

# *Digital Inverter R32 6.0HP*

## *Light Commercial System*

### Outdoor Units

RAV-GM1601ATP-E / TR  
RAV-GM1601ATJP-E  
RAV-GM1601AT8P-E / TR  
RAV-GM1601AT8JP-E

### Indoor Units

RAV-RM561UTP-E / TR  
RAV-RM801UTP-E / TR  
RAV-RM1601UTP-E / TR  
  
RAV-RM561MUT-E / TR  
  
RAV-RM561SDT-E / TR  
  
RAV-RM561BTP-E / TR  
RAV-RM801BTP-E / TR  
RAV-RM1601BTP-E / TR  
  
RAV-RM561CTP-E / TR  
RAV-RM801CTP-E / TR  
RAV-RM1601CTP-E / TR  
  
RAV-RM561KRTP-E / TR  
RAV-RM801KRTP-E / TR

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# 1. Line up

## 1-1. Single Line-up

### Outdoor unit

Model name	RAV-GM1601ATP-E / TR RAV-GM1601AT8P-E / TR	RAV-GM1601ATJP-E RAV-GM1601AT8JP-E
Appearance	 <p style="text-align: right;">6 HP</p>	

### Indoor unit

Capacity Type		(kbtu/h) **	56	80	90	100	140	160
4-way Cassette		RAV-RM**01UTP	56	80	-	-	-	160
Compact 4-way		RAV-RM**01MUT	56	-	-	-	-	-
Slim Duct		RAV-RM**01SDT	56	-	-	-	-	-
Standard Duct		RAV-RM**01BTP	56	80	-	-	-	160
Ceiling		RAV-RM**01CTP	56	80	-	-	-	160
High wall		RAV-RM**01KRTP	56	80	-	-	-	-

## 1-2. Combination Patterns

Capacity Range (HP)	Phase	Outdoor Unit		Indoor Unit					
		Model name	System	4-way Cassette	Compact 4-way	Slim duct	Standard Duct	Ceiling	Hi-wall
6.0	1	RAV-GM1601AT(J)P*	Single system	RAV-RM1601UTP*	-	-	RAV-RM1601BTP*	RAV-RM1601CTP*	-
			Twin system	RAV-RM801UTP*	-	-	RAV-RM801BTP*	RAV-RM801CTP*	RAV-RM801KRTP*
			Triple system	RAV-RM561UTP*	RAV-RM561MUT*	RAV-RM561SDT*	RAV-RM561BTP*	RAV-RM561CTP*	RAV-RM561KRTP*
	3	RAV-GM1601AT8(J)P*	Single system	RAV-RM1601UTP*	-	-	RAV-RM1601BTP*	RAV-RM1601CTP*	-
			Twin system	RAV-RM801UTP*	-	-	RAV-RM801BTP*	RAV-RM801CTP*	RAV-RM801KRTP*
			Triple system	RAV-RM561UTP*	RAV-RM561MUT*	RAV-RM561SDT*	RAV-RM561BTP*	RAV-RM561CTP*	RAV-RM561KRTP*

## **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**

#### **2-1-5. Part Load Performance**

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

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

## 2-1-1. Specifications

### 4-way Cassette Type

Model		Indoor unit		RAV-RM1601UTP-E / TR	RAV-RM1601UTP-E / TR
		Outdoor unit		RAV-GM1601AT(J)P-E / ATP-TR	RAV-GM1601AT8(J)P-E / AT8P-TR
Cooling capacity		(kW)		14.0 < 3.0 - 16.0 >	14.0 < 3.0 - 16.0 >
Heating capacity		(kW)		16.0 < 3.0 - 18.0 >	16.0 < 3.0 - 18.0 >
Power supply				1 phase 220V-240V/50Hz, 1phase 220V/60Hz	3 phase 380V-415V/50Hz, 3phase 380V/60Hz
Electrical characteristics	Cooling	Power consumption	(kW)	4.49	4.49
		EER		3.12	3.12
		PdesignC		14.00	14.00
		SEER		6.30	6.30
	Heating	Power consumption	(kW)	4.43	4.43
		COP		3.61	3.61
		PdesignH (Tbiv -7°C)		8.00	8.00
		SCOP		4.35	4.35
		Maximum current	(A)	29.0	16.1
	<b>Indoor unit</b>				
Appearance	Main unit		Zinc hot dipping steel plate		Zinc hot dipping steel plate
	Ceiling panel (Sold separately)	Model Panel color	RBC-U31PGP(W)-E, RBC-U31PGSP(W)-E W: Moon-white(2.5GY 9.0/0.5)		RBC-U31PGP(W)-E, RBC-U31PGSP(W)-E W: Moon-white(2.5GY 9.0/0.5)
Outer dimension	Main unit	Height	(mm)	319	319
		Width	(mm)	840	840
		Depth	(mm)	840	840
	Ceiling panel (Sold separately)	Height	(mm)	30	30
		Width	(mm)	950	950
		Depth	(mm)	950	950
Total weight	Main unit		(kg)	24.0	24.0
	Ceiling panel (Sold separately)		(kg)	4.2	4.2
Fan unit	Fan			Turbo fan	Turbo fan
	Standard air flow	H/M/L	(m3/h)	2130 / 1500 / 1230	2130 / 1500 / 1230
	Motor		(W)	150	150
External static pressure	Standard (Upper - Lower)		(Pa)	-	-
Air filter				Standard filter (Long life filter)	Standard filter (Long life filter)
Sound pressure level		H/M/L	(dB)	45 / 40 / 36	45 / 40 / 36
Sound power level		H/M/L	(dB)	60 / 55 / 51	60 / 55 / 51
Connecting pipe	Drain port			VP25	VP25

\*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 35°C DB

## 4-way Cassette Type

Twin system : Single phase model

Model		Indoor unit 1		RAV-RM801UTP-E / TR	
		Indoor unit 2		RAV-RM801UTP-E / TR	
		Outdoor unit		RAV-GM1601AT(J)P-E / ATP-TR	
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >		
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >		
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz			
Electrical characteristics	Cooling	Power consumption (kW)		4.49	
		EER		3.12	
		PdesignC		14.0	
		SEER		6.30	
	Heating	Power consumption (kW)		4.43	
		COP		3.61	
		PdesignH (Tbiv -7°C)		8.00	
		SCOP		4.35	
	Maximum current (A)		29.0		
	<b>Indoor unit</b>				
Appearance	Main unit		Zinc hot dipping steel plate		
	Ceiling panel (Sold separately)	Model	RBC-U31PGPW-E, RBC-U31PGSPW-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)		20.0		
	Ceiling panel (Sold separately) (kg)		4.2		
Fan unit	Fan		Turbo fan		
	Standard air flow	H/M/L (m3/h)	1230 / 960 / 810		
	Motor (W)		20		
External static pressure	Standard (Upper - Lower) (Pa)		-		
Air filter		Standard filter (Long life filter)			
Sound pressure level		H/M/L (dB)	35 / 31 / 28		
Sound power level		H/M/L (dB)	50 / 46 / 43		
Connecting pipe	Drain port		VP25		

\*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 35°C DB

## 4-way Cassette Type

Twin system : Three phase model

Model		Indoor unit 1		RAV-RM801UTP-E / TR	
		Indoor unit 2		RAV-RM801UTP-E / TR	
		Outdoor unit		RAV-GM1601AT8(J)P-E / AT8P-TR	
Cooling capacity		(kW)		14.0 < 3.0 - 16.0 >	
Heating capacity		(kW)		16.0 < 3.0 - 18.0 >	
Power supply		3 phase 380V-415V/50Hz, 3phase 380V/60Hz			
Electrical characteristics	Cooling	Power consumption (kW)		4.49	
		EER		3.12	
		PdesignC		14.0	
		SEER		6.30	
	Heating	Power consumption (kW)		4.43	
		COP		3.61	
		PdesignH (Tbiv -7°C)		8.00	
		SCOP		4.35	
	Maximum current (A)		16.1		
	<b>Indoor unit</b>				
Appearance		Main unit		Zinc hot dipping steel plate	
		Ceiling panel (Sold separately)	Model	RBC-U31PGPW-E , RBC-U31PGSPW-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)		20.0		
	Ceiling panel (Sold separately) (kg)		4.2		
Fan unit	Fan		Turbo fan		
	Standard air flow	H/M/L (m3/h)	1230 / 960 / 810		
	Motor (W)		20		
External static pressure	Standard (Upper - Lower) (Pa)		-		
Air filter		Standard filter (Long life filter)			
Sound pressure level		H/M/L (dB)	35 / 31 / 28		
Sound power level		H/M/L (dB)	50 / 46 / 43		
Connecting pipe	Drain port		VP25		

\*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 35°C DB



## 4-way Cassette Type

Triple system : Single phase model

<b>Model</b>	<b>Indoor unit 1</b>		<b>RAV-RM561UTP-E / TR</b>	
	<b>Indoor unit 2</b>		<b>RAV-RM561UTP-E / TR</b>	
	<b>Indoor unit 3</b>		<b>RAV-RM561UTP-E / TR</b>	
	<b>Outdoor unit</b>		<b>RAV-GM1601AT(j)P-E / ATP-TR</b>	
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >	
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >	
Power supply			1 phase 220V-240V/50Hz, 1phase 220V/60Hz	
Electrical characteristics	Cooling	Power consumption	(kW)	4.49
		EER		3.12
		PdesignC		14.0
		SEER		6.30
	Heating	Power consumption	(kW)	4.43
		COP		3.61
		PdesignH (Tbiv -7°C)		8.00
		SCOP		4.35
		Maximum current	(A)	29.0
<b>Indoor unit</b>				
Appearance	Main unit		Zinc hot dipping steel plate	
	Ceiling panel (Sold separately)	Model	RBC-U31PGPW-E, RBC-U31PGSPW-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)	20.0
	Ceiling panel (Sold separately)		(kg)	4.2
Fan unit	Fan		Turbo fan	
	Standard air flow	H/M/L	(m3/h)	1050 / 870 / 780
	Motor		(W)	14
External static pressure	Standard (Upper - Lower)		(Pa)	-
Air filter		Standard filter (Long life filter)		
Sound pressure level		H/M/L	(dB)	32 / 29 / 28
Sound power level		H/M/L	(dB)	47 / 44 / 43
Connecting pipe	Drain port		VP25	

\*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 35°C DB

## 4-way Cassette Type

## Triple system : Three phase model

Model	Indoor unit 1		RAV-RM561UTP-E / TR
	Indoor unit 2		RAV-RM561UTP-E / TR
	Indoor unit 3		RAV-RM561UTP-E / TR
	Outdoor unit		RAV-GM1601AT8(J)P-E / AT8P-TR
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >
Power supply			3 phase 380V-415V/50Hz, 3phase 380V/60Hz
Electrical characteristics	Cooling	Power consumption	(kW) 4.49
		EER	3.12
		PdesignC	14.0
		SEER	6.30
	Heating	Power consumption	(kW) 4.43
		COP	3.61
		PdesignH (Tbiv -7°C)	8.00
		SCOP	4.35
		Maximum current	(A) 16.1
Appearance	Main unit		Zinc hot dipping steel plate
	Ceiling panel (Sold separately)	Model	RBC-U31PGPW-E, RBC-U31PGSPW-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)		20.0
	Ceiling panel (Sold separately) (kg)		4.2
Fan unit	Fan		Turbo fan
	Standard air flow	H/M/L (m <sup>3</sup> /h)	1050 / 870 / 780
	Motor (W)		14
External static pressure	Standard (Upper - Lower) (Pa)		-
Air filter			Standard filter (Long life filter)
Sound pressure level		H/M/L (dB)	32 / 29 / 28
Sound power level		H/M/L (dB)	47 / 44 / 43
Connecting pipe	Drain port		VP25

\*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.

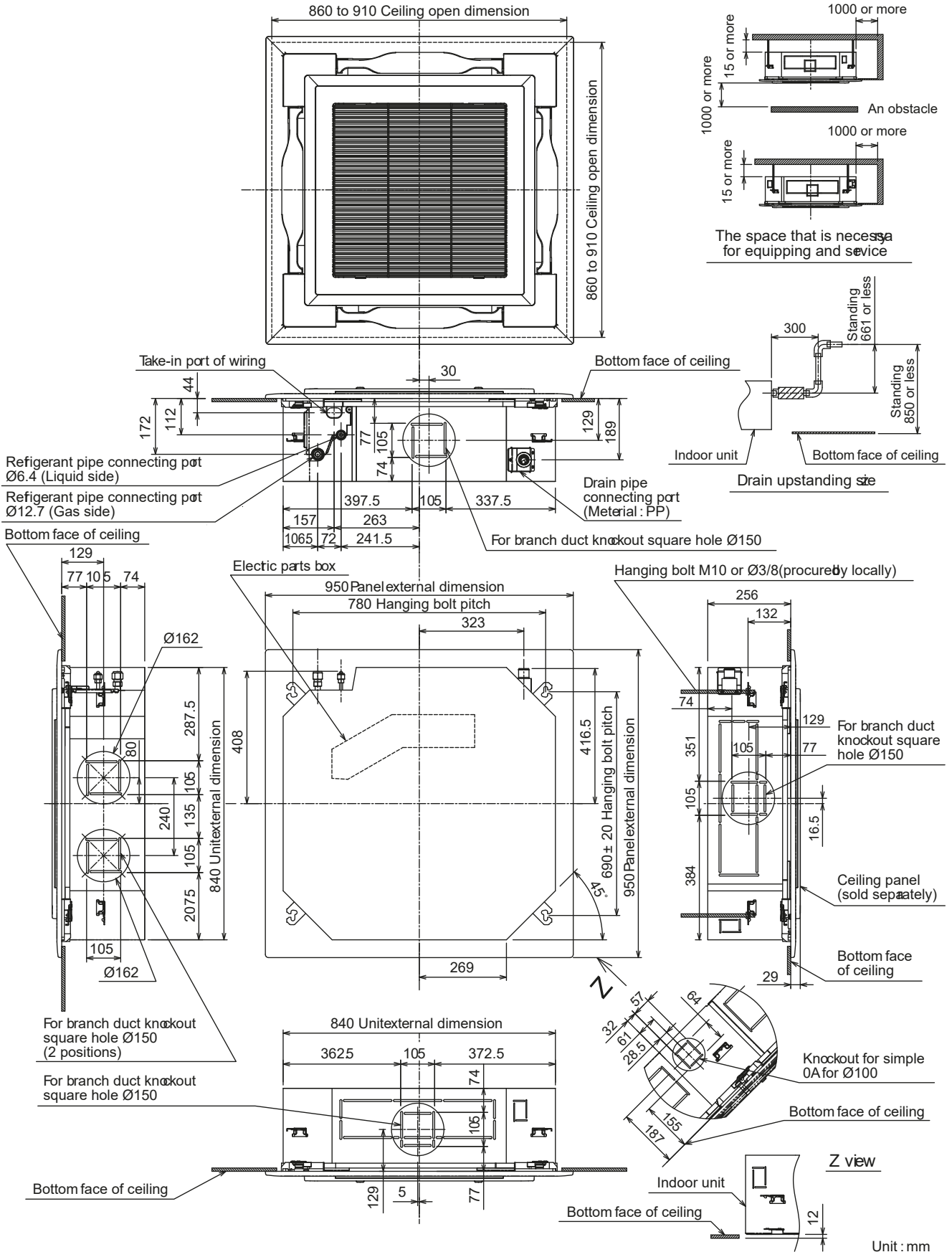
\*2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

Note :

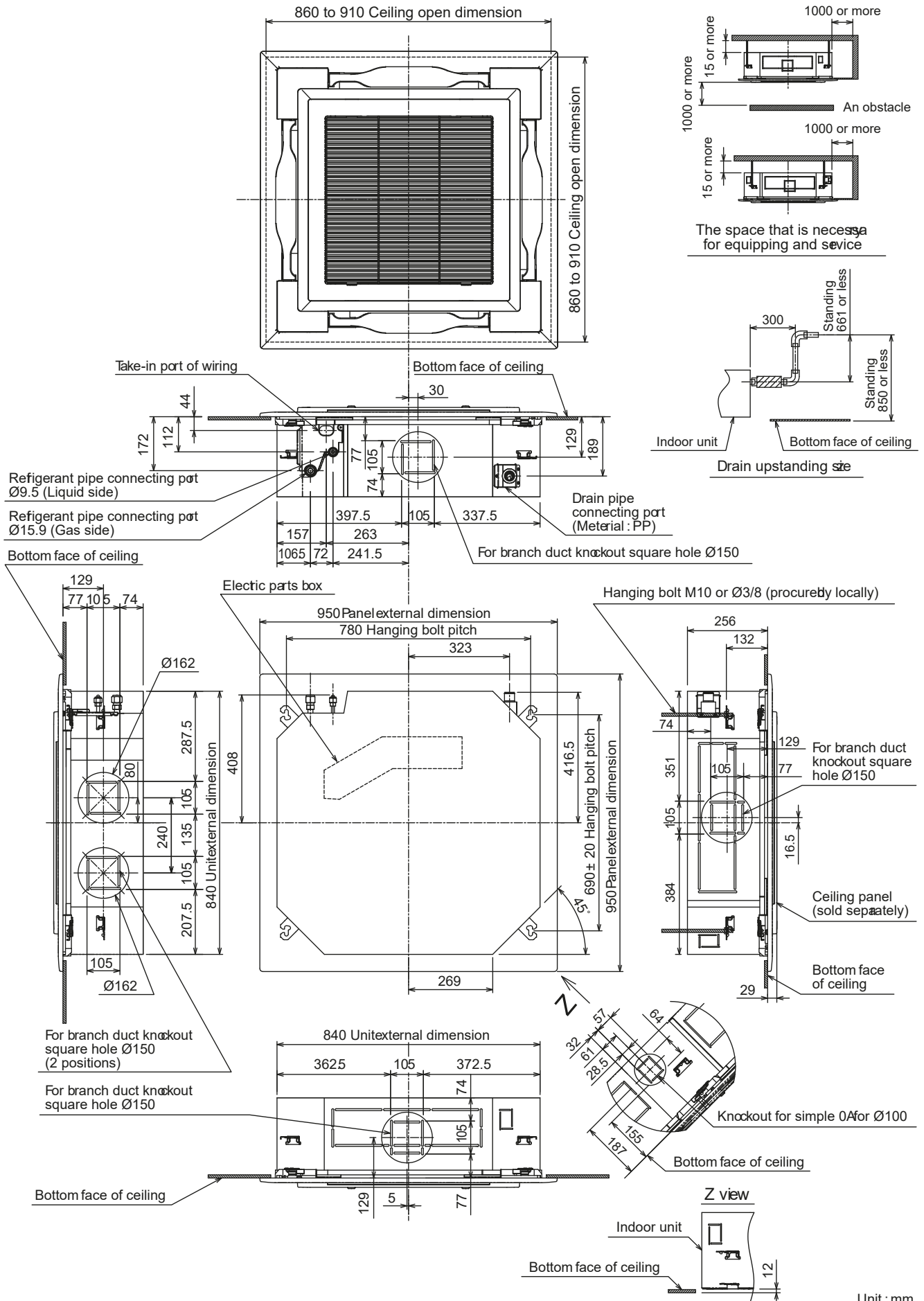
Rated conditions Cooling : Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB  
Heating : Indoor air temperature 20°C DB, Outdoor air temperature 35°C DB

## 2-1-2. Dimension

### RAV-RM561UTP-E / TR

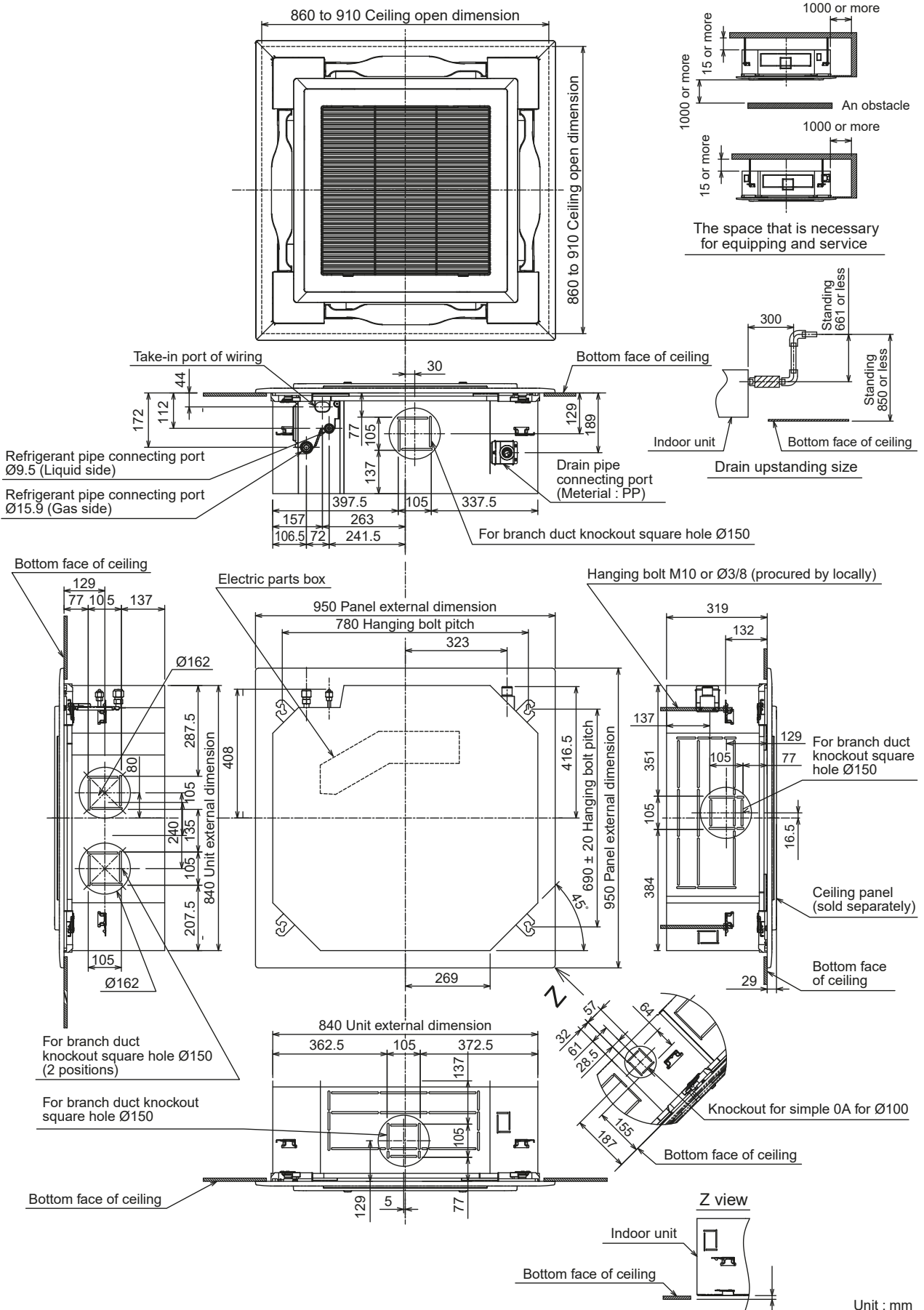


RAV-RM801UTP-E / TR



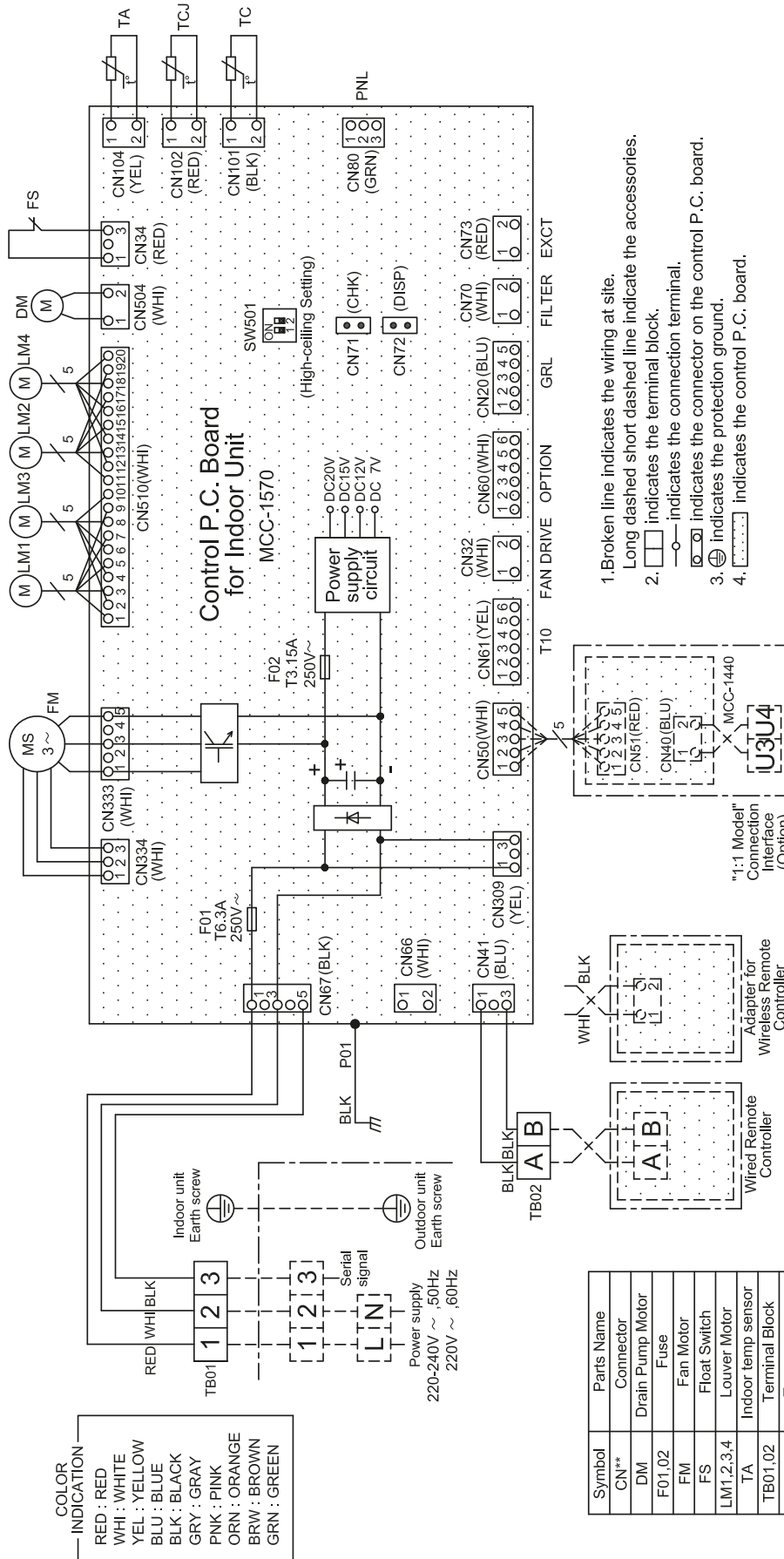
Unit : mm

RAV-RM1601UTP-E / TR



## 2-1-3. Wiring Diagrams

RAV-RM561UTP-E / TR, RAV-RM801UTP-E / TR, RAV-RM1601UTP-E / TR



## 2-1-4. Sensible Capacity Table

RAV-RM1601UTP-E / TR : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-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
1601	10.0	13.1	9.6	13.8	10.1	14.5	10.6	15.0	11.0	15.5	11.3	16.0	11.7	16.5	12.0	17.4	12.7	18.2	13.3
	12.0	13.1	9.5	13.7	10.0	14.4	10.5	14.9	10.9	15.4	11.3	15.9	11.6	16.4	11.9	17.3	12.6	18.1	13.2
	14.0	13.0	9.5	13.7	10.0	14.3	10.4	14.8	10.8	15.4	11.2	15.8	11.5	16.3	11.8	17.2	12.5	18.0	13.1
	16.0	12.9	9.4	13.6	9.9	14.2	10.4	14.7	10.7	15.2	11.1	15.7	11.4	16.1	11.8	17.1	12.5	17.9	13.0
	18.0	12.8	9.3	13.5	9.8	14.1	10.3	14.6	10.7	15.1	11.0	15.6	11.3	16.0	11.7	17.0	12.4	17.7	12.9
	20.0	12.7	9.2	13.3	9.7	14.0	10.2	14.5	10.6	15.0	10.9	15.4	11.3	15.9	11.6	16.8	12.3	17.6	12.8
	21.0	12.6	9.2	13.3	9.7	13.9	10.2	14.4	10.5	14.9	10.9	15.4	11.2	15.8	11.5	16.7	12.2	17.5	12.8
	23.0	12.5	9.1	13.2	9.6	13.8	10.1	14.3	10.4	14.8	10.8	15.2	11.1	15.7	11.4	16.6	12.1	17.3	12.6
	25.0	12.4	9.0	13.0	9.5	13.7	9.9	14.1	10.3	14.6	10.7	15.1	11.0	15.5	11.3	16.4	11.9	17.1	12.5
	27.0	12.2	8.9	12.8	9.4	13.5	9.8	14.0	10.2	14.4	10.5	14.9	10.8	15.3	11.1	16.2	11.8	16.9	12.3
	29.0	12.1	8.8	12.7	9.2	13.3	9.7	13.8	10.0	14.3	10.4	14.7	10.7	15.1	11.0	16.0	11.6	16.7	12.2
	31.0	11.9	8.7	12.5	9.1	13.1	9.6	13.6	9.9	14.0	10.2	14.5	10.5	14.9	10.8	15.8	11.5	16.5	12.0
	33.0	11.7	8.5	12.3	9.0	12.9	9.4	13.4	9.7	13.8	10.1	14.2	10.4	14.6	10.7	15.5	11.3	16.2	11.8
	35.0	11.5	8.4	12.1	8.8	12.7	9.3	13.1	9.6	13.6	9.9	14.0	10.2	14.4	10.5	15.3	11.1	16.0	11.6
37.0	11.3	8.2	11.9	8.6	12.5	9.1	12.9	9.4	13.3	9.7	13.7	10.0	14.1	10.3	15.0	10.9	15.6	11.4	
39.0	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	

RAV-RM801UTP-E / TR (Twin) : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-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
801	10.0	7.9	6.8	8.2	7.0	8.5	7.2	8.7	7.4	8.9	7.6	9.1	7.8	9.4	8.0	9.8	8.2	10.2	8.3
	12.0	7.8	6.7	8.1	6.9	8.4	7.1	8.6	7.3	8.8	7.5	9.0	7.7	9.3	7.9	9.7	8.1	10.1	8.2
	14.0	7.7	6.6	8.0	6.8	8.3	7.0	8.5	7.2	8.7	7.4	8.9	7.6	9.2	7.8	9.6	8.0	10.0	8.1
	16.0	7.6	6.5	7.9	6.7	8.2	6.9	8.4	7.1	8.6	7.3	8.8	7.5	9.1	7.7	9.5	7.9	9.9	8.0
	18.0	7.5	6.4	7.8	6.6	8.1	6.8	8.3	7.0	8.5	7.2	8.7	7.4	9.0	7.6	9.4	7.8	9.8	7.9
	20.0	7.4	6.3	7.7	6.5	8.0	6.7	8.2	6.9	8.4	7.1	8.6	7.3	8.9	7.5	9.3	7.7	9.7	7.8
	21.0	7.3	6.2	7.6	6.4	7.9	6.6	8.1	6.8	8.3	7.0	8.5	7.2	8.8	7.4	9.2	7.6	9.6	7.7
	23.0	7.2	6.1	7.5	6.3	7.8	6.5	8.0	6.7	8.2	6.9	8.4	7.1	8.7	7.3	9.1	7.5	9.5	7.6
	25.0	7.1	6.0	7.4	6.2	7.7	6.4	7.9	6.6	8.1	6.8	8.3	7.0	8.6	7.2	9.0	7.4	9.4	7.5
	27.0	7.0	5.9	7.3	6.1	7.6	6.3	7.8	6.5	8.0	6.7	8.2	6.9	8.5	7.1	8.9	7.3	9.3	7.4
	29.0	6.8	5.8	7.1	6.0	7.4	6.2	7.6	6.4	7.8	6.6	8.0	6.8	8.3	7.0	8.7	7.2	9.1	7.3
	31.0	6.5	5.6	6.8	5.8	7.1	6.0	7.3	6.2	7.5	6.4	7.7	6.6	8.0	6.8	8.4	7.0	8.8	7.1
	33.0	6.2	5.4	6.5	5.6	6.8	5.8	7.0	6.0	7.2	6.2	7.4	6.4	7.7	6.6	8.1	6.8	8.5	6.9
	35.0	5.9	5.2	6.2	5.4	6.5	5.6	6.7	5.8	6.9	6.0	7.1	6.2	7.4	6.4	7.8	6.6	8.2	6.7
37.0	5.8	5.1	6.1	5.3	6.4	5.5	6.6	5.7	6.8	5.9	7.0	6.1	7.3	6.3	7.7	6.5	8.1	6.6	
39.0	5.6	5.0	5.9	5.2	6.2	5.4	6.4	5.6	6.6	5.8	6.8	6.0	7.1	6.2	7.5	6.4	7.9	6.5	

RAV-RM561UTP-E / TR (Triple) : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-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
561	10.0	4.7	3.9	4.9	4.1	5.2	4.3	5.4	4.4	5.6	4.6	5.7	4.7	5.9	4.9	6.2	5.1	6.5	5.4
	12.0	4.7	3.9	4.9	4.1	5.2	4.3	5.3	4.4	5.5	4.6	5.7	4.7	5.8	4.8	6.2	5.1	6.5	5.3
	14.0	4.6	3.8	4.9	4.0	5.1	4.2	5.3	4.4	5.5	4.5	5.6	4.7	5.8	4.8	6.1	5.1	6.4	5.3
	16.0	4.6	3.8	4.8	4.0	5.1	4.2	5.3	4.4	5.4	4.5	5.6	4.6	5.8	4.8	6.1	5.0	6.4	5.3
	18.0	4.6	3.8	4.8	4.0	5.0	4.2	5.2	4.3	5.4	4.5	5.6	4.6	5.7	4.7	6.1	5.0	6.3	5.2
	20.0	4.5	3.7	4.8	3.9	5.0	4.1	5.2	4.3	5.4	4.4	5.5	4.6	5.7	4.7	6.0	5.0	6.3	5.2
	21.0	4.5	3.7	4.7	3.9	5.0	4.1	5.2	4.3	5.3	4.4	5.5	4.5	5.6	4.7	6.0	4.9	6.3	5.2
	23.0	4.5	3.7	4.7	3.9	4.9	4.1	5.1	4.2	5.3	4.4	5.4	4.5	5.6	4.6	5.9	4.9	6.2	5.1
	25.0	4.4	3.6	4.6	3.8	4.9	4.0	5.0	4.2	5.2	4.3	5.4	4.4	5.5	4.6	5.9	4.8	6.1	5.1
	27.0	4.4	3.6	4.6	3.8	4.8	4.0	5.0	4.1	5.2	4.3	5.3	4.4	5.5	4.5	5.8	4.8	6.0	5.0
	29.0	4.3	3.6	4.5	3.7	4.8	3.9	4.9	4.1	5.1	4.2	5.2	4.3	5.4	4.5	5.7	4.7	6.0	4.9
	31.0	4.2	3.5	4.5	3.7	4.7	3.9	4.9	4.0	5.0	4.1	5.2	4.3	5.3	4.4	5.6	4.7	5.9	4.9
	33.0	4.2	3.5	4.4	3.6	4.6	3.8	4.8	3.9	4.9	4.1	5.1	4.2	5.2	4.3	5.5	4.6	5.8	4.8
	35.0	4.1	3.4	4.3	3.6	4.5	3.7	4.7	3.9	4.9	4.0	5.0	4.1	5.1	4.3	5.4	4.5	5.7	4.7
37.0	4.0	3.3	4.2	3.5	4.4	3.7	4.6	3.8	4.8	3.9	4.9	4.1	5.0	4.2	5.3	4.4	5.6	4.6	
39.0	3.9	3.3	4.2	3.4	4.4	3.6	4.5	3.7	4.7	3.9	4.8	4.0	4.9	4.1	5.2	4.3	5.5	4.5	

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

## 2-1-5. Part Load Performance

Indoor Unit : RAV-RM1601UTP-E / TR

Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	4487	16000	4432

Q: Capacity in W

W: Power Consumption in W

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	12040	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5380	4520	3740	3040	2400	1850	1370	960	780	780
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	4960	4170	3450	2800	2210	1700	1260	880	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	4550	3820	3160	2560	2030	1560	1150	810	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4487	3770	3120	2530	2000	1540	1140	800	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3270	2750	2270	1840	1460	1120	830	580	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	2690	2260	1870	1520	1200	920	680	480	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2150	1810	1500	1210	960	740	550	380	310	310

### Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	4900	4120	3410	2780	2220	1730	1300	960	670	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4640	3910	3240	2640	2100	1640	1240	910	640	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4432	3730	3090	2520	2010	1570	1180	870	610	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4290	3610	2990	2440	1950	1520	1140	840	590	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4080	3440	2850	2320	1850	1450	1090	800	560	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3620	3050	2520	2060	1640	1280	960	710	500	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3550	2980	2470	2020	1610	1260	940	700	490	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3510	2950	2450	2000	1590	1240	930	690	480	510
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3340	2810	2330	1900	1520	1180	890	660	460	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3130	2640	2180	1780	1420	1110	830	620	430	460



Twin system

Indoor Unit : RAV-RM801UTP-E / TR (x2)

Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	4487	16000	4432

Q: Capacity in W

W: Power Consumption in W

Cooling

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	12040	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5380	4520	3740	3040	2400	1850	1370	960	780	780
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	4960	4170	3450	2800	2210	1700	1260	880	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	4550	3820	3160	2560	2030	1560	1150	810	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4487	3770	3120	2530	2000	1540	1140	800	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3270	2750	2270	1840	1460	1120	830	580	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	2690	2260	1870	1520	1200	920	680	480	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2150	1810	1500	1210	960	740	550	380	310	310

Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	4900	4120	3410	2780	2220	1730	1300	960	670	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4640	3910	3240	2640	2100	1640	1240	910	640	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4432	3730	3090	2520	2010	1570	1180	870	610	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4290	3610	2990	2440	1950	1520	1140	840	590	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4080	3440	2850	2320	1850	1450	1090	800	560	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3620	3050	2520	2060	1640	1280	960	710	500	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3550	2980	2470	2020	1610	1260	940	700	490	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3510	2950	2450	2000	1590	1240	930	690	480	510
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3340	2810	2330	1900	1520	1180	890	660	460	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3130	2640	2180	1780	1420	1110	830	620	430	460

Triple system

Indoor Unit : RAV-RM561UTP-E (x3)

Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	4487	16000	4432

Q: Capacity in W

W: Power Consumption in W

Cooling

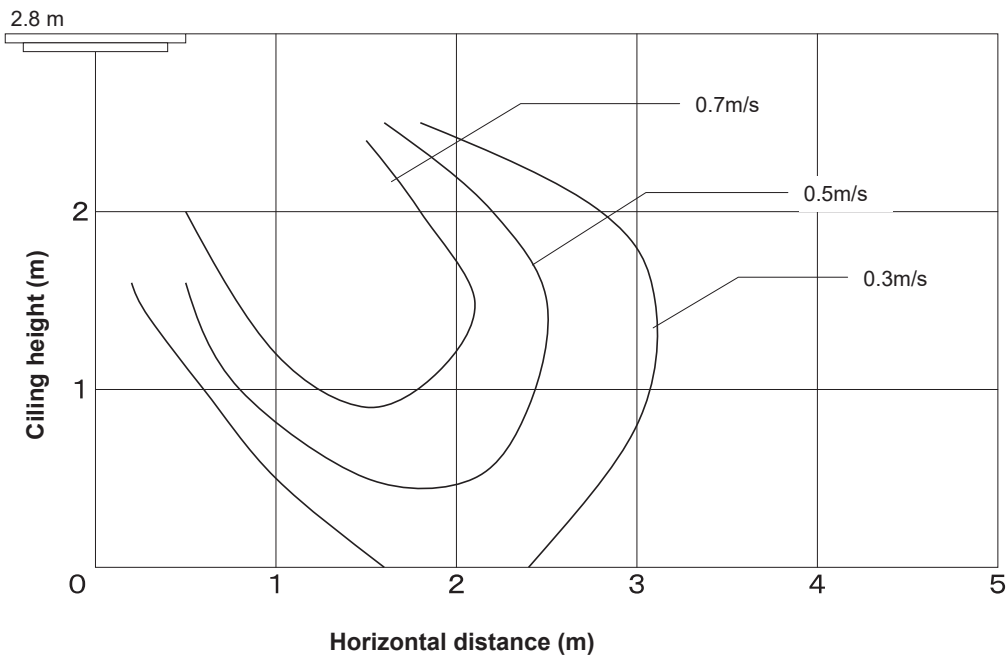
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	12040	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5380	4520	3740	3040	2400	1850	1370	960	780	780
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	4960	4170	3450	2800	2210	1700	1260	880	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	4550	3820	3160	2560	2030	1560	1150	810	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4487	3770	3120	2530	2000	1540	1140	800	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3270	2750	2270	1840	1460	1120	830	580	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	2690	2260	1870	1520	1200	920	680	480	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2150	1810	1500	1210	960	740	550	380	310	310

Heating

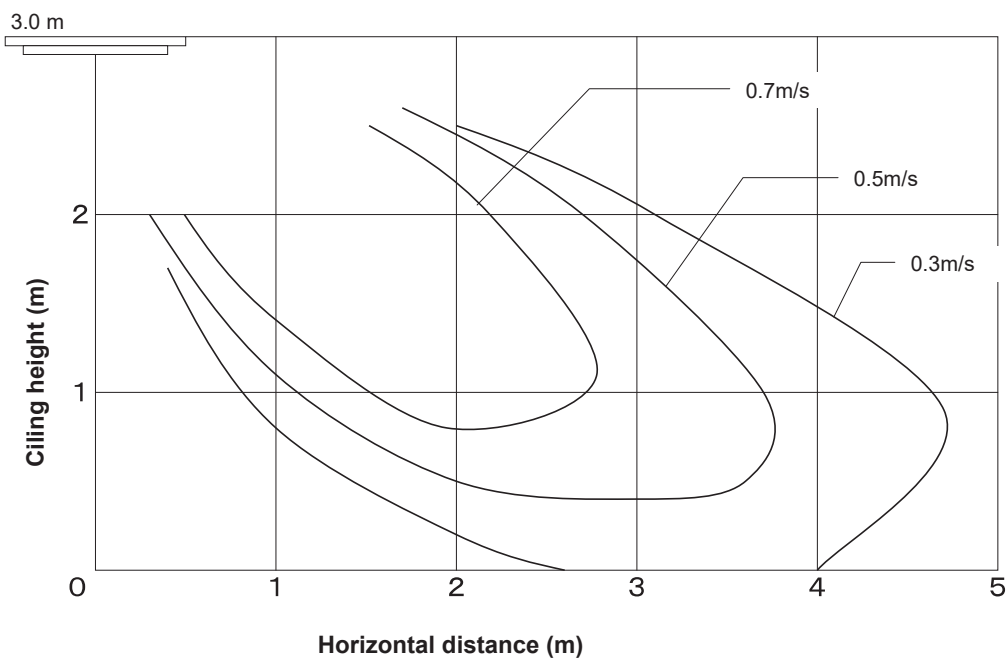
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	4900	4120	3410	2780	2220	1730	1300	960	670	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4640	3910	3240	2640	2100	1640	1240	910	640	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4432	3730	3090	2520	2010	1570	1180	870	610	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4290	3610	2990	2440	1950	1520	1140	840	590	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4080	3440	2850	2320	1850	1450	1090	800	560	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3620	3050	2520	2060	1640	1280	960	710	500	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3550	2980	2470	2020	1610	1260	940	700	490	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3510	2950	2450	2000	1590	1240	930	690	480	510
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3340	2810	2330	1900	1520	1180	890	660	460	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3130	2640	2180	1780	1420	1110	830	620	430	460

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

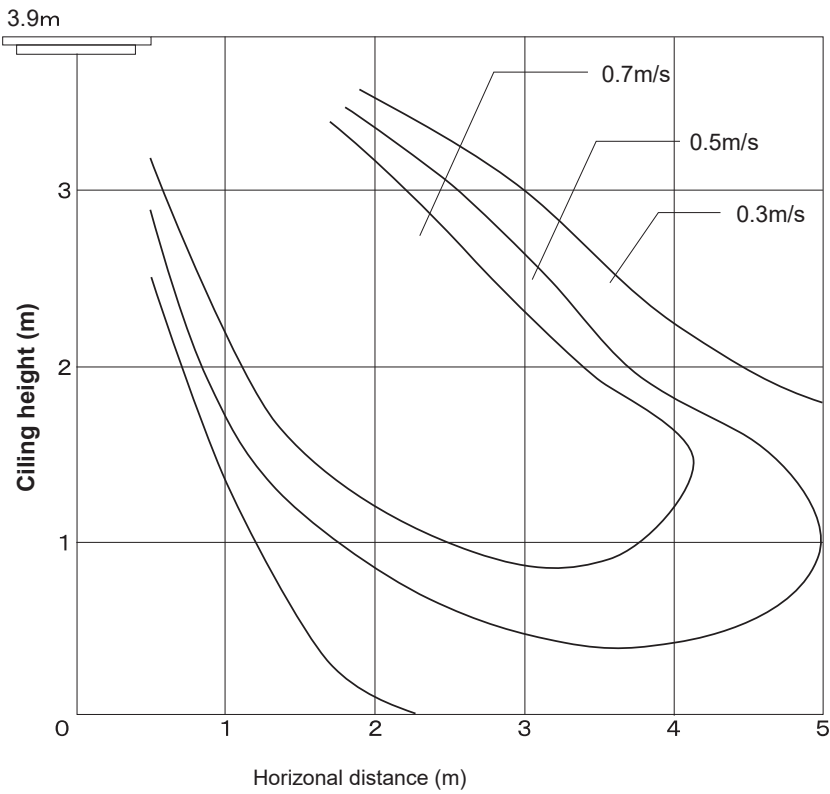
RAV-RM561UTP-E / TR



RAV-RM801UTP-E / TR

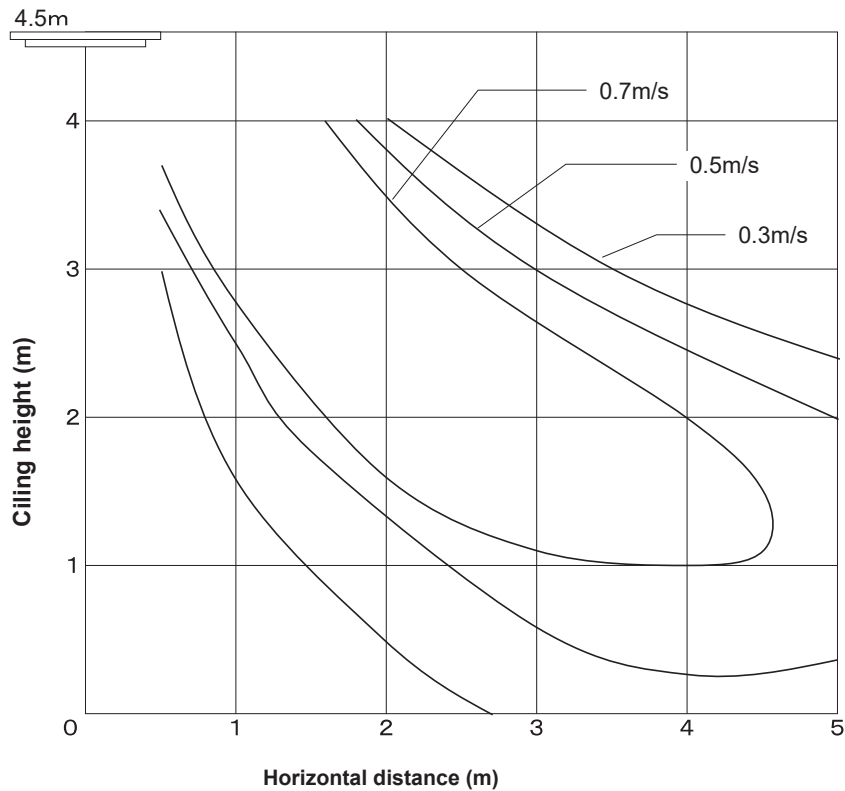


**RAV-SM1604UTP-E / TR**

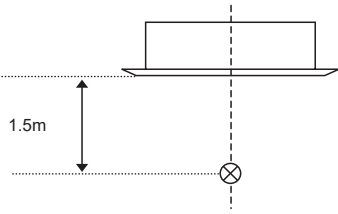


**RAV-RM1601UTP-E / TR**

(High ceiling)

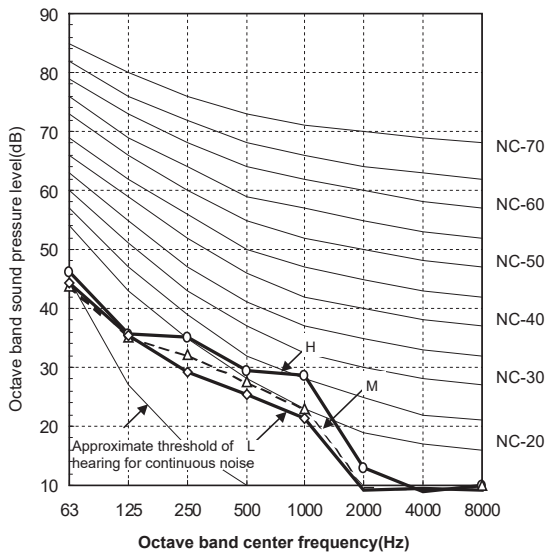


## 2-1-7. Sound characteristics (NC curve)



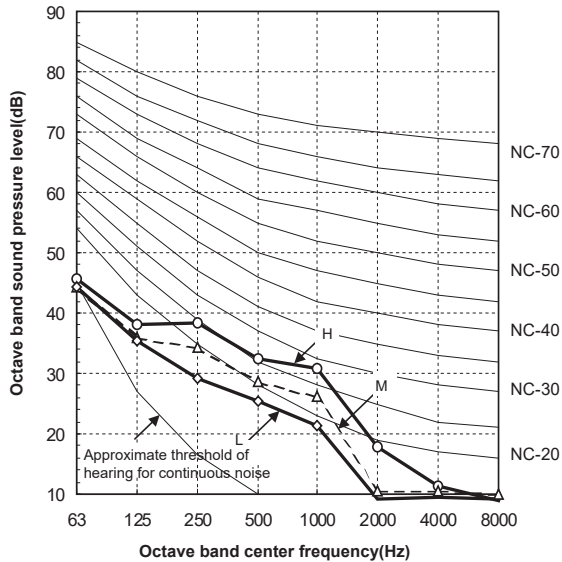
### RAV-RM561UTP-E / TR

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

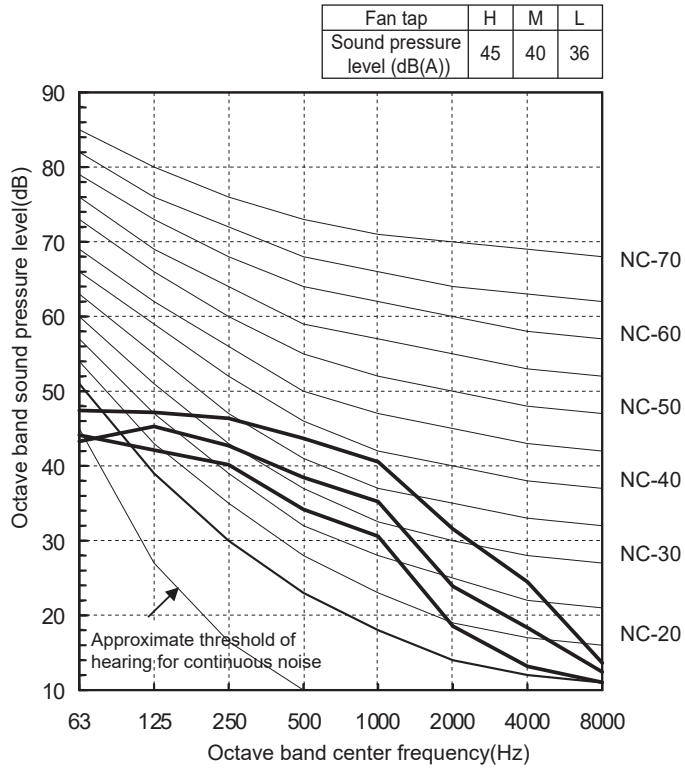


### RAV-RM801UTP-E / TR

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



RAV-RM1604UTP-E / TR



## **2-2. Compact 4 way 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 Type

Triple system : Single phase model

<b>Model</b>		<b>Indoor unit 1</b>	<b>RAV-RM561MUT-E / TR</b>	
		<b>Indoor unit 2</b>	<b>RAV-RM561MUT-E / TR</b>	
		<b>Indoor unit 3</b>	<b>RAV-RM561MUT-E / TR</b>	
		<b>Outdoor unit</b>	<b>RAV-GM1601AT(J)P-E / ATP-TR</b>	
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >	
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >	
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz		
Electrical characteristics	Cooling	Power consumption	(kW)	4.96
		EER		2.82
		PdesignC		14.0
		SEER		5.10
	Heating	Power consumption	(kW)	4.69
		COP		3.41
		PdesignH(Tbiv-7°C)		8.00
		SCOP		4.00
Maximum current		(A)	29.0	
<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 (Mansell5PB9/1)	
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)	15.0	
	Ceiling panel (Sold separately)	(kg)	3.0	
Fan unit	Fan		Turbo fan	
	Standard air flow	H/M/L	(m3/h)	798/672/546
	Motor		(W)	60
External static pressure	Standard (Upper - Lower)		(Pa)	-
Air filter		Standard filter (Long life filter)		
Sound pressure level		H/M/L	(dB)	44 / 39 / 35
Sound power level		H/M/L	(dB)	59 / 54 / 50
Connecting pipe	Drain port		VP20	

\*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 35°C DB



## Compact 4-way Type

Triple system : Three phase model

Model	Indoor unit 1		RAV-RM561MUT-E / TR
	Indoor unit 2		RAV-RM561MUT-E / TR
	Indoor unit 3		RAV-RM561MUT-E / TR
	Outdoor unit		RAV-GM1601AT8(J)P-E / AT8P-TR
Cooling capacity (kW)			14.0 < 3.0 - 16.0 >
Heating capacity (kW)			16.0 < 3.0 - 18.0 >
Power supply			3 phase 380V-415V/50Hz, 3phase 380V/60Hz
Electrical characteristics	Cooling	Power consumption (kW)	4.96
		EER	2.82
		PdesignC	14.0
		SEER	5.10
	Heating	Power consumption (kW)	4.69
		COP	3.41
		PdesignH (Tbiv -7°C)	8.00
		SCOP	4.00
		Maximum current (A)	16.1
<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)	15.0	
	Ceiling panel (Sold separately) (kg)	3.0	
Fan unit	Fan		Turbo fan
	Standard air flow	H/M/L (m3/h)	798/672/546
	Motor (W)		60
External static pressure	Standard (Upper - Lower) (Pa)	-	
Air filter			Standard filter (Long life filter)
Sound pressure level		H/M/L (dB)	44/39/35
Sound power level		H/M/L (dB)	59/54/50
Connecting pipe	Drain port		VP20

\*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.

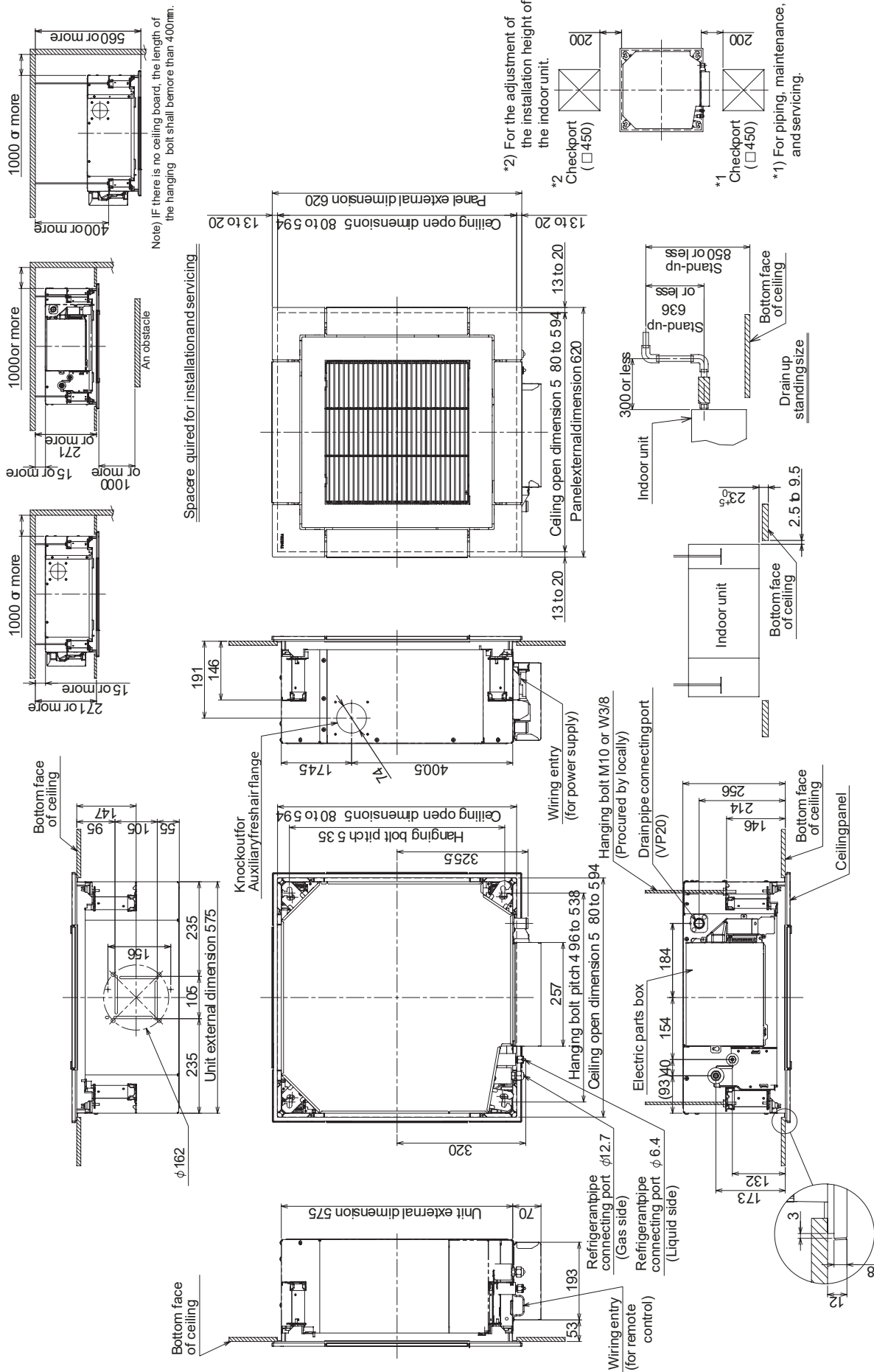
Note :

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 35°C DB

## 2-2-2. Dimension

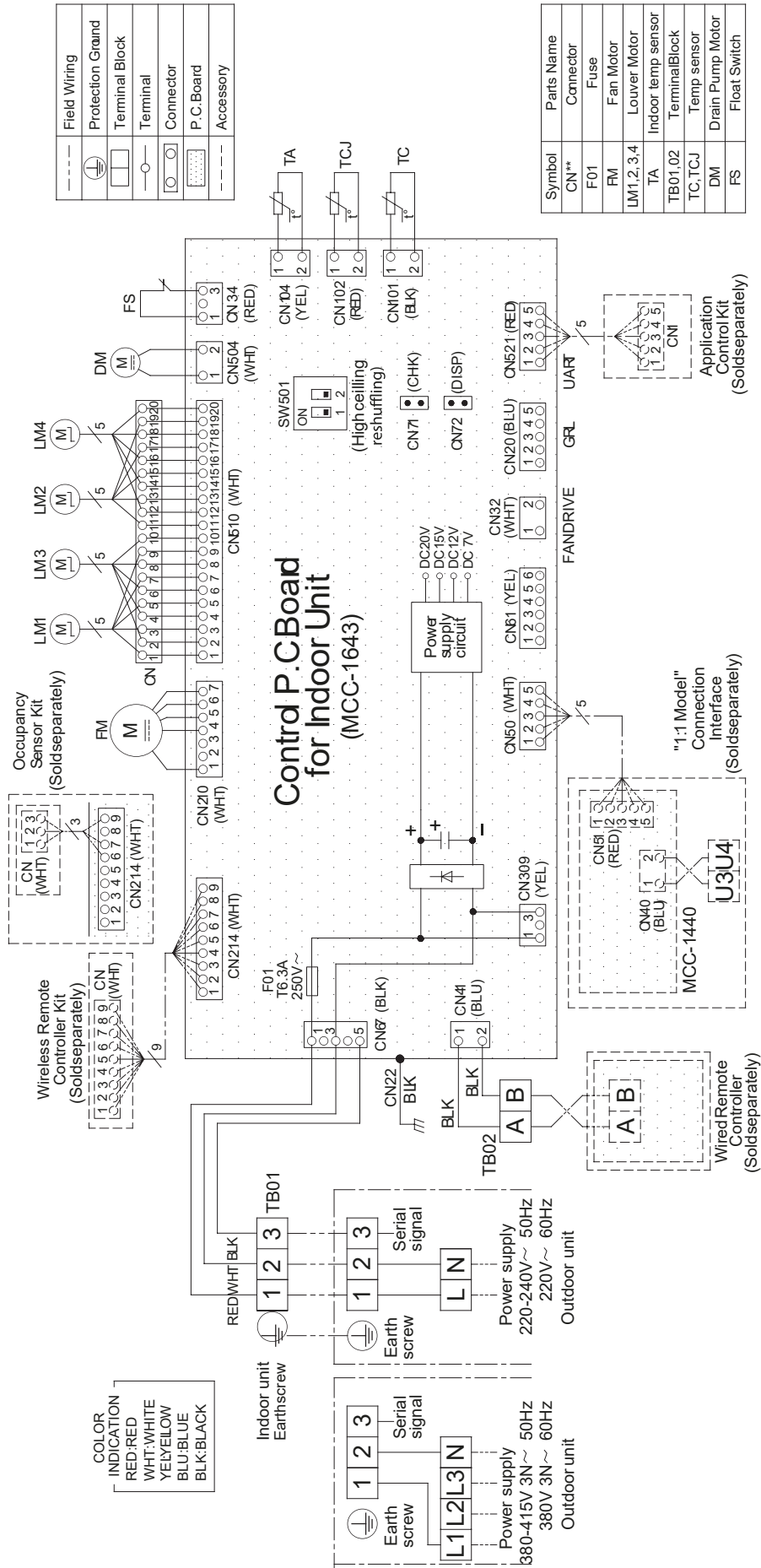
### RAV-RM561MUT-E / TR



(Unit : mm)

## 2-2-3. Wiring Diagrams

### RAV-RM561MUT-E / TR



## 2-2-4. Sensible Capacity Table

RAV-RM561MUT-E / TR (Triple) : RAV-GP1601AT(J)P-E / ATP-TR, RAV-GP1601AT8(J)P-E / AT8P-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
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	5.0
	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	4.3	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	4.5	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	

TC: Total Capacity [kW]

SHC: Sensible Heat Capacity [kW]

## 2-2-5. Part Load Performance

### Combination

Indoor Unit : RAV-RM561MUT-E / TR (x3)

Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	4965	16000	4692

Q: Capacity in W  
W: Power Consumption in W

### Cooling

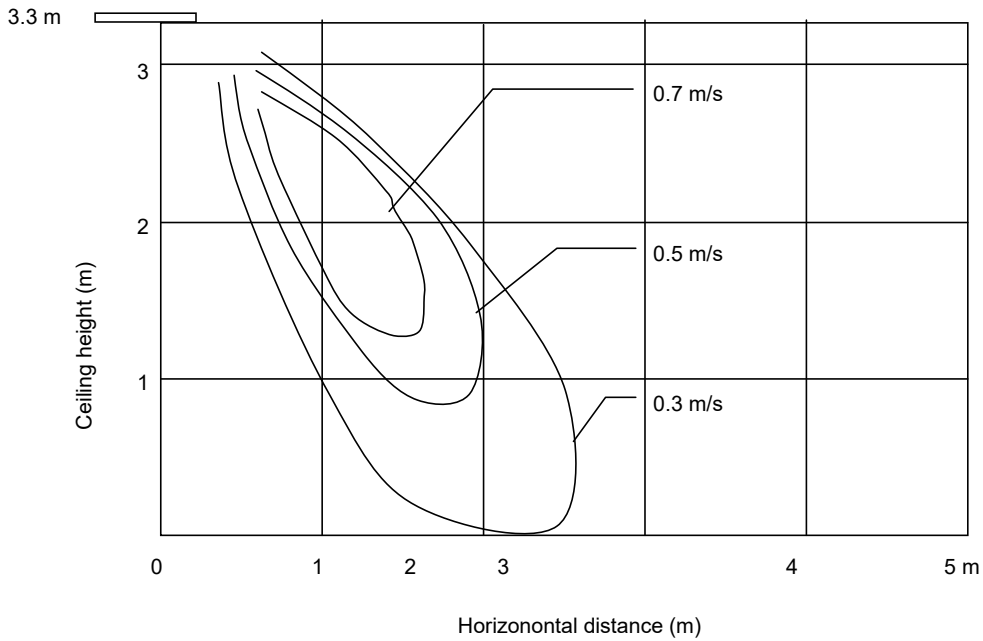
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11440	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5470	5000	4140	3360	2660	2040	1510	1070	780	780
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	5490	4610	3810	3090	2450	1880	1390	980	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	5030	4220	3490	2840	2250	1720	1280	900	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4965	4170	3450	2800	2220	1700	1260	890	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3620	3040	2520	2040	1620	1240	920	650	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	2980	2500	2070	1680	1330	1020	760	530	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2380	2000	1660	1340	1070	820	600	430	310	310

### Heating

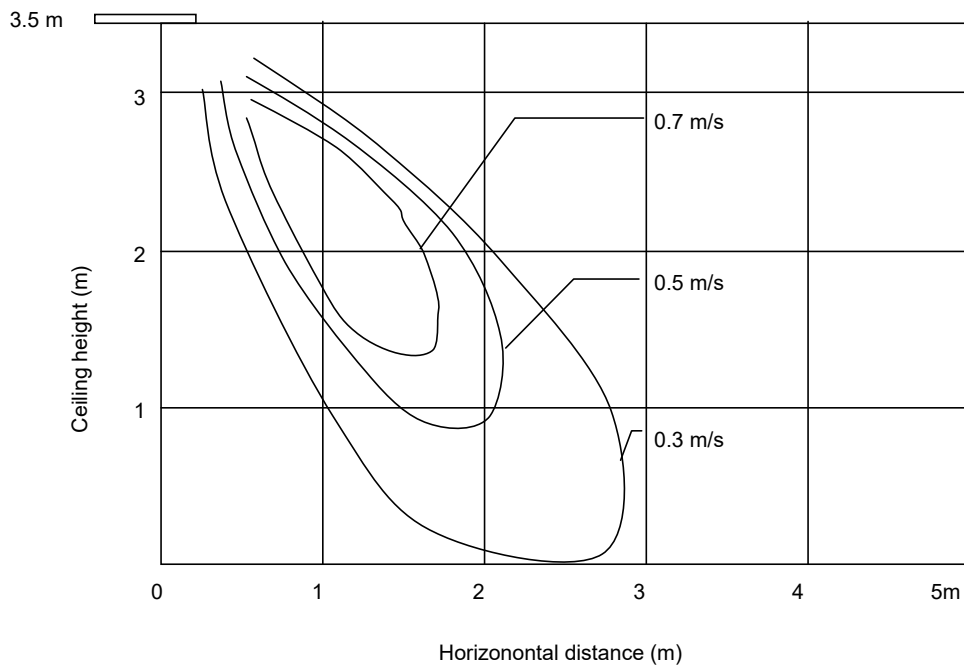
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5180	4360	3610	2950	2350	1830	1380	1020	720	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4910	4140	3420	2800	2230	1740	1310	960	680	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4692	3950	3270	2670	2130	1660	1250	920	650	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4550	3830	3170	2590	2060	1610	1210	890	630	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4320	3640	3010	2460	1960	1530	1150	850	600	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3830	3230	2670	2180	1740	1360	1020	750	530	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3750	3160	2620	2140	1700	1330	1000	740	520	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3720	3130	2590	2110	1690	1310	990	730	510	510
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3540	2980	2470	2010	1610	1250	940	690	490	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3320	2790	2310	1890	1510	1170	880	650	460	460

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

RAV-RM561MUT-E / TR



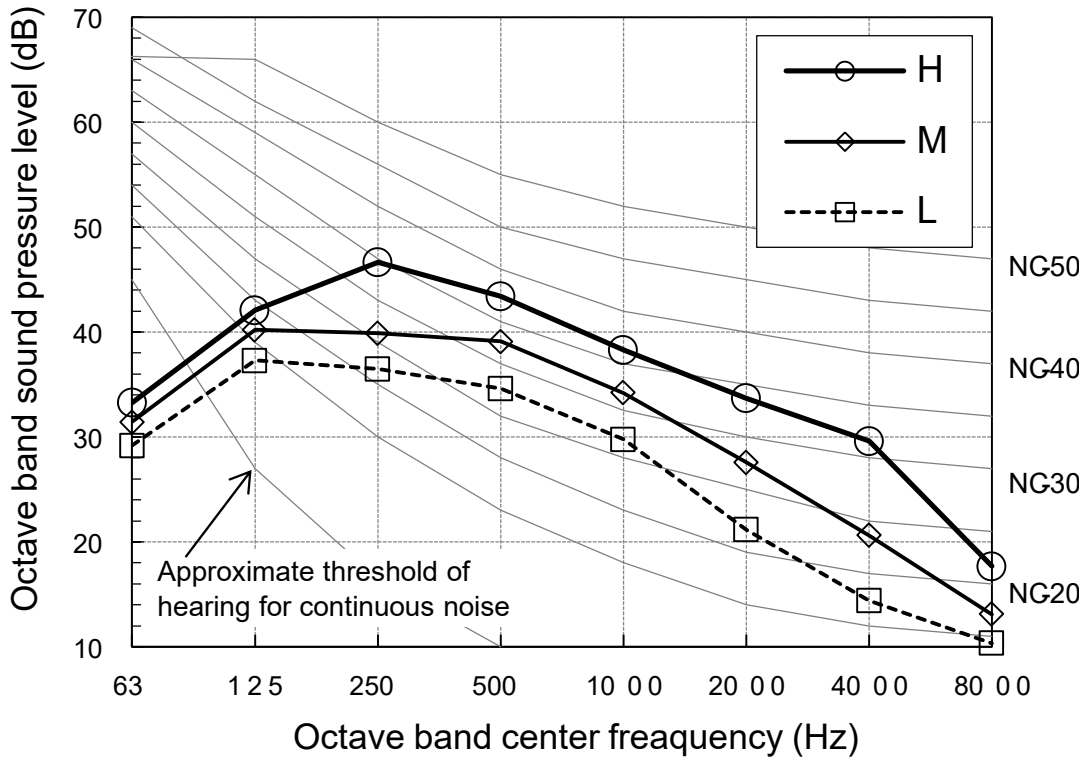
RAV-RM561MUT-E / TR (High Ceiling mode)



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

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 Characteristics**

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



## 2-3-1. Specifications

### Slim Duct Type

Tripple system : Single phase model

Model	Indoor unit 1		RAV-RM561SDT-E / TR	
	Indoor unit 2		RAV-RM561SDT-E / TR	
	Indoor unit 3		RAV-RM561SDT-E / TR	
	Outdoor unit		RAV-GM1601AT(J)P-E / ATP-TR	
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >	
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >	
Power supply			1 phase 220V-240V/50Hz, 1phase 220V/60Hz	
Electrical characteristics	Cooling	Power consumption	(kW)	4.98
		EER		2.81
		PdesignC		14.0
		SEER		5.10
	Heating	Power consumption	(kW)	4.69
		COP		3.41
		PdesignH(Tbiv-7°C)		8.00
		SCOP		4.00
		Maximum current	(A)	29.0
Appearance	Main unit		Zinc hot dipping steel plate	
	Ceiling panel (Sold separately)	Model	-	
		Panel color	-	
Outer dimension	Main unit	Height	(mm)	210
		Width	(mm)	845
		Depth	(mm)	645
	Ceiling panel (Sold separately)	Height	(mm)	-
		Width	(mm)	-
		Depth	(mm)	-
Total weight	Main unit		(kg)	22
	Ceiling panel (Sold separately)		(kg)	3.0
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)	29 (44-4)
Air filter		Standard 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	

\*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 35°C DB

## Slim Duct Type

Tripple system : Three phase model

Model	Indoor unit 1		RAV-RM561SDT-E / TR
	Indoor unit 2		RAV-RM561SDT-E / TR
	Indoor unit 2		RAV-RM561SDT-E / TR
	Outdoor unit		RAV-GM1601AT8(J)P-E / AT8P-TR
Cooling capacity (kW)			14.0 < 3.0 - 16.0 >
Heating capacity (kW)			16.0 < 3.0 - 18.0 >
Power supply			3 phase 380V-415V/50Hz, 3phase 380V/60Hz
Electrical characteristics	Cooling	Power consumption (kW)	4.98
		EER	2.81
		PdesignC	14.0
		SEER	5.10
	Heating	Power consumption (kW)	4.69
		COP	3.41
		PdesignH (Tbiv -7°C)	8.00
		SCOP	4.00
		Maximum current (A)	16.1
Appearance	Main unit		Zinc hot dipping steel plate
	Ceiling panel (Sold separately)	Model	-
		Panel color	-
Outer dimension	Main unit	Height (mm)	210
		Width (mm)	845
		Depth (mm)	645
	Ceiling panel (Sold separately)	Height (mm)	-
		Width (mm)	-
		Depth (mm)	-
Total weight	Main unit (kg)		22
	Ceiling panel (Sold separately) (kg)		3.0
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)		29 (44-4)
Air filter			Standard 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

\*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.

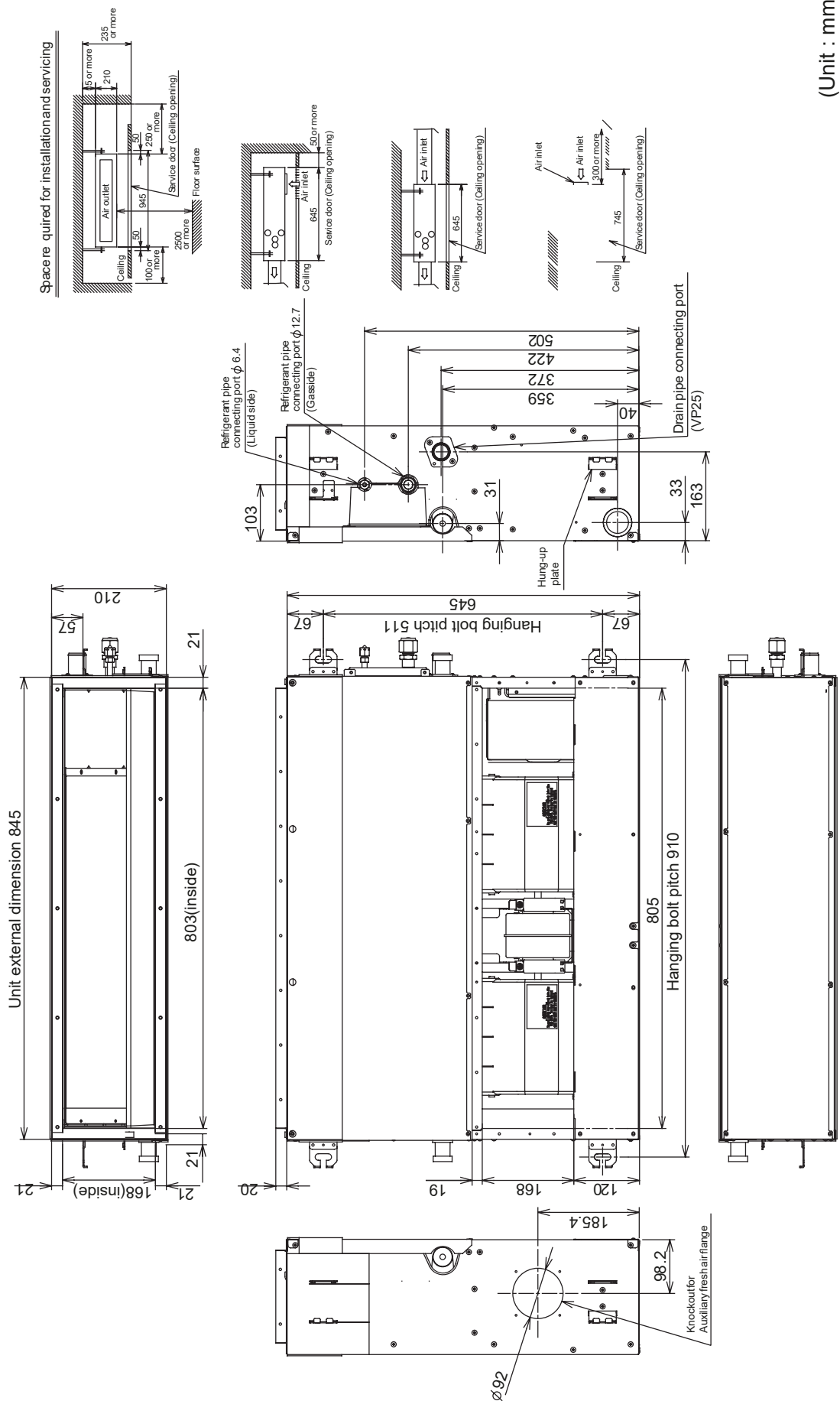
\*2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

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 35°C DB

## 2-3-2. Dimension

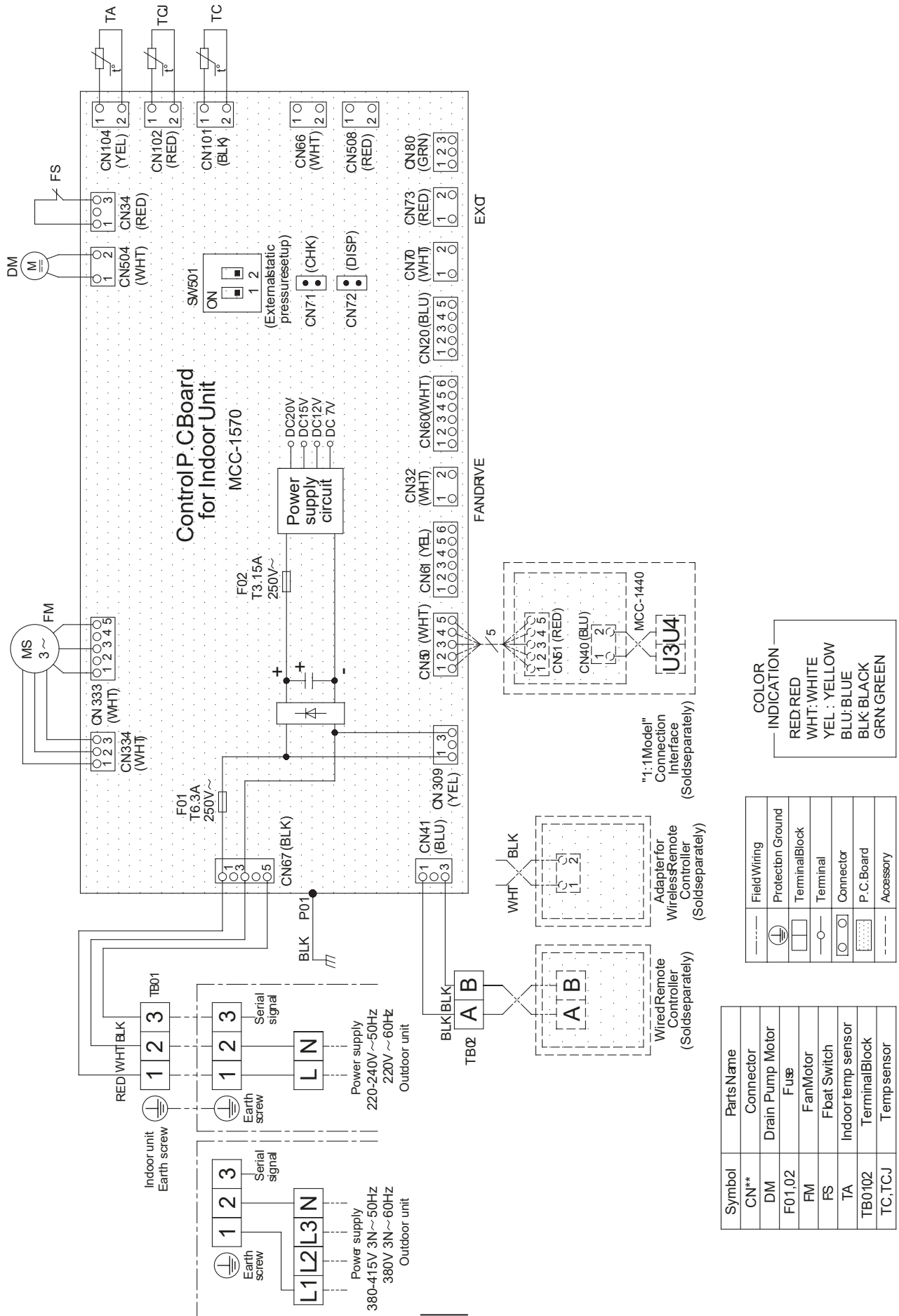
### RAV-RM561SDT-E / TR



(Unit : mm)

### 2-3-3. Wiring Diagrams

#### RAV-RM561SDT-E / TR



## 2-3-4. Sensible Capacity Table

RAV-RM561SDT-E / TR (Triple) : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

unit size		indoor air temp.																		
		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
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	5.0	
	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	4.3	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	4.5	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		

TC: Total Capacity [kW]

SHC: Sensible Heat Capacity [kW]

## 2-3-5. Part Load Performance

### Combination

Indoor Unit : RAV-RM561SDT-E / TR (x3)

Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	4982	16000	4692

Q: Capacity in W  
W: Power Consumption in W

### Cooling

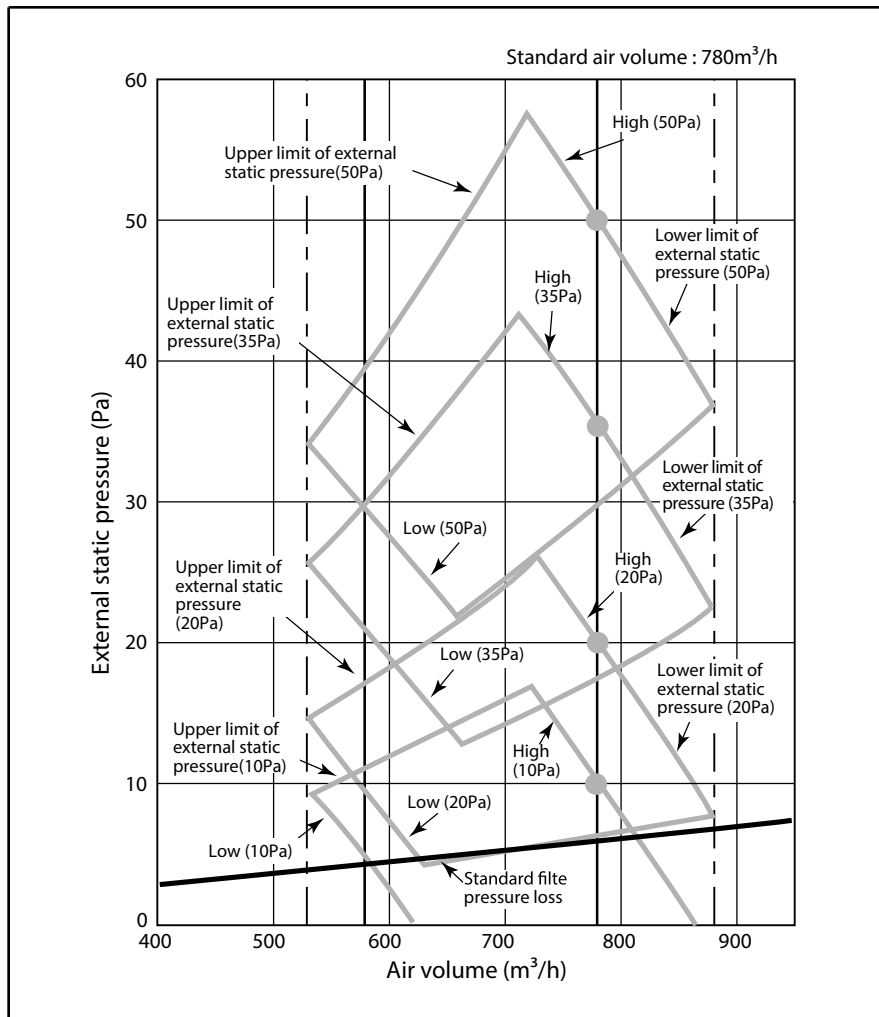
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11410	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5470	5030	4150	3370	2660	2050	1510	1070	780	780
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	5510	4630	3820	3110	2450	1890	1390	980	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	5050	4240	3500	2850	2250	1730	1280	900	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4982	4190	3460	2810	2220	1710	1260	890	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3630	3050	2520	2050	1620	1250	920	650	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	2990	2510	2080	1690	1330	1030	760	530	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2390	2010	1660	1350	1070	820	600	430	310	310

### Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5180	4360	3610	2950	2350	1830	1380	1020	720	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4910	4140	3420	2800	2230	1740	1310	960	680	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4692	3950	3270	2670	2130	1660	1250	920	650	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4550	3830	3170	2590	2060	1610	1210	890	630	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4320	3640	3010	2460	1960	1530	1150	850	600	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3830	3230	2670	2180	1740	1360	1020	750	530	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3750	3160	2620	2140	1700	1330	1000	740	520	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3720	3130	2590	2110	1690	1310	990	730	510	510
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3540	2980	2470	2010	1610	1250	940	690	490	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3320	2790	2310	1890	1510	1170	880	650	460	460

## 2-3-6. Fan Static Characteristics

RAV-RM561SDT-E / TR

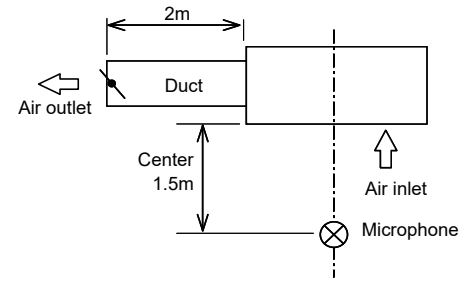


## 2-3-7. Sound characteristics (NC curve)

### RAV-RM561SDT-E / TR

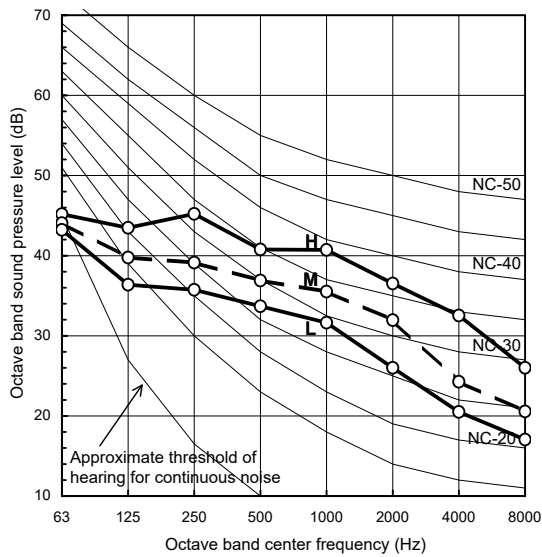
[Measuring location]

Under air intake



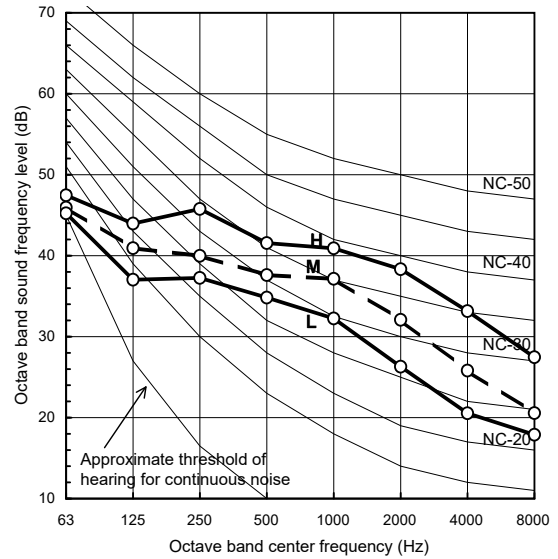
[External static pressure 10Pa]

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



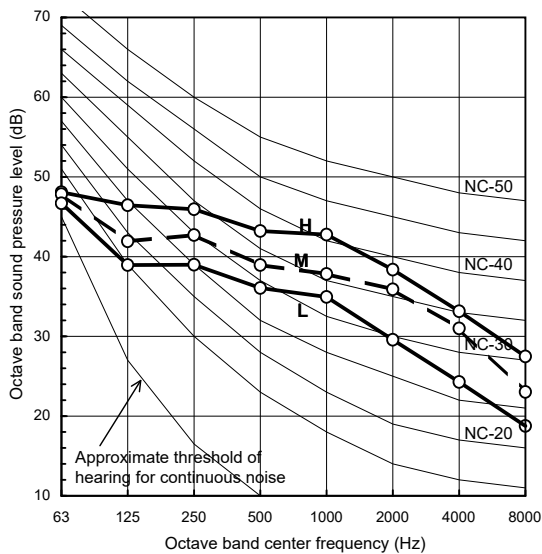
[External static pressure 20Pa]

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



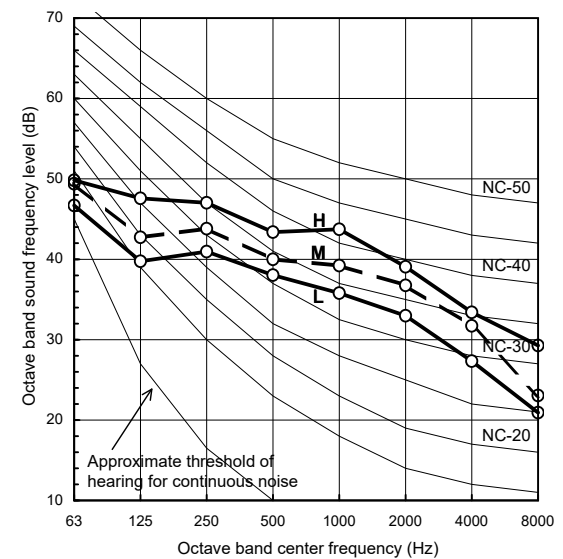
[External static pressure 35Pa]

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. 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 Characteristics**

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

## 2-4-1. Specifications

### Standard Duct Type

Model		Indoor unit		RAV-RM1601BTP-E / TR	RAV-RM1601BTP-E / TR
		Outdoor unit		RAV-GM1601AT(J)P-E / ATP-TR	RAV-GM1601AT8(J)P-E / AT8P-TR
Cooling capacity		(kW)		14.0 < 3.0 - 16.0 >	14.0 < 3.0 - 16.0 >
Heating capacity		(kW)		16.0 < 3.0 - 18.0 >	16.0 < 3.0 - 18.0 >
Power supply				1 phase 220V-240V/50Hz, 1phase 220V/60Hz	3 phase 380V-415V/50Hz, 3phase 380V/60Hz
Electrical characteristics	Cooling	Power consumption (kW)		5.13	5.13
		EER		2.73	2.73
		PdesignC		14.00	14.00
		SEER		5.30	5.30
	Heating	Power consumption (kW)		4.69	4.69
		COP		3.41	3.41
		PdesignH		8.00	8.00
		SCOP		3.90	3.90
	Maximum current (A)				29.0
<b>Indoor unit</b>					
Appearance	Main unit		Zinc hot dipping steel plate		Zinc hot dipping steel plate
	Ceiling panel (Sold separately)	Model	-		-
		Panel color	-		-
Outer dimension	Main unit	Height (mm)	275		275
		Width (mm)	1400		1400
		Depth (mm)	750		750
	Ceiling panel (Sold separately)	Height (mm)	-		-
		Width (mm)	-		-
		Depth (mm)	-		-
Total weight	Main unit (kg)		40.0		40.0
	Ceiling panel (Sold separately) (kg)		-		-
Fan unit	Fan		Centrifugal fan		Centrifugal fan
	Standard air flow	H/M/L (m3/h)	2100 / 1650 / 1260		2100 / 1650 / 1260
	Motor (W)		250		250
External static pressure	Standard (Upper - Lower) (Pa)		50 (120-30)		50 (120-30)
Air filter		Standard filter (Long life filter)		Standard filter (Long life filter)	
Sound pressure level		H/M/L (dB)	40 / 36 / 33		40 / 36 / 33
Sound power level		H/M/L (dB)	55 / 51 / 48		55 / 51 / 48
Connecting pipe	Drain port		VP25		VP25

\*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 35°C DB

## Standard Duct Type

Twin system : Single phase model

Model		Indoor unit 1		RAV-RM801BTP-E / TR
		Indoor unit 2		RAV-RM801BTP-E / TR
		Outdoor unit		RAV-GM1601AT(J)P-E / ATP-TR
Cooling capacity		(kW)		14.0 < 3.0 - 16.0 >
Heating capacity		(kW)		16.0 < 3.0 - 18.0 >
Power supply		1 phase 220V-240V/50Hz, 1 phase 220V/60Hz		
Electrical characteristics	Cooling	Power consumption (kW)		5.13
		EER		2.73
		PdesignC		14.0
		SEER		5.30
	Heating	Power consumption (kW)		4.69
		COP		3.41
		PdesignH(Tbiv-7°C)		8.00
		SCOP		3.90
		Maximum current (A)		29.0
<b>Indoor unit</b>				
Appearance	Main unit		Zinc hot dipping steel plate	
	Ceiling panel (Sold separately)	Model		-
		Panel color		-
Outer dimension	Main unit	Height (mm)	275	
		Width (mm)	1000	
		Depth (mm)	750	
	Ceiling panel (Sold separately)	Height (mm)	-	
		Width (mm)	-	
		Depth (mm)	-	
Total weight	Main unit (kg)		30.0	
	Ceiling panel (Sold separately) (kg)		-	
Fan unit	Fan		Centrifugal fan	
	Standard air flow	H/M/L (m3/h)	1200 / 930 / 720	
	Motor (W)		150	
External static pressure	Standard (Upper - Lower) (Pa)		30 (120-30)	
Air filter		Standard filter (Long life filter)		
Sound pressure level		H/M/L (dB)	34 / 30 / 26	
Sound power level		H/M/L (dB)	49 / 45 / 41	
Connecting pipe	Drain port		VP25	

\*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 35°C DB

## Standard Duct Type

Twin system : Three phase model

Model	Indoor unit 1		RAV-RM801BTP-E / TR
	Indoor unit 2		RAV-RM801BTP-E / TR
	Outdoor unit		RAV-GM1601A8(J)P-E / AT8P-TR
Cooling capacity (kW)			14.0 < 3.0 - 16.0 >
Heating capacity (kW)			16.0 < 3.0 - 18.0 >
Power supply			3 phase 380V-415V/50Hz, 3phase 380V/60Hz
Electrical characteristics	Cooling	Power consumption (kW)	5.13
		EER	2.73
		PdesignC	14.0
		SEER	5.30
	Heating	Power consumption (kW)	4.69
		COP	3.41
		PdesignH (Tbiv -7°C)	8.00
		SCOP	3.90
	Maximum current (A)		16.1
	<b>Indoor unit</b>		
Appearance	Main unit		Zinc hot dipping steel plate
	Ceiling panel (Sold separately)	Model	-
		Panel color	-
Outer dimension	Main unit	Height (mm)	275
		Width (mm)	1000
		Depth (mm)	750
	Ceiling panel (Sold separately)	Height (mm)	-
		Width (mm)	-
		Depth (mm)	-
Total weight	Main unit (kg)	30.0	
	Ceiling panel (Sold separately) (kg)	-	
Fan unit	Fan		Centrifugal fan
	Standard air flow	H/M/L (m3/h)	1200 / 930 / 720
	Motor (W)		150
External static pressure	Standard (Upper - Lower) (Pa)		30 (120-30)
Air filter			Standard filter (Long life filter)
Sound pressure level		H/M/L (dB)	34 / 30 / 26
Sound power level		H/M/L (dB)	49 / 45 / 41
Connecting pipe	Drain port		VP25

\*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 35°C DB

## Standard Duct Type

Triple system : Single phase model

Model	Indoor unit 1		RAV-RM561BTP-E / TR
	Indoor unit 2		RAV-RM561BTP-E / TR
	Indoor unit 3		RAV-RM561BTP-E / TR
	Outdoor unit		RAV-GM1601AT(J)P-E / ATP-TR
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >
Power supply			1 phase 220V-240V/50Hz, 1phase 220V/60Hz
Electrical characteristics	Cooling	Power consumption	(kW) 5.13
		EER	2.73
		PdesignC	14.0
		SEER	5.30
	Heating	Power consumption	(kW) 4.69
		COP	3.41
		PdesignH(Tbiv-7°C)	8.00
		SCOP	3.90
	Maximum current		(A) 29.0
	<b>Indoor unit</b>		
Appearance	Main unit		Zinc hot dipping steel plate
	Ceiling panel (Sold separately)	Model	-
		Panel color	-
Outer dimension	Main unit	Height	(mm) 275
		Width	(mm) 700
		Depth	(mm) 750
	Ceiling panel (Sold separately)	Height	(mm) -
		Width	(mm) -
		Depth	(mm) -
Total weight	Main unit		(kg) 23.0
	Ceiling panel (Sold separately)		(kg) -
Fan unit	Fan		Centrifugal fan
	Standard air flow	H/M/L	(m <sup>3</sup> /h) 800 / 630 / 480
	Motor		(W) 150
External static pressure	Standard (Upper - Lower)		(Pa) 30 (120-30)
Air filter		Standard filter (Long life filter)	
Sound pressure level		H/M/L	(dB) 33 / 29 / 25
Sound power level		H/M/L	(dB) 48 / 44 / 40
Connecting pipe	Drain port		VP25

\*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 35°C DB

## Standard Duct Type

Triple system : Three phase model

Model	Indoor unit 1		RAV-RM561BTP-E / TR	
	Indoor unit 2		RAV-RM561BTP-E / TR	
	Indoor unit 3		RAV-RM561BTP-E / TR	
	Outdoor unit		RAV-GM1601AT8(J)P-E / AT8P-TR	
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >	
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >	
Power supply			3 phase 380V-415V/50Hz, 3phase 380V/60Hz	
Electrical characteristics	Cooling	Power consumption	(kW)	5.13
		EER		2.73
		PdesignC		14.0
		SEER		5.30
	Heating	Power consumption	(kW)	4.69
		COP		3.41
		PdesignH (Tbiv -7°C)		8.00
		SCOP		3.90
	Maximum current		(A)	16.1
	<b>Indoor unit</b>			
Appearance	Main unit		Zinc hot dipping steel plate	
	Ceiling panel (Sold separately)	Model	-	
		Panel color	-	
Outer dimension	Main unit	Height	(mm)	275
		Width	(mm)	700
		Depth	(mm)	750
	Ceiling panel (Sold separately)	Height	(mm)	-
		Width	(mm)	-
		Depth	(mm)	-
Total weight	Main unit		(kg)	23.0
	Ceiling panel (Sold separately)		(kg)	-
Fan unit	Fan			Centrifugal fan
	Standard air flow	H/M/L	(m3/h)	800 / 630 / 480
	Motor		(W)	150
External static pressure	Standard (Upper - Lower)		(Pa)	30 (120-30)
Air filter				Standard filter (Long life filter)
Sound pressure level		H/M/L	(dB)	33 / 29 / 25
Sound power level		H/M/L	(dB)	48 / 44 / 40
Connecting pipe	Drain port			VP25

\*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.

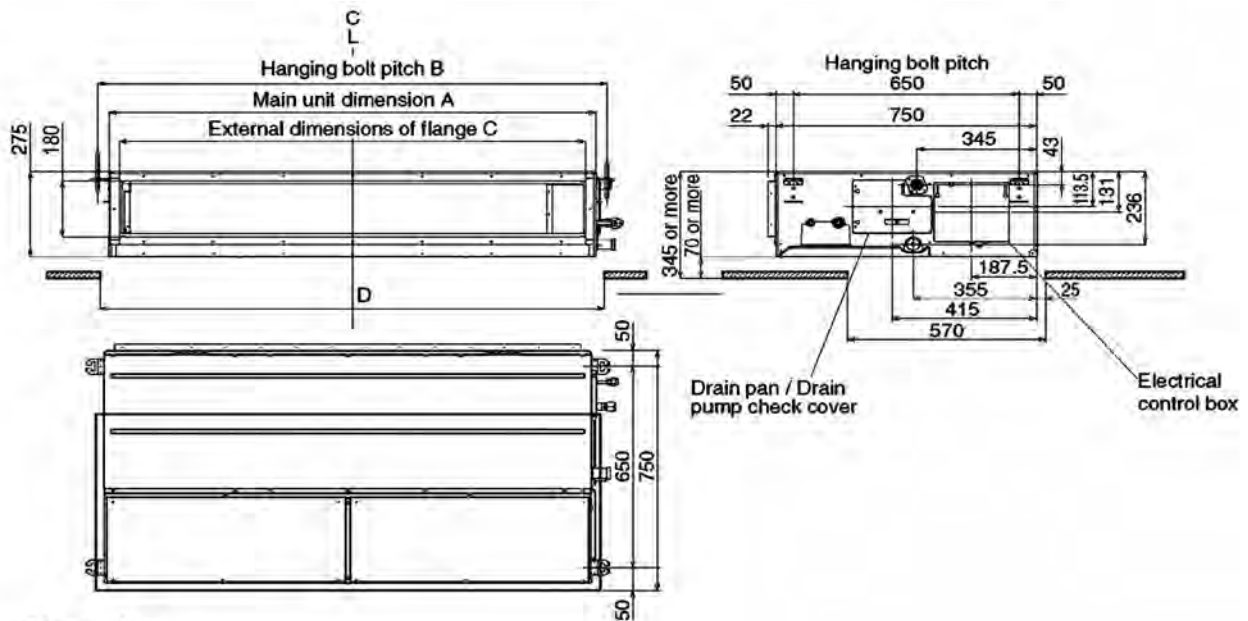
\*2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

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 35°C DB

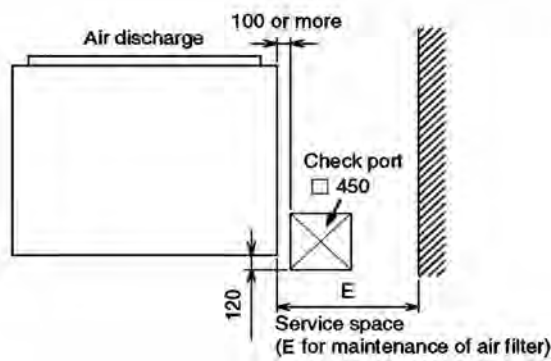
## 2-4-2. Dimension

RAV-RM561BTP-E / TR, RAV-RM801BTP-E / TR, RAV-RM1601BTP-E / TR



Dimension

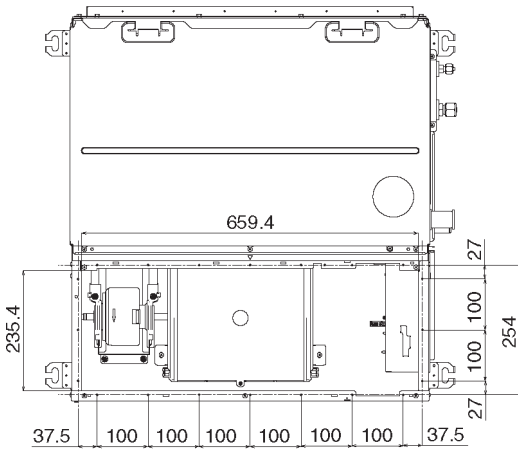
	A	B	C	D
RM56 type	700	765	640	750
RM80 type	1000	1065	940	1050
RM160 type	1400	1465	1340	1450



	E
RM56 type	700
RM80 type	500
RM160 type	700

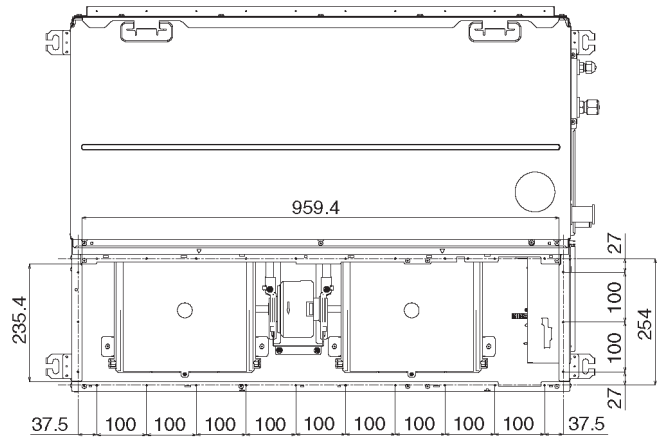
**RM56 type**

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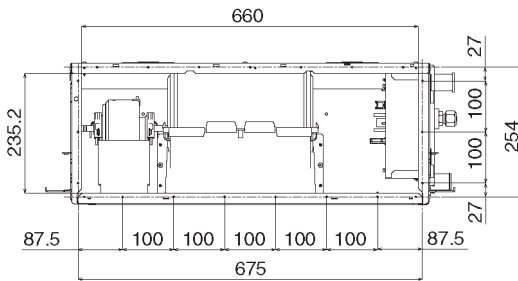


**RM80 type**

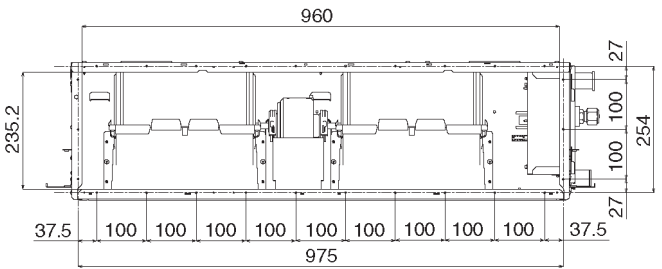
<Under air intake>



<Back air intake>

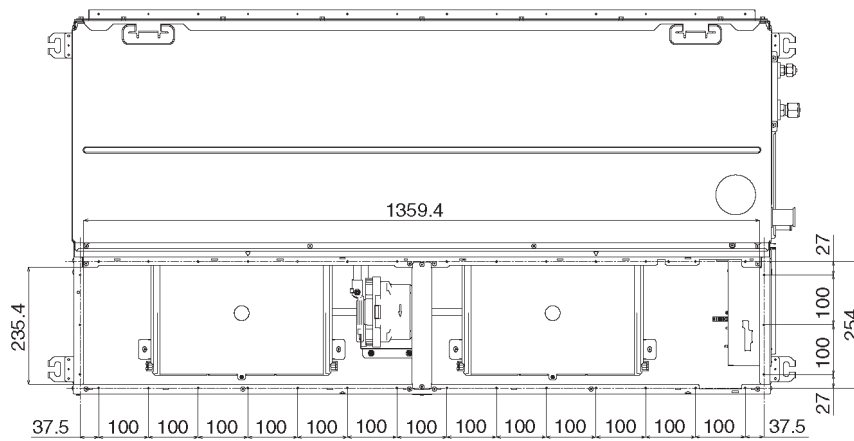


<Back air intake>

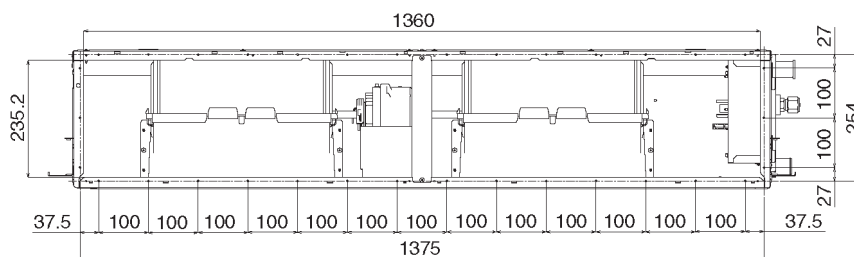


**RM160 type**

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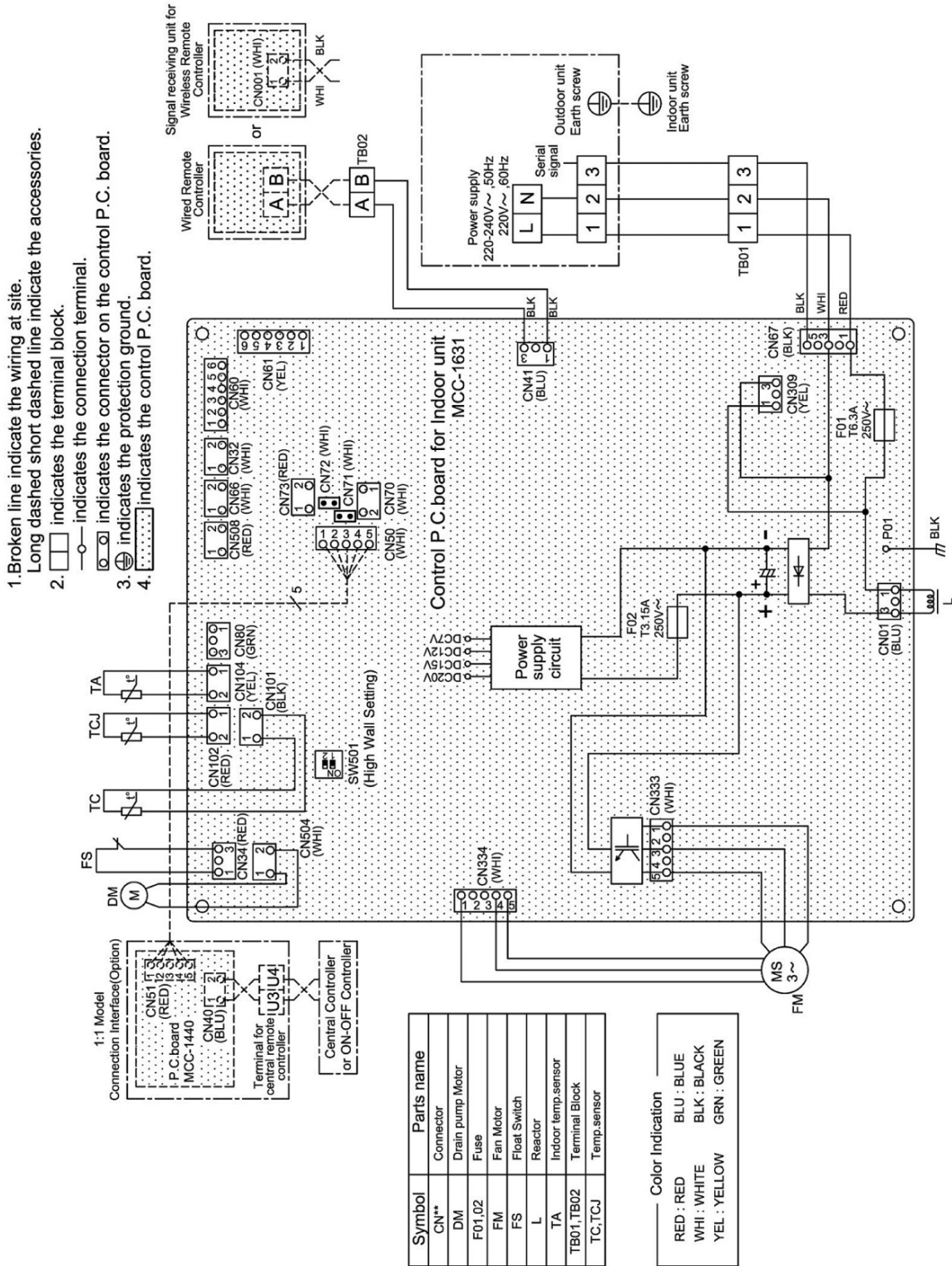
<Back air intake>





## 2-4-3. Wiring Diagrams

### RAV-RM561BTP-E / TR, RAV-RM801BTP-E / TR, RAV-RM1601BTP-E / TR



## 2-4-4. Sensible Capacity Table

RAV-RM1601BTP-E / TR : RAV-GP1601AT(J)P-E / ATP-TR, RAV-GP1601AT8(J)P-E / AT8P-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
1601	10.0	13.1	9.6	13.8	10.1	14.5	10.6	15.0	11.0	15.5	11.3	16.0	11.7	16.5	12.0	17.4	12.7	18.2	13.3
	12.0	13.1	9.5	13.7	10.0	14.4	10.5	14.9	10.9	15.4	11.3	15.9	11.6	16.4	11.9	17.3	12.6	18.1	13.2
	14.0	13.0	9.5	13.7	10.0	14.3	10.4	14.8	10.8	15.4	11.2	15.8	11.5	16.3	11.8	17.2	12.5	18.0	13.1
	16.0	12.9	9.4	13.6	9.9	14.2	10.4	14.7	10.7	15.2	11.1	15.7	11.4	16.1	11.8	17.1	12.5	17.9	13.0
	18.0	12.8	9.3	13.5	9.8	14.1	10.3	14.6	10.7	15.1	11.0	15.6	11.3	16.0	11.7	17.0	12.4	17.7	12.9
	20.0	12.7	9.2	13.3	9.7	14.0	10.2	14.5	10.6	15.0	10.9	15.4	11.3	15.9	11.6	16.8	12.3	17.6	12.8
	21.0	12.6	9.2	13.3	9.7	13.9	10.2	14.4	10.5	14.9	10.9	15.4	11.2	15.8	11.5	16.7	12.2	17.5	12.8
	23.0	12.5	9.1	13.2	9.6	13.8	10.1	14.3	10.4	14.8	10.8	15.2	11.1	15.7	11.4	16.6	12.1	17.3	12.6
	25.0	12.4	9.0	13.0	9.5	13.7	9.9	14.1	10.3	14.6	10.7	15.1	11.0	15.5	11.3	16.4	11.9	17.1	12.5
	27.0	12.2	8.9	12.8	9.4	13.5	9.8	14.0	10.2	14.4	10.5	14.9	10.8	15.3	11.1	16.2	11.8	16.9	12.3
	29.0	12.1	8.8	12.7	9.2	13.3	9.7	13.8	10.0	14.3	10.4	14.7	10.7	15.1	11.0	16.0	11.6	16.7	12.2
	31.0	11.9	8.7	12.5	9.1	13.1	9.6	13.6	9.9	14.0	10.2	14.5	10.5	14.9	10.8	15.8	11.5	16.5	12.0
	33.0	11.7	8.5	12.3	9.0	12.9	9.4	13.4	9.7	13.8	10.1	14.2	10.4	14.6	10.7	15.5	11.3	16.2	11.8
	35.0	11.5	8.4	12.1	8.8	12.7	9.3	13.1	9.6	13.6	9.9	14.0	10.2	14.4	10.5	15.3	11.1	16.0	11.6
37.0	11.3	8.2	11.9	8.6	12.5	9.1	12.9	9.4	13.3	9.7	13.7	10.0	14.1	10.3	15.0	10.9	15.6	11.4	
39.0	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	

RAV-RM801BTP-E / TR (Twin) : RAV-GP1601AT(J)P-E / ATP-TR, RAV-GP1601AT8(J)P-E / AT8P-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
801	10.0	7.9	5.9	8.2	6.1	8.5	6.3	8.7	6.5	8.9	6.7	9.1	6.9	9.4	7.1	9.8	7.3	10.2	7.4
	12.0	7.8	5.8	8.1	6.0	8.4	6.2	8.6	6.4	8.8	6.6	9.0	6.8	9.3	7.0	9.7	7.2	10.1	7.3
	14.0	7.7	5.7	8.0	5.9	8.3	6.1	8.5	6.3	8.7	6.5	8.9	6.7	9.2	6.9	9.6	7.1	10.0	7.2
	16.0	7.6	5.6	7.9	5.8	8.2	6.0	8.4	6.2	8.6	6.4	8.8	6.6	9.1	6.8	9.5	7.0	9.9	7.1
	18.0	7.5	5.5	7.8	5.7	8.1	5.9	8.3	6.1	8.5	6.3	8.7	6.5	9.0	6.7	9.4	6.9	9.8	7.0
	20.0	7.4	5.4	7.7	5.6	8.0	5.8	8.2	6.0	8.4	6.2	8.6	6.4	8.9	6.6	9.3	6.8	9.7	6.9
	21.0	7.3	5.3	7.6	5.5	7.9	5.7	8.1	5.9	8.3	6.1	8.5	6.3	8.8	6.5	9.2	6.7	9.6	6.8
	23.0	7.2	5.2	7.5	5.4	7.8	5.6	8.0	5.8	8.2	6.0	8.4	6.2	8.7	6.4	9.1	6.6	9.5	6.7
	25.0	7.1	5.1	7.4	5.3	7.7	5.5	7.9	5.7	8.1	5.9	8.3	6.1	8.6	6.3	9.0	6.5	9.4	6.6
	27.0	7.0	5.0	7.3	5.2	7.6	5.4	7.8	5.6	8.0	5.8	8.2	6.0	8.5	6.2	8.9	6.4	9.3	6.5
	29.0	6.8	4.9	7.1	5.1	7.4	5.3	7.6	5.5	7.8	5.7	8.0	5.9	8.3	6.1	8.7	6.3	9.1	6.4
	31.0	6.5	4.7	6.8	4.9	7.1	5.1	7.3	5.3	7.5	5.5	7.7	5.7	8.0	5.9	8.4	6.1	8.8	6.2
	33.0	6.2	4.5	6.5	4.7	6.8	4.9	7.0	5.1	7.2	5.3	7.4	5.5	7.7	5.7	8.1	5.9	8.5	6.0
	35.0	5.9	4.3	6.2	4.5	6.5	4.7	6.7	4.9	6.9	5.1	7.1	5.3	7.4	5.5	7.8	5.7	8.2	5.8
37.0	5.8	4.2	6.1	4.4	6.4	4.6	6.6	4.8	6.8	5.0	7.0	5.2	7.3	5.4	7.7	5.6	8.1	5.7	
39.0	5.6	4.1	5.9	4.3	6.2	4.5	6.4	4.7	6.6	4.9	6.8	5.1	7.1	5.3	7.5	5.5	7.9	5.6	

RAV-RM561BTP-E / TR (Triple) : RAV-GP1601AT(J)P-E / ATP-TR, RAV-GP1601AT8(J)P-E / AT8P-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	3.9	4.9	4.1	5.2	4.3	5.4	4.5	5.6	4.6	5.7	4.8	5.9	4.9	6.2	5.2	6.5	5.4
	12.0	4.7	3.9	4.9	4.1	5.2	4.3	5.3	4.5	5.5	4.6	5.7	4.7	5.8	4.9	6.2	5.2	6.5	5.4
	14.0	4.6	3.9	4.9	4.1	5.1	4.3	5.3	4.4	5.5	4.6	5.6	4.7	5.8	4.9	6.1	5.1	6.4	5.4
	16.0	4.6	3.8	4.8	4.0	5.1	4.3	5.3	4.4	5.4	4.6	5.6	4.7	5.8	4.8	6.1	5.1	6.4	5.3
	18.0	4.6	3.8	4.8	4.0	5.0	4.2	5.2	4.4	5.4	4.5	5.6	4.6	5.7	4.8	6.1	5.1	6.3	5.3
	20.0	4.5	3.8	4.8	4.0	5.0	4.2	5.2	4.3	5.4	4.5	5.5	4.6	5.7	4.7	6.0	5.0	6.3	5.3
	21.0	4.5	3.8	4.7	4.0	5.0	4.2	5.2	4.3	5.3	4.5	5.5	4.6	5.6	4.7	6.0	5.0	6.3	5.2
	23.0	4.5	3.7	4.7	3.9	4.9	4.1	5.1	4.3	5.3	4.4	5.4	4.5	5.6	4.7	5.9	4.9	6.2	5.2
	25.0	4.4	3.7	4.6	3.9	4.9	4.1	5.0	4.2	5.2	4.4	5.4	4.5	5.5	4.6	5.9	4.9	6.1	5.1
	27.0	4.4	3.6	4.6	3.8	4.8	4.0	5.0	4.2	5.2	4.3	5.3	4.4	5.5	4.6	5.8	4.8	6.0	5.1
	29.0	4.3	3.6	4.5	3.8	4.8	4.0	4.9	4.1	5.1	4.3	5.2	4.4	5.4	4.5	5.7	4.8	6.0	5.0
	31.0	4.2	3.5	4.5	3.7	4.7	3.9	4.9	4.1	5.0	4.2	5.2	4.3	5.3	4.4	5.6	4.7	5.9	4.9
	33.0	4.2	3.5	4.4	3.7	4.6	3.9	4.8	4.0	4.9	4.1	5.1	4.3	5.2	4.4	5.5	4.6	5.8	4.8
	35.0	4.1	3.4	4.3	3.6	4.5	3.8	4.7	3.9	4.9	4.1	5.0	4.2	5.1	4.3	5.4	4.6	5.7	4.8
37.0	4.0	3.4	4.2	3.5	4.4	3.7	4.6	3.9	4.8	4.0	4.9	4.1	5.0	4.2	5.3	4.5	5.6	4.7	
39.0	3.9	3.3	4.2	3.5	4.4	3.6	4.5	3.8	4.7	3.9	4.8	4.0	4.9	4.1	5.2	4.4	5.5	4.6	

TC: Total Capacity [kW]

SHC: Sensible Heat Capacity [kW]

## 2-4-5. Part load performance

Indoor Unit : RAV-RM1601BTP-E / TR

Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	5128	16000	4692

Q: Capacity in W

W: Power Consumption in W

### Cooling

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11320	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5510	5130	4240	3440	2720	2090	1550	1080	770	770
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	5670	4760	3930	3190	2530	1940	1440	1010	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	5190	4370	3610	2930	2320	1780	1320	920	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	5128	4310	3560	2890	2290	1760	1300	910	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3740	3140	2600	2110	1670	1280	950	660	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	3080	2590	2140	1730	1370	1060	780	550	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2460	2070	1710	1390	1100	840	620	440	310	310

### Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5180	4360	3610	2950	2350	1830	1380	1020	720	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4910	4140	3420	2800	2230	1740	1310	960	680	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4692	3950	3270	2670	2130	1660	1250	920	650	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4550	3830	3170	2590	2060	1610	1210	890	630	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4320	3640	3010	2460	1960	1530	1150	850	600	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3830	3230	2670	2180	1740	1360	1020	750	530	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3750	3160	2620	2140	1700	1330	1000	740	520	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3730	3140	2600	2120	1690	1320	990	730	520	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3560	2990	2480	2020	1610	1260	950	700	490	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3320	2790	2310	1890	1510	1170	880	650	460	460

**Twin system**

**Indoor Unit** : RAV-RM801BTP-E / TR (x2)

**Outdoor unit** : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	5128	16000	4692

Q: Capacity in W

W: Power Consumption in W

**Cooling**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11320	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5510	5130	4240	3440	2720	2090	1550	1080	770	770
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	5670	4760	3930	3190	2530	1940	1440	1010	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	5190	4370	3610	2930	2320	1780	1320	920	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	5128	4310	3560	2890	2290	1760	1300	910	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3740	3140	2600	2110	1670	1280	950	660	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	3080	2590	2140	1730	1370	1060	780	550	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2460	2070	1710	1390	1100	840	620	440	310	310

**Heating**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5180	4360	3610	2950	2350	1830	1380	1020	720	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4910	4140	3420	2800	2230	1740	1310	960	680	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4692	3950	3270	2670	2130	1660	1250	920	650	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4550	3830	3170	2590	2060	1610	1210	890	630	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4320	3640	3010	2460	1960	1530	1150	850	600	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3830	3230	2670	2180	1740	1360	1020	750	530	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3750	3160	2620	2140	1700	1330	1000	740	520	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3730	3140	2600	2120	1690	1320	990	730	520	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3560	2990	2480	2020	1610	1260	950	700	490	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3320	2790	2310	1890	1510	1170	880	650	460	460

**Triple system**

**Indoor Unit : RAV-RM561BTP-E / TR (x3)**

**Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR**

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	5128	16000	4692

Q: Capacity in W

W: Power Consumption in W

**Cooling**

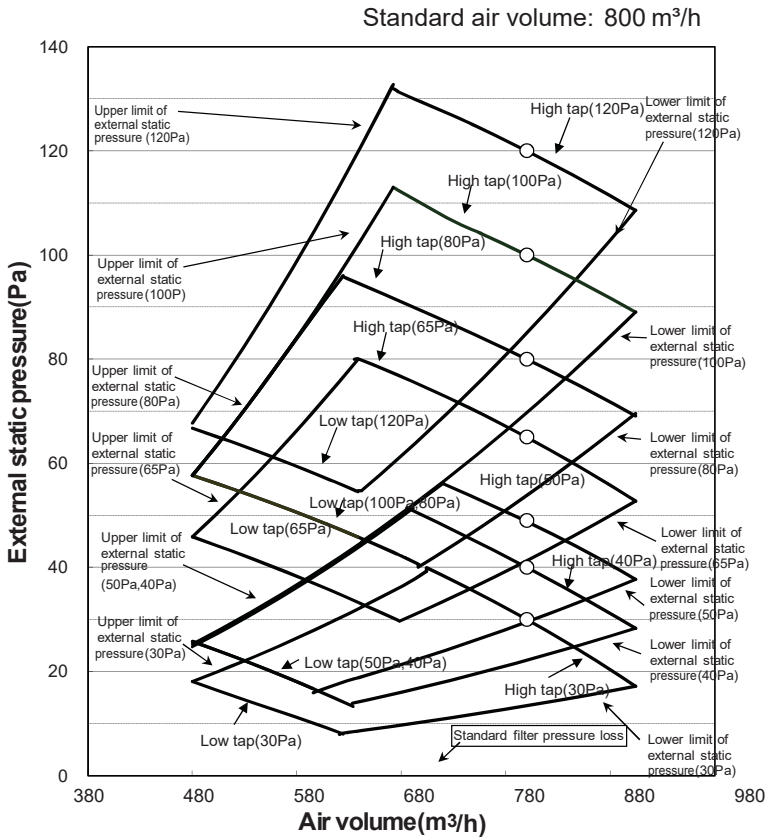
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11320	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5510	5130	4240	3440	2720	2090	1550	1080	770	770
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	5670	4760	3930	3190	2530	1940	1440	1010	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	5190	4370	3610	2930	2320	1780	1320	920	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	5128	4310	3560	2890	2290	1760	1300	910	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3740	3140	2600	2110	1670	1280	950	660	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	3080	2590	2140	1730	1370	1060	780	550	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2460	2070	1710	1390	1100	840	620	440	310	310

**Heating**

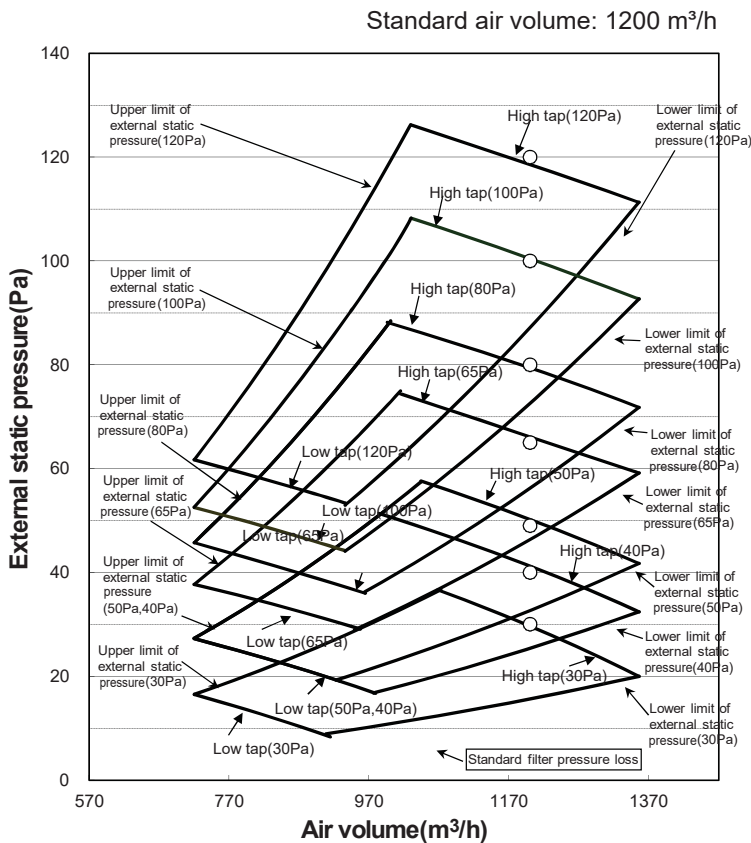
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5180	4360	3610	2950	2350	1830	1380	1020	720	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4910	4140	3420	2800	2230	1740	1310	960	680	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4692	3950	3270	2670	2130	1660	1250	920	650	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4550	3830	3170	2590	2060	1610	1210	890	630	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4320	3640	3010	2460	1960	1530	1150	850	600	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3830	3230	2670	2180	1740	1360	1020	750	530	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3750	3160	2620	2140	1700	1330	1000	740	520	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3730	3140	2600	2120	1690	1320	990	730	520	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3560	2990	2480	2020	1610	1260	950	700	490	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3320	2790	2310	1890	1510	1170	880	650	460	460

## 2-4-6. Fan Static Characteristics

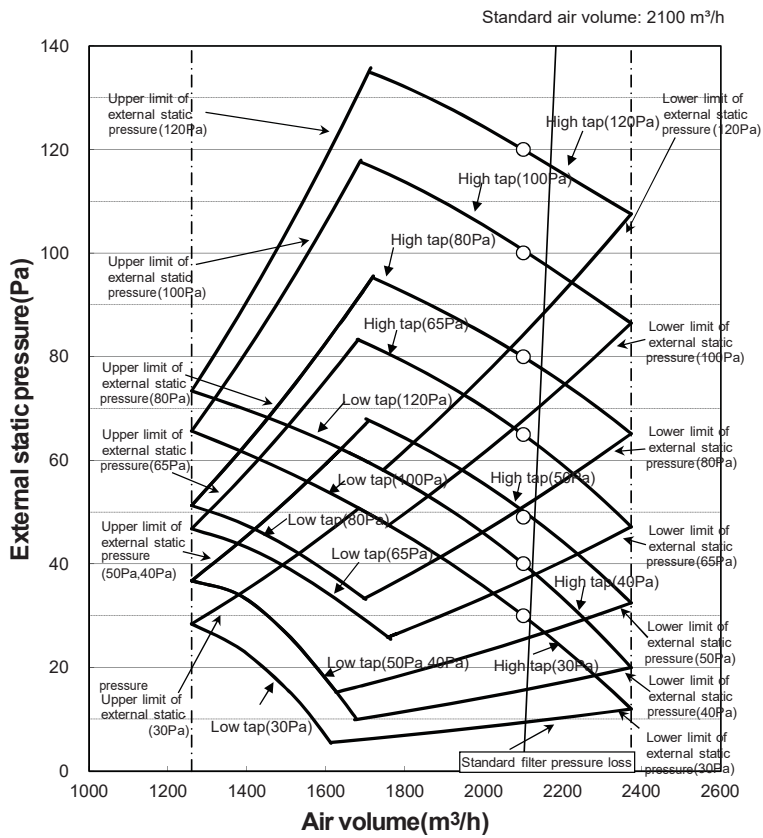
RAV-RM561BTP-E / TR



RAV-RM801BTP-E / TR

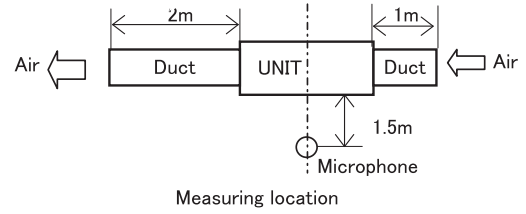


RAV-RM1601BTP-E / TR



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

### RAV-RM561BTP-E / TR

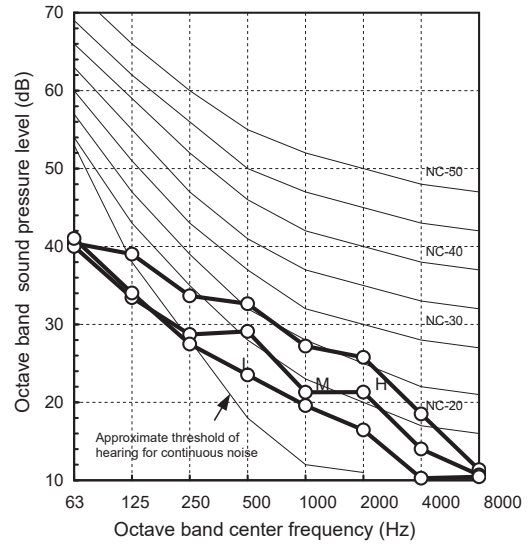
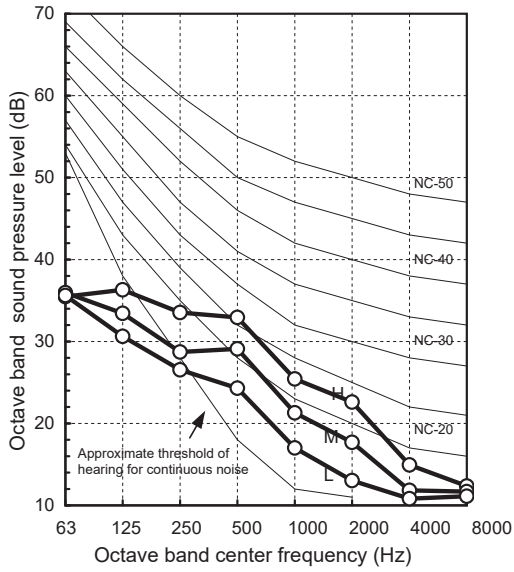


External static pressure 30Pa

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

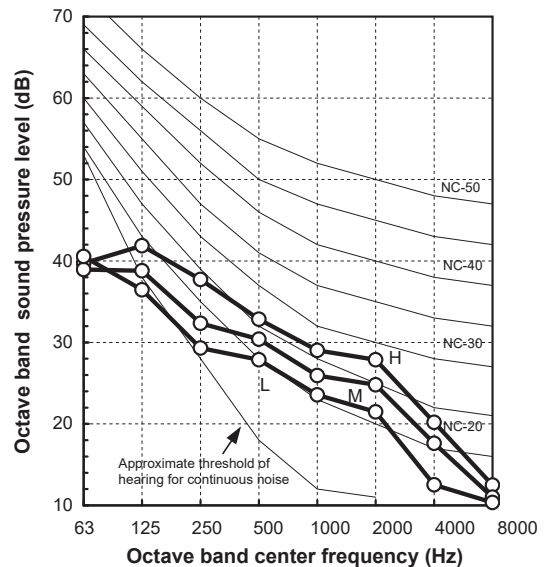
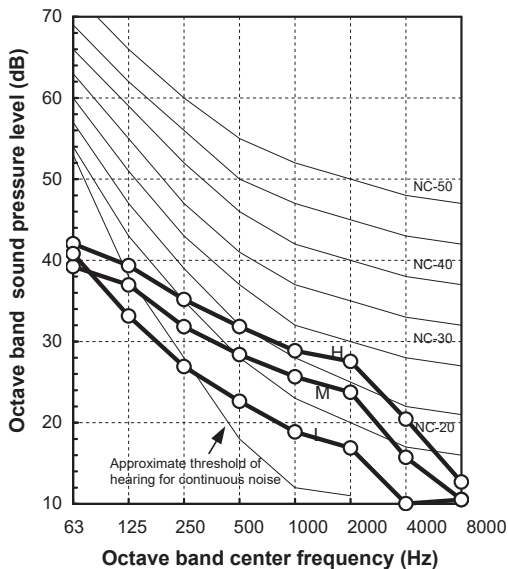


External static pressure 50Pa

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

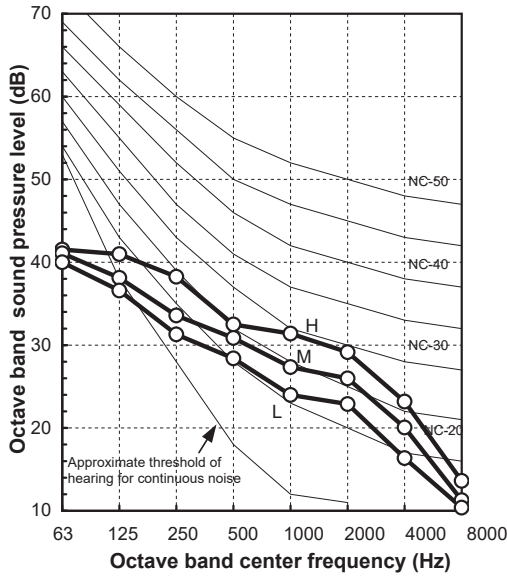




**RAV-RM561BTP-E / TR**

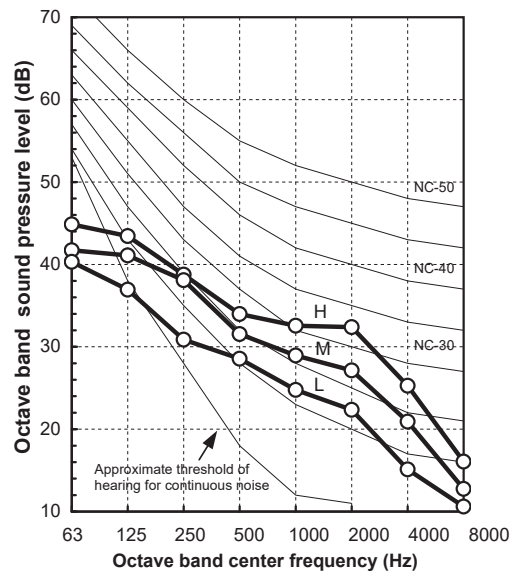
External static pressure 80Pa

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



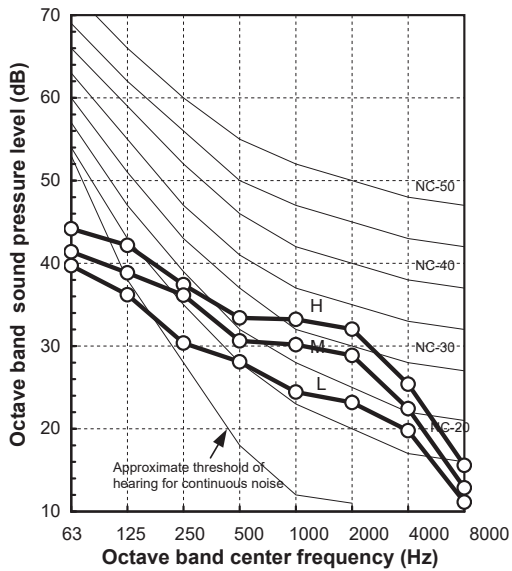
External static pressure 100Pa

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



External static pressure 120Pa

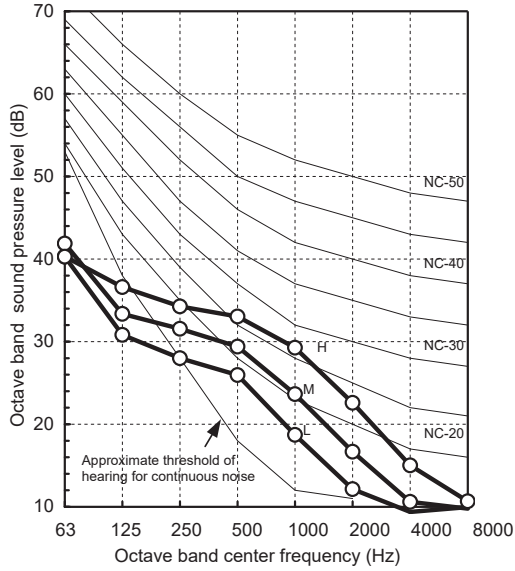
Fan tap	H	M	L
Sound pressure level (dB(A))	39	35	31



**RAV-RM801BTP-E / TR**

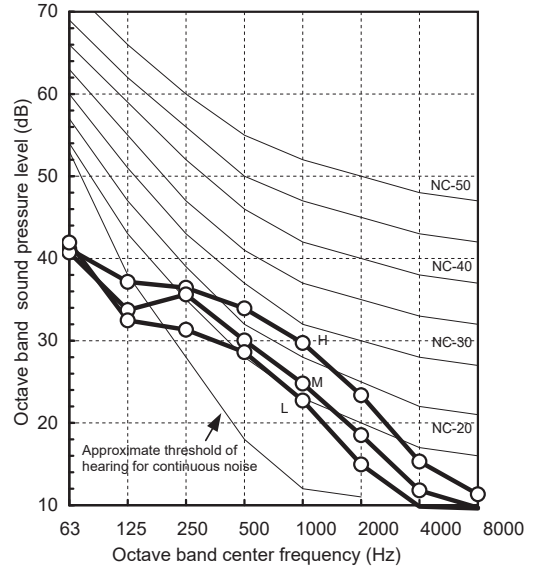
External static pressure 30Pa

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



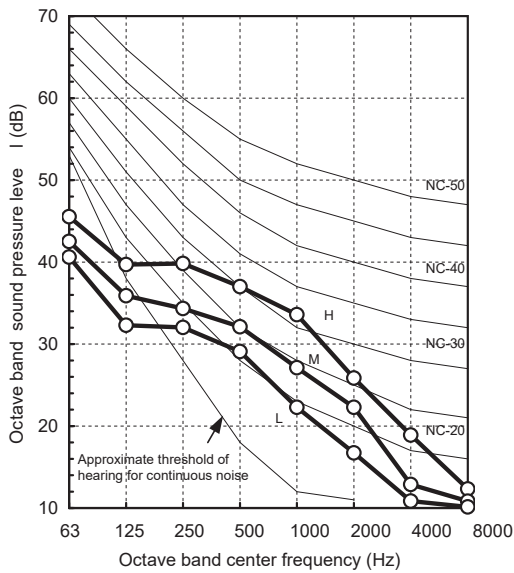
External static pressure 40Pa

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



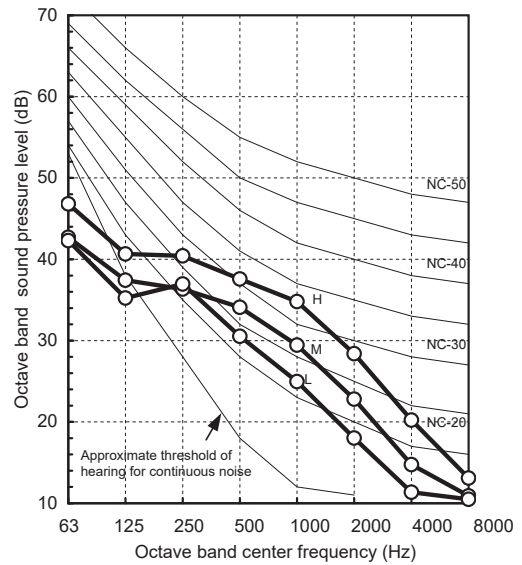
External static pressure 50Pa

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



External static pressure 65Pa

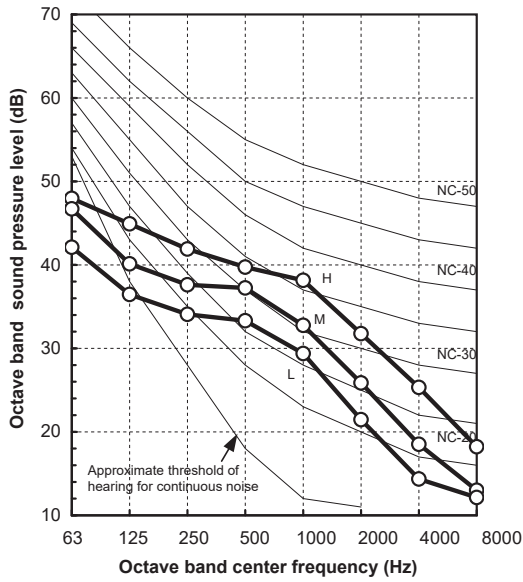
Fan tap	H	M	L
Sound pressure level (dB(A))	39	35	32



**RAV-RM801BTP-E / TR**

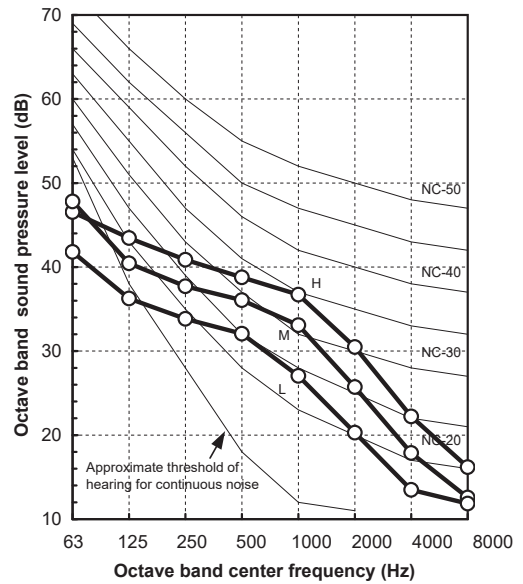
External static pressure 80Pa

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



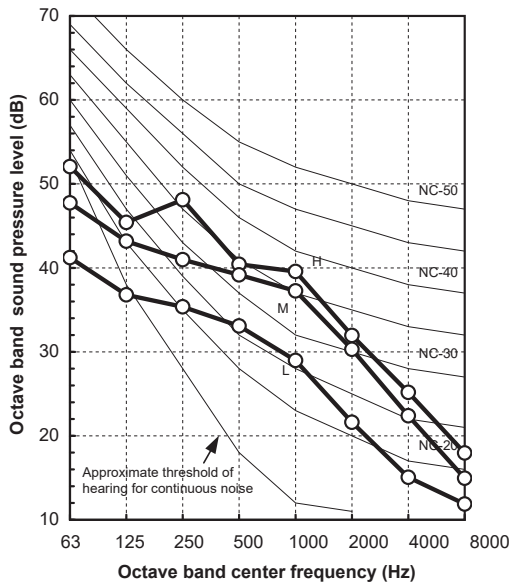
External static pressure 100Pa

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



External static pressure 120Pa

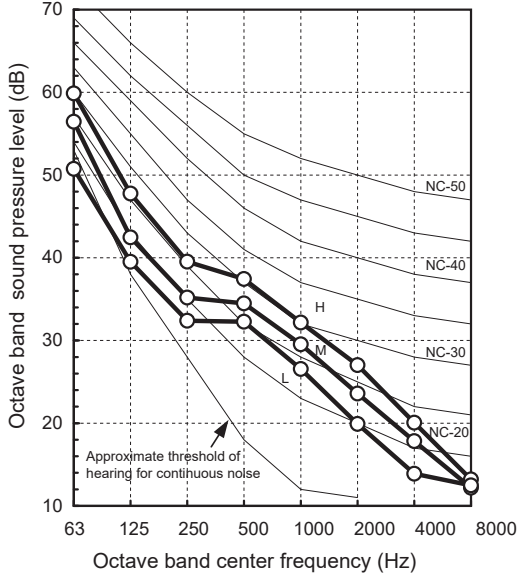
Fan tap	H	M	L
Sound pressure level (dB(A))	44	41	34



**RAV-RM1601BTP-E / TR**

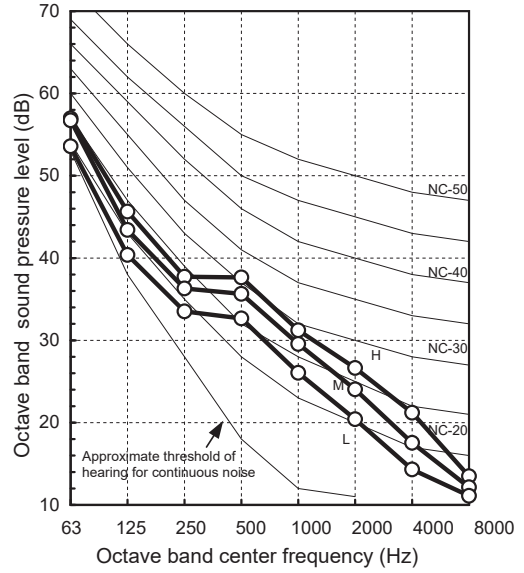
External static pressure 30Pa

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



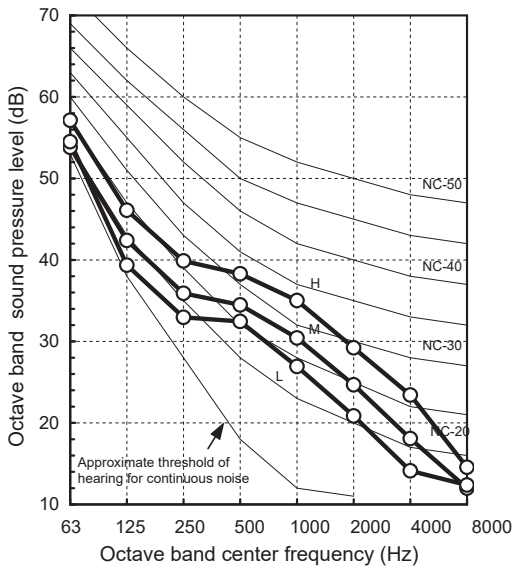
External static pressure 40Pa

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



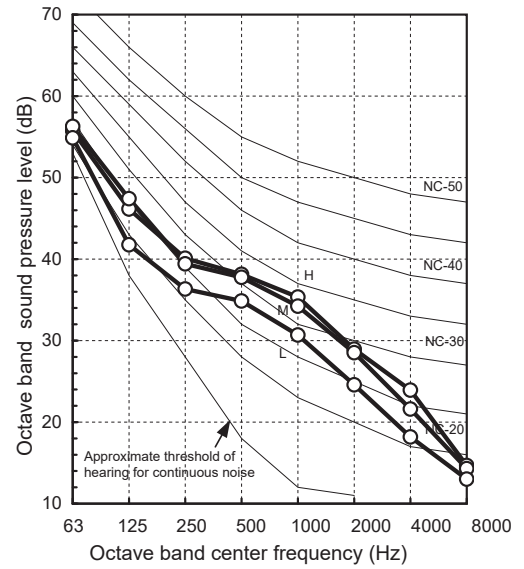
External static pressure 50Pa

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



External static pressure 65Pa

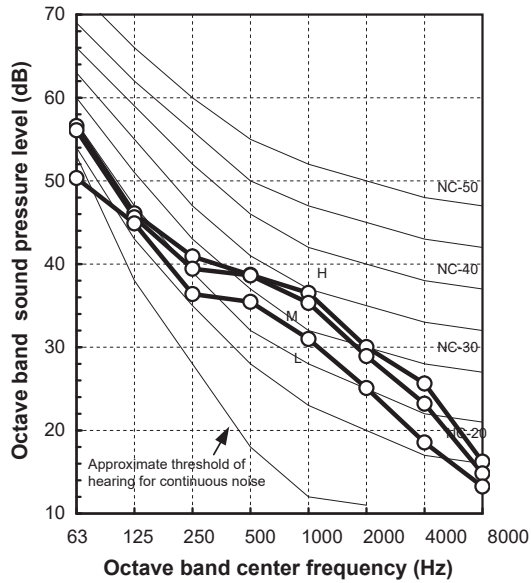
Fan tap	H	M	L
Sound pressure level (dB(A))	41	39	36



**RAV-RM1601BTP-E / TR**

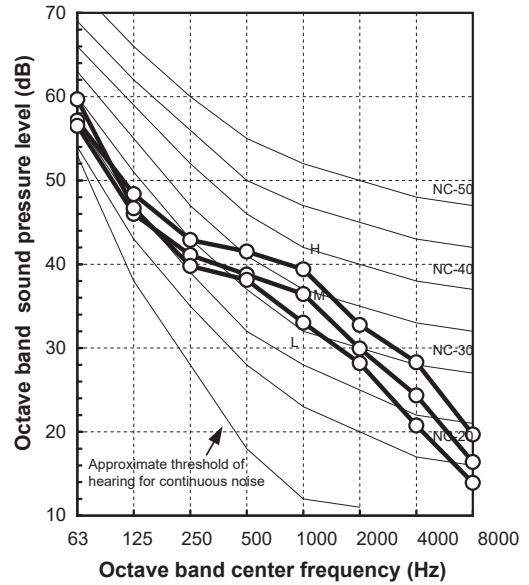
External static pressure 80Pa

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



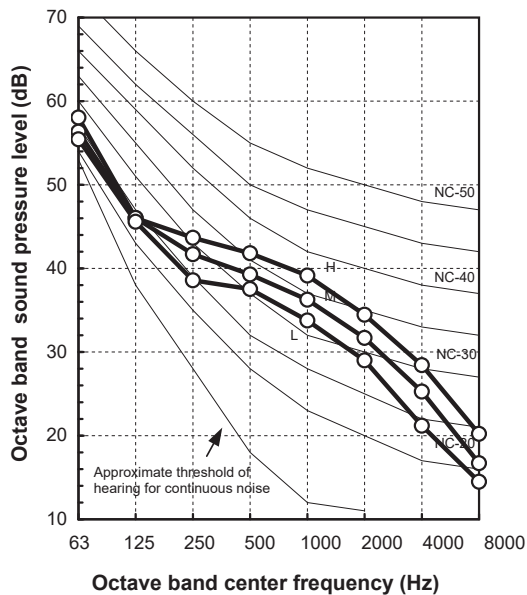
External static pressure 100Pa

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. 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

### Ceiling Type

Model		Indoor unit		RAV-RM1601CTP-E / TR	RAV-RM1601CTP-E / TR
		Outdoor unit		RAV-GM1601AT(J)P-E / ATP-TR	RAV-GM1601AT8(J)P-E / AT8P-TR
Cooling capacity		(kW)		14.0 < 3.0 - 16.0 >	14.0 < 3.0 - 16.0 >
Heating capacity		(kW)		16.0 < 3.0 - 18.0 >	16.0 < 3.0 - 18.0 >
Power supply				1 phase 220V-240V/50Hz, 1phase 220V/60Hz	3 phase 380V-415V/50Hz, 3phase 380V/60Hz
Electrical characteristics	Cooling	Power consumption (kW)		4.65	4.65
		EER		3.01	3.01
		PdesignC		14.00	14.00
		SEER		5.90	5.90
	Heating	Power consumption (kW)		4.61	4.61
		COP		3.47	3.47
		PdesignH		8.00	8.00
		SCOP		4.10	4.10
		Maximum current (A)		29.0	16.1
<b>Indoor unit</b>					
Appearance	Main unit		Pure white		Pure white
	Ceiling panel (Sold separately)	Model	-		-
		Panel color	-		-
Outer dimension	Main unit	Height (mm)	235		235
		Width (mm)	1586		1586
		Depth (mm)	690		690
	Ceiling panel (Sold separately)	Height (mm)	-		-
		Width (mm)	-		-
		Depth (mm)	-		-
Total weight	Main unit (kg)		37.0		37.0
	Ceiling panel (Sold separately) (kg)		-		-
Fan unit	Fan		Centrifugal fan		Centrifugal fan
	Standard air flow	H/M/L (m3/h)	2040 / 1650 / 1260		2040 / 1650 / 1260
	Motor (W)		139		139
External static pressure	Standard (Upper - Lower) (Pa)		-		-
Air filter		Standard filter (Long life filter)		Standard filter (Long life filter)	
Sound pressure level		H/M/L (dB)	46 / 42 / 36		46 / 42 / 36
Sound power level		H/M/L (dB)	61 / 57 / 51		61 / 57 / 51
Connecting pipe	Drain port		VP25		VP25

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 35°C DB

## Ceiling Type

Twin system : Single phase model

<b>Model</b>		<b>Indoor unit 1</b>		<b>RAV-RM801CTP-E / TR</b>	
		<b>Indoor unit 2</b>		<b>RAV-RM801CTP-E / TR</b>	
		<b>Outdoor unit</b>		<b>RAV-GM1601AT(J)P-E / ATP-TR</b>	
Cooling capacity (kW)				14.0 < 3.0 - 16.0 >	
Heating capacity (kW)				16.0 < 3.0 - 18.0 >	
Power supply				1 phase 220V-240V/50Hz, 1phase 220V/60Hz	
Electrical characteristics	Cooling	Power consumption (kW)		4.65	
		EER		3.01	
		PdesignC		14.0	
		SEER		5.90	
	Heating	Power consumption (kW)		4.61	
		COP		3.47	
		PdesignH(Tbiv-7°C)		8.00	
		SCOP		4.10	
		Maximum current (A)		29.0	
<b>Indoor unit</b>					
Appearance		Main unit		Pure white	
		Ceiling panel (Sold separately)	Model	-	
			Panel color	-	
Outer dimension		Main unit		Height (mm)	235
				Width (mm)	1270
				Depth (mm)	690
		Ceiling panel (Sold separately)		Height (mm)	-
				Width (mm)	-
				Depth (mm)	-
Total weight		Main unit (kg)		29.0	
		Ceiling panel (Sold separately) (kg)		-	
Fan unit		Fan		Centrifugal fan	
		Standard air flow	H/M/L (m <sup>3</sup> /h)	1410 / 1002 / 750	
		Motor (W)		94	
External static pressure		Standard (Upper - Lower) (Pa)		-	
Air filter				Standard filter (Long life filter)	
Sound pressure level		H/M/L (dB)	41 / 36 / 29		
Sound power level		H/M/L (dB)	56 / 51 / 44		
Connecting pipe	Drain port		VP20		

\*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 35°C DB



## Ceiling Type

## Twin system : Three phase model

Model	Indoor unit 1		RAV-RM801CTP-E / TR
	Indoor unit 2		RAV-RM801CTP-E / TR
	Outdoor unit		RAV-GM1601AT8(J)P-E / AT8P-TR
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >
Power supply			3 phase 380V-415V/50Hz, 3phase 380V/60Hz
Electrical characteristics	Cooling	Power consumption	(kW) 4.65
		EER	3.01
		PdesignC	14.0
		SEER	5.90
	Heating	Power consumption	(kW) 4.61
		COP	3.47
		PdesignH (Tbiv -7°C)	8.00
		SCOP	4.10
		Maximum current	(A) 16.1
			<b>Indoor unit</b>
Appearance	Main unit		Pure white
	Ceiling panel (Sold separately)	Model	-
		Panel color	-
Outer dimension	Main unit	Height	(mm) 235
		Width	(mm) 1270
		Depth	(mm) 690
	Ceiling panel (Sold separately)	Height	(mm) -
		Width	(mm) -
		Depth	(mm) -
Total weight	Main unit		(kg) 29.0
	Ceiling panel (Sold separately)		(kg) -
Fan unit	Fan		Centrifugal fan
	Standard air flow	H/M/L (m3/h)	1410 / 1002 / 750
	Motor		(W) 94
External static pressure	Standard (Upper - Lower)		(Pa) -
Air filter			Standard filter (Long life filter)
Sound pressure level		H/M/L (dB)	41 / 36 / 29
Sound power level		H/M/L (dB)	56 / 51 / 44
Connecting pipe	Drain port		VP20

\*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 35°C DB

## Ceiling Type

Triple system : Single phase model

Model	Indoor unit 1		RAV-RM561CTP-E / TR
	Indoor unit 2		RAV-RM561CTP-E / TR
	Indoor unit 3		RAV-RM561CTP-E / TR
	Outdoor unit		RAV-GM1601AT(J)P-E / ATP-TR
Cooling capacity (kW)			14.0 < 3.0 - 16.0 >
Heating capacity (kW)			16.0 < 3.0 - 18.0 >
Power supply			1 phase 220V-240V/50Hz, 1phase 220V/60Hz
Electrical characteristics	Cooling	Power consumption (kW)	4.65
		EER	3.01
		PdesignC	14.0
		SEER	5.90
	Heating	Power consumption (kW)	4.61
		COP	3.47
		PdesignH(Tbiv-7°C)	8.00
		SCOP	4.10
		Maximum current (A)	29.0
Appearance	Main unit		Pure white
	Ceiling panel (Sold separately)	Model	-
		Panel color	-
Outer dimension	Main unit	Height (mm)	235
		Width (mm)	952
		Depth (mm)	690
	Ceiling panel (Sold separately)	Height (mm)	-
		Width (mm)	-
		Depth (mm)	-
Total weight	Main unit (kg)	23.0	
	Ceiling panel (Sold separately) (kg)		
Fan unit	Fan		Centrifugal fan
	Standard air flow	H/M/L (m3/h)	900 / 720 / 540
	Motor (W)		94
External static pressure	Standard (Upper - Lower) (Pa)		-
Air filter			Standard filter (Long life filter)
Sound pressure level		H/M/L (dB)	37 / 35 / 28
Sound power level		H/M/L (dB)	52 / 50 / 43
Connecting pipe	Drain port		VP20

\*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 35°C DB

## Ceiling Type

Triple system : Three phase model

Model		Indoor unit 1		RAV-RM561CTP-E / TR
		Indoor unit 2		RAV-RM561CTP-E / TR
		Indoor unit 3		RAV-RM561CTP-E / TR
		Outdoor unit		RAV-GM1601AT8(J)P-E / AT8P-TR
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >	
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >	
Power supply		3 phase 380V-415V/50Hz, 3phase 380V/60Hz		
Electrical characteristics	Cooling	Power consumption (kW)		4.65
		EER		3.01
		PdesignC		14.0
		SEER		5.90
	Heating	Power consumption (kW)		4.61
		COP		3.47
		PdesignH (Tbiv -7°C)		8.00
		SCOP		4.10
Maximum current (A)		16.1		
<b>Indoor unit</b>				
Appearance		Main unit		Pure white
		Ceiling panel (Sold separately)	Model	-
			Panel color	-
Outer dimension		Main unit	Height (mm)	235
			Width (mm)	952
			Depth (mm)	690
		Ceiling panel (Sold separately)	Height (mm)	-
			Width (mm)	-
			Depth (mm)	-
Total weight		Main unit (kg)		23.0
		Ceiling panel (Sold separately) (kg)		-
Fan unit		Fan		Centrifugal fan
		Standard air flow	H/M/L (m3/h)	900 / 720 / 540
		Motor (W)		94
External static pressure		Standard (Upper - Lower) (Pa)		-
Air filter		Standard filter (Long life filter)		
Sound pressure level		H/M/L (dB)	37 / 35 / 28	
Sound power level		H/M/L (dB)	52 / 50 / 43	
Connecting pipe		Drain port		VP20

\*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.

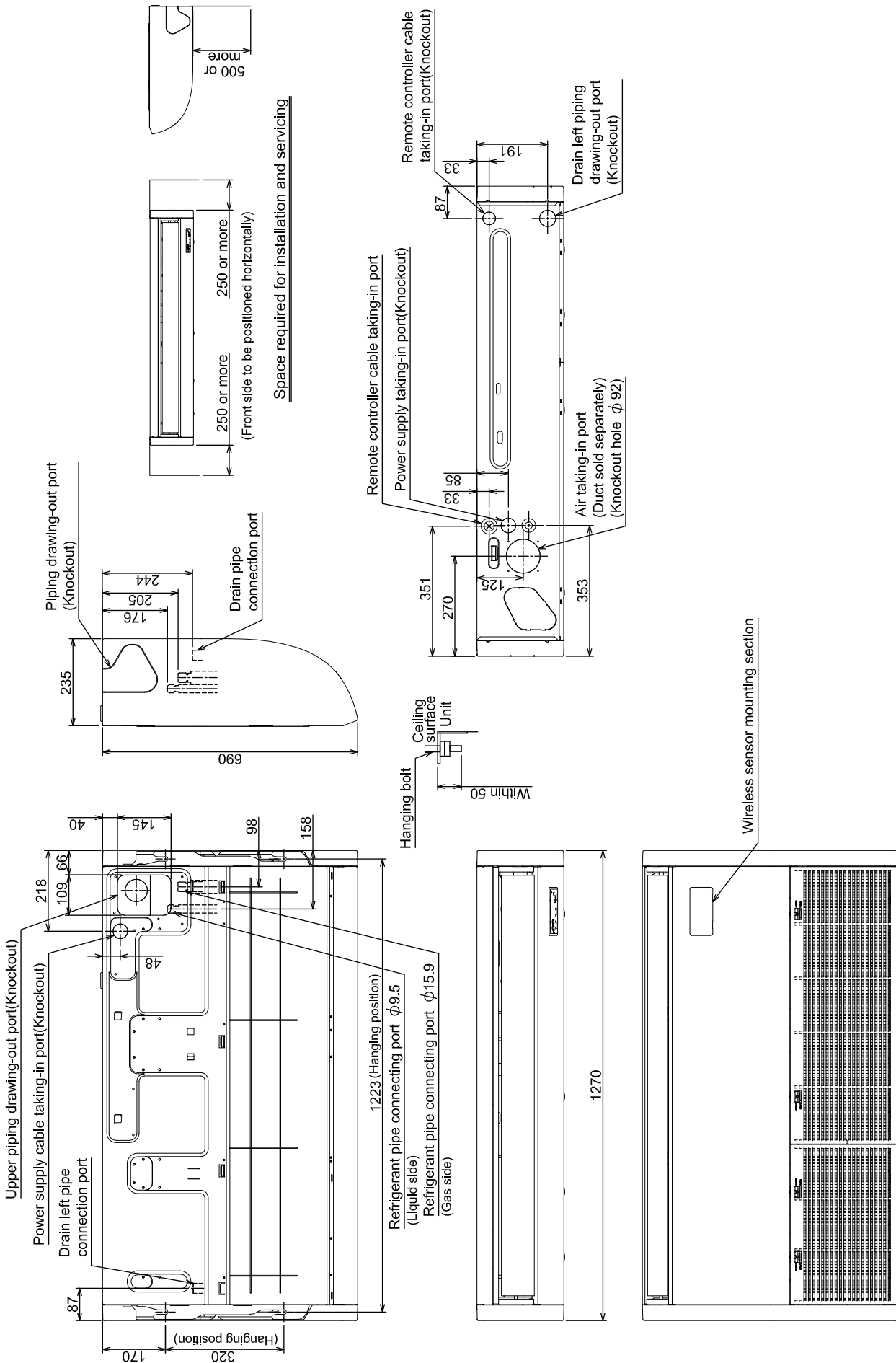
\*2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

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 35°C DB

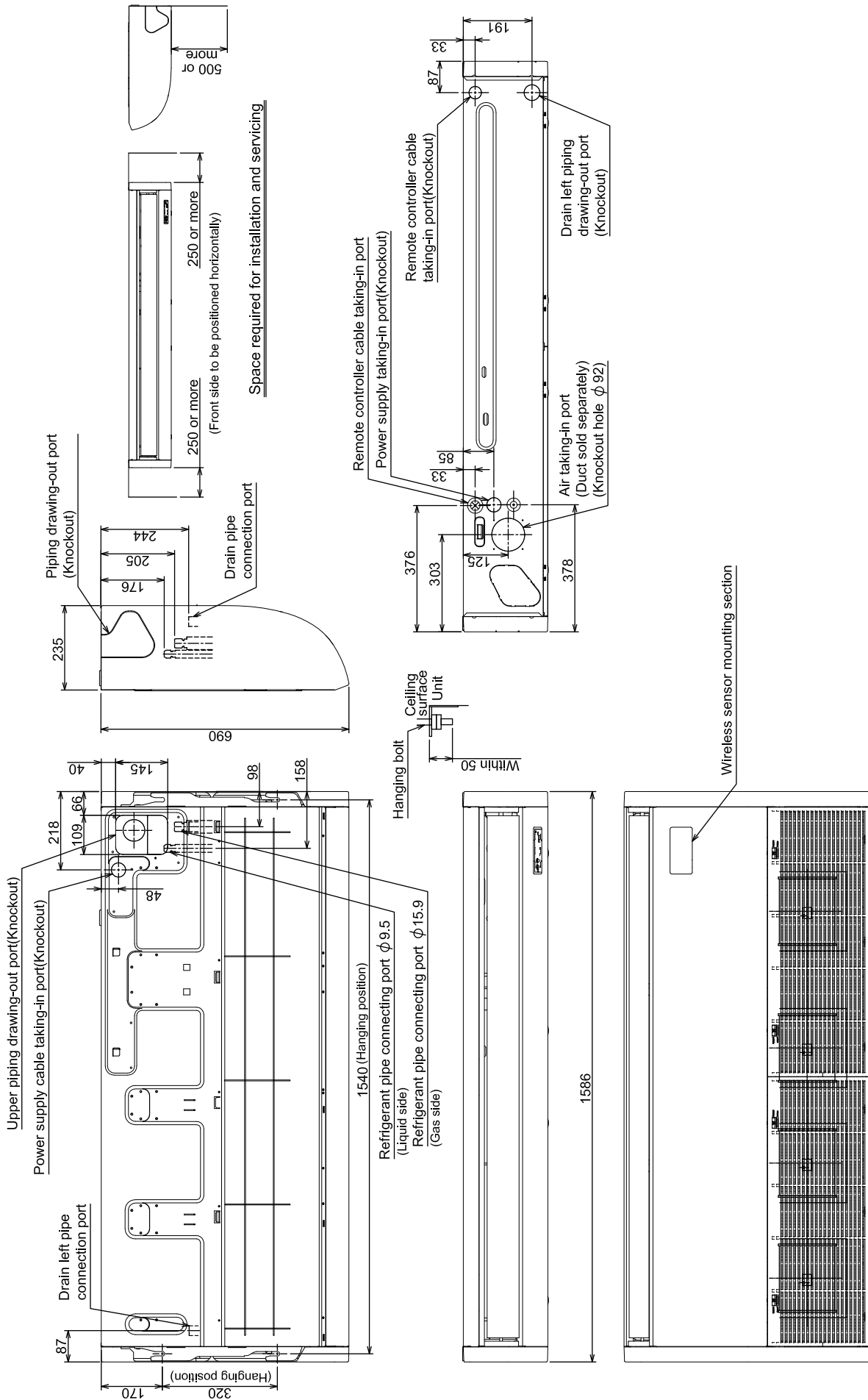


RAV-RM801CTP-E / TR



(Unit:mm)

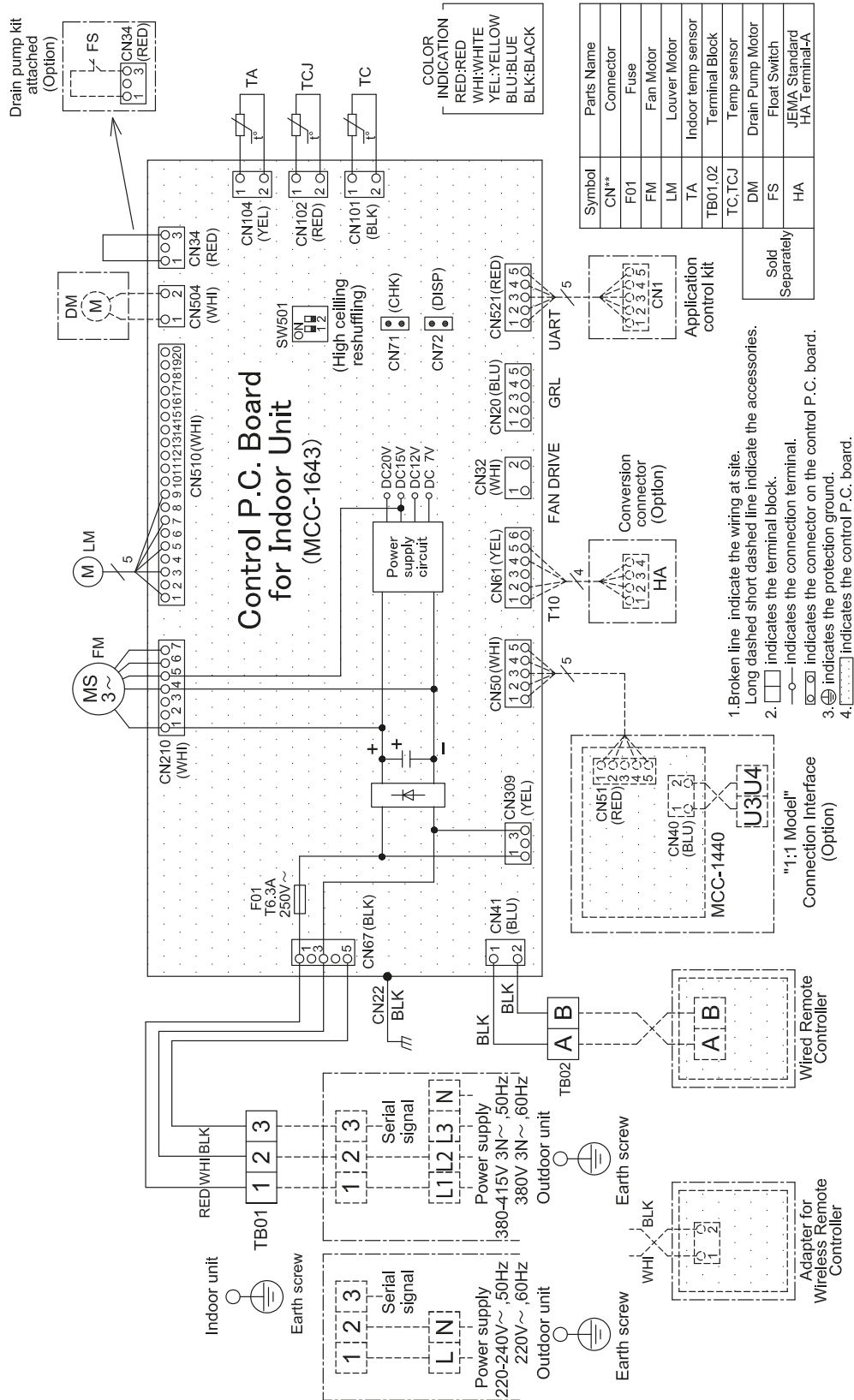
RAV-RM1601CTP-E / TR



(Unit:mm)

### 2-5-3. Wiring Diagrams

RAV-RM561CTP-E / TR, RAV-RM801CTP-E / TR, RAV-RM1601CTP-E / TR



## 2-5-4. Sensible Capacity Table

RAV-RM1601CTP-E / TR : RAV-GP1601AT(J)P-E / ATP-TR, RAV-GP1601AT8(J)P-E / AT8P-TR

unit size		indoor air temp.																			
		outdoor air temp.		14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		CDB	20.0CDB	20.0CDB	21.5CDB	23.0CDB	23.0CDB	24.5CDB	26.0CDB	27.0CDB	27.0CDB	28.0CDB	28.0CDB	30.0CDB	30.0CDB	32.0CDB	32.0CDB	TC	SHC	TC	SHC
1601	10.0	13.1	9.2	13.8	9.7	14.5	10.2	15.0	10.5	15.5	10.9	16.0	11.2	16.5	11.5	17.4	12.2	18.2	12.8		
	12.0	13.1	9.1	13.7	9.6	14.4	10.1	14.9	10.5	15.4	10.8	15.9	11.1	16.4	11.5	17.3	12.1	18.1	12.7		
	14.0	13.0	9.1	13.7	9.6	14.3	10.0	14.8	10.4	15.4	10.7	15.8	11.1	16.3	11.4	17.2	12.1	18.0	12.6		
	16.0	12.9	9.0	13.6	9.5	14.2	10.0	14.7	10.3	15.2	10.7	15.7	11.0	16.1	11.3	17.1	12.0	17.9	12.5		
	18.0	12.8	9.0	13.5	9.4	14.1	9.9	14.6	10.2	15.1	10.6	15.6	10.9	16.0	11.2	17.0	11.9	17.7	12.4		
	20.0	12.7	8.9	13.3	9.3	14.0	9.8	14.5	10.2	15.0	10.5	15.4	10.8	15.9	11.1	16.8	11.8	17.6	12.3		
	21.0	12.6	8.8	13.3	9.3	13.9	9.8	14.4	10.1	14.9	10.5	15.4	10.8	15.8	11.1	16.7	11.7	17.5	12.3		
	23.0	12.5	8.8	13.2	9.2	13.8	9.7	14.3	10.0	14.8	10.3	15.2	10.7	15.7	11.0	16.6	11.6	17.3	12.1		
	25.0	12.4	8.7	13.0	9.1	13.7	9.6	14.1	9.9	14.6	10.2	15.1	10.5	15.5	10.8	16.4	11.5	17.1	12.0		
	27.0	12.2	8.5	12.8	9.0	13.5	9.4	14.0	9.8	14.4	10.1	14.9	10.4	15.3	10.7	16.2	11.3	16.9	11.9		
	29.0	12.1	8.4	12.7	8.9	13.3	9.3	13.8	9.6	14.3	10.0	14.7	10.3	15.1	10.6	16.0	11.2	16.7	11.7		
	31.0	11.9	8.3	12.5	8.7	13.1	9.2	13.6	9.5	14.0	9.8	14.5	10.1	14.9	10.4	15.8	11.0	16.5	11.5		
	33.0	11.7	8.2	12.3	8.6	12.9	9.0	13.4	9.4	13.8	9.7	14.2	10.0	14.6	10.3	15.5	10.9	16.2	11.4		
	35.0	11.5	8.0	12.1	8.5	12.7	8.9	13.1	9.2	13.6	9.5	14.0	9.8	14.4	10.1	15.3	10.7	16.0	11.2		
37.0	11.3	7.9	11.9	8.3	12.5	8.7	12.9	9.0	13.3	9.3	13.7	9.6	14.1	9.9	15.0	10.5	15.6	11.0			
39.0	11.1	7.7	11.6	8.1	12.2	8.5	12.6	8.8	13.1	9.1	13.5	9.4	13.8	9.7	14.7	10.3	15.3	10.7			

RAV-RM801CTP-E / TR (Twin) : RAV-GP1601AT(J)P-E / ATP-TR, RAV-GP1601AT8(J)P-E / AT8P-TR

unit size		indoor air temp.																			
		outdoor air temp.		14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		CDB	20.0CDB	20.0CDB	21.5CDB	23.0CDB	23.0CDB	24.5CDB	26.0CDB	27.0CDB	27.0CDB	28.0CDB	28.0CDB	30.0CDB	30.0CDB	32.0CDB	32.0CDB	TC	SHC	TC	SHC
801	10.0	7.9	6.1	8.2	6.3	8.5	6.5	8.7	6.7	8.9	6.9	9.1	7.1	9.4	7.3	9.8	7.5	10.2	7.6		
	12.0	7.8	6.0	8.1	6.2	8.4	6.4	8.6	6.6	8.8	6.8	9.0	7.0	9.3	7.2	9.7	7.4	10.1	7.5		
	14.0	7.7	5.9	8.0	6.1	8.3	6.3	8.5	6.5	8.7	6.7	8.9	6.9	9.2	7.1	9.6	7.3	10.0	7.4		
	16.0	7.6	5.8	7.9	6.0	8.2	6.2	8.4	6.4	8.6	6.6	8.8	6.8	9.1	7.0	9.5	7.2	9.9	7.3		
	18.0	7.5	5.7	7.8	5.9	8.1	6.1	8.3	6.3	8.5	6.5	8.7	6.7	9.0	6.9	9.4	7.1	9.8	7.2		
	20.0	7.4	5.6	7.7	5.8	8.0	6.0	8.2	6.2	8.4	6.4	8.6	6.6	8.9	6.8	9.3	7.0	9.7	7.1		
	21.0	7.3	5.5	7.6	5.7	7.9	5.9	8.1	6.1	8.3	6.3	8.5	6.5	8.8	6.7	9.2	6.9	9.6	7.0		
	23.0	7.2	5.4	7.5	5.6	7.8	5.8	8.0	6.0	8.2	6.2	8.4	6.4	8.7	6.6	9.1	6.8	9.5	6.9		
	25.0	7.1	5.3	7.4	5.5	7.7	5.7	7.9	5.9	8.1	6.1	8.3	6.3	8.6	6.5	9.0	6.7	9.4	6.8		
	27.0	7.0	5.2	7.3	5.4	7.6	5.6	7.8	5.8	8.0	6.0	8.2	6.2	8.5	6.4	8.9	6.6	9.3	6.7		
	29.0	6.8	5.1	7.1	5.3	7.4	5.5	7.6	5.7	7.8	5.9	8.0	6.1	8.3	6.3	8.7	6.5	9.1	6.6		
	31.0	6.5	4.9	6.8	5.1	7.1	5.3	7.3	5.5	7.5	5.7	7.7	5.9	8.0	6.1	8.4	6.3	8.8	6.4		
	33.0	6.2	4.7	6.5	4.9	6.8	5.1	7.0	5.3	7.2	5.5	7.4	5.7	7.7	5.9	8.1	6.1	8.5	6.2		
	35.0	5.9	4.5	6.2	4.7	6.5	4.9	6.7	5.1	6.9	5.3	7.1	5.5	7.4	5.7	7.8	5.9	8.2	6.0		
37.0	5.8	4.4	6.1	4.6	6.4	4.8	6.6	5.0	6.8	5.2	7.0	5.4	7.3	5.6	7.7	5.8	8.1	5.9			
39.0	5.6	4.3	5.9	4.5	6.2	4.7	6.4	4.9	6.6	5.1	6.8	5.3	7.1	5.5	7.5	5.7	7.9	5.8			

RAV-RM561CTP-E / TR (Triple) : RAV-GP1601AT(J)P-E / ATP-TR, RAV-GP1601AT8(J)P-E / AT8P-TR

unit size		indoor air temp.																			
		outdoor air temp.		14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		CDB	20.0CDB	20.0CDB	21.5CDB	23.0CDB	23.0CDB	24.5CDB	26.0CDB	27.0CDB	27.0CDB	28.0CDB	28.0CDB	30.0CDB	30.0CDB	32.0CDB	32.0CDB	TC	SHC	TC	SHC
561	10.0	4.7	3.9	4.9	4.1	5.2	4.3	5.4	4.5	5.6	4.6	5.7	4.7	5.9	4.9	6.2	5.2	6.5	5.4		
	12.0	4.7	3.9	4.9	4.1	5.2	4.3	5.3	4.4	5.5	4.6	5.7	4.7	5.8	4.8	6.2	5.1	6.5	5.4		
	14.0	4.6	3.8	4.9	4.0	5.1	4.2	5.3	4.4	5.5	4.5	5.6	4.7	5.8	4.8	6.1	5.1	6.4	5.3		
	16.0	4.6	3.8	4.8	4.0	5.1	4.2	5.3	4.4	5.4	4.5	5.6	4.6	5.8	4.8	6.1	5.1	6.4	5.3		
	18.0	4.6	3.8	4.8	4.0	5.0	4.2	5.2	4.3	5.4	4.5	5.6	4.6	5.7	4.7	6.1	5.0	6.3	5.3		
	20.0	4.5	3.8	4.8	4.0	5.0	4.1	5.2	4.3	5.4	4.4	5.5	4.6	5.7	4.7	6.0	5.0	6.3	5.2		
	21.0	4.5	3.7	4.7	3.9	5.0	4.1	5.2	4.3	5.3	4.4	5.5	4.6	5.6	4.7	6.0	5.0	6.3	5.2		
	23.0	4.5	3.7	4.7	3.9	4.9	4.1	5.1	4.2	5.3	4.4	5.4	4.5	5.6	4.6	5.9	4.9	6.2	5.1		
	25.0	4.4	3.7	4.6	3.9	4.9	4.0	5.0	4.2	5.2	4.3	5.4	4.5	5.5	4.6	5.9	4.9	6.1	5.1		
	27.0	4.4	3.6	4.6	3.8	4.8	4.0	5.0	4.1	5.2	4.3	5.3	4.4	5.5	4.5	5.8	4.8	6.0	5.0		
	29.0	4.3	3.6	4.5	3.8	4.8	3.9	4.9	4.1	5.1	4.2	5.2	4.3	5.4	4.5	5.7	4.7	6.0	5.0		
	31.0	4.2	3.5	4.5	3.7	4.7	3.9	4.9	4.0	5.0	4.2	5.2	4.3	5.3	4.4	5.6	4.7	5.9	4.9		
	33.0	4.2	3.5	4.4	3.6	4.6	3.8	4.8	4.0	4.9	4.1	5.1	4.2	5.2	4.3	5.5	4.6	5.8	4.8		
	35.0	4.1	3.4	4.3	3.6	4.5	3.8	4.7	3.9	4.9	4.0	5.0	4.1	5.1	4.3	5.4	4.5	5.7	4.7		
37.0	4.0	3.3	4.2	3.5	4.4	3.7	4.6	3.8	4.8	4.0	4.9	4.1	5.0	4.2	5.3	4.4	5.6	4.6			
39.0	3.9	3.3	4.2	3.4	4.4	3.6	4.5	3.7	4.7	3.9	4.8	4.0	4.9	4.1	5.2	4.3	5.5	4.5			

TC: Total Capacity [kW]

SHC: Sensible Heat Capacity [kW]



## 2-5-5. Part load performance

Indoor unit : RAV-RM1601CTP-E / TR

Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	4651	16000	4611

Q: Capacity in W

W: Power Consumption in W

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11800	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5400	4690	3880	3140	2500	1910	1420	1000	780	780
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	5140	4320	3570	2900	2300	1760	1300	920	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	4710	3960	3270	2650	2110	1610	1200	840	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4651	3910	3230	2620	2080	1590	1180	830	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3390	2850	2350	1910	1520	1160	860	610	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	2790	2350	1940	1570	1250	950	710	500	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2230	1880	1550	1260	1000	760	570	400	310	310

### Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5100	4290	3560	2900	2310	1800	1360	990	710	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4830	4060	3370	2740	2190	1710	1290	940	670	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4611	3880	3220	2620	2090	1630	1230	900	640	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4470	3760	3120	2540	2030	1580	1190	870	620	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4250	3570	2970	2410	1920	1500	1130	830	590	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3770	3170	2630	2140	1710	1330	1000	740	520	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3690	3100	2580	2100	1670	1300	980	720	510	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3660	3080	2560	2080	1660	1290	980	710	510	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3500	2940	2440	1990	1580	1240	930	680	490	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3260	2740	2280	1850	1480	1150	870	640	450	460

**Twin system**

**Indoor unit** : RAV-RM801CTP-E / TR (x2)

**Outdoor unit** : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	4651	16000	4611

Q: Capacity in W

W: Power Consumption in W

**Cooling**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11800	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5400	4690	3880	3140	2500	1910	1420	1000	780	780
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	5140	4320	3570	2900	2300	1760	1300	920	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	4710	3960	3270	2650	2110	1610	1200	840	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4651	3910	3230	2620	2080	1590	1180	830	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3390	2850	2350	1910	1520	1160	860	610	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	2790	2350	1940	1570	1250	950	710	500	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2230	1880	1550	1260	1000	760	570	400	310	310

**Heating**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5100	4290	3560	2900	2310	1800	1360	990	710	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4830	4060	3370	2740	2190	1710	1290	940	670	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4611	3880	3220	2620	2090	1630	1230	900	640	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4470	3760	3120	2540	2030	1580	1190	870	620	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4250	3570	2970	2410	1920	1500	1130	830	590	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3770	3170	2630	2140	1710	1330	1000	740	520	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3690	3100	2580	2100	1670	1300	980	720	510	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3660	3080	2560	2080	1660	1290	980	710	510	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3500	2940	2440	1990	1580	1240	930	680	490	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3260	2740	2280	1850	1480	1150	870	640	450	460

**Triple system**

Indoor unit : RAV-RM561CTP-E / TR (x3)

Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	4651	16000	4611

Q: Capacity in W

W: Power Consumption in W

**Cooling**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11800	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5400	4690	3880	3140	2500	1910	1420	1000	780	780
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	5140	4320	3570	2900	2300	1760	1300	920	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	4710	3960	3270	2650	2110	1610	1200	840	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	4651	3910	3230	2620	2080	1590	1180	830	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3390	2850	2350	1910	1520	1160	860	610	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	2790	2350	1940	1570	1250	950	710	500	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2230	1880	1550	1260	1000	760	570	400	310	310

**Heating**

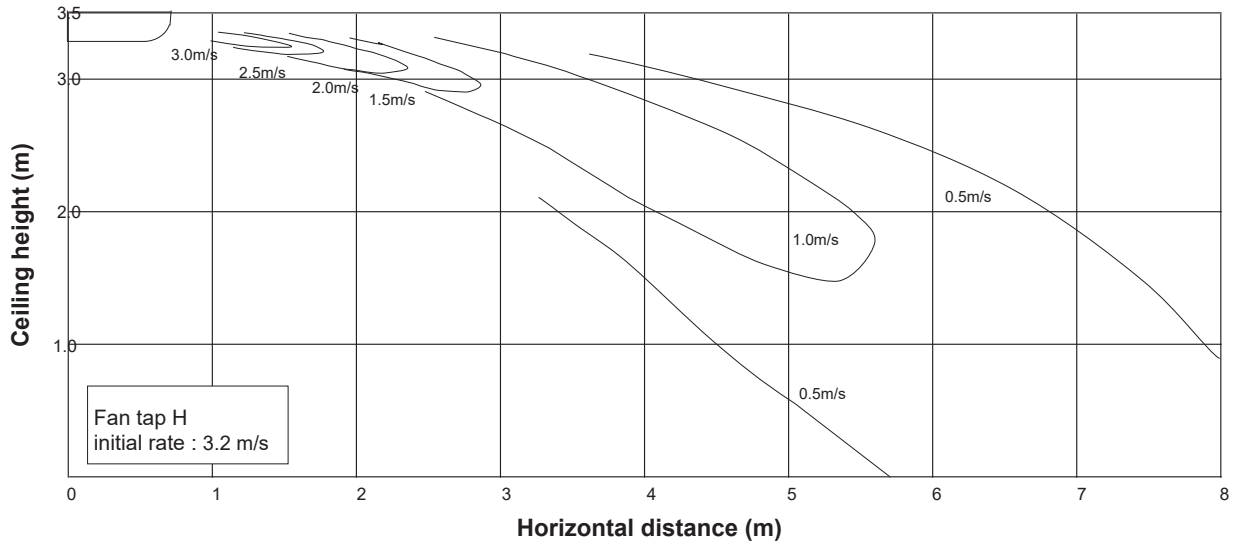
Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5100	4290	3560	2900	2310	1800	1360	990	710	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	4830	4060	3370	2740	2190	1710	1290	940	670	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4611	3880	3220	2620	2090	1630	1230	900	640	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4470	3760	3120	2540	2030	1580	1190	870	620	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4250	3570	2970	2410	1920	1500	1130	830	590	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	3770	3170	2630	2140	1710	1330	1000	740	520	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3690	3100	2580	2100	1670	1300	980	720	510	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3660	3080	2560	2080	1660	1290	980	710	510	520
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3500	2940	2440	1990	1580	1240	930	680	490	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3260	2740	2280	1850	1480	1150	870	640	450	460

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

RAV-RM561CTP-E / TR

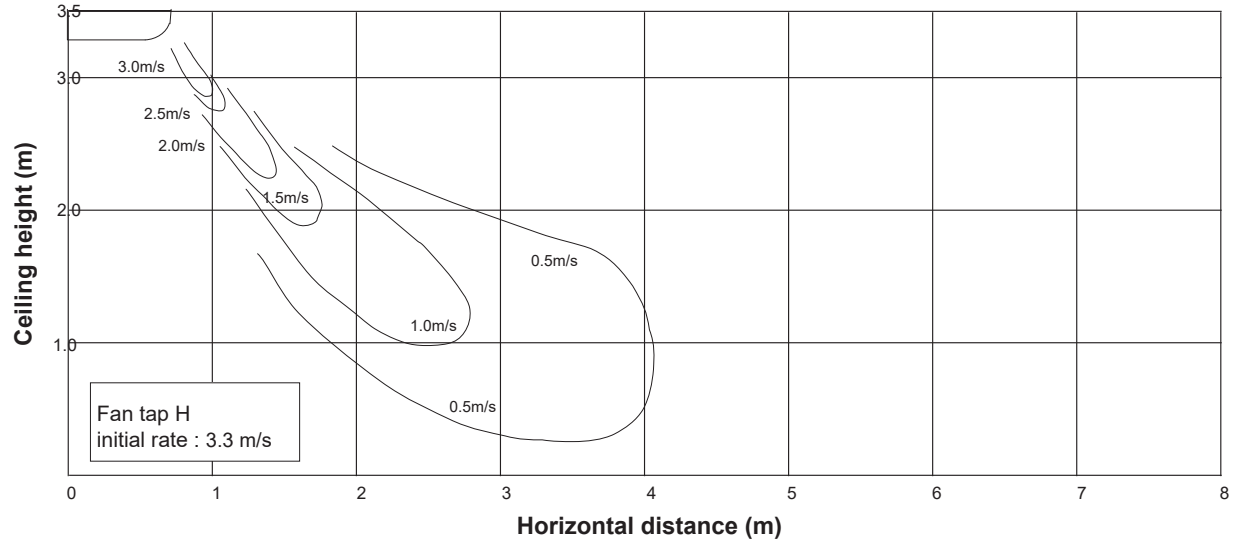
### Cooling

(Louver position : F2)



### Heating

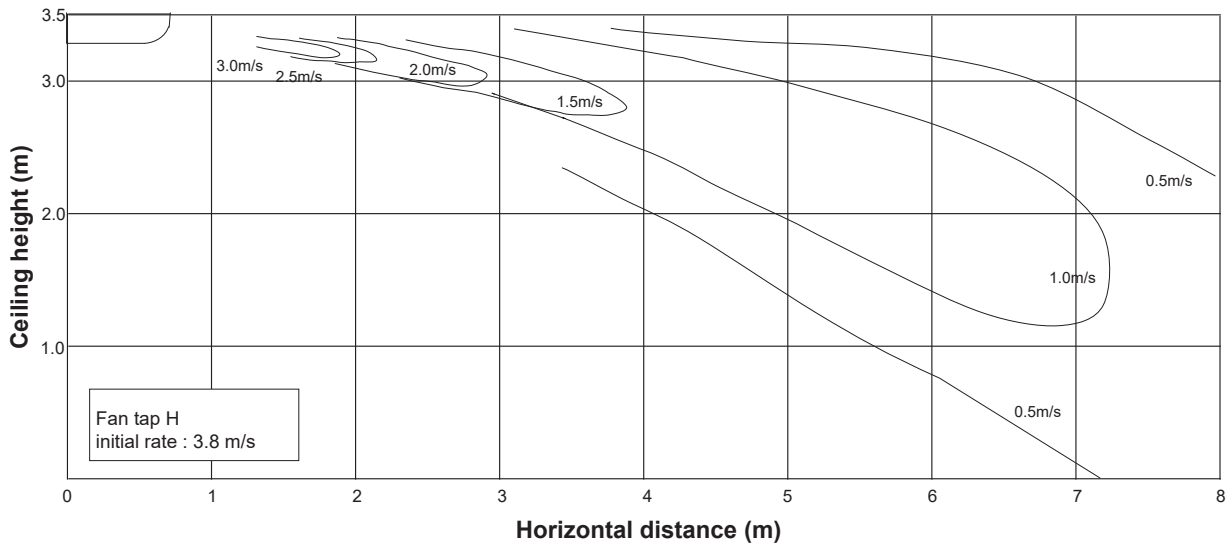
(Louver position : F5)



RAV-RM801CTP-E / TR

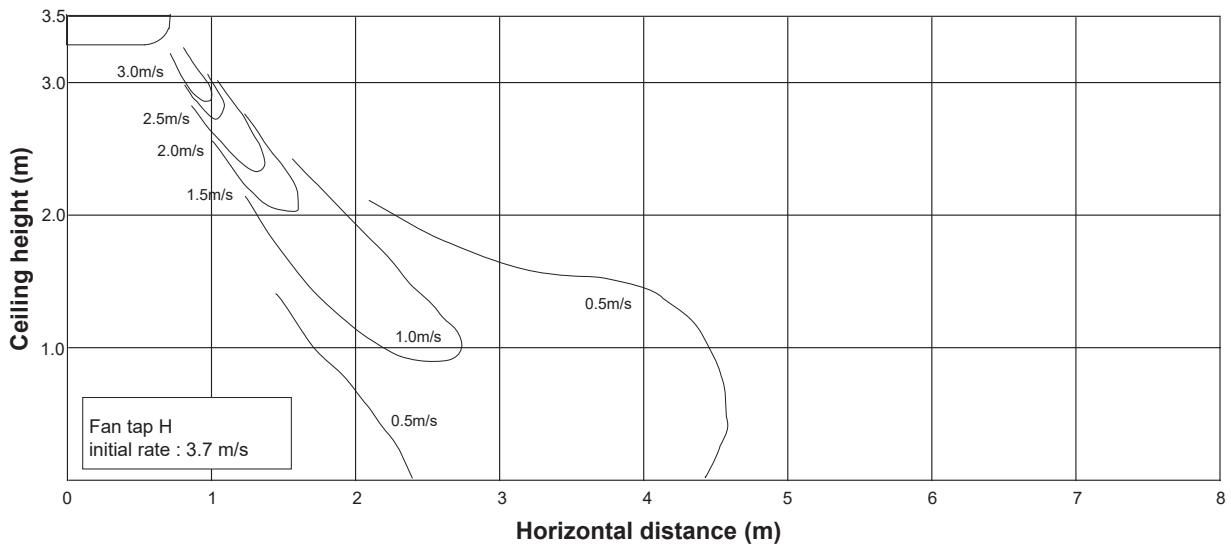
Cooling

(Louver position : F2)



Heating

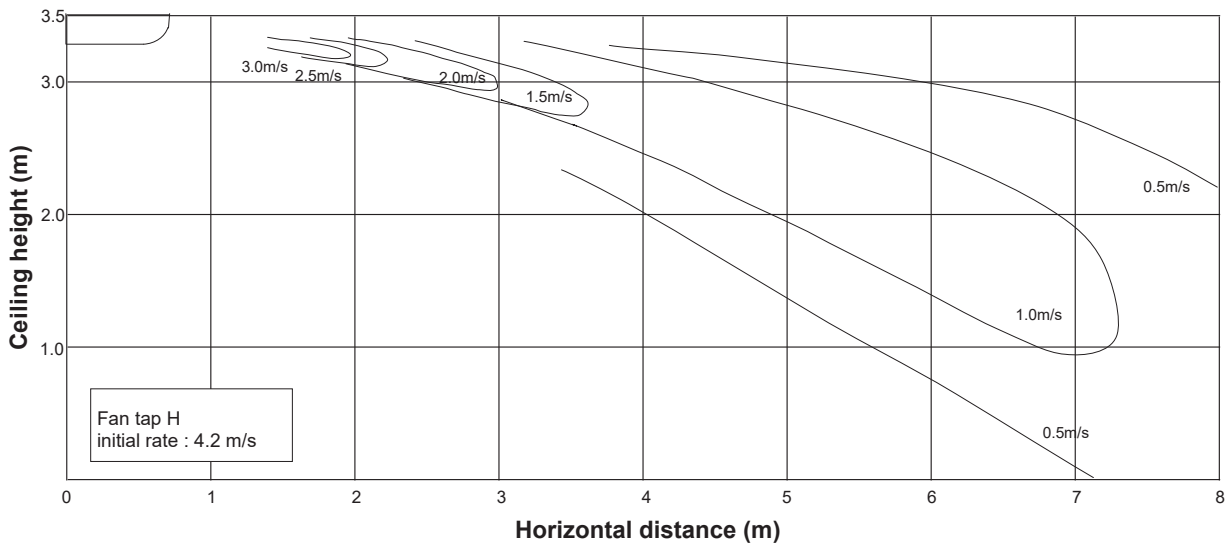
(Louver position : F5)



RAV-RM1601CTP-E / TR

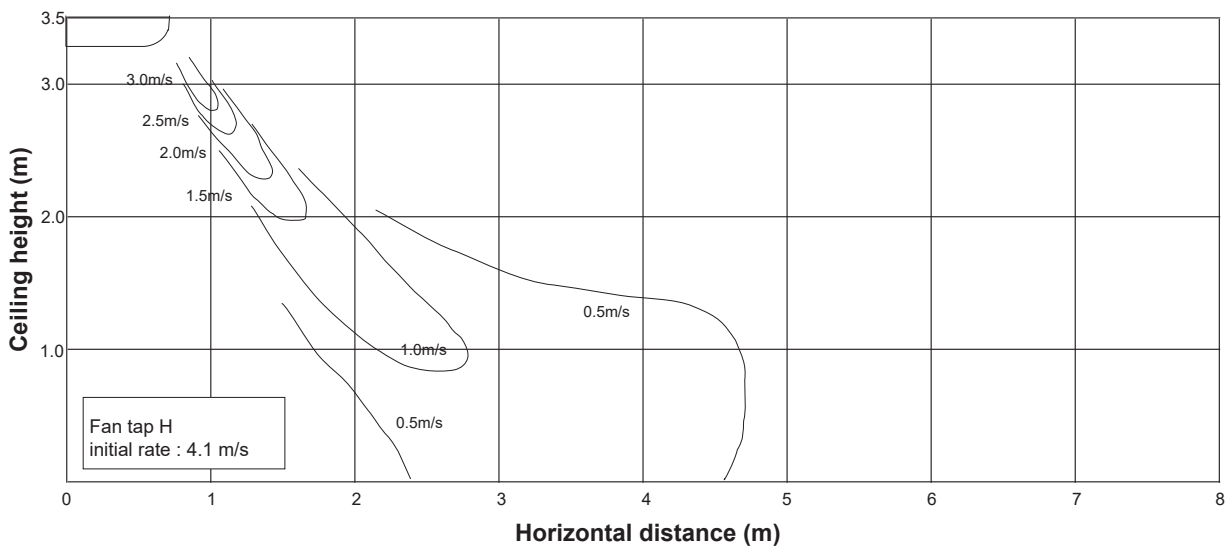
Cooling

(Louver position : F2)



Heating

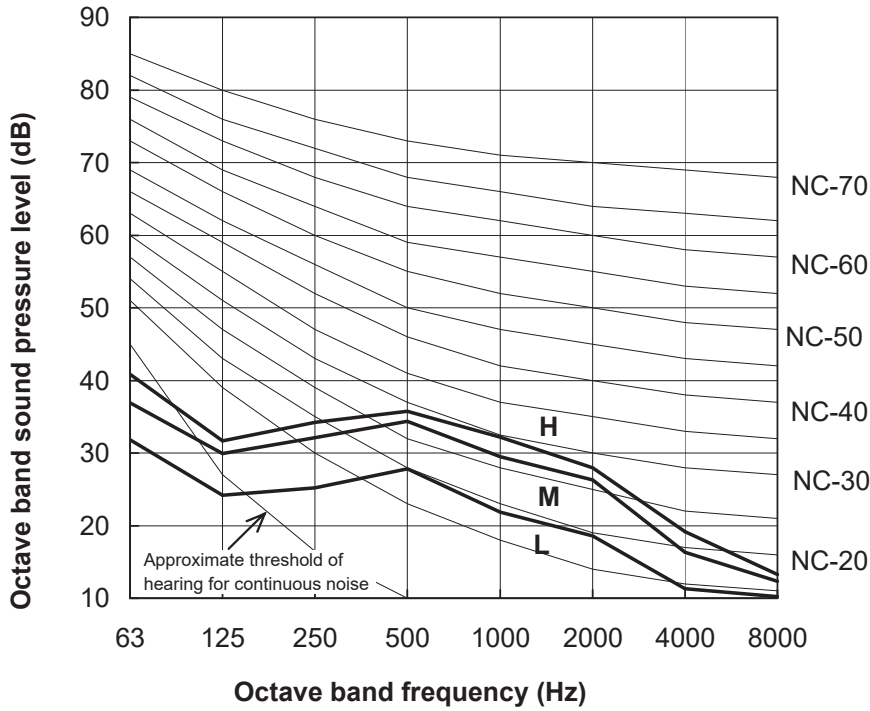
(Louver position : F5)



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

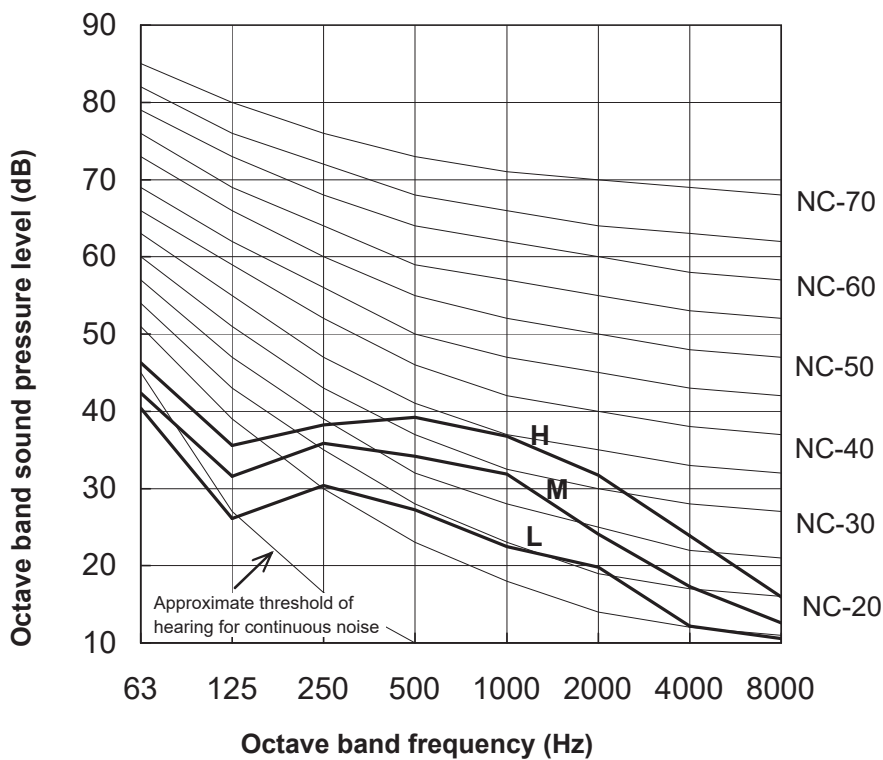
### RAV-RM561CTP-E / TR

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



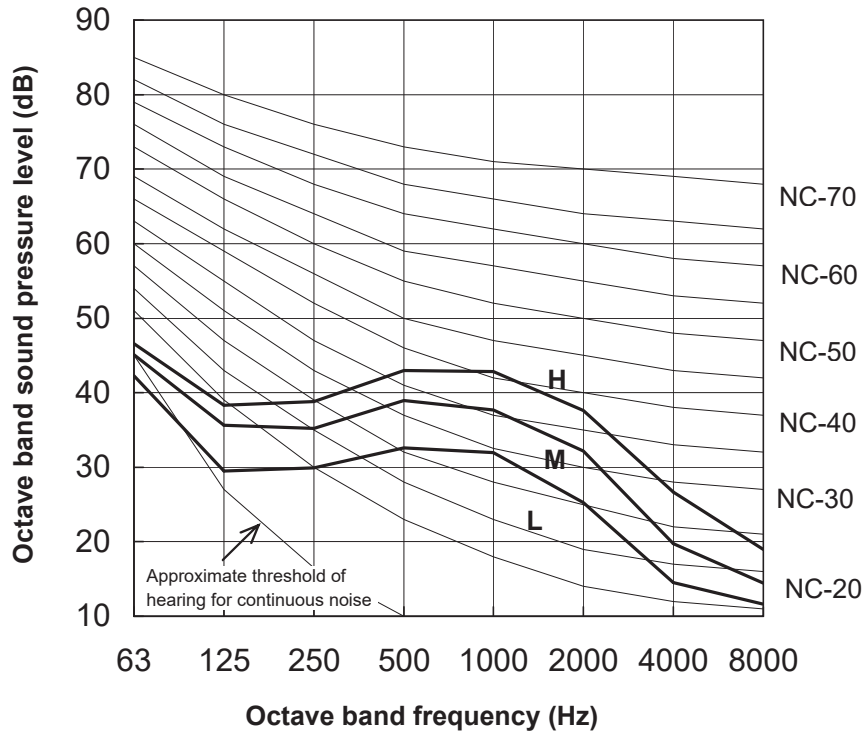
### RAV-RM801CTP-E / TR

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



**RAV-RM1601CTP-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)**

## 2-6-1. Specifications

### High Wall Type

Twin system : Single phase model

Model		Indoor unit 1		RAV-RM801KRTP-E / TR
		Indoor unit 2		RAV-RM801KRTP-E / TR
		Outdoor unit		RAV-GM1601AT(J)P-E / ATP-TR
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >	
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >	
Power supply		1 phase 220V-240V/50Hz, 1phase 220V/60Hz		
Electrical characteristics	Cooling	Power consumption (kW)		5.09
		EER		2.75
		PdesignC		14.0
		SEER		5.10
	Heating	Power consumption (kW)		4.98
		COP		3.21
		PdesignH(Tbiv-7°C)		8.00
		SCOP		4.00
	Maximum current (A)		29.0	
<b>Indoor unit</b>				
Appearance	Main unit		Pure white	
	Ceiling panel (Sold separately)	Model		-
		Panel color		-
Outer dimension	Main unit	Height (mm)	320	
		Width (mm)	1,050	
		Depth (mm)	250	
	Ceiling panel (Sold separately)	Height (mm)	-	
		Width (mm)	-	
		Depth (mm)	-	
Total weight	Main unit (kg)		14.0	
	Ceiling panel (Sold separately) (kg)		-	
Fan unit	Fan		Cross flow fan	
	Standard air flow	H/M/L (m3/h)	1040 / 910 / 680	
	Motor (W)		30	
External static pressure	Standard (Upper - Lower) (Pa)		-	
Air filter		Standard filter (Long life filter)		
Sound pressure level		H/M/L (dB)	45 / 41 / 35	
Sound power level		H/M/L (dB)	60 / 56 / 50	
Connecting pipe	Drain port		VP16	

\*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 35°C DB

## High Wall Type

## Twin system : Three phase model

Model		Indoor unit 1		RAV-RM801KRTP-E / TR
		Indoor unit 2		RAV-RM801KRTP-E / TR
		Outdoor unit		RAV-GM1601AT8(J)P-E / AT8P-TR
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >	
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >	
Power supply		3 phase 380V-415V/50Hz, 3phase 380V/60Hz		
Electrical characteristics	Cooling	Power consumption (kW)		5.09
		EER		2.75
		PdesignC		14.0
		SEER		5.10
	Heating	Power consumption (kW)		4.98
		COP		3.21
		PdesignH (Tbiv -7°C)		8.0
		SCOP		4.00
		Maximum current (A)		16.1
	<b>Indoor unit</b>			
Appearance	Main unit		Pure white	
	Ceiling panel (Sold separately)	Model	-	
Panel color		-		
Outer dimension	Main unit	Height (mm)	320	
		Width (mm)	1,050	
		Depth (mm)	250	
	Ceiling panel (Sold separately)	Height (mm)	-	
		Width (mm)	-	
		Depth (mm)	-	
Total weight	Main unit (kg)		14.0	
	Ceiling panel (Sold separately) (kg)		-	
Fan unit	Fan		Cross flow fan	
	Standard air flow	H/M/L (m3/h)	1040 / 910 / 680	
	Motor (W)		30	
External static pressure	Standard (Upper - Lower) (Pa)		-	
Air filter		Standard filter (Long life filter)		
Sound pressure level		H/M/L (dB)	45 / 41 / 35	
Sound power level		H/M/L (dB)	60 / 56 / 50	
Connecting pipe	Drain port		VP16	

\*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 35°C DB

## High Wall Type

Triple system : Single phase model

Model	Indoor unit 1		RAV-RM561KRTP-E / TR	
	Indoor unit 2		RAV-RM561KRTP-E / TR	
	Indoor unit 2		RAV-RM561KRTP-E / TR	
	Outdoor unit		RAV-GM1601AT(J)P-E / ATP-TR	
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >	
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >	
Power supply			1 phase 220V-240V/50Hz, 1phase 220V/60Hz	
Electrical characteristics	Cooling	Power consumption	(kW)	5.09
		EER		2.75
		PdesignC		14.0
		SEER		5.10
	Heating	Power consumption	(kW)	4.98
		COP		3.21
		PdesignH(Tbiv-7°C)		8.00
		SCOP		4.00
		Maximum current	(A)	29.0
<b>Indoor unit</b>				
Appearance	Main unit		Pure white	
	Ceiling panel (Sold separately)	Model	-	
		Panel color	-	
Outer dimension	Main unit	Height	(mm)	320
		Width	(mm)	1,050
		Depth	(mm)	250
	Ceiling panel (Sold separately)	Height	(mm)	-
		Width	(mm)	-
		Depth	(mm)	-
Total weight	Main unit		(kg)	14.0
	Ceiling panel (Sold separately)		(kg)	-
Fan unit	Fan		Cross flow fan	
	Standard air flow	H/M/L	(m <sup>3</sup> /h)	960 / 830 / 680
	Motor		(W)	30
External static pressure	Standard (Upper - Lower)		(Pa)	-
Air filter		Standard filter (Long life filter)		
Sound pressure level		H/M/L	(dB)	42 / 39 / 35
Sound power level		H/M/L	(dB)	57 / 54 / 50
Connecting pipe	Drain port		VP16	

\*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 35°C DB

## High Wall Type

Triple system : Three phase model

Model	Indoor unit 1		RAV-RM561KRTP-E / TR	
	Indoor unit 2		RAV-RM561KRTP-E / TR	
	Indoor unit 3		RAV-RM561KRTP-E / TR	
	Outdoor unit		RAV-GM1601AT8(J)P-E / AT8P-TR	
Cooling capacity		(kW)	14.0 < 3.0 - 16.0 >	
Heating capacity		(kW)	16.0 < 3.0 - 18.0 >	
Power supply			3 phase 380V-415V/50Hz, 3phase 380V/60Hz	
Electrical characteristics	Cooling	Power consumption	(kW)	5.09
		EER		2.75
		PdesignC		14.0
		SEER		5.10
	Heating	Power consumption	(kW)	4.98
		COP		3.21
		PdesignH (Tbiv -7°C)		8.00
		SCOP		4.00
		Maximum current	(A)	16.1
<b>Indoor unit</b>				
Appearance	Main unit		Pure white	
	Ceiling panel (Sold separately)	Model	-	
		Panel color	-	
Outer dimension	Main unit	Height	(mm)	320
		Width	(mm)	1,050
		Depth	(mm)	250
	Ceiling panel (Sold separately)	Height	(mm)	-
		Width	(mm)	-
		Depth	(mm)	-
Total weight	Main unit		(kg)	14.0
	Ceiling panel (Sold separately)		(kg)	-
Fan unit	Fan		Cross flow fan	
	Standard air flow	H/M/L	(m3/h)	960 / 830 / 680
	Motor		(W)	30
External static pressure	Standard (Upper - Lower)		(Pa)	-
Air filter		Standard filter (Long life filter)		
Sound pressure level		H/M/L	(dB)	42 / 39 / 35
Sound power level		H/M/L	(dB)	57 / 54 / 50
Connecting pipe	Drain port		VP16	

\*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.

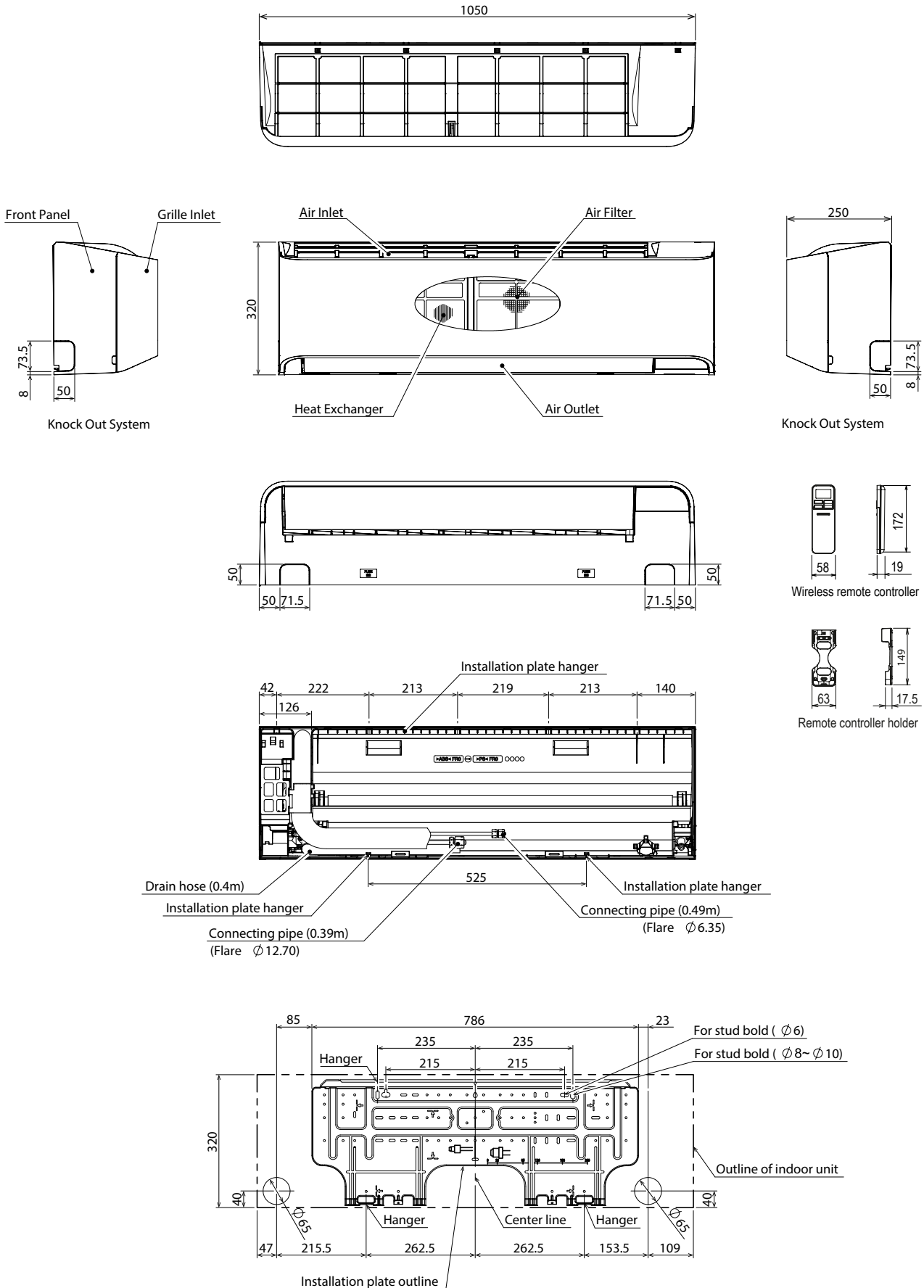
\*2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616. Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

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 35°C DB

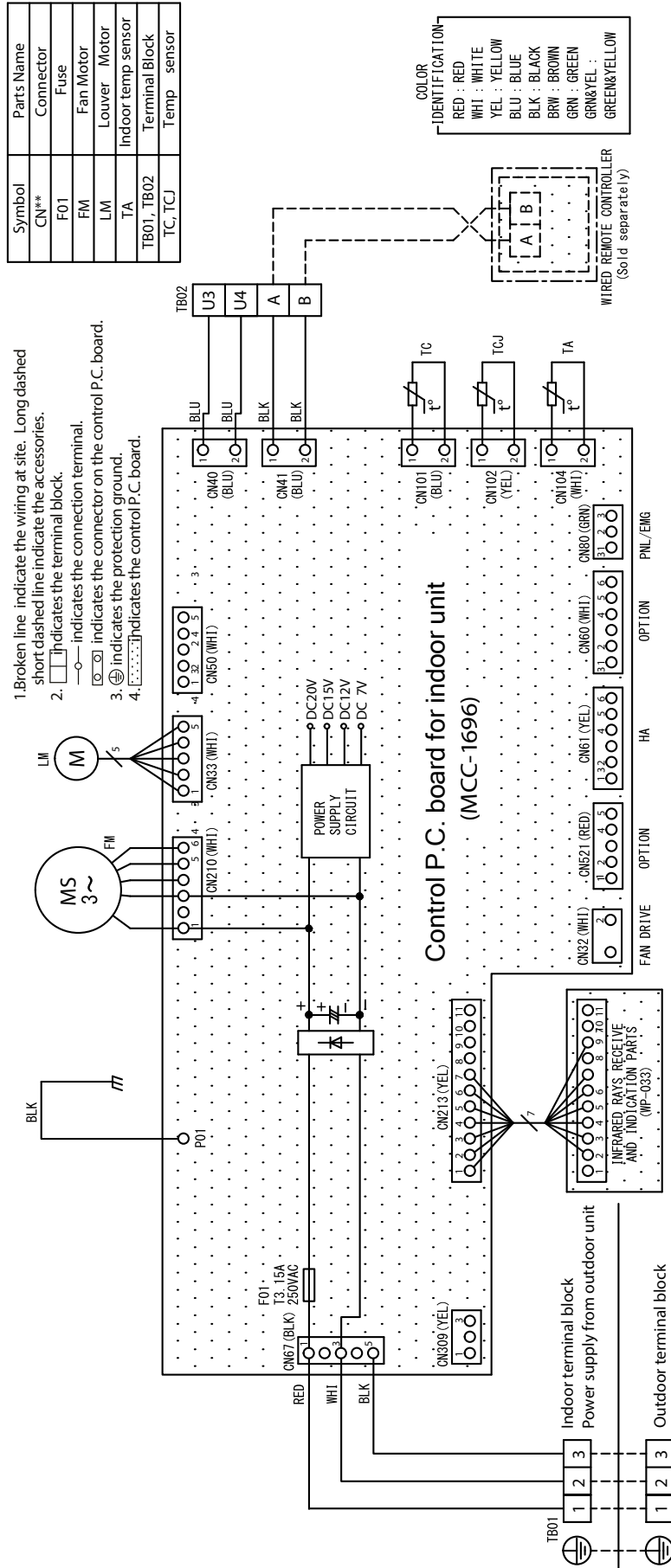
## 2-6-2. Dimension

### RAV-RM561KRTP-E / TR, RAV-RM801KRTP-E / TR



## 2-6-3. Wiring Diagrams

### RAV-RM561KRTP-E / TR, RAV-RM801KRTP-E / TR



## 2-6-4. Sensible Capacity Table

RAV-RM801KRTP-E / TR (Twin) : RAV-GP1601AT(J)P-E / ATP-TR, RAV-GP1601AT8(J)P-E / AT8P-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
801	10.0	6.7	4.7	7.0	4.9	7.4	5.2	7.6	5.4	7.9	5.6	8.1	5.7	8.3	5.9	8.8	6.2	9.2	6.5
	12.0	6.6	4.7	7.0	4.9	7.3	5.2	7.6	5.3	7.8	5.5	8.1	5.7	8.3	5.8	8.8	6.2	9.2	6.5
	14.0	6.6	4.6	6.9	4.9	7.3	5.1	7.5	5.3	7.8	5.5	8.0	5.6	8.2	5.8	8.7	6.1	9.1	6.4
	16.0	6.5	4.6	6.9	4.8	7.2	5.1	7.5	5.3	7.7	5.4	8.0	5.6	8.2	5.8	8.7	6.1	9.1	6.4
	18.0	6.5	4.6	6.8	4.8	7.2	5.0	7.4	5.2	7.7	5.4	7.9	5.6	8.1	5.7	8.6	6.1	9.0	6.3
	20.0	6.4	4.5	6.8	4.8	7.1	5.0	7.4	5.2	7.6	5.4	7.8	5.5	8.1	5.7	8.5	6.0	8.9	6.3
	21.0	6.4	4.5	6.7	4.7	7.1	5.0	7.3	5.2	7.6	5.3	7.8	5.5	8.0	5.6	8.5	6.0	8.9	6.3
	23.0	6.3	4.5	6.7	4.7	7.0	4.9	7.2	5.1	7.5	5.3	7.7	5.4	7.9	5.6	8.4	5.9	8.8	6.2
	25.0	6.3	4.4	6.6	4.6	6.9	4.9	7.2	5.0	7.4	5.2	7.6	5.4	7.9	5.5	8.3	5.9	8.7	6.1
	27.0	6.2	4.4	6.5	4.6	6.8	4.8	7.1	5.0	7.3	5.2	7.5	5.3	7.8	5.5	8.2	5.8	8.6	6.0
	29.0	6.1	4.3	6.4	4.5	6.7	4.8	7.0	4.9	7.2	5.1	7.4	5.2	7.7	5.4	8.1	5.7	8.5	6.0
	31.0	6.0	4.2	6.3	4.5	6.7	4.7	6.9	4.9	7.1	5.0	7.3	5.2	7.5	5.3	8.0	5.6	8.4	5.9
	33.0	5.9	4.2	6.2	4.4	6.5	4.6	6.8	4.8	7.0	4.9	7.2	5.1	7.4	5.2	7.9	5.5	8.2	5.8
	35.0	5.8	4.1	6.1	4.3	6.4	4.5	6.7	4.7	6.9	4.9	7.1	5.0	7.3	5.1	7.7	5.4	8.1	5.7
37.0	5.7	4.0	6.0	4.2	6.3	4.4	6.5	4.6	6.8	4.8	7.0	4.9	7.2	5.0	7.6	5.3	7.9	5.6	
39.0	5.6	3.9	5.9	4.2	6.2	4.4	6.4	4.5	6.6	4.7	6.8	4.8	7.0	4.9	7.4	5.2	7.8	5.5	

RAV-RM561KRTP-E / TR (Triple) : RAV-GP1601AT(J)P-E / ATP-TR, RAV-GP1601AT8(J)P-E / AT8P-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	3.8	4.9	4.1	5.2	4.3	5.4	4.4	5.6	4.6	5.7	4.7	5.9	4.8	6.2	5.1	6.5	5.3
	12.0	4.7	3.8	4.9	4.0	5.2	4.2	5.3	4.4	5.5	4.5	5.7	4.7	5.8	4.8	6.2	5.1	6.5	5.3
	14.0	4.6	3.8	4.9	4.0	5.1	4.2	5.3	4.3	5.5	4.5	5.6	4.6	5.8	4.8	6.1	5.0	6.4	5.3
	16.0	4.6	3.8	4.8	4.0	5.1	4.2	5.3	4.3	5.4	4.5	5.6	4.6	5.8	4.7	6.1	5.0	6.4	5.2
	18.0	4.6	3.7	4.8	3.9	5.0	4.1	5.2	4.3	5.4	4.4	5.6	4.6	5.7	4.7	6.1	5.0	6.3	5.2
	20.0	4.5	3.7	4.8	3.9	5.0	4.1	5.2	4.2	5.4	4.4	5.5	4.5	5.7	4.7	6.0	4.9	6.3	5.2
	21.0	4.5	3.7	4.7	3.9	5.0	4.1	5.2	4.2	5.3	4.4	5.5	4.5	5.6	4.6	6.0	4.9	6.3	5.1
	23.0	4.5	3.7	4.7	3.9	4.9	4.0	5.1	4.2	5.3	4.3	5.4	4.5	5.6	4.6	5.9	4.9	6.2	5.1
	25.0	4.4	3.6	4.6	3.8	4.9	4.0	5.0	4.1	5.2	4.3	5.4	4.4	5.5	4.5	5.9	4.8	6.1	5.0
	27.0	4.4	3.6	4.6	3.8	4.8	3.9	5.0	4.1	5.2	4.2	5.3	4.4	5.5	4.5	5.8	4.7	6.0	5.0
	29.0	4.3	3.5	4.5	3.7	4.8	3.9	4.9	4.0	5.1	4.2	5.2	4.3	5.4	4.4	5.7	4.7	6.0	4.9
	31.0	4.2	3.5	4.5	3.7	4.7	3.8	4.9	4.0	5.0	4.1	5.2	4.2	5.3	4.4	5.6	4.6	5.9	4.8
	33.0	4.2	3.4	4.4	3.6	4.6	3.8	4.8	3.9	4.9	4.1	5.1	4.2	5.2	4.3	5.5	4.5	5.8	4.8
	35.0	4.1	3.4	4.3	3.5	4.5	3.7	4.7	3.9	4.9	4.0	5.0	4.1	5.1	4.2	5.4	4.5	5.7	4.7
37.0	4.0	3.3	4.2	3.5	4.4	3.6	4.6	3.8	4.8	3.9	4.9	4.0	5.0	4.1	5.3	4.4	5.6	4.6	
39.0	3.9	3.2	4.2	3.4	4.4	3.6	4.5	3.7	4.7	3.8	4.8	3.9	4.9	4.1	5.2	4.3	5.5	4.5	

TC: Total Capacity [kW]

SHC: Sensible Heat Capacity [kW]



## 2-6-5. Part Load Performance

### Twin system

Indoor Unit : RAV-RM801KRTP-E / TR (x2)

Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	5091	16000	4980

Q: Capacity in W

W: Power Consumption in W

### Cooling

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11200	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5420	5140	4250	3440	2720	2100	1550	1090	780	780
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	5630	4730	3910	3170	2510	1930	1430	1010	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	5160	4340	3590	2910	2300	1770	1310	920	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	5091	4280	3540	2870	2270	1750	1290	910	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3710	3120	2580	2090	1650	1280	940	660	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	3050	2570	2120	1720	1360	1050	770	550	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2440	2050	1700	1380	1090	840	620	440	310	310

### Heating

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5500	4630	3850	3130	2500	1940	1470	1070	760	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	5210	4390	3640	2960	2370	1840	1390	1020	720	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4980	4190	3480	2830	2260	1760	1330	970	690	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4830	4060	3370	2740	2190	1710	1290	940	670	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4590	3860	3210	2610	2080	1620	1220	890	640	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	4070	3420	2840	2310	1850	1440	1090	790	560	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3980	3350	2780	2260	1810	1410	1060	780	550	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3940	3320	2760	2240	1790	1390	1050	770	550	510
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3750	3160	2620	2130	1700	1330	1000	730	520	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3520	2960	2460	2000	1600	1240	940	690	490	460

**Triple system**

Indoor Unit : RAV-RM561KRTP-E / TR (x3)

Outdoor unit : RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR

	Cooling		Heating	
	Capacity(W)	Power consumption (W)	Capacity(W)	Power consumption (W)
MINIMUM	3000	650	3000	650
RATING	14000	5091	16000	4980

Q: Capacity in W

W: Power Consumption in W

**Cooling**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11200	10840	9630	8430	7220	6020	4820	3610	2580	2580
	W	5420	5140	4250	3440	2720	2100	1550	1090	780	780
43	Q	12660	11390	10120	8860	7590	6330	5060	3800	2710	2710
	W	5630	4730	3910	3170	2510	1930	1430	1010	720	720
40	Q	13150	11830	10520	9200	7890	6570	5260	3940	2820	2820
	W	5160	4340	3590	2910	2300	1770	1310	920	660	660
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	3000	3000
	W	5091	4280	3540	2870	2270	1750	1290	910	650	650
30	Q	14900	13410	11920	10430	8940	7450	5960	4470	3190	3190
	W	3710	3120	2580	2090	1650	1280	940	660	470	470
25	Q	15830	14250	12660	11080	9500	7910	6330	4750	3390	3390
	W	3050	2570	2120	1720	1360	1050	770	550	390	390
20	Q	16800	15120	13440	11760	10080	8400	6720	5040	3600	3600
	W	2440	2050	1700	1380	1090	840	620	440	310	310

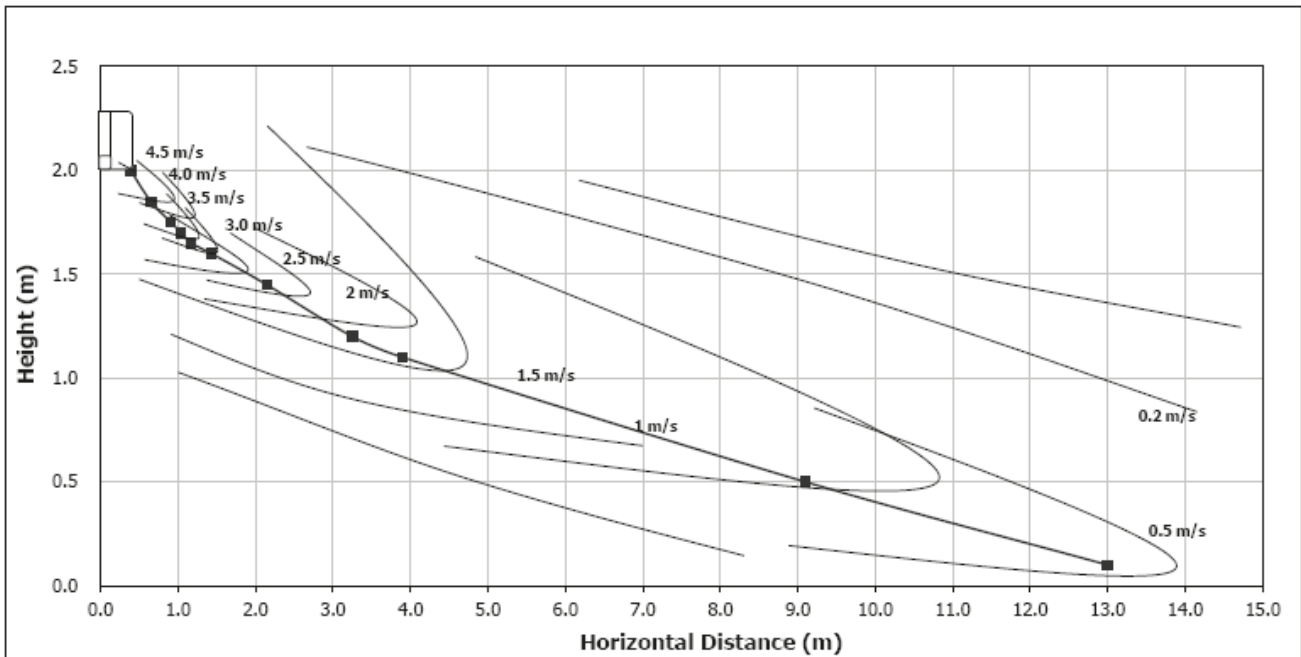
**Heating**

Outdoor temperature(°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19300	17370	15440	13510	11580	9650	7720	5790	3860	3620
	W	5500	4630	3850	3130	2500	1940	1470	1070	760	720
10	Q	17260	15540	13810	12080	10360	8630	6910	5180	3450	3240
	W	5210	4390	3640	2960	2370	1840	1390	1020	720	680
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	3000
	W	4980	4190	3480	2830	2260	1760	1330	970	690	650
5	Q	15170	13650	12130	10620	9100	7580	6070	4550	3030	2840
	W	4830	4060	3370	2740	2190	1710	1290	940	670	630
2	Q	12000	10800	9600	8400	7200	6000	4800	3600	2400	2250
	W	4590	3860	3210	2610	2080	1620	1220	890	640	600
0	Q	11680	10510	9340	8180	7010	5840	4670	3500	2340	2190
	W	4070	3420	2840	2310	1850	1440	1090	790	560	530
-5	Q	10880	9790	8700	7620	6530	5440	4350	3260	2180	2040
	W	3980	3350	2780	2260	1810	1410	1060	780	550	520
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1840
	W	3940	3320	2760	2240	1790	1390	1050	770	550	510
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1690
	W	3750	3160	2620	2130	1700	1330	1000	730	520	490
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1420
	W	3520	2960	2460	2000	1600	1240	940	690	490	460

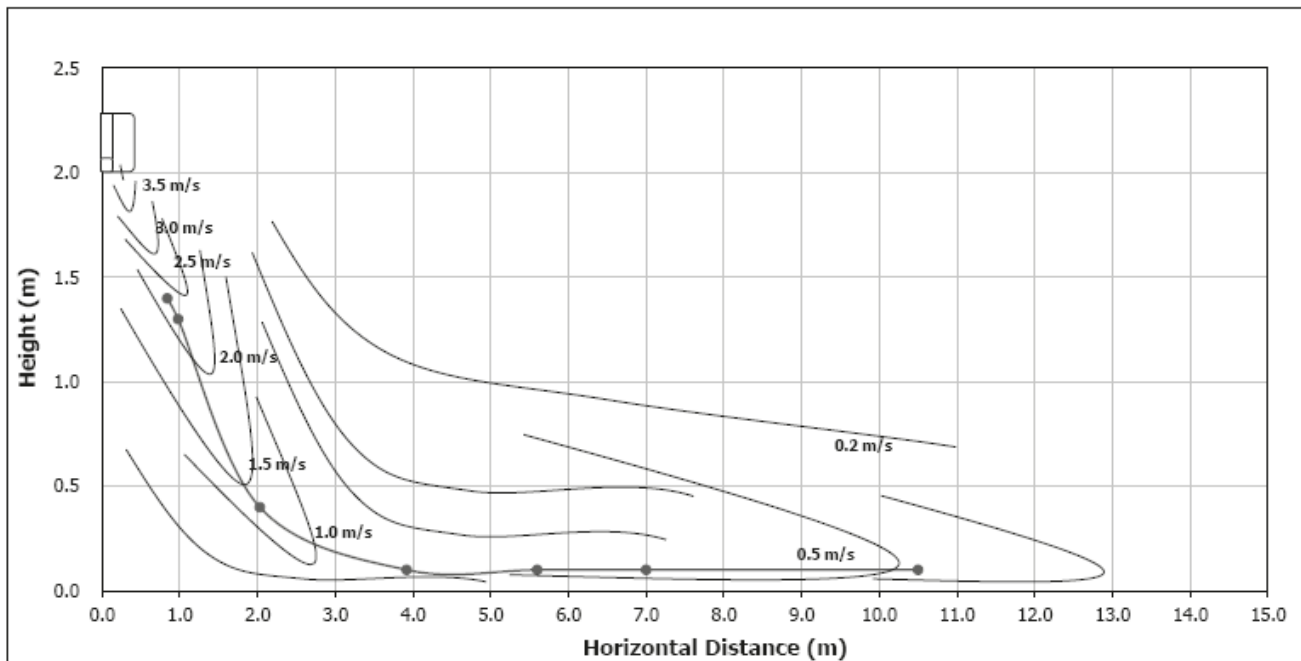
## 2-6-6. Air Throw Distance Chart

RAV-RM561KRTP-E / TR

### Cooling

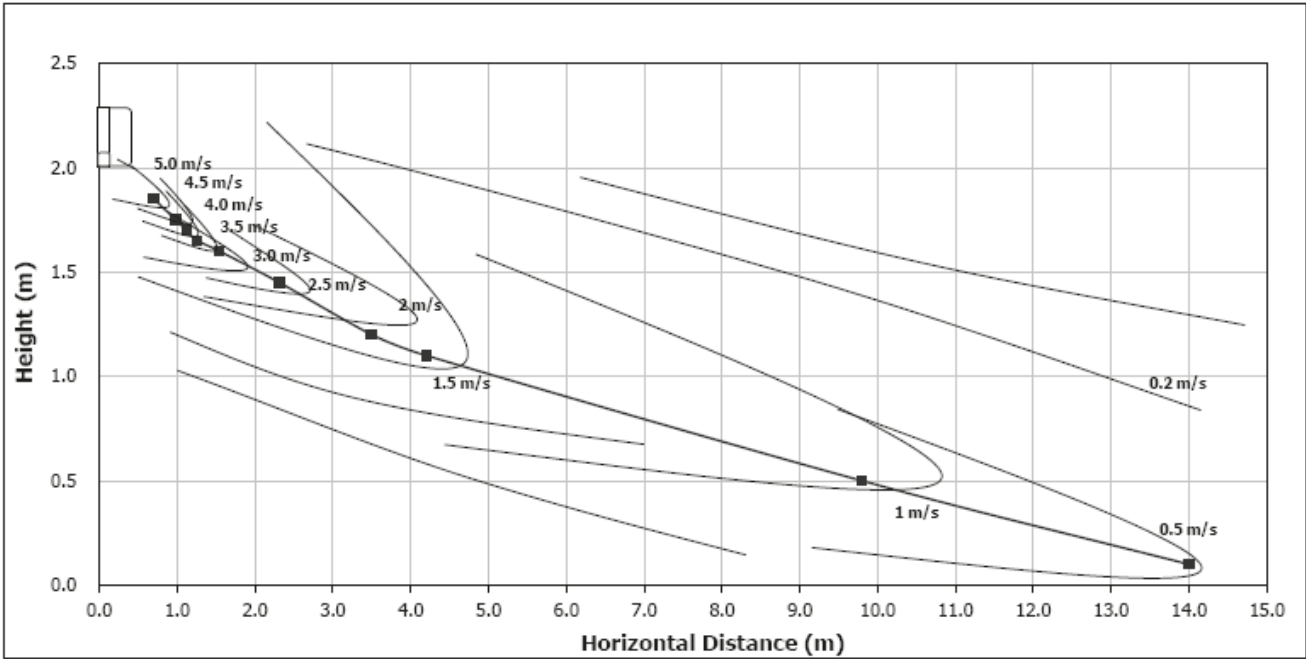


### Heating

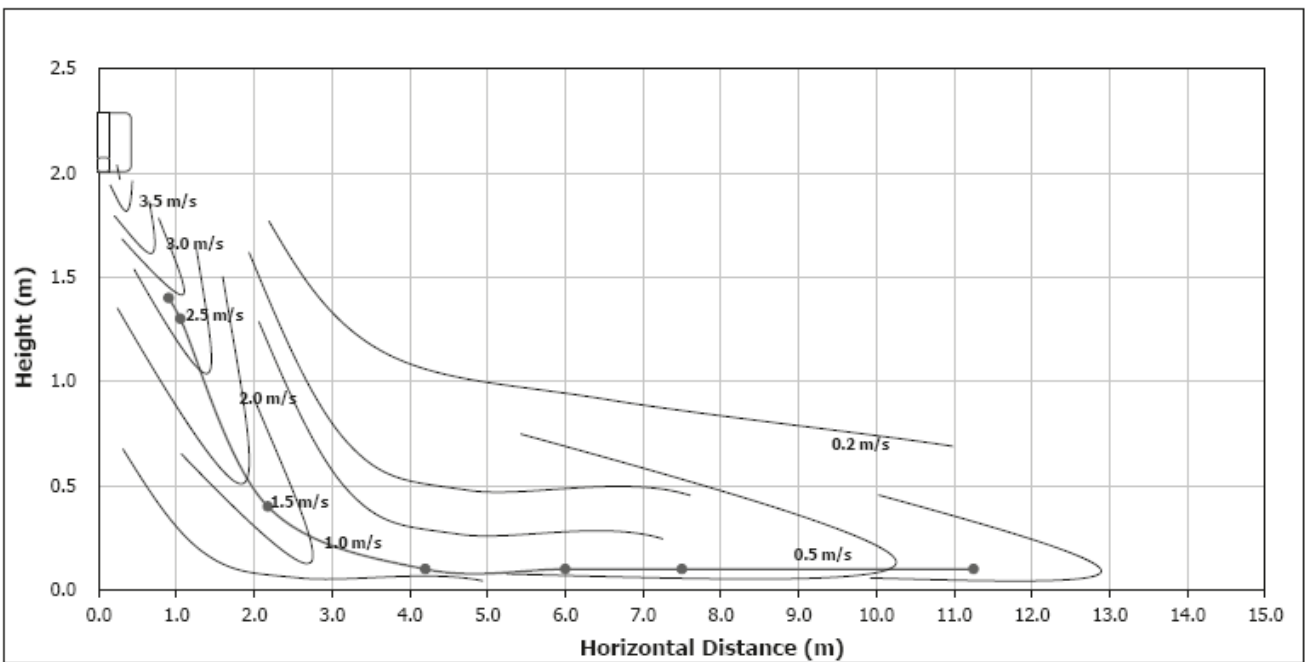


RAV-RM801KRTP-E / TR

Cooling



Heating

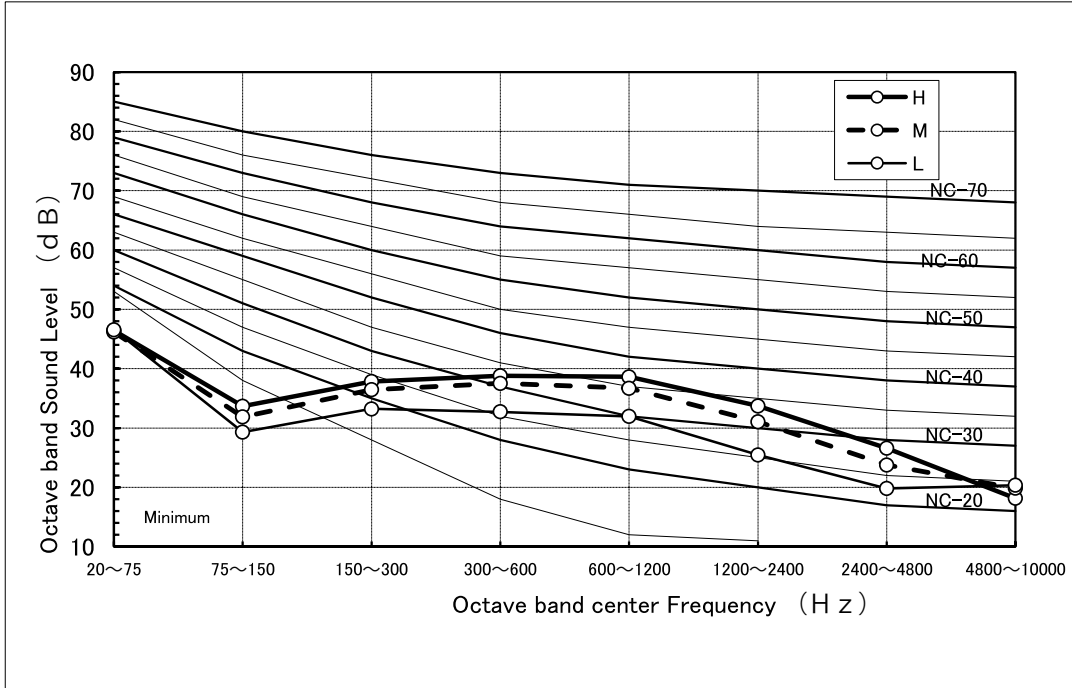


## 2-6-7. Sound characteristics (NC curve)

RAV-RM561KRTP-E / TR

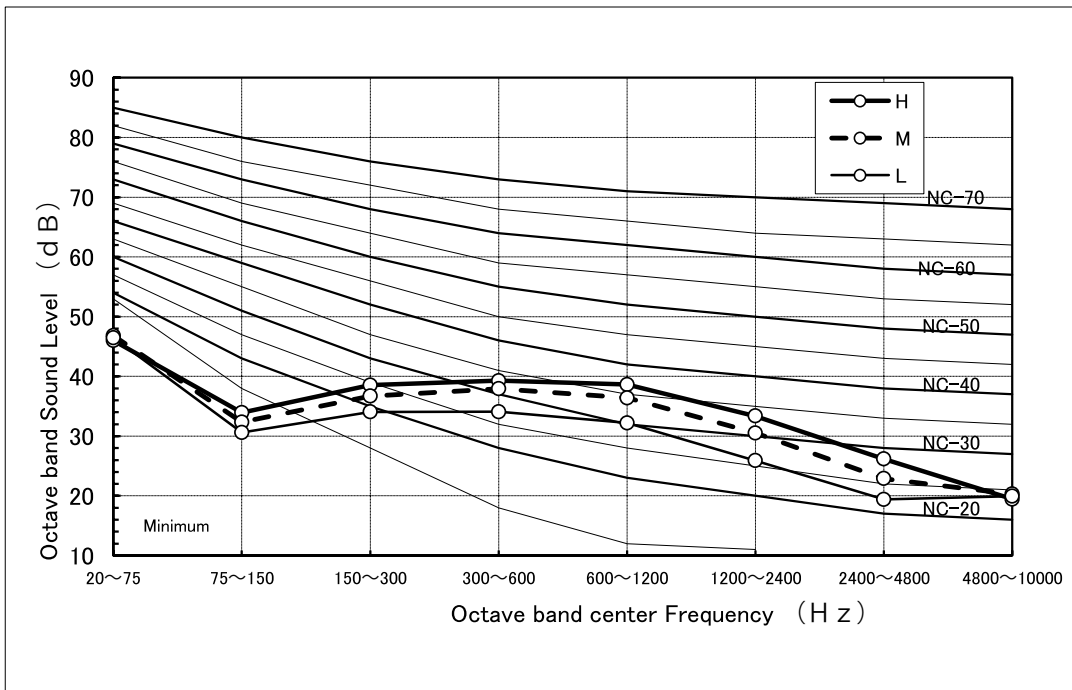
### Cooling

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



### Heating

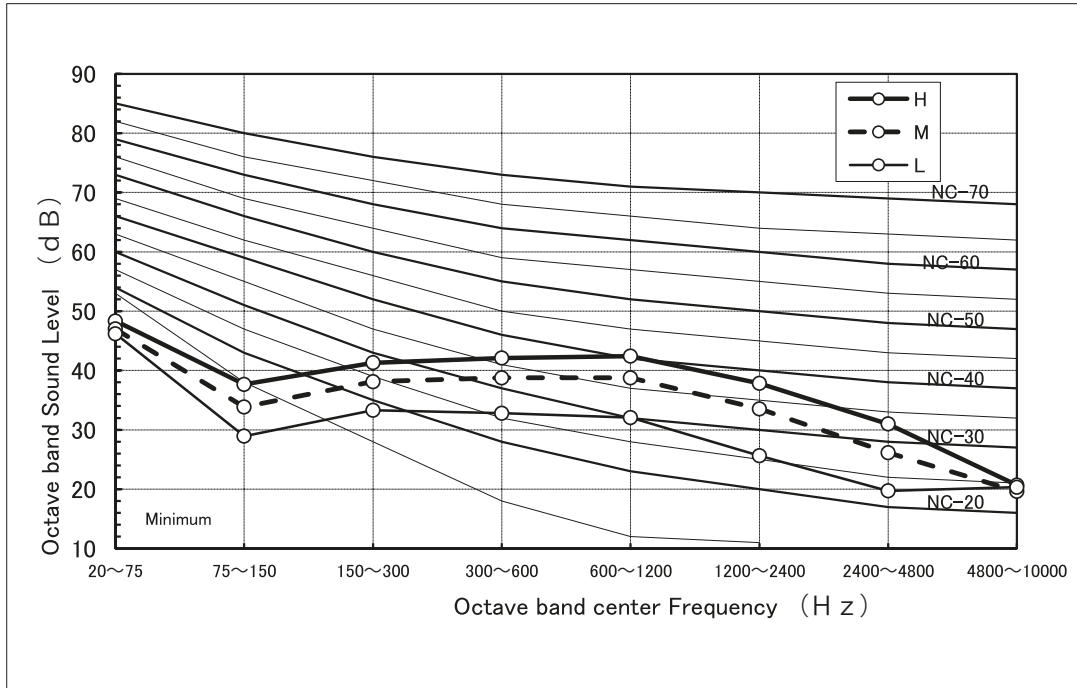
Specification (d B)			
Fan tap	H	M	L
Sound pressure level (dB(A))	42	39	35



RAV-RM801KRTP-E / TR

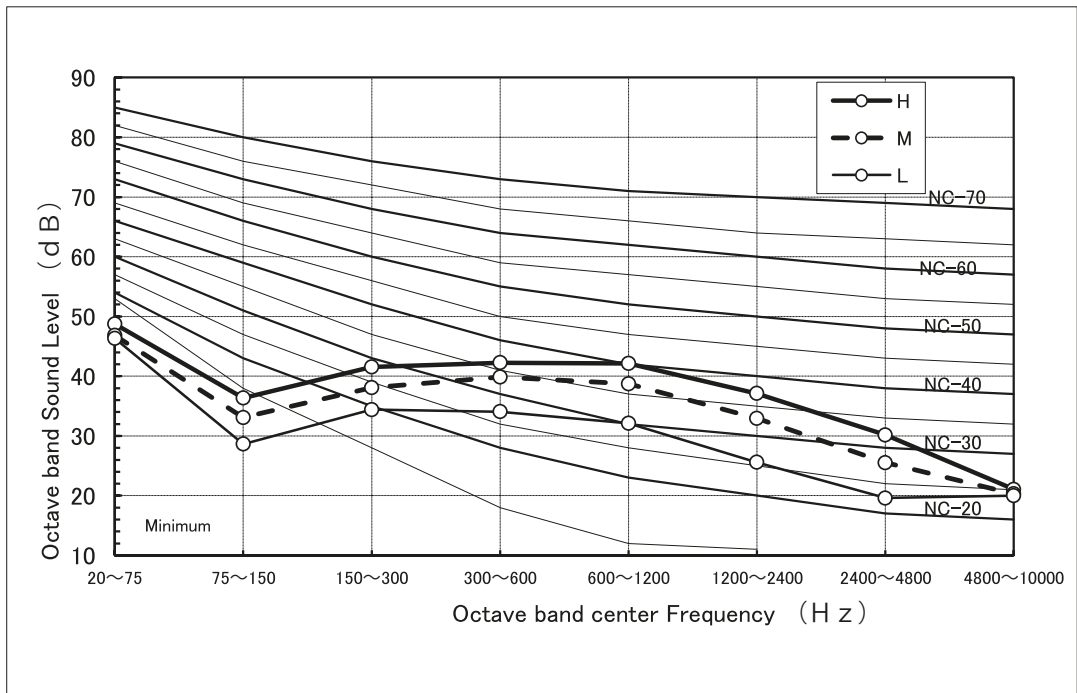
Cooling

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**

### **3-1. Specifications**

### **3-2. Dimension**

### **3-3. Wiring Diagrams**

### **3-4. Refrigerant Cycle Diagram**

### **3-5. Sound Characteristic**

### **3-6. Connecting Pipe Length and Lift Difference Between Indoor Units VS. Capacity Correction Value**

### 3-1 Specification

Model name	Outdoor unit	RAV-GM1601AT(J)P-E / ATP-TR		
Power supply	1 phase 220-240v, 50Hz 1 phase 220v, 60Hz (Power exclusive to outdoor is required.)			
Compressor	Type	Hermetic compressor		
	Motor (kW)	3.75		
	Pole	4		
Refrigerant charged	(kg)	2.4		
Refrigerant control	Pulse motor valve			
Inter connecting pipe	Standard length	(m)	7.5	
	Min. length	(m)	5	
	Max. total length	(m)	50	
	Additional refrigerant charge under long piping connector		35g/m (31m to 50m)	
	Height difference	Outdoor lower	(m)	30
Outdoor higher		(m)	30	
Outer dimension	Height	(mm)	1340	
	Width	(mm)	900	
	Depth	(mm)	320	
Appearance	Silky shade (Muncel 1Y8.5/0.5)			
Total weight	(kg)	95		
Heat exchanger	Finned tube			
Fan unit	Fan	Propeller fan		
	Standard air flow high	(m <sup>3</sup> /min.)	115	
	Motor	(W)	100+100	
Connecting pipe	Gas side	(mm)	15.9	
	Liquid side	(mm)	6.4	
Sound pressure level	Cooling/Heating (dB A)	53/55		
Sound power level	Cooling/Heating (dB A)	70/72		
Outside air temperature, Cooling	°C (Dry bulb temp.)	-15 to 46		
Outside air temperature, Heating	°C (Wet bulb temp.)	-15 to 15		

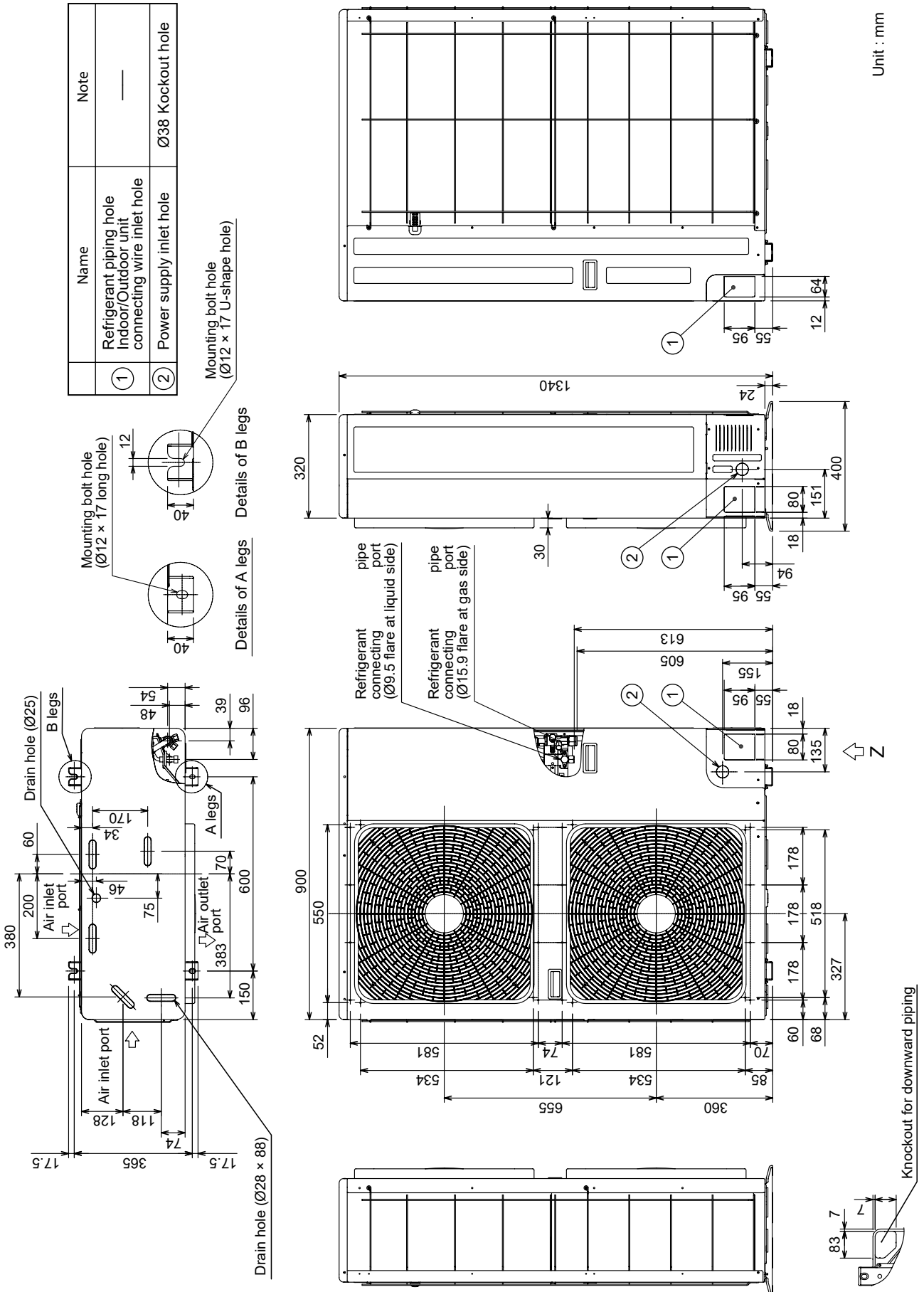


Model name	Outdoor unit	RAV-GM1601AT8P-E	RAV-GM1601AT8JP-E	
Power supply		3 phase 380-415V 50Hz 3 phase 380V 60Hz (Power exclusive to outdoor is required.)		
Compressor	Type	Hermetic compressor		
	Motor (kW)	3.75		
	Pole	4		
Refrigerant charged (kg)		2.4		
Refrigerant control		Pulse motor valve		
Inter connecting pipe	Standard length (m)	7.5		
	Max. total length (m)	50		
	Additional refrigerant charge under long piping connector		35g/m (Over 30m)	
	Height difference	Outdoor lower (m)	30	
Outdoor higher (m)		30		
Outer dimension	Height (mm)	1340		
	Width (mm)	900		
	Depth (mm)	320		
Appearance		Silky shade (Muncel 1Y8.5/0.5)		
Total weight (kg)		94		
Heat exchanger		Finned tube		
Fan unit	Fan	Propeller fan		
	Standard air flow high (m <sup>3</sup> /min.)	138		
	Motor (W)	100		
Connecting pipe	Gas side (mm)	15.9		
	Liquid side (mm)	9.52		
Sound pressure level	Cooling/Heating (dB·A)	53/55		
Sound power level	Cooling/Heating (dB·A)	70/72		
Outside air temperature, cooling	°C (Dry bulb temp.)	-15 to 46		
Outside air temperature, heating	°C (Wet bulb temp.)	-15 to 15		

Model name	Outdoor unit	RAV-GM1601AT8P-TR	
Power supply		3 phase 380-415V 50Hz 3 phase 380V 60Hz (Power exclusive to outdoor is required.)	
Compressor	Type	Hermetic compressor	
	Motor (kW)	3.75	
	Pole	4	
Refrigerant charged (kg)		2.4	
Refrigerant control		Pulse motor valve	
Inter connecting pipe	Standard length (m)	7.5	
	Max. total length (m)	50	
	Additional refrigerant charge under long piping connector		35g/m (Over 30m)
	Height difference	Outdoor lower (m)	30
Outdoor higher (m)		30	
Outer dimension	Height (mm)	1340	
	Width (mm)	900	
	Depth (mm)	320	
Appearance		Silky shade (Muncel 1Y8.5/0.5)	
Total weight (kg)		91	
Heat exchanger		Finned tube	
Fan unit	Fan	Propeller fan	
	Standard air flow high (m <sup>3</sup> /min.)	138	
	Motor (W)	100	
Connecting pipe	Gas side (mm)	15.9	
	Liquid side (mm)	9.52	
Sound pressure level	Cooling/Heating (dB·A)	53/55	
Sound power level	Cooling/Heating (dB·A)	70/72	
Outside air temperature, cooling	°C (Dry bulb temp.)	-15 to 46	
Outside air temperature, heating	°C (Wet bulb temp.)	-15 to 15	

### 3-2. Dimension

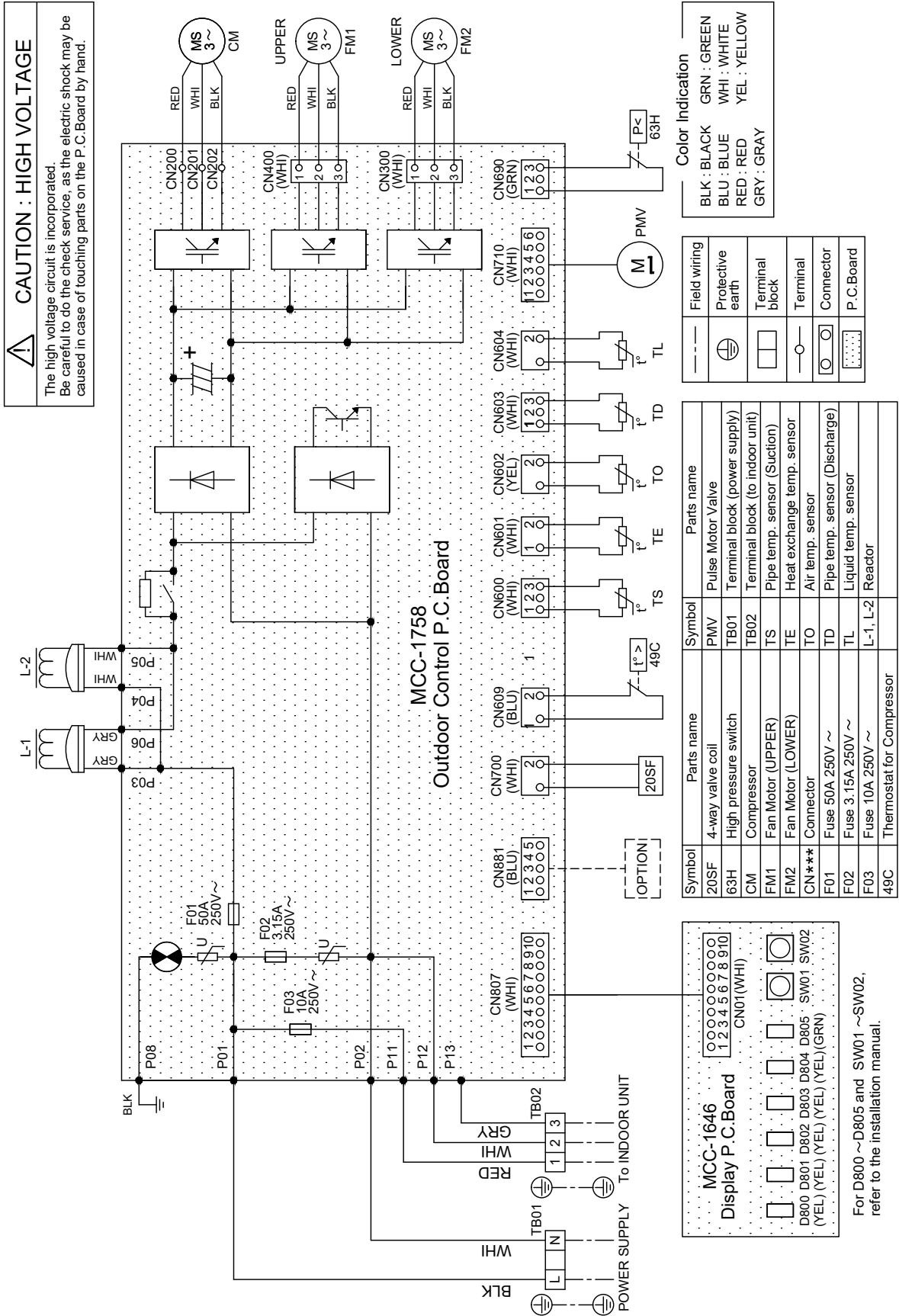
RAV-GM1601AT(J)P-E / ATP-TR, RAV-GM1601AT8(J)P-E / AT8P-TR



Unit : mm

### 3-3. Wiring diagrams

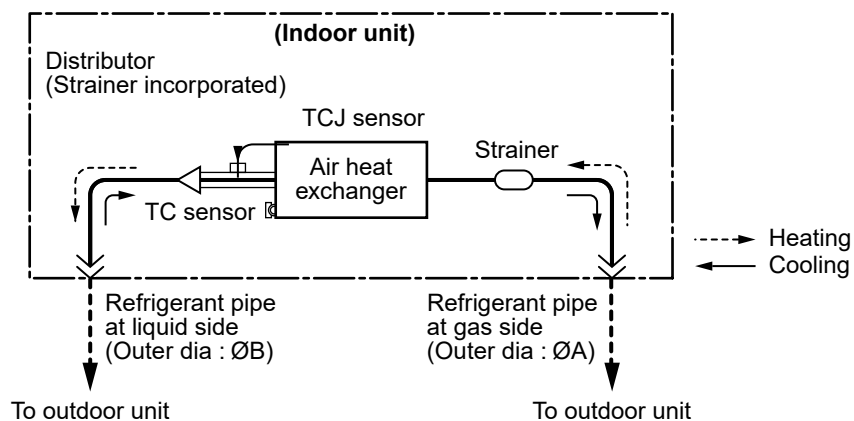
RAV-GM1601AT(J)P- E / ATP-TR, RAV-GM1601AT8(J)P- E / AT8P-TR



### 3-4. Refrigerant cycle diagram

#### Indoor unit

#### Single type ( combination of 1 indoor unit and 1 out door unit )

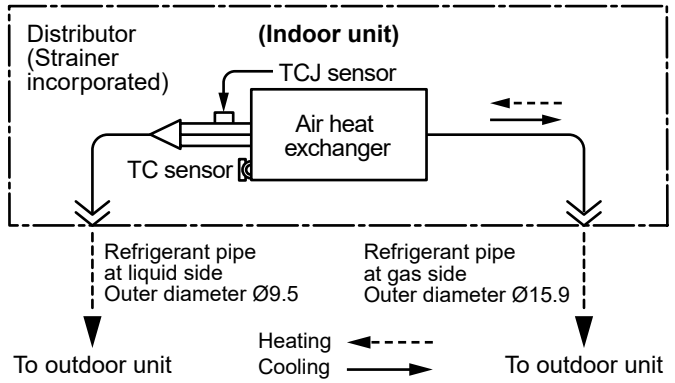


#### Dimension table

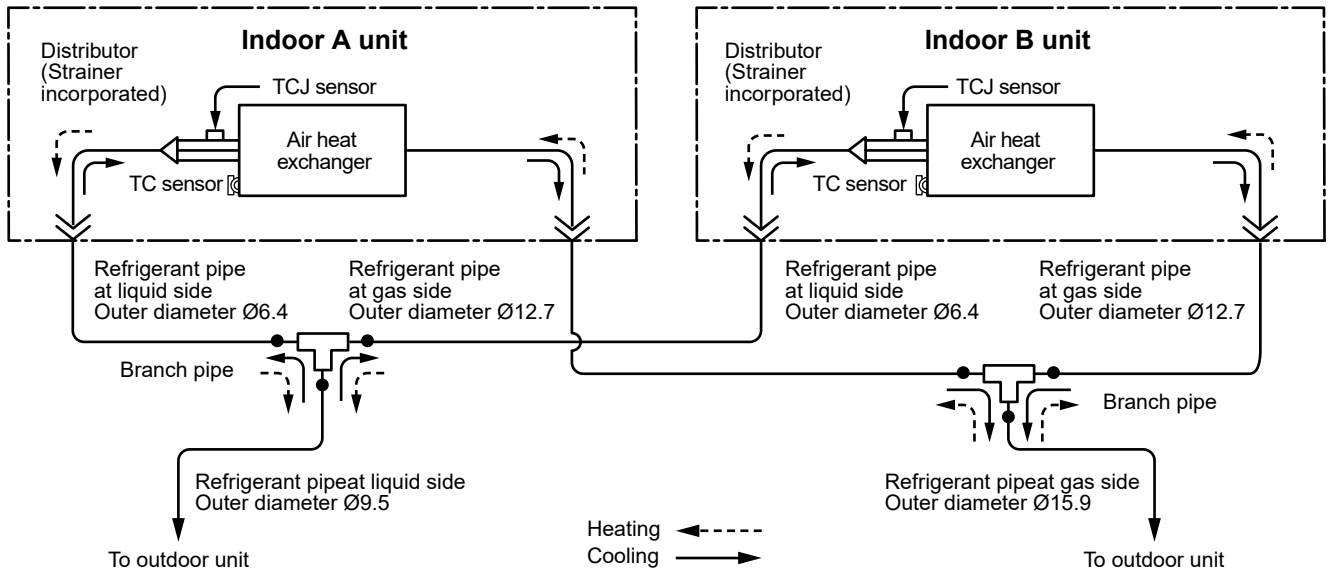
Indoor unit	Outer diameter of refrigerant pipe	
	Gas side ØA	Liquid side ØB
RM160 type	15.9	9.5

< Indoor unit to be connected to RAV-RM1601ATP\*

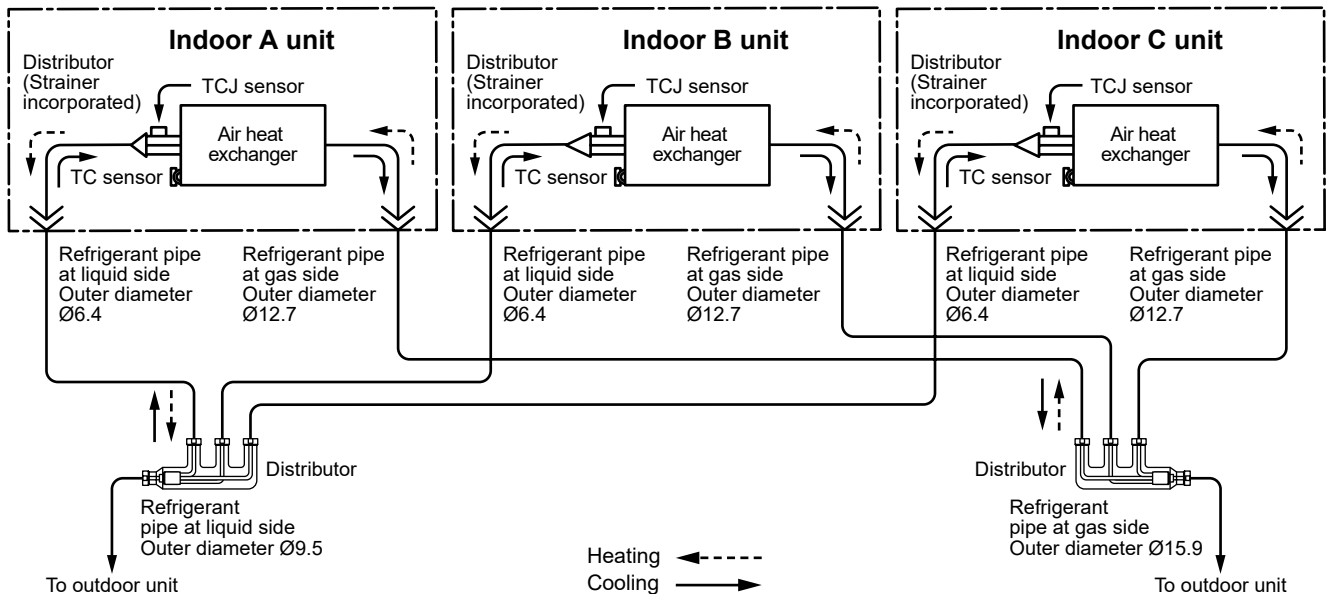
- **Single type**  
(Combination of one indoor unit and one outdoor unit)



- **Twin type (Combination of two indoor units and one outdoor unit)**

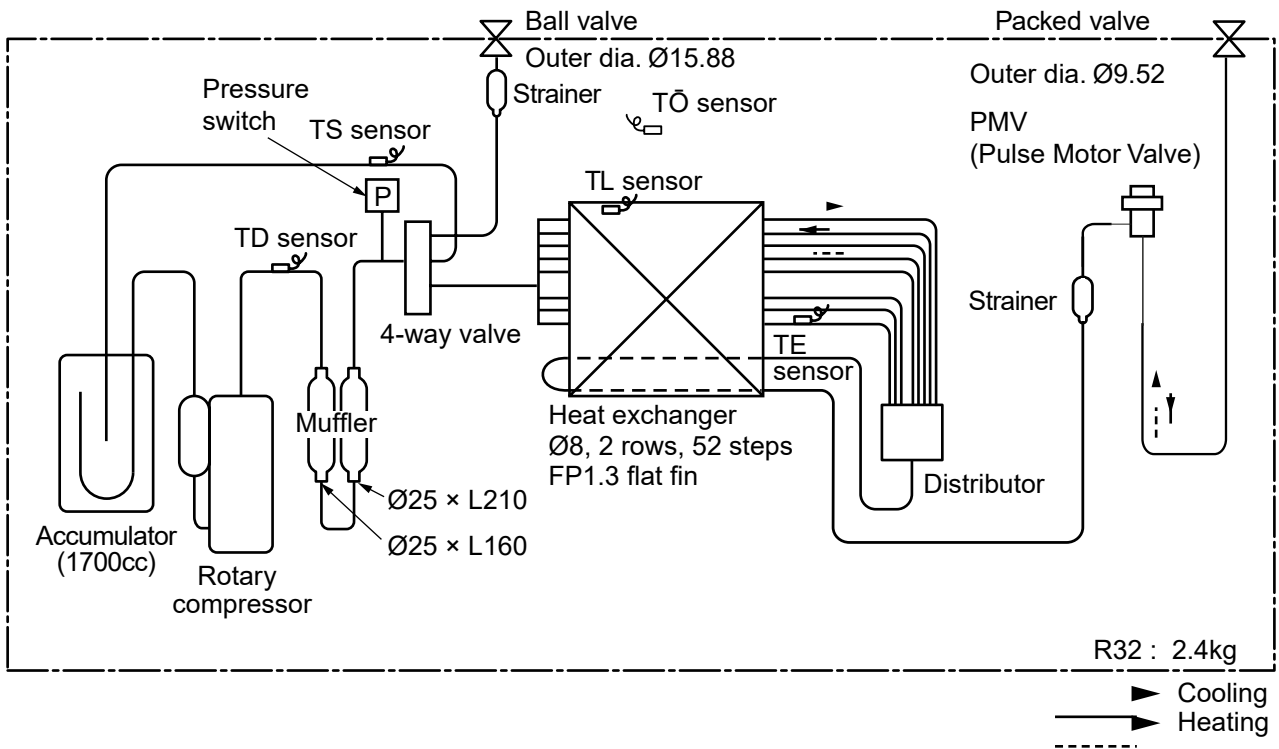


- **Triple type (Combination of three indoor units and one outdoor unit)**



Outdoor unit

RAV-GM1601AT \*P\*



RAV-GM1601AT \*P\*

		Pressure				Pipe surface temperature (°C)				* Comp. Hz	Fan	Temp	
		(MPa)		(kg/cm <sup>2</sup> G)		(TD)	(TS)	(TC)	(TE)			In	Out
		Pd	Ps	Pd	Ps								
Cooling	Standard	2.86	0.85	29.2	8.7	91	8	8	39	68	HIGH	27/19	35/-
	Overload	3.40	0.97	34.7	9.9	82	12	15	54	67	HIGH	32/23	46/-
	Low load	2.92	0.74	29.8	7.5	66	3	4	47	30	LOW	18/13	-15/-
Heating	Standard	2.97	0.63	50.3	6.4	88	1	49	3	68	HIGH	20/-	7/6
	Overload	3.10	1.12	30.6	11.4	86	19	52	16	27	LOW	27/-	24/18
	Low load	2.22	0.26	22.6	2.6	84	-18	36	-17	81	HIGH	15/-	-15/-

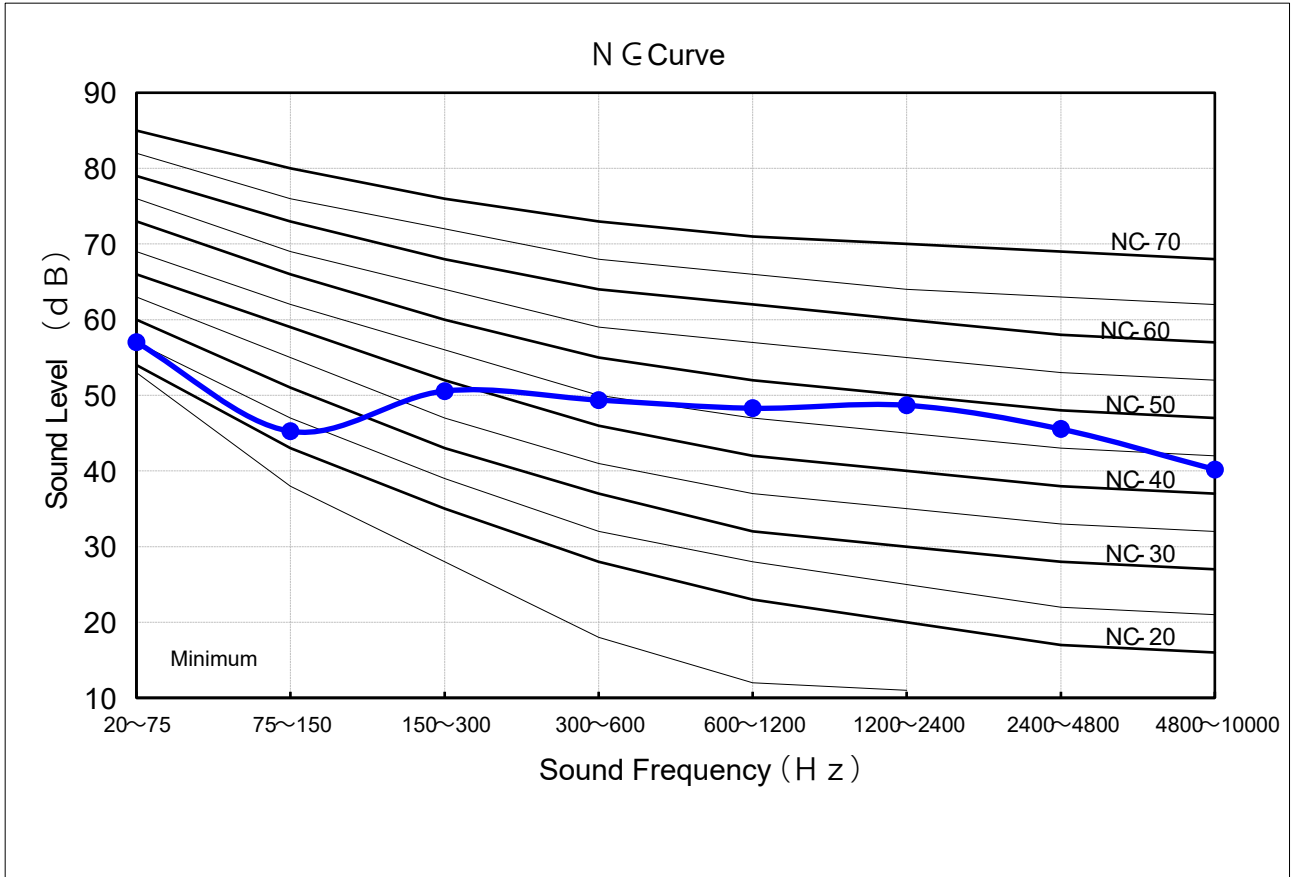
\* 4 poles are provided to this compressor.

The compressor frequency (Hz) measured with a clamp meter is 2 times of revolutions (rps) of the compressor.

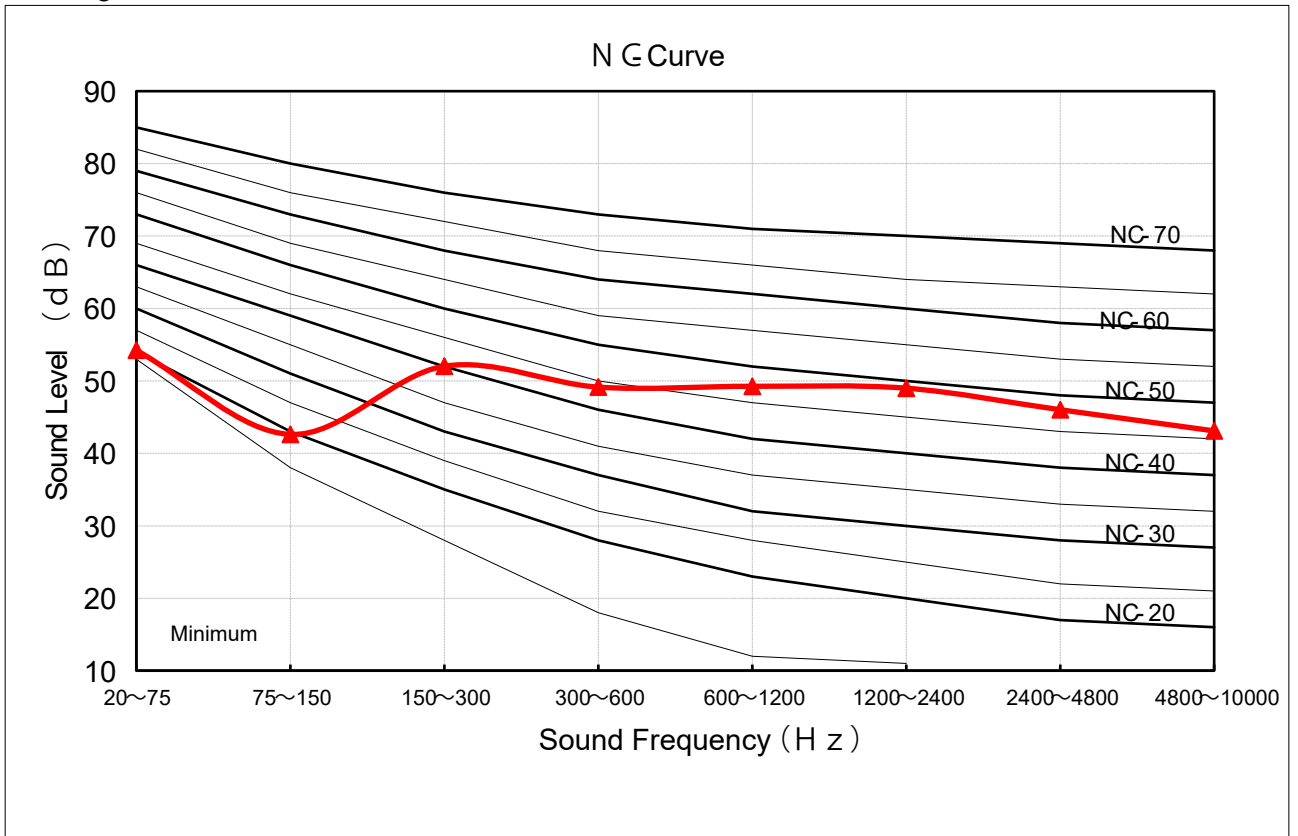
### 3-5. Sound characteristics (NC curve)

RAV-GM1601AT(J)P- E / ATP-TR, RAV-GM1601AT8(J)P- E / AT8P-TR

Cooling

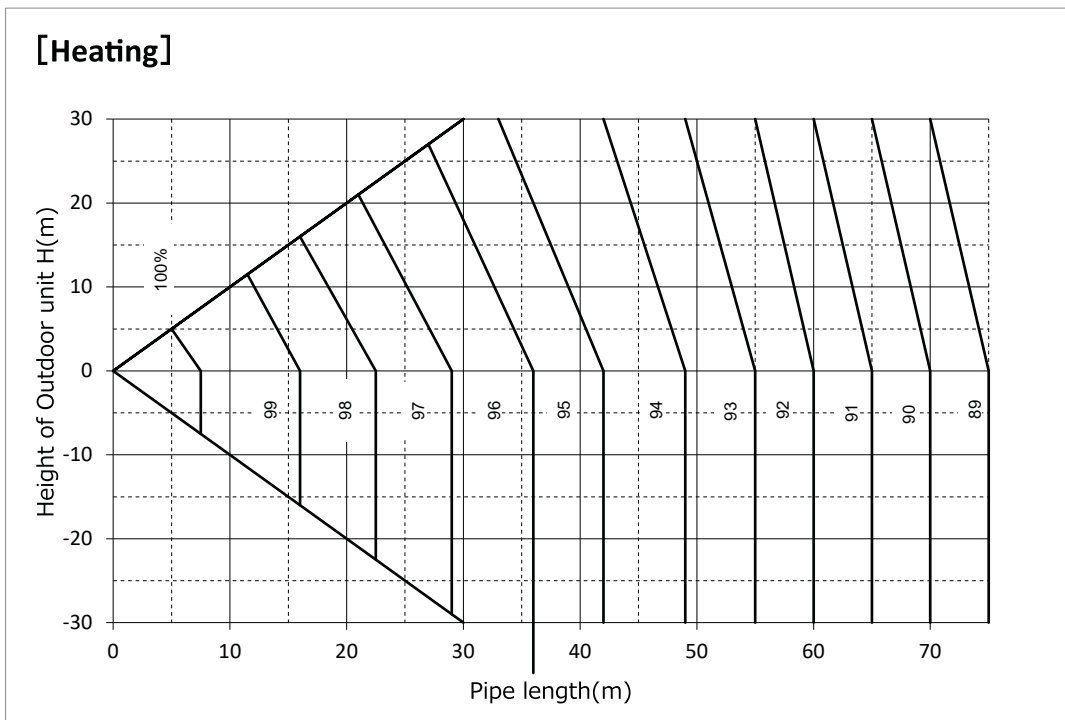
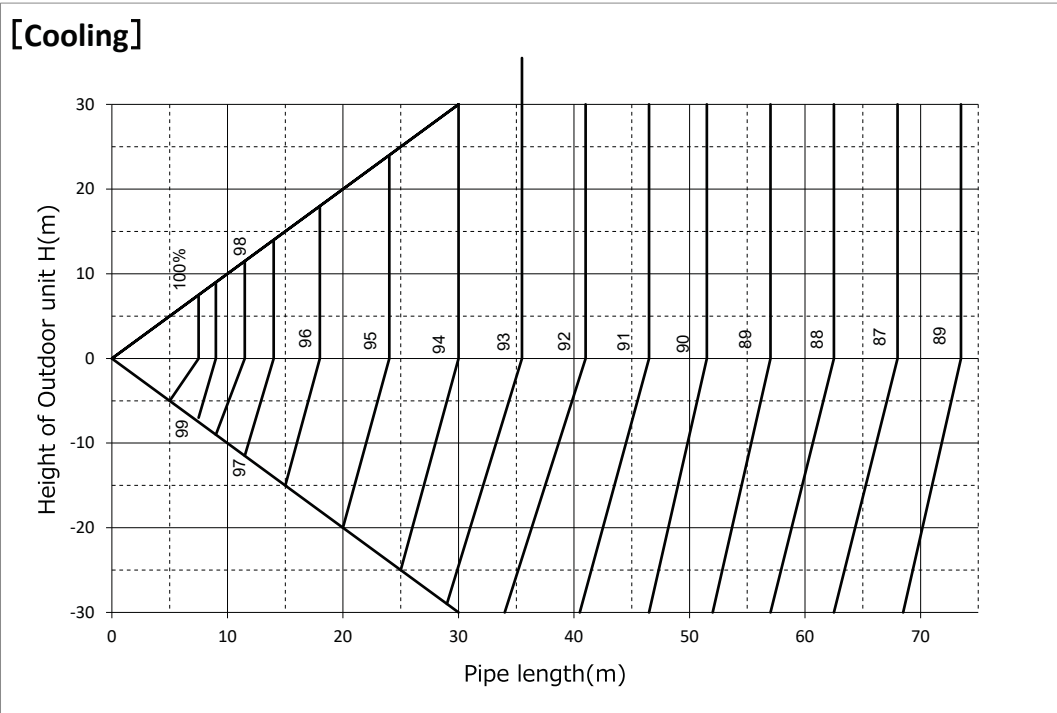
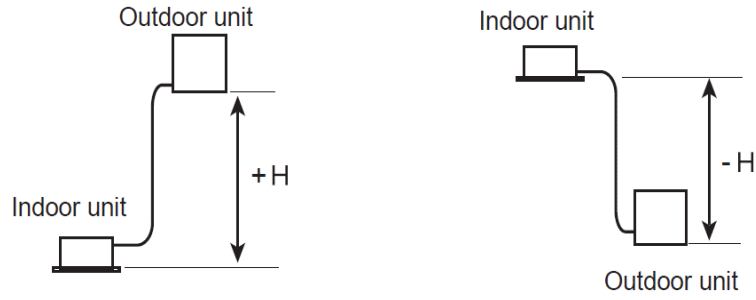


Heating





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



Charging additional refrigerant

Figure of Single

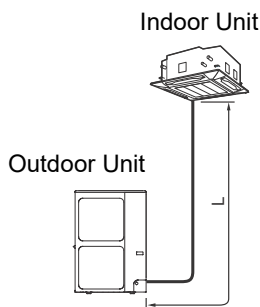


Figure of Simultaneous twin

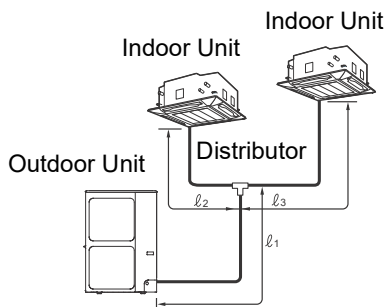
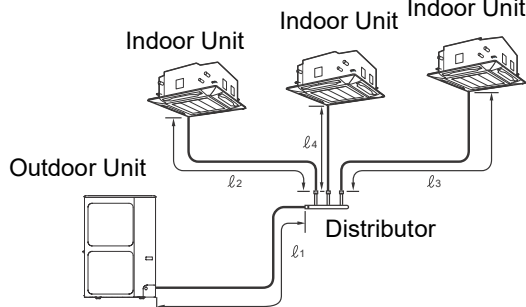


Figure of Simultaneous triple



Formula for calculating the amount of additional refrigerant  
 (Formula will differ depending on the diameter of the liquid connecting side pipe.)

\*  $l_1$  to  $l_4$  are the lengths of the pipes shown in the figures above (unit: m).

Single

Diameter of connecting pipe (liquid side)	Amount of additional refrigerant per meter (g/m)	Amount of additional refrigerant (g) = Amount of refrigerant charged for main pipe
$l$	$\alpha$	
Ø9.5	40	$\alpha \times (l - 30)$

Simultaneous twin

Outdoor unit	Diameter of connecting pipe (liquid side)			Amount of additional refrigerant per meter (g/m)		Amount of additional refrigerant (g) = Amount of refrigerant charged for main pipe + amount of refrigerant charged for branch piping
	$l_1$	$l_2$	$l_3$	$\alpha$	$\beta$	
GM160	Ø9.5	Ø9.5	Ø9.5	40	40	$\alpha \times (l_1 - 28) + \beta \times (l_2 + l_3 - 4)$

Simultaneous triple

Outdoor unit	Diameter of connecting pipe (liquid side)				Amount of additional refrigerant per meter (g/m)		Amount of additional refrigerant (g) = Amount of refrigerant charged for main pipe + amount of refrigerant charged for branch piping
	$l_1$	$l_2$	$l_3$	$l_4$	$\alpha$	$\beta$	
GM160	Ø9.5	Ø6.4	Ø6.4	Ø6.4	40	20	$\alpha \times (l_1 - 28) + \beta \times (l_2 + l_3 + l_4 - 6)$

### 4. Optional Accessories

Accessory Parts List		4-way Cassette	Compact 4-way	Slim duct	Standard duct	Ceiling	High wall
		series 1	series 1	series 1	series 1	series 1	series 1
		RAV-RM561UTP-E/-TR RAV-RM801UTP-E/-TR RAV-RM1601UTP-E/-TR	RAV-RM561MUT-E/-TF	RAV-RM561SDT-E/-TR	RAV-RM561BTP-E/-TR RAV-RM801BTP-E/-TR RAV-RM1601BTP-E/-TR	RAV-RM561CTP-E/-TR RAV-RM801CTP-E/-TR RAV-RM1601CTP-E/-TR	RAV-RM561KRTP-E/-TR RAV-RM801KRTP-E/-TR
Wired Remote Controller	RBC-AMS51E-EN,ES	OK	OK	OK	OK	OK	OK
	RBC-AMS55E-EN, ES	OK	OK	OK	OK	OK	OK
	RBC-AMS41E	OK	OK	OK	OK	OK	OK
	RBC-AMT32E	OK	OK	OK	OK	OK	OK
	RBC-AS41E	OK	OK	OK	OK	OK	OK
Wireless Remote Controller	RBC-AX32UM(W)-E		OK				
	TCB-AX32E2	OK	OK	OK	OK	OK	
	RBC-AX32U(W)-E	OK					
	RBC-AX33CE					OK	
Schedule Timer	TCB-EXS21TLE	OK	OK	OK	OK	OK	OK
TCC-Link adaptor	TCB-PCNT30TLE2	OK	OK	OK	OK	OK	
Ceiling Panel	RBC-UM21PG(W)-E		OK				
	RBC-U31PGP(W)-E	OK					
Occupancy Sensor	TCB-SIR41UM-E		OK				
Fresh air filter chamber	TCB-GFC1602UE	OK					
Spacer for height adjustment	TCB-SP1602UE	OK					
Air discharge direction kit	TCB-BC1602UE	OK					
Auxiliary fresh air flange	TCB-FF101URE2	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	
Optional connector table (Peak-cut control/Night operation / compressor ON status output)	TCB-KBOS4E	OK	OK	OK	OK	OK	

## 4.2 Controller

Parts name	Model name	Used with
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*1	Energy save operation (Limit the peak of electric current)	Night Operation by only New Controller *2
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%)*3	Option (Only 75%)*3
×	NA	NA

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