

# TOSHIBA

Leading Innovation >>>

E10-391

## *Multi split Outdoor unit 2rooms (UAV)* **ENGINEERING DATABOOK**

---

### **Outdoor Unit**

Model name: \_\_\_\_\_

**RAS-M18UAV-E**

# Contents

---

<b>1. Specifications</b> .....	<b>2</b>
1-1. Outdoor unit .....	2
1-2. Combination .....	3
<b>2. Pipe Capacity Correction</b> .....	<b>4</b>
<b>3. Dimension</b> .....	<b>5</b>
<b>4. Center of Gravity</b> .....	<b>6</b>
<b>5. Wiring</b> .....	<b>7</b>
<b>6. Sound Characteristics (NC Curve)</b> .....	<b>8</b>
<b>7. Part Load Performance</b> .....	<b>9</b>
2-room multisplit: 1-unit operation (07 type) .....	9
2-room multisplit: 1-unit operation (10 type) .....	10
2-room multisplit: 1-unit operation (13 type) .....	11
2-room multisplit: 1-unit operation (16 type) .....	12
2-room multisplit: 2-unit operation (07 type + 07 type) .....	13
2-room multisplit: 2-unit operation (10 type + 07 type) .....	14
2-room multisplit: 2-unit operation (10 type + 10 type) .....	15
2-room multisplit: 2-unit operation (13 type + 07 type) .....	16
2-room multisplit: 2-unit operation (13 type + 10 type) .....	17
2-room multisplit: 2-unit operation (16 type + 07 type) .....	18
2-room multisplit: 2-unit operation (16 type + 10 type) .....	19
2-room multisplit: 2-unit operation (13 type + 13 type) .....	20
2-room multisplit: 2-unit operation (16 type + 13 type) .....	21

# 1. Specifications

## 1-1. Outdoor unit

**Indoor units :** RAS-M07SKV-E, RAS-M10PKVP-E, RAS-M10PKVP-ND, RAS-M10SKV-E, RAS-B10UFV-E, RAS-M10GDV-E, RAS-M10SMUV-E, RAS-M13PKVP-E, RAS-M13PKVP-ND, RAS-M13SKV-E, RAS-B13UFV-E, RAS-M13GDV-E, RAS-M13SMUV-E, RAS-M16PKVP-E, RAS-M16PKVP-ND, RAS-M16SKV-E, RAS-M16GDV-E, RAS-M16SMUV-E  
**Outdoor unit :** RAS-M18UAV-E

Technical specifications Heat Pump

Model	(Outdoor Unit)	RAS-M18UAV-E			
Cooling capacity		5.2			
Cooling capacity range		1.4 - 6.2			
Heating capacity		5.6			
Heating capacity range		0.9 - 8.3			
Power Supply	(V / ph / Hz)	220-240 / 1 / 50, 220 / 1 / 60			
Electrical characteristics		Indoor unit (Operating per unit)			
Unit model		RAS-M07SKV-E	RAS-*10***-E	RAS-*13***-E	RAS-M16***-E
Cooling running current (220 V / 230 V / 240 V)	(A)	2.40 / 2.30 / 2.20	3.25 / 3.10 / 2.98	5.21 / 5.00 / 4.77	7.03 / 6.70 / 6.44
Cooling power consumption	(kW)	0.46	0.63	1.10	1.50
Cooling power factor	(%)	87	88	96	97
EER		4.35	4.29	3.36	3.00
Heating running current (220 V / 230 V / 240 V)	(A)	3.65 / 3.50 / 3.34	5.62 / 5.40 / 5.15	8.43 / 8.10 / 7.73	8.90 / 8.50 / 8.16
Heating power consumption	(kW)	0.73	1.20	1.80	1.90
Heating power factor	(%)	91	97	96	97
COP		3.70	3.33	2.78	2.89
		Indoor unit (Operating when Outdoor unit 16+13)			
Cooling running current (220 V / 230 V / 240 V)	(A)	6.75 / 6.45 / 6.19			
Cooling power consumption	(kW)	1.44			
Cooling power factor	(%)	97			
EER		3.61			
Heating running current (220 V / 230 V / 240 V)	(A)	5.58 / 5.35 / 5.11			
Heating power consumption	(kW)	1.19			
Heating power factor	(%)	97			
COP		4.71			
Maximum current		14.4			
Outdoor unit					
Dimension (H x W x D)	(mm)	550 x 780 x 290			
Net weight	(kg)	41			
Heat exchanger		finned tube			
Sound pressure level (Cooling ; H)	(dB(A))	49			
Sound pressure level (Heating ; H)	(dB(A))	51			
Sound power level (Cooling ; H)	(dB(A))	64			
Sound power level (Heating ; H)	(dB(A))	66			
Piping connection					
A unit liquid size / Gas size	(mm)	6.35 / 9.52			
B unit liquid size / Gas size	(mm)	6.35 / 12.7			
Max. Piping Length (per unit)	(m)	20			
Min. Piping Length (per unit)	(m)	2			
Max. Piping Length (total)	(m)	30			
Max. charge less Length	(m)	20			
Max. Piping Height Difference	(m)	10			
Usable temperature range					
Outdoor (cooling / heating)		5 to 43 deg C / -15 to 24 deg C			

This specification refer to JIS C9612

**Measured condition:**

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

## 1-2. Combination

CDU:RAS-M18UAV-E 230 V

<Cooling / 230 V>

Power Voltage (V)	Operating Status	Combination (kBTU)				Unit capacity (kW)				Cooling capacity (kW)	Power input (W)	Running Current (A)	Rated EER	CDU Sound Pressure Level (dB)	CDU Sound Power Level (dB)
		A	B	C	D	A	B	C	D						
230	1 unit Operation	07	-	-	-	2.0	-	-	-	2.0 (1.1 - 3.0)	460 (220 - 800 )	2.30 (1.37 - 3.66)	4.35	45	60
		10	-	-	-	2.7	-	-	-	2.7 (1.1 - 3.2)	630 (220-800)	3.10 (1.37 - 3.66)	4.29	46	61
		13	-	-	-	3.7	-	-	-	3.7 (1.1 - 3.7)	1100 (220 - 1400)	5.00 (1.37 - 6.21)	3.36	49	64
		16	-	-	-	4.5	-	-	-	4.5 (1.1 - 4.5)	1500 (220 - 1700)	6.70 (1.37 - 7.23)	3.00	49	64
	2 units Operation	07	07	-	-	2.00	2.00	-	-	4.0 (1.4 - 4.8)	960 (260 - 2150)	4.50 (1.61 - 9.54)	4.17	48	63
		10	07	-	-	2.65	1.95	-	-	4.6 (1.4 - 6.0)	1200 (260 - 2150)	5.61 (1.61 - 9.54)	3.83	49	64
		10	10	-	-	2.55	2.55	-	-	5.1 (1.4 - 6.1)	1410 (260 - 2150)	6.45 (1.61 - 9.54)	3.62	49	64
		13	07	-	-	3.38	1.82	-	-	5.2 (1.4 - 6.1)	1440 (260 - 2170)	6.45 (1.61 - 9.63)	3.61	49	64
		13	10	-	-	3.00	2.20	-	-	5.2 (1.4 - 6.2)	1440 (260 - 2170)	6.45 (1.61 - 9.63)	3.61	49	64
		16	07	-	-	3.60	1.60	-	-	5.2 (1.4 - 6.2)	1440 (260 - 2170)	6.45 (1.61 - 9.63)	3.61	49	64
		16	10	-	-	3.25	1.95	-	-	5.2 (1.4 - 6.2)	1440 (260 - 2170)	6.45 (1.61 - 9.63)	3.61	49	64
		13	13	-	-	2.60	2.60	-	-	5.2 (1.4 - 6.2)	1440 (260 - 2170)	6.45 (1.61 - 9.63)	3.61	49	64
		16	13	-	-	2.85	2.35	-	-	5.2 (1.4 - 6.2)	1440 (260 - 2170)	6.45 (1.61 - 9.63)	3.61	49	64

<Heating / 230 V>

Power Voltage (V)	Operating Status	Combination (kBTU)				Unit capacity (kW)				Heating capacity (kW)	Power input (W)	Running Current (A)	Rated EER	CDU Sound Pressure Level (dB)	CDU Sound Power Level (dB)
		A	B	C	D	A	B	C	D						
230	1 unit Operation	07	-	-	-	2.7	-	-	-	2.7 (0.7 - 4.8)	730 (170 - 1700)	3.50 (1.06 - 7.54)	3.70	48	63
		10	-	-	-	4.0	-	-	-	4.0 (0.7 - 5.2)	1200 (170 - 1700)	5.40 (1.06 - 7.54)	3.33	51	66
		13	-	-	-	5.0	-	-	-	5.0 (0.7 - 6.5)	1800 (170 - 2530)	8.10 (1.06 - 11.22)	2.78	51	66
		16	-	-	-	5.5	-	-	-	5.5 (0.7 - 6.9)	1900 (170 - 2530)	8.50 (1.06 - 11.22)	2.89	51	66
	2 units Operation	07	07	-	-	2.70	2.70	-	-	5.4 (0.9 - 8.0)	1190 (200 - 2480)	5.35 (1.24 - 11.12)	4.54	51	66
		10	07	-	-	3.79	1.61	-	-	5.4 (0.9 - 8.2)	1190 (200 - 2530)	5.35 (1.24 - 11.22)	4.54	51	66
		10	10	-	-	2.70	2.70	-	-	5.4 (0.9 - 8.2)	1190 (200 - 2530)	5.35 (1.24 - 11.22)	4.54	51	66
		13	07	-	-	3.64	1.96	-	-	5.6 (0.9 - 8.2)	1190 (200 - 2530)	5.35 (1.24 - 11.22)	4.71	51	66
		13	10	-	-	3.11	2.49	-	-	5.6 (0.9 - 8.3)	1190 (200 - 2530)	5.35 (1.24 - 11.22)	4.71	51	66
		16	07	-	-	3.76	1.84	-	-	5.6 (0.9 - 8.3)	1190 (200 - 2530)	5.35 (1.24 - 11.22)	4.71	51	66
		16	10	-	-	3.24	2.36	-	-	5.6 (0.9 - 8.3)	1190 (200 - 2530)	5.35 (1.24 - 11.22)	4.71	51	66
		13	13	-	-	2.80	2.80	-	-	5.6 (0.9 - 8.3)	1190 (200 - 2530)	5.35 (1.24 - 11.22)	4.71	51	66
		16	13	-	-	2.93	2.67	-	-	5.6 (0.9 - 8.3)	1190 (200 - 2530)	5.35 (1.24 - 11.22)	4.71	51	66

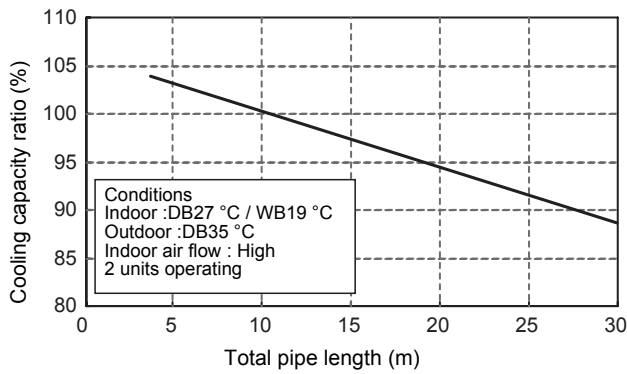
## 2. Pipe Capacity Correction

### ■ Connecting pipe length and lift difference between indoor units vs. capacity correction value

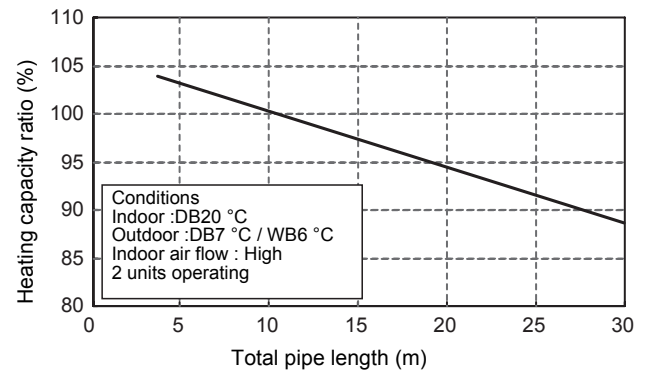
RAS-M18UAV-E

2 rooms

<Cooling>

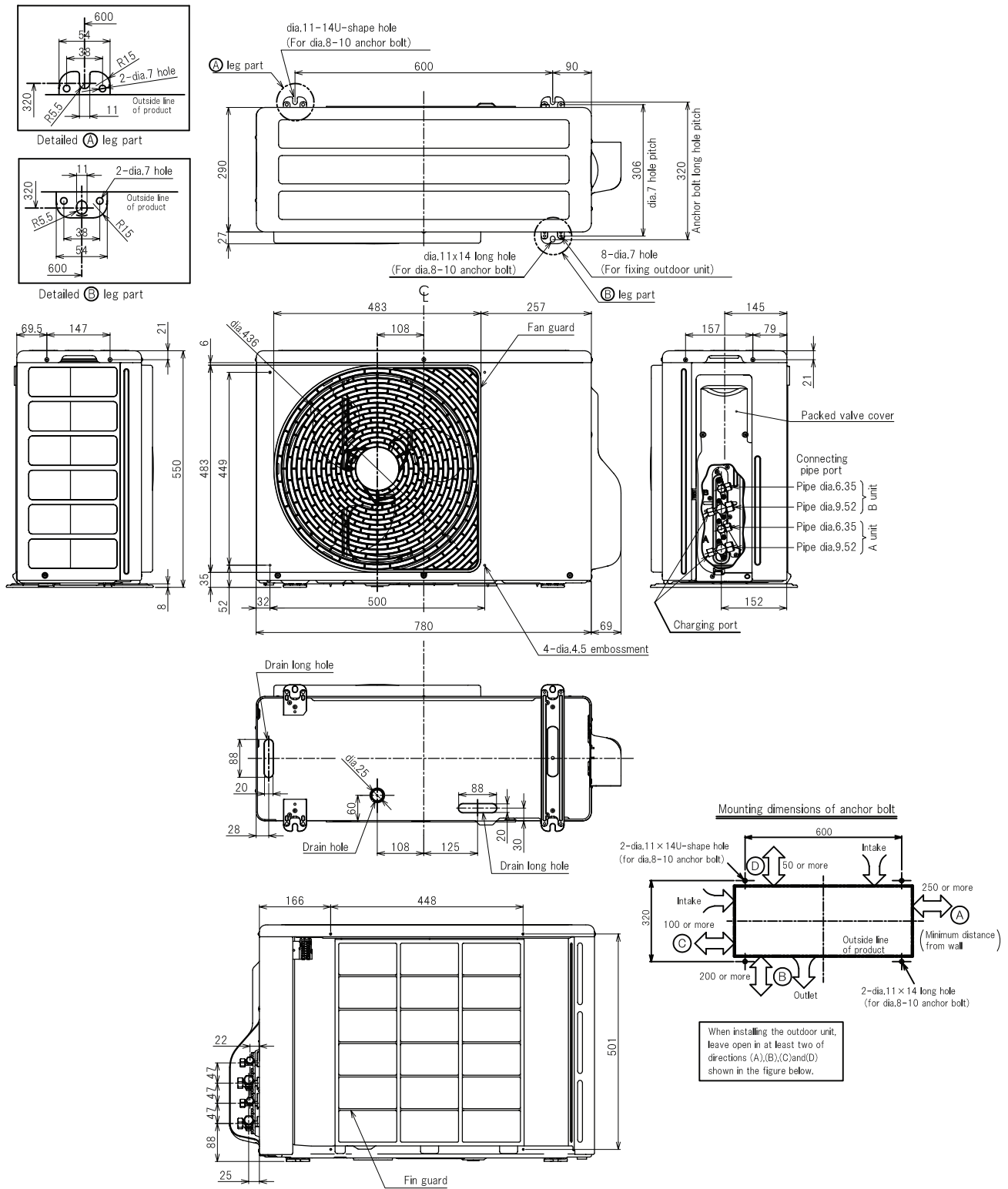


<Heating>



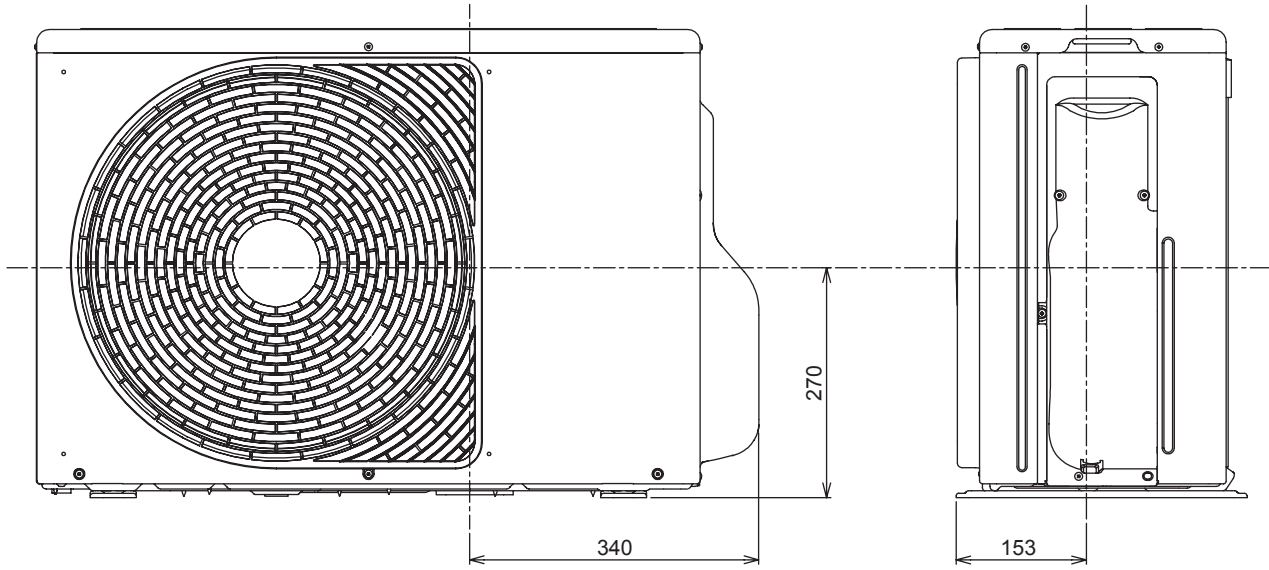
# 3. Dimension

Units: mm

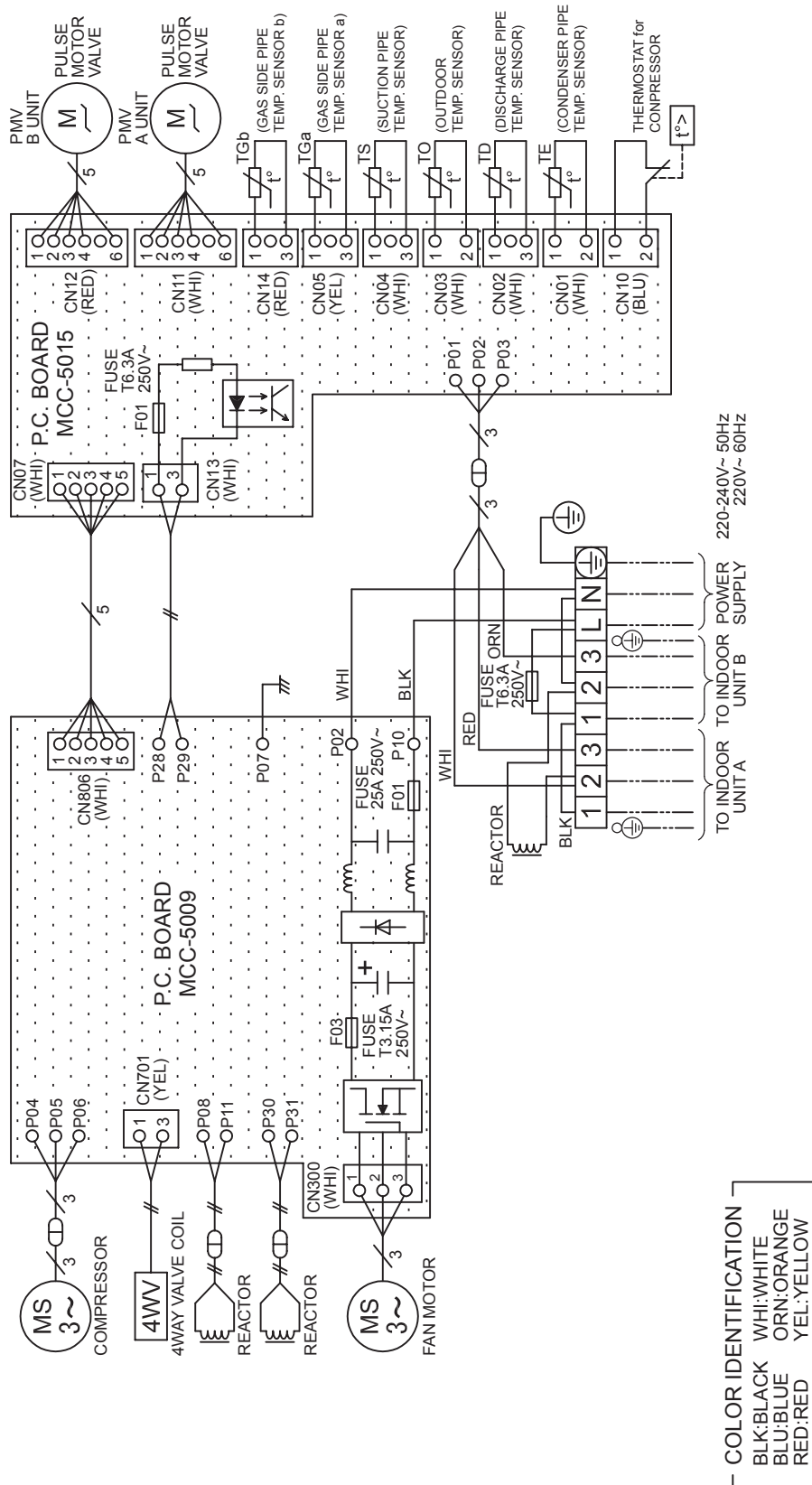


# 4. Center of Gravity

Units: mm



# 5. Wiring



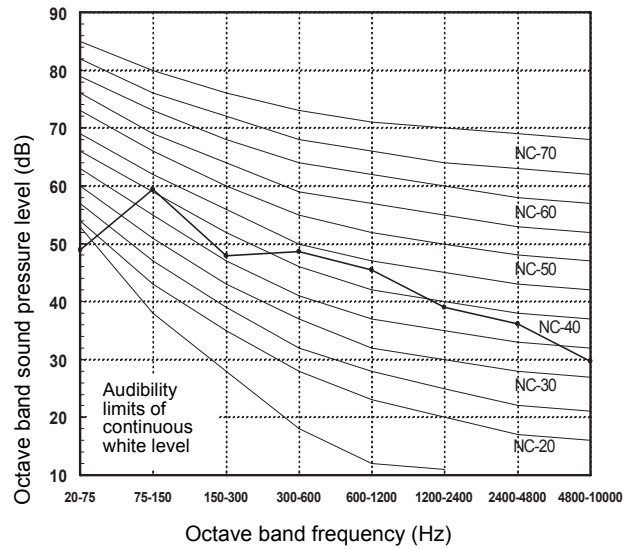
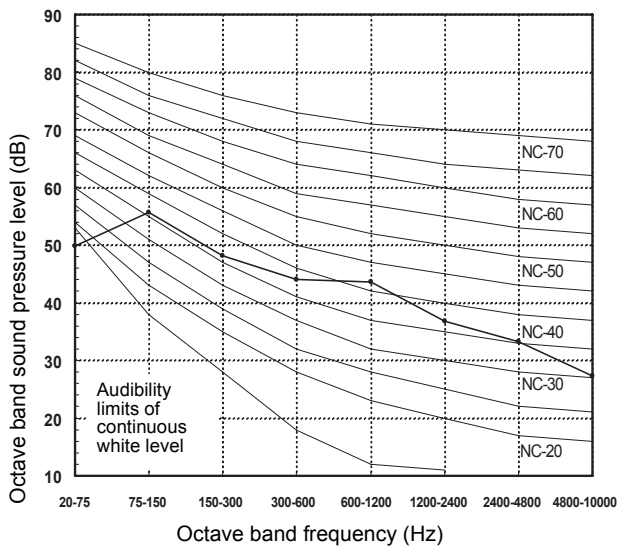


# 6. Sound Characteristics (NC Curve)

Model name	Measuring location	Sound pressure level (dB)	
		Cooling	Heating
RAS-M18UAV-E	Unit frontside 1 m Upper from floor 1 m (JIS Standard)  	40	40

RAS-M18UAV-E (Cooling)

RAS-M18UAV-E (Heating)



## 7. Part Load Performance

### 2-room multisplit: 1-unit operation (07 type)

Indoor unit : RAS-M07SKV-E

Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1100	220	700	170
Rating	2000	460	2700	730
Maximum	3000	800	4800	1700

### Cooling

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	1790	1620	1440	1260	1080	990	990	990	990	990
	W	510	460	390	330	280	240	240	240	240	240
40	Q	1870	1680	1500	1310	1120	1030	1030	1030	1030	1030
	W	490	440	380	320	270	240	240	240	240	240
35	Q	2000	1800	1600	1400	1200	1100	1100	1100	1100	1100
	W	460	410	350	300	250	220	220	220	220	220
30	Q	2130	1920	1700	1490	1280	1170	1170	1170	1170	1170
	W	430	380	320	280	230	200	200	200	200	200
25	Q	2260	2030	1810	1580	1350	1240	1240	1240	1240	1240
	W	390	350	300	260	210	190	190	190	190	190
20	Q	2390	2150	1910	1670	1430	1310	1310	1310	1310	1310
	W	360	320	270	240	200	170	170	170	170	170

### Heating

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	3390	3050	2720	2380	2040	1700	1360	1020	880	880
	W	800	720	640	550	470	390	310	220	190	190
15	Q	3130	2810	2500	2190	1880	1560	1250	940	810	810
	W	780	690	620	530	460	370	300	210	180	180
10	Q	2860	2570	2290	2000	1720	1430	1140	860	740	740
	W	750	670	590	510	440	360	290	200	170	170
7	Q	2700	2430	2160	1890	1620	1350	1080	810	700	700
	W	730	650	580	500	430	350	280	200	170	170
5.5	Q	2300	2070	1840	1610	1380	1150	920	690	600	600
	W	680	610	540	470	400	330	260	190	160	160
5	Q	2160	1950	1730	1510	1300	1080	870	650	560	560
	W	680	610	540	470	400	330	260	190	160	160
2	Q	1960	1760	1570	1370	1180	980	780	590	510	510
	W	650	580	510	450	380	310	250	180	150	150
0	Q	1820	1640	1460	1280	1090	910	730	550	480	480
	W	630	560	500	430	370	310	240	180	150	150
-5	Q	1480	1340	1190	1040	890	740	590	450	390	390
	W	580	520	460	400	340	280	220	160	140	140
-7	Q	1350	1210	1080	940	810	670	540	400	350	350
	W	560	510	450	390	330	270	220	160	130	130
-10	Q	1420	1280	1140	1000	850	710	570	430	370	370
	W	590	520	470	400	350	280	230	160	140	140

**2-room multisplit: 1-unit operation (10 type)**

Indoor units : RAS-M10SKV-E, RAS-M10PKVP-E, RAS-M10PKVP-ND, RAS-M10SMUV-E,  
RAS-M10GDV-E, RAS-M10UFV-E

Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1100	220	700	170
Rating	2700	630	4000	1200
Maximum	3200	800	5200	1700

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	2420	2180	1940	1700	1450	1210	990	990	990	990
	W	700	620	540	470	390	310	240	240	240	240
40	Q	2530	2270	2020	1770	1520	1260	1030	1030	1030	1030
	W	680	600	530	450	380	300	240	240	240	240
35	Q	2700	2430	2160	1890	1620	1350	1100	1100	1100	1100
	W	630	560	490	420	350	280	220	220	220	220
30	Q	2870	2590	2300	2010	1720	1440	1170	1170	1170	1170
	W	580	520	450	390	320	260	200	200	200	200
25	Q	3050	2740	2440	2130	1830	1520	1240	1240	1240	1240
	W	540	480	420	360	300	240	190	190	190	190
20	Q	3220	2900	2580	2250	1930	1610	1310	1310	1310	1310
	W	490	440	380	330	270	220	170	170	170	170

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	5030	4530	4020	3520	3020	2510	2010	1510	1010	880
	W	1320	1190	1050	910	770	640	500	360	220	190
15	Q	4630	4170	3710	3240	2780	2320	1850	1390	930	810
	W	1280	1150	1010	880	740	620	480	350	210	180
10	Q	4240	3810	3390	2970	2540	2120	1690	1270	850	740
	W	1230	1110	970	850	720	590	460	340	200	170
7	Q	4000	3600	3200	2800	2400	2000	1600	1200	800	700
	W	1200	1080	950	830	700	580	450	330	200	170
5.5	Q	3410	3070	2730	2390	2050	1710	1370	1020	680	600
	W	1120	1010	890	770	650	540	420	310	190	160
5	Q	3210	2890	2570	2250	1930	1610	1290	960	640	560
	W	1110	1000	880	760	650	540	420	310	190	160
2	Q	2910	2620	2330	2040	1750	1460	1170	870	580	510
	W	1070	960	850	730	620	510	400	300	180	150
0	Q	2700	2430	2170	1900	1630	1360	1090	810	540	480
	W	1040	930	820	710	600	500	390	290	180	150
-5	Q	2200	1980	1760	1540	1320	1100	880	660	440	390
	W	960	870	760	660	560	460	360	270	160	140
-7	Q	2000	1800	1600	1400	1200	1000	800	600	400	350
	W	930	840	740	640	540	450	350	260	160	130
-10	Q	2110	1900	1690	1480	1260	1050	840	630	420	370
	W	970	870	770	670	560	470	360	270	160	140
-15	Q	1710	1540	1370	1200	1030	860	680	510	340	300
	W	920	830	730	640	540	440	340	250	150	130

**2-room multisplit: 1-unit operation (13 type)**

Indoor units: RAS-M13SKV-E, RAS-M13PKVP-E, RAS-M13PKVP-ND, RAS-M13SMUV-E,  
RAS-M13GDV-E, RAS-M13UFV-E

Outdoor unit: RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1100	220	700	170
Rating	3700	1100	5000	1800
Maximum	4200	1400	6500	2530

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	3320	2990	2660	2320	1990	1660	1330	1000	990	990
	W	1220	1080	940	800	670	520	390	240	240	240
40	Q	3460	3120	2770	2420	2080	1730	1390	1040	1030	1030
	W	1180	1040	910	770	640	500	380	240	240	240
35	Q	3700	3330	2960	2590	2220	1850	1480	1110	1100	1100
	W	1100	970	850	720	600	470	350	220	220	220
30	Q	3940	3540	3150	2760	2360	1970	1570	1180	1170	1170
	W	1020	900	790	670	560	440	320	200	200	200
25	Q	4170	3760	3340	2920	2500	2090	1670	1250	1240	1240
	W	940	830	730	620	510	400	300	190	190	190
20	Q	4410	3970	3530	3090	2650	2210	1760	1320	1310	1310
	W	860	760	670	570	470	370	270	170	170	170

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	6280	5660	5030	4400	3770	3140	2510	1890	1260	880
	W	1980	1770	1560	1360	1150	940	730	520	310	190
15	Q	5790	5210	4630	4050	3470	2900	2320	1740	1160	810
	W	1910	1710	1510	1310	1110	900	700	500	300	180
10	Q	5300	4770	4240	3710	3180	2650	2120	1590	1060	740
	W	1840	1650	1450	1260	1060	870	680	480	290	170
7	Q	5000	4500	4000	3500	3000	2500	2000	1500	1000	700
	W	1800	1610	1420	1230	1040	850	660	470	280	170
5.5	Q	4270	3840	3410	2990	2560	2130	1710	1280	850	600
	W	1680	1500	1320	1150	970	790	620	440	260	160
5	Q	4020	3610	3210	2810	2410	2000	1610	1200	800	560
	W	1670	1490	1310	1140	960	780	620	440	260	160
2	Q	3640	3270	2910	2550	2180	1820	1460	1090	720	510
	W	1600	1430	1260	1090	920	750	590	420	250	150
0	Q	3390	3050	2700	2370	2030	1690	1360	1020	670	480
	W	1550	1390	1220	1060	900	730	570	410	240	150
-5	Q	2760	2480	2200	1930	1650	1370	1100	830	550	390
	W	1440	1280	1130	980	830	680	530	380	220	140
-7	Q	2500	2250	2000	1750	1500	1250	1000	750	500	350
	W	1390	1240	1090	950	800	660	510	360	220	130
-10	Q	2630	2370	2110	1840	1580	1320	1050	790	530	370
	W	1450	1300	1140	990	840	680	530	380	230	140
-15	Q	2140	1930	1710	1500	1280	1070	860	640	430	300
	W	1380	1230	1090	940	800	650	510	360	210	130

**2-room multisplit: 1-unit operation (16 type)**

Indoor units : RAS-M16SKV-E, RAS-M16PKVP-E, RAS-M16PKVP-ND, RAS-M16SMUV-E,  
RAS-M16GDV-E

Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1100	220	700	170
Rating	4500	1500	5500	1900
Maximum	4900	1700	6900	2530

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	4040	3630	3230	2830	2420	2020	1620	1210	990	990
	W	1670	1480	1290	1100	910	720	530	340	240	240
40	Q	4210	3790	3370	2950	2530	2110	1680	1260	1030	1030
	W	1610	1430	1240	1060	880	700	510	330	240	240
35	Q	4500	4050	3600	3150	2700	2250	1800	1350	1100	1100
	W	1500	1330	1160	990	820	650	480	310	220	220
30	Q	4790	4310	3830	3350	2870	2390	1920	1440	1170	1170
	W	1390	1230	1080	920	760	600	450	290	200	200
25	Q	5080	4570	4060	3550	3050	2540	2030	1520	1240	1240
	W	1290	1140	990	850	700	560	410	270	190	190
20	Q	5370	4830	4290	3760	3220	2680	2150	1610	1310	1310
	W	1180	1040	910	780	640	510	380	240	170	170

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	6910	6220	5530	4840	4150	3460	2770	2070	1380	880
	W	2090	1870	1650	1440	1220	1000	780	560	340	190
15	Q	6370	5730	5100	4460	3820	3180	2550	1910	1270	810
	W	2020	1810	1590	1390	1180	970	750	540	330	180
10	Q	5830	5240	4660	4080	3500	2910	2330	1750	1170	740
	W	1940	1740	1540	1340	1140	930	730	520	320	170
7	Q	5500	4950	4400	3850	3300	2750	2200	1650	1100	700
	W	1900	1700	1500	1310	1110	910	710	510	310	170
5.5	Q	4690	4220	3750	3290	2820	2350	1880	1410	940	600
	W	1770	1580	1400	1220	1030	850	660	480	290	160
5	Q	4410	3970	3530	3100	2650	2210	1770	1330	880	560
	W	1760	1570	1390	1210	1020	840	660	480	290	160
2	Q	4000	3600	3200	2800	2400	2000	1600	1200	800	510
	W	1690	1500	1330	1160	980	810	630	460	280	150
0	Q	3720	3350	2970	2610	2240	1860	1490	1120	750	480
	W	1640	1460	1290	1130	950	790	610	440	270	150
-5	Q	3030	2720	2420	2120	1820	1520	1210	910	610	390
	W	1520	1350	1200	1040	880	730	570	410	250	140
-7	Q	2750	2470	2200	1930	1650	1380	1100	830	550	350
	W	1470	1310	1160	1010	850	700	550	400	240	130
-10	Q	2900	2610	2320	2030	1740	1450	1160	870	580	370
	W	1530	1370	1210	1060	890	730	570	410	250	140
-15	Q	2350	2120	1880	1650	1410	1180	940	710	470	300
	W	1460	1300	1150	1000	850	700	540	390	240	130

**2-room multisplit: 2-unit operation (07 type + 07 type)**

Indoor unit : RAS-M07SKV-E

Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1400	260	900	200
Rating	4000	960	5400	1190
Maximum	4800	2150	8000	2480

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	3590	3230	2870	2510	2150	1790	1440	1260	1260	1260
	W	1070	940	820	710	590	470	340	290	290	290
40	Q	3740	3370	2990	2620	2250	1870	1500	1310	1310	1310
	W	1030	910	790	690	570	450	330	280	280	280
35	Q	4000	3600	3200	2800	2400	2000	1600	1400	1400	1400
	W	960	850	740	640	530	420	310	260	260	260
30	Q	4260	3830	3410	2980	2550	2130	1700	1490	1490	1490
	W	890	790	690	590	490	390	290	240	240	240
25	Q	4510	4060	3610	3160	2710	2260	1810	1580	1580	1580
	W	820	730	630	550	450	360	270	220	220	220
20	Q	4770	4290	3820	3340	2860	2390	1910	1670	1670	1670
	W	750	670	580	500	420	330	240	200	200	200

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	6790	6110	5430	4750	4070	3390	2720	2040	1360	1130
	W	1310	1180	1050	910	780	660	530	400	260	220
15	Q	6250	5630	5000	4380	3750	3130	2500	1880	1250	1040
	W	1260	1140	1010	880	750	640	510	380	260	210
10	Q	5720	5150	4580	4000	3430	2860	2290	1720	1140	950
	W	1220	1100	970	850	730	610	490	370	250	200
7	Q	5400	4860	4320	3780	3240	2700	2160	1620	1080	900
	W	1190	1070	950	830	710	600	480	360	240	200
5.5	Q	4610	4150	3690	3230	2760	2300	1840	1380	920	770
	W	1110	1000	890	770	660	560	450	340	220	190
5	Q	4340	3900	3470	3040	2600	2160	1730	1300	870	720
	W	1100	990	880	760	660	560	450	340	220	190
2	Q	3930	3540	3140	2750	2350	1960	1570	1180	780	660
	W	1060	950	850	730	630	530	430	320	210	180
0	Q	3660	3290	2930	2560	2190	1820	1460	1090	730	610
	W	1030	920	820	710	610	520	420	310	200	180
-5	Q	2970	2680	2380	2080	1780	1480	1190	890	590	500
	W	950	860	760	660	570	480	390	290	190	160
-7	Q	2700	2430	2160	1890	1620	1350	1080	810	540	450
	W	920	830	740	640	550	460	370	280	180	160
-10	Q	2850	2560	2280	1990	1710	1420	1140	850	570	470
	W	960	860	770	670	570	480	390	290	190	160
-15	Q	2310	2080	1850	1620	1390	1160	920	690	460	390
	W	910	820	730	640	540	460	370	280	180	150

**2-room multisplit: 2-unit operation (10 type + 07 type)**

Indoor units : RAS-M10SKV-E, RAS-M10PKVP-E, RAS-M10PKVP-ND, RAS-M10SMUV-E,  
RAS-M10GDV-E, RAS-M10UFV-E  
RAS-M07SKV-E  
Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1400	260	900	200
Rating	4600	1200	5400	1190
Maximum	6000	2150	8200	2530

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	4130	3710	3300	2890	2480	2060	1650	1260	1260	1260
	W	1330	1180	1030	880	730	580	430	290	290	290
40	Q	4300	3870	3440	3010	2580	2150	1720	1310	1310	1310
	W	1290	1140	1000	850	710	560	420	280	280	280
35	Q	4600	4140	3680	3220	2760	2300	1840	1400	1400	1400
	W	1200	1060	930	790	660	520	390	260	260	260
30	Q	4900	4410	3920	3430	2940	2450	1960	1490	1490	1490
	W	1110	980	860	730	610	480	360	240	240	240
25	Q	5190	4670	4150	3630	3110	2600	2080	1580	1580	1580
	W	1030	910	800	680	570	450	330	220	220	220
20	Q	5490	4940	4390	3840	3290	2740	2190	1670	1670	1670
	W	940	830	730	620	520	410	310	200	200	200

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	6790	6110	5430	4750	4070	3390	2720	2040	1360	1130
	W	1310	1180	1050	910	780	660	530	400	260	220
15	Q	6250	5630	5000	4380	3750	3130	2500	1880	1250	1040
	W	1260	1140	1010	880	750	640	510	380	260	210
10	Q	5720	5150	4580	4000	3430	2860	2290	1720	1140	950
	W	1220	1100	970	850	730	610	490	370	250	200
7	Q	5400	4860	4320	3780	3240	2700	2160	1620	1080	900
	W	1190	1070	950	830	710	600	480	360	240	200
5.5	Q	4610	4150	3690	3230	2760	2300	1840	1380	920	770
	W	1110	1000	890	770	660	560	450	340	220	190
5	Q	4340	3900	3470	3040	2600	2160	1730	1300	870	720
	W	1100	990	880	760	660	560	450	340	220	190
2	Q	3930	3540	3140	2750	2350	1960	1570	1180	780	660
	W	1060	950	850	730	630	530	430	320	210	180
0	Q	3660	3290	2930	2560	2190	1820	1460	1090	730	610
	W	1030	920	820	710	610	520	420	310	200	180
-5	Q	2970	2680	2380	2080	1780	1480	1190	890	590	500
	W	950	860	760	660	570	480	390	290	190	160
-7	Q	2700	2430	2160	1890	1620	1350	1080	810	540	450
	W	920	830	740	640	550	460	370	280	180	160
-10	Q	2850	2560	2280	1990	1710	1420	1140	850	570	470
	W	960	860	770	670	570	480	390	290	190	160
-15	Q	2310	2080	1850	1620	1390	1160	920	690	460	390
	W	910	820	730	640	540	460	370	280	180	150

**2-room multisplit: 2-unit operation (10 type + 10 type)**

Indoor units : RAS-M10SKV-E, RAS-M10PKVP-E, RAS-M10PKVP-ND, RAS-M10SMUV-E,  
RAS-M10GDV-E, RAS-M10UFV-E

Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1400	260	900	200
Rating	5100	1410	5400	1190
Maximum	6100	2150	8200	2530

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	4580	4120	3660	3200	2750	2290	1830	1370	1260	1260
	W	1570	1390	1210	1030	870	690	510	330	290	290
40	Q	4770	4300	3820	3340	2860	2390	1910	1430	1310	1310
	W	1510	1340	1170	1000	840	660	490	320	280	280
35	Q	5100	4590	4080	3570	3060	2550	2040	1530	1400	1400
	W	1410	1250	1090	930	780	620	460	300	260	260
30	Q	5430	4880	4340	3800	3260	2710	2170	1630	1490	1490
	W	1310	1160	1010	860	720	580	430	280	240	240
25	Q	5750	5180	4600	4030	3450	2880	2300	1730	1580	1580
	W	1210	1070	930	800	670	530	390	260	220	220
20	Q	6080	5470	4870	4260	3650	3040	2430	1820	1670	1670
	W	1110	980	860	730	610	490	360	240	200	200

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	6790	6110	5430	4750	4070	3390	2720	2040	1360	1130
	W	1310	1180	1050	910	780	660	530	400	260	220
15	Q	6250	5630	5000	4380	3750	3130	2500	1880	1250	1040
	W	1260	1140	1010	880	750	640	510	380	260	210
10	Q	5720	5150	4580	4000	3430	2860	2290	1720	1140	950
	W	1220	1100	970	850	730	610	490	370	250	200
7	Q	5400	4860	4320	3780	3240	2700	2160	1620	1080	900
	W	1190	1070	950	830	710	600	480	360	240	200
5.5	Q	4610	4150	3690	3230	2760	2300	1840	1380	920	770
	W	1110	1000	890	770	660	560	450	340	220	190
5	Q	4340	3900	3470	3040	2600	2160	1730	1300	870	720
	W	1100	990	880	760	660	560	450	340	220	190
2	Q	3930	3540	3140	2750	2350	1960	1570	1180	780	660
	W	1060	950	850	730	630	530	430	320	210	180
0	Q	3660	3290	2930	2560	2190	1820	1460	1090	730	610
	W	1030	920	820	710	610	520	420	310	200	180
-5	Q	2970	2680	2380	2080	1780	1480	1190	890	590	500
	W	950	860	760	660	570	480	390	290	190	160
-7	Q	2700	2430	2160	1890	1620	1350	1080	810	540	450
	W	920	830	740	640	550	460	370	280	180	160
-10	Q	2850	2560	2280	1990	1710	1420	1140	850	570	470
	W	960	860	770	670	570	480	390	290	190	160
-15	Q	2310	2080	1850	1620	1390	1160	920	690	460	390
	W	910	820	730	640	540	460	370	280	180	150



**2-room multisplit: 2-unit operation (13 type + 07 type)**

Indoor units : RAS-M13SKV-E, RAS-M13PKVP-E, RAS-M13PKVP-ND, RAS-M13SMUV-E,  
RAS-M13GDV-E, RAS-M13UFV-E  
RAS-M07SKV-E  
Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1400	260	900	200
Rating	5200	1440	5600	1190
Maximum	6100	2170	8200	2530

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	4670	4200	3730	3270	2800	2330	1870	1400	1260	1260
	W	1600	1420	1240	1070	880	700	520	340	290	290
40	Q	4870	4380	3890	3410	2920	2430	1950	1460	1310	1310
	W	1540	1370	1200	1030	850	680	500	330	280	280
35	Q	5200	4680	4160	3640	3120	2600	2080	1560	1400	1400
	W	1440	1280	1120	960	790	630	470	310	260	260
30	Q	5530	4980	4430	3870	3320	2770	2210	1660	1490	1490
	W	1340	1190	1040	890	730	580	440	290	240	240
25	Q	5870	5280	4690	4110	3520	2930	2350	1760	1580	1580
	W	1230	1100	960	820	680	540	400	270	220	220
20	Q	6200	5580	4960	4340	3720	3100	2480	1860	1670	1670
	W	1130	1000	880	750	620	490	370	240	200	200

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	7040	6340	5630	4930	4220	3520	2820	2110	1410	1130
	W	1310	1180	1050	930	790	660	530	400	280	220
15	Q	6490	5840	5190	4540	3890	3240	2590	1950	1300	1040
	W	1260	1140	1010	890	770	640	510	380	270	210
10	Q	5930	5340	4750	4150	3560	2970	2370	1780	1190	950
	W	1220	1100	970	860	740	610	490	370	260	200
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1120	900
	W	1190	1070	950	840	720	600	480	360	250	200
5.5	Q	4780	4300	3820	3340	2870	2390	1910	1430	960	770
	W	1110	1000	890	780	670	560	450	340	230	190
5	Q	4500	4050	3590	3140	2700	2250	1800	1350	900	720
	W	1100	990	880	770	670	560	450	340	230	190
2	Q	4070	3660	3260	2850	2450	2040	1630	1220	820	660
	W	1060	950	850	740	640	530	430	320	220	180
0	Q	3790	3410	3030	2650	2280	1900	1510	1130	760	610
	W	1030	920	820	720	620	520	420	310	210	180
-5	Q	3080	2770	2470	2160	1850	1540	1230	920	620	500
	W	950	860	760	670	570	480	390	290	200	160
-7	Q	2800	2520	2240	1960	1680	1400	1120	840	560	450
	W	920	830	740	650	560	460	370	280	190	160
-10	Q	2950	2660	2360	2070	1770	1480	1180	890	590	470
	W	960	860	770	680	580	480	390	290	200	160
-15	Q	2400	2160	1920	1680	1440	1200	960	720	480	390
	W	910	820	730	640	550	460	370	280	190	150

**2-room multisplit: 2-unit operation (13 type + 10 type)**

Indoor units : RAS-M13SKV-E, RAS-M13PKVP-E, RAS-M13PKVP-ND, RAS-M13SMUV-E,  
RAS-M13GDV-E, RAS-M13UFV-E  
RAS-M10SKV-E, RAS-M10PKVP-E, RAS-M10PKVP-ND, RAS-M10SMUV-E,  
RAS-M10GDV-E, RAS-M10UFV-E

Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1400	260	900	200
Rating	5200	1440	5600	1190
Maximum	6200	2170	8300	2530

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	4670	4200	3730	3270	2800	2330	1870	1400	1260	1260
	W	1600	1420	1240	1070	880	700	520	340	290	290
40	Q	4870	4380	3890	3410	2920	2430	1950	1460	1310	1310
	W	1540	1370	1200	1030	850	680	500	330	280	280
35	Q	5200	4680	4160	3640	3120	2600	2080	1560	1400	1400
	W	1440	1280	1120	960	790	630	470	310	260	260
30	Q	5530	4980	4430	3870	3320	2770	2210	1660	1490	1490
	W	1340	1190	1040	890	730	580	440	290	240	240
25	Q	5870	5280	4690	4110	3520	2930	2350	1760	1580	1580
	W	1230	1100	960	820	680	540	400	270	220	220
20	Q	6200	5580	4960	4340	3720	3100	2480	1860	1670	1670
	W	1130	1000	880	750	620	490	370	240	200	200

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	7040	6340	5630	4930	4220	3520	2820	2110	1410	1130
	W	1310	1180	1050	930	790	660	530	400	280	220
15	Q	6490	5840	5190	4540	3890	3240	2590	1950	1300	1040
	W	1260	1140	1010	890	770	640	510	380	270	210
10	Q	5930	5340	4750	4150	3560	2970	2370	1780	1190	950
	W	1220	1100	970	860	740	610	490	370	260	200
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1120	900
	W	1190	1070	950	840	720	600	480	360	250	200
5.5	Q	4780	4300	3820	3340	2870	2390	1910	1430	960	770
	W	1110	1000	890	780	670	560	450	340	230	190
5	Q	4500	4050	3590	3140	2700	2250	1800	1350	900	720
	W	1100	990	880	770	670	560	450	340	230	190
2	Q	4070	3660	3260	2850	2450	2040	1630	1220	820	660
	W	1060	950	850	740	640	530	430	320	220	180
0	Q	3790	3410	3030	2650	2280	1900	1510	1130	760	610
	W	1030	920	820	720	620	520	420	310	210	180
-5	Q	3080	2770	2470	2160	1850	1540	1230	920	620	500
	W	950	860	760	670	570	480	390	290	200	160
-7	Q	2800	2520	2240	1960	1680	1400	1120	840	560	450
	W	920	830	740	650	560	460	370	280	190	160
-10	Q	2950	2660	2360	2070	1770	1480	1180	890	590	470
	W	960	860	770	680	580	480	390	290	200	160
-15	Q	2400	2160	1920	1680	1440	1200	960	720	480	390
	W	910	820	730	640	550	460	370	280	190	150

**2-room multisplit: 2-unit operation (16 type + 07 type)**

Indoor units : RAS-M16SKV-E, RAS-M16PKVP-E, RAS-M16PKVP-ND, RAS-M16SMUV-E,  
RAS-M16GDV-E  
RAS-M07SKV-E  
Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1400	260	900	200
Rating	5200	1440	5600	1190
Maximum	6200	2170	8300	2530

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	4670	4200	3730	3270	2800	2330	1870	1400	1260	1260
	W	1600	1420	1240	1070	880	700	520	340	290	290
40	Q	4870	4380	3890	3410	2920	2430	1950	1460	1310	1310
	W	1540	1370	1200	1030	850	680	500	330	280	280
35	Q	5200	4680	4160	3640	3120	2600	2080	1560	1400	1400
	W	1440	1280	1120	960	790	630	470	310	260	260
30	Q	5530	4980	4430	3870	3320	2770	2210	1660	1490	1490
	W	1340	1190	1040	890	730	580	440	290	240	240
25	Q	5870	5280	4690	4110	3520	2930	2350	1760	1580	1580
	W	1230	1100	960	820	680	540	400	270	220	220
20	Q	6200	5580	4960	4340	3720	3100	2480	1860	1670	1670
	W	1130	1000	880	750	620	490	370	240	200	200

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	7040	6340	5630	4930	4220	3520	2820	2110	1410	1130
	W	1310	1180	1050	930	790	660	530	400	280	220
15	Q	6490	5840	5190	4540	3890	3240	2590	1950	1300	1040
	W	1260	1140	1010	890	770	640	510	380	270	210
10	Q	5930	5340	4750	4150	3560	2970	2370	1780	1190	950
	W	1220	1100	970	860	740	610	490	370	260	200
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1120	900
	W	1190	1070	950	840	720	600	480	360	250	200
5.5	Q	4780	4300	3820	3340	2870	2390	1910	1430	960	770
	W	1110	1000	890	780	670	560	450	340	230	190
5	Q	4500	4050	3590	3140	2700	2250	1800	1350	900	720
	W	1100	990	880	770	670	560	450	340	230	190
2	Q	4070	3660	3260	2850	2450	2040	1630	1220	820	660
	W	1060	950	850	740	640	530	430	320	220	180
0	Q	3790	3410	3030	2650	2280	1900	1510	1130	760	610
	W	1030	920	820	720	620	520	420	310	210	180
-5	Q	3080	2770	2470	2160	1850	1540	1230	920	620	500
	W	950	860	760	670	570	480	390	290	200	160
-7	Q	2800	2520	2240	1960	1680	1400	1120	840	560	450
	W	920	830	740	650	560	460	370	280	190	160
-10	Q	2950	2660	2360	2070	1770	1480	1180	890	590	470
	W	960	860	770	680	580	480	390	290	200	160
-15	Q	2400	2160	1920	1680	1440	1200	960	720	480	390
	W	910	820	730	640	550	460	370	280	190	150

**2-room multisplit: 2-unit operation (16 type + 10 type)**

Indoor units : RAS-M16SKV-E, RAS-M16PKVP-E, RAS-M16PKVP-ND, RAS-M16SMUV-E,  
RAS-M16GDV-E

RAS-M10SKV-E, RAS-M10PKVP-E, RAS-M10PKVP-ND, RAS-M10SMUV-E,  
RAS-M10GDV-E, RAS-M10UFV-E

Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1400	260	900	200
Rating	5200	1440	5600	1190
Maximum	6200	2170	8300	2530

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	4670	4200	3730	3270	2800	2330	1870	1400	1260	1260
	W	1600	1420	1240	1070	880	700	520	340	290	290
40	Q	4870	4380	3890	3410	2920	2430	1950	1460	1310	1310
	W	1540	1370	1200	1030	850	680	500	330	280	280
35	Q	5200	4680	4160	3640	3120	2600	2080	1560	1400	1400
	W	1440	1280	1120	960	790	630	470	310	260	260
30	Q	5530	4980	4430	3870	3320	2770	2210	1660	1490	1490
	W	1340	1190	1040	890	730	580	440	290	240	240
25	Q	5870	5280	4690	4110	3520	2930	2350	1760	1580	1580
	W	1230	1100	960	820	680	540	400	270	220	220
20	Q	6200	5580	4960	4340	3720	3100	2480	1860	1670	1670
	W	1130	1000	880	750	620	490	370	240	200	200

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	7040	6340	5630	4930	4220	3520	2820	2110	1410	1130
	W	1310	1180	1050	930	790	660	530	400	280	220
15	Q	6490	5840	5190	4540	3890	3240	2590	1950	1300	1040
	W	1260	1140	1010	890	770	640	510	380	270	210
10	Q	5930	5340	4750	4150	3560	2970	2370	1780	1190	950
	W	1220	1100	970	860	740	610	490	370	260	200
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1120	900
	W	1190	1070	950	840	720	600	480	360	250	200
5.5	Q	4780	4300	3820	3340	2870	2390	1910	1430	960	770
	W	1110	1000	890	780	670	560	450	340	230	190
5	Q	4500	4050	3590	3140	2700	2250	1800	1350	900	720
	W	1100	990	880	770	670	560	450	340	230	190
2	Q	4070	3660	3260	2850	2450	2040	1630	1220	820	660
	W	1060	950	850	740	640	530	430	320	220	180
0	Q	3790	3410	3030	2650	2280	1900	1510	1130	760	610
	W	1030	920	820	720	620	520	420	310	210	180
-5	Q	3080	2770	2470	2160	1850	1540	1230	920	620	500
	W	950	860	760	670	570	480	390	290	200	160
-7	Q	2800	2520	2240	1960	1680	1400	1120	840	560	450
	W	920	830	740	650	560	460	370	280	190	160
-10	Q	2950	2660	2360	2070	1770	1480	1180	890	590	470
	W	960	860	770	680	580	480	390	290	200	160
-15	Q	2400	2160	1920	1680	1440	1200	960	720	480	390
	W	910	820	730	640	550	460	370	280	190	150

**2-room multisplit: 2-unit operation (13 type + 13 type)**

Indoor units : RAS-M13SKV-E, RAS-M13PKVP-E, RAS-M13PKVP-ND, RAS-M13SMUV-E,  
RAS-M13GDV-E, RAS-M13UFV-E

Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1400	260	900	200
Rating	5200	1440	5600	1190
Maximum	6200	2170	8300	2530

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	4670	4200	3730	3270	2800	2330	1870	1400	1260	1260
	W	1600	1420	1240	1070	880	700	520	340	290	290
40	Q	4870	4380	3890	3410	2920	2430	1950	1460	1310	1310
	W	1540	1370	1200	1030	850	680	500	330	280	280
35	Q	5200	4680	4160	3640	3120	2600	2080	1560	1400	1400
	W	1440	1280	1120	960	790	630	470	310	260	260
30	Q	5530	4980	4430	3870	3320	2770	2210	1660	1490	1490
	W	1340	1190	1040	890	730	580	440	290	240	240
25	Q	5870	5280	4690	4110	3520	2930	2350	1760	1580	1580
	W	1230	1100	960	820	680	540	400	270	220	220
20	Q	6200	5580	4960	4340	3720	3100	2480	1860	1670	1670
	W	1130	1000	880	750	620	490	370	240	200	200

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	7040	6340	5630	4930	4220	3520	2820	2110	1410	1130
	W	1310	1180	1050	930	790	660	530	400	280	220
15	Q	6490	5840	5190	4540	3890	3240	2590	1950	1300	1040
	W	1260	1140	1010	890	770	640	510	380	270	210
10	Q	5930	5340	4750	4150	3560	2970	2370	1780	1190	950
	W	1220	1100	970	860	740	610	490	370	260	200
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1120	900
	W	1190	1070	950	840	720	600	480	360	250	200
5.5	Q	4780	4300	3820	3340	2870	2390	1910	1430	960	770
	W	1110	1000	890	780	670	560	450	340	230	190
5	Q	4500	4050	3590	3140	2700	2250	1800	1350	900	720
	W	1100	990	880	770	670	560	450	340	230	190
2	Q	4070	3660	3260	2850	2450	2040	1630	1220	820	660
	W	1060	950	850	740	640	530	430	320	220	180
0	Q	3790	3410	3030	2650	2280	1900	1510	1130	760	610
	W	1030	920	820	720	620	520	420	310	210	180
-5	Q	3080	2770	2470	2160	1850	1540	1230	920	620	500
	W	950	860	760	670	570	480	390	290	200	160
-7	Q	2800	2520	2240	1960	1680	1400	1120	840	560	450
	W	920	830	740	650	560	460	370	280	190	160
-10	Q	2950	2660	2360	2070	1770	1480	1180	890	590	470
	W	960	860	770	680	580	480	390	290	200	160
-15	Q	2400	2160	1920	1680	1440	1200	960	720	480	390
	W	910	820	730	640	550	460	370	280	190	150

**2-room multisplit: 2-unit operation (16 type + 13 type)**

Indoor units : RAS-M16SKV-E, RAS-M16PKVP-E, RAS-M16PKVP-ND, RAS-M16SMUV-E,  
RAS-M16GDV-E

RAS-M13SKV-E, RAS-M13PKVP-E, RAS-M13PKVP-ND, RAS-M13SMUV-E,  
RAS-M13GDV-E, RAS-M13UFV-E

Outdoor unit : RAS-M18UAV-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
Minimum	1400	260	900	200
Rating	5200	1440	5600	1190
Maximum	6200	2170	8300	2530

**Cooling**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
43	Q	4670	4200	3730	3270	2800	2330	1870	1400	1260	1260
	W	1600	1420	1240	1070	880	700	520	340	290	290
40	Q	4870	4380	3890	3410	2920	2430	1950	1460	1310	1310
	W	1540	1370	1200	1030	850	680	500	330	280	280
35	Q	5200	4680	4160	3640	3120	2600	2080	1560	1400	1400
	W	1440	1280	1120	960	790	630	470	310	260	260
30	Q	5530	4980	4430	3870	3320	2770	2210	1660	1490	1490
	W	1340	1190	1040	890	730	580	440	290	240	240
25	Q	5870	5280	4690	4110	3520	2930	2350	1760	1580	1580
	W	1230	1100	960	820	680	540	400	270	220	220
20	Q	6200	5580	4960	4340	3720	3100	2480	1860	1670	1670
	W	1130	1000	880	750	620	490	370	240	200	200

**Heating**

Outdoor temperature (°C)		Load (%)									
		100	90	80	70	60	50	40	30	20	10
20	Q	7040	6340	5630	4930	4220	3520	2820	2110	1410	1130
	W	1310	1180	1050	930	790	660	530	400	280	220
15	Q	6490	5840	5190	4540	3890	3240	2590	1950	1300	1040
	W	1260	1140	1010	890	770	640	510	380	270	210
10	Q	5930	5340	4750	4150	3560	2970	2370	1780	1190	950
	W	1220	1100	970	860	740	610	490	370	260	200
7	Q	5600	5040	4480	3920	3360	2800	2240	1680	1120	900
	W	1190	1070	950	840	720	600	480	360	250	200
5.5	Q	4780	4300	3820	3340	2870	2390	1910	1430	960	770
	W	1110	1000	890	780	670	560	450	340	230	190
5	Q	4500	4050	3590	3140	2700	2250	1800	1350	900	720
	W	1100	990	880	770	670	560	450	340	230	190
2	Q	4070	3660	3260	2850	2450	2040	1630	1220	820	660
	W	1060	950	850	740	640	530	430	320	220	180
0	Q	3790	3410	3030	2650	2280	1900	1510	1130	760	610
	W	1030	920	820	720	620	520	420	310	210	180
-5	Q	3080	2770	2470	2160	1850	1540	1230	920	620	500
	W	950	860	760	670	570	480	390	290	200	160
-7	Q	2800	2520	2240	1960	1680	1400	1120	840	560	450
	W	920	830	740	650	560	460	370	280	190	160
-10	Q	2950	2660	2360	2070	1770	1480	1180	890	590	470
	W	960	860	770	680	580	480	390	290	200	160
-15	Q	2400	2160	1920	1680	1440	1200	960	720	480	390
	W	910	820	730	640	550	460	370	280	190	150

# **TOSHIBA CARRIER CORPORATION**

23-17, TAKANAWA 3-CHOME, MINATOKU, TOKYO 108-8580, JAPAN

Copyright © 2011 TOSHIBA CARRIER CORPORATION, ALL Rights Reserved.