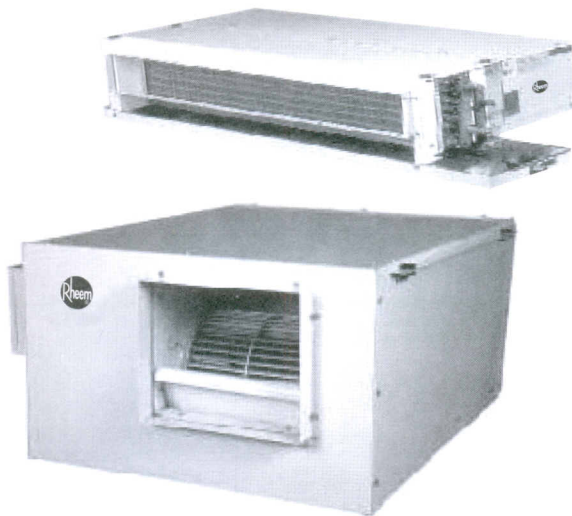


SPLIT SYSTEM

RILE A-SADE SERIES

HIGH EFFICIENCY,
DUCTED SPLIT SYSTEM
AIR CONDITIONERS
HEAVY DUTY
50 HERTZ



The RILE A series is the latest introduction in the range of RHEEM's split air conditioners with most reliable unit design available. All air handler models are only 11-19 inches high. These units can be matched with all RHEEM condensing units.

Engineering Features

Air Handler

- **CABINET** - Made from heavy gauge galvanized steel, and power coated by electrostatic painting process.
- **MOTOR** - Permanently lubricated with thermal overload protection & ventilated type motors are mounted inside of insulated cabinet to reduce motor noise and provide a neat looking installation.
- **BLOWER** - Double inlet, double width, forward curved aluminum/GI construction dynamically balanced for low noise & high performance.
- **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.

- **EXPANSION DEVICE** - Capillary / Flow check orifice
- **FILTERS** - 6 mm thick woven synthetic / Half inch (optional) permanent washable filters available on all units.
- **INSULATION** - 5 mm thick irradiated grade EPE, fire retardant.
- **EVAPORATOR COIL** - Coils are constructed with inner grooved copper tubes and aluminum fins mechanically bonded to the tubes for maximum heat transfer capabilities.
- **REFRIGERANT CONNECTIONS** - Field piping connections, are sweat type, made through side of the unit.
- **DRAIN PAN** - Insulated galvanized steel sandwich construction drain pan is designed to trap condensate drain.
- **SERVICE ACCESS** - For RILE 036A to 072A removable panels at the bottom of the unit, can be easily removed for access to motor & blowers. For RILE 018A to 030A entire fan & motor section can be separated from the coil section by wing nuts for servicing and maintenance.
- **TESTING** - All units are run tested at the factory prior to shipment.

Engineering Features Condensing Units

The RHEEM Classic X High Efficiency SADE- Condensing Unit is designed with performance in mind. These units offer comfort, energy conservation and dependability for single, multi-family and light commercial applications.

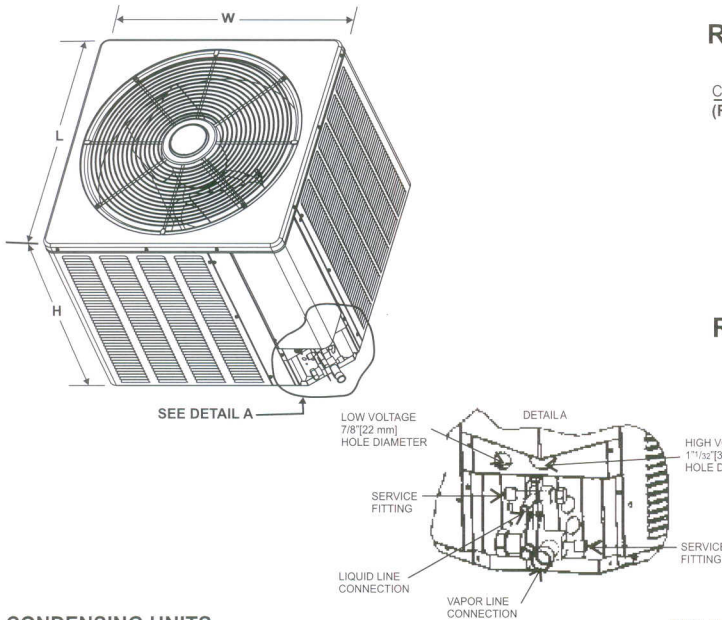
The RHEEM Classic X SADE - Condensing Units are the result of an on going development program for improved efficiencies.

- Attractive , louvered wrap-around jacket protects the coil from yard hazards and weather extremes. Top grille is steel reinforced for extra strength. Cabinet is powder coated for all-weather protection.
- Air is discharged up ward away from bushes and shrubs. The discharge pattern of the top grille provides minimum air restriction, resulting in quiet fan operation.
- Exclusive Combination Grille/Motor Mount secures the fan motor to the underside of the discharge grille. This removable top grille provides access to the condenser fan motor condenser coil and compressor.
- The control box is located on the top side corner of the cabinet providing for easy access to all controls, through a service panel.
- Single speed condenser fan motor is designed for low speed, quiet energy saving operation.
- **All Units tested in accordance with A.R.I standard NO.210/240&340/360**

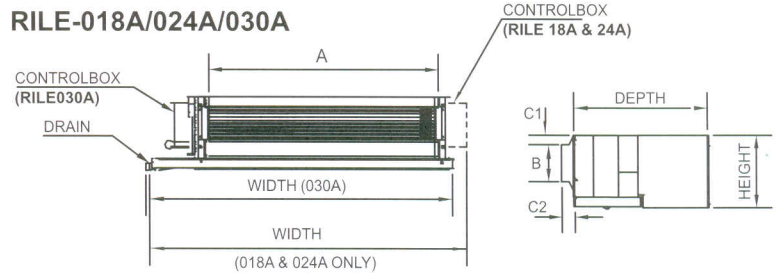
- Compressor is hermetically sealed and incorporates internal high temperature motor overload protection ,and durable insulation on the motor windings. It is internally spring mounted and externally mounted on rubber grommets to reduce vibration and noise.
- Compressor has an internal pressure-relief assembly to protect against excessive pressure differential.
- All refrigerant connections are on the exterior of the units, located close to the ground for neat appearing installations.
- Cabinet is constructed of powder coated galvanized steel. The full wrap around louvered grille protects the coil from damage. This cabinet is also able to with stand 1000 hours of salt spray test.
- Copper Tube - Aluminum Fin coils are used on all models.
- Service valves are standard on all models.
- Power and control wiring are kept separate.
- Every unit is factory charged and tested.
- Drawn, painted base pan for extra corrosion resistance and sound reduction
- Low Pressure (L.P.) Cut out safety control is a standard feature on all the models.
- High Pressure (H.P.) Cut out safety control is a standard feature on all the models.

DIMENSIONS AND OPERATING WEIGHT

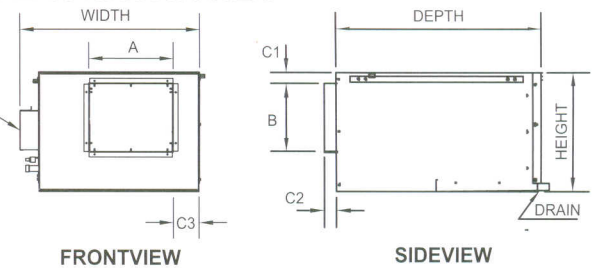
CONDENSING UNITS SADE SERIES



AIR HANDLING UNITS RILE A SERIES



RILE - 036A/042A/048A/060A/072A



CONDENSING UNITS

Model	Unit Dimensions & Operating Weight			
	Width "W" Inches [mm]	Length "L" Inches [mm]	Height "H" Inches [mm]	Weight Lbs.
SADE 018	23 5/8 [600.07]	23 5/8 [600.07]	24 1/4 [615.95]	130
SADE 024				135
SADE 030				135
SADE 036				140
SADE 042				145
SADE 048				167
SADE 060	31 5/8 [803.27]	31 5/8 [803.27]	27 15/16 [709.61]	180
SADE 065				181

AIR HANDLING UNITS

Model	Height (Inches)	Depth (Inches)	Width (Inches)	A (Inches)	B (Inches)	C1 (Inches)	C2 (Inches)	C3 (Inches)	Weight (Lbs)
RILE018A	11.0	21.0	47.0	33.0	4.7	1.40	1.00	--	65
RILE024A	11.0	21.0	47.0	33.0	4.7	1.40	1.00	--	66
RILE030A	12.0	26.5	41.0	34.0	6.6	1.40	1.00	--	68
RILE036A	15.0	34.0	30.0	10.6	9.6	1.25	1.25	5.60	85
RILE042A	17.5	34.0	30.0	13.5	11.0	1.00	1.60	4.40	90
RILE048A	17.5	34.0	30.0	13.5	11.0	1.00	1.60	4.40	90
RILE060A	19.0	33.0	30.0	12.6	11.8	0.73	2.00	4.90	110
RILE072A	19.0	37.0	30.0	13.5	12.5	3.75	2.00	2.65	115

TABLE FOR TECHNICAL DATA

AIR HANDLING UNIT MODEL		RILE 018	RILE 024	RILE 024	RILE 030	RILE 036A	RILE 042	RILE 048	RILE 048	RILE 060A	RILE 072A		
CONDENSING UNIT MODEL		SADE 018S	SADE 024S	SADE 030S	SADE 036S	SADE 042N	SADE 048N	SADE 048N	SADE 060N	SADE 065N			
AMBIENT TEMP : 95° F	80DB / 67 WB° F	16.4	17.2	21.0	28.6	32.2	34.3	35.7	37.7	42.3	51.4	65.3	
	EVAPORATOR ENTERING AIR TEMP.	SMBH	12.2	13.1	18.0	21.8	23.9	26.2	28.8	31.5	40.8	51.8	
		76DB / 63 WB° F	15.1	15.4	19.5	26.0	29.8	31.1	32.6	34.1	39.1	47.6	60.7
		SMBH	12.0	12.5	15.5	17.4	21.1	23.7	25.3	27.8	31.0	40.1	51.2
AMBIENT TEMP : 115° F	80DB / 67 WB° F	14.8	15.3	19.0	25.8	29.1	31.0	32.3	34.1	38.2	46.4	59.0	
	EVAPORATOR ENTERING AIR TEMP.	SMBH	11.3	12.0	14.5	20.3	22.2	24.3	24.6	26.7	29.2	39.2	49.8
		76DB / 63 WB° F	13.8	14.0	17.7	24.1	27.1	28.9	29.9	31.7	34.1	43.5	55.4
		SMBH	11.2	11.7	14.4	20.1	22.1	24.1	24.3	26.4	29.1	38.8	49.5
AIR FLOW PERFORMANCE	LOW	523	665	665	835	1029	1112	1112	1265	1265	1865	2223	
	MEDIUM	559	724	724	905	1088	1265	1265	1441	1441	1930	2335	
	HIGH	600	800	800	1000	1200	1380	1380	1600	1600	2000	2400	
EXTERNAL STATIC PRESSURE	ESP	0.10	0.10	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	
NOISE LEVEL (AHU)	LOW	43	44	44	45	46	47	47	49	49	51	53	
	MEDIUM	44	46	46	47	48	49	49	51	51	53	56	
	HIGH	47	48	48	49	50	51	51	53	53	55	58	
NUMBER OF COMPRESSORS	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		
EXPANSION DEVICE / REFRIGERANT R-22													
ELECTRICAL DATA	POWER SUPPLY	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	
	POWER INPUT	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	
		KW	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	
	CIRCUIT BREAKER SIZE	AMPS	15	15	15	15	15	15	15	15	15	15	
AMPS		15	15	15	15	15	15	15	15	15	15		
FULL LOAD CURRENT	AMPS	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3		
	AMPS	10.8	10.9	13.6	16.4	16.5	19.6	19.7	7.0	7.1	8.7	10.8	
COIL FACE AREA	SQ. FT.	1.5	1.8	1.8	2.4	2.4	2.4	4.7	4.7	4.7	7.5	7.5	
	SQ. FT.	5.33	5.33	8.51	8.51	11.14	11.14	11.14	11.14	12.43	16.39	16.39	
NUMBER OF FANS	NOS	2	2	2	2	2	2	2	2	2	2		
	NOS	1	1	1	1	1	1	1	1	1	1		
NET WEIGHT (APPR.)**	LBS	65	66	66	68	85	85	90	90	90	110	115	
	LBS	130	130	135	135	140	140	145	145	167	180	181	

NOTE - * POWER SUPPLY : 1-50-220/240 & 3-50-380/415
 ** For shipping weight, add 10 Lbs to net weight

		AIR HANDLING UNIT AIR FLOW PERFORMANCE						
		MOTOR SPEED	CFM DELIVERED AGAINST EXTERNAL STATIC PRESSURE - INCHES OF WG					
			0	0.1	0.2	0.3	0.4	0.5
RILE 018A	LO	575	523	475	425			
	MED	610	559	510	460	--	--	--
	HI	650	600	550	500			
RILE 024A	LO	720	665	615	560			
	MED	775	724	675	620	--	--	--
	HI	850	800	750	700			
RILE 030A	LO	890	835	785	740			
	MED	950	905	855	800	--	--	--
	HI	1050	1000	950	900			
RILE 036A	LO	1080	1029	980	930			
	MED	1140	1088	1040	995	--	--	--
	HI	1250	1200	1150	1100			
RILE 042A	LO	1215	1165	1112	1060	1010	960	910
	MED	1370	1315	1265	1210	1160	1110	1060
	HI	1480	1430	1380	1335	1290	1240	1190
RILE 048A	LO	1370	1315	1265	1210	1160	1110	1060
	MED	1540	1492	1441	1395	1350	1300	1250
	HI	1700	1650	1600	1550	1500	1450	1400
RILE 060A	LO	1965	1915	1865	1820	1775	1725	1675
	MED	2030	1980	1930	1880	1835	1785	1735
	HI	2100	2050	2000	1950	1905	1855	1805
RILE 072A	LO	2325	2275	2223	2175	2120	2070	2020
	MED	2435	2385	2335	2290	2240	2190	2140
	HI	2500	2450	2400	2350	2300	2250	2200

Model Number Identification

Condensing Unit

<u>S</u>	<u>A</u>	<u>D</u>	<u>E</u>	<u>018</u>	<u>S</u>	<u>A</u>
RHEEM EXPORT	REMOTE CONDENSING UNIT	HIGH EFFICIENCY (STANDARD)	DESIGN SERIES	COOLING CAPACITY (NOMINAL)	ELECTRICAL DESIGNATION	VARIATIONS FULL METAL JACKET
			E = FIFTH DESIGN	018 = 18,000 BTU/HR [5.28 kW]	S = 220-1-50	
				024 = 24,000 BTU/HR [7.03 kW]		
				030 = 30,000 BTU/HR [8.79 kW]	N = 380-3-50	
				036 = 36,000 BTU/HR [10.55 kW]		
				042 = 42,000 BTU/HR [12.31 kW]		
				048 = 48,000 BTU/HR [14.07 kW]		
				060 = 60,000 BTU/HR [17.58 kW]		
				065 = 72,000 BTU/HR [21.10 kW]		

Air Handling Unit

<u>R</u>	<u>I</u>	<u>L</u>	<u>E</u>	<u>018</u>	<u>A</u>
RHEEM EXPORT	INTERNATIONAL A.H.U.	LOW HEIGHT	DESIGN SERIES	COOLING CAPACITY (NOMINAL)	VARIATIONS
				018 = 18,000 BTU/HR [5.28 kW]	

Condensing Unit Refrigerant Line Size Information

System Model Numbers	Line Size (inch O.D.)	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]
SADE	[mm]	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]			36[10.97]	42[12.80]	48[14.63]	54[16.46]			36[10.97]	30[9.14]	24[7.32]	18[5.49]
024	1/4*[6.35]	25[7.62]	50[15.24]					25[7.62]	23[7.01]				
	5/16[7.94]		24[7.32]	34[10.36]	44[13.41]	54[16.46]	64[19.51]		48[14.63]	38[11.58]	28[8.53]	18[5.49]	8[2.44]
030	1/4* [6.35]	25[7.62]	50[15.24]					25[7.62]	23[7.01]				
	5/16[7.94]		19[5.79]	33[10.06]	47[14.33]	61[18.59]			50[15.24]	39[11.89]	25[7.62]	11[3.35]	
	3/8[9.53]					11[3.35]	15[4.57]						57[17.37]
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]			34[10.36]	40[12.19]	46[14.02]	52[15.85]			38[11.58]	32[9.75]	26[7.92]	20[6.10]
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]			32[9.75]	39[11.89]	46[14.02]	53[16.15]			40[12.19]	33[10.66]	26[7.92]	19[5.79]
048	3/8*[9.53]	25[7.62]	44[13.41]	53[16.15]	61[18.59]	70[21.34]		25[7.62]	28[8.53]	19[5.79]	11[3.35]	3[.91]	
	1/2[12.7]					37[11.28]	39[11.89]					35[10.67]	33[10.06]
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[.91]		
065	1/2*[12.7]				35[10.67]	38[11.58]	41[12.50]				37[11.28]	34[10.36]	31[9.45]

NOTES:

- This chart is applicable for condensing units.
- If the separation height exceeds the table value, reduce the indoor coil flow - check piston two sizes plus one size for each additional 10 feet [3.05m].
Example 1: A 5 ton [17.58 kW] condensing unit with a total line length of 125 feet [38.10m] with a vertical separation of 101 feet [30.78m] utilizing a 1/2 [12.7mm] liquid line : Table = 38 feet [11.58m] maximum vertical separation for 125 feet [38.10] run. Separation exceeds table by (101-38) = 63 feet [19.20m]. Therefore, reduce the indoor coil flow - check piston 2 + 6 = 8 sizes (For example, a # 89 piston would reduce to a # 81 piston)
- Do not exceed 120 feet [36.58m] maximum vertical separation.
- Do not exceed table values for capillary tube coils.
- Always use the smallest liquid line possible to minimize system charge.
- Chart may be used to size horizontal runs.

*Standard line size

NOTES:

- This chart is applicable for condensing units.
Example 1 : A2.5 ton [nom.] 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 : A5 ton [nom.] 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.
- Always use the smallest liquid line possible to minimize system charge.

Vapor Line Length /Size versus Capacity Multiplier								
System Model Numbers	SADE	018	024	030	036	042	048	060/065
Vapor Line Run - feet[m]	--			5/8" [15.88mm] O.D. Optional			7/8" [22.23mm] O.D. Optional	
	5/8" [15.88mm] O.D. Standard			3/4" [19.05mm] O.D. Standard			1 1/8" [28.58mm] O.D. Standard	
	3/4" [19.05mm] O.D. Optional			7/8" [22.23mm] O.D. Optional			1 1/4" [34.94mm] O.D. Optional	
25[7.62]	Optional	-	.98	-	-	-	.99	.98
	Standard	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Optional	1.01	1.01	1.01	1.01	1.01	1.01	1.01
50[15.24]	Optional	-	.96	-	-	-	.97	.97
	Standard	.98	.99	.99	.98	.97	1.00	.99
	Optional	1.00	1.00	1.00	1.00	1.00	1.01	1.01
100[30.48]	Optional	-	.93	-	-	-	.96	.95
	Standard	.96	.98	.97	.96	.94	.99	.99
	Optional	.99	.99	.99	.99	.98	1.00	1.00
150[45.72]	Optional	-	-	-	-	-	.93	.91
	Standard	.97	.97	.95	.93	.90	.99	.98
	Optional	.98	.98	.97	.97	.96	1.00	.99

NOTES: Capacity Multiplier x Rated Capacity = Actual Capacity. [] Designates Metric Conversions

Additional compressor oil is not required for runs up to 150 feet [45.72 m].

Oil traps in vertical runs are not required for any height up to 100 feet [30.48 m]. See Liquid Line chart for Vertical Separation Requirements and Limitations.

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.

**RHEEM
AIR CONDITIONING
DIVISION**

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"In keeping with its policy of continuous progress and product improvement, RHEEM reserves the right to make changes with out notice."