

New 7-Series Under-Ceiling Indoor Units

Key Features

1. Chassis completely re-designed
2. Increased product range, now includes 6HP model
3. New features to enable easy installation
 - a. Easy access hanger
 - b. Easier wiring connections
 - c. Improved layout of the refrigerant piping

TOSHIBA would like to announce the New **7-Series Under-Ceiling Indoor Units** available from September 2013. Improved air volume with reduced noise levels now includes 6HP unit. With rounded curves the new series provides enhanced installation features.



Specifications

HP	New Model	Dimensions mm	Weight kg	Sound Pressure db	Air Flow m ³ /min	Pipe Sizes mm - inch
2	RAV-SM567CTP-E	235 x 950 x 690	23	37/35/28	15/12/2009	12.7-6.4 - 1/2-1/4
3	RAV-SM807CTP-E	235 x 1270 x 690	29	38/36/29	20.5/17/12.5	15.9-9.5 - 5/8-3/8
4	RAV-SM1107CTP-E	235 x 1586 x 690	35	44/38/32	31/22.5/17	15.9-9.5 - 5/8-3/8
5	RAV-SM1407CTP-E	235 x 1586 x 690	35	44/41/35	31/25.5/20	15.9-9.5 - 5/8-3/8
6	RAV-SM1607CTP-E	235 x 1586 x 690	35	44/41/35	31/25.5/20	15.9-9.5 - 5/8-3/8

Combination Chart

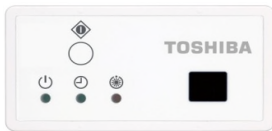

Outdoor	7-Series Under Ceiling												
	Single					Twin				Triple		Quad	
	RAV-SM567CT-E	RAV-SM807CT-E	RAV-SM1107CT-E	RAV-SM1407CT-E	RAV-SM1607CT-E	RAV-SM567CT-E	RAV-SM807CT-E	RAV-SM1107CT-E	RAV-SM1407CT-E	RAV-SM567CT-E	RAV-SM807CT-E	RAV-SM567CT-E	RAV-SM807CT-E
RAV-SM563AT-E	✓												
RAV-SM803AT-E		✓											
RAV-SM1103AT-E1			✓			✓							
RAV-SM1403AT-E1				✓			✓						
RAV-SM1603AT-E					✓		✓			✓			
RAV-SM2244AT8-E								✓			✓	✓	
RAV-SM2804AT8-E									✓		✓		✓
RAV-SP564ATP-E	✓												
RAV-SP804ATP-E		✓											
RAV-SP1104AT-E			✓			✓							
RAV-SP1404AT-E				✓			✓						
RAV-SP1104AT8-E			✓			✓							
RAV-SP1404AT8-E				✓			✓						
RAV-SP1604AT8-E					✓		✓			✓			

Key Features

1. Chassis completely re-designed
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Accessories

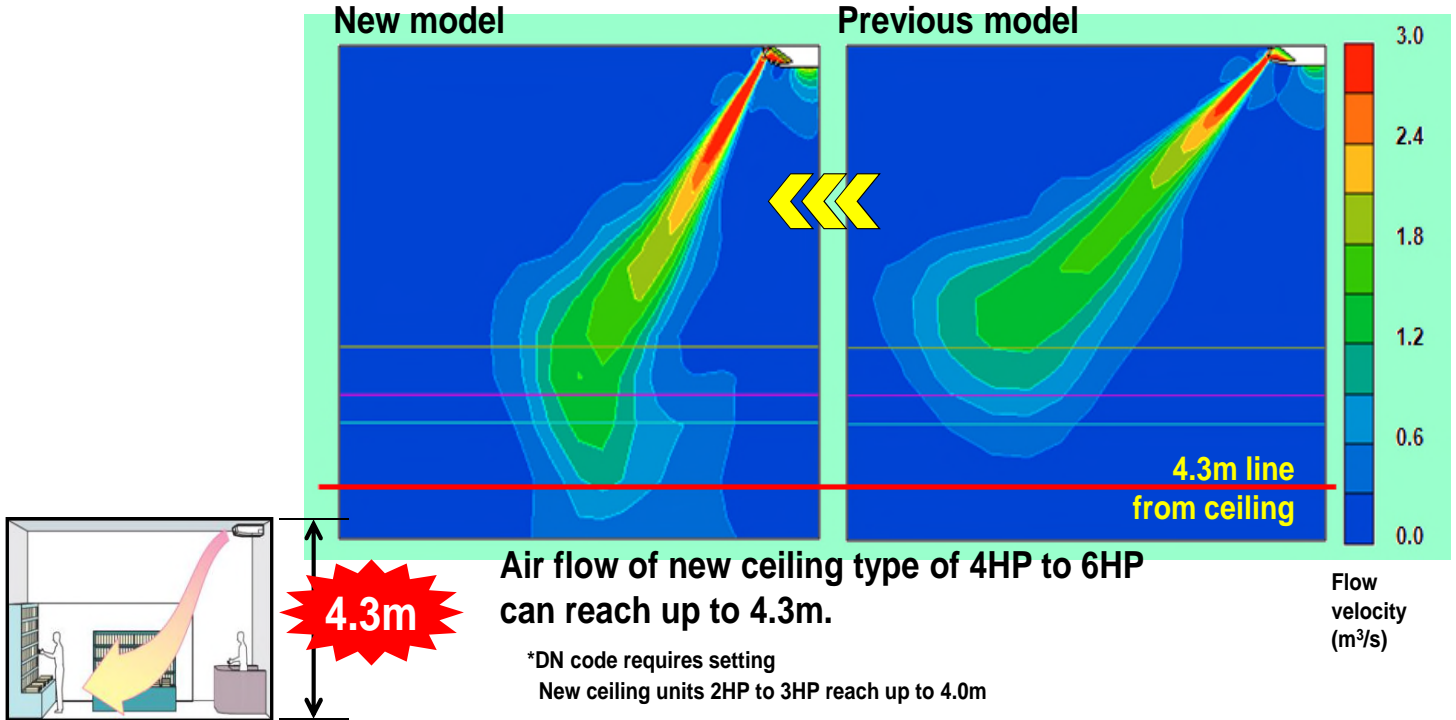
Parts name	Wireless Remote Control Receiver	Optional Connecting Kit
Appearance		
Model name	RBC-AX33CE	TCB-PCUC1E
Notes	Receiver unit for wireless remote controller	For external I/O without local relay preparation

For further information please contact our customer support team on 0870 843 0333, your local representative, or your supplier of **TOSHIBA** products, or email any enquiries to general.enquiries@toshiba-ac.com

1. All new-design indoor unit

Large Air Volume

Simulation of air flow in heating



Improved **air performance**, because heated air reaches to floor from high ceiling position such as a large store

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New Silent Design

Comparison of Sound Pressure Level

HP	Air flow level	New model (dB(A))	Previous model (dB(A))	Noise reduction (dB(A))
2HP	High	37	42	-5
	Low	28	30	-2
3HP	High	41	44	-3
	Low	29	33	-4
4HP	High	44	47	-3
	Low	32	35	-3
5HP	High	44	49	-5
	Low	35	37	-2
6HP	High	46	49	-3
	Low	36	38	-2

Indication of sound	
30dB(A)	Whisper
40dB(A)	Library

**Noise Levels
Best in Class**

SPECIFICATIONS

<Single Type>

Model	Indoor unit		RAV-SM567CTP-E	RAV-SM807CTP-E	RAV-SM1107CTP-E	RAV-SM1407CTP-E	RAV-SM1607CTP-E	
	Outdoor unit		RAV-SM563AT-E	RAV-SM803AT-E	RAV-SM1103AT-E1	RAV-SM1403AT-E1	RAV-SM1603AT-E	
Cooling capacity		(kW)	5.0 (1.5-5.6)	6.9 (1.5-7.4)	10.0 (3.0-11.2)	12.1 (3.0-13.2)	14.0(3.0-16.0)	
Heating capacity		(kW)	5.6 (1.5-6.3)	8.0 (1.5-9.0)	11.2 (3.0-12.5)	12.8 (3.0-16.0)	16.0(3.0-18.0)	
Power supply			1 phase 230V (220-240V) 50Hz					
Electrical characteristics	Cooling	Running current	(A)	7.46 - 6.84	11.51 - 10.55	14.42 - 13.22	20.67 - 18.94	22.25 - 20.39
		Power consumption	(kW)	1.56	2.38	3.11	4.41	4.65
		Power factor	(%)	95	94	98	97	95
		EER		3.21	2.90	3.22	2.74	3.01
	Heating	Running current	(A)	6.89 - 6.32	10.35 - 9.49	13.64 - 12.50	15.84 - 14.52	22.06 - 20.22
		Power consumption	(kW)	1.44	2.14	2.94	3.38	4.61
		Power factor	(%)	95	94	98	97	95
		COP		3.89	3.74	3.81	3.79	3.47
		Maximum current	(A)	12.8	15.1	21.6	22.2	31.5
	Indoor unit							
Appearance	Main unit		Pure white					
Outer dimension	Main unit	Height	(mm)	235	235	235	235	235
		Width	(mm)	950	1270	1586	1586	1586
		Depth	(mm)	690	690	690	690	690
Total weight	Main unit		(kg)	23	29	35	35	35
Heat exchanger		Finned tube						
Fan unit	Fan		Centrifugal					
	Standard air flow	H/M/L m3/min)	15.0 / 12.0 / 9.0	23.5 / 16.7 / 12.5	31.0 / 22.5 / 17.0	34.0 / 25.5 / 20.0	34.0 / 27.5 / 21.0	
	Motor	(W)	94	94	139	139	139	
Air filter		Standard filter attached (Long life filter)						
Controller (Sold Separately)		RBC-AMT32E, AMS41E,AMS51E, AS41E, AX33CE						
Connecting pipe	Gas side	(mm)	12.7	15.9	15.9	15.9	15.9	
	Liquid side	(mm)	6.4	9.5	9.5	9.5	9.5	
	Drain port	(mm)	VP20					
Sound pressure level		H/M/L (dB·A)	37 / 35 / 28	41 / 36 / 29	44 / 38 / 32	46 / 41 / 35	46 / 42 / 36	
Sound power level		H/M/L (dB·A)	52 / 50 / 43	56 / 51 / 44	59 / 53 / 47	61 / 56 / 50	61 / 57 / 51	

SPECIFICATIONS

<Twin Type>

Model		Indoor unit 1	RAV-SM567CTP-E	RAV-SM807CTP-E	RAV-SM807CTP-E	RAV-SM567CTP-E		
		Indoor unit 2	RAV-SM567CTP-E	RAV-SM807CTP-E	RAV-SM807CTP-E	RAV-SM567CTP-E		
		Indoor unit 3	-	-	-	RAV-SM567CTP-E		
		Outdoor unit	RAV-SM1103AT-E1	RAV-SM1403AT-E1	RAV-SM1603AT-E	RAV-SM1603AT-E		
Cooling capacity		(kW)	10.0 (3.0-11.2)	12.1 (3.0-13.2)	14.0(3.0-16.0)	14.0(3.0-16.0)		
Heating capacity		(kW)	11.2 (3.0-12.5)	12.8 (3.0-16.0)	16.0(3.0-18.0)	16.0(3.0-18.0)		
Power supply			1 phase 230V (220-240V) 50Hz					
Electrical characteristics	Cooling	Running current	(A)	14.42 - 13.22	20.67 - 18.94	22.25 - 20.39	22.25 - 20.39	
		Power consumption	(kW)	3.11	4.41	4.65	4.65	
		Power factor	(%)	98	97	95	95	
		EER		3.22	2.74	3.01	3.01	
	Heating	Running current	(A)	13.64 - 12.50	15.84 - 14.52	22.06 - 20.22	22.06 - 20.22	
		Power consumption	(kW)	2.94	3.38	4.61	4.61	
		Power factor	(%)	98	97	95	95	
		COP		3.81	3.79	3.47	3.47	
		Maximum current	(A)	21.6	22.2	31.8	31.7	
	Indoor unit							
Fan unit		Fan		Centrifugal				
		Standard air flow	H/M/L (m3/min)	15.0 / 12.0 / 9.0	23.5 / 16.7 / 12.5	23.5 / 16.7 / 12.5	15.0 / 12.0 / 9.0	
		Motor	(W)	94	94	94	94	
Sound pressure level		H/M/L	(dB·A)	37 / 35 / 28	41 / 36 / 29	41 / 36 / 29	37 / 35 / 28	
Sound power level		H/M/L	(dB·A)	52 / 50 / 43	56 / 51 / 44	56 / 51 / 44	52 / 50 / 43	
Outdoor unit								
Pipe		Standard length	(m)	7.5	7.5	7.5	7.5	
		Max. total length	(m)	50				
		Over 30m		40g/m (31m to 50m)				
		Height difference	Outdoor lower	(m)	30	30	30	30
Outdoor higher	(m)		30	30	30	30		
Fan unit		Fan		Propeller fan				
		Standard air flow High	(m3/min)	75	75	103	103	
		Motor	(W)	100	100	100 + 100	100 + 100	
Connecting pipe		Gas side	Main	(mm)	15.9	15.9	15.9	15.9
			Sub	(mm)	12.7	15.9	15.9	12.7
		Liquid side	Main	(mm)	9.5	9.5	9.5	9.5
			Sub	(mm)	6.4	9.5	9.5	6.4
Sound pressure level		Cool/Heat	(dB·A)	53 / 54	54 / 54	51 / 53	51 / 53	
Sound power level		Cool/Heat	(dB·A)	70 / 71	71 / 71	68 / 70	68 / 70	

SPECIFICATIONS

<Twin Type>

Model	Indoor unit 1		RAV-SM1107CTP-E	RAV-SM1407CTP-E		
	Indoor unit 2		RAV-SM1107CTP-E	RAV-SM1407CTP-E		
	Outdoor unit		RAV-SM2244AT8-E	RAV-SM2804AT8-E		
Cooling capacity		(kW)	20.0 (9.8-22.4)	23.0 (9.8-27.0)		
Heating capacity		(kW)	22.4 (9.8-25.0)	27.0 (9.8-31.5)		
Power supply			3 phase 380-415V 50Hz			
Electrical characteristics	Cooling	Running current	(A)	11.51 - 10.54	15.44 - 14.13	
		Power consumption	(kW)	7.12	9.55	
		Power factor	(%)	94	94	
		EER		2.81	2.41	
	Heating	Running current	(A)	10.34 - 9.47	12.80 - 11.72	
		Power consumption	(kW)	6.40	7.92	
		Power factor	(%)	94	94	
		COP		3.50	3.41	
		Maximum current	(A)	18.0	22.0	
		Indoor unit				
Fan unit	Fan		Centrifugal			
	Standard air flow	H/M/L (m3/min)	31.0 / 22.5 / 17.0	34.0 / 25.5 / 20.0		
	Motor		139	139		
Sound pressure level		H/M/L (dB/A)	44 / 38 / 32	46 / 41 / 35		
Sound power level		H/M/L (dB/A)	59 / 53 / 47	61 / 56 / 50		
Outdoor unit						
Outer dimension	Max. total length		(m)	70	70	
	Min. length		(m)	7.5	7.5	
	Height difference	Outdoor lower	(m)	30	30	
		Outdoor high	(m)	30	30	
Fan unit	Fan		Propeller fan			
	Standard air flow high		(m3/min)	133	133	
	Motor		(W)	100 + 100	100 + 100	
Connecting pipe	Outdoor unit- Pipe Branch		Gas side	28.6	28.6	
			Liquid side	(mm)	12.7	12.7
	Pipe branch Indoor unit		Gas side	(mm)	15.9	15.9
			Liquid side	(mm)	9.5	9.5
Sound pressure level	Cooling/Heating		(dB-A)	56/57	57/58	
Sound power level	Cooling/Heating		(dB-A)	72/74	74/75	

SPECIFICATIONS

<Triple Type>

Model	Indoor unit 1		RAV-SM807CTP-E	RAV-SM807CTP-E
	Indoor unit 2		RAV-SM807CTP-E	RAV-SM807CTP-E
	Indoor unit 3		RAV-SM807CTP-E	RAV-SM807CTP-E
	Outdoor unit		RAV-SM2244AT8-E	RAV-SM2804AT8-E
Cooling capacity (kW)			20.0(9.8-22.4)	23.0(9.8-27.0)
Heating capacity (kW)			22.4(9.8-25.0)	27.0(9.8-31.5)
Power supply			3 phase 380-415V 50Hz	
Electrical characteristics	Cooling	Running current (A)	11.51 - 10.54	15.44 - 14.13
		Power consumption (kW)	7.12	9.55
		Power factor (%)	94	94
		EER	2.81	2.41
	Heating	Running current (A)	10.34 - 9.47	12.80 - 11.72
		Power consumption (kW)	6.40	7.92
		Power factor (%)	94	94
		COP	3.50	3.41
		Maximum current (A)	18.0	22.0
		Indoor unit		
Fan unit	Fan		Centrifugal	
	Standard air flow	H/M/L (m3/min)	23.5 / 16.7 / 12.5	23.5 / 16.7 / 12.5
	Motor	(W)	94	94
Sound pressure level		H/M/L (dB/A)	41 / 36 / 29	41 / 36 / 29
Sound power level		H/M/L (dB/A)	56 / 51 / 44	56 / 51 / 44
Outdoor unit				
Outer dimension	Max. total length (m)		70	70
	Min. length (m)		7.5	7.5
	Height difference	Outdoor lower (m)	30	30
		Outdoor high (m)	30	30
Fan unit	Fan		Propeller fan	
	Standard airflow high	(m3/min)	133	133
	Motor	(W)	100 + 100	100 + 100
Connecting pipe	Outdoor unit- Pipe branch		Gas side (mm)	28.6
			Liquid side (mm)	12.7
	Pipe branch - Indoor unit		Gas side (mm)	15.9
			Liquid side (mm)	9.5
Sound pressure level		Cooling/Heating (dB/A)	56/57	57/58
Sound power level		Cooling/Heating (dB/A)	72/74	74/75

SPECIFICATIONS

<Quad Type>

Model	Indoor unit 1		RAV-SM567CTP-E	RAV-SM807CTP-E
	Indoor unit 2		RAV-SM567CTP-E	RAV-SM807CTP-E
	Indoor unit 3		RAV-SM567CTP-E	RAV-SM807CTP-E
	Indoor unit 4		RAV-SM567CTP-E	RAV-SM807CTP-E
	Outdoor unit		RAV-SM2244AT8-E	RAV-SM2804AT8-E
Cooling capacity (kW)			20.0 (9.8-22.4)	23.0 (9.8-27.0)
Heating capacity (kW)			22.4 (9.8-25.0)	27.0 (9.8-31.5)
Power supply			3 phase 380-415V	
Electrical characteristics	Cooling	Running current (A)	11.51 - 10.54	15.44 - 14.13
		Power consumption (kW)	7.12	9.55
		Power factor (%)	94	94
		EER	2.81	2.41
	Heating	Running current (A)	10.34 - 9.47	12.80 - 11.72
		Power consumption (kW)	6.40	7.92
		Power factor (%)	94	94
		COP	3.50	3.41
		Maximum current (A)	18.0	22.0
	Indoor unit			
Fan unit	Fan		Centrifugal	
	Standard air flow	H/M/L (m3/min)	15.0 / 12.0 / 9.0	23.5 / 16.7 / 12.5
	Motor	(W)	94	94
Sound pressure level		H/M/L (dB/A)	37 / 35 / 28	41 / 36 / 29
Sound power level		H/M/L (dB/A)	52 / 50 / 43	56 / 51 / 44
Outdoor unit				
Outer dimension	Max. total length (m)		70	70
	Min. length (m)		7.5	7.5
	Height difference	Outdoor lower (m)	30	30
		Outdoor high (m)	30	30
Fan unit	Fan		Propeller fan	
	Standard air flow high (m3/min)		133	133
	Motor (W)		100 + 100	100 + 100
Connecting pipe	Outdoor unit- Pipe branch		Gas side (mm)	28.6
			Liquid side (mm)	12.7
	Pipe branch - Indoor unit		Gas side (mm)	15.9
			Liquid side (mm)	9.5
Sound pressure level		Cooling/Heating (dB/A)	56/57	57/58
Sound power level		Cooling/Heating (dB/A)	72/74	74/75

SPECIFICATIONS

<Single Type>

Model		Indoor unit		RAV-SM567CTP-E	RAV-SM807CTP-E	RAV-SM1107CTP-E	RAV-SM1407CTP-E
		Outdoor unit		RAV-SP564ATP-E	RAV-SP804ATP-E	RAV-SP1104AT-E	RAV-SP1404AT-E
Cooling capacity		(kW)		5.0 (1.2-5.6)	7.1 (1.9-8.0)	10.0 (2.6-12.0)	12.5 (2.6-14.0)
Heating capacity		(kW)		5.6 (0.9-7.4)	8.0 (1.3-10.6)	11.2 (2.4-13.0)	14.0 (2.4-16.5)
Power supply		1 phase 230V (220-240V) 50Hz					
Electrical characteristics	Cooling	Running current (A)		6.35 - 5.82	8.72 - 7.99	11.48 - 10.52	18.09 - 16.58
		Power consumption (kW)		1.37	1.86	2.45	3.90
		Power factor (%)		98	97	97	98
		EER		3.65	3.82	4.08	3.21
	Heating	Running current (A)		5.94 - 5.44	9.00 - 8.25	11.20 - 10.27	16.79 - 15.39
		Power consumption (kW)		1.28	1.92	2.39	3.62
		Power factor (%)		98	97	97	98
		COP		4.38	4.17	4.69	3.87
		Maximum current (A)		13.6	20.6	21.6	21.6
	Indoor unit						
Appearance	Main unit		Pure white				
Outer dimension	Main unit	Height (mm)	235	235	235	235	
		Width (mm)	950	1270	1586	1586	
		Depth (mm)	690	690	690	690	
Total weight	Main unit (kg)		23	29	35	35	
Heat exchanger		Finned tube					
Fan unit	Fan		Centrifugal				
	Standard air flow	H/M/L m3/min	15.0 / 12.0 / 9.0	23.5 / 16.7 / 12.5	31.0 / 22.5 / 17.0	34.0 / 25.5 / 20.0	
	Motor (W)		94	94	139	139	
Air filter		Standard filter attached (Long life filter)					
Controller (Sold Separately)		RBC-AMT32E, AMS41E,AMS51E, AS41E, AX33CE					
Connecting pipe	Gas side (mm)		12.7	15.9	15.9	15.9	
	Liquid side (mm)		6.4	9.5	9.5	9.5	
	Drain port (mm)		VP20				
Sound pressure level		H/M/L (dB·A)	37 / 35 / 28	41 / 36 / 29	44 / 38 / 32	46 / 41 / 35	
Sound power level		H/M/L (dB·A)	52 / 50 / 43	56 / 51 / 44	59 / 53 / 47	61 / 56 / 50	

SPECIFICATIONS

<Twin Type>

Model		Indoor unit 1		RAV-SM567CTP-E	RAV-SM807CTP-E
		Indoor unit 2		RAV-SM567CTP-E	RAV-SM807CTP-E
		Outdoor unit		RAV-SP1104AT-E	RAV-SP1404AT-E
Cooling capacity		(kW)		10.0 (2.6-12.0)	12.5 (2.6-14.0)
Heating capacity		(kW)		11.2 (2.4-13.0)	14.0 (2.4-16.5)
Power supply		1 phase 230V (220-240V) 50Hz			
Electrical characteristic	Cooling	Running current (A)		11.48 - 10.52	18.09 - 16.58
		Power consumption (kW)		2.45	3.90
		Power factor (%)		97	98
		EER		4.08	3.21
	Heating	Running current (A)		11.20 - 10.27	16.79 - 15.39
		Power consumption (kW)		2.39	3.62
		Power factor (%)		97	98
		COP		4.69	3.87
		Maximum current (A)		21.6	22.3
Indoor unit					
Fan unit		Fan		Centrifugal	
		Standard air flow H/M/L m3/min)		15.0 / 12.0 / 9.0	23.5 / 16.7 / 12.5
		Motor (W)		94	94
Sound pressure level		H/M/L (dB·A)	37 / 35 / 28	41 / 36 / 29	
Sound power level		H/M/L (dB·A)	52 / 50 / 43	56 / 51 / 44	
Outdoor unit					
Power supply		1 phase 230V (220-240V) 50Hz			
Outer dimension		Standard length (m)		7.5	
		Min. length (m)		3	
		Max. total length (m)		50	
		Over 30m		40g/m (31m to 50m)	
		Height difference	Outdoor lower (m)		30
Outdoor high (m)			30		
Fan unit		Fan		Propeller fan	
		Standard air flow high (m3/min)		101	103
		Motor (W)		100 + 100	100 + 100
Connecting pipe		Gas side	Main (mm)	15.9	15.9
			Sub (mm)	12.7	15.9
		Liquid side	Main (mm)	9.5	9.5
			Sub (mm)	6.4	9.5
Sound pressure level	Cooling/Heating (dB·A)		49/50	51/52	
Sound power level	Cooling/Heating (dB·A)		66/67	68/69	

SPECIFICATIONS

<Single Type>

Model		Indoor unit		RAV-SM1107CTP-E	RAV-SM1407CTP-E	RAV-SM1607CTP-E
		Outdoor unit		RAV-SP1104AT8-E	RAV-SP1404AT8-E	RAV-SP1604AT8-E
Cooling capacity		(kW)		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)
Power supply				3 phase 4wired(3N-4pole) 380V - 415V 50Hz		
Electrical characteristics	Cooling	Running current (A)		4.45 - 4.07	6.50 - 5.95	7.60 - 6.96
		Power consumption (kW)		2.37	3.72	4.50
		Power factor (%)		81	87	90
		EER		4.22	3.36	3.11
	Heating	Running current (A)		4.75 - 4.35	6.22 - 5.69	7.28 - 6.66
		Power consumption (kW)		2.53	3.56	4.31
		Power factor (%)		81	87	90
		COP		4.43	3.93	3.71
		Maximum current (A)		16.1	15.9	16.1
	Indoor unit					
Fan unit		Fan		Centrifugal		
		Standard air flow	H/M/L (m3/min)	31.0 / 22.5 / 17.0	34.0 / 25.5 / 20.0	34.0 / 27.5 / 21.0
		Motor (W)		139	139	139
Sound pressure level		H/M/L (dB·A)		44 / 38 / 32	46 / 41 / 35	46 / 42 / 36
Sound power level		H/M/L (dB·A)		59 / 53 / 47	61 / 56 / 50	61 / 57 / 51
Outdoor unit						
Outer dimension		Standard length (m)		7.5		
		Min. length (m)		3		
		Max. total length (m)		75		
		Over 30m		40g/m (31m to 75m)		
		Height difference	Outdoor lower (m)		30	
Outdoor high (m)			30			
Connecting pipe		Gas side (mm)		15.9		
		Liquid side (mm)		9.5		
Fan unit		Fan		Propeller fan		
		Standard air flow high	(m3/min)	101	103	103
		Motor (W)		100 + 100	100 + 100	100 + 100
Sound pressure level	Cooling/Heating (dB·A)		49/50	51/52	51/53	
Sound power level	Cooling/Heating (dB·A)		66/67	68/69	68/70	