

# Residential Inverter Heat Pump New SHORAI

### Indoor Units

**RAS-25G3KVSG-ND**

**RAS-35G3KVSG-ND**

**RAS-25G3KVSGB-ND**

**RAS-35G3KVSGB-ND**

### Outdoor Units

**RAS-25J2AVSG-ND1**



**RAS-35J2AVSG-ND1**



# Contents



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1 Line up. . . . .	3
2 Specifications . . . . .	4
3 Dimension . . . . .	5
4 Wiring diagram . . . . .	8
5 Refrigerant cycle diagram . . . . .	10
6 Air speed distribution . . . . .	12
7 Sound characteristics (NC Curve) . . . . .	14
8 Capacity table . . . . .	16
9 Part load performance . . . . .	18
10 Performance characteristic . . . . .	22

# 1. Line up

Indoor Unit	Outdoor Unit	Model Name		Capacity Rank
		FCU	CDU	
		RAS-25G3KVSG-ND	RAS-25J2AVSG-ND1	10k
		RAS-35G3KVSG-ND	RAS-35J2AVSG-ND1	13k

Indoor Unit	Outdoor Unit	Model Name		Capacity Rank
		FCU	CDU	
		RAS-25G3KVSGB-ND	RAS-25J2AVSG-ND1	10k
		RAS-35G3KVSGB-ND	RAS-35J2AVSG-ND1	13k

Accessories	
	<p>Standard remote controller</p> <p>White : WH-TA15PE</p> <p>Black : WH-UA04UE</p>
	<p>Wireless adapter for white FCU</p> <p>RB-N105S-G without cable</p> <p>RB-N106S-G with cable for outside unit installation</p> <p>Application</p> <p>Toshiba Home AC control</p>

## 2. Specifications

System	Size		10k	13k
	Indoor	White	RAS-25G3KVSG-ND	RAS-35G3KVSG-ND
		Black	RAS-25G3KVSGB-ND	RAS-35G3KVSGB-ND
Outdoor		RAS-25J2AVSG-ND1	RAS-35J2AVSG-ND1	
Power supply (V/Ph/Hz)			220 - 240 / 1 / 50	
Cooling	Capacity		2.8	3.5
	Power Consumption (kW)		0.63	0.85
	EER		4.44	4.12
	PdesignC (kW)		2.80	3.50
	SEER		<b>7.70</b>	<b>7.30</b>
	Indoor Noise (H/L/Q) (dB)		42/25/19	43/25/19
	Outdoor Noise (dB)		45	47
	Indoor Air Flow (m <sup>3</sup> /hr)		690	730
Heating	Capacity (kW)		3.2	4.2
	Power Consumption (kW)		0.65	0.92
	COP		4.92	4.57
	PdesignH (Tbiv -10°C) (kW)		2.70	3.60
	SCOP		<b>5.10</b>	<b>5.10</b>
	Indoor Noise (H/L/Q) (dB)		45/25/19	45/25/19
	Outdoor Noise (dB)		47	48
	Indoor Air Flow (m <sup>3</sup> /min)		820	840
FCU	Dimensions	H x W x D (mm)	293 x 800 x 226	
		Net Weight (kg)	10	10
CDU	Dimensions	H x W x D (mm)	550 x 780 x 290	
		Net Weight (kg)	38	38
Pipe	Chargeless (m)		15	15
	Maximum Length (m)		20	20
	Maximum Height (m)		12	12
	Refrigerant		R32	
	Refrigerant amount (kg)		0.76	0.76
Energy Label		Cooling / Heating	<b>A++ / A+++</b>	<b>A++ / A+++</b>
Useable Range Temperature		Cooling (°C)	Indoor: 21 ~ 32 °C , Outdoor: (-15) ~ 46 °C	
		Heating (°C)	Indoor: 0 ~ 28 °C , Outdoor: (-25) ~ 24 °C	

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.

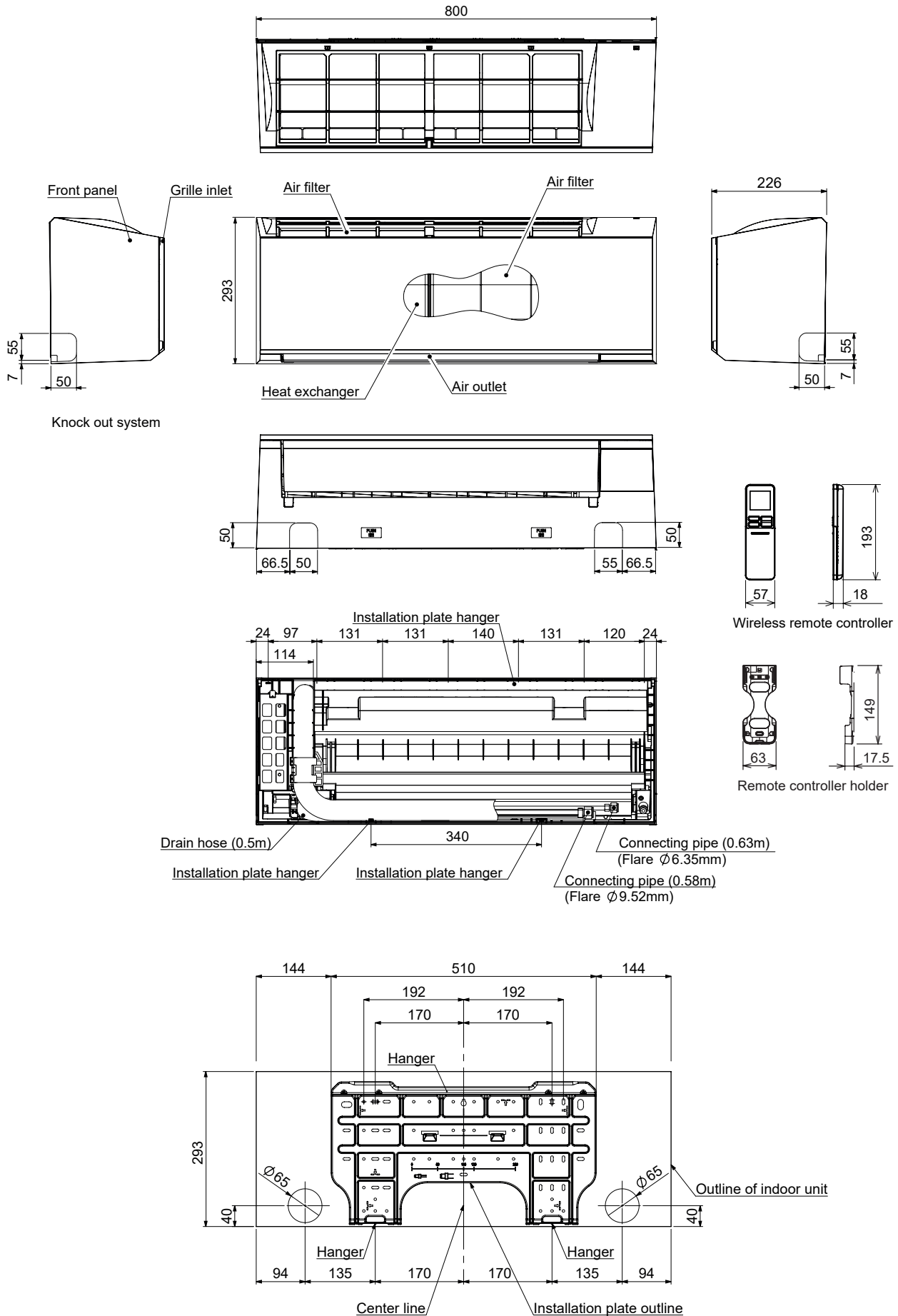
Cooling : Capacity test condition, inside : 27 °C (Db) / 19 °C (Wb), outside : 35 °C (Db) / 24 °C (Wb)

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

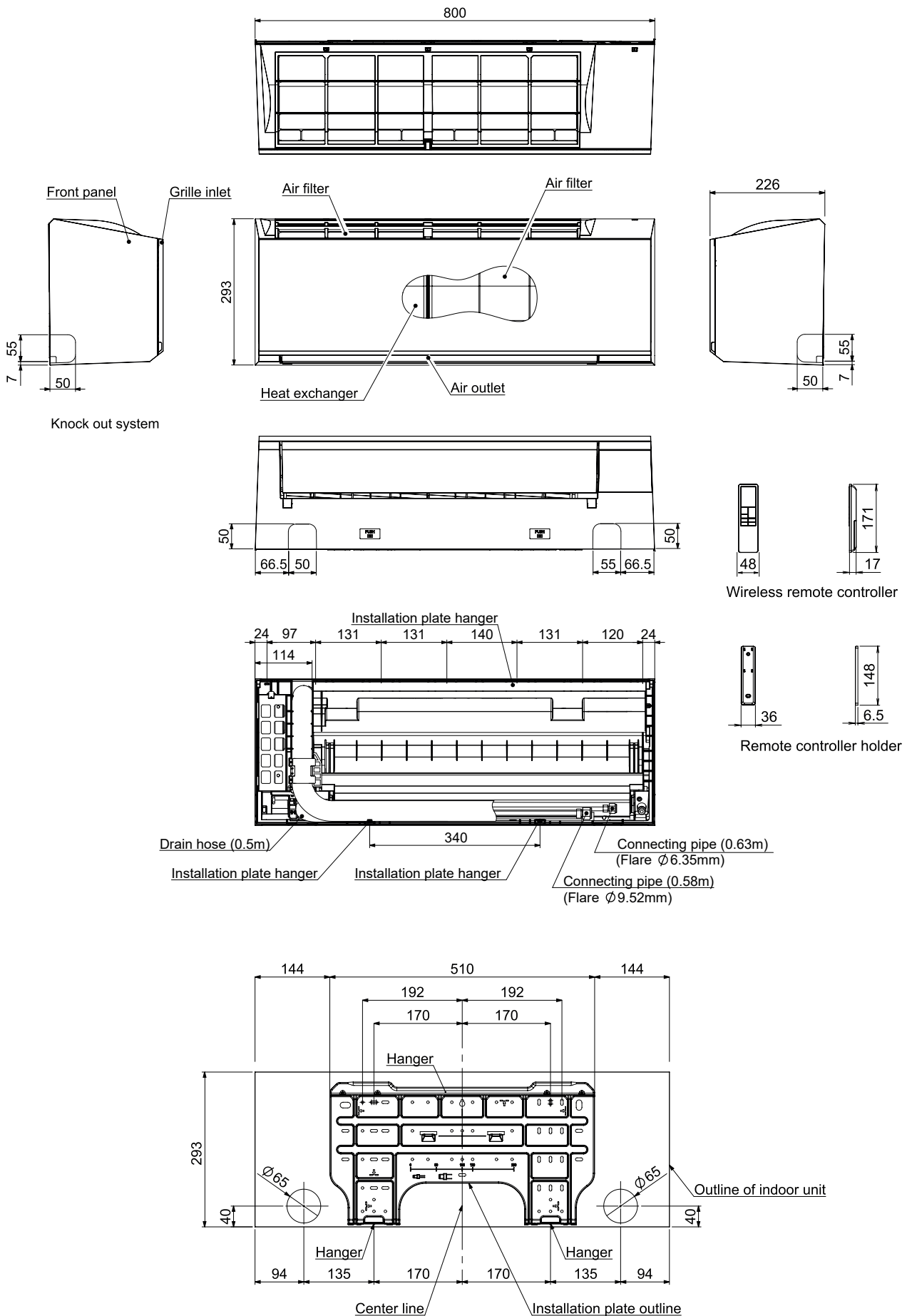
Piping length : 5 m per Indoor Unit.

### 3. Dimension

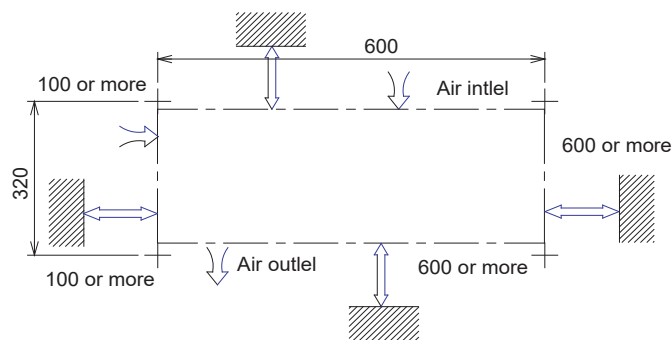
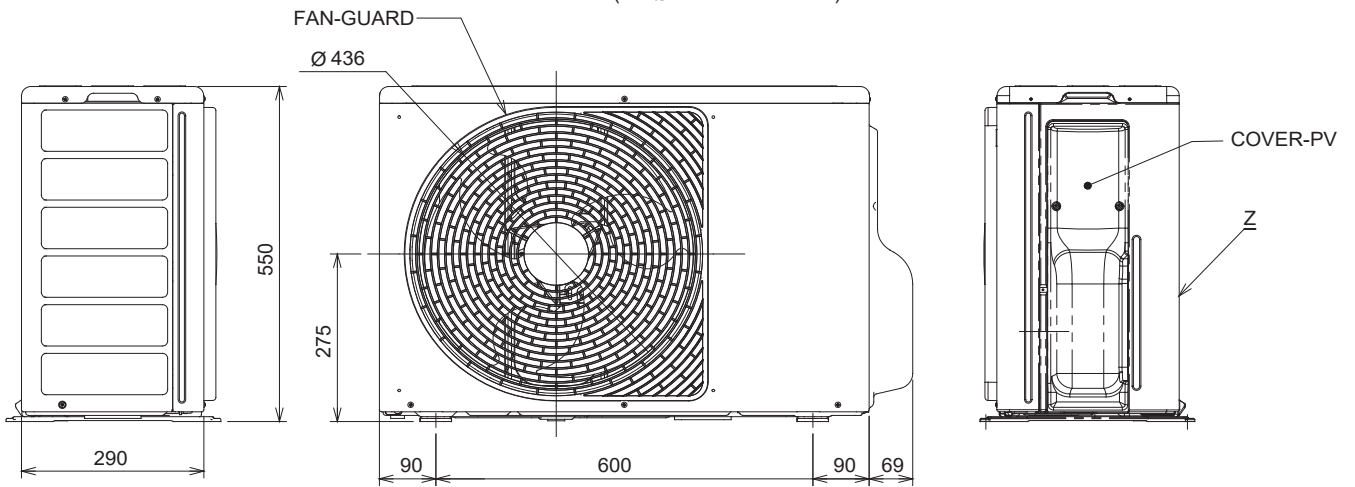
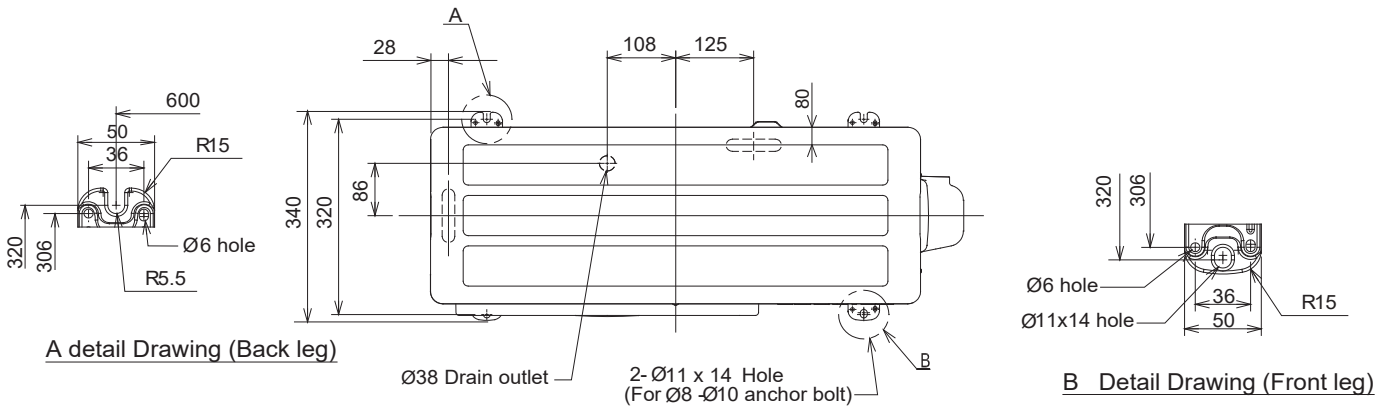
Indoor Unit : RAS-25G3KVSG-ND / RAS-35G3KVSG-ND



Indoor Unit : RAS-25G3KVSGB-ND / RAS-35G3KVSGB-ND



Outdoor Unit : RAS-25J2AVSG-ND1 / RAS-35J2AVSG-ND1

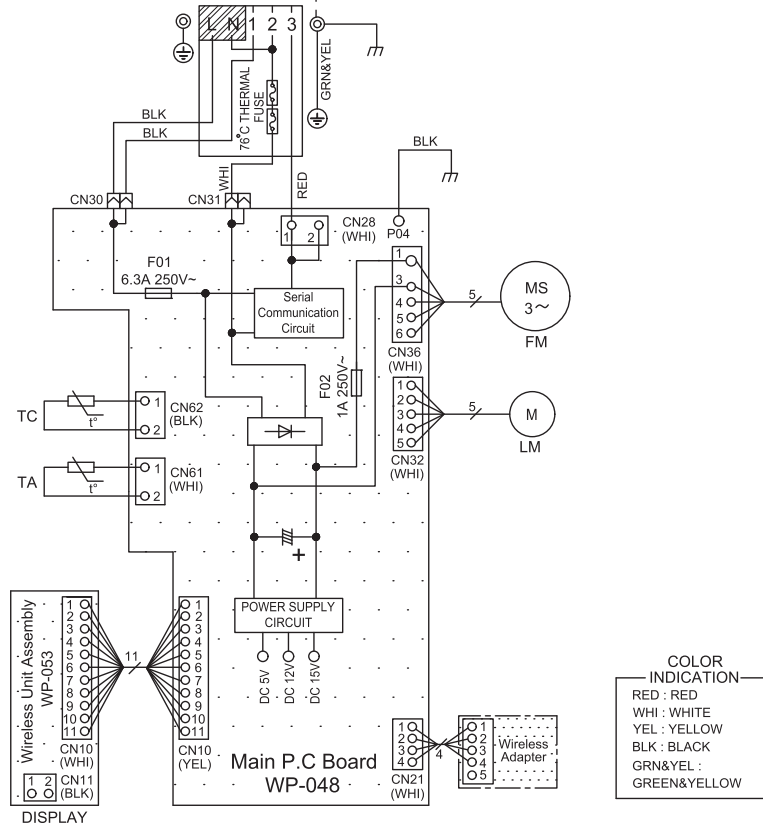
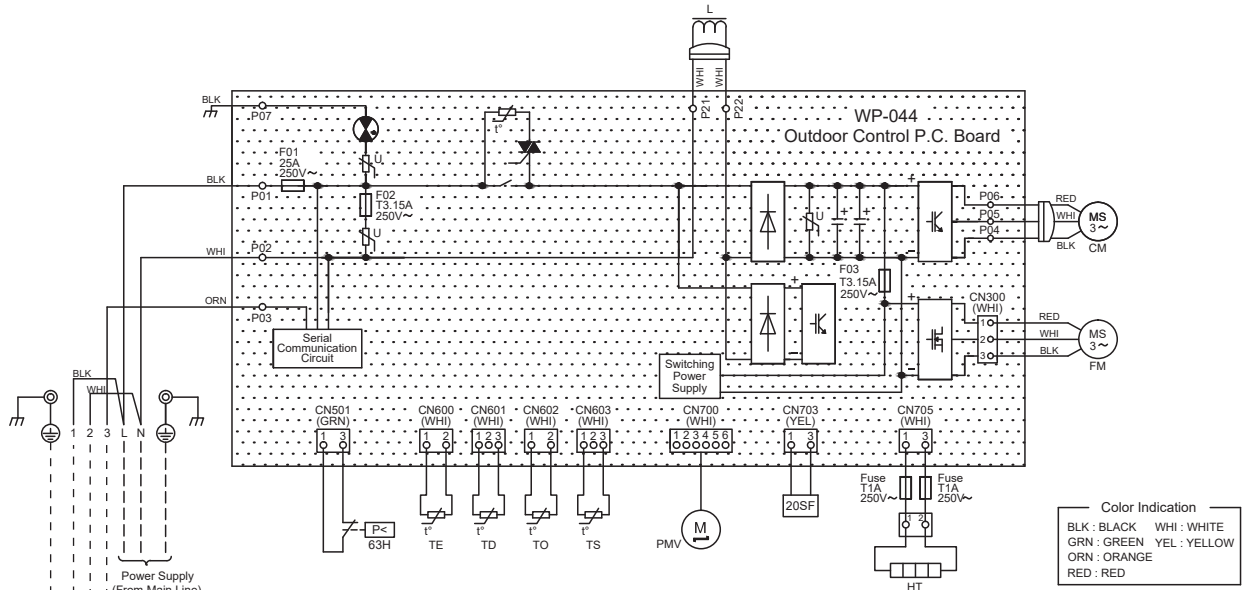


(Unit : mm)

# 4. Wiring diagrams

RAS-25G3KVSG-ND : RAS-25J2AVSG-ND1

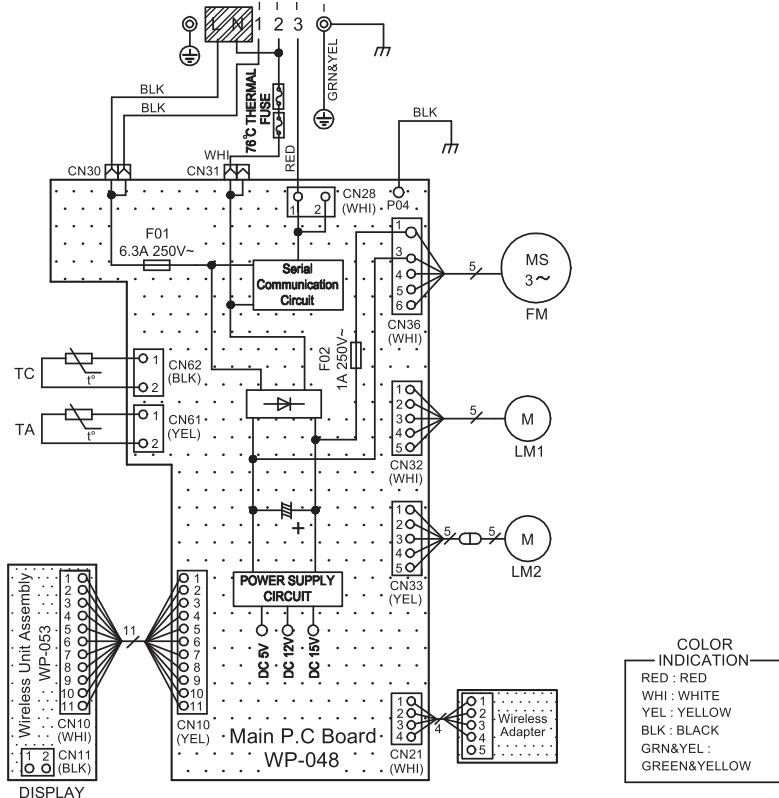
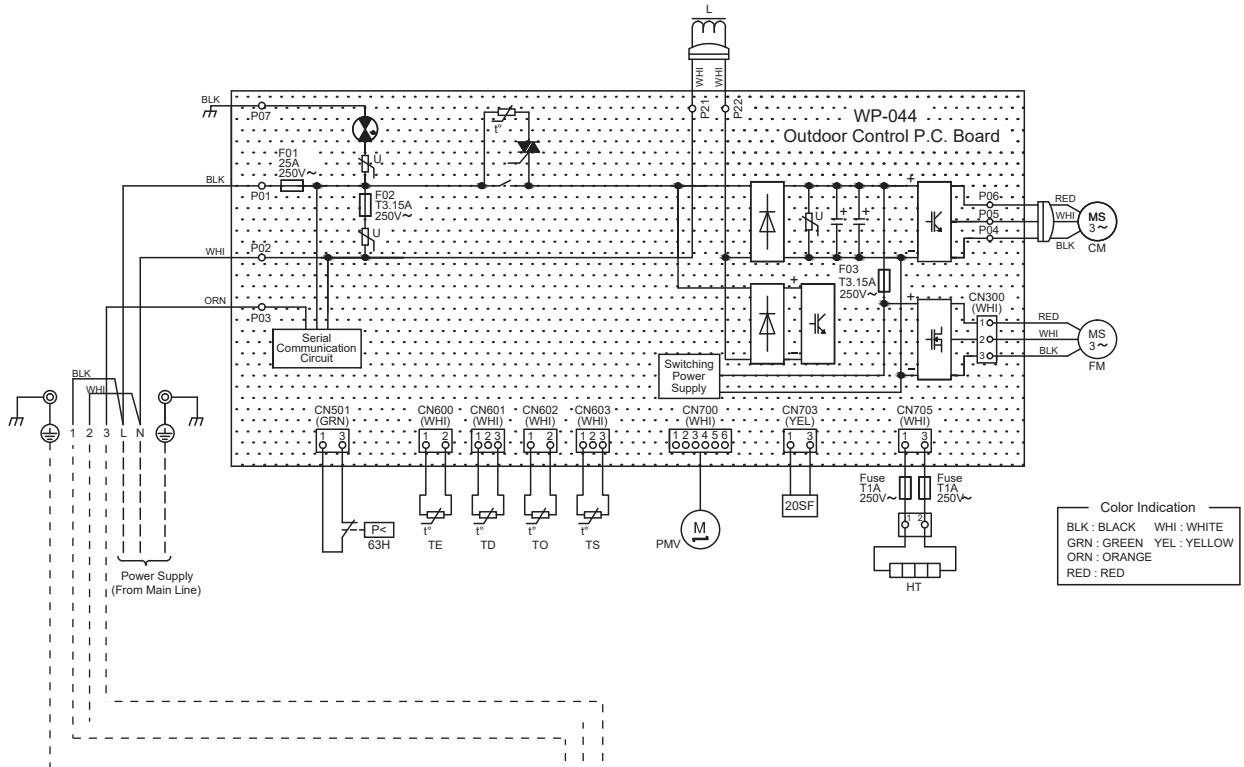
RAS-35G3KVSG-ND : RAS-35J2AVSG-ND1





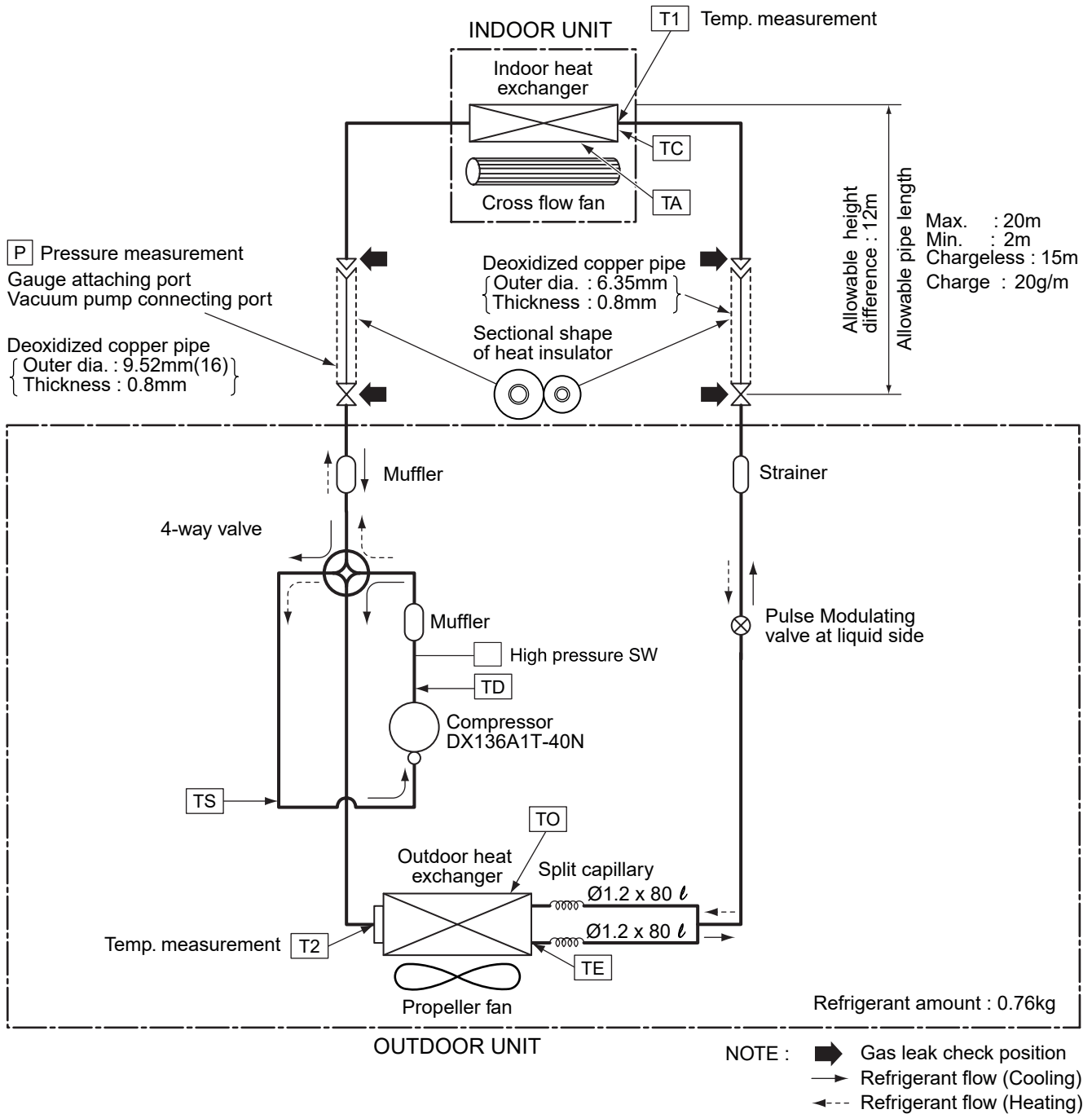
RAS-25G3KVSGB-ND : RAS-25J2AVSG-ND1

RAS-35G3KVSGB-ND : RAS-35J2AVSG-ND1



# 5. Refrigerant Cycle Diagram

RAS-25G3KVSG-ND : RAS-25J2AVSG-ND1  
 RAS-25G3KVSGB-ND : RAS-25J2AVSG-ND1

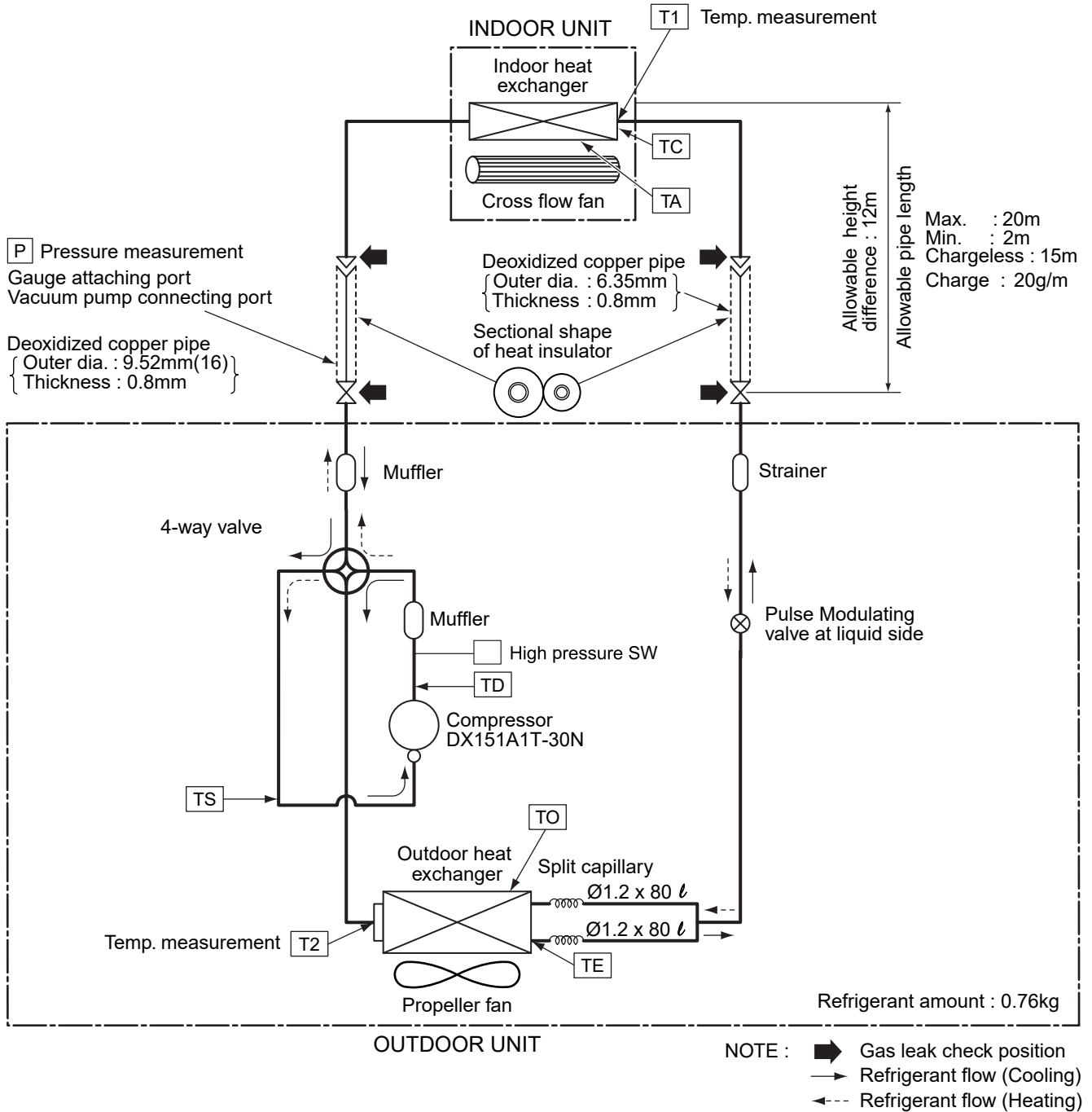


**NOTE :**

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

RAS-35G3KVSG-ND : RAS-35J2AVSG-ND1

RAS-35G3KVSGB-ND : RAS-35J2AVSG-ND1



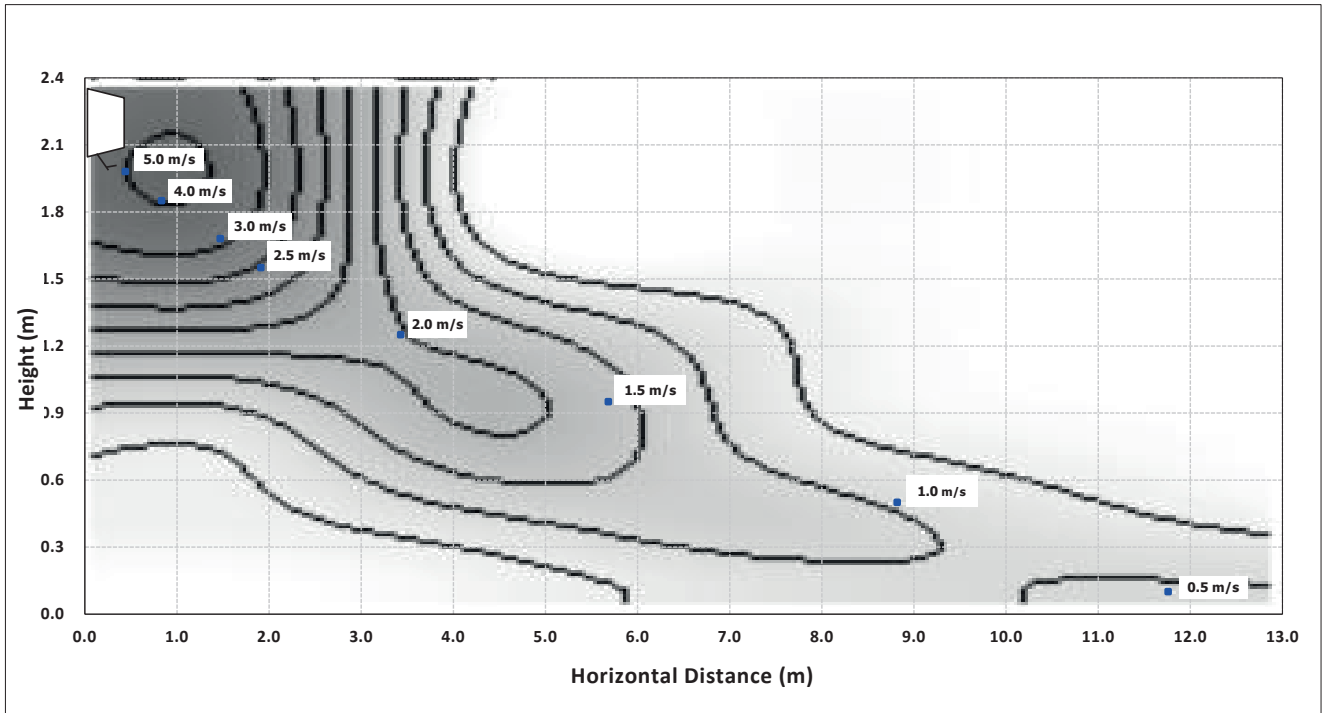
NOTE :

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

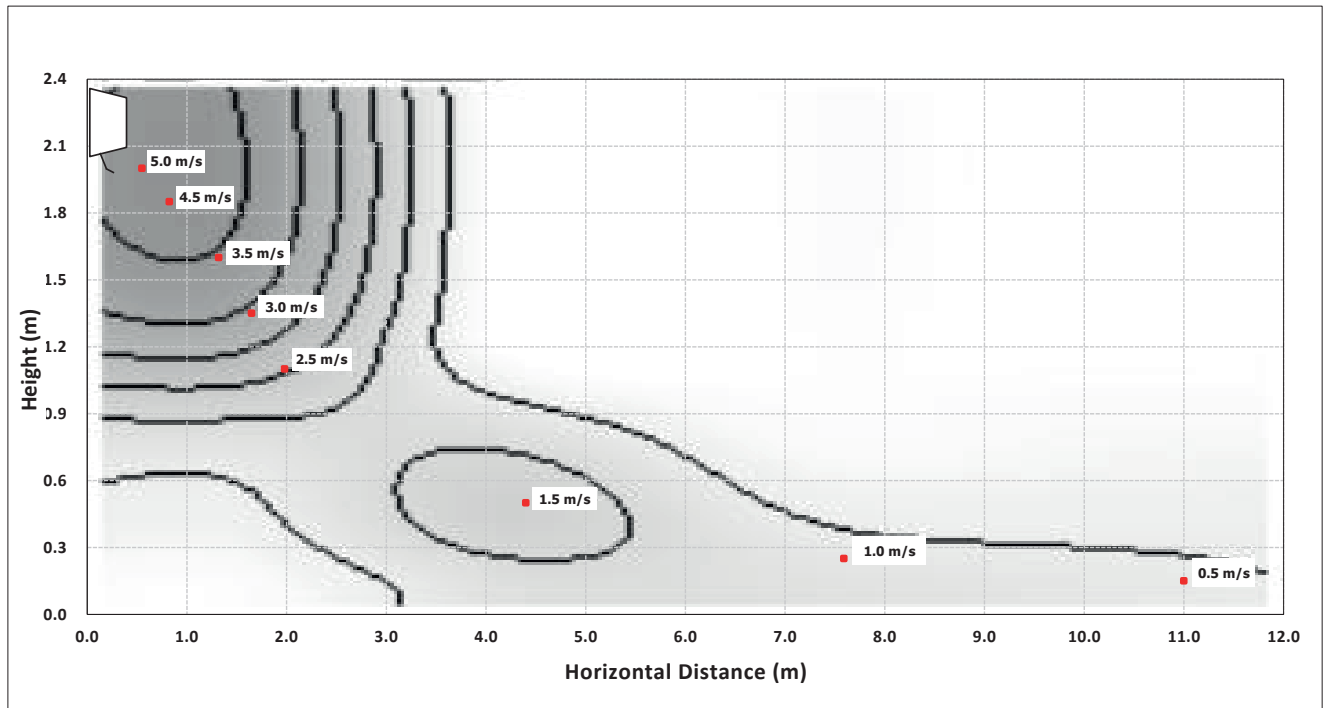
# 6. Air Speed Distribution

RAS-25G3KVSG-ND / RAS-25G3KVSGB-ND

Cooling

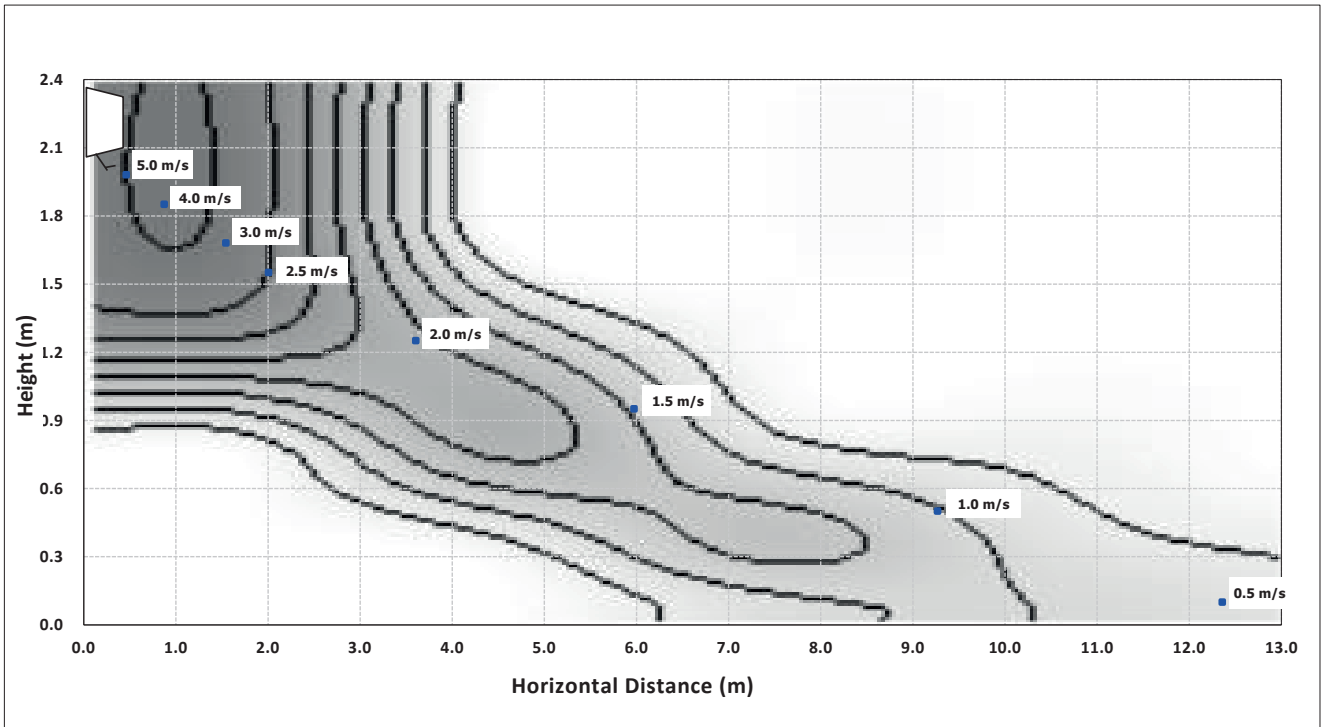


Heating

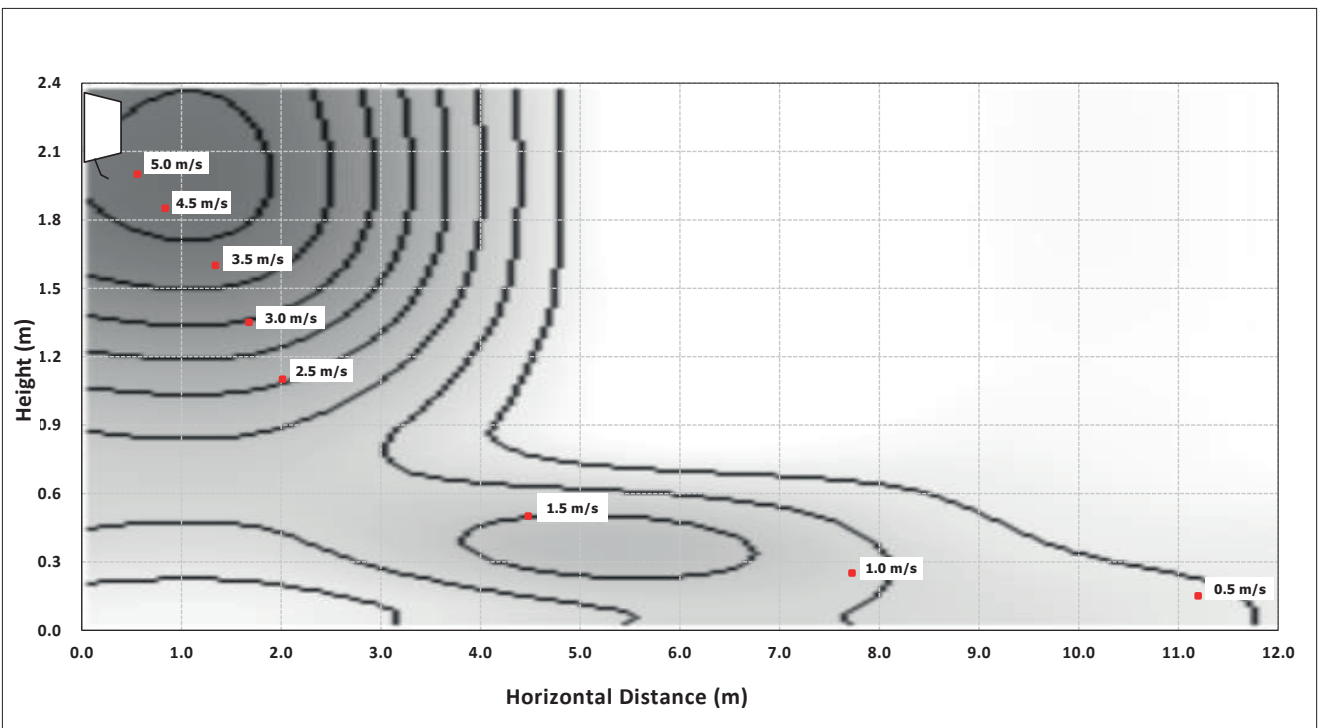


RAS-35J2KVSG-ND / RAS-35J2KVSGB-ND

Cooling



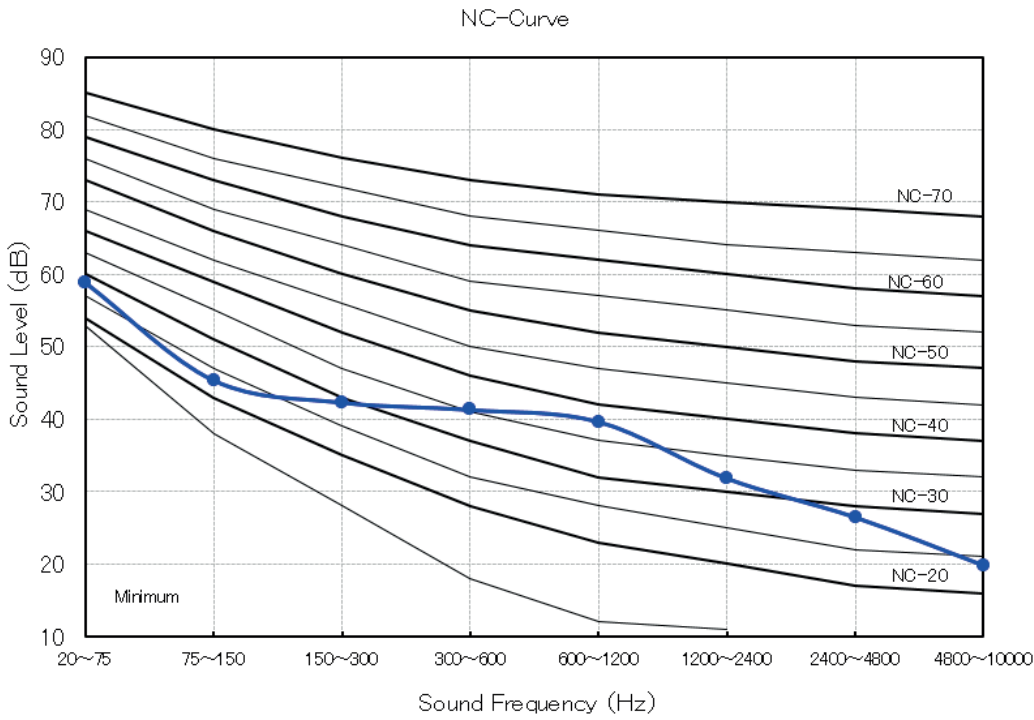
Heating



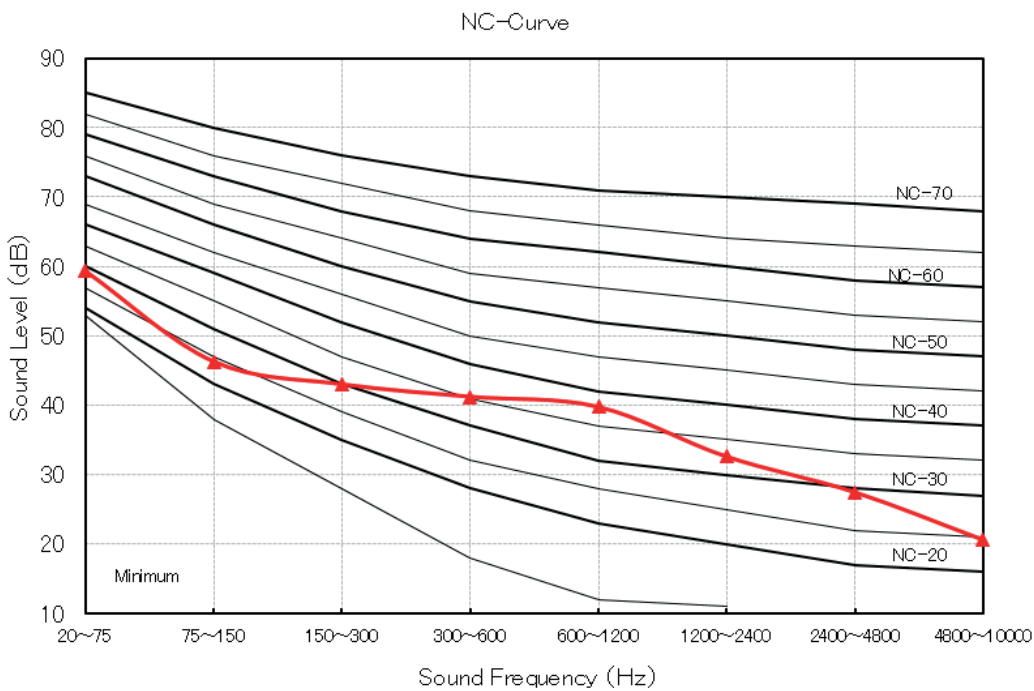
# 7. Sound Characteristics (NC Curve)

RAS-25J2AVSG-ND1

Measured point	Specification
	Cooling
Horizontal 1.0 m	45

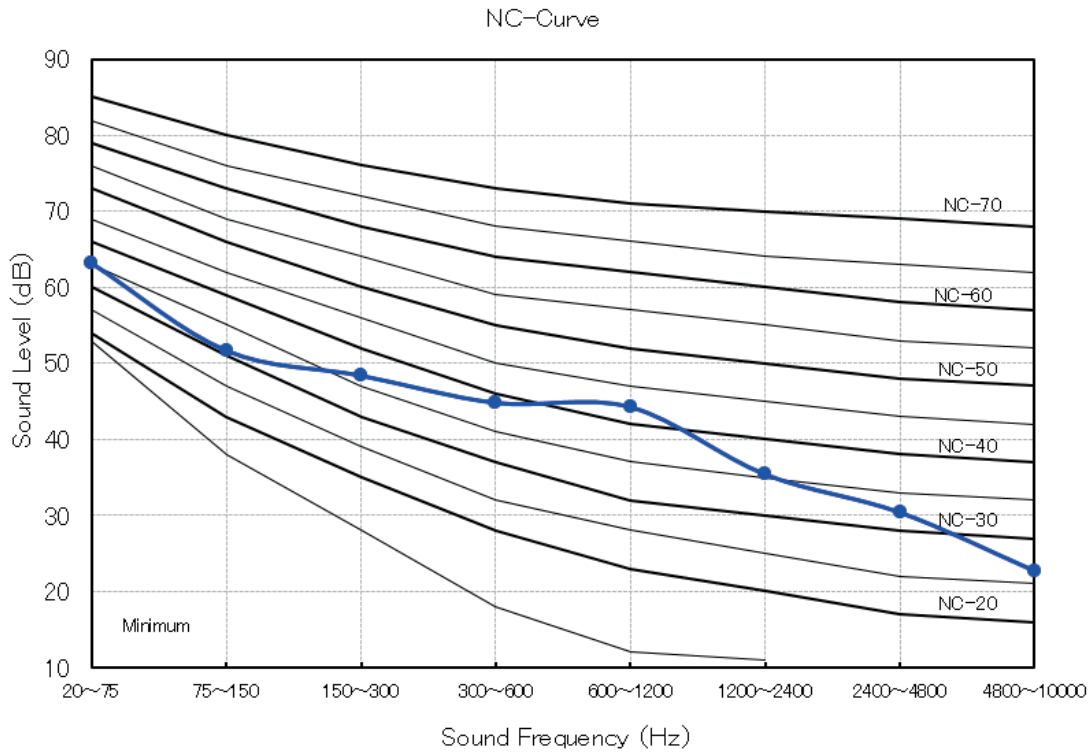


Measured point	Specification
	Heating
Horizontal 1.0 m	47

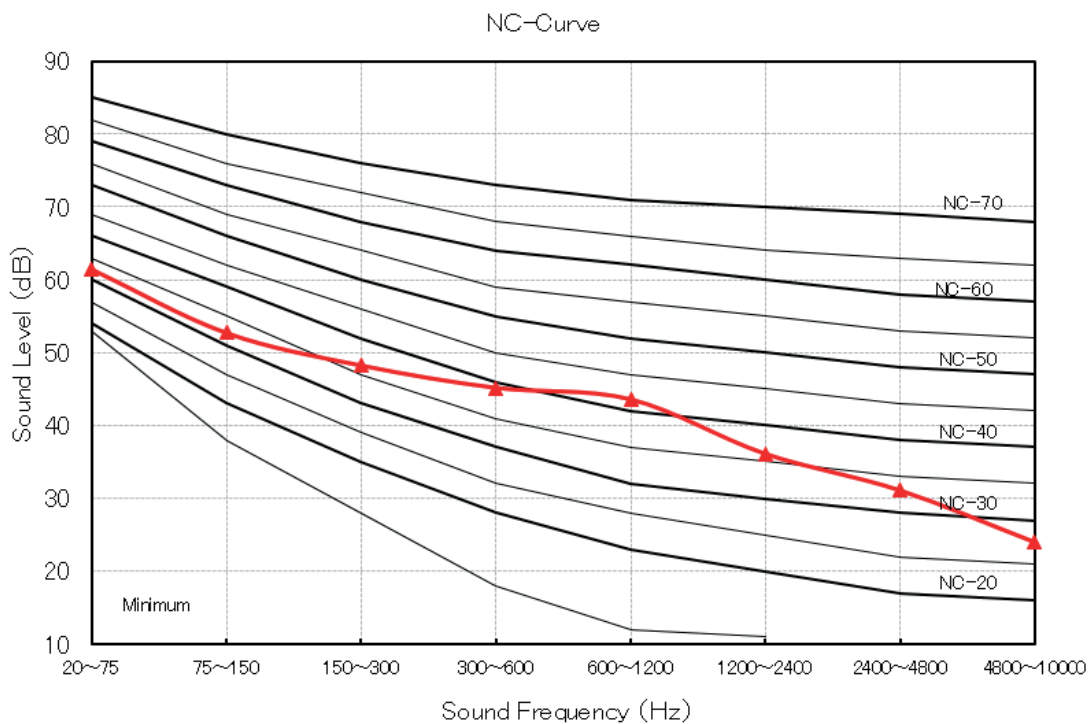


RAS-35J2AVSG-ND1

Measured point	Specification
	Cooling
Horizontal 1.0 m	47



Measured point	Specification
	Heating
Horizontal 1.0 m	48



## 8. Capacity Table

RAS-25G3KVSG-ND ; RAS-25J2AVSG-ND1

RAS-25G3KVSGB-ND ; RAS-25J2AVSG-ND1

Specification of product at standard condition

Standard Condition	Indoor	27°C (DB) / 19°C (WB)	Total Cooling Capacity (TC)	2.80 kW
	Outdoor	35°C (DB) / 24°C (WB)	Sensible Heat Capacity (SHC)	2.40 kW

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	2.74	2.52	3.03	2.69	3.24	2.86	3.34	2.86	3.43	2.87	3.64	2.85	3.80	2.81
21	2.71	2.49	3.00	2.66	3.21	2.83	3.30	2.83	3.40	2.84	3.60	2.82	3.76	2.78
22	2.68	2.46	2.96	2.63	3.17	2.80	3.27	2.80	3.36	2.80	3.56	2.79	3.72	2.75
23	2.65	2.44	2.93	2.60	3.14	2.77	3.23	2.77	3.32	2.77	3.52	2.76	3.68	2.72
24	2.62	2.41	2.90	2.57	3.10	2.74	3.20	2.74	3.29	2.74	3.48	2.73	3.64	2.69
25	2.60	2.38	2.87	2.55	3.07	2.71	3.16	2.71	3.25	2.71	3.44	2.70	3.60	2.66
26	2.57	2.36	2.83	2.52	3.03	2.68	3.12	2.68	3.21	2.68	3.40	2.67	3.56	2.63
27	2.54	2.33	2.80	2.49	3.00	2.65	3.09	2.65	3.18	2.65	3.36	2.64	3.52	2.60
28	2.51	2.30	2.77	2.46	2.96	2.61	3.05	2.62	3.14	2.62	3.32	2.61	3.48	2.57
29	2.48	2.27	2.74	2.43	2.93	2.58	3.02	2.58	3.10	2.59	3.28	2.58	3.44	2.54
30	2.45	2.25	2.70	2.40	2.89	2.55	2.98	2.55	3.06	2.56	3.25	2.55	3.39	2.51
31	2.42	2.22	2.67	2.37	2.86	2.52	2.94	2.52	3.03	2.53	3.21	2.52	3.35	2.48
32	2.39	2.19	2.64	2.34	2.82	2.49	2.91	2.49	2.99	2.50	3.17	2.48	3.31	2.45
33	2.36	2.17	2.61	2.31	2.79	2.46	2.87	2.46	2.95	2.46	3.13	2.45	3.27	2.42
34	2.33	2.14	2.57	2.28	2.75	2.43	2.84	2.43	2.92	2.43	3.09	2.42	3.23	2.39
<b>35</b>	<b>2.30</b>	<b>2.11</b>	<b>2.54</b>	<b>2.26</b>	<b>2.72</b>	<b>2.40</b>	<b>2.80</b>	<b>2.40</b>	<b>2.88</b>	<b>2.40</b>	<b>3.05</b>	<b>2.39</b>	<b>3.19</b>	<b>2.36</b>
36	2.27	2.08	2.51	2.23	2.69	2.37	2.76	2.37	2.84	2.37	3.01	2.36	3.15	2.33
37	2.24	2.06	2.47	2.20	2.65	2.34	2.73	2.34	2.81	2.34	2.97	2.33	3.11	2.30
38	2.21	2.03	2.44	2.17	2.62	2.31	2.69	2.31	2.77	2.31	2.93	2.30	3.07	2.27
39	2.18	2.00	2.41	2.14	2.58	2.28	2.66	2.28	2.73	2.28	2.89	2.27	3.03	2.24
40	2.15	1.98	2.38	2.11	2.55	2.25	2.62	2.25	2.70	2.25	2.85	2.24	2.99	2.21
41	2.12	1.95	2.34	2.08	2.51	2.21	2.58	2.22	2.66	2.22	2.82	2.21	2.94	2.18
42	2.09	1.92	2.31	2.05	2.48	2.18	2.55	2.18	2.62	2.19	2.78	2.18	2.90	2.15
43	2.06	1.89	2.28	2.02	2.44	2.15	2.51	2.15	2.58	2.16	2.74	2.15	2.86	2.12
44	2.03	1.87	2.25	2.00	2.41	2.12	2.48	2.12	2.55	2.13	2.70	2.12	2.82	2.09
45	2.00	1.84	2.21	1.97	2.37	2.09	2.44	2.09	2.51	2.09	2.66	2.09	2.78	2.06
46	1.98	1.81	2.18	1.94	2.34	2.06	2.40	2.06	2.47	2.06	2.62	2.05	2.74	2.02



RAS-35G3KVSG-ND ; RAS-35J2AVSG-ND1

RAS-35G3KVSG-ND ; RAS-35J2AVSG-ND1

Specification of product at standard condition

Standard Condition	Indoor	27°C (DB) / 19°C (WB)	Total Cooling Capacity (TC)	3.50	kW
	Outdoor	35°C (DB) / 24°C (WB)		Sensible Heat Capacity (SHC)	

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	3.15	3.79	3.36	4.05	3.58	4.17	3.58	4.29	3.58	4.55	3.57	4.76	3.51
21	3.39	3.11	3.75	3.33	4.01	3.54	4.13	3.54	4.25	3.54	4.50	3.53	4.70	3.48
22	3.35	3.08	3.70	3.29	3.97	3.50	4.08	3.50	4.20	3.51	4.45	3.49	4.65	3.44
23	3.32	3.05	3.66	3.25	3.92	3.46	4.04	3.46	4.15	3.47	4.40	3.45	4.60	3.40
24	3.28	3.01	3.62	3.22	3.88	3.42	3.99	3.42	4.11	3.43	4.35	3.41	4.55	3.36
25	3.24	2.98	3.58	3.18	3.84	3.38	3.95	3.39	4.06	3.39	4.30	3.37	4.50	3.33
26	3.21	2.94	3.54	3.15	3.79	3.35	3.90	3.35	4.02	3.35	4.25	3.34	4.45	3.29
27	3.17	2.91	3.50	3.11	3.75	3.31	3.86	3.31	3.97	3.31	4.20	3.30	4.40	3.25
28	3.13	2.88	3.46	3.07	3.71	3.27	3.81	3.27	3.92	3.27	4.16	3.26	4.35	3.21
29	3.10	2.84	3.42	3.04	3.66	3.23	3.77	3.23	3.88	3.24	4.11	3.22	4.29	3.17
30	3.06	2.81	3.38	3.00	3.62	3.19	3.72	3.19	3.83	3.20	4.06	3.18	4.24	3.14
31	3.02	2.77	3.34	2.96	3.57	3.15	3.68	3.15	3.78	3.16	4.01	3.14	4.19	3.10
32	2.99	2.74	3.30	2.93	3.53	3.11	3.63	3.12	3.74	3.12	3.96	3.11	4.14	3.06
33	2.95	2.71	3.26	2.89	3.49	3.08	3.59	3.08	3.69	3.08	3.91	3.07	4.09	3.02
34	2.91	2.67	3.22	2.86	3.44	3.04	3.54	3.04	3.65	3.04	3.86	3.03	4.04	2.98
<b>35</b>	<b>2.87</b>	<b>2.64</b>	<b>3.17</b>	<b>2.82</b>	<b>3.40</b>	<b>3.00</b>	<b>3.50</b>	<b>3.00</b>	<b>3.60</b>	<b>3.00</b>	<b>3.81</b>	<b>2.99</b>	<b>3.99</b>	<b>2.95</b>
36	2.84	2.61	3.13	2.78	3.36	2.96	3.46	2.96	3.55	2.97	3.76	2.95	3.94	2.91
37	2.80	2.57	3.09	2.75	3.31	2.92	3.41	2.92	3.51	2.93	3.71	2.91	3.89	2.87
38	2.76	2.54	3.05	2.71	3.27	2.88	3.37	2.88	3.46	2.89	3.67	2.88	3.83	2.83
39	2.73	2.50	3.01	2.67	3.23	2.85	3.32	2.85	3.42	2.85	3.62	2.84	3.78	2.80
40	2.69	2.47	2.97	2.64	3.18	2.81	3.28	2.81	3.37	2.81	3.57	2.80	3.73	2.76
41	2.65	2.44	2.93	2.60	3.14	2.77	3.23	2.77	3.32	2.77	3.52	2.76	3.68	2.72
42	2.62	2.40	2.89	2.57	3.09	2.73	3.19	2.73	3.28	2.73	3.47	2.72	3.63	2.68
43	2.58	2.37	2.85	2.53	3.05	2.69	3.14	2.69	3.23	2.70	3.42	2.68	3.58	2.64
44	2.54	2.33	2.81	2.49	3.01	2.65	3.10	2.65	3.18	2.66	3.37	2.64	3.53	2.61
45	2.51	2.30	2.77	2.46	2.96	2.61	3.05	2.62	3.14	2.62	3.32	2.61	3.48	2.57
46	2.47	2.27	2.73	2.42	2.92	2.58	3.01	2.58	3.09	2.58	3.27	2.57	3.42	2.53

# 9. Part Load Performance

Indoor : RAS-25G3KVSG-ND / RAS-25G3KVSGB-ND

Outdoor : RAS-25J2AVSG-ND1

Single split type

Operation range		Cooling	
		Q	P
MINIMUM	W	1100	220
RATING	W	2800	630
MAXIMUM	W	3500	870

## Cooling

Outdoor Temperature DB (°C)	Parts Load (%)																			
	100 (Max)		90		80 (Rate)		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	683	3756	589	3339	495	2922	416	2504	338	2087	259	1670	181	1312	173	1312	173	1312	173
21	4129	695	3716	600	3303	504	2890	424	2477	344	2064	264	1652	184	1298	176	1298	176	1298	176
22	4084	708	3676	610	3267	513	2859	431	2450	350	2042	269	1634	187	1284	179	1284	179	1284	179
23	4039	720	3635	621	3231	522	2827	439	2423	356	2020	273	1616	190	1269	182	1269	182	1269	182
24	3994	733	3595	632	3195	531	2796	446	2396	362	1997	278	1598	194	1255	185	1255	185	1255	185
25	3949	745	3554	643	3159	540	2764	454	2370	368	1975	283	1580	197	1241	188	1241	188	1241	188
26	3904	758	3514	653	3123	549	2733	462	2343	375	1952	287	1562	200	1227	192	1227	192	1227	192
27	3859	770	3473	664	3087	558	2702	469	2316	381	1930	292	1544	204	1213	195	1213	195	1213	195
28	3814	783	3433	675	3052	567	2670	477	2289	387	1907	297	1526	207	1199	198	1199	198	1199	198
29	3770	795	3393	686	3016	576	2639	484	2262	393	1885	302	1508	210	1185	201	1185	201	1185	201
30	3725	808	3352	696	2980	585	2607	492	2235	399	1862	306	1490	214	1171	204	1171	204	1171	204
31	3680	820	3312	707	2944	594	2576	500	2208	405	1840	311	1472	217	1156	207	1156	207	1156	207
32	3635	833	3271	718	2908	603	2544	507	2181	412	1817	316	1454	220	1142	211	1142	211	1142	211
33	3590	845	3231	729	2872	612	2513	515	2154	418	1795	321	1436	223	1128	214	1128	214	1128	214
34	3545	858	3190	739	2836	621	2481	522	2127	424	1772	325	1418	227	1114	217	1114	217	1114	217
<b>35</b>	<b>3500</b>	<b>870</b>	<b>3150</b>	<b>750</b>	<b>2800</b>	<b>630</b>	<b>2450</b>	<b>530</b>	<b>2100</b>	<b>430</b>	<b>1750</b>	<b>330</b>	<b>1400</b>	<b>230</b>	<b>1100</b>	<b>220</b>	<b>1100</b>	<b>220</b>	<b>1100</b>	<b>220</b>
36	3455	882	3110	761	2764	639	2419	538	2073	436	1728	335	1382	233	1086	223	1086	223	1086	223
37	3410	895	3069	772	2728	648	2387	545	2046	442	1705	339	1364	237	1072	226	1072	226	1072	226
38	3365	907	3029	782	2692	657	2356	553	2019	448	1683	344	1346	240	1058	229	1058	229	1058	229
39	3320	920	2988	793	2656	666	2324	560	1992	455	1660	349	1328	243	1044	233	1044	233	1044	233
40	3275	932	2948	804	2620	675	2293	568	1965	461	1638	354	1310	246	1029	236	1029	236	1029	236
41	3231	945	2907	815	2584	684	2261	576	1938	467	1615	358	1292	250	1015	239	1015	239	1015	239
42	3186	957	2867	825	2548	693	2230	583	1911	473	1593	363	1274	253	1001	242	1001	242	1001	242
43	3141	970	2827	836	2513	702	2198	591	1884	479	1570	368	1256	256	987	245	987	245	987	245
44	3096	982	2786	847	2477	711	2167	598	1857	485	1548	373	1238	260	973	248	973	248	973	248
45	3051	995	2746	858	2441	720	2136	606	1831	492	1525	377	1220	263	959	252	959	252	959	252
46	3006	1007	2705	868	2405	729	2104	614	1804	498	1503	382	1202	266	945	255	945	255	945	255

Indoor : RAS-25G3KVSG-ND / RAS-25G3KVSGB-ND

Outdoor : RAS-25J2AVSG-ND1

Single split type

Operation range	Heating	
	Q	P
MINIMUM	W 1000	200
RATING	W 3200	650
MAXIMUM	W 7200	2400

Heating

Outdoor Temperature DB (°C)	Parts Load (%)																			
	100 (Max)		90		80		70		60		50		44 (Rate)		30		22		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
-25	2600	1300	2340	1129	2080	959	1820	589	1560	496	1300	404	1283	374	866	193	641	155	401	115
-24	2720	1360	2448	1182	2176	1003	1904	616	1632	519	1360	422	1342	391	906	202	671	162	419	120
-23	2840	1420	2556	1234	2272	1047	1988	643	1704	542	1420	441	1401	408	946	211	701	170	438	126
-22	2960	1480	2664	1286	2368	1092	2072	670	1776	565	1480	459	1461	426	986	220	730	177	456	131
-21	3080	1540	2772	1338	2464	1136	2156	697	1848	588	1540	478	1520	443	1026	229	760	184	475	136
-20	3200	1600	2880	1390	2560	1180	2240	725	1920	611	1600	497	1579	460	1066	237	789	191	493	142
-19	3320	1620	2988	1407	2656	1195	2324	734	1992	618	1660	503	1638	466	1106	240	819	194	512	143
-18	3440	1640	3096	1425	2752	1210	2408	743	2064	626	1720	509	1697	472	1146	243	849	196	530	145
-17	3560	1660	3204	1442	2848	1224	2492	752	2136	634	1780	515	1757	478	1186	246	878	198	549	147
-16	3680	1680	3312	1460	2944	1239	2576	761	2208	641	1840	522	1816	483	1226	249	908	201	567	149
-15	3800	1700	3420	1477	3040	1254	2660	770	2280	649	1900	528	1875	489	1265	252	937	203	586	150
-14	3860	1720	3474	1494	3088	1269	2702	779	2316	656	1930	534	1905	495	1285	255	952	205	595	152
-13	3920	1740	3528	1512	3136	1283	2744	788	2352	664	1960	540	1934	501	1305	258	967	208	604	154
-12	3980	1760	3582	1529	3184	1298	2786	797	2388	672	1990	546	1964	506	1325	261	982	210	614	156
-11	4040	1780	3636	1546	3232	1313	2828	806	2424	679	2020	553	1993	512	1345	264	997	213	623	158
-10	4100	1800	3690	1564	3280	1328	2870	815	2460	687	2050	559	2023	518	1365	267	1011	215	632	159
-9	4150	1817	3735	1578	3320	1340	2905	823	2490	693	2075	564	2048	523	1382	270	1024	217	640	161
-8	4200	1833	3780	1593	3360	1352	2940	830	2520	700	2100	569	2072	527	1399	272	1036	219	648	162
-7	4250	1850	3825	1607	3400	1364	2975	838	2550	706	2125	574	2097	532	1415	274	1048	221	655	164
-6	4300	1867	3870	1622	3440	1377	3010	845	2580	712	2150	579	2122	537	1432	277	1061	223	663	165
-5	4350	1883	3915	1636	3480	1389	3045	853	2610	719	2175	585	2146	542	1449	279	1073	225	671	167
-4	4400	1900	3960	1651	3520	1401	3080	861	2640	725	2200	590	2171	547	1465	282	1085	227	678	168
-3	4450	1917	4005	1665	3560	1414	3115	868	2670	732	2225	595	2196	551	1482	284	1098	229	686	170
-2	4500	1933	4050	1680	3600	1426	3150	876	2700	738	2250	600	2220	556	1499	287	1110	231	694	171
-1	4550	1950	4095	1694	3640	1438	3185	883	2730	744	2275	605	2245	561	1515	289	1122	233	702	173
0	4600	1967	4140	1709	3680	1450	3220	891	2760	751	2300	610	2270	566	1532	292	1135	235	709	174
1	4650	1983	4185	1723	3720	1463	3255	898	2790	757	2325	616	2294	571	1549	294	1147	237	717	176
2	4700	2000	4230	1738	3760	1475	3290	906	2820	763	2350	621	2319	575	1565	297	1159	239	725	177
3	4736	2017	4263	1752	3789	1487	3315	913	2842	770	2368	626	2357	583	1591	301	1178	242	732	178
4	4772	2034	4295	1767	3818	1500	3341	921	2863	776	2386	631	2395	591	1616	305	1197	245	739	180
5	4809	2050	4328	1781	3847	1512	3366	929	2885	783	2404	636	2433	599	1642	309	1216	249	748	181
6	7014	2363	6313	2053	5611	1743	4910	1070	4209	902	3507	733	3118	640	2104	330	1559	266	974	197
<b>7</b>	<b>7200</b>	<b>2400</b>	<b>6480</b>	<b>2085</b>	<b>5760</b>	<b>1770</b>	<b>5040</b>	<b>1087</b>	<b>4320</b>	<b>916</b>	<b>3600</b>	<b>745</b>	<b>3200</b>	<b>650</b>	<b>2160</b>	<b>335</b>	<b>1600</b>	<b>270</b>	<b>1000</b>	<b>200</b>
8	7386	2437	6647	2117	5909	1797	5170	1104	4431	930	3693	757	3283	660	2216	341	1641	274	1026	203
9	7572	2474	6814	2150	6057	1825	5300	1121	4543	944	3786	768	3366	670	2271	346	1682	278	1052	206
10	7757	2511	6982	2182	6206	1852	5430	1137	4654	959	3879	780	3448	680	2327	351	1724	283	1077	209
11	7943	2549	7149	2214	6355	1880	5560	1154	4766	973	3972	791	3531	690	2383	356	1765	287	1103	212
12	8129	2586	7316	2246	6503	1907	5690	1171	4877	987	4065	803	3613	700	2439	361	1806	291	1129	215
13	8315	2623	7483	2279	6652	1934	5820	1188	4989	1001	4157	814	3696	710	2494	366	1848	295	1155	219
14	8501	2660	7651	2311	6801	1962	5950	1205	5100	1015	4250	826	3779	721	2550	372	1889	299	1181	222
15	8686	2697	7818	2343	6949	1989	6081	1222	5212	1029	4343	837	3861	731	2606	377	1930	303	1206	225
16	8872	2734	7985	2376	7098	2017	6211	1238	5323	1044	4436	849	3944	741	2662	382	1971	308	1232	228
17	9058	2772	8152	2408	7246	2044	6341	1255	5435	1058	4529	860	4026	751	2717	387	2013	312	1258	231
18	9194	2789	8274	2423	7355	2057	6436	1263	5516	1064	4597	866	4109	761	2773	392	2054	316	1284	234
19	9285	2789	8357	2423	7428	2057	6500	1263	5571	1064	4643	866	4191	771	2829	398	2095	320	1310	237
20	9376	2789	8438	2423	7501	2057	6563	1263	5625	1064	4688	866	4274	781	2885	403	2137	324	1335	240
21	9465	2789	8518	2423	7572	2057	6625	1263	5679	1064	4732	866	4357	791	2940	408	2178	329	1361	243
22	9553	2789	8598	2423	7642	2057	6687	1263	5732	1064	4777	866	4439	801	2996	413	2219	333	1387	246
23	9640	2789	8676	2423	7712	2057	6748	1263	5784	1064	4820	866	4522	811	3052	418	2260	337	1413	250
24	9726	2789	8754	2423	7781	2057	6808	1263	5836	1064	4863	866	4604	821	3108	424	2302	341	1439	253

Indoor : RAS-35G3KVSG-ND / RAS-35G3KVSGB-ND

Outdoor : RAS-35J2AVSG-ND1

Single split type

Operation range	Cooling	
	Q	P
MINIMUM	W 1300	260
RATING	W 3500	850
MAXIMUM	W 4500	1370

**Cooling**

Outdoor Temperature DB (°C)	Parts Load (%)																			
	100 (Max)		90		80		78 (Rate)		60		50		39		30		20		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
20	5366	1075	4830	892	4293	708	4173	667	3220	441	2683	314	2087	173	1610	215	1550	204	1550	204
21	5309	1095	4778	908	4247	721	4128	679	3185	449	2654	320	2064	176	1593	218	1534	208	1534	208
22	5251	1115	4726	924	4201	734	4084	692	3150	457	2625	325	2042	179	1575	222	1517	212	1517	212
23	5193	1134	4674	941	4154	747	4039	704	3116	465	2597	331	2020	182	1558	226	1500	215	1500	215
24	5135	1154	4622	957	4108	760	3994	716	3081	473	2568	337	1997	185	1541	230	1484	219	1484	219
25	5078	1174	4570	973	4062	773	3949	728	3047	481	2539	343	1975	188	1523	234	1467	223	1467	223
26	5020	1193	4518	989	4016	786	3904	740	3012	490	2510	348	1952	192	1506	238	1450	226	1450	226
27	4962	1213	4466	1006	3970	799	3859	752	2977	498	2481	354	1930	195	1489	242	1433	230	1433	230
28	4904	1233	4414	1022	3923	811	3814	765	2943	506	2452	360	1907	198	1471	246	1417	234	1417	234
29	4847	1252	4362	1038	3877	824	3769	777	2908	514	2423	366	1885	201	1454	250	1400	238	1400	238
30	4789	1272	4310	1055	3831	837	3724	789	2873	522	2394	371	1862	204	1437	254	1383	241	1383	241
31	4731	1291	4258	1071	3785	850	3679	801	2839	530	2366	377	1840	207	1419	258	1367	245	1367	245
32	4673	1311	4206	1087	3739	863	3634	813	2804	538	2337	383	1817	211	1402	262	1350	249	1350	249
33	4616	1331	4154	1103	3692	876	3589	826	2769	546	2308	389	1795	214	1385	265	1333	253	1333	253
34	4558	1350	4102	1120	3646	889	3545	838	2735	554	2279	394	1772	217	1367	269	1317	256	1317	256
<b>35</b>	<b>4500</b>	<b>1370</b>	<b>4050</b>	<b>1136</b>	<b>3600</b>	<b>902</b>	<b>3500</b>	<b>850</b>	<b>2700</b>	<b>562</b>	<b>2250</b>	<b>400</b>	<b>1750</b>	<b>220</b>	<b>1350</b>	<b>273</b>	<b>1300</b>	<b>260</b>	<b>1300</b>	<b>260</b>
36	4442	1390	3998	1152	3554	915	3455	862	2665	570	2221	406	1728	223	1333	277	1283	264	1283	264
37	4381	1408	3943	1167	3505	927	3410	874	2631	578	2192	411	1705	226	1315	281	1267	267	1267	267
38	4289	1408	3860	1167	3431	927	3365	886	2596	586	2163	417	1683	229	1298	285	1250	271	1250	271
39	4198	1408	3779	1167	3359	927	3320	899	2561	594	2135	423	1660	233	1281	289	1233	275	1233	275
40	4110	1408	3699	1167	3288	927	3275	911	2527	602	2106	429	1638	236	1263	293	1217	279	1217	279
41	4022	1408	3620	1167	3218	927	3230	923	2492	610	2077	434	1615	239	1246	297	1200	282	1200	282
42	3937	1408	3543	1167	3150	927	3185	935	2457	618	2048	440	1593	242	1229	301	1183	286	1183	286
43	3853	1408	3468	1167	3082	927	3140	947	2423	626	2019	446	1570	245	1211	305	1167	290	1167	290
44	3771	1408	3394	1167	3017	927	3095	960	2388	634	1990	452	1548	248	1194	309	1150	294	1150	294
45	3546	1310	3192	1086	2837	862	3051	972	2354	643	1961	457	1525	252	1177	313	1133	297	1133	297
46	3471	1310	3124	1086	2777	862	3006	984	2319	651	1932	463	1503	255	1159	316	1116	301	1116	301

Indoor : RAS-35G3KVSG-ND / RAS-35G3KVSGB-ND

Outdoor : RAS-35J2AVSG-ND1

Single split type

Operation range	Heating	
	Q	P
MINIMUM	W 1000	200
RATING	W 4200	920
MAXIMUM	W 7700	2500

Heating

Outdoor Temperature DB (°C)	Parts Load (%)																			
	100 (Max)		90		80		70		60		55 (Rate)		40		27		20		10	
	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
-25	2700	1500	2430	1291	2160	1083	1890	736	1620	617	1494	531	1096	365	747	219	548	166	356	115
-24	2820	1520	2538	1309	2256	1097	1974	745	1692	625	1561	538	1144	370	780	222	572	169	372	117
-23	2940	1540	2646	1326	2352	1112	2058	755	1764	633	1627	545	1193	374	813	225	597	171	387	119
-22	3060	1560	2754	1343	2448	1126	2142	765	1836	641	1693	552	1242	379	847	228	621	173	403	120
-21	3180	1580	2862	1360	2544	1141	2226	775	1908	650	1760	559	1290	384	880	231	645	175	419	122
-20	3300	1600	2970	1378	2640	1155	2310	785	1980	658	1826	566	1339	389	913	234	670	178	435	123
-19	3440	1640	3096	1412	2752	1184	2408	804	2064	674	1904	581	1396	399	952	240	698	182	453	126
-18	3580	1680	3222	1446	2864	1213	2506	824	2148	691	1981	595	1453	409	990	246	726	186	472	129
-17	3720	1720	3348	1481	2976	1242	2604	843	2232	707	2059	609	1510	418	1029	251	755	191	490	132
-16	3860	1760	3474	1515	3088	1271	2702	863	2316	724	2136	623	1566	428	1068	257	783	195	509	135
-15	4000	1800	3600	1550	3200	1299	2800	883	2400	740	2214	637	1623	438	1107	263	812	200	527	139
-14	4100	1840	3690	1584	3280	1328	2870	902	2460	757	2269	651	1664	447	1134	269	832	204	540	142
-13	4200	1880	3780	1619	3360	1357	2940	922	2520	773	2324	666	1704	457	1162	275	852	209	553	145
-12	4300	1920	3870	1653	3440	1386	3010	942	2580	790	2380	680	1745	467	1190	281	872	213	567	148
-11	4400	1960	3960	1687	3520	1415	3080	961	2640	806	2435	694	1786	477	1217	287	893	217	580	151
-10	4500	2000	4050	1722	3600	1444	3150	981	2700	822	2490	708	1826	486	1245	292	913	222	593	154
-9	4583	2025	4125	1743	3667	1462	3208	993	2750	833	2536	717	1860	492	1268	296	930	225	604	156
-8	4667	2050	4200	1765	3733	1480	3267	1005	2800	843	2583	726	1894	498	1291	300	947	227	615	158
-7	4750	2075	4275	1786	3800	1498	3325	1018	2850	853	2629	735	1928	505	1314	303	964	230	626	160
-6	4833	2100	4350	1808	3867	1516	3383	1030	2900	864	2675	743	1961	511	1337	307	981	233	637	162
-5	4917	2125	4425	1830	3933	1534	3442	1042	2950	874	2721	752	1995	517	1360	311	998	236	648	164
-4	5000	2150	4500	1851	4000	1552	3500	1054	3000	884	2767	761	2029	523	1383	314	1014	239	659	165
-3	5083	2175	4575	1873	4067	1570	3558	1067	3050	894	2813	770	2063	529	1406	318	1031	241	670	167
-2	5167	2200	4650	1894	4133	1588	3617	1079	3100	905	2859	779	2097	535	1429	322	1048	244	681	169
-1	5250	2225	4725	1916	4200	1606	3675	1091	3150	915	2905	788	2130	541	1452	325	1065	247	692	171
0	5333	2250	4800	1937	4267	1624	3733	1103	3200	925	2951	797	2164	547	1475	329	1082	250	703	173
1	5417	2275	4875	1959	4333	1642	3792	1116	3250	935	2998	805	2198	553	1499	333	1099	252	714	175
2	5500	2300	4950	1980	4400	1660	3850	1128	3300	946	3044	814	2232	559	1522	336	1116	255	725	177
3	5584	2338	5025	2013	4467	1688	3909	1147	3350	961	3094	825	2268	567	1547	341	1134	259	736	183
4	5668	2376	5101	2046	4534	1715	3967	1165	3401	977	3143	836	2305	574	1571	345	1153	262	747	188
5	5751	2414	5176	2079	4601	1743	4026	1184	3451	993	3193	847	2342	582	1596	350	1171	265	758	194
6	5835	2452	5251	2112	4668	1771	4091	1202	3501	1009	3243	858	2380	590	1621	354	1189	268	769	200
7	5919	2490	5326	2145	4735	1799	4156	1220	3551	1025	3293	869	2419	598	1646	358	1207	271	780	206
8	6003	2528	5401	2178	4802	1827	4221	1238	3601	1041	3343	880	2458	606	1671	362	1225	274	791	212
9	6087	2566	5476	2211	4869	1855	4286	1256	3651	1057	3393	891	2497	614	1696	366	1243	277	802	218
10	6171	2604	5551	2244	4936	1883	4351	1274	3701	1073	3443	902	2536	622	1721	370	1261	280	813	224
11	6255	2642	5626	2277	5003	1911	4416	1292	3751	1089	3493	913	2575	630	1746	374	1279	283	824	230
12	6339	2680	5701	2310	5070	1939	4481	1310	3801	1105	3543	924	2614	638	1771	378	1297	286	835	236
13	6423	2718	5776	2343	5137	1967	4546	1328	3851	1121	3593	935	2653	646	1796	382	1315	289	846	242
14	6507	2756	5851	2376	5204	1995	4611	1346	3901	1137	3643	946	2692	654	1821	386	1333	292	857	248
15	6591	2794	5926	2409	5271	2023	4676	1364	3951	1153	3693	957	2731	662	1846	390	1351	295	868	254
16	6675	2832	6001	2442	5338	2051	4741	1382	4001	1169	3743	968	2770	670	1871	394	1369	298	879	260
17	6759	2870	6076	2475	5405	2079	4806	1400	4051	1185	3793	979	2809	678	1896	398	1387	301	890	266
18	6843	2908	6151	2508	5472	2107	4871	1418	4101	1201	3843	990	2848	686	1921	402	1405	304	901	272
19	6927	2946	6226	2541	5539	2135	4936	1436	4151	1217	3893	1001	2887	694	1946	406	1423	307	912	278
20	7011	2984	6301	2574	5606	2163	5001	1454	4201	1233	3943	1012	2926	702	1971	410	1441	310	923	284
21	7095	3022	6376	2607	5673	2191	5066	1472	4251	1249	3993	1023	2965	710	1996	414	1459	313	934	290
22	7179	3060	6451	2640	5740	2219	5131	1490	4301	1265	4043	1034	3004	718	2021	418	1477	316	945	296
23	7263	3098	6526	2673	5807	2247	5196	1508	4351	1281	4093	1045	3043	726	2046	422	1495	319	956	302
24	7347	3136	6601	2706	5874	2275	5261	1526	4401	1297	4143	1056	3082	734	2071	426	1513	322	967	308

# 10. Performance Characteristic

Indoor : RAS-25G3KVSG-ND / RAS-25G3KVSGB-ND

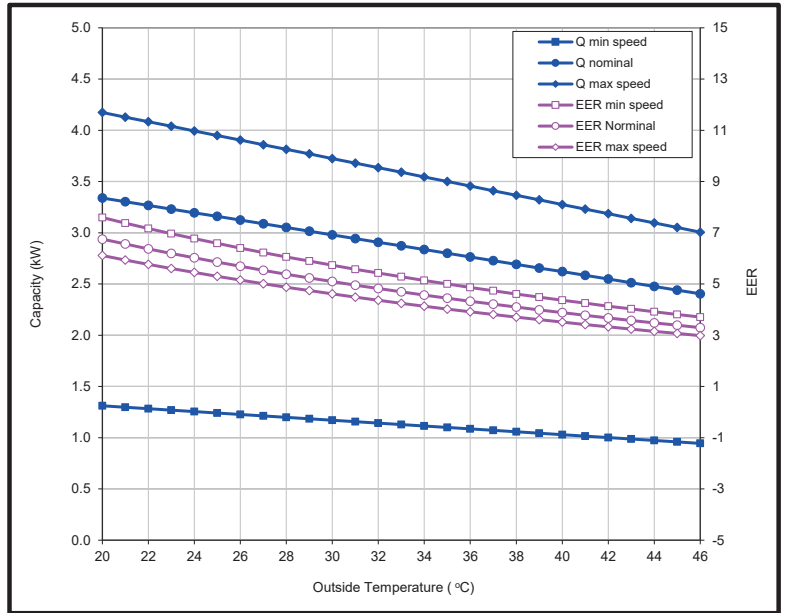
Outdoor : RAS-25J2AVSG-ND1

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	1.10	0.22	5.00
	Rated	2.80	0.63	4.44
	Max	3.50	0.87	4.02
Heating JIS In: 20 °C DB/15° C WB Out: 7 °C DB/6° C WB	Min	1.00	0.20	5.00
	Rated	3.20	0.65	4.92
	Max	7.20	2.40	3.00
Heating Low Temp. In: 20 °C DB/15° C WB Out: 2 °C DB/1° C WB	Max	4.70	2.00	2.35
	Max	4.10	1.80	2.28
Heating Low Temp. In: 20 °C DB/15° C WB Out: -10 °C DB	Max	3.80	1.70	2.24
	Max	3.20	1.60	2.00
Heating Low Temp. In: 20 °C DB/15° C WB Out: -20 °C DB	Max	2.60	1.30	2.00

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	1.31	0.17	7.60	3.34	0.49	6.75	4.17	0.68	6.11
21	1.30	0.18	7.38	3.30	0.50	6.56	4.13	0.70	5.94
22	1.28	0.18	7.17	3.27	0.51	6.37	4.08	0.71	5.77
23	1.27	0.18	6.97	3.23	0.52	6.19	4.04	0.72	5.61
24	1.26	0.19	6.77	3.20	0.53	6.02	3.99	0.73	5.45
25	1.24	0.19	6.59	3.16	0.54	5.85	3.95	0.75	5.30
26	1.23	0.19	6.40	3.12	0.55	5.69	3.90	0.76	5.15
27	1.21	0.19	6.23	3.09	0.56	5.54	3.86	0.77	5.01
28	1.20	0.20	6.06	3.05	0.57	5.38	3.81	0.78	4.87
29	1.18	0.20	5.89	3.02	0.58	5.24	3.77	0.80	4.74
30	1.17	0.20	5.73	2.98	0.58	5.09	3.72	0.81	4.61
31	1.16	0.21	5.58	2.94	0.59	4.96	3.68	0.82	4.49
32	1.14	0.21	5.43	2.91	0.60	4.82	3.63	0.83	4.37
33	1.13	0.21	5.28	2.87	0.61	4.69	3.59	0.85	4.25
34	1.11	0.22	5.14	2.84	0.62	4.57	3.54	0.86	4.13
35	1.10	0.22	5.00	2.80	0.63	4.44	3.50	0.87	4.02
36	1.09	0.22	4.87	2.76	0.64	4.33	3.46	0.88	3.92
37	1.07	0.23	4.74	2.73	0.65	4.21	3.41	0.89	3.81
38	1.06	0.23	4.61	2.69	0.66	4.10	3.37	0.91	3.71
39	1.04	0.23	4.49	2.66	0.67	3.99	3.32	0.92	3.61
40	1.03	0.24	4.37	2.62	0.68	3.88	3.28	0.93	3.51
41	1.02	0.24	4.25	2.58	0.68	3.78	3.23	0.94	3.42
42	1.00	0.24	4.14	2.55	0.69	3.68	3.19	0.96	3.33
43	0.99	0.25	4.03	2.51	0.70	3.58	3.14	0.97	3.24
44	0.97	0.25	3.92	2.48	0.71	3.48	3.10	0.98	3.15
45	0.96	0.25	3.81	2.44	0.72	3.39	3.05	0.99	3.07
46	0.94	0.25	3.71	2.40	0.73	3.30	3.01	1.01	2.98

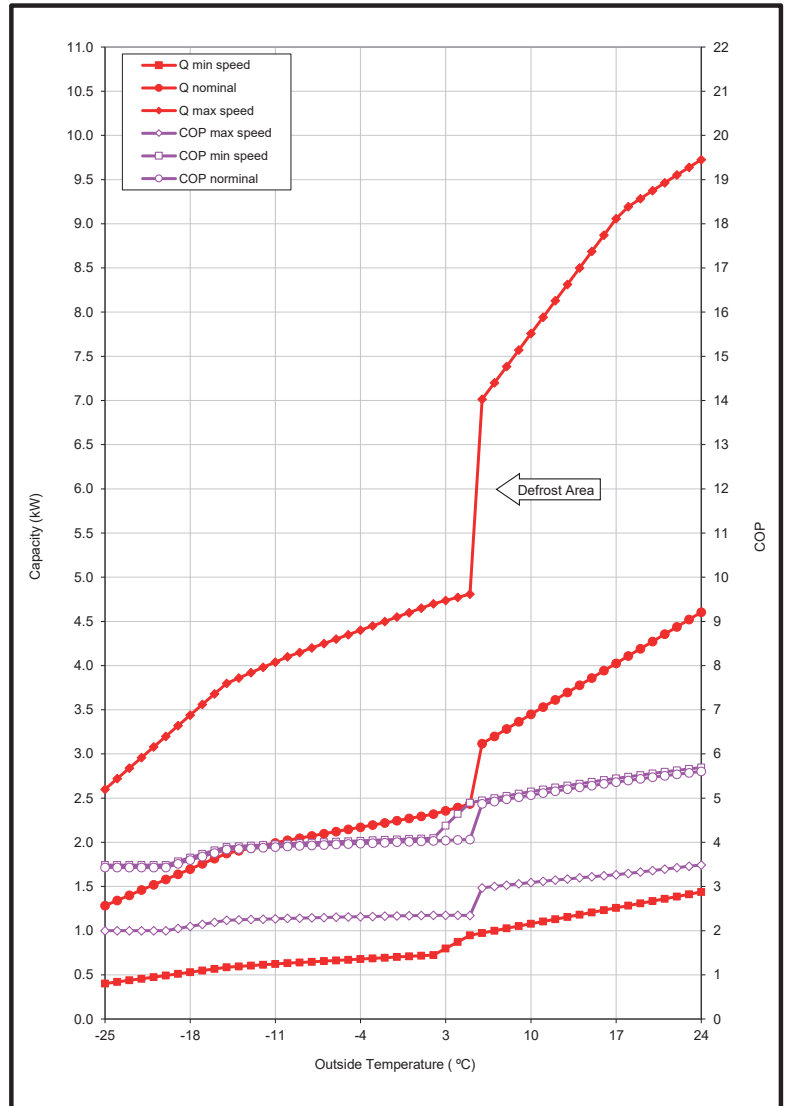


Indoor : RAS-25G3KVSG-ND / RAS-25G3KVSGB-ND

Outdoor : RAS-25J2AVSG-ND1

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 (-)
-25	0.40	0.12	3.48	1.28	0.37	3.43	2.60	1.30	2.00
-24	0.42	0.12	3.48	1.34	0.39	3.43	2.72	1.36	2.00
-23	0.44	0.13	3.48	1.40	0.41	3.43	2.84	1.42	2.00
-22	0.46	0.13	3.48	1.46	0.43	3.43	2.96	1.48	2.00
-21	0.47	0.14	3.48	1.52	0.44	3.43	3.08	1.54	2.00
<b>-20</b>	<b>0.49</b>	<b>0.14</b>	<b>3.48</b>	<b>1.58</b>	<b>0.46</b>	<b>3.43</b>	<b>3.20</b>	<b>1.60</b>	<b>2.00</b>
-19	0.51	0.14	3.57	1.64	0.47	3.52	3.32	1.62	2.05
-18	0.53	0.15	3.65	1.70	0.47	3.60	3.44	1.64	2.10
-17	0.55	0.15	3.74	1.76	0.48	3.68	3.56	1.66	2.14
-16	0.57	0.15	3.82	1.82	0.48	3.76	3.68	1.68	2.19
<b>-15</b>	<b>0.59</b>	<b>0.15</b>	<b>3.89</b>	<b>1.87</b>	<b>0.49</b>	<b>3.83</b>	<b>3.80</b>	<b>1.70</b>	<b>2.24</b>
-14	0.60	0.15	3.91	1.90	0.49	3.85	3.86	1.72	2.24
-13	0.60	0.15	3.92	1.93	0.50	3.86	3.92	1.74	2.25
-12	0.61	0.16	3.94	1.96	0.51	3.88	3.98	1.76	2.26
-11	0.62	0.16	3.95	1.99	0.51	3.89	4.04	1.78	2.27
<b>-10</b>	<b>0.63</b>	<b>0.16</b>	<b>3.97</b>	<b>2.02</b>	<b>0.52</b>	<b>3.91</b>	<b>4.10</b>	<b>1.80</b>	<b>2.28</b>
-9	0.64	0.16	3.98	2.05	0.52	3.92	4.15	1.82	2.28
-8	0.65	0.16	3.99	2.07	0.53	3.93	4.20	1.83	2.29
-7	0.66	0.16	4.00	2.10	0.53	3.94	4.25	1.85	2.30
-6	0.66	0.17	4.01	2.12	0.54	3.95	4.30	1.87	2.30
-5	0.67	0.17	4.02	2.15	0.54	3.96	4.35	1.88	2.31
-4	0.68	0.17	4.03	2.17	0.55	3.97	4.40	1.90	2.32
-3	0.69	0.17	4.04	2.20	0.55	3.98	4.45	1.92	2.32
-2	0.69	0.17	4.06	2.22	0.56	3.99	4.50	1.93	2.33
-1	0.70	0.17	4.07	2.24	0.56	4.00	4.55	1.95	2.33
0	0.71	0.17	4.08	2.27	0.57	4.01	4.60	1.97	2.34
1	0.72	0.18	4.08	2.29	0.57	4.02	4.65	1.98	2.34
<b>2</b>	<b>0.72</b>	<b>0.18</b>	<b>4.09</b>	<b>2.32</b>	<b>0.58</b>	<b>4.03</b>	<b>4.70</b>	<b>2.00</b>	<b>2.35</b>
3	0.80	0.18	4.38	2.36	0.58	4.04	4.74	2.02	2.35
4	0.87	0.19	4.64	2.39	0.59	4.05	4.77	2.03	2.35
5	0.95	0.19	4.89	2.43	0.60	4.07	4.81	2.05	2.35
6	0.97	0.20	4.95	3.12	0.64	4.87	7.01	2.36	2.97
<b>7</b>	<b>1.00</b>	<b>0.20</b>	<b>5.00</b>	<b>3.20</b>	<b>0.65</b>	<b>4.92</b>	<b>7.20</b>	<b>2.40</b>	<b>3.00</b>
8	1.03	0.20	5.05	3.28	0.66	4.97	7.39	2.44	3.03
9	1.05	0.21	5.10	3.37	0.67	5.02	7.57	2.47	3.06
10	1.08	0.21	5.15	3.45	0.68	5.07	7.76	2.51	3.09
11	1.10	0.21	5.19	3.53	0.69	5.11	7.94	2.55	3.12
12	1.13	0.22	5.24	3.61	0.70	5.16	8.13	2.59	3.14
13	1.15	0.22	5.28	3.70	0.71	5.20	8.31	2.62	3.17
14	1.18	0.22	5.33	3.78	0.72	5.24	8.50	2.66	3.20
15	1.21	0.22	5.37	3.86	0.73	5.28	8.69	2.70	3.22
16	1.23	0.23	5.41	3.94	0.74	5.32	8.87	2.73	3.24
17	1.26	0.23	5.45	4.03	0.75	5.36	9.06	2.77	3.27
18	1.28	0.23	5.49	4.11	0.76	5.40	9.19	2.79	3.30
19	1.31	0.24	5.52	4.19	0.77	5.44	9.29	2.79	3.33
20	1.34	0.24	5.56	4.27	0.78	5.47	9.38	2.79	3.36
21	1.36	0.24	5.59	4.36	0.79	5.51	9.46	2.79	3.39
22	1.39	0.25	5.63	4.44	0.80	5.54	9.55	2.79	3.43
23	1.41	0.25	5.66	4.52	0.81	5.57	9.64	2.79	3.46
24	1.44	0.25	5.69	4.60	0.82	5.61	9.73	2.79	3.49



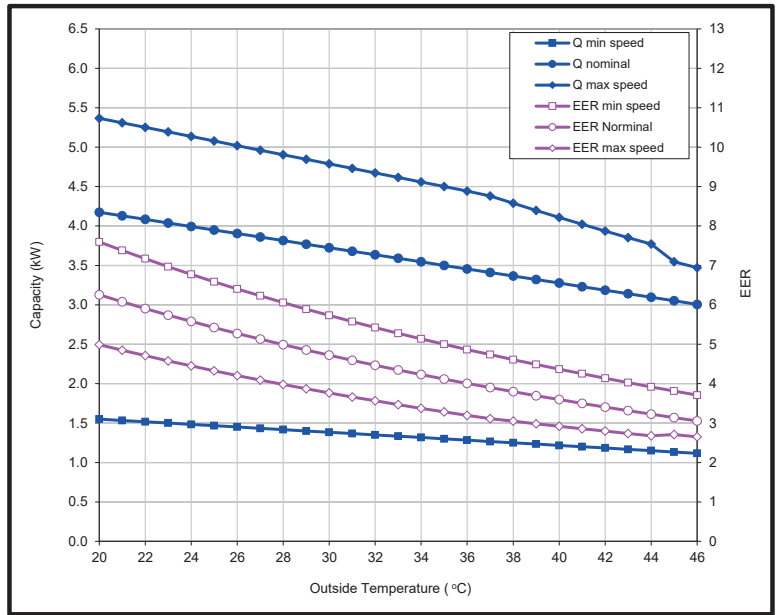
Indoor : RAS-35G3KVSG-ND / RAS-35G3KVSGB-ND  
 Outdoor : RAS-35J2AVSG-ND1

**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	1.30	0.26	5.00
	Rated	3.50	0.85	4.12
	Max	4.50	1.37	3.28
Heating JIS In: 20°C DB/15°C WB Out: 7°C DB/6°C WB	Min	1.00	0.20	5.00
	Rated	4.20	0.92	4.57
	Max	7.70	2.50	3.08
Heating Low Temp. In: 20°C DB/15°C WB Out: 2°C DB/1°C WB	Max	5.50	2.30	2.39
Heating Low Temp. In: 20°C DB/15°C WB Out: -10°C DB	Max	4.50	2.00	2.25
Heating Low Temp. In: 20°C DB/15°C WB Out: -15°C DB	Max	4.00	1.80	2.22
Heating Low Temp. In: 20°C DB/15°C WB Out: -20°C DB	Max	3.30	1.60	2.06
Heating Low Temp. In: 20°C DB/15°C WB Out: -25°C DB	Max	2.70	1.50	1.80

**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	1.55	0.20	7.60	4.17	0.67	6.26	5.37	1.08	4.99
21	1.53	0.21	7.38	4.13	0.68	6.08	5.31	1.10	4.85
22	1.52	0.21	7.17	4.08	0.69	5.90	5.25	1.11	4.71
23	1.50	0.22	6.97	4.04	0.70	5.74	5.19	1.13	4.58
24	1.48	0.22	6.77	3.99	0.72	5.58	5.14	1.15	4.45
25	1.47	0.22	6.59	3.95	0.73	5.42	5.08	1.17	4.33
26	1.45	0.23	6.40	3.90	0.74	5.27	5.02	1.19	4.21
27	1.43	0.23	6.23	3.86	0.75	5.13	4.96	1.21	4.09
28	1.42	0.23	6.06	3.81	0.76	4.99	4.90	1.23	3.98
29	1.40	0.24	5.89	3.77	0.78	4.85	4.85	1.25	3.87
30	1.38	0.24	5.73	3.72	0.79	4.72	4.79	1.27	3.77
31	1.37	0.25	5.58	3.68	0.80	4.59	4.73	1.29	3.66
32	1.35	0.25	5.43	3.63	0.81	4.47	4.67	1.31	3.56
33	1.33	0.25	5.28	3.59	0.83	4.35	4.62	1.33	3.47
34	1.32	0.26	5.14	3.54	0.84	4.23	4.56	1.35	3.38
<b>35</b>	<b>1.30</b>	<b>0.26</b>	<b>5.00</b>	<b>3.50</b>	<b>0.85</b>	<b>4.12</b>	<b>4.50</b>	<b>1.37</b>	<b>3.28</b>
36	1.28	0.26	4.87	3.46	0.86	4.01	4.44	1.39	3.20
37	1.27	0.27	4.74	3.41	0.87	3.90	4.38	1.41	3.11
38	1.25	0.27	4.61	3.37	0.89	3.80	4.29	1.41	3.05
39	1.23	0.27	4.49	3.32	0.90	3.69	4.20	1.41	2.98
40	1.22	0.28	4.37	3.28	0.91	3.60	4.11	1.41	2.92
41	1.20	0.28	4.25	3.23	0.92	3.50	4.02	1.41	2.86
42	1.18	0.29	4.14	3.19	0.94	3.41	3.94	1.41	2.80
43	1.17	0.29	4.03	3.14	0.95	3.31	3.85	1.41	2.74
44	1.15	0.29	3.92	3.10	0.96	3.23	3.77	1.41	2.68
45	1.13	0.30	3.81	3.05	0.97	3.14	3.55	1.31	2.71
46	1.12	0.30	3.71	3.01	0.98	3.05	3.47	1.31	2.65



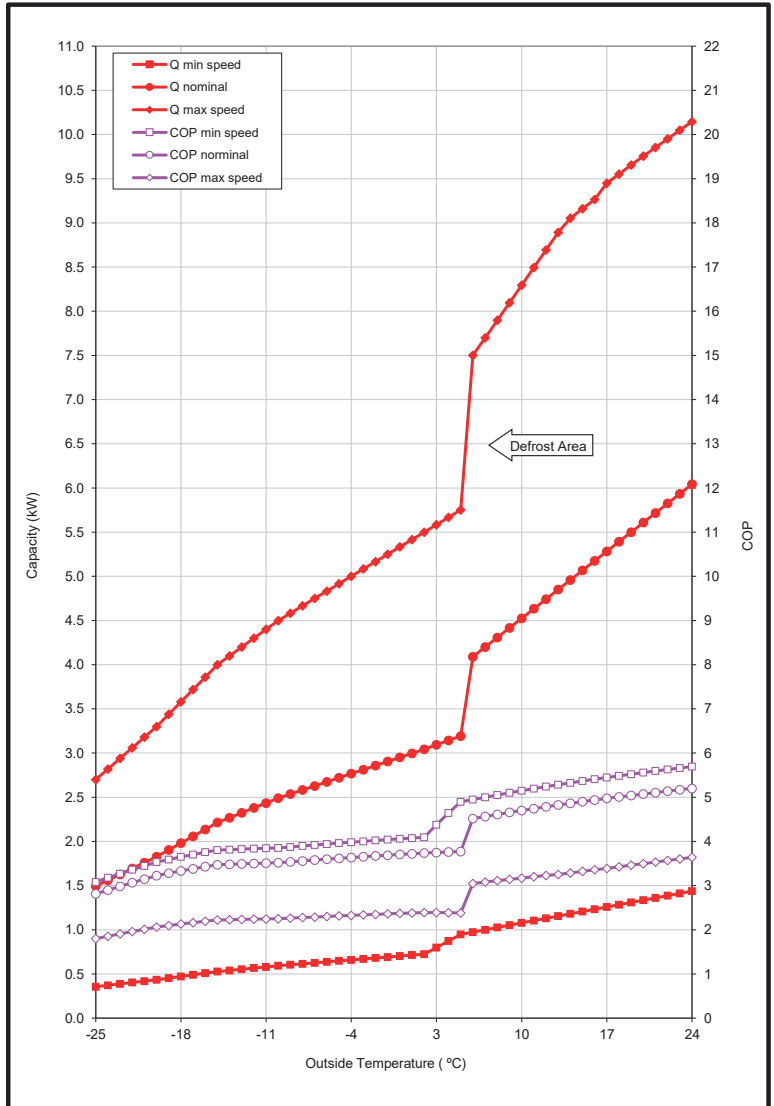


Indoor : RAS-35G3KVSG-ND / RAS-35G3KVSGB-ND

Outdoor : RAS-35J2AVSG-ND1

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 (-)
-25	0.36	0.12	3.08	1.49	0.53	2.81	2.70	1.50	1.80
-24	0.37	0.12	3.18	1.56	0.54	2.90	2.82	1.52	1.86
-23	0.39	0.12	3.27	1.63	0.55	2.98	2.94	1.54	1.91
-22	0.40	0.12	3.36	1.69	0.55	3.07	3.06	1.56	1.96
-21	0.42	0.12	3.45	1.76	0.56	3.15	3.18	1.58	2.01
-20	0.43	0.12	3.53	1.83	0.57	3.22	3.30	1.60	2.06
-19	0.45	0.13	3.59	1.90	0.58	3.28	3.44	1.64	2.10
-18	0.47	0.13	3.65	1.98	0.59	3.33	3.58	1.68	2.13
-17	0.49	0.13	3.70	2.06	0.61	3.38	3.72	1.72	2.16
-16	0.51	0.14	3.75	2.14	0.62	3.43	3.86	1.76	2.19
-15	0.53	0.14	3.80	2.21	0.64	3.47	4.00	1.80	2.22
-14	0.54	0.14	3.82	2.27	0.65	3.48	4.10	1.84	2.23
-13	0.55	0.14	3.82	2.32	0.67	3.49	4.20	1.88	2.23
-12	0.57	0.15	3.83	2.38	0.68	3.50	4.30	1.92	2.24
-11	0.58	0.15	3.84	2.43	0.69	3.51	4.40	1.96	2.24
-10	0.59	0.15	3.85	2.49	0.71	3.52	4.50	2.00	2.25
-9	0.60	0.16	3.88	2.54	0.72	3.54	4.58	2.03	2.26
-8	0.61	0.16	3.90	2.58	0.73	3.56	4.67	2.05	2.28
-7	0.63	0.16	3.92	2.63	0.73	3.58	4.75	2.08	2.29
-6	0.64	0.16	3.94	2.67	0.74	3.60	4.83	2.10	2.30
-5	0.65	0.16	3.96	2.72	0.75	3.62	4.92	2.13	2.31
-4	0.66	0.17	3.98	2.77	0.76	3.64	5.00	2.15	2.33
-3	0.67	0.17	4.00	2.81	0.77	3.65	5.08	2.18	2.34
-2	0.68	0.17	4.02	2.86	0.78	3.67	5.17	2.20	2.35
-1	0.69	0.17	4.04	2.91	0.79	3.69	5.25	2.23	2.36
0	0.70	0.17	4.06	2.95	0.80	3.71	5.33	2.25	2.37
1	0.71	0.18	4.08	3.00	0.81	3.72	5.42	2.28	2.38
2	0.72	0.18	4.09	3.04	0.81	3.74	5.50	2.30	2.39
3	0.80	0.18	4.38	3.09	0.83	3.75	5.58	2.34	2.39
4	0.87	0.19	4.64	3.14	0.84	3.76	5.67	2.38	2.39
5	0.95	0.19	4.89	3.19	0.85	3.77	5.75	2.41	2.38
6	0.97	0.20	4.95	4.09	0.91	4.52	7.50	2.46	3.05
7	1.00	0.20	5.00	4.20	0.92	4.57	7.70	2.50	3.08
8	1.03	0.20	5.05	4.31	0.93	4.61	7.90	2.54	3.11
9	1.05	0.21	5.10	4.42	0.95	4.66	8.10	2.58	3.14
10	1.08	0.21	5.15	4.53	0.96	4.70	8.30	2.62	3.17
11	1.10	0.21	5.19	4.63	0.98	4.74	8.49	2.65	3.20
12	1.13	0.22	5.24	4.74	0.99	4.78	8.69	2.69	3.23
13	1.15	0.22	5.28	4.85	1.01	4.82	8.89	2.73	3.25
14	1.18	0.22	5.33	4.96	1.02	4.86	9.05	2.76	3.29
15	1.21	0.22	5.37	5.07	1.03	4.90	9.16	2.76	3.32
16	1.23	0.23	5.41	5.18	1.05	4.94	9.27	2.76	3.36
17	1.26	0.23	5.45	5.28	1.06	4.97	9.45	2.79	3.39
18	1.28	0.23	5.49	5.39	1.08	5.01	9.55	2.79	3.43
19	1.31	0.24	5.52	5.50	1.09	5.04	9.65	2.79	3.46
20	1.34	0.24	5.56	5.61	1.11	5.08	9.76	2.79	3.50
21	1.36	0.24	5.59	5.72	1.12	5.11	9.85	2.79	3.53
22	1.39	0.25	5.63	5.83	1.13	5.14	9.95	2.79	3.57
23	1.41	0.25	5.66	5.93	1.15	5.17	10.05	2.79	3.60
24	1.44	0.25	5.69	6.04	1.16	5.20	10.15	2.79	3.64



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