

SPLIT SYSTEM

RIZX B-C / RAAC SERIES RIZX B-C / SARC SERIES

HIGH STATIC, DUCTED
SPLIT SYSTEM AIR CONDITIONERS
COOLING ONLY, HEAVY DUTY
50 HERTZ



RIZX B-C



RAAC

SARC



The RIZX B-C Series is the latest introduction in the range of RHEEM split airconditioners with the most reliable unit design available. All air handler models are only 11 - 18 inches high. These units can be matched with all RHEEM condensing units.

Engineering Features

Air Handler

- CABINET** - Powder coat painted made from heavy gauge galvanized steel metal
- MOTOR** - Inherently protected, mounted on resilient neoprene rubber mountings, to reduce noise level.
- BLOWER**- Centrifugal, forward curved, double inlet double width type, made from heavy duty galvanized iron plain sheet / aluminium sheet.
- LOW PROFILE** - Allow for horizontal installation in most standard drop ceiling application, and the movement of units through most standard doorways for addition or replacement work.
- UNIT SUSPENSION** - Unique design neoprene rubberised grommets are provided at four corners for suspending the unit from the ceiling/concrete slab to eliminate vibration.
- EXPANSION DEVICE** - Capillary

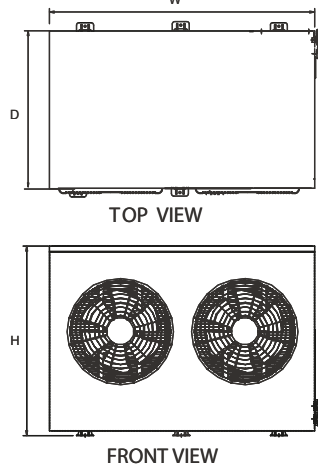
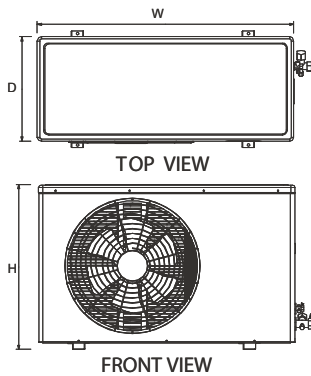
- FILTERS** - 5mm thick Woven synthetic, permanent washable filters are standard on all units. Optional - half inch aluminium frame washable filters.
- INSULATION** - 5mm thick irradiated grade EPE, fire retardent lining material for thermal and acoustic application.
- EVAPORATORCOIL** - Coils are constructed with inner grooved copper tubes (IGT) & aluminium fins mechanically bonded to the tubes for maximum heat transfer capabilities.
- REFRIGERANT CONNECTIONS** - For field piping connections sweat type joints are provided on side of the unit.
- DRAINPAN** - Insulated & powder coated galvanized steel drain pan is designed to trap condensate drain. The sandwich insulation kept between upper and lower sheet metal panels provides drip free performance. The drain connections are on two sides of the unit for the convenience of installation.
- SERVICEACCESS** - Removable panels at the bottom of the unit, can be easily removed for access to motor and blowers. Alternately entire fan & motor section with return air plenum can be separated from the coil section for servicing and maintenance.
- TESTING** - All units are run tested at the factory prior to shipment.

Engineering Features Condensing Units

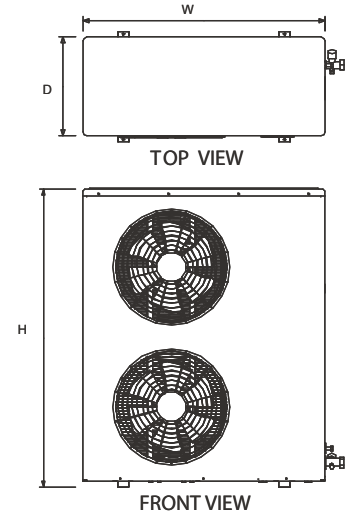
- Compressor is hermetically sealed and incorporates internal high temperature motor overload protection, and durable insulation on the motor winding . It is internally spring mounted and externally mounted on rubber grommets to reduce vibration and noise.
- Compressor has an internal pressure - relief assembly to protect against excessive pressure differential.
- Condenser fan motor is inherently protected and permanently lubricated type.
- Metallic Condenser fan blades ensure safety & durability.
- All refrigerant connection are on the exterior of the units, located close to the ground for neat appearing installation.
- HP and LP safety controls are a standard feature on all the models.
- **All Units tested in accordance with A.R.I. standard.**
No.210/240&340/360
- New design SARC version of low height condensing units for models 060 and 072 allow installation of units in the upper area of a balcony in any apartment. This gives clear space for normal use of the balcony
- Cabinet is constructed of galvanised steel with polyester powder coating for U.V radiation protection.
- Internally Grooved Copper Tube (IGT) & Aluminium Fin coils are used on all models.
- The compressor and the control box is located in separate compartment of the cabinet providing for easy access through service panels.
- Service valves are standard on all models.
- Every unit is factory charged and tested.

DIMENSIONS AND OPERATING WEIGHT

RAAC 018 / 024 / 030 /
036 / 042 / 048



RAAC 060 / 072



CONDENSING UNITS

Model	Height 'H' (Inches)	Depth 'D' (Inches)	Width 'W' (Inches)	Weight (Lbs)
RAAC 018	21	13	33	134
RAAC 024	21	13	33	143
RAAC 030	21	13	33	150
RAAC 036	27	16	40	179
RAAC 042	27	16	40	183
RAAC 048	27	16	40	185
RAAC 060	50	16	40	240
RAAC 072	50	16	40	244
SARC 060	32	30	44	243
SARC 072	32	30	44	247

AIR HANDLING UNITS

Model	A (Inches)	B (Inches)	C (Inches)	D (Inches)	E (Inches)	F (Inches)	G (Inches)	Weight (Lbs)
RIZX 018B-C	35.9	10.9	24.7	34.8	19.4	7.5	33.3	50
RIZX 024B-C	35.9	10.9	24.7	34.8	19.4	7.5	33.3	50
RIZX 030B-C	35.9	10.9	24.7	34.8	19.4	7.5	33.3	60
RIZX 036B-C	38.6	15.0	28.9	33.3	22.3	9.4	32.1	100
RIZX 042B-C	42.6	15.0	35.9	41.4	29.0	9.4	40.1	110
RIZX 048B-C	42.6	15.0	35.9	41.4	29.0	9.4	40.1	125
RIZX 060B-C	44.0	18.0	36.9	42.8	27.5	9.4	41.1	145
RIZX 072B-C	44.0	18.0	36.9	42.8	27.5	9.4	41.1	155

RIZX B-C 018/024/030/036/042/048/060/072

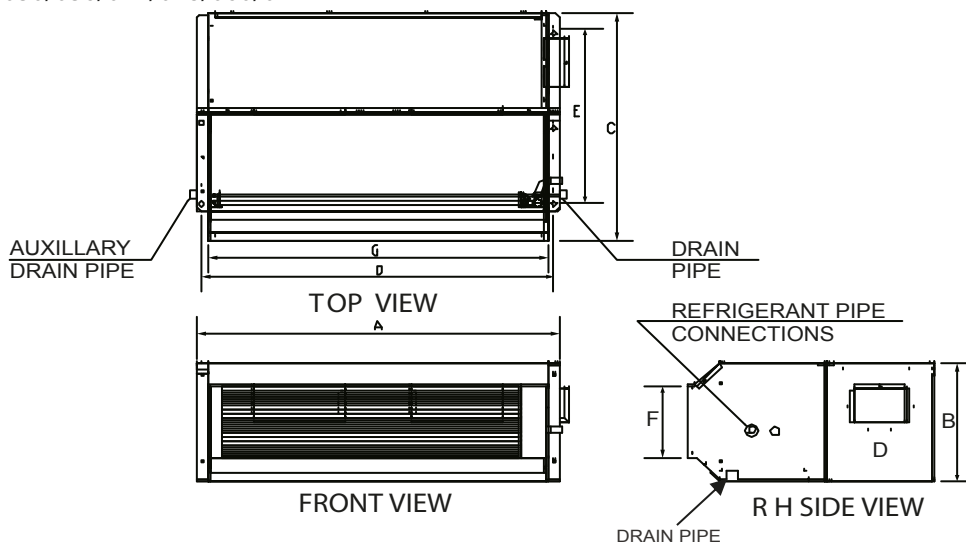


TABLE FOR TECHNICAL DATA															
AIR HANDLING UNIT MODEL				RIZX 018B-C	RIZX 024B-C	RIZX 024B-C	RIZX 030B-C	RIZX 036B-C	RIZX 036B-C	RIZX 042B-C	RIZX 042B-C	RIZX 048B-C	RIZX 048B-C	RIZX 060B-C	RIZX 072B-C
CONDENSING UNIT MODEL				RAAC 018T	RAAC 018T	RAAC 024T	RAAC 030T	RAAC 030T	RAAC 036T	RAAC 036N	RAAC 042N	RAAC 042N	RAAC 048N	RAAC 060N SARC 060N	RAAC 072N SARC 065N
AMBIENT TEMP: 95°F	EVAPORATOR ENTERING AIR TEMP.	80DB/67WB °F	TMBH	15.4	15.9	19.9	24.4	25.1	29.4	29.6	34.3	35.4	38.2	49.7	58.1
			SMBH	11.7	12.5	15.3	18.8	20.0	22.1	22.9	26.8	28.5	28.7	38.7	44.2
		76DB/63WB °F	TMBH	14.4	14.9	18.7	23.0	23.7	27.6	27.8	32.6	33.5	36.1	46.3	54.0
			SMBH	11.6	12.4	15.0	18.2	19.3	21.3	22.1	26.1	27.7	27.7	37.9	43.2
AMBIENT TEMP: 115°F	EVAPORATOR ENTERING AIR TEMP.	80DB/67WB °F	TMBH	13.6	14.0	17.6	21.5	22.2	26.0	26.2	30.4	31.4	33.8	42.9	51.4
			SMBH	11.1	11.8	14.4	17.5	18.5	20.6	21.4	24.6	26.2	26.4	35.2	41.6
		76DB/63WB °F	TMBH	12.7	13.1	16.3	20.0	20.6	24.2	24.4	28.2	29.0	31.4	40.7	47.7
			SMBH	10.9	11.6	14.0	17.0	18.0	20.3	21.1	24.2	25.7	26.0	35.0	40.6
AIR FLOW PERFORMANCE (DRY COIL)		LOW	CFM	550	715	715	865	990	990	905	905	950	950	1390	1550
		MEDIUM		570	755	755	890	1040	1040	1020	1020	1085	1085	1530	1710
		HIGH		600	785	785	905	1115	1115	1270	1270	1320	1320	1665	1820
EXTERNAL STATIC PRESSURE (ESP)			INCH OF WG	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
NUMBER OF COMPRESSORS				1	1	1	1	1	1	1	1	1	1	1	1
NUMBER OF CIRCUITS FOR AIR HANDLING UNIT				1	1	1	1	1	1	1	1	1	1	1	1
EXPANSION DEVICE / REFRIGERANT R-22				Capillary											
ELECTRICAL DATA	*POWER SUPPLY	AIR HANDLING UNIT	PH-HZ-VOLTS	1-50-220	1-50-220	1-50-220	1-50-220	1-50-220	1-50-220	1-50-220	1-50-220	1-50-220	1-50-220	1-50-220	1-50-220
		CONDENSING UNIT		1-50-220	1-50-220	1-50-220	1-50-220	1-50-220	*1-50-220	*3-50-380	*3-50-380	*3-50-380	3-50-380	3-50-380	3-50-380
	POWER INPUT	AIR HANDLING UNIT	KW	0.12	0.23	0.23	0.29	0.33	0.33	0.35	0.35	0.35	0.35	0.41	0.46
		CONDENSING UNIT		1.9	1.9	2.3	3.1	3.2	3.3	3.4	3.7	3.8	4.1	5	5.3
	CIRCUIT BREAKER SIZE	AIR HANDLING UNIT	AMPS	15	15	15	15	15	15	15	15	15	15	15	15
		CONDENSING UNIT		15	15	20	20	30	30	30	15	15	15	20	20
	FULL LOAD CURRENT	AIR HANDLING UNIT	AMPS	0.6	1.1	1.1	1.4	1.6	1.6	1.7	1.7	1.7	1.7	2	2.2
		CONDENSING UNIT		9.6	9.6	11.5	15.5	15.6	16.4	5.8	6.5	6.5	7.3	8.9	9.5
COIL FACE AREA		AIR HANDLING UNIT	SQ.FT.	1.8	1.8	1.8	20	2.7	2.7	3.1	3.1	3.5	3.5	4.3	4.4
		CONDENSING UNIT		4.2	4.2	4.2	4.2	4.2	6.5	6.5	6.5	6.5	6.5	13.1	13.1
NUMBER OF FANS		AIR HANDLING UNIT	NOS	2	2	2	2	2	2	2	2	2	2	2	2
		CONDENSING UNIT		1	1	1	1	1	1	1	1	1	1	2	2

Note : * Optional Power Supply 1-50-220/240 & 3-50-380/415

Condensing Unit Refrigerant Line Size Information

System Model Numbers	Line Size (inch O.D.) [mm]	Liquid Line Size Outdoor Unit Above Indoor Coil						Liquid Line Size Outdoor Unit Below Indoor Coil					
		Total Length - Feet (m)						Total Length - Feet (m)					
		25 [7.26]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	150 [45.72]	25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	150 [45.72]
		Vertical Separation - Feet [m]						Vertical Separation - Feet [m]					
018	1/4* [6.35]	25 [7.62]	50 [15.24]	70 [21.34]			25 [7.62]	23 [7.01]	8[2.44]				
	5/16 [7.94]				80 [24.39]	90 [27.44]	110 [33.52]			52 [15.85]	52 [15.85]	52 [15.85]	
024	1/4* [6.35]	25 [7.62]	50 [15.24]				25 [7.62]	23 [7.01]					
	5/16 [7.94]			34 [10.36]	70 [21.34]	90 [27.44]	110 [33.52]		55 [16.76]	52 [15.85]	52 [15.85]	52 [15.85]	
030	1/4* [6.35]	25 [7.62]	50 [15.24]				25 [7.62]	23 [7.01]					
	5/16 [7.94]			33 [10.06]	70 [21.34]	61 [18.59]		50 [15.24]	39 [11.89]	25 [7.62]	11 [3.35]		
	3/8 [9.53]					90 [27.44]	110 [33.52]					52 [15.85]	
036	5/16* [7.94]	25 [7.62]	50 [15.24]	70 [21.34]			25 [7.62]	23 [7.01]	9 [2.74]				
	3/8 [9.53]				70 [21.34]	90 [27.44]	110 [33.52]			52 [15.85]	52 [15.85]	52 [15.85]	
042	5/16* [7.94]	25 [7.62]	50 [15.24]	75 [22.86]			25 [7.62]	23 [7.01]	9 [2.74]				
	3/8 [9.53]				70 [21.34]	90 [27.44]	110 [33.52]			55 [17.56]	52 [15.85]	52 [15.85]	
048	3/8* [9.53]	25 [7.62]	44 [13.41]	53 [16.15]	61 [18.59]	70 [21.34]		25 [7.62]	23 [7.01]	19 [5.79]	11 [3.35]	3 [0.91]	
	1/2 [12.7]					90 [27.44]	110 [33.52]					52 [15.85]	
060	3/8* [9.53]	25 [7.62]	48 [14.63]	61 [18.59]	72 [21.95]			25 [7.62]	23 [7.01]	11 [3.35]	3 [0.91]		
072	1/2* [12.7]				80 [24.39]	90 [27.44]	110 [33.52]				52 [15.85]	52 [15.85]	

*Standard line size

NOTES :

- This chart is applicable for condensing units.
- Do not exceed 120 feet [36.58m] maximum vertical separation.
- Always use the smallest liquid line possible to minimize system charge.
- Chart may be used to size horizontal runs.
- The total length up to 150 Ft. [45.72 m.] permissible with minimum number of fittings in the pipeline and enhance pipe sizes as per tables.

NOTES :

- This chart is applicable for condensing units.
Example 1: A 2.5 ton [8.79kW] condensing unit with a total line length of 75 feet [22.86m] with a vertical separation of 30 feet [9.14m] requires a liquid line size of 5/16 [7.94mm].
- This chart may also be used to size horizontal runs.
Example 2: A 5 ton [17.58kW] condensing unit may have a total horizontal run of 100 feet [30.48m] if using the 3/8 [9.53mm] liquid line. The total horizontal run of using 1/2 [12.7mm] liquid line size will be 150 feet [45.72m].
- Do not exceed vertical separation as indicated on the chart.
- The total length up to 150 Ft. [45.72 m.] permissible with minimum number of fittings in the pipeline and enhance pipe sizes as per tables.

Vapor Line Length / Size versus Capacity Multiplier

System Model Numbers	018	024	030	036	042	048	060/072
Vapor Line Run-feet [m]	-- 5/8" [15.88 mm] O.D. Standard 3/4" [19.05mm]		5/8" [15.88mm] O.D. Optional 3/4" [19.05mm] O.D. Standard 7/8" [22.23 mm] O.D. Optional			7/8" [22.23 mm] O.D. Optional 1 1/8" [28.58mm] O.D. Standard 1 3/8" [34.94mm] O.D. Optional	
25' [7.62]	Optional Standard Optional	- 1.00 1.01	.98 1.00 1.01	- 1.00 1.01	- 1.00 1.01	- 1.00 1.01	.98 1.00 1.01
50' [15.24]	Optional Standard Optional	- .98 1.00	.96 .99 1.00	- .99 1.00	- .98 1.00	- .97 1.00	.97 1.00 1.01
100' [30.48]	Optional Standard Optional	- .96 .99	.93 .98 .99	- .97 .99	- .96 .99	- .94 .98	.95 .99 1.00
150' [45.72]	Optional Standard Optional	- .97 .98	- .97 .98	- .95 .97	- .93 .97	- .90 .96	.91 .98 .99

NOTES: Capacity Multiplier x Rated Capacity = Actual Capacity

[] Designates Metric Conversions

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

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