

Inverter Multi Split Duct

Engineering Data Book

Indoor Unit

RAS-M07G3DV-E
RAS-M10G3DV-E
RAS-M13G3DV-E
RAS-M16G3DV-E
RAS-M07G3DV-ND
RAS-M10G3DV-ND
RAS-M13G3DV-ND
RAS-M16G3DV-ND
RAS-M07G3DV-TR
RAS-M10G3DV-TR
RAS-M13G3DV-TR
RAS-M16G3DV-TR

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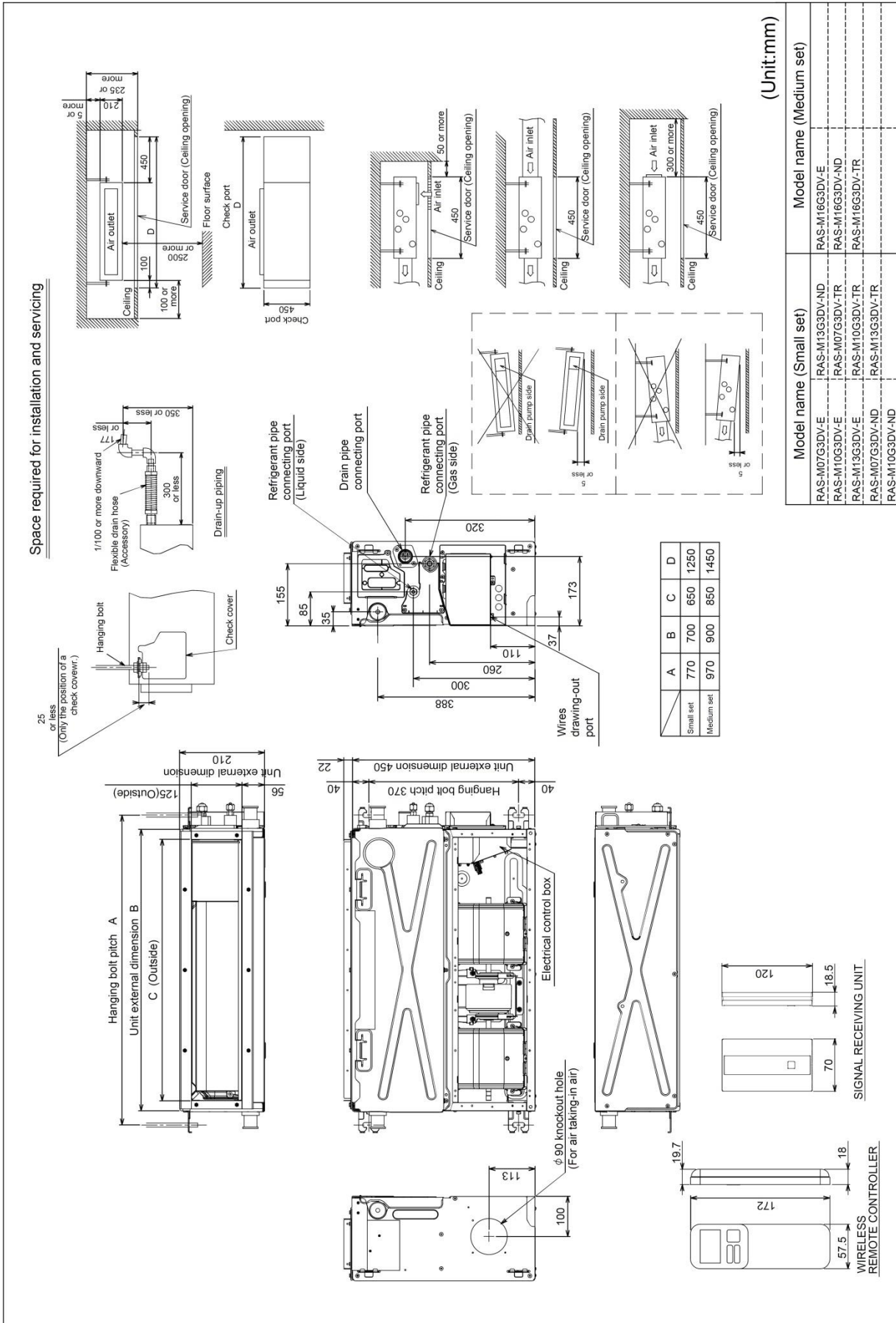
1 Specifications

1-1. Indoor Unit (Concealed Duct Inverter Multi Split Type)

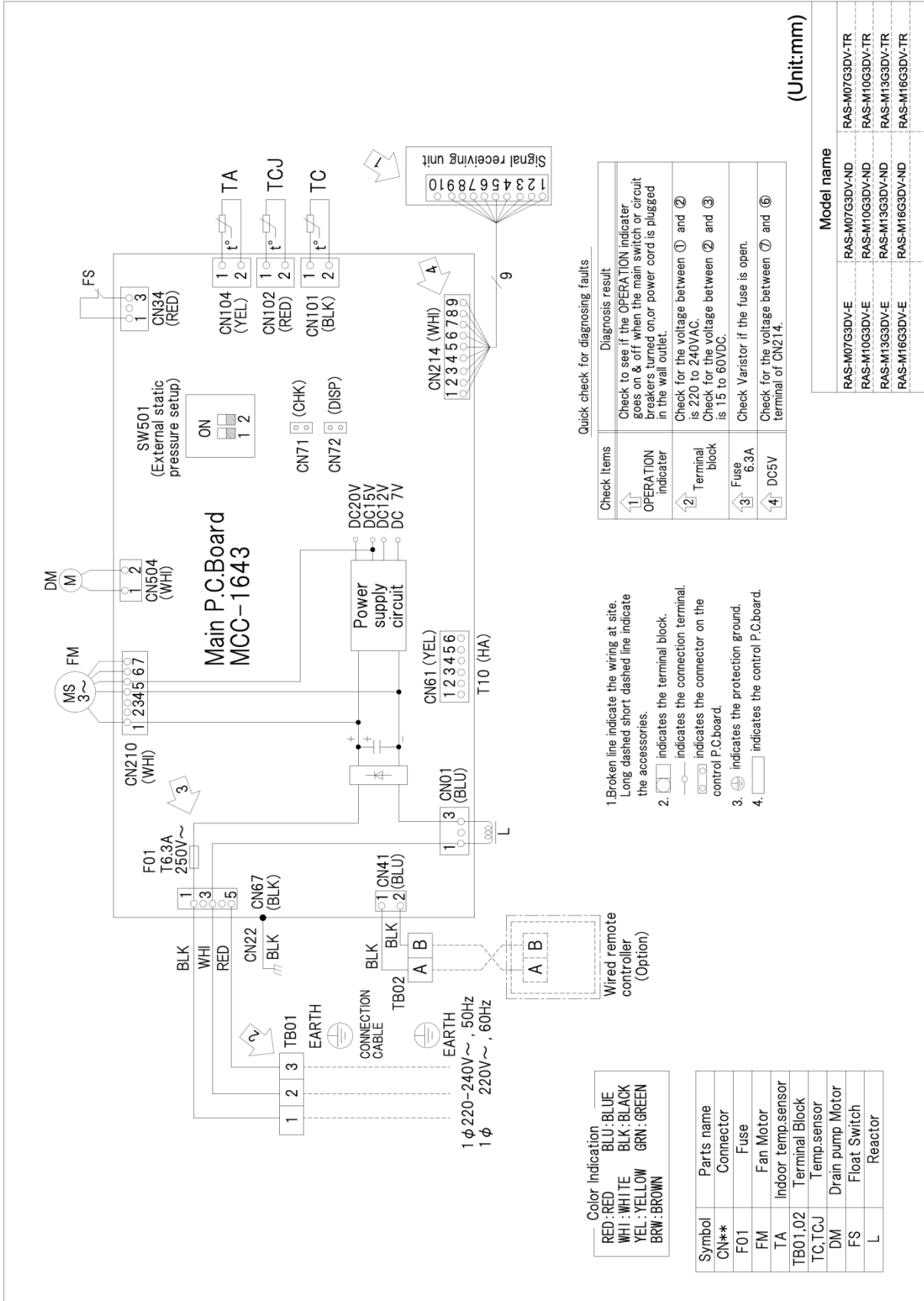
Model Name		RAS-M07G3DV-E				RAS-M10G3DV-E				RAS-M13G3DV-E				RAS-M16G3DV-E					
		RAS-M07G3DV-ND				RAS-M10G3DV-ND				RAS-M13G3DV-ND				RAS-M16G3DV-ND					
		RAS-M07G3DV-TR				RAS-M10G3DV-TR				RAS-M13G3DV-TR				RAS-M16G3DV-TR					
Cooling capacity (Rated) [kW]		2.0				2.7				3.7				4.5					
Cooling Capacity range [kW]		*1				*1				*1				*1					
Heating Capacity (Rated) [kW]		2.7				4.0				5.0				5.5					
Heating Capacity range [kW]		*1				*1				*1				*1					
Power supply		1Phase, 50Hz, 220-240V / 1Phase, 60Hz, 220V																	
Electric characteristics *2	Voltage [V]	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240			
	Running current [A]	0.35	0.34	0.32	0.35	0.34	0.32	0.40	0.38	0.36	0.45	0.43	0.42						
	Power Consumption [W]	48				48				54				62					
	Power Factor [%]	62				62				62				62					
External Static Pressure Setting		4steps (10 / 20 / 35 /45)																	
		10Pa	20Pa	35Pa	45Pa	10Pa	20Pa	35Pa	45Pa	10Pa	20Pa	35Pa	45Pa	10Pa	20Pa	35Pa	45Pa		
Air flow [m3/h] *3	Cooling	HH	570				570				610				780				
		H+	525				525				555				720	670	690	690	
		H	475				475				500				580	540	590	600	
		L+	430				430				440				500	490	490	560	
		L	380				380				385				420				
	Heating	HH	570				570				610				780				
		H+	525				525				555				720	670	690	690	
		H	475				475				500				580	540	590	600	
		L+	430				430				440				510	490	490	560	
		L	380				380				385				450				
Sound pressure level [dBA] *3	Back air intake	Cooling	HH	33	34	35	36	33	34	35	36	35	36	37	38	33	34	35	36
			H+	31	32	33	34	31	32	33	34	32	33	34	35	31	31	32	33
			H	29	30	31	32	29	30	31	32	29	30	31	32	27	27	29	31
			L+	27	28	29	30	27	28	29	30	27	28	29	30	24	25	26	29
			L	25	26	27	28	25	26	27	28	25	26	27	28	22	23	24	25
		Heating	HH	33	34	35	36	33	34	35	36	35	36	37	38	33	34	35	36
			H+	31	32	33	34	31	32	33	34	32	33	34	35	31	31	32	33
			H	29	30	31	32	29	30	31	32	29	30	31	32	27	27	29	31
			L+	27	28	29	30	27	28	29	30	27	28	29	30	25	25	26	29
			L	25	26	27	28	25	26	27	28	25	26	27	28	23	24	25	26
	Under air intake	Cooling	HH	41	42	43	44	41	42	43	44	43	44	45	46	41	42	43	44
			H+	38	39	40	41	38	39	40	41	39	40	41	42	39	39	40	41
			H	35	36	37	38	35	36	37	38	36	37	38	39	34	34	36	38
			L+	33	34	35	36	33	34	35	36	33	34	35	36	31	32	33	36
			L	30	31	32	33	30	31	32	33	30	31	32	33	27	28	29	30
		Heating	HH	41	42	43	44	41	42	43	44	43	44	45	46	41	42	43	44
			H+	38	39	40	41	38	39	40	41	39	40	41	42	39	39	40	41
			H	35	36	37	38	35	36	37	38	36	37	38	39	34	34	36	38
			L+	33	34	35	36	33	34	35	36	33	34	35	36	32	32	33	36
			L	30	31	32	33	30	31	32	33	30	31	32	33	28	29	30	31
Fan Unit	Fan	centrifugal fan																	
	Motor Output [W]	94																	
Dimensions *4	Height [mm]	210																	
	Width [mm]	700												900					
	Depth [mm]	450																	
Net weight [kg]	16												19						
Piping connection	Type	Flare connection																	
	Liquid side [mm]	Φ6.35																	
	Gas side [mm]	Φ9.52												Φ12.7					
	Drain port	VP25																	
Usable indoor temperature range (Cooling/Heating)		21~32°C / 0~28°C																	

*1 ... Refer to the service manual of the outdoor unit to be combined.
 *2 ... Electrical characteristics is under FAN ONLY mode HH tap at 35Pa.
 *3 ... Under standard external static pressure line at each pressure setting.
 *4 ... Unit external dimension (except hanging hook)

2 Dimensions



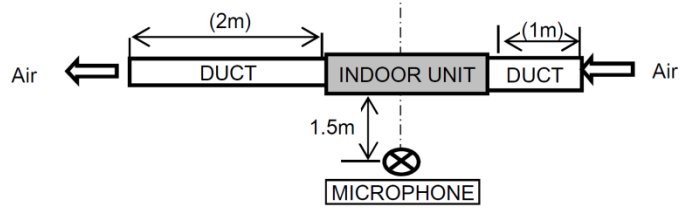
3 Wiring Diagram



4 Sound Characteristics (NC Curve)

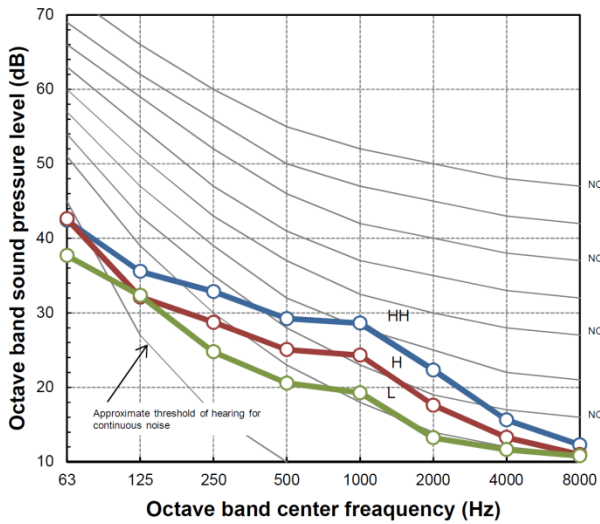
RAS-M07G3DV-E
RAS-M10G3DV-E

Measuring location
Rear air intake



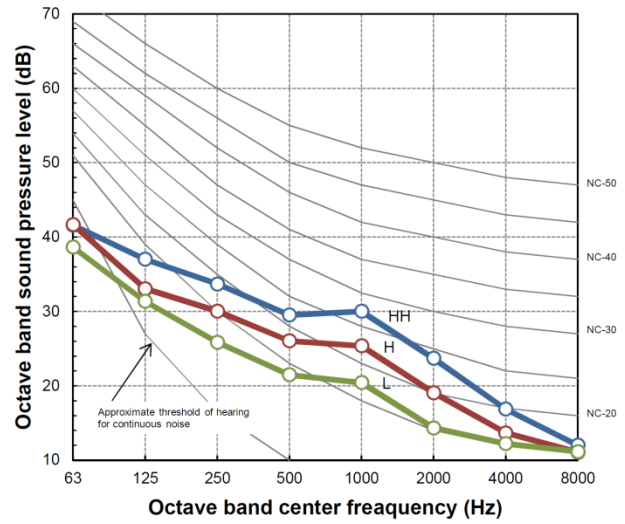
External static pressure 10Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	33.0	29.0	25.0



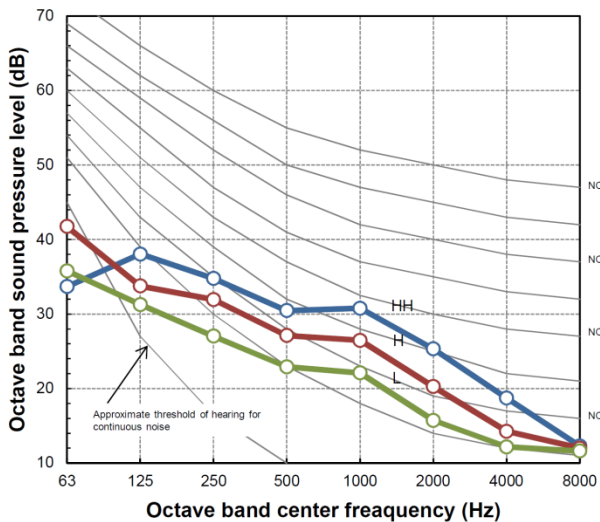
External static pressure 20Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	34.0	30.0	26.0



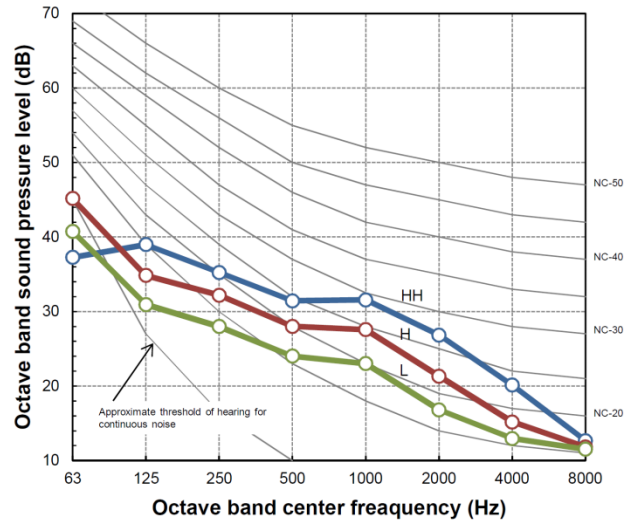
External static pressure 35Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	35.0	31.0	27.0



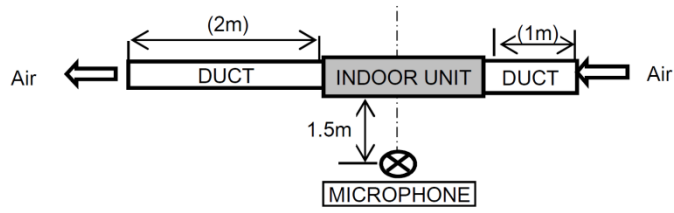
External static pressure 45Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	36.0	32.0	28.0



RAS-M13G3DV-E

Measuring location
Rear air intake

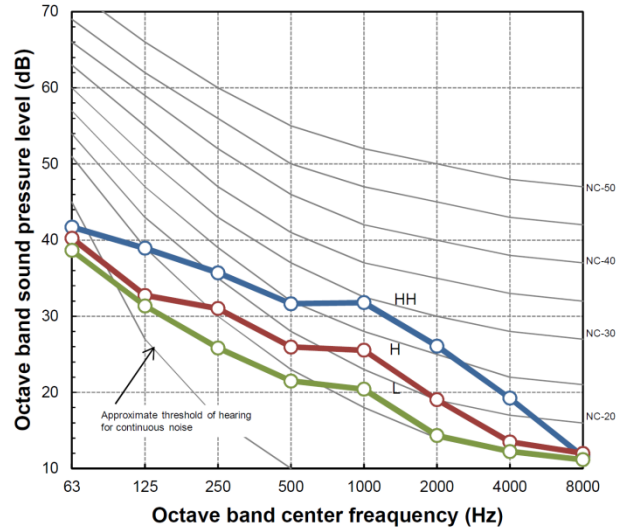
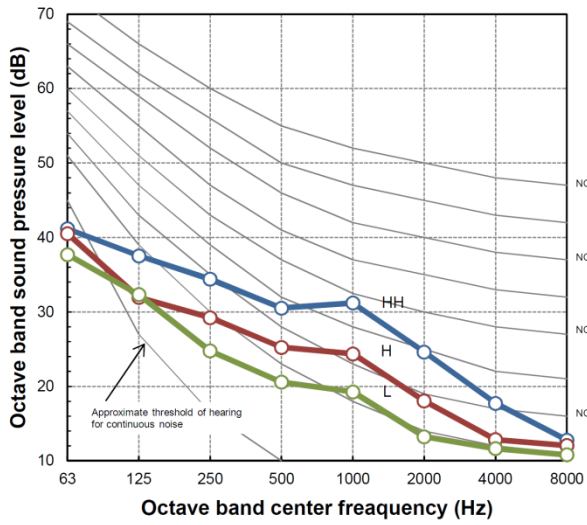


External static pressure 10Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	35.0	29.0	25.0

External static pressure 20Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	36.0	30.0	26.0

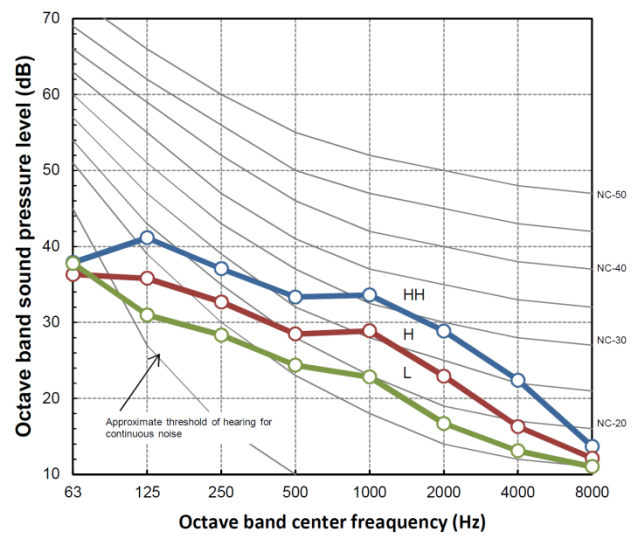
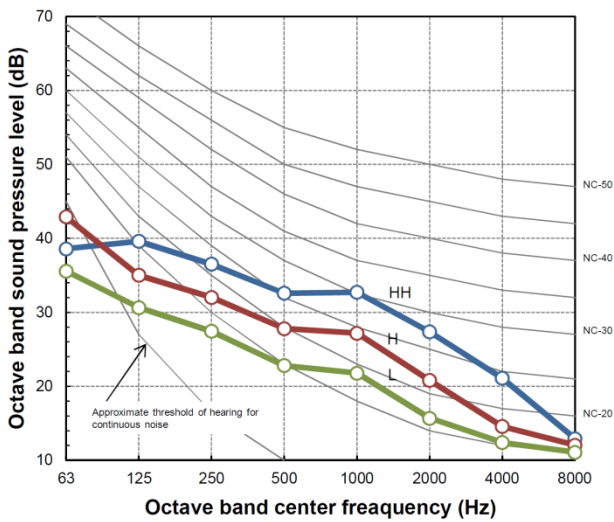


External static pressure 35Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	37.0	31.0	27.0

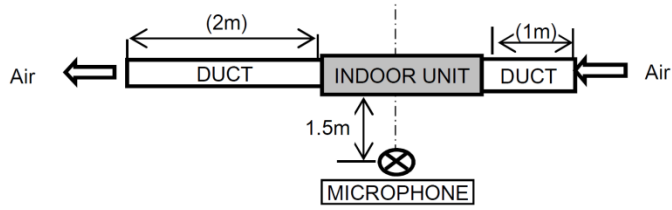
External static pressure 45Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	38.0	32.0	28.0



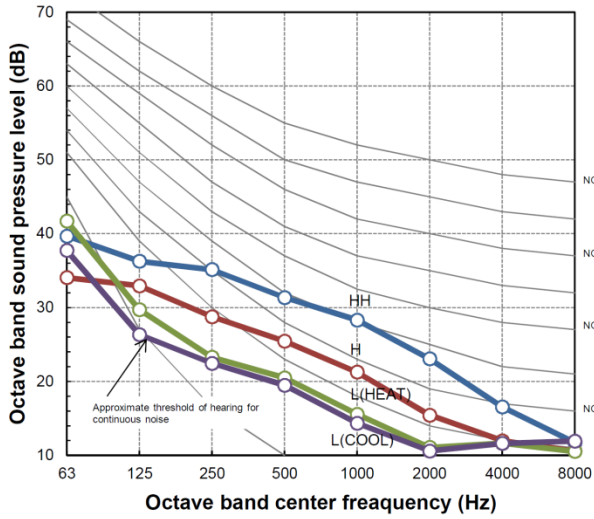
RAS-M16G3DV-E

Measuring location
Rear air intake



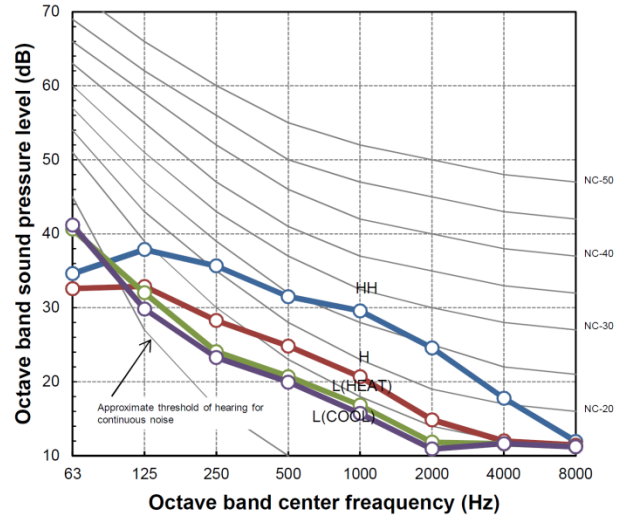
External static pressure 10Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	33.0	27.0	(COOL)22.0 (HEAT)23.0



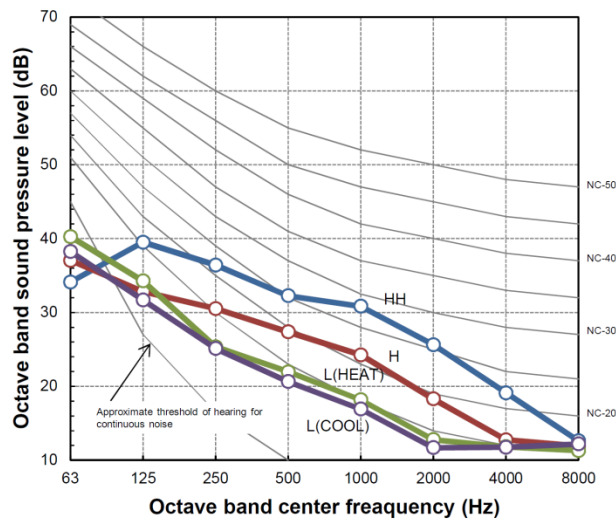
External static pressure 20Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	34.0	27.0	(COOL)23.0 (HEAT)24.0



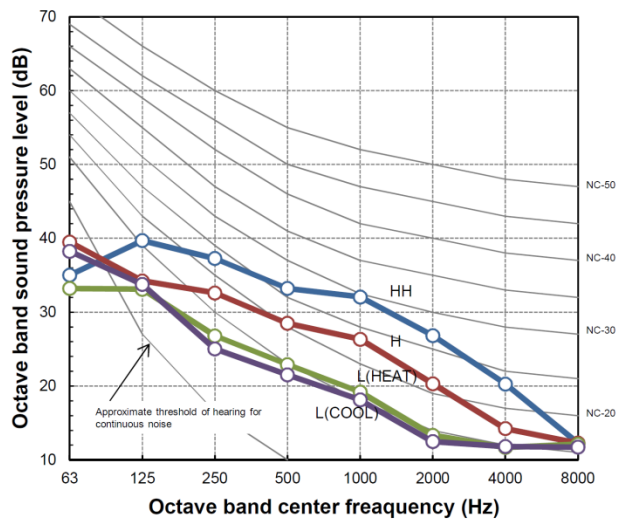
External static pressure 35Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	35.0	29.0	(COOL)24.0 (HEAT)25.0



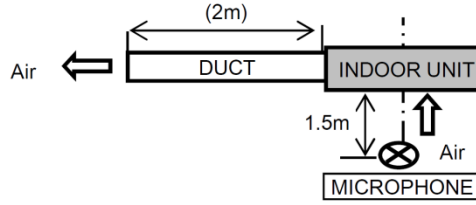
External static pressure 45Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	36.0	31.0	(COOL)25.0 (HEAT)26.0



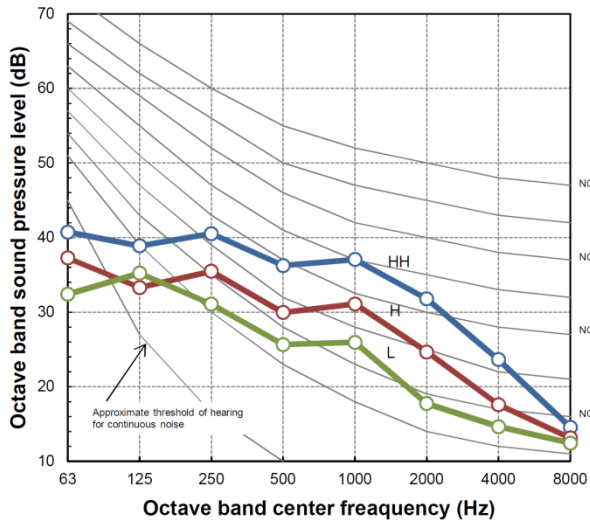
RAS-M07G3DV-E
RAS-M10G3DV-E

Measuring location
Under air intake



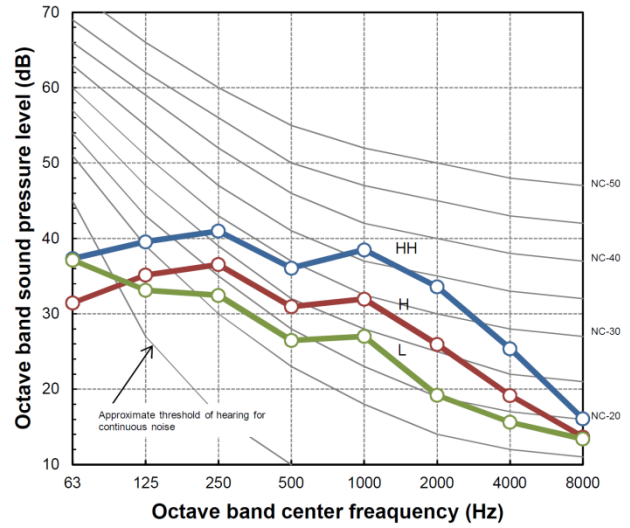
External static pressure 10Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	41.0	35.0	30.0



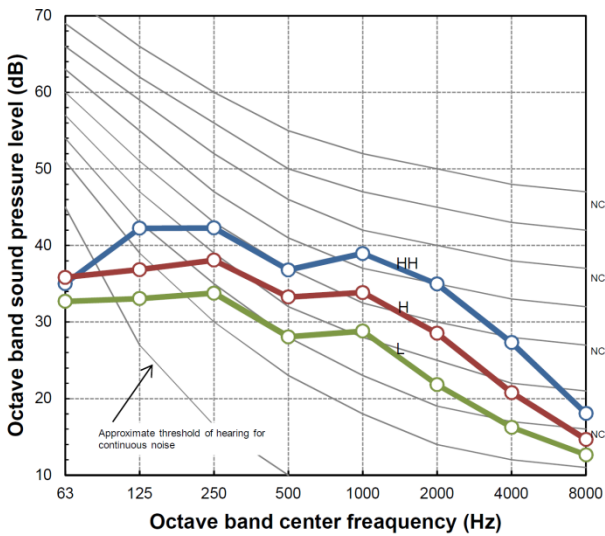
External static pressure 20Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	42.0	36.0	31.0



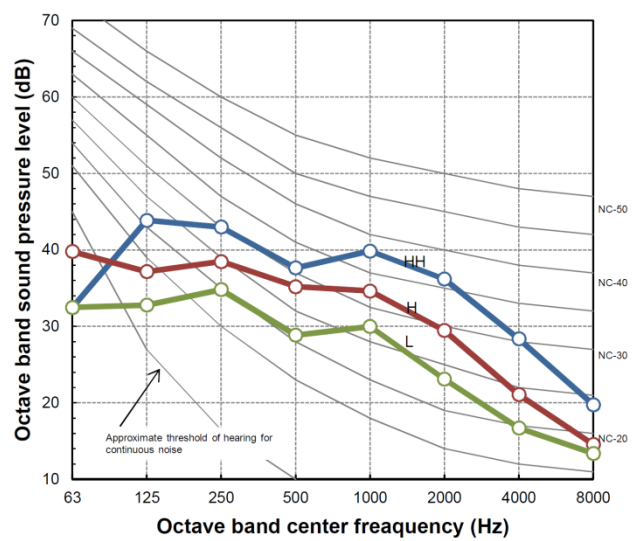
External static pressure 35Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	43.0	37.0	32.0



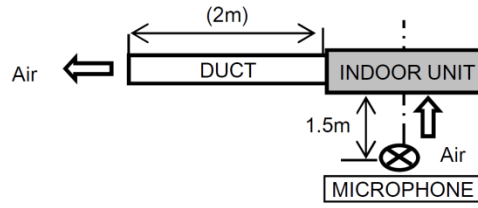
External static pressure 45Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	44.0	38.0	33.0



RAS-M13G3DV-E

Measuring location
Under air intake

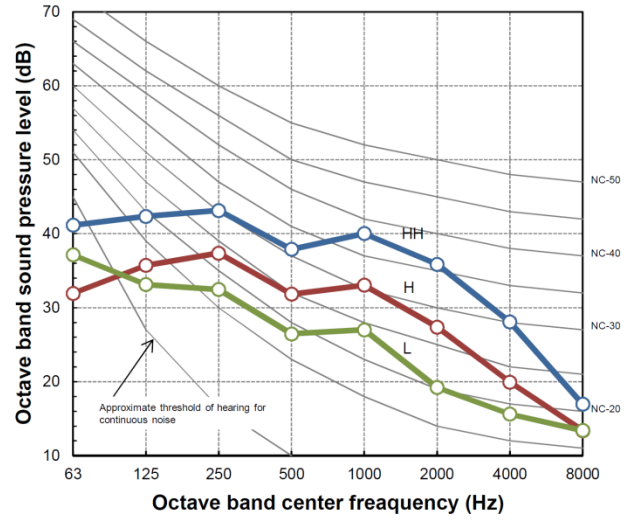
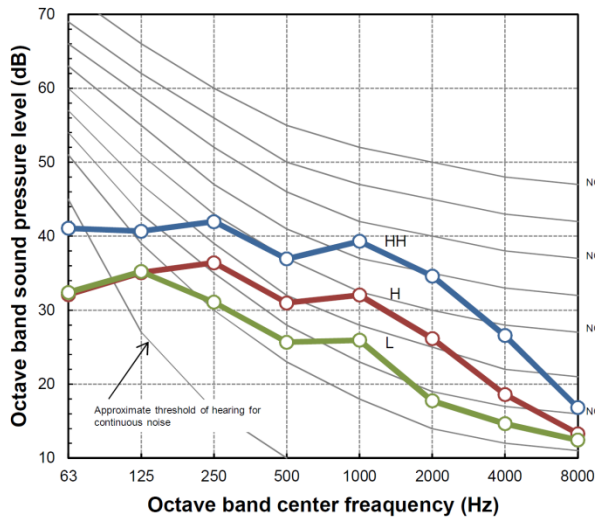


External static pressure 10Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	43.0	36.0	30.0

External static pressure 20Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	44.0	37.0	31.0

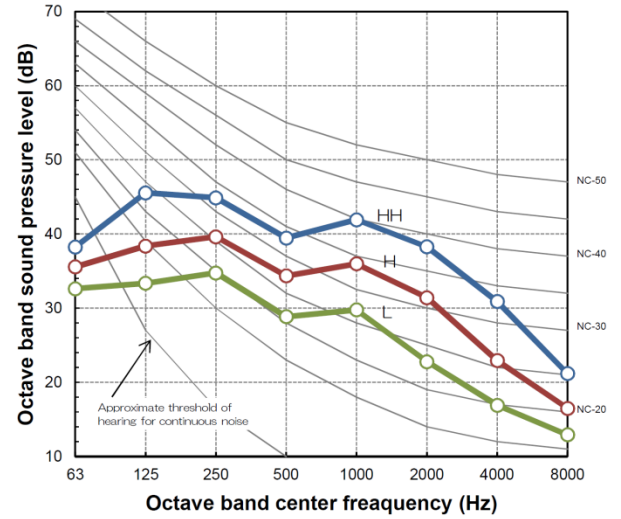
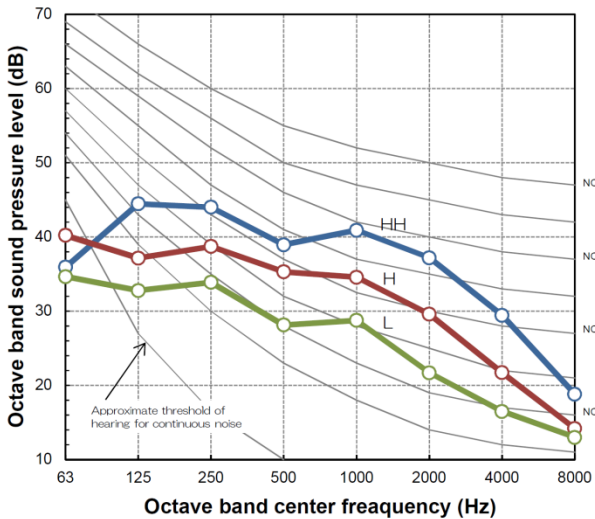


External static pressure 35Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	45.0	38.0	32.0

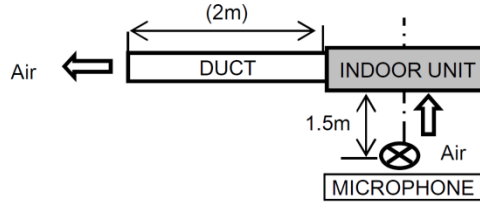
External static pressure 45Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	46.0	39.0	33.0



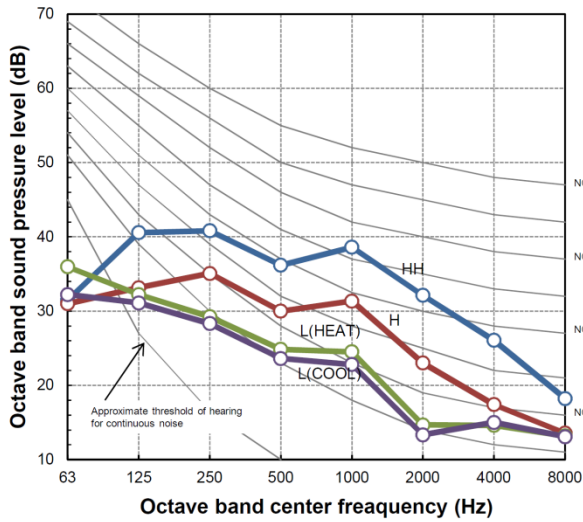
RAS-M16G3DV-E

Measuring location
Under air intake



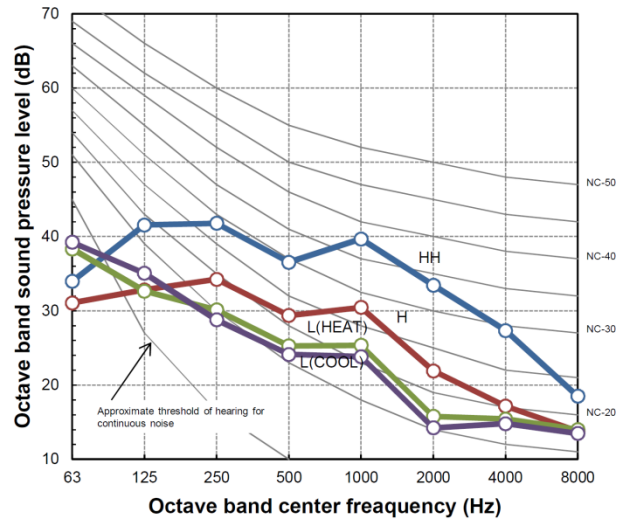
External static pressure 10Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	41.0	34.0	(COOL)27.0 (HEAT)28.0



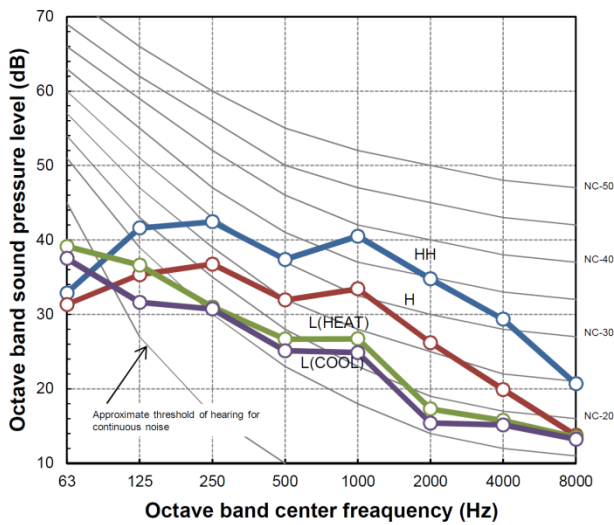
External static pressure 20Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	42.0	34.0	(COOL)28.0 (HEAT)29.0



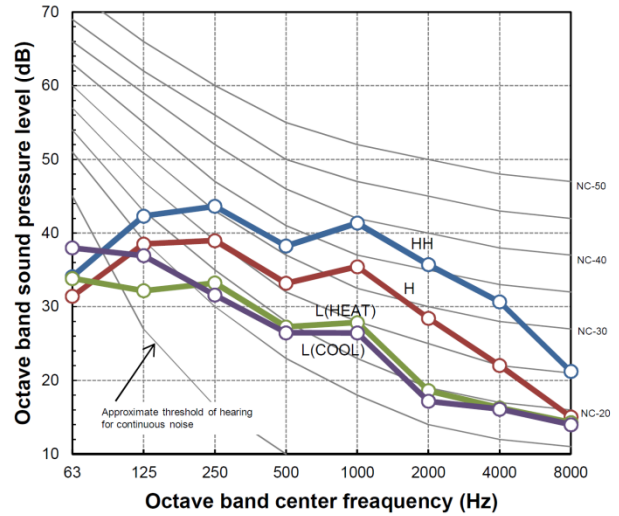
External static pressure 35Pa

Fan tap	HH	H	L
Sound pressure level (dB(A))	43.0	36.0	(COOL)29.0 (HEAT)30.0

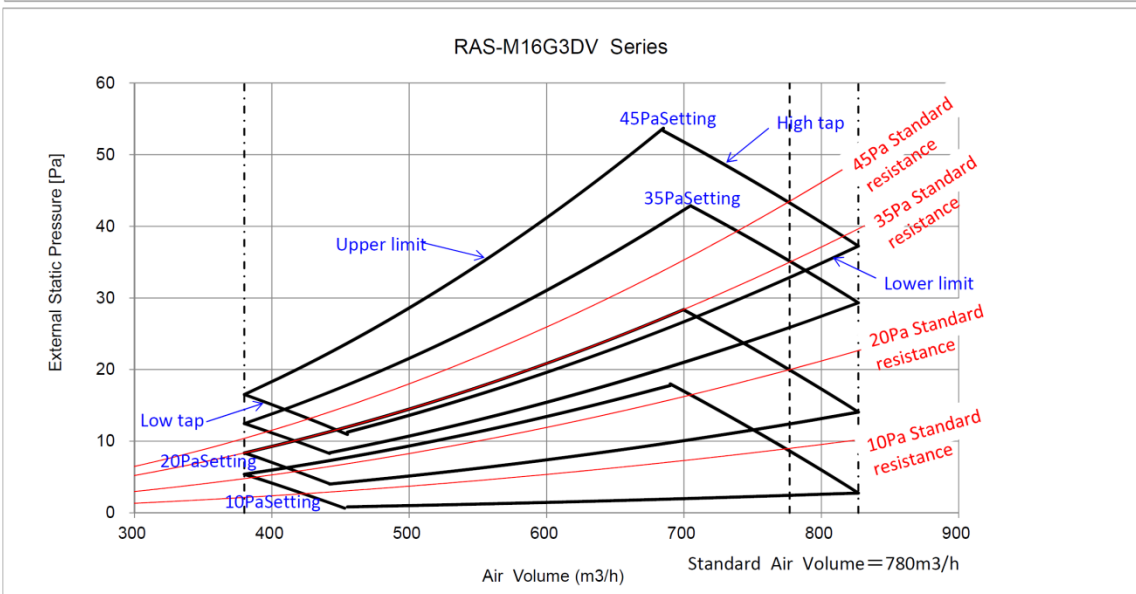
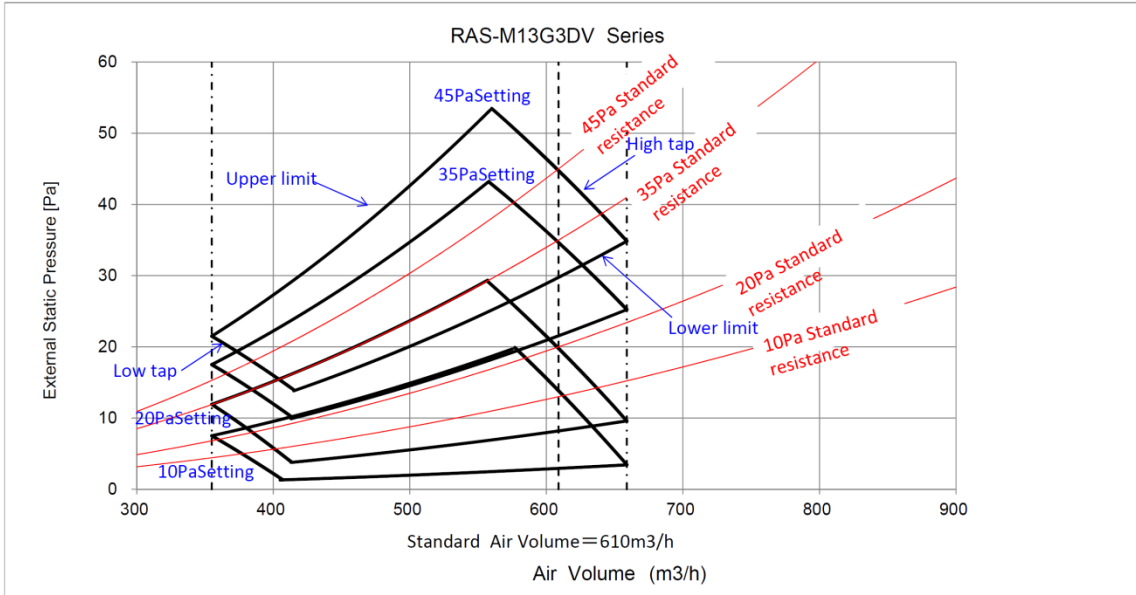
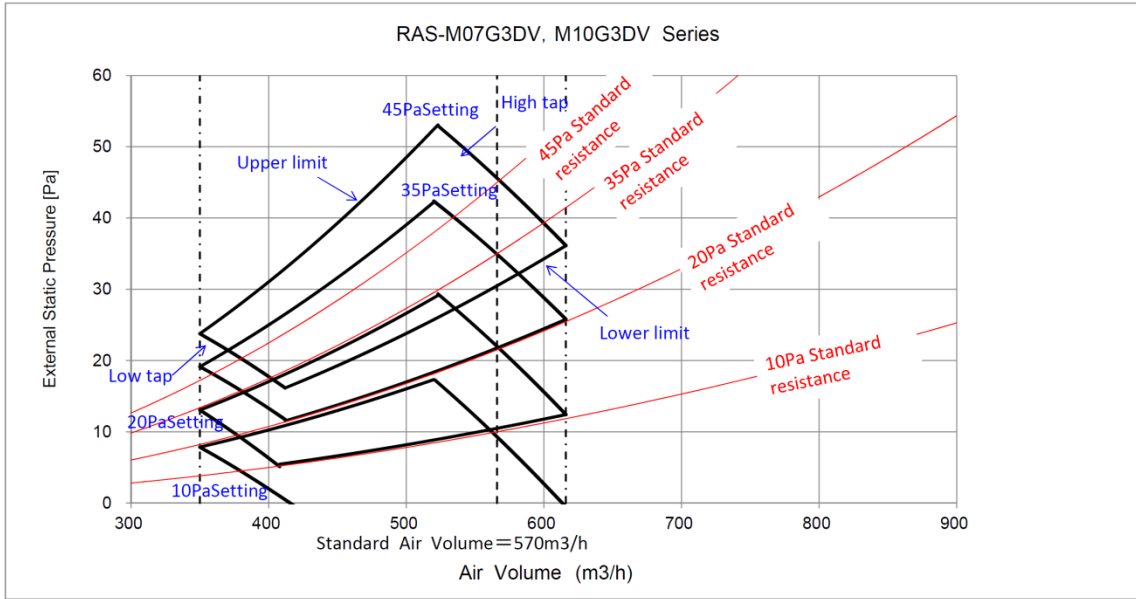


External static pressure 45Pa

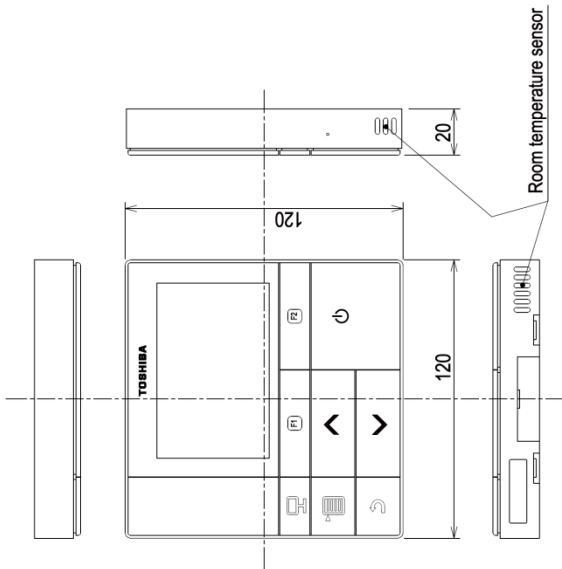
Fan tap	HH	H	L
Sound pressure level (dB(A))	44.0	38.0	(COOL)30.0 (HEAT)31.0



5 Fan Characteristics

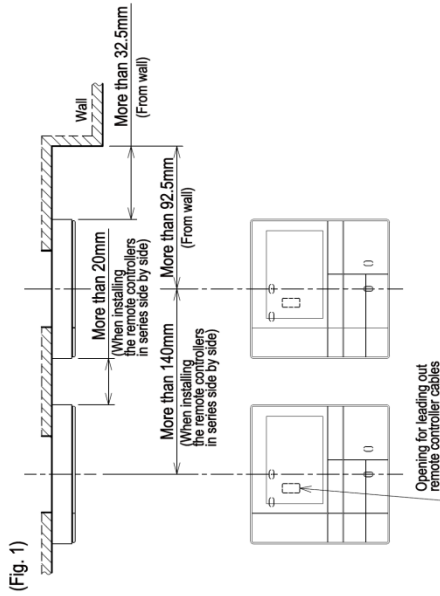


6 Remote Controller Dimensions

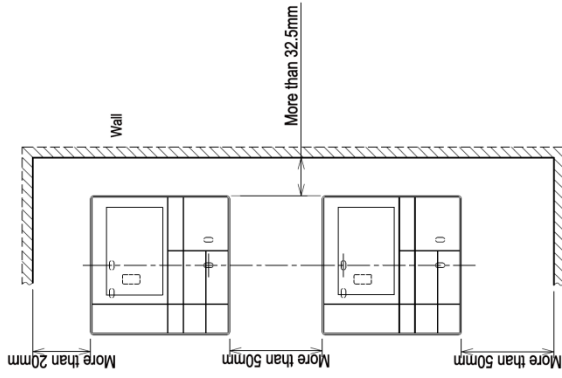


How to install the remote controllers in series side by side

When installing the remote controllers on a wall, follow the installation steps shown in Fig. 1, or Fig. 2.



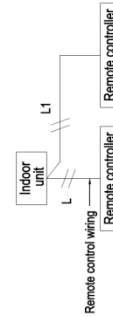
(Fig. 2)



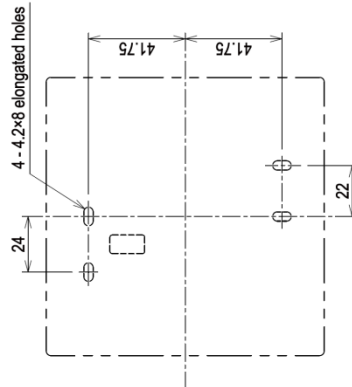
Remote controller cable and cables connecting indoor units

The remote controller cable (communication cable) and AC 220-240V cable must not be allowed to come into direct contact with each other, and they must not be run through the same electrical conduit. Failure to observe these precautions may give rise to noise or other problems which may cause trouble in the control system.

Wiring type	VCTF : 0.5mm ² to 2.0mm ² × 2
Total length of remote control wiring and inter-wiring between remote controllers (L+L')	1 remote controller: Up to 500m 2 remote controllers: Up to 300m



<Remote controller installation dimensions>



units : mm

MODEL NAME

RB-RWS20-E

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