

SPLIT SYSTEM

**RPTL-B & SAGL / SALC SERIES
DUCTED SPLIT SYSTEM
HIGH EFFICIENCY AIR CONDITIONERS
R- 410 A, GREEN REFRIGERANT
50 Hz**

featuring R410A
earth friendly refrigerant



RPTL-B



SALC



SAGL



Tested in accordance
with AHRI Standard
210/240 UAC

AIR HANDLERS – RPTL-B

Engineering Features

- **CABINET** - Made from heavy galvanized steel and powder coated by electrostatic process.
- **MOTOR** - Three speed, permanently lubricated with thermal overload protection & ventilated type motors mounted inside an insulated cabinet to reduce motor noise and provide a neat looking installation.
- **BLOWER** - Double inlet, double width, forward curved metallic construction, dynamically balanced for low noise & high performance.
- **UNIT SUSPENSION** - Unique design hangers are provided at four corners for suspending the unit from the ceiling or concrete slab to eliminate any vibration.
- **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. All air handler models are only 11.8" to 15.7" (300 to 400mm) high.
- **INSULATION** - Polyethylene 10mm. (average) thickness.
- **EVAPORATOR COIL** - Coils are constructed with inner grooved copper tubes and aluminium fins mechanically bonded to the tubes for maximum heat transfer capabilities.
- **EXPANSION VALVE** - Thermostatic expansion valve is standard on all units.
- **FILTERS** - Aluminium filter 0.5" (12.70 mm.) permanent washable type provided on all units.
- **REFRIGERANT CONNECTIONS** - Field piping connection, are sweat type, made through side of the unit.
- **DRAIN PAN** - Galvanized steel sheet sandwich construction and outside surface is insulated with polyethylene foam insulation to avoid condensation.
- **SERVICE ACCESS** - All capacities 012 to 072 have removable panel at the bottom of the units, which can be easily removed for access to motor & blowers. Additionally the entire fan & motor section can be separated from the coil section for servicing and maintenance.
- **TESTING** - All units are run tested at the factory prior to shipment.

CONDENSING UNITS – SAGL & SALC

Engineering Features

- Louvered steel cabinet (for SAGL) powder coated paint system rated at 1008 hours salt spray as per ASTM B117.
 - Easily accessible control box.
 - Condenser coils constructed with Copper tubing and enhanced aluminium fins.
 - Exclusive Combination Grilled / Motor mount secures the motor to the underside of discharge grille for quiet fan operation for SAGL.
 - Bi-Directional Filter Drier (shipped-not installed) for SAGL.
 - Low Pressure Control (RXAC-A07).
 - High Pressure control (RXAB-A07).
 - Scroll compressor (in SAGL) 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.
- SALC incorporates rotary compressor and additionally the time delay relay as standard feature.

Applications

Outdoor condensing units designed for ground level or wall bracket mounting or roof top installation. These units offer comfort and dependability for single, multi-family and light commercial applications.

Field Installation (Optional)

- Time Delay Control (SAGL)- Compressor will remain off for five minutes after power or thermostat interruption, high allowing system pressures to equalize. Starting during pressure conditions can result in shortened compressor life. (Model No.RXMDB01)
 - Low Ambient Switch - Cycles outdoor fan maintain adequate condensing pressures assuring liquid refrigerant flow to the coil. Allows unit's functioning with outdoor temperatures down to 40 deg F. (Model No.RXAD-A04)
- It is recommended that this control be installed in units to be operated at outdoor ambient temperatures under 70 deg.F
- Hard Start Kits - Available through the Parts Department.
 - Crankcase Heater - Available through the Parts Department.

Cooling Capacities

MODEL NO.	CAPACITIES AT VARIOUS CONDITIONS																													
	RPTL + SALC						RPTL + SAGL																							
Evap. air - CFM (Dry Coil)	12		18		24		30		36		42		48		60		72													
	435	335	235	580	550	465	805	705	825	850	890	575	825	850	890	1200	1125	1085	1580	1370	1168	1699	1381	1178	1770	1430	1242	2100	2050	1915
ESP-External Static Pressure in Inches of Wg	0.10																													
Cooling Capacity MBTU/Hr. 95°F Amb. 80/67°F on coil	12.0	11.4	10.8	14.9	14.2	13.5	20.6	19.6	18.6	24.8	23.6	22.4	29.8	28.3	26.8	36.5	34.7	33.0	43.3	41.2	39.1	56.2	53.4	50.7	65.2	61.9	58.8	65.2	61.9	58.8
Cooling Capacity MBTU/Hr. 115°F Amb. 80/67°F on coil	9.1	8.7	8.2	12.2	11.5	11.0	17.1	16.3	15.5	19.1	18.1	17.2	24.4	23.2	22.0	30.5	28.9	27.5	32.5	30.9	29.3	40.3	38.3	36.4	49.5	47.0	44.7	49.5	47.0	44.7
Total KW (set)	1.00	0.90	0.80	1.24	1.14	1.04	1.72	1.62	1.52	1.93	1.83	1.73	2.53	2.43	2.33	3.13	3.03	2.93	3.65	3.55	3.45	5.50	5.40	5.30	6.76	6.66	6.56	6.76	6.66	6.56
Cooling Capacity MBTU/Hr. 115°F Amb. 80/67°F on coil	10.6	10.1	9.6	13.1	12.5	11.8	17.6	16.7	15.9	20.2	19.2	18.3	27.4	26.0	24.7	31.4	29.8	28.3	39.0	37.1	35.2	50.8	48.3	45.9	57.3	54.5	51.8	57.3	54.5	51.8
Total KW (set)	1.17	1.06	0.95	1.52	1.42	1.32	2.14	2.04	1.94	2.36	2.25	2.16	3.15	3.04	2.93	3.72	3.62	3.52	4.36	4.27	4.17	6.63	6.52	6.44	8.04	7.94	7.82	8.04	7.94	7.82
Cooling Capacity MBTU/Hr. 115°F Amb. 76/63°F on coil	9.8	9.3	8.9	12.0	11.4	10.9	16.8	16.0	15.2	19.0	18.0	17.1	25.2	23.9	22.7	30.0	28.5	27.1	36.5	34.6	32.9	48.0	45.6	43.3	53.8	51.2	48.6	53.8	51.2	48.6
Total KW (set)	8.6	8.1	7.7	11.1	10.5	10.0	15.9	15.1	14.3	16.6	15.7	15.0	22.6	21.5	20.4	28.6	27.2	25.9	32.2	30.6	29.0	38.8	36.8	35.0	46.2	43.9	41.7	46.2	43.9	41.7
Total KW (set)	1.18	1.08	0.98	1.52	1.42	1.32	2.14	2.04	1.94	2.37	2.27	2.17	3.15	3.05	2.95	3.74	3.64	3.54	4.38	4.28	4.18	6.64	6.54	6.44	8.05	7.95	7.85	8.05	7.95	7.85

RPTL-B : Air Handling unit air flow (CFM) at various External Static Pressure conditions

ESP- External Static Pressure (inch of Wg)	Fan Speed	RPTL-012B	RPTL-018B	RPTL-024B	RPTL-030B	RPTL-036B	RPTL-042B	RPTL-048B	RPTL-060B	RPTL-072B
0.1"	High	435	580	805	890	1325	1670	1793	1860	2275
	Medium	335	550	705	850	1250	1460	1476	1500	2210
	Low	235	465	575	825	1175	1275	1286	1310	2135
0.2"	High	365	485	745	800	1200	1580	1699	1770	2100
	Medium	265	450	625	745	1125	1370	1381	1430	2050
	Low	220	375	525	715	1085	1168	1178	1242	1915
0.3"	High	240	325	625	660	1115	1480	1587	1680	1915
	Medium	190	285	535	650	1090	1250	1263	1335	1890
	Low	-	225	425	550	975	1080	1088	1150	1810

NOTE: The air flow is measured at dry coil condition with AI Filter

Condensing Unit refrigerant line size information Refrigeration high quality seamless copper tubing.

Liquid Line Sizing (R-410A)														
Unit Models	Liquid Line Connection Size (Inch I.D.)	Line Size (Inch O.D.) [mm]	Liquid Line Size – Outdoor Unit Above Indoor Coil (Cooling Only—Does not apply to Heat Pumps)						Liquid Line Size – Outdoor Unit Below Indoor Coil					
			Total Equivalent Length - Feet [-m]						Total Equivalent 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]					
12 & 18	3/8" [9.53]	1/4 [6.35]	25[7.62]	50[15.24]	70[21.34]	N/A	N/A	N/A	25 [7.62]	40 [12.19]	25 [7.62]	9 [2.74]	N/A	N/A
		5/16 * [7.94]	N/A	N/A	N/A	80[24.39]	90[27.44]	110[33.52]	25 [7.62]	50 [15.24]	62 [18.90]	58 [17.68]	53 [16.15]	49 [14.94]
		3/8 * [9.53]	25[7.62]	50[15.24]	N/A	N/A	N/A	N/A	25 [7.62]	50 [15.24]	75 [22.86]	72 [21.95]	70 [21.34]	68 [20.73]
24	3/8" [9.53]	1/4 [6.35]	25[7.62]	30[9.14]	34[10.36]	N/A	N/A	N/A	23 [7.01]	N/A	N/A	N/A	N/A	N/A
		5/16 * [7.94]	N/A	N/A	N/A	70[21.34]	90[27.44]	110[33.52]	25 [7.62]	36 [10.97]	29 [8.84]	23 [7.01]	16 [4.88]	9 [2.74]
		3/8 * [9.53]	N/A	N/A	N/A	N/A	N/A	N/A	25 [7.62]	50 [15.24]	72 [21.95]	70 [21.34]	68 [20.73]	65 [19.81]
30	3/8" [9.53]	1/4 [6.35]	25[7.62]	50[15.24]	N/A	N/A	N/A	N/A	25 [7.62]	N/A	N/A	N/A	N/A	N/A
		5/16 * [7.94]	N/A	N/A	33[10.36]	70[21.34]	61[18.59]	N/A	25 [7.62]	49 [14.94]	38 [11.58]	27 [8.23]	17 [5.18]	6 [1.83]
		3/8 * [9.53]	N/A	N/A	N/A	N/A	90[27.44]	110[33.52]	25 [7.62]	50 [15.24]	68 [20.73]	65 [19.81]	62 [18.90]	58 [17.68]
36	3/8" [9.53]	5/16 [7.94]	25[7.62]	50[15.24]	70[21.34]	N/A	N/A	N/A	25 [7.62]	50 [15.24]	37 [11.28]	22 [6.71]	7 [2.13]	N/A
		3/8 * [9.53]	N/A	N/A	N/A	70[21.34]	90[27.34]	110[33.52]	25 [7.62]	50 [15.24]	68 [20.73]	63 [19.20]	58 [17.68]	53 [16.15]
42	3/8" [9.53]	5/16 [7.94]	25[7.62]	50[15.24]	75[22.86]	N/A	N/A	N/A	25 [7.62]	23 [7.01]	4 [1.22]	N/A	N/A	N/A
		3/8 * [9.53]	N/A	N/A	N/A	70[21.34]	90[27.44]	110[33.52]	25 [7.62]	50 [15.24]	43 [13.11]	36 [10.97]	30 [9.14]	24 [7.32]
48	3/8" [9.53]	3/8 * [9.53]	25[7.62]	44[13.41]	53[16.51]	61[18.59]	70[21.34]	N/A	25 [7.62]	46 [14.02]	38 [11.58]	30 [9.14]	22 [6.71]	15 [4.57]
		1/2 [12.57]	N/A	N/A	N/A	N/A	90[27.44]	110[33.52]	25 [7.62]	50 [15.24]	56 [17.07]	55 [16.76]	53 [16.15]	52 [15.85]
60 & 65	3/8" [9.53]	3/8 * [9.53]	25[7.62]	48[14.63]	61[18.59]	72[21.95]	N/A	N/A	25 [7.62]	50 [15.24]	56 [17.07]	44 [13.41]	32 [9.75]	20 [6.10]
		1/2 [12.57]	N/A	N/A	N/A	80[24.39]	90[27.44]	110[33.52]	25 [7.62]	50 [15.24]	75 [22.86]	81 [24.69]	79 [24.08]	76 [23.16]

NOTE:*Standard line size - N/A = Application not recommended.

Suction Line Length/Size versus Capacity Multiplier (R-410A)										
Unit Models		12 & 18	24	30	36	42	48	60 & 65		
Suction Line Connection size		3/4" [19.05] I.D.				7/8" [22.23] I.D.				
Suction Line Run-Feet [m]		5/8" [15.88 mm] O.D. Optional 3/4" [19.05 mm] O.D. Standard*		5/8" [15.88 mm] O.D. Optional 3/4" [19.05 mm] O.D. Standard* 7/8" [22.23 mm] O.D. Optional		3/4" [19.05 mm] O.D. Optional 7/8" [22.23 mm] O.D. Standard*		7/8" [22.23 mm] O.D. Optional 1 1/8" [28.58 mm] O.D. Standard*		
25' [7.62]	Optional	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	Standard	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	Optional	—	—	1.00	—	—	—	—	—	
50' [15.24]	Optional	.98	.98	.96	.98	.99	.99	.99	.99	
	Standard	.99	.99	.98	.99	.99	.99	.99	.99	
	Optional	—	—	.99	—	—	—	—	—	
100' [30.48]	Optional	.95	.95	.94	.96	.96	.96	.96	.97	
	Standard	.96	.96	.96	.96	.97	.98	.98	.98	
	Optional	—	—	.97	—	—	—	—	—	
150' [45.72]	Optional	.92	.92	.91	.94	.94	.95	.95	.94	
	Standard	.93	.94	.93	.95	.96	.96	.96	.97	
	Optional	—	—	.95	—	—	—	—	—	

NOTE:*Standard line size - Using suction line larger than shown in chart will result in poor oil return and is not recommended [] 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.

**RHEEM
AIR CONDITIONING
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"In keeping with its policy of continuous progress and product improvement, RHEEM reserves the right to make changes without notice"