

SPLIT SYSTEM

RILE A - SAKB 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 airconditioners with the 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 powder 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** - woven synthetic / Half inch aluminium(optional) permanent washable filters are standard on all units.
- **INSULATION** - 5mm thick irradiated grade EPE, fire retardent.
- **EVAPORATOR COIL** - Coils are constructed with inner grooved copper tubes and aluminium fins mechanically bonded to the tubes for maximum heat transfer capabilities.
- **REFRIGERANT CONNECTIONS** - Field piping connections, RILE 018 A to 030 A flare & RILE 036 A to 072 A sweat type, are made through side of the unit.
- **DRAIN PAN** - Insulated galvanized steel 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 SAKB -Condensing Unit was 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 SAKB - Condensing Units are the result of an ongoing development program for improved efficiencies. With SEER's ranging to 10.50, these units continue a tradition of high efficiency.

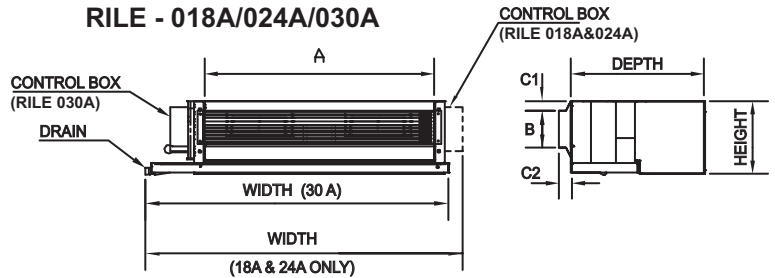
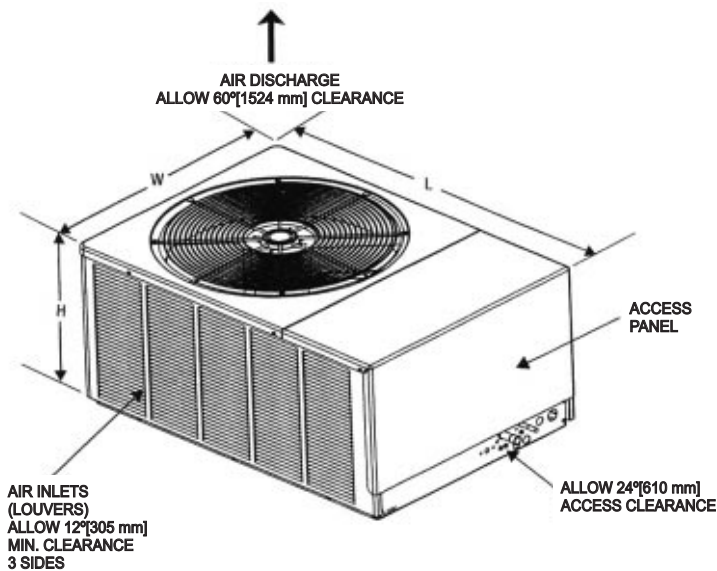
- Attractive, louvered wrap-around jacket protects the coil from yard hazards and weather extremes. Top grille is steel reinforced for extra strength. Cabinet is powder painted for all-weather protection.
- Air is discharged upward away from bushes and shrubs. The discharge pattern of the top grille provides minimum air restriction, resulting in quiet fan operation.
- Exclusive Combination Grille/Motor Mount secures the motor to the underside of the discharge grille. The grille protects the motor windings and bearings from rain and snow.
- All controls are accessible by removing one service panel. Removable top grille provides access to the condenser fan motor and condenser coil.
- Single speed motor is designed for low speed, quiet energy-saving operation.
- All Units tested in accordance with A.R.I. standard no.2-10-81-360-86

- 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.
- Compressors have 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 painted 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 - Aluminium Fin coils are used on all models.
- The control box is located in the top corner of the cabinet providing for easy access through a service panel.
- Service valves are standard on all models.
- Power and control wiring are kept separate.
- Every unit is factory charged and tested.
- Separate compressor compartment for easy service access.
- Drawn, painted base pan for extra corrosion resistance and sound reduction.
- H.P. Cutout safety control is a standard feature on all the models.

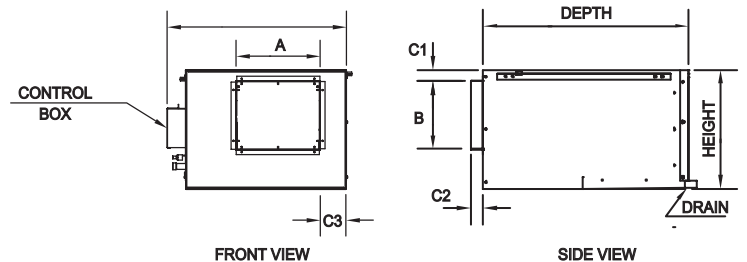
CONDENSING UNITS SAKB SERIES

DIMENSIONS AND OPERATING WEIGHT

AIR HANDLING UNITS RILE A SERIES



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



CONDENSING UNITS

AIR HANDLING UNITS

Model	Height H (Inches)	Length L (Inches)	Width W (Inches)	Weight (Lbs)
SAKB 018	17.0	36.0	23.0	130
SAKB 024	17.0	36.0	23.0	135
SAKB 030	19.0	36.0	23.0	145
SAKB 036	19.0	41.0	27.0	170
SAKB 042	19.0	41.0	27.0	180
SAKB 048	23.0	44.0	31.0	200
SAKB 060	23.0	44.0	31.0	230
SAKB 065	23.0	44.0	31.0	230

Model	Height (Inches)	Depth (Inches)	Width (Inches)	A (Inches)	B (Inches)	C1 (Inches)	C2 (Inches)	C3 (Inches)	Weight (Lbs)
RILE 018A	11.0	21.0	47.0	33.0	4.7	1.40	1.00	--	65
RILE 024A	11.0	21.0	47.0	33.0	4.7	1.40	1.00	--	66
RILE 030A	12.0	26.5	41.0	34.0	6.6	1.40	1.00	--	68
RILE 036A	15.0	34.0	30.0	10.6	9.6	1.25	1.25	5.60	85
RILE 042A	17.5	34.0	30.0	13.5	11.0	1.00	1.60	4.40	90
RILE 048A	17.5	34.0	30.0	13.5	11.0	1.00	1.60	4.40	90
RILE 060A	19.0	33.0	30.0	12.6	11.8	0.73	2.00	4.90	110
RILE 072A	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 018A	RILE 024A	RILE 024A	RILE 024A	RILE 030A	RILE 036A	RILE 036A	RILE 042A	RILE 042A	RILE 048A	RILE 048A	RILE 060A	RILE 072A
CONDENSING UNIT MODEL		SAKB 018	SAKB 018	SAKB 024	SAKB 030	SAKB 030	SAKB 030	SAKB 036	SAKB 036	SAKB 042	SAKB 042	SAKB 048	SAKB 060	SAKB 065
AMBIENT TEMP : 95 deg F	80DB / 67 WB Deg F	16.10	17.40	22.00	25.80	27.10	32.50	34.30	36.70	38.60	42.90	53.40	67.50	
	EVAPORATOR AIR ENTERING AIR TEMP	11.60	13.60	17.20	19.70	22.00	25.70	26.40	27.10	30.00	33.10	43.50	55.80	
AMBIENT TEMP : 115 deg F	76DB / 63 WB Deg F	15.00	16.30	20.60	24.00	25.40	29.50	32.20	34.20	36.10	40.20	50.10	63.30	
	EVAPORATOR AIR ENTERING AIR TEMP	11.50	12.50	16.70	18.20	19.70	24.80	25.90	26.40	28.80	32.30	42.00	54.20	
AIR FLOW PERFORMANCE	80DB / 67 WB Deg F	14.20	15.40	19.50	22.70	23.90	28.80	30.30	32.00	34.20	37.90	47.20	59.50	
	LOW	10.30	12.40	15.70	17.60	19.40	23.30	25.00	25.40	27.20	30.30	40.20	51.50	
	MEDIUM	13.20	14.40	18.20	21.20	22.40	26.80	28.40	29.60	31.90	35.50	44.20	55.80	
ESP	76DB / 63 WB Deg F	11.10	11.40	15.30	17.00	17.80	22.40	23.10	24.90	25.80	29.50	36.70	46.70	
	LOW	523	665	665	835	1029	1029	1112	1112	1265	1265	1865	2223	
	MEDIUM	559	724	724	905	1088	1088	1265	1265	1441	1441	1930	2335	
NOISE LEVEL(AHU)	HIGH	600	800	800	1000	1200	1200	1380	1380	1600	1600	2000	2400	
	INCHES OF WC	0.10	0.10	0.10	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	
	LOW	43	44	44	45	46	46	47	47	49	49	51	53	
NUMBER OF COMPRESSORS	MEDIUM	45	46	46	47	48	48	49	49	51	51	53	56	
	HIGH	47	48	48	49	50	50	51	51	53	53	55	58	
	1	1	1	1	1	1	1	1	1	1	1	1	1	
NUMBER OF CIRCUITS FOR THE AIR HANDLING UNIT		1	1	1	1	1	1	1	1	1	1	1	1	
EXPANSION DEVICE														
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	1-50-220	1-50-220
	POWER INPUT	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	1-50-220
	CIRCUIT BREAKER SIZE	0.26	0.26	0.26	0.26	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	1.1
	FULL LOAD CURRENT	1.60	1.60	2.00	2.40	2.40	2.80	2.80	2.80	3.90	3.90	4.40	5.20	6.50
COIL FACE AREA	AIR HANDLING UNIT	15	15	15	15	15	15	15	15	15	15	15	15	
	CONDENSING UNIT	20	20	20	25	25	30	30	15	15	15	15	20	
NUMBER OF FANS	AIR HANDLING UNIT	1.3	1.3	1.3	1.3	2.0	2.0	2.5	2.5	2.5	2.5	2.5	5	
	CONDENSING UNIT	7.9	7.9	10.0	11.9	11.9	14.3	14.3	4.7	4.7	4.7	7.5	11.0	
NET WEIGHT (Lbs)*	AIR HANDLING UNIT	1.5	1.8	1.8	2.4	2.4	2.4	4.7	4.7	4.7	4.7	7.5	7.5	
	CONDENSING UNIT	5.0	5.0	6.1	9.1	9.1	11.0	11.0	11.0	11.0	11.0	15.8	15.8	
CAPILLARY	AIR HANDLING UNIT	2	2	2	2	1	1	1	1	1	1	1	1	
	CONDENSING UNIT	1	1	1	1	1	1	1	1	1	1	1	1	
ORIFICE	AIR HANDLING UNIT	65	66	66	68	85	85	85	90	90	90	110	115	
	CONDENSING UNIT	130	130	135	145	145	170	170	180	180	180	230	230	

Note:
 * For shipping weight, add 10 Lbs to net weight
 ** 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 [7.62]	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]			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 [0.91]	
	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 [0.91]		
065	1/2* [12.7]				35 [10.67]	38 [11.58]	41 [12.50]				37 [11.28]	34 [10.36]	31 [9.45]

*Standard line size

NOTES

- This chart is applicable for condensing units.
- Do not exceed 120 feet [36.58m] maximum vertical separation,
- No changes required for expansion valve coils.
- Coils with flow-check pistons may require change of piston size,only incase of longer pipe lengths
- 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.

NOTES :

- This chart is applicable for condensing units.
Example 1: A 2.5 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: A 5 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.
- No changes required for flow-check pistons or expansion valve coils.

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

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