



## RAV Twin-Split Ceiling Indoor Unit

CODE		69	100	100	121	121	
<b>Performance</b>							
Indoor Unit 1		RAV-	SM408CTP-E	SM568CTP-E	SM568CTP-E	SM808CTP-E	SM808CTP-E
Indoor Unit 2		RAV-	SM408CTP-E	SM568CTP-E	SM568CTP-E	SM808CTP-E	SM808CTP-E
Outdoor Unit		RAV-	SM804ATP-E	SM1104ATP-E	SM1104AT8P-E	SM1404ATP-E	SM1404AT8P-E
Nominal	Cooling Capacity	kW	6.9	10.0	10.0	12.1	12.1
	Heating Capacity	kW	7.7	11.2	11.2	12.8	12.8
	EER/COP	W/W	2.90/3.62	3.22/3.81	3.22/3.81	2.74/3.73	2.74/3.73
UK	Cooling Total/Sensible	kW	6.60/5.00	9.50/7.20	9.50/7.20	11.50/8.40	11.50/8.40
	Heating	kW	5.51	8.01	8.01	9.16	9.16
Cooling EN14825	Range Min. - Max.	kW	1.5 - 7.4	3.0 - 11.2	3.0 - 11.2	3.0 - 13.2	3.0 - 13.2
	Power Input	kW	2.38	3.11	3.11	4.42	4.42
	Pdesign	kW	6.90	10.00	10.00	-	-
	SEER/Energy Efficiency Class		5.62/A+	5.70/A+	5.70/A+	-	-
	Seasonal Energy Consumption	kWh/a	429	614	614	-	-
Heating EN14825	Range Min. - Max.	kW	1.5 - 9.0	3.0 - 12.5	3.0 - 12.5	3.0 - 16.0	3.0 - 16.0
	Power Input	kW	2.13	2.94	2.94	3.43	3.43
	Pdesign	kW	6.80	7.60	7.60	-	-
	SCOP/Energy Efficiency Class		4.01/A+	4.27/A+	4.27/A+	-	-
	Seasonal Energy Consumption	kWh/a	2372	2490	2490	-	-
<b>Indoor Data</b>							
Air Flow	High - Medium - Low	l/s	250 - 200 - 150	250 - 200 - 150	250 - 200 - 150	392 - 278 - 208	392 - 278 - 208
	High - Medium - Low	m <sup>3</sup> /h	900 - 720 - 540	900 - 720 - 540	900 - 720 - 540	1410 - 1002 - 750	1410 - 1002 - 750
Sound	Pressure High - Medium - Low	dB(A)	37 - 35 - 28	37 - 35 - 28	37 - 35 - 28	41 - 36 - 29	41 - 36 - 29
	Power High - Medium - Low	dB(A)	52 - 50 - 43	52 - 50 - 43	52 - 50 - 43	56 - 51 - 44	56 - 51 - 44
Unit	Height x Width x Depth	mm	235 x 950 x 690	235 x 950 x 690	235 x 950 x 690	235 x 1270 x 690	235 x 1270 x 690
	Weight	kg	23	23	23	29	29
Pipe Connection	Flare Connections (gas - liquid)	inch	1/2 - 1/4	1/2 - 1/4	1/2 - 1/4	5/8 - 3/8	5/8 - 3/8
	Height Difference Indoor To Indoor	m	±0.5	±0.5	±0.5	±0.5	±0.5
	Outdoor Connection To Distributor (gas - liquid)	inch	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8
	Sub Branch Line To Indoor (gas - liquid)	inch	1/2 - 1/4	1/2 - 1/4	1/2 - 1/4	5/8 - 3/8	5/8 - 3/8
	Max. Subtractive Separation Between Indoors	m	5	10	10	10	10
	Max. Length Distributor To Furthest Indoor	m	10	15	15	15	15
	Drain Pipe Connection OD/ID	mm	VP26/20	VP26/20	VP26/20	VP26/20	VP26/20
Power Cable	Indoor to Indoor		2 core + earth	2 core + earth	2 core + earth	2 core + earth	2 core + earth
Remote Controller			RBC-AMT32E	RBC-AMT32E	RBC-AMT32E	RBC-AMT32E	RBC-AMT32E
<b>Outdoor Data</b>							
Operating Range	Cooling/Heating	°C	46 to -15/15 to -15	46 to -15/15 to -15	46 to -15/15 to -15	46 to -15/15 to -15	46 to -15/15 to -15
Air Flow	High	m <sup>3</sup> /h - l/s	2700 - 750	4080 - 1133	4080 - 1133	4200 - 1167	4200 - 1167
Sound	Pressure High Cooling/Heating	dB(A)	48/52	53/54	53/54	54/55	54/55
	Power High Cooling/Heating	dB(A)	65/69	70/71	70/71	70/71	70/71
Unit	Height x Width x Depth	mm	550 x 780 x 290	890 x 900 x 320	890 x 900 x 320	890 x 900 x 320	890 x 900 x 320
	Weight	kg	39	68	68	68	68
Pipe Connection	Flare Connections (gas - liquid)	inch	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8
	Min.-Max. Length	m	5-30	5-50	5-50	5-50	5-50
	Maximum Height Difference	m	±30	±30	±30	±30	±30
	Drain Port Connection	mm	16	16	16	16	16
Refrigerant R410A	Base Charge/Chargeless Length	kg/m	1.7/22	2.8/32	2.8/30	2.8/32	2.8/30
	Additional Charge Main Liquid Side	g/m	40	40	40	40	40
	Additional Charge Sub Liquid Side	g/m	20	20	20	40	40
Run Current	Maximum	A	12.23	15.04	3.22	21.37	4.92
Power Cable	Outdoor to Header Indoor		3 core + earth	3 core + earth	3 core + earth	3 core + earth	3 core + earth
Power Supply	Suggested Fuse Size	V/ph/Hz-A	220-240/1/50-16	220-240/1/50-20	380-415/3/50-10	220-240/1/50-32	380-415/3/50-10

RBC-AMS41E	Remote Controller Built-In Timer	Full control including service functions with fully-programmable 7-day timer
RBC-AMS54E-ES	Lite-Vision Plus Remote Controller	Includes timer and backlight display as well as power-save functions, multilingual
RBC-AS41E	Simplified Controller	Ideal for hotel and basic use applications (no service function available)
RBC-SMF1	Fan Interface	Interface to provide an output to enable an external fan from the unit
RBC-SMT1	CN02 Connector Timer Interface Lead	Lead to provide ON/OFF control from the RBC-AMT32E remote or any central controller
TCB-TC41LE	Remote Sensor	Room temperature sensing in conditioned space
TCB-DP31CE	Drain Pump	Condensate lift pump for ceiling-suspended units



## RAV Twin-Split Ceiling Indoor Unit (continued)

CODE		140	200	230	
<b>Performance</b>					
<b>Indoor Unit 1</b>		<b>RAV-</b>	<b>SM808CTP-E</b>	<b>SM1108CTP-E</b>	<b>SM1408CTP-E</b>
<b>Indoor Unit 2</b>		<b>RAV-</b>	<b>SM808CTP-E</b>	<b>SM1108CTP-E</b>	<b>SM1408CTP-E</b>
<b>Outdoor Unit</b>		<b>RAV-</b>	<b>SM1603AT-E1</b>	<b>SM2246AT8-E</b>	<b>SM2806AT8-E</b>
Nominal	Cooling Capacity	kW	14.0	20.0	23.0
	Heating Capacity	kW	16.0	22.4	27.0
	EER/COP	W/W	3.01/3.47	2.81/3.50	2.41/3.41
UK	Cooling Total/Sensible	kW	13.30/9.30	19.30/13.50	22.20/14.90
	Heating	kW	10.45	14.63	17.63
Cooling EN14825	Range Min. - Max.	kW	3.0 - 16.0	4.6 - 22.4	4.6 - 27.0
	Power Input	kW	4.65	7.12	9.55
	Pdesign	kW	-	-	-
	SEER/Energy Efficiency Class		-	-	-
	Seasonal Energy Consumption	kWh/a	-	-	-
Heating EN14825	Range Min. - Max.	kW	3.0 - 18.0	4.6 - 25.0	4.6 - 31.5
	Power Input	kW	4.61	6.40	7.92
	Pdesign	kW	-	-	-
	SCOP/Energy Efficiency Class		-	-	-
	Seasonal Energy Consumption	kWh/a	-	-	-
<b>Indoor Data</b>					
Air Flow	High - Medium - Low	l/s	392 - 278 - 208	517 - 375 - 283	567 - 425 - 333
	High - Medium - Low	m <sup>3</sup> /h	1410 - 1002 - 750	1860 - 1350 - 1020	2040 - 1530 - 1200
Sound	Pressure High - Medium - Low	dB(A)	41 - 36 - 29	44 - 38 - 32	46 - 41 - 35
	Power High - Medium - Low	dB(A)	56 - 51 - 44	59 - 53 - 47	61 - 56 - 50
Unit	Height x Width x Depth	mm	235 x 1270 x 690	235 x 1586 x 690	235 x 1586 x 690
	Weight	kg	29	35	35
Pipe Connection	Flare Connections (gas - liquid)	inch	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8
	Height Difference Indoor To Indoor	m	±0.5	±0.5	±0.5
	Outdoor Connection To Distributor (gas - liquid)	inch	5/8 - 3/8	1-1/8 - 1/2	1-1/8 - 1/2
	Sub Branch Line To Indoor (gas - liquid)	inch	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8
	Max. Subtractive Separation Between Indoors	m	10	10	10
	Max. Length Distributor To Furthest Indoor	m	15	20	20
	Drain Pipe Connection OD/ID	mm	VP26/20	VP26/20	VP26/20
Power Cable	Indoor to Indoor		2 core + earth	2 core + earth	2 core + earth
Remote Controller			RBC-AMT32E	RBC-AMT32E	RBC-AMT32E
<b>Outdoor Data</b>					
Operating Range	Cooling/Heating	°C	43 to -15/15 to -15	52 to -15/15 to -27	52 to -15/15 to -27
Air Flow	High	m <sup>3</sup> /h - l/s	6180 - 1717	9180 - 2550	10920 - 3033
Sound	Pressure High Cooling/Heating	dB(A)	51/53	58/60	61/63
	Power High Cooling/Heating	dB(A)	68/70	76/76	78/80
Unit	Height x Width x Depth	mm	1340 x 900 x 320	1550 x 1010 x 370	1550 x 1010 x 370
	Weight	kg	99	142	142
Pipe Connection	Flare Connections (gas - liquid)	inch	5/8 - 3/8	1-1/8 (3/4) - 1/2	1-1/8 (3/4) - 1/2
	Min.-Max. Length	m	5-50	5-100	5-100
	Maximum Height Difference	m	±30	±30	±30
	Drain Port Connection	mm	16	16	16
Refrigerant R410A	Base Charge/Chargeless Length	kg/m	3.1/32	5.9/30	5.9/30
	Additional Charge Main Liquid Side	g/m	40	80	80
	Additional Charge Sub Liquid Side	g/m	40	40	40
Run Current	Maximum	A	21.7	10.78	15.06
Power Cable	Outdoor to Header Indoor		3 core + earth	3 core + earth	3 core + earth
Power Supply	Suggested Fuse Size	V/ph/Hz-A	220-240/1/50-32	380-415/3/50-16	380-415/3/50-20

RBC-AMS41E	Remote Controller Built-In Timer	Full control including service functions with fully-programmable 7-day timer
RBC-AMS54E-ES	Lite-Vision Plus Remote Controller	Includes timer and backlight display as well as power-save functions, multilingual
RBC-AS41E	Simplified Controller	Ideal for hotel and basic use applications (no service function available)
RBC-SMF1	Fan Interface	Interface to provide an output to enable an external fan from the unit
RBC-SMT1	CN02 Connector Timer Interface Lead	Lead to provide ON/OFF control from the RBC-AMT32E remote or any central controller
TCB-TC41LE	Remote Sensor	Room temperature sensing in conditioned space
TCB-DP31CE	Drain Pump	Condensate lift pump for ceiling-suspended units



## RAV Twin-Split Ceiling Indoor Unit

CODE		71	100	100	125	125	140
<b>Performance</b>							
Indoor Unit 1	RAV-	SM408CTP-E	SM568CTP-E	SM568CTP-E	SM808CTP-E	SM808CTP-E	SM808CTP-E
Indoor Unit 2	RAV-	SM408CTP-E	SM568CTP-E	SM568CTP-E	SM808CTP-E	SM808CTP-E	SM808CTP-E
Outdoor Unit	RAV-	SP804ATP-E	SP1104AT-E1	SP1104AT8-E1	SP1404AT-E1	SP1404AT8-E1	SP1604AT8-E1
Nominal	Cooling Capacity	kW	7.1	10.0	10.0	12.5	14.0
	Heating Capacity	kW	8.0	11.2	11.2	14.0	16.0
	EER/COP	W/W	3.82/4.17	4.08/4.69	4.22/4.43	3.21/3.87	3.36/3.93
UK	Cooling Total/Sensible	kW	6.70/5.10	9.50/7.20	9.50/7.20	11.90/8.70	11.90/8.70
	Heating	kW	5.22	7.31	7.31	9.14	10.45
Cooling EN14825	Range Min. - Max.	kW	1.9 - 8.0	2.6 - 12.0	2.6 - 12.0	2.6 - 14.0	2.6 - 16.0
	Power Input	kW	1.86	2.45	2.37	3.90	4.50
	Pdesign	kW	7.10	10.00	10.00	-	-
	SEER/Energy Efficiency Class		6.21/A++	6.18/A++	6.35/A++	-	-
	Seasonal Energy Consumption	kWh/a	400	567	552	-	-
Heating EN14825	Range Min. - Max.	kW	1.3 - 10.6	2.4 - 13.0	2.4 - 14.0	2.4 - 16.5	2.4 - 19.0
	Power Input	kW	1.92	2.39	2.53	3.62	4.31
	Pdesign	kW	7.60	11.60	11.60	-	-
	SCOP/Energy Efficiency Class		4.10/A+	4.27/A+	4.41/A+	-	-
	Seasonal Energy Consumption	kWh/a	2596	3800	3684	-	-

Indoor Data		RAV-	SM408CTP-E	SM568CTP-E	SM568CTP-E	SM808CTP-E	SM808CTP-E	SM808CTP-E
Air Flow	High - Medium - Low	l/s	250 - 200 - 150	250 - 200 - 150	250 - 200 - 150	392 - 278 - 208	392 - 278 - 208	392 - 278 - 208
	High - Medium - Low	m <sup>3</sup> /h	900 - 720 - 540	900 - 720 - 540	900 - 720 - 540	1410 - 1002 - 750	1410 - 1002 - 750	1410 - 1002 - 750
Sound	Pressure High - Medium - Low	dB(A)	37 - 35 - 28	37 - 35 - 28	37 - 35 - 28	41 - 36 - 29	41 - 36 - 29	41 - 36 - 29
	Power High - Medium - Low	dB(A)	52 - 50 - 43	52 - 50 - 43	52 - 50 - 43	56 - 51 - 44	56 - 51 - 44	56 - 51 - 44
Unit	Height x Width x Depth	mm	235 x 950 x 690	235 x 950 x 690	235 x 950 x 690	235 x 1270 x 690	235 x 1270 x 690	235 x 1270 x 690
	Weight	kg	23	23	23	29	29	29
Pipe Connection	Flare Connections (gas - liquid)	inch	1/2 - 1/4	1/2 - 1/4	1/2 - 1/4	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8
	Height Difference Indoor To Indoor	m	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5
	Outdoor Connection To Distributor (gas - liquid)	inch	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8
	Sub Branch Line To Indoor (gas - liquid)	inch	1/2 - 1/4	1/2 - 1/4	1/2 - 1/4	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8
	Max. Subtractive Separation Between Indoors	m	10	10	10	10	10	10
	Max. Length Distributor To Furthest Indoor	m	10	15	15	15	15	15
	Drain Pipe Connection OD/ID	mm	VP26/20	VP26/20	VP26/20	VP26/20	VP26/20	VP26/20
Power Cable	Indoor to Indoor		2 core + earth	2 core + earth	2 core + earth	2 core + earth	2 core + earth	2 core + earth
Remote Controller			RBC-AMT32E	RBC-AMT32E	RBC-AMT32E	RBC-AMT32E	RBC-AMT32E	RBC-AMT32E

Outdoor Data		RAV-	SP804ATP-E	SP1104AT-E1	SP1104AT8-E1	SP1404AT-E1	SP1404AT8-E1	SP1604AT8-E1
Operating Range	Cooling/Heating	°C	43 to -15/15 to -20	43 to -15/15 to -20	46 to -15/15 to -20	43 to -15/15 to -20	46 to -15/15 to -20	46 to -15/15 to -20
Air Flow	High	m <sup>3</sup> /h - l/s	3000 - 833	6060 - 1683	6060 - 1683	6180 - 1717	6180 - 1717	6180 - 1717
Sound	Pressure High Cooling/Heating	dB(A)	48/49	49/50	49/50	51/52	51/52	51/53
	Power High Cooling/Heating	dB(A)	64/65	66/67	66/67	68/69	68/69	68/70
Unit	Height x Width x Depth	mm	890 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
	Weight	kg	66	93	95	93	95	95
Pipe Connection	Flare Connections (gas - liquid)	inch	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8	5/8 - 3/8
	Min.-Max. Length	m	5-50	3-50	3-50	3-50	3-50	3-50
	Maximum Height Difference	m	±30	±30	±30	±30	±30	±30
	Drain Port Connection	mm	16	16	16	16	16	16
Refrigerant R410A	Base Charge/Chargeless Length	kg/m	2.1/32	3.1/32	3.1/32	3.1/32	3.1/32	3.1/32
	Additional Charge Main Liquid Side	g/m	40	40	40	40	40	40
	Additional Charge Sub Liquid Side	g/m	20	20	20	40	40	40
Run Current	Maximum	A	9.02	10.43	3.72	15.76	5.42	6.66
Power Cable	Outdoor to Header Indoor		3 core + earth	3 core + earth	3 core + earth	3 core + earth	3 core + earth	3 core + earth
Power Supply	Suggested Fuse Size	V/ph/Hz-A	220-240/1/50-16	220-240/1/50-16	380-415/3/50-10	220-240/1/50-25	380-415/3/50-16	380-415/3/50-16

### Accessories

RBC-AMS41E	Remote Controller Built-In Timer	Full control including service functions with fully-programmable 7-day timer
RBC-AMS54E-ES	Lite-Vision Plus Remote Controller	Includes timer and backlight display as well as power-save functions, multilingual
RBC-AS41E	Simplified Controller	Ideal for hotel and basic use applications (no service function available)
RBC-SMF1	Fan Interface	Interface to provide an output to enable an external fan from the unit
RBC-SMT1	CN02 Connector Timer Interface Lead	Lead to provide ON/OFF control from the RBC-AMT32E remote or any central controller
TCB-TC41LE	Remote Sensor	Room temperature sensing in conditioned space
TCB-DP31CE	Drain Pump	Condensate lift pump for ceiling-suspended units