

Super Digital Inverter 3 Phase 4-6HP

Engineering Data Book

Outdoor Unit

**RAV-SP1104AT8(Z,ZG)-E
RAV-SP1404AT8(Z,ZG)-E
RAV-SP1604AT8(Z,ZG)-E
RAV-SP1104AT8(Z,ZG)-TR
RAV-SP1404AT8(Z,ZG)-TR
RAV-SP1604AT8(Z,ZG)-TR
RAV-SP1104AT7(Z,ZG)
RAV-SP1404AT7(Z,ZG)
RAV-SP1604AT7(Z,ZG)**

Contents

1	Specifications	2
2	Pipe Capacity Correction	19
3	Dimensional Drawing	20
4	Wiring Diagrams	21
5	Refrigerating Cycle Diagram	22
6	Sensible Capacity Table	23
7	Part Load Performance	28
8	Sound Characteristics (NC Curve)	46
9	Refrigerant Pipe Length	48

Note: The data book describe simplify outdoor unit name(RAV-SP***AT*-*). However, all data are same as salt pollution model(Z,ZG). Corresponding model name are refer to the cover.

1 Specifications

1-1. Indoor Unit

1-1-1. Indoor unit (4-way Cassette Type)

<Single type>

Model	Indoor unit		RAV-SM	1104UT-E	1404UT-E	1604UT-E	1104UT-E	1404UT-E	1604UT-E	
	Outdoor unit		RAV-SP	1104AT8-E 1104AT8-TR	1404AT8-E 1404AT8-TR	1604AT8-E 1604AT8-TR	1104AT7	1404AT7	1604AT7	
Cooling capacity			(kW)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	14.0 (2.6-16.0)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	14.0 (2.6-16.0)	
Heating capacity			(kW)	11.2 (2.4-15.6)	14.0 (2.4-18.0)	16.0 (2.4-19.0)	11.2 (2.4-15.6)	14.0 (2.4-18.0)	16.0 (2.4-19.0)	
Power supply		3 phase 4wired (3N-4pole) 380V - 415V 50Hz			3 phase 4wired (3N-4pole) 380V 60Hz					
Electrical characteristics	Cooling	Running current		(A)	4.45 - 4.07	6.03 - 5.52	7.55 - 6.91	4.45	6.03	7.55
		Power consumption		(kW)	2.37	3.46	4.49	2.37	3.46	4.49
		Power factor		(%)	81	87	90	81	87	90
		EER			4.22	3.61	3.12	4.22	3.61	3.12
		Energy efficiency class *			A	A	B	-	-	-
	Heating	Running current		(A)	4.52 - 4.14	5.97 - 5.47	7.26 - 6.65	4.52	5.97	7.26
		Power consumption		(kW)	2.42	3.42	4.30	2.42	3.42	4.30
		Power factor		(%)	81	87	90	81	87	90
		COP			4.63	4.09	3.72	4.63	4.09	3.72
		Energy efficiency class *			A	A	A	-	-	-
Maximum current			(A)	14.7	14.7	14.7	14.7	14.7	14.7	
Indoor unit										
Appearance	Main unit		Zinc hot dipping steel plate							
	Ceiling panel (Sold separately)	Model	RBC-U31PG(W,WS)-E , RBC-U31PGS(W,WS)-E							
		Panel color	W: Moon-white (2.5GY 9.0/0.5), WS: Stripe-white (2.5GY 9.0/0.5, (Gray:8B 3/0.3))							
Outer dimension	Main unit	Height	(mm)	319	319	319	319	319	319	
		Width	(mm)	840	840	840	840	840	840	
		Depth	(mm)	840	840	840	840	840	840	
	Ceiling panel (Sold separately)	Height	(mm)	30	30	30	30	30	30	
		Width	(mm)	950	950	950	950	950	950	
		Depth	(mm)	950	950	950	950	950	950	
Total weight	Main unit		(kg)	24	24	24	24	24	24	
	Ceiling panel (Sold separately)		(kg)	4.2	4.2	4.2	4.2	4.2	4.2	
Heat exchanger		Finned tube								
Fan unit	Fan		Turbo fan							
	Standard air flow	H/M/L	(m3/min)	33.5/24.0/19.5	35.0/24.0/20.5	35.5/25.0/21.0	33.5/24.0/19.5	35.0/24.0/20.5	35.5/25.0/21.0	
	Motor		(W)	68	72	72	68	72	72	
Sound pressure level		H/M/L		(dB/A)	43/38/33	44/38/34	45/40/36	43/38/33	44/38/34	45/40/36
Sound power level		H/M/L		(dB/A)	58/53/48	59/53/49	60/55/51	58/53/48	59/53/49	60/55/51
Connecting pipe	Drain port		VP25							
Outdoor unit										
Outer dimension	Standard length		(m)	7.5	7.5	7.5	7.5	7.5	7.5	
	Min. length		(m)	3	3	3	3	3	3	
	Max. total length		(m)	75	75	75	75	75	75	
	Over 30m		40g/m (31m to 75m)							
	Height difference	Outdoor lower		(m)	30	30	30	30	30	30
Outdoor high		(m)	30	30	30	30	30	30		
Connecting pipe	Gas side		(mm)	15.9	15.9	15.9	15.9	15.9	15.9	
	Liquid side		(mm)	9.5	9.5	9.5	9.5	9.5	9.5	
Fan unit	Fan		Propeller fan							
	Standard air flow high		(m3/min)	101	103	103	101	103	103	
	Motor		(W)	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	
Sound pressure level		Cooling/Heating		(dB/A)	49/50	51/52	51/53	49/50	51/52	51/53
Sound power level		Cooling/Heating		(dB/A)	66/67	68/69	68/70	66/67	68/69	68/70

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-2. Indoor unit (4-way Cassette Type)

<Twin type>

Model	Indoor unit 1		RAV-SM	564UT-E	804UT-E	804UT-E	564UT-E	804UT-E	804UT-E
	Indoor unit 2		RAV-SM	564UT-E	804UT-E	804UT-E	564UT-E	804UT-E	804UT-E
	Outdoor unit		RAV-SP	1104AT8-E	1404AT8-E	1604AT8-E	1104AT7	1404AT7	1604AT7
Cooling capacity			(kW)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	14.0 (2.6-16.0)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	14.0 (2.6-16.0)
Heating capacity			(kW)	11.2 (2.4-15.6)	14.0 (2.4-18.0)	16.0 (2.4-19.0)	11.2 (2.4-15.6)	14.0 (2.4-18.0)	16.0 (2.4-19.0)
Power supply				3 phase 4wired(3N-4pole) 380V - 415V 50Hz			3 phase 4wired(3N-4pole) 380V 60Hz		
Electrical characteristics	Cooling	Running current	(A)	4.45 - 4.07	6.03 - 5.52	7.55 - 6.91	4.45	6.03	7.55
		Power consumption	(kW)	2.37	3.46	4.49	2.37	3.46	4.49
		Power factor	(%)	81	87	90	81	87	90
		EER		4.22	3.61	3.12	4.22	3.61	3.12
		Energy efficiency class *		A	A	B	-	-	-
	Heating	Running current	(A)	4.52 - 4.14	5.97 - 5.47	7.26 - 6.65	4.52	5.97	7.26
		Power consumption	(kW)	2.42	3.42	4.30	2.42	3.42	4.30
		Power factor	(%)	81	87	90	81	87	90
		COP		4.63	4.09	3.72	4.63	4.09	3.72
		Energy efficiency class *		A	A	A	-	-	-
Maximum current			(A)	14.5	14.5	14.5	14.5	14.5	14.5
Indoor unit									
Appearance	Main unit		Zinc hot dipping steel plate						
	Ceiling panel (Sold separately)	Model	RBC-U31PG(W,WS)-E , RBC-U31PGS(W,WS)-E						
		Panel color	W:Moon-white (2.5GY 9.0/0.5), WS:Stripe-white (2.5GY 9.0/0.5, (Gray:8B 3/0.3))						
Outer dimension	Main unit	Height	(mm)	256	256	256	256	256	256
		Width	(mm)	840	840	840	840	840	840
		Depth	(mm)	840	840	840	840	840	840
	Ceiling panel (Sold separately)	Height	(mm)	30	30	30	30	30	30
		Width	(mm)	950	950	950	950	950	950
		Depth	(mm)	950	950	950	950	950	950
Total weight	Main unit	(kg)	20	20	20	20	20	20	
	Ceiling panel (Sold separately)	(kg)	4.2	4.2	4.2	4.2	4.2	4.2	
Heat exchanger			Finned tube						
Fan unit	Fan		Turbo fan						
	Standard air flow	H/M/L (m3/min)	17.5/14.5/13.0	20.5/16.0/13.5	20.5/16.0/13.5	17.5/14.5/13.0	20.5/16.0/13.5	20.5/16.0/13.5	
	Motor	(W)	14	20	20	14	20	20	
Sound pressure level	H/M/L (dB/A)		32/29/28	35/31/28	35/31/28	32/29/28	35/31/28	35/31/28	
Sound power level	H/M/L (dB/A)		47/44/43	50/46/43	50/46/43	47/44/43	50/46/43	50/46/43	
Connecting pipe	Drain port		VP25						
Outdoor unit									
Outer dimension	Standard length		(m)	7.5	7.5	7.5	7.5	7.5	7.5
	Min. length		(m)	3	3	3	3	3	3
	Max. total length		(m)	50	50	50	50	50	50
	Over 30m		40g/m (31m to 50m)						
	Hight difference	Outdoor lower	(m)	30	30	30	30	30	30
Outdoor high		(m)	30	30	30	30	30	30	
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	15.9	15.9	15.9	15.9
		Sub	(mm)	12.7	15.9	15.9	12.7	15.9	15.9
	Liquid side	Main	(mm)	9.5	9.5	9.5	9.5	9.5	9.5
		Sub	(mm)	6.4	9.5	9.5	6.4	9.5	9.5
Fan unit	Fan		Propeller fan						
	Standard air flow high	(m3/min)	101	103	103	101	103	103	
	Motor	(W)	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	
Sound pressure level	Cooling/Heating (dB/A)		49/50	51/52	51/53	49/50	51/52	51/53	
Sound power level	Cooling/Heating (dB/A)		66/67	68/69	68/70	66/67	68/69	68/70	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-3. Indoor unit (4-way Cassette Type)

<Triple type>

Model	Indoor unit 1		RAV-SM	564UT-E	564UT-E	
	Indoor unit 2		RAV-SM	564UT-E	564UT-E	
	Indoor unit 3		RAV-SM	564UT-E	564UT-E	
	Outdoor unit		RAV-SP	1604AT8-E 1604AT8-TR	1604AT7	
Cooling capacity			(kW)	14.0 (2.6-16.0)	14.0 (2.6-16.0)	
Heating capacity			(kW)	16.0 (2.4-19.0)	16.0 (2.4-19.0)	
Power supply				3 phase 4wired(3N-4pole) 380V - 415V 50Hz	3 phase 4wired(3N-4pole) 380V 60Hz	
Electrical characteristics	Cooling	Running current		(A)	7.55 - 6.91	7.55
		Power consumption		(kW)	4.49	4.49
		Power factor		(%)	90	90
		EER			3.12	3.12
		Energy efficiency class *			B	-
	Heating	Running current		(A)	7.26 - 6.65	7.26
		Power consumption		(kW)	4.30	4.30
		Power factor		(%)	90	90
		COP			3.72	3.72
		Energy efficiency class *			A	-
Maximum current		(A)	14.8	14.8		
Indoor unit						
Appearance	Main unit		Zinc hot dipping steel plate			
	Ceiling panel (Sold separately)	Model	RBC-U31PG(W,WS)-E , RBC-U31PGS(W,WS)-E			
		Panel color	W: Moon-white (2.5GY 9.0/0.5) , WS: Stripe-white (2.5GY 9.0/0.5, (Gray:8B 3/0.3))			
Outer dimension	Main unit	Height	(mm)	256	256	
		Width	(mm)	840	840	
		Depth	(mm)	840	840	
	Ceiling panel (Sold separately)	Height	(mm)	30	30	
		Width	(mm)	950	950	
		Depth	(mm)	950	950	
Total weight	Main unit		(kg)	20	20	
	Ceiling panel (Sold separately)		(kg)	4.2	4.2	
Heat exchanger			Finned tube			
Fan unit	Fan		Turbo fan			
	Standard air flow	H/M/L	(m3/min)	17.5/14.5/13.0	17.5/14.5/13.0	
	Motor		(W)	14	14	
Sound pressure level		H/M/L	(dB/A)	32/29/28	32/29/28	
Sound power level		H/M/L	(dB/A)	47/44/43	47/44/43	
Connecting pipe	Drain port		VP25			
Outdoor unit						
Outer dimension	Standard length		(m)	7.5	7.5	
	Min. length		(m)	3	3	
	Max. total length		(m)	50	50	
	Over 30m		40g/m (31m to 50m)			
	Hight difference	Outdoor lower		(m)	30	30
Outdoor high		(m)	30	30		
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	
		Sub	(mm)	12.7	12.7	
	Liquid side	Main	(mm)	9.5	9.5	
		Sub	(mm)	6.4	6.4	
Fan unit	Fan		Propeller fan			
	Standard air flow high		(m3/min)	103	103	
	Motor		(W)	100 + 100	100 + 100	
Sound pressure level	Cooling/Heating		(dB/A)	51/53	51/53	
Sound power level	Cooling/Heating		(dB/A)	68/70	68/70	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-4. Indoor unit (Compact 4-way Cassette (600 x 600) Type)

<Twin type>

Model	Indoor unit 1		RAV-SM	562MUT-E	562MUT-E
	Indoor unit 2		RAV-SM	562MUT-E	562MUT-E
	Outdoor unit		RAV-SP	1104AT8-E	1104AT7
Cooling capacity		(kW)		10.0 (2.6-12.0)	10.0 (2.6-12.0)
Heating capacity		(kW)		11.2 (2.4-14.0)	11.2 (2.4-14.0)
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz	3 phase 4wired (3N-4pole) 380V 60Hz
Electrical characteristics	Cooling	Running current (A)		5.23 - 4.79	5.23
		Power consumption (kW)		2.79	2.79
		Power factor (%)		81	81
		EER		3.58	3.58
		Energy efficiency class *		A	-
	Heating	Running current (A)		4.99 - 4.57	4.99
		Power consumption (kW)		2.67	2.67
		Power factor (%)		81	81
		COP		4.19	4.19
		Energy efficiency class *		A	-
Maximum current (A)				14.9	14.9
Indoor unit					
Appearance	Main unit		Zinc hot dipping steel plate		
	Ceiling panel (Sold separately)	Model	RBC-UM11PG(W)-E		
		Panel color	Moon-white (Muncel 2.5GY 9.0/0.5)		
Outer dimension	Main unit	Height (mm)	268	268	
		Width (mm)	575	575	
		Depth (mm)	575	575	
	Ceiling panel (Sold separately)	Height (mm)	27	27	
		Width (mm)	700	700	
		Depth (mm)	700	700	
Total weight	Main unit (kg)		16	16	
	Ceiling panel (Sold separately) (kg)		3	3	
Heat exchanger		Finned tube			
Fan unit	Fan		Turbo fan		
	Standard air flow	H/M/L (m3/min)	13.3 / 11.2 / 9.1	13.3 / 11.2 / 9.1	
	Motor (W)		60	60	
Sound pressure level		H/M/L (dB/A)	43 / 39 / 34	43 / 39 / 34	
Sound power level		H/M/L (dB/A)	58 / 54 / 49	58 / 54 / 49	
Connecting pipe	Drain port		VP25		
Outdoor unit					
Outer dimension	Standard length (m)		7.5	7.5	
	Min. length (m)		3	3	
	Max. total length (m)		50	50	
	Over 30m		40g/m (31m to 50m)		
	Hight difference	Outdoor lower (m)	30	30	
Outdoor high (m)		30	30		
Connecting pipe	Gas side	Main (mm)	15.9	15.9	
		Sub (mm)	12.7	12.7	
	Liquid side	Main (mm)	9.5	9.5	
		Sub (mm)	6.4	6.4	
Fan unit	Fan		Propeller fan		
	Standard air flow high (m3/min)		101	101	
	Motor (W)		100 + 100	100 + 100	
Sound pressure level		Cooling/Heating (dB/A)	49/50	49/50	
Sound power level		Cooling/Heating (dB/A)	66/67	66/67	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-5. Indoor unit (Compact 4-way Cassette (600 × 600) Type)

<Triple type>

Model	Indoor unit 1		RAV-SM	562MUT-E	562MUT-E	
	Indoor unit 2		RAV-SM	562MUT-E	562MUT-E	
	Indoor unit 3		RAV-SM	562MUT-E	562MUT-E	
	Outdoor unit		RAV-SP	1604AT8-E 1604AT8-TR	1604AT7	
Cooling capacity			(kW)	14.0 (2.6-16.0)	14.0 (2.6-16.0)	
Heating capacity			(kW)	16.0 (2.4-19.0)	16.0 (2.4-19.0)	
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz	3 phase 4wired (3N-4pole) 380V 60Hz	
Electrical characteristics	Cooling	Running current		(A)	8.39 - 7.68	8.39
		Power consumption		(kW)	4.99	4.99
		Power factor		(%)	90	90
		EER			2.81	2.81
		Energy efficiency class *			C	-
	Heating	Running current		(A)	7.77 - 7.11	7.77
		Power consumption		(kW)	4.60	4.60
		Power factor		(%)	90	90
		COP			3.48	3.48
		Energy efficiency class *			B	-
Maximum current		(A)	15.4	15.4		
Indoor unit						
Appearance	Main unit		Zinc hot dipping steel plate			
	Ceiling panel (Sold separately)	Model	RBC-UM11PG(W)-E			
		Panel color	Moon-white (Muncel 2.5GY 9.0/0.5)			
Outer dimension	Main unit	Height	(mm)	268	268	
		Width	(mm)	575	575	
		Depth	(mm)	575	575	
	Ceiling panel (Sold separately)	Height	(mm)	27	27	
		Width	(mm)	700	700	
		Depth	(mm)	700	700	
Total weight	Main unit		(kg)	16	16	
	Ceiling panel (Sold separately)		(kg)	3	3	
Heat exchanger			Finned tube			
Fan unit	Fan		Turbo fan			
	Standard air flow	H/M/L	(m3/min)	13.3 / 11.2 / 9.1	13.3 / 11.2 / 9.1	
	Motor			(W)	60	
Sound pressure level		H/M/L	(dB/A)	43 / 39 / 34	43 / 39 / 34	
Sound power level		H/M/L	(dB/A)	58 / 54 / 49	58 / 54 / 49	
Connecting pipe	Drain port		VP25			
Outdoor unit						
Outer dimension	Standard length		(m)	7.5	7.5	
	Min. length		(m)	3	3	
	Max. total length		(m)	50	50	
	Over 30m		40g/m (31m to 50m)			
	Hight difference	Outdoor lower		(m)	30	30
Outdoor high		(m)	30	30		
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	
		Sub	(mm)	12.7	12.7	
	Liquid side	Main	(mm)	9.5	9.5	
		Sub	(mm)	6.4	6.4	
Fan unit	Fan		Propeller fan			
	Standard air flow high		(m3/min)	103	103	
	Motor		(W)	100 + 100	100 + 100	
Sound pressure level	Cooling/Heating		(dB/A)	51/53	51/53	
Sound power level	Cooling/Heating		(dB/A)	68/70	68/70	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-6. Indoor unit (Slim Duct Type)

<Twin type>

Model	Indoor unit 1		RAV-SM	564SDT-E	564SDT-E
	Indoor unit 2		RAV-SM	564SDT-E	564SDT-E
	Outdoor unit		RAV-SP	1104AT8-E 1104AT8-TR	1104AT7
Cooling capacity		(kW)		10.0 (2.6-12.0)	10.0 (2.6-12.0)
Heating capacity		(kW)		11.2 (2.4-14.0)	11.2 (2.4-14.0)
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz	3 phase 4wired (3N-4pole) 380V 60Hz
Electrical characteristics	Cooling	Running current (A)		5.23 - 4.79	5.23
		Power consumption (kW)		2.79	2.79
		Power factor (%)		81	81
		EER		3.58	3.58
		Energy efficiency class *		A	-
	Heating	Running current (A)		4.99 - 4.57	4.99
		Power consumption (kW)		2.67	2.67
		Power factor (%)		81	81
		COP		4.19	4.19
		Energy efficiency class *		A	-
Maximum current (A)				15.1	15.1
Indoor unit					
Appearance	Main unit		Zinc hot dipping steel plate		
Outer dimension	Main unit	Height (mm)	210		210
		Width (mm)	845		845
		Depth (mm)	645		645
Total weight	Main unit (kg)		22		22
Heat exchanger		Finned tube			
Fan unit	Fan		Centrifugal fan		
	Standard air flow	H/M/L (m3/min)	13.0 / 11.3 / 9.7		13.0 / 11.3 / 9.7
	Motor (W)		60		60
Sound pressure level	Under air inlet	H/M/L (dB/A)	45 / 40 / 36		45 / 40 / 36
	Back air inlet	H/M/L (dB/A)	33 / 31 / 28		33 / 31 / 28
Sound power level	Under air inlet	H/M/L (dB/A)	60 / 55 / 51		60 / 55 / 51
	Back air inlet	H/M/L (dB/A)	48 / 46 / 43		48 / 46 / 43
Connecting pipe	Drain port		VP25		
Outdoor unit					
Outer dimension	Standard length (m)		7.5		7.5
	Min. length (m)		3		3
	Max. total length (m)		50		50
	Over 30m		40g/m (31m to 50m)		
	Height difference	Outdoor lower	(m)	30	
Outdoor high		(m)	30		30
Connecting pipe	Gas side	Main (mm)	15.9		15.9
		Sub (mm)	12.7		12.7
	Liquid side	Main (mm)	9.5		9.5
		Sub (mm)	6.4		6.4
Fan unit	Fan		Propeller fan		
	Standard air flow high (m3/min)		101		101
	Motor (W)		100 + 100		100 + 100
Sound pressure level	Cooling/Heating (dB/A)		49/50		49/50
Sound power level	Cooling/Heating (dB/A)		66/67		66/67

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-7. Indoor unit (Slim Duct Type)

<Triple type>

Model	Indoor unit 1		RAV-SM	564SDT-E	564SDT-E	
	Indoor unit 2		RAV-SM	564SDT-E	564SDT-E	
	Indoor unit 3		RAV-SM	564SDT-E	564SDT-E	
	Outdoor unit		RAV-SP	1604AT8-E 1604AT8-TR	1604AT7	
Cooling capacity			(kW)	14.0 (2.6-16.0)	14.0 (2.6-16.0)	
Heating capacity			(kW)	16.0 (2.4-19.0)	16.0 (2.4-19.0)	
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz	3 phase 4wired (3N-4pole) 380V 60Hz	
Electrical characteristics	Cooling	Running current		(A)	8.39 - 7.68	8.39
		Power consumption		(kW)	4.99	4.99
		Power factor		(%)	90	90
		EER			2.81	2.81
		Energy efficiency class *			C	-
	Heating	Running current		(A)	7.77 - 7.11	7.77
		Power consumption		(kW)	4.60	4.60
		Power factor		(%)	90	90
		COP			3.48	3.48
		Energy efficiency class *			B	-
Maximum current		(A)	15.8	15.8		
Indoor unit						
Appearance	Main unit		Zinc hot dipping steel plate			
Outer dimension	Main unit	Height	(mm)	210	210	
		Width	(mm)	845	845	
		Depth	(mm)	645	645	
Total weight	Main unit		(kg)	22	22	
Heat exchanger			Finned tube			
Fan unit	Fan		Centrifugal fan			
	Standard air flow	H/M/L	(m3/min)	13.0 / 11.3 / 9.7	13.0 / 11.3 / 9.7	
	Motor		(W)	60	60	
Sound pressure level	Under air inlet	H/M/L	(dB/A)	45 / 40 / 36	45 / 40 / 36	
	Back air inlet	H/M/L	(dB/A)	33 / 31 / 28	33 / 31 / 28	
Sound power level	Under air inlet	H/M/L	(dB/A)	60 / 55 / 51	60 / 55 / 51	
	Back air inlet	H/M/L	(dB/A)	48 / 46 / 43	48 / 46 / 43	
Connecting pipe	Drain port		VP25			
Outdoor unit						
Outer dimension	Standard length		(m)	7.5	7.5	
	Min. length		(m)	3	3	
	Max. total length		(m)	50	50	
	Over 30m		40g/m (31m to 50m)			
	Height difference	Outdoor lower	(m)	30	30	
Outdoor high		(m)	30	30		
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	
		Sub	(mm)	12.7	12.7	
	Liquid side	Main	(mm)	9.5	9.5	
		Sub	(mm)	6.4	6.4	
Fan unit	Fan		Propeller fan			
	Standard air flow high		(m3/min)	103	103	
	Motor		(W)	100 + 100	100 + 100	
Sound pressure level	Cooling/Heating		(dB/A)	51/53	51/53	
Sound power level	Cooling/Heating		(dB/A)	68/70	68/70	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-8. Indoor unit (Duct Type)

<Single type>

Model	Indoor unit		RAV-SM	1102BT-E	1402BT-E	1102BT-E	1402BT-E	
	Outdoor unit		RAV-SP	1104AT8-E 1104AT8-TR	1404AT8-E 1404AT8-TR	1104AT7	1404AT7	
Cooling capacity			(kW)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	
Heating capacity			(kW)	11.2 (2.4-14.0)	14.0 (2.4-18.0)	11.2 (2.4-14.0)	14.0 (2.4-18.0)	
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz		3 phase 4wired (3N-4pole) 380V 60Hz		
Electrical characteristics	Cooling	Running current	(A)	5.51 - 5.05	6.73 - 6.16	5.51	6.73	
		Power consumption	(kW)	2.94	3.86	2.94	3.86	
		Power factor	(%)	81	87	81	87	
		EER		3.40	3.24	3.40	3.24	
		Energy efficiency class *		A	A	-	-	
	Heating	Running current	(A)	5.18 - 4.74	6.20 - 5.68	5.18	6.20	
		Power consumption	(kW)	2.77	3.55	2.77	3.55	
		Power factor	(%)	81	87	81	87	
		COP		4.04	3.94	4.04	3.94	
		Energy efficiency class *		A	A	-	-	
		Maximum current	(A)	15.6	16.0	15.6	16.0	
Indoor unit								
Appearance	Main unit			Zinc hot dipping steel plate				
Outer dimension	Main unit	Height	(mm)	320	320	320	320	
		Width	(mm)	1350	1350	1350	1350	
		Depth	(mm)	800	800	800	800	
Total weight	Main unit		(kg)	54	54	54	54	
Heat exchanger				Finned tube				
Fan unit	Fan			Centrifugal fan				
	Standard air flow	H/M/L	(m3/min)	27.0/23.0/18.9	33.0/28.0/23.1	27.0/23.0/18.9	33.0/28.0/23.1	
	Motor			(W)	120	120	120	120
	External static pressure	Standard (at shipment)		(Pa)	40			
Set up for tap exchange		(Pa)	20/40/70/100	20/40/65/90	20/40/70/100	20/40/65/90		
Sound pressure level			H/M/L	(dB/A)	42 / 39 / 36	44 / 41 / 38	42 / 39 / 36	44 / 41 / 38
Sound power level			H/M/L	(dB/A)	57 / 54 / 51	59 / 56 / 53	57 / 54 / 51	59 / 56 / 53
Connecting pipe	Drain port			VP25				
Outdoor unit								
Outer dimension	Standard length		(m)	7.5	7.5	7.5	7.5	
	Min. length		(m)	3	3	3	3	
	Max. total length		(m)	75	75	75	75	
	Over 30m			40g/m (31m to 75m)				
	Hight difference	Outdoor lower		(m)	30	30	30	30
Outdoor high		(m)	30	30	30	30		
Connecting pipe	Gas side		(mm)	15.9	15.9	15.9	15.9	
	Liquid side		(mm)	9.5	9.5	9.5	9.5	
Fan unit	Fan			Propeller fan				
	Standard air flow high			(m3/min)	101	103	101	103
	Motor			(W)	100 + 100	100 + 100	100 + 100	100 + 100
Sound pressure level	Cooling/Heating		(dB/A)	49/50	51/52	49/50	51/52	
Sound power level	Cooling/Heating		(dB/A)	66/67	68/69	66/67	68/69	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-9. Indoor unit (Duct Type)

<Twin type>

Model	Indoor unit 1		RAV-SM	562BT-E	802BT-E	802BT-E	562BT-E	802BT-E	802BT-E	
	Indoor unit 2		RAV-SM	562BT-E	802BT-E	802BT-E	562BT-E	802BT-E	802BT-E	
	Outdoor unit		RAV-SP	1104AT8-E 1104AT8-TR	1404AT8-E 1404AT8-TR	1604AT8-E 1604AT8-TR	1104AT7	1404AT7	1604AT7	
Cooling capacity			(kW)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	14.0 (2.6-16.0)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	14.0 (2.6-16.0)	
Heating capacity			(kW)	11.2 (2.4-14.0)	14.0 (2.4-18.0)	16.0 (2.4-19.0)	11.2 (2.4-14.0)	14.0 (2.4-18.0)	16.0 (2.4-19.0)	
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz			3 phase 4wired (3N-4pole) 380V 60Hz			
Electrical characteristics	Cooling	Running current	(A)	5.51 - 5.05	6.73 - 6.16	8.61 - 7.88	5.51	6.73	8.61	
		Power consumption	(kW)	2.94	3.86	5.12	2.94	3.86	5.12	
		Power factor	(%)	81	87	90	81	87	90	
		EER		3.40	3.24	2.73	3.40	3.24	2.73	
		Energy efficiency class *		A	A	D	-	-	-	
	Heating	Running current	(A)	5.18 - 4.74	6.20 - 5.68	7.77 - 7.11	5.18	6.20	7.77	
		Power consumption	(kW)	2.77	3.55	4.60	2.77	3.55	4.60	
		Power factor	(%)	81	87	90	81	87	90	
		COP		4.04	3.94	3.48	4.04	3.94	3.48	
		Energy efficiency class *		A	A	B	-	-	-	
Maximum current			(A)	16.4	16.4	16.4	16.4	16.4	16.4	
Indoor unit										
Appearance		Main unit		Zinc hot dipping steel plate						
Outer dimension	Main unit	Height	(mm)	320	320	320	320	320	320	
		Width	(mm)	700	1000	1000	700	1000	1000	
		Depth	(mm)	800	800	800	800	800	800	
Total weight	Main unit		(kg)	30	39	39	30	39	39	
Heat exchanger			Finned tube							
Fan unit	Fan		Centrifugal fan							
	Standard air flow	H/M/L	(m ³ /min)	13.0 / 11.9 / 9.8	19.0 / 16.2 / 13.3	19.0 / 16.2 / 13.3	13.0 / 11.9 / 9.8	19.0 / 16.2 / 13.3	19.0 / 16.2 / 13.3	
	Motor		(W)	120	120	120	120	120	120	
	External static pressure	Standard (at shipment)		(Pa)	40					
		Set up for tap exchange		(Pa)	20/40/70/100					
Sound pressure level		H/M/L	(dB/A)	40 / 37 / 33	40 / 37 / 34	40 / 37 / 34	40 / 37 / 33	40 / 37 / 34	40 / 37 / 34	
Sound power level		H/M/L	(dB/A)	55 / 52 / 48	55 / 52 / 49	55 / 52 / 49	55 / 52 / 48	55 / 52 / 49	55 / 52 / 49	
Connecting pipe	Drain port		VP25							
Outdoor unit										
Outer dimension	Standard length		(m)	7.5	7.5	7.5	7.5	7.5	7.5	
	Min. length		(m)	3	3	3	3	3	3	
	Max. total length		(m)	50	50	50	50	50	50	
	Over 30m		40g/m (31m to 50m)							
	Height difference	Outdoor lower		(m)	30	30	30	30	30	30
Outdoor high		(m)	30	30	30	30	30	30		
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	15.9	15.9	15.9	15.9	
		Sub	(mm)	12.7	15.9	15.9	12.7	15.9	15.9	
	Liquid side	Main	(mm)	9.5	9.5	9.5	9.5	9.5	9.5	
		Sub	(mm)	6.4	9.5	9.5	6.4	9.5	9.5	
Fan unit	Fan		Propeller fan							
	Standard air flow high		(m ³ /min)	101	103	103	101	103	103	
	Motor		(W)	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	
Sound pressure level		Cooling/Heating	(dB/A)	49/50	51/52	51/53	49/50	51/52	51/53	
Sound power level		Cooling/Heating	(dB/A)	66/67	68/69	68/70	66/67	68/69	68/70	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-10. Indoor unit (Duct Type)

<Tripple type>

Model	Indoor unit 1		RAV-SM	562BT-E	562BT-E	
	Indoor unit 2		RAV-SM	562BT-E	562BT-E	
	Indoor unit 3		RAV-SM	562BT-E	562BT-E	
	Outdoor unit		RAV-SP	1604AT8-E 1604AT8-TR	1604AT7	
Cooling capacity			(kW)	14.0 (2.6-16.0)	14.0 (2.6-16.0)	
Heating capacity			(kW)	16.0 (2.4-19.0)	16.0 (2.4-19.0)	
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz	3 phase 4wired (3N-4pole) 380V 60Hz	
Electrical characteristics	Cooling	Running current		(A)	8.61 - 7.88	8.61
		Power consumption		(kW)	5.12	5.12
		Power factor		(%)	90	90
		EER			2.73	2.73
		Energy efficiency class *			D	-
	Heating	Running current		(A)	7.77 - 7.11	7.77
		Power consumption		(kW)	4.60	4.60
		Power factor		(%)	90	90
		COP			3.48	3.48
		Energy efficiency class *			B	-
Maximum current		(A)	16.4	16.4		
Indoor unit						
Appearance	Main unit		Zinc hot dipping steel plate			
Outer dimension	Main unit	Height	(mm)	320	320	
		Width	(mm)	700	700	
		Depth	(mm)	800	800	
Total weight	Main unit		(kg)	30	30	
Heat exchanger			Finned tube			
Fan unit	Fan		Centrifugal fan			
	Standard air flow	H/M/L	(m3/min)	13.0 / 11.9 / 9.8	13.0 / 11.9 / 9.8	
	Motor		(W)	120	120	
	External static pressure	Standard (at shipment)		(Pa)	40	
		Set up for tap exchange		(Pa)	20/40/70/100	
Sound pressure level		H/M/L	(dB/A)	40 / 37 / 33	40 / 37 / 33	
Sound power level		H/M/L	(dB/A)	55 / 52 / 48	55 / 52 / 48	
Connecting pipe	Drain port		VP25			
Outdoor unit						
Outer dimension	Standard length		(m)	7.5	7.5	
	Min. length		(m)	3	3	
	Max. total length		(m)	50	50	
	Over 30m		40g/m (31m to 50m)			
	Hight difference	Outdoor lower		(m)	30	30
Outdoor high		(m)	30	30		
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	
		Sub	(mm)	12.7	12.7	
	Liquid side	Main	(mm)	9.5	9.5	
		Sub	(mm)	6.4	6.4	
Fan unit	Fan		Propeller fan			
	Standard air flow high		(m3/min)	103	103	
	Motor		(W)	100 + 100	100 + 100	
Sound pressure level	Cooling/Heating		(dB/A)	51/53	51/53	
Sound power level	Cooling/Heating		(dB/A)	68/70	68/70	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-11. Indoor unit (High Static Duct Type)

<Single type>

Model	Indoor unit		RAV-SM		1403DT-A		1603DT-A		
	Outdoor unit		RAV-SP		1404AT8-E		1604AT8-E		
Cooling capacity			(kW)		13.0 (3.3-14.1)		14.3 (3.3-16.0)		
Heating capacity			(kW)		14.0 (4.2-18.0)		16.0 (4.2-19.0)		
Power supply					3 phase 4wired (3N-4pole) 415V 50Hz**				
Electrical characteristics	Cooling	Running current	(A)		6.89**		7.71**		
		Power consumption	(kW)		4.32		5.01		
		Power factor	(%)		87		90		
		EER			3.01		2.85		
		Energy efficiency class *			(B)		(C)		
	Heating	Running current	(A)		5.48**		6.85**		
		Power consumption	(kW)		3.43		4.43		
		Power factor	(%)		87		90		
		COP			4.08		3.61		
		Energy efficiency class *			(A)		(A)		
		Maximum current	(A)		16.3		16.3		
Indoor unit									
Appearance	Main unit				Zinc hot dipping steel plate				
Outer dimension	Main unit	Height	(mm)		380				
		Width	(mm)		1050				
		Depth	(mm)		600				
Total weight	Main unit		(kg)		57				
Heat exchanger					Finned tube				
Fan unit	Fan				Centrifugal fan				
	Standard air flow	at 100pa/HH tap	(m ³ /min)		55.0		58.0		
	Motor		(W)		600				
	External static pressure	Standard (at HH tap)		(Pa)		100			
		Range at HH tap		(Pa)		50 - 250			
Sound pressure level	H		(dB/A)		49		50		
Sound power level	H		(dB/A)		64		65		
Connecting pipe	Drain port				VP25				
Outdoor unit									
Outer dimension	Standard length		(m)		7.5		7.5		
	Min. length		(m)		3		3		
	Max. total length		(m)		75		75		
	Over 30m				40g/m (31m to 75m)				
	Hight difference	Outdoor lower		(m)		30		30	
Outdoor high		(m)		30		30			
Connecting pipe	Gas side		(mm)		15.9		15.9		
	Liquid side		(mm)		9.5		9.5		
Fan unit	Fan				Propeller fan				
	Standard air flow high		(m ³ /min)		103		103		
	Motor		(W)		100 + 100		100 + 100		
Sound pressure level	Cooling/Heating		(dB/A)		51/52		51/53		
Sound power level	Cooling/Heating		(dB/A)		68/69		68/70		

* IEC standard

** When indoor unit supply is 240V in Australia

1-1-12. Indoor unit (Ceiling Type)

<Single type>

Model	Indoor unit		RAV-SM	1102CT-E	1402CT-E	1102CT-E	1402CT-E	
	Outdoor unit		RAV-SP	1104AT8-E 1104AT8-TR	1404AT8-E 1404AT8-TR	1104AT7	1404AT7	
Cooling capacity			(kW)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	
Heating capacity			(kW)	11.2 (2.4-14.0)	14.0 (2.4-18.0)	11.2 (2.4-14.0)	14.0 (2.4-18.0)	
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz		3 phase 4wired (3N-4pole) 380V 60Hz		
Electrical characteristics	Cooling	Running current	(A)	5.23 - 4.79	6.67 - 6.11	5.23	6.67	
		Power consumption	(kW)	2.79	3.83	2.79	3.83	
		Power factor	(%)	81	87	81	87	
		EER	(W/W)	3.58	3.26	3.58	3.26	
		Energy efficiency class *		A	A	-	-	
	Heating	Running current	(A)	4.99 - 4.57	6.46 - 5.92	4.99	6.46	
		Power consumption	(kW)	2.67	3.70	2.67	3.70	
		Power factor	(%)	81	87	81	87	
		COP	(W/W)	4.19	3.78	4.19	3.78	
		Energy efficiency class *		A	A	-	-	
		Maximum current	(A)	15.2	15.2	15.2	15.2	
Indoor unit								
Appearance	Main unit		Shine white					
Outer dimension	Main unit	Height	(mm)	210	210	210	210	
		Width	(mm)	1595	1595	1595	1595	
		Depth	(mm)	680	680	680	680	
Total weight	Main unit		(kg)	33	33	33	33	
Heat exchanger			Finned tube					
Fan unit	Fan		Centrifugal fan					
	Standard air flow	H/M/L	(m3/min)	27.5 / 24.0 / 21.2	30.0 / 26.0 / 23.1	27.5 / 24.0 / 21.2	30.0 / 26.0 / 23.1	
	Motor		(W)	120	120	120	120	
Sound pressure level			H/M/L	(dB/A)	41 / 38 / 35	43 / 40 / 37	41 / 38 / 35	43 / 40 / 37
Sound power level			H/M/L	(dB/A)	56 / 53 / 50	58 / 55 / 52	56 / 53 / 50	58 / 55 / 52
Connecting pipe	Drain port		VP20					
Outdoor unit								
Outer dimension	Standard length		(m)	7.5	7.5	7.5	7.5	
	Min. length		(m)	3	3	3	3	
	Max. total length		(m)	75	75	75	75	
	Over 30m		40g/m (31m to 75m)					
	Hight difference	Outdoor lower		(m)	30	30	30	30
Outdoor high		(m)	30	30	30	30		
Connecting pipe	Gas side		(mm)	15.9	15.9	15.9	15.9	
	Liquid side		(mm)	9.5	9.5	9.5	9.5	
Fan unit	Fan		Propeller fan					
	Standard air flow high		(m3/min)	101	103	101	103	
	Motor		(W)	100 + 100	100 + 100	100 + 100	100 + 100	
Sound pressure level	Cooling/Heating		(dB/A)	49/50	51/52	49/50	51/52	
Sound power level	Cooling/Heating		(dB/A)	66/67	68/69	66/67	68/69	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-13. Indoor unit (Ceiling Type)

<Twin type>

Model	Indoor unit 1		RAV-SM	562CT-E	802CT-E	802CT-E	562CT-E	802CT-E	802CT-E	
	Indoor unit 2		RAV-SM	562CT-E	802CT-E	802CT-E	562CT-E	802CT-E	802CT-E	
	Outdoor unit		RAV-SP	1104AT8-E	1404AT8-E	1604AT8-E	1104AT7	1404AT7	1604AT7	
Cooling capacity			(kW)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	14.0 (2.6-16.0)	10.0 (2.6-12.0)	12.5 (2.6-14.0)	14.0 (2.6-16.0)	
Heating capacity			(kW)	11.2 (2.4-14.0)	14.0 (2.4-18.0)	16.0 (2.4-19.0)	11.2 (2.4-14.0)	14.0 (2.4-18.0)	16.0 (2.4-19.0)	
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz			3 phase 4wired (3N-4pole) 380V 60Hz			
Electrical characteristics	Cooling	Running current	(A)	5.23 - 4.79	6.67 - 6.11	8.39 - 7.68	5.23	6.67	8.39	
		Power consumption	(kW)	2.79	3.83	4.99	2.79	3.83	4.99	
		Power factor	(%)	81	87	90	81	87	90	
		EER		3.58	3.26	2.81	3.58	3.26	2.81	
		Energy efficiency class *		A	A	C	-	-	-	
	Heating	Running current	(A)	4.99 - 4.57	6.46 - 5.92	7.77 - 7.11	4.99	6.46	7.77	
		Power consumption	(kW)	2.67	3.70	4.60	2.67	3.70	4.60	
		Power factor	(%)	81	87	90	81	87	90	
		COP		4.19	3.78	3.48	4.19	3.78	3.48	
		Energy efficiency class *		A	A	B	-	-	-	
Maximum current			(A)	14.8	15.6	15.6	14.8	15.6	15.6	
Indoor unit										
Appearance		Main unit		Shine white						
Outer dimension	Main unit	Height	(mm)	210	210	210	210	210	210	
		Width	(mm)	910	1180	1180	910	1180	1180	
		Depth	(mm)	680	680	680	680	680	680	
Total weight	Main unit		(kg)	21	25	25	21	25	25	
Heat exchanger			Finned tube							
Fan unit	Fan		Centrifugal fan							
	Standard air flow	H/M/L	(m3/min)	13.0 / 11.2 / 10.0	18.5 / 16.7 / 14.6	18.5 / 16.7 / 14.6	13.0 / 11.2 / 10.0	18.5 / 16.7 / 14.6	18.5 / 16.7 / 14.6	
	Motor		(W)	60	60	60	60	60	60	
Sound pressure level		H/M/L	(dB/A)	36 / 33 / 30	38 / 36 / 33	38 / 36 / 33	36 / 33 / 30	38 / 36 / 33	38 / 36 / 33	
Sound power level		H/M/L	(dB/A)	51 / 48 / 45	53 / 51 / 48	53 / 51 / 48	51 / 48 / 45	53 / 51 / 48	53 / 51 / 48	
Connecting pipe	Drain port		VP20							
Outdoor unit										
Outer dimension	Standard length		(m)	7.5	7.5	7.5	7.5	7.5	7.5	
	Min. length		(m)	3	3	3	3	3	3	
	Max. total length		(m)	50	50	50	50	50	50	
	Over 30m		40g/m (31m to 50m)							
	Height difference	Outdoor lower		(m)	30	30	30	30	30	30
Outdoor high		(m)	30	30	30	30	30	30		
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	15.9	15.9	15.9	15.9	
		Sub	(mm)	12.7	15.9	15.9	12.7	15.9	15.9	
	Liquid side	Main	(mm)	9.5	9.5	9.5	9.5	9.5	9.5	
		Sub	(mm)	6.4	9.5	9.5	6.4	9.5	9.5	
Fan unit	Fan		Propeller fan							
	Standard air flow high		(m3/min)	101	103	103	101	103	103	
	Motor		(W)	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	
Sound pressure level	Cooling/Heating		(dB/A)	49/50	51/52	51/53	49/50	51/52	51/53	
Sound power level	Cooling/Heating		(dB/A)	66/67	68/69	68/70	66/67	68/69	68/70	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-14. Indoor unit (Ceiling Type)

<Tripple type>

Model	Indoor unit 1		RAV-SM	562CT-E	562CT-E	
	Indoor unit 2		RAV-SM	562CT-E	562CT-E	
	Indoor unit 3		RAV-SM	562CT-E	562CT-E	
	Outdoor unit		RAV-SP	1604AT8-E 1604AT8-TR	1604AT7	
Cooling capacity		(kW)		14.0 (2.6-16.0)	14.0 (2.6-16.0)	
Heating capacity		(kW)		16.0 (2.4-19.0)	16.0 (2.4-19.0)	
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz	3 phase 4wired (3N-4pole) 380V 60Hz	
Electrical characteristics	Cooling	Running current	(A)	8.39 - 7.68	8.39	
		Power consumption	(kW)	4.99	4.99	
		Power factor	(%)	90	90	
		EER		2.81	2.81	
		Energy efficiency class *		C	-	
	Heating	Running current	(A)	7.77 - 7.11	7.77	
		Power consumption	(kW)	4.60	4.60	
		Power factor	(%)	90	90	
		COP		3.48	3.48	
		Energy efficiency class *		B	-	
	Maximum current	(A)	15.3	15.3		
Indoor unit						
Appearance	Main unit		Shine white			
Outer dimension	Main unit	Height	(mm)	210	210	
		Width	(mm)	910	910	
		Depth	(mm)	680	680	
Total weight	Main unit		(kg)	21	21	
Heat exchanger		Finned tube				
Fan unit	Fan		Centrifugal fan			
	Standard air flow	H/M/L	(m3/min)	13.0 / 11.2 / 10.0	13.0 / 11.2 / 10.0	
	Motor		(W)	60	60	
Sound pressure level		H/M/L	(dB/A)	36 / 33 / 30	36 / 33 / 30	
Sound power level		H/M/L	(dB/A)	51 / 48 / 45	51 / 48 / 45	
Connecting pipe	Drain port		VP20			
Outdoor unit						
Outer dimension	Standard length		(m)	7.5	7.5	
	Min. length		(m)	3	3	
	Max. total length		(m)	50	50	
	Over 30m		40g/m (31m to 50m)			
	Hight difference	Outdoor lower	(m)	30	30	
Outdoor high		(m)	30	30		
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	
		Sub	(mm)	12.7	12.7	
	Liquid side	Main	(mm)	9.5	9.5	
		Sub	(mm)	6.4	6.4	
Fan unit	Fan		Propeller fan			
	Standard air flow high	(m3/min)	103	103		
	Motor	(W)	100 + 100	100 + 100		
Sound pressure level	Cooling/Heating		(dB/A)	51/53	51/53	
Sound power level	Cooling/Heating		(dB/A)	68/70	68/70	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-15. Indoor unit (High Wall Type)

<Twin type>

Model	Indoor unit 1		RAV-SM	562KRT-E	802KRT-E	802KRT-E	562KRT-E	802KRT-E	802KRT-E	
	Indoor unit 2		RAV-SM	562KRT-E	802KRT-E	802KRT-E	562KRT-E	802KRT-E	802KRT-E	
	Outdoor unit		RAV-SP	1104AT8-E	1404AT8-E	1604AT8-E	1104AT7	1404AT7	1604AT7	
Cooling capacity			(kW)	10.0 (2.6-12.0)	12.3 (2.6-13.5)	14.0 (2.6-16.0)	10.0 (2.6-12.0)	12.3 (2.6-13.5)	14.0 (2.6-16.0)	
Heating capacity			(kW)	11.2 (2.4-14.0)	14.0 (2.4-18.0)	16.0 (2.4-19.0)	11.2 (2.4-14.0)	14.0 (2.4-18.0)	16.0 (2.4-19.0)	
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz			3 phase 4wired (3N-4pole) 380V 60Hz			
Electrical characteristics	Cooling	Running current	(A)	5.48 - 5.02	6.97 - 6.38	8.57 - 7.85	5.48	6.97	8.57	
		Power consumption	(kW)	2.92	4.00	5.10	2.92	4.00	5.10	
		Power factor	(%)	81	87	90	81	87	90	
		EER		3.42	3.08	2.75	3.42	3.08	2.75	
		Energy efficiency class *		A	B	D	-	-	-	
	Heating	Running current	(A)	5.33 - 4.88	6.78 - 6.20	8.24 - 7.54	5.33	6.78	8.24	
		Power consumption	(kW)	2.85	3.88	4.88	2.85	3.88	4.88	
		Power factor	(%)	81	87	90	81	87	90	
		COP		3.93	3.61	3.28	3.93	3.61	3.28	
		Energy efficiency class *		A	A	C	-	-	-	
Maximum current			(A)	14.5	14.8	14.8	14.5	14.8	14.8	
Indoor unit										
Appearance		Main unit		Pure white						
Outer dimension	Main unit	Height	(mm)	298	298	298	298	298	298	
		Width	(mm)	998	998	998	998	998	998	
		Depth	(mm)	221	221	221	221	221	221	
Total weight	Main unit		(kg)	12	12	12	12	12	12	
Heat exchanger		Finned tube								
Fan unit	Fan		Cross flow fan							
	Standard air flow	H/M/L	(m3/min)	14.0 / 12.5 / 10.7	18.5 / 14.6 / 12.2	18.5 / 14.6 / 12.2	14.0 / 12.5 / 10.7	18.5 / 14.6 / 12.2	18.5 / 14.6 / 12.2	
	Motor		(W)	30	30	30	30	30	30	
Sound pressure level		H/M/L	(dB/A)	39 / 36 / 33	45 / 41 / 36	45 / 41 / 36	39 / 36 / 33	45 / 41 / 36	45 / 41 / 36	
Sound power level		H/M/L	(dB/A)	54 / 51 / 48	60 / 56 / 51	60 / 56 / 51	54 / 51 / 48	60 / 56 / 51	60 / 56 / 51	
Connecting pipe	Drain port		VP16							
Outdoor unit										
Outer dimension	Standard length		(m)	7.5	7.5	7.5	7.5	7.5	7.5	
	Min. length		(m)	3	3	3	3	3	3	
	Max. total length		(m)	50	50	50	50	50	50	
	Over 30m		40g/m (31m to 50m)							
	Hight difference	Outdoor lower		(m)	30	30	30	30	30	30
Outdoor high		(m)	30	30	30	30	30	30		
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	15.9	15.9	15.9	15.9	
		Sub	(mm)	12.7	15.9	15.9	12.7	15.9	15.9	
	Liquid side	Main	(mm)	9.5	9.5	9.5	9.5	9.5	9.5	
		Sub	(mm)	6.4	9.5	9.5	6.4	9.5	9.5	
Fan unit	Fan		Propeller fan							
	Standard air flow high		(m3/min)	101	103	103	101	103	103	
	Motor		(W)	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	
Sound pressure level		Cooling/Heating	(dB/A)	49/50	51/52	51/53	49/50	51/52	51/53	
Sound power level		Cooling/Heating	(dB/A)	66/67	68/69	68/70	66/67	68/69	68/70	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-1-16. Indoor unit (High Wall Type)

<Tripple type>

Model	Indoor unit 1		RAV-SM	562KRT-E	562KRT-E	
	Indoor unit 2		RAV-SM	562KRT-E	562KRT-E	
	Indoor unit 3		RAV-SM	562KRT-E	562KRT-E	
	Outdoor unit		RAV-SP	1604AT8-E 1604AT8-TR	1604AT7	
Cooling capacity			(kW)	14.0 (2.6-16.0)	14.0 (2.6-16.0)	
Heating capacity			(kW)	16.0 (2.4-19.0)	16.0 (2.4-19.0)	
Power supply				3 phase 4wired (3N-4pole) 380V - 415V 50Hz	3 phase 4wired (3N-4pole) 380V 60Hz	
Electrical characteristics	Cooling	Running current		(A)	8.57 - 7.85	8.57
		Power consumption		(kW)	5.10	5.10
		Power factor		(%)	90	90
		EER			2.75	2.75
		Energy efficiency class *			D	-
	Heating	Running current		(A)	8.24 - 7.54	8.24
		Power consumption		(kW)	4.88	4.88
		Power factor		(%)	90	90
		COP			3.28	3.28
		Energy efficiency class *			C	-
Maximum current		(A)	14.9	14.9		
Indoor unit						
Appearance	Main unit			Pure white		
Outer dimension	Main unit	Height	(mm)	298	298	
		Width	(mm)	998	998	
		Depth	(mm)	221	221	
Total weight	Main unit			(kg)	12	
Heat exchanger			Finned tube			
Fan unit	Fan		Cross flow fan			
	Standard air flow	H/M/L	(m3/min)	14.0 / 12.5 / 10.7	14.0 / 12.5 / 10.7	
	Motor		(W)	30	30	
Sound pressure level		H/M/L	(dB/A)	39 / 36 / 33	39 / 36 / 33	
Sound power level		H/M/L	(dB/A)	54 / 51 / 48	54 / 51 / 48	
Connecting pipe	Drain port			VP16		
Outdoor unit						
Outer dimension	Standard length		(m)	7.5	7.5	
	Min. length		(m)	3	3	
	Max. total length		(m)	50	50	
	Over 30m		40g/m (31m to 50m)			
	Hight difference	Outdoor lower		(m)	30	30
Outdoor high		(m)	30	30		
Connecting pipe	Gas side	Main	(mm)	15.9	15.9	
		Sub	(mm)	12.7	12.7	
	Liquid side	Main	(mm)	9.5	9.5	
		Sub	(mm)	6.4	6.4	
Fan unit	Fan		Propeller fan			
	Standard air flow high		(m3/min)	103	103	
	Motor		(W)	100 + 100	100 + 100	
Sound pressure level	Cooling/Heating		(dB/A)	51/53	51/53	
Sound power level	Cooling/Heating		(dB/A)	68/70	68/70	

* IEC standard

This specification refer to JISB8615-1 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: 7.5m

1-2. Outdoor Unit

Model	Outdoor unit	RAV-SP	1104AT8-E 1104AT8-TR	1404AT8-E 1404AT8-TR	1604AT8-E 1604AT8-TR	1104AT7	1404AT7	1604AT7	
Power supply			3 phase 4wired (3N-4pole) 380V - 415V 50Hz (Power exclusive to outdoor required.)			3 phase 4wired (3N-4pole) 380V 60Hz (Power exclusive to outdoor required.)			
Compressor	Type		Hermetic compressor						
	Motor (kW)		3.75	3.75	3.75	3.75	3.75	3.75	
	Pole		4	4	4	4	4	4	
Refrigerant charged		(kg)	3.1	3.1	3.1	3.1	3.1	3.1	
Refrigerant control			Pulse motor valve						
Pipe	Standard length (m)		7.5	7.5	7.5	7.5	7.5	7.5	
	Minum length (m)		3	3	3	3	3	3	
	Max. total length (m)		75	75	75	75	75	75	
	Additional refrigerant charge under long piping connection			40g/m(31m to 75m)					
	Hight difference	Outdoor lower (m)		30	30	30	30	30	30
Outdoor high (m)			30	30	30	30	30	30	
Outer dimension	Height (mm)		1340	1340	1340	1340	1340	1340	
	Width (mm)		900	900	900	900	900	900	
	Depth (mm)		320	320	320	320	320	320	
Appearance			Silky shade (Muncel 1Y8.5-0.5)						
Total weight		(kg)	95	95	95	95	95	95	
Heat exchanger			Finned tube						
Connecting pipe	Gas side (mm)		15.9	15.9	15.9	15.9	15.9	15.9	
	Liquid side (mm)		9.5	9.5	9.5	9.5	9.5	9.5	
Fan unit	Fan		Propeller fan						
	Standard air flow (m3/min)		101	103	103	101	103	103	
	Motor (W)		100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	100 + 100	
Sound pressure level	Cooling/Heating (dB/A)		49/50	51/52	51/53	49/50	51/52	51/53	
Sound power level	Cooling/Heating (dB/A)		66/67	68/69	68/70	66/67	68/69	68/70	
Outside air temperature, cooling			46 to -15C						
Outside air temperature, heating			15 to -20C						

This specification refer to JISB8615-1 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: 7.5m

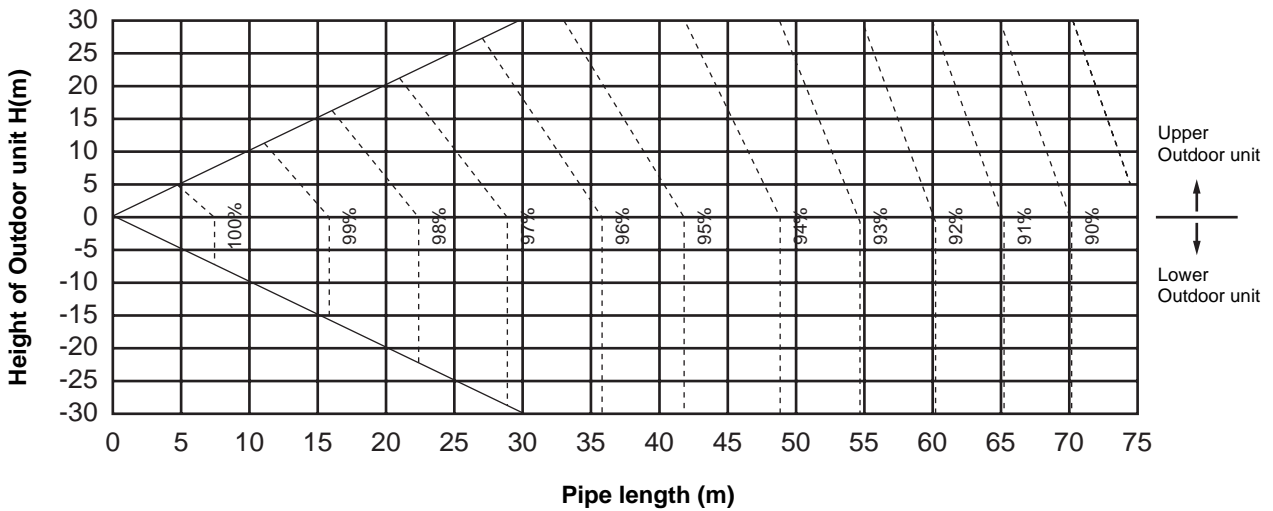
2 Pipe Capacity Correction

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

RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7
 RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7
 RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7

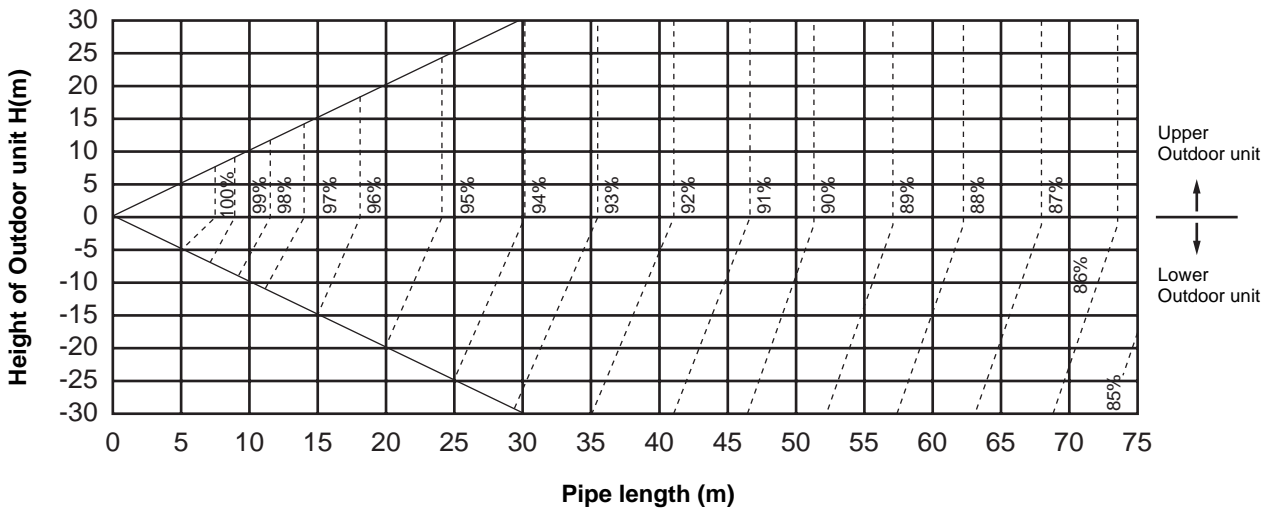
Heating

Minimum pipe length 3m



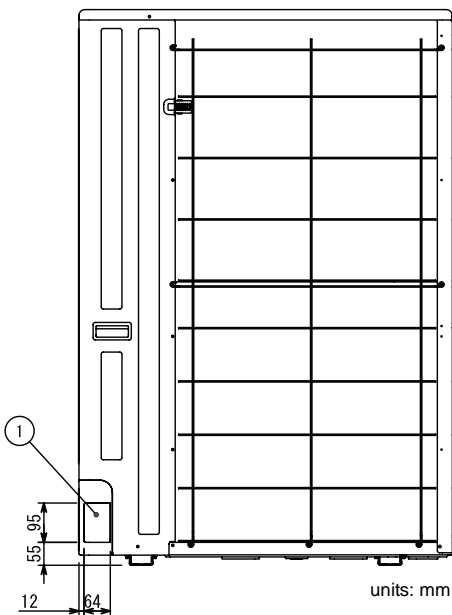
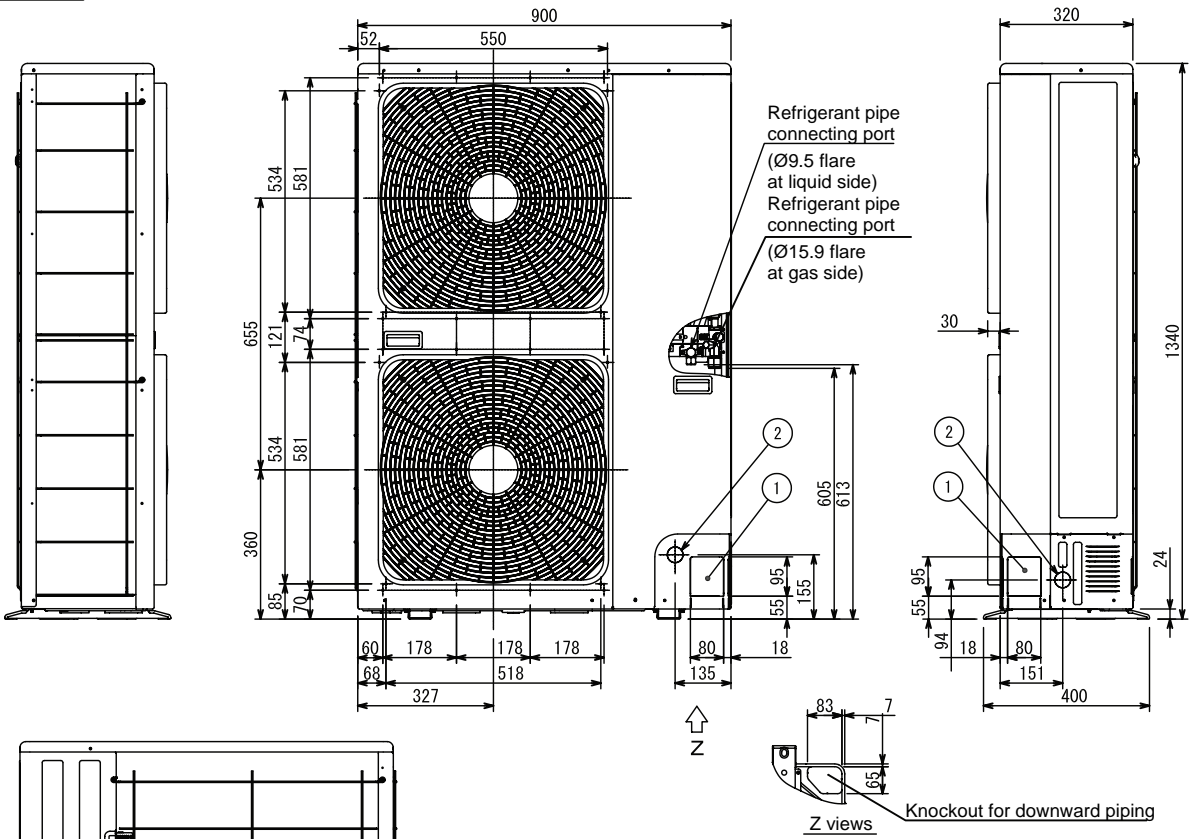
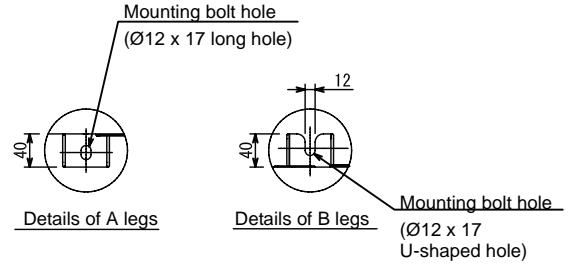
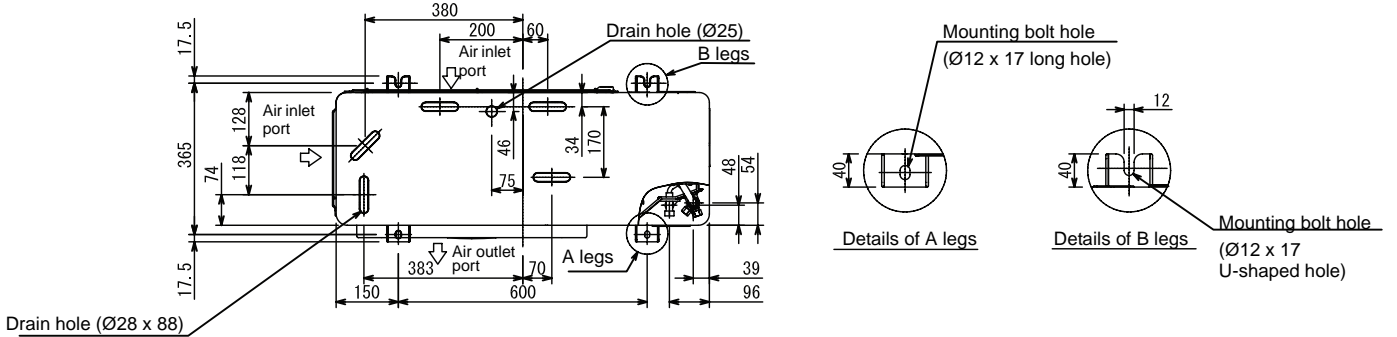
Cooling

Minimum pipe length 3m



3 Dimensional Drawing

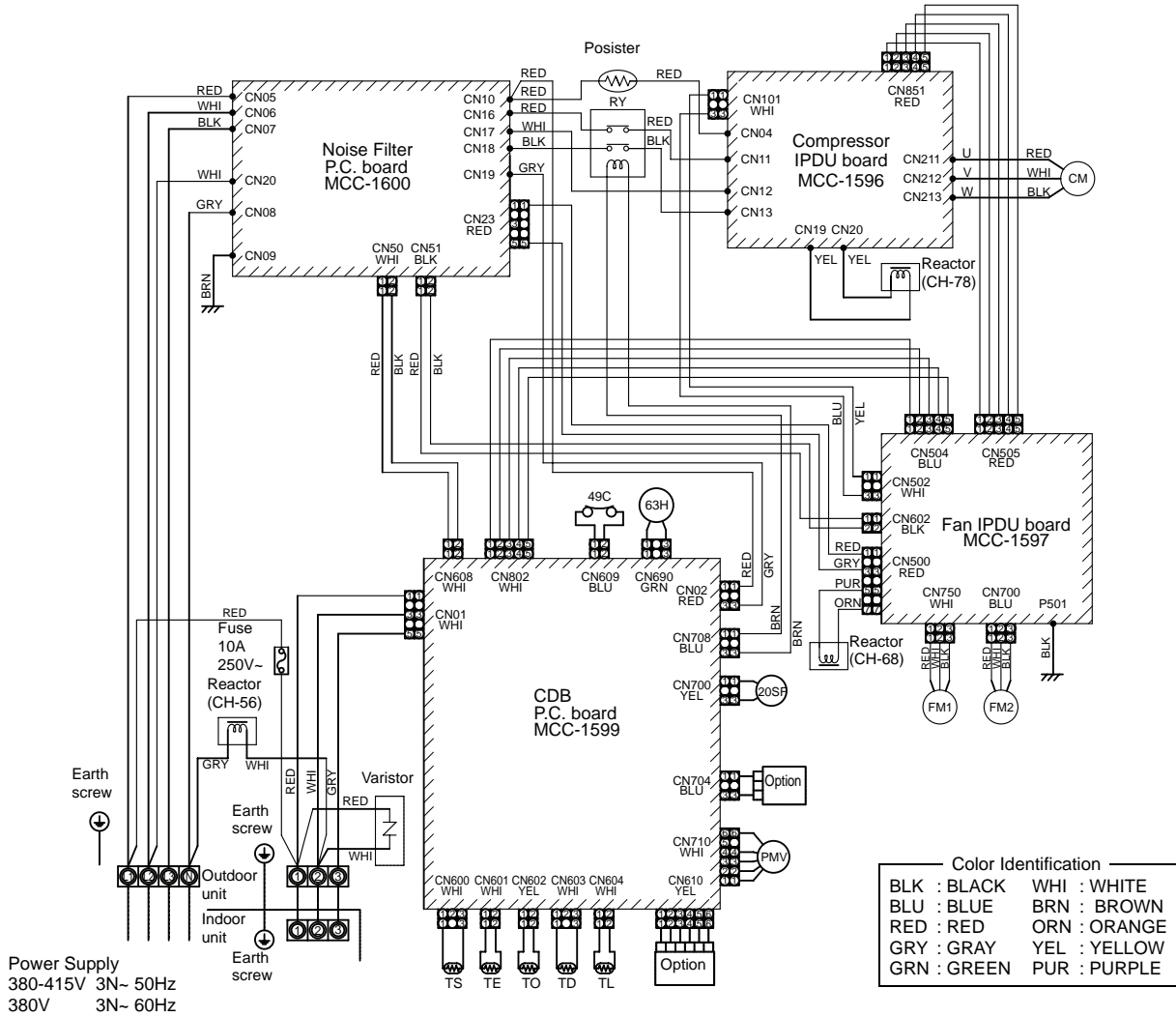
RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7
 RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7
 RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7



	Name	Note
①	Refrigerant piping hole Indoor/Outdoor unit connecting wire inlet hole	—
②	Power supply inlet hole	Ø38 Knockout hole

4 Wiring Diagrams

**Model : RAV-SP1104AT8(Z)(ZG)-E, -SP1404AT8(Z)(ZG)-E, -SP1604AT8(Z)(ZG)-E,
RAV-SP1104AT7(Z)(ZG), -SP1404AT7(Z)(ZG), -SP1604AT7(Z)(ZG)
RAV-SP1104AT8(Z)(ZG)-TR, -SP1404AT8(Z)(ZG)-TR, -SP1604AT8(Z)(ZG)-TR**

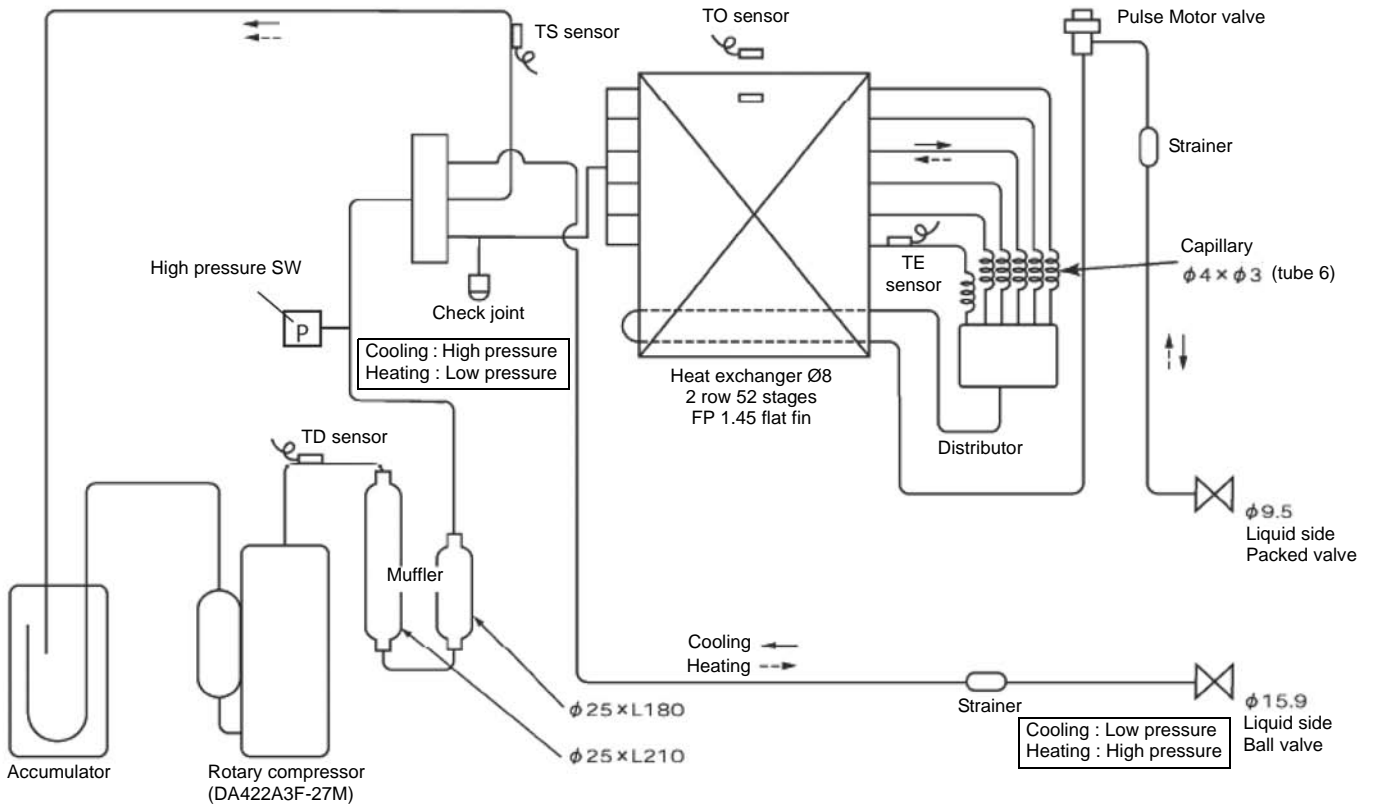


Symbol	Part Name	Symbol	Part Name
CM	Compressor	TL	Heat exchanger sensor 2
FM1, 2	Fan motor	TO	Outside temperature sensor
PMV	Pulse motor valve	20SF	4-way valve coil
TD	Pipe temperature sensor (Discharge)	49C	Compressor case thermostat
TS	Pipe temperature sensor (Suction)	63H	High-pressure switch
TE	Heat exchanger sensor 1	RY	Relay

1. © indicates the terminal block. Alphanumeric characters in the cycle indicate the terminal No.
2. The two-dot chain line indicates the wiring procured locally.
3. ▨ indicates the P.C. board.
4. For the indoor unit circuit, refer to the wiring diagram of the indoor unit.

5 Refrigerating Cycle Diagram

RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7
 RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7
 RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7



6 Sensible Capacity Table

3-phase Super Digital Inverter 4 Series Sensible Heat Capacity : RAV-SM***UT-E

RAV-SM1104UT-E / RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1104	10.0	10.4	8.0	11.0	8.4	11.5	8.8	11.9	9.1	12.3	9.4	12.7	9.7	13.0	10.0	13.8	10.6	14.4	11.0
	12.0	10.2	7.8	10.8	8.2	11.3	8.6	11.7	9.0	12.1	9.3	12.5	9.5	12.8	9.8	13.6	10.4	14.2	10.9
	14.0	10.1	7.7	10.6	8.1	11.1	8.5	11.5	8.8	11.9	9.1	12.2	9.4	12.6	9.6	13.3	10.2	14.0	10.7
	16.0	9.9	7.6	10.4	8.0	10.9	8.4	11.3	8.6	11.7	8.9	12.0	9.2	12.4	9.5	13.1	10.0	13.7	10.5
	18.0	9.7	7.4	10.2	7.8	10.7	8.2	11.1	8.5	11.5	8.8	11.8	9.0	12.2	9.3	12.9	9.8	13.5	10.3
	20.0	9.5	7.3	10.0	7.7	10.5	8.1	10.9	8.3	11.3	8.6	11.6	8.9	11.9	9.1	12.6	9.7	13.2	10.1
	21.0	9.4	7.2	9.9	7.6	10.4	8.0	10.8	8.3	11.2	8.5	11.5	8.8	11.8	9.0	12.5	9.6	13.1	10.0
	23.0	9.3	7.1	9.8	7.5	10.2	7.8	10.6	8.1	11.0	8.4	11.3	8.6	11.6	8.9	12.3	9.4	12.9	9.8
	25.0	9.1	7.0	9.6	7.3	10.0	7.7	10.4	8.0	10.8	8.2	11.1	8.5	11.4	8.7	12.1	9.2	12.6	9.6
	27.0	8.9	6.8	9.4	7.2	9.8	7.5	10.2	7.8	10.5	8.1	10.9	8.3	11.2	8.5	11.8	9.0	12.4	9.5
	29.0	8.7	6.7	9.2	7.0	9.7	7.4	10.0	7.6	10.3	7.9	10.6	8.1	10.9	8.4	11.6	8.9	12.1	9.3
	31.0	8.6	6.6	9.0	6.9	9.5	7.2	9.8	7.5	10.1	7.8	10.4	8.0	10.7	8.2	11.4	8.7	11.9	9.1
	33.0	8.4	6.4	8.8	6.8	9.3	7.1	9.6	7.3	9.9	7.6	10.2	7.8	10.5	8.0	11.1	8.5	11.6	8.9
	35.0	8.2	6.3	8.6	6.6	9.1	6.9	9.4	7.2	9.7	7.4	10.0	7.7	10.3	7.9	10.9	8.3	11.4	8.7
	37.0	8.0	6.1	8.5	6.5	8.9	6.8	9.2	7.0	9.5	7.3	9.8	7.5	10.1	7.7	10.7	8.2	11.1	8.5
39.0	7.9	6.0	8.3	6.3	8.7	6.6	9.0	6.9	9.3	7.1	9.6	7.3	9.8	7.5	10.4	8.0	10.9	8.3	

RAV-SM1404UT-E / RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1404	10.0	13.0	9.0	13.7	9.5	14.4	10.0	14.9	10.3	15.4	10.7	15.8	11.0	16.3	11.3	17.3	12.0	18.1	12.5
	12.0	12.8	8.9	13.5	9.3	14.1	9.8	14.6	10.1	15.1	10.5	15.6	10.8	16.0	11.1	17.0	11.8	17.7	12.3
	14.0	12.6	8.7	13.2	9.2	13.9	9.6	14.4	10.0	14.9	10.3	15.3	10.6	15.7	10.9	16.7	11.6	17.4	12.1
	16.0	12.4	8.6	13.0	9.0	13.6	9.5	14.1	9.8	14.6	10.1	15.0	10.4	15.5	10.7	16.4	11.4	17.1	11.9
	18.0	12.1	8.4	12.8	8.9	13.4	9.3	13.9	9.6	14.4	10.0	14.8	10.2	15.2	10.5	16.1	11.2	16.8	11.7
	20.0	11.9	8.3	12.5	8.7	13.2	9.1	13.6	9.5	14.1	9.8	14.5	10.1	14.9	10.3	15.8	11.0	16.5	11.5
	21.0	11.8	8.2	12.4	8.6	13.0	9.0	13.5	9.4	14.0	9.7	14.4	10.0	14.8	10.3	15.7	10.9	16.4	11.4
	23.0	11.6	8.0	12.2	8.5	12.8	8.9	13.2	9.2	13.7	9.5	14.1	9.8	14.5	10.1	15.4	10.7	16.1	11.1
	25.0	11.4	7.9	12.0	8.3	12.6	8.7	13.0	9.0	13.4	9.3	13.8	9.6	14.2	9.9	15.1	10.5	15.8	10.9
	27.0	11.1	7.7	11.7	8.1	12.3	8.5	12.7	8.8	13.2	9.1	13.6	9.4	14.0	9.7	14.8	10.3	15.5	10.7
	29.0	10.9	7.6	11.5	8.0	12.1	8.4	12.5	8.7	12.9	9.0	13.3	9.2	13.7	9.5	14.5	10.1	15.2	10.5
	31.0	10.7	7.4	11.3	7.8	11.8	8.2	12.2	8.5	12.7	8.8	13.0	9.0	13.4	9.3	14.2	9.8	14.9	10.3
	33.0	10.5	7.3	11.0	7.7	11.6	8.0	12.0	8.3	12.4	8.6	12.8	8.9	13.1	9.1	13.9	9.6	14.5	10.1
	35.0	10.3	7.1	10.8	7.5	11.3	7.9	11.7	8.1	12.1	8.4	12.5	8.7	12.9	8.9	13.6	9.4	14.2	9.9
	37.0	10.0	7.0	10.6	7.3	11.1	7.7	11.5	8.0	11.9	8.2	12.2	8.5	12.6	8.7	13.3	9.2	13.9	9.7
39.0	9.8	6.8	10.3	7.2	10.9	7.5	11.2	7.8	11.6	8.1	12.0	8.3	12.3	8.5	13.0	9.0	13.6	9.5	

RAV-SM1604UT-E / RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1604	10.0	14.6	9.7	15.3	10.2	16.1	10.7	16.7	11.1	17.2	11.4	17.7	11.8	18.3	12.1	19.3	12.8	20.2	13.4
	12.0	14.3	9.5	15.1	10.0	15.8	10.5	16.4	10.9	16.9	11.2	17.4	11.6	17.9	11.9	19.0	12.6	19.9	13.2
	14.0	14.1	9.3	14.8	9.8	15.6	10.3	16.1	10.7	16.7	11.1	17.1	11.4	17.6	11.7	18.7	12.4	19.5	13.0
	16.0	13.8	9.2	14.6	9.7	15.3	10.1	15.8	10.5	16.4	10.9	16.8	11.2	17.3	11.5	18.4	12.2	19.2	12.7
	18.0	13.6	9.0	14.3	9.5	15.0	10.0	15.5	10.3	16.1	10.7	16.5	11.0	17.0	11.3	18.0	12.0	18.9	12.5
	20.0	13.3	8.9	14.0	9.3	14.7	9.8	15.3	10.1	15.8	10.5	16.2	10.8	16.7	11.1	17.7	11.7	18.5	12.3
	21.0	13.2	8.8	13.9	9.2	14.6	9.7	15.1	10.0	15.6	10.4	16.1	10.7	16.6	11.0	17.5	11.6	18.3	12.2
	23.0	13.0	8.6	13.7	9.1	14.3	9.5	14.8	9.8	15.3	10.2	15.8	10.5	16.3	10.8	17.2	11.4	18.0	11.9
	25.0	12.7	8.4	13.4	8.9	14.1	9.3	14.6	9.7	15.1	10.0	15.5	10.3	15.9	10.6	16.9	11.2	17.7	11.7
	27.0	12.5	8.3	13.1	8.7	13.8	9.1	14.3	9.5	14.8	9.8	15.2	10.1	15.6	10.4	16.6	11.0	17.3	11.5
	29.0	12.2	8.1	12.9	8.5	13.5	9.0	14.0	9.3	14.5	9.6	14.9	9.9	15.3	10.2	16.2	10.8	17.0	11.3
	31.0	12.0	8.0	12.6	8.4	13.2	8.8	13.7	9.1	14.2	9.4	14.6	9.7	15.0	10.0	15.9	10.6	16.6	11.0
	33.0	11.7	7.8	12.4	8.2	13.0	8.6	13.4	8.9	13.9	9.2	14.3	9.5	14.7	9.8	15.6	10.3	16.3	10.8
	35.0	11.5	7.6	12.1	8.0	12.7	8.4	13.1	8.7	13.6	9.0	14.0	9.3	14.4	9.6	15.3	10.1	16.0	10.6
	37.0	11.3	7.5	11.8	7.9	12.4	8.2	12.9	8.5	13.3	8.8	13.7	9.1	14.1	9.4	14.9	9.9	15.6	10.4
39.0	11.0	7.3	11.6	7.7	12.2	8.1	12.6	8.4	13.0	8.6	13.4	8.9	13.8	9.1	14.6	9.7	15.3	10.1	

TC:Total Capacity [kW]

SHC:Sensible Heat Capacity [kW]

3-phase Super Digital Inverter 4 Series Sensible Heat Capacity : RAV-SM***BT-E

RAV-SM1102BT-E / RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB		15.0CWB		16.0CWB		17.0CWB		18.0CWB		19.0CWB		20.0CWB		22.0CWB		24.0CWB	
		20.0CDB		21.5CDB		23.0CDB		24.5CDB		26.0CDB		27.0CDB		28.0CDB		30.0CDB		32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1102	10.0	10.4	7.4	11.0	7.8	11.5	8.2	11.9	8.5	12.3	8.7	12.7	9.0	13.0	9.3	13.8	9.8	14.4	10.3
	12.0	10.2	7.3	10.8	7.6	11.3	8.0	11.7	8.3	12.1	8.6	12.5	8.8	12.8	9.1	13.6	9.6	14.2	10.1
	14.0	10.1	7.1	10.6	7.5	11.1	7.9	11.5	8.2	11.9	8.4	12.2	8.7	12.6	8.9	13.3	9.5	14.0	9.9
	16.0	9.9	7.0	10.4	7.4	10.9	7.8	11.3	8.0	11.7	8.3	12.0	8.5	12.4	8.8	13.1	9.3	13.7	9.7
	18.0	9.7	6.9	10.2	7.3	10.7	7.6	11.1	7.9	11.5	8.2	11.8	8.4	12.2	8.6	12.9	9.1	13.5	9.6
	20.0	9.5	6.8	10.0	7.1	10.5	7.5	10.9	7.7	11.3	8.0	11.6	8.2	11.9	8.5	12.6	9.0	13.2	9.4
	21.0	9.4	6.7	9.9	7.1	10.4	7.4	10.8	7.7	11.2	7.9	11.5	8.2	11.8	8.4	12.5	8.9	13.1	9.3
	23.0	9.3	6.6	9.8	6.9	10.2	7.3	10.6	7.5	11.0	7.8	11.3	8.0	11.6	8.2	12.3	8.7	12.9	9.1
	25.0	9.1	6.5	9.6	6.8	10.0	7.1	10.4	7.4	10.8	7.6	11.1	7.9	11.4	8.1	12.1	8.6	12.6	9.0
	27.0	8.9	6.3	9.4	6.7	9.8	7.0	10.2	7.2	10.5	7.5	10.9	7.7	11.2	7.9	11.8	8.4	12.4	8.8
	29.0	8.7	6.2	9.2	6.5	9.7	6.9	10.0	7.1	10.3	7.3	10.6	7.6	10.9	7.8	11.6	8.2	12.1	8.6
	31.0	8.6	6.1	9.0	6.4	9.5	6.7	9.8	7.0	10.1	7.2	10.4	7.4	10.7	7.6	11.4	8.1	11.9	8.4
	33.0	8.4	6.0	8.8	6.3	9.3	6.6	9.6	6.8	9.9	7.0	10.2	7.3	10.5	7.5	11.1	7.9	11.6	8.3
	35.0	8.2	5.8	8.6	6.1	9.1	6.4	9.4	6.7	9.7	6.9	10.0	7.1	10.3	7.3	10.9	7.7	11.4	8.1
	37.0	8.0	5.7	8.5	6.0	8.9	6.3	9.2	6.5	9.5	6.8	9.8	6.9	10.1	7.1	10.7	7.6	11.2	7.9
39.0	7.9	5.6	8.3	5.9	8.7	6.2	9.0	6.4	9.3	6.6	9.6	6.8	9.8	7.0	10.4	7.4	10.9	7.7	

RAV-SM1402BT-E / RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		1402	10.0	13.0	9.0	13.7	9.5	14.4	9.9	14.9	10.3	15.4	10.7	15.8	11.0	16.3	11.3	17.3	11.9
12.0	12.8		8.9	13.5	9.3	14.1	9.8	14.6	10.1	15.1	10.5	15.6	10.8	16.0	11.1	17.0	11.7	17.7	12.3
14.0	12.6		8.7	13.2	9.2	13.9	9.6	14.4	10.0	14.9	10.3	15.3	10.6	15.7	10.9	16.7	11.5	17.4	12.1
16.0	12.4		8.5	13.0	9.0	13.6	9.4	14.1	9.8	14.6	10.1	15.0	10.4	15.5	10.7	16.4	11.3	17.1	11.9
18.0	12.1		8.4	12.8	8.8	13.4	9.3	13.9	9.6	14.4	9.9	14.8	10.2	15.2	10.5	16.1	11.1	16.8	11.6
20.0	11.9		8.2	12.5	8.7	13.2	9.1	13.6	9.4	14.1	9.8	14.5	10.0	14.9	10.3	15.8	10.9	16.5	11.4
21.0	11.8		8.2	12.4	8.6	13.0	9.0	13.5	9.3	14.0	9.7	14.4	9.9	14.8	10.2	15.7	10.8	16.4	11.3
23.0	11.6		8.0	12.2	8.4	12.8	8.9	13.2	9.2	13.7	9.5	14.1	9.8	14.5	10.0	15.4	10.6	16.1	11.1
25.0	11.4		7.9	12.0	8.3	12.6	8.7	13.0	9.0	13.4	9.3	13.8	9.6	14.2	9.9	15.1	10.4	15.8	10.9
27.0	11.1		7.7	11.7	8.1	12.3	8.5	12.7	8.8	13.2	9.1	13.6	9.4	14.0	9.7	14.8	10.2	15.5	10.7
29.0	10.9		7.6	11.5	8.0	12.1	8.4	12.5	8.6	12.9	8.9	13.3	9.2	13.7	9.5	14.5	10.0	15.2	10.5
31.0	10.7		7.4	11.3	7.8	11.8	8.2	12.2	8.5	12.7	8.8	13.0	9.0	13.4	9.3	14.2	9.8	14.9	10.3
33.0	10.5		7.3	11.0	7.6	11.6	8.0	12.0	8.3	12.4	8.6	12.8	8.8	13.1	9.1	13.9	9.6	14.5	10.1
35.0	10.3		7.1	10.8	7.5	11.3	7.8	11.7	8.1	12.1	8.4	12.5	8.7	12.9	8.9	13.6	9.4	14.2	9.9
37.0	10.0		7.0	10.6	7.3	11.1	7.7	11.5	8.0	11.9	8.2	12.2	8.5	12.6	8.7	13.3	9.2	13.9	9.6
39.0	9.8	6.8	10.3	7.2	10.9	7.5	11.2	7.8	11.6	8.0	12.0	8.3	12.3	8.5	13.0	9.0	13.6	9.4	

TC:Total Capacity [kW]

SHC:Sensible Heat Capacity [kW]

3-phase Super Digital Inverter 4 Series Sensible Heat Capacity : RAV-SM***CT-E

RAV-SM1102CT-E / RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1102	10.0	10.4	6.9	11.0	7.2	11.5	7.6	11.9	7.9	12.3	8.1	12.7	8.4	13.0	8.6	13.8	9.1	14.4	9.5
	12.0	10.2	6.8	10.8	7.1	11.3	7.5	11.7	7.7	12.1	8.0	12.5	8.2	12.8	8.5	13.6	9.0	14.2	9.4
	14.0	10.1	6.6	10.6	7.0	11.1	7.3	11.5	7.6	11.9	7.9	12.2	8.1	12.6	8.3	13.3	8.8	14.0	9.2
	16.0	9.9	6.5	10.4	6.9	10.9	7.2	11.3	7.5	11.7	7.7	12.0	7.9	12.4	8.2	13.1	8.7	13.7	9.0
	18.0	9.7	6.4	10.2	6.7	10.7	7.1	11.1	7.3	11.5	7.6	11.8	7.8	12.2	8.0	12.9	8.5	13.5	8.9
	20.0	9.5	6.3	10.0	6.6	10.5	6.9	10.9	7.2	11.3	7.4	11.6	7.7	11.9	7.9	12.6	8.3	13.2	8.7
	21.0	9.4	6.2	9.9	6.6	10.4	6.9	10.8	7.1	11.2	7.4	11.5	7.6	11.8	7.8	12.5	8.3	13.1	8.6
	23.0	9.3	6.1	9.8	6.4	10.2	6.8	10.6	7.0	11.0	7.2	11.3	7.4	11.6	7.7	12.3	8.1	12.9	8.5
	25.0	9.1	6.0	9.6	6.3	10.0	6.6	10.4	6.9	10.8	7.1	11.1	7.3	11.4	7.5	12.1	8.0	12.6	8.3
	27.0	8.9	5.9	9.4	6.2	9.8	6.5	10.2	6.7	10.5	7.0	10.9	7.2	11.2	7.4	11.8	7.8	12.4	8.2
	29.0	8.7	5.8	9.2	6.1	9.7	6.4	10.0	6.6	10.3	6.8	10.6	7.0	10.9	7.2	11.6	7.7	12.1	8.0
	31.0	8.6	5.7	9.0	5.9	9.5	6.2	9.8	6.5	10.1	6.7	10.4	6.9	10.7	7.1	11.4	7.5	11.9	7.8
	33.0	8.4	5.5	8.8	5.8	9.3	6.1	9.6	6.3	9.9	6.5	10.2	6.7	10.5	6.9	11.1	7.3	11.6	7.7
	35.0	8.2	5.4	8.6	5.7	9.1	6.0	9.4	6.2	9.7	6.4	10.0	6.6	10.3	6.8	10.9	7.2	11.4	7.5
	37.0	8.0	5.3	8.5	5.6	8.9	5.9	9.2	6.1	9.5	6.3	9.8	6.5	10.1	6.6	10.7	7.0	11.2	7.4
39.0	7.9	5.2	8.3	5.5	8.7	5.7	9.0	5.9	9.3	6.1	9.6	6.3	9.8	6.5	10.4	6.9	10.9	7.2	

RAV-SM1402CT-E / RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1402	10.0	13.0	8.5	13.7	9.0	14.4	9.4	14.9	9.8	15.4	10.1	15.8	10.4	16.3	10.7	17.3	11.3	18.1	11.8
	12.0	12.8	8.4	13.5	8.8	14.1	9.3	14.6	9.6	15.1	9.9	15.6	10.2	16.0	10.5	17.0	11.1	17.7	11.6
	14.0	12.6	8.2	13.2	8.7	13.9	9.1	14.4	9.4	14.9	9.8	15.3	10.0	15.7	10.3	16.7	10.9	17.4	11.4
	16.0	12.4	8.1	13.0	8.5	13.6	9.0	14.1	9.3	14.6	9.6	15.0	9.9	15.5	10.1	16.4	10.7	17.1	11.2
	18.0	12.1	8.0	12.8	8.4	13.4	8.8	13.9	9.1	14.4	9.4	14.8	9.7	15.2	10.0	16.1	10.6	16.8	11.0
	20.0	11.9	7.8	12.5	8.2	13.2	8.6	13.6	8.9	14.1	9.2	14.5	9.5	14.9	9.8	15.8	10.4	16.5	10.8
	21.0	11.8	7.7	12.4	8.1	13.0	8.6	13.5	8.9	14.0	9.2	14.4	9.4	14.8	9.7	15.7	10.3	16.4	10.7
	23.0	11.6	7.6	12.2	8.0	12.8	8.4	13.2	8.7	13.7	9.0	14.1	9.3	14.5	9.5	15.4	10.1	16.1	10.5
	25.0	11.4	7.5	12.0	7.8	12.6	8.2	13.0	8.5	13.4	8.8	13.8	9.1	14.2	9.3	15.1	9.9	15.8	10.3
	27.0	11.1	7.3	11.7	7.7	12.3	8.1	12.7	8.4	13.2	8.6	13.6	8.9	14.0	9.2	14.8	9.7	15.5	10.1
	29.0	10.9	7.2	11.5	7.5	12.1	7.9	12.5	8.2	12.9	8.5	13.3	8.7	13.7	9.0	14.5	9.5	15.2	9.9
	31.0	10.7	7.0	11.3	7.4	11.8	7.8	12.2	8.0	12.7	8.3	13.0	8.6	13.4	8.8	14.2	9.3	14.9	9.7
	33.0	10.5	6.9	11.0	7.2	11.6	7.6	12.0	7.9	12.4	8.1	12.8	8.4	13.1	8.6	13.9	9.1	14.5	9.5
	35.0	10.3	6.7	10.8	7.1	11.3	7.4	11.7	7.7	12.1	8.0	12.5	8.2	12.9	8.4	13.6	8.9	14.2	9.3
	37.0	10.0	6.6	10.6	6.9	11.1	7.3	11.5	7.5	11.9	7.8	12.2	8.0	12.6	8.3	13.3	8.7	13.9	9.1
39.0	9.8	6.4	10.3	6.8	10.9	7.1	11.2	7.4	11.6	7.6	12.0	7.8	12.3	8.1	13.0	8.5	13.6	8.9	

TC:Total Capacity [kW]

SHC:Sensible Heat Capacity [kW]

3-phase Super Digital Inverter 4 Series Sensible Heat Capacity : RAV-SM***DT-A

RAV-SM1403DT-A / RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1403	10.0	13.5	11.5	14.2	12.1	14.9	12.7	15.5	13.1	16.0	13.6	16.5	14.0	16.9	14.4	17.9	15.2	18.8	15.9
	12.0	13.3	11.3	14.0	11.9	14.7	12.5	15.2	12.9	15.7	13.4	16.2	13.8	16.7	14.2	17.6	15.0	18.5	15.7
	14.0	13.1	11.1	13.8	11.7	14.4	12.3	15.0	12.7	15.5	13.1	15.9	13.5	16.4	13.9	17.3	14.7	18.1	15.4
	16.0	12.8	10.9	13.5	11.5	14.2	12.1	14.7	12.5	15.2	12.9	15.6	13.3	16.1	13.7	17.0	14.5	17.8	15.1
	18.0	12.6	10.7	13.3	11.3	13.9	11.8	14.4	12.3	14.9	12.7	15.4	13.0	15.8	13.4	16.7	14.2	17.5	14.9
	20.0	12.4	10.5	13.0	11.1	13.7	11.6	14.2	12.0	14.7	12.4	15.1	12.8	15.5	13.2	16.4	14.0	17.2	14.6
	21.0	12.3	10.4	12.9	11.0	13.6	11.5	14.0	11.9	14.5	12.3	14.9	12.7	15.4	13.1	16.3	13.8	17.0	14.5
	23.0	12.0	10.2	12.7	10.8	13.3	11.3	13.8	11.7	14.2	12.1	14.7	12.5	15.1	12.8	16.0	13.6	16.7	14.2
	25.0	11.8	10.0	12.4	10.6	13.1	11.1	13.5	11.5	14.0	11.9	14.4	12.2	14.8	12.6	15.7	13.3	16.4	13.9
	27.0	11.6	9.8	12.2	10.4	12.8	10.9	13.3	11.3	13.7	11.6	14.1	12.0	14.5	12.3	15.4	13.1	16.1	13.7
	29.0	11.4	9.7	12.0	10.2	12.5	10.7	13.0	11.0	13.4	11.4	13.8	11.7	14.2	12.1	15.1	12.8	15.8	13.4
	31.0	11.1	9.5	11.7	9.9	12.3	10.4	12.7	10.8	13.2	11.2	13.6	11.5	13.9	11.8	14.8	12.5	15.4	13.1
	33.0	10.9	9.3	11.5	9.7	12.0	10.2	12.5	10.6	12.9	11.0	13.3	11.3	13.7	11.6	14.5	12.3	15.1	12.8
	35.0	10.7	9.1	11.2	9.5	11.8	10.0	12.2	10.4	12.6	10.7	13.0	11.0	13.4	11.4	14.2	12.0	14.8	12.6
37.0	10.4	8.9	11.0	9.3	11.5	9.8	11.9	10.1	12.4	10.5	12.7	10.8	13.1	11.1	13.9	11.8	14.5	12.3	
39.0	10.2	8.7	10.8	9.1	11.3	9.6	11.7	9.9	12.1	10.3	12.4	10.6	12.8	10.9	13.6	11.5	14.2	12.0	

RAV-SM1603DT-A / RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7

		indoor air temp.																	
unit size	outdoor air temp. CDB	14.0CWB 20.0CDB		15.0CWB 21.5CDB		16.0CWB 23.0CDB		17.0CWB 24.5CDB		18.0CWB 26.0CDB		19.0CWB 27.0CDB		20.0CWB 28.0CDB		22.0CWB 30.0CDB		24.0CWB 32.0CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
1603	10.0	14.9	12.4	15.7	13.1	16.4	13.7	17.0	14.2	17.6	14.7	18.1	15.1	18.6	15.6	19.7	16.5	20.7	17.2
	12.0	14.6	12.2	15.4	12.9	16.2	13.5	16.7	14.0	17.3	14.5	17.8	14.9	18.3	15.3	19.4	16.2	20.3	17.0
	14.0	14.4	12.0	15.1	12.6	15.9	13.3	16.4	13.7	17.0	14.2	17.5	14.6	18.0	15.0	19.1	15.9	20.0	16.7
	16.0	14.1	11.8	14.9	12.4	15.6	13.0	16.2	13.5	16.7	14.0	17.2	14.4	17.7	14.8	18.7	15.7	19.6	16.4
	18.0	13.9	11.6	14.6	12.2	15.3	12.8	15.9	13.3	16.4	13.7	16.9	14.1	17.4	14.5	18.4	15.4	19.3	16.1
	20.0	13.6	11.4	14.3	12.0	15.1	12.6	15.6	13.0	16.1	13.5	16.6	13.9	17.1	14.3	18.1	15.1	18.9	15.8
	21.0	13.5	11.3	14.2	11.9	14.9	12.5	15.4	12.9	16.0	13.3	16.4	13.7	16.9	14.1	17.9	15.0	18.7	15.6
	23.0	13.3	11.1	13.9	11.6	14.6	12.2	15.2	12.7	15.7	13.1	16.1	13.5	16.6	13.9	17.6	14.7	18.4	15.3
	25.0	13.0	10.9	13.7	11.4	14.4	12.0	14.9	12.4	15.4	12.8	15.8	13.2	16.3	13.6	17.2	14.4	18.0	15.1
	27.0	12.8	10.6	13.4	11.2	14.1	11.8	14.6	12.2	15.1	12.6	15.5	13.0	16.0	13.3	16.9	14.1	17.7	14.8
	29.0	12.5	10.4	13.2	11.0	13.8	11.5	14.3	11.9	14.8	12.3	15.2	12.7	15.7	13.1	16.6	13.8	17.3	14.5
	31.0	12.2	10.2	12.9	10.8	13.5	11.3	14.0	11.7	14.5	12.1	14.9	12.5	15.3	12.8	16.2	13.6	17.0	14.2
	33.0	12.0	10.0	12.6	10.5	13.3	11.1	13.7	11.5	14.2	11.8	14.6	12.2	15.0	12.5	15.9	13.3	16.6	13.9
	35.0	11.7	9.8	12.4	10.3	13.0	10.8	13.4	11.2	13.9	11.6	14.3	11.9	14.7	12.3	15.6	13.0	16.3	13.6
37.0	11.5	9.6	12.1	10.1	12.7	10.6	13.1	11.0	13.6	11.4	14.0	11.7	14.4	12.0	15.2	12.7	15.9	13.3	
39.0	11.2	9.4	11.8	9.9	12.4	10.4	12.9	10.7	13.3	11.1	13.7	11.4	14.1	11.8	14.9	12.4	15.6	13.0	

TC:Total Capacity [kW]

SHC:Sensible Heat Capacity [kW]

7 Part Load Performance

7-1. Indoor unit: RAV-SM1104UT-E / RAV-SM564UT-E (Twin)

Outdoor unit: RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	10000	2370	11200	2420

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	8820	7940	7060	6170	5290	4410	3530	2650	2290	2290
	W	2760	2330	1940	1580	1240	990	850	790	770	770
40	Q	9460	8510	7570	6620	5680	4730	3780	2840	2460	2460
	W	2540	2150	1790	1460	1150	910	780	730	710	710
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	2600	2600
	W	2370	2000	1670	1360	1070	850	730	680	660	660
30	Q	10540	9490	8430	7380	6320	5270	4220	3160	2740	2740
	W	2200	1850	1550	1260	990	790	680	630	610	610
25	Q	11070	9960	8860	7750	6640	5540	4430	3320	2880	2880
	W	2030	1710	1430	1160	920	730	620	580	560	560
20	Q	11610	10450	9290	8130	6970	5810	4640	3480	3020	3020
	W	1860	1570	1310	1070	840	670	570	530	520	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	2890	2890
	W	2670	2320	1940	1590	1290	1010	780	640	580	580
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	2630	2630
	W	2530	2190	1840	1500	1220	960	740	610	550	550
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	2400	2400
	W	2420	2100	1760	1440	1170	920	710	580	530	530
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2240	2240
	W	2340	2030	1710	1400	1130	890	690	560	510	510
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2010	2010
	W	2230	1940	1620	1330	1080	850	650	530	490	490
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	1980	1720	1440	1180	960	750	580	480	430	430
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	1980	1720	1440	1180	960	750	580	480	430	430
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1470	1470
	W	1920	1670	1400	1140	930	730	560	460	420	420
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1350	1350
	W	1840	1600	1340	1100	890	700	540	440	400	400
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1140	1140
	W	1740	1510	1260	1030	840	660	510	420	380	380
-20	Q	4350	3910	3480	3040	2610	2170	1740	1300	930	930
	W	1630	1420	1190	970	790	620	480	390	360	360

7-2. Indoor unit: RAV-SM1404UT-E / RAV-SM804UT-E (Twin)
Outdoor unit: RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	12500	3460	14000	3420

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11030	9920	8820	7720	6620	5510	4410	3310	2290	2290
	W	4020	3400	2840	2310	1800	1340	1080	850	770	770
40	Q	11830	10640	9460	8280	7100	5910	4730	3550	2460	2460
	W	3710	3130	2620	2140	1660	1230	1000	780	710	710
35	Q	12500	11250	10000	8750	7500	6250	5000	3750	2600	2600
	W	3460	2920	2440	1990	1550	1150	930	730	660	660
30	Q	13180	11860	10540	9220	7910	6590	5270	3950	2740	2740
	W	3210	2710	2260	1840	1440	1070	860	680	610	610
25	Q	13840	12450	11070	9690	8300	6920	5540	4150	2880	2880
	W	2960	2500	2090	1700	1330	980	800	620	560	560
20	Q	14510	13060	11610	10160	8710	7260	5810	4350	3020	3020
	W	2720	2290	1920	1560	1220	900	730	570	520	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3380	2890
	W	3770	3280	2750	2240	1830	1410	1070	790	620	580
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3070	2630
	W	3570	3100	2600	2120	1730	1340	1010	750	590	550
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	2800	2400
	W	3420	2970	2490	2030	1660	1280	970	720	560	530
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2610	2240
	W	3310	2880	2410	1970	1610	1240	940	700	540	510
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2340	2010
	W	3150	2740	2300	1870	1530	1180	890	660	520	490
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1830	1570
	W	2800	2430	2040	1660	1360	1050	790	590	460	430
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1830	1570
	W	2800	2430	2040	1660	1360	1050	790	590	460	430
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1720	1470
	W	2720	2360	1980	1610	1320	1020	770	570	440	420
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1570	1350
	W	2600	2260	1890	1540	1260	970	740	550	430	400
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1330	1140
	W	2450	2130	1790	1460	1190	920	700	520	400	380
-20	Q	5430	4890	4350	3800	3260	2720	2170	1630	1090	930
	W	2310	2000	1680	1370	1120	860	650	490	380	360

7-3. Indoor unit: RAV-SM1604UT-E / RAV-SM804UT-E (Twin) / RAV-SM564UT-E (Triple)
Outdoor unit: RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	14000	4490	16000	4300

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	12350	11110	9880	8640	7410	6170	4940	3700	2470	2290
	W	5220	4410	3690	2930	2230	1600	1230	920	790	770
40	Q	13240	11920	10600	9270	7950	6620	5300	3970	2650	2460
	W	4820	4070	3400	2700	2060	1480	1140	850	730	710
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	2800	2600
	W	4490	3790	3170	2520	1920	1380	1060	790	680	660
30	Q	14760	13280	11800	10330	8850	7380	5900	4430	2950	2740
	W	4160	3510	2940	2340	1780	1280	980	730	630	610
25	Q	15500	13950	12400	10850	9300	7750	6200	4650	3100	2880
	W	3840	3240	2710	2160	1640	1180	910	680	580	560
20	Q	16250	14630	13000	11380	9750	8130	6500	4880	3250	3020
	W	3520	2980	2490	1980	1510	1080	830	620	530	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	2890
	W	4740	4110	3450	2820	2250	1650	1240	880	630	580
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	2630
	W	4490	3900	3270	2680	2130	1570	1170	840	600	550
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	2400
	W	4300	3730	3130	2560	2040	1500	1120	800	570	530
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2240
	W	4170	3610	3030	2480	1980	1450	1090	780	550	510
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2010
	W	3960	3440	2890	2360	1880	1380	1030	740	530	490
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	3520	3050	2560	2100	1670	1230	920	660	470	430
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	3520	3050	2560	2100	1670	1230	920	660	470	430
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1470
	W	3410	2960	2490	2030	1620	1190	890	640	450	420
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1350
	W	3270	2840	2380	1950	1550	1140	850	610	430	400
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1140
	W	3090	2680	2250	1840	1460	1080	800	570	410	380
-20	Q	6210	5590	4970	4350	3720	3100	2480	1860	1240	930
	W	2900	2520	2110	1730	1380	1010	760	540	380	360

7-4. Indoor unit: RAV-SM562MUT-E (Twin)

Outdoor unit: RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	10000	2790	11200	2670

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	8820	7940	7060	6170	5290	4410	3530	2650	2290	2290
	W	3240	2740	2290	1860	1470	1160	980	810	770	770
40	Q	9460	8510	7570	6620	5680	4730	3780	2840	2460	2460
	W	2990	2530	2110	1720	1350	1070	900	750	710	710
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	2600	2600
	W	2790	2360	1970	1600	1260	1000	840	700	660	660
30	Q	10540	9490	8430	7380	6320	5270	4220	3160	2740	2740
	W	2590	2190	1830	1480	1170	930	780	650	610	610
25	Q	11070	9960	8860	7750	6640	5540	4430	3320	2880	2880
	W	2390	2020	1690	1370	1080	860	720	600	560	560
20	Q	11610	10450	9290	8130	6970	5810	4640	3480	3020	3020
	W	2190	1850	1550	1260	990	790	660	550	520	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	2890	2890
	W	2940	2560	2150	1750	1430	1110	860	710	580	580
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	2630	2630
	W	2790	2420	2040	1660	1360	1060	820	670	550	550
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	2400	2400
	W	2670	2320	1950	1590	1300	1010	780	640	530	530
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2240	2240
	W	2590	2250	1890	1540	1260	980	760	620	510	510
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2010	2010
	W	2460	2140	1800	1470	1200	930	720	590	490	490
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	2190	1900	1600	1300	1060	830	640	520	430	430
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	2190	1900	1600	1300	1060	830	640	520	430	430
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1470	1470
	W	2120	1840	1550	1260	1030	800	620	510	420	420
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1350	1350
	W	2030	1770	1480	1210	990	770	590	490	400	400
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1140	1140
	W	1920	1660	1400	1140	930	720	560	460	380	380
-20	Q	4350	3910	3480	3040	2610	2170	1740	1300	930	930
	W	1800	1570	1320	1070	880	680	530	430	360	360

7-5. Indoor unit: RAV-SM562MUT-E (Triple)

Outdoor unit: RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	14000	4990	16000	4600

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	12350	11110	9880	8640	7410	6170	4940	3700	2470	2290
	W	5800	4900	4090	3260	2480	1780	1360	1010	880	770
40	Q	13240	11920	10600	9270	7950	6620	5300	3970	2650	2460
	W	5350	4520	3780	3000	2290	1640	1260	930	820	710
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	2800	2600
	W	4990	4210	3520	2800	2130	1530	1170	870	760	660
30	Q	14760	13280	11800	10330	8850	7380	5900	4430	2950	2740
	W	4630	3900	3260	2600	1970	1420	1080	810	700	610
25	Q	15500	13950	12400	10850	9300	7750	6200	4650	3100	2880
	W	4270	3600	3010	2400	1820	1310	1000	740	650	560
20	Q	16250	14630	13000	11380	9750	8130	6500	4880	3250	3020
	W	3920	3300	2760	2200	1670	1200	920	680	600	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	2890
	W	5070	4400	3690	3010	2410	1760	1320	940	670	580
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	2630
	W	4810	4170	3500	2850	2290	1670	1250	890	640	550
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	2400
	W	4600	3990	3350	2730	2190	1600	1200	850	610	530
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2240
	W	4460	3870	3250	2650	2120	1550	1160	820	590	510
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2010
	W	4240	3680	3090	2520	2020	1480	1110	780	560	490
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	3770	3270	2740	2240	1790	1310	980	700	500	430
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	3770	3270	2740	2240	1790	1310	980	700	500	430
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1470
	W	3650	3170	2660	2170	1740	1270	950	670	480	420
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1350
	W	3500	3040	2550	2080	1670	1220	910	650	460	400
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1140
	W	3300	2860	2400	1960	1570	1150	860	610	440	380
-20	Q	6210	5590	4970	4350	3720	3100	2480	1860	1240	930
	W	3110	2690	2260	1840	1480	1080	810	570	410	360

7-6. Indoor unit: RAV-SM564SDT-E (Twin)

Outdoor unit: RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	10000	2790	11200	2670

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	8820	7940	7060	6170	5290	4410	3530	2650	2290	2290
	W	3240	2740	2290	1860	1470	1160	980	810	770	770
40	Q	9460	8510	7570	6620	5680	4730	3780	2840	2460	2460
	W	2990	2530	2110	1720	1350	1070	900	750	710	710
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	2600	2600
	W	2790	2360	1970	1600	1260	1000	840	700	660	660
30	Q	10540	9490	8430	7380	6320	5270	4220	3160	2740	2740
	W	2590	2190	1830	1480	1170	930	780	650	610	610
25	Q	11070	9960	8860	7750	6640	5540	4430	3320	2880	2880
	W	2390	2020	1690	1370	1080	860	720	600	560	560
20	Q	11610	10450	9290	8130	6970	5810	4640	3480	3020	3020
	W	2190	1850	1550	1260	990	790	660	550	520	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	2890	2890
	W	2940	2560	2150	1750	1430	1110	860	710	580	580
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	2630	2630
	W	2790	2420	2040	1660	1360	1060	820	670	550	550
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	2400	2400
	W	2670	2320	1950	1590	1300	1010	780	640	530	530
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2240	2240
	W	2590	2250	1890	1540	1260	980	760	620	510	510
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2010	2010
	W	2460	2140	1800	1470	1200	930	720	590	490	490
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	2190	1900	1600	1300	1060	830	640	520	430	430
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	2190	1900	1600	1300	1060	830	640	520	430	430
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1470	1470
	W	2120	1840	1550	1260	1030	800	620	510	420	420
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1350	1350
	W	2030	1770	1480	1210	990	770	590	490	400	400
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1140	1140
	W	1920	1660	1400	1140	930	720	560	460	380	380
-20	Q	4350	3910	3480	3040	2610	2170	1740	1300	930	930
	W	1800	1570	1320	1070	880	680	530	430	360	360

7-7. Indoor unit: RAV-SM564SDT-E (Triple)

Outdoor unit: RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	14000	4990	16000	4600

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	12350	11110	9880	8640	7410	6170	4940	3700	2470	2290
	W	5800	4900	4090	3260	2480	1780	1360	1010	880	770
40	Q	13240	11920	10600	9270	7950	6620	5300	3970	2650	2460
	W	5350	4520	3780	3000	2290	1640	1260	930	820	710
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	2800	2600
	W	4990	4210	3520	2800	2130	1530	1170	870	760	660
30	Q	14760	13280	11800	10330	8850	7380	5900	4430	2950	2740
	W	4630	3900	3260	2600	1970	1420	1080	810	700	610
25	Q	15500	13950	12400	10850	9300	7750	6200	4650	3100	2880
	W	4270	3600	3010	2400	1820	1310	1000	740	650	560
20	Q	16250	14630	13000	11380	9750	8130	6500	4880	3250	3020
	W	3920	3300	2760	2200	1670	1200	920	680	600	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	2890
	W	5070	4400	3690	3010	2410	1760	1320	940	670	580
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	2630
	W	4810	4170	3500	2850	2290	1670	1250	890	640	550
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	2400
	W	4600	3990	3350	2730	2190	1600	1200	850	610	530
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2240
	W	4460	3870	3250	2650	2120	1550	1160	820	590	510
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2010
	W	4240	3680	3090	2520	2020	1480	1110	780	560	490
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	3770	3270	2740	2240	1790	1310	980	700	500	430
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	3770	3270	2740	2240	1790	1310	980	700	500	430
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1470
	W	3650	3170	2660	2170	1740	1270	950	670	480	420
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1350
	W	3500	3040	2550	2080	1670	1220	910	650	460	400
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1140
	W	3300	2860	2400	1960	1570	1150	860	610	440	380
-20	Q	6210	5590	4970	4350	3720	3100	2480	1860	1240	930
	W	3110	2690	2260	1840	1480	1080	810	570	410	360

7-8. Indoor unit: RAV-SM1102BT-E / RAV-SM562BT-E (Twin)
Outdoor unit: RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	10000	2940	11200	2770

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	8820	7940	7060	6170	5290	4410	3530	2650	2290	2290
	W	3420	2880	2420	1970	1550	1220	1020	860	770	770
40	Q	9460	8510	7570	6620	5680	4730	3780	2840	2460	2460
	W	3150	2660	2230	1810	1430	1130	940	790	710	710
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	2600	2600
	W	2940	2480	2080	1690	1330	1050	880	740	660	660
30	Q	10540	9490	8430	7380	6320	5270	4220	3160	2740	2740
	W	2730	2300	1930	1570	1230	970	820	690	610	610
25	Q	11070	9960	8860	7750	6640	5540	4430	3320	2880	2880
	W	2520	2120	1780	1450	1140	900	750	630	560	560
20	Q	11610	10450	9290	8130	6970	5810	4640	3480	3020	3020
	W	2310	1950	1630	1330	1040	820	690	580	520	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	2890	2890
	W	3050	2660	2230	1820	1480	1160	890	730	580	580
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	2630	2630
	W	2890	2520	2110	1720	1400	1100	850	690	550	550
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	2400	2400
	W	2770	2410	2020	1650	1340	1050	810	660	530	530
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2240	2240
	W	2680	2340	1960	1600	1300	1020	780	640	510	510
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2010	2010
	W	2550	2220	1860	1520	1240	970	750	610	490	490
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	2270	1970	1650	1350	1100	860	660	540	430	430
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	2270	1970	1650	1350	1100	860	660	540	430	430
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1470	1470
	W	2200	1910	1600	1310	1060	830	640	520	420	420
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1350	1350
	W	2110	1830	1540	1260	1020	800	620	500	400	400
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1140	1140
	W	1990	1730	1450	1180	960	750	580	470	380	380
-20	Q	4350	3910	3480	3040	2610	2170	1740	1300	930	930
	W	1870	1630	1360	1110	900	710	550	450	360	360

7-9. Indoor unit: RAV-SM1402BT-E / RAV-SM802BT-E (Twin)

Outdoor unit: RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	12500	3860	14000	3550

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11030	9920	8820	7720	6620	5510	4410	3310	2290	2290
	W	4490	3790	3160	2580	2010	1490	1210	940	770	770
40	Q	11830	10640	9460	8280	7100	5910	4730	3550	2460	2460
	W	4140	3500	2920	2380	1860	1370	1120	870	710	710
35	Q	12500	11250	10000	8750	7500	6250	5000	3750	2600	2600
	W	3860	3260	2720	2220	1730	1280	1040	810	660	660
30	Q	13180	11860	10540	9220	7910	6590	5270	3950	2740	2740
	W	3580	3020	2520	2060	1600	1190	960	750	610	610
25	Q	13840	12450	11070	9690	8300	6920	5540	4150	2880	2880
	W	3300	2790	2330	1900	1480	1100	890	690	560	560
20	Q	14510	13060	11610	10160	8710	7260	5810	4350	3020	3020
	W	3030	2560	2140	1740	1360	1000	820	640	520	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3380	2890
	W	3910	3400	2860	2330	1900	1470	1110	830	650	580
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3070	2630
	W	3710	3220	2710	2200	1800	1390	1060	780	620	550
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	2800	2400
	W	3550	3080	2590	2110	1720	1330	1010	750	590	530
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2610	2240
	W	3440	2980	2510	2040	1670	1290	980	730	570	510
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2340	2010
	W	3270	2840	2390	1950	1590	1230	930	690	540	490
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1830	1570
	W	2910	2520	2120	1730	1410	1090	830	610	480	430
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1830	1570
	W	2910	2520	2120	1730	1410	1090	830	610	480	430
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1720	1470
	W	2820	2450	2060	1680	1370	1060	800	600	470	420
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1570	1350
	W	2700	2340	1970	1610	1310	1010	770	570	450	400
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1330	1140
	W	2550	2210	1860	1510	1230	950	720	540	420	380
-20	Q	5430	4890	4350	3800	3260	2720	2170	1630	1090	930
	W	2400	2080	1750	1420	1160	900	680	510	400	360

7-10. Indoor unit: RAV-SM802BT-E (Twin) / RAV-SM562BT-E (Triple)

Outdoor unit: RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	14000	5120	16000	4600

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	12350	11110	9880	8640	7410	6170	4940	3700	2470	2290
	W	5950	5020	4200	3350	2550	1830	1400	1050	910	770
40	Q	13240	11920	10600	9270	7950	6620	5300	3970	2650	2460
	W	5490	4640	3870	3090	2350	1680	1290	970	840	710
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	2800	2600
	W	5120	4320	3610	2880	2190	1570	1200	900	780	660
30	Q	14760	13280	11800	10330	8850	7380	5900	4430	2950	2740
	W	4750	4000	3350	2670	2030	1460	1110	830	720	610
25	Q	15500	13950	12400	10850	9300	7750	6200	4650	3100	2880
	W	4380	3700	3090	2470	1870	1340	1030	770	670	560
20	Q	16250	14630	13000	11380	9750	8130	6500	4880	3250	3020
	W	4020	3390	2830	2260	1720	1230	940	710	610	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	2890
	W	5070	4400	3690	3010	2410	1760	1320	940	670	580
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	2630
	W	4810	4170	3500	2850	2290	1670	1250	890	640	550
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	2400
	W	4600	3990	3350	2730	2190	1600	1200	850	610	530
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2240
	W	4460	3870	3250	2650	2120	1550	1160	820	590	510
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2010
	W	4240	3680	3090	2520	2020	1480	1110	780	560	490
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	3770	3270	2740	2240	1790	1310	980	700	500	430
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	3770	3270	2740	2240	1790	1310	980	700	500	430
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1470
	W	3650	3170	2660	2170	1740	1270	950	670	480	420
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1350
	W	3500	3040	2550	2080	1670	1220	910	650	460	400
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1140
	W	3300	2860	2400	1960	1570	1150	860	610	440	380
-20	Q	6210	5590	4970	4350	3720	3100	2480	1860	1240	930
	W	3110	2690	2260	1840	1480	1080	810	570	410	360

7-11. Indoor unit: RAV-SM1403DT-A
Outdoor unit: RAV-SP1404AT8-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3300	900	4200	800
RATING	13000	4320	14000	3430

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11470	10320	9170	8030	6880	5730	4590	3440	2910	2910
	W	5020	4450	3880	3330	2760	2190	1670	1160	1050	1050
40	Q	12300	11070	9840	8610	7380	6150	4920	3690	3120	3120
	W	4640	4110	3580	3070	2540	2020	1550	1070	970	970
35	Q	13000	11700	10400	9100	7800	6500	5200	3900	3300	3300
	W	4320	3830	3340	2860	2370	1880	1440	1000	900	900
30	Q	13700	12330	10960	9590	8220	6850	5480	4110	3480	3480
	W	4000	3550	3100	2650	2200	1740	1330	930	830	830
25	Q	14390	12950	11510	10070	8630	7200	5760	4320	3650	3650
	W	3700	3280	2860	2450	2030	1610	1230	860	770	770
20	Q	15090	13580	12070	10570	9060	7550	6040	4530	3830	3830
	W	3390	3010	2620	2250	1860	1480	1130	790	710	710

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	5060	5060
	W	3780	3370	2980	2570	2170	1760	1370	880	880	880
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	4600	4600
	W	3580	3200	2820	2430	2060	1670	1300	840	840	840
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	4200	4200
	W	3430	3060	2700	2330	1970	1600	1240	800	800	800
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	3920	3920
	W	3320	2970	2620	2260	1910	1550	1200	780	780	780
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	3510	3510
	W	3160	2820	2490	2150	1820	1480	1140	740	740	740
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	2740	2740
	W	2810	2510	2210	1910	1610	1310	1020	660	660	660
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	2740	2740
	W	2810	2510	2210	1910	1610	1310	1020	660	660	660
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	2580	2580
	W	2720	2430	2140	1850	1560	1270	980	640	640	640
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	2360	2360
	W	2610	2330	2050	1770	1500	1220	940	610	610	610
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1990	1990
	W	2460	2200	1940	1670	1410	1150	890	570	570	570
-20	Q	5430	4890	4350	3800	3260	2720	2170	1630	1630	1630
	W	2320	2070	1820	1570	1330	1080	840	540	540	540

7-12. Indoor unit: RAV-SM1603DT-A
Outdoor unit: RAV-SP1604AT8-E

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	3300	900	4200	800
RATING	14300	5010	16000	4430

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	12610	11350	10090	8830	7570	6310	5050	3780	2910	2910
	W	5830	5090	4360	3630	2880	2150	1600	1200	1050	1050
40	Q	13530	12180	10820	9470	8120	6760	5410	4060	3120	3120
	W	5380	4700	4020	3350	2660	1990	1480	1110	970	970
35	Q	14300	12870	11440	10010	8580	7150	5720	4290	3300	3300
	W	5010	4380	3750	3120	2480	1850	1380	1030	900	900
30	Q	15070	13560	12060	10550	9040	7540	6030	4520	3480	3480
	W	4640	4060	3480	2890	2300	1710	1280	950	830	830
25	Q	15830	14250	12660	11080	9500	7920	6330	4750	3650	3650
	W	4290	3750	3210	2670	2120	1580	1180	880	770	770
20	Q	16600	14940	13280	11620	9960	8300	6640	4980	3830	3830
	W	3930	3440	2940	2450	1950	1450	1080	810	710	710

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	5060	5060
	W	4880	4320	3750	3190	2610	2050	1510	990	880	880
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	4600	4600
	W	4630	4100	3550	3020	2480	1940	1430	940	840	840
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	4200	4200
	W	4430	3920	3400	2890	2370	1860	1370	900	800	800
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	3920	3920
	W	4290	3800	3290	2800	2300	1800	1330	870	780	780
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	3510	3510
	W	4080	3610	3130	2660	2190	1710	1260	830	740	740
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2740	2740
	W	3630	3210	2780	2370	1940	1520	1120	740	660	660
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2740	2740
	W	3630	3210	2780	2370	1940	1520	1120	740	660	660
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	2580	2580
	W	3520	3110	2700	2290	1880	1480	1090	710	640	640
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	2360	2360
	W	3370	2980	2590	2200	1800	1420	1040	680	610	610
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1990	1990
	W	3180	2810	2440	2070	1700	1330	980	650	570	570
-20	Q	6210	5590	4970	4350	3720	3100	2480	1860	1630	1630
	W	2990	2650	2300	1950	1600	1260	920	610	540	540

7-13. Indoor unit: RAV-SM1102CT-E / RAV-SM562CT-E (Twin)

Outdoor unit: RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	10000	2790	11200	2670

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	8820	7940	7060	6170	5290	4410	3530	2650	2290	2290
	W	3240	2740	2290	1860	1470	1160	980	810	770	770
40	Q	9460	8510	7570	6620	5680	4730	3780	2840	2460	2460
	W	2990	2530	2110	1720	1350	1070	900	750	710	710
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	2600	2600
	W	2790	2360	1970	1600	1260	1000	840	700	660	660
30	Q	10540	9490	8430	7380	6320	5270	4220	3160	2740	2740
	W	2590	2190	1830	1480	1170	930	780	650	610	610
25	Q	11070	9960	8860	7750	6640	5540	4430	3320	2880	2880
	W	2390	2020	1690	1370	1080	860	720	600	560	560
20	Q	11610	10450	9290	8130	6970	5810	4640	3480	3020	3020
	W	2190	1850	1550	1260	990	790	660	550	520	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	2890	2890
	W	2940	2560	2150	1750	1430	1110	860	710	580	580
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	2630	2630
	W	2790	2420	2040	1660	1360	1060	820	670	550	550
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	2400	2400
	W	2670	2320	1950	1590	1300	1010	780	640	530	530
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2240	2240
	W	2590	2250	1890	1540	1260	980	760	620	510	510
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2010	2010
	W	2460	2140	1800	1470	1200	930	720	590	490	490
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	2190	1900	1600	1300	1060	830	640	520	430	430
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	2190	1900	1600	1300	1060	830	640	520	430	430
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1470	1470
	W	2120	1840	1550	1260	1030	800	620	510	420	420
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1350	1350
	W	2030	1770	1480	1210	990	770	590	490	400	400
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1140	1140
	W	1920	1660	1400	1140	930	720	560	460	380	380
-20	Q	4350	3910	3480	3040	2610	2170	1740	1300	930	930
	W	1800	1570	1320	1070	880	680	530	430	360	360

7-14. Indoor unit: RAV-SM1402CT-E / RAV-SM802CT-E (Twin)

Outdoor unit: RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	12500	3830	14000	3700

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	11030	9920	8820	7720	6620	5510	4410	3310	2290	2290
	W	4450	3760	3140	2560	2000	1480	1200	930	770	770
40	Q	11830	10640	9460	8280	7100	5910	4730	3550	2460	2460
	W	4110	3470	2900	2360	1850	1360	1110	860	710	710
35	Q	12500	11250	10000	8750	7500	6250	5000	3750	2600	2600
	W	3830	3230	2700	2200	1720	1270	1030	800	660	660
30	Q	13180	11860	10540	9220	7910	6590	5270	3950	2740	2740
	W	3550	2990	2500	2040	1590	1180	950	740	610	610
25	Q	13840	12450	11070	9690	8300	6920	5540	4150	2880	2880
	W	3280	2760	2310	1880	1470	1090	880	680	560	560
20	Q	14510	13060	11610	10160	8710	7260	5810	4350	3020	3020
	W	3010	2540	2120	1730	1350	1000	810	630	520	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3380	2890
	W	4080	3540	2980	2430	1970	1530	1160	860	670	580
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3070	2630
	W	3870	3350	2820	2300	1870	1450	1100	820	640	550
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	2800	2400
	W	3700	3210	2700	2200	1790	1390	1050	780	610	530
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2610	2240
	W	3590	3110	2620	2130	1730	1350	1020	760	590	510
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2340	2010
	W	3410	2960	2490	2030	1650	1280	970	720	560	490
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1830	1570
	W	3030	2630	2210	1800	1470	1140	860	640	500	430
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1830	1570
	W	3030	2630	2210	1800	1470	1140	860	640	500	430
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1720	1470
	W	2940	2550	2140	1750	1420	1100	830	620	480	420
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1570	1350
	W	2820	2440	2050	1670	1360	1060	800	590	460	400
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1330	1140
	W	2650	2300	1940	1580	1280	1000	750	560	440	380
-20	Q	5430	4890	4350	3800	3260	2720	2170	1630	1090	930
	W	2500	2170	1820	1490	1210	940	710	530	410	360

7-15. Indoor unit: RAV-SM802CT-E (Twin) / RAV-SM562CT-E (Triple)

Outdoor unit: RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	14000	4990	16000	4600

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	12350	11110	9880	8640	7410	6170	4940	3700	2470	2290
	W	5800	4900	4090	3260	2480	1780	1360	1010	880	770
40	Q	13240	11920	10600	9270	7950	6620	5300	3970	2650	2460
	W	5350	4520	3780	3000	2290	1640	1260	930	820	710
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	2800	2600
	W	4990	4210	3520	2800	2130	1530	1170	870	760	660
30	Q	14760	13280	11800	10330	8850	7380	5900	4430	2950	2740
	W	4630	3900	3260	2600	1970	1420	1080	810	700	610
25	Q	15500	13950	12400	10850	9300	7750	6200	4650	3100	2880
	W	4270	3600	3010	2400	1820	1310	1000	740	650	560
20	Q	16250	14630	13000	11380	9750	8130	6500	4880	3250	3020
	W	3920	3300	2760	2200	1670	1200	920	680	600	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	2890
	W	5070	4400	3690	3010	2410	1760	1320	940	670	580
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	2630
	W	4810	4170	3500	2850	2290	1670	1250	890	640	550
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	2400
	W	4600	3990	3350	2730	2190	1600	1200	850	610	530
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2240
	W	4460	3870	3250	2650	2120	1550	1160	820	590	510
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2010
	W	4240	3680	3090	2520	2020	1480	1110	780	560	490
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	3770	3270	2740	2240	1790	1310	980	700	500	430
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	3770	3270	2740	2240	1790	1310	980	700	500	430
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1470
	W	3650	3170	2660	2170	1740	1270	950	670	480	420
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1350
	W	3500	3040	2550	2080	1670	1220	910	650	460	400
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1140
	W	3300	2860	2400	1960	1570	1150	860	610	440	380
-20	Q	6210	5590	4970	4350	3720	3100	2480	1860	1240	930
	W	3110	2690	2260	1840	1480	1080	810	570	410	360

7-16. Indoor unit: RAV-SM562KRT-E (Twin)

Outdoor unit: RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	10000	2920	11200	2850

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	8820	7940	7060	6170	5290	4410	3530	2650	2290	2290
	W	3400	2870	2400	1950	1540	1220	1020	850	770	770
40	Q	9460	8510	7570	6620	5680	4730	3780	2840	2460	2460
	W	3130	2650	2210	1800	1420	1130	940	780	710	710
35	Q	10000	9000	8000	7000	6000	5000	4000	3000	2600	2600
	W	2920	2470	2060	1680	1320	1050	880	730	660	660
30	Q	10540	9490	8430	7380	6320	5270	4220	3160	2740	2740
	W	2710	2290	1910	1560	1220	970	820	680	610	610
25	Q	11070	9960	8860	7750	6640	5540	4430	3320	2880	2880
	W	2500	2110	1760	1440	1130	900	750	620	560	560
20	Q	11610	10450	9290	8130	6970	5810	4640	3480	3020	3020
	W	2290	1940	1620	1320	1040	820	690	570	520	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	13510	12160	10810	9450	8100	6750	5400	4050	2890	2890
	W	3140	2720	2290	1860	1520	1190	920	750	580	580
10	Q	12260	11040	9810	8580	7360	6130	4910	3680	2630	2630
	W	2980	2580	2170	1770	1440	1130	870	710	550	550
7	Q	11200	10080	8960	7840	6720	5600	4480	3360	2400	2400
	W	2850	2470	2080	1690	1380	1080	830	680	530	530
5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2240	2240
	W	2760	2390	2020	1640	1340	1050	800	660	510	510
2	Q	9360	8430	7490	6550	5620	4680	3750	2810	2010	2010
	W	2630	2280	1920	1560	1270	1000	770	630	490	490
0	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	2330	2020	1700	1380	1130	880	680	560	430	430
-5	Q	7310	6580	5850	5120	4390	3660	2930	2190	1570	1570
	W	2330	2020	1700	1380	1130	880	680	560	430	430
-7	Q	6880	6190	5500	4810	4130	3440	2750	2060	1470	1470
	W	2260	1960	1650	1340	1100	860	660	540	420	420
-10	Q	6300	5670	5040	4410	3780	3150	2520	1890	1350	1350
	W	2170	1880	1580	1290	1050	820	630	520	400	400
-15	Q	5310	4780	4250	3720	3190	2650	2120	1590	1140	1140
	W	2050	1770	1490	1210	990	770	600	490	380	380
-20	Q	4350	3910	3480	3040	2610	2170	1740	1300	930	930
	W	1920	1670	1400	1140	930	730	560	460	360	360

7-17. Indoor unit: RAV-SM802KRT-E (Twin)

Outdoor unit: RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	12300	4000	14000	3880

Cooling

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	10850	9760	8680	7590	6510	5420	4340	3250	2290	2290
	W	4650	3930	3280	2670	2080	1550	1260	980	770	770
40	Q	11640	10470	9310	8150	6980	5820	4650	3490	2460	2460
	W	4290	3630	3030	2470	1920	1430	1160	900	710	710
35	Q	12300	11070	9840	8610	7380	6150	4920	3690	2600	2600
	W	4000	3380	2820	2300	1790	1330	1080	840	660	660
30	Q	12960	11670	10370	9070	7780	6480	5190	3890	2740	2740
	W	3710	3130	2610	2130	1660	1230	1000	780	610	610
25	Q	13620	12250	10890	9530	8170	6810	5450	4080	2880	2880
	W	3420	2890	2410	1970	1530	1140	920	720	560	560
20	Q	14280	12850	11420	10000	8570	7140	5710	4280	3020	3020
	W	3140	2650	2210	1810	1410	1040	850	660	520	520

Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	16880	15190	13510	11820	10130	8440	6750	5060	3380	2890
	W	4280	3720	3120	2550	2070	1610	1220	890	710	580
10	Q	15330	13800	12260	10730	9200	7670	6130	4600	3070	2630
	W	4050	3520	2960	2410	1960	1530	1160	850	670	550
7	Q	14000	12600	11200	9800	8400	7000	5600	4200	2800	2400
	W	3880	3370	2830	2310	1880	1460	1110	810	640	530
5	Q	13060	11760	10450	9140	7840	6530	5220	3920	2610	2240
	W	3760	3270	2740	2240	1820	1410	1080	780	620	510
2	Q	11700	10530	9360	8190	7020	5850	4680	3510	2340	2010
	W	3580	3110	2610	2130	1730	1350	1020	750	590	490
0	Q	9140	8230	7310	6400	5490	4570	3660	2740	1830	1570
	W	3180	2760	2320	1890	1540	1200	910	660	520	430
-5	Q	9140	8230	7310	6400	5490	4570	3660	2740	1830	1570
	W	3180	2760	2320	1890	1540	1200	910	660	520	430
-7	Q	8600	7740	6880	6020	5160	4300	3440	2580	1720	1470
	W	3080	2680	2250	1830	1490	1160	880	640	510	420
-10	Q	7870	7090	6300	5510	4720	3940	3150	2360	1570	1350
	W	2950	2560	2150	1760	1430	1110	840	620	490	400
-15	Q	6640	5970	5310	4650	3980	3320	2650	1990	1330	1140
	W	2780	2420	2030	1660	1350	1050	800	580	460	380
-20	Q	5430	4890	4350	3800	3260	2720	2170	1630	1090	930
	W	2620	2270	1910	1560	1270	990	750	550	430	360

7-18. Indoor unit: RAV-SM802KRT-E (Twin) / RAV-SM562KRT-E (Triple)
Outdoor unit: RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7

	Cooling		Heating	
	Capacity Q (W)	Power consumption W (W)	Capacity Q (W)	Power consumption W (W)
MINIMUM	2600	660	2400	530
RATING	14000	5100	16000	4880

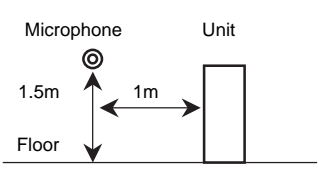
Cooling

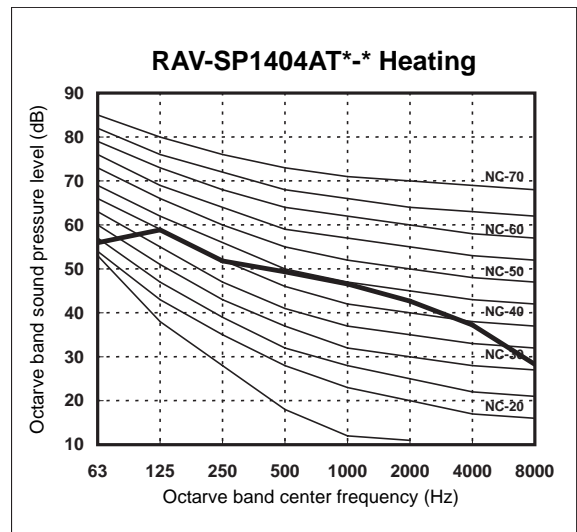
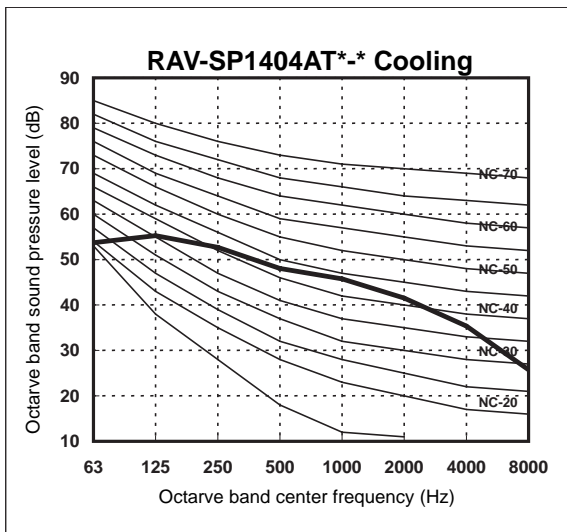
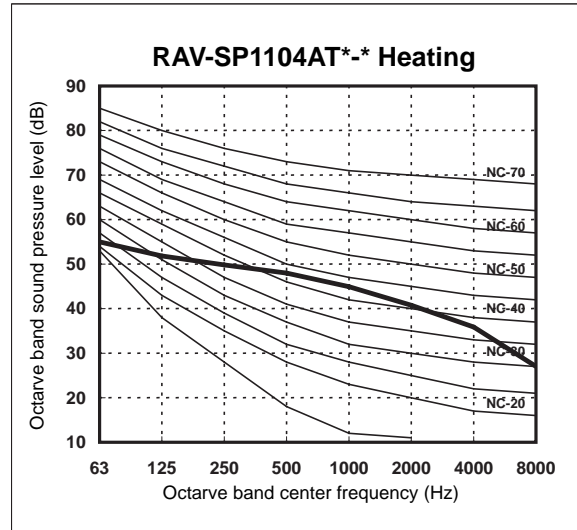
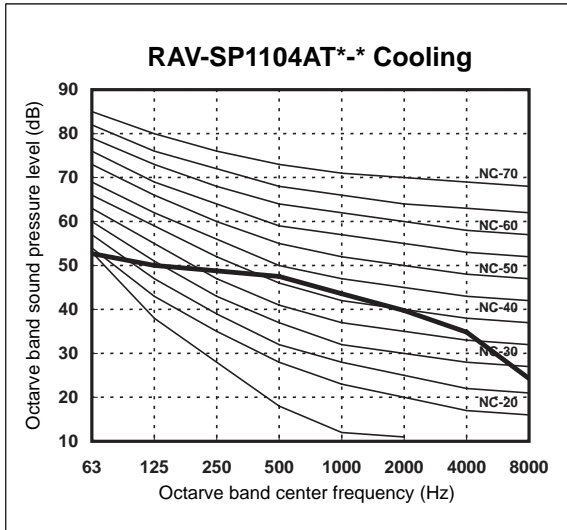
Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
46	Q	12350	11110	9880	8640	7410	6170	4940	3700	2470	2290
	W	5930	5010	4190	3340	2540	1810	1400	1040	910	770
40	Q	13240	11920	10600	9270	7950	6620	5300	3970	2650	2460
	W	5470	4620	3860	3080	2340	1670	1290	950	840	710
35	Q	14000	12600	11200	9800	8400	7000	5600	4200	2800	2600
	W	5100	4310	3600	2870	2180	1560	1200	890	780	660
30	Q	14760	13280	11800	10330	8850	7380	5900	4430	2950	2740
	W	4730	4000	3340	2660	2020	1450	1110	830	720	610
25	Q	15500	13950	12400	10850	9300	7750	6200	4650	3100	2880
	W	4370	3690	3080	2460	1870	1340	1030	760	670	560
20	Q	16250	14630	13000	11380	9750	8130	6500	4880	3250	3020
	W	4000	3380	2830	2250	1710	1220	940	700	610	520

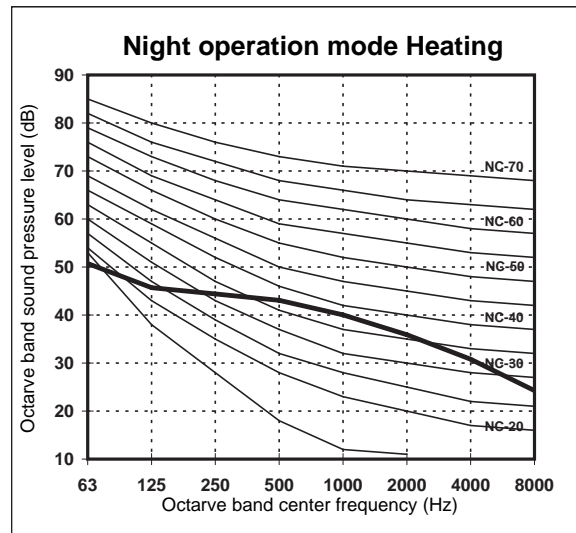
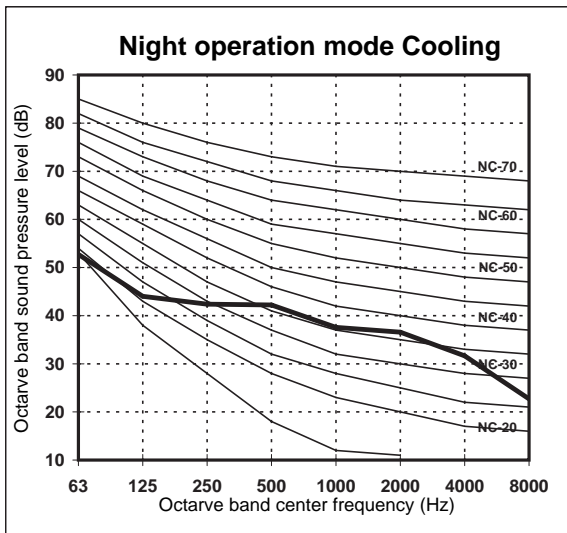
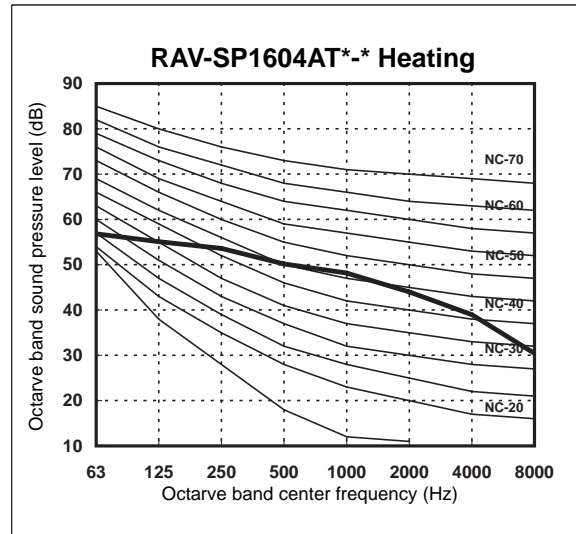
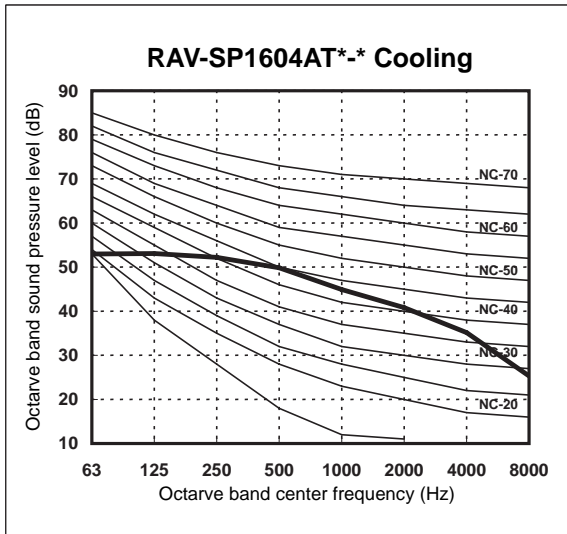
Heating

Outdoor temperature (°C)		Load(%)									
		100	90	80	70	60	50	40	30	20	10
15	Q	19290	17370	15440	13510	11580	9650	7720	5790	3860	2890
	W	5380	4680	3930	3200	2560	1870	1400	990	720	580
10	Q	17520	15770	14020	12260	10510	8760	7010	5260	3500	2630
	W	5100	4430	3720	3030	2420	1780	1330	940	680	550
7	Q	16000	14400	12800	11200	9600	8000	6400	4800	3200	2400
	W	4880	4240	3560	2900	2320	1700	1270	900	650	530
5	Q	14930	13440	11940	10450	8960	7460	5970	4480	2990	2240
	W	4730	4110	3450	2810	2250	1650	1230	870	630	510
2	Q	13380	12040	10700	9360	8030	6690	5350	4010	2680	2010
	W	4500	3910	3280	2670	2140	1570	1170	830	600	490
0	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	4000	3470	2920	2380	1900	1390	1040	740	530	430
-5	Q	10450	9400	8360	7310	6270	5220	4180	3130	2090	1570
	W	4000	3470	2920	2380	1900	1390	1040	740	530	430
-7	Q	9820	8840	7860	6880	5890	4910	3930	2950	1960	1470
	W	3870	3370	2830	2300	1840	1350	1010	710	520	420
-10	Q	9000	8100	7200	6300	5400	4500	3600	2700	1800	1350
	W	3710	3230	2710	2210	1770	1290	970	680	490	400
-15	Q	7580	6830	6070	5310	4550	3790	3030	2280	1520	1140
	W	3500	3040	2550	2080	1660	1220	910	650	470	380
-20	Q	6210	5590	4970	4350	3720	3100	2480	1860	1240	930
	W	3290	2860	2400	1960	1570	1150	860	610	440	360

8 Sound Characteristics (NC Curve)

Model name	Measuring location	Sound pressure level (dB)	
		Cooling	Heating
RAV-SP1104AT8-E, RAV-SP1104AT8-TR, RAV-SP1104AT7	Unit frontside 1m Upper from floor 1.5m (JIS Standard) 	49	50
RAV-SP1404AT8-E, RAV-SP1404AT8-TR, RAV-SP1404AT7		51	52
RAV-SP1604AT8-E, RAV-SP1604AT8-TR, RAV-SP1604AT7		51	53
Night operation mode		44	45





9 Refrigerant Pipe Length

Single

Allowable pipe length (m)	Height difference (Indoor-outdoor H) (m)	
	Indoor unit: Upper	Outdoor unit: Lower
Total length L		
75	30	30

Pipe diameter (mm)		Number of bent portions
Gas side	Liquid side	
Ø15.9	Ø9.5	

Simultaneous twin, triple

System	Model	Allowable pipe length (m)			Height difference (m)		
		Total length • $l_1 + l_2$ • $l_1 + l_3$ • $l_1 + l_4$ Maximum	Distributed pipes • l_2 • l_3 • l_4 Maximum	Distributed pipes • $l_3 - l_2$ • $l_4 - l_2$ • $l_4 - l_3$ Maximum	Indoor-outdoor H		Indoor-indoor (Δh)
					Indoor unit: Upper	Outdoor unit: Upper	
TWIN	SP110	50	15	10	30	30	0.5
	SP140, SP160	50	15	10	30	30	0.5
TRIPLE	SP160 only	50	15	10	30	30	0.5

System	Model	Pipe diameter (mm)				Number of bent portions
		Main pipe		Branching pipe		
		Gas side	Liquid side	Gas side	Liquid side	
TWIN	SP110	Ø15.9	Ø9.5	Ø12.7	Ø6.4	10 or less
	SP140, SP160	Ø15.9	Ø9.5	Ø15.9	Ø9.5	10 or less
TRIPLE	SP160 only	Ø15.9	Ø9.5	Ø12.7	Ø6.4	10 or less

Figure of Single

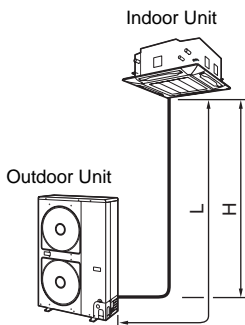


Figure of Simultaneous twin

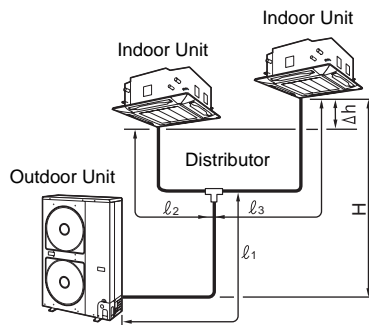
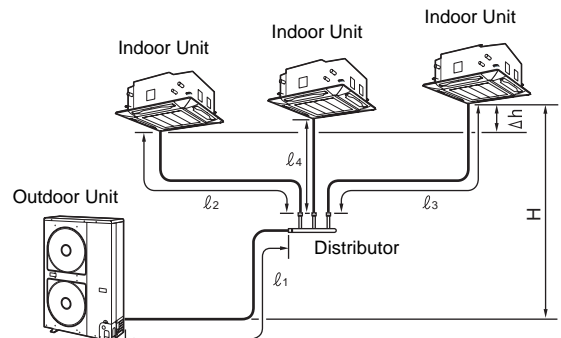


Figure of Simultaneous triple



Work instructions

The existing R22 and R407C piping can be reused for our digital inverter R410A product installations.

⚠ WARNING

Confirming the existence of scratches or dents on the existing pipes and confirming the reliability of the pipe strength are conventionally referred to the local site. If the specified conditions can be cleared, it is possible to update existing R22 and R407C pipes to those for R410A models.

Basic conditions needed to reuse existing pipes

Check and observe the presence of three conditions in the refrigerant piping works.

1. **Dry** (There is no moisture inside of the pipes.)
2. **Clean** (There is no dust inside of the pipes.)
3. **Tight** (There are no refrigerant leaks.)

Restrictions for use of existing pipes

In the following cases, the existing pipes should not be reused as they are. Clean the existing pipes or exchange them with new pipes.

1. When a scratch or dent is heavy, be sure to use new pipes for the refrigerant piping works.
2. When the existing pipe thickness is thinner than the specified "Pipe diameter and thickness," be sure to use new pipes for the refrigerant piping works.
 - The operating pressure of R410A is high (1.6 times that of R22 and R407C). If there is a scratch or dent on the pipe or a thinner pipe is used, the pressure strength may be inadequate, which may cause the pipe to break in the worst case.

*** Pipe diameter and thickness (mm)**

Pipe outer diameter		Ø6.4	Ø9.5	Ø12.7	Ø15.9	Ø19.0
Thickness	R410A	0.8	0.8	0.8	1.0	1.0
	R22 (R407C)					

- In case the pipe diameter is Ø12.7 mm or less and the thickness is less than 0.7 mm, be sure to use new pipes for the refrigerant piping works.
3. When the outdoor unit was left with the pipes disconnected, or the gas leaked from the pipes and the pipes were not repaired and refilled.
 - There is the possibility of rain water or air, including moisture, entering the pipe.
 4. When refrigerant cannot be recovered using a refrigerant recovery unit.
 - There is the possibility that a large quantity of dirty oil or moisture remains inside the pipes.
 5. When a commercially available dryer is attached to the existing pipes.
 - There is the possibility that copper green rust has been generated.

6. When the existing air conditioner is removed after refrigerant has been recovered.
 - Check if the oil is judged to be clearly different from normal oil.
 - The refrigerator oil is copper rust green in color:
 - There is the possibility that moisture has mixed with the oil and rust has been generated inside the pipe.
 - There is discolored oil, a large quantity of residue, or a bad smell.
 - A large quantity of shiny metal dust or other wear residue can be seen in the refrigerant oil.
7. When the air conditioner has a history of the compressor failing and being replaced.
 - When discolored oil, a large quantity of residue, shiny metal dust, or other wear residue or mixture of foreign matter is observed, trouble will occur.
8. When temporary installation and removal of the air conditioner are repeated such as when leased etc.
9. If the type of refrigerator oil of the existing air conditioner is other than the following oil (Mineral oil), Suniso, Freol-S, MS (Synthetic oil), alkyl benzene (HAB, Barrel-freeze), ester series, PVE only of ether series.
 - The winding-insulation of the compressor may deteriorate.

NOTE

The above descriptions are results have been confirmed by our company and represent our views on our air conditioners, but do not guarantee the use of the existing pipes of air conditioners that have adopted R410A in other companies.

Branching pipe for simultaneous operation system

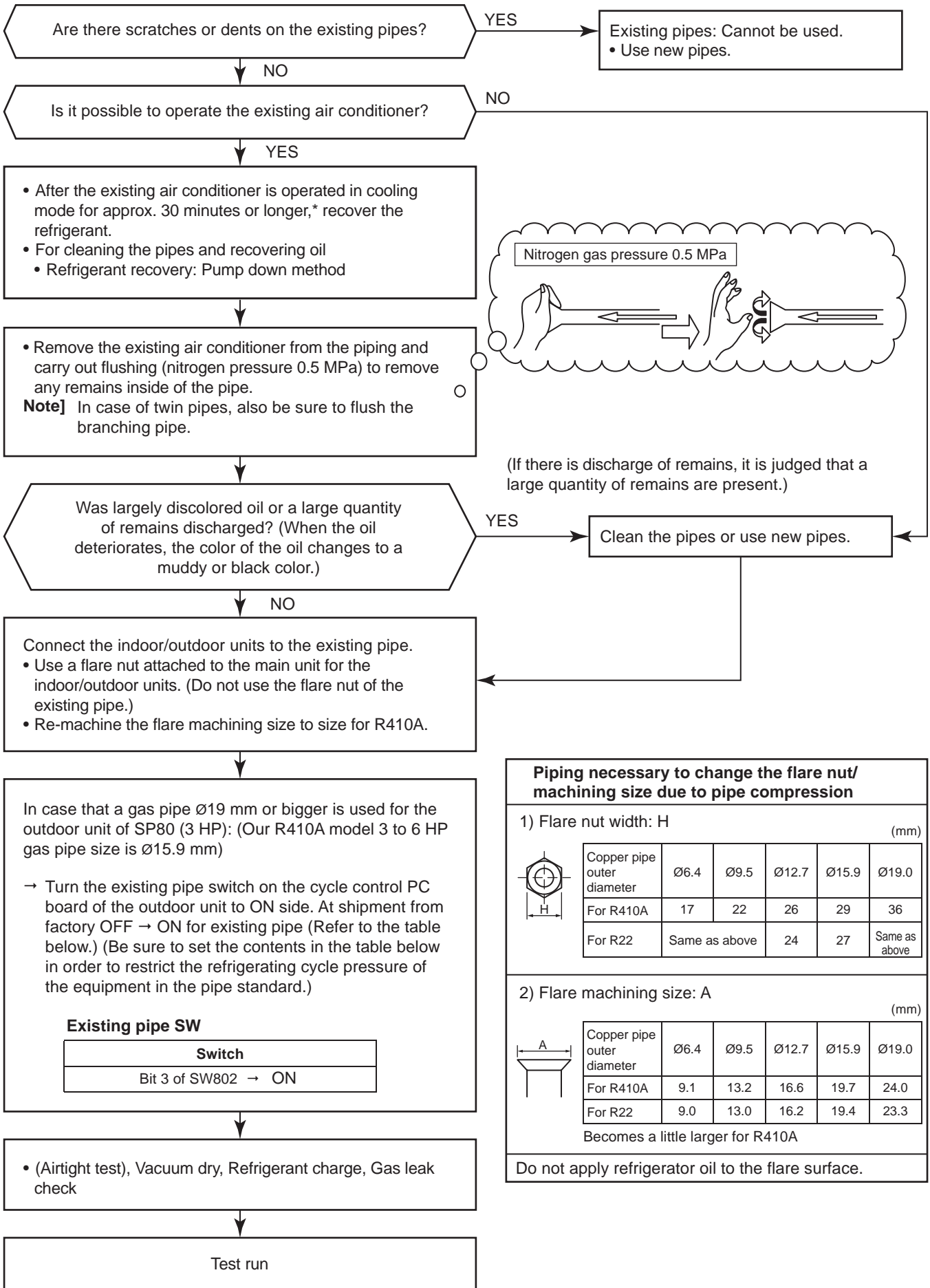
- In the concurrent twin system, when TOSHIBA has specified that branching pipe is to be used, it can be reused.
 - Branching pipe model name: RBC-TWP30E2, RBC-TWP50E2, RBC-TRP100E
 - On the existing air conditioner for simultaneous operation system (twin, triple system), there are cases of branch pipes being used that have insufficient compressive strength. In such case, please change the piping to a branch pipe for R410A.

Curing of pipes

When removing and opening the indoor or outdoor unit for a long time, cure the pipes as follows:

- Otherwise rust may be generated when moisture or foreign matter due to condensation enters the pipes.
- The rust cannot be removed by cleaning, and new pipes are necessary.

Placement location	Term	Curing manner
Outdoors	1 month or more	Pinching
	Less than 1 month	
Indoors	Every time	Pinching or taping



Piping necessary to change the flare nut/ machining size due to pipe compression

1) Flare nut width: H (mm)

Copper pipe outer diameter	Ø6.4	Ø9.5	Ø12.7	Ø15.9	Ø19.0
For R410A	17	22	26	29	36
For R22	Same as above		24	27	Same as above

2) Flare machining size: A (mm)

Copper pipe outer diameter	Ø6.4	Ø9.5	Ø12.7	Ø15.9	Ø19.0
For R410A	9.1	13.2	16.6	19.7	24.0
For R22	9.0	13.0	16.2	19.4	23.3

Becomes a little larger for R410A

Do not apply refrigerator oil to the flare surface.

TOSHIBA CARRIER CORPORATION

23-17, TAKANAWA 3-CHOME, MINATO-KU, TOKYO, 108-0074, JAPAN

Copyright © 2010 TOSHIBA CARRIER CORPORATION, ALL Rights Reserved.