	Min. length	(m)		5.0			
	Max. total length	(m)		30.0		50.0	
Flare Connections	Gas side	(mm)		12.7	15.9		
	Liquid side	(mm)		6.4	9.5		
Sound pressure level	Cooling/Heating		(dB)	46 / 48	48 / 52	54 / 57	55 / 57
Sound power level	Cooling/Heating		(dB)	63 / 65	65 / 69	70 / 74	70 / 74
Operating Range	Cooling	(°C)		-15 / 46			
	Heating	(°C)		-15 / 15			

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

\*2 : 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.

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

## Standard Duct (Twin System)

Model		Indoor unit 1		RAV-RM561BTP-E/TR	RAV-RM801BTP-E/TR
		Indoor unit 2		RAV-RM561BTP-E/TR	RAV-RM801BTP-E/TR
		Outdoor unit	(RAV-GM***ATJP-E)	RAV-GM1101ATP-E/TR	RAV-GM1401ATP-E/TR
Cooling capacity		(kW)		9.5 < 3.0 - 11.2 >	12.1 < 3.0 - 13.2 >
Heating capacity		(kW)		11.2 < 3.0 - 13.0 >	13.0 < 3.0 - 16.0 >
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz			
Electrical characteristics	Cooling	Running current (A)		14.5-13.2	21.37 - 19.59
		Power consumption (kW)		2.99	4.42
		Power factor (%)		94	94
		EER		3.18	2.74
		SEER		5.28	5.36
	Heating	Running current (A)		14.5-13.3	17.40-15.90
		Power consumption (kW)		2.99	3.60
		Power factor (%)		94	94
		COP		3.75	3.61
		SCOP		4.22	4.21
Maximum current				22.8	22.8
<b>Indoor unit</b>					
Appearance	Main unit		Zinc hot dipping steel plate		
Outer dimension	Main unit	Height (mm)	275		
		Width (mm)	700	1,000	
		Depth (mm)	750		
Total weight	Main unit		23	30	
Fan unit	Fan		Centrifugal fan		
	Standard air flow	H/M/L (m3/h)	800/630/480		1200/930/720
	Motor (W)		150		
External static pressure	Standard (Upper - Lower) (Pa)		30 (120 - 30 )		
Air filter		Long life filter			
Sound pressure level		H/M/L (dB)	33 / 29 / 25		34 / 30 / 26
Sound power level		H/M/L (dB)	48 / 44 / 40		49 / 45 / 41
Connecting pipe	Drain port		VP25		
<b>Outdoor unit</b>					
Air Flow (m3/h)		4,080		4,200	
Outer dimension	Height (mm)		890		
	Width (mm)		900		
	Depth (mm)		320		
Total weight	Main unit (kg)		68		
Pipe	Min. length (m)		5.0		
	Max. total length (m)		50.0		
Flare Connections	Main	Gas (mm)	15.9		
		Liquid (mm)	9.5		
	Branch	Gas (mm)	12.7		
		Liquid (mm)	6.4		
Sound pressure level	Cooling/Heating (dB)		54 / 57	55 / 57	
Sound power level	Cooling/Heating (dB)		70 / 74	70 / 74	
Operating Range	Cooling (°C)		-15 / 46		
	Heating (°C)		-15 / 15		

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

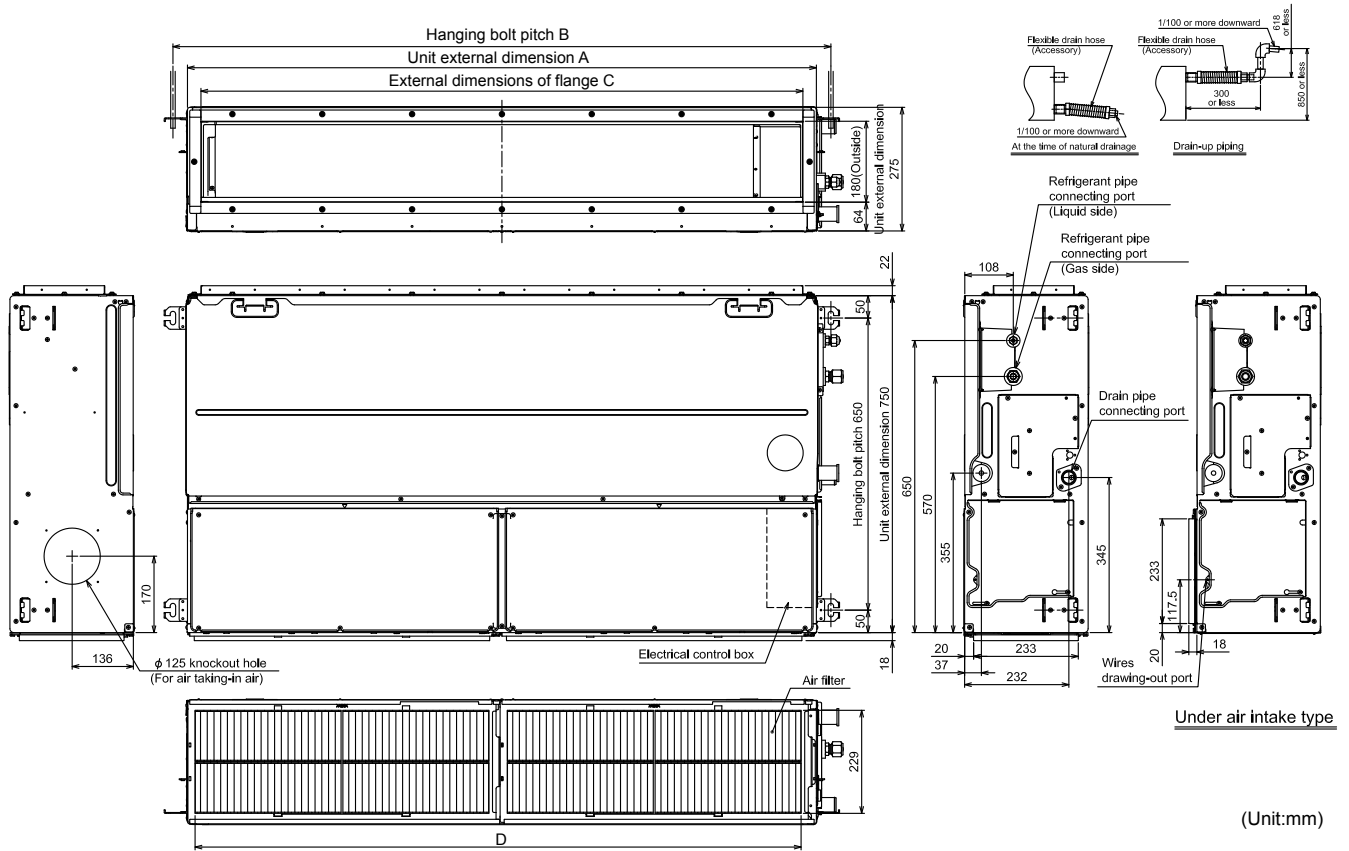
\*2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

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

## 2-4-2. Dimension

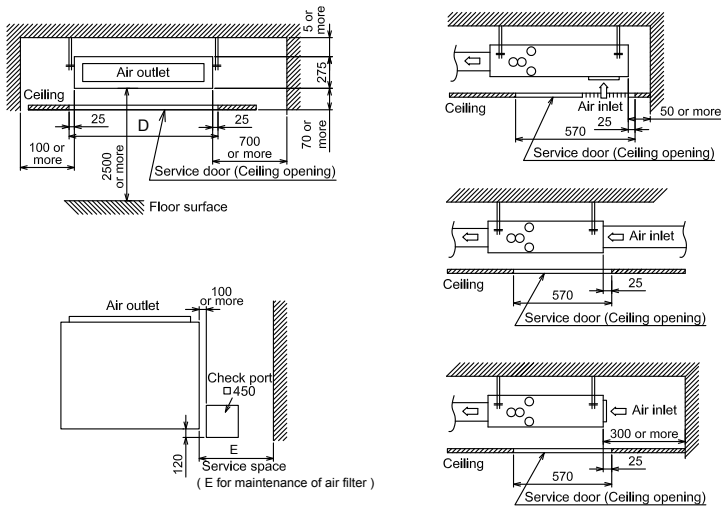
### RAV-RM561BTP-E/TR, RAV-RM801BTP-E/TR, RAV-RM1101BTP-E/TR and RAV-RM1401BTP-E/TR



### Dimension

	A	B	C	D
RAV-SM566BTP-E / E1	700	765	640	750
RAV-SM806BTP-E / E1	1000	1065	940	1050
RAV-SM1106BTP-E / E1	1400	1465	1340	1450
RAV-SM1406BTP-E				

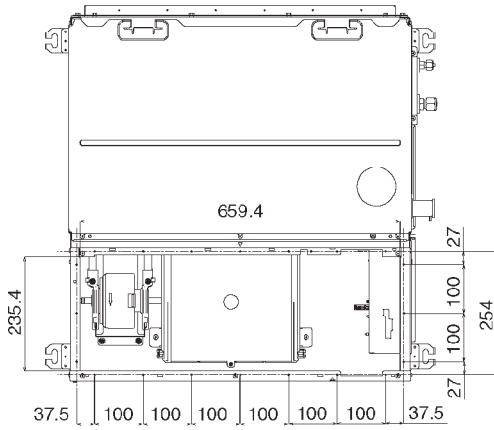
### Space required for installation and servicing



	E
RAV-SM566BTP-E / E1	700
RAV-SM806BTP-E / E1	500
RAV-SM1106BTP-E / E1	700
RAV-SM1406BTP-E	

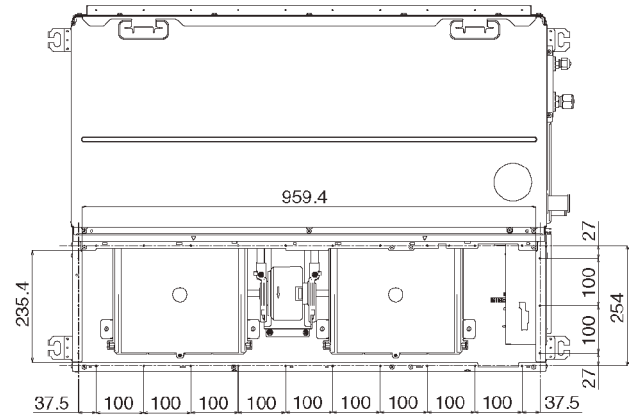
**RAV-RM561BTP-E/TR**

<Under air intake>

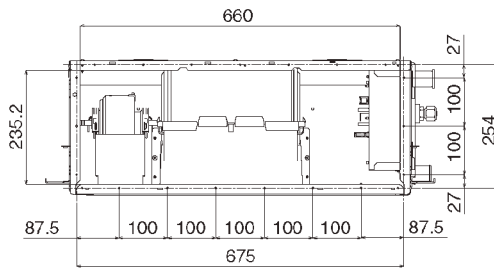


**RAV-RM801BTP-E/TR**

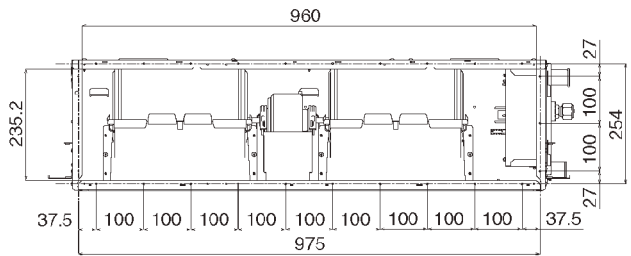
<Under air intake>



<Back air intake>

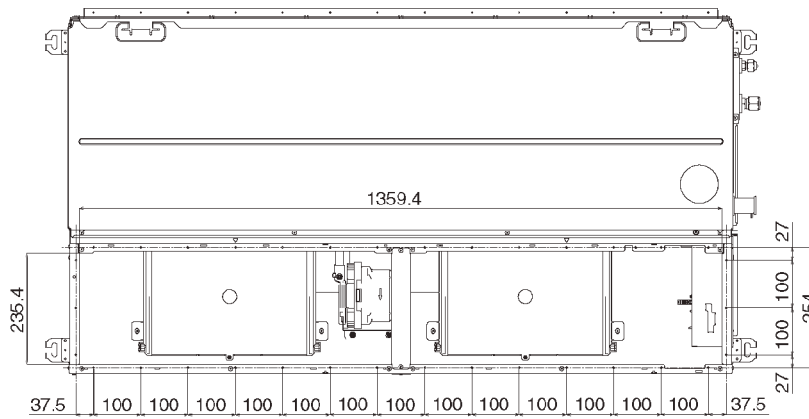


<Back air intake>

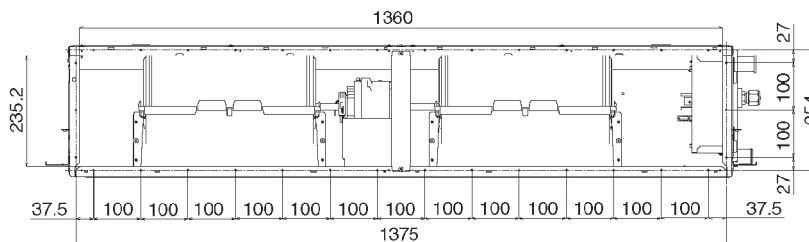


**RAV-RM1101BTP-E/TR and RAV-RM1401BTP-E/TR**

<Under air intake>



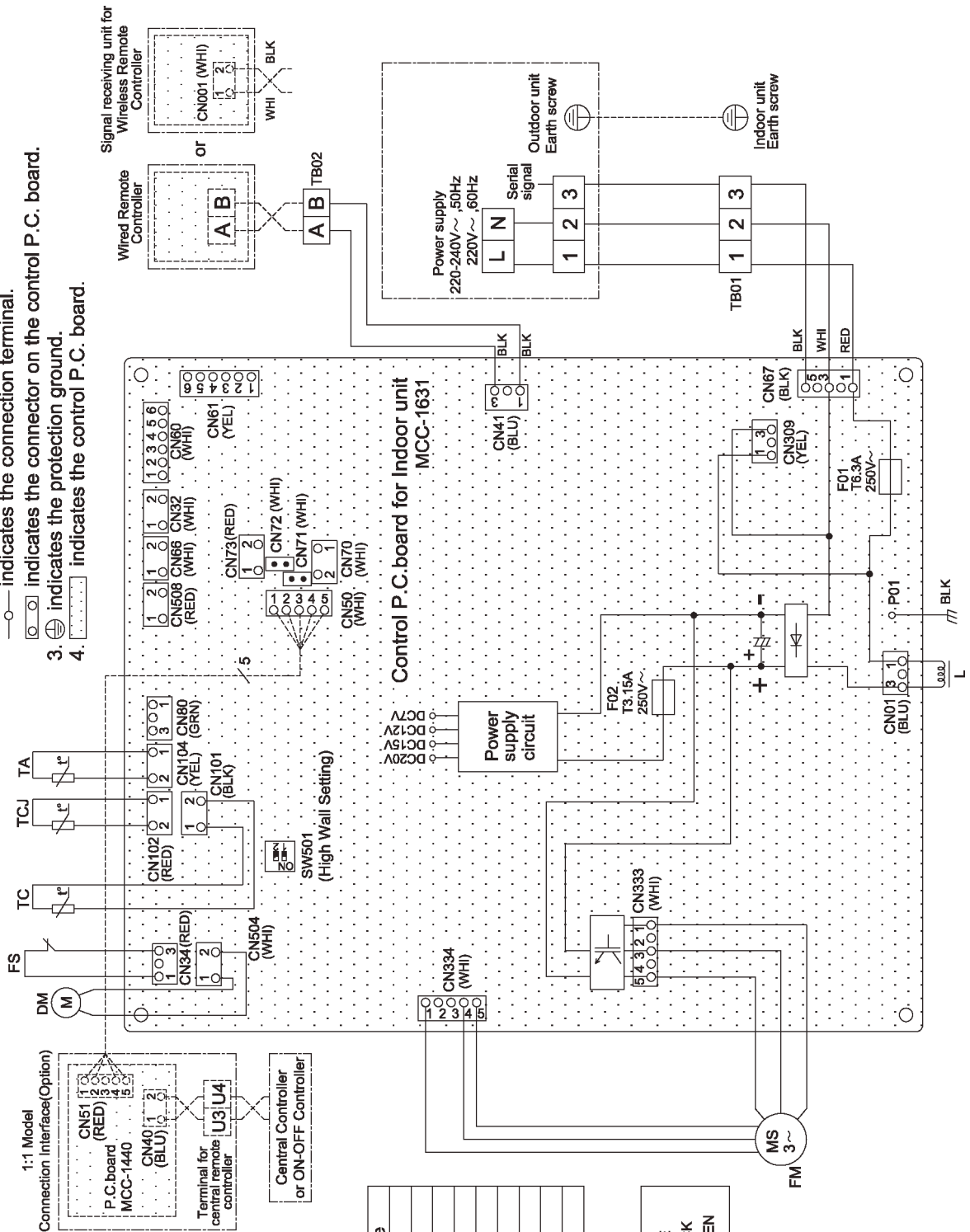
<Back air intake>



### 2-4-3. Wiring Diagrams

RAV-RM561BTP-E/TR, RAV-RM801BTP-E/TR, RAV-RM1101BTP-E/TR and RAV-RM1401BTP-E/TR

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



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
WHI	: WHITE
YEL	: YELLOW
BLU	: BLUE
BLK	: BLACK
GRN	: GREEN

## 2-4-4. Sensible Capacity Table

### Digital Inverter R32 Sensible Heat Capacity : RAV-RM\*\*\*BTP-E/TR

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
561	10.0	4.7	3.6	4.9	3.8	5.2	3.9	5.4	4.1	5.5	4.2	5.7	4.3	5.9	4.5	6.2	4.7	6.5	4.9
	12.0	4.7	3.5	4.9	3.7	5.2	3.9	5.3	4.1	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	4.9	3.7	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	4.8	3.7	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	4.8	3.7	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	4.8	3.6	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	4.7	3.6	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	4.7	3.6	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	4.6	3.5	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	4.6	3.5	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	4.5	3.4	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	4.5	3.4	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	4.4	3.3	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	4.3	3.3	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	4.2	3.2	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	4.2	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	door air temp.																	
		14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
801	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. °C DB	Indoor air temp.																	
		14.0 CWB		15.0 CWB		16.0 CWB		17.0 CWB		18.0 CWB		19.0 CWB		20.0 CWB		22.0 CWB		24.0 CWB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1101	10.0	9.09	7.63	9.41	7.81	10.04	8.13	10.28	8.30	10.75	8.64	11.07	8.62	11.39	8.61	12.06	8.51	12.61	8.33
	12.0	9.03	7.59	9.35	7.76	9.98	8.08	10.21	8.25	10.68	8.59	11.00	8.57	11.31	8.55	11.98	8.46	12.53	8.28
	14.0	8.97	7.53	9.28	7.70	9.90	8.02	10.14	8.19	10.61	8.53	10.92	8.50	11.23	8.49	11.89	8.40	12.44	8.22
	16.0	8.90	7.47	9.21	7.64	9.82	7.96	10.06	8.13	10.52	8.46	10.83	8.44	11.14	8.42	11.80	8.33	12.34	8.15
	18.0	8.82	7.40	9.12	7.57	9.74	7.89	9.97	8.05	10.43	8.38	10.73	8.36	11.04	8.35	11.69	8.26	12.23	8.08
	20.0	8.71	7.32	9.02	7.48	9.62	7.79	9.85	7.96	10.31	8.29	10.61	8.26	10.91	8.25	11.56	8.16	12.09	7.99
	21.0	8.68	7.29	8.99	7.46	9.59	7.77	9.82	7.93	10.27	8.26	10.57	8.24	10.87	8.22	11.52	8.13	12.05	7.96
	23.0	8.59	7.21	8.88	7.37	9.48	7.68	9.71	7.84	10.15	8.16	10.45	8.14	10.75	8.13	11.39	8.04	11.91	7.87
	25.0	8.49	7.13	8.79	7.29	9.38	7.59	9.60	7.75	10.04	8.07	10.34	8.05	10.63	8.04	11.26	7.95	11.78	7.78
	27.0	8.36	7.02	8.66	7.18	9.24	7.48	9.46	7.64	9.89	7.95	10.18	7.93	10.47	7.92	11.09	7.83	11.60	7.67
	29.0	8.24	6.92	8.53	7.08	9.10	7.37	9.32	7.53	9.75	7.84	10.03	7.81	10.32	7.80	10.93	7.72	11.43	7.55
	31.0	8.11	6.81	8.39	6.96	8.95	7.25	9.17	7.41	9.59	7.71	9.87	7.69	10.15	7.68	10.75	7.59	11.25	7.43
	33.0	7.97	6.69	8.24	6.84	8.80	7.12	9.00	7.28	9.42	7.57	9.70	7.55	9.97	7.54	10.56	7.46	11.05	7.30
	35.0	7.80	6.55	8.07	6.70	8.62	6.98	8.82	7.13	9.23	7.42	9.50	7.40	9.77	7.39	10.35	7.31	10.82	7.15
37.0	7.65	6.42	7.92	6.57	8.45	6.84	8.65	6.99	9.05	7.27	9.31	7.25	9.58	7.24	10.14	7.16	10.61	7.01	
39.0	7.48	6.28	7.74	6.42	8.26	6.69	8.45	6.83	8.84	7.11	9.10	7.09	9.36	7.08	9.91	7.00	10.37	6.85	

unit size	outdoor air temp. CDB	indoor air temp.																	
		14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1401	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	1.5	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	

## 2-4-5. Part load performance

### Combination

Indoor unit : RAV-RM561BTP-E/TR

Outdoor unit : RAV-GM561ATP-E/TR, RAV-GM561ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	310	1500	310
RATING	5000	1830	5300	1620

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	4630	4170	3710	3240	2780	2320	1850	1390	1390	1390
	W	2000	1600	1280	1020	800	620	460	340	340	340
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1830	1460	1170	930	730	570	420	310	310	310
30	Q	5270	4750	4220	3690	3170	2640	2110	1580	1580	1580
	W	1650	1310	1050	840	660	510	380	280	280	280
25	Q	5510	4960	4400	3850	3310	2760	2200	1650	1650	1650
	W	1480	1180	940	750	590	460	340	250	250	250
20	Q	5660	5090	4530	3960	3400	2830	2260	1700	1700	1700
	W	1320	1050	840	670	530	410	300	220	220	220

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6330	5700	5070	4430	3800	3170	2540	1900	1790	1790
	W	1710	1460	1220	990	790	610	460	340	330	330
10	Q	5750	5170	4600	4020	3450	2880	2300	1720	1630	1630
	W	1650	1410	1180	960	760	590	450	330	320	320
7	Q	5300	4770	4240	3710	3180	2650	2120	1590	1500	1500
	W	1620	1380	1150	940	740	580	440	330	310	310
5	Q	4080	3670	3270	2860	2450	2040	1640	1220	1160	1160
	W	1390	1190	990	810	640	500	370	280	270	270
2	Q	3990	3590	3190	2790	2390	2000	1600	1200	1130	1130
	W	1370	1170	980	790	630	490	370	280	260	260
0	Q	3930	3540	3150	2750	2360	1970	1580	1180	1110	1110
	W	1360	1160	970	790	620	490	370	270	260	260
-5	Q	3790	3410	3030	2650	2270	1900	1520	1140	1070	1070
	W	1330	1130	940	770	610	470	360	270	250	250
-7	Q	3730	3360	2990	2610	2240	1870	1500	1120	1060	1060
	W	1310	1120	930	760	600	470	350	260	250	250
-10	Q	3440	3100	2760	2410	2070	1720	1380	1030	980	980
	W	1260	1080	900	730	580	450	340	250	240	240
-15	Q	2650	2390	2120	1860	1590	1330	1060	790	750	750
	W	1130	960	800	650	520	400	300	230	220	220



## Combination

Indoor unit : RAV-RM801BTP-E/TR

Outdoor unit : RAV-GM801ATP-E/TR, RAV-GM801ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
<b>MINIMUM</b>	1500	310	1500	310
<b>RATING</b>	6700	2380	7700	2320

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	<b>Q</b>	6330	5690	5060	4430	3800	3160	2530	1900	1420	1420
	<b>W</b>	2600	2110	1660	1270	960	720	560	430	340	340
35	<b>Q</b>	6700	6030	5360	4690	4020	3350	2680	2010	1500	1500
	<b>W</b>	2380	1940	1520	1170	880	660	510	390	310	310
30	<b>Q</b>	7080	6370	5670	4960	4250	3540	2830	2130	1590	1590
	<b>W</b>	2170	1770	1390	1060	800	600	470	360	280	280
25	<b>Q</b>	7360	6620	5890	5150	4420	3680	2950	2210	1650	1650
	<b>W</b>	1970	1600	1260	960	730	550	420	320	260	260
20	<b>Q</b>	7470	6720	5980	5230	4480	3740	2990	2240	1670	1670
	<b>W</b>	1760	1440	1130	860	650	490	380	290	230	230

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	<b>Q</b>	9100	8190	7280	6370	5460	4560	3640	2730	1820	1780
	<b>W</b>	2530	2120	1740	1390	1090	830	640	490	350	340
10	<b>Q</b>	8260	7440	6610	5780	4960	4130	3310	2470	1650	1610
	<b>W</b>	2410	2020	1660	1330	1040	790	610	470	330	320
7	<b>Q</b>	7700	6930	6160	5390	4620	3850	3080	2310	1540	1500
	<b>W</b>	2320	1940	1590	1280	1000	760	590	450	320	310
5	<b>Q</b>	5930	5340	4750	4150	3560	2970	2370	1780	1180	1160
	<b>W</b>	1990	1670	1370	1100	860	650	510	390	280	270
2	<b>Q</b>	5800	5220	4640	4060	3480	2900	2320	1740	1160	1130
	<b>W</b>	1960	1650	1350	1080	850	650	500	380	270	260
0	<b>Q</b>	5710	5140	4570	4000	3430	2860	2290	1710	1140	1110
	<b>W</b>	1940	1630	1340	1070	840	640	490	380	270	260
-5	<b>Q</b>	5510	4960	4410	3860	3310	2760	2200	1650	1100	1070
	<b>W</b>	1900	1590	1300	1050	820	620	480	370	260	250
-7	<b>Q</b>	5420	4880	4340	3800	3250	2710	2170	1620	1080	1060
	<b>W</b>	1880	1580	1290	1040	810	620	480	370	260	250
-10	<b>Q</b>	5010	4510	4010	3500	3000	2510	2000	1500	1000	980
	<b>W</b>	1810	1520	1240	1000	780	590	460	350	250	240
-15	<b>Q</b>	3850	3470	3080	2700	2310	1930	1540	1150	770	750
	<b>W</b>	1620	1360	1110	890	700	530	410	310	220	210

## Combination

Indoor unit : RAV-RM1101BTP-E/TR

Outdoor unit : RAV-GM1101ATP-E/TR, RAV-GM1101ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	9500	2990	11200	2990

Q: Capacity in W

W: Power Consumption in W

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	9000	8100	7200	6300	5400	4500	3600	2840	2840	2840
	W	3250	2600	2110	1690	1360	1050	830	650	650	650
35	Q	9500	8550	7600	6650	5700	4750	3800	3000	3000	3000
	W	2990	2390	1940	1560	1250	970	760	600	600	600
30	Q	10480	8960	7960	6970	5970	4980	3980	3140	3140	3140
	W	2820	2170	1760	1420	1130	880	690	540	540	540
25	Q	10880	9300	8270	7240	6200	5170	4130	3260	3260	3260
	W	2570	1970	1600	1290	1030	800	630	490	490	490
20	Q	11170	9550	8490	7430	6370	5310	4240	3350	3350	3350
	W	2320	1780	1450	1160	930	720	570	450	450	450

## Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13410	12060	10730	9390	8050	6700	5360	4020	3590	3590
	W	3280	2820	2370	1930	1540	1210	940	720	660	660
10	Q	12190	10950	9750	8530	7310	6090	4870	3660	3260	3260
	W	3120	2680	2250	1840	1470	1150	900	690	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2990	2570	2160	1760	1410	1100	860	660	600	600
5	Q	8630	7760	6900	6040	5180	4310	3450	2590	2310	2310
	W	2570	2210	1850	1510	1210	950	740	570	520	520
2	Q	8440	7580	6750	5900	5060	4210	3370	2530	2260	2260
	W	2530	2180	1830	1490	1190	930	730	560	510	510
0	Q	8310	7480	6650	5820	4990	4150	3320	2490	2230	2230
	W	2510	2150	1810	1480	1180	920	720	550	500	500
-5	Q	8010	7200	6410	5610	4810	4000	3200	2400	2150	2150
	W	2450	2100	1770	1440	1150	900	700	540	490	490
-7	Q	7890	7090	6310	5520	4730	3940	3150	2370	2110	2110
	W	2420	2080	1750	1430	1140	890	700	540	490	490
-10	Q	7280	6550	5830	5100	4370	3640	2910	2180	1950	1950
	W	2330	2010	1680	1370	1100	860	670	520	470	470
-15	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	2080	1790	1510	1230	980	770	600	460	420	420

## Combination

Indoor unit : RAV-RM1401BTP-E/TR

Outdoor unit : RAV-GM1401ATP-E/TR, RAV-GM1401ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	12100	4420	13000	3600

Q: Capacity in W

W: Power Consumption in W

Cooling	Outdoor temperature(°C)		Load(%)								
			100	90	80	70	60	50	40	30	20
40	Q	11460	10310	9170	8030	6880	5730	4590	3440	2840	2840
		W	4810	3880	3050	2340	1770	1340	1020	760	650
35	Q	12100	10890	9680	8470	7260	6050	4840	3630	3000	3000
		W	4420	3570	2800	2150	1630	1230	940	700	600
30	Q	12680	11410	10140	8880	7610	6340	5080	3810	3140	3140
		W	4010	3240	2540	1950	1480	1120	850	640	540
25	Q	13160	11840	10530	9220	7900	6580	5270	3960	3260	3260
		W	3650	2950	2310	1770	1350	1020	780	580	500
20	Q	13520	12160	10810	9470	8120	6760	5410	4060	3350	3350
		W	3290	2660	2090	1600	1210	920	700	520	450

## Heating

Heating	Outdoor temperature(°C)		Load(%)								
			100	90	80	70	60	50	40	30	20
15	Q	15570	14010	12460	10900	9340	7780	6230	4670	3590	3590
		W	3950	3320	2760	2280	1830	1450	1120	840	660
10	Q	14150	12730	11320	9900	8490	7070	5660	4240	3260	3260
		W	3760	3160	2630	2170	1740	1380	1070	800	630
7	Q	13000	11700	10400	9100	7800	6500	5200	3900	3000	3000
		W	3600	3030	2520	2080	1670	1320	1020	770	600
5	Q	10010	9010	8010	7010	6010	5010	4010	3000	2310	2310
		W	3090	2600	2160	1790	1430	1130	880	660	520
2	Q	9790	8810	7830	6850	5870	4900	3920	2940	2260	2260
		W	3050	2570	2130	1760	1410	1120	860	650	510
0	Q	9650	8680	7720	6750	5790	4820	3860	2890	2230	2230
		W	3020	2540	2110	1740	1400	1110	860	650	500
-5	Q	9300	8370	7440	6510	5580	4650	3720	2790	2150	2150
		W	2940	2480	2060	1700	1370	1080	830	630	490
-7	Q	9160	8240	7330	6410	5500	4580	3660	2750	2110	2110
		W	2910	2450	2040	1680	1350	1070	830	620	490
-10	Q	8460	7610	6770	5920	5080	4230	3380	2540	1950	1950
		W	2810	2360	1960	1620	1300	1030	800	600	470
-15	Q	6500	5850	5200	4550	3900	3250	2600	1950	1500	1500
		W	2510	2110	1760	1450	1160	920	710	540	420

**Combination**

Indoor unit : RAV-RM5601BTP-E/TR x 2 (Twin system )

Outdoor unit : RAV-GM1101ATP-E/TR, RAV-GM1101ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	9500	2990	11200	2990

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	9000	8100	7200	6300	5400	4500	3600	2840	2840	2840
	W	3250	2600	2110	1690	1360	1050	830	650	650	650
35	Q	9500	8550	7600	6650	5700	4750	3800	3000	3000	3000
	W	2990	2390	1940	1560	1250	970	760	600	600	600
30	Q	10480	8960	7960	6970	5970	4980	3980	3140	3140	3140
	W	2820	2170	1760	1420	1130	880	690	540	540	540
25	Q	10880	9300	8270	7240	6200	5170	4130	3260	3260	3260
	W	2570	1970	1600	1290	1030	800	630	490	490	490
20	Q	11170	9550	8490	7430	6370	5310	4240	3350	3350	3350
	W	2320	1780	1450	1160	930	720	570	450	450	450

**Heating**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13410	12060	10730	9390	8050	6700	5360	4020	3590	3590
	W	3280	2820	2370	1930	1540	1210	940	720	660	660
10	Q	12190	10950	9750	8530	7310	6090	4870	3660	3260	3260
	W	3120	2680	2250	1840	1470	1150	900	690	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2990	2570	2160	1760	1410	1100	860	660	600	600
5	Q	8630	7760	6900	6040	5180	4310	3450	2590	2310	2310
	W	2570	2210	1850	1510	1210	950	740	570	520	520
2	Q	8440	7580	6750	5900	5060	4210	3370	2530	2260	2260
	W	2530	2180	1830	1490	1190	930	730	560	510	510
0	Q	8310	7480	6650	5820	4990	4150	3320	2490	2230	2230
	W	2510	2150	1810	1480	1180	920	720	550	500	500
-5	Q	8010	7200	6410	5610	4810	4000	3200	2400	2150	2150
	W	2450	2100	1770	1440	1150	900	700	540	490	490
-7	Q	7890	7090	6310	5520	4730	3940	3150	2370	2110	2110
	W	2420	2080	1750	1430	1140	890	700	540	490	490
-10	Q	7280	6550	5830	5100	4370	3640	2910	2180	1950	1950
	W	2330	2010	1680	1370	1100	860	670	520	470	470
-15	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	2080	1790	1510	1230	980	770	600	460	420	420

**Combination**

Indoor unit : RAV-RM801BTP-E/TR x 2 (Twin system )

Outdoor unit : RAV-GM1401ATP-E/TR, RAV-GM1401ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	12100	4420	13000	3600

Q: Capacity in W  
W: Power Consumption in W

**Cooling**

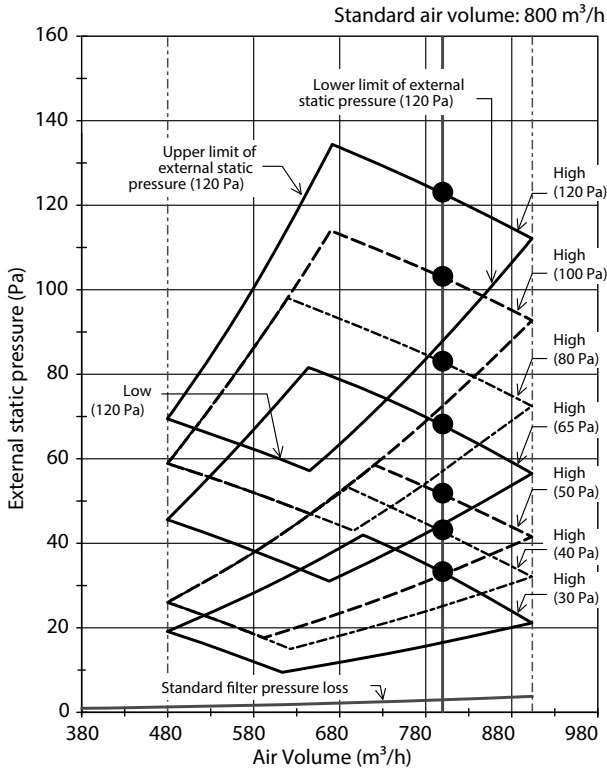
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	11460	10310	9170	8030	6880	5730	4590	3440	2840	2840
	W	4810	3880	3050	2340	1770	1340	1020	760	650	650
35	Q	12100	10890	9680	8470	7260	6050	4840	3630	3000	3000
	W	4420	3570	2800	2150	1630	1230	940	700	600	600
30	Q	12680	11410	10140	8880	7610	6340	5080	3810	3140	3140
	W	4010	3240	2540	1950	1480	1120	850	640	540	540
25	Q	13160	11840	10530	9220	7900	6580	5270	3960	3260	3260
	W	3650	2950	2310	1770	1350	1020	780	580	500	500
20	Q	13520	12160	10810	9470	8120	6760	5410	4060	3350	3350
	W	3290	2660	2090	1600	1210	920	700	520	450	450

**Heating**

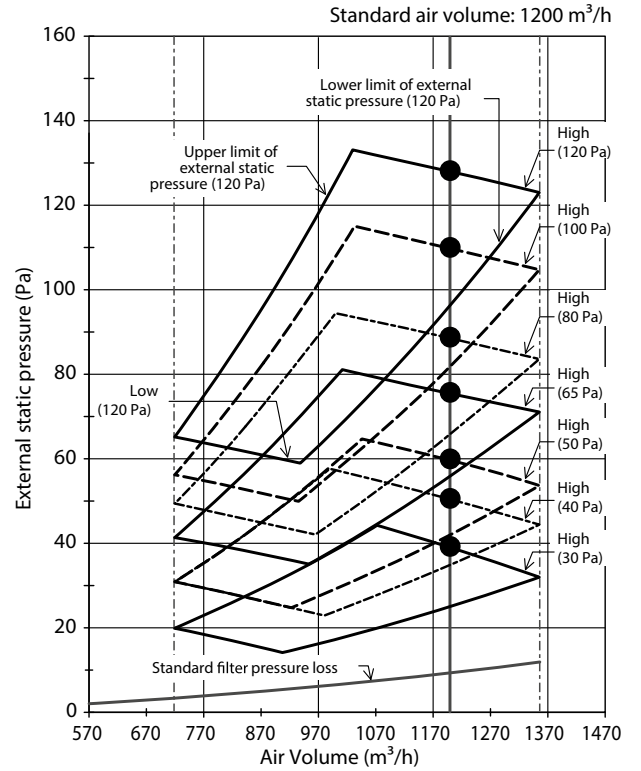
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	15570	14010	12460	10900	9340	7780	6230	4670	3590	3590
	W	3950	3320	2760	2280	1830	1450	1120	840	660	660
10	Q	14150	12730	11320	9900	8490	7070	5660	4240	3260	3260
	W	3760	3160	2630	2170	1740	1380	1070	800	630	630
7	Q	13000	11700	10400	9100	7800	6500	5200	3900	3000	3000
	W	3600	3030	2520	2080	1670	1320	1020	770	600	600
5	Q	10010	9010	8010	7010	6010	5010	4010	3000	2310	2310
	W	3090	2600	2160	1790	1430	1130	880	660	520	520
2	Q	9790	8810	7830	6850	5870	4900	3920	2940	2260	2260
	W	3050	2570	2130	1760	1410	1120	860	650	510	510
0	Q	9650	8680	7720	6750	5790	4820	3860	2890	2230	2230
	W	3020	2540	2110	1740	1400	1110	860	650	500	500
-5	Q	9300	8370	7440	6510	5580	4650	3720	2790	2150	2150
	W	2940	2480	2060	1700	1370	1080	830	630	490	490
-7	Q	9160	8240	7330	6410	5500	4580	3660	2750	2110	2110
	W	2910	2450	2040	1680	1350	1070	830	620	490	490
-10	Q	8460	7610	6770	5920	5080	4230	3380	2540	1950	1950
	W	2810	2360	1960	1620	1300	1030	800	600	470	470
-15	Q	6500	5850	5200	4550	3900	3250	2600	1950	1500	1500
	W	2510	2110	1760	1450	1160	920	710	540	420	420

## 2-4-6. Fan Static Characteristic

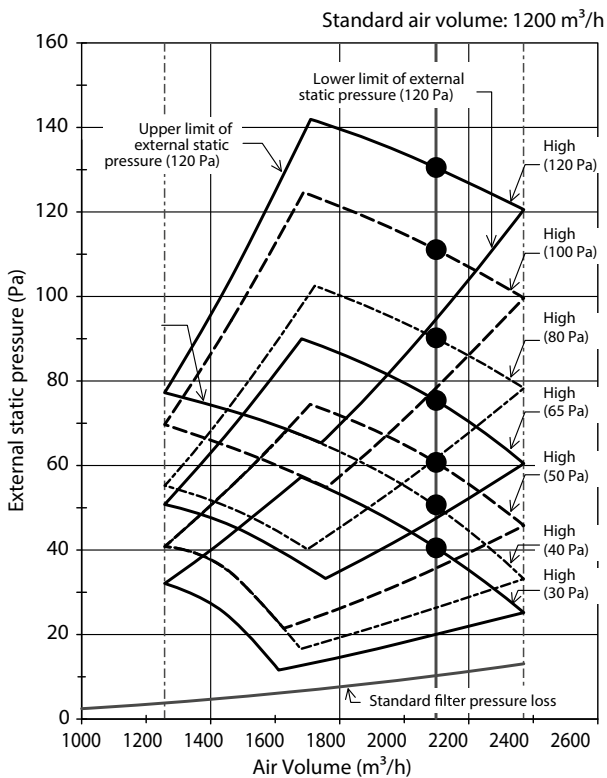
### RAV-RM561BTP-E/TR



### RAV-RM801BTP-E/TR

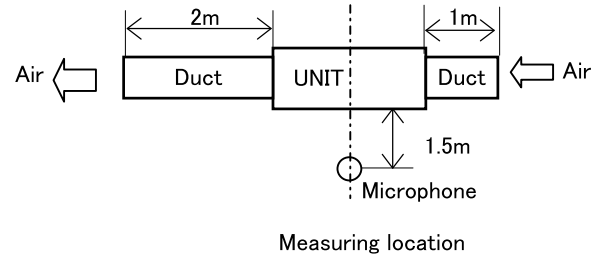


### RAV-RM1101BTP-E/TR and RAV-RM1401BTP-E/TR



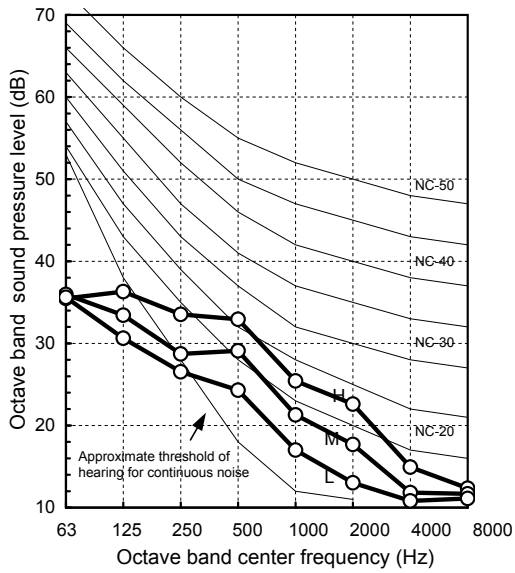
## 2-4-7. Sound Characteristics (NC curve)

RAV-RM561BTP-E/TR



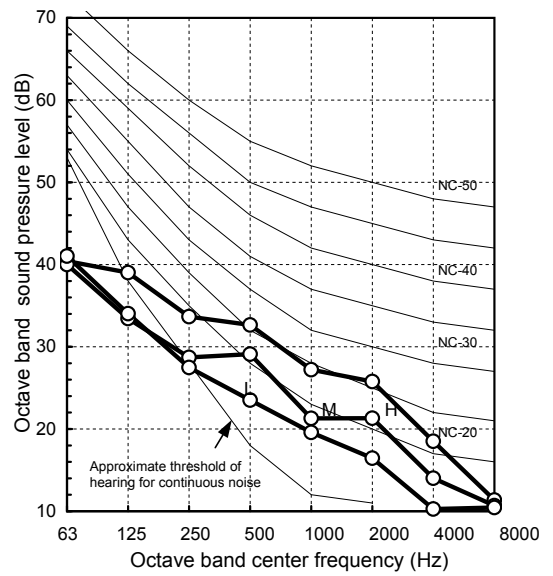
External static pressure 30Pa

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



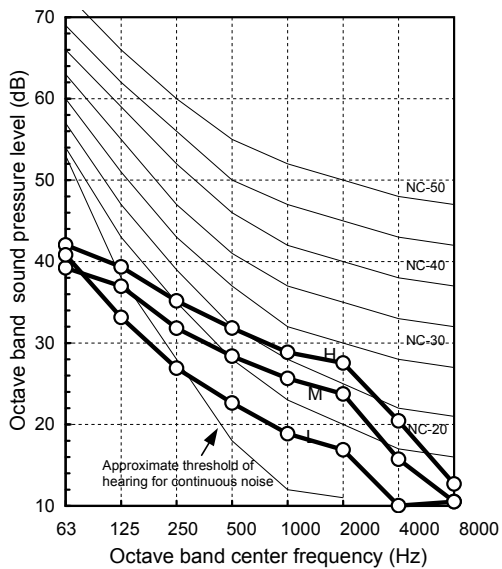
External static pressure 40Pa

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



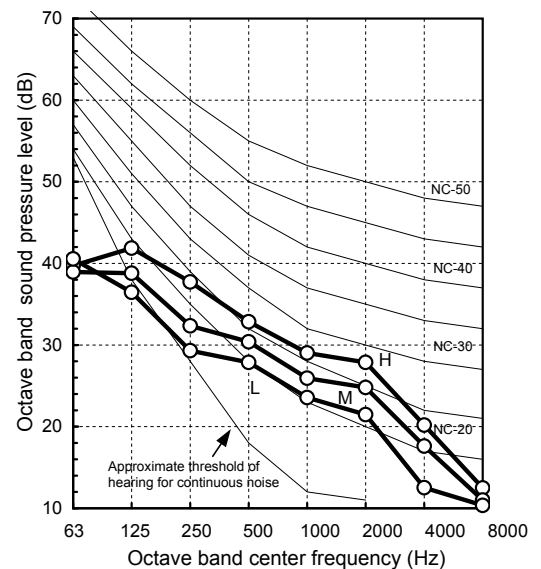
External static pressure 50Pa

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



External static pressure 65Pa

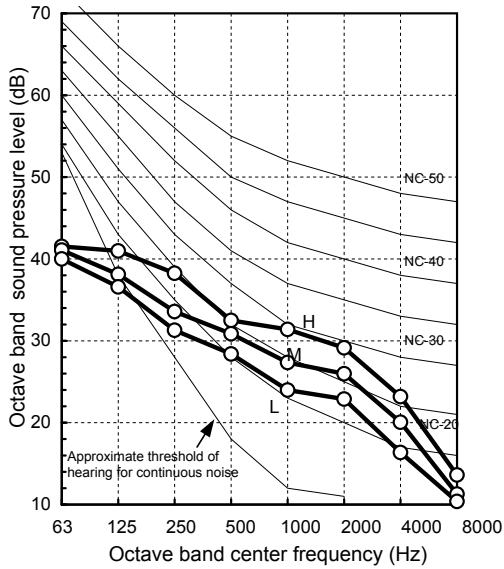
FAN tap	H	M	L
Sound pressure level (dB(A) )	36	32	29



RAV-RM561BTP-E/TR

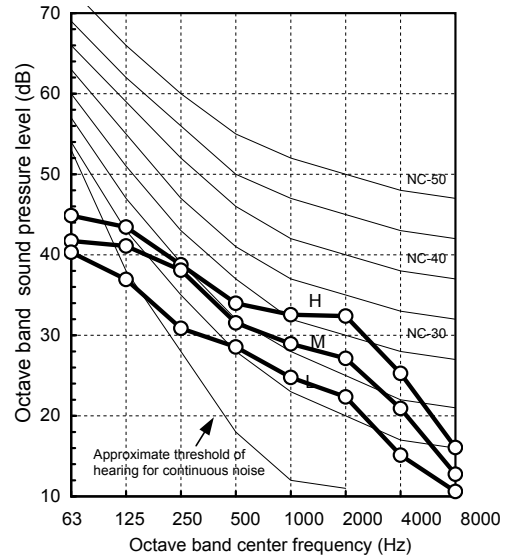
External static pressure 80Pa

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



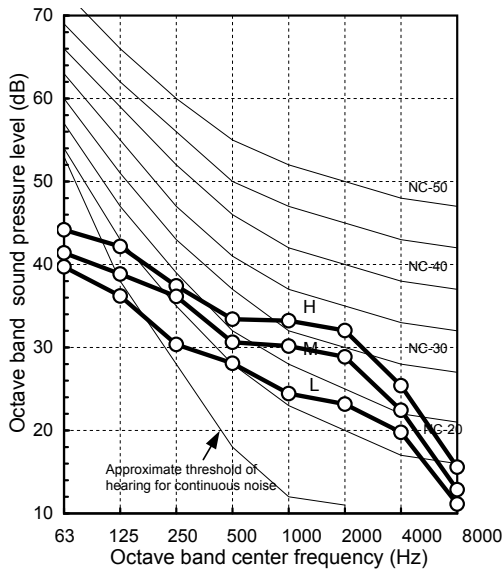
External static pressure 100Pa

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



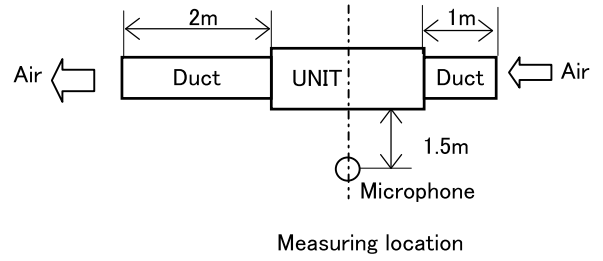
External static pressure 120Pa

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



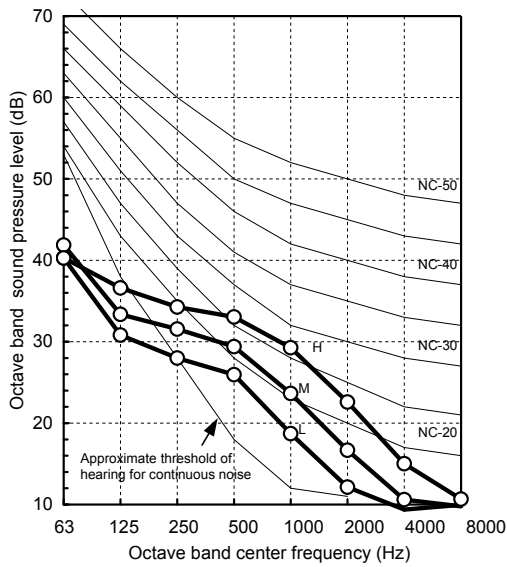


RAV-RM801BTP-E/TR



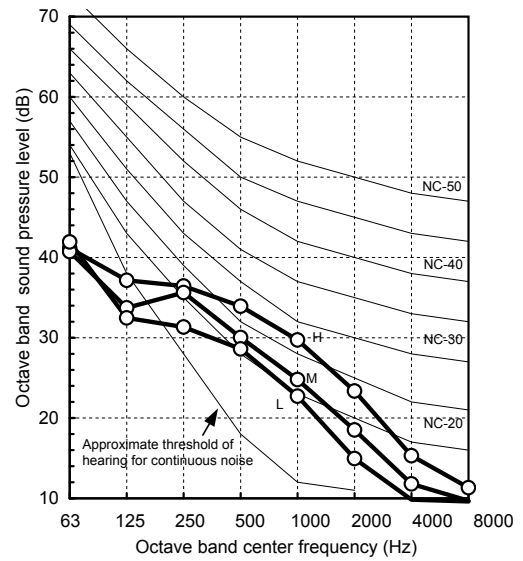
External static pressure 30Pa

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



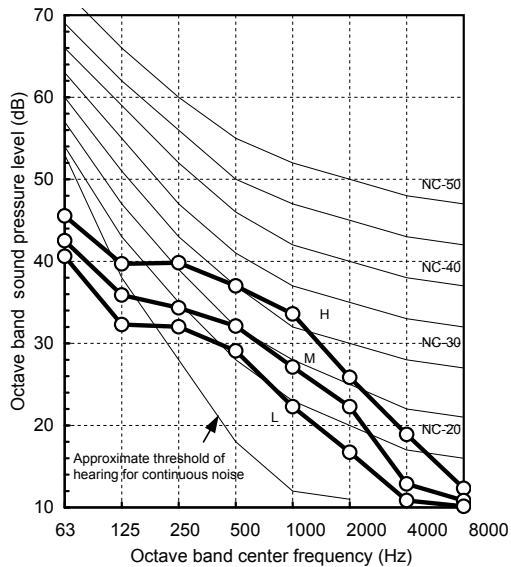
External static pressure 40Pa

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



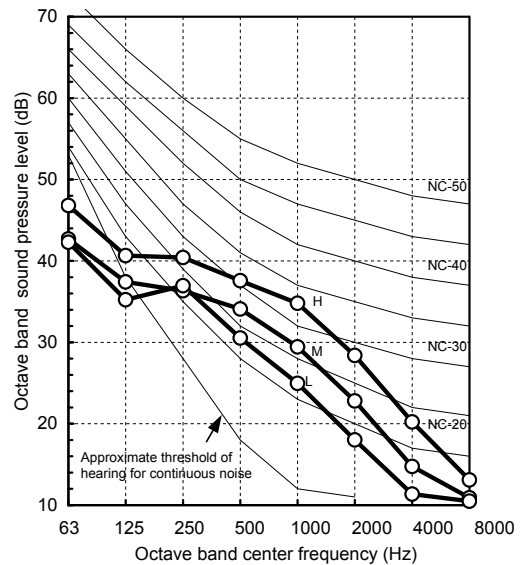
External static pressure 50Pa

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



External static pressure 65Pa

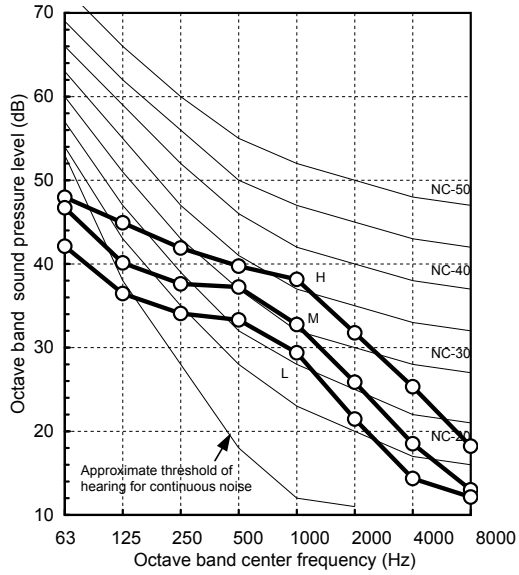
FAN tap	H	M	L
Sound pressure level (dB(A))	39	35	32



RAV-RM801BTP-E/TR

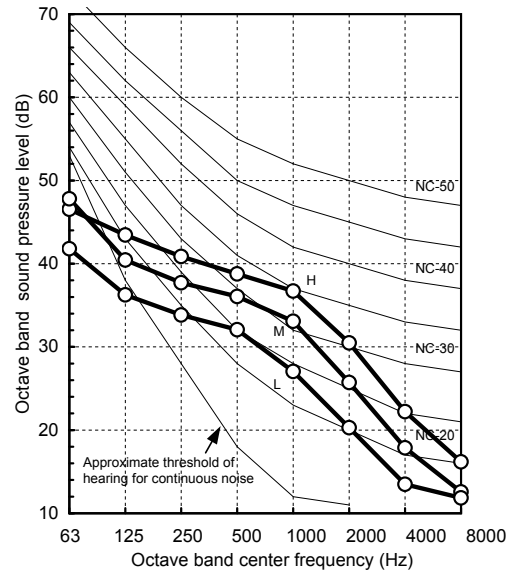
External static pressure 80Pa

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



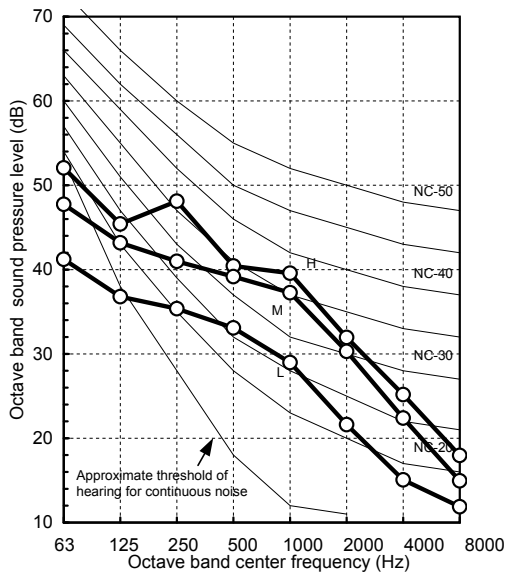
External static pressure 100Pa

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

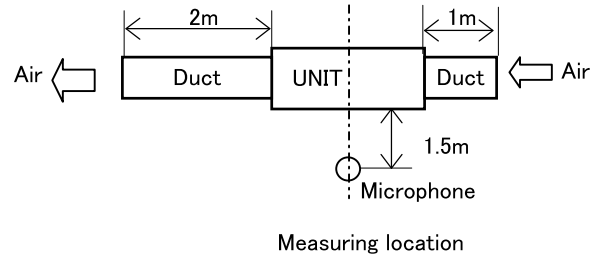


External static pressure 120Pa

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

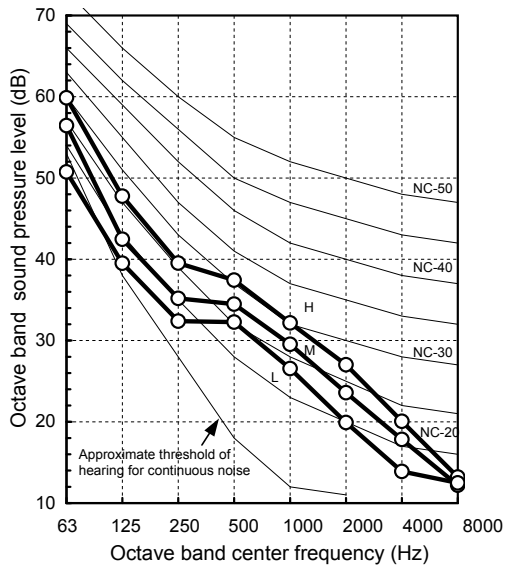


RAV-RM1101BTP-E/TR, RAV-RM1401BTP-E/TR



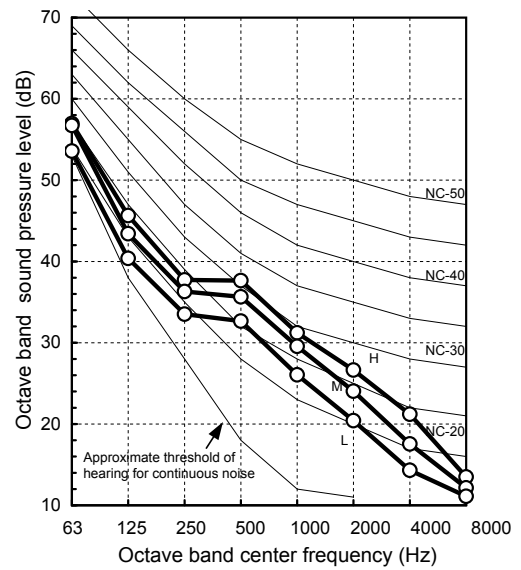
External static pressure 30Pa

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



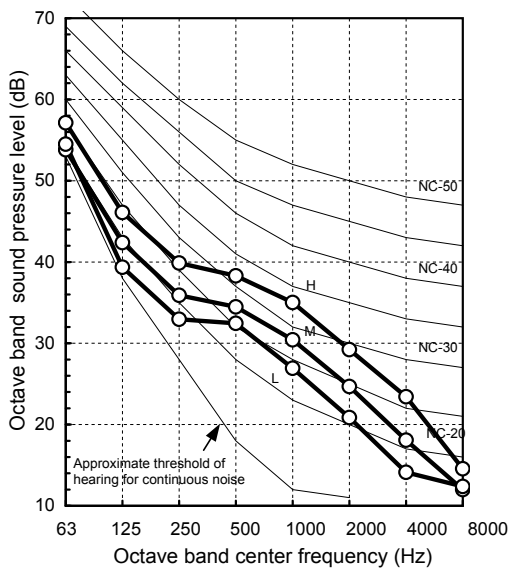
External static pressure 40Pa

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



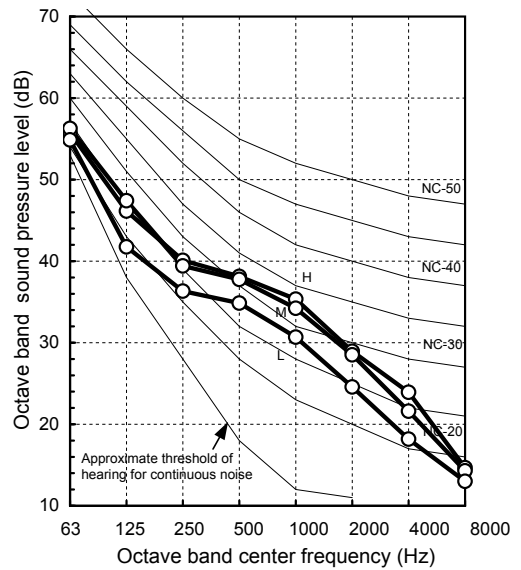
External static pressure 50Pa

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



External static pressure 65Pa

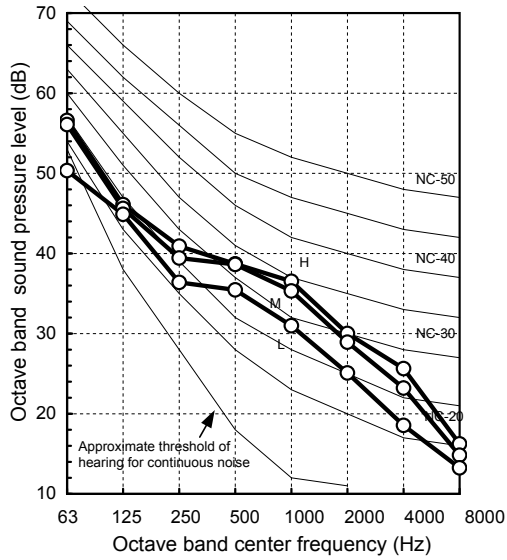
FAN tap	H	M	L
Sound pressure level (dB(A) )	41	39	36



RAV-RM1101BTP-E/TR, RAV-RM1401BTP-E/TR

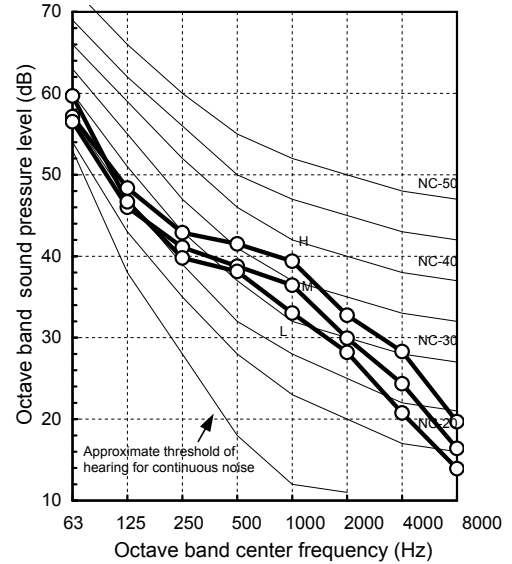
External static pressure 80Pa

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



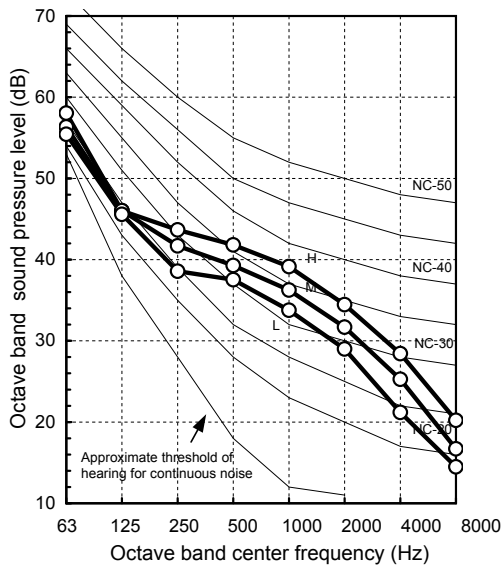
External static pressure 100Pa

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. Under Ceiling 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. Air Throw Distance Chart**

### **2-5-7. Sound Characteristics (NC Curve)**

## 2-5-1. Specifications

### Under Ceilling Type <Single Type>

Model		Indoor unit		RAV-RM401CTP-E/TR	RAV-RM561CTP-E/TR	RAV-RM801CTP-E/TR	RAV-RM1101CTP-E/TR	RAV-RM1401CTP-E/TR
		Outdoor unit (RAV-GM***ATJP-E)		RAV-GM401ATP-E/TR	RAV-GM561ATP-E/TR	RAV-GM801ATP-E/TR	RAV-GM1101ATP-E/TR	RAV-GM1401ATP-E/TR
Cooling capacity		(kW)		3.6 < 0.9-4.0 >	5.0 < 1.5 - 5.6 >	6.9 < 1.5 - 7.4 >	9.5 < 3.0 - 11.2 >	12.1 < 3.0 - 13.2 >
Heating capacity		(kW)		4.0 < 0.8-5.0 >	5.3 < 1.5 - 6.3 >	7.7 < 1.5 - 9.0 >	11.2 < 3.0 - 13.0 >	13.0 < 3.0 - 16.0 >
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz						
Electrical characteristics	Cooling	Running current (A)		4.10-3.75	7.54 - 6.92	11.15 - 10.22	14.30-13.10	21.40-19.60
		Power consumption (kW)		0.83	1.61	2.38	2.95	4.42
		Power factor (%)		92	97	97	94	94
		EER		4.34	3.11	2.90	3.22	2.74
	SEER		6.34	5.50	5.62	5.86	5.36	
	Heating	Running current (A)		3.82-3.50	6.37 - 5.84	9.98 - 9.15	14.20-13.00	16.80-15.40
		Power consumption (kW)		0.78	1.36	2.13	2.94	3.48
		Power factor (%)		93	97	97	94	94
		COP		5.13	3.90	3.62	3.81	3.74
	SCOP		5.1	4.32	4.21	4.27	4.19	
Maximum current				9.15	15.5	15.5	22.8	22.8
<b>Indoor unit</b>								
Appearance	Main unit		Pure white					
Outer dimension	Main unit	Height (mm)	235					
		Width (mm)	952	1,270	1,586			
		Depth (mm)	690					
Total weight	Main unit (kg)		23	29	37			
Fan unit	Fan		Centrifugal fan					
	Standard air flow	H/M/L (m3/h)	900 / 720 / 540	1410 / 1002 / 750	1860 / 1350 / 1020	2040 / 1530 / 1200		
	Motor (W)		94			139		
Air filter		Standard filter (Long life filter)						
Sound pressure level	H/M/L (dB)		37 / 35 / 28	37 / 35 / 28	41 / 36 / 29	44 / 38 / 32	46 / 41 / 35	
Sound power level	H/M/L (dB)		52 / 50 / 43	52 / 50 / 43	56 / 51 / 44	59 / 53 / 47	61 / 56 / 50	
Controller (Sold Separately)		VP20						
<b>Outdoor unit</b>								
Air Flow	(m3/h)		2200	2,400	2,700	4,080	4,200	
Outer dimension	Height (mm)		550	550			890	
	Width (mm)		780	780			900	
	Depth (mm)		290	290			320	
Total weight	Main unit (kg)		39	40	44	68		
Pipe	Min. length (m)		2.0	5.0				
	Max. total length (m)		20.0	30.0			50.0	
Flare Connections	Gas side (mm)		12.7	12.7	15.9			
	Liquid side (mm)		6.4	6.4	9.5			
Sound pressure level	Cooling/Heating (dB)		49 / 50	46 / 48	48 / 52	54 / 57	55 / 57	
Sound power level	Cooling/Heating (dB)		64 / 65	63 / 65	65 / 69	70 / 74	70 / 74	
Operating Range	Cooling (°C)		-15 / 46					
	Heating (°C)		-15 / 15					

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

\*2 : 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.

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

## Under Ceiling (Twin System)

Model		Indoor unit 1		RAV-RM561CTP-E/TR	RAV-RM801CTP-E/TR
		Indoor unit 2		RAV-RM561CTP-E/TR	RAV-RM801CTP-E/TR
		Outdoor unit	(RAV-GM***ATJP-E)	RAV-GM1104ATP-E/TR	RAV-GM1404ATP-E/TR
Cooling capacity		(kW)		9.5 < 3.0 - 11.2 >	12.1 < 3.0 - 13.2 >
Heating capacity		(kW)		11.2 < 3.0 - 13.0 >	13.0 < 3.0 - 16.0 >
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz			
Electrical characteristics	Cooling	Running current (A)		14.30-13.10	21.37 - 19.59
		Power consumption (kW)		2.95	4.42
		Power factor (%)		94	94
		EER		3.22	2.74
		SEER		5.85	5.36
	Heating	Running current (A)		14.20-13.00	16.80-15.40
		Power consumption (kW)		2.94	3.48
		Power factor (%)		94	94
		COP		3.81	3.74
				4.28	4.19
	Maximum current				22.8
<b>Indoor unit</b>					
Appearance	Main unit		Pure White		
Outer dimension	Main unit	Height (mm)	235		
		Width (mm)	950	1,270	
		Depth (mm)	690		
Total weight	Main unit		23	29	
Fan unit	Fan		Centrifugal fan		
	Standard air flow	H/M/L (m3/h)	900 / 720 / 540		1410 / 1002 / 750
	Motor (W)		94		
Air filter		Long life filter			
Sound pressure level		H/M/L (dB)	37 / 35 / 28		41 / 36 / 29
Sound power level		H/M/L (dB)	52 / 50 / 43		56 / 51 / 44
Connecting pipe	Drain port		VP20		
<b>Outdoor unit</b>					
Air Flow (m3/h)		4,080		4,200	
Outer dimension	Height (mm)		890		
	Width (mm)		900		
	Depth (mm)		320		
Total weight	Main unit (kg)		68		
Pipe	Min. length (m)		5		
	Max. total length (m)		50		
Flare Connections	Main	Gas (mm)	15.9		
		Liquid (mm)	9.5		
	Branch	Gas (mm)	12.7		
		Liquid (mm)	6.4		
Sound pressure level	Cooling/Heating (dB)		54 / 57		55 / 57
Sound power level	Cooling/Heating (dB)		70 / 74		70 / 74
Operating Range	Cooling (°C)		-15 / 46		
	Heating (°C)		-15 / 15		

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

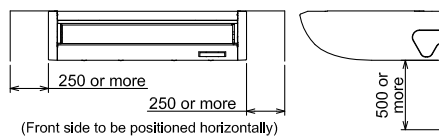
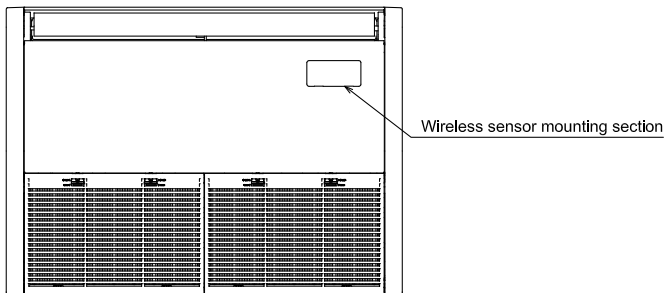
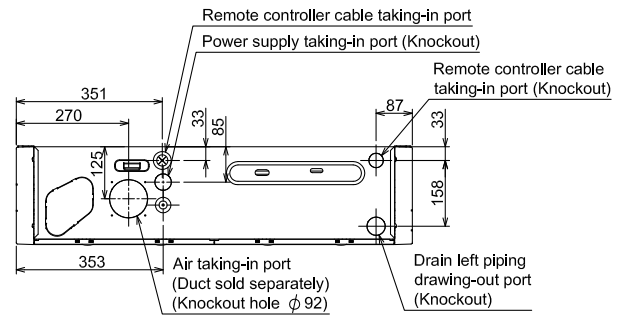
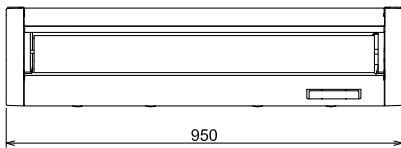
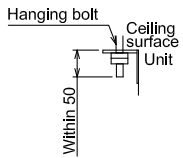
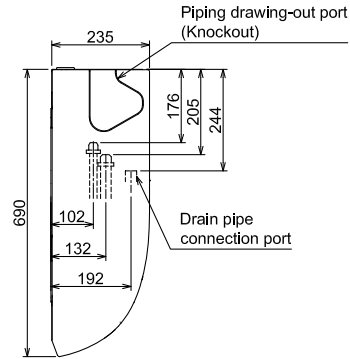
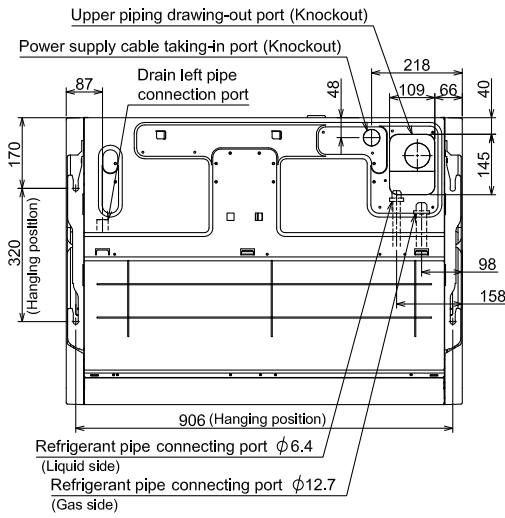
\*2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

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

## 2-5-2. Dimension

### RAV-RM401CTP-E/TR and RAV-RM561CTP-E/TR

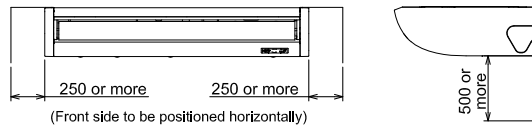
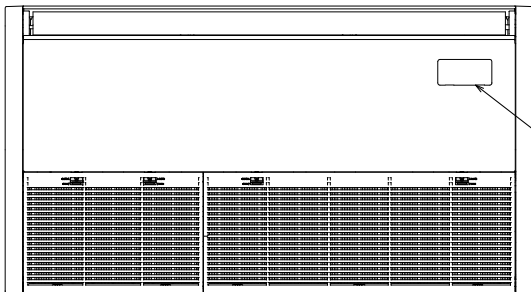
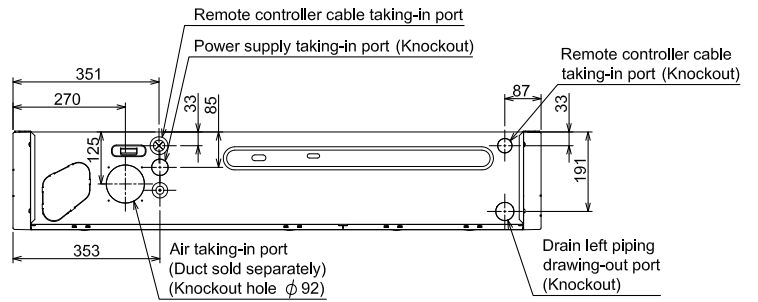
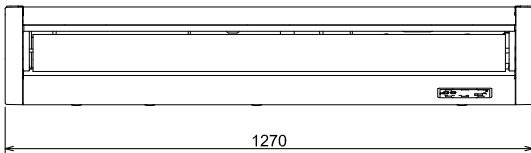
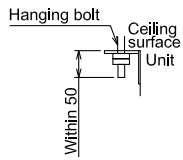
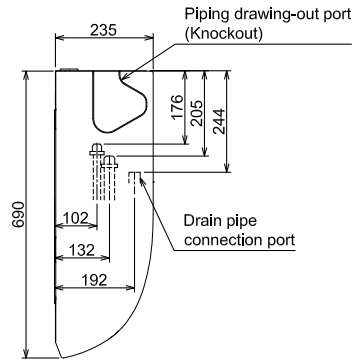
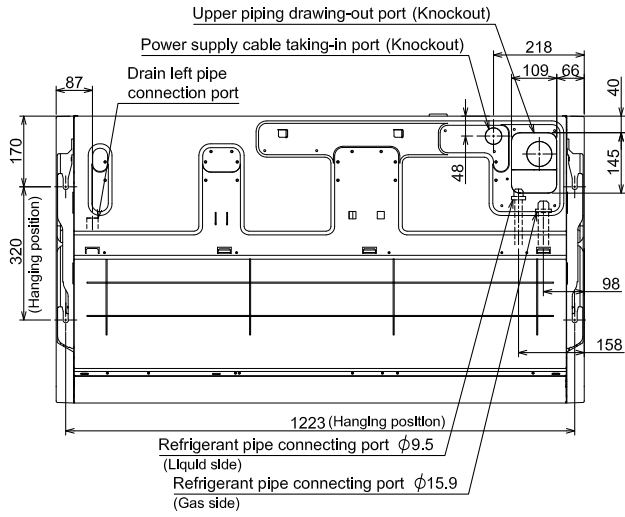


Space required for installation and servicing

(Unit:mm)



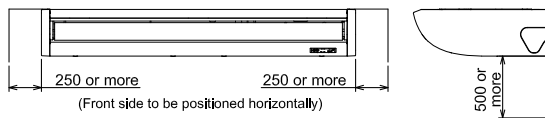
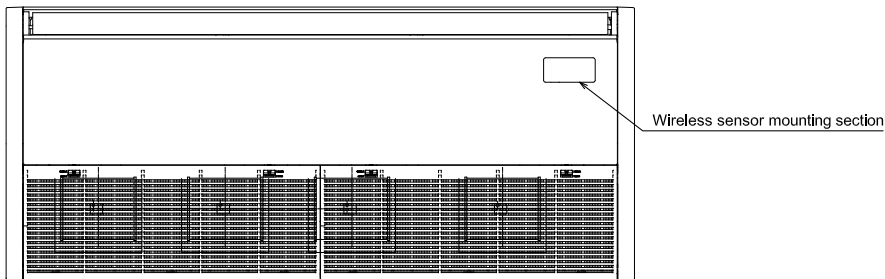
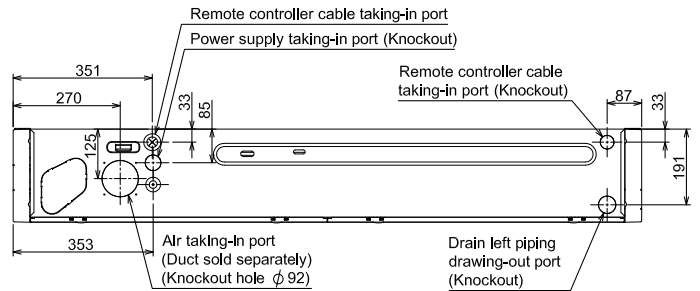
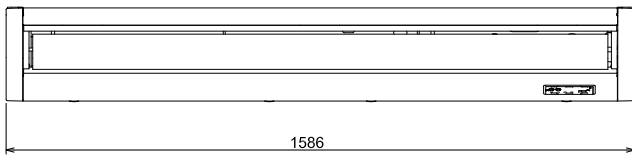
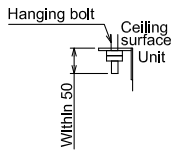
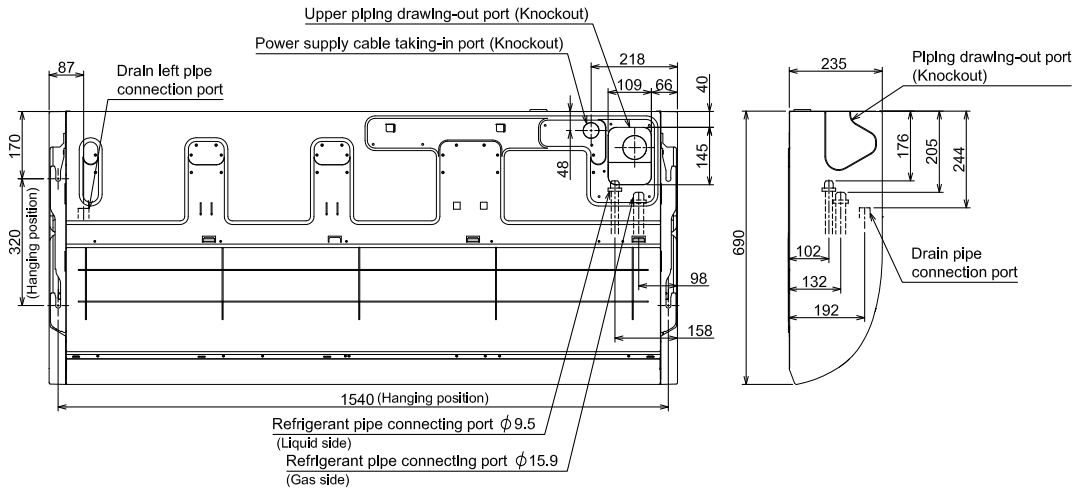
RAV-RM801CTP-E/TR



Space required for installation and servicing

(Unit:mm)

RAV-RM1101CTP-E/TR and RAV-RM1401CTP-E/TR

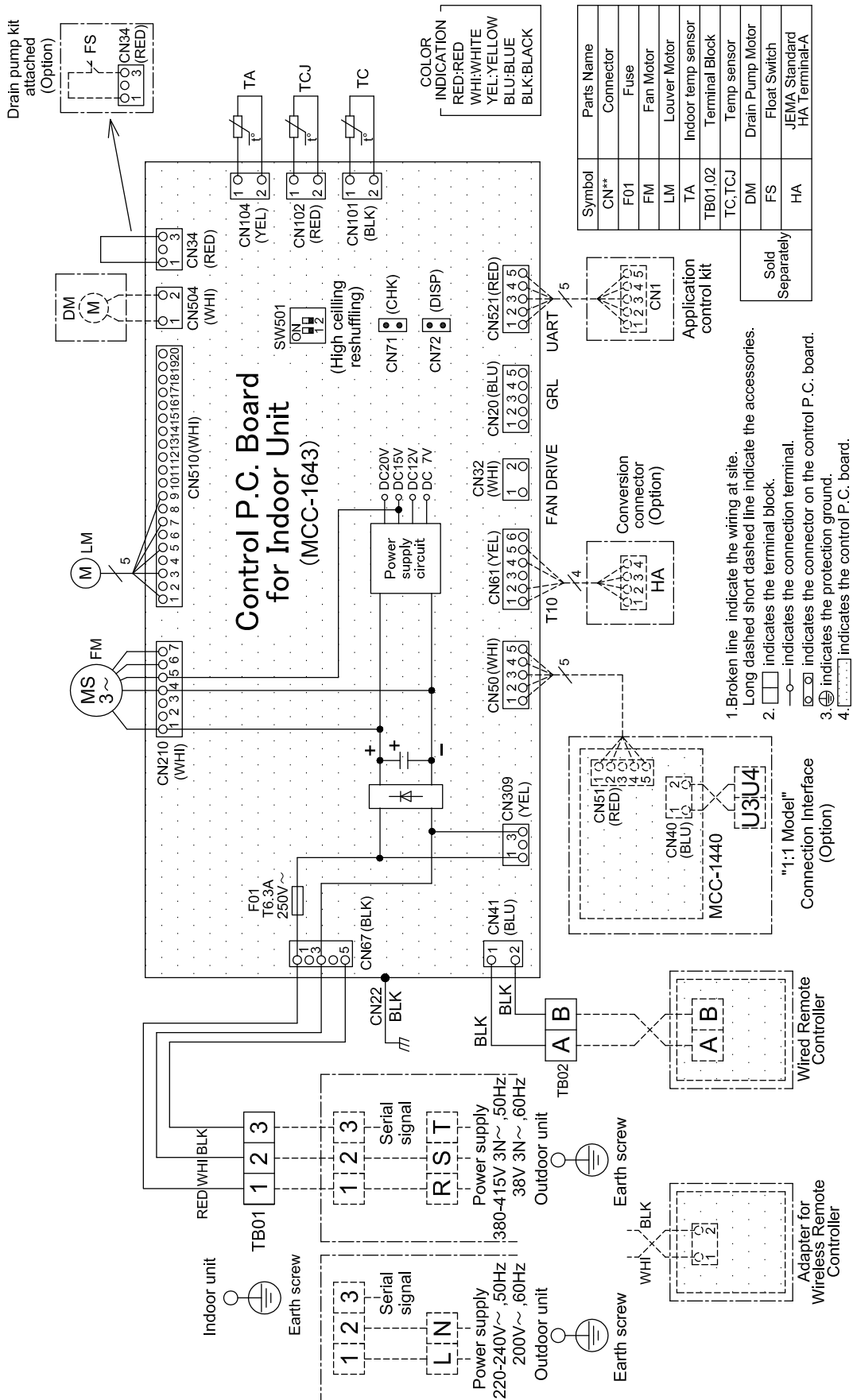


Space required for installation and servicing

(Unit:mm)

### 2-5-3. Wiring Diagrams

RAV-RM401CTP-E/TR, RAV-RM561CTP-E/TR, RAV-RM801CTP-E/TR,  
RAV-RM1101CTP-E/TR and RAV-RM1401CTP-E/TR



## 2-5-4. Sensible Capacity Table

### Digital Inverter R32 Sensible Heat Capacity : RAV-RM\*\*\*CTP-E/TR

indoor air temp.																			
unit size	outdoor air temp. CDB	14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20.0CDB		21.5CDB		23.0CDB		24.5CDB		26.0CDB		27.0CDB		28.0CDB		30.0CDB		32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
401	10.0	3.54	3.07	3.67	3.14	3.91	3.27	4.01	3.34	4.19	3.48	4.31	3.48	4.44	3.47	4.70	3.44	4.92	3.38
	12.0	3.51	3.04	3.63	3.11	3.87	3.24	3.97	3.31	4.15	3.45	4.27	3.44	4.39	3.44	4.65	3.41	4.87	3.35
	14.0	3.47	3.01	3.59	3.08	3.83	3.21	3.92	3.27	4.10	3.41	4.23	3.40	4.35	3.40	4.60	3.37	4.81	3.31
	16.0	3.43	2.97	3.55	3.04	3.79	3.17	3.88	3.24	4.06	3.37	4.18	3.36	4.30	3.36	4.55	3.33	4.76	3.27
	18.0	3.39	2.94	3.51	3.00	3.74	3.13	3.83	3.20	4.01	3.33	4.13	3.32	4.24	3.32	4.50	3.29	4.70	3.23
	20.0	3.35	2.90	3.46	2.97	3.70	3.09	3.78	3.16	3.96	3.29	4.08	3.28	4.19	3.28	4.44	3.25	4.64	3.19
	21.0	3.32	2.88	3.44	2.95	3.67	3.07	3.76	3.14	3.93	3.26	4.05	3.26	4.16	3.26	4.41	3.23	4.61	3.17
	23.0	3.28	2.84	3.39	2.90	3.62	3.03	3.71	3.09	3.88	3.22	3.99	3.21	4.10	3.21	4.35	3.18	4.55	3.13
	25.0	3.22	2.79	3.34	2.86	3.56	2.98	3.64	3.04	3.81	3.17	3.92	3.16	4.04	3.16	4.27	3.13	4.47	3.07
	27.0	3.18	2.75	3.29	2.82	3.51	2.94	3.59	3.00	3.76	3.12	3.87	3.12	3.98	3.12	4.22	3.09	4.41	3.03
	29.0	3.13	2.71	3.24	2.77	3.45	2.89	3.54	2.95	3.70	3.07	3.81	3.07	3.92	3.07	4.15	3.04	4.34	2.98
	31.0	3.07	2.66	3.18	2.72	3.39	2.84	3.47	2.90	3.63	3.02	3.74	3.01	3.85	3.01	4.08	2.99	4.26	2.93
	33.0	3.02	2.61	3.12	2.67	3.33	2.79	3.41	2.85	3.57	2.96	3.67	2.96	3.78	2.96	4.00	2.93	4.19	2.88
	35.0	2.96	2.56	3.06	2.62	3.27	2.73	3.34	2.79	3.50	2.90	3.60	2.90	3.70	2.90	3.92	2.87	4.10	2.82
	37.0	2.90	2.51	3.00	2.57	3.20	2.68	3.28	2.74	3.43	2.85	3.53	2.84	3.63	2.84	3.85	2.82	4.02	2.77
39.0	2.84	2.46	2.94	2.52	3.14	2.62	3.21	2.68	3.36	2.79	3.46	2.78	3.56	2.78	3.77	2.76	3.94	2.71	

indoor air temp.																			
unit size	outdoor air temp. CDB	14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20.0CDB		21.5CDB		23.0CDB		24.5CDB		26.0CDB		27.0CDB		28.0CDB		30.0CDB		32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
561	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	

indoor air temp.																			
unit size	outdoor air temp. CDB	14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20.0CDB		21.5CDB		23.0CDB		24.5CDB		26.0CDB		27.0CDB		28.0CDB		30.0CDB		32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
801	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	

TC:Total Capacity [kW]

SHC:Sensible Heat Capacity [kW]

Digital Inverter R32 Sensible Heat Capacity : RAV-RM\*\*\*CTP-E/TR

		Indoor air temp.																
Outdoor air temp.	14.0 CWB 20.0 CDB	15.0 CWB		16.0 CWB		17.0 CWB		18.0 CWB		19.0 CWB		20.0 CWB		22.0 CWB		24.0 CWB		
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	
	°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	
10.0	9.09	7.44	9.41	7.61	10.04	7.92	10.28	8.09	10.75	8.42	11.07	8.39	11.39	8.37	12.06	8.26	12.61	8.07
12.0	9.03	7.40	9.35	7.56	9.98	7.87	10.21	8.04	10.68	8.36	11.00	8.33	11.31	8.32	11.98	8.21	12.53	8.02
14.0	8.97	7.34	9.28	7.50	9.90	7.81	10.14	7.98	10.61	8.30	10.92	8.27	11.23	8.26	11.89	8.15	12.44	7.96
16.0	8.90	7.28	9.21	7.44	9.82	7.75	10.06	7.91	10.52	8.24	10.83	8.21	11.14	8.19	11.80	8.08	12.34	7.89
18.0	8.82	7.22	9.12	7.38	9.74	7.68	9.97	7.84	10.43	8.16	10.73	8.14	11.04	8.12	11.69	8.01	12.23	7.82
20.0	8.71	7.13	9.02	7.29	9.62	7.59	9.85	7.75	10.31	8.07	10.61	8.04	10.91	8.02	11.56	7.92	12.09	7.73
21.0	8.68	7.11	8.99	7.27	9.59	7.57	9.82	7.73	10.27	8.04	10.57	8.01	10.87	8.00	11.52	7.89	12.05	7.71
23.0	8.59	7.03	8.88	7.19	9.48	7.48	9.71	7.64	10.15	7.95	10.45	7.92	10.75	7.90	11.39	7.80	11.91	7.62
25.0	8.49	6.95	8.79	7.11	9.38	7.40	9.60	7.55	10.04	7.86	10.34	7.83	10.63	7.82	11.26	7.71	11.78	7.53
27.0	8.36	6.85	8.66	7.00	9.24	7.29	9.46	7.44	9.89	7.74	10.18	7.72	10.47	7.70	11.09	7.60	11.60	7.42
29.0	8.24	6.75	8.53	6.90	9.10	7.18	9.32	7.33	9.75	7.63	10.03	7.60	10.32	7.59	10.93	7.49	11.43	7.31
31.0	8.11	6.64	8.39	6.79	8.95	7.06	9.17	7.21	9.59	7.51	9.87	7.48	10.15	7.46	10.75	7.37	11.25	7.19
33.0	7.97	6.52	8.24	6.67	8.80	6.94	9.00	7.09	9.42	7.37	9.70	7.35	9.97	7.33	10.56	7.24	11.05	7.07
35.0	7.80	6.39	8.07	6.53	8.62	6.80	8.82	6.94	9.23	7.22	9.50	7.20	9.77	7.18	10.35	7.09	10.82	6.92
37.0	7.65	6.26	7.92	6.40	8.45	6.66	8.65	6.80	9.05	7.08	9.31	7.06	9.58	7.04	10.14	6.95	10.61	6.79
39.0	7.48	6.12	7.74	6.26	8.26	6.51	8.45	6.65	8.84	6.92	9.10	6.90	9.36	6.88	9.91	6.79	10.37	6.63

		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
	°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
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	

TC:Total Capacity [kW]

SHC:Sensible Heat Capacity [kW]

## 2-5-5. Part load performance

### Combination

Indoor unit : RAV-RM401CTP-E/TR

Outdoor unit : RAV-GM401ATP-E/TR, RAV-GM401ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	900	180	800	140
RATING	3600	830	4000	780

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	3330	3000	2670	2330	2000	1670	1330	1000	830	830
	W	910	790	680	570	470	370	280	210	200	200
35	Q	3600	3240	2880	2520	2160	1800	1440	1080	900	900
	W	830	720	620	520	430	340	260	190	180	180
30	Q	3790	3410	3040	2660	2280	1900	1520	1140	950	950
	W	750	650	560	470	390	310	230	170	160	160
25	Q	3920	3530	3140	2750	2350	1960	1570	1180	980	980
	W	670	580	500	420	350	270	210	150	150	150
20	Q	4080	3670	3260	2850	2450	2040	1630	1220	1020	1020
	W	600	520	450	370	310	240	190	140	130	130

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	4820	4340	3860	3380	2890	2410	1930	1450	960	960
	W	880	730	610	510	410	320	240	170	160	160
10	Q	4310	3880	3440	3010	2580	2150	1720	1290	860	860
	W	820	680	570	470	380	290	220	160	150	150
7	Q	4000	3600	3200	2800	2400	2000	1600	1200	800	800
	W	780	650	540	450	360	280	210	150	140	140
5	Q	3040	2730	2430	2120	1820	1520	1210	910	610	610
	W	720	600	500	410	330	260	190	140	130	130
2	Q	2890	2600	2320	2030	1740	1450	1160	870	580	580
	W	690	570	480	400	320	250	190	130	120	120
0	Q	2800	2520	2240	1960	1680	1400	1120	840	560	560
	W	670	560	460	390	310	240	180	130	120	120
-5	Q	2560	2310	2050	1800	1540	1280	1030	770	510	510
	W	620	520	430	360	290	220	170	120	110	110
-7	Q	2470	2220	1980	1730	1480	1240	990	740	490	490
	W	610	500	420	350	280	220	160	120	110	110
-10	Q	2250	2020	1800	1570	1350	1120	900	670	450	450
	W	580	480	400	330	270	210	160	110	100	100
-15	Q	1730	1560	1380	1210	1040	860	690	520	350	350
	W	510	430	360	300	240	180	140	100	90	90

## Combination

Indoor unit : RAV-RM561CTP-E/TR

Outdoor unit : RAV-GM561ATP-E/TR, RAV-GM561ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	1500	290	1500	290
RATING	5000	1610	5300	1360

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	4630	4170	3710	3240	2780	2320	1850	1390	1390	1390
	W	1760	1400	1120	890	710	540	420	320	320	320
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1610	1290	1030	820	650	500	380	290	290	290
30	Q	5270	4750	4220	3690	3170	2640	2110	1580	1580	1580
	W	1450	1160	930	740	580	450	340	260	260	260
25	Q	5510	4960	4400	3850	3310	2760	2200	1650	1650	1650
	W	1300	1040	830	660	520	400	310	230	230	230
20	Q	5660	5090	4530	3960	3400	2830	2260	1700	1700	1700
	W	1160	930	740	590	470	360	270	210	210	210

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6330	5700	5070	4430	3800	3170	2540	1900	1790	1790
	W	1440	1230	1020	830	670	530	410	320	310	310
10	Q	5750	5170	4600	4020	3450	2880	2300	1720	1630	1630
	W	1390	1180	990	800	640	510	400	310	300	300
7	Q	5300	4770	4240	3710	3180	2650	2120	1590	1500	1500
	W	1360	1160	970	790	630	500	390	300	290	290
5	Q	4080	3670	3270	2860	2450	2040	1640	1220	1160	1160
	W	1170	1000	830	680	540	430	340	260	250	250
2	Q	3990	3590	3190	2790	2390	2000	1600	1200	1130	1130
	W	1150	980	820	670	530	420	330	250	240	240
0	Q	3930	3540	3150	2750	2360	1970	1580	1180	1110	1110
	W	1140	970	810	660	530	420	330	250	240	240
-5	Q	3790	3410	3030	2650	2270	1900	1520	1140	1070	1070
	W	1110	950	790	640	520	410	320	250	240	240
-7	Q	3730	3360	2990	2610	2240	1870	1500	1120	1060	1060
	W	1100	940	780	640	510	410	320	240	230	230
-10	Q	3440	3100	2760	2410	2070	1720	1380	1030	980	980
	W	1060	910	760	610	490	390	300	230	220	220
-15	Q	2650	2390	2120	1860	1590	1330	1060	790	750	750
	W	950	810	680	550	440	350	270	210	200	200

## Combination

Indoor unit : RAV-RM801CTP-E/TR

Outdoor unit : RAV-GM801ATP-E/TR, RAV-GM801ATJP-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
<b>MINIMUM</b>	1500	290	1500	290
<b>RATING</b>	6900	2380	7700	2130

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	<b>Q</b>	6510	5860	5210	4560	3910	3250	2610	1960	1420	1420
	<b>W</b>	2600	2130	1680	1280	960	720	560	430	340	340
35	<b>Q</b>	6900	6210	5520	4830	4140	3450	2760	2070	1500	1500
	<b>W</b>	2380	1950	1540	1170	880	660	510	390	290	290
30	<b>Q</b>	7290	6560	5840	5100	4380	3640	2920	2190	1590	1590
	<b>W</b>	2170	1780	1400	1070	800	600	470	360	280	280
25	<b>Q</b>	7580	6820	6070	5310	4550	3790	3030	2280	1650	1650
	<b>W</b>	1970	1610	1270	970	720	550	420	320	260	260
20	<b>Q</b>	7690	6920	6160	5380	4620	3840	3080	2310	1670	1670
	<b>W</b>	1760	1450	1140	870	650	490	380	290	230	230

## Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
15	<b>Q</b>	9100	8190	7280	6370	5460	4560	3640	2730	1820	1780
	<b>W</b>	2320	1940	1590	1280	1000	770	600	460	330	320
10	<b>Q</b>	8260	7440	6610	5780	4960	4130	3310	2470	1650	1610
	<b>W</b>	2210	1860	1520	1220	950	740	570	440	310	300
7	<b>Q</b>	7700	6930	6160	5390	4620	3850	3080	2310	1540	1500
	<b>W</b>	2130	1790	1460	1170	920	710	550	420	300	290
5	<b>Q</b>	5930	5340	4750	4150	3560	2970	2370	1780	1180	1160
	<b>W</b>	1830	1530	1260	1010	790	610	470	360	260	250
2	<b>Q</b>	5800	5220	4640	4060	3480	2900	2320	1740	1160	1130
	<b>W</b>	1800	1510	1240	990	780	600	470	360	250	240
0	<b>Q</b>	5710	5140	4570	4000	3430	2860	2290	1710	1140	1110
	<b>W</b>	1790	1500	1230	980	770	600	460	350	250	240
-5	<b>Q</b>	5510	4960	4410	3860	3310	2760	2200	1650	1100	1070
	<b>W</b>	1740	1460	1200	960	750	580	450	340	250	240
-7	<b>Q</b>	5420	4880	4340	3800	3250	2710	2170	1620	1080	1060
	<b>W</b>	1730	1450	1190	950	740	580	450	340	240	230
-10	<b>Q</b>	5010	4510	4010	3500	3000	2510	2000	1500	1000	980
	<b>W</b>	1660	1390	1140	920	720	550	430	330	230	220
-15	<b>Q</b>	3850	3470	3080	2700	2310	1930	1540	1150	770	750
	<b>W</b>	1490	1240	1020	820	640	500	380	290	210	200



**Combination**

Indoor unit : RAV-RM1101CTP-E/TR

Outdoor unit : RAV-GM1101ATP-E/TR, RAV-GM1101ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	9500	2950	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	9000	8100	7200	6300	5400	4500	3600	2840	2840	2840
	W	3200	2550	2070	1670	1340	1040	810	650	650	650
35	Q	9500	8550	7600	6650	5700	4750	3800	3000	3000	3000
	W	2950	2350	1910	1540	1230	960	750	600	600	600
30	Q	9960	8960	7960	6970	5970	4980	3980	3140	3140	3140
	W	2680	2130	1730	1400	1120	870	680	540	540	540
25	Q	10340	9300	8270	7240	6200	5170	4130	3260	3260	3260
	W	2430	1940	1570	1270	1010	790	620	490	490	490
20	Q	10610	9550	8490	7430	6370	5310	4240	3350	3350	3350
	W	2200	1750	1420	1150	920	720	560	450	450	450

**Heating**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13410	12060	10730	9390	8050	6700	5360	4010	3600	3600
	W	3230	2770	2330	1900	1520	1200	940	720	660	660
10	Q	12190	10950	9750	8530	7310	6090	4870	3640	3270	3270
	W	3070	2640	2220	1810	1440	1140	900	690	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2940	2530	2120	1730	1380	1090	860	660	600	600
5	Q	8630	7760	6900	6040	5180	4310	3450	2580	2310	2310
	W	2520	2170	1820	1490	1190	940	740	570	520	520
2	Q	8440	7580	6750	5900	5060	4210	3370	2520	2260	2260
	W	2490	2140	1800	1470	1170	920	730	560	510	510
0	Q	8310	7470	6650	5820	4990	4150	3320	2490	2230	2230
	W	2460	2120	1780	1450	1160	910	720	550	500	500
-5	Q	8010	7200	6410	5610	4810	4000	3200	2400	2150	2150
	W	2410	2070	1740	1420	1130	890	700	540	490	490
-7	Q	7890	7090	6310	5520	4730	3940	3150	2360	2120	2120
	W	2380	2050	1720	1400	1120	880	700	540	490	490
-10	Q	7280	6550	5830	5100	4370	3640	2910	2180	1950	1950
	W	2290	1970	1660	1350	1080	850	670	520	470	470
-15	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	2050	1760	1480	1210	960	760	600	460	420	420

**Combination**

Indoor unit : RAV-RM1401CTP-E/TR

Outdoor unit : RAV-GM1401ATP-E/TR, RAV-GM1401ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	12100	4420	13000	3480

Q: Capacity in W

W: Power Consumption in W

Cooling		Load(%)									
Outdoor temperature(°C)		100	90	80	70	60	50	40	30	20	10
40	Q	11460	10310	9170	8030	6880	5730	4590	3440	2840	2840
	W	4810	3880	3050	2340	1770	1340	1020	760	650	650
35	Q	12100	10890	9680	8470	7260	6050	4840	3630	3000	3000
	W	4420	3570	2800	2150	1630	1230	940	700	600	600
30	Q	12680	11410	10140	8880	7610	6340	5080	3810	3140	3140
	W	4010	3240	2540	1950	1480	1120	850	640	540	540
25	Q	13160	11840	10530	9220	7900	6580	5270	3960	3260	3260
	W	3650	2950	2310	1780	1350	1020	780	580	500	500
20	Q	13520	12160	10810	9470	8120	6760	5410	4060	3350	3350
	W	3290	2660	2090	1600	1210	920	700	520	450	450

**Heating**

Heating		Load(%)									
Outdoor temperature(°C)		100	90	80	70	60	50	40	30	20	10
15	Q	15570	14010	12460	10900	9340	7780	6230	4670	3590	3590
	W	3820	3210	2680	2210	1780	1400	1080	820	660	660
10	Q	14150	12730	11320	9900	8490	7070	5660	4240	3260	3260
	W	3630	3060	2550	2100	1690	1340	1020	780	630	630
7	Q	13000	11700	10400	9100	7800	6500	5200	3900	3000	3000
	W	3480	2930	2440	2010	1620	1280	980	750	600	600
5	Q	10010	9010	8010	7010	6010	5010	4010	3000	2310	2310
	W	2990	2520	2100	1730	1390	1100	840	640	520	520
2	Q	9790	8810	7830	6850	5870	4900	3920	2940	2260	2260
	W	2950	2480	2070	1700	1370	1080	830	640	510	510
0	Q	9650	8680	7720	6750	5790	4820	3860	2890	2230	2230
	W	2920	2460	2050	1680	1360	1070	820	630	500	500
-5	Q	9300	8370	7440	6510	5580	4650	3720	2790	2150	2150
	W	2850	2400	2000	1640	1320	1050	800	610	490	490
-7	Q	9160	8240	7330	6410	5500	4580	3660	2750	2110	2110
	W	2810	2370	1970	1630	1310	1040	790	610	490	490
-10	Q	8460	7610	6770	5920	5080	4230	3380	2540	1950	1950
	W	2710	2280	1900	1570	1260	1000	760	580	470	470
-15	Q	6500	5850	5200	4550	3900	3250	2600	1950	1500	1500
	W	2430	2040	1700	1400	1130	890	680	520	420	420

## Combination

Indoor unit : RAV-RM561CTP-E/TR x 2 ( Twin system )

Outdoor unit : RAV-GM1101ATP-E/TR, RAV-GM1101ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	9500	2950	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	9000	8100	7200	6300	5400	4500	3600	2840	2840	2840
	W	3200	2550	2070	1670	1340	1040	810	650	650	650
35	Q	9500	8550	7600	6650	5700	4750	3800	3000	3000	3000
	W	2950	2350	1910	1540	1230	960	750	600	600	600
30	Q	9960	8960	7960	6970	5970	4980	3980	3140	3140	3140
	W	2680	2130	1730	1400	1120	870	680	540	540	540
25	Q	10340	9300	8270	7240	6200	5170	4130	3260	3260	3260
	W	2430	1940	1570	1270	1010	790	620	490	490	490
20	Q	10610	9550	8490	7430	6370	5310	4240	3350	3350	3350
	W	2200	1750	1420	1150	920	720	560	450	450	450

## Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13410	12060	10730	9390	8050	6700	5360	4010	3600	3600
	W	3230	2770	2330	1900	1520	1200	940	720	660	660
10	Q	12190	10950	9750	8530	7310	6090	4870	3640	3270	3270
	W	3070	2640	2220	1810	1440	1140	900	690	630	630
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2940	2530	2120	1730	1380	1090	860	660	600	600
5	Q	8630	7760	6900	6040	5180	4310	3450	2580	2310	2310
	W	2520	2170	1820	1490	1190	940	740	570	520	520
2	Q	8440	7580	6750	5900	5060	4210	3370	2520	2260	2260
	W	2490	2140	1800	1470	1170	920	730	560	510	510
0	Q	8310	7470	6650	5820	4990	4150	3320	2490	2230	2230
	W	2460	2120	1780	1450	1160	910	720	550	500	500
-5	Q	8010	7200	6410	5610	4810	4000	3200	2400	2150	2150
	W	2410	2070	1740	1420	1130	890	700	540	490	490
-7	Q	7890	7090	6310	5520	4730	3940	3150	2360	2120	2120
	W	2380	2050	1720	1400	1120	880	700	540	490	490
-10	Q	7280	6550	5830	5100	4370	3640	2910	2180	1950	1950
	W	2290	1970	1660	1350	1080	850	670	520	470	470
-15	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	2050	1760	1480	1210	960	760	600	460	420	420

## Combination

Indoor unit : RAV-RM801CTP-E/TR x 2 ( Twin system )

Outdoor unit : RAV-GM1401ATP-E/TR, RAV-GM1401ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	12100	4420	13000	3480

Q: Capacity in W

W: Power Consumption in W

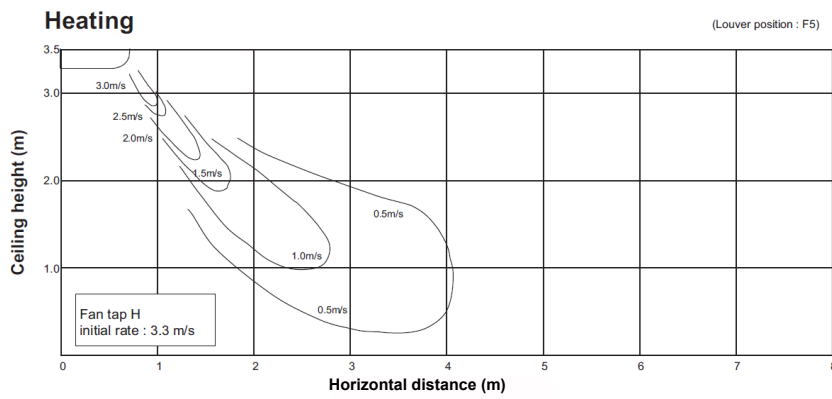
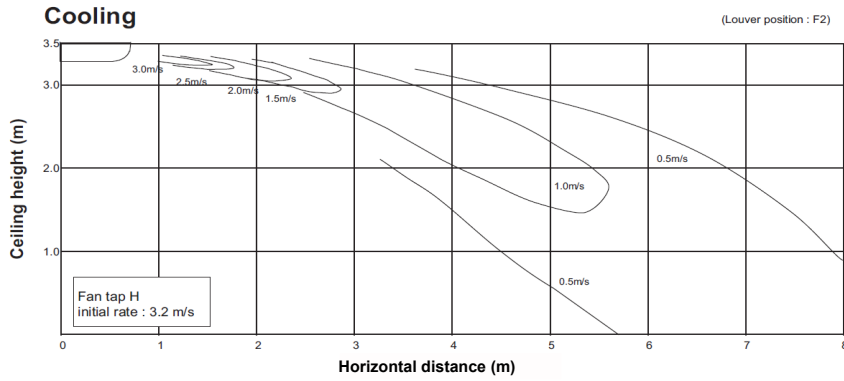
Cooling		Load(%)									
Outdoor temperature(°C)		100	90	80	70	60	50	40	30	20	10
40	Q	11460	10310	9170	8030	6880	5730	4590	3440	2840	2840
	W	4810	3880	3050	2340	1770	1340	1020	760	650	650
35	Q	12100	10890	9680	8470	7260	6050	4840	3630	3000	3000
	W	4420	3570	2800	2150	1630	1230	940	700	600	600
30	Q	12680	11410	10140	8880	7610	6340	5080	3810	3140	3140
	W	4010	3240	2540	1950	1480	1120	850	640	540	540
25	Q	13160	11840	10530	9220	7900	6580	5270	3960	3260	3260
	W	3650	2950	2310	1780	1350	1020	780	580	500	500
20	Q	13520	12160	10810	9470	8120	6760	5410	4060	3350	3350
	W	3290	2660	2090	1600	1210	920	700	520	450	450

## Heating

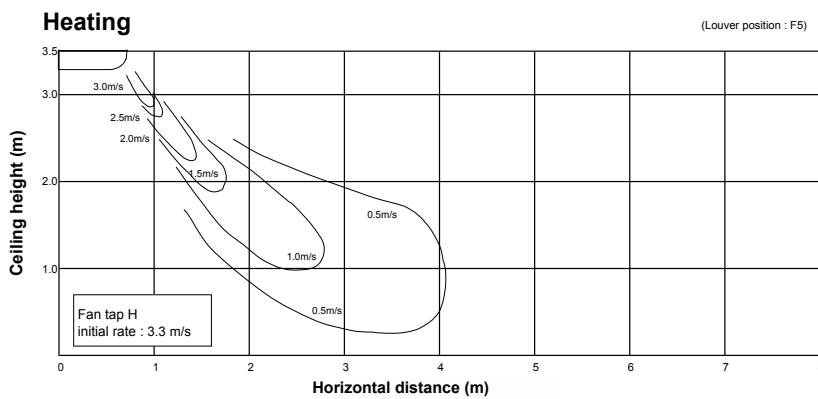
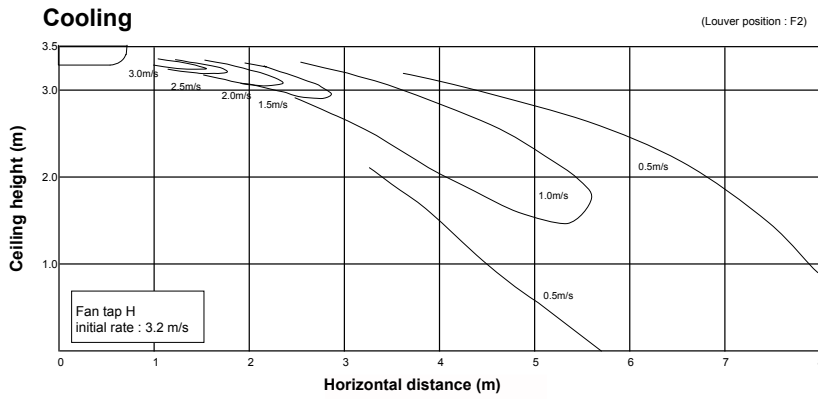
Heating		Load(%)									
Outdoor temperature(°C)		100	90	80	70	60	50	40	30	20	10
15	Q	15570	14010	12460	10900	9340	7780	6230	4670	3590	3590
	W	3820	3210	2680	2210	1780	1400	1080	820	660	660
10	Q	14150	12730	11320	9900	8490	7070	5660	4240	3260	3260
	W	3630	3060	2550	2100	1690	1340	1020	780	630	630
7	Q	13000	11700	10400	9100	7800	6500	5200	3900	3000	3000
	W	3480	2930	2440	2010	1620	1280	980	750	600	600
5	Q	10010	9010	8010	7010	6010	5010	4010	3000	2310	2310
	W	2990	2520	2100	1730	1390	1100	840	640	520	520
2	Q	9790	8810	7830	6850	5870	4900	3920	2940	2260	2260
	W	2950	2480	2070	1700	1370	1080	830	640	510	510
0	Q	9650	8680	7720	6750	5790	4820	3860	2890	2230	2230
	W	2920	2460	2050	1680	1360	1070	820	630	500	500
-5	Q	9300	8370	7440	6510	5580	4650	3720	2790	2150	2150
	W	2850	2400	2000	1640	1320	1050	800	610	490	490
-7	Q	9160	8240	7330	6410	5500	4580	3660	2750	2110	2110
	W	2810	2370	1970	1630	1310	1040	790	610	490	490
-10	Q	8460	7610	6770	5920	5080	4230	3380	2540	1950	1950
	W	2710	2280	1900	1570	1260	1000	760	580	470	470
-15	Q	6500	5850	5200	4550	3900	3250	2600	1950	1500	1500
	W	2430	2040	1700	1400	1130	890	680	520	420	420

## 2-5-6. Air Throw Distance Chart

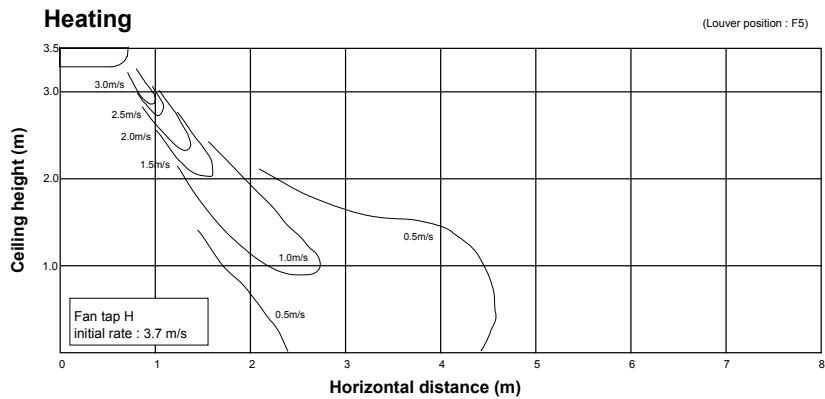
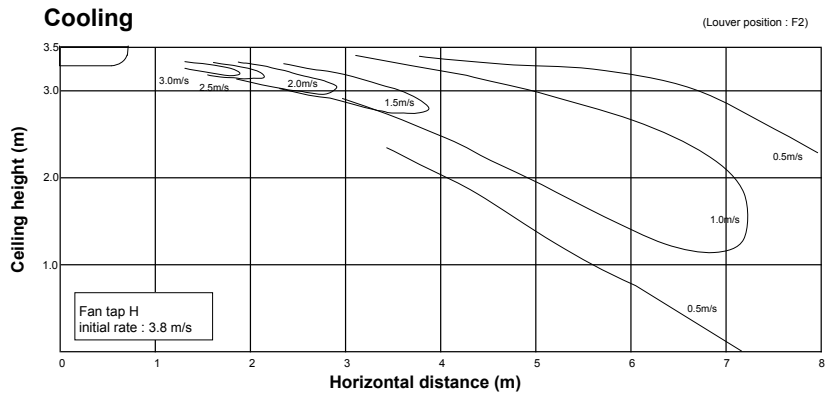
### RAV-RM401CTP-E



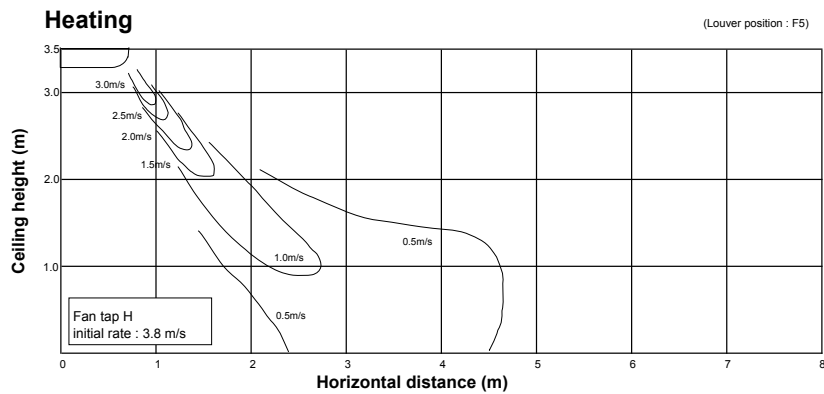
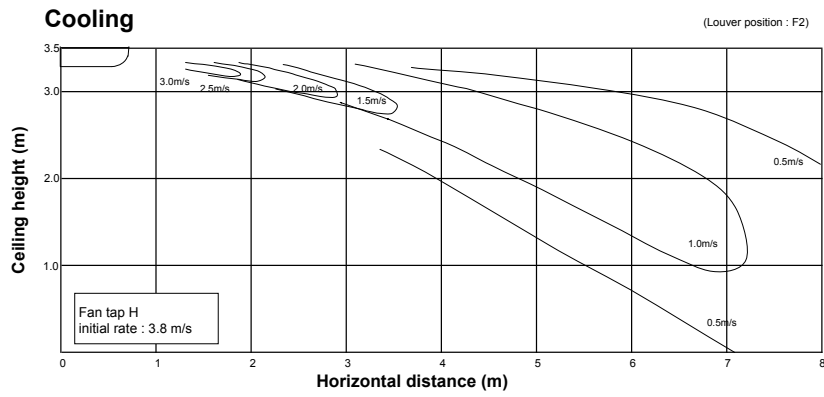
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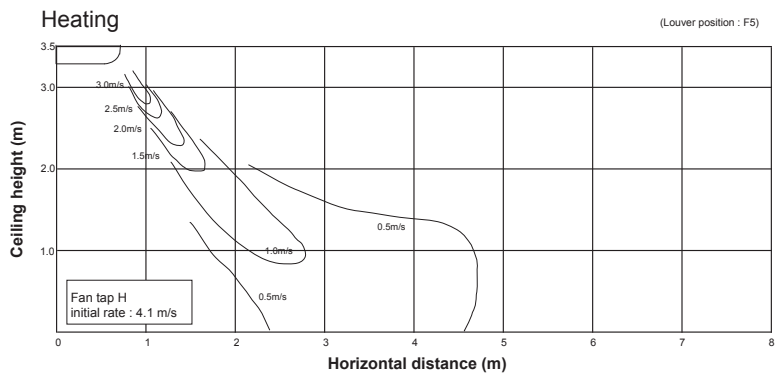
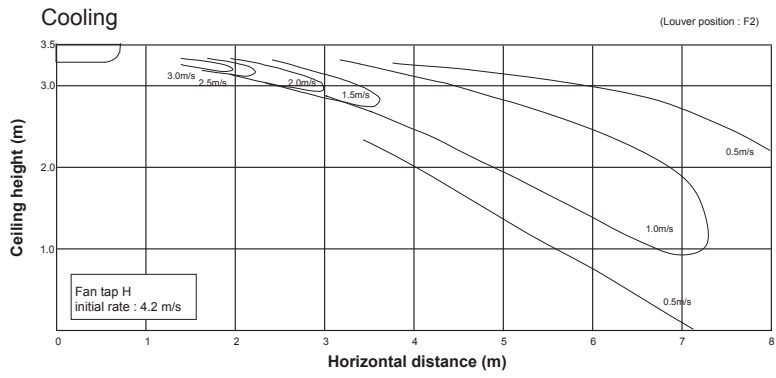
### RAV-RM801CTP-E



### RAV-RM1101CTP-E



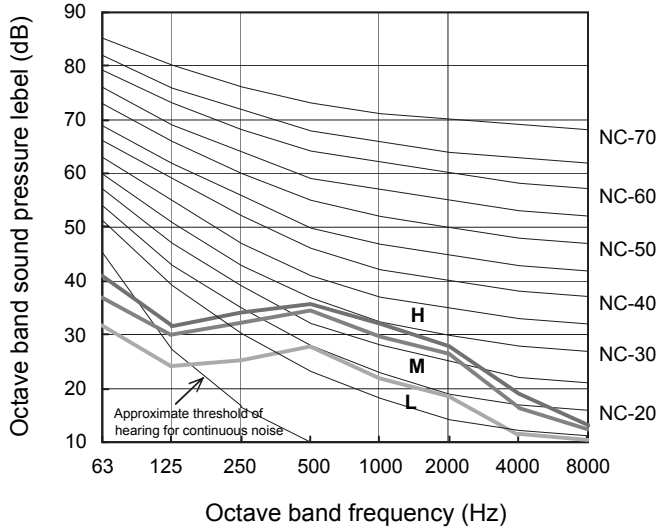
RAV-RM1401CTP-E



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

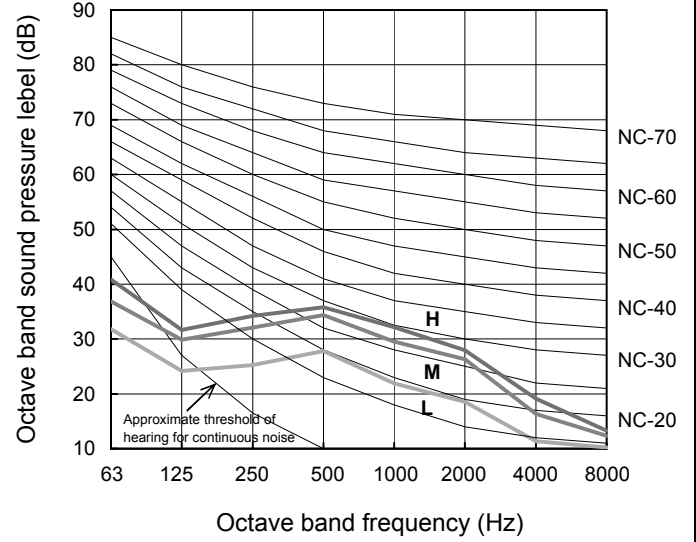
**RAV-RM401CTP-E/TR**

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



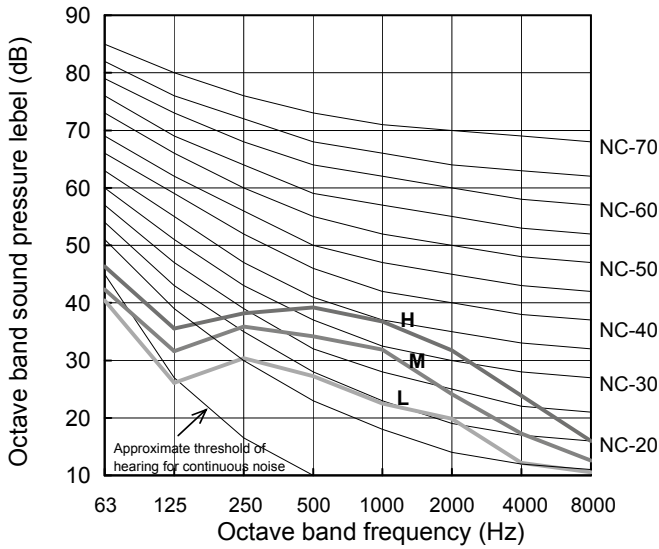
**RAV-RM561CTP-E/TR**

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



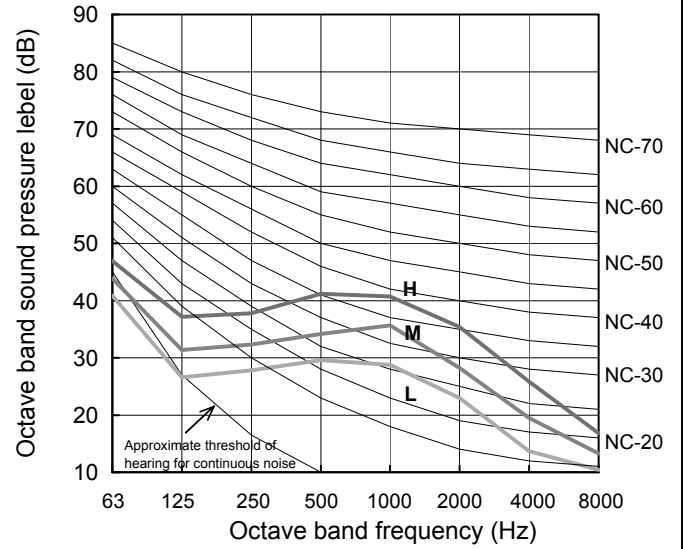
**RAV-RM801CTP-E/TR**

Fan tap	H	M	L
Sound pressure level (dB(A))	41	36	29



**RAV-RM1101CTP-E/TR**

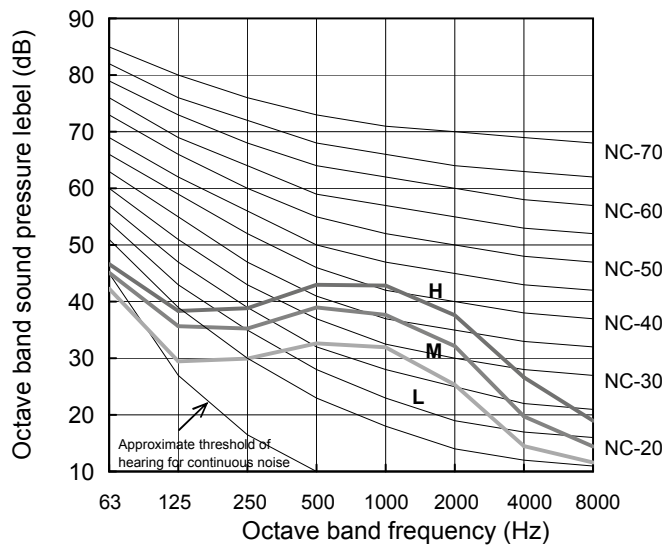
Fan tap	H	M	L
Sound pressure level (dB(A))	44	38	32





**RAV-RM1401CTP-E/TR**

Fan tap	H	M	L
Sound pressure level (dB(A))	46	41	35



## **2-6. High-wall 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)**

## 2-5-1. Specifications

### High-wall Type <Single Type>

Model		Indoor unit		RAV- RM301KRTP-E/TR	RAV- RM401KRTP-E/TR	RAV- RM561KRTP-E/TR	RAV- RM801KRTP-E/TR
		Outdoor unit	(RAV-GM***ATJP-E)	RAV-GM301ATP-E/TR	RAV-GM401ATP-E/TR	RAV-GM561ATP-E/TR	RAV-GM801ATP-E/TR
Cooling capacity		(kW)		2.5 < 0.9-3.0 >	3.6 < 0.9-4.0 >	5.0 < 1.5 - 5.6 >	6.7 < 1.5 - 8.0 >
Heating capacity		(kW)		3.4 < 0.8-4.5 >	4.0 < 0.8-5.0 >	5.3 < 1.5 - 6.3 >	7.7 < 1.5 - 9.0 >
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz					
Electrical characteristics	Cooling	Running current (A)		3.07-2.83	5.60-5.10	7.78-7.13	11.43-10.48
		Power consumption (kW)		0.61	1.13	1.66	2.44
		Power factor (%)		90	92	97	97
		EER		4.10	3.19	3.01	2.75
		SEER		6.36	6.12	6.19	5.73
	Heating	Running current (A)		4.17-3.80	5.50-5.00	7.26-6.66	12.23-11.21
		Power consumption (kW)		0.85	1.12	1.55	2.61
		Power factor (%)		93	93	97	97
		COP		4.00	3.57	3.42	2.95
		SCOP		4.10	4.22	4.00	4.01
Maximum current (A)				7.9	9.2	15.5	15.5
<b>Indoor unit</b>							
Outer dimension	Main unit	Height (mm)		293	293	320	320
		Width (mm)		798	798	1050	1050
		Depth (mm)		230	230	250	250
Total weight	Main unit (kg)		10.0	10.0	14.0	14.0	
Fan unit	Fan		Cross flow fan				
	Standard air flow	H/M/L (m3/h)	670/540/450	700/580/450	960/830/680	1040/910/680	
	Motor (W)		30	30	30	30	
Controller (Packed with unit)		WH-TA09NE					
Air filter		Standard filter (Long life filter)					
Sound pressure level	H/M/L (dB)		40 / 34 / 29	41 / 36 / 30	42 / 39 / 36	45 / 41 / 35	
Sound power level	H/M/L (dB)		55 / 49 / 44	55 / 51 / 45	57 / 54 / 51	60 / 56 / 51	
<b>Outdoor unit</b>							
Air Flow (m3/h)				1,800	2,200	2,400	2,700
Outer dimension	Height (mm)		550				
	Width (mm)		780				
	Depth (mm)		290				
Total weight	Main unit (kg)		29	34	40	43	
Pipe	Min. length (m)		2.0		5.0		
	Max. total length (m)		20.0		30.0		
Flare Connections	Gas side (mm)		9.5	12.7		15.9	
	Liquid side (mm)		6.4	6.4		9.5	
Sound pressure level	Cooling/Heating (dB)		46 / 47	49 / 50	46 / 48	48 / 52	
Sound power level	Cooling/Heating (dB)		61 / 62	64 / 65	63 / 65	65 / 69	
Operating Range	Cooling (°C)		-15 / 46				
	Heating (°C)		-15 / 15				

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

\*2 : 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.

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

## High wall (Twin System)

Model		Indoor unit 1		RAV-RM561KRTP-E/TR	RAV-RM801KRTP-E/TR
		Indoor unit 2		RAV-RM561KRTP-E/TR	RAV-RM801KRTP-E/TR
		Outdoor unit (RAV-GM***ATJP-E)		RAV-GM1101ATP-E/TR	RAV-GM1401ATP-E/TR
Cooling capacity		(kW)		9.5 < 3.0 - 11.2 >	12.1 < 3.0 - 13.2 >
Heating capacity		(kW)		11.2 < 3.0 - 13.0 >	13.0 < 3.0 - 16.0 >
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz			
Electrical characteristics	Cooling	Running current (A)		14.40-13.20	22.80-20.90
		Power consumption (kW)		2.98	4.71
		Power factor (%)		94	94
		EER		3.19	2.57
		SEER		5.32	5.24
	Heating	Running current (A)		14.50-13.25	18.60-17.10
		Power consumption (kW)		2.99	3.86
		Power factor (%)		94	94
		COP		3.75	3.37
		SCOP		4.19	4.19
Maximum current (A)				22.8	22.8
<b>Indoor unit</b>					
Outer dimension	Main unit		Height (mm)	320	320
			Width (mm)	1050	1050
			Depth (mm)	250	250
Total weight	Main unit (kg)		14.0	14.0	
Fan unit	Fan		Cross flow fan		
	Standard air flow	H/M/L (m3/h)	960/830/680	1040/910/680	
	Motor (W)		30		
Air filter		Standard filter (Long life filter)			
Sound pressure level		H/M/L (dB)	42 / 39 / 36	45 / 41 / 35	
Sound power level		H/M/L (dB)	57 / 54 / 51	60 / 56 / 51	
<b>Outdoor unit</b>					
Air Flow (m3/h)				4,080	4,200
Outer dimension	Height (mm)		890		
	Width (mm)		900		
	Depth (mm)		320		
Total weight	Main unit (kg)		68		
Pipe	Min. length (m)		5.0		
	Max. total length (m)		50.0		
Flare Connections	Main	Gas (mm)	15.9		
		Liquid (mm)	9.5		
	Branch	Gas (mm)	12.7	15.9	
		Liquid (mm)	6.4	9.5	
Sound pressure level	Cooling / Heating (dB)		54 / 57	55 / 57	
Sound power level	Cooling/Heating (dB)		70 / 74	70 / 74	
Operating Range	Cooling (°C)		-15 / 46		
	Heating (°C)		-15 / 15		

\*1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

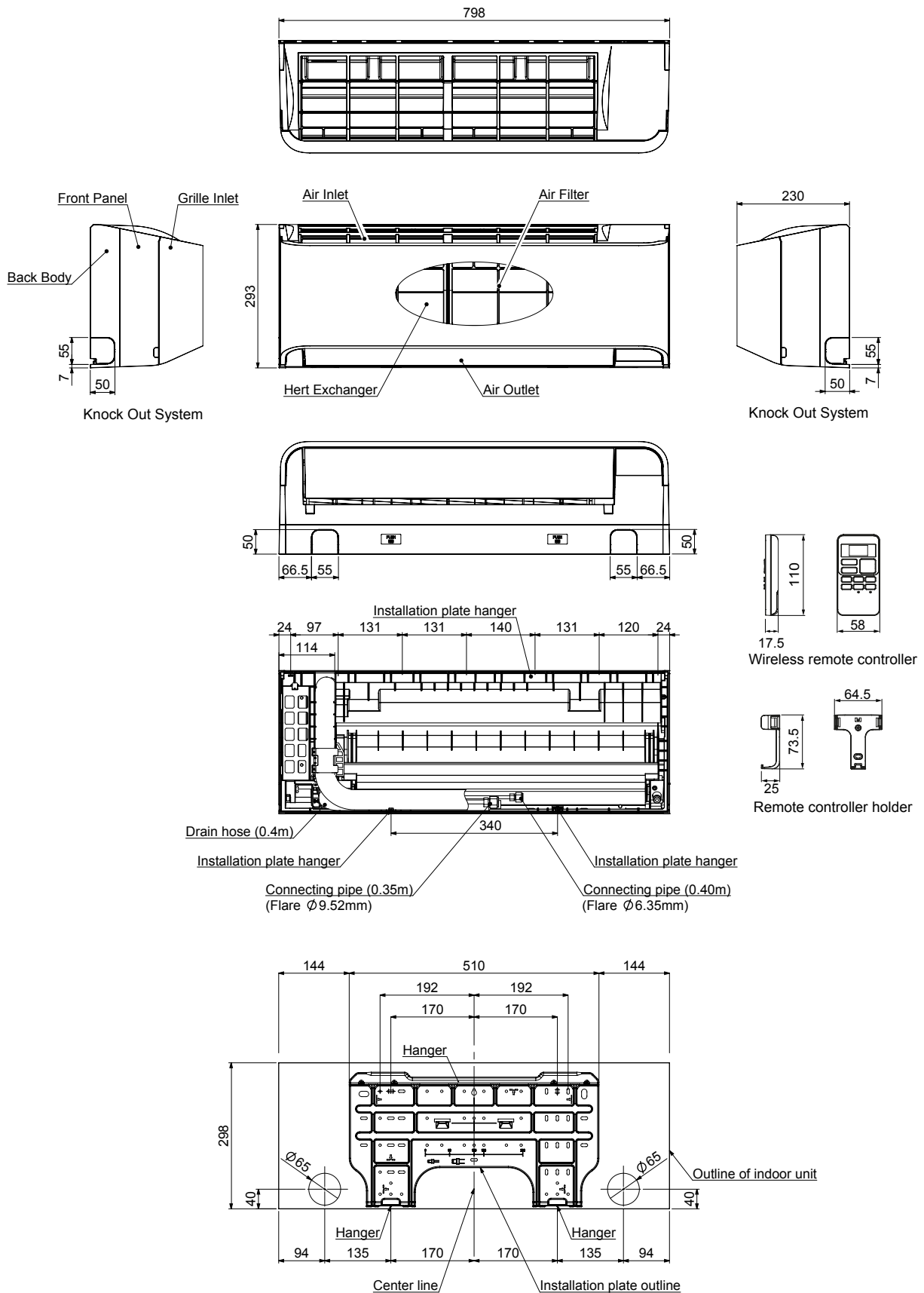
\*2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

Note :

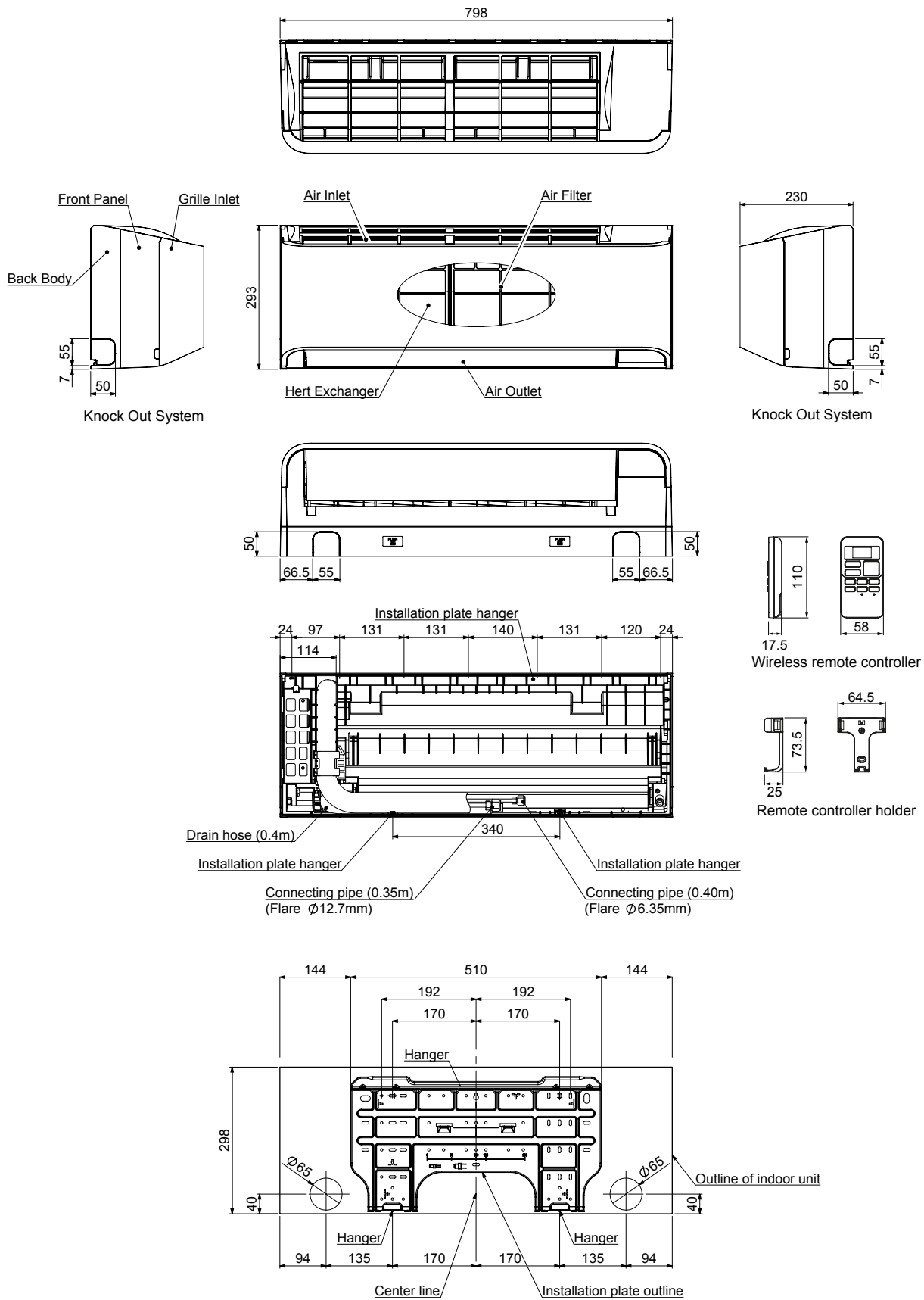
Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB  
Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

## 2-6-2. Dimension

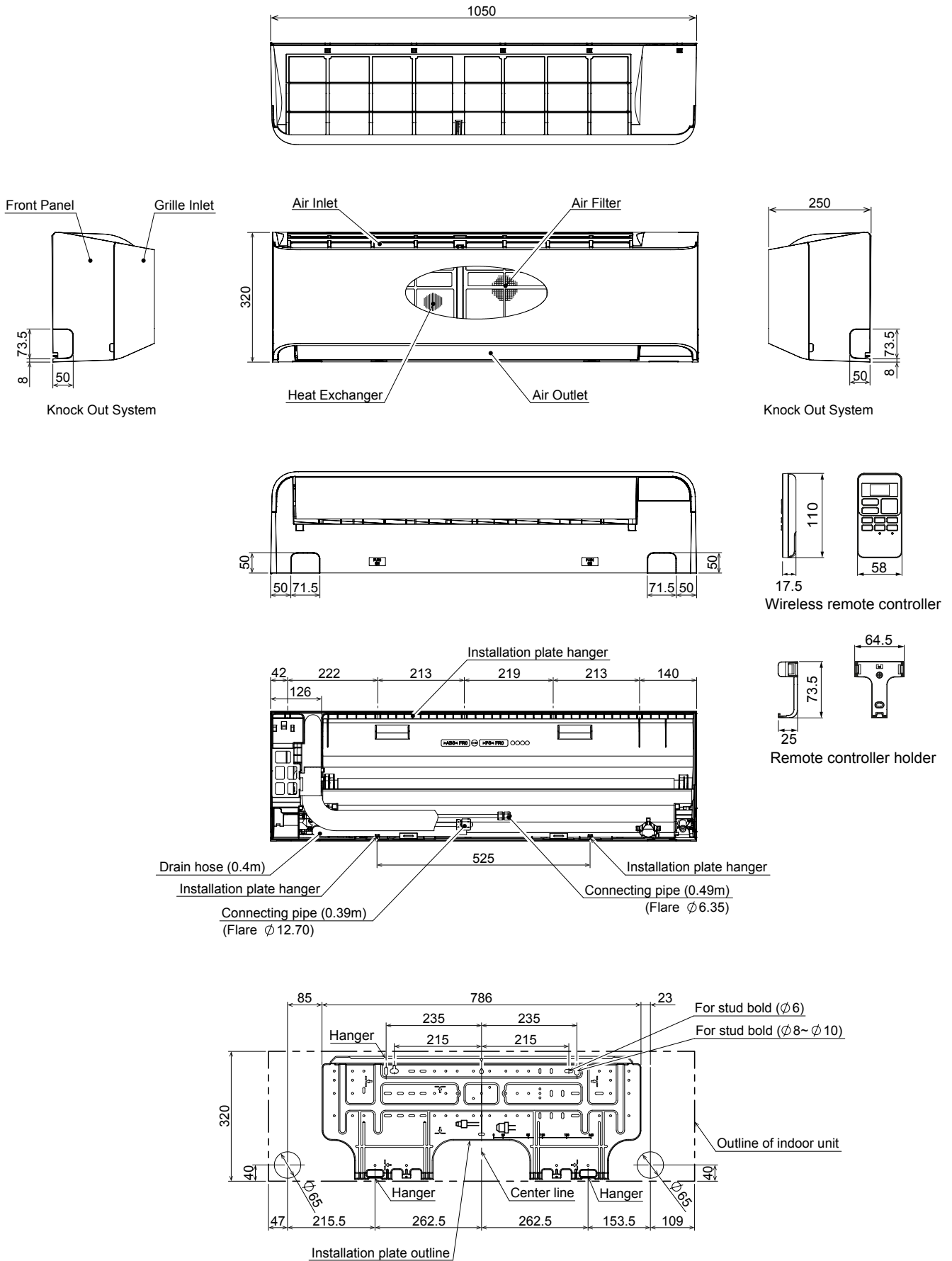
### RAV-RM301KRTP-E/TR



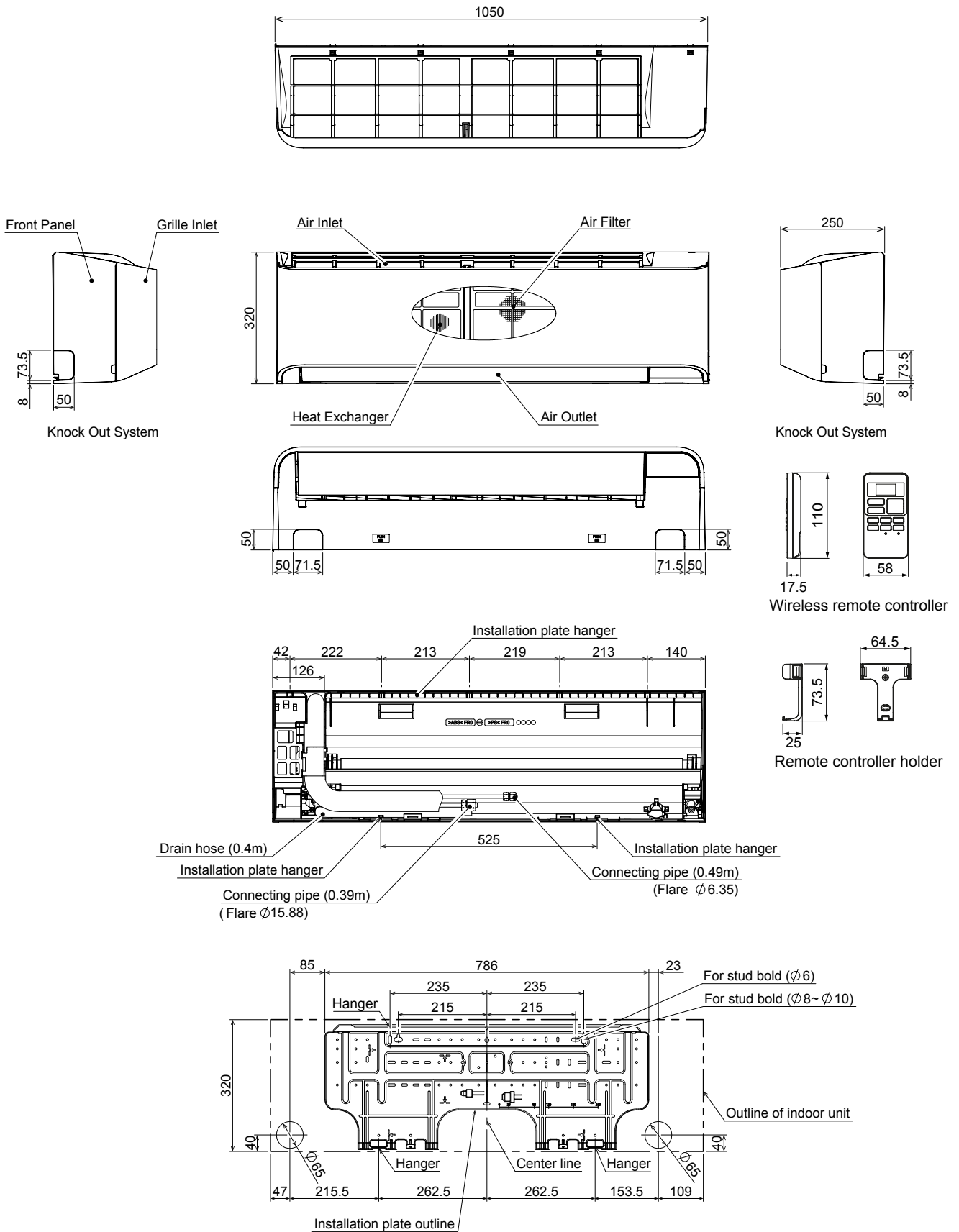
RAV-RM401KRTP-E/TR



RAV-RM561KRTP-E/TR



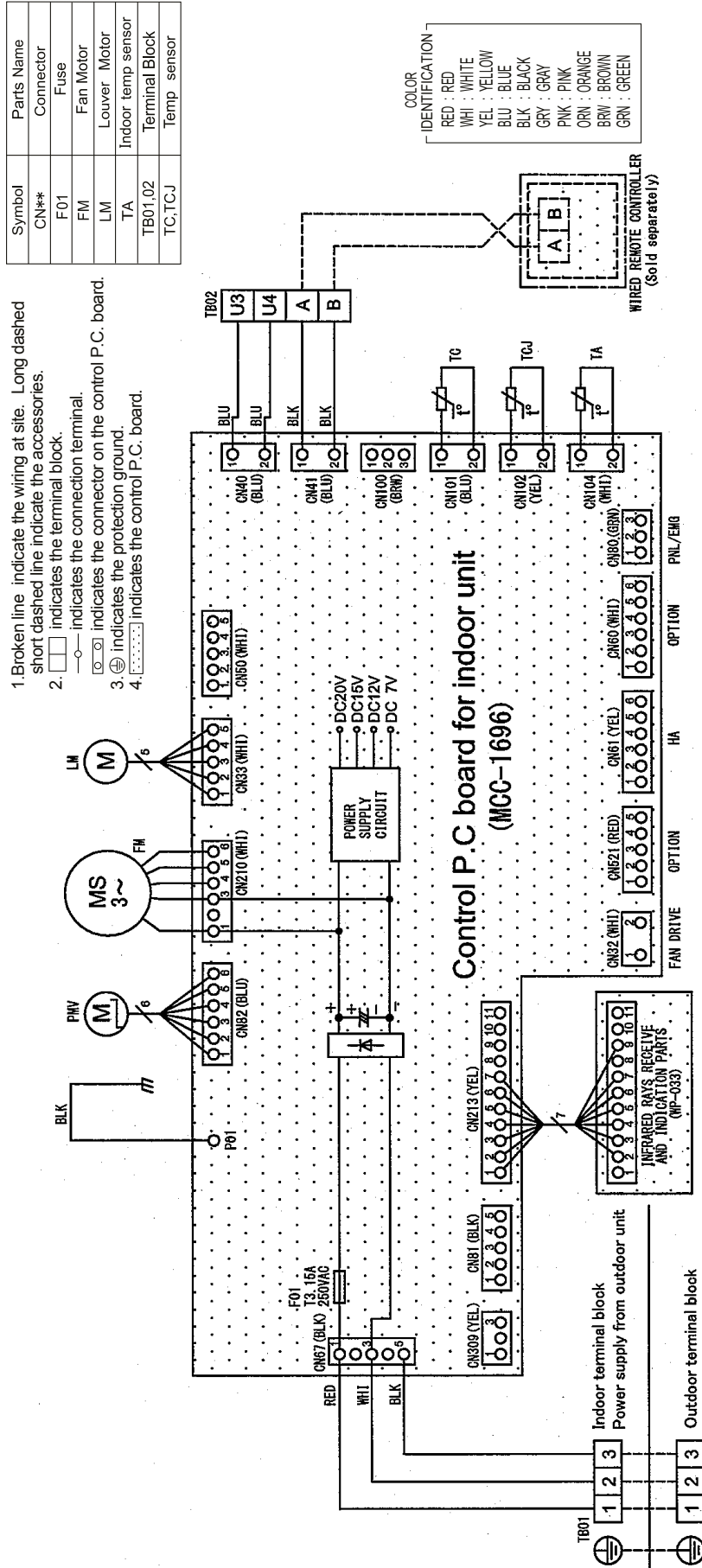
RAV-RM801KRTP-E/TR





### 2-6-3. Wiring Diagrams

#### RAV-RM301KRTP-E/TR, RAV-RM401KRTP-E/TR, RAV-RM561KRTP-E/TR and RAV-RM801KRTP-E/TR



# 2-6-4. Sensible Capacity Table

## Digital Inverter R32 Sensible Heat Capacity : RAV-RM\*\*\*K RTP-E/TR

Unit size	Outdoor air temp.	Indoor Air temperature																	
		14.0 °F WB		15.0 °F WB		16.0 °F WB		17.0 °F WB		18.0 °F WB		19.0 °F WB		20.0 °F WB		22.0 °F WB		24.0 °F WB	
		20.0 °F DB		21.0 °F DB		23.0 °F DB		24.0 °F DB		26.0 °F DB		27.0 °F DB		28.0 °F DB		30.0 °F DB		32.0 °F DB	
°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	
301	10.0	2.36	2.03	2.44	2.08	2.61	2.17	2.67	2.21	2.79	2.30	2.88	2.30	2.96	2.30	3.13	2.28	3.28	2.23
	12.0	2.34	2.02	2.43	2.06	2.59	2.15	2.65	2.20	2.77	2.29	2.85	2.28	2.94	2.28	3.11	2.26	3.25	2.22
	14.0	2.33	2.00	2.41	2.05	2.57	2.13	2.63	2.18	2.75	2.27	2.83	2.27	2.91	2.26	3.08	2.24	3.23	2.20
	16.0	2.31	1.99	2.39	2.03	2.55	2.12	2.61	2.16	2.73	2.25	2.81	2.25	2.89	2.25	3.06	2.22	3.20	2.18
	18.0	2.29	1.97	2.37	2.01	2.52	2.10	2.58	2.14	2.70	2.23	2.78	2.23	2.86	2.22	3.03	2.20	3.17	2.16
	20.0	2.26	1.95	2.34	1.99	2.50	2.08	2.56	2.12	2.68	2.21	2.76	2.20	2.83	2.20	3.00	2.18	3.14	2.14
	21.0	2.25	1.94	2.33	1.98	2.49	2.07	2.55	2.11	2.66	2.20	2.74	2.19	2.82	2.19	2.99	2.17	3.12	2.13
	23.0	2.23	1.92	2.31	1.96	2.46	2.05	2.52	2.09	2.64	2.17	2.71	2.17	2.79	2.17	2.96	2.15	3.09	2.11
	25.0	2.20	1.90	2.28	1.94	2.43	2.02	2.49	2.07	2.61	2.15	2.68	2.15	2.76	2.14	2.92	2.13	3.06	2.08
	27.0	2.18	1.87	2.25	1.92	2.40	2.00	2.46	2.04	2.58	2.12	2.65	2.12	2.73	2.12	2.89	2.10	3.02	2.06
	29.0	2.15	1.85	2.23	1.89	2.37	1.97	2.43	2.02	2.54	2.10	2.62	2.09	2.69	2.09	2.85	2.07	2.98	2.03
	31.0	2.12	1.83	2.20	1.87	2.34	1.95	2.40	1.99	2.51	2.07	2.58	2.07	2.66	2.07	2.81	2.05	2.94	2.01
	33.0	2.09	1.80	2.17	1.84	2.31	1.92	2.37	1.96	2.47	2.04	2.55	2.04	2.62	2.04	2.77	2.02	2.90	1.98
	35.0	2.05	1.77	2.12	1.81	2.27	1.88	2.32	1.92	2.43	2.00	2.50	2.00	2.57	2.00	2.72	1.98	2.85	1.94
	37.0	2.03	1.75	2.10	1.79	2.24	1.86	2.29	1.90	2.40	1.98	2.47	1.98	2.54	1.98	2.69	1.96	2.82	1.92
	39.0	2.00	1.72	2.07	1.76	2.21	1.83	2.26	1.87	2.36	1.95	2.43	1.95	2.50	1.94	2.65	1.93	2.77	1.89

Unit size	Outdoor air temp.	Indoor Air temperature																	
		14.0 °F WB		15.0 °F WB		16.0 °F WB		17.0 °F WB		18.0 °F WB		19.0 °F WB		20.0 °F WB		22.0 °F WB		24.0 °F WB	
		20.0 °F DB		21.0 °F DB		23.0 °F DB		24.0 °F DB		26.0 °F DB		27.0 °F DB		28.0 °F DB		30.0 °F DB		32.0 °F DB	
°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	
401	10.0	3.40	2.76	3.52	2.82	3.76	2.93	3.85	3.00	4.02	3.12	4.14	3.11	4.26	3.10	4.51	3.05	4.72	2.98
	12.0	3.38	2.74	3.49	2.80	3.73	2.91	3.82	2.97	3.99	3.09	4.11	3.08	4.23	3.08	4.48	3.03	4.68	2.96
	14.0	3.35	2.72	3.47	2.78	3.70	2.89	3.79	2.95	3.96	3.07	4.08	3.06	4.19	3.05	4.44	3.01	4.65	2.94
	16.0	3.32	2.69	3.44	2.75	3.67	2.86	3.75	2.92	3.93	3.04	4.04	3.03	4.16	3.02	4.40	2.98	4.61	2.91
	18.0	3.29	2.67	3.41	2.73	3.63	2.84	3.72	2.90	3.89	3.02	4.01	3.01	4.12	3.00	4.36	2.96	4.57	2.88
	20.0	3.26	2.64	3.37	2.70	3.60	2.81	3.68	2.87	3.85	2.99	3.97	2.98	4.08	2.97	4.32	2.93	4.52	2.86
	21.0	3.24	2.63	3.36	2.69	3.58	2.80	3.67	2.86	3.84	2.97	3.95	2.96	4.06	2.95	4.30	2.91	4.50	2.84
	23.0	3.21	2.60	3.32	2.66	3.54	2.77	3.63	2.83	3.79	2.94	3.91	2.93	4.02	2.92	4.26	2.88	4.45	2.81
	25.0	3.17	2.57	3.28	2.63	3.50	2.74	3.59	2.79	3.75	2.91	3.86	2.90	3.97	2.89	4.21	2.85	4.40	2.78
	27.0	3.14	2.54	3.24	2.60	3.46	2.70	3.54	2.76	3.71	2.87	3.82	2.86	3.93	2.86	4.16	2.82	4.35	2.75
	29.0	3.10	2.51	3.20	2.57	3.42	2.67	3.50	2.73	3.66	2.84	3.77	2.83	3.88	2.82	4.11	2.78	4.29	2.71
	31.0	3.06	2.48	3.16	2.53	3.37	2.64	3.45	2.69	3.61	2.80	3.72	2.79	3.83	2.78	4.05	2.74	4.24	2.68
	33.0	3.01	2.44	3.12	2.50	3.33	2.60	3.41	2.65	3.56	2.76	3.67	2.75	3.77	2.74	4.00	2.71	4.18	2.64
	35.0	2.96	2.40	3.06	2.45	3.27	2.55	3.34	2.60	3.50	2.71	3.60	2.70	3.70	2.69	3.92	2.66	4.10	2.59
	37.0	2.92	2.37	3.02	2.42	3.23	2.52	3.30	2.57	3.46	2.68	3.56	2.67	3.66	2.66	3.88	2.63	4.05	2.56
	39.0	2.88	2.33	2.98	2.38	3.18	2.48	3.25	2.53	3.40	2.64	3.50	2.63	3.60	2.62	3.81	2.58	3.99	2.52

Unit size	Outdoor air temp.	Indoor Air temperature																	
		14.0 °F WB		15.0 °F WB		16.0 °F WB		17.0 °F WB		18.0 °F WB		19.0 °F WB		20.0 °F WB		22.0 °F WB		24.0 °F WB	
		20.0 °F DB		21.0 °F DB		23.0 °F DB		24.0 °F DB		26.0 °F DB		27.0 °F DB		28.0 °F DB		30.0 °F DB		32.0 °F DB	
°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	
561	10.0	4.72	3.74	4.89	3.82	5.22	3.97	5.34	4.05	5.59	4.22	5.75	4.20	5.92	4.18	6.27	4.12	6.55	4.01
	12.0	4.69	3.71	4.85	3.79	5.18	3.94	5.30	4.02	5.55	4.19	5.71	4.17	5.87	4.15	6.22	4.09	6.50	3.98
	14.0	4.65	3.68	4.81	3.76	5.14	3.91	5.26	3.99	5.50	4.15	5.66	4.13	5.83	4.12	6.17	4.05	6.45	3.95
	16.0	4.61	3.65	4.77	3.73	5.09	3.88	5.21	3.96	5.46	4.12	5.62	4.10	5.78	4.09	6.12	4.02	6.40	3.92
	18.0	4.57	3.61	4.73	3.69	5.05	3.84	5.17	3.92	5.41	4.08	5.57	4.06	5.72	4.05	6.06	3.98	6.34	3.88
	20.0	4.53	3.58	4.68	3.66	5.00	3.80	5.12	3.88	5.35	4.04	5.51	4.02	5.67	4.01	6.00	3.95	6.28	3.84
	21.0	4.50	3.56	4.66	3.64	4.97	3.79	5.09	3.86	5.33	4.02	5.48	4.00	5.64	3.99	5.97	3.93	6.25	3.82
	23.0	4.46	3.52	4.61	3.60	4.92	3.75	5.04	3.82	5.27	3.98	5.43	3.96	5.58	3.95	5.91	3.88	6.18	3.78
	25.0	4.41	3.49	4.56	3.56	4.87	3.70	4.98	3.78	5.21	3.93	5.37	3.92	5.52	3.90	5.84	3.84	6.11	3.74
	27.0	4.35	3.44	4.51	3.52	4.81	3.66	4.92	3.74	5.15	3.89	5.30	3.87	5.45	3.86	5.78	3.80	6.04	3.70
	29.0	4.30	3.40	4.45	3.47	4.75	3.61	4.86	3.69	5.09	3.84	5.24	3.82	5.39	3.81	5.70	3.75	5.96	3.65
	31.0	4.24	3.36	4.39	3.43	4.69	3.57	4.80	3.64	5.02	3.79	5.17	3.77	5.31	3.76	5.63	3.70	5.89	3.60
	33.0	4.18	3.31	4.33	3.38	4.62	3.52	4.73	3.59	4.95	3.74	5.09	3.72	5.24	3.71	5.55	3.65	5.80	3.55
	35.0	4.11	3.25	4.25	3.32	4.54	3.45	4.64	3.52	4.86	3.67	5.00	3.65	5.14	3.64	5.45	3.58	5.70	3.49
	37.0	4.06	3.21	4.20	3.28	4.48	3.41	4.59	3.48	4.80	3.63	4.94	3.61	5.08	3.60	5.38	3.54	5.63	3.45
	39.0	3.99	3.16	4.13	3.23	4.41	3.36	4.52	3.43	4.72	3.57	4.86	3.55	5.00	3.54	5.30	3.48	5.54	3.39

Unit size	Outdoor air temp.	Indoor Air temperature																	
		14.0 °F WB		15.0 °F WB		16.0 °F WB		17.0 °F WB		18.0 °F WB		19.0 °F WB		20.0 °F WB		22.0 °F WB		24.0 °F WB	
		20.0 °F DB		21.0 °F DB		23.0 °F DB		24.0 °F DB		26.0 °F DB		27.0 °F DB		28.0 °F DB		30.0 °F DB		32.0 °F DB	
°C DB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	
801	10.0	6.33	4.83	6.55	4.93	6.99	5.12	7.16	5.23	7.49	5.44	7.71	5.41	7.93	5.38	8.40	5.28	8.78	5.12
	12.0	6.28	4.79	6.50	4.89	6.94	5.08	7.10	5.19	7.43	5.40	7.65	5.37	7.87	5.34	8.33	5.24	8.72	5.08
	14.0	6.23	4.75	6.45	4.85	6.88	5.04	7.05	5.15	7.37	5.36	7.59	5.32	7.81	5.30	8.27	5.20	8.65	5.04
	16.0	6.18	4.71	6.40	4.81	6.83	5.00	6.99	5.10	7.31	5.31	7.53	5.28	7.74	5.25	8.20	5.15	8.57	5.00
	18.0	6.13	4.67	6.34	4.77	6.76	4.95	6.92	5.06	7.24	5.26	7.46	5.23	7.67	5.21	8.12	5.11	8.50	4.96
	20.0	6.07	4.62	6.28	4.72	6.70	4.91	6.86	5.01	7.17	5.21	7.39	5.18	7.60	5.16	8.04	5.06	8.41	4.91
	21.0	6.04	4.60	6.25	4.70	6.67	4.88	6.82	4.98	7.14	5.19	7.35	5.15	7.56	5.13	8.00	5.03	8.37	4.88
	23.0	5.97	4.55	6.18	4.65	6.60	4.83	6.75	4.93	7.06	5.13	7.27	5.10	7.48	5.08	7.92	4.98	8.28	4.83
	25.0	5.91	4.50	6.11	4.60	6.52	4.78	6.68	4.88	6.98									

## 2-6-5. Part load performance

### Combination

Indoor unit : RAV-RM301KRTP-E/TR

Outdoor unit : RAV-GM301ATP-E/TR, RAV-GM301ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	900	250	800	170
RATING	2500	610	3400	850

Q: Capacity in W

W: Power Consumption in W

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	2410	2170	1930	1690	1450	1210	960	870	870	870
	W	670	590	520	470	400	340	280	270	270	270
35	Q	2500	2250	2000	1750	1500	1250	1000	900	900	900
	W	610	540	480	430	370	310	260	250	250	250
30	Q	2600	2340	2080	1820	1560	1300	1040	940	940	940
	W	560	490	440	390	340	280	240	230	230	230
25	Q	2680	2410	2150	1880	1610	1340	1070	970	970	970
	W	500	440	400	350	300	260	210	210	210	210
20	Q	2760	2480	2200	1930	1650	1380	1100	990	990	990
	W	450	400	360	320	270	230	190	190	190	190

### Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	4040	3640	3230	2830	2420	2020	1620	1210	950	950
	W	910	770	680	570	470	390	290	200	180	180
10	Q	3670	3300	2930	2570	2200	1830	1470	1100	860	860
	W	870	740	650	550	450	370	280	200	170	170
7	Q	3400	3060	2720	2380	2040	1700	1360	1020	800	800
	W	850	720	630	530	440	360	270	190	170	170
5	Q	2620	2360	2090	1830	1570	1310	1050	790	620	620
	W	730	620	540	450	380	310	230	160	150	150
2	Q	2560	2300	2050	1790	1540	1280	1020	770	600	600
	W	720	610	530	450	370	300	230	160	140	140
0	Q	2520	2270	2020	1760	1510	1260	1010	760	590	590
	W	710	600	530	440	370	300	230	160	140	140
-5	Q	2430	2190	1950	1700	1460	1220	970	730	570	570
	W	700	590	520	430	360	300	220	160	140	140
-7	Q	2390	2150	1910	1680	1440	1200	960	720	560	560
	W	690	580	510	430	360	290	220	150	140	140
-10	Q	2210	1990	1770	1550	1330	1100	880	660	520	520
	W	660	560	490	410	340	280	210	150	130	130
-15	Q	1700	1530	1360	1190	1020	850	680	510	400	400
	W	590	500	440	370	310	250	190	130	120	120

## Combination

Indoor unit : RAV-RM401KRTP-E/TR

Outdoor unit : RAV-GM401ATP-E/TR, RAV-GM401ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	900	180	800	140
RATING	3600	1130	4000	1120

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	3470	3120	2780	2430	2080	1740	1390	1040	870	870
	W	1230	1090	960	860	740	620	520	430	200	200
35	Q	3600	3240	2880	2520	2160	1800	1440	1080	900	900
	W	1130	1000	880	790	680	570	480	390	180	180
30	Q	3750	3370	3000	2620	2250	1870	1500	1120	940	940
	W	1030	910	800	720	620	520	440	350	160	160
25	Q	3860	3480	3090	2700	2320	1930	1550	1160	970	970
	W	930	820	720	650	560	470	400	320	150	150
20	Q	3970	3570	3170	2780	2380	1980	1590	1190	990	990
	W	840	740	650	590	500	420	360	290	130	130

## Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	4750	4280	3800	3330	2850	2380	1900	1430	950	950
	W	1200	1020	890	750	630	500	390	280	150	150
10	Q	4320	3880	3450	3020	2590	2160	1730	1290	860	860
	W	1150	980	850	720	610	480	370	270	140	140
7	Q	4000	3600	3200	2800	2400	2000	1600	1200	800	800
	W	1120	950	830	700	590	470	360	260	140	140
5	Q	3080	2770	2460	2160	1850	1540	1230	920	620	620
	W	960	820	710	600	510	400	310	220	120	120
2	Q	3010	2710	2410	2110	1810	1510	1200	900	600	600
	W	950	800	700	590	500	400	300	220	120	120
0	Q	2970	2670	2370	2080	1780	1480	1190	890	590	590
	W	940	800	700	590	490	390	300	220	120	120
-5	Q	2860	2580	2290	2000	1720	1430	1140	860	570	570
	W	920	780	680	570	480	390	300	210	110	110
-7	Q	2820	2530	2250	1970	1690	1410	1130	840	560	560
	W	910	770	670	570	480	380	290	210	110	110
-10	Q	2600	2340	2080	1820	1560	1300	1040	780	520	520
	W	870	740	650	550	460	370	280	200	110	110
-15	Q	2000	1800	1600	1400	1200	1000	800	600	400	400
	W	780	660	580	490	410	330	250	180	100	100

## Combination

Indoor unit : RAV-RM561KRTP-E/TR

Outdoor unit : RAV-GM561ATP-E/TR, RAV-GM561ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	1500	300	1500	300
RATING	5000	1660	5300	1550

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	4820	4340	3860	3380	2890	2410	1930	1450	1450	1450
	W	1810	1450	1160	920	730	560	430	330	330	330
35	Q	5000	4500	4000	3500	3000	2500	2000	1500	1500	1500
	W	1660	1330	1060	840	670	510	390	300	300	300
30	Q	5200	4680	4160	3640	3120	2600	2080	1560	1560	1560
	W	1510	1210	960	760	610	460	350	270	270	270
25	Q	5370	4830	4290	3760	3220	2680	2150	1610	1610	1610
	W	1370	1100	870	690	550	420	320	250	250	250
20	Q	5510	4960	4410	3860	3310	2760	2200	1650	1650	1650
	W	1230	990	790	620	500	380	290	220	220	220

## Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	6300	5670	5040	4410	3780	3150	2520	1890	1780	1780
	W	1660	1410	1160	940	730	570	430	310	320	320
10	Q	5720	5150	4570	4000	3430	2860	2290	1720	1620	1620
	W	1590	1350	1110	910	700	550	410	300	310	310
7	Q	5300	4770	4240	3710	3180	2650	2120	1590	1500	1500
	W	1550	1310	1080	880	680	530	400	290	300	300
5	Q	4080	3670	3260	2860	2450	2040	1630	1220	1150	1150
	W	1330	1120	930	760	580	450	340	250	260	260
2	Q	3990	3590	3190	2790	2390	2000	1600	1200	1130	1130
	W	1310	1110	910	740	580	450	340	250	250	250
0	Q	3930	3540	3140	2750	2360	1970	1570	1180	1110	1110
	W	1300	1100	910	740	570	440	340	240	250	250
-5	Q	3790	3410	3030	2650	2270	1900	1520	1140	1070	1070
	W	1270	1070	890	720	560	430	330	240	250	250
-7	Q	3730	3360	2980	2610	2240	1870	1490	1120	1060	1060
	W	1260	1060	880	710	550	430	320	240	240	240
-10	Q	3440	3100	2760	2410	2070	1720	1380	1030	970	970
	W	1210	1020	840	690	530	410	310	230	230	230
-15	Q	2650	2390	2120	1860	1590	1330	1060	800	750	750
	W	1080	910	750	610	470	370	280	200	210	210

**Combination**

Indoor unit : RAV-RM801KRTP-E/TR

Outdoor unit : RAV-GM801ATP-E/TR, RAV-GM801ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	1500	310	1500	310
RATING	6700	2440	7700	2610

Q: Capacity in W

W: Power Consumption in W

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
40	Q	6460	5810	5170	4520	3880	3230	2580	1940	1450	1450
	W	2660	2170	1700	1310	980	740	580	440	340	340
35	Q	6700	6030	5360	4690	4020	3350	2680	2010	1500	1500
	W	2440	1990	1560	1200	900	680	530	400	310	310
30	Q	6970	6270	5580	4880	4180	3490	2790	2090	1560	1560
	W	2220	1810	1420	1090	820	620	480	360	280	280
25	Q	7190	6470	5750	5030	4310	3590	2880	2160	1610	1610
	W	2010	1640	1290	990	740	560	440	330	260	260
20	Q	7390	6650	5910	5170	4430	3690	2950	2220	1650	1650
	W	1810	1480	1160	890	670	500	390	300	230	230

**Heating**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	9150	8230	7320	6400	5490	4570	3660	2740	1830	1780
	W	2800	2370	1950	1590	1220	970	720	540	360	330
10	Q	8310	7480	6650	5810	4980	4150	3320	2490	1660	1620
	W	2690	2270	1870	1520	1170	930	690	510	350	320
7	Q	7700	6930	6160	5390	4620	3850	3080	2310	1540	1500
	W	2610	2210	1820	1480	1140	900	670	500	340	310
5	Q	5930	5340	4740	4150	3560	2960	2370	1780	1190	1150
	W	2240	1900	1560	1270	980	770	570	430	290	270
2	Q	5800	5220	4640	4060	3480	2900	2320	1740	1160	1130
	W	2210	1870	1540	1250	960	760	570	420	290	260
0	Q	5710	5140	4570	4000	3430	2850	2280	1710	1140	1110
	W	2190	1850	1530	1240	960	760	560	420	290	260
-5	Q	5510	4960	4410	3860	3300	2750	2200	1650	1100	1070
	W	2140	1810	1490	1210	930	740	550	410	280	250
-7	Q	5420	4880	4340	3790	3250	2710	2170	1630	1080	1060
	W	2120	1790	1480	1200	920	730	540	410	280	250
-10	Q	5000	4500	4000	3500	3000	2500	2000	1500	1000	970
	W	2040	1730	1420	1160	890	700	520	390	270	240
-15	Q	3850	3470	3080	2700	2310	1930	1540	1160	770	750
	W	1820	1540	1270	1030	790	630	470	350	240	220

## Combination

Indoor unit : RAV-RM561KRTP-E/TR x 2 ( Twin system )

Outdoor unit : RAV-GM1101ATP-E/TR, RAV-GM1101ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	9500	2980	11200	2990

Q: Capacity in W

W: Power Consumption in W

Cooling		Load(%)									
Outdoor temperature(°C)		100	90	80	70	60	50	40	30	20	10
40	Q	9160	8240	7330	6410	5500	4580	3660	2890	2890	2890
	W	3250	2610	2070	1650	1310	1000	760	650	650	650
35	Q	9500	8550	7600	6650	5700	4750	3800	3000	3000	3000
	W	2980	2390	1900	1510	1200	920	700	600	600	600
30	Q	9880	8890	7910	6920	5930	4940	3950	3120	3120	3120
	W	2710	2170	1730	1370	1090	840	640	550	550	550
25	Q	10190	9170	8160	7140	6120	5100	4080	3220	3220	3220
	W	2450	1970	1570	1240	990	760	580	490	490	490
20	Q	10470	9420	8380	7330	6280	5240	4190	3310	3310	3310
	W	2210	1770	1410	1120	890	680	520	450	450	450

## Heating

Heating		Load(%)									
Outdoor temperature(°C)		100	90	80	70	60	50	40	30	20	10
15	Q	13310	11980	10650	9310	7980	6650	5320	3990	3560	3560
	W	3210	2710	2240	1810	1410	1110	830	610	640	640
10	Q	12080	10870	9670	8460	7250	6040	4830	3620	3240	3240
	W	3080	2600	2150	1740	1350	1060	790	590	620	620
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	3000	3000
	W	2990	2530	2090	1690	1310	1030	770	570	600	600
5	Q	8620	7760	6900	6040	5170	4310	3450	2590	2310	2310
	W	2570	2170	1790	1450	1120	880	660	490	510	510
2	Q	8430	7590	6750	5900	5060	4220	3370	2530	2260	2260
	W	2530	2140	1770	1430	1110	870	650	480	510	510
0	Q	8310	7470	6640	5810	4980	4150	3320	2490	2220	2220
	W	2510	2120	1750	1420	1100	860	650	480	500	500
-5	Q	8010	7210	6410	5610	4810	4010	3200	2400	2150	2150
	W	2450	2070	1710	1390	1070	840	630	470	490	490
-7	Q	7880	7090	6310	5520	4730	3940	3150	2360	2110	2110
	W	2420	2050	1690	1370	1060	830	620	460	490	490
-10	Q	7280	6550	5820	5090	4370	3640	2910	2180	1950	1950
	W	2340	1980	1630	1320	1020	800	600	450	470	470
-15	Q	5600	5040	4480	3920	3360	2800	2240	1680	1500	1500
	W	2080	1760	1460	1180	910	720	540	400	420	420

## Combination

Indoor unit : RAV-RM801KRTP-E/TR x 2 ( Twin system )

Outdoor unit : RAV-GM1401ATP-E/TR, RAV-GM1401ATJP-E

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	600	3000	600
RATING	12100	4710	13000	3860

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	11670	10500	9330	8170	7000	5830	4670	3500	2890	2890
	W	5130	4190	3280	2530	1900	1430	1110	840	650	650
35	Q	12100	10890	9680	8470	7260	6050	4840	3630	3000	3000
	W	4710	3840	3010	2320	1740	1310	1020	770	600	600
30	Q	12590	11330	10070	8810	7550	6290	5040	3780	3120	3120
	W	4290	3490	2740	2110	1580	1190	930	700	550	550
25	Q	12980	11690	10390	9090	7790	6490	5190	3900	3220	3220
	W	3880	3160	2480	1910	1430	1080	840	630	490	490
20	Q	13340	12000	10670	9340	8000	6670	5340	4000	3310	3310
	W	3490	2850	2230	1720	1290	970	760	570	450	450

## Heating

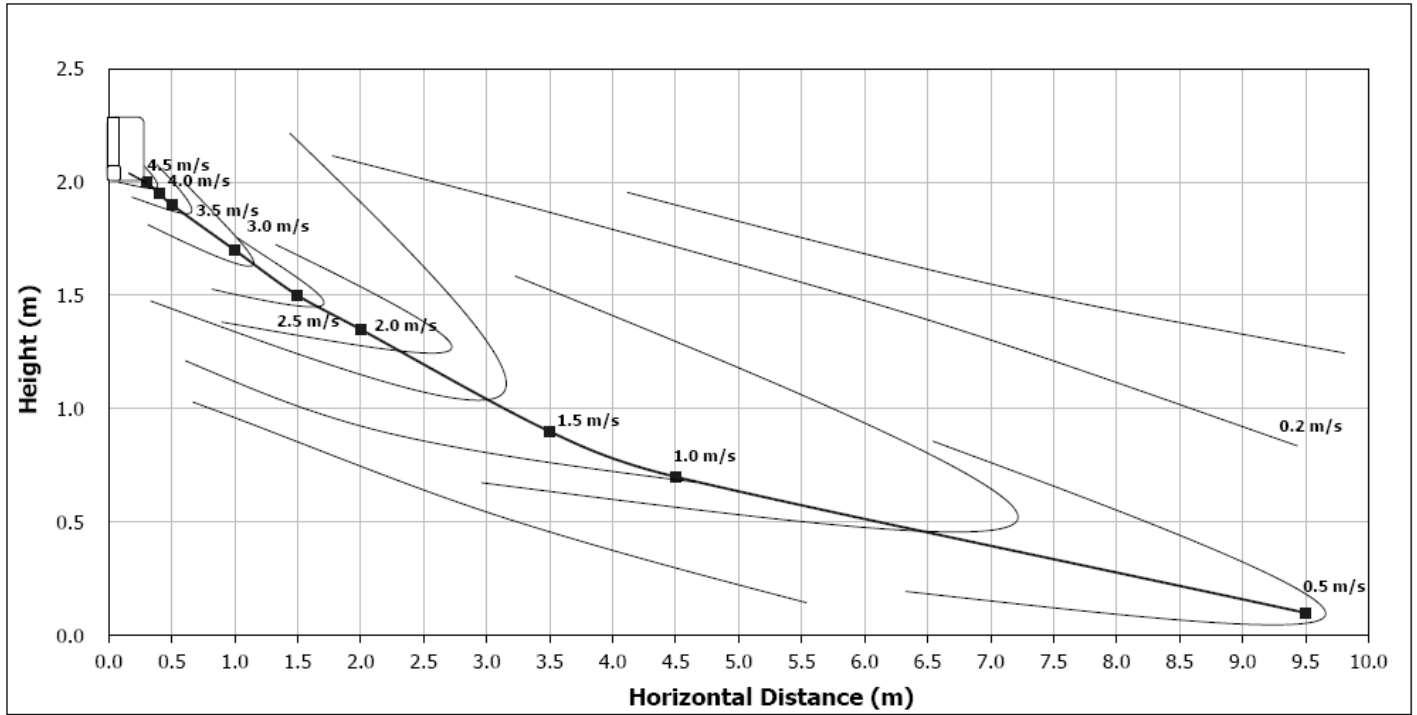
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	15450	13900	12360	10810	9270	7720	6180	4630	3560	3560
	W	4140	3510	2900	2340	1810	1420	1060	780	640	640
10	Q	14020	12620	11220	9820	8410	7010	5610	4210	3240	3240
	W	3970	3360	2780	2240	1740	1360	1020	750	620	620
7	Q	13000	11700	10400	9100	7800	6500	5200	3900	3000	3000
	W	3860	3270	2700	2180	1690	1320	990	730	600	600
5	Q	10010	9010	8010	7010	6010	5000	4000	3000	2310	2310
	W	3310	2810	2320	1870	1450	1130	850	630	510	510
2	Q	9790	8810	7830	6850	5870	4890	3920	2940	2260	2260
	W	3270	2770	2280	1840	1430	1120	840	620	510	510
0	Q	9640	8680	7710	6750	5780	4820	3860	2890	2220	2220
	W	3240	2740	2270	1830	1420	1110	830	610	500	500
-5	Q	9300	8370	7440	6510	5580	4650	3720	2790	2150	2150
	W	3160	2680	2210	1790	1390	1080	810	600	490	490
-7	Q	9150	8230	7320	6400	5490	4570	3660	2740	2110	2110
	W	3130	2650	2190	1770	1370	1070	800	590	490	490
-10	Q	8450	7600	6760	5910	5070	4220	3380	2530	1950	1950
	W	3020	2550	2110	1700	1320	1030	770	570	470	470
-15	Q	6500	5850	5200	4550	3900	3250	2600	1950	1500	1500
	W	2690	2280	1880	1520	1180	920	690	510	420	420



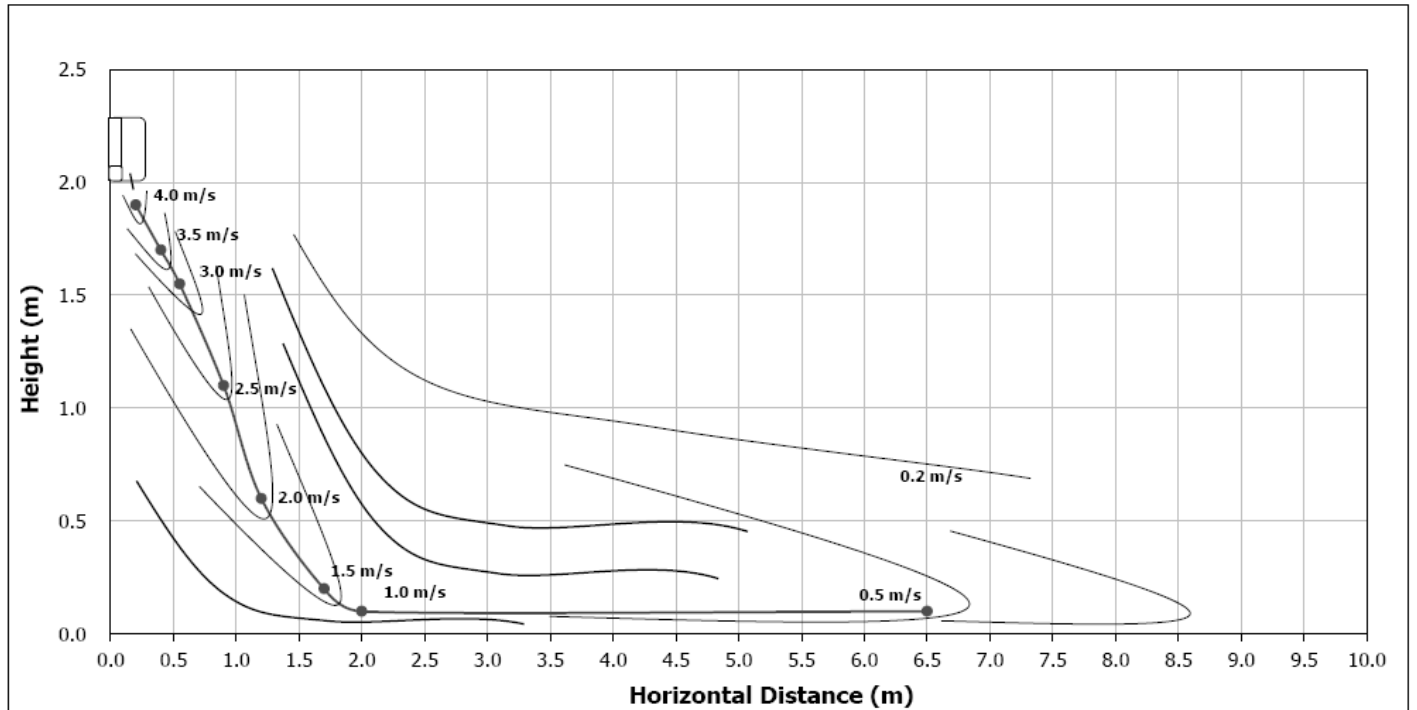
## 2-6-6. Air Throw Distance Chart

RAV-RM301KRTP-E/TR

Cooling

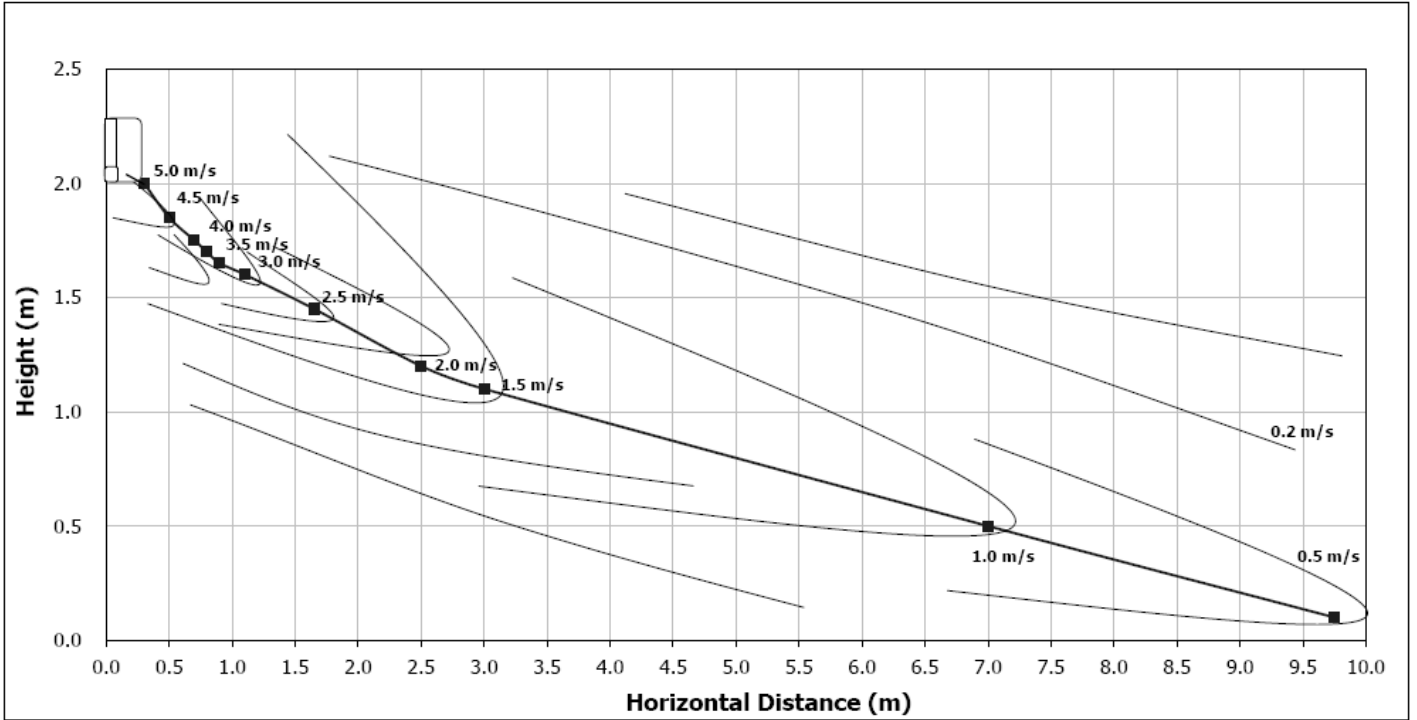


Heating

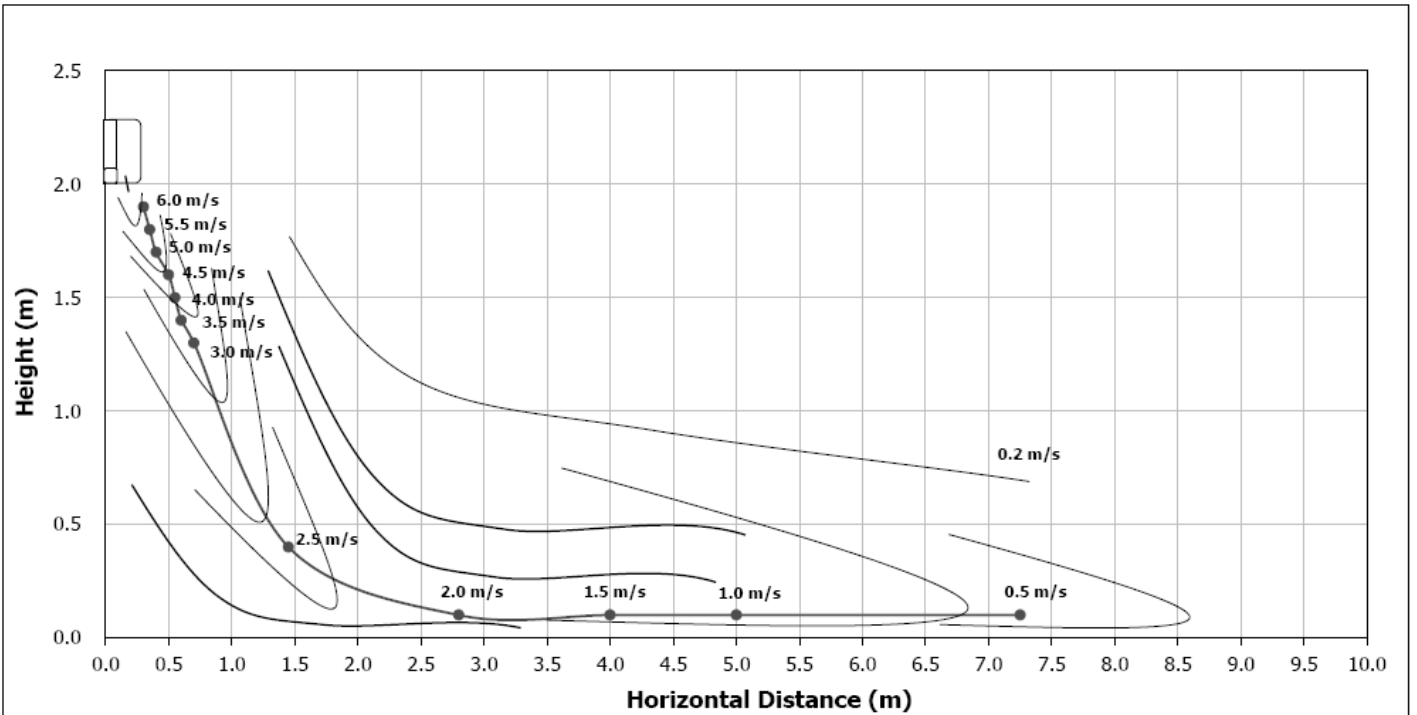


RAV-RM401KRTP-E/TR

Cooling

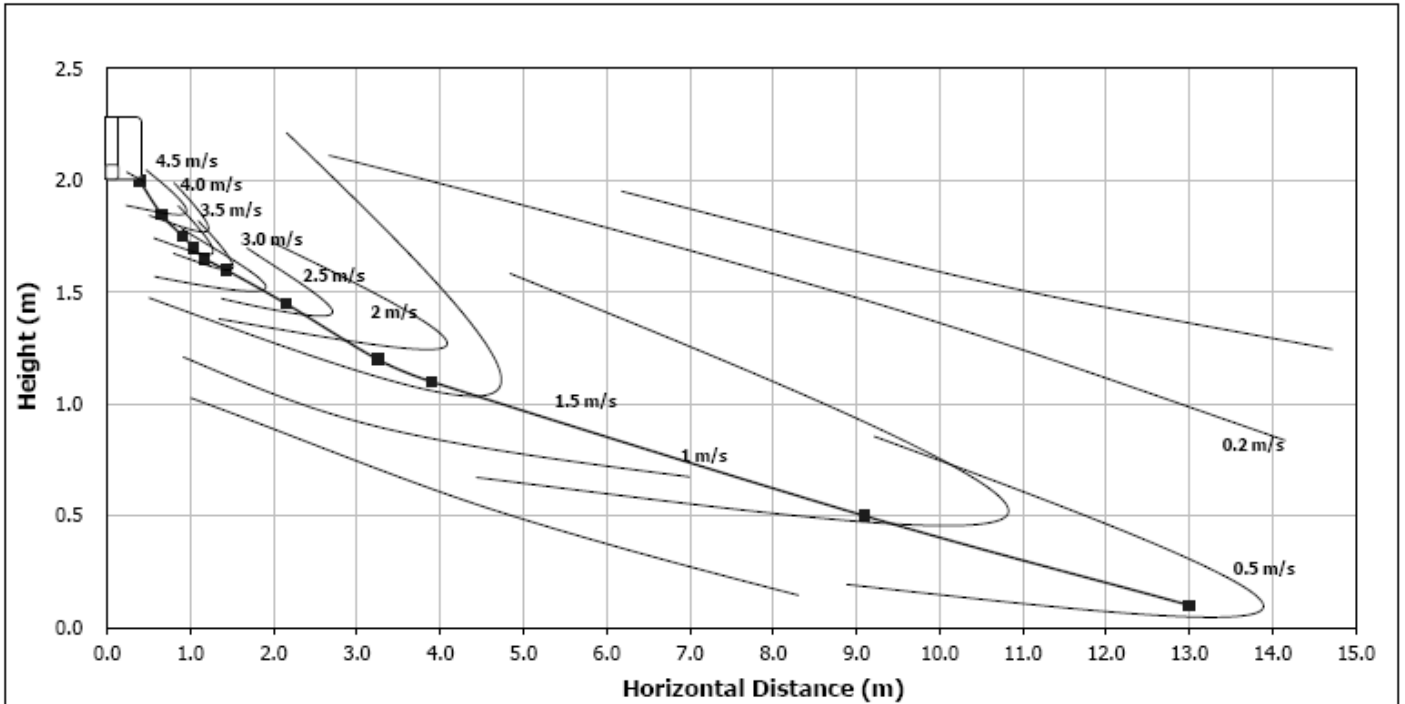


Heating

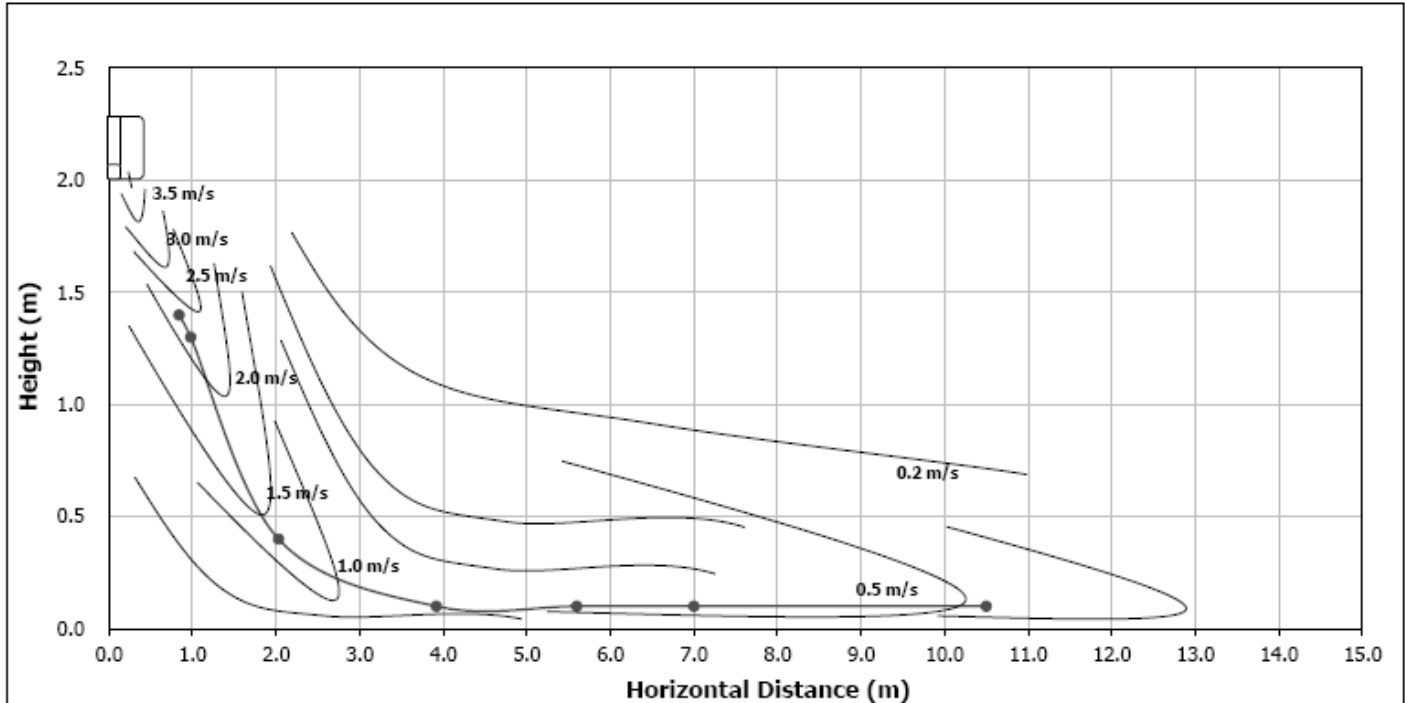


RAV-RM561KRTP-E/TR

Cooling

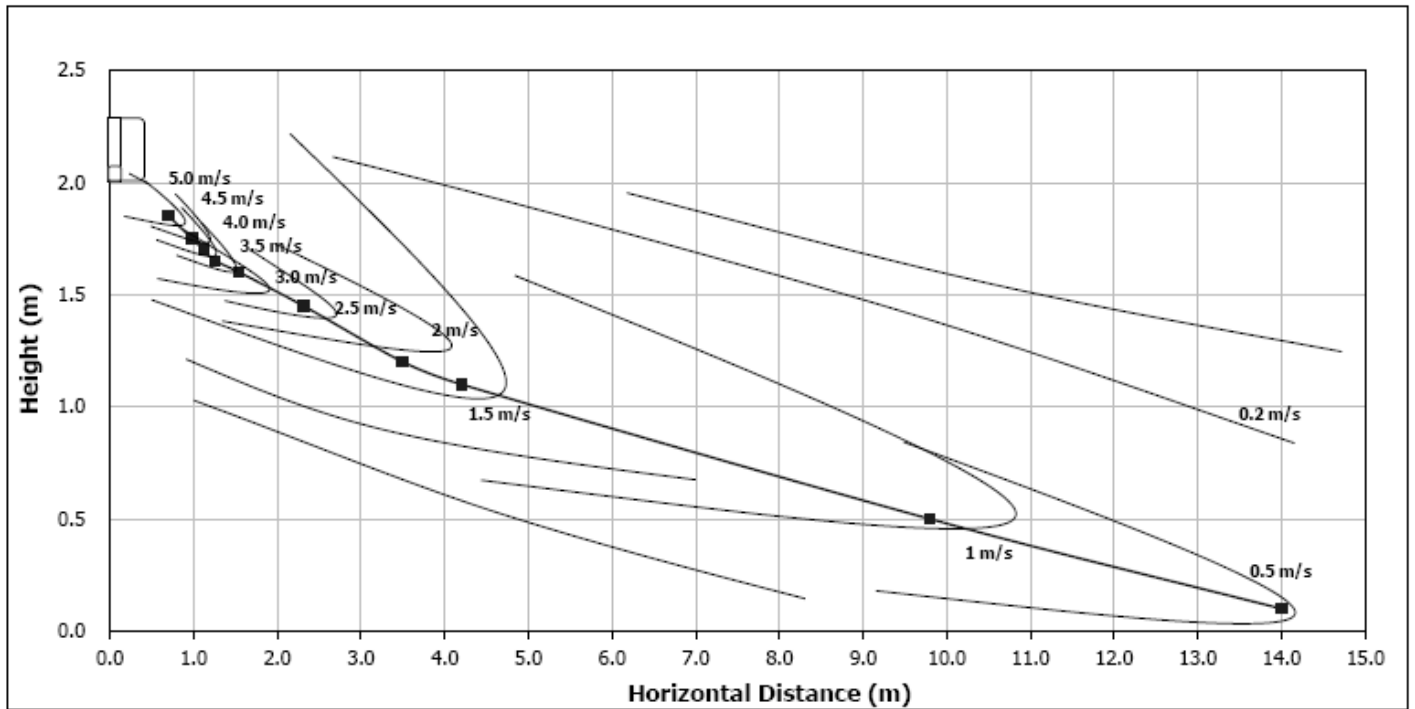


Heating

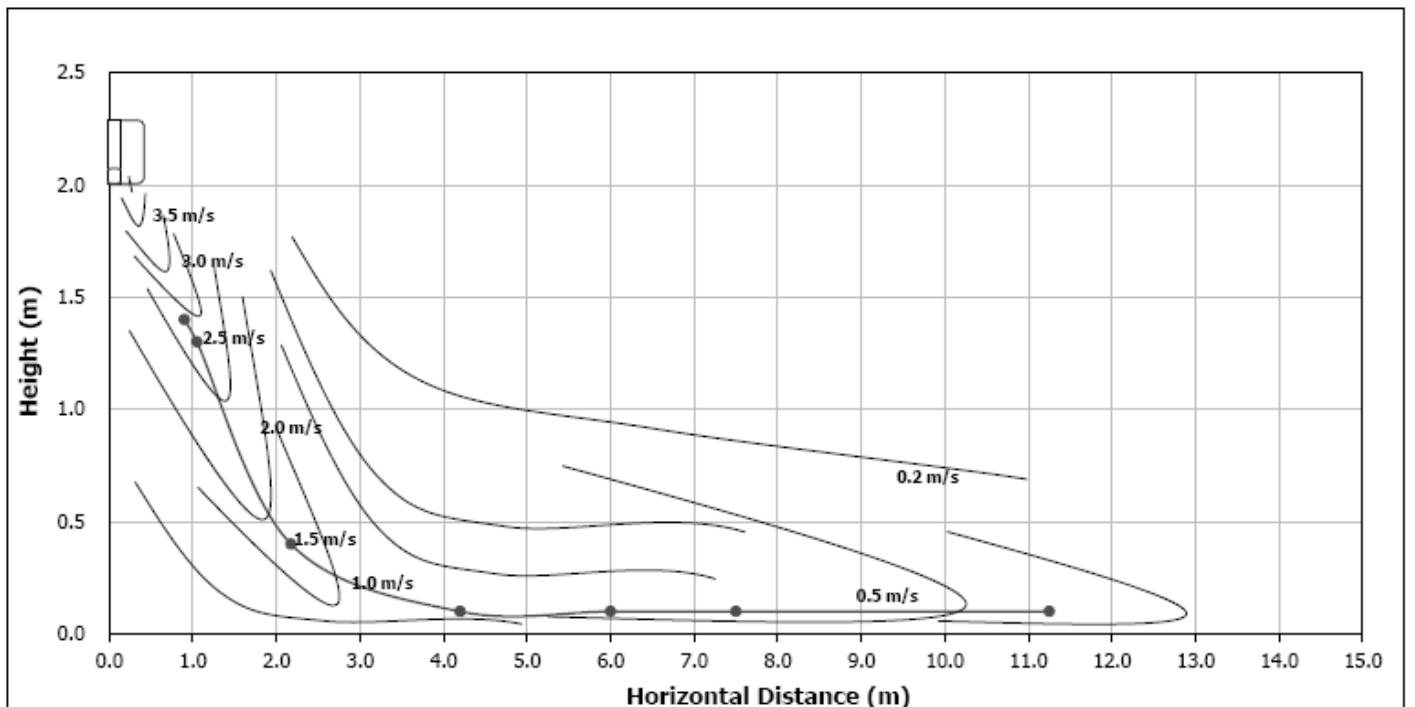


RAV-RM801KRTP-E/TR

Cooling



Heating

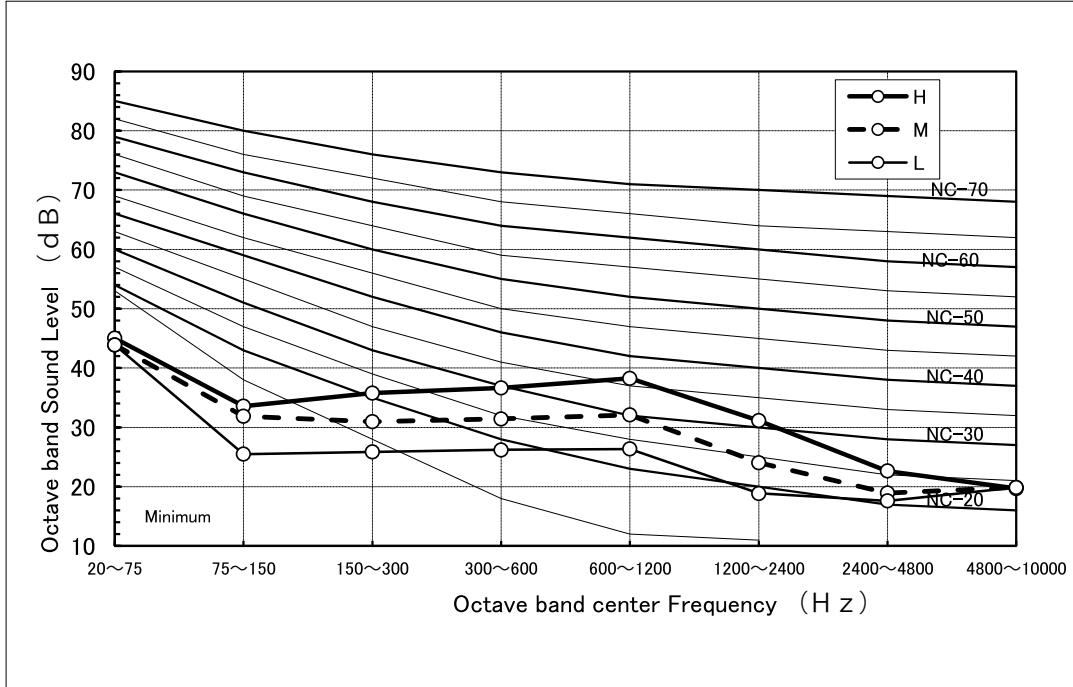


## 2-6-7. Sound Characteristics (NC curve)

### RAV-RM301KRTP-E/TR

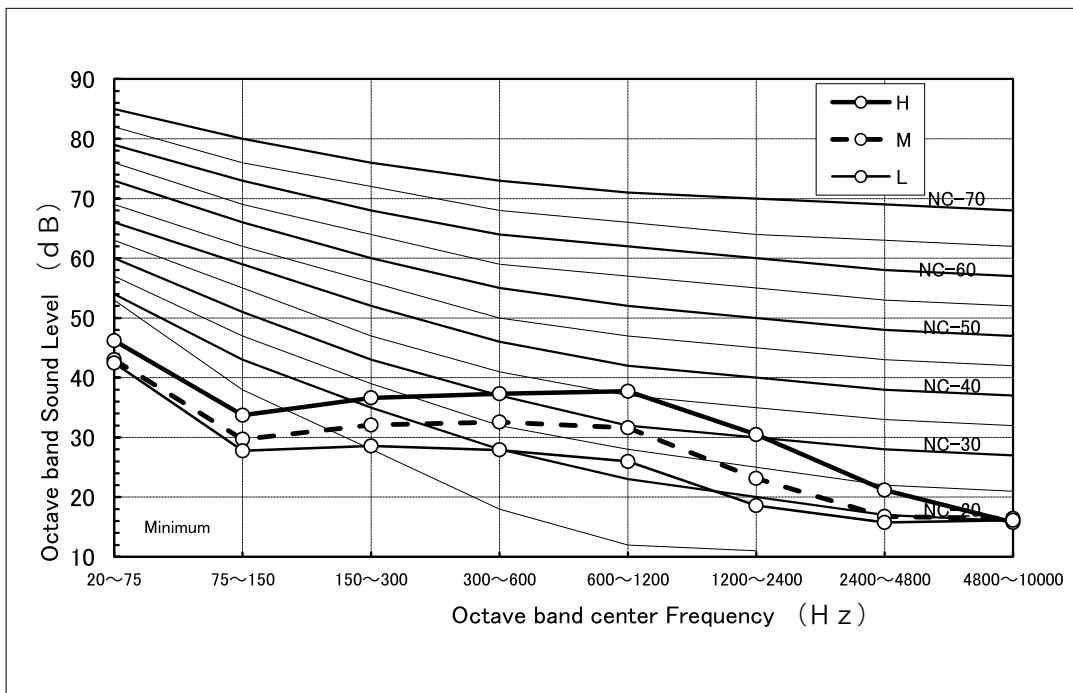
#### Cooling

Specification (d B)			
Fan tap	H	M	L
Sound pressure level (dB(A))	40	34	29



#### Heating

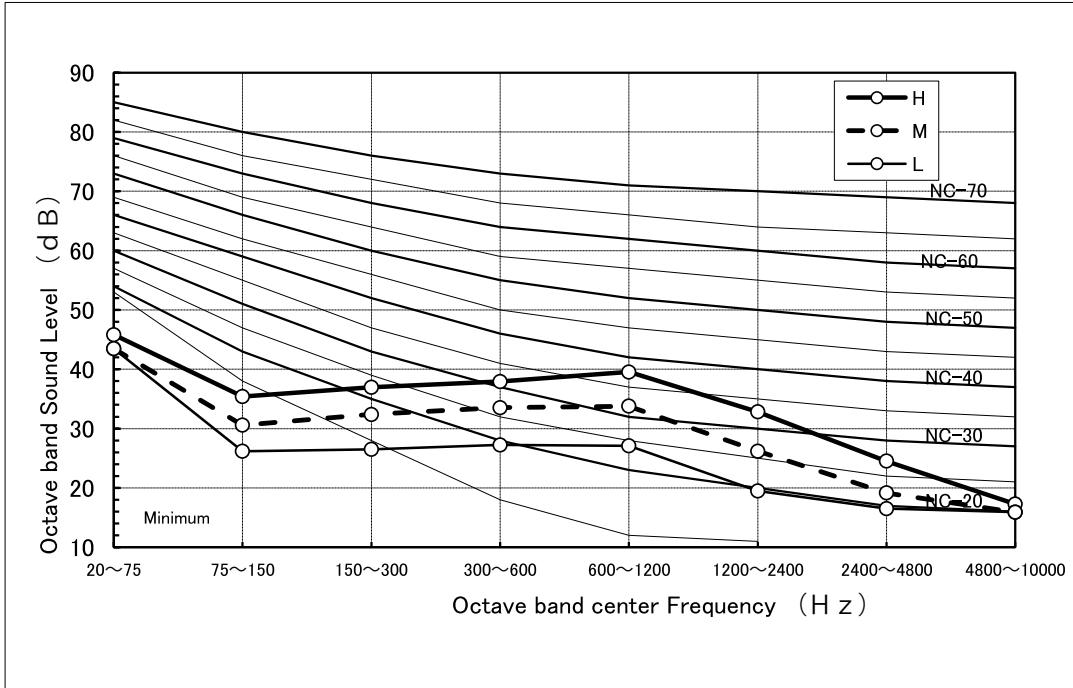
Specification (d B)			
Fan tap	H	M	L
Sound pressure level (dB(A))	40	34	29



**RAV-RM401KRTP-E/TR**

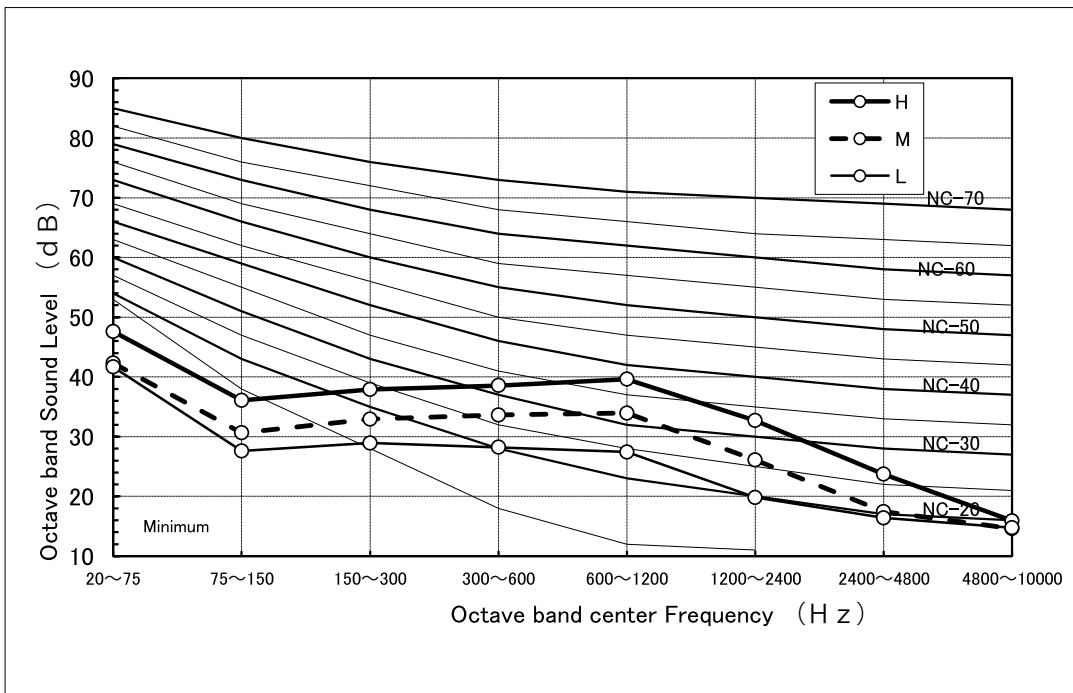
**Cooling**

Specification (d B)			
Fan tap	H	M	L
Sound pressure level (dB(A))	41	36	30



**Heating**

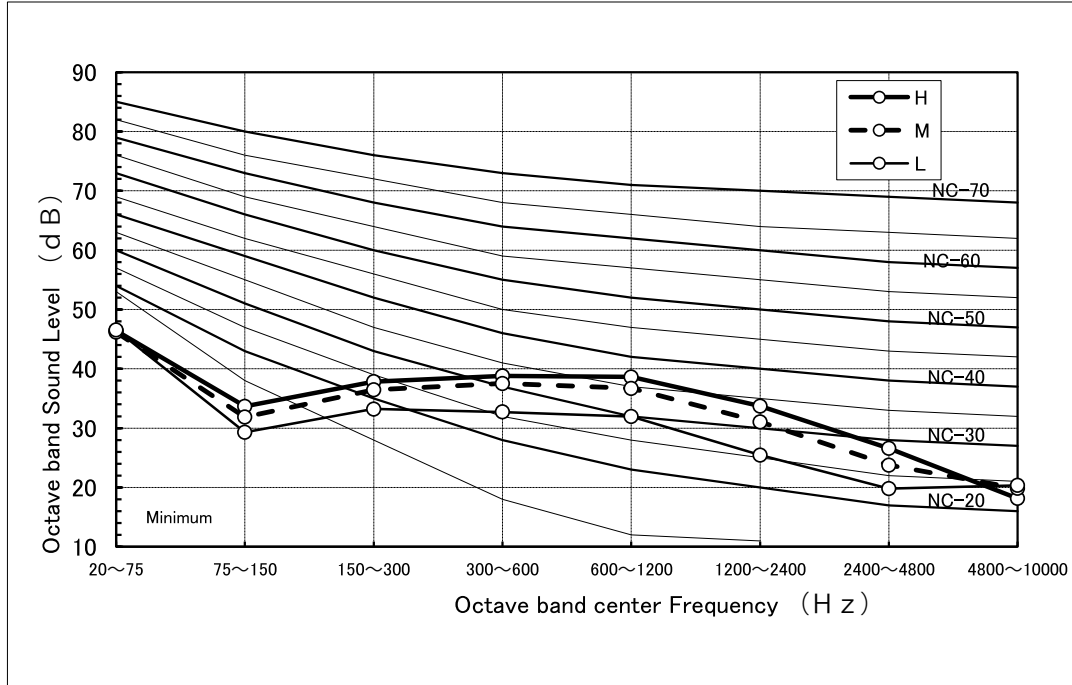
Specification (d B)			
Fan tap	H	M	L
Sound pressure level (dB(A))	41	36	30



**RAV-RM561KRTP-E/TR**

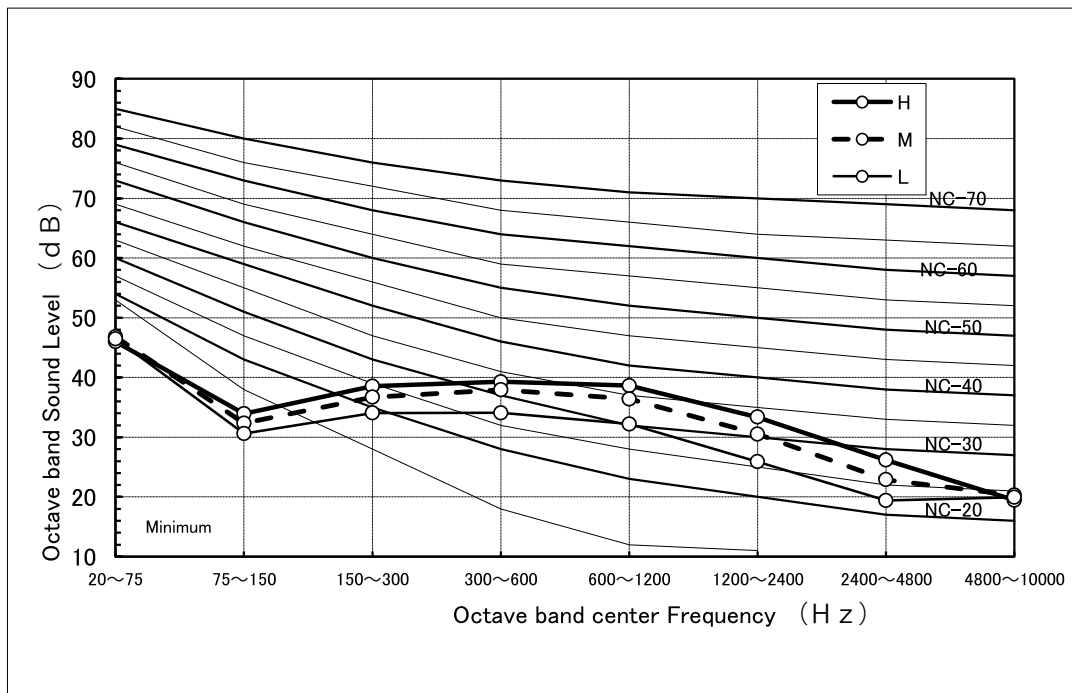
**Cooling**

Specification (d B)			
Fan tap	H	M	L
Sound pressure level (dB(A))	42	39	35



**Heating**

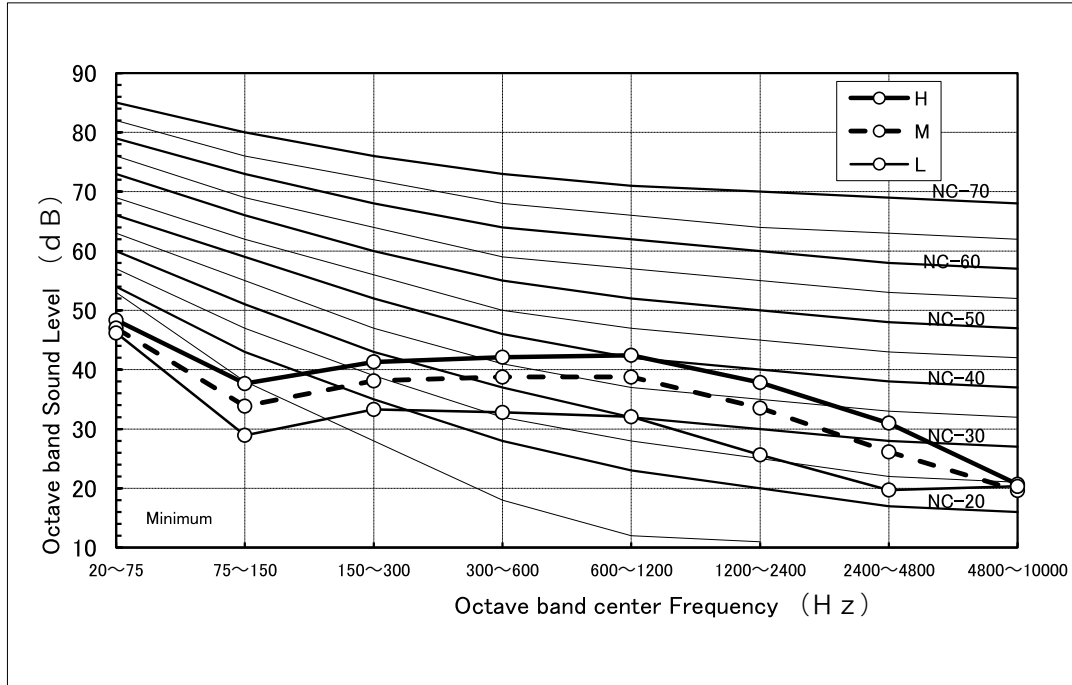
Specification (d B)			
Fan tap	H	M	L
Sound pressure level (dB(A))	42	39	35



### RAV-RM801KRTP-E/TR

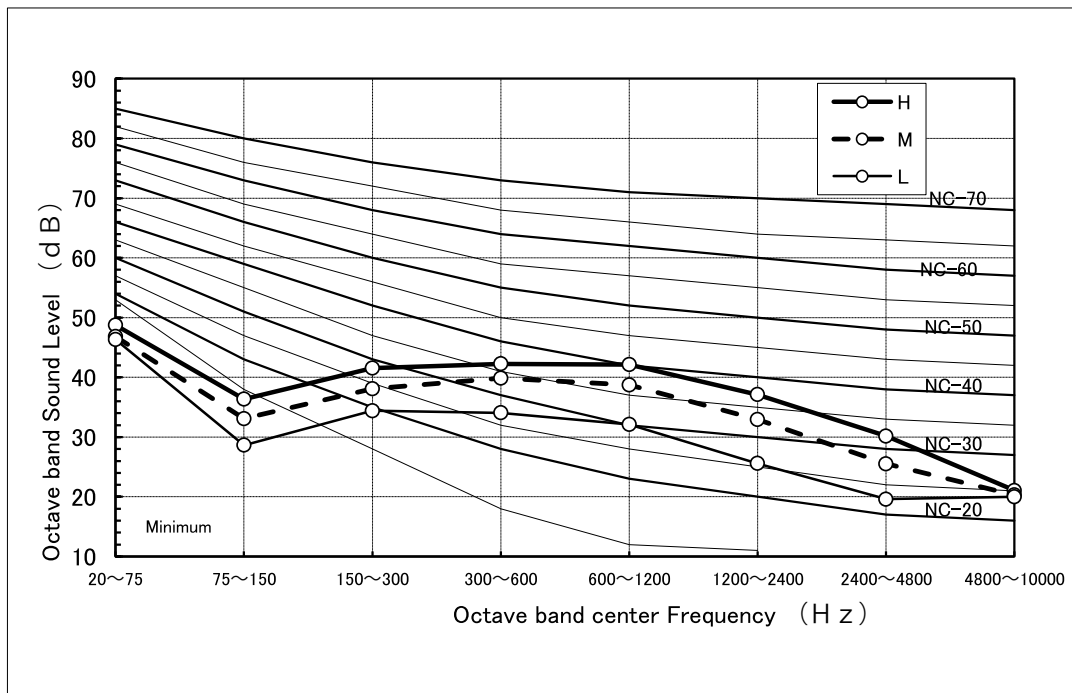
#### Cooling

Specification (d B)			
Fan tap	H	M	L
Sound pressure level (dB(A))	45	41	35



#### Heating

Specification (d B)			
Fan tap	H	M	L
Sound pressure level (dB(A))	45	41	35





## **3. Outdoor Unit**

**2-2-1. Specifications**

**2-2-2. Dimension**

**2-2-3. Wiring Diagrams**

**2-2-4. Refrigerant Cycle Diagram**

**2-2-5. Sound Characteristic**

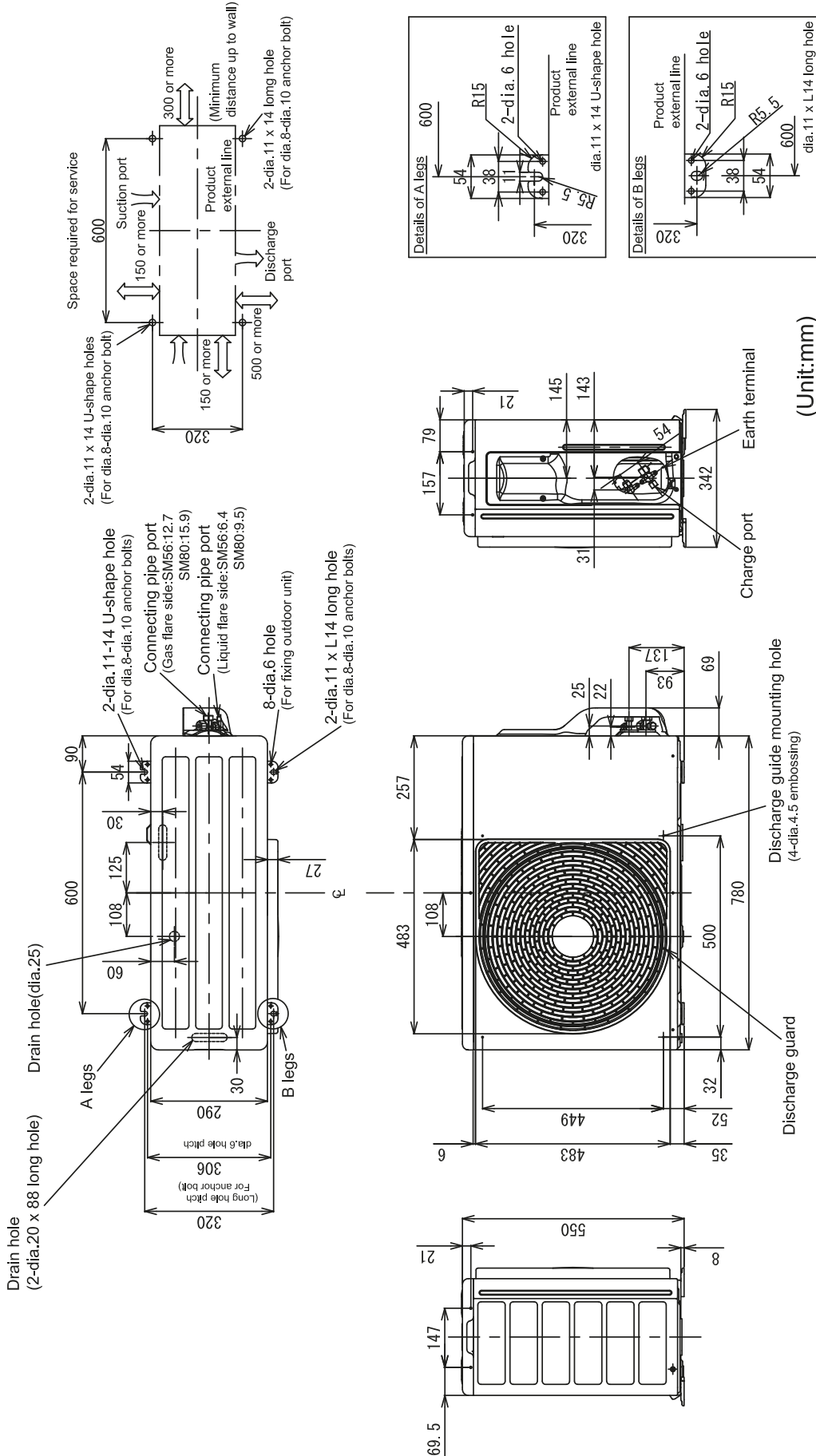
**2-2-6. Connecting Pipe Length and Lift Difference Between Indoor Units VS. Capacity Correction Value**

## 3-1 Specification

Model	Outdoor unit ( RAV- ) ( RAV- )	GM301ATP-E/TR	GM401ATP-E/TR	GM561ATP-E/TR	GM801ATP-E/TR	GM1101ATP-E/TR	GM1401ATP-E/TR	
		GM301ATJP-E	GM401ATJP-E	GM561ATJP-E	GM801ATJP-E	GM1101ATJP-E	GM1401ATJP-E	
Power supply	1 phase 220V-240V / 50Hz, 1 phase 220V / 60Hz ( Power exclusive to outdoor is required )							
Compressor	Type	Hermetic Compressor						
	Motor (kW)	0.75	1.10	1.10	1.60	3.00		
	Pole	4						
Refrigerant Charged	(kg)	0.63	0.9	0.9	1.3	2.1		
Refrigerant Control	(kg)	Pulse motor valve						
Outer dimension	Height (mm)	550		550		890		
	Width (mm)	780		780		900		
	Depth (mm)	290		290		320		
Appearance	Silky shade (Muncel 1Y 8.5 / 0.5)							
Total weight	Main unit (kg)	29	34	40	43	68		
Heat Exchanger	Finned tube							
Fan Unit	Fan	Propeller fan						
	Standard air flow (m <sup>3</sup> / h)	30	37	40	45	68	70	
	Motor (W)	43				100		
Inter Connecting Pipe	Standard length	7.5						
	Min. length (m)	2.0		5.0				
	Max. total length (m)	20.0		30.0		50.0		
	Additional refrigerant charge under long piping connector	20 g / m ( 15 m. to 20 m. )		20 g / m ( 21 m. to 30 m. )	35 g / m ( 21 m. to 30 m. )	35 g / m ( 31 m. to 50 m. )		
	Height difference	Outdoor low (m)	10		30			
		Outdoor high (m)	10		30			
Flare Connections	Gas side (mm)	9.5	12.7	12.7	15.9			
	Liquid side (mm)	6.4	6.4	6.4	9.5			
Sound pressure level	Cooling / Heating (dB)	46 / 47	49 / 50	46 / 48	48 / 52	54 / 57	55 / 57	
Sound power level	Cooling / Heating (dB)	61 / 62	64 / 65	63 / 65	65 / 69	70 / 74	70 / 74	
Operating Range	Cooling (°C)	-15 / 46						
	Heating (°C)	-15 / 15						

### 3-2. Dimension

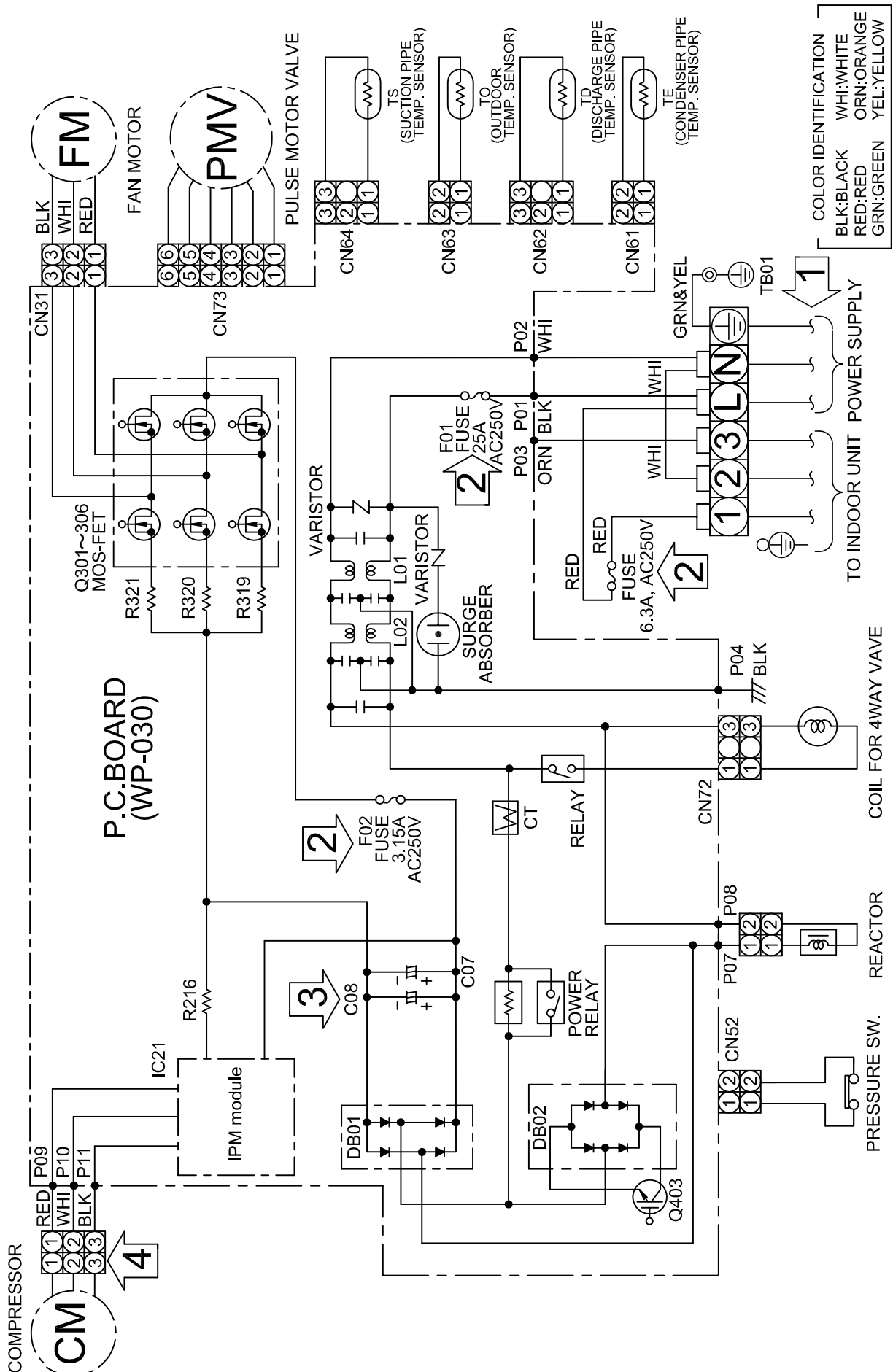
#### RAV-GM301ATP-E/TR, RAV-GM401ATP-E/TR, RAV-GM561ATP-E/TR, RAV-GM801ATP-E/TR, (\*ATJP-E)



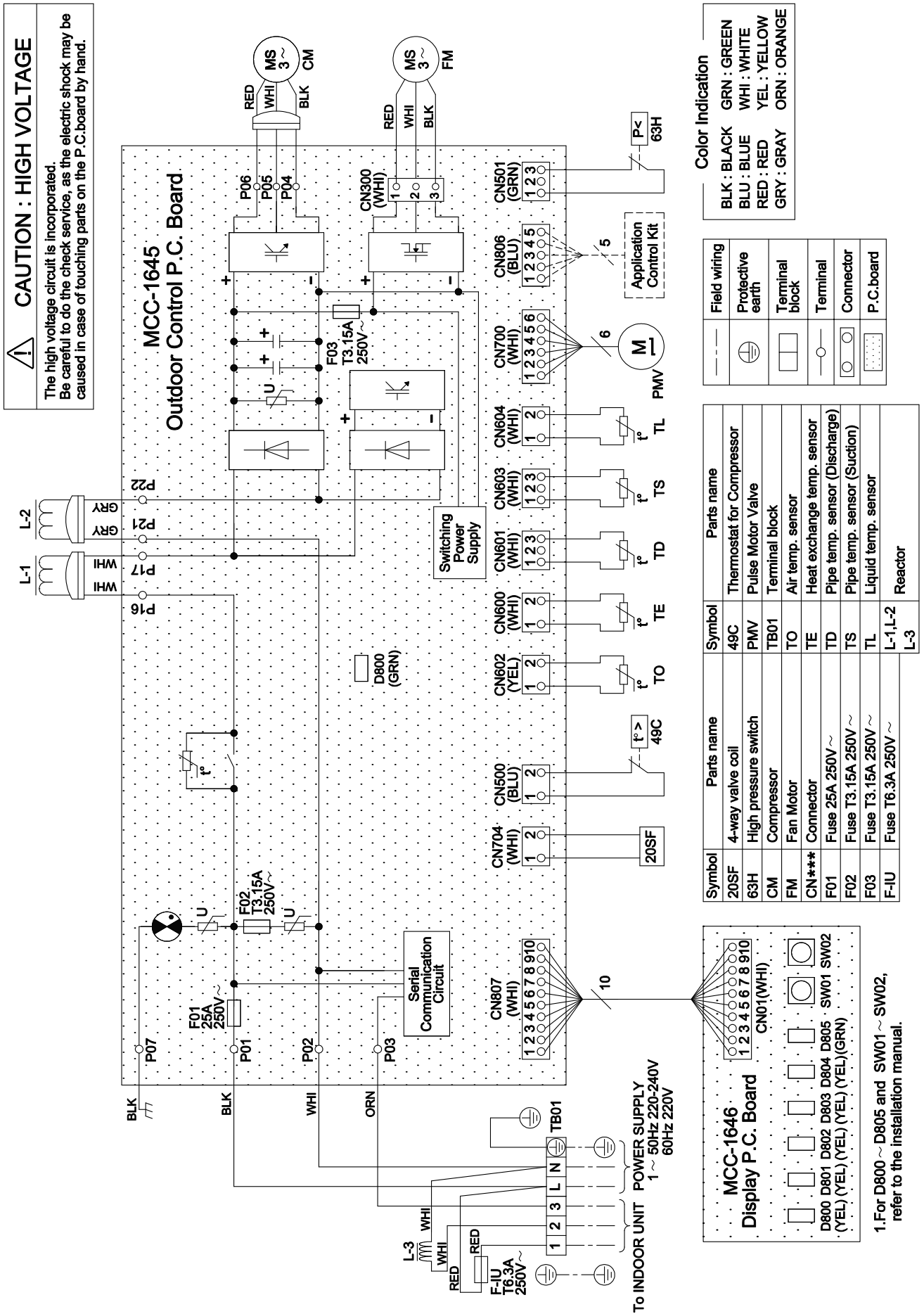


### 3-3. Wiring diagrams

#### RAV-GM301ATP-E/TR, RAV-GM401ATP-E/TR (\*ATJP-E)

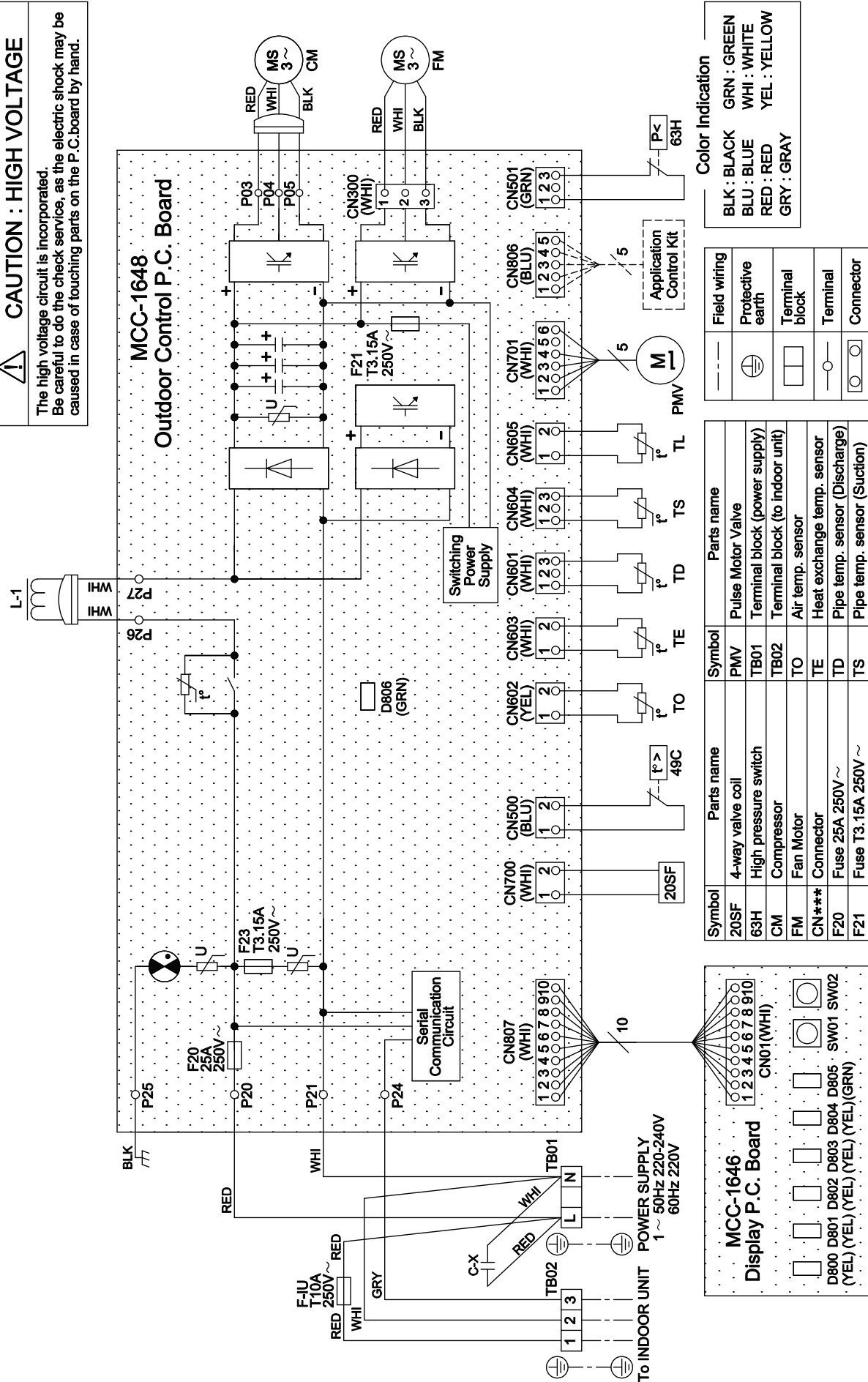


RAV-GM561ATP-E/TR, RAV-GM801ATP-E/TR ( \*ATJP-E )



RAV-GM1101ATP-E/TR, RAV-GM1401ATP-E/TR (\*ATJP-E)

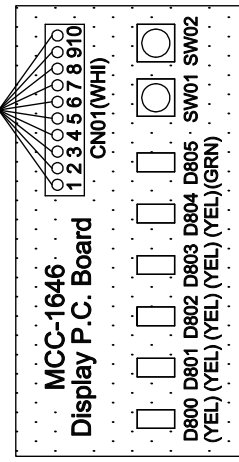
**CAUTION : HIGH VOLTAGE**  
 The high voltage circuit is incorporated.  
 Be careful to do the check service, as the electric shock may be caused in case of touching parts on the P.C.board by hand.



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

Field wiring
Protective earth
Terminal block
Terminal
Connector
P.C.board

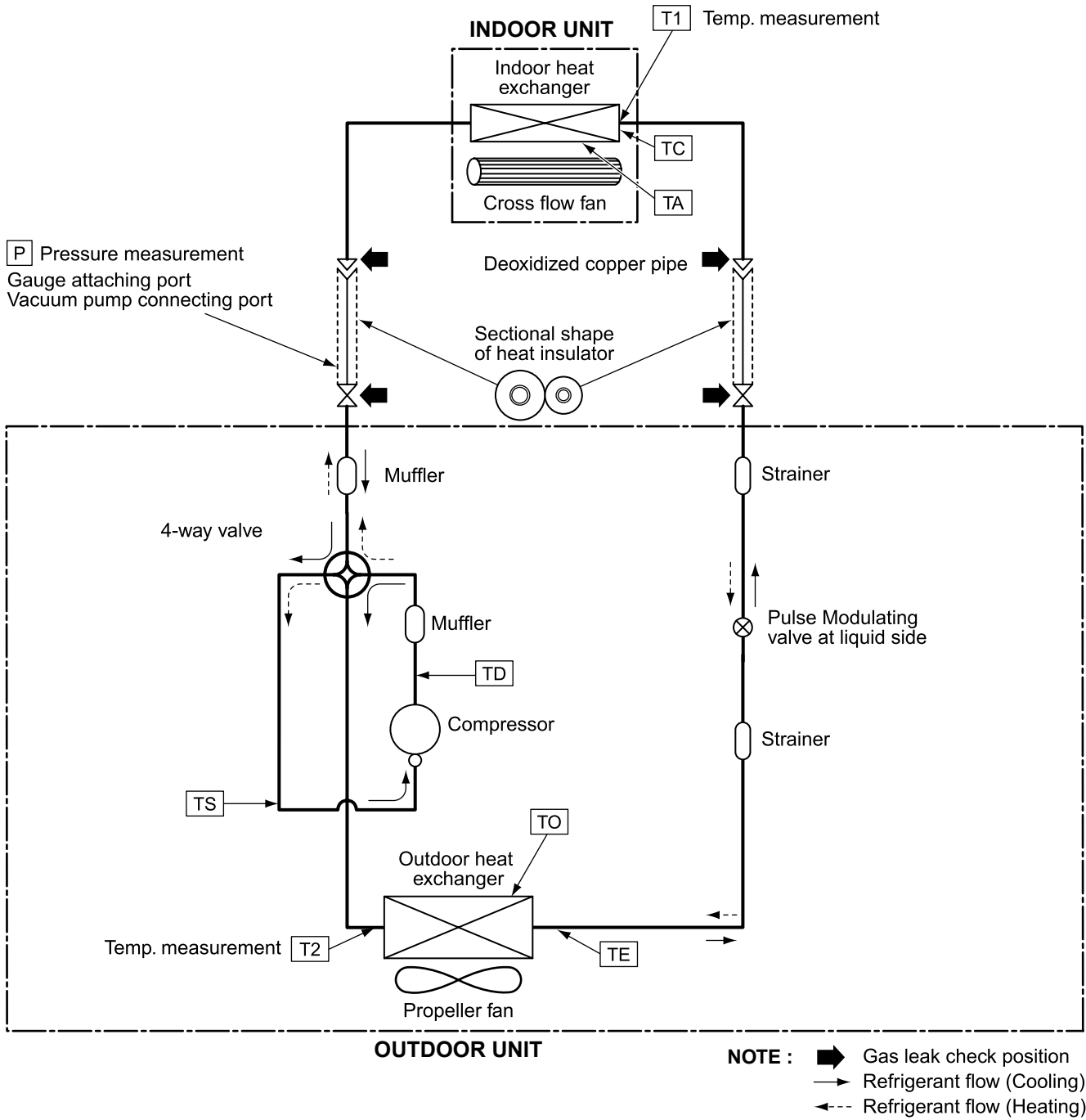
Symbol	Parts name	Symbol	Parts name
20SF	4-way valve coil	PMV	Pulse Motor Valve
63H	High pressure switch	TB01	Terminal block (power supply)
CM	Compressor	TB02	Terminal block (to indoor unit)
FM	Fan Motor	TO	Air temp. sensor
CN***	Connector	TE	Heat exchange temp. sensor
F20	Fuse 25A 250V~	TD	Pipe temp. sensor (Discharge)
F21	Fuse T3.15A 250V~	TS	Pipe temp. sensor (Suction)
F23	Fuse T3.15A 250V~	TL	Liquid temp. sensor
F-IU	Fuse T10A 250V~	L-1	Reactor
49C	Thermostat for Compressor	C-X	X-capacitor



1. For D800 ~ D805 and SW01 ~ SW02, refer to the installation manual.

### 3-4. Refrigerant cycle diagram

RAV-GM301ATP-E/TR ( \*ATJP-E )

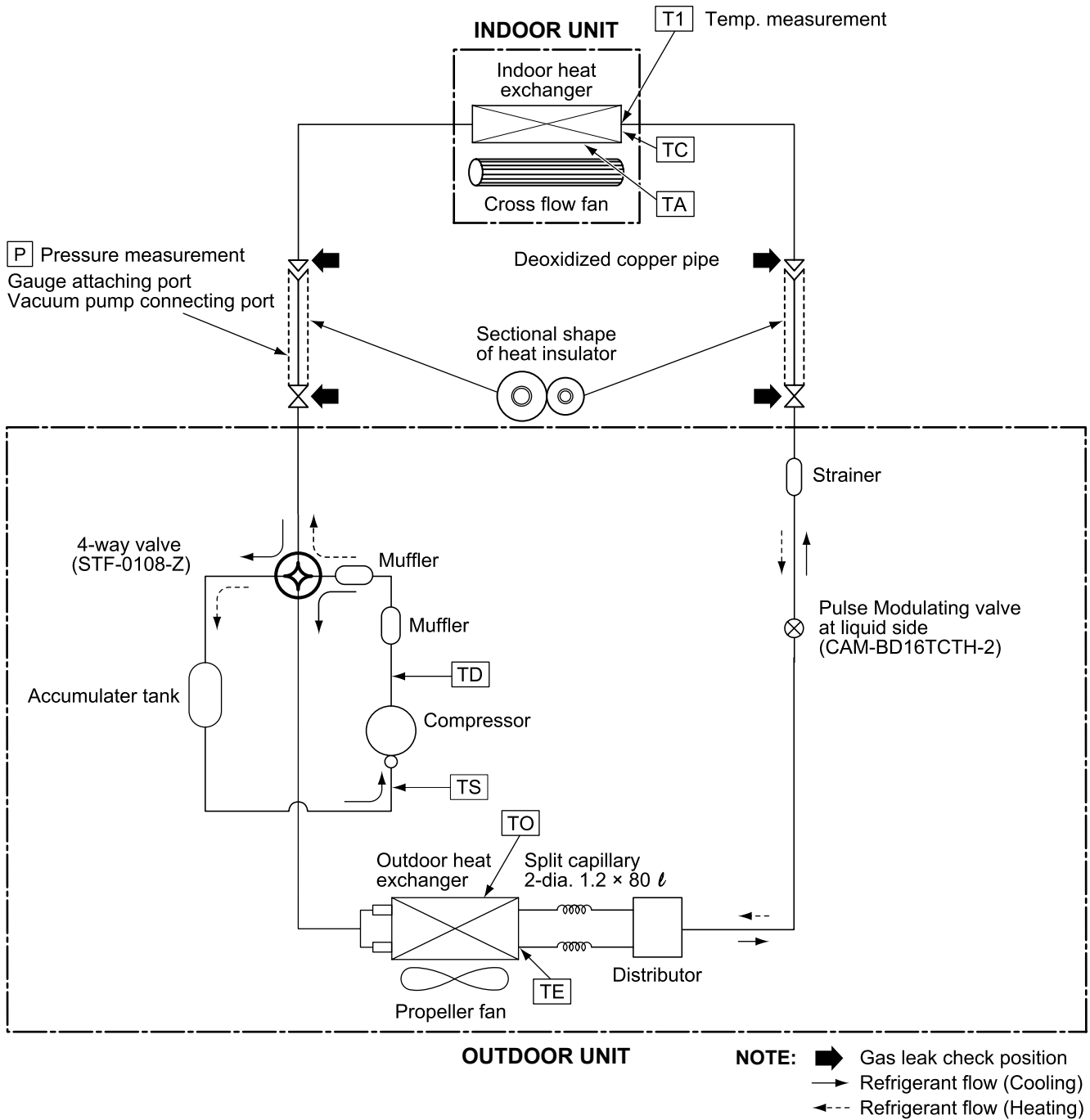


**NOTE :**

- The maximum pipe length of this air conditioner is 20 m. When the pipe length exceeds 15m, the additional charging of refrigerant, 20g per 1m for the part of pipe exceeded 15m is required. (Max. 100g)



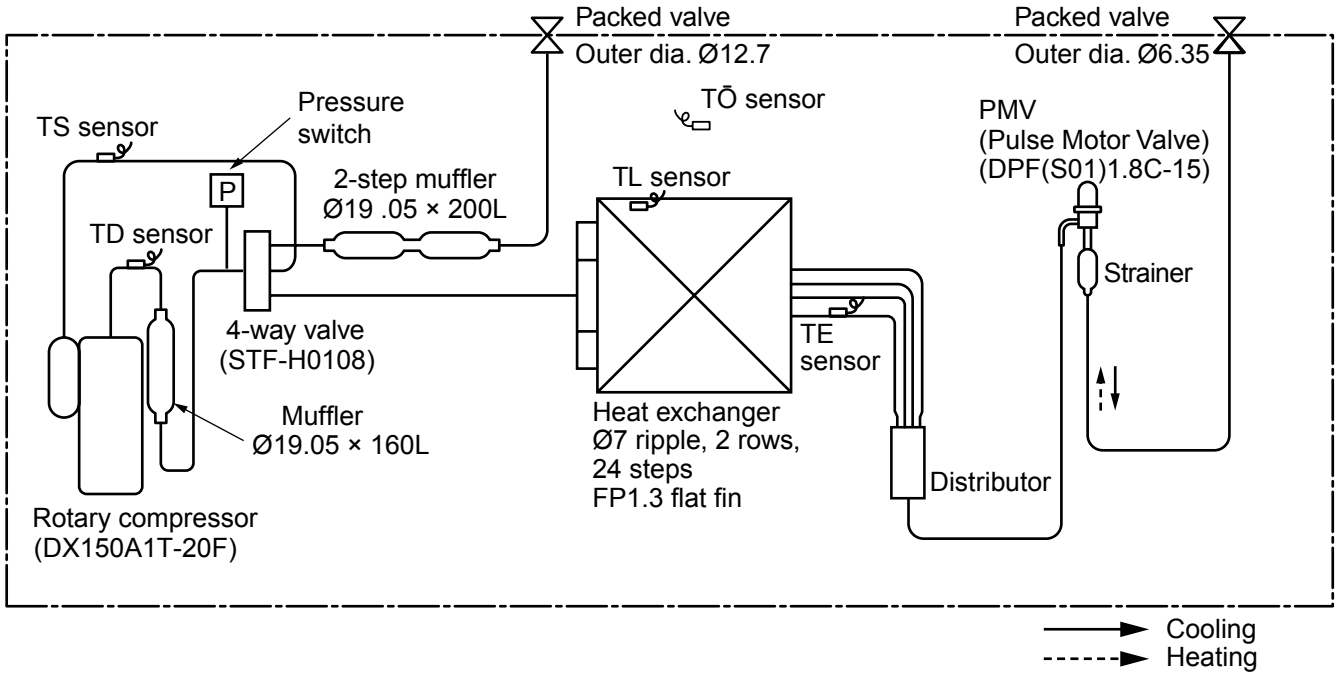
RAV-GM401ATP-E/TR ( \*ATJP-E )



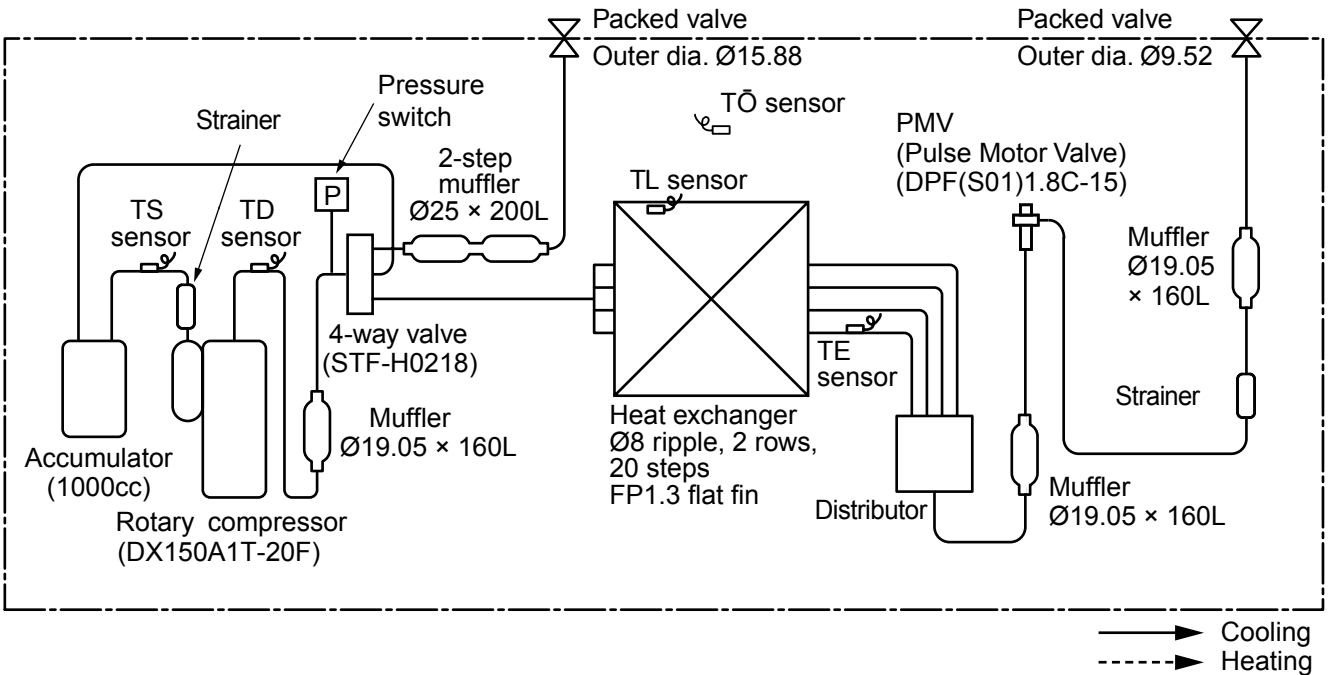
**NOTE :**

- The maximum pipe length of this air conditioner is 20m. When the pipe length exceeds 15m, the additional charging of refrigerant, 20g per 1m for the part of pipe exceeded 15m is required. (Max. 100g)

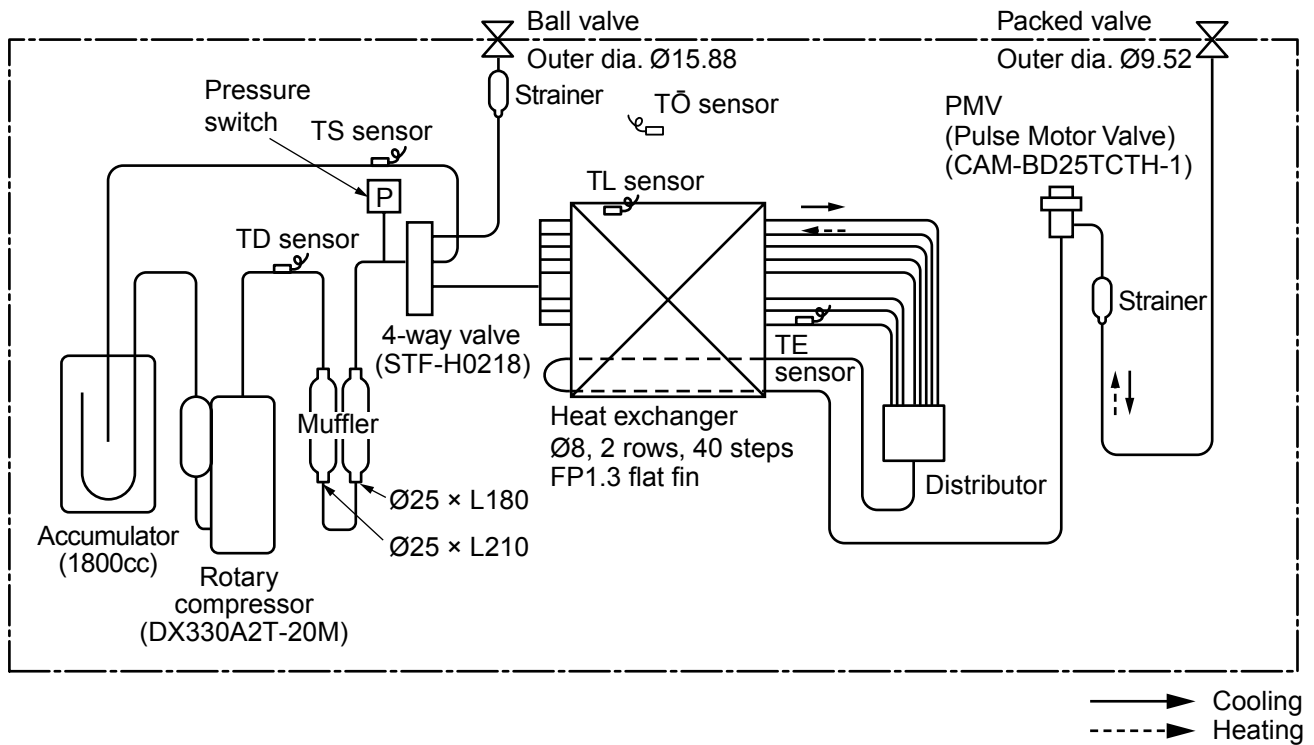
**RAV-GM561ATP-E/TR ( \*ATJP-E )**



**RAV-GM801ATP-E/TR ( \*ATJP-E )**



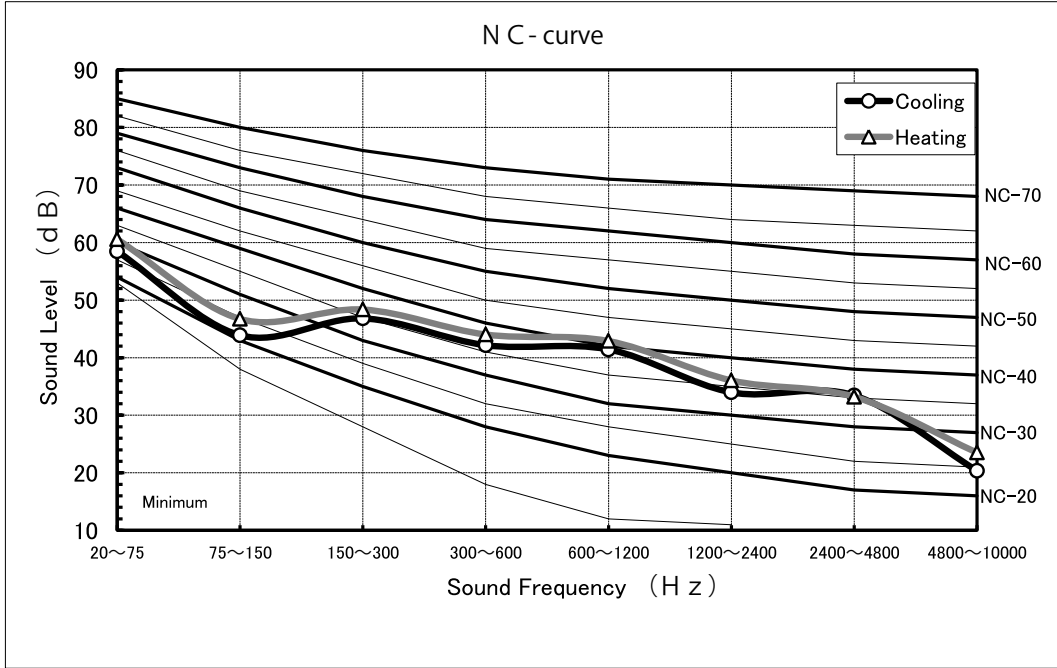
**RAV-GM1101ATP-E/TR, RAV-GM1401ATP-E/TR ( \*ATJP-E )**



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

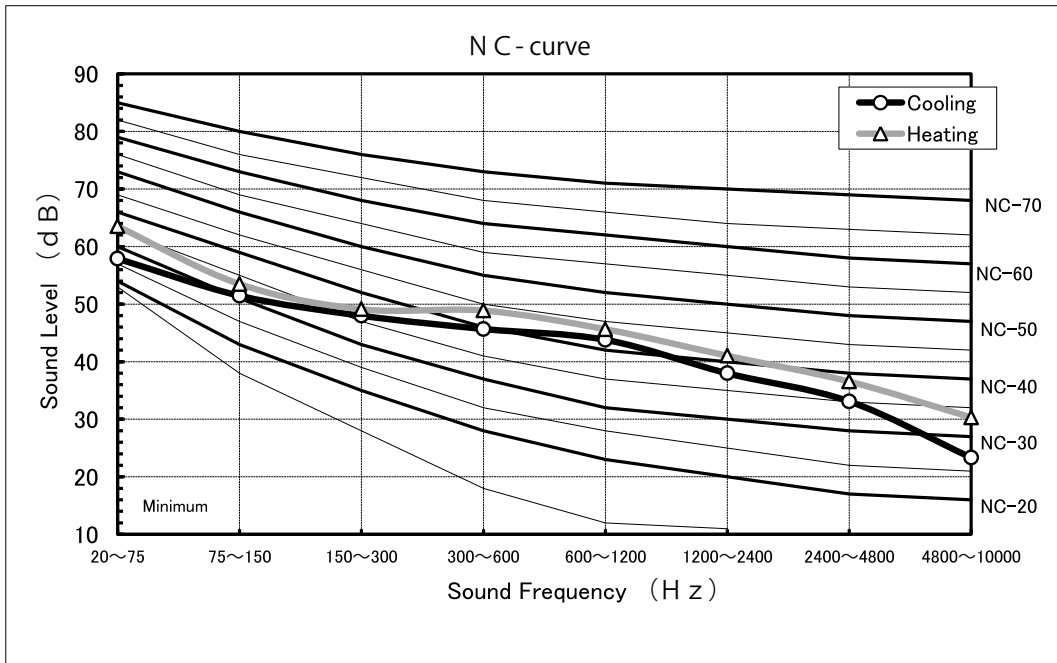
#### RAV-GM301ATP-E/TR (\*ATJP-E)

Measured point	Specification (d B)	
	Cooling	Heating
Horizontal 1.0 m	46	47



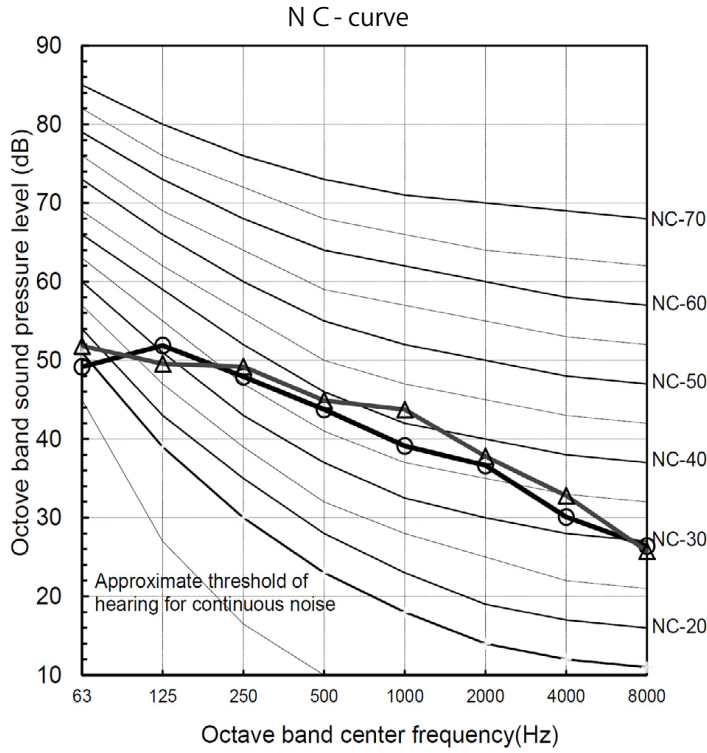
#### RAV-GM401ATP-E/TR (\*ATJP-E)

Measured point	Specification (d B)	
	Cooling	Heating
Horizontal 1.0 m	49	50



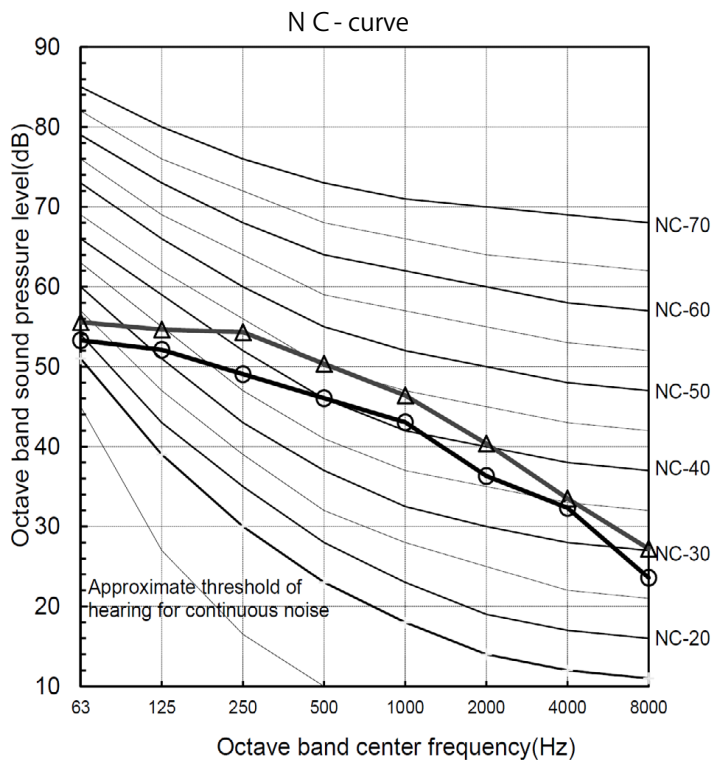
**RAV-GM561ATP-E/TR (\*ATJP-E)**

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



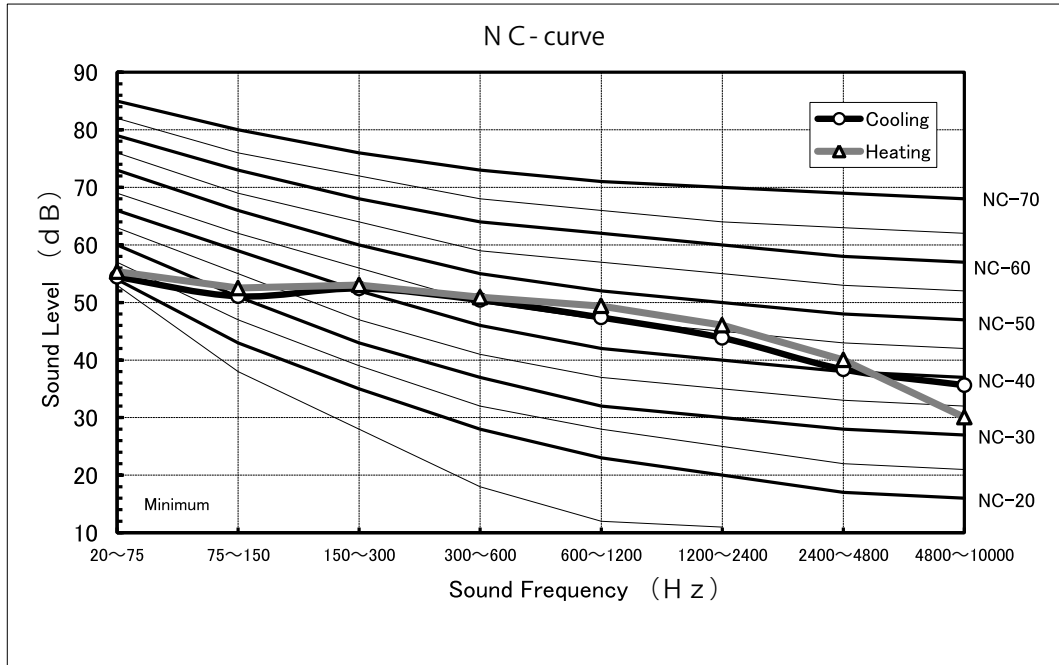
**RAV-GM801ATP-E/TR (\*ATJP-E)**

Sound pressure level (dB(A))	Cooling	Heating
	48	52



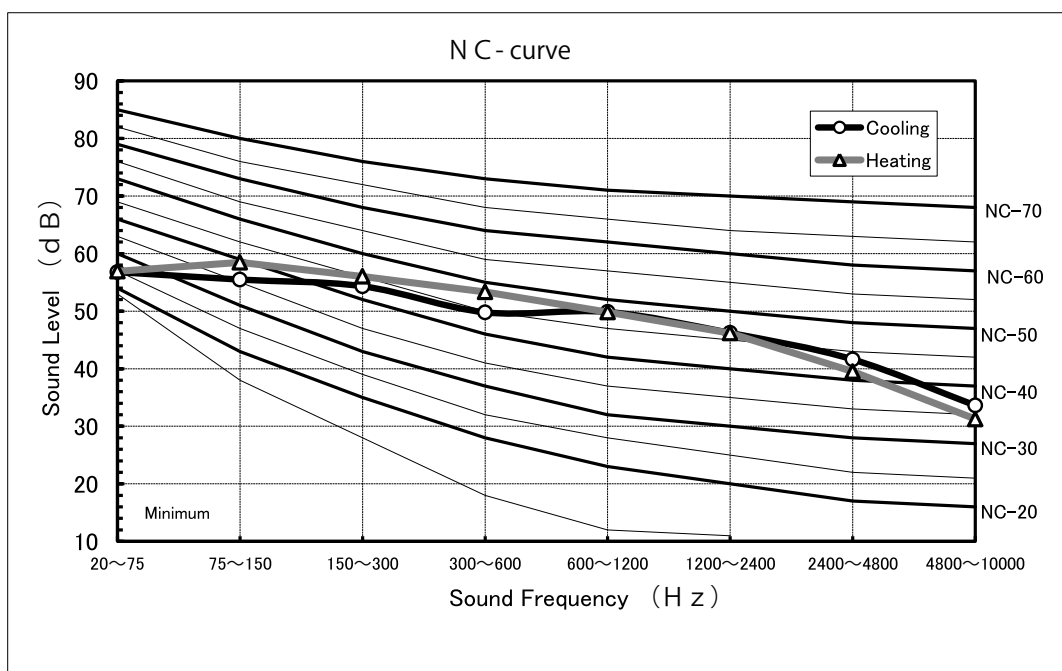
RAV-GM1101ATP-E/TR (\*ATJP-E)

Measured point	Specification (d B)	
	Cooling	Heating
Horizontal 1.0 m	54	57



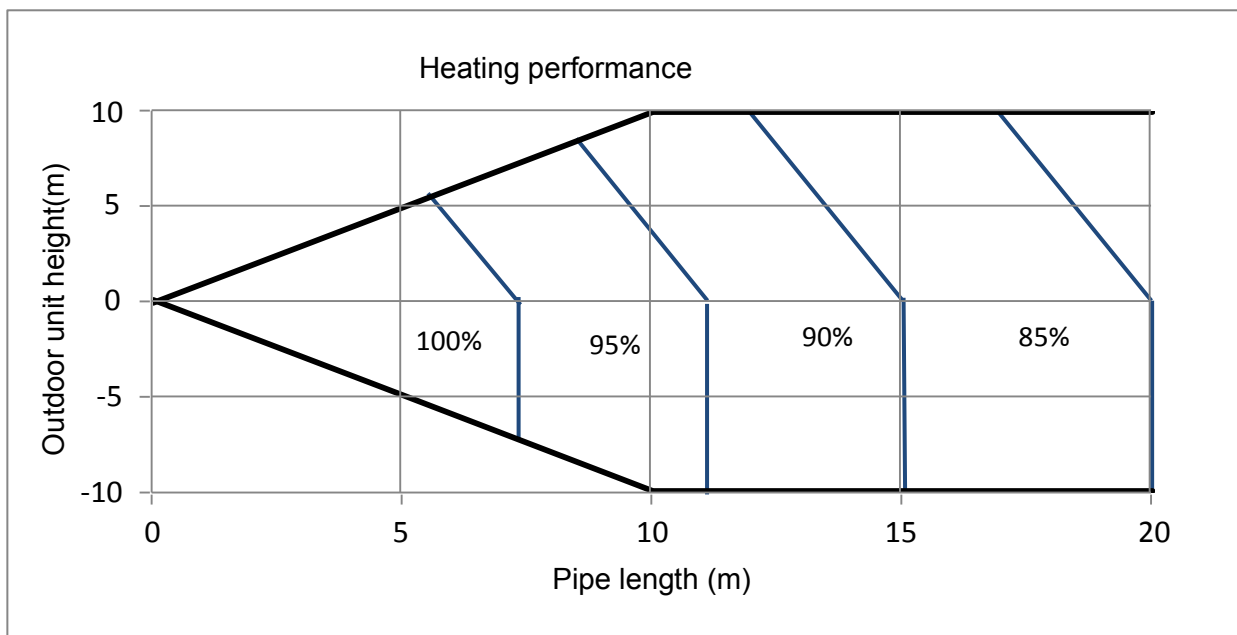
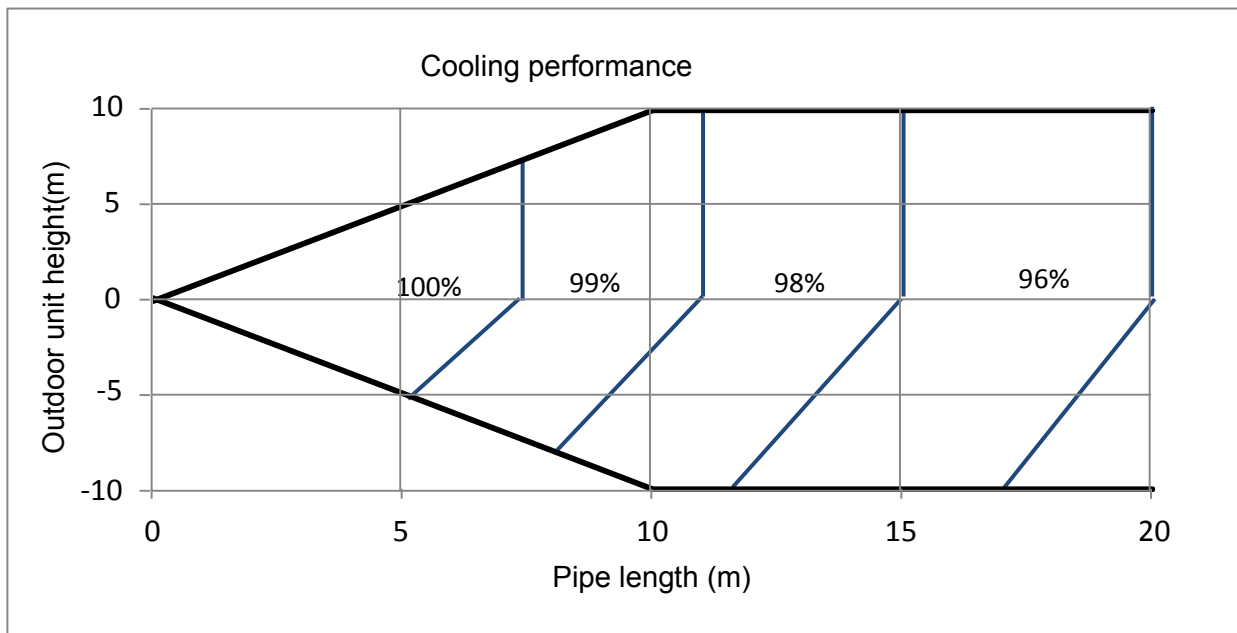
RAV-GM1401ATP-E/TR (\*ATJP-E)

Measured point	Specification (d B)	
	Cooling	Heating
Horizontal 1.0 m	55	57

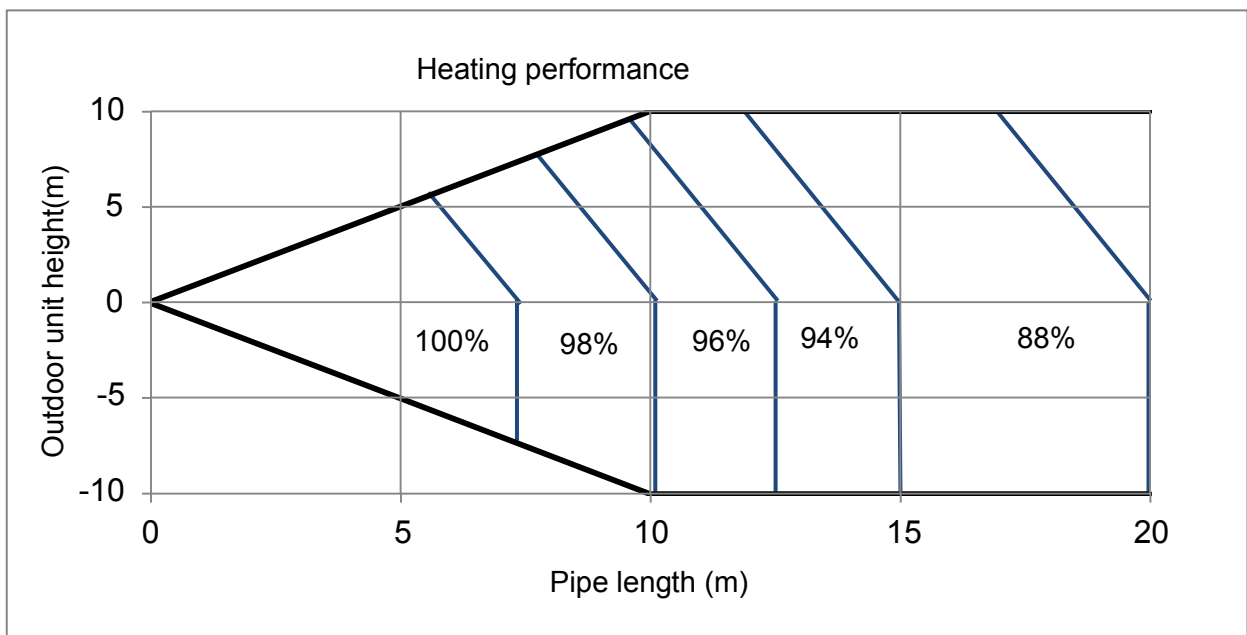
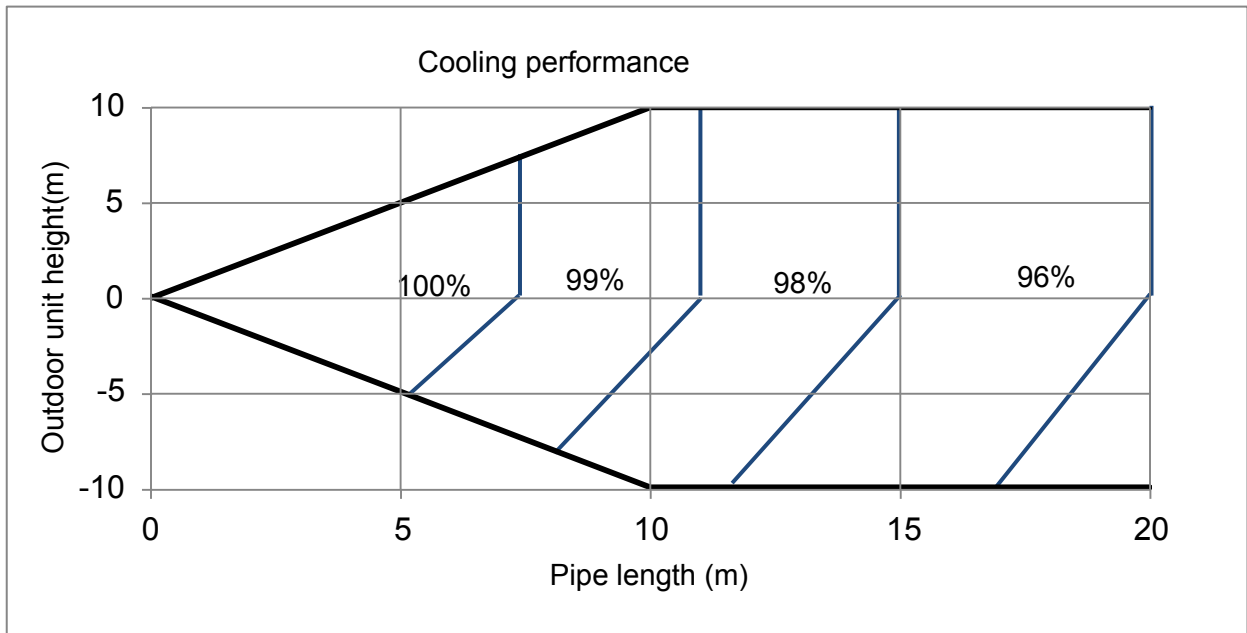


### 3-6. Connecting pipe length and lift difference between indoor units vs. capacity correction value

RAV-GM301ATP-E/TR (\*ATJP-E)



RAV-GM401ATP-E/TR ( \*ATJP-E )

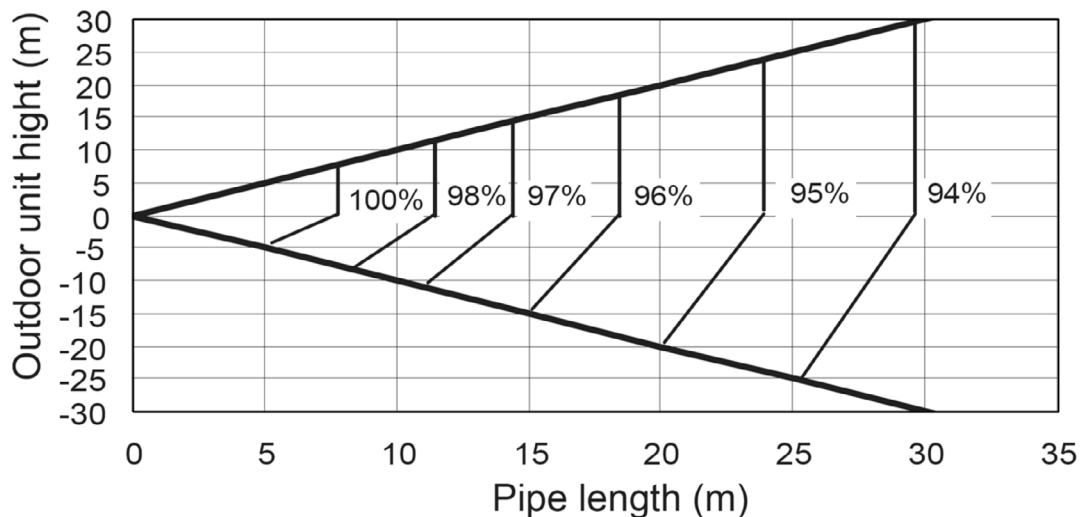




RAV-GM561ATP-E/TR ( \*ATJP-E )

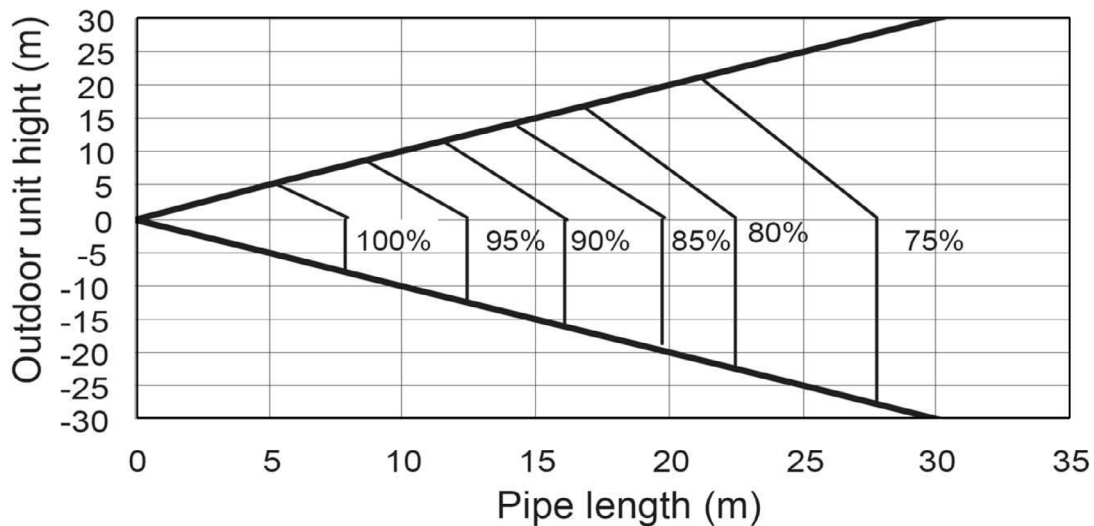
[Cooling]

Cooling performance



[Heating]

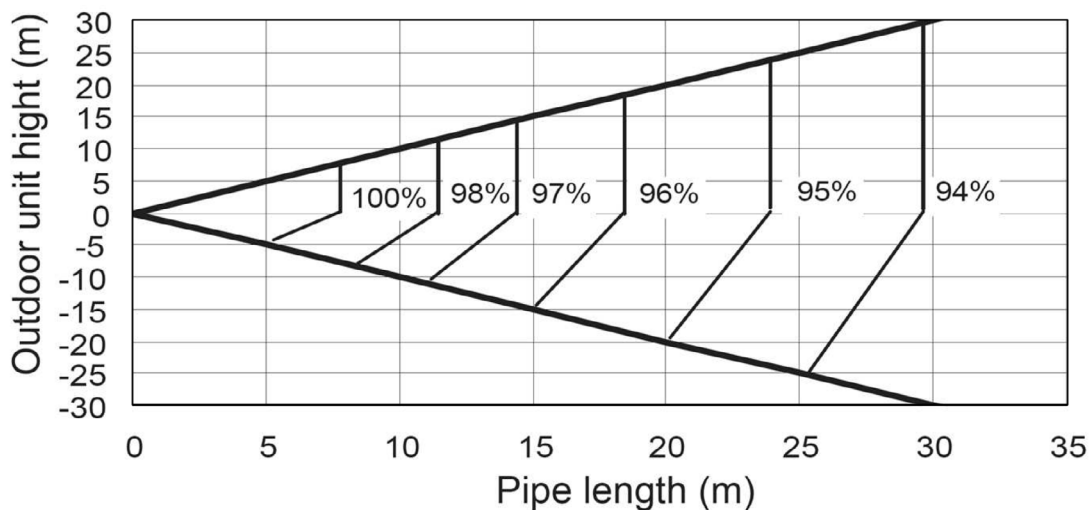
Heating performance



RAV-GM801ATP-E/TR ( \*ATJP-E )

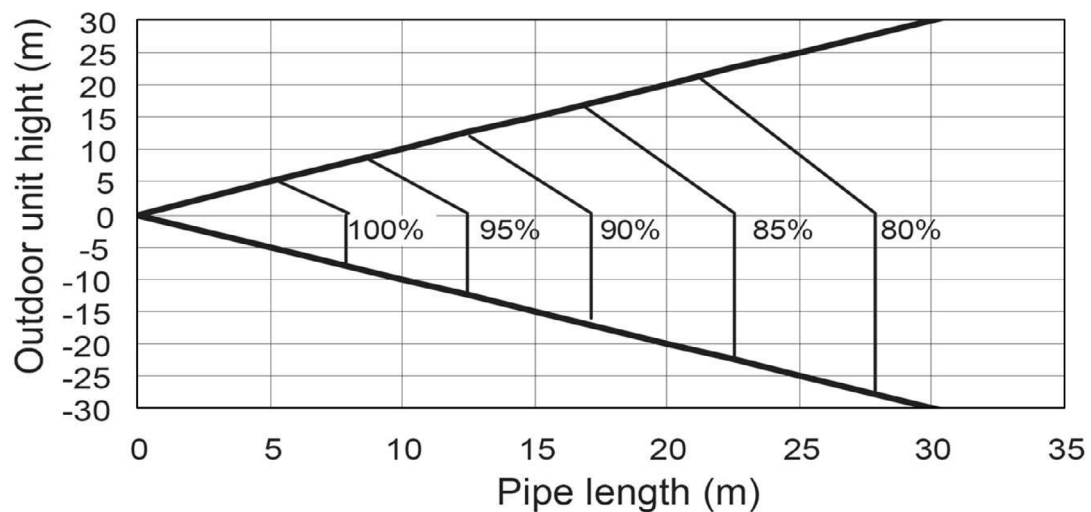
[Cooling]

Cooling performance



[Heating]

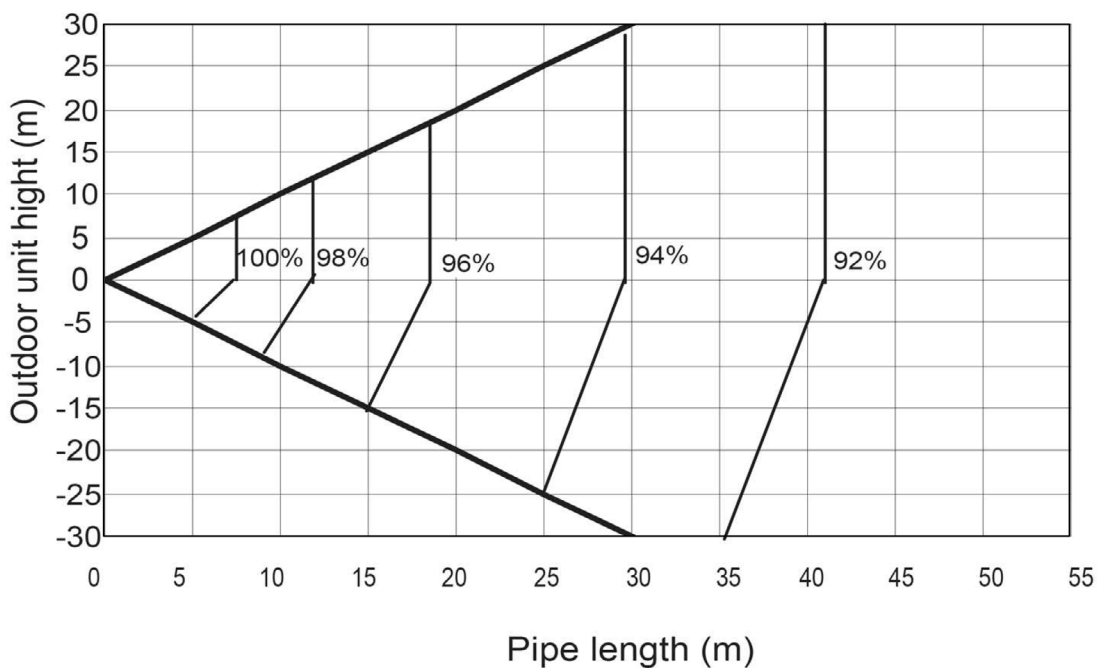
Heating performance



RAV-GM1101ATP-E/TR, RAV-GM1401ATP-E/TR ( \*ATJP-E )

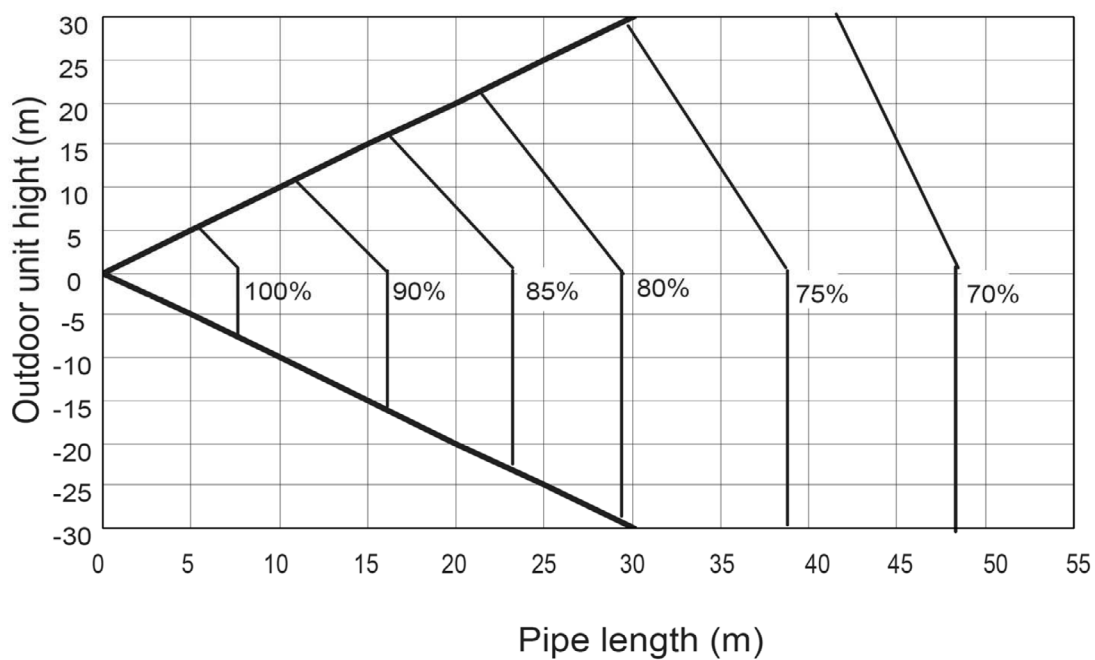
[Cooling]

Cooling performance



[Heating]

Heating performance



# 4. Option

## 4.1 Accessories

Accessory Parts List		4way Cassette		Compact 4way		Slim duct		Stadard duct		Under ceiling											
		series 1		series 1		series 1		series 1		series 1											
		RAV-RM561UTP-E/-TR	RAV-RM801UTP-E/-TR	RAV-RM1101UTP-E/-TR	RAV-RM1401UTP-E/-TR	RAV-RM301MUT-E/-TR	RAV-RM401MUT-E/-TR	RAV-RM451MUT-E/-TR	RAV-RM561MUT-E/-TR	RAV-RM301SDT-E/-TR	RAV-RM401SDT-E/-TR	RAV-RM451SDT-E/-TR	RAV-RM561SDT-E/-TR	RAV-RM561BTP-E/-TR	RAV-RM801BTP-E/-TR	RAV-RM1101BTP-E/-TR	RAV-RM1401BTP-E/-TR	RAV-RM561CTP-E/-TR	RAV-RM801CTP-E/-TR	RAV-RM1101CTP-E/-TR	RAV-RM1401CTP-E/-TR
Wired Remote Controller	RBC-AMS51E-EN,ES	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	RBC-AMS55E-EN, ES	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	RBC-AMS41E	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	RBC-AMT32E	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	RBC-AS41E	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Wireless Remote Controller	RBC-AX32UM(W)-E				OK																
	TCB-AX32E2	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	RBC-AX32U(W)-E	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
	RBC-AX33CE																				OK
Schedule Timer	TCB-EXS21TLE	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
TCC-Link adaptor	TCB-PCNT30TLE2	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Ceiling Panel	RBC-UM21PG(W)-E				OK																
	RBC-U31PGP(W)-E	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Occupancy Sensor	TCB-SIR41UM-E				OK																
Fresh air filter chamber	TCB-GFC1602UE	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Spacer for height adjustment	TCB-SP1602UE	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Air discharge direction kit	TCB-BC1602UE	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Auxiliary fresh air flange	TCB-FF101URE2	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Optional connecting kit	TCB-PCUC2E																				OK
Spigot shaped flange	TCB-SF56C6BPE, TCB-SF80C6BPE, TCB-SF160C6BPE																				OK
Application control kit	TCB-PCOS1E2	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Optional connector table (Peak-cut control/Night operation /Compressor ON status output)	TCB-KBOS4E	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

## 4.2 Controller

Parts name	Model name	Used with
Wired remote controller	RBC-AMS51E-EN, ES	All indoor Units
	RBC-AMS55E-EN, ES	
	RBC-AMS41E	
	RBC-AMT32E	
	RBC-AS41E	
Simple wired controller	RBC-AS21E2	All indoor units
Wireless remote controller	RBC-AX32UM (W)-E	Compact 4-way
	TCB-AX32E2	All indoor Units
	RBC-AX32U(W)-E	4-way Cassette
	RBC-AX33CE	Under Ceiling
Schedule timer	TCB-EXS21TLE	Wired remote controller
ON-OFF controller	TCB-CC163TLE2	Wired remote controller/Central remote controller
Central controller	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 / High wall type
Terminal box	TCB-PX30MUE	Used with TCB-PCNT30TLE2
		4-way cassette (4 series) type

**Energy Save operation (RBC-AMS54/55E-EN/ES)**

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		
			DI R32		
			Linked with A2A HEX by TCC link <sup>*1</sup>	Energy save operation (Limit the peak of electric current)	Night Operation by only New Controller <sup>*2</sup>
4-way cassette type	RAV-RM**1UTP-E/TP	×	○	×	×
Compact 4-way cassette type	RAV-RM**1MUT-E/TP	OK	○	×	×
Standard duct	RAV-RM**1BTP-E/TP	OK	○	×	×
Slim Duct	RAV-RM**1SDT-E/TP	×	○	×	×
Ceiling type	RAV-RM**1CTP-E/TP	OK	○	×	×
High Wall type	RAV-RM**1KRTP-E/TP	×	○	×	×

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

\*2) New Controller : RBC-AMS54/55E-EN/ES

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

	RBC-AMS54/55E-EN/ES	RBC-AMT32E/RBC-AMS41E
○	0%, 50%, Option (Only 75%) <sup>*3</sup>	Option (Only 75%) <sup>*3</sup>
×	NA	NA

# Appendix

**Specifications for ErP Lot-10**

*Digital Inverter < Series 1> 1 phase*

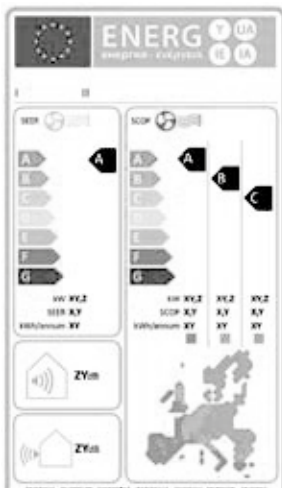
No	Outdoor unit type	Connection type	HP	Indoor unit		Outdoor unit		Rated Capacity (kW)		Specification					
				Model name	Qty	Model name	Qty	Cooling	Heating	SEER	Energy Label	PdesignC	SCOP (average)	Energy Label	Pdesignh (average)
1	DI	Single	1.0	RAV-RM301MUT-E	1	RAV-GM301ATP-E	1	2.5	3.4	5.94	A+	2.5	4.70	A++	2.3
2	DI	Single	1.0	RAV-RM301SDT-E	1	RAV-GM301ATP-E	1	2.5	3.4	6.29	A++	2.5	4.60	A++	2.6
3	DI	Single	1.0	RAV-RM301KRTP-E	1	RAV-GM301ATP-E	1	2.5	3.4	6.36	A++	2.5	4.10	A+	2.6
4	DI	Single	1.5	RAV-RM401MUT-E	1	RAV-GM401ATP-E	1	3.6	4.0	5.76	A+	3.6	4.44	A+	2.7
5	DI	Single	1.5	RAV-RM401SDT-E	1	RAV-GM401ATP-E	1	3.6	4.0	5.86	A+	3.6	4.01	A+	2.7
6	DI	Single	1.5	RAV-RM401CTP-E	1	RAV-GM401ATP-E	1	3.6	4.0	6.34	A++	5.0	5.10	A+++	2.7
7	DI	Single	1.5	RAV-RM401KRTP-E	1	RAV-GM401ATP-E	1	3.6	4.0	6.12	A++	3.6	4.22	A+	2.7
8	DI	Single	2.0	RAV-RM561UTP-E	1	RAV-GM561ATP-E	1	5.0	5.3	6.34	A++	5.0	4.60	A++	2.8
9	DI	Single	2.0	RAV-RM561MUT-E	1	RAV-GM561ATP-E	1	5.0	5.3	5.69	A+	5.0	4.37	A+	2.8
10	DI	Single	2.0	RAV-RM561BTP-E	1	RAV-GM561ATP-E	1	5.0	5.3	5.28	A	5.0	4.08	A+	2.8
11	DI	Single	2.0	RAV-RM561SDT-E	1	RAV-GM561ATP-E	1	5.0	5.3	5.14	A	5.0	4.16	A+	2.8
12	DI	Single	2.0	RAV-RM561CTP-E	1	RAV-GM561ATP-E	1	5.0	5.3	5.50	A	5.0	4.32	A+	2.8
13	DI	Single	2.0	RAV-RM561KRTP-E	1	RAV-GM561ATP-E	1	5.0	5.3	6.19	A++	5.0	4.00	A+	2.8
14	DI	Single	3.0	RAV-RM801UTP-E	1	RAV-GM801ATP-E	1	6.7	7.7	5.81	A+	6.7	4.42	A+	5.1
15	DI	Single	3.0	RAV-RM801BTP-E	1	RAV-GM801ATP-E	1	6.7	7.7	5.20	A	6.7	4.13	A+	5.1
16	DI	Single	3.0	RAV-RM801CTP-E	1	RAV-GM801ATP-E	1	6.9	7.7	5.62	A+	6.9	4.21	A+	5.1
17	DI	Single	3.0	RAV-RM801KRTP-E	1	RAV-GM801ATP-E	1	6.7	7.7	5.73	A+	6.7	4.01	A+	5.1
18	DI	Single	4.0	RAV-RM1101UTP-E	1	RAV-GM1101ATP-E	1	9.5	11.2	6.15	A++	9.5	4.28	A+	8.0
19	DI	Single	4.0	RAV-RM1101BTP-E	1	RAV-GM1101ATP-E	1	9.5	11.2	5.28	A	9.5	4.19	A+	7.6
20	DI	Single	4.0	RAV-RM1101CTP-E	1	RAV-GM1101ATP-E	1	9.5	11.2	5.86	A+	9.5	4.27	A+	7.6
21	DI	Twin	4.0	RAV-RM561UTP-E	2	RAV-GM1101ATP-E	1	9.5	11.2	5.94	A+	9.5	4.28	A+	8.0
22	DI	Twin	4.0	RAV-RM561MUT-E	2	RAV-GM1101ATP-E	1	9.5	11.2	5.50	A	9.5	4.02	A+	7.4
23	DI	Twin	4.0	RAV-RM561BTP-E	2	RAV-GM1101ATP-E	1	9.5	11.2	5.28	A	9.5	4.22	A+	7.6
24	DI	Twin	4.0	RAV-RM561SDT-E	2	RAV-GM1101ATP-E	1	9.5	11.2	5.32	A	9.5	4.19	A+	7.4
25	DI	Twin	4.0	RAV-RM561CTP-E	2	RAV-GM1101ATP-E	1	9.5	11.2	5.85	A+	9.5	4.28	A+	7.6
26	DI	Twin	4.0	RAV-RM561KRTP-E	2	RAV-GM1101ATP-E	1	9.5	11.2	5.32	A	9.5	4.19	A+	7.6
27	DI	Single	5.0	RAV-RM1401UTP-E	1	RAV-GM1401ATP-E	1	12.0	13.0	5.71	A+	12.0	4.29	A+	8.0
28	DI	Single	5.0	RAV-RM1401BTP-E	1	RAV-GM1401ATP-E	1	12.1	13.0	5.36	-	12.1	4.19	-	7.6
29	DI	Single	5.0	RAV-RM1401CTP-E	1	RAV-GM1401ATP-E	1	12.1	13.0	5.36	-	12.1	4.19	-	7.6
30	DI	Twin	5.0	RAV-RM801UTP-E	2	RAV-GM1401ATP-E	1	12.0	13.0	5.57	A	12.0	4.29	A+	8.0
31	DI	Twin	5.0	RAV-RM801BTP-E	2	RAV-GM1401ATP-E	1	12.1	13.0	5.36	-	12.1	4.21	-	7.6
32	DI	Twin	5.0	RAV-RM801CTP-E	2	RAV-GM1401ATP-E	1	12.1	13.0	5.36	-	12.1	4.19	-	7.6
33	DI	Twin	5.0	RAV-RM801KRTP-E	2	RAV-GM1401ATP-E	1	12.1	13.0	5.24	-	12.1	4.19	-	8.0

\* 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

**Specifications for Turkey Lot-10**

*Digital Inverter < Series 1 > 1 phase*

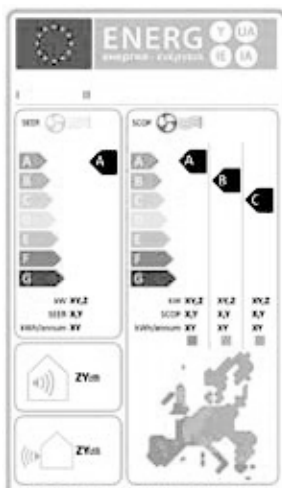
No	Outdoor unit type	Connection type	HP	Indoor unit		Outdoor unit		Rated Capacity (kW)		Specification					
				Model name	Qty	Model name	Qty	Cooling	Heating	SEER	Energy Label	PdesignC	SCOP (average)	Energy Label	Pdesignh (average)
1	DI	Single	1.0	RAV-RM301MUT-TR	1	RAV-GM301ATP-TR	1	2.5	3.4	5.94	A+	2.5	4.70	A++	2.3
2	DI	Single	1.0	RAV-RM301SDT-TR	1	RAV-GM301ATP-TR	1	2.5	3.4	6.29	A++	2.5	4.60	A++	2.6
3	DI	Single	1.0	RAV-RM301KRTP-TR	1	RAV-GM301ATP-TR	1	2.5	3.4	6.36	A++	2.5	4.10	A+	2.6
4	DI	Single	1.5	RAV-RM401MUT-TR	1	RAV-GM401ATP-TR	1	3.6	4.0	5.76	A+	3.6	4.44	A+	2.7
5	DI	Single	1.5	RAV-RM401SDT-TR	1	RAV-GM401ATP-TR	1	3.6	4.0	5.86	A+	3.6	4.01	A+	2.7
6	DI	Single	1.5	RAV-RM401CTP-TR	1	RAV-GM401ATP-TR	1	3.6	4.0	6.34	A++	5.0	5.10	A+++	2.7
7	DI	Single	1.5	RAV-RM401KRTP-TR	1	RAV-GM401ATP-TR	1	3.6	4.0	6.12	A++	3.6	4.22	A+	2.7
8	DI	Single	2.0	RAV-RM561UTP-TR	1	RAV-GM561ATP-TR	1	5.0	5.3	6.34	A++	5.0	4.60	A++	2.8
9	DI	Single	2.0	RAV-RM561MUT-TR	1	RAV-GM561ATP-TR	1	5.0	5.3	5.69	A+	5.0	4.37	A+	2.8
10	DI	Single	2.0	RAV-RM561BTP-TR	1	RAV-GM561ATP-TR	1	5.0	5.3	5.28	A	5.0	4.08	A+	2.8
11	DI	Single	2.0	RAV-RM561SDT-TR	1	RAV-GM561ATP-TR	1	5.0	5.3	5.14	A	5.0	4.16	A+	2.8
12	DI	Single	2.0	RAV-RM561CTP-TR	1	RAV-GM561ATP-TR	1	5.0	5.3	5.50	A	5.0	4.32	A+	2.8
13	DI	Single	2.0	RAV-RM561KRTP-TR	1	RAV-GM561ATP-TR	1	5.0	5.3	6.19	A++	5.0	4.00	A+	2.8
14	DI	Single	3.0	RAV-RM801UTP-TR	1	RAV-GM801ATP-TR	1	6.7	7.7	5.81	A+	6.7	4.42	A+	5.1
15	DI	Single	3.0	RAV-RM801BTP-TR	1	RAV-GM801ATP-TR	1	6.7	7.7	5.20	A	6.7	4.13	A+	5.1
16	DI	Single	3.0	RAV-RM801CTP-TR	1	RAV-GM801ATP-TR	1	6.9	7.7	5.62	A+	6.9	4.21	A+	5.1
17	DI	Single	3.0	RAV-RM801KRTP-TR	1	RAV-GM801ATP-TR	1	6.7	7.7	5.73	A+	6.7	4.01	A+	5.1
18	DI	Single	4.0	RAV-RM1101UTP-TR	1	RAV-GM1101ATP-TR	1	9.5	11.2	6.15	A++	9.5	4.28	A+	8.0
19	DI	Single	4.0	RAV-RM1101BTP-TR	1	RAV-GM1101ATP-TR	1	9.5	11.2	5.28	A	9.5	4.19	A+	7.6
20	DI	Single	4.0	RAV-RM1101CTP-TR	1	RAV-GM1101ATP-TR	1	9.5	11.2	5.86	A+	9.5	4.27	A+	7.6
21	DI	Twin	4.0	RAV-RM561UTP-TR	2	RAV-GM1101ATP-TR	1	9.5	11.2	5.94	A+	9.5	4.28	A+	8.0
22	DI	Twin	4.0	RAV-RM561MUT-TR	2	RAV-GM1101ATP-TR	1	9.5	11.2	5.50	A	9.5	4.02	A+	7.4
23	DI	Twin	4.0	RAV-RM561BTP-TR	2	RAV-GM1101ATP-TR	1	9.5	11.2	5.28	A	9.5	4.22	A+	7.6
24	DI	Twin	4.0	RAV-RM561SDT-TR	2	RAV-GM1101ATP-TR	1	9.5	11.2	5.32	A	9.5	4.19	A+	7.4
25	DI	Twin	4.0	RAV-RM561CTP-TR	2	RAV-GM1101ATP-TR	1	9.5	11.2	5.85	A+	9.5	4.28	A+	7.6
26	DI	Twin	4.0	RAV-RM561KRTP-TR	2	RAV-GM1101ATP-TR	1	9.5	11.2	5.32	A	9.5	4.19	A+	7.6
27	DI	Single	5.0	RAV-RM1401UTP-TR	1	RAV-GM1401ATP-TR	1	12.0	13.0	5.71	A+	12.0	4.29	A+	8.0
28	DI	Single	5.0	RAV-RM1401BTP-TR	1	RAV-GM1401ATP-TR	1	12.1	13.0	5.36	-	12.1	4.19	-	7.6
29	DI	Single	5.0	RAV-RM1401CTP-TR	1	RAV-GM1401ATP-TR	1	12.1	13.0	5.36	-	12.1	4.19	-	7.6
30	DI	Twin	5.0	RAV-RM801UTP-TR	2	RAV-GM1401ATP-TR	1	12.0	13.0	5.57	A	12.0	4.29	A+	8.0
31	DI	Twin	5.0	RAV-RM801BTP-TR	2	RAV-GM1401ATP-TR	1	12.1	13.0	5.36	-	12.1	4.21	-	7.6
32	DI	Twin	5.0	RAV-RM801CTP-TR	2	RAV-GM1401ATP-TR	1	12.1	13.0	5.36	-	12.1	4.19	-	7.6
33	DI	Twin	5.0	RAV-RM801KRTP-TR	2	RAV-GM1401ATP-TR	1	12.1	13.0	5.24	-	12.1	4.19	-	8.0

\* ErP Lot 10

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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



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