

TOSHIBA

E10-321

Carrier

Console (Inverter Multi)

Engineering Data Book

Indoor Unit

Model name:

RAS-B10UFV-E

RAS-B13UFV-E

RAS-B18UFV-E

Contents

1. Specifications	2
2. Dimension	3
3. Wiring Diagram	4
4. Air Speed Characteristics.....	5
5. Sound Characteristics (NC curve)	8

1. Specifications

Standard type		Technical specifications Heat Pump		
Model	(Indoor Unit)	RAS-B10UFV-E	RAS-B13UFV-E	RAS-B18UFV-E
	(Outdoor Unit)	RAS-5M34UAV-E*1		
Power Supply (V/ph/Hz)		220-240 / 1 / 50, 220 / 1 / 60		
Electrical characteristics		Indoor unit (Operation per unit)		
Cooling capacity (kW)		2.7	3.7	5.0
Cooling capacity range (min. - max.) (kW)		1.4 - 3.2	1.4 - 4.4	1.4 - 5.2
Cooling power input (kW)		0.75	1.2	1.95
EER		3.6	3.08	2.56
Heating capacity (kW)		4.0	5.0	6.0
Heating capacity range (min. - max.) (kW)		0.8 - 5.2	0.8 - 6.5	0.8 - 7.1
Heating power input (kW)		1.45	2.05	2.63
COP		2.76	2.44	2.28
Indoor Unit		RAS-B10UFV-E	RAS-B13UFV-E	RAS-B18UFV-E
Dimension (HxWxD) (mm)		600 x 700 x 220	600 x 700 x 220	600 x 700 x 220
Net weight (kg)		16	16	16
Air Flow (Cooling; H/L) (m ³ /h)		468 / 258	510 / 300	600 / 366
Air Flow (Cooling; H/L) (l/s)		130.0 / 71.7	141.7 / 83.3	167.0 / 101.7
Air Flow (Heating; H/L) (m ³ /h)		510 / 258	522 / 300	642 / 366
Air Flow (Heating; H/L) (l/s)		141.7 / 71.7	153.3 / 83.3	178.3 / 101.7
Sound pressure level (Cooling; H/L) (dB(A))		39 / 26	40 / 27	46 / 34
Sound pressure level (Heating; H/L) (dB(A))		39 / 26	40 / 27	46 / 34
Sound power level (Cooling; H/L) (dB(A))		54 / 41	55 / 42	61 / 49
Sound power level (Heating; H/L) (dB(A))		54 / 41	55 / 42	61 / 49
Outdoor Unit		RAS-5M34UAV-E		
Dimension (HxWxD) (mm)		890 x 900 x 320		
Net weight (kg)		75		
Fan Motor Output (W)		100		
Compressor Output (W)		2200		
Sound pressure level (Cooling;H) (dB(A))		51		
Sound pressure level (Heating; H) (dB(A))		54		
Sound power level (Cooling;H) (dB(A))		66		
Sound power level (Heating; H) (dB(A))		69		
Piping connection				
A unit liquid size / Gas size (mm)		6.35 / 12.7		
B unit liquid size / Gas size (mm)		6.35 / 12.7		
C unit liquid size / Gas size (mm)		6.35 / 9.52		
D unit liquid size / Gas size (mm)		6.35 / 9.52		
E unit liquid size / Gas size (mm)		6.35 / 9.52		
Max. Piping Length (per unit) (m)		25		
Min. Piping Length (per unit) (m)		3		
Max. Piping Length (total) (m)		80		
Max. charge less Length (m)		40		
Max. Piping Height Difference (m)		15		
Usable temperature range				
Outdoor (cooling / heating)		-10 to 46 deg C / -10 to 22 deg C	-10 to 46 deg C / -10 to 22 deg C	-10 to 46 deg C / -10 to 22 deg C

This specification refer to JIS C9612

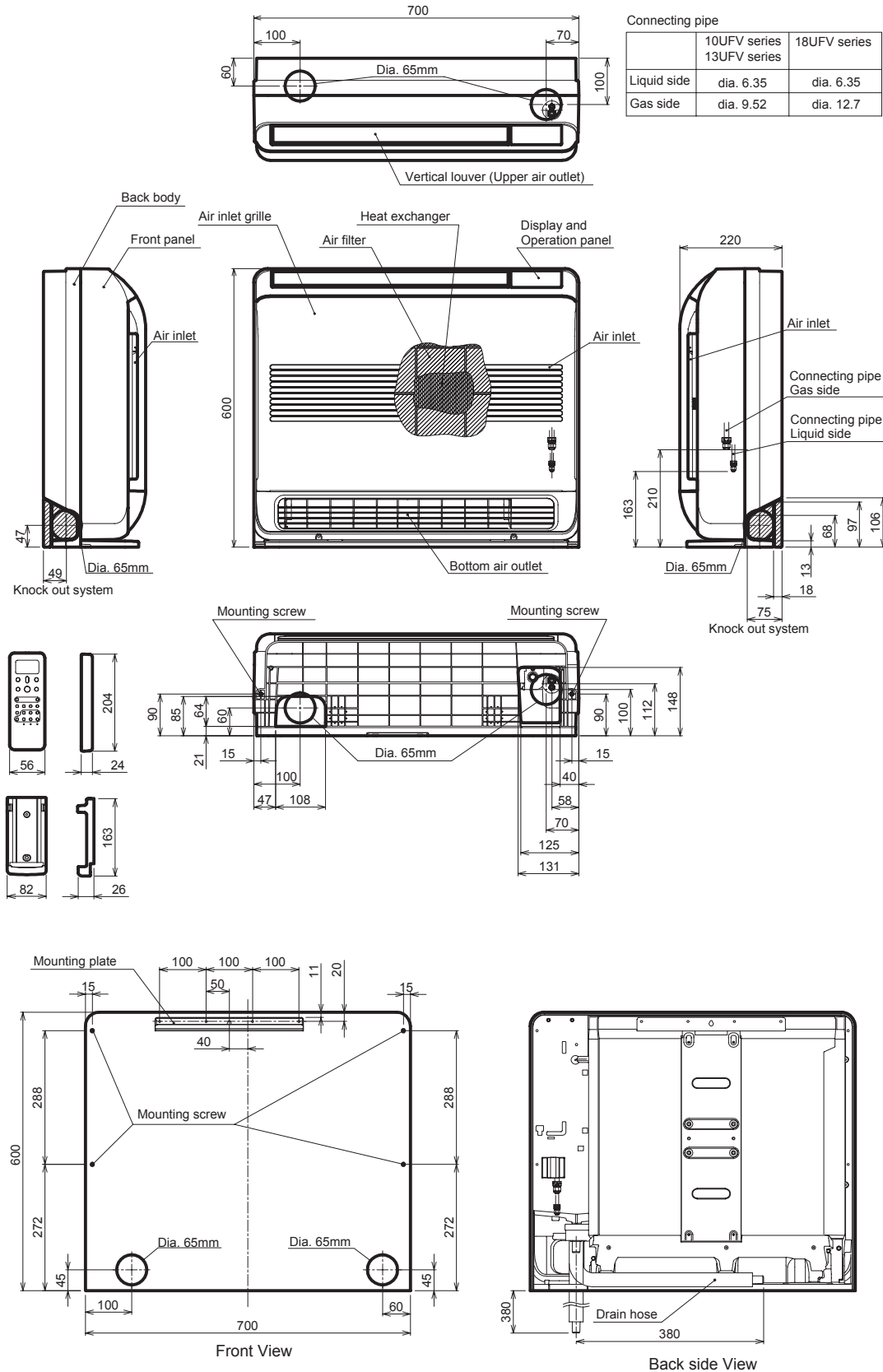
Measured condition : Cooling capacity test condition Inside: 27°C (Db) / 19°C (Wb) Outside: 35°C (Db) / 24°C (Wb)
 Heating capacity test condition Inside: 20°C (Db) Outside: 7°C (Db) / 6°C (Wb)
 Piping length: 5m

*1 Refer to the Inverter multi databook of the outdoor unit to be combined.

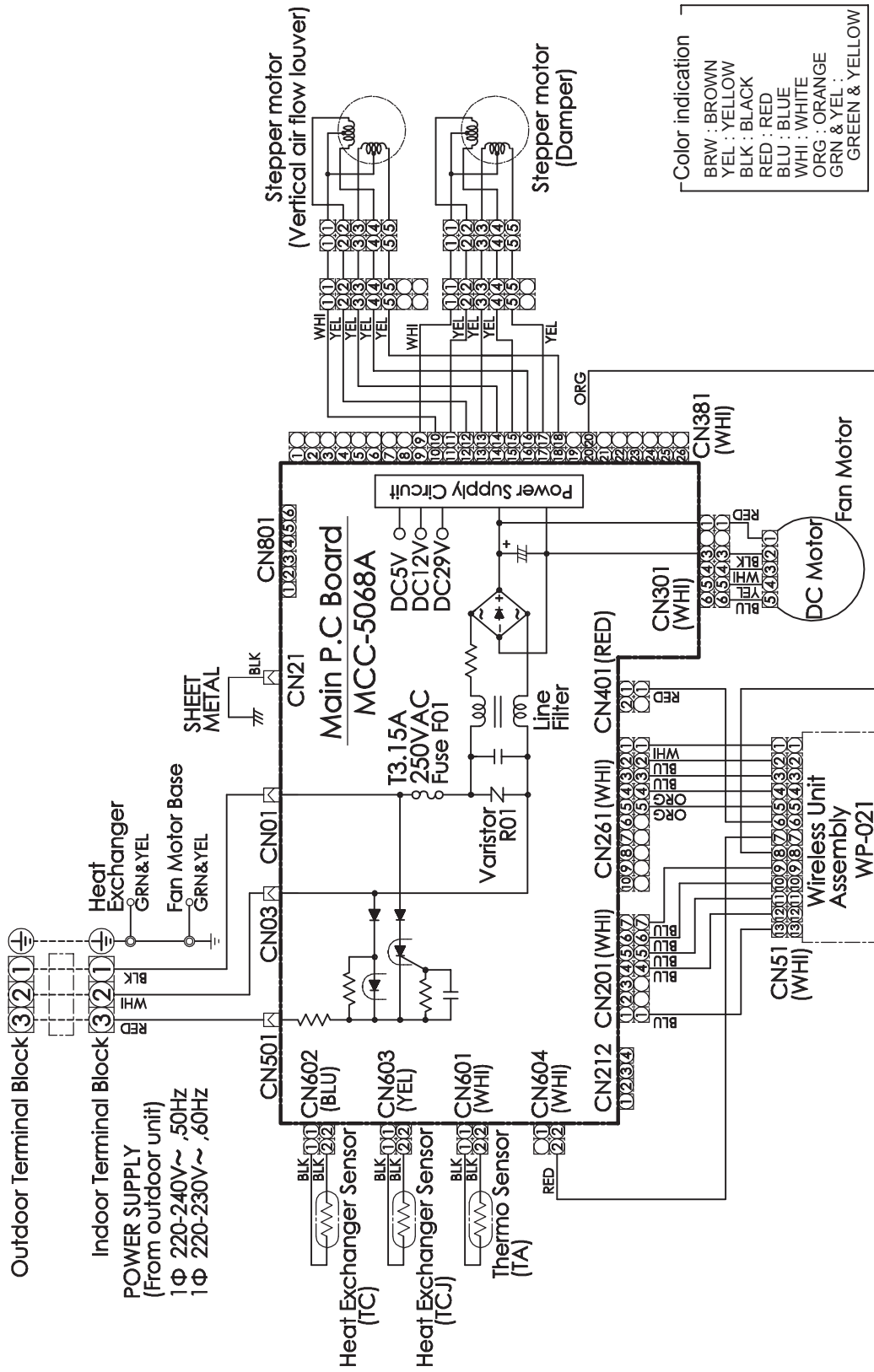
2. Dimension

RAS-B10UFV-E, RAS-B13UFV-E, RAS-B18UFV-E

Unit:mm



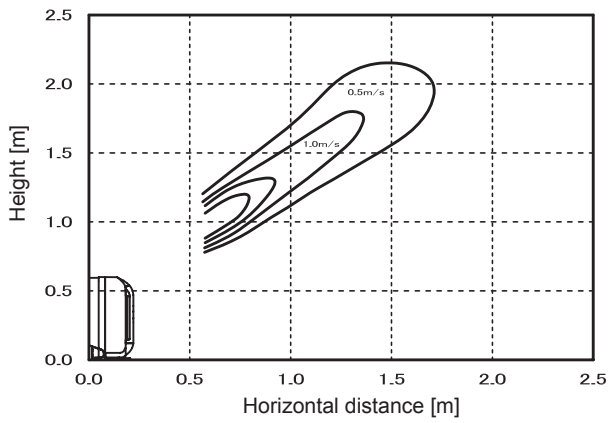
3. Wiring Diagram



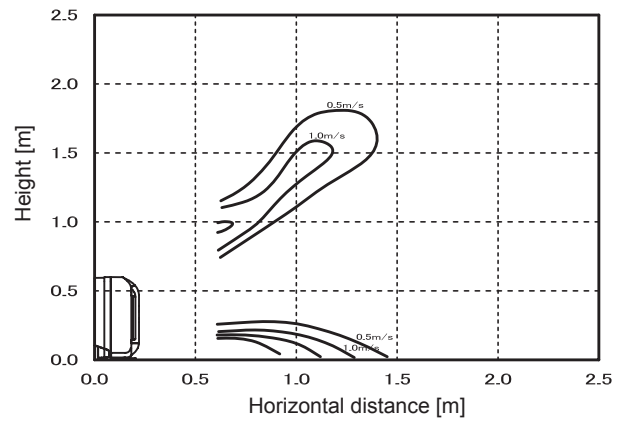
4. Air Speed Characteristics

RAS-B10UFV-E

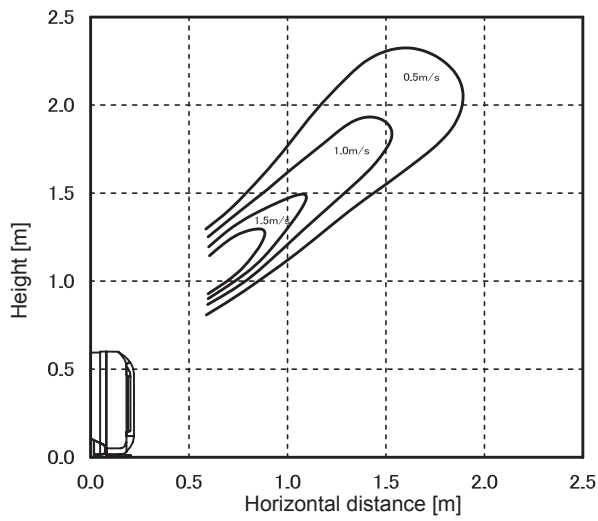
Cooling - Upper



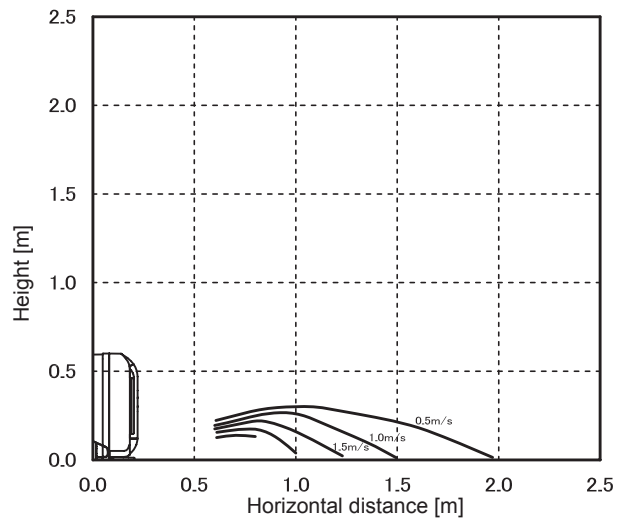
Cooling - Upper & Lower



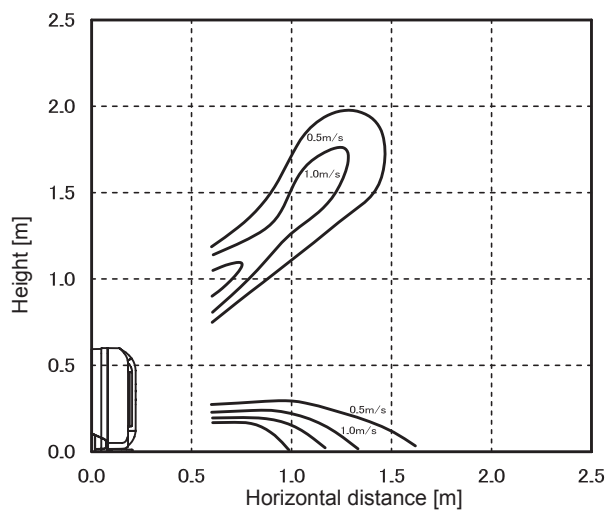
Heating - Upper



Heating - Lower

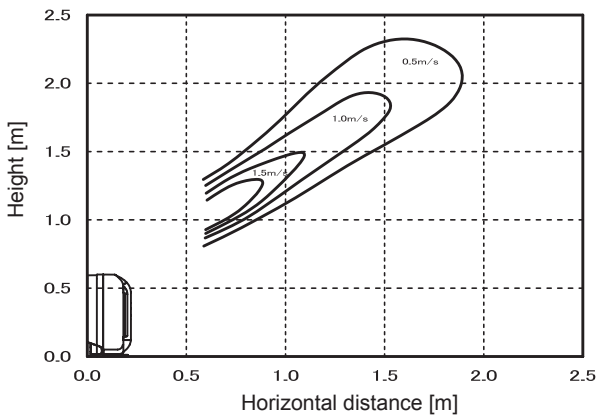


Heating - Upper & Lower

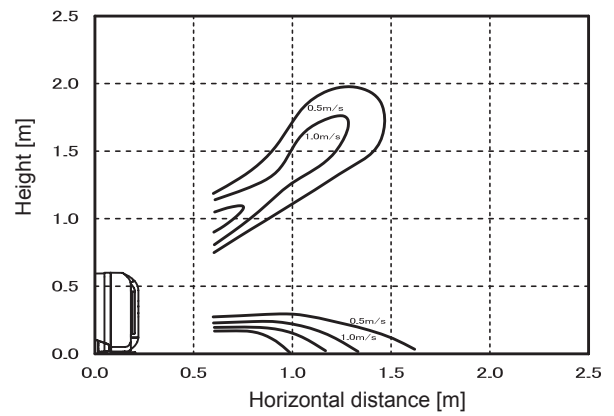


RAS-B13UFV-E

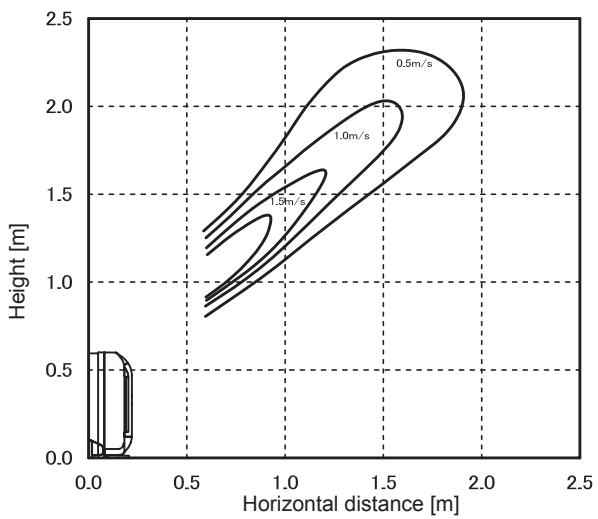
Cooling - Upper



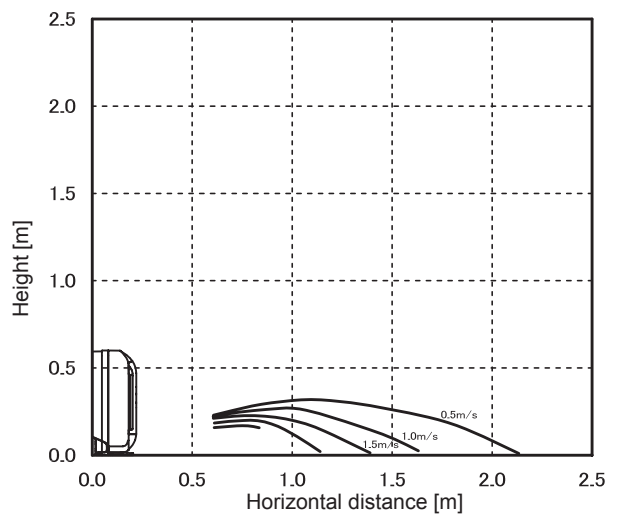
Cooling - Upper & Lower



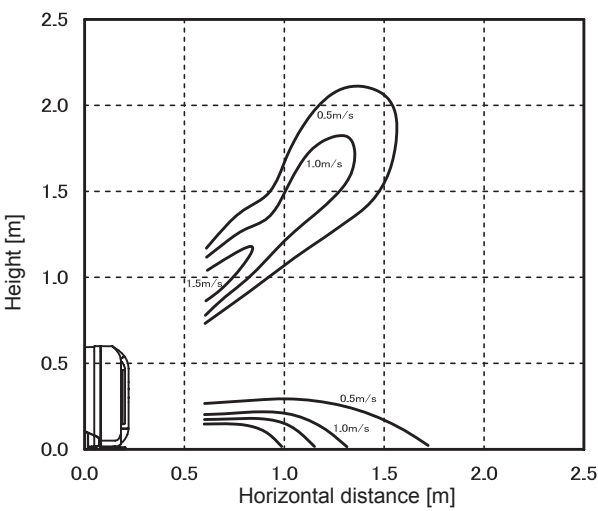
Heating - Upper



Heating - Lower

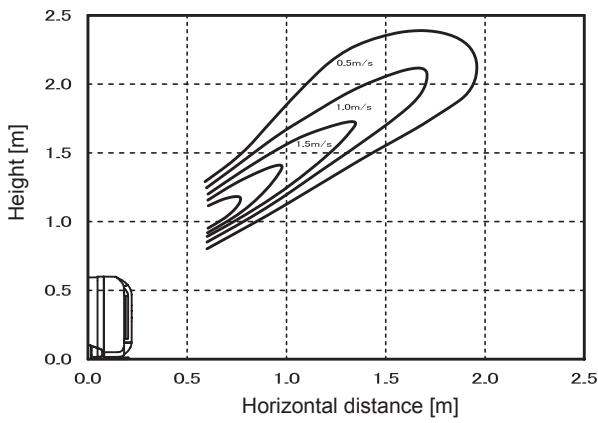


Heating - Upper & Lower

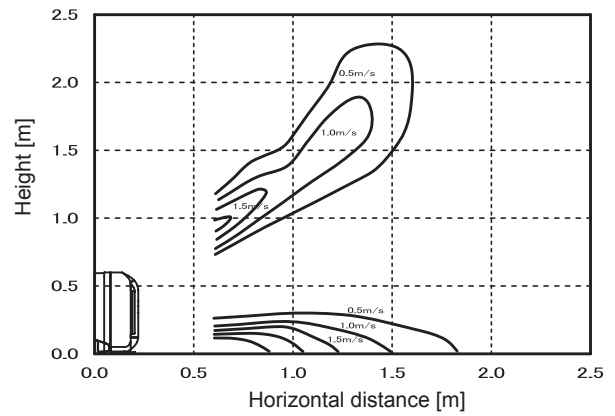


RAS-B18UFV-E

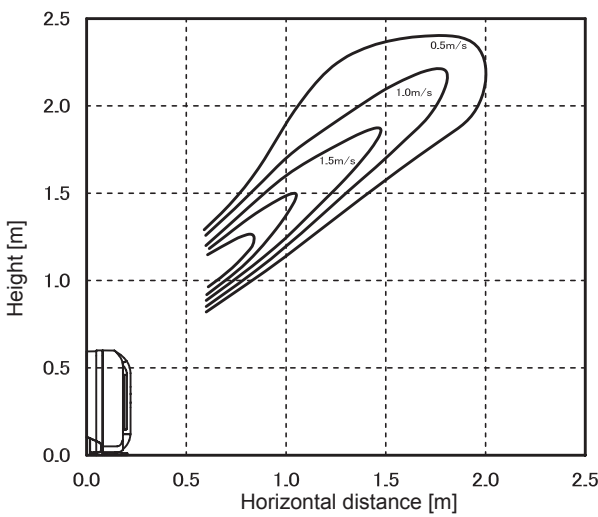
Cooling - Upper



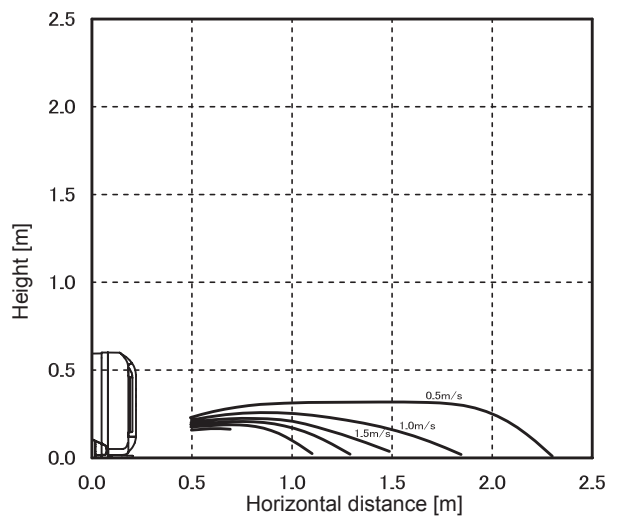
Cooling - Upper & Lower



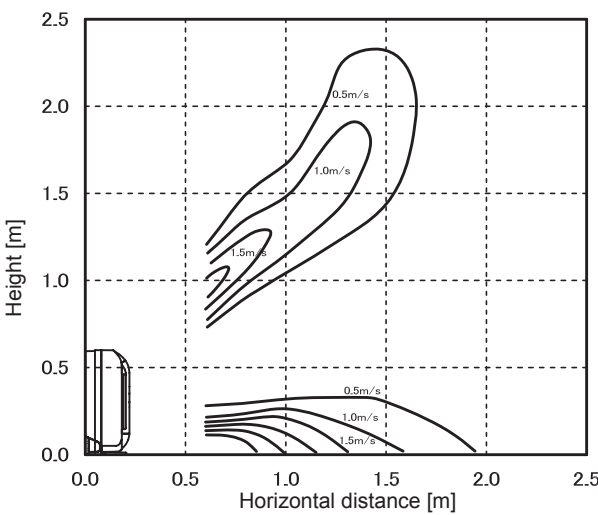
Heating - Upper



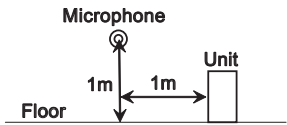
Heating - Lower



Heating - Upper & Lower

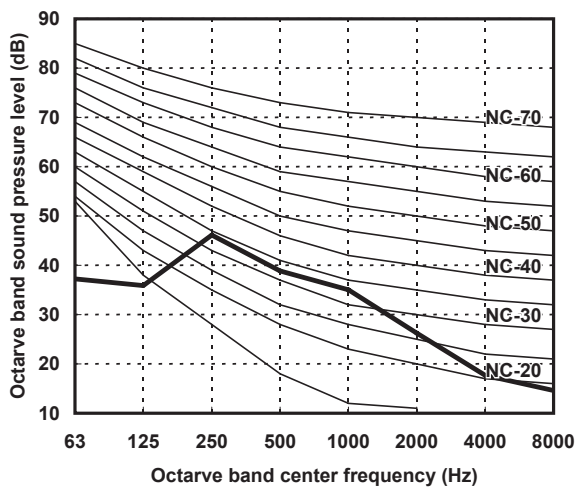


5. Sound Characteristics (NC curve)

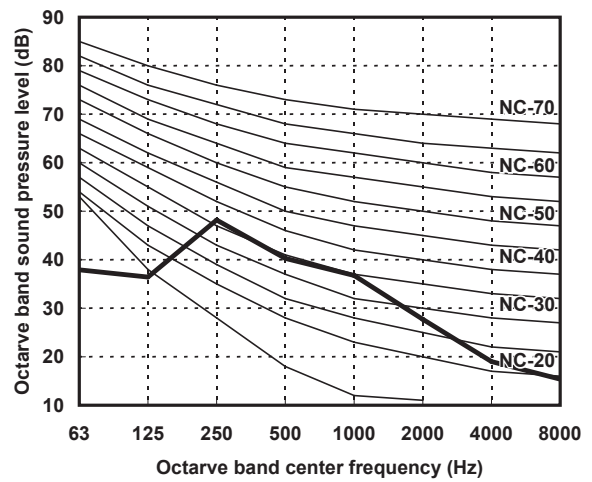
Model name	Measuring location	Sound pressure level (dB)	
		Cooling	Heating
RAS-B10UFV-E	Unit frontside 1m Upper from floor 1m (JIS Standard)	39	39
RAS-B13UFV-E		40	40
RAS-B18UFV-E		46	46

RAS-B10UFV-E

Cooling

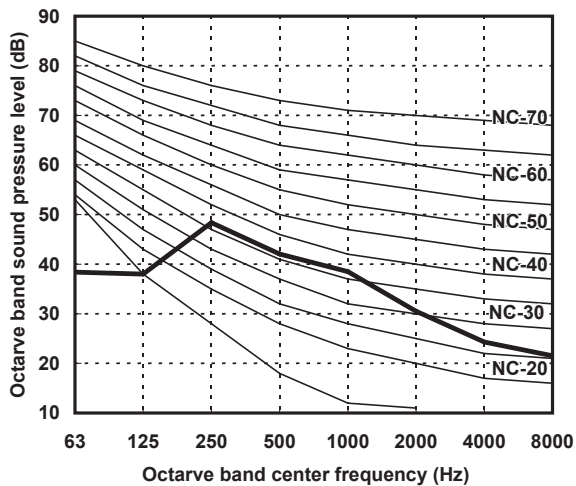


Heating

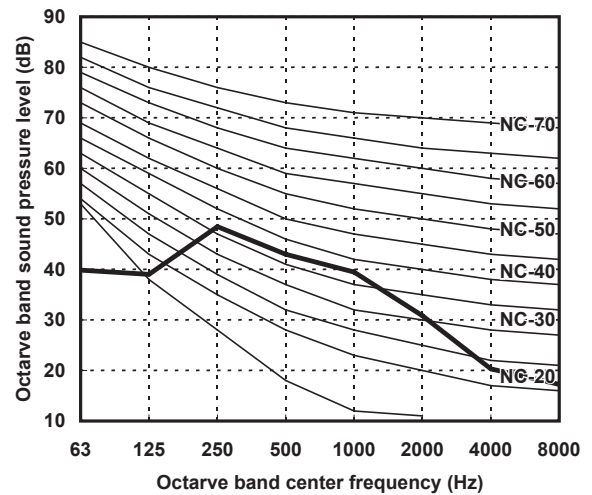


RAS-B13UFV-E

Cooling

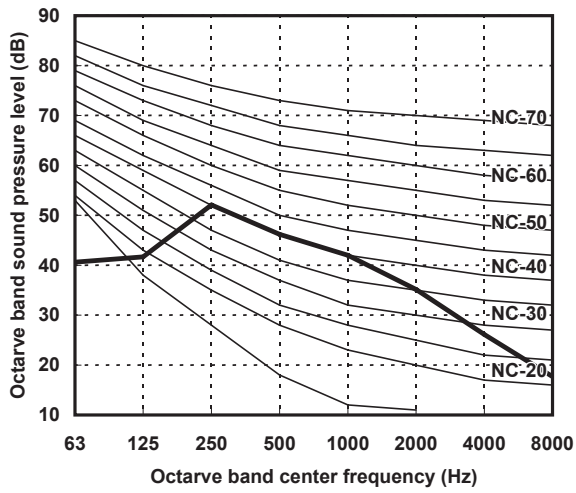


Heating

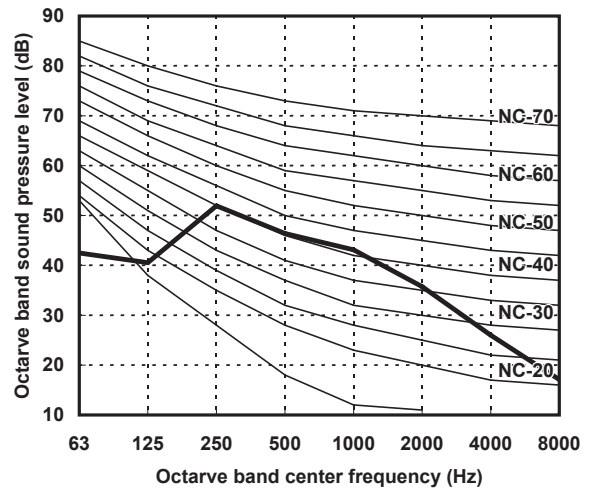


RAS-B18UFV-E

Cooling



Heating



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