

Residential Inverter Heat Pump *Premiun SHORAI*

Indoor Units

RAS-B10J2KVRG-E	RAS-10J2KVRG-TR
RAS-B13J2KVRG-E	RAS-13J2KVRG-TR
RAS-B16J2KVRG-E	RAS-16J2KVRG-TR
RAS-18J2KVRG-E	RAS-18J2KVRG-TR
RAS-B22J2KVRG-E	RAS-22J2KVRG-TR
RAS-B24J2KVRG-E	RAS-24J2KVRG-TR

Outdoor Units

RAS-10J2AVRG-E / TR
RAS-13J2AVRG-E / TR
RAS-16J2AVRG-E / TR
RAS-18J2AVRG-E / TR
RAS-22J2AVRG-E / TR
RAS-24J2AVRG-E / TR

Contents

1	Line up.	2
2	Specifications	3
3	Dimension	8
4	Wiring diagram	12
5	Refrigerant cycle diagram	17
6	Air speed distribution	21
7	Sound characteristics (NC Curve)	27
8	Capacity table	33
9	Part load performance	39
10	Performance characteristic	45

1. Line up

Indoor Unit	Outdoor Unit	Model Name		Capacity Rank
		FCU	CDU	
 FCU BF1 Grille T2 for 10, 13, 16K	 CDU NADR for 10, 13, 16, 18, 22K	RAS-B10J2KVRG-E RAS-10J2KVRG-TR	RAS-10J2AVRG-E RAS-10J2AVRG-TR	10k
		RAS-B13J2KVRG-E RAS-13J2KVRG-TR	RAS-13J2AVRG-E RAS-13J2AVRG-TR	13k
		RAS-B16J2KVRG-E RAS-16J2KVRG-TR	RAS-16J2AVRG-E RAS-16J2AVRG-TR	16k
 FCU BF2 Grille T2 for 18, 22, 24K	 CDU NADR for 10, 13, 16, 18, 22K	RAS-18J2KVRG-E RAS-18J2KVRG-TR	RAS-18J2AVRG-E RAS-18J2AVRG-TR	18k
		RAS-B22J2KVRG-E RAS-22J2KVRG-TR	RAS-22J2AVRG-E RAS-22J2AVRG-TR	22k
	 CDU 630H for 24K	RAS-B24J2KVRG-E RAS-24J2KVRG-TR	RAS-24J2AVRG-E RAS-24J2AVRG-TR	24k

2. Specifications

Unit model	Indoor			RAS-B10J2KVRG-E RAS-10J2KVRG-TR		RAS-B13J2KVRG-E RAS-13J2KVRG-TR		
	Outdoor			RAS-10J2AVRG-E/TR		RAS-13J2AVRG-E/TR		
Cooling capacity	(kW)			2.50		3.50		
Cooling capacity range	(kW)			0.75-3.20		0.80-4.10		
Heating capacity	(kW)			3.20		4.20		
Heating capacity range	(kW)			0.90-4.80		0.80-5.30		
Power supply				1Ph/220-240V/50Hz				
Electric characteristic	Indoor	Operation mode		Cooling	Heating	Cooling	Heating	
		Running current (A)		0.25-0.23	0.25-0.23	0.28-0.26	0.28-0.26	
		Power consumption (W)		35	35	40	40	
		Power factor (%)		63	63	64	94	
	Outdoor	Operation mode		Cooling	Heating	Cooling	Heating	
		Running current (A)		2.80-2.57	3.50-3.22	4.81-4.39	4.94-4.54	
		Power consumption (W)		600	750	1010	1040	
		Power factor (%)		89	91	96	94	
Starting current (A)			3.05-2.80	3.75-3.45	5.09-4.65	5.22-4.80		
COP (Cooling / Heating)				4.17/4.27		3.33/3.89		
SCOP (Cooling / Heating)				6.90/4.60		6.50/4.60		
Operating noise	Indoor	High	(Cooling / Heating)	(dB-A)	38/39		39/39	
		Medium	(Cooling / Heating)	(dB-A)	30/31		30/32	
		Low	(Cooling / Heating)	(dB-A)	23/24		23/24	
	Outdoor		(Cooling / Heating)		(dB-A)	46/47		48/50
Indoor unit	Unit model			RAS-(B)10J2KVRG		RAS-(B)13J2KVRG		
	Dimension	Height	(mm)	293		293		
		Width	(mm)	798		798		
		Depth	(mm)	241		241		
	Net weight		(kg)	9		9		
	Fan motor output		(W)	30		30		
	Air flow rate (Cooling / Heating)		(m ³ / min)	9/10		10/10		
Outdoor unit	Unit model			RAS-10J2AVRG		RAS-13J2AVRG		
	Dimension	Height	(mm)	550		550		
		Width	(mm)	780		780		
		Depth	(mm)	290		290		
	Net weight		(kg)	28		28		
	Compressor	Motor output	(W)	620		620		
		Type	Single rotary type with DC-inverter variable speed control					
	Model		KSK89D53UFZ					
	Fan motor output		(W)	43				
Air flow rate (Cooling / Heating)		(m ³ / min)	28/28		33/33			
Piping connection	Type			Flare connection				
	Indoor unit	Liquid side	(mm)	Ø6.35				
		Gas side	(mm)	Ø9.52				
	Outdoor unit	Liquid side	(mm)	Ø6.35				
		Gas side	(mm)	Ø9.52				
	Maximum length		(m)	20				
	Maximum charge-less length		(m)	15				
Maximum height difference		(m)	12					
Refrigerant	Name of refrigerant			R32				
	Weight		(kg)	0.51		0.67		
Wiring connection	Power supply		3 Wires: Includes earth (Outdoor)					
	Interconnection		4 Wires: Includes earth					
Usable temperature range		Indoor (Cooling / Heating)	(°C)	21-32/ -28				
		Outdoor (Cooling / Heating)	(°C)	-15,46/-15,24				
Accessory	Indoor unit	Installation plate		1				
		Wireless remote controller		1				
		Batteries		2				
		Remote controller holder		1				
		Toshiba IAQ filter		1				
		Mounting screw		6(Ø4x25L)				
		Remote controller holder Flat head wood screw		2(Ø3.1x16L)				
		Installation manual		1				
		Owner's manual		1				

For performance when each indoor unit is combined with other unit, refer to the separate table.

* The specifications may be subject to change without notice for purpose of improvement.

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 : 5 m per Indoor Unit.

Unit model	Indoor			RAS-B16J2KVRG-E RAS-16J2KVRG-TR			
	Outdoor			RAS-16J2AVRG-E/TR			
Cooling capacity				(kW)	4.60		
Cooling capacity range				(kW)	1.20-5.30		
Heating capacity				(kW)	5.50		
Heating capacity range				(kW)	0.90-6.50		
Power supply				1Ph/220-240V/50Hz			
Electric characteristic	Indoor	Operation mode			Cooling	Heating	
		Running current			(A)	0.31-0.29	0.31-0.29
		Power consumption			(W)	45	45
		Power factor			(%)	65	65
	Outdoor	Operation mode			Cooling	Heating	
		Running current			(A)	6.29-5.76	6.79-6.21
		Power consumption			(W)	1355	1475
		Power factor			(%)	98	99
Starting current			(A)	6.60-6.05	7.10-6.50		
COP (Cooling / Heating)				3.29/3.62			
SCOP (Cooling / Heating)				6.50/4.20			
Operating noise	Indoor	High	(Cooling / Heating)	(dB-A)	43/43		
		Medium	(Cooling / Heating)	(dB-A)	33/34		
		Low	(Cooling / Heating)	(dB-A)	25/26		
	Outdoor			(Cooling / Heating)	(dB-A)	49/52	
Indoor unit	Unit model			RAS-(B)16J2KVRG			
	Dimension	Height			(mm)	293	
		Width			(mm)	798	
		Depth			(mm)	241	
	Net weight			(kg)	9		
	Fan motor output			(W)	30		
	Air flow rate			(Cooling / Heating)	(m³ / min)	13/13	
Outdoor unit	Unit model			RAS-16J2AVRG			
	Dimension	Height			(mm)	550	
		Width			(mm)	780	
		Depth			(mm)	290	
	Net weight			(kg)	34		
	Compressor	Motor output			(W)	890	
		Type			Single rotary type with DC-inverter variable speed control		
	Model			KSN108D22UFZ			
	Fan motor output			(W)	43		
Air flow rate			(Cooling / Heating)	(m³ / min)	34/36		
Piping connection	Type			Flare connection			
	Indoor unit	Liquid side			(mm)	Ø6.35	
		Gas side			(mm)	Ø12.7	
	Outdoor unit	Liquid side			(mm)	Ø6.35	
		Gas side			(mm)	Ø12.7	
	Maximum length			(m)	20		
	Maximum charge-less length			(m)	15		
Maximum height difference			(m)	12			
Refrigerant	Name of refrigerant			R32			
	Weight			(kg)	0.80		
Wiring connection	Power supply			3 Wires: Includes earth (Outdoor)			
	Interconnection			4 Wires: Includes earth			
Usable temperature range		Indoor	(Cooling / Heating)	(°C)	21-32/ -28		
		Outdoor	(Cooling / Heating)	(°C)	-15,46/-15,24		
Accessory	Indoor unit	Installation plate			1		
		Wireless remote controller			1		
		Batteries			2		
		Remote controller holder			1		
		Toshiba IAQ filter			1		
		Mounting screw			6(Ø4x25L)		
		Remote controller holder Flat head wood screw			2(Ø3.1x16L)		
		Installation manual			1		
		Owner's manual			1		

For performance when each indoor unit is combined with other unit, refer to the separate table.

* The specifications may be subject to change without notice for purpose of improvement.

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 : 5 m per Indoor Unit.

Unit model	Indoor			RAS-18J2KVRG-E RAS-18J2KVRG-TR	
	Outdoor			RAS-18J2AVRG-E/TR	
Cooling capacity				(kW)	5.00
Cooling capacity range				(kW)	1.24-6.00
Heating capacity				(kW)	6.00
Heating capacity range				(kW)	0.88-6.50
Power supply				1Ph/220-240V/50Hz	
Electric characteristic	Indoor	Operation mode		Cooling	Heating
		Running current		(A) 0.30-0.28	0.30-0.28
		Power consumption		(W) 40	40
		Power factor		(%) 60	60
	Outdoor	Operation mode		Cooling	Heating
		Running current		(A) 6.70-6.15	8.05-7.40
		Power consumption		(W) 1420	1600
		Power factor		(%) 96	90
		Starting current	(A) 6.40	7.75	
COP (Cooling / Heating)				3.52/3.75	
SCOP (Cooling / Heating)				7.30/4.40	
Operating noise	Indoor	High	(Cooling / Heating)	(dB-A)	44/44
		Medium	(Cooling / Heating)	(dB-A)	37/37
		Low	(Cooling / Heating)	(dB-A)	31/31
	Outdoor	(Cooling / Heating)		(dB-A)	49/50
Indoor unit	Unit model			RAS-18J2KVRG	
	Dimension	Height		(mm)	320
		Width		(mm)	1050
		Depth		(mm)	265
	Net weight			(kg)	15
	Fan motor output			(W)	30
	Air flow rate			(Cooling / Heating) (m ³ / min)	16/16
Outdoor unit	Unit model			RAS-18J2AVRG	
	Dimension	Height		(mm)	550
		Width		(mm)	780
		Depth		(mm)	290
	Net weight			(kg)	34
	Compressor	Motor output		(W)	900
		Type		Twin rotary type with DC-inverter variable speed control	
	Model			KTN130D30UFZ	
	Fan motor output			(W)	43
Air flow rate			(Cooling / Heating) (m ³ / min)	35/32	
Piping connection	Type			Flare connection	
	Indoor unit	Liquid side		(mm)	Ø6.35
		Gas side		(mm)	Ø12.70
	Outdoor unit	Liquid side		(mm)	Ø6.35
		Gas side		(mm)	Ø12.70
	Maximum length			(m)	20
	Maximum charge-less length			(m)	15
Maximum height difference			(m)	12	
Refrigerant	Name of refrigerant			R32	
	Weight			(kg)	1.10
Wiring connection	Power supply		3 Wires: Includes earth (Outdoor)		
	Interconnection		4 Wires: Includes earth		
Usable temperature range		Indoor	(Cooling / Heating)	(°C)	21-32/ -28
		Outdoor	(Cooling / Heating)	(°C)	-15,46/-15,24
Accessory	Indoor unit	Installation plate			1
		Wireless remote controller			1
		Batteries			2
		Remote controller holder			1
		Toshiba IAQ filter			2
		Mounting screw			6(Ø4x25L)
		Remote controller holder			2(Ø3.1x16L)
		Flat head wood screw			
		Installation manual			1
Owner's manual			1		

For performance when each indoor unit is combined with other unit, refer to the separate table.

* The specifications may be subject to change without notice for purpose of improvement.

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 : 5 m per Indoor Unit.

Unit model	Indoor			RAS-B22J2KVRG-E RAS-22J2KVRG-TR	
	Outdoor			RAS-22J2AVRG-E/TR	
Cooling capacity (kW)				6.10	
Cooling capacity range (kW)				1.29-6.70	
Heating capacity (kW)				7.00	
Heating capacity range (kW)				0.93-7.50	
Power supply				1Ph/220-240V/50Hz	
Electric characteristic	Indoor	Operation mode		Cooling	Heating
		Running current (A)		0.33-0.31	0.33-0.31
		Power consumption (W)		45	45
		Power factor (%)		61	61
	Outdoor	Operation mode		Cooling	Heating
		Running current (A)		9.20-8.45	9.30-8.50
		Power consumption (W)		1990	1940
		Power factor (%)		98	95
Starting current (A)				8.80	8.90
COP (Cooling / Heating)				3.07/3.61	
SCOP (Cooling / Heating)				6.80/4.40	
Operating noise	Indoor	High	(Cooling / Heating)	(dB-A)	45/46
		Medium	(Cooling / Heating)	(dB-A)	40/41
		Low	(Cooling / Heating)	(dB-A)	34/34
	Outdoor		(Cooling / Heating)		(dB-A)
Indoor unit	Unit model			RAS-(B)22J2KVRG	
	Dimension	Height (mm)		320	
		Width (mm)		1050	
		Depth (mm)		265	
	Net weight (kg)			15	
	Fan motor output (W)			30	
	Air flow rate (Cooling / Heating) (m³ / min)			16/16	
Outdoor unit	Unit model			RAS-22J2AVRG	
	Dimension	Height (mm)		550	
		Width (mm)		780	
		Depth (mm)		290	
	Net weight (kg)			34	
	Compressor	Motor output (W)		900	
		Type		Twin rotary type with DC-inverter variable speed control	
	Model			KTN130D30UFZ	
	Fan motor output (W)			43	
Air flow rate (Cooling / Heating) (m³ / min)			36/36		
Piping connection	Type			Flare connection	
	Indoor unit	Liquid side (mm)		Ø6.35	
		Gas side (mm)		Ø12.70	
	Outdoor unit	Liquid side (mm)		Ø6.35	
		Gas side (mm)		Ø12.70	
	Maximum length (m)			20	
	Maximum charge-less length (m)			15	
Maximum height difference (m)			12		
Refrigerant	Name of refrigerant			R32	
	Weight (kg)			1.10	
Wiring connection	Power supply		3 Wires: Includes earth (Outdoor)		
	Interconnection		4 Wires: Includes earth		
Usable temperature range		Indoor (Cooling / Heating) (°C)	21-32/ -28		
		Outdoor (Cooling / Heating) (°C)	-15,46/-15,24		
Accessory	Indoor unit	Installation plate		1	
		Wireless remote controller		1	
		Batteries		2	
		Remote controller holder		1	
		Toshiba IAQ filter		2	
		Mounting screw		6(Ø4x25L)	
		Remote controller holder Flat head wood screw		2(Ø3.1x16L)	
		Installation manual		1	
		Owner's manual		1	

For performance when each indoor unit is combined with other unit, refer to the separate table.

* The specifications may be subject to change without notice for purpose of improvement.

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 : 5 m per Indoor Unit.

Unit model	Indoor			RAS-B24J2KVRG-E RAS-24J2KVRG-TR			
	Outdoor			RAS-24J2AVRG-E/TR			
Cooling capacity				(kW)	7.00		
Cooling capacity range				(kW)	1.50-7.70		
Heating capacity				(kW)	8.00		
Heating capacity range				(kW)	1.60-8.80		
Power supply				1Ph/220-240V/50Hz			
Electric characteristic	Indoor	Operation mode			Cooling	Heating	
		Running current			(A) 0.36-0.34	0.36-0.34	
		Power consumption			(W) 50	50	
		Power factor			(%) 62	62	
	Outdoor	Operation mode			Cooling	Heating	
		Running current			(A) 10.14-9.36	10.94-9.96	
		Power consumption			(W) 2200	2360	
		Power factor			(%) 98	98	
Starting current				(A) 10.10	10.80		
COP (Cooling / Heating)				3.11/3.32			
SCOP (Cooling / Heating)				6.25/4.07			
Operating noise	Indoor	High	(Cooling / Heating)	(dB-A)	47/48		
		Medium	(Cooling / Heating)	(dB-A)	41/41		
		Low	(Cooling / Heating)	(dB-A)	35/35		
	Outdoor	(Cooling / Heating)			(dB-A)	53/53	
Indoor unit	Unit model				RAS-(B)24J2KVRG		
	Dimension	Height			(mm)	320	
		Width			(mm)	1050	
		Depth			(mm)	265	
	Net weight				(kg)	15	
	Fan motor output				(W)	30	
	Air flow rate				(Cooling / Heating) (m ³ / min)	18/19	
Outdoor unit	Unit model				RAS-24J2AVR		
	Dimension	Height			(mm)	630	
		Width			(mm)	800	
		Depth			(mm)	300	
	Net weight				(kg)	41	
	Compressor	Motor output			(W)	1100	
		Type			Twin rotary type with DC-inverter variable speed control		
	Model				DX151A1T-30N		
	Fan motor output				(W)	70	
Air flow rate				(Cooling / Heating) (m ³ / min)	49/49		
Piping connection	Type				Flare connection		
	Indoor unit	Liquid side			(mm)	Ø 6.35	
		Gas side			(mm)	Ø 12.70	
	Outdoor unit	Liquid side			(mm)	Ø 6.35	
		Gas side			(mm)	Ø 12.70	
	Maximum length				(m)	20	
	Maximum charge-less length				(m)	15	
Maximum height difference				(m)	15		
Refrigerant	Name of refrigerant				R32		
	Weight				(kg)	1.14	
Wiring connection		Power supply				3 Wires: Includes earth (Outdoor)	
		Interconnection				4 Wires: Includes earth	
Usable temperature range		Indoor	(Cooling / Heating)	(°C)	21-32/ -28		
		Outdoor	(Cooling / Heating)	(°C)	-15,46/-15,24		
Accessory	Indoor unit	Installation plate				1	
		Wireless remote controller				1	
		Batteries				2	
		Remote controller holder				1	
		Toshiba IAQ filter				2	
		Mounting screw				6(Ø4x25L)	
		Remote controller holder Flat head wood screw				2(Ø3.1x16L)	
		Installation manual				1	
		Owner's manual				1	

For performance when each indoor unit is combined with other unit, refer to the separate table.

* The specifications may be subject to change without notice for purpose of improvement.

Cooling : Capacity test condition, inside : 27 °C (Db) / 19 °C (Wb), outside : 35 °C (Db) / 24 °C (Wb)

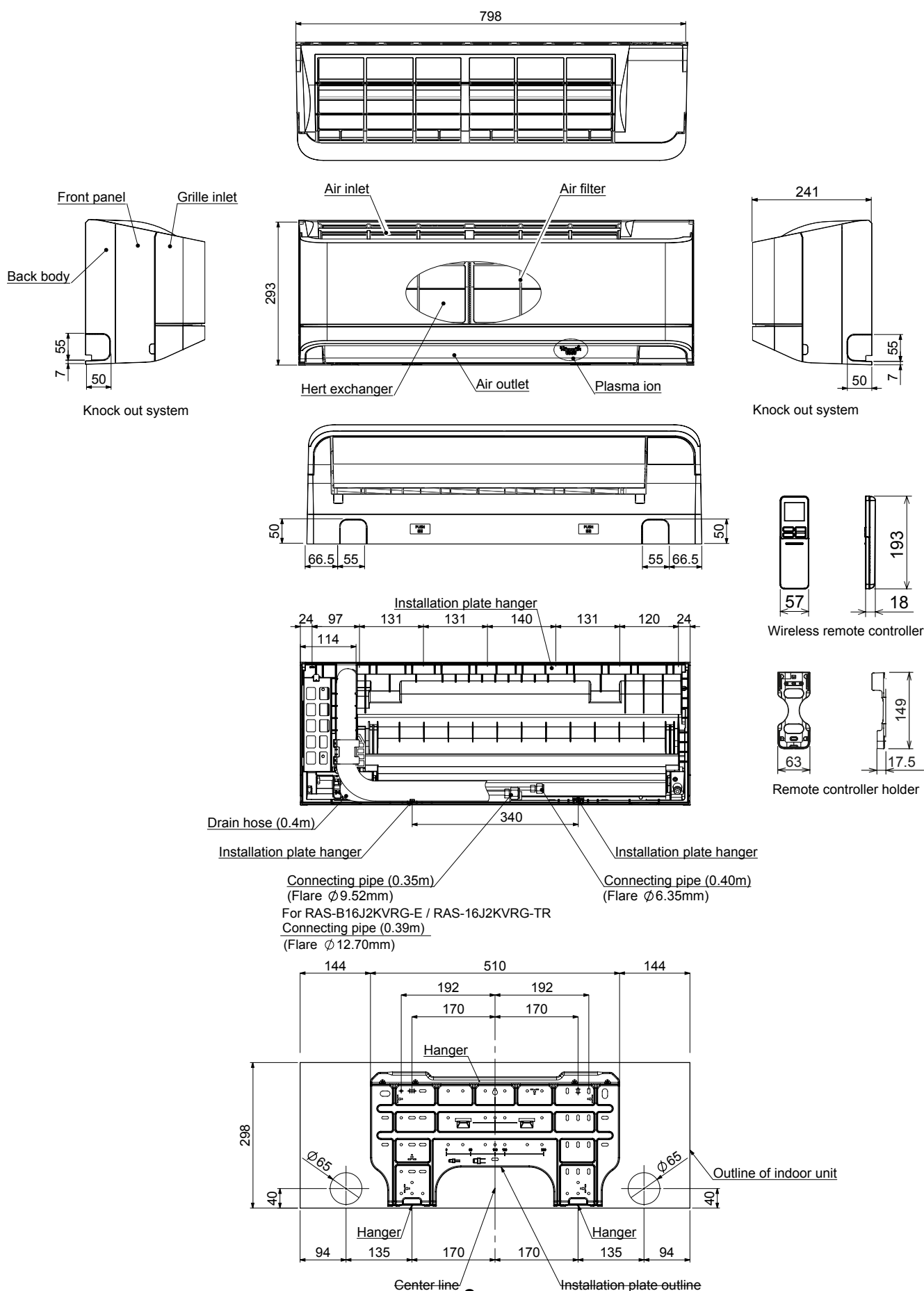
Heating : Capacity test condition, inside : 20 °C (Db), outside : 7 °C (Db) / 6 °C (Wb)

Piping length : 5 m per Indoor Unit.

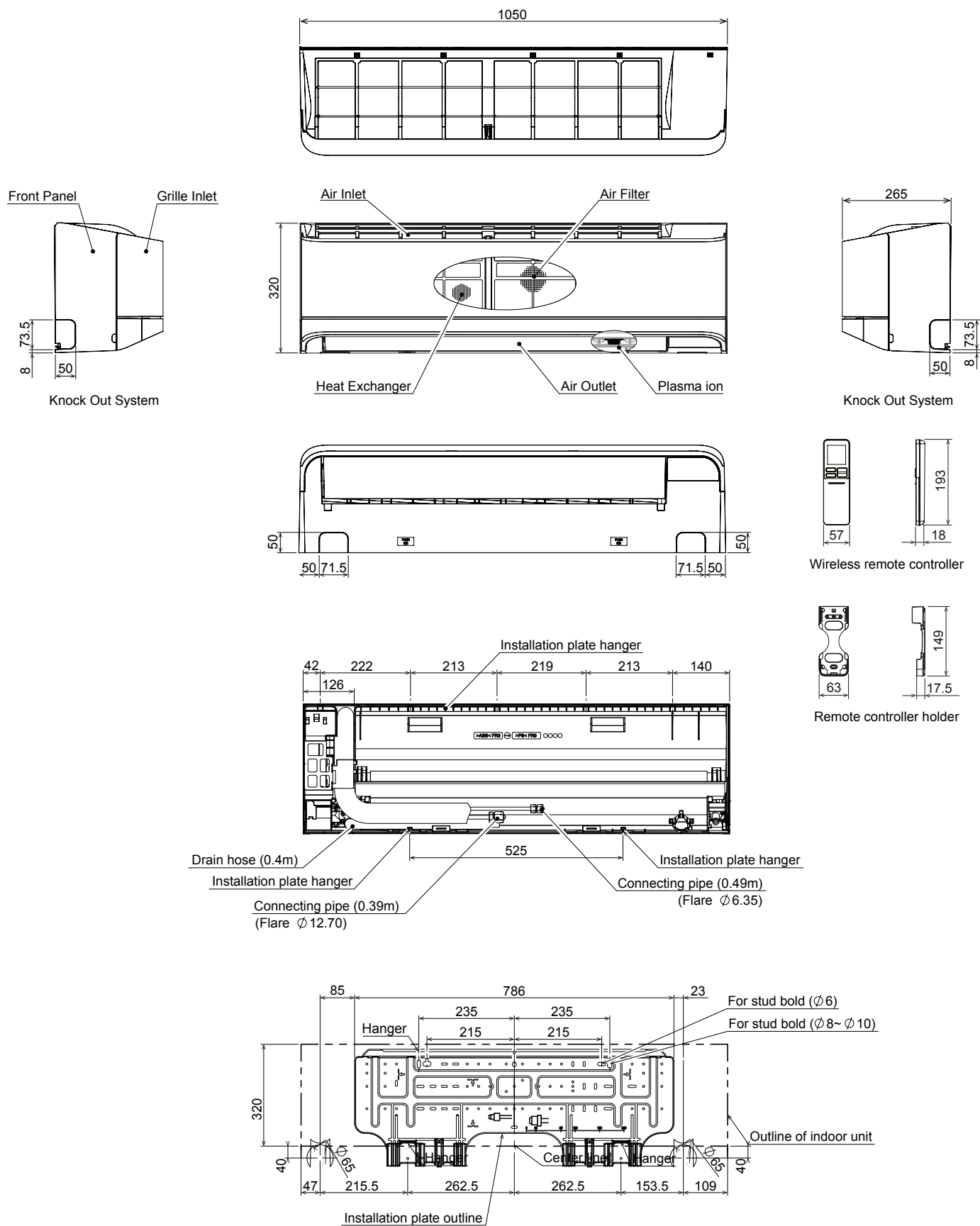
3. Dimension

Indoor Unit : RAS-B10J2KVRG-E, RAS-B13J2KVRG-E and RAS-B16J2KVRG-E
RAS-10J2KVRG-TR, RAS-13J2KVRG-TR and RAS-16J2KVRG-TR

(Unit : mm)

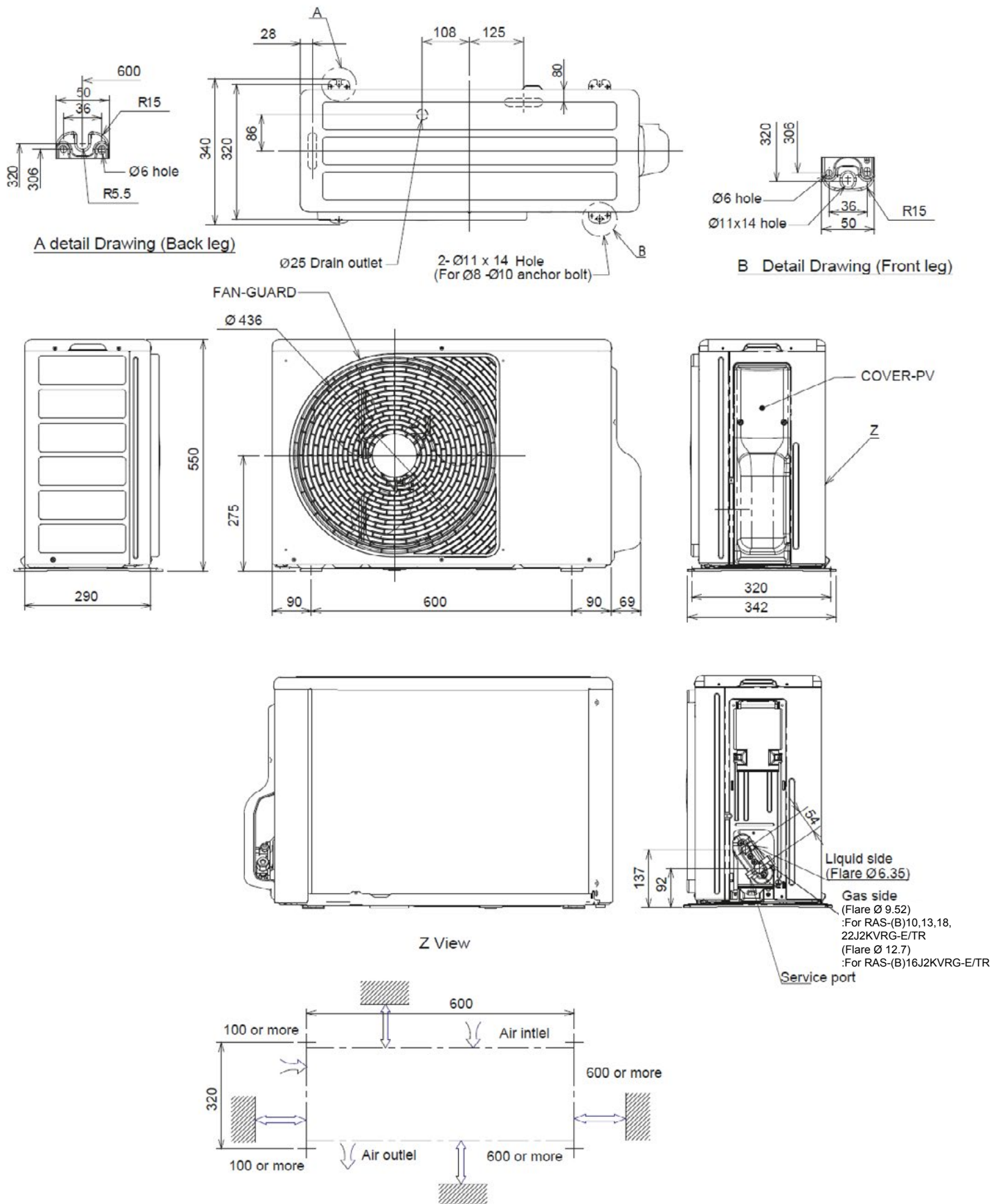


Indoor Unit : RAS-18J2KVRG-E, RAS-B22J2KVRG-E and RAS-B24J2KVRG-E
 RAS-18J2KVRG-TR, RAS-22J2KVRG-TR and RAS-24J2KVRG-TR
 (Unit : mm)



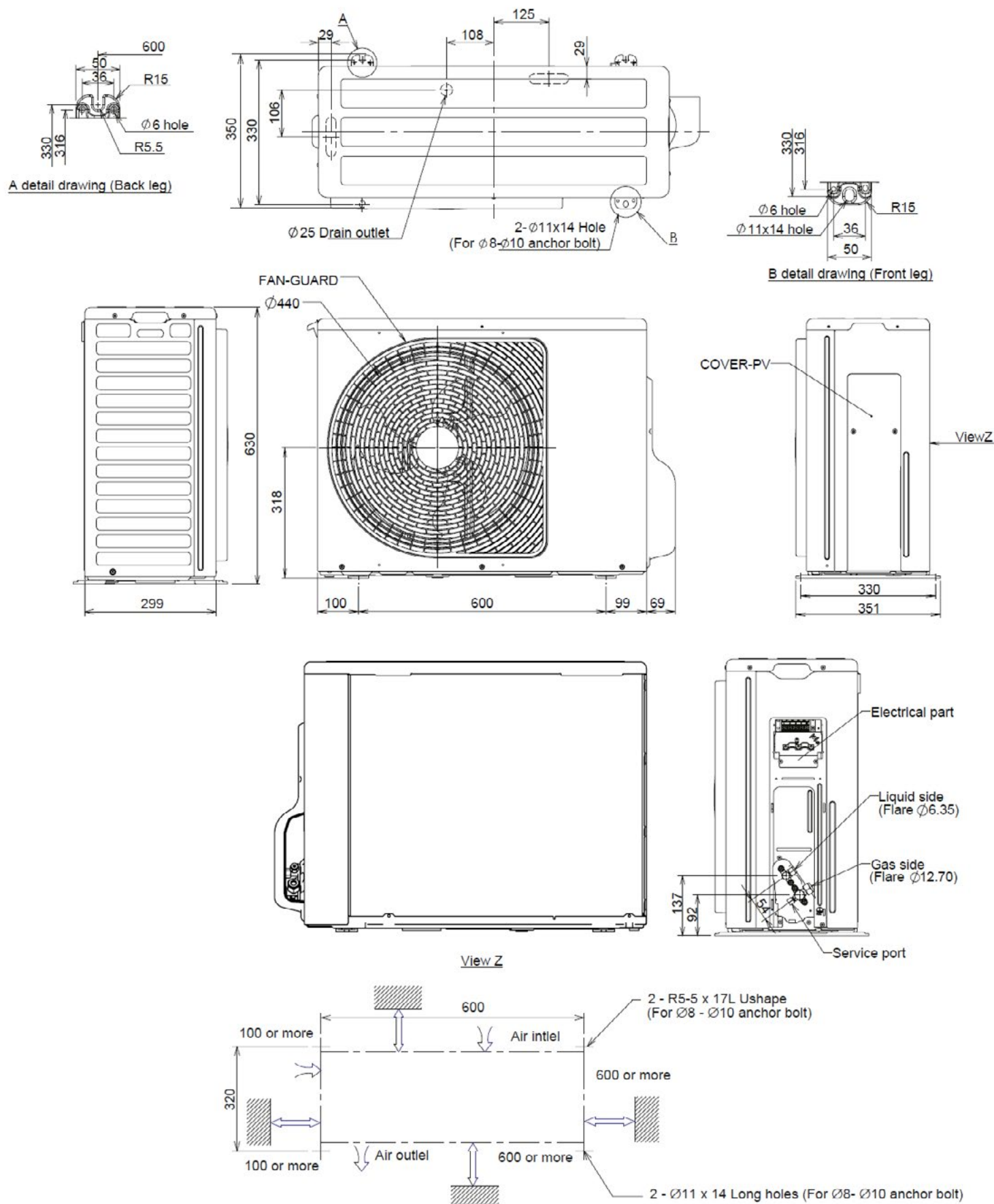
Outdoor Unit : RAS-10J2AVRG- E/TR, RAS-13J2AVRG- E/TR, RAS-16J2AVRG- E/TR,
RAS-18J2AVRG- E/TR and RAS-22J2AVRG-E/TR

(Unit : mm)



Outdoor Unit : RAS-24J2AVRG- E/TR

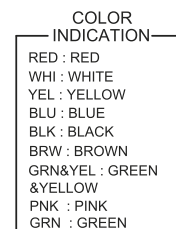
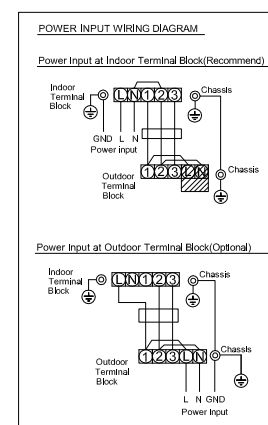
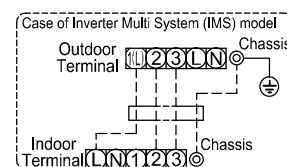
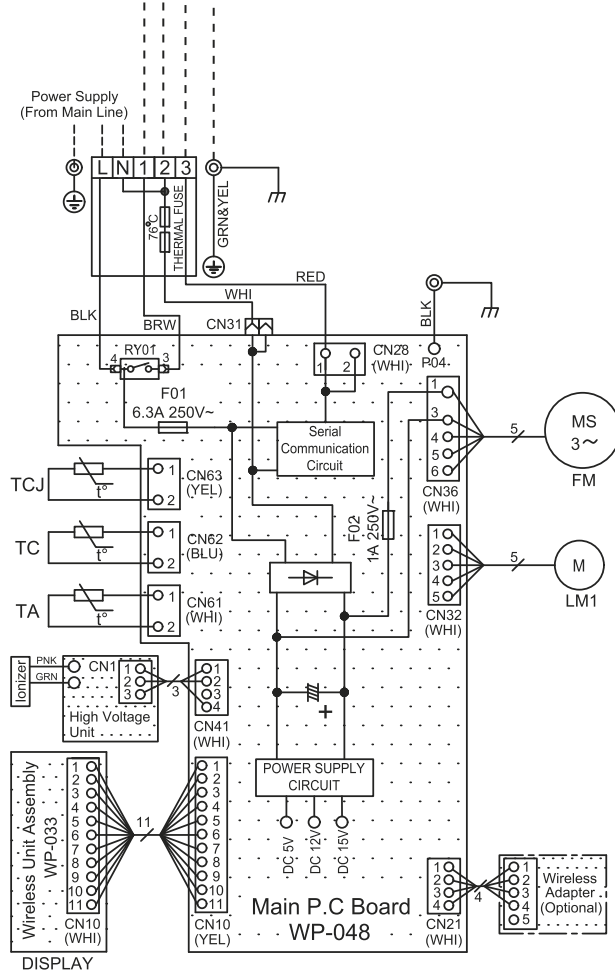
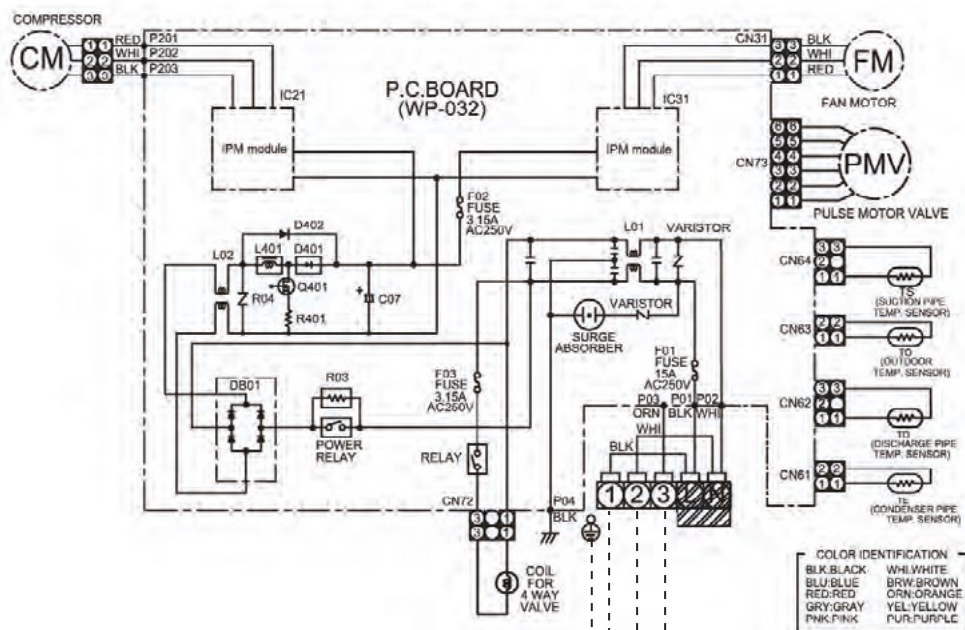
(Unit : mm)



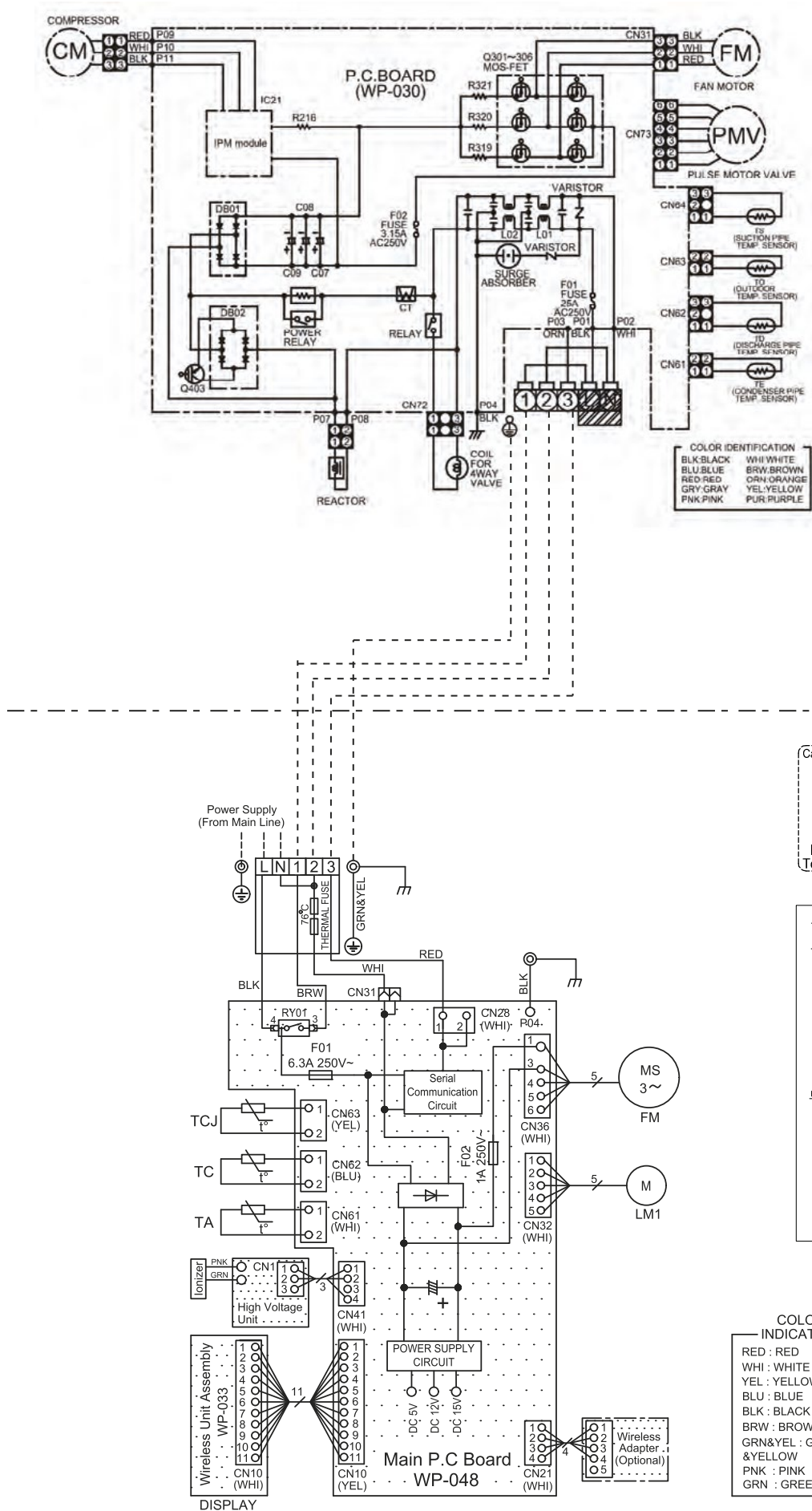
4. Wiring diagrams

RAS-B10J2KVRG-E / RAS-10J2KVRG-TR : RAS-10J2AVRG-E / TR

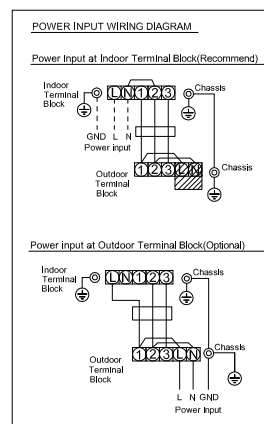
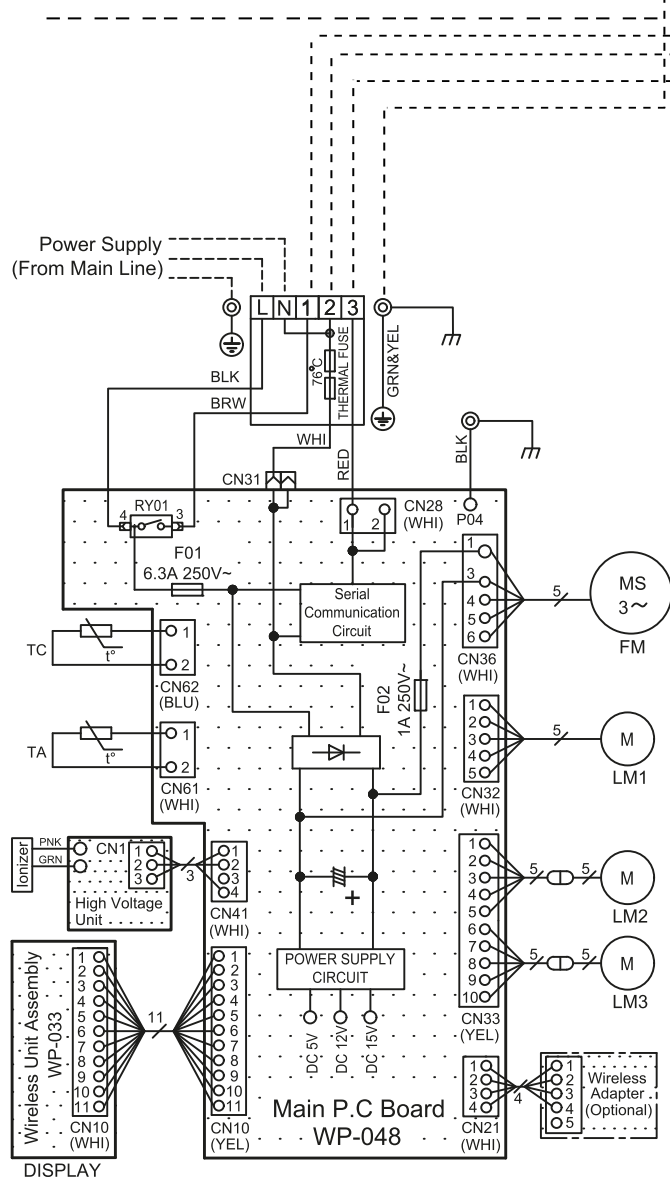
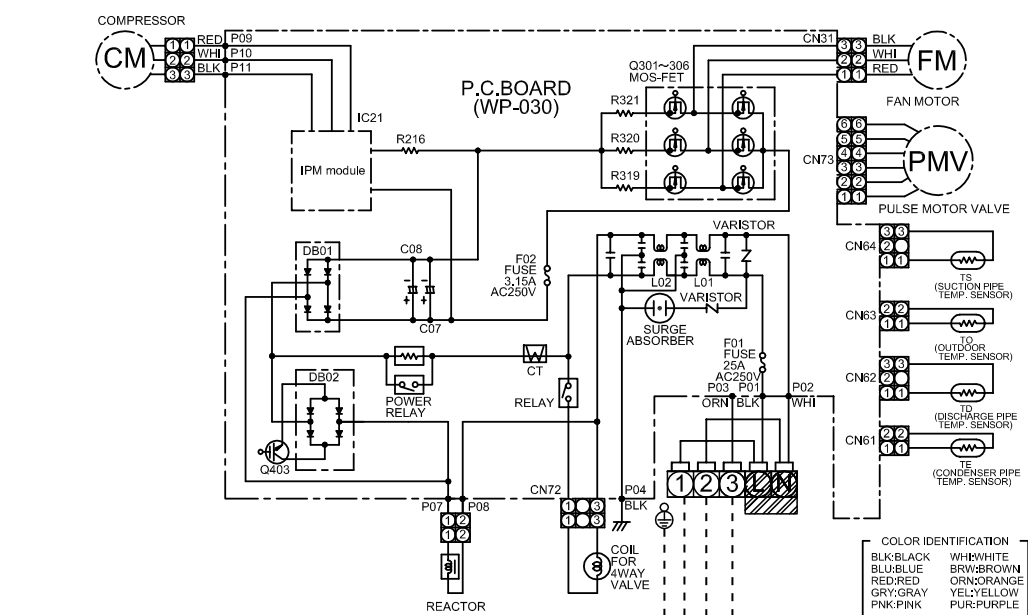
RAS-B13J2KVRG-E / RAS-13J2KVRG-TR : RAS-13J2AVRG-E / TR



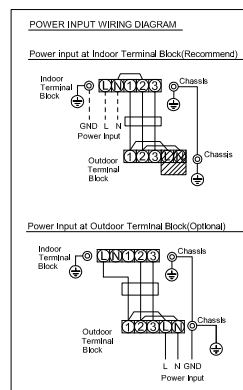
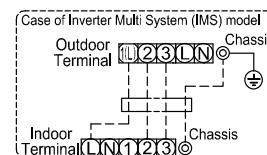
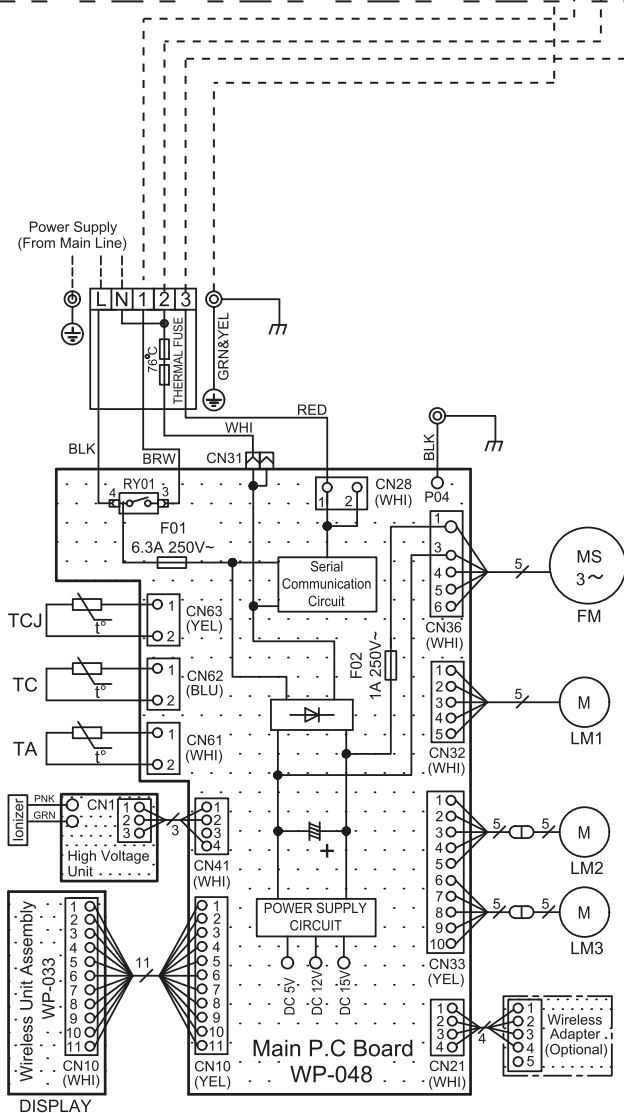
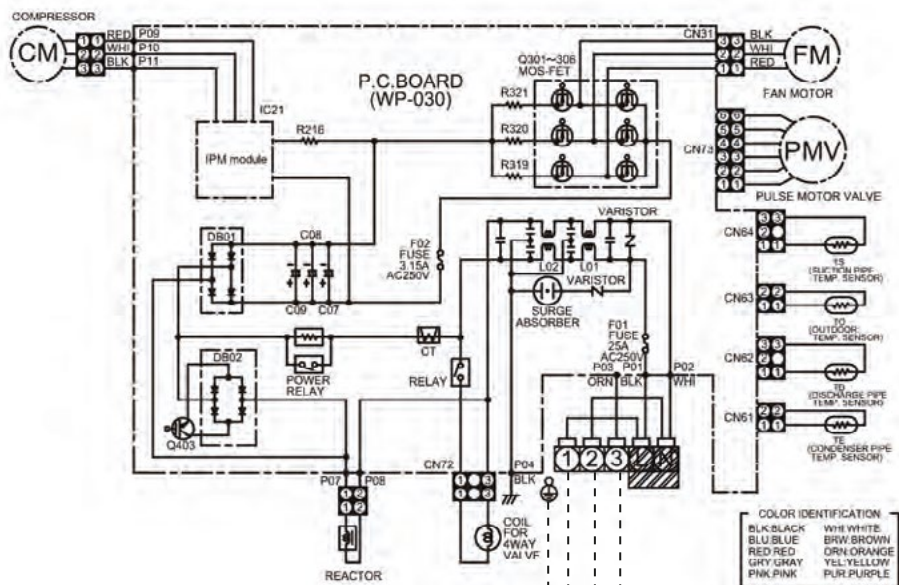
RAS-B16J2KVRG-E / RAS-16J2KVRG-TR : RAS-16J2AVRG-E/TR



RAS-18J2KVRG-E / TR : RAS-18J2AVRG-E / TR



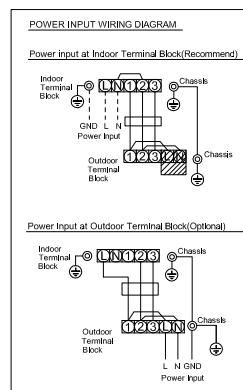
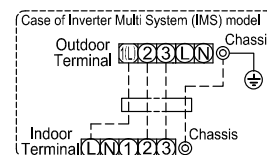
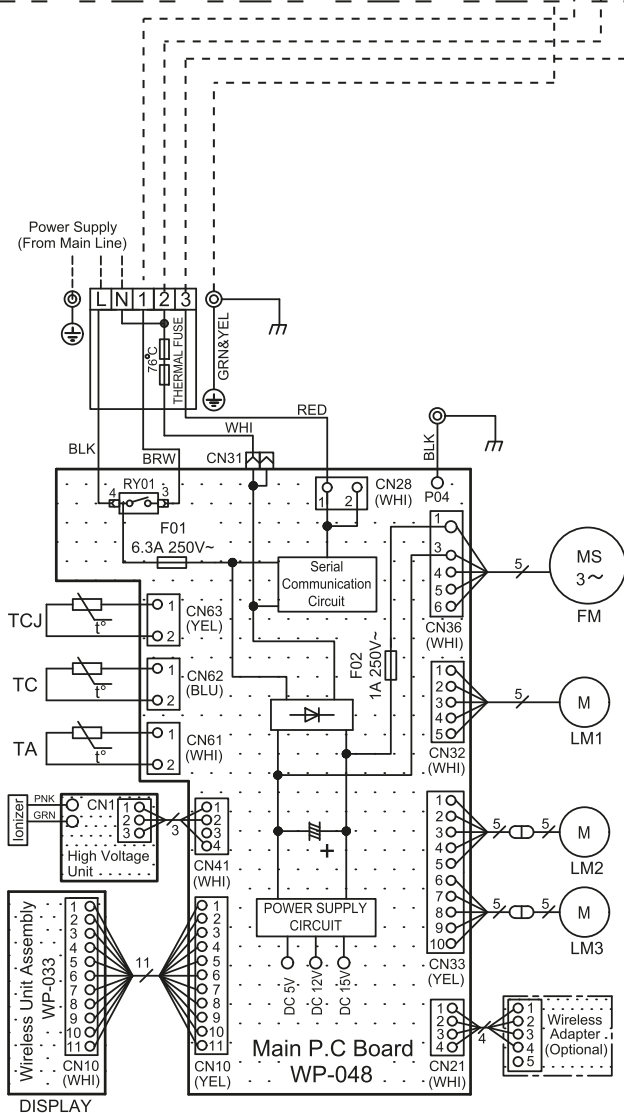
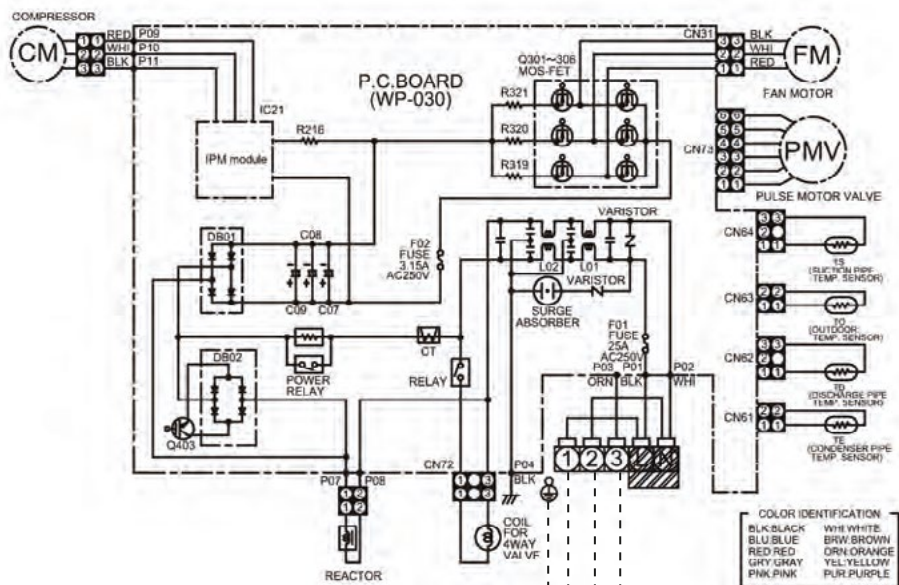
RAS-B22J2KVRG-E / RAS-22J2KVRG-TR : RAS-22J2AVRG-E / TR



COLOR INDICATION

RED	: RED
WHI	: WHITE
YEL	: YELLOW
BLU	: BLUE
BLK	: BLACK
BRW	: BROWN
GRN&YEL	: GREEN & YELLOW
PNK	: PINK
GRN	: GREEN

RAS-B24J2KVRG-E / RAS-24J2KVRG-TR : RAS-24J2AVRG-E / TR



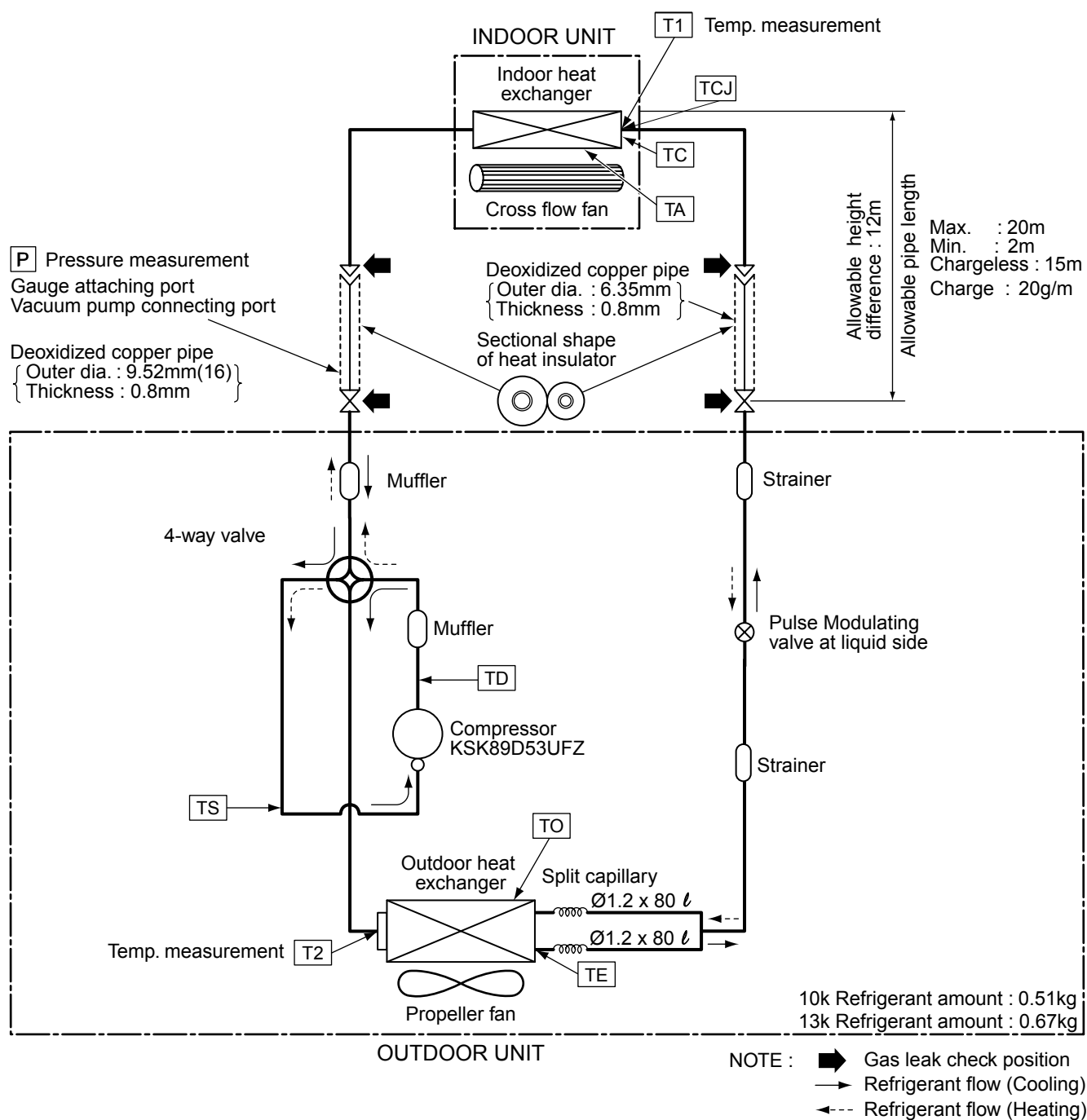
COLOR INDICATION

RED	: RED
WHI	: WHITE
YEL	: YELLOW
BLU	: BLUE
BLK	: BLACK
BRW	: BROWN
GRN&YEL	: GREEN & YELLOW
PNK	: PINK
GRN	: GREEN

5. Refrigerant Cycle Diagram

RAS-B10J2KVRG-E / RAS-10J2KVRG-TR : RAS-10J2AVRG-E / TR

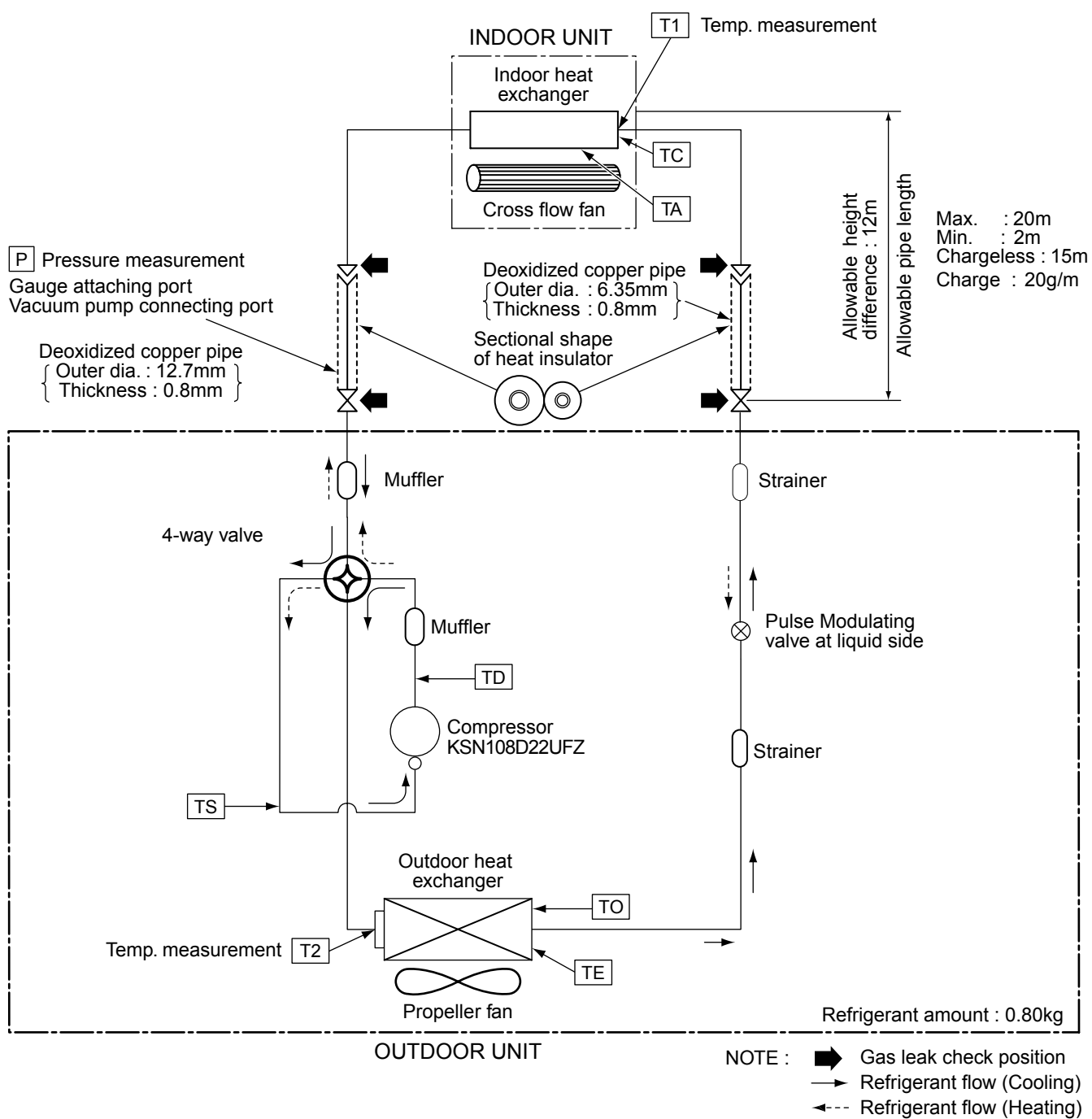
RAS-B13J2KVRG-E / RAS-13J2KVRG-TR : RAS-13J2AVRG-E / TR



NOTE :

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

RAS-B16J2KVRG-E / RAS-16J2KVRG-TR : RAS-16J2AVRG-E / TR

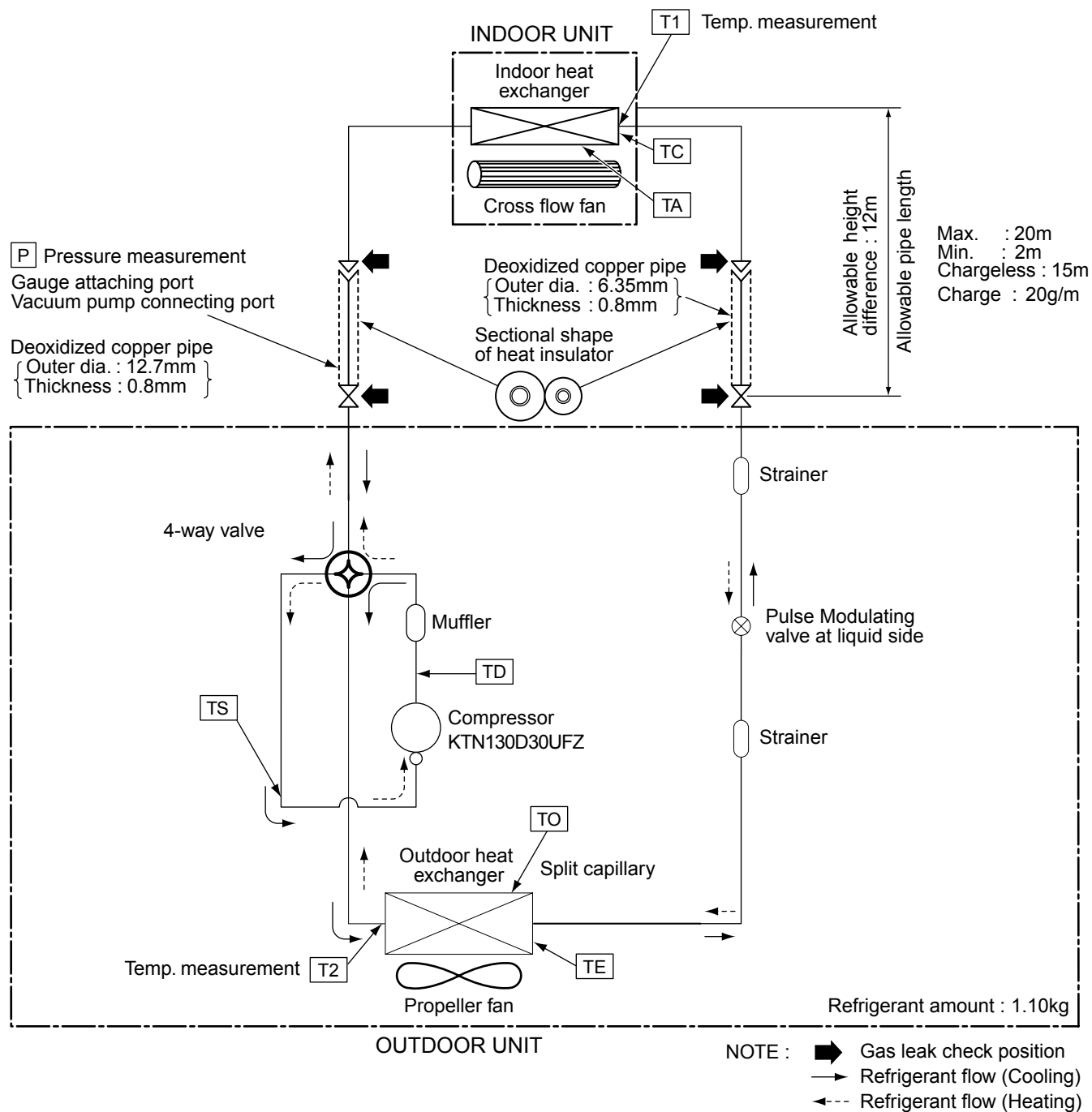


NOTE :

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

RAS-18J2KVRG-E / TR : RAS-18J2AVRG-E / TR

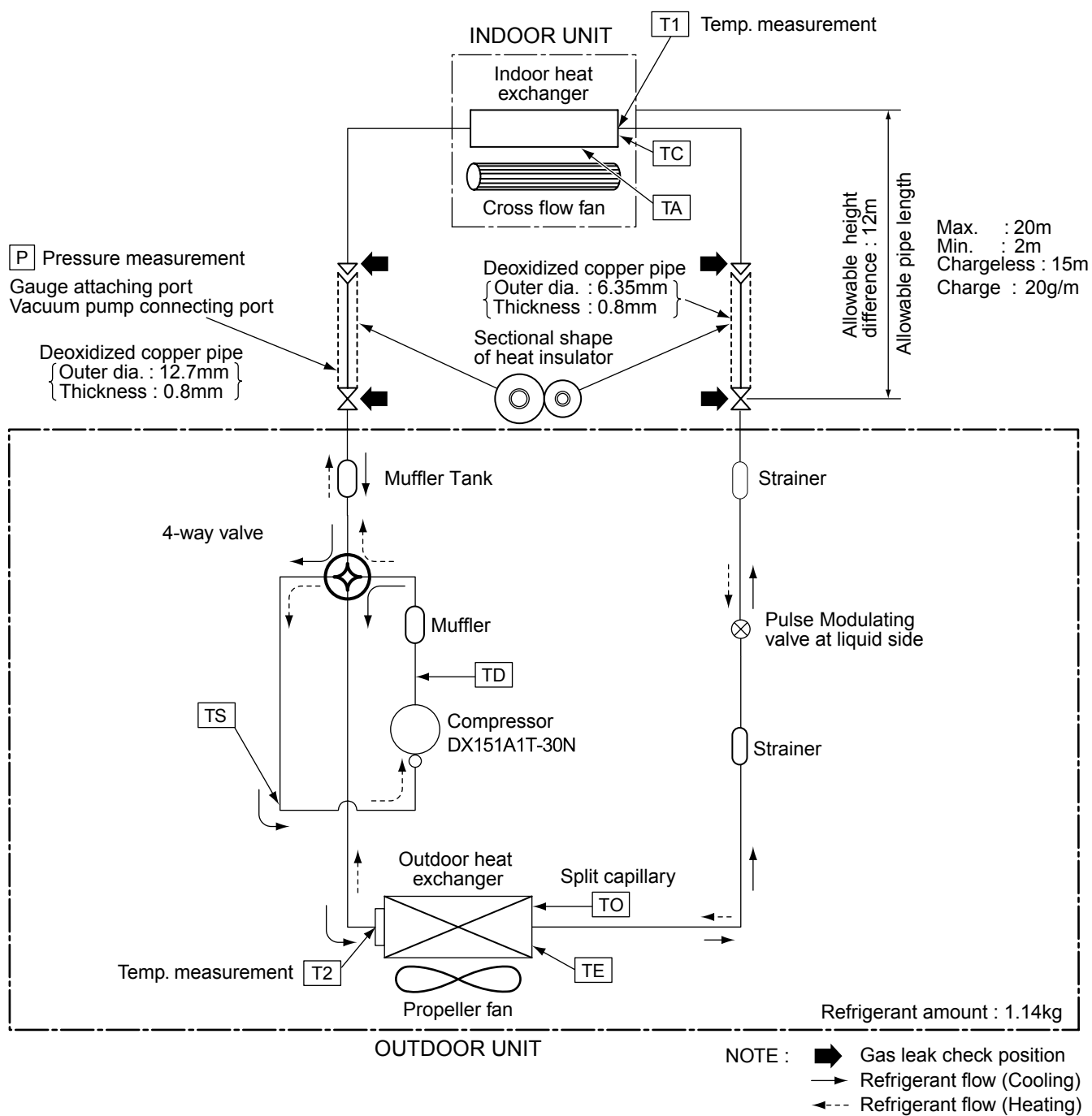
RAS-B22J2KVRG-E / RAS-22J2KVRG-TR : RAS-22J2AVRG-E / TR



NOTE :

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

RAS-B24J2KVRG-E / RAS-24J2KVRG-TR : RAS-B24J2AVRG-E / TR



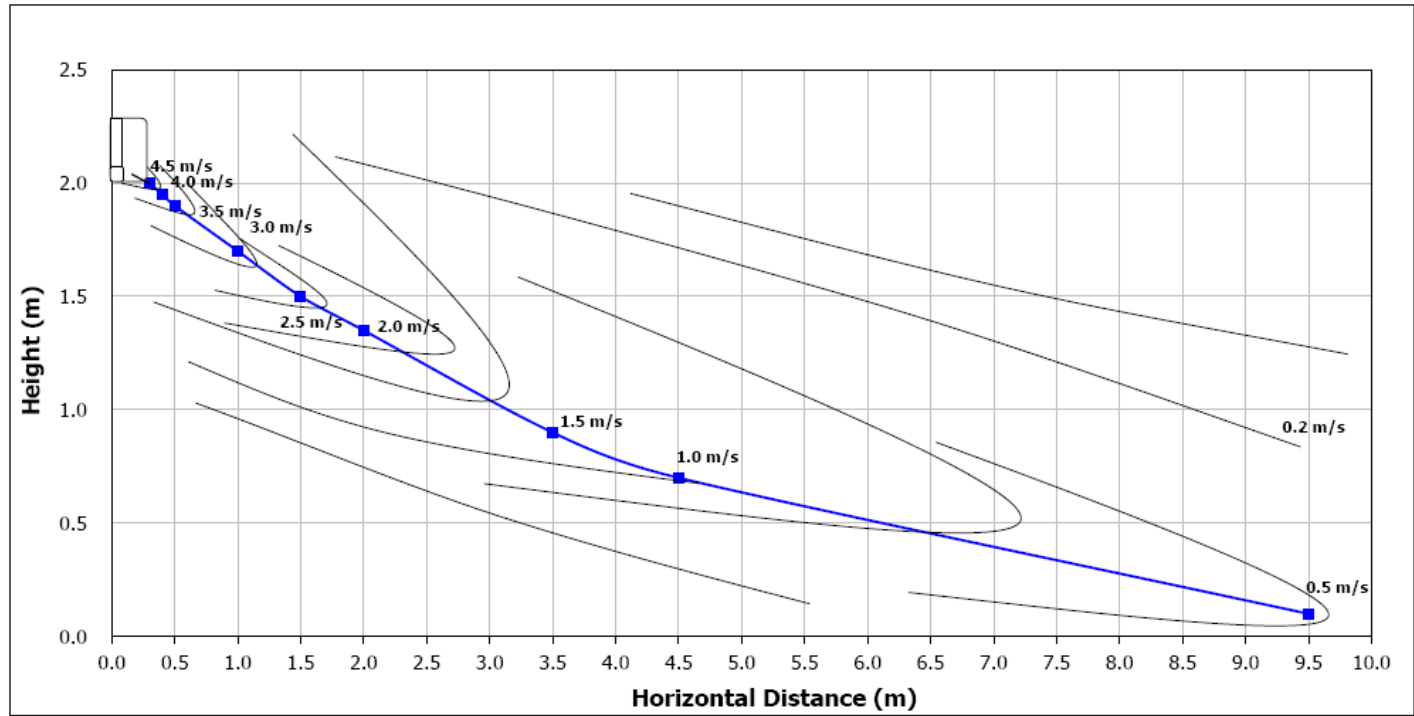
NOTE :

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

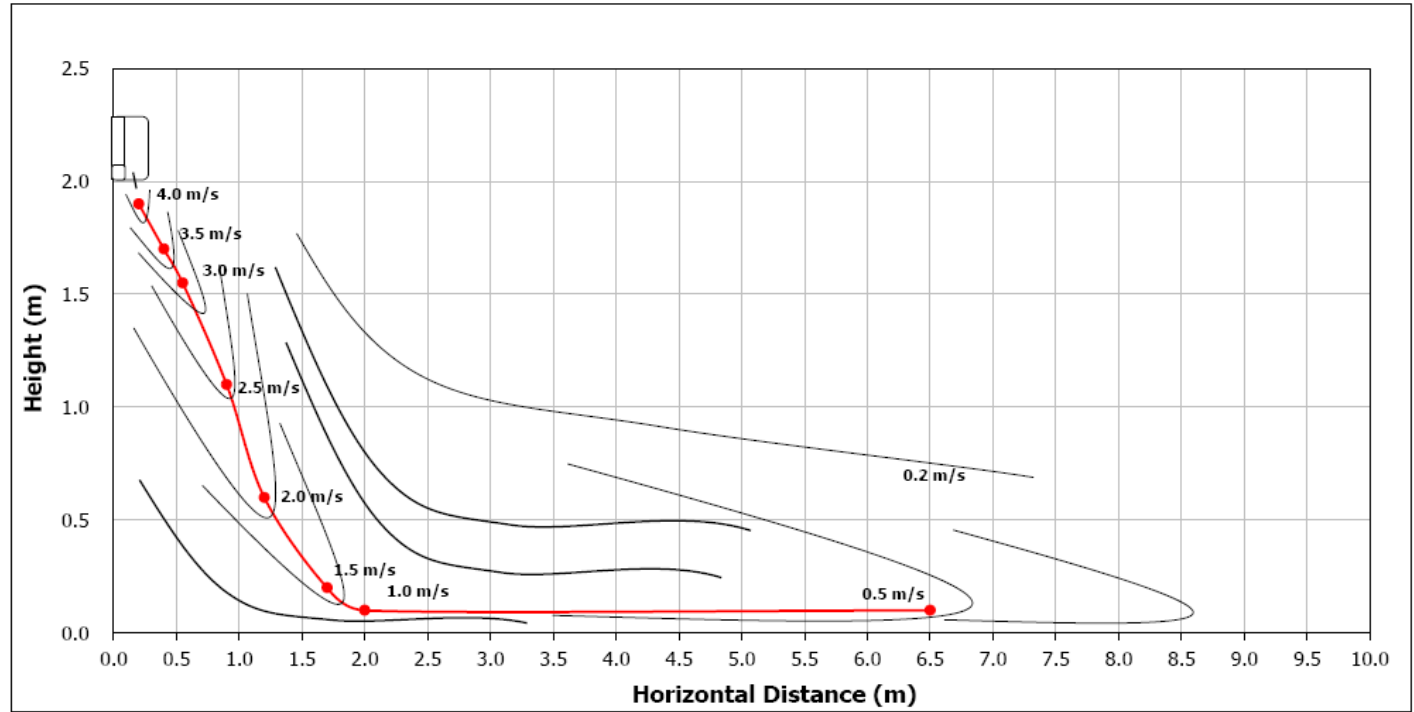
6. Air Speed Distribution

RAS-B10J2KVRG-E / RAS-10J2KVRG-TR

Cooling

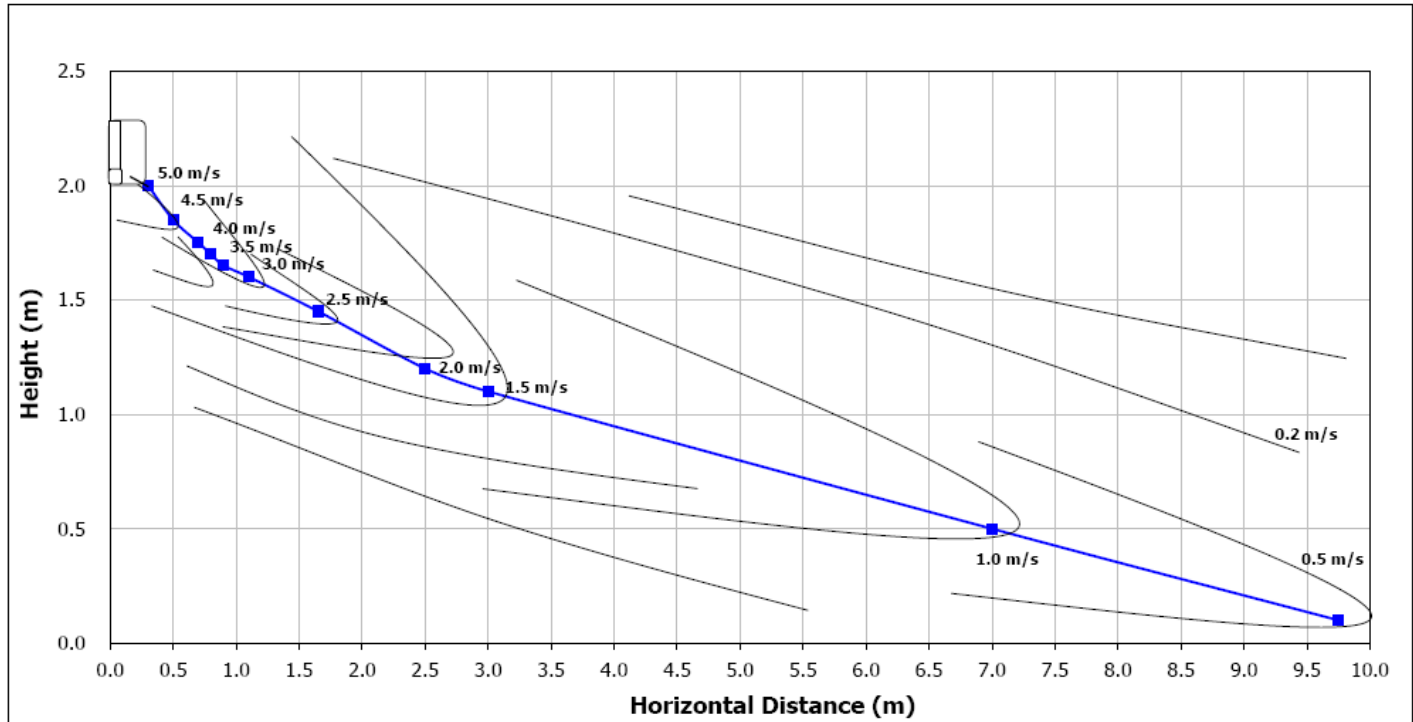


Heating

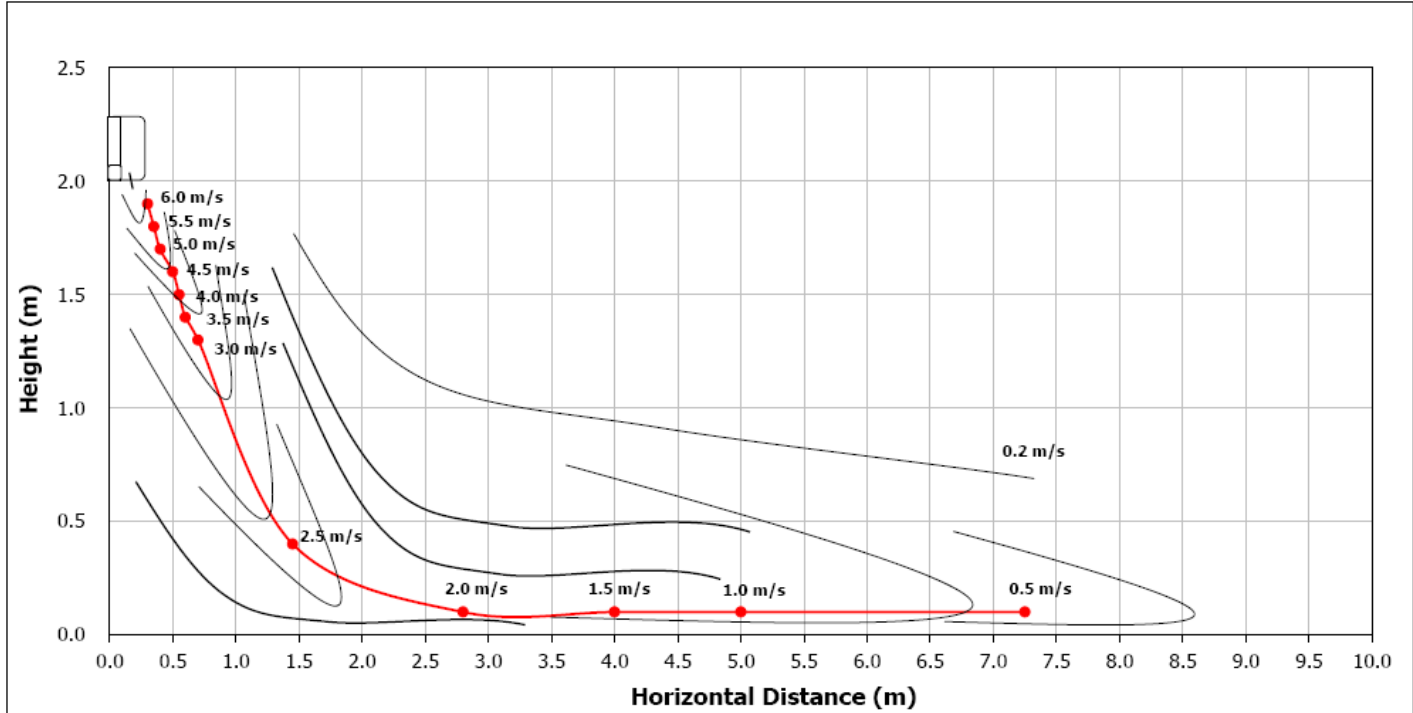


RAS-B13J2KVRG-E / RAS-13J2KVRG-TR

Cooling

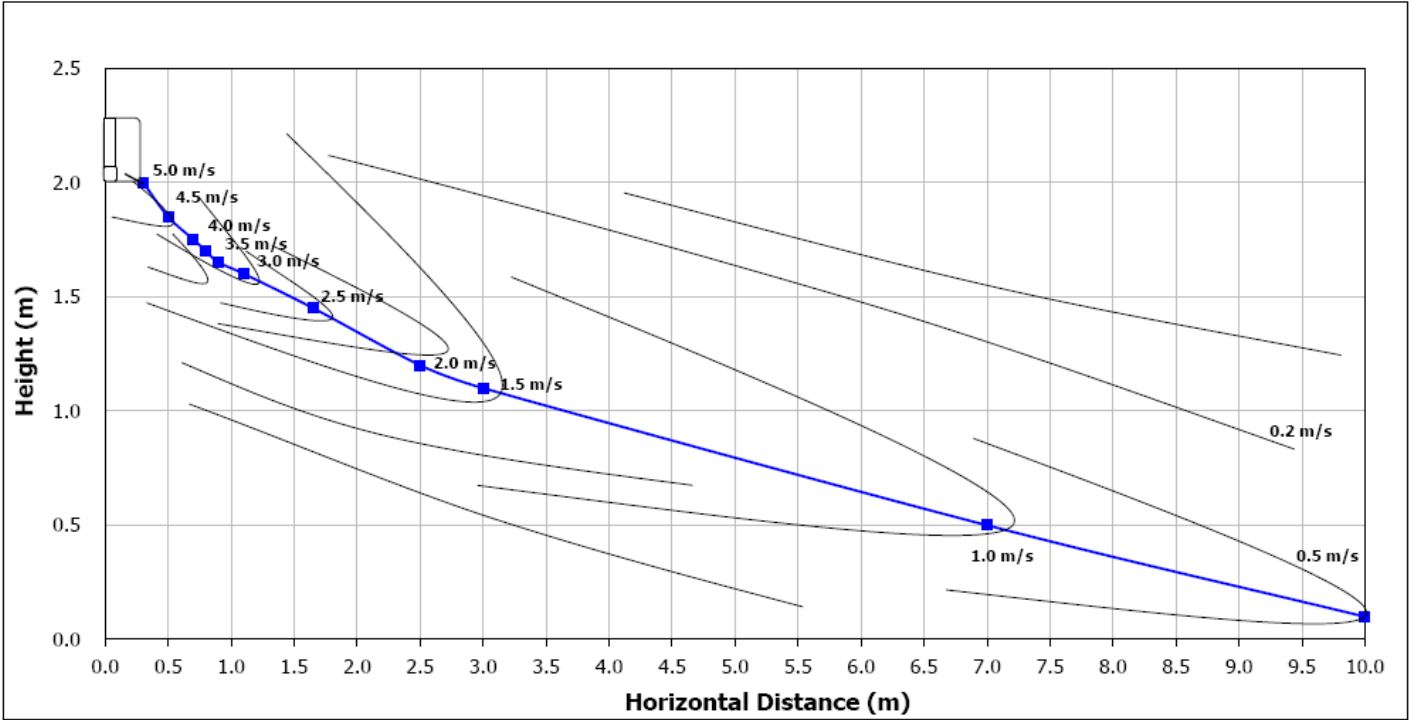


Heating

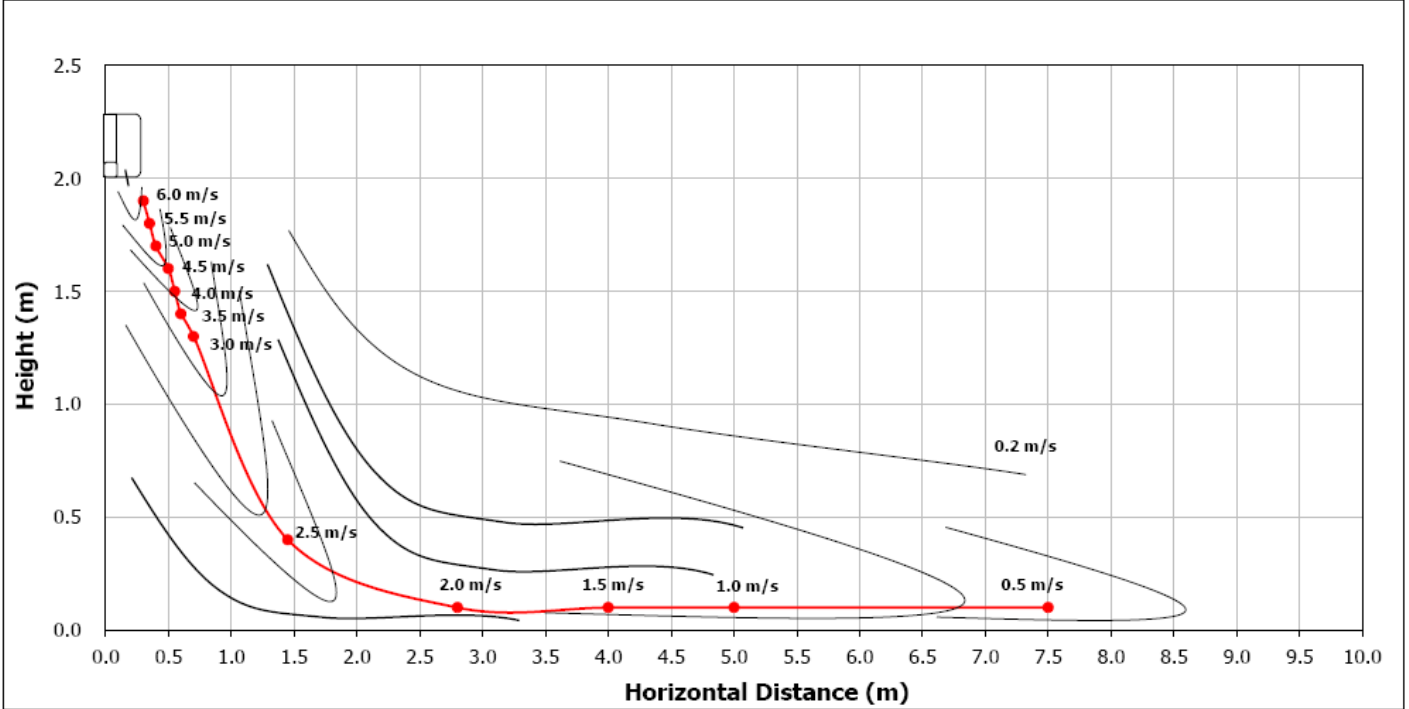


RAS-B16J2KVRG-E / RAS-16J2KVRG-TR

Cooling

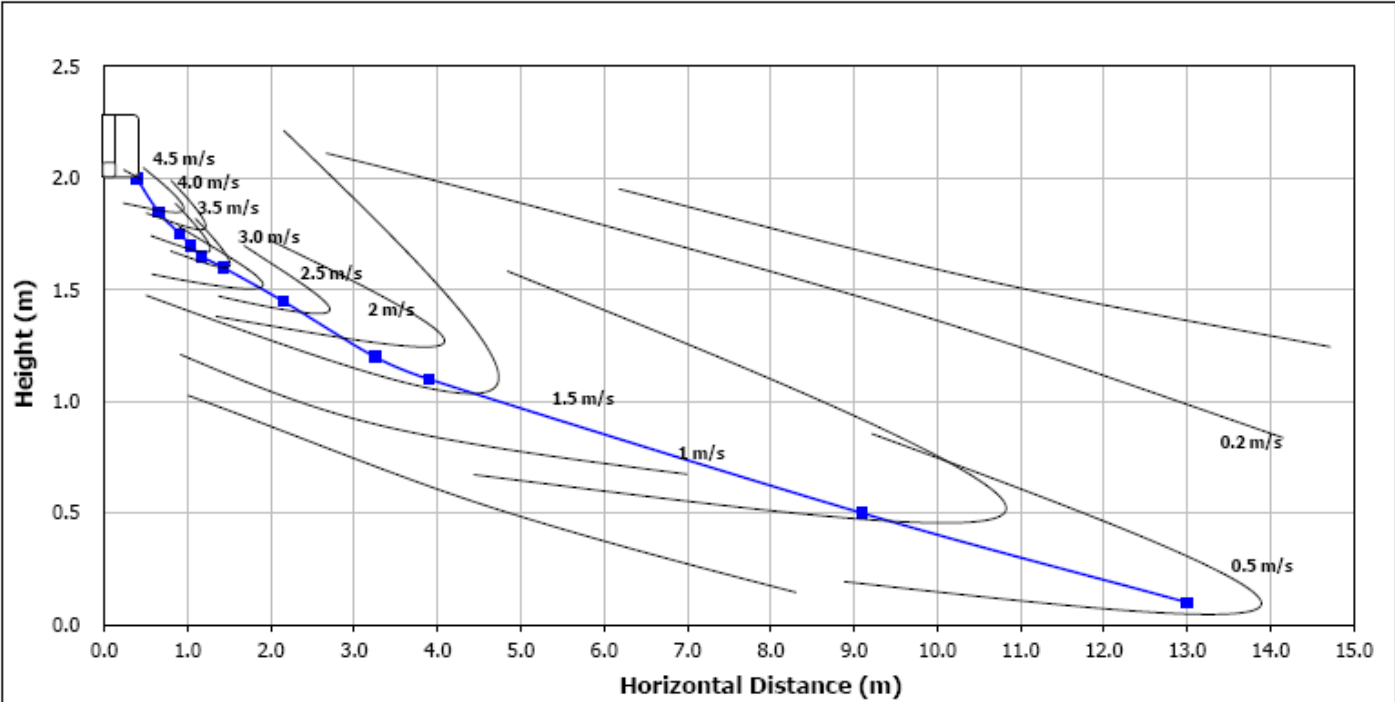


Heating

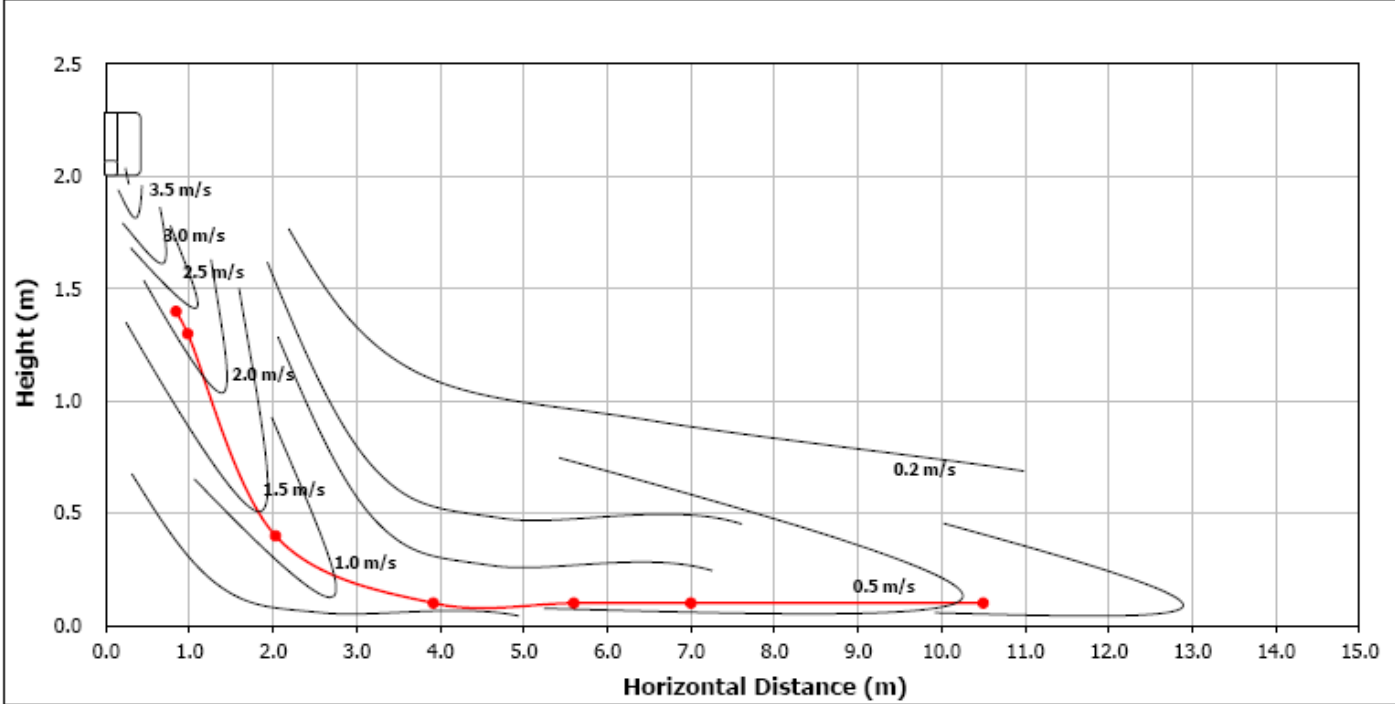


RAS-18J2KVRG-E / TR

Cooling

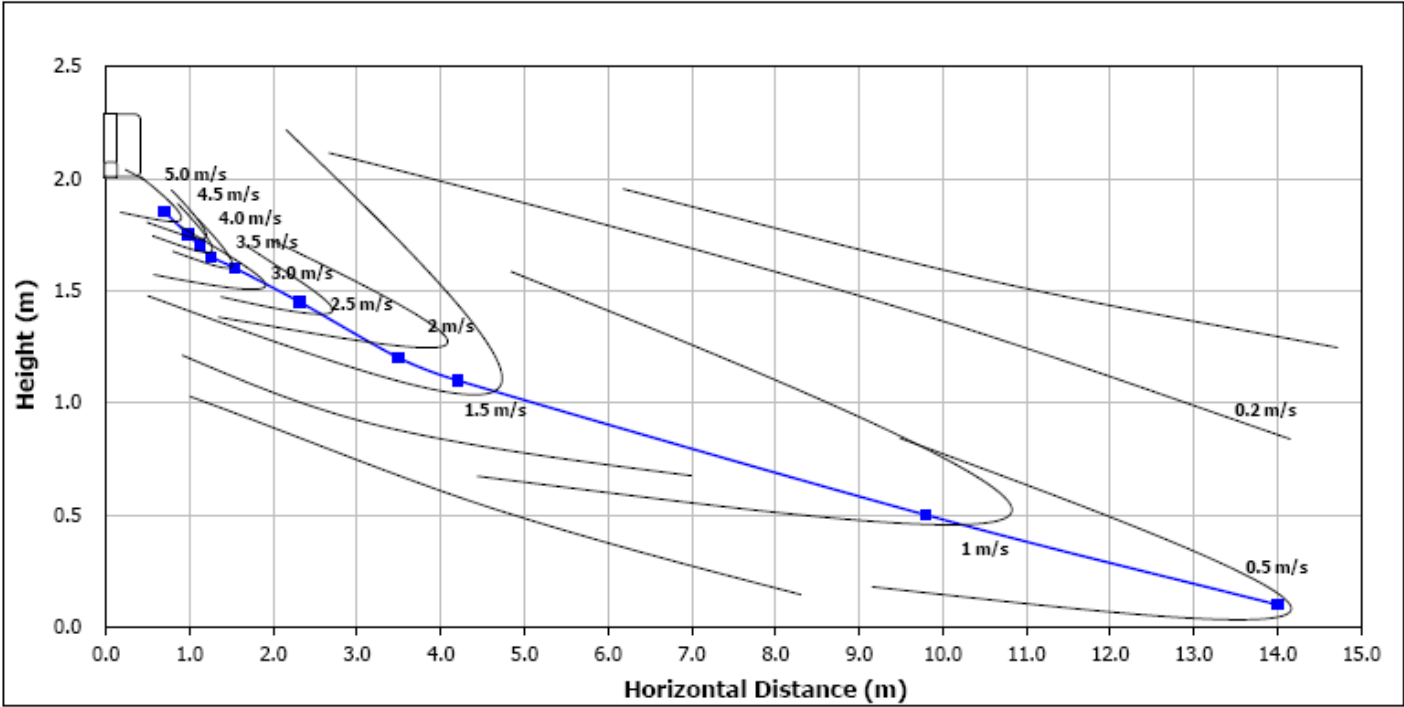


Heating

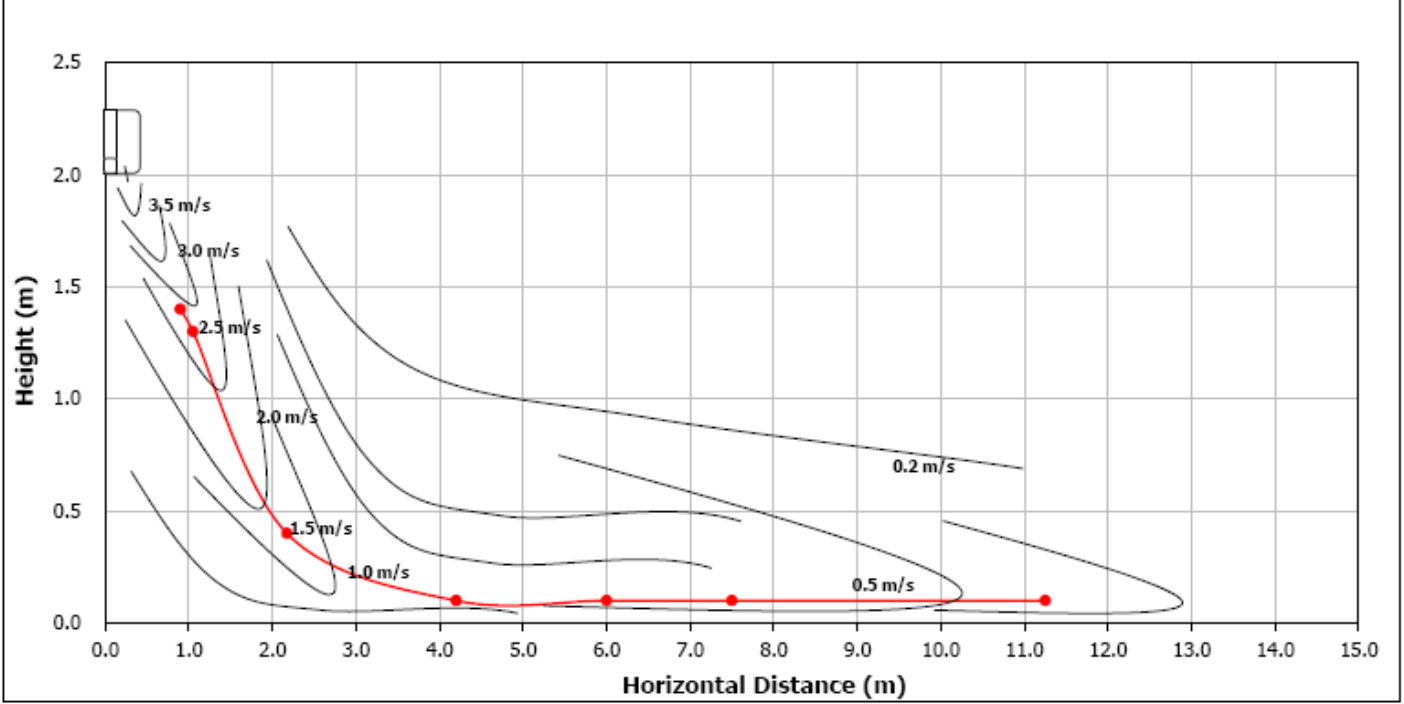


RAS-B22J2KVRG-E / RAS-22J2KVRG-TR

Cooling

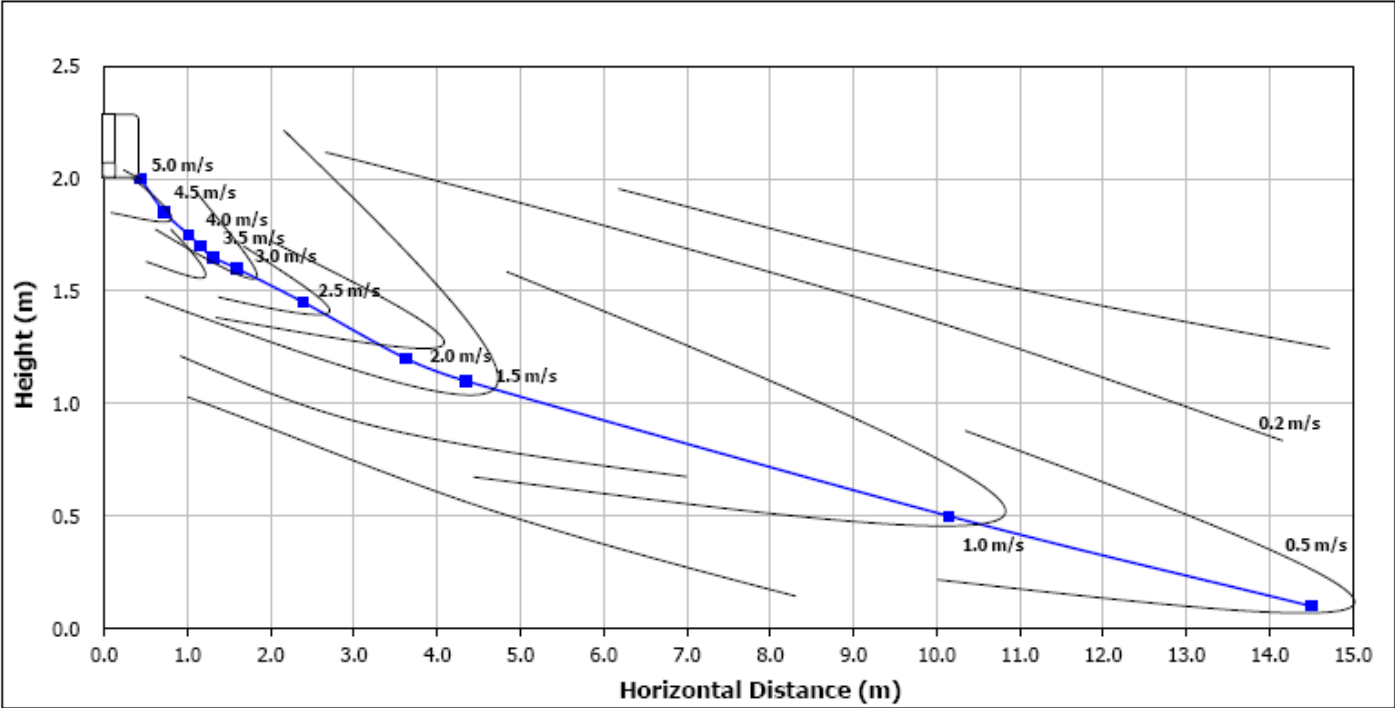


Heating

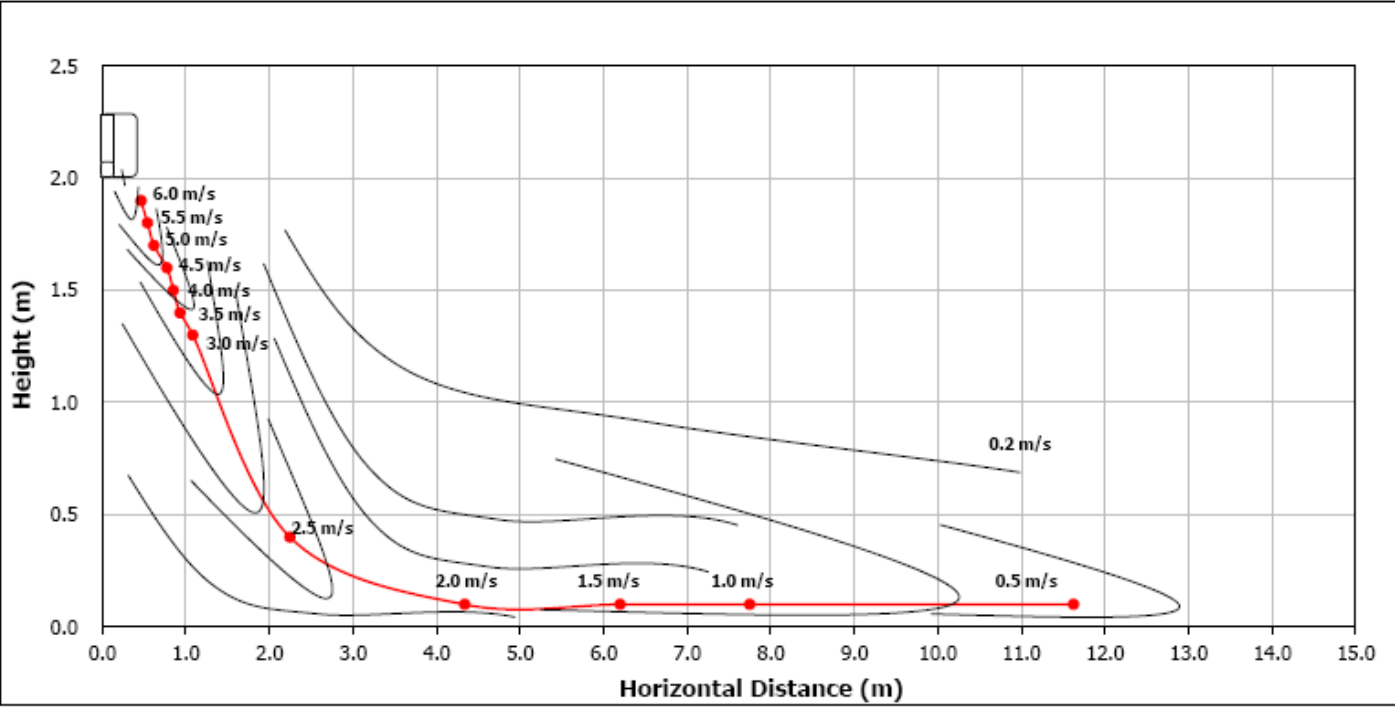


RAS-B24J2KVRG-E / RAS-24J2KVRG-TR

Cooling



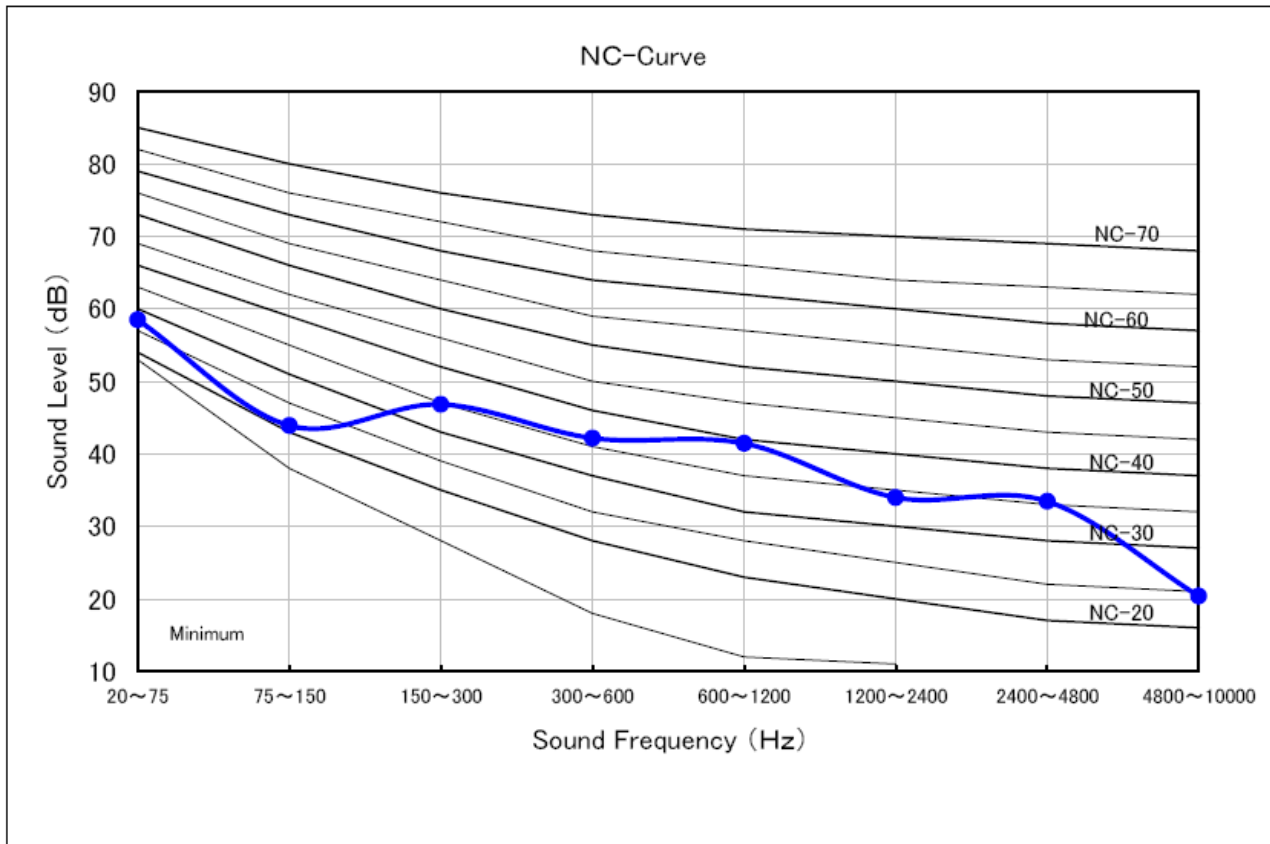
Heating



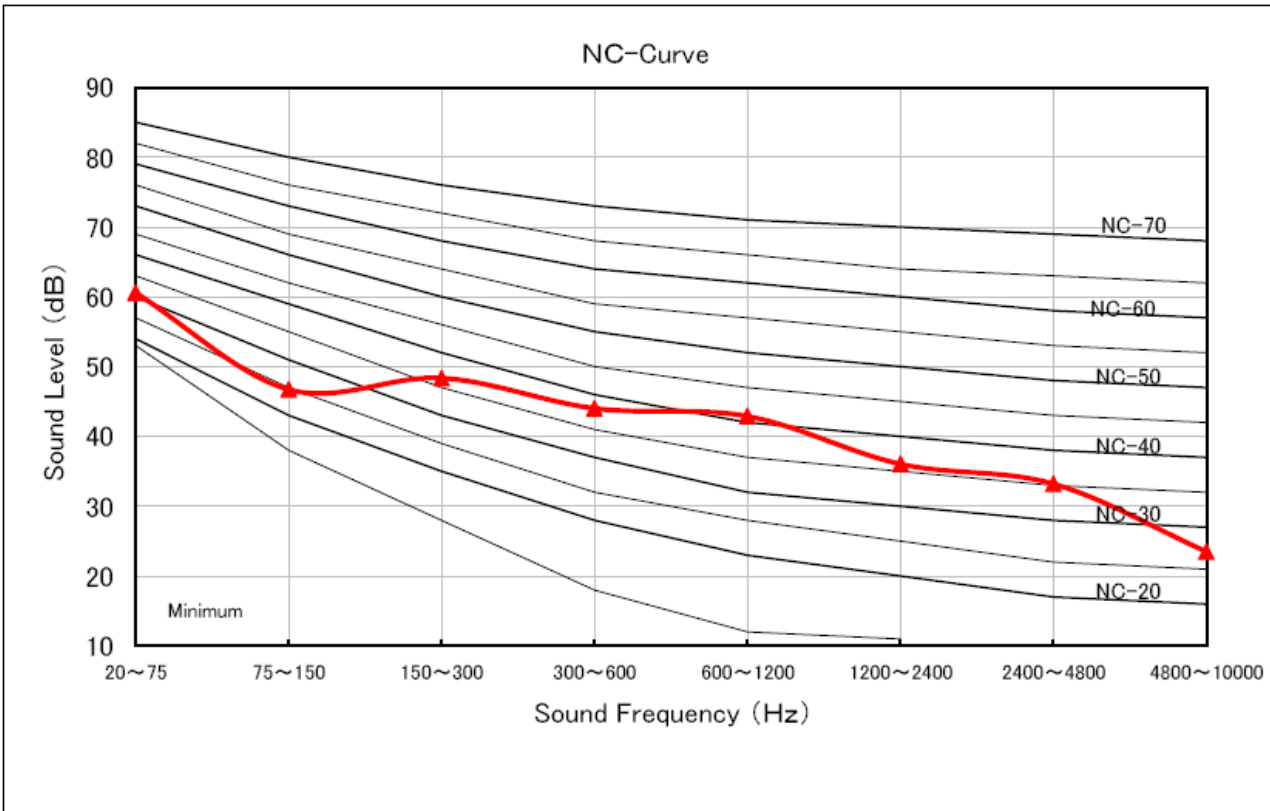
7. Sound Characteristics (NC Curve)

RAS-10J2AVRG-E / TR (Rated Conditions)

Cooling

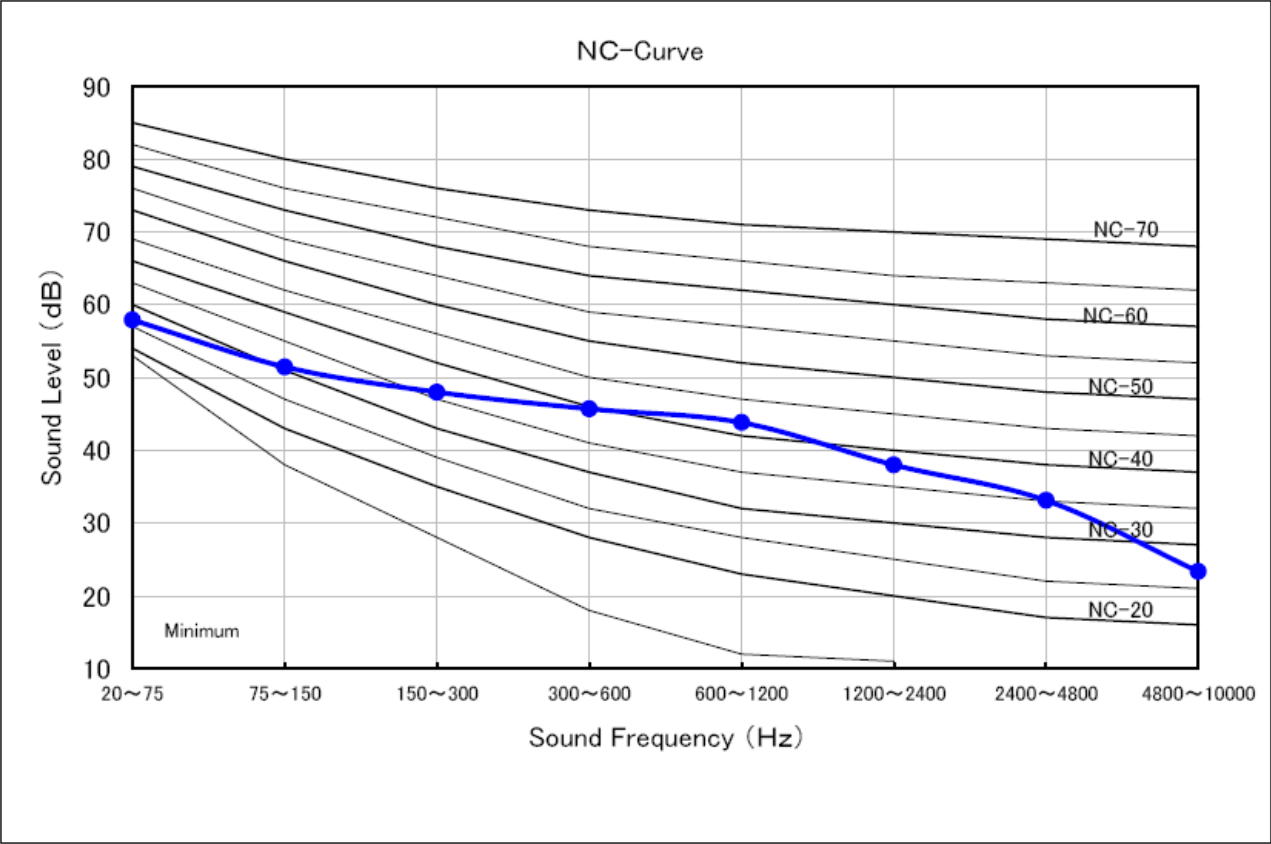


Heating

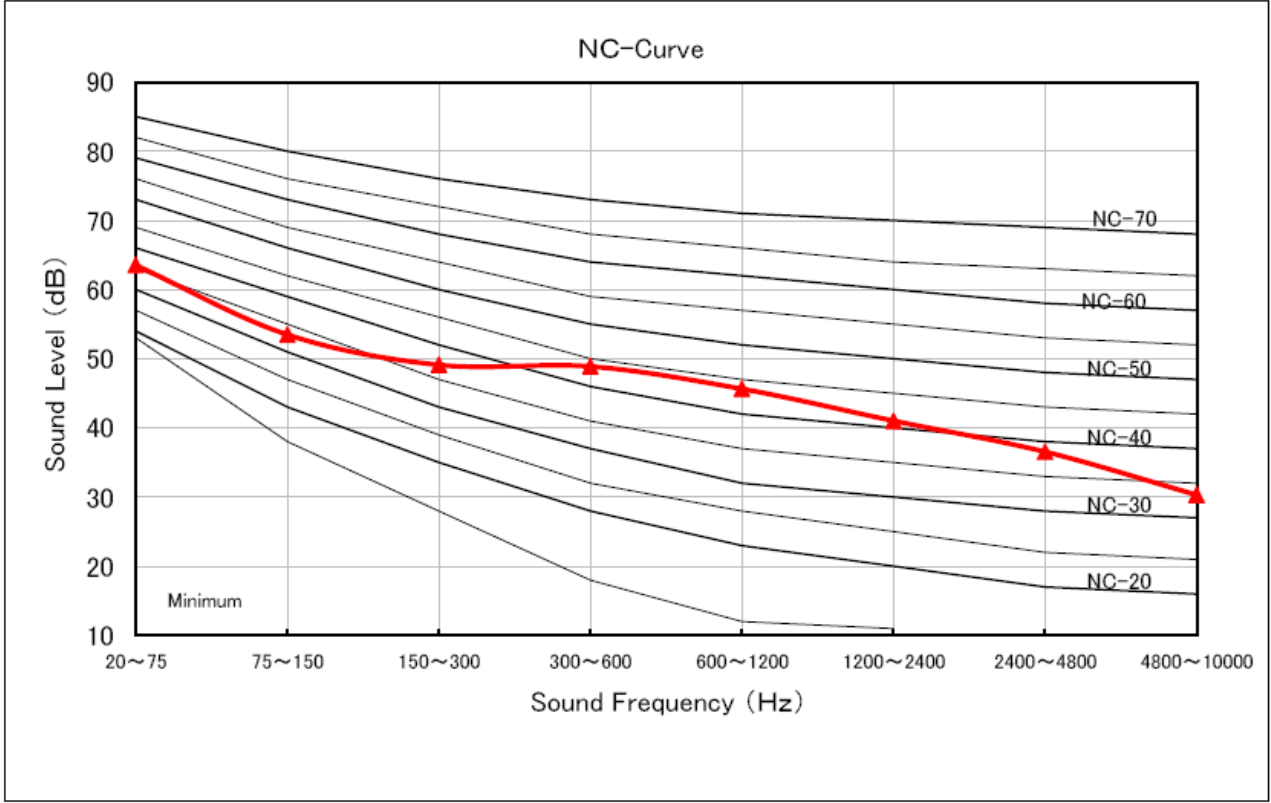


RAS-13J2AVRG-E / TR (Rated Conditions)

Cooling

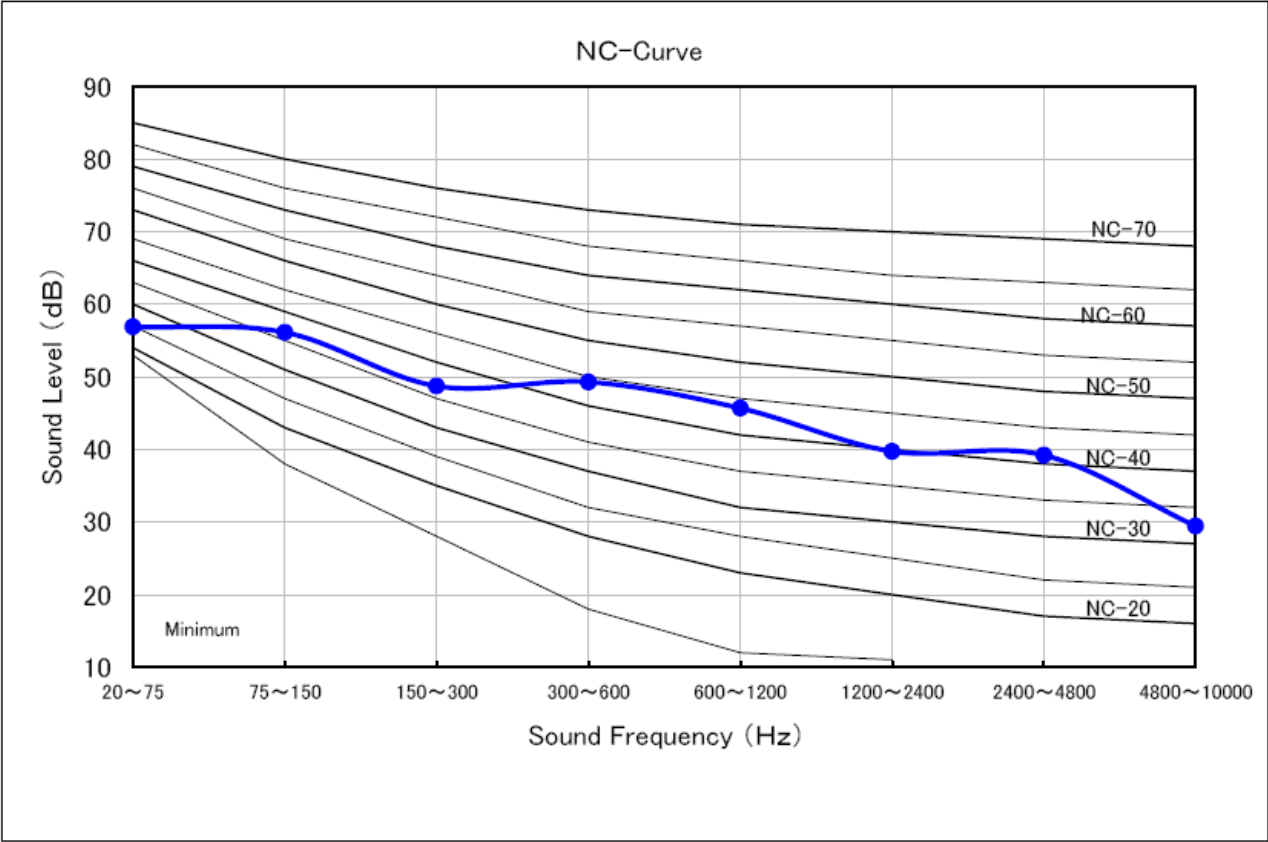


Heating

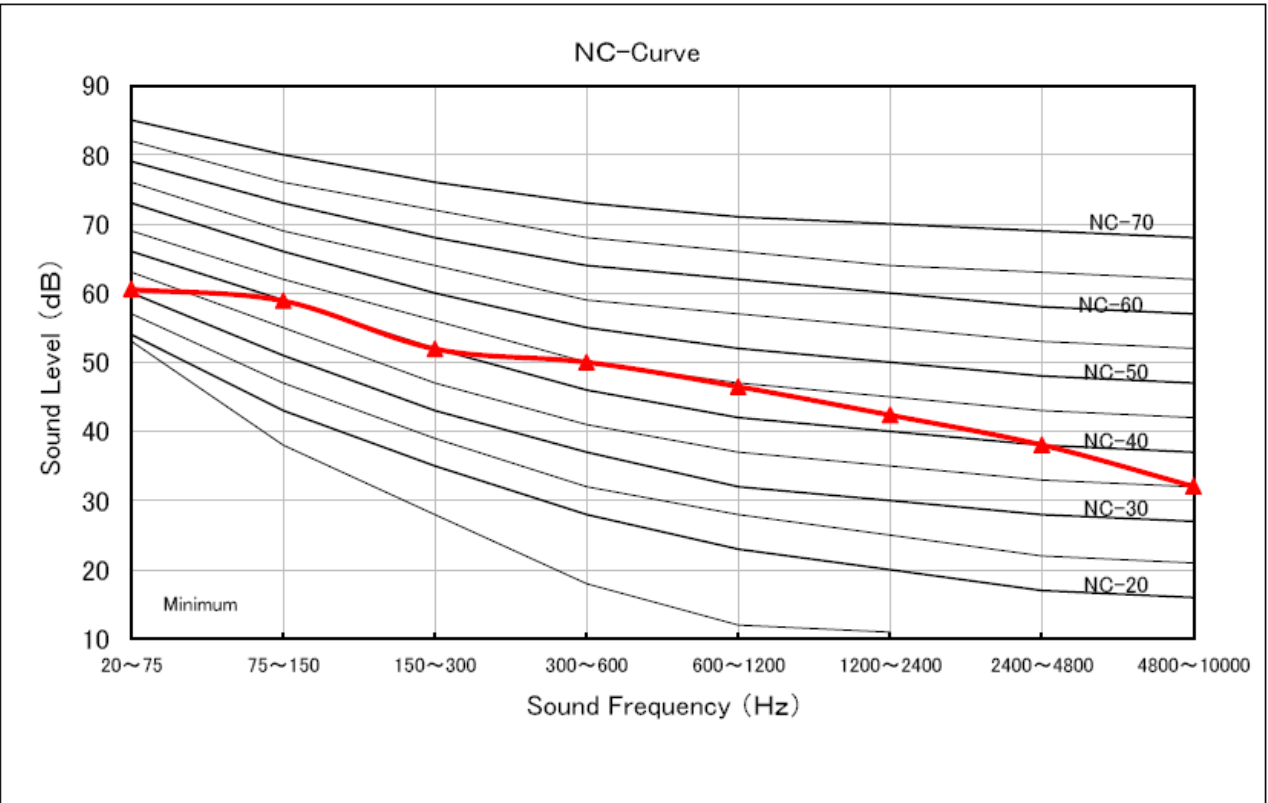


RAS-16J2AVRG-E / TR (Rated Conditions)

Cooling

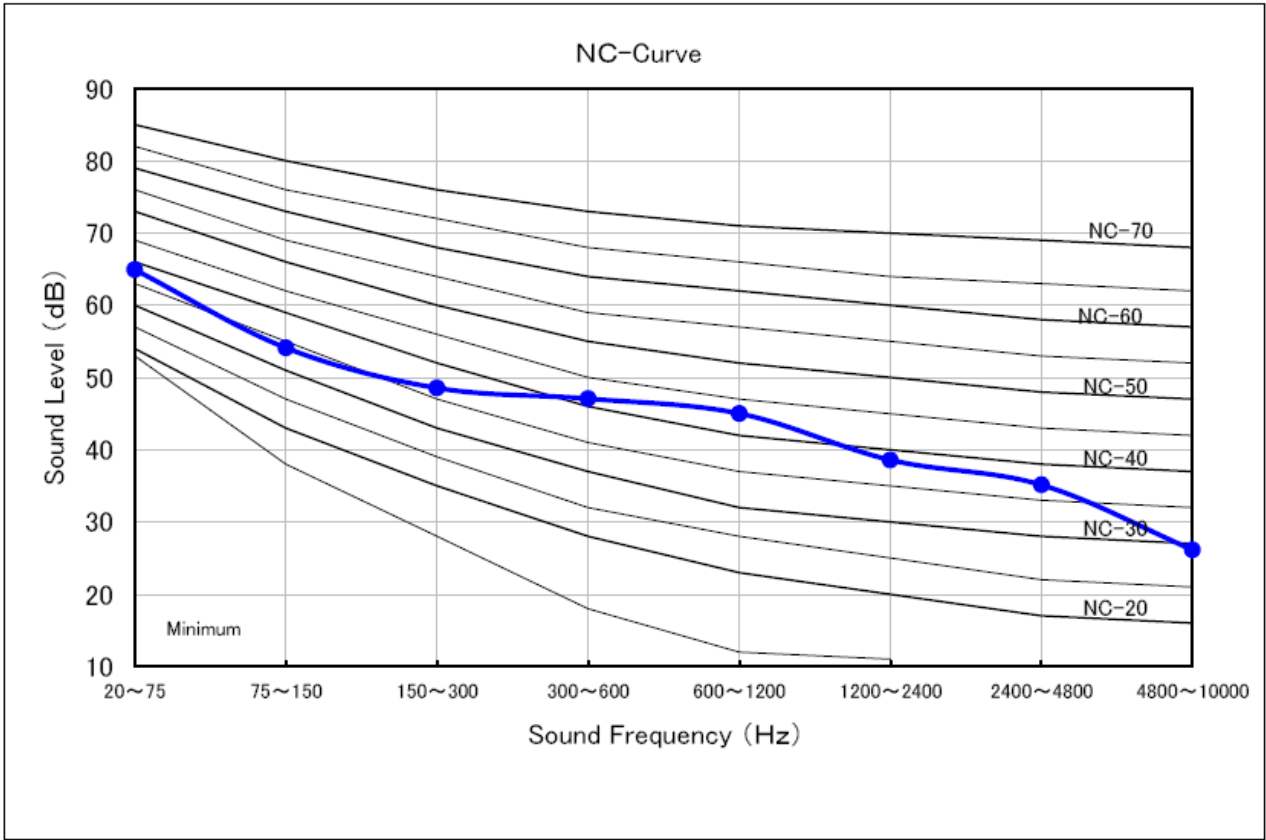


Heating

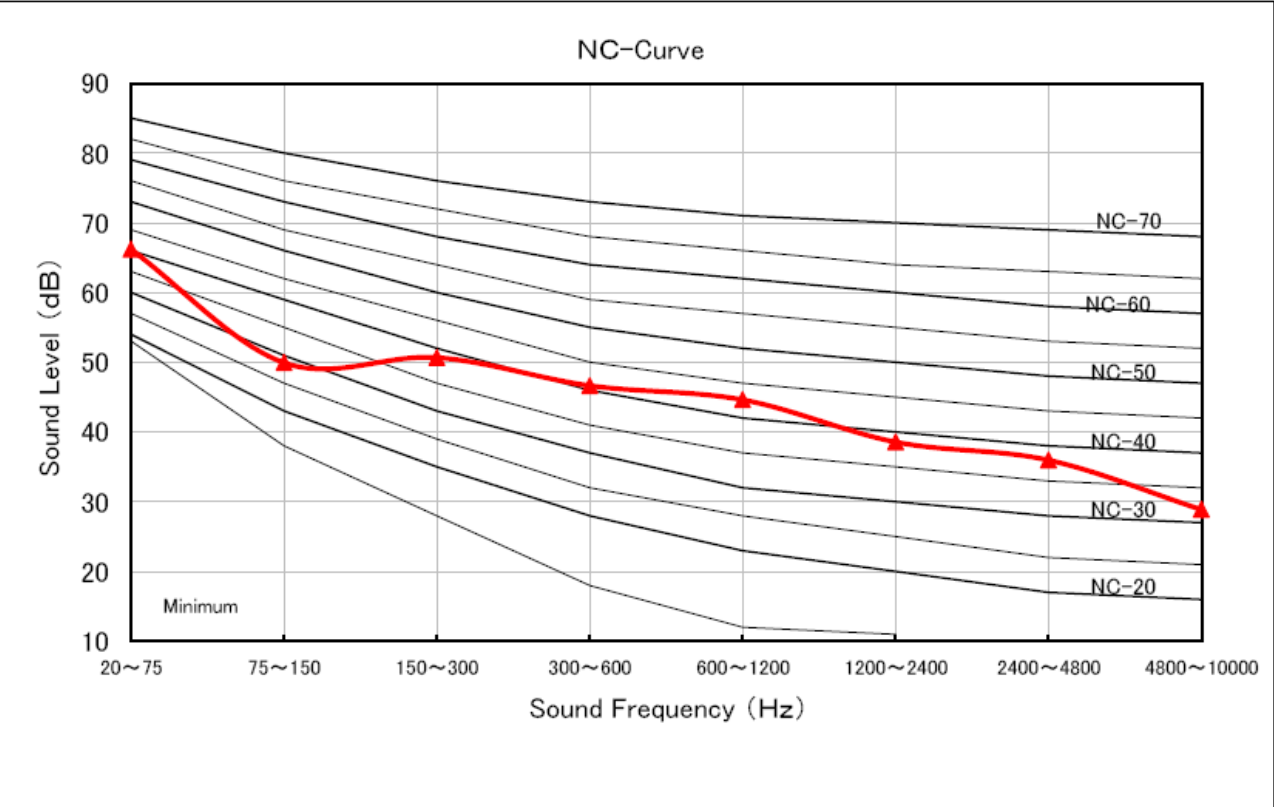


RAS-18J2AVRG-E / TR (Rated Conditions)

Cooling

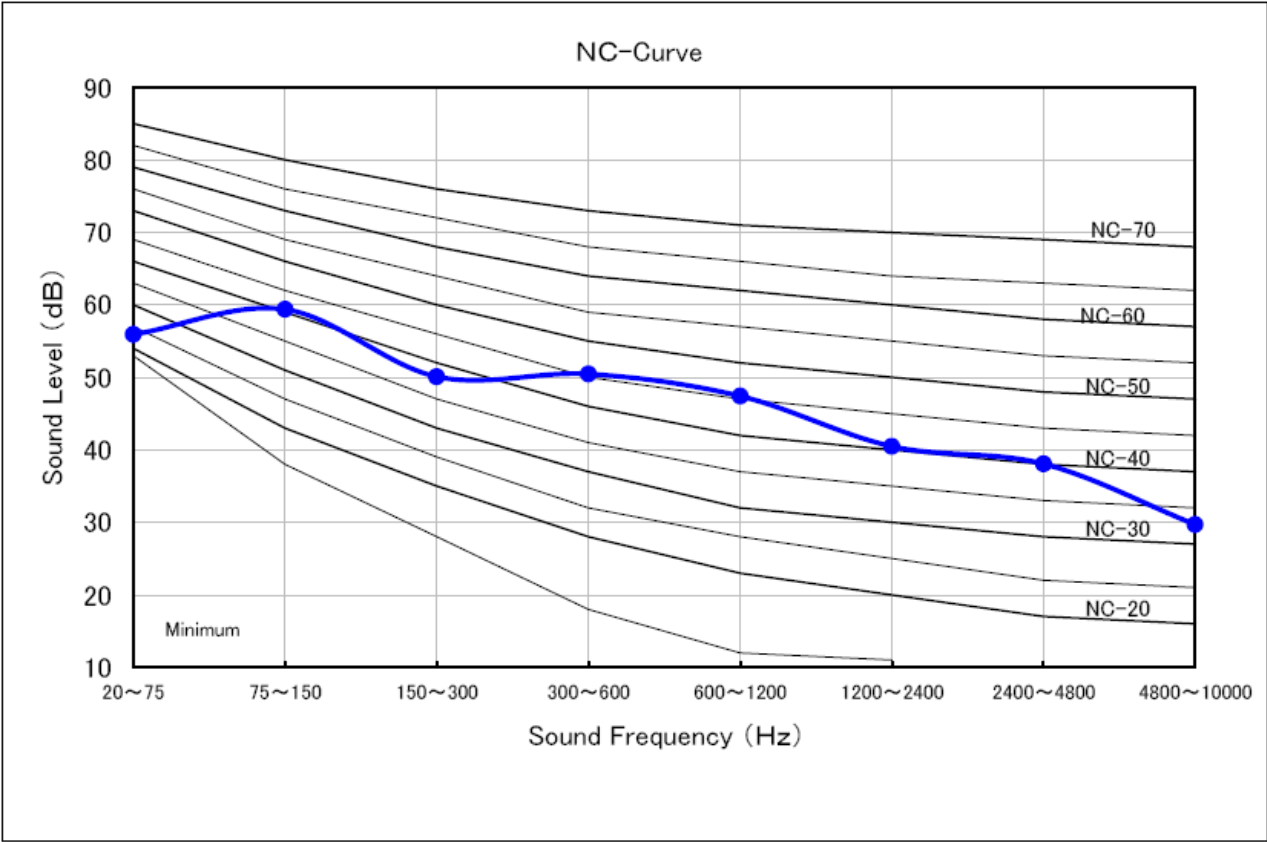


Heating

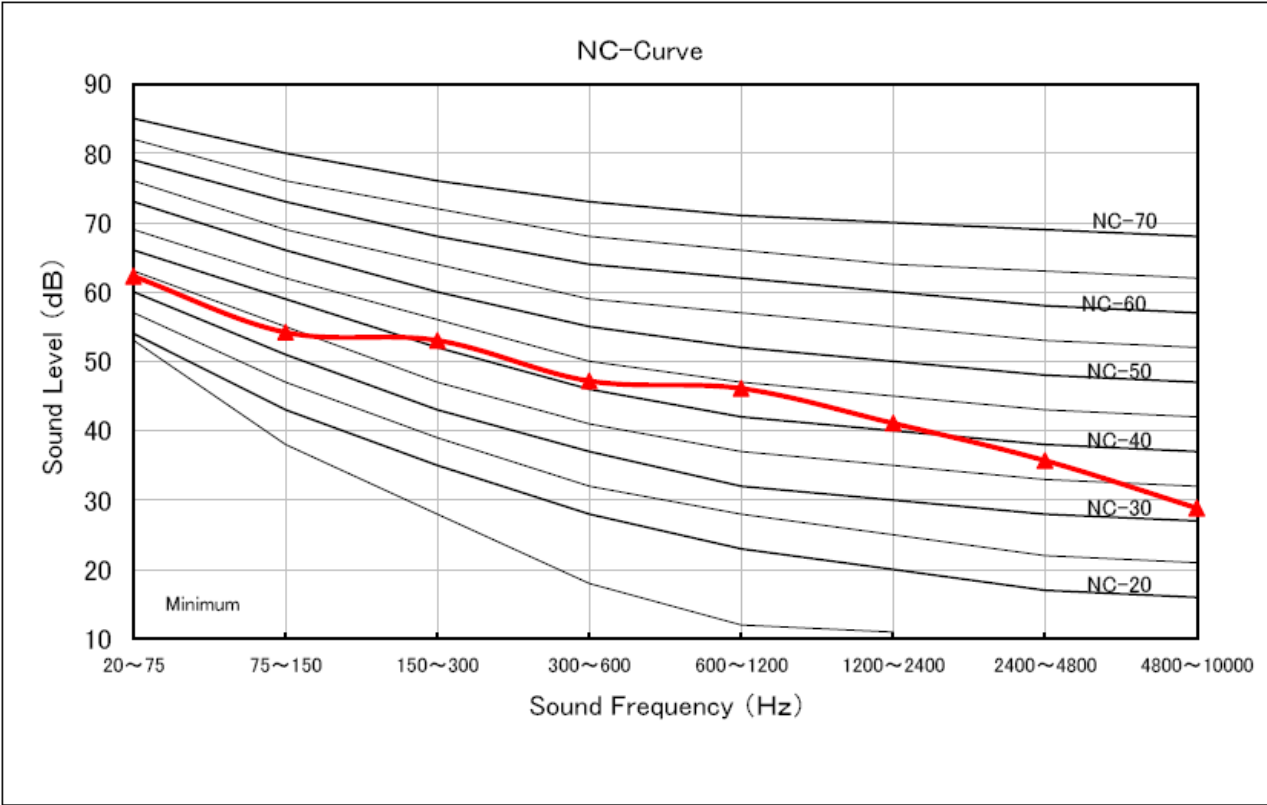


RAS-22J2AVRG-E (Rated Conditions)

Cooling

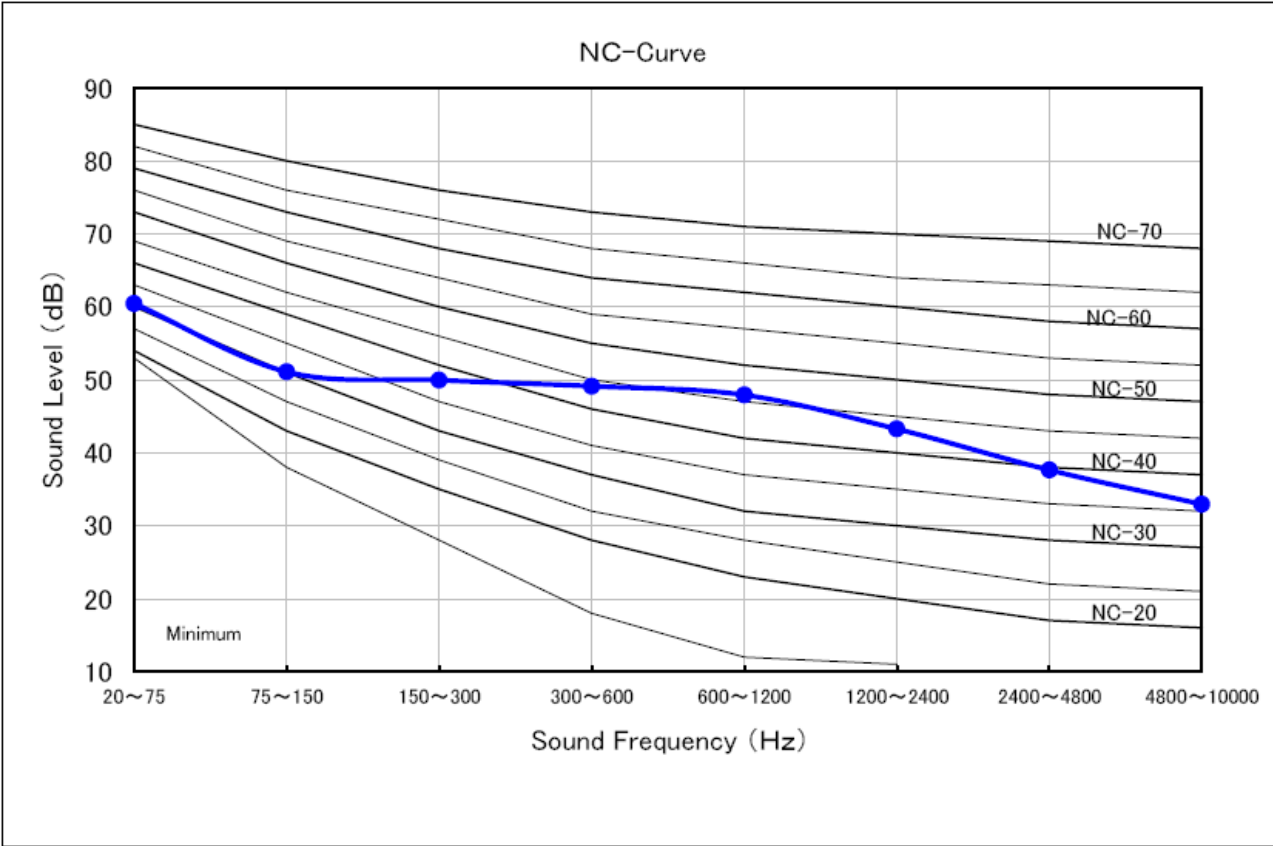


Heating

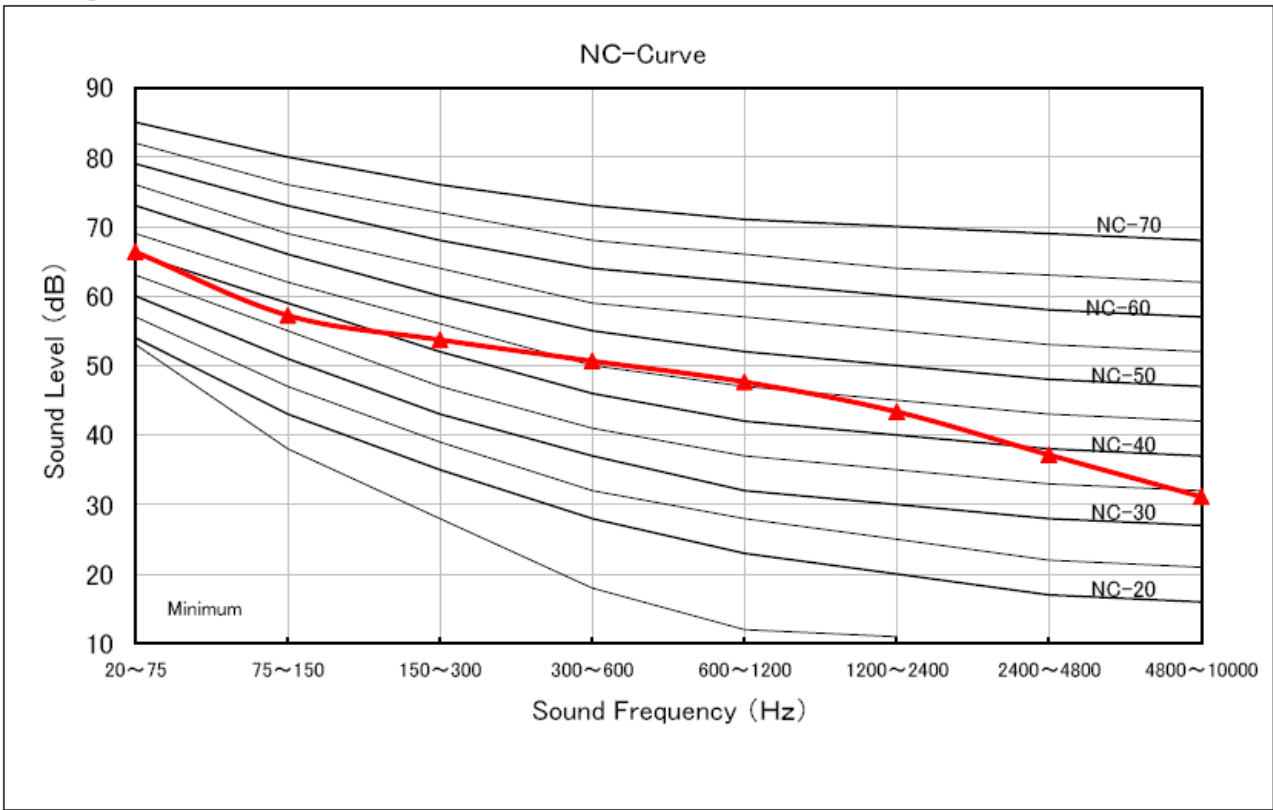


RAS-24J2AVRG-E / TR (Rated Conditions)

Cooling



Heating



8. Capacity Table

Product models : RAS-B10J2KVRG-E : RAS-10J2AVRG-E
RAS-10J2KVRG-TR : RAS-10J2AVRG-TR

Specification

Total Cooling Capacity (TC)	2.50 kW
Sensible Heat Capacity (SHC)	2.00 kW

Standard Condition

Indoor	27°C (DB) / 19°C (WB)
Outdoor	35°C (DB) / 24°C (WB)

Outdoor air temperature (DB) °C	Indoor air temperature													
	20.0°C (DB) 14.0°C (WB)		23.0°C (DB) 16.0°C (WB)		26.0°C (DB) 18.0°C (WB)		27.0°C (DB) 19.0°C (WB)		28.0°C (DB) 20.0°C (WB)		30.0°C (DB) 22.0°C (WB)		32.0°C (DB) 24.0°C (WB)	
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
20	2.45	2.11	2.70	2.25	2.90	2.39	2.98	2.39	3.07	2.38	3.25	2.36	3.40	2.32
21	2.42	2.09	2.68	2.22	2.86	2.36	2.95	2.36	3.03	2.36	3.21	2.34	3.36	2.29
22	2.40	2.06	2.65	2.20	2.83	2.34	2.92	2.33	3.00	2.33	3.18	2.31	3.32	2.27
23	2.37	2.04	2.62	2.17	2.80	2.31	2.89	2.31	2.97	2.31	3.14	2.29	3.29	2.24
24	2.34	2.02	2.59	2.15	2.77	2.29	2.85	2.28	2.93	2.28	3.11	2.26	3.25	2.22
25	2.32	1.99	2.56	2.13	2.74	2.26	2.82	2.26	2.90	2.26	3.07	2.23	3.21	2.19
26	2.29	1.97	2.53	2.10	2.71	2.23	2.79	2.23	2.87	2.23	3.04	2.21	3.18	2.17
27	2.26	1.95	2.50	2.08	2.68	2.21	2.76	2.21	2.84	2.20	3.00	2.18	3.14	2.14
28	2.24	1.93	2.47	2.05	2.65	2.18	2.72	2.18	2.80	2.18	2.97	2.16	3.10	2.12
29	2.21	1.90	2.44	2.03	2.62	2.16	2.69	2.15	2.77	2.15	2.93	2.13	3.07	2.09
30	2.19	1.88	2.41	2.01	2.58	2.13	2.66	2.13	2.74	2.13	2.90	2.11	3.03	2.07
31	2.16	1.86	2.38	1.98	2.55	2.11	2.63	2.10	2.70	2.10	2.86	2.08	2.99	2.04
32	2.13	1.84	2.36	1.96	2.52	2.08	2.60	2.08	2.67	2.08	2.83	2.06	2.96	2.02
33	2.11	1.81	2.33	1.93	2.49	2.05	2.56	2.05	2.64	2.05	2.79	2.03	2.92	1.99
34	2.08	1.79	2.30	1.91	2.46	2.03	2.53	2.03	2.60	2.02	2.76	2.01	2.88	1.97
35	2.05	1.77	2.27	1.88	2.43	2.00	2.50	2.00	2.57	2.00	2.72	1.98	2.85	1.94
36	2.03	1.74	2.24	1.86	2.40	1.98	2.47	1.97	2.54	1.97	2.69	1.95	2.81	1.92
37	2.00	1.72	2.21	1.84	2.37	1.95	2.44	1.95	2.51	1.95	2.65	1.93	2.78	1.89
38	1.97	1.70	2.18	1.81	2.34	1.93	2.40	1.92	2.47	1.92	2.62	1.90	2.74	1.87
39	1.95	1.68	2.15	1.79	2.30	1.90	2.37	1.90	2.44	1.90	2.58	1.88	2.70	1.84
40	1.92	1.65	2.12	1.76	2.27	1.87	2.34	1.87	2.41	1.87	2.55	1.85	2.67	1.82
41	1.90	1.63	2.09	1.74	2.24	1.85	2.31	1.85	2.37	1.84	2.51	1.83	2.63	1.79
42	1.87	1.61	2.06	1.72	2.21	1.82	2.28	1.82	2.34	1.82	2.48	1.80	2.59	1.77
43	1.84	1.59	2.03	1.69	2.18	1.80	2.24	1.79	2.31	1.79	2.44	1.78	2.56	1.74
44	1.82	1.56	2.01	1.67	2.15	1.77	2.21	1.77	2.27	1.77	2.41	1.75	2.52	1.72
45	1.79	1.54	1.98	1.64	2.12	1.75	2.18	1.74	2.24	1.74	2.37	1.73	2.48	1.69
46	1.76	1.52	1.95	1.62	2.09	1.72	2.15	1.72	2.21	1.72	2.34	1.70	2.45	1.67

Product models : RAS-B13J2KVRG-E : RAS-13J2AVRG-E
RAS-13J2KVRG-TR : RAS-13J2AVRG-TR

Specification

Total Cooling Capacity (TC)	3.50 kW
Sensible Heat Capacity (SHC)	2.70 kW

Standard Condition

Indoor	27°C (DB) / 19°C (WB)
Outdoor	35°C (DB) / 24°C (WB)

Outdoor air temperature (DB) °C	Indoor air temperature													
	20.0°C (DB) 14.0°C (WB)		23.0°C (DB) 16.0°C (WB)		26.0°C (DB) 18.0°C (WB)		27.0°C (DB) 19.0°C (WB)		28.0°C (DB) 20.0°C (WB)		30.0°C (DB) 22.0°C (WB)		32.0°C (DB) 24.0°C (WB)	
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
20	3.43	2.85	3.79	3.04	4.05	3.23	4.17	3.22	4.29	3.21	4.55	3.18	4.76	3.11
21	3.39	2.82	3.75	3.01	4.01	3.19	4.13	3.19	4.25	3.18	4.50	3.14	4.70	3.07
22	3.35	2.79	3.70	2.97	3.97	3.16	4.08	3.15	4.20	3.15	4.45	3.11	4.65	3.04
23	3.32	2.76	3.66	2.94	3.92	3.12	4.04	3.12	4.15	3.11	4.40	3.07	4.60	3.01
24	3.28	2.73	3.62	2.91	3.88	3.09	3.99	3.08	4.11	3.08	4.35	3.04	4.55	2.97
25	3.24	2.70	3.58	2.87	3.84	3.06	3.95	3.05	4.06	3.04	4.30	3.01	4.50	2.94
26	3.21	2.67	3.54	2.84	3.79	3.02	3.90	3.01	4.02	3.01	4.25	2.97	4.45	2.91
27	3.17	2.64	3.50	2.81	3.75	2.99	3.86	2.98	3.97	2.97	4.20	2.94	4.40	2.87
28	3.13	2.61	3.46	2.78	3.71	2.95	3.81	2.94	3.92	2.94	4.16	2.90	4.35	2.84
29	3.10	2.58	3.42	2.74	3.66	2.92	3.77	2.91	3.88	2.90	4.11	2.87	4.29	2.81
30	3.06	2.55	3.38	2.71	3.62	2.88	3.72	2.87	3.83	2.87	4.06	2.83	4.24	2.77
31	3.02	2.52	3.34	2.68	3.57	2.85	3.68	2.84	3.78	2.83	4.01	2.80	4.19	2.74
32	2.99	2.48	3.30	2.65	3.53	2.81	3.63	2.80	3.74	2.80	3.96	2.77	4.14	2.71
33	2.95	2.45	3.26	2.61	3.49	2.78	3.59	2.77	3.69	2.76	3.91	2.73	4.09	2.67
34	2.91	2.42	3.22	2.58	3.44	2.74	3.54	2.73	3.65	2.73	3.86	2.70	4.04	2.64
35	2.87	2.39	3.17	2.55	3.40	2.71	3.50	2.70	3.60	2.70	3.81	2.66	3.99	2.61
36	2.84	2.36	3.13	2.51	3.36	2.67	3.46	2.67	3.55	2.66	3.76	2.63	3.94	2.57
37	2.80	2.33	3.09	2.48	3.31	2.64	3.41	2.63	3.51	2.63	3.71	2.60	3.89	2.54
38	2.76	2.30	3.05	2.45	3.27	2.60	3.37	2.60	3.46	2.59	3.67	2.56	3.83	2.50
39	2.73	2.27	3.01	2.42	3.23	2.57	3.32	2.56	3.42	2.56	3.62	2.53	3.78	2.47
40	2.69	2.24	2.97	2.38	3.18	2.53	3.28	2.53	3.37	2.52	3.57	2.49	3.73	2.44
41	2.65	2.21	2.93	2.35	3.14	2.50	3.23	2.49	3.32	2.49	3.52	2.46	3.68	2.40
42	2.62	2.18	2.89	2.32	3.09	2.46	3.19	2.46	3.28	2.45	3.47	2.42	3.63	2.37
43	2.58	2.15	2.85	2.29	3.05	2.43	3.14	2.42	3.23	2.42	3.42	2.39	3.58	2.34
44	2.54	2.12	2.81	2.25	3.01	2.40	3.10	2.39	3.18	2.38	3.37	2.36	3.53	2.30
45	2.51	2.09	2.77	2.22	2.96	2.36	3.05	2.35	3.14	2.35	3.32	2.32	3.48	2.27
46	2.47	2.05	2.73	2.19	2.92	2.33	3.01	2.32	3.09	2.31	3.27	2.29	3.42	2.24

Product models : RAS-B16J2KVRG-E : RAS-16J2AVRG-E

RAS-16J2KVRG-TR : RAS-16J2AVRG-TR

Specification

Total Cooling Capacity (TC)	4.60 kW
Sensible Heat Capacity (SHC)	3.50 kW

Standard Condition

Indoor	27°C (DB) / 19°C (WB)
Outdoor	35°C (DB) / 24°C (WB)

Outdoor air temperature (DB) °C	Indoor air temperature													
	20.0°C (DB) 14.0°C (WB)		23.0°C (DB) 16.0°C (WB)		26.0°C (DB) 18.0°C (WB)		27.0°C (DB) 19.0°C (WB)		28.0°C (DB) 20.0°C (WB)		30.0°C (DB) 22.0°C (WB)		32.0°C (DB) 24.0°C (WB)	
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
20	4.51	3.70	4.98	3.94	5.33	4.19	5.49	4.17	5.64	4.17	5.98	4.11	6.25	4.02
21	4.46	3.66	4.92	3.90	5.27	4.14	5.43	4.13	5.58	4.12	5.91	4.07	6.18	3.97
22	4.41	3.62	4.87	3.86	5.21	4.10	5.37	4.08	5.52	4.08	5.85	4.02	6.12	3.93
23	4.36	3.58	4.82	3.81	5.16	4.05	5.31	4.04	5.46	4.03	5.78	3.98	6.05	3.89
24	4.31	3.54	4.76	3.77	5.10	4.01	5.25	3.99	5.40	3.99	5.72	3.93	5.98	3.84
25	4.26	3.50	4.71	3.73	5.04	3.96	5.19	3.95	5.34	3.94	5.65	3.89	5.91	3.80
26	4.21	3.46	4.65	3.69	4.98	3.92	5.13	3.90	5.28	3.90	5.59	3.85	5.85	3.76
27	4.17	3.42	4.60	3.64	4.93	3.87	5.07	3.86	5.22	3.85	5.53	3.80	5.78	3.71
28	4.12	3.38	4.55	3.60	4.87	3.83	5.01	3.81	5.16	3.81	5.46	3.76	5.71	3.67
29	4.07	3.34	4.49	3.56	4.81	3.78	4.95	3.77	5.10	3.76	5.40	3.71	5.64	3.63
30	4.02	3.30	4.44	3.52	4.76	3.74	4.90	3.72	5.04	3.72	5.33	3.67	5.58	3.58
31	3.97	3.26	4.39	3.47	4.70	3.69	4.84	3.68	4.97	3.67	5.27	3.62	5.51	3.54
32	3.92	3.22	4.33	3.43	4.64	3.65	4.78	3.63	4.91	3.63	5.20	3.58	5.44	3.50
33	3.88	3.18	4.28	3.39	4.58	3.60	4.72	3.59	4.85	3.58	5.14	3.54	5.38	3.46
34	3.83	3.14	4.23	3.35	4.53	3.56	4.66	3.54	4.79	3.54	5.08	3.49	5.31	3.41
35	3.78	3.10	4.17	3.30	4.47	3.51	4.60	3.50	4.73	3.49	5.01	3.45	5.24	3.37
36	3.73	3.06	4.12	3.26	4.41	3.47	4.54	3.46	4.67	3.45	4.95	3.40	5.17	3.33
37	3.68	3.02	4.07	3.22	4.35	3.42	4.48	3.41	4.61	3.40	4.88	3.36	5.11	3.28
38	3.63	2.99	4.01	3.18	4.30	3.38	4.42	3.37	4.55	3.36	4.82	3.32	5.04	3.24
39	3.58	2.95	3.96	3.13	4.24	3.33	4.36	3.32	4.49	3.31	4.75	3.27	4.97	3.20
40	3.54	2.91	3.90	3.09	4.18	3.29	4.30	3.28	4.43	3.27	4.69	3.23	4.90	3.15
41	3.49	2.87	3.85	3.05	4.12	3.24	4.25	3.23	4.37	3.22	4.62	3.18	4.84	3.11
42	3.44	2.83	3.80	3.01	4.07	3.20	4.19	3.19	4.31	3.18	4.56	3.14	4.77	3.07
43	3.39	2.79	3.74	2.96	4.01	3.15	4.13	3.14	4.25	3.13	4.50	3.09	4.70	3.02
44	3.34	2.75	3.69	2.92	3.95	3.11	4.07	3.10	4.19	3.09	4.43	3.05	4.64	2.98
45	3.19	2.62	3.53	2.79	3.78	2.97	3.89	2.96	4.00	2.95	4.24	2.92	4.43	2.85
46	3.11	2.56	3.43	2.72	3.68	2.89	3.79	2.88	3.89	2.87	4.12	2.84	4.31	2.77

Product models : RAS-18J2KVRG-E : RAS-18J2AVRG-E
RAS-18J2KVRG-TR : RAS-18J2AVRG-TR

Specification

Total Cooling Capacity (TC)	5.00 kW
Sensible Heat Capacity (SHC)	3.50 kW

Standard Condition

Indoor	27°C (DB) / 19°C (WB)
Outdoor	35°C (DB) / 24°C (WB)

Outdoor air temperature (DB) °C	Indoor air temperature													
	20.0°C (DB) 14.0°C (WB)		23.0°C (DB) 16.0°C (WB)		26.0°C (DB) 18.0°C (WB)		27.0°C (DB) 19.0°C (WB)		28.0°C (DB) 20.0°C (WB)		30.0°C (DB) 22.0°C (WB)		32.0°C (DB) 24.0°C (WB)	
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
20	4.90	3.73	5.41	3.95	5.79	4.20	5.96	4.17	6.13	4.15	6.49	4.07	6.79	3.95
21	4.84	3.69	5.35	3.91	5.73	4.15	5.90	4.13	6.07	4.11	6.43	4.03	6.72	3.91
22	4.79	3.65	5.29	3.87	5.67	4.11	5.83	4.08	6.00	4.06	6.36	3.99	6.65	3.87
23	4.74	3.61	5.23	3.83	5.60	4.06	5.77	4.04	5.94	4.02	6.29	3.94	6.57	3.83
24	4.69	3.57	5.18	3.78	5.54	4.02	5.71	3.99	5.87	3.98	6.22	3.90	6.50	3.78
25	4.63	3.53	5.12	3.74	5.48	3.97	5.64	3.95	5.80	3.93	6.15	3.85	6.43	3.74
26	4.58	3.49	5.06	3.70	5.42	3.93	5.58	3.90	5.74	3.89	6.08	3.81	6.35	3.70
27	4.53	3.45	5.00	3.66	5.36	3.88	5.51	3.86	5.67	3.84	6.01	3.77	6.28	3.66
28	4.48	3.41	4.94	3.61	5.29	3.84	5.45	3.81	5.61	3.80	5.94	3.72	6.21	3.61
29	4.42	3.37	4.88	3.57	5.23	3.79	5.39	3.77	5.54	3.75	5.87	3.68	6.14	3.57
30	4.37	3.33	4.83	3.53	5.17	3.75	5.32	3.72	5.47	3.71	5.80	3.64	6.06	3.53
31	4.32	3.29	4.77	3.49	5.11	3.70	5.26	3.68	5.41	3.66	5.73	3.59	5.99	3.48
32	4.27	3.24	4.71	3.44	5.04	3.66	5.19	3.63	5.34	3.62	5.66	3.55	5.92	3.44
33	4.21	3.20	4.65	3.40	4.98	3.61	5.13	3.59	5.28	3.57	5.59	3.50	5.84	3.40
34	4.16	3.16	4.59	3.36	4.92	3.57	5.06	3.54	5.21	3.53	5.52	3.46	5.77	3.36
35	4.11	3.12	4.54	3.32	4.86	3.52	5.00	3.50	5.14	3.48	5.45	3.42	5.70	3.31
36	4.05	3.08	4.48	3.27	4.79	3.48	4.94	3.46	5.08	3.44	5.38	3.37	5.62	3.27
37	4.00	3.04	4.42	3.23	4.73	3.43	4.87	3.41	5.01	3.39	5.31	3.33	5.55	3.23
38	3.95	3.00	4.36	3.19	4.67	3.39	4.81	3.37	4.94	3.35	5.24	3.28	5.48	3.19
39	3.90	2.96	4.30	3.15	4.61	3.34	4.74	3.32	4.88	3.30	5.17	3.24	5.40	3.14
40	3.84	2.92	4.24	3.10	4.55	3.30	4.68	3.28	4.81	3.26	5.10	3.20	5.33	3.10
41	3.79	2.88	4.19	3.06	4.48	3.25	4.62	3.23	4.75	3.22	5.03	3.15	5.26	3.06
42	3.74	2.84	4.13	3.02	4.42	3.20	4.55	3.19	4.68	3.17	4.96	3.11	5.18	3.02
43	3.69	2.80	4.07	2.98	4.36	3.16	4.49	3.14	4.61	3.13	4.89	3.07	5.11	2.97
44	3.61	2.75	3.99	2.92	4.27	3.10	4.40	3.08	4.53	3.06	4.79	3.01	5.01	2.92
45	3.38	2.57	3.73	2.73	3.99	2.89	4.11	2.88	4.23	2.86	4.48	2.81	4.68	2.72
46	3.29	2.51	3.64	2.66	3.90	2.82	4.01	2.81	4.13	2.79	4.37	2.74	4.57	2.66

Product models : RAS-B22J2KVRG-E : RAS-22J2AVRG-E
RAS-22J2KVRG-TR : RAS-22J2AVRG-TR

Specification

Total Cooling Capacity (TC)	6.10 kW
Sensible Heat Capacity (SHC)	4.15 kW

Standard Condition

Indoor	27°C (DB) / 19°C (WB)
Outdoor	35°C (DB) / 24°C (WB)

Outdoor air temperature DB (°C)	Indoor air temperature													
	20.0°C (DB) 14.0°C (WB)		23.0°C (DB) 16.0°C (WB)		26.0°C (DB) 18.0°C (WB)		27.0°C (DB) 19.0°C (WB)		28.0°C (DB) 20.0°C (WB)		30.0°C (DB) 22.0°C (WB)		32.0°C (DB) 24.0°C (WB)	
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
20	5.98	4.43	6.60	4.69	7.07	4.98	7.27	4.95	7.48	4.92	7.92	4.81	8.29	4.66
21	5.91	4.38	6.53	4.64	6.99	4.93	7.20	4.90	7.40	4.87	7.84	4.76	8.20	4.61
22	5.85	4.33	6.46	4.59	6.91	4.88	7.12	4.84	7.32	4.81	7.75	4.71	8.11	4.56
23	5.78	4.29	6.39	4.54	6.84	4.82	7.04	4.79	7.24	4.76	7.67	4.66	8.02	4.51
24	5.72	4.24	6.31	4.49	6.76	4.77	6.96	4.74	7.16	4.71	7.58	4.61	7.93	4.46
25	5.65	4.19	6.24	4.44	6.69	4.72	6.88	4.68	7.08	4.66	7.50	4.55	7.84	4.41
26	5.59	4.14	6.17	4.39	6.61	4.66	6.80	4.63	7.00	4.60	7.41	4.50	7.75	4.36
27	5.52	4.09	6.10	4.34	6.53	4.61	6.73	4.58	6.92	4.55	7.33	4.45	7.66	4.31
28	5.46	4.05	6.03	4.29	6.46	4.55	6.65	4.52	6.84	4.50	7.24	4.40	7.57	4.26
29	5.40	4.00	5.96	4.24	6.38	4.50	6.57	4.47	6.76	4.44	7.16	4.35	7.48	4.21
30	5.33	3.95	5.89	4.19	6.31	4.45	6.49	4.42	6.68	4.39	7.07	4.30	7.40	4.16
31	5.27	3.90	5.82	4.14	6.23	4.39	6.41	4.36	6.60	4.34	6.99	4.24	7.31	4.11
32	5.20	3.86	5.75	4.09	6.15	4.34	6.33	4.31	6.52	4.29	6.90	4.19	7.22	4.06
33	5.14	3.81	5.68	4.04	6.08	4.29	6.26	4.26	6.44	4.23	6.82	4.14	7.13	4.01
34	5.07	3.76	5.60	3.99	6.00	4.23	6.18	4.20	6.35	4.18	6.73	4.09	7.04	3.96
35	5.01	3.71	5.53	3.94	5.93	4.18	6.10	4.15	6.27	4.13	6.64	4.04	6.95	3.91
36	4.95	3.67	5.46	3.89	5.85	4.13	6.02	4.10	6.19	4.07	6.56	3.99	6.86	3.86
37	4.88	3.62	5.39	3.83	5.77	4.07	5.94	4.04	6.11	4.02	6.47	3.93	6.77	3.81
38	4.82	3.57	5.32	3.78	5.70	4.02	5.87	3.99	6.03	3.97	6.39	3.88	6.68	3.76
39	4.75	3.52	5.25	3.73	5.62	3.96	5.79	3.94	5.95	3.91	6.30	3.83	6.59	3.71
40	4.18	3.10	4.62	3.28	4.94	3.49	5.09	3.46	5.23	3.44	5.54	3.37	5.80	3.26
41	4.05	3.00	4.47	3.18	4.79	3.38	4.93	3.35	5.07	3.33	5.37	3.26	5.62	3.16
42	3.92	2.90	4.33	3.08	4.63	3.27	4.77	3.25	4.91	3.23	5.20	3.16	5.43	3.06
43	3.79	2.81	4.18	2.97	4.48	3.16	4.61	3.14	4.74	3.12	5.02	3.05	5.25	2.95
44	3.66	2.71	4.04	2.87	4.32	3.05	4.45	3.03	4.58	3.01	4.85	2.95	5.07	2.85
45	3.52	2.61	3.89	2.77	4.17	2.94	4.29	2.92	4.41	2.90	4.67	2.84	4.89	2.75
46	3.39	2.51	3.75	2.67	4.01	2.83	4.13	2.81	4.25	2.79	4.50	2.73	4.71	2.65

Product models : RAS-B24J2KVRG-E : RAS-24J2AVRG-E
RAS-24J2KVRG-TR : RAS-24J2AVRG-TR

Specification

Total Cooling Capacity (TC)	7.00 kW
Sensible Heat Capacity (SHC)	4.60 kW

Standard Condition

Indoor	27°C (DB) / 19°C (WB)
Outdoor	35°C (DB) / 24°C (WB)

Outdoor air temperature (DB) °C	Indoor air temperature													
	20.0°C (DB) 14.0°C (WB)		23.0°C (DB) 16.0°C (WB)		26.0°C (DB) 18.0°C (WB)		27.0°C (DB) 19.0°C (WB)		28.0°C (DB) 20.0°C (WB)		30.0°C (DB) 22.0°C (WB)		32.0°C (DB) 24.0°C (WB)	
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
20	6.86	4.92	7.57	5.21	8.11	5.53	8.35	5.49	8.59	5.45	9.09	5.31	9.51	5.13
21	6.78	4.87	7.49	5.15	8.02	5.47	8.26	5.43	8.49	5.39	9.00	5.26	9.41	5.07
22	6.71	4.82	7.41	5.10	7.93	5.41	8.17	5.37	8.40	5.33	8.90	5.20	9.31	5.02
23	6.64	4.76	7.33	5.04	7.85	5.35	8.08	5.31	8.31	5.27	8.80	5.14	9.20	4.96
24	6.56	4.71	7.25	4.99	7.76	5.29	7.99	5.25	8.22	5.21	8.70	5.08	9.10	4.91
25	6.49	4.66	7.16	4.93	7.67	5.23	7.90	5.19	8.12	5.15	8.60	5.03	9.00	4.85
26	6.41	4.60	7.08	4.87	7.59	5.17	7.81	5.13	8.03	5.10	8.51	4.97	8.90	4.80
27	6.34	4.55	7.00	4.82	7.50	5.11	7.72	5.07	7.94	5.04	8.41	4.91	8.79	4.74
28	6.27	4.50	6.92	4.76	7.41	5.06	7.63	5.01	7.85	4.98	8.31	4.86	8.69	4.69
29	6.19	4.45	6.84	4.71	7.32	5.00	7.54	4.95	7.75	4.92	8.21	4.80	8.59	4.63
30	6.12	4.39	6.76	4.65	7.24	4.94	7.45	4.90	7.66	4.86	8.11	4.74	8.49	4.57
31	6.04	4.34	6.68	4.59	7.15	4.88	7.36	4.84	7.57	4.80	8.02	4.68	8.38	4.52
32	5.97	4.29	6.59	4.54	7.06	4.82	7.27	4.78	7.48	4.74	7.92	4.63	8.28	4.46
33	5.90	4.23	6.51	4.48	6.97	4.76	7.18	4.72	7.39	4.69	7.82	4.57	8.18	4.41
34	5.82	4.18	6.43	4.43	6.89	4.70	7.09	4.66	7.29	4.63	7.72	4.51	8.08	4.35
35	5.75	4.13	6.35	4.37	6.80	4.64	7.00	4.60	7.20	4.57	7.63	4.46	7.98	4.30
36	5.68	4.08	6.27	4.31	6.71	4.58	6.91	4.54	7.11	4.51	7.53	4.40	7.87	4.24
37	5.60	4.02	6.19	4.26	6.63	4.52	6.82	4.48	7.02	4.45	7.43	4.34	7.77	4.19
38	5.53	3.97	6.11	4.20	6.54	4.46	6.73	4.42	6.92	4.39	7.33	4.28	7.67	4.13
39	5.45	3.92	6.02	4.15	6.45	4.40	6.64	4.36	6.83	4.33	7.23	4.23	7.57	4.08
40	5.38	3.86	5.94	4.09	6.36	4.34	6.55	4.30	6.74	4.27	7.14	4.17	7.46	4.02
41	5.31	3.81	5.86	4.03	6.28	4.28	6.46	4.25	6.65	4.22	7.04	4.11	7.36	3.97
42	5.23	3.76	5.78	3.98	6.19	4.22	6.37	4.19	6.55	4.16	6.94	4.06	7.26	3.91
43	5.16	3.70	5.70	3.92	6.10	4.16	6.28	4.13	6.46	4.10	6.84	4.00	7.16	3.86
44	5.09	3.65	5.62	3.86	6.01	4.10	6.19	4.07	6.37	4.04	6.74	3.94	7.05	3.80
45	5.01	3.60	5.53	3.81	5.93	4.04	6.10	4.01	6.28	3.98	6.65	3.88	6.95	3.75
46	4.94	3.55	5.45	3.75	5.84	3.98	6.01	3.95	6.18	3.92	6.55	3.83	6.85	3.69

9. Part Load Performance

Single Split Type

Indoor : RAS-B10J2VRG-E / RAS-10J2VRG-TR

Outdoor : RAS-10J2AVRG-E / TR

		Cooling		Heating	
		Q	P	Q	P
Minimum	(W)	750	170	900	170
Rating	(W)	2500	600	3200	750
Maximum	(W)	3200	820	4800	1400

Cooling

Outdoor Temperature DB (°C)	Parts Load (%)																			
	100		90		80		70		60		50		40		30		20		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
20	2981	471	2683	423	2385	375	2087	326	1789	278	1491	230	1193	182	894	133	894	133	894	133
21	2949	480	2654	430	2359	381	2064	332	1770	283	1475	234	1180	185	885	136	885	136	885	136
22	2917	488	2625	438	2334	388	2042	338	1750	288	1459	238	1167	188	875	138	875	138	875	138
23	2885	497	2597	446	2308	395	2020	344	1731	293	1443	242	1154	192	866	141	866	141	866	141
24	2853	505	2568	454	2282	402	1997	350	1712	298	1426	247	1141	195	856	143	856	143	856	143
25	2821	514	2539	461	2257	409	1975	356	1693	304	1410	251	1128	198	846	146	846	146	846	146
26	2789	523	2510	469	2231	416	1952	362	1673	309	1394	255	1116	202	837	148	837	148	837	148
27	2757	531	2481	477	2205	422	1930	368	1654	314	1378	259	1103	205	827	151	827	151	827	151
28	2725	540	2452	485	2180	429	1907	374	1635	319	1362	263	1090	208	817	153	817	153	817	153
29	2693	548	2423	492	2154	436	1885	380	1616	324	1346	268	1077	212	808	155	808	155	808	155
30	2660	557	2394	500	2128	443	1862	386	1596	329	1330	272	1064	215	798	158	798	158	798	158
31	2628	566	2366	508	2103	450	1840	392	1577	334	1314	276	1051	218	789	160	789	160	789	160
32	2596	574	2337	515	2077	457	1817	398	1558	339	1298	280	1039	221	779	163	779	163	779	163
33	2564	583	2308	523	2051	463	1795	404	1539	344	1282	284	1026	225	769	165	769	165	769	165
34	2532	591	2279	531	2026	470	1772	410	1519	349	1266	289	1013	228	760	168	760	168	760	168
35	2500	600	2250	539	2000	477	1750	416	1500	354	1250	293	1000	231	750	170	750	170	750	170
36	2468	609	2221	546	1974	484	1728	422	1481	359	1234	297	987	235	740	172	740	172	740	172
37	2436	617	2192	554	1949	491	1705	428	1462	364	1218	301	974	238	731	175	731	175	731	175
38	2404	626	2163	562	1923	498	1683	434	1442	370	1202	305	962	241	721	177	721	177	721	177
39	2372	634	2135	569	1897	504	1660	440	1423	375	1186	310	949	245	712	180	712	180	712	180
40	2340	643	2106	577	1872	511	1638	446	1404	380	1170	314	936	248	702	182	702	182	702	182
41	2308	652	2077	585	1846	518	1615	451	1385	385	1154	318	923	251	692	185	692	185	692	185
42	2275	660	2048	593	1820	525	1593	457	1365	390	1138	322	910	255	683	187	683	187	683	187
43	2243	669	2019	600	1795	532	1570	463	1346	395	1122	326	897	258	673	189	673	189	673	189
44	2211	677	1990	608	1769	539	1548	469	1327	400	1106	331	885	261	663	192	663	192	663	192
45	2179	686	1961	616	1743	546	1525	475	1308	405	1090	335	872	265	654	194	654	194	654	194
46	2147	695	1932	623	1718	552	1503	481	1288	410	1074	339	859	268	644	197	644	197	644	197

Heating

Outdoor Temperature DB (°C)	Parts Load (%)																			
	100		90		80		70		60		50		40		30		20		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
-15	1371	492	1234	439	1097	386	960	333	823	281	686	228	549	175	411	122	386	112	386	112
-14	1446	504	1301	450	1157	395	1012	341	868	287	723	233	578	179	434	124	407	114	407	114
-13	1520	515	1368	460	1216	404	1064	349	912	293	760	238	608	183	456	127	428	117	428	117
-12	1595	527	1436	470	1276	413	1117	357	957	300	798	243	638	187	479	130	449	119	449	119
-11	1670	538	1503	480	1336	422	1169	364	1002	306	835	249	668	191	501	133	470	122	470	122
-10	1744	549	1570	490	1395	431	1221	372	1046	313	872	254	698	195	523	136	491	125	491	125
-9	1819	561	1637	500	1455	440	1273	380	1091	319	909	259	727	199	546	138	511	127	511	127
-8	1893	572	1704	511	1515	449	1325	387	1136	326	947	264	757	203	568	141	532	130	532	130
-7	1968	583	1771	521	1574	458	1377	395	1181	332	984	270	787	207	590	144	553	132	553	132
-6	2007	592	1806	529	1605	465	1405	401	1204	337	1003	274	803	210	602	146	564	134	564	134
-5	2046	601	1841	537	1637	472	1432	407	1227	342	1023	278	818	213	614	148	575	136	575	136
-4	2085	610	1876	545	1668	479	1459	413	1251	348	1042	282	834	216	625	151	586	138	586	138
-3	2124	619	1911	552	1699	486	1487	419	1274	353	1062	286	850	219	637	153	597	140	597	140
-2	2163	628	1947	560	1730	493	1514	425	1298	358	1081	290	865	223	649	155	608	142	608	142
-1	2202	637	1982	568	1761	500	1541	431	1321	363	1101	294	881	226	661	157	619	144	619	144
0	2241	646	2017	576	1793	507	1569	437	1344	368	1120	298	896	229	672	159	630	146	630	146
1	2280	655	2052	584	1824	514	1596	443	1368	373	1140	303	912	232	684	162	641	148	641	148
2	2319	664	2087	592	1855	521	1623	449	1391	378	1159	307	928	235	696	164	652	150	652	150
3	2357	673	2121	600	1885	528	1650	456	1414	383	1178	311	943	238	707	166	663	152	663	152
4	2395	682	2155	608	1916	535	1676	462	1437	388	1197	315	958	242	718	168	674	154	674	154
5	2433	690	2190	616	1946	542	1703	468	1460	393	1216	319	973	245	730	170	684	157	684	157
6	3117	738	2806	659	2494	579	2182	500	1870	421	1559	341	1247	262	935	182	877	167	877	167
7	3200	750	2880	669	2560	589	2240	508	1920	427	1600	347	1280	266	960	185	900	170	900	170
8	3283	762	2954	680	2626	598	2298	516	1970	434	1641	352	1313	270	985	188	923	173	923	173
9	3365	773	3029	690	2692	607	2356	524	2019	440	1683	357	1346	274	1010	191	946	175	946	175
10	3448	785	3103	700	2758	616	2413	532	2069	447	1724	363	1379	278	1034	194	970	178	970	178
11	3530	796	3177	711	2824	625	2471	539	2118	454	1765	368	1412	282	1059	197	993	181	993	181
12	3613	808	3252	721	2890	634	2529	547	2168	460	1806	373	1445	286	1084	199	1016	183	1016	183
13	3695	820	3326	731	2956	643	2587	555	2217	467	1848	379	1478	291	1109	202	1039	186	1039	186
14	3778	831	3400	742	3022	652	2645	563	2267	474	1889	384	1511	295	1133	205	1063	188	1063	188
15	3861	843	3475	752	3089	662	2702	571	2316	480	1930	389	1544	299	1158	208	1086	191	1086	191
16	3943	855	3549	763	3155	671	2760	579	2366	487	1972	395	1577	303	1183	211	1109	194	1109	194
17	4026	866	3623	773	3221	680	2818	587	2415	493	2013	400	1610	307	1208	214	1132	196	1132	196
18	4108	878	3698	783	3287	689	2876	594	2465	500	2054	406	1643	311	1233	217	1155	199	1155	199
19	4191	889	3772	794	3353	698	2934	602	2515	507	2095	411	1676	315	1257	220	1179	202	1179	202
20	4274	901	3846	804	3419	707	2991	610	2564	513	2137	416	1709	319	1282	222	1202	204	1202	204
21	4356	913	3921	814	3485	716	3049	618	2614	520	2178	422	1742	323	1307	225	1225	207	1225	207
22	4439	924	3995	825	3551	725	3107	626	2663	526	2219	427	1775	328	1332	228	1248	209	1248	209
23	4521	936	4069	835	3617	734	3165	634	2713	533	2261	432	1809	332	1356	231	1272	212	1272	212
24	4604	947	4143	845	3683	744	3223	642	2762	540	2302	438	1842	336	1381	234	1295	215	1295	215

Indoor : RAS-B13J2KVRG-E / RAS-13J2KVRG-TR
Outdoor : RAS-13J2AVRG-E / TR

		Cooling		Heating	
		Q	P	Q	P
Minimum	(W)	800	180	800	150
Rating	(W)	3500	1050	4200	1080
Maximum	(W)	4100	1250	5300	1550

Cooling

Outdoor Temperature DB (°C)	Parts Load (%)																			
	100		90		80		70		60		50		40		30		20		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
20	4174	824	3756	736	3339	647	2922	559	2504	470	2087	382	1670	293	1252	205	954	141	954	141
21	4129	839	3716	749	3303	659	2890	569	2477	479	2064	389	1652	298	1239	208	944	144	944	144
22	4084	854	3676	763	3267	671	2859	579	2450	487	2042	396	1634	304	1225	212	933	146	933	146
23	4039	869	3635	776	3231	683	2827	589	2423	496	2020	403	1616	309	1212	216	923	149	923	149
24	3994	884	3595	789	3195	694	2796	599	2396	504	1997	409	1598	314	1198	219	913	152	913	152
25	3949	900	3554	803	3159	706	2764	610	2370	513	1975	416	1580	320	1185	223	903	154	903	154
26	3904	915	3514	816	3123	718	2733	620	2343	522	1952	423	1562	325	1171	227	892	157	892	157
27	3859	930	3473	830	3087	730	2702	630	2316	530	1930	430	1544	331	1158	231	882	159	882	159
28	3814	945	3433	843	3052	742	2670	640	2289	539	1907	437	1526	336	1144	234	872	162	872	162
29	3770	960	3393	857	3016	754	2639	650	2262	547	1885	444	1508	341	1131	238	862	165	862	165
30	3725	975	3352	870	2980	765	2607	661	2235	556	1862	451	1490	347	1117	242	851	167	851	167
31	3680	990	3312	883	2944	777	2576	671	2208	565	1840	458	1472	352	1104	246	841	170	841	170
32	3635	1005	3271	897	2908	789	2544	681	2181	573	1817	465	1454	357	1090	249	831	172	831	172
33	3590	1020	3231	910	2872	801	2513	691	2154	582	1795	472	1436	363	1077	253	821	175	821	175
34	3545	1035	3190	924	2836	813	2481	701	2127	590	1772	479	1418	368	1063	257	810	177	810	177
35	3500	1050	3150	937	2800	824	2450	712	2100	599	1750	486	1400	373	1050	261	800	180	800	180
36	3455	1065	3110	951	2764	836	2419	722	2073	607	1728	493	1382	379	1037	264	790	183	790	183
37	3410	1080	3069	964	2728	848	2387	732	2046	616	1705	500	1364	384	1023	268	779	185	779	185
38	3365	1095	3029	978	2692	860	2356	742	2019	625	1683	507	1346	389	1010	272	769	188	769	188
39	3320	1110	2988	991	2656	872	2324	752	1992	633	1660	514	1328	395	996	275	759	190	759	190
40	3275	1125	2948	1004	2620	884	2293	763	1965	642	1638	521	1310	400	983	279	749	193	749	193
41	3231	1140	2907	1018	2584	895	2261	773	1938	650	1615	528	1292	405	969	283	738	195	738	195
42	3186	1155	2867	1031	2548	907	2230	783	1911	659	1593	535	1274	411	956	287	728	198	728	198
43	3141	1170	2827	1045	2513	919	2198	793	1884	668	1570	542	1256	416	942	290	718	201	718	201
44	3096	1185	2786	1058	2477	931	2167	803	1857	676	1548	549	1238	421	929	294	708	203	708	203
45	3051	1201	2746	1072	2441	943	2136	814	1831	685	1525	556	1220	427	915	298	697	206	697	206
46	3006	1216	2705	1085	2405	954	2104	824	1804	693	1503	563	1202	432	902	302	687	208	687	208

Heating

Outdoor Temperature DB (°C)	Parts Load (%)																			
	100		90		80		70		60		50		40		30		20		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
-15	1654	710	1489	634	1324	559	1158	483	993	408	827	332	662	257	496	181	331	106	315	99
-14	1758	726	1582	649	1406	572	1230	494	1055	417	879	340	703	263	527	185	352	108	335	101
-13	1861	742	1675	663	1489	584	1303	505	1117	427	931	348	744	269	558	190	372	111	355	103
-12	1965	759	1768	678	1572	597	1375	517	1179	436	982	355	786	274	589	194	393	113	374	105
-11	2068	775	1861	692	1654	610	1448	528	1241	445	1034	363	827	280	620	198	414	115	394	108
-10	2171	791	1954	707	1737	623	1520	539	1303	454	1086	370	869	286	651	202	434	118	414	110
-9	2275	807	2047	721	1820	636	1592	550	1365	464	1137	378	910	292	682	206	455	120	433	112
-8	2378	823	2140	736	1903	648	1665	561	1427	473	1189	386	951	298	713	210	476	123	453	114
-7	2482	840	2233	750	1985	661	1737	572	1489	482	1241	393	993	304	744	214	496	125	473	117
-6	2544	853	2290	762	2035	671	1781	581	1526	490	1272	399	1018	308	763	218	509	127	485	118
-5	2606	865	2346	773	2085	681	1825	589	1564	497	1303	405	1043	313	782	221	521	129	496	120
-4	2669	878	2402	785	2135	692	1868	598	1601	505	1334	411	1068	318	801	224	534	131	508	122
-3	2731	891	2458	796	2185	702	1912	607	1639	512	1366	417	1093	322	819	228	546	133	520	124
-2	2794	904	2514	808	2235	712	1956	616	1676	519	1397	423	1118	327	838	231	559	135	532	126
-1	2856	917	2571	820	2285	722	1999	624	1714	527	1428	429	1142	332	857	234	571	137	544	127
0	2919	930	2627	831	2335	732	2043	633	1751	534	1459	435	1167	336	876	238	584	139	556	129
1	2981	943	2683	843	2385	742	2087	642	1789	542	1491	441	1192	341	894	241	596	141	568	131
2	3043	956	2739	854	2435	752	2130	651	1826	549	1522	447	1217	346	913	244	609	142	580	133
3	3093	969	2784	866	2475	763	2165	660	1856	556	1547	453	1237	350	928	247	619	144	589	135
4	3143	981	2829	877	2515	773	2200	668	1886	564	1572	459	1257	355	943	251	629	146	599	136
5	3193	994	2874	889	2554	783	2235	677	1916	571	1597	465	1277	360	958	254	639	148	608	138
6	4092	1063	3682	950	3273	837	2864	724	2455	611	2046	498	1637	385	1227	272	818	158	779	148
7	4200	1080	3780	965	3360	850	2940	735	2520	620	2100	506	1680	391	1260	276	840	161	800	150
8	4308	1097	3878	980	3447	863	3016	747	2585	630	2154	513	1723	397	1293	280	862	163	821	152
9	4417	1113	3975	995	3533	877	3092	758	2650	640	2208	521	1767	403	1325	284	883	166	841	155
10	4525	1130	4073	1010	3620	890	3168	770	2715	649	2263	529	1810	409	1358	289	905	168	862	157
11	4634	1147	4170	1025	3707	903	3243	781	2780	659	2317	537	1853	415	1390	293	927	171	883	159
12	4742	1164	4268	1040	3794	916	3319	792	2845	669	2371	545	1897	421	1423	297	948	173	903	162
13	4850	1180	4365	1055	3880	929	3395	804	2910	678	2425	553	1940	427	1455	301	970	176	924	164
14	4959	1197	4463	1070	3967	942	3471	815	2975	688	2479	560	1983	433	1488	306	992	178	945	166
15	5067	1214	4560	1085	4054	956	3547	826	3040	697	2534	568	2027	439	1520	310	1013	181	965	169
16	5175	1231	4658	1100	4140	969	3623	838	3105	707	2588	576	2070	445	1553	314	1035	183	986	171
17	5284	1247	4755	1115	4227	982	3699	849	3170	717	2642	584	2114	451	1585	319	1057	186	1006	173
18	5392	1264	4853	1129	4314	995	3775	861	3235	726	2696	592	2157	457	1618	323	1078	188	1027	176
19	5501	1281	4951	1144	4401	1008	3850	872	3300	736	2750	600	2200	463	1650	327	1100	191	1048	178
20	5609	1297	5048	1159	4487	1021	3926	883	3365	745	2805	607	2244	469	1683	331	1122	193	1068	180
21	5717	1314	5146	1174	4574	1035	4002	895	3430	755	2859	615	2287	475	1715	336	1143	196	1089	183
22	5826	1331	5243	1189	4661	1048	4078	906	3495	765	2913	623	2330	481	1748	340	1165	198	1110	185
23	5934	1348	5341	1204	4747	1061	4154	918	3561	774	2967	631	2374	488	1780	344	1187	201	1130	187
24	6043	1364	5438	1219	4834	1074	4230	929	3626	784	3021	639	2417	494	1813	348	1209	203	1151	189

Indoor : RAS-B16J2KVRG-E / RAS-16J2KVRG-TR
Outdoor : RAS-16J2AVRG-E / TR

		Cooling		Heating	
		Q	P	Q	P
Minimum	(W)	1200	230	900	170
Rating	(W)	4600	1400	5500	1520
Maximum	(W)	5300	1720	6500	1820

Cooling																				
Outdoor Temperature DB (°C)	Parts Load (%)																			
	100		90		80		70		60		50		40		30		20		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
20	5486	1099	4937	975	4388	850	3840	726	3291	602	2743	478	2194	353	1646	229	1431	181	1431	181
21	5426	1119	4884	993	4341	866	3799	739	3256	613	2713	486	2171	360	1628	233	1416	184	1416	184
22	5367	1139	4831	1010	4294	882	3757	753	3220	624	2684	495	2147	366	1610	238	1400	187	1400	187
23	5308	1159	4778	1028	4247	897	3716	766	3185	635	2654	504	2123	373	1593	242	1385	190	1385	190
24	5249	1179	4724	1046	4199	913	3675	779	3150	646	2625	513	2100	379	1575	246	1369	194	1369	194
25	5190	1199	4671	1064	4152	928	3633	793	3114	657	2595	521	2076	386	1557	250	1354	197	1354	197
26	5131	1219	4618	1082	4105	944	3592	806	3079	668	2566	530	2053	392	1539	254	1339	200	1339	200
27	5072	1239	4565	1099	4058	959	3551	819	3043	679	2536	539	2029	399	1522	258	1323	204	1323	204
28	5013	1260	4512	1117	4011	975	3509	832	3008	690	2507	547	2005	405	1504	263	1308	207	1308	207
29	4954	1280	4459	1135	3963	990	3468	846	2973	701	2477	556	1982	412	1486	267	1292	210	1292	210
30	4895	1300	4406	1153	3916	1006	3427	859	2937	712	2448	565	1958	418	1469	271	1277	214	1277	214
31	4836	1320	4353	1171	3869	1021	3385	872	2902	723	2418	574	1934	424	1451	275	1262	217	1262	217
32	4777	1340	4299	1188	3822	1037	3344	885	2866	734	2389	582	1911	431	1433	279	1246	220	1246	220
33	4718	1360	4246	1206	3774	1052	3303	899	2831	745	2359	591	1887	437	1415	284	1231	223	1231	223
34	4659	1380	4193	1224	3727	1068	3261	912	2795	756	2330	600	1864	444	1398	288	1215	227	1215	227
35	4600	1400	4140	1242	3680	1083	3220	925	2760	767	2300	609	1840	450	1380	292	1200	230	1200	230
36	4541	1420	4087	1260	3633	1099	3179	938	2725	778	2270	617	1816	457	1362	296	1185	233	1185	233
37	4482	1440	4034	1277	3586	1114	3137	952	2689	789	2241	626	1793	463	1345	300	1169	237	1169	237
38	4423	1460	3981	1295	3538	1130	3096	965	2654	800	2211	635	1769	470	1327	304	1154	240	1154	240
39	4364	1480	3927	1313	3491	1146	3055	978	2618	811	2182	643	1746	476	1309	309	1138	243	1138	243
40	4305	1500	3874	1331	3444	1161	3013	991	2583	822	2152	652	1722	483	1291	313	1123	246	1123	246
41	4246	1520	3821	1348	3397	1177	2972	1005	2547	833	2123	661	1698	489	1274	317	1108	250	1108	250
42	4187	1540	3768	1366	3349	1192	2931	1018	2512	844	2093	670	1675	495	1256	321	1092	253	1092	253
43	4128	1561	3715	1384	3302	1208	2889	1031	2477	855	2064	678	1651	502	1238	325	1077	256	1077	256
44	4069	1581	3662	1402	3255	1223	2848	1044	2441	866	2034	687	1627	508	1221	330	1061	260	1061	260
45	3889	1546	3500	1371	3111	1196	2722	1021	2334	847	1945	672	1556	497	1167	322	1015	254	1015	254
46	3786	1546	3408	1371	3029	1196	2650	1021	2272	847	1893	672	1515	497	1136	322	988	254	988	254

Heating																				
Outdoor Temperature DB (°C)	Parts Load (%)																			
	100		90		80		70		60		50		40		30		20		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
-15	2409	1015	2168	908	1927	800	1686	692	1445	584	1205	476	964	368	723	261	482	153	394	114
-14	2543	1037	2289	927	2034	817	1780	707	1526	597	1271	486	1017	376	763	266	509	156	416	116
-13	2677	1059	2409	946	2142	834	1874	721	1606	609	1338	497	1071	384	803	272	535	159	438	118
-12	2811	1080	2530	966	2249	851	1968	736	1687	622	1405	507	1124	392	843	277	562	163	460	121
-11	2945	1102	2650	985	2356	868	2061	751	1767	634	1472	517	1178	400	883	283	589	166	482	123
-10	3079	1124	2771	1004	2463	885	2155	766	1847	646	1539	527	1232	408	924	288	616	169	504	126
-9	3213	1146	2891	1024	2570	902	2249	781	1928	659	1606	537	1285	416	964	294	643	172	526	128
-8	3347	1167	3012	1043	2677	919	2343	795	2008	671	1673	547	1339	424	1004	300	669	176	548	131
-7	3481	1189	3133	1063	2785	936	2436	810	2088	684	1740	558	1392	431	1044	305	696	179	570	133
-6	3537	1206	3183	1078	2829	950	2476	822	2122	694	1768	566	1415	438	1061	310	707	181	579	135
-5	3593	1224	3234	1094	2874	964	2515	834	2156	704	1796	574	1437	444	1078	314	719	184	588	137
-4	3649	1241	3284	1109	2919	977	2554	846	2189	714	1824	582	1460	450	1095	319	730	187	597	139
-3	3705	1258	3335	1125	2964	991	2594	857	2223	724	1853	590	1482	457	1112	323	741	189	606	141
-2	3761	1276	3385	1140	3009	1005	2633	869	2257	734	1881	598	1504	463	1128	327	752	192	615	143
-1	3817	1293	3436	1156	3054	1018	2672	881	2290	744	1909	606	1527	469	1145	332	763	195	625	145
0	3873	1310	3486	1171	3099	1032	2711	893	2324	754	1937	615	1549	475	1162	336	775	197	634	147
1	3929	1328	3536	1187	3144	1046	2751	905	2358	764	1965	623	1572	482	1179	341	786	200	643	149
2	3986	1345	3587	1202	3188	1059	2790	917	2391	774	1993	631	1594	488	1196	345	797	202	652	150
3	4051	1363	3646	1218	3241	1074	2836	929	2430	784	2025	639	1620	495	1215	350	810	205	663	152
4	4116	1381	3704	1235	3293	1088	2881	941	2470	795	2058	648	1646	501	1235	355	823	208	674	154
5	4181	1399	3763	1251	3345	1102	2927	954	2509	805	2091	656	1673	508	1254	359	836	211	684	157
6	5358	1496	4822	1338	4286	1179	3751	1020	3215	861	2679	702	2143	543	1607	384	1072	225	877	167
7	5500	1520	4950	1359	4400	1197	3850	1036	3300	874	2750	713	2200	552	1650	390	1100	229	900	170
8	5642	1544	5078	1380	4514	1216	3949	1052	3385	888	2821	724	2257	560	1693	396	1128	232	923	173
9	5784	1567	5205	1401	4627	1234	4049	1068	3470	901	2892	735	2314	569	1735	402	1157	236	946	175
10	5926	1591	5333	1422	4741	1253	4148	1084	3555	915	2963	746	2370	577	1778	408	1185	239	970	178
11	6068	1614	5461	1443	4854	1271	4247	1100	3641	929	3034	757	2427	586	1820	414	1214	243	993	181
12	6210	1638	5589	1464	4968	1290	4347	1116	3726	942	3105	768	2484	594	1863	420	1242	246	1016	183
13	6352	1661	5716	1485	5081	1308	4446	1132	3811	956	3176	779	2541	603	1905	426	1270	250	1039	186
14	6494	1685	5844	1506	5195	1327	4545	1148	3896	969	3247	790	2597	611	1948	432	1299	253	1063	188
15	6635	1708	5972	1527	5308	1345	4645	1164	3981	983	3318	801	2654	620	1991	438	1327	257	1086	191
16	6777	1732	6100	1548	5422	1364	4744	1180	4066	996	3389	812	2711	628	2033	444	1355	261	1109	194
17	6919	1755	6227	1569	5535	1383	4844	1196	4152	1010	3460	823	2768	637	2076	451	1384	264	1132	196
18	7061	1779	6355	1590	5649	1401	4943	1212	4237	1023	3531	834	2825	645	2118	457	1412	268	1155	199
19	7203	1802	6483	1611	5763	1420	5042	1228	4322	1037	3602	845	2881	654	2161	463	1441	271	1179	202
20	7345	1826	6611	1632	5876	1438	5142	1244	4407	1050	3673	856	2938	663	2204	469	1469	275	1202	204
21	7487	1849	6738	1653	5990	1457	5241	1260	4492	1064	3744	867	2995	671	2246	475	1497	278	1225	207
22	7629	1873	6866	1674	6103	1475	5340	1276	4577	1077	3815	879	3052	680	2289	481	1526	282	1248	209
23	7771	1897	6994	1695	6217	1494	5440	1292	4663	1091	3885	890	3108	688	2331	487	1554	285	1272	212
24	7913	1920	7122	1716	6330	1512	5539	1308	4748	1104	3956	901	3165	697	2374	493	1583	289	1295	215

Indoor : RAS-18J2KVRG-E / TR
Outdoor : RAS-18J2AVRG-E / TR

		Cooling		Heating	
		Q	P	Q	P
Minimum	(W)	1240	230	880	160
Rating	(W)	5000	1420	6000	1600
Maximum	(W)	6000	2000	6500	1750

Cooling		Parts Load (%)																			
		100		90		80		70		60		50		40		30		20		10	
		Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
Outdoor Temperature DB (°C)																					
20	5963	1115	5366	990	4770	866	4174	742	3578	618	2981	494	2385	369	1789	245	1479	181	1479	181	
21	5898	1135	5309	1009	4719	882	4129	756	3539	629	2949	503	2359	376	1770	250	1463	184	1463	184	
22	5834	1155	5251	1027	4667	898	4084	769	3501	640	2917	512	2334	383	1750	254	1447	187	1447	187	
23	5770	1176	5193	1045	4616	914	4039	783	3462	652	2885	521	2308	390	1731	259	1431	190	1431	190	
24	5706	1196	5135	1063	4565	930	3994	796	3424	663	2853	530	2282	396	1712	263	1415	194	1415	194	
25	5642	1216	5078	1081	4513	945	3949	810	3385	674	2821	539	2257	403	1693	268	1399	197	1399	197	
26	5578	1237	5020	1099	4462	961	3904	823	3347	685	2789	548	2231	410	1673	272	1383	200	1383	200	
27	5513	1257	4962	1117	4411	977	3859	837	3308	697	2757	557	2205	417	1654	276	1367	204	1367	204	
28	5449	1278	4904	1135	4359	993	3814	850	3270	708	2725	566	2180	423	1635	281	1351	207	1351	207	
29	5385	1298	4847	1153	4308	1009	3770	864	3231	719	2693	575	2154	430	1616	285	1335	210	1335	210	
30	5321	1318	4789	1171	4257	1024	3725	878	3193	731	2660	584	2128	437	1596	290	1320	214	1320	214	
31	5257	1339	4731	1189	4205	1040	3680	891	3154	742	2628	593	2103	444	1577	294	1304	217	1304	217	
32	5193	1359	4673	1207	4154	1056	3635	905	3116	753	2596	602	2077	450	1558	299	1288	220	1288	220	
33	5128	1379	4616	1226	4103	1072	3590	918	3077	764	2564	611	2051	457	1539	303	1272	223	1272	223	
34	5064	1400	4558	1244	4051	1088	3545	932	3039	776	2532	620	2026	464	1519	308	1256	227	1256	227	
35	5000	1420	4500	1262	4000	1104	3500	945	3000	787	2500	629	2000	471	1500	312	1240	230	1240	230	
36	4936	1440	4442	1280	3949	1119	3455	959	2962	798	2468	638	1974	477	1481	317	1224	233	1224	233	
37	4872	1461	4385	1298	3897	1135	3410	972	2923	810	2436	647	1949	484	1462	321	1208	237	1208	237	
38	4808	1481	4327	1316	3846	1151	3365	986	2885	821	2404	656	1923	491	1442	326	1192	240	1192	240	
39	4743	1501	4269	1334	3795	1167	3320	999	2846	832	2372	665	1897	498	1423	330	1176	243	1176	243	
40	4679	1522	4211	1352	3743	1183	3275	1013	2808	843	2340	674	1872	504	1404	335	1160	246	1160	246	
41	4615	1542	4154	1370	3692	1198	3231	1027	2769	855	2308	683	1846	511	1385	339	1145	250	1145	250	
42	4551	1562	4096	1388	3641	1214	3186	1040	2731	866	2275	692	1820	518	1365	344	1129	253	1129	253	
43	4487	1583	4038	1406	3589	1230	3141	1054	2692	877	2243	701	1795	524	1346	348	1113	256	1113	256	
44	4399	1590	3959	1413	3519	1235	3080	1058	2640	881	2200	704	1760	527	1320	350	1091	257	1091	257	
45	4110	1479	3699	1315	3288	1150	2877	985	2466	820	2055	655	1644	490	1233	325	1019	240	1019	240	
46	4011	1479	3609	1315	3208	1150	2807	985	2406	820	2005	655	1604	490	1203	325	995	240	995	240	

Heating		Parts Load (%)																			
Outdoor Temperature DB (°C)	100		90		80		70		60		50		40		30		20		10		
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	
-15	2571	1051	2314	940	2057	829	1800	718	1543	607	1285	497	1028	386	771	275	514	164	377	105	
-14	2710	1075	2439	961	2168	848	1897	735	1626	621	1355	508	1084	395	813	281	542	168	398	107	
-13	2850	1098	2565	983	2280	867	1995	751	1710	635	1425	519	1140	403	855	287	570	172	418	110	
-12	2989	1122	2690	1004	2391	886	2092	767	1793	649	1495	531	1196	412	897	294	598	175	438	112	
-11	3129	1146	2816	1026	2503	905	2190	784	1877	663	1564	542	1251	421	939	300	626	179	459	115	
-10	3268	1170	2941	1047	2614	924	2288	800	1961	677	1634	553	1307	430	980	306	654	183	479	117	
-9	3407	1194	3067	1068	2726	942	2385	816	2044	691	1704	565	1363	439	1022	313	681	187	500	119	
-8	3547	1218	3192	1090	2837	961	2483	833	2128	704	1773	576	1419	447	1064	319	709	190	520	122	
-7	3686	1242	3318	1111	2949	980	2580	849	2212	718	1843	587	1474	456	1106	325	737	194	541	124	
-6	3760	1262	3384	1129	3008	996	2632	862	2256	729	1880	596	1504	463	1128	330	752	197	551	126	
-5	3833	1281	3450	1146	3067	1011	2683	876	2300	741	1917	605	1533	470	1150	335	767	200	562	128	
-4	3907	1300	3516	1163	3125	1026	2735	889	2344	752	1953	615	1563	477	1172	340	781	203	573	130	
-3	3980	1320	3582	1180	3184	1041	2786	902	2388	763	1990	624	1592	485	1194	345	796	206	584	132	
-2	4054	1339	3648	1198	3243	1056	2838	915	2432	774	2027	633	1622	492	1216	350	811	209	595	134	
-1	4127	1358	3715	1215	3302	1072	2889	928	2476	785	2064	642	1651	499	1238	355	825	212	605	136	
0	4201	1377	3781	1232	3361	1087	2941	942	2520	796	2100	651	1680	506	1260	360	840	215	616	138	
1	4274	1397	3847	1249	3419	1102	2992	955	2565	807	2137	660	1710	513	1282	366	855	218	627	140	
2	4348	1416	3913	1267	3478	1117	3043	968	2609	819	2174	669	1739	520	1304	371	870	221	638	142	
3	4419	1435	3977	1284	3535	1132	3093	981	2651	830	2210	678	1768	527	1326	376	884	224	648	143	
4	4490	1454	4041	1301	3592	1147	3143	994	2694	841	2245	687	1796	534	1347	381	898	227	659	145	
5	4561	1473	4105	1318	3649	1162	3193	1007	2737	852	2281	696	1825	541	1368	386	912	230	669	147	
6	5845	1575	5261	1409	4676	1243	4092	1077	3507	911	2923	745	2338	578	1754	412	1169	246	857	158	
7	6000	1600	5400	1431	4800	1263	4200	1094	3600	925	3000	756	2400	588	1800	419	1200	250	880	160	
8	6155	1625	5539	1453	4924	1282	4308	1111	3693	939	3077	768	2462	597	1846	425	1231	254	903	162	
9	6310	1650	5679	1476	5048	1302	4417	1128	3786	954	3155	780	2524	606	1893	432	1262	258	925	165	
10	6465	1674	5818	1498	5172	1321	4525	1145	3879	968	3232	791	2586	615	1939	438	1293	262	948	167	
11	6619	1699	5957	1520	5295	1341	4634	1161	3972	982	3310	803	2648	624	1986	445	1324	265	971	170	
12	6774	1724	6097	1542	5419	1360	4742	1178	4065	997	3387	815	2710	633	2032	451	1355	269	994	172	
13	6929	1749	6236	1564	5543	1380	4850	1195	4157	1011	3465	827	2772	642	2079	458	1386	273	1016	175	
14	7084	1773	6375	1586	5667	1399	4959	1212	4250	1025	3542	838	2834	651	2125	464	1417	277	1039	177	
15	7239	1798	6515	1609	5791	1419	5067	1229	4343	1040	3619	850	2895	660	2172	471	1448	281	1062	180	
16	7394	1823	6654	1631	5915	1438	5175	1246	4436	1054	3697	862	2957	669	2218	477	1479	285	1084	182	
17	7548	1848	6794	1653	6039	1458	5284	1263	4529	1068	3774	873	3019	678	2265	484	1510	289	1107	185	
18	7703	1873	6933	1675	6163	1478	5392	1280	4622	1083	3852	885	3081	688	2311	490	1541	293	1130	187	
19	7858	1897	7072	1697	6286	1497	5501	1297	4715	1097	3929	897	3143	697	2357	497	1572	296	1153	190	
20	8013	1922	7212	1719	6410	1517	5609	1314	4808	1111	4006	908	3205	706	2404	503	1603	300	1175	192	
21	8168	1947	7351	1742	6534	1536	5717	1331	4901	1126	4084	920	3267	715	2450	510	1634	304	1198	195	
22	8323	1972	7490	1764	6658	1556	5826	1348	4994	1140	4161	932	3329	724	2497	516	1665	308	1221	197	
23	8477	1996	7630	1786	6782	1575	5934	1365	5086	1154	4239	944	3391	733	2543	522	1695	312	1243	200	
24	8632	2021	7769	1808	6906	1595	6043	1382	5179	1168	4316	955	3453	742	2590	529	1726	316	1266	202	

Indoor : RAS-B22J2KVRG-E / RAS-22J2KVRG-TR
 Outdoor : RAS-22J2AVRG-E / TR

Operation range		Cooling		Heating	
		Q	P	Q	P
MINIMUM	W	1290	240	930	190
RATING	W	6100	1990	7000	1940
MAXIMUM	W	6700	2200	7500	2100

Cooling

Outdoor Temperature	Parts Load (%)																			
DB (°C)	100		90		80		70		60		50		40		30		20		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
20	7274	1562	6547	1388	5819	1214	5092	1039	4365	865	3637	691	2910	517	2182	343	1538	188	1538	188
21	7196	1591	6476	1413	5757	1236	5037	1058	4318	881	3598	704	2878	526	2159	349	1522	192	1522	192
22	7118	1619	6406	1439	5694	1258	4982	1077	4271	897	3559	716	2847	536	2135	355	1505	195	1505	195
23	7039	1648	6335	1464	5632	1280	4928	1096	4224	913	3520	729	2816	545	2112	361	1489	199	1489	199
24	6961	1676	6265	1489	5569	1302	4873	1115	4177	928	3481	742	2784	555	2088	368	1472	202	1472	202
25	6883	1705	6195	1515	5506	1325	4818	1134	4130	944	3441	754	2753	564	2065	374	1456	206	1456	206
26	6805	1733	6124	1540	5444	1347	4763	1153	4083	960	3402	767	2722	573	2041	380	1439	209	1439	209
27	6726	1762	6054	1565	5381	1369	4708	1172	4036	976	3363	779	2691	583	2018	386	1422	212	1422	212
28	6648	1790	5983	1591	5318	1391	4654	1191	3989	992	3324	792	2659	592	1994	393	1406	216	1406	216
29	6570	1819	5913	1616	5256	1413	4599	1210	3942	1007	3285	805	2628	602	1971	399	1389	219	1389	219
30	6491	1847	5842	1641	5193	1435	4544	1229	3895	1023	3246	817	2597	611	1947	405	1373	223	1373	223
31	6413	1876	5772	1667	5131	1457	4489	1248	3848	1039	3207	830	2565	621	1924	411	1356	226	1356	226
32	6335	1904	5701	1692	5068	1480	4434	1267	3801	1055	3167	842	2534	630	1900	418	1340	230	1340	230
33	6257	1933	5631	1717	5005	1502	4380	1286	3754	1071	3128	855	2503	640	1877	424	1323	233	1323	233
34	6178	1961	5560	1743	4943	1524	4325	1305	3707	1086	3089	868	2471	649	1853	430	1307	237	1307	237
35	6100	1990	5490	1768	4880	1546	4270	1324	3660	1102	3050	880	2440	658	1830	436	1290	240	1290	240
36	6022	2019	5420	1793	4817	1568	4215	1343	3613	1118	3011	893	2409	668	1807	443	1273	243	1273	243
37	5943	2047	5349	1819	4755	1590	4160	1362	3566	1134	2972	906	2377	677	1783	449	1257	247	1257	247
38	5865	2076	5279	1844	4692	1613	4106	1381	3519	1150	2933	918	2346	687	1760	455	1240	250	1240	250
39	5787	2104	5208	1869	4629	1635	4051	1400	3472	1165	2893	931	2315	696	1736	461	1224	254	1224	254
40	5089	1916	4580	1702	4072	1489	3563	1275	3054	1061	2545	848	2036	634	1527	420	1076	231	1076	231
41	4930	1916	4437	1702	3944	1489	3451	1275	2958	1061	2465	848	1972	634	1479	420	1042	231	1042	231
42	4770	1916	4293	1702	3816	1489	3339	1275	2862	1061	2385	848	1908	634	1431	420	1009	231	1009	231
43	4610	1916	4149	1702	3688	1489	3227	1275	2766	1061	2305	848	1844	634	1383	420	975	231	975	231
44	4450	1916	4005	1702	3560	1489	3115	1275	2670	1061	2225	848	1780	634	1335	420	941	231	941	231
45	4291	1916	3861	1702	3432	1489	3003	1275	2574	1061	2145	848	1716	634	1287	420	907	231	907	231
46	4131	1916	3718	1702	3305	1489	2892	1275	2478	1061	2065	848	1652	634	1239	420	874	231	874	231

Heating

Outdoor Temperature DB (°C)	Parts Load (%)																			
	100		90		80		70		60		50		40		30		20		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
-15	2555	1279	2300	1146	2044	1013	1789	880	1533	747	1278	614	1022	481	767	348	511	215	339	125
-14	2694	1308	2424	1172	2155	1036	1886	900	1616	764	1347	628	1077	492	808	356	539	220	358	128
-13	2832	1337	2549	1198	2266	1059	1982	920	1699	781	1416	642	1133	503	850	363	566	224	376	131
-12	2971	1366	2674	1224	2377	1082	2079	940	1782	798	1485	656	1188	513	891	371	594	229	395	134
-11	3109	1395	2798	1250	2487	1105	2176	960	1866	814	1555	669	1244	524	933	379	622	234	413	137
-10	3248	1424	2923	1276	2598	1128	2273	979	1949	831	1624	683	1299	535	974	387	650	239	431	139
-9	3386	1453	3048	1302	2709	1150	2370	999	2032	848	1693	697	1355	546	1016	395	677	244	450	142
-8	3525	1482	3172	1327	2820	1173	2467	1019	2115	865	1762	711	1410	557	1057	403	705	249	468	145
-7	3663	1510	3297	1353	2931	1196	2564	1039	2198	882	1832	725	1465	568	1099	411	733	253	487	148
-6	3820	1533	3438	1374	3056	1214	2674	1055	2292	895	1910	736	1528	576	1146	417	764	257	508	150
-5	3977	1556	3579	1394	3181	1233	2784	1071	2386	909	1988	747	1591	585	1193	423	795	261	528	152
-4	4133	1579	3720	1415	3306	1251	2893	1086	2480	922	2067	758	1653	594	1240	429	827	265	549	155
-3	4290	1602	3861	1436	3432	1269	3003	1102	2574	935	2145	769	1716	602	1287	435	858	269	570	157
-2	4446	1625	4002	1456	3557	1287	3112	1118	2668	949	2223	780	1778	611	1334	442	889	273	591	159
-1	4603	1648	4143	1477	3682	1305	3222	1134	2762	962	2301	791	1841	619	1381	448	921	277	612	161
0	4759	1671	4283	1497	3807	1323	3332	1149	2856	976	2380	802	1904	628	1428	454	952	280	632	164
1	4916	1694	4424	1518	3933	1341	3441	1165	2950	989	2458	813	1966	637	1475	460	983	284	653	166
2	5072	1717	4565	1538	4058	1360	3551	1181	3043	1002	2536	824	2029	645	1522	467	1014	288	674	168
3	5156	1740	4640	1559	4124	1378	3609	1197	3093	1016	2578	835	2062	654	1547	473	1031	292	685	170
4	5239	1763	4715	1580	4191	1396	3667	1213	3143	1029	2619	846	2095	663	1572	479	1048	296	696	173
5	5322	1786	4790	1600	4257	1414	3725	1229	3193	1043	2661	857	2129	671	1597	485	1064	300	707	175
6	5419	1910	6137	1711	5455	1513	4774	1314	4092	1115	3410	917	2728	718	2046	519	1364	320	906	187
7	7000	1940	6300	1738	5600	1536	4900	1335	4200	1133	3500	931	2800	729	2100	527	1400	326	930	190
8	7181	1970	6463	1765	5745	1560	5026	1355	4308	1150	3590	945	2872	740	2154	535	1436	331	954	193
9	7361	2000	6625	1792	5889	1584	5153	1376	4417	1168	3681	960	2945	752	2208	544	1472	336	978	196
10	7542	2030	6788	1819	6034	1608	5279	1397	4525	1185	3771	974	3017	763	2263	552	1508	341	1002	199
11	7723	2060	6950	1846	6178	1632	5406	1417	4634	1203	3861	989	3089	774	2317	560	1545	346	1026	202
12	7903	2090	7113	1873	6323	1655	5532	1438	4742	1220	3952	1003	3161	786	2371	568	1581	351	1050	205
13	8084	2120	7275	1900	6467	1679	5659	1459	4850	1238	4042	1017	3234	797	2425	576	1617	356	1074	208
14	8265	2150	7438	1927	6612	1703	5785	1479	4959	1256	4132	1032	3306	808	2479	584	1653	361	1098	211
15	8445	2180	7601	1953	6756	1727	5912	1500	5067	1273	4223	1046	3378	819	2534	593	1689	366	1122	214
16	8626	2210	7763	1980	6901	1750	6038	1521	5175	1291	4313	1061	3450	831	2588	601	1725	371	1146	216
17	8806	2240	7926	2007	7045	1774	6165	1541	5284	1308	4403	1075	3523	842	2642	609	1761	376	1170	219
18	8987	2270	8088	2034	7190	1798	6291	1562	5392	1326	4494	1089	3595	853	2696	617	1797	381	1194	222
19	9168	2300	8251	2061	7334	1822	6417	1583	5501	1343	4584	1104	3667	865	2750	625	1834	386	1218	225
20	9348	2331	8414	2088	7479	1846	6544	1603	5609	1361	4674	1118	3739	876	2805	633	1870	391	1242	228
21	9529	2361	8576	2115	7623	1869	6670	1624	5717	1378	4765	1133	3812	887	2859	642	1906	396	1266	231
22	9710	2391	8739	2142	7768	1893	6797	1645	5826	1396	4855	1147	3884	898	2913	650	1942	401	1290	234
23	9890	2421	8901	2169	7912	1917	6923	1665	5934	1413	4945	1162	3956	910	2967	658	1978	406	1314	237
24	10071	2451	9064	2196	8057	1941	7050	1686	6043	1431	5035	1176	4028	921	3021	666	2014	411	1338	240

Indoor : RAS-B24J2KVRG-E / RAS-24J2KVRG-TR
Outdoor : RAS-24J2AVRG-E / TR

		Cooling		Heating	
		Q	P	Q	P
Minimum	(W)	1500	300	1600	300
Rating	(W)	7000	2250	8000	2410
Maximum	(W)	7700	2550	8800	2750

Cooling		Parts Load (%)																			
Outdoor Temperature DB (°C)		100		90		80		70		60		50		40		30		20		10	
		Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
20		8348	1766	7513	1571	6678	1377	5843	1182	5009	987	4174	792	3339	597	2504	402	1789	236	1789	236
21		8258	1799	7432	1600	6606	1402	5780	1203	4955	1005	4129	807	3303	608	2477	410	1770	240	1770	240
22		8168	1831	7351	1629	6534	1427	5717	1225	4901	1023	4084	821	3267	619	2450	417	1750	244	1750	244
23		8078	1863	7270	1658	6462	1452	5655	1247	4847	1041	4039	836	3231	630	2423	425	1731	248	1731	248
24		7988	1895	7189	1686	6391	1477	5592	1268	4793	1059	3994	850	3195	641	2396	432	1712	253	1712	253
25		7898	1928	7109	1715	6319	1502	5529	1290	4739	1077	3949	864	3159	652	2370	439	1693	257	1693	257
26		7809	1960	7028	1744	6247	1527	5466	1311	4685	1095	3904	879	3123	663	2343	447	1673	261	1673	261
27		7719	1992	6947	1772	6175	1553	5403	1333	4631	1113	3859	893	3087	674	2316	454	1654	266	1654	266
28		7629	2024	6866	1801	6103	1578	5340	1354	4577	1131	3814	908	3052	685	2289	461	1635	270	1635	270
29		7539	2057	6785	1830	6031	1603	5277	1376	4523	1149	3770	922	3016	695	2262	469	1616	274	1616	274
30		7449	2089	6704	1858	5959	1628	5214	1398	4470	1167	3725	937	2980	706	2235	476	1596	279	1596	279
31		7359	2121	6623	1887	5887	1653	5152	1419	4416	1185	3680	951	2944	717	2208	483	1577	283	1577	283
32		7270	2153	6543	1916	5816	1678	5089	1441	4362	1203	3635	966	2908	728	2181	491	1558	287	1558	287
33		7180	2186	6462	1944	5744	1703	5026	1462	4308	1221	3590	980	2872	739	2154	498	1539	291	1539	291
34		7090	2218	6381	1973	5672	1729	4963	1484	4254	1239	3545	995	2836	750	2127	505	1519	296	1519	296
35		7000	2250	6300	2002	5600	1754	4900	1505	4200	1257	3500	1009	2800	761	2100	513	1500	300	1500	300
36		6910	2282	6219	2031	5528	1779	4837	1527	4146	1275	3455	1024	2764	772	2073	520	1481	304	1481	304
37		6820	2315	6138	2059	5456	1804	4774	1549	4092	1293	3410	1038	2728	783	2046	527	1462	309	1462	309
38		6731	2347	6057	2088	5384	1829	4711	1570	4038	1311	3365	1052	2692	794	2019	535	1442	313	1442	313
39		6641	2379	5977	2117	5313	1854	4648	1592	3984	1329	3320	1067	2656	805	1992	542	1423	317	1423	317
40		5558	1986	5002	1767	4446	1548	3890	1329	3335	1110	2779	891	2223	671	1667	452	1191	265	1191	265
41		5393	1986	4853	1767	4314	1548	3775	1329	3236	1110	2696	891	2157	671	1618	452	1156	265	1156	265
42		5227	1986	4705	1767	4182	1548	3659	1329	3136	1110	2614	891	2091	671	1568	452	1120	265	1120	265
43		5062	1986	4556	1767	4050	1548	3544	1329	3037	1110	2531	891	2025	671	1519	452	1085	265	1085	265
44		4897	1986	4408	1767	3918	1548	3428	1329	2938	1110	2449	891	1959	671	1469	452	1049	265	1049	265
45		4524	1896	4072	1687	3619	1478	3167	1269	2714	1060	2262	850	1810	641	1357	432	969	253	969	253
46		4359	1896	3923	1687	3487	1478	3051	1269	2615	1060	2179	850	1744	641	1308	432	934	253	934	253

Heating		Parts Load (%)																			
Outdoor Temperature DB (°C)	100		90		80		70		60		50		40		30		20		10		
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	
-15	3579	1538	3222	1370	2864	1202	2506	1033	2148	865	1790	697	1432	528	1074	360	716	191	716	191	
-14	3772	1588	3394	1414	3017	1240	2640	1067	2263	893	1886	719	1509	545	1131	371	754	198	754	198	
-13	3964	1638	3567	1458	3171	1279	2775	1100	2378	921	1982	741	1585	562	1189	383	793	204	793	204	
-12	4156	1687	3740	1502	3325	1318	2909	1133	2493	949	2078	764	1662	579	1247	395	831	210	831	210	
-11	4348	1737	3913	1547	3478	1357	3043	1167	2609	976	2174	786	1739	596	1304	406	870	216	870	216	
-10	4540	1786	4086	1591	3632	1395	3178	1200	2724	1004	2270	809	1816	613	1362	418	908	222	908	222	
-9	4732	1836	4259	1635	3786	1434	3312	1233	2839	1032	2366	831	1893	630	1420	429	946	229	946	229	
-8	4924	1886	4432	1679	3939	1473	3447	1267	2954	1060	2462	854	1970	647	1477	441	985	235	985	235	
-7	5116	1935	4605	1723	4093	1512	3581	1300	3070	1088	2558	876	2046	664	1535	453	1023	241	1023	241	
-6	5192	1957	4673	1743	4153	1529	3634	1315	3115	1100	2596	886	2077	672	1558	458	1038	244	1038	244	
-5	5267	1979	4741	1763	4214	1546	3687	1329	3160	1113	2634	896	2107	680	1580	463	1053	246	1053	246	
-4	5343	2001	4809	1782	4275	1563	3740	1344	3206	1125	2672	906	2137	687	1603	468	1069	249	1069	249	
-3	5419	2023	4877	1802	4335	1580	3793	1359	3251	1137	2709	916	2168	695	1626	473	1084	252	1084	252	
-2	5494	2045	4945	1821	4396	1597	3846	1374	3297	1150	2747	926	2198	702	1648	478	1099	255	1099	255	
-1	5570	2067	5013	1841	4456	1615	3899	1388	3342	1162	2785	936	2228	710	1671	483	1114	257	1114	257	
0	5646	2089	5081	1860	4517	1632	3952	1403	3387	1174	2823	946	2258	717	1694	489	1129	260	1129	260	
1	5721	2111	5149	1880	4577	1649	4005	1418	3433	1187	2861	956	2289	725	1716	494	1144	263	1144	263	
2	5797	2133	5217	1899	4638	1666	4058	1433	3478	1199	2899	966	2319	732	1739	499	1159	265	1159	265	
3	5892	2161	5303	1925	4714	1688	4124	1452	3535	1215	2946	979	2357	742	1768	506	1178	269	1178	269	
4	5987	2190	5388	1950	4790	1711	4191	1471	3592	1231	2994	992	2395	752	1796	512	1197	273	1197	273	
5	6082	2219	5474	1976	4866	1733	4257	1490	3649	1247	3041	1005	2433	762	1825	519	1216	276	1216	276	
6	7794	2373	7014	2113	6235	1853	5455	1594	4676	1334	3897	1074	3117	815	2338	555	1559	295	1559	295	
7	8000	2410	7200	2146	6400	1883	5600	1619	4800	1355	4000	1091	3200	828	2400	564	1600	300	1600	300	
8	8206	2447	7386	2179	6565	1912	5745	1644	4924	1376	4103	1108	3283	840	2462	572	1641	305	1641	305	
9	8413	2485	7572	2213	6730	1941	5889	1669	5048	1397	4206	1125	3365	853	2524	581	1683	309	1683	309	
10	8619	2522	7757	2246	6895	1970	6034	1694	5172	1418	4310	1142	3448	866	2586	590	1724	314	1724	314	
11	8826	2559	7943	2279	7061	1999	6178	1719	5295	1439	4413	1159	3530	879	2648	599	1765	319	1765	319	
12	9032	2597	8129	2312	7226	2028	6323	1744	5419	1460	4516	1176	3613	892	2710	607	1806	323	1806	323	
13	9239	2634	8315	2346	7391	2057	6467	1769	5543	1481	4619	1193	3695	904	2772	616	1848	328	1848	328	
14	9445	2671	8501	2379	7556	2087	6612	1794	5667	1502	4723	1210	3778	917	2834	625	1889	333	1889	333	
15	9652	2709	8686	2412	7721	2116	6756	1819	5791	1523	4826	1226	3861	930	2895	634	1930	337	1930	337	
16	9858	2746	8872	2445	7886	2145	6901	1844	5915	1544	4929	1243	3943	943	2957	642	1972	342	1972	342	
17	10065	2783	9058	2479	8052	2174	7045	1869	6039	1565	5032	1260	4026	956	3019	651	2013	346	2013	346	
18	10271	2820	9244	2512	8217	2203	7190	1894	6163	1586	5135	1277	4108	968	3081	660	2054	351	2054	351	
19	10477	2858	9430	2545	8382	2232	7334	1920	6286	1607	5239	1294	4191	981	3143	668	2095	356	2095	356	
20	10684	2895	9615	2578	8547	2261	7479	1945	6410	1628	5342	1311	4274	994	3205	677	2137	360	2137	360	
21	10815	2900	9733	2583	8652	2265	7570	1948	6489	1631	5407	1313	4326	996	3244	678	2163	361	2163	361	
22	10933	2900	9840	2583	8747	2265	7653	1948	6560	1631	5467	1313	4373	996	3280	678	2187	361	2187	361	
23	11052	2900	9947	2583	8842	2265	7736	1948	6631	1631	5526	1313	4421	996	3316	678	2210	361	2210	361	
24	11171	2900	10054	2583	8937	2265	7819	1948	6702	1631	5585	1313	4468	996	3351	678	2234	361	2234	361	

10. Performance Characteristic

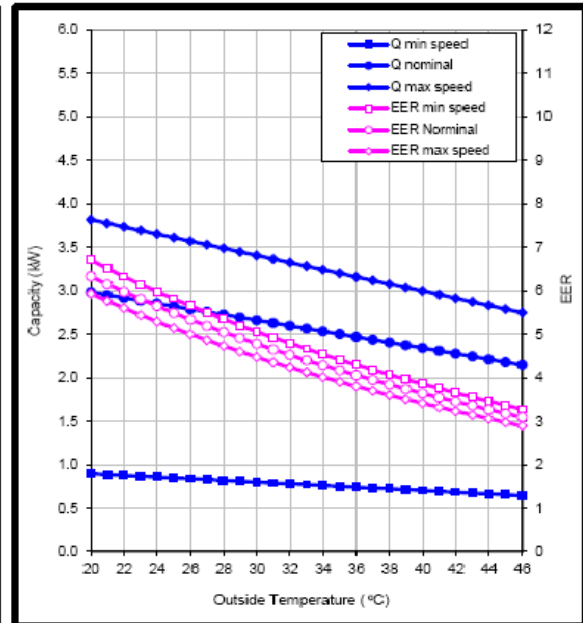
Model : RAS-B10J2KVRG-E / RAS-10J2KVRG-TR : RAS-10J2AVRG-E / TR

Product specification :

Condition		Capacity (kW)	Power (kW)	EER/COP	
Cooling JIS In: 27°C DB/19°C WB Out: 35°C DB/24°C WB	Min	0.75	0.17	4.41	
	Rated	2.50	0.60	4.17	
	Max	3.20	0.82	3.90	
Heating JIS In: 20°C DB/15°C WB Out: 7°C DB/6°C WB	Min	0.90	0.17	5.29	
	Rated	3.20	0.75	4.27	
	Max	4.80	1.40	3.43	
Heating Low Temp. In: 20°C DB/15°C WB Out: 2°C DB/1°C WB		Max	3.50	1.24	2.82

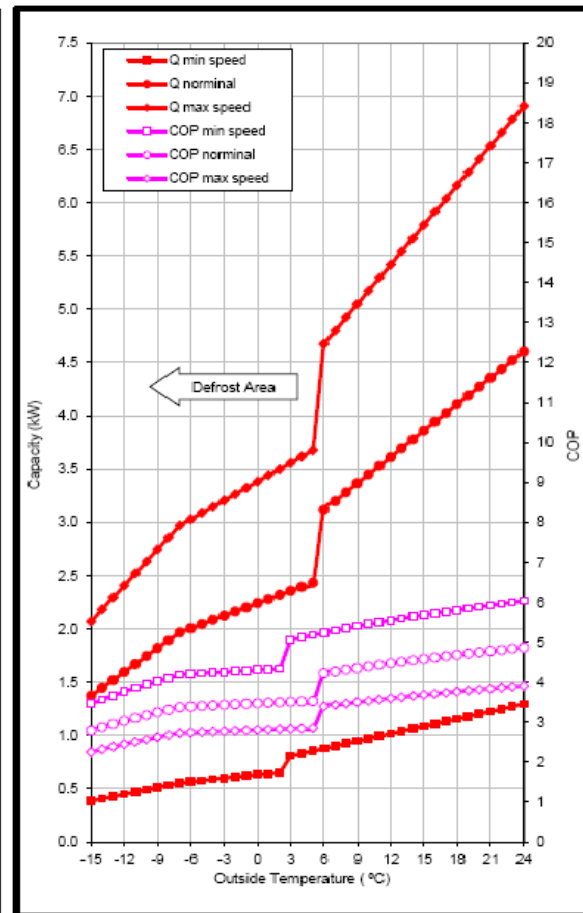
Cooling performance characteristic :

Outside Temp. (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)
20	0.89	0.13	6.70	2.98	0.47	6.33	3.82	0.64	5.93
21	0.88	0.14	6.51	2.95	0.48	6.15	3.77	0.66	5.76
22	0.88	0.14	6.33	2.92	0.49	5.98	3.73	0.67	5.60
23	0.87	0.14	6.15	2.89	0.50	5.81	3.69	0.68	5.44
24	0.86	0.14	5.98	2.85	0.51	5.64	3.65	0.69	5.29
25	0.85	0.15	5.81	2.82	0.51	5.49	3.61	0.70	5.14
26	0.84	0.15	5.65	2.79	0.52	5.34	3.57	0.71	5.00
27	0.83	0.15	5.49	2.76	0.53	5.19	3.53	0.73	4.86
28	0.82	0.15	5.34	2.72	0.54	5.05	3.49	0.74	4.73
29	0.81	0.16	5.20	2.69	0.55	4.91	3.45	0.75	4.60
30	0.80	0.16	5.06	2.66	0.56	4.78	3.41	0.76	4.47
31	0.79	0.16	4.92	2.63	0.57	4.65	3.36	0.77	4.35
32	0.78	0.16	4.79	2.60	0.57	4.52	3.32	0.78	4.23
33	0.77	0.17	4.66	2.56	0.58	4.40	3.28	0.80	4.12
34	0.76	0.17	4.53	2.53	0.59	4.28	3.24	0.81	4.01
35	0.75	0.17	4.41	2.50	0.60	4.17	3.20	0.82	3.90
36	0.74	0.17	4.29	2.47	0.61	4.06	3.16	0.83	3.80
37	0.73	0.17	4.18	2.44	0.62	3.95	3.12	0.84	3.70
38	0.72	0.18	4.07	2.40	0.63	3.84	3.08	0.86	3.60
39	0.71	0.18	3.96	2.37	0.63	3.74	3.04	0.87	3.50
40	0.70	0.18	3.85	2.34	0.64	3.64	2.99	0.88	3.41
41	0.69	0.18	3.75	2.31	0.65	3.54	2.95	0.89	3.32
42	0.68	0.19	3.65	2.28	0.66	3.45	2.91	0.90	3.23
43	0.67	0.19	3.55	2.24	0.67	3.35	2.87	0.91	3.14
44	0.66	0.19	3.46	2.21	0.68	3.26	2.83	0.93	3.06
45	0.65	0.19	3.36	2.18	0.69	3.18	2.79	0.94	2.98
46	0.64	0.20	3.27	2.15	0.69	3.09	2.75	0.95	2.90



Heating performance characteristic :

Outside Temp. (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)
-15	0.39	0.11	3.46	1.37	0.49	2.78	2.07	0.92	2.25
-14	0.41	0.11	3.56	1.45	0.50	2.87	2.18	0.94	2.32
-13	0.43	0.12	3.66	1.52	0.52	2.95	2.30	0.96	2.38
-12	0.45	0.12	3.76	1.60	0.53	3.03	2.41	0.98	2.45
-11	0.47	0.12	3.85	1.67	0.54	3.10	2.52	1.01	2.51
-10	0.49	0.12	3.94	1.74	0.55	3.18	2.63	1.03	2.57
-9	0.51	0.13	4.02	1.82	0.56	3.24	2.75	1.05	2.62
-8	0.53	0.13	4.11	1.89	0.57	3.31	2.86	1.07	2.67
-7	0.55	0.13	4.18	1.97	0.58	3.37	2.97	1.09	2.72
-6	0.56	0.13	4.20	2.01	0.59	3.39	3.03	1.11	2.74
-5	0.58	0.14	4.22	2.05	0.60	3.40	3.09	1.12	2.75
-4	0.59	0.14	4.24	2.08	0.61	3.42	3.15	1.14	2.76
-3	0.60	0.14	4.26	2.12	0.62	3.43	3.21	1.16	2.77
-2	0.61	0.14	4.27	2.16	0.63	3.44	3.26	1.17	2.78
-1	0.62	0.14	4.29	2.20	0.64	3.46	3.32	1.19	2.79
0	0.63	0.15	4.30	2.24	0.65	3.47	3.38	1.21	2.80
1	0.64	0.15	4.32	2.28	0.65	3.48	3.44	1.22	2.81
2	0.65	0.15	4.34	2.32	0.66	3.49	3.50	1.24	2.82
3	0.81	0.16	5.06	2.36	0.67	3.50	3.56	1.26	2.83
4	0.83	0.16	5.12	2.39	0.68	3.51	3.62	1.27	2.84
5	0.85	0.16	5.18	2.43	0.69	3.52	3.68	1.29	2.85
6	0.88	0.17	5.24	3.12	0.74	4.22	4.68	1.38	3.39
7	0.90	0.17	5.29	3.20	0.75	4.27	4.80	1.40	3.43
8	0.92	0.17	5.35	3.28	0.76	4.31	4.92	1.42	3.46
9	0.95	0.18	5.40	3.37	0.77	4.35	5.05	1.44	3.50
10	0.97	0.18	5.45	3.45	0.78	4.39	5.17	1.47	3.53
11	0.99	0.18	5.50	3.53	0.80	4.43	5.30	1.49	3.56
12	1.02	0.18	5.55	3.61	0.81	4.47	5.42	1.51	3.59
13	1.04	0.19	5.59	3.70	0.82	4.51	5.54	1.53	3.62
14	1.06	0.19	5.64	3.78	0.83	4.54	5.67	1.55	3.65
15	1.09	0.19	5.68	3.86	0.84	4.58	5.79	1.57	3.68
16	1.11	0.19	5.73	3.94	0.85	4.61	5.91	1.60	3.71
17	1.13	0.20	5.77	4.03	0.87	4.65	6.04	1.62	3.74
18	1.16	0.20	5.81	4.11	0.88	4.68	6.16	1.64	3.76
19	1.18	0.20	5.85	4.19	0.89	4.71	6.29	1.66	3.79
20	1.20	0.20	5.89	4.27	0.90	4.74	6.41	1.68	3.81
21	1.23	0.21	5.92	4.36	0.91	4.77	6.53	1.70	3.84
22	1.25	0.21	5.96	4.44	0.92	4.80	6.66	1.73	3.86
23	1.27	0.21	5.99	4.52	0.94	4.83	6.78	1.75	3.88
24	1.29	0.21	6.03	4.60	0.95	4.86	6.91	1.77	3.90



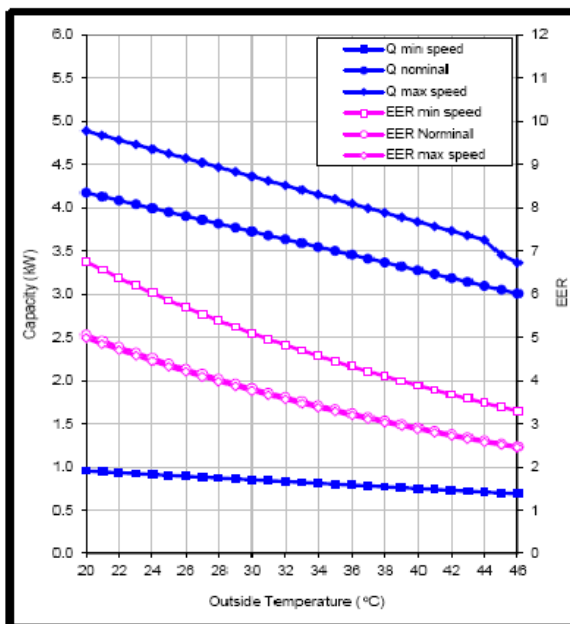
Model : RAS-B13J2KVRG-E / RAS-13J2KVRG-TR : RAS-13J2AVRG-E / TR

Product specification :

Condition	Capacity (kW)	Power (kW)	EER/COP
Cooling JIS	Min 0.80	0.18	4.44
In: 27°C DB/19°C WB	Rated 3.50	1.05	3.33
Out: 35°C DB/24°C WB	Max 4.10	1.25	3.28
Heating JIS	Min 0.80	0.15	5.33
In: 20°C DB/15°C WB	Rated 4.20	1.08	3.89
Out: 7°C DB/6°C WB	Max 5.30	1.55	3.42
Heating Low Temp.			
In: 20°C DB/15°C WB	Max 3.90	1.40	2.79
Out: 2°C DB/1°C WB			

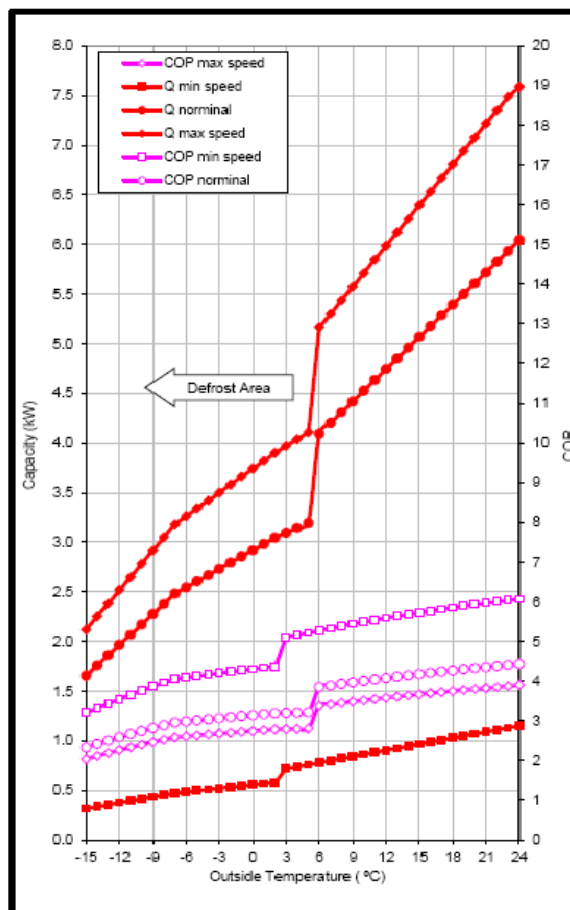
Cooling performance characteristic :

Outside Temp (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)
20	0.95	0.14	6.75	4.17	0.82	5.06	4.89	0.98	4.98
21	0.94	0.14	6.56	4.13	0.84	4.92	4.84	1.00	4.84
22	0.93	0.15	6.37	4.08	0.85	4.78	4.78	1.02	4.70
23	0.92	0.15	6.19	4.04	0.87	4.65	4.73	1.04	4.57
24	0.91	0.15	6.02	3.99	0.88	4.52	4.68	1.05	4.44
25	0.90	0.15	5.85	3.95	0.90	4.39	4.63	1.07	4.32
26	0.89	0.16	5.69	3.90	0.91	4.27	4.57	1.09	4.20
27	0.88	0.16	5.54	3.86	0.93	4.15	4.52	1.11	4.09
28	0.87	0.16	5.38	3.81	0.94	4.04	4.47	1.12	3.97
29	0.86	0.16	5.24	3.77	0.96	3.93	4.42	1.14	3.86
30	0.85	0.17	5.09	3.72	0.97	3.82	4.36	1.16	3.76
31	0.84	0.17	4.96	3.68	0.99	3.72	4.31	1.18	3.66
32	0.83	0.17	4.82	3.63	1.00	3.62	4.26	1.20	3.56
33	0.82	0.17	4.69	3.59	1.02	3.52	4.21	1.21	3.46
34	0.81	0.18	4.57	3.54	1.03	3.43	4.15	1.23	3.37
35	0.80	0.18	4.44	3.50	1.05	3.33	4.10	1.25	3.28
36	0.79	0.18	4.33	3.46	1.07	3.24	4.05	1.27	3.19
37	0.78	0.19	4.21	3.41	1.08	3.16	3.99	1.29	3.11
38	0.77	0.19	4.10	3.37	1.10	3.07	3.94	1.30	3.02
39	0.76	0.19	3.99	3.32	1.11	2.99	3.89	1.32	2.94
40	0.75	0.19	3.88	3.28	1.13	2.91	3.84	1.34	2.86
41	0.74	0.20	3.78	3.23	1.14	2.83	3.78	1.36	2.79
42	0.73	0.20	3.68	3.19	1.16	2.76	3.73	1.38	2.71
43	0.72	0.20	3.58	3.14	1.17	2.68	3.68	1.39	2.64
44	0.71	0.20	3.48	3.10	1.19	2.61	3.63	1.41	2.57
45	0.70	0.21	3.39	3.05	1.20	2.54	3.45	1.38	2.51
46	0.69	0.21	3.30	3.01	1.22	2.47	3.36	1.38	2.44



Heating performance characteristic :

Outside Temp (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)
-15	0.32	0.10	3.20	1.65	0.71	2.33	2.12	1.04	2.04
-14	0.33	0.10	3.32	1.76	0.73	2.42	2.25	1.06	2.12
-13	0.35	0.10	3.44	1.86	0.74	2.51	2.39	1.09	2.19
-12	0.37	0.11	3.55	1.96	0.76	2.59	2.52	1.11	2.27
-11	0.39	0.11	3.66	2.07	0.77	2.67	2.65	1.14	2.33
-10	0.41	0.11	3.76	2.17	0.79	2.74	2.78	1.16	2.40
-9	0.43	0.11	3.86	2.27	0.81	2.82	2.92	1.18	2.47
-8	0.45	0.11	3.96	2.38	0.82	2.89	3.05	1.21	2.53
-7	0.47	0.12	4.05	2.48	0.84	2.96	3.18	1.23	2.59
-6	0.48	0.12	4.09	2.54	0.85	2.98	3.26	1.25	2.61
-5	0.50	0.12	4.13	2.61	0.87	3.01	3.34	1.27	2.63
-4	0.51	0.12	4.17	2.67	0.88	3.04	3.42	1.29	2.66
-3	0.52	0.12	4.20	2.73	0.89	3.06	3.50	1.31	2.68
-2	0.53	0.13	4.24	2.79	0.90	3.09	3.58	1.32	2.70
-1	0.54	0.13	4.27	2.86	0.92	3.11	3.66	1.34	2.72
0	0.56	0.13	4.30	2.92	0.93	3.14	3.74	1.36	2.75
1	0.57	0.13	4.34	2.98	0.94	3.16	3.82	1.38	2.77
2	0.58	0.13	4.37	3.04	0.96	3.18	3.90	1.40	2.79
3	0.72	0.14	5.10	3.09	0.97	3.19	3.97	1.42	2.79
4	0.74	0.14	5.16	3.14	0.98	3.20	4.04	1.44	2.80
5	0.76	0.15	5.22	3.19	0.99	3.21	4.11	1.46	2.81
6	0.78	0.15	5.28	4.09	1.06	3.85	5.16	1.53	3.38
7	0.80	0.15	5.33	4.20	1.08	3.89	5.30	1.55	3.42
8	0.82	0.15	5.39	4.31	1.10	3.93	5.44	1.57	3.45
9	0.84	0.15	5.44	4.42	1.11	3.97	5.57	1.60	3.49
10	0.86	0.16	5.49	4.53	1.13	4.00	5.71	1.62	3.52
11	0.88	0.16	5.54	4.63	1.15	4.04	5.85	1.65	3.55
12	0.90	0.16	5.59	4.74	1.16	4.08	5.98	1.67	3.58
13	0.92	0.16	5.64	4.85	1.18	4.11	6.12	1.69	3.61
14	0.94	0.17	5.68	4.96	1.20	4.14	6.26	1.72	3.64
15	0.97	0.17	5.73	5.07	1.21	4.17	6.39	1.74	3.67
16	0.99	0.17	5.77	5.18	1.23	4.21	6.53	1.77	3.70
17	1.01	0.17	5.81	5.28	1.25	4.24	6.67	1.79	3.72
18	1.03	0.18	5.85	5.39	1.26	4.27	6.80	1.81	3.75
19	1.05	0.18	5.89	5.50	1.28	4.30	6.94	1.84	3.78
20	1.07	0.18	5.93	5.61	1.30	4.32	7.08	1.86	3.80
21	1.09	0.18	5.97	5.72	1.31	4.35	7.21	1.89	3.83
22	1.11	0.18	6.00	5.83	1.33	4.38	7.35	1.91	3.85
23	1.13	0.19	6.04	5.93	1.35	4.40	7.49	1.93	3.87
24	1.15	0.19	6.07	6.04	1.36	4.43	7.59	1.94	3.90



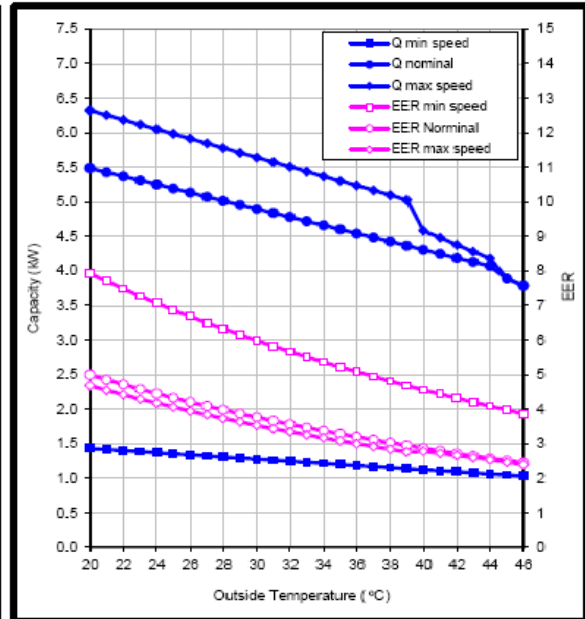
Model : RAS-B16J2KVRG-E / RAS-16J2KVRG-TR : RAS-16J2AVRG-E / TR

Product specification :

Condition		Capacity (kW)	Power (kW)	EER/COP	
Cooling JIS In: 27°C DB/19°C WB Out: 35°C DB/24°C WB	Min	1.20	0.23	5.22	
	Rated	4.60	1.40	3.29	
	Max	5.30	1.72	3.08	
Heating JIS In: 20°C DB/15°C WB Out: 7°C DB/6°C WB	Min	0.90	0.17	5.29	
	Rated	5.50	1.52	3.62	
	Max	6.50	1.82	3.57	
Heating Low Temp. In: 20°C DB/15°C WB Out: 2°C DB/1°C WB		Max	4.50	1.55	2.90

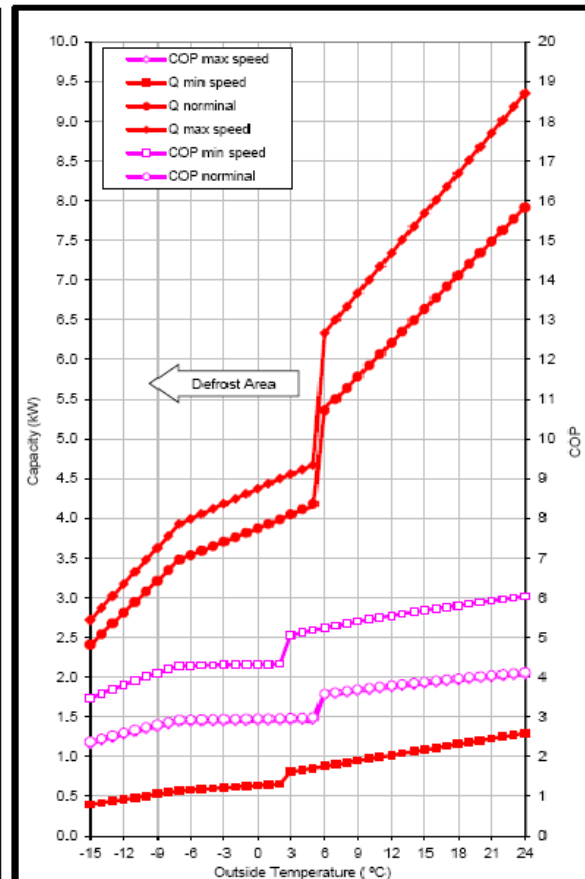
Cooling performance characteristic :

Outside Temp (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)
20	1.43	0.18	7.93	5.49	1.10	4.99	6.32	1.35	4.68
21	1.42	0.18	7.70	5.43	1.12	4.85	6.25	1.37	4.55
22	1.40	0.19	7.48	5.37	1.14	4.71	6.18	1.40	4.42
23	1.38	0.19	7.27	5.31	1.16	4.58	6.12	1.42	4.29
24	1.37	0.19	7.07	5.25	1.18	4.45	6.05	1.45	4.17
25	1.35	0.20	6.87	5.19	1.20	4.33	5.98	1.47	4.06
26	1.34	0.20	6.68	5.13	1.22	4.21	5.91	1.50	3.95
27	1.32	0.20	6.50	5.07	1.24	4.09	5.84	1.52	3.84
28	1.31	0.21	6.32	5.01	1.26	3.98	5.78	1.55	3.73
29	1.29	0.21	6.15	4.95	1.28	3.87	5.71	1.57	3.63
30	1.28	0.21	5.98	4.90	1.30	3.77	5.64	1.60	3.53
31	1.26	0.22	5.82	4.84	1.32	3.66	5.57	1.62	3.44
32	1.25	0.22	5.66	4.78	1.34	3.57	5.50	1.65	3.34
33	1.23	0.22	5.51	4.72	1.36	3.47	5.44	1.67	3.25
34	1.22	0.23	5.36	4.66	1.38	3.38	5.37	1.70	3.17
35	1.20	0.23	5.22	4.60	1.40	3.29	5.30	1.72	3.08
36	1.18	0.23	5.08	4.54	1.42	3.20	5.23	1.74	3.00
37	1.17	0.24	4.94	4.48	1.44	3.11	5.16	1.77	2.92
38	1.15	0.24	4.81	4.42	1.46	3.03	5.10	1.79	2.84
39	1.14	0.24	4.68	4.36	1.48	2.95	5.03	1.82	2.76
40	1.12	0.25	4.56	4.30	1.50	2.87	4.98	1.85	2.68
41	1.11	0.25	4.43	4.25	1.52	2.79	4.91	1.88	2.60
42	1.09	0.25	4.32	4.19	1.54	2.72	4.84	1.91	2.52
43	1.08	0.26	4.20	4.13	1.56	2.65	4.78	1.94	2.44
44	1.06	0.26	4.09	4.07	1.58	2.57	4.71	1.97	2.36
45	1.05	0.26	3.98	4.01	1.60	2.50	4.64	2.00	2.28
46	1.03	0.27	3.87	3.95	1.62	2.43	4.57	2.03	2.20



Heating performance characteristic :

Outside Temp (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)
-15	0.39	0.11	3.47	2.41	1.02	2.37	2.72	1.17	2.32
-14	0.42	0.12	3.59	2.54	1.04	2.45	2.87	1.20	2.40
-13	0.44	0.12	3.70	2.68	1.06	2.53	3.02	1.22	2.48
-12	0.46	0.12	3.81	2.81	1.08	2.60	3.17	1.25	2.55
-11	0.48	0.12	3.91	2.94	1.10	2.67	3.33	1.27	2.62
-10	0.50	0.13	4.01	3.08	1.12	2.74	3.48	1.30	2.68
-9	0.53	0.13	4.10	3.21	1.15	2.80	3.63	1.32	2.75
-8	0.55	0.13	4.20	3.35	1.17	2.87	3.78	1.35	2.81
-7	0.57	0.13	4.28	3.48	1.19	2.93	3.93	1.37	2.87
-6	0.58	0.13	4.29	3.54	1.21	2.93	3.99	1.39	2.87
-5	0.59	0.14	4.30	3.59	1.22	2.94	4.06	1.41	2.88
-4	0.60	0.14	4.30	3.65	1.24	2.94	4.12	1.43	2.88
-3	0.61	0.14	4.31	3.71	1.26	2.94	4.18	1.45	2.89
-2	0.62	0.14	4.31	3.76	1.28	2.95	4.25	1.47	2.89
-1	0.62	0.14	4.32	3.82	1.29	2.95	4.31	1.49	2.89
0	0.63	0.15	4.32	3.87	1.31	2.96	4.37	1.51	2.90
1	0.64	0.15	4.33	3.93	1.33	2.96	4.44	1.53	2.90
2	0.65	0.15	4.34	3.99	1.35	2.96	4.50	1.55	2.90
3	0.81	0.16	5.06	4.05	1.36	2.97	4.56	1.57	2.91
4	0.83	0.16	5.12	4.12	1.38	2.98	4.61	1.58	2.92
5	0.85	0.16	5.18	4.18	1.40	2.99	4.67	1.60	2.92
6	0.88	0.17	5.24	4.25	1.42	3.00	4.73	1.62	2.93
7	0.90	0.17	5.29	4.30	1.44	3.01	4.79	1.64	2.94
8	0.92	0.17	5.35	4.36	1.46	3.02	4.85	1.66	2.95
9	0.95	0.18	5.40	4.42	1.48	3.03	4.91	1.68	2.96
10	0.97	0.18	5.45	4.48	1.50	3.04	4.97	1.70	2.97
11	0.99	0.18	5.50	4.54	1.52	3.05	5.03	1.72	2.98
12	1.02	0.18	5.55	4.60	1.54	3.06	5.09	1.74	2.99
13	1.04	0.19	5.59	4.66	1.56	3.07	5.15	1.76	3.00
14	1.06	0.19	5.64	4.72	1.58	3.08	5.21	1.78	3.01
15	1.09	0.19	5.68	4.78	1.60	3.09	5.27	1.80	3.02
16	1.11	0.19	5.73	4.84	1.62	3.10	5.33	1.82	3.03
17	1.13	0.20	5.77	4.90	1.64	3.11	5.39	1.84	3.04
18	1.16	0.20	5.81	4.96	1.66	3.12	5.45	1.86	3.05
19	1.18	0.20	5.85	5.02	1.68	3.13	5.51	1.88	3.06
20	1.20	0.20	5.89	5.08	1.70	3.14	5.57	1.90	3.07
21	1.23	0.21	5.92	5.14	1.72	3.15	5.63	1.92	3.08
22	1.25	0.21	5.96	5.20	1.74	3.16	5.69	1.94	3.09
23	1.27	0.21	5.99	5.26	1.76	3.17	5.75	1.96	3.10
24	1.29	0.21	6.03	5.32	1.78	3.18	5.81	1.98	3.11



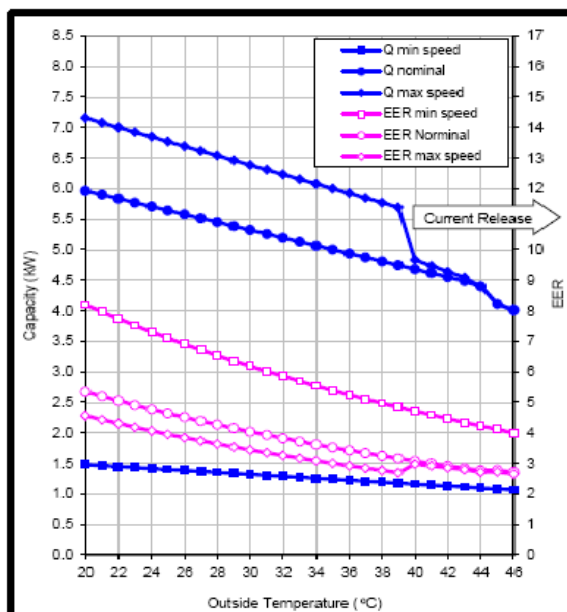
Model : RAS-18J2KVRG-E / TR : RAS-18J2AVRG-E / TR

Product specification :

Condition		Capacity (kW)	Power (kW)	EER/COP	
Cooling JIS In: 27°C DB/19°C WB Out: 35°C DB/24°C WB	Min	1.24	0.23	5.39	
	Rated	5.00	1.42	3.52	
	Max	6.00	2.00	3.00	
Heating JIS In: 20°C DB/15°C WB Out: 7°C DB/6°C WB	Min	0.88	0.16	5.50	
	Rated	6.00	1.60	3.75	
	Max	6.50	1.75	3.71	
Heating Low Temp. In: 20°C DB/15°C WB Out: 2°C DB/1°C WB		Max	4.60	1.55	2.97

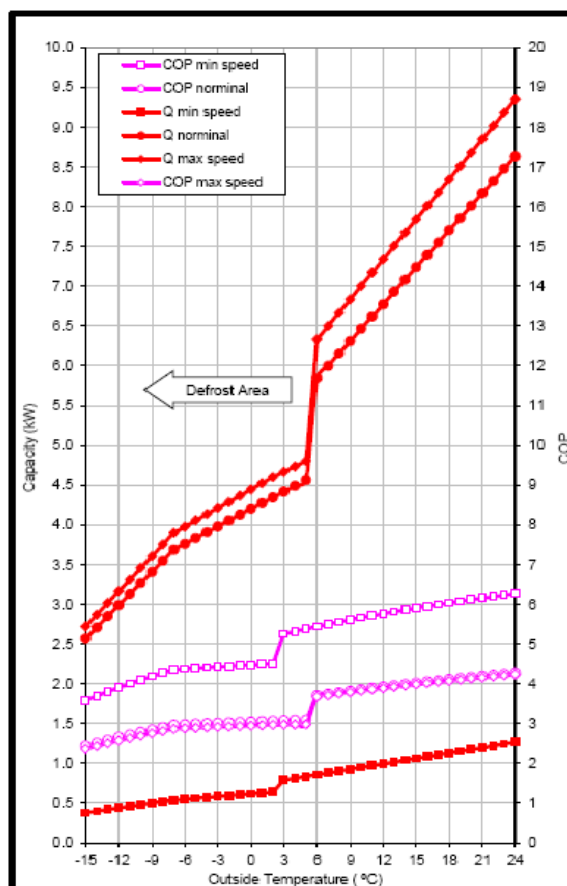
Cooling performance characteristic :

Outside Temp. (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)
20	1.48	0.18	8.19	5.96	1.11	5.35	7.16	1.57	4.56
21	1.46	0.18	7.96	5.90	1.14	5.20	7.08	1.60	4.43
22	1.45	0.19	7.73	5.83	1.16	5.05	7.00	1.63	4.30
23	1.43	0.19	7.51	5.77	1.18	4.91	6.92	1.66	4.18
24	1.42	0.19	7.30	5.71	1.20	4.77	6.85	1.68	4.06
25	1.40	0.20	7.10	5.64	1.22	4.64	6.77	1.71	3.95
26	1.38	0.20	6.90	5.58	1.24	4.51	6.69	1.74	3.84
27	1.37	0.20	6.71	5.51	1.26	4.39	6.62	1.77	3.74
28	1.35	0.21	6.53	5.45	1.28	4.27	6.54	1.80	3.63
29	1.34	0.21	6.35	5.39	1.30	4.15	6.46	1.83	3.54
30	1.32	0.21	6.18	5.32	1.32	4.04	6.39	1.86	3.44
31	1.30	0.22	6.01	5.26	1.34	3.93	6.31	1.89	3.35
32	1.29	0.22	5.85	5.19	1.36	3.82	6.23	1.91	3.26
33	1.27	0.22	5.69	5.13	1.38	3.72	6.15	1.94	3.17
34	1.26	0.23	5.54	5.06	1.40	3.62	6.08	1.97	3.08
35	1.24	0.23	5.39	5.00	1.42	3.52	6.00	2.00	3.00
36	1.22	0.23	5.25	4.94	1.44	3.43	5.92	2.03	2.92
37	1.21	0.24	5.11	4.87	1.46	3.34	5.85	2.06	2.84
38	1.19	0.24	4.97	4.81	1.48	3.25	5.77	2.09	2.77
39	1.18	0.24	4.84	4.74	1.50	3.16	5.69	2.11	2.69
40	1.16	0.25	4.71	4.68	1.52	3.07	5.61	2.14	2.62
41	1.14	0.25	4.58	4.62	1.54	2.99	5.53	2.17	2.55
42	1.13	0.25	4.46	4.55	1.56	2.91	5.45	2.20	2.48
43	1.11	0.26	4.34	4.49	1.58	2.83	5.37	2.23	2.41
44	1.10	0.26	4.22	4.40	1.59	2.77	5.29	2.26	2.34
45	1.08	0.26	4.11	4.31	1.61	2.71	5.21	2.29	2.27
46	1.06	0.27	4.00	4.21	1.63	2.66	5.13	2.32	2.20



Heating performance characteristic :

Outside Temp. (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)
-15	0.38	0.11	3.59	2.57	1.05	2.45	2.72	1.15	2.37
-14	0.40	0.11	3.70	2.71	1.07	2.52	2.87	1.18	2.44
-13	0.42	0.11	3.80	2.85	1.10	2.59	3.02	1.20	2.51
-12	0.44	0.11	3.91	2.99	1.12	2.66	3.16	1.23	2.57
-11	0.46	0.11	4.00	3.13	1.15	2.73	3.31	1.26	2.64
-10	0.48	0.12	4.10	3.27	1.17	2.79	3.46	1.28	2.70
-9	0.50	0.12	4.18	3.41	1.19	2.85	3.61	1.31	2.76
-8	0.52	0.12	4.27	3.55	1.22	2.91	3.75	1.33	2.81
-7	0.54	0.12	4.35	3.69	1.24	2.97	3.90	1.36	2.87
-6	0.55	0.13	4.37	3.76	1.26	2.98	3.98	1.38	2.88
-5	0.56	0.13	4.39	3.83	1.28	2.99	4.06	1.40	2.89
-4	0.57	0.13	4.41	3.91	1.30	3.00	4.13	1.42	2.90
-3	0.58	0.13	4.42	3.98	1.32	3.02	4.21	1.44	2.92
-2	0.59	0.13	4.44	4.05	1.34	3.03	4.29	1.47	2.93
-1	0.61	0.14	4.46	4.13	1.36	3.04	4.37	1.49	2.94
0	0.62	0.14	4.47	4.20	1.38	3.05	4.44	1.51	2.95
1	0.63	0.14	4.49	4.27	1.40	3.06	4.52	1.53	2.96
2	0.64	0.14	4.50	4.35	1.42	3.07	4.60	1.55	2.97
3	0.79	0.15	5.26	4.42	1.43	3.08	4.67	1.57	2.97
4	0.81	0.15	5.32	4.49	1.45	3.09	4.73	1.59	2.97
5	0.83	0.16	5.38	4.56	1.47	3.10	4.80	1.61	2.98
6	0.86	0.16	5.44	4.63	1.48	3.11	4.87	1.63	2.98
7	0.88	0.16	5.50	4.70	1.50	3.12	4.94	1.65	2.98
8	0.90	0.16	5.56	4.77	1.52	3.13	5.01	1.67	2.98
9	0.93	0.16	5.61	4.84	1.54	3.14	5.08	1.69	2.98
10	0.95	0.17	5.66	4.91	1.56	3.15	5.15	1.71	2.98
11	0.97	0.17	5.71	4.98	1.58	3.16	5.22	1.73	2.98
12	0.99	0.17	5.76	5.05	1.60	3.17	5.29	1.75	2.98
13	1.02	0.17	5.81	5.12	1.62	3.18	5.36	1.77	2.98
14	1.04	0.18	5.86	5.19	1.64	3.19	5.43	1.79	2.98
15	1.06	0.18	5.90	5.26	1.66	3.20	5.50	1.81	2.98
16	1.08	0.18	5.95	5.33	1.68	3.21	5.57	1.83	2.98
17	1.11	0.18	5.99	5.40	1.70	3.22	5.64	1.85	2.98
18	1.13	0.19	6.03	5.47	1.72	3.23	5.71	1.87	2.98
19	1.15	0.19	6.07	5.54	1.74	3.24	5.78	1.89	2.98
20	1.18	0.19	6.11	5.61	1.76	3.25	5.85	1.91	2.98
21	1.20	0.19	6.15	5.68	1.78	3.26	5.92	1.93	2.98
22	1.22	0.20	6.19	5.75	1.80	3.27	5.99	1.95	2.98
23	1.24	0.20	6.23	5.82	1.82	3.28	6.06	1.97	2.98
24	1.27	0.20	6.26	5.89	1.84	3.29	6.13	1.99	2.98



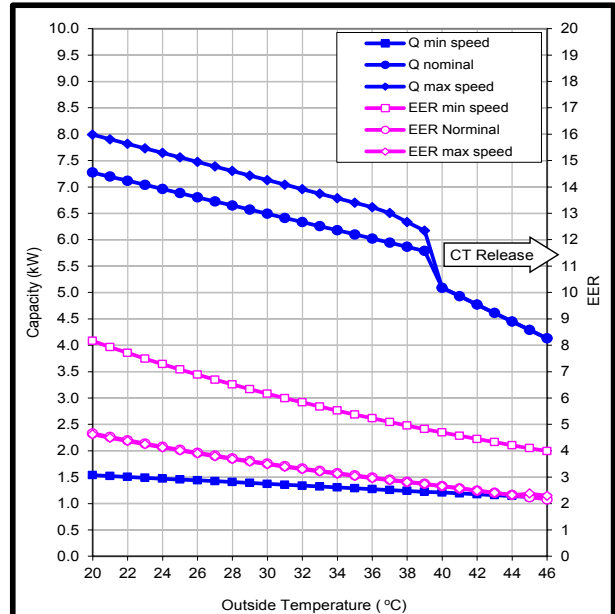
Model : RAS-B22J2KVRG-E / RAS-22J2KVRG-TR : RAS-22J2AVRG-E / TR

Product specification :

Condition		Capacity (kW)	Power (kW)	EER/COP	
Cooling JIS In: 27 °C DB/19°C WB Out: 35°C DB/24°C WB	Min	1.29	0.24	5.38	
	Rated	6.10	1.99	3.07	
	Max	6.70	2.20	3.05	
Heating JIS In: 20 °C DB/15°C WB Out: 7 °C DB/6°C WB	Min	0.93	0.19	4.89	
	Rated	7.00	1.94	3.61	
	Max	7.50	2.10	3.57	
Heating Low Temp. In: 20 °C DB/15°C WB Out: 2°C DB/4°C WB		Max	5.40	2.08	2.60

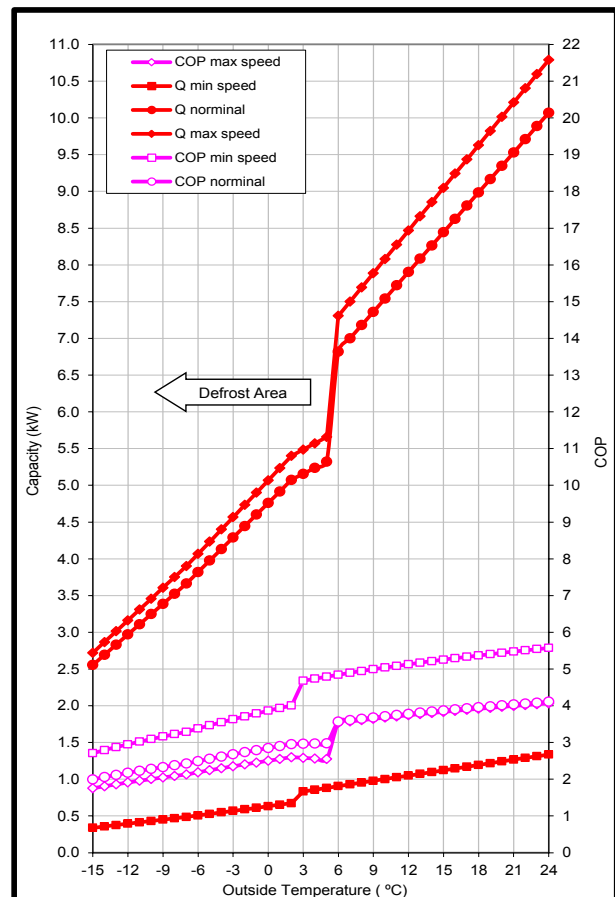
Cooling performance characteristic :

Outside Temp (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)
20	1.54	0.19	8.17	7.27	1.56	4.66	7.99	1.73	4.63
21	1.52	0.19	7.93	7.20	1.59	4.52	7.90	1.76	4.49
22	1.51	0.20	7.71	7.12	1.62	4.40	7.82	1.79	4.37
23	1.49	0.20	7.49	7.04	1.65	4.27	7.73	1.82	4.24
24	1.47	0.20	7.28	6.96	1.68	4.15	7.65	1.85	4.13
25	1.46	0.21	7.08	6.88	1.70	4.04	7.56	1.88	4.01
26	1.44	0.21	6.88	6.80	1.73	3.93	7.47	1.92	3.90
27	1.42	0.21	6.69	6.73	1.76	3.82	7.39	1.95	3.79
28	1.41	0.22	6.51	6.65	1.79	3.71	7.30	1.98	3.69
29	1.39	0.22	6.33	6.57	1.82	3.61	7.22	2.01	3.59
30	1.37	0.22	6.16	6.49	1.85	3.51	7.13	2.04	3.49
31	1.36	0.23	5.99	6.41	1.88	3.42	7.04	2.07	3.40
32	1.34	0.23	5.83	6.33	1.90	3.33	6.96	2.11	3.30
33	1.32	0.23	5.68	6.26	1.93	3.24	6.87	2.14	3.22
34	1.31	0.24	5.52	6.18	1.96	3.15	6.79	2.17	3.13
35	1.29	0.24	5.38	6.10	1.99	3.07	6.70	2.20	3.05
36	1.27	0.24	5.23	6.02	2.02	2.98	6.61	2.23	2.96
37	1.26	0.25	5.09	5.94	2.05	2.90	6.50	2.25	2.89
38	1.24	0.25	4.95	5.87	2.08	2.83	6.34	2.25	2.81
39	1.22	0.25	4.82	5.79	2.10	2.75	6.17	2.25	2.74
40	1.21	0.26	4.69	5.09	1.92	2.66	5.09	1.92	2.66
41	1.19	0.26	4.57	4.93	1.92	2.57	4.93	1.92	2.57
42	1.17	0.26	4.45	4.77	1.92	2.49	4.77	1.92	2.49
43	1.16	0.27	4.33	4.61	1.92	2.41	4.61	1.92	2.41
44	1.14	0.27	4.21	4.45	1.92	2.32	4.45	1.92	2.32
45	1.12	0.27	4.10	4.29	1.92	2.24	4.29	1.80	2.38
46	1.11	0.28	3.99	4.13	1.92	2.16	4.13	1.80	2.29



Heating performance characteristic :

Outside Temp (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)
-15	0.34	0.13	2.71	2.56	1.28	2.00	2.72	1.55	1.75
-14	0.36	0.13	2.79	2.69	1.31	2.06	2.87	1.59	1.81
-13	0.38	0.13	2.87	2.83	1.34	2.12	3.02	1.62	1.86
-12	0.39	0.13	2.95	2.97	1.37	2.17	3.16	1.66	1.91
-11	0.41	0.14	3.02	3.11	1.39	2.23	3.31	1.69	1.96
-10	0.43	0.14	3.09	3.25	1.42	2.28	3.46	1.73	2.00
-9	0.45	0.14	3.16	3.39	1.45	2.33	3.61	1.76	2.05
-8	0.47	0.15	3.23	3.52	1.48	2.38	3.75	1.80	2.09
-7	0.49	0.15	3.29	3.66	1.51	2.43	3.90	1.83	2.13
-6	0.51	0.15	3.38	3.82	1.53	2.49	4.07	1.86	2.19
-5	0.53	0.15	3.47	3.98	1.56	2.56	4.23	1.89	2.25
-4	0.55	0.15	3.55	4.13	1.58	2.62	4.40	1.91	2.30
-3	0.57	0.16	3.63	4.29	1.60	2.68	4.57	1.94	2.35
-2	0.59	0.16	3.71	4.45	1.63	2.74	4.73	1.97	2.40
-1	0.61	0.16	3.79	4.60	1.65	2.79	4.90	2.00	2.45
0	0.63	0.16	3.86	4.76	1.67	2.85	5.07	2.02	2.50
1	0.65	0.17	3.94	4.92	1.69	2.90	5.23	2.05	2.55
2	0.67	0.17	4.01	5.07	1.72	2.95	5.40	2.08	2.60
3	0.83	0.18	4.68	5.16	1.74	2.96	5.49	2.13	2.58
4	0.86	0.18	4.74	5.24	1.76	2.97	5.57	2.17	2.56
5	0.88	0.18	4.79	5.32	1.79	2.98	5.66	2.22	2.55
6	0.91	0.19	4.84	5.45	1.91	3.57	7.31	2.07	3.53
7	0.93	0.19	4.89	7.00	1.94	3.61	7.50	2.10	3.57
8	0.95	0.19	4.94	7.18	1.97	3.64	7.69	2.13	3.61
9	0.98	0.20	4.99	7.36	2.00	3.68	7.89	2.17	3.64
10	1.00	0.20	5.04	7.54	2.03	3.72	8.08	2.20	3.68
11	1.03	0.20	5.09	7.72	2.06	3.75	8.27	2.23	3.71
12	1.05	0.20	5.13	7.90	2.09	3.78	8.47	2.26	3.74
13	1.07	0.21	5.17	8.08	2.12	3.81	8.66	2.30	3.77
14	1.10	0.21	5.21	8.26	2.15	3.84	8.85	2.33	3.80
15	1.12	0.21	5.25	8.45	2.18	3.87	9.05	2.36	3.83
16	1.15	0.22	5.29	8.63	2.21	3.90	9.24	2.39	3.86
17	1.17	0.22	5.33	8.81	2.24	3.93	9.44	2.43	3.89
18	1.19	0.22	5.37	8.99	2.27	3.96	9.63	2.46	3.92
19	1.22	0.23	5.41	9.17	2.30	3.99	9.82	2.49	3.94
20	1.24	0.23	5.44	9.35	2.33	4.01	10.02	2.52	3.97
21	1.27	0.23	5.48	9.53	2.36	4.04	10.21	2.56	4.00
22	1.29	0.23	5.51	9.71	2.39	4.06	10.40	2.59	4.02
23	1.31	0.24	5.54	9.89	2.42	4.09	10.60	2.62	4.04
24	1.34	0.24	5.57	10.07	2.45	4.11	10.79	2.65	4.07



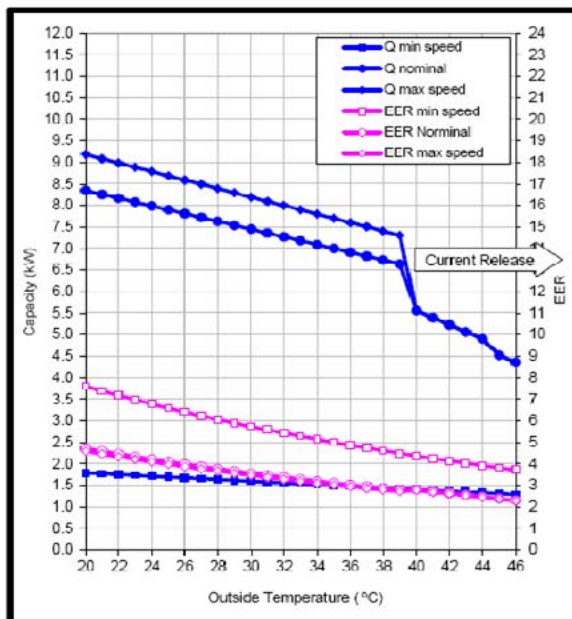
Model : RAS-B24J2KVRG-E / RAS-24J2KVRG-TR : RAS-24J2AVRG-E / TR

Product specification :

Condition		Capacity (kW)	Power (kW)	EER/COP	
Cooling JIS In: 27°C DB/19°C WB Out: 35°C DB/24°C WB	Min	1.50	0.30	5.00	
	Rated	7.00	2.25	3.11	
	Max	7.70	2.55	3.02	
Heating JIS In: 20°C DB/15°C WB Out: 7°C DB/6°C WB	Min	1.60	0.30	5.33	
	Rated	8.00	2.41	3.32	
	Max	8.80	2.75	3.20	
Heating Low Temp. In: 20°C DB/15°C WB Out: 2°C DB/1°C WB		Max	6.30	2.15	2.93

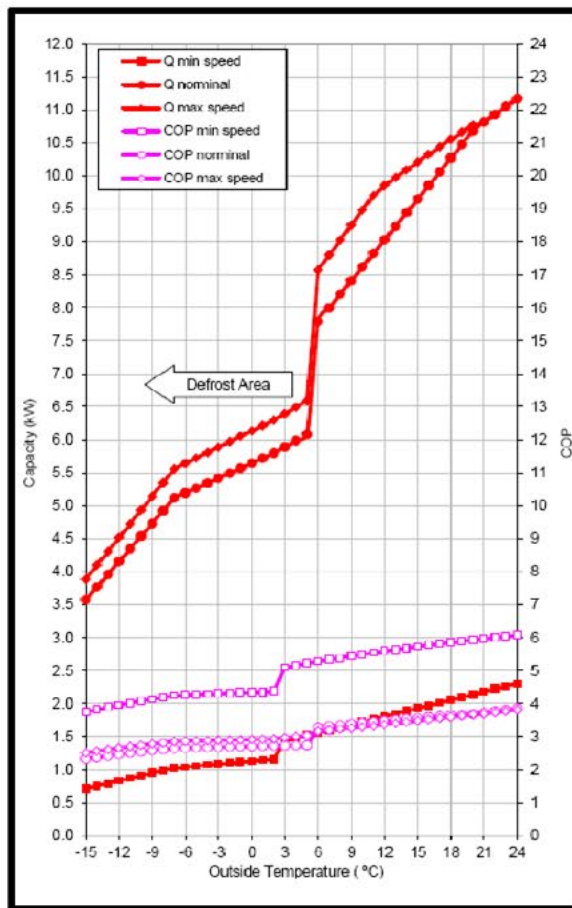
Cooling performance characteristic :

Outside Temp (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)	Capacity (kW)	Power (kW)	EER (-)
20	1.79	0.24	7.60	8.35	1.77	4.73	9.18	2.00	4.59
21	1.77	0.24	7.38	8.26	1.80	4.59	9.08	2.04	4.46
22	1.75	0.24	7.17	8.17	1.83	4.46	8.98	2.07	4.33
23	1.73	0.25	6.97	8.08	1.86	4.34	8.89	2.11	4.21
24	1.71	0.25	6.77	7.99	1.90	4.21	8.79	2.15	4.09
25	1.69	0.26	6.59	7.90	1.93	4.10	8.69	2.18	3.98
26	1.67	0.26	6.40	7.81	1.96	3.98	8.59	2.22	3.87
27	1.65	0.27	6.23	7.72	1.99	3.87	8.49	2.26	3.76
28	1.63	0.27	6.06	7.63	2.02	3.77	8.39	2.29	3.66
29	1.62	0.27	5.89	7.54	2.06	3.67	8.29	2.33	3.56
30	1.60	0.28	5.73	7.45	2.09	3.57	8.19	2.37	3.46
31	1.58	0.28	5.58	7.36	2.12	3.47	8.10	2.40	3.37
32	1.56	0.29	5.43	7.27	2.15	3.38	8.00	2.44	3.28
33	1.54	0.29	5.28	7.18	2.19	3.29	7.90	2.48	3.19
34	1.52	0.30	5.14	7.09	2.22	3.20	7.80	2.51	3.10
35	1.50	0.30	5.00	7.00	2.25	3.11	7.70	2.55	3.02
36	1.48	0.30	4.87	6.91	2.28	3.03	7.60	2.59	2.94
37	1.46	0.31	4.74	6.82	2.31	2.95	7.50	2.62	2.86
38	1.44	0.31	4.61	6.73	2.35	2.87	7.40	2.66	2.78
39	1.42	0.32	4.49	6.64	2.38	2.79	7.30	2.70	2.71
40	1.40	0.32	4.37	6.56	1.99	2.80	7.20	2.74	2.64
41	1.38	0.33	4.25	6.47	1.99	2.72	7.10	2.78	2.57
42	1.37	0.33	4.14	6.38	1.99	2.63	7.00	2.82	2.50
43	1.35	0.33	4.03	6.29	1.99	2.55	6.90	2.86	2.43
44	1.33	0.34	3.92	6.20	1.99	2.47	6.80	2.90	2.36
45	1.31	0.34	3.81	6.11	1.99	2.39	6.70	2.94	2.29
46	1.29	0.35	3.71	6.02	1.99	2.30	6.60	2.98	2.22



Heating performance characteristic :

Outside Temp (°C)	Min capacity			Nominal capacity			Max capacity		
	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)	Capacity (kW)	Power (kW)	COP (-)
-15	0.72	0.19	3.74	3.58	1.54	2.33	3.89	1.55	2.51
-14	0.75	0.20	3.82	3.77	1.59	2.38	4.10	1.60	2.56
-13	0.79	0.20	3.89	3.96	1.64	2.42	4.31	1.65	2.61
-12	0.83	0.21	3.96	4.16	1.69	2.46	4.52	1.70	2.66
-11	0.87	0.22	4.02	4.35	1.74	2.50	4.73	1.75	2.70
-10	0.91	0.22	4.08	4.54	1.79	2.54	4.93	1.80	2.74
-9	0.95	0.23	4.14	4.73	1.84	2.58	5.14	1.85	2.78
-8	0.98	0.23	4.20	4.92	1.89	2.61	5.35	1.90	2.82
-7	1.02	0.24	4.25	5.12	1.94	2.64	5.56	1.95	2.85
-6	1.04	0.24	4.26	5.19	1.96	2.65	5.64	1.97	2.86
-5	1.05	0.25	4.28	5.27	1.98	2.66	5.72	1.99	2.87
-4	1.07	0.25	4.29	5.34	2.00	2.67	5.81	2.02	2.88
-3	1.08	0.25	4.30	5.42	2.02	2.68	5.89	2.04	2.89
-2	1.10	0.25	4.32	5.49	2.04	2.69	5.97	2.06	2.90
-1	1.11	0.26	4.33	5.57	2.07	2.69	6.05	2.08	2.91
0	1.13	0.26	4.34	5.65	2.09	2.70	6.14	2.10	2.92
1	1.14	0.26	4.35	5.72	2.11	2.71	6.22	2.13	2.93
2	1.16	0.27	4.37	5.80	2.13	2.72	6.30	2.15	2.93
3	1.43	0.28	5.10	5.89	2.16	2.73	6.40	2.15	2.97
4	1.48	0.29	5.16	5.99	2.19	2.73	6.49	2.16	3.01
5	1.52	0.29	5.22	6.08	2.22	2.74	6.59	2.17	3.04
6	1.56	0.30	5.28	6.17	2.27	2.74	6.68	2.19	3.07
7	1.60	0.30	5.33	6.26	2.31	2.74	6.77	2.21	3.10
8	1.64	0.30	5.39	6.35	2.35	2.74	6.86	2.23	3.13
9	1.68	0.31	5.44	6.44	2.39	2.74	6.95	2.25	3.16
10	1.72	0.31	5.49	6.53	2.43	2.74	7.04	2.27	3.19
11	1.77	0.32	5.54	6.62	2.47	2.74	7.13	2.29	3.22
12	1.81	0.32	5.59	6.71	2.51	2.74	7.22	2.31	3.25
13	1.85	0.33	5.64	6.80	2.55	2.74	7.31	2.33	3.28
14	1.89	0.33	5.68	6.89	2.59	2.74	7.40	2.35	3.31
15	1.93	0.34	5.73	6.98	2.63	2.74	7.49	2.37	3.34
16	1.97	0.34	5.77	7.07	2.67	2.74	7.58	2.39	3.37
17	2.01	0.35	5.81	7.16	2.71	2.74	7.67	2.41	3.40
18	2.05	0.35	5.85	7.25	2.75	2.74	7.76	2.43	3.43
19	2.10	0.36	5.89	7.34	2.79	2.74	7.85	2.45	3.46
20	2.14	0.36	5.93	7.43	2.83	2.74	7.94	2.47	3.49
21	2.18	0.37	5.97	7.52	2.87	2.74	8.03	2.49	3.52
22	2.22	0.37	6.00	7.61	2.91	2.74	8.12	2.51	3.55
23	2.26	0.37	6.04	7.70	2.95	2.74	8.21	2.53	3.58
24	2.30	0.38	6.07	7.79	2.99	2.74	8.30	2.55	3.61



TOSHIBA CARRIER (THAILAND) CO.,LTD.

144/9 Moo 5, Bangkadi Industrial Park, Tivanon Road, Tambol Bangkadi,
Amphur Muang, Pathumthani 12000, Thailand

Copyright © 2015 TOSHIBA CARRIER (THAILAND), All Rights Reserved

Notice : Toshiba is committed to continuously improving its products to ensure the highest quality and reliability standard, and to meet local regulations and market requirements. All features and specifications are subject to change without prior notice.
