



Vantix® Line Air Handlers



SH1PY

PSC Motor

Single-Stage Airflow

Efficiencies: 13.4 to 15.2 SEER2

Expansion Device: Thermal Expansion Valve (TXV)

Refrigerant Type: R-454B



Table of Contents

Features and Benefits3

Model Number Identification.....4

Dimensional Data5

Unit Dimensions & Weights.....6

Airflow Directional Data.....7

Airflow Performance Data 8-10

Electrical Data 11-15

Limited Warranty16

Features and Benefits

- **Quiet Operation¹:** Provided by a cabinet construction with 1.0 inch of foil faced insulation for quieter sound characteristics
- **Aluminum Indoor Coil Design:** Are constructed of aluminum fins bonded to internally grooved aluminum tubing and are more corrosion resistant
- **Versatile 4-Way Convertible Compact Design:** Allows for upflow, downflow, horizontal left and horizontal right applications, even in the smallest of spaces
- **Rugged Steel, Compact Cabinet Construction:** Designed for added strength and versatility
- **Field-installed Auxiliary Heater Kits:** Provide exact heat for indoor comfort and include circuit breakers which meet UL and cUL requirements for service disconnect
- **Cabinet Air Leakage Less Than 2% At 1-inch H₂O:** When tested in accordance with ASHRAE Standard 193
- **Mobile/Manufactured Home Capability:** Designed to be suitable for installation in mobile/manufactured homes
- **Designing for Sustainability with Low GWP:** For 2025, the Environmental Protection Agency (EPA) has set a global warming potential (GWP) limit of 700 for refrigerant used in heating and cooling systems. This new requirement will result in a 78%² lower GWP than previous-generation refrigerants — with only minimal changes to system installation. For us, this is another step toward our continued sustainability goal of reducing greenhouse gas emissions, while still delivering an exceptional level of energy efficient, dependable comfort
- **Refrigerant Detection System^{TM3}:** An integrated one-box, patented design featuring the A2L sensor and mitigation board, offering easier commissioning with a single component and simplified wiring configuration, compatibility with any 24V thermostat application and system protection by automatically pausing outdoor unit operation — if excess refrigerant is detected

¹Based on manufacturer's air handler offering, and the product's airflow stages, motor type and cabinet insulation. Sound levels are also dependent on air handler location and installation ²When comparing the GWP of R-454B to R-410A refrigerant ³Factory or field installed in the furnace coil or air handler and is applicable to the complete heating and cooling system featuring Low GWP Refrigerant (A2L)

Air Handlers

<u>S</u>	<u>H</u>	<u>1</u>	<u>P</u>	<u>Y</u>	<u>18</u>	<u>17</u>	<u>S</u>	<u>T</u>	<u>A</u>	<u>N</u>	<u>N</u>	<u>A</u>	<u>L</u>
Brand	Product Category	Stages Of Airflow	Motor Type	Refrigerant	Capacity	Width	Efficiency	Metering	Major Series	Controls	Coil Series	Voltage	Sensor
S - Russell® By Rheem	H - Multipoise Air Handler	1 - 1-Stage	P - PSC	Y - R-454B	18 - 18,000 [5.28 kW] 24 - 24,000 [7.03 kW] 30 - 30,000 [8.79 kW] 36 - 36,000 [10.55 kW] 42 - 42,000 [12.31 kW] 48 - 48,000 [14.07 kW] 60 - 60,000 [17.58 kW]	17 - 17.5" 21 - 21" 24 - 24.5"	S - Standard	T - TXV	A - 1st Design	N - Non-Communicating	N - N-Coil	A - 115/1/60 J - 208-240/1/60 D - 480/3/60	BLANK - Factory Installed L - Less A2L Sensor

Available Models		
SH1PY1817STANNJ	SH1PY4824STANNJ	SH1PY3621STANNAL
SH1PY1817STANNJL	SH1PY4824STANNJL	SH1PY4221STANNA
SH1PY2417STANNJ	SH1PY6024STANNJ	SH1PY4221STANNAL
SH1PY2417STANNJL	SH1PY6024STANNJL	SH1PY4821STANNA
SH1PY3017STANNJ	SH1PY1817STANNA	SH1PY4821STANNAL
SH1PY3017STANNJL	SH1PY1817STANNAL	SH1PY3617STANND
SH1PY3617STANNJ	SH1PY2417STANNA	SH1PY3621STANND
SH1PY3621STANNJ	SH1PY2417STANNAL	SH1PY4221STANND
SH1PY3617STANNJL	SH1PY3017STANNA	SH1PY4821STANND
SH1PY3621STANNJL	SH1PY3017STANNAL	SH1PY3617STANNDL
SH1PY4221STANNJ	SH1PY3617STANNA	SH1PY3621STANNDL
SH1PY4221STANNJL	SH1PY3621STANNA	SH1PY4221STANNDL
SH1PY4821STANNJ	SH1PY3617STANNAL	SH1PY4821STANNDL

Standard Equipment
The most compact unit design available, all standard heat air handler models only 42-1/2 to 55-1/2 inches [1079 to 1409 mm] high
Attractive pre-painted cabinet exterior
Rugged wall steel cabinet construction, designed for added strength and versatility
1.0" foil faced insulation mechanically retained in blower compartment for excellent thermal and sound performance
Four leg blower motor mount
Blower housing with controls, motor and blower. Slide out design for service and maintenance convenience
Traditional open wire element design for heat applications
Field convertible for vertical downflow, horizontal left hand or right hand air supply
3 combustible floor base accessories fit all model sizes when required for downflow installations on combustible floors
Indoor coil design provides low air side pressure drop, high performance and extremely compact size
Expansion valve on indoor coil provides for operation with air conditioning
Coils are constructed of aluminum fins bonded to internally grooved aluminum tubing
Coils are tested at the factory with an extensive refrigerant leak check
Coils have copper sweat refrigerant connections
Coils utilize chatleff metering device connections
Molded polymer corrosion resistant condensate drain pan is provided on all indoor coils
Supply duct flanges provided as standard on air handler cabinet
Provisions for field electrical, connections available from either side or top of the air handler cabinet
Connection point for high voltage wiring is inside the air handler cabinet. Low voltage connection is made on the outside of the air handler cabinet
Concentric knockouts are provided for power connection to cabinet. Installer may pull desired hole size up to 2 inches [51 mm] for 1-1/2 inch [38 mm] conduit
Front refrigerant and drain connections

[] Designates Metric Conversions

Unit Dimensions

ELECTRICAL CONNECTIONS
MAY EXIT TOP OR EITHER SIDE
HIGH VOLTAGE CONNECTION 7/8" [22.2 mm],
1 3/32" [27.8 mm], 1 31/32" [50 mm] DIA. KNOCKOUTS.

LOW VOLTAGE CONNECTION
5/8" [15.9 mm] AND 7/8" [22.2 mm] KNOCKOUT

SUPPLY AIR

NOTE: 24" CLEARANCE REQUIRED IN FRONT OF
UNIT FOR FILTER AND COIL MAINTENANCE.

AUXILIARY DRAIN CONNECTION
3/4" [19.1 mm] FEMALE PIPE THREAD (NPT)
HORIZONTAL APPLICATION ONLY

PRIMARY DRAIN CONNECTION
3/4" [19.1 mm] FEMALE PIPE THREAD (NPT)

AUXILIARY DRAIN CONNECTION
3/4" [19.1 mm] FEMALE PIPE THREAD (NPT)
UPFLOW/DOWNFLOW APPLICATION ONLY

LIQUID LINE CONNECTION
COPPER (SWEAT)

VAPOR LINE CONNECTION
COPPER (SWEAT)

HORIZONTAL ADAPTER KIT

VAPOR LINE
CONNECTION

AUXILIARY HORIZONTAL
DRAIN CONNECTION

PRIMARY DRAIN
CONNECTION

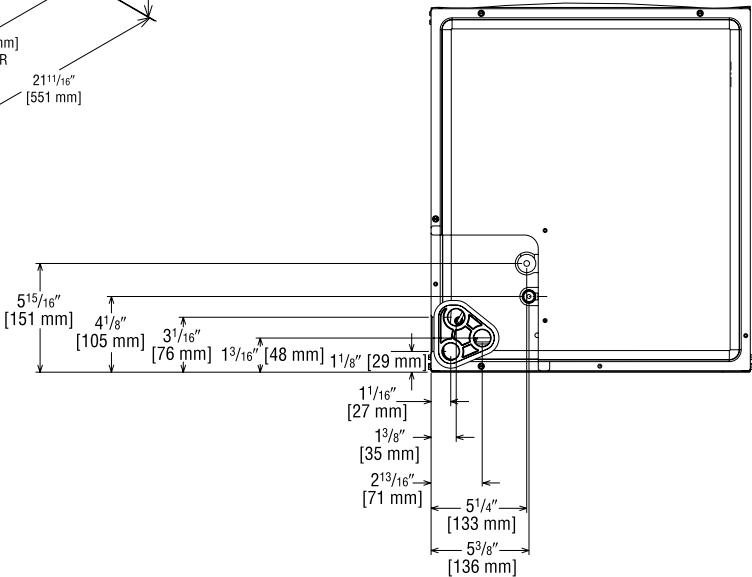
AUXILIARY UPFLOW/DOWNFLOW
DRAIN CONNECTION

LIQUID LINE
CONNECTION

VERTICAL DRAIN PAN

Return Air Opening Dimensions

Model Cabinet Size	Return Air Opening Width (Inches)	Return Air Opening Depth/Length (Inches)
17	15 7/8	19 3/4
21	19 3/8	19 3/4
24	22 7/8	19 3/4



UPFLOW UNIT SHOWN:
UNIT MAY BE INSTALLED UPFLOW, DOWNFLOW,
HORIZONTAL RIGHT OR LEFT AIR SUPPLY.

[] Designates Metric Conversions
() Designates Unit with Double Coil Cabinet

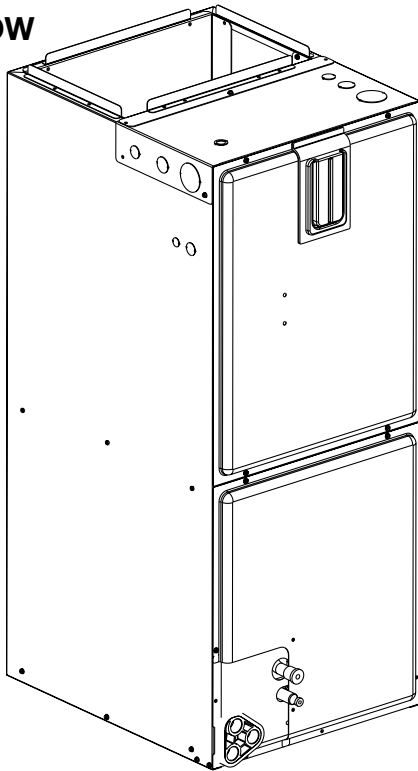
Unit Dimensions & Weights

Model Size SH1PY	Refrigerant Connections Sweat (In.) [mm] ID		Unit Width “W” In. [mm]	Unit Height “H” In. [mm]	Supply Duct “A” In. [mm]	Air Flow CFM (Nom.) [L/s]		Unit Weight/Shipping Weight (Lbs.) [kg]
	Liquid	Vapor				Lo	Hi	Unit With Coil (Max. KW)
1817S/2417S	3/8 [9.53]	3/4 [19.05]	17 1/2 [445]	42 1/2 [1080]	16 [406]	600 [283]	800 [378]	81/95 [37/43]
3017S/3617S	3/8 [9.53]	3/4 [19.05]	17 1/2 [445]	42 1/2 [1080]	16 [406]	1000 [472]	1200 [566]	90/104 [41/47]
3621S	3/8 [9.53]	7/8 [22.23]	21 [533]	42 1/2 [1080]	19 1/2 [495]	1200 [566]	—	109/124 [49/56]
4221S/4821S	3/8 [9.53]	7/8 [22.23]	21 [533]	50 1/2 [1282]	19 1/2 [495]	1400 [661]	1600 [755]	130/146 [59/66]
4824S	3/8 [9.53]	7/8 [22.23]	24 1/2 [622]	55 1/2 [1410]	23 [584]	1600 [755]	—	143/161 [65/73]
6024S	3/8 [9.53]	7/8 [22.23]	24 1/2 [622]	55 1/2 [1410]	23 [584]	—	1800 [850]	164/181 [75/82]

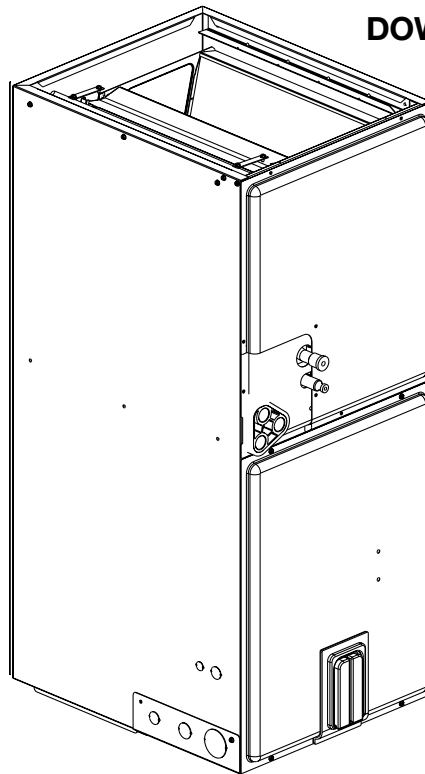
[] Designates Metric Conversions

Airflow Directional Data

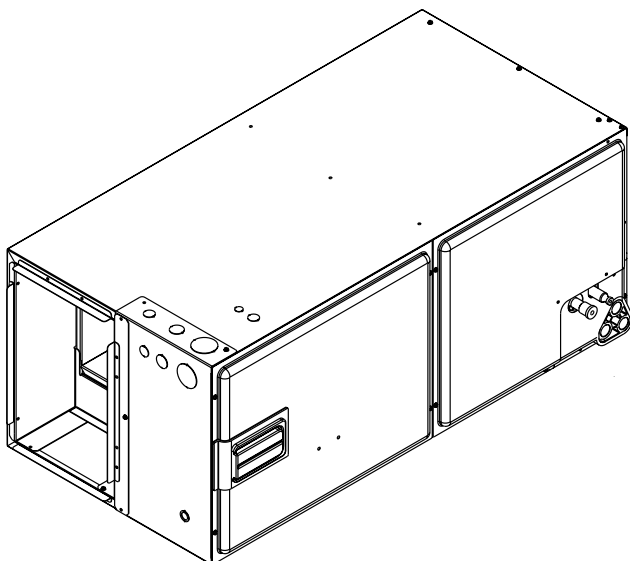
UPFLOW



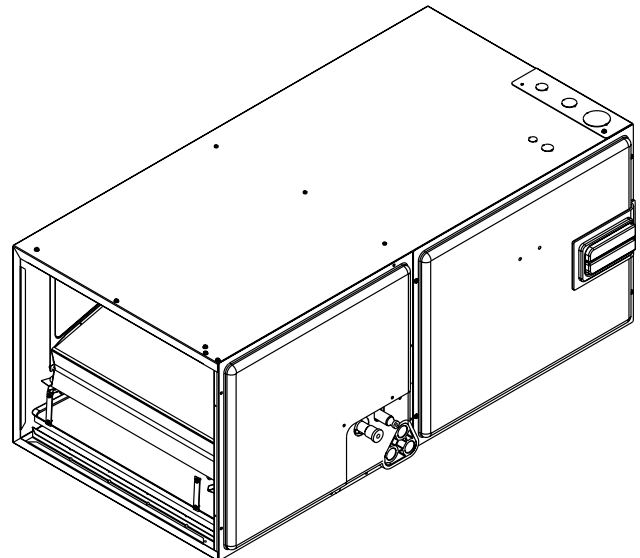
DOWNFLOW



**HORIZONTAL LEFT
HAND AIRFLOW**



**HORIZONTAL RIGHT
HAND AIRFLOW**



Airflow Performance

Airflow performance data is based on cooling performance with a coil and no filter in place. Select performance table for appropriate unit size, voltage and number of electric heaters to be used. Make sure external static applied to unit allows operation within the minimum and maximum limits shown in

table below for both cooling and electric heat operation. For optimum blower performance, operate the unit in the .3 [8 mm] to .7 inches [18 mm] W.C. external static range. Units with coils should be applied with a minimum of .1 inch [3 mm] W.C. external static range.

General Airflow Operating Limits

Cabinet Width	17		17/21		21			24	
Cooling BTUH x 1,000 Cooling Tons Nominal	18 1.5	24 2	30 2.5	36 3	42 3.5	48 4	60 5	48 4	60 5
Heat Pump or Air Conditioning Maximum Heat/Cool CFM [L/s] (37.5 CFM [18 L/s]/1,000 BTUH) (450 CFM [212 L/s]/Ton Nominal)	675 [319]	900 [425]	1125 [531]	1350 [637]	1575 [743]	1800 [850]	1925 [907]	1800 [850]	1930* [911]
Heat Pump or Air Conditioning Nominal Heat/Cool CFM [L/s] (33.3 CFM [16 L/s]/1,000 BTUH) (400 CFM [189 L/s]/Ton Nominal)	600 [283]	800 [378]	1000 [472]	1200 [566]	1400 [661]	1600 [755]	1750 [826]	1550 [732]	1800* [850]
Heat Pump or Air Conditioning Minimum Heat/Cool CFM [L/s] (30.0 CFM [14 L/s]/1,000 BTUH) (360 CFM [170 L/s]/Ton Nominal)	540 [255]	720 [340]	900 [425]	1080 [510]	1260 [595]	1440 [680]	1575 [743]	1440 [680]	1620* [765]
Maximum kW Electric Heating & Minimum Electric Heat CFM [L/s]	13 (6.13) 487 [230]	13 (6.13) 617 [291]	18 (8.49) 814 [384]	18 (8.49) 1054 [497]	20 (9.44) 1171 [553]	25 (11.8) 1502 [709]	25 (11.8) 1502 [709]	25 (11.8) 1502 [709]	30 (14.16) 1666 [786]
Maximum Electric Heat Rise °F [°C]	80 [26.7]	63 [17.2]	66 [18.9]	51 [10.6]	49 [9.4]	50 [10]	50 [10]	50 [10]	54 [12.2]

*CFM [L/s] per ton requirements are reduced for 5 ton systems.

[] Designates Metric Conversions

115/208 Airflow Performance Data: SH1PY (PSC Motor)

Air Handler Model SH1PY	Motor Speed From Factory	Manufacturer Recommended Air Flow Range (Min./Max.) CFM	Blower Size/ Motor HP [W] # of Speeds	Motor Speed	PSC CFM[L/s] Air Delivery/RPM/Watts (Dry Coil — No Filter)										
					External Static Pressure-Inches W.C.										
						0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]	0.9 [.22]	1.0 [.25]
1817S No Heater	High	517/711 CFM [244/336 Us]	10x6 1/5HP [149] 2 Speed	Low	CFM	723	661	625	582	545	482	425	345	198	—
					RPM	585	630	681	738	786	838	880	940	1006	—
					Watts	182	179	176	172	167	161	155	145	129	—
				High	CFM	880	837	807	761	712	659	596	524	417	221
					RPM	664	711	756	797	845	881	920	956	1000	1062
					Watts	255	248	244	236	231	220	213	200	187	163
1817S with 13kw Heater	High	487/661 CFM [230/312 Us]	10x6 1/5HP [149] 2 Speed	Low	CFM	693	631	595	552	515	452	395	315	168	—
					RPM	615	660	711	768	816	868	910	970	1036	—
					Watts	173	170	167	163	158	152	146	136	120	—
				High	CFM	830	787	757	711	662	609	546	474	367	171
					RPM	689	736	781	822	870	906	945	981	1025	1087
					Watts	244	237	233	225	220	209	202	189	176	152
24175T No Heater	High	647/888 CFM [305/419 Us]	10x6 1/5HP [149] 2 Speed	Low	CFM	850	825	795	765	718	665	619	569	486	354
					RPM	649	704	759	802	841	883	919	961	996	1044
					Watts	300	289	283	274	261	247	236	222	207	178
				High	CFM	1069	1058	1011	982	938	887	832	761	696	565
					RPM	782	832	861	889	929	956	983	1012	1032	1063
					Watts	416	412	398	379	366	349	329	313	295	263
2417S with 13kw Heater	High	617/838 CFM [291/395 Us]	10x6 1/5HP [149] 2 Speed	Low	CFM	820	795	765	735	688	635	589	539	456	324
					RPM	679	734	789	832	871	913	949	991	1026	1074
					Watts	291	280	274	265	252	238	227	213	198	169
				High	CFM	1019	1008	961	932	888	837	782	711	646	515
					RPM	807	857	886	914	954	981	1008	1037	1057	1088
					Watts	405	401	387	368	355	338	318	302	284	252
3017S No Heater	High	864/1004 CFM [408/474 Us]	10x8 1/4HP [186] 2 Speed	Low	CFM	1148	1104	1055	1001	943	884	815	710	538	402
					RPM	732	771	803	839	874	905	934	971	1024	1016
					Watts	375	368	356	346	332	321	307	289	259	239
				High	CFM	1402	1349	1297	1231	1175	1109	1038	953	811	545
					RPM	862	885	908	929	951	976	1000	1018	1038	1082
					Watts	541	527	514	495	480	466	449	428	397	345
3017S with 18kw Heater	High	814/904 CFM [384/427 Us]	10x8 1/4HP [186] 2 Speed	Low	CFM	1118	1054	1005	951	893	834	765	660	488	352
					RPM	782	821	853	889	924	955	984	1021	1074	1066
					Watts	355	348	336	326	312	301	287	269	239	219
				High	CFM	1302	1249	1197	1131	1075	1009	938	853	711	445
					RPM	887	910	933	954	976	1001	1025	1043	1063	1107
					Watts	511	497	484	465	450	436	419	398	367	315
3617S/3621S No Heater	High	1110/1248 CFM [524/589 Us]	10x8 1/3HP [249] 2 Speed	Low	CFM	1340	1315	1275	1235	1185	1120	1054	980	857	743
					RPM	796	836	870	904	932	963	990	1014	1044	1071
					Watts	475	457	442	426	410	394	374	353	329	302
				High	CFM	1576	1520	1474	1421	1361	1301	1216	1129	1024	869
					RPM	908	929	954	975	995	1016	1036	1056	1074	1094
					Watts	603	572	548	526	505	485	460	434	407	375

NOTE: “(—)” indicate airflow values outside unit static range. Some CFM values on the table are outside of the general airflow operating limits and are for reference only.

[] Designates Metric Conversions

115/208 Airflow Performance Data: SH1PY (PSC Motor) (Con't.)

Air Handler Model SH1PY	Motor Speed From Factory	Manufacturer Recommended Air Flow Range (Min./Max.) CFM	Blower Size/ Motor HP [W] # of Speeds	Motor Speed	PSC CFM[L/s] Air Delivery/RPM/Watts (Dry Coil — No Filter)										
					External Static Pressure-Inches W.C.										
						0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]	0.9 [.22]	1.0 [.25]
3617S/ 3621S with 18kw Heater	High	1060/1148 CFM [500/542 Us]	10x8 1/3HP [249] 2 Speed	Low	CFM	1290	1265	1225	1185	1135	1070	1004	930	807	693
					RPM	846	886	920	954	982	1013	1040	1064	1094	1121
					Watts	455	437	422	406	390	374	354	333	309	282
				High	CFM	1476	1420	1374	1321	1261	1201	1116	1029	924	769
					RPM	933	954	979	1000	1020	1041	1061	1081	1099	1119
					Watts	573	542	518	496	475	455	430	404	377	345
4221S No Heater	High	1241/1537 CFM [586/725 Us]	10x10 1/2HP [373] 2 Speed	Low	CFM	1645	1585	1528	1456	1372	1297	1185	952	774	598
					RPM	861	887	913	943	970	991	1015	1056	1080	1098
					Watts	551	525	503	477	449	425	400	323	316	288
				High	CFM	2032	1930	1842	1763	1670	1561	1441	1330	1161	830
					RPM	1023	1029	1040	1049	1060	1071	1082	1092	1105	1125
					Watts	827	788.2	760	738.9	702	675	647	621	587	530
4221S with 20kw Heater	High	1225/1500 CFM [553/678 Us]	10x10 1/2HP [373] 2 Speed	Low	CFM	1575	1515	1458	1386	1302	1227	1115	882	704	528
					RPM	911	937	963	993	1020	1041	1065	1106	1130	1148
					Watts	531	505	483	457	429	405	380	303	296	268
				High	CFM	1932	1830	1742	1663	1570	1461	1341	1230	1061	730
					RPM	1048	1054	1065	1074	1085	1096	1107	1117	1130	1150
					Watts	797	758	730	709	672	645	617	591	557	500
4821S/ 4824S No Heater	High	1395/1824 CFM [658/861 Us]	10x10 3/4HP [559] 2 Speed	Low	CFM	1489	1494	1484	1462	1435	1396	1356	1297	1229	1128
					RPM	630	684	733	777	813	850	886	920	955	988
					Watts	619	614	606	595	587	577	566	554	534	514
				High	CFM	2247	2217	2186	2139	2077	2019	1952	1872	1778	1674
					RPM	882	914	948	966	986	1005	1021	1038	1052	1067
					Watts	1059	1007	966	936	905	878	854	829	797	766
4821S/ 4824S with 25kw Heater	High	1225/1500 CFM [625/814 Us]	10x10 3/4HP [559] 2 Speed	Low	CFM	1419	1424	1414	1392	1365	1326	1286	1227	1159	1058
					RPM	650	704	753	797	833	870	906	940	975	1008
					Watts	599	594	586	575	567	557	546	534	514	494
				High	CFM	2147	2117	2086	2039	1977	1919	1852	1772	1678	1574
					RPM	902	934	968	986	1006	1025	1041	1058	1072	1087
					Watts	1009	957	916	886	855	828	804	779	747	716
6024S No Heater	High	1710/1967 CFM [807/928 Us]	11x11 3/4HP [559] 2 Speed	Low	CFM	1948	1913	1877	1831	1782	1723	1657	1595	1512	1409
					RPM	811	842	867	898	923	947	970	985	1004	1024
					Watts	757	745	734	715	699	682	660	646	618	592
				High	CFM	2174	2134	2084	2037	1976	1906	1831	1754	1665	1586
					RPM	894	918	939	958	978	999	1014	1031	1044	1055
					Watts	902	884.3	866	844.9	824	797	773	746	719	701
6024S with 30kw Heater	High	1640/1796 CFM [773/847 Us]	11x11 3/4HP [559] 2 Speed	Low	CFM	1878	1843	1807	1761	1712	1653	1587	1525	1442	1339
					RPM	861	892	917	948	973	997	1020	1035	1054	1074
					Watts	727	715	704	685	669	652	630	616	588	562
				High	CFM	2074	2034	1984	1937	1876	1806	1731	1654	1565	1486
					RPM	944	968	989	1008	1028	1049	1064	1081	1094	1105
					Watts	872	854.3	836	814.9	794	767	743	716	689	671

NOTE: “(—)” indicate airflow values outside unit static range. Some CFM values on the table are outside of the general airflow operating limits and are for reference only.

[] Designates Metric Conversions

Electrical Data – Blower Motor Only – No Electric Heat

Air Handler Model SH1PY	Voltage	Phase	Hertz	HP	RPM	Speeds	Circuit Amps.	Minimum Circuit Ampacity	Maximum Circuit Protector
1817S	115	1	60	1/5	1075	2	2.3	3	15
2417S				1/5	1075	2	3.8	5	15
3017S				1/4	1075	2	4.7	6	15
3617S/3621S				1/3	1075	2	6.1	8	15
4221S				1/2	1075	2	7.9	10	15
4821S				3/4	1075	2	8.4	11	15
1817S	208/240	1	60	1/5	1075	2	1.7	3	15
2417S				1/5	1075	2	1.7	3	15
3017S				1/4	1075	2	2.5	4	15
3617S/3621S				1/3	1075	2	2.5	4	15
4221S				1/2	1075	2	5.2	7	15
4821ST/4824ST				3/4	1075	2	5.2	7	15
6024ST				3/4	1075	2	5.2	7	15
3617S/3621S	480	3	60	1/3	1075	2	1.7	3	15
4221S				1/2	1075	2	1.9	3	15
4821ST				3/4	1075	2	2.2	3	15

Electrical Data – With Electric Heat

Air Handler Model SH1PY	Heater Model No.	Heater kW (208/240V)	PH/HZ	No. Elements kW Per	Type Supply Circuit Single Circuit Multiple Circuit	Heater Amps.	Motor Amps.	Minimum Circuit Ampacity	Maximum Overcurrent Protection
1817S 2417S (208/240V)	RXBH-17203J-1	2.25/3.0	1/60	1-3.0	SINGLE	10.8/125.	1.7	16/18	20/20
	RXBH-1724203J-1	2.25/3.0	1/60	1-3.0	SINGLE	10.8/12.5	1.7	16/18	20/20
	RXBH-1724205J-1	3.6/4.8	1/60	1-4.8	SINGLE	17.3/20.0	1.7	24/28	25/30
	RXBH-1724207J-1	5.4/7.2	1/60	2-3.6	SINGLE	26.0/30.0	1.7	35/40	35/40
	RXBH-1724210J-1	7.2/9.6	1/60	2-4.8	SINGLE	34.6/40.0	1.7	46/53	50/60
	RXBH-1724A13J-1	9.4/12.5	1/60	3-4.17	SINGLE	45.1/52.1	1.7	59/68	60/70
		3.1/4.2	1/60	1-4.17	MULTIPLE CKT 1	15.0/17.4	1.7	21/24	25/25
		6.3/8.3	1/60	2-4.17	MULTIPLE CKT 2	30.1/34.7	0	38/44	40/45
	RXBH-1724A07C-1	5.4/7.2	1/60	3-2.4	SINGLE	15.0/17.3	1.7	21/24	25/25
	RXBH-1724A10C-1	7.2/9.6	1/60	3-3.2	SINGLE	20.0/23.1	1.7	28/31	30/35
	RXBH-1724A13C-1	9.4/12.5	1/60	3-4.17	SINGLE	26.1/30.1	1.7	35/40	35/40
3017S/3617S (208/240V)	RXBH-17203J-1	2.25/3.0	1/60	1-3.0	SINGLE	10.8/12.5	2.5	17/19	20/20
			1/60						
3017S 3617S 3621S (208/240V)	RXBH-1724203J-1	2.25/3.0	1/60	1-3.0	SINGLE	10.8/12.5	2.5	17/19	20/20
	RXBH-1724205J-1	3.6/4.8	1/60	1-4.8	SINGLE	17.3/20.0	2.5	25/29	25/30
	RXBH-1724207J-1	5.4/7.2	1/60	2-3.6	SINGLE	26.0/30.0	2.5	36/41	40/45
	RXBH-1724210J-1	7.2/9.6	1/60	2-4.8	SINGLE	34.6/40.0	2.5	47/54	50/60
	RXBH-1724A13J-1	9.4/12.5	1/60	3-4.17	SINGLE	45.1/52.1	2.5	60/69	60/70
		3.1/4.2	1/60	1-4.17	MULTIPLE CKT 1	15.0/17.4	2.5	22/25	25/25
		6.3/8.3	1/60	2-4.17	MULTIPLE CKT 2	30.1/34.7	0	38/44	40/45
	RXBH-1724A15J-1	10.8/14.4	1/60	3-4.8	SINGLE	51.9/60.0	2.5	68/79	70/80
	RXBH-1724A15J-1	3.6/4.8	1/60	1-4.8	MULTIPLE CKT 1	17.3/20.0	2.5	25/29	25/30
		7.2/9.6	1/60	2-4.8	MULTIPLE CKT 2	34.6/40.0	0	44/50	45/50
	RXBH-1724A18J-1	12.8/17.0	1/60	3-5.68	SINGLE	61.6/70.8	2.5	81/92	90/100
	RXBH-1724A18J-1	4.3/5.7	1/60	1-5.68	MULTIPLE CKT 1	20.5/23.6	2.5	29/33	30/35
		8.5/11.3	1/60	2-5.68	MULTIPLE CKT 2	41.1/47.2	0	52/59	60/60
	RXBH-1724A07C-1	5.4/7.2	3/60	3-2.4	SINGLE	15.0/17.3	2.5	22/25	25/25
	RXBH-1724A10C-1	7.2/9.6	3/60	3-3.2	SINGLE	20.0/23.1	2.5	29/32	30/35
	RXBH-1724A13C-1	9.4/12.5	3/60	3-4.17	SINGLE	26.1/30.1	2.5	36/41	40/45
	RXBH-1724A15C-1	10.8/14.4	3/60	3-4.8	SINGLE	30.0/34.6	2.5	41/47	45/50
	RXBH-1724A18C-1	12.8/17.0	3/60	3-5.68	SINGLE	35.5/41.0	2.5	48/55	50/60
3617S/3621S (480V)	RXBH-17A07D	7.2	3/60	3-2.4	SINGLE	8.7	1.7	13	15
	RXBH-17A10D	9.6	3/60	3-3.2	SINGLE	11.6	1.7	17	20
	RXBH-17A15D	14.4	3/60	3-4.8	SINGLE	17.3	1.7	24	25
	RXBH-17A18D	17	3/60	3-5.68	SINGLE	20.4	1.7	28	30

? Heater Kit Connection Type A = Breaker B = Terminal Block C = Pullout Disconnect

Electrical Data – With Electric Heat (Con't.)

Air Handler Model SH1PY	Heater Model No.	Heater kW (208/240V)	PH/HZ	No. Elements kW Per	Type Supply Circuit Single Circuit Multiple Circuit	Heater Amps.	Motor Amps.	Minimum Circuit Ampacity	Maximum Overcurrent Protection
4221S 4821S 4824S (208/240V)	RXBH-1724705J-1	3.6/4.8	1/60	1-4.8	SINGLE	17.3/20.0	5.2	29/32	30/35
	RXBH-1724707J-1	5.4/7.2	1/60	2-3.6	SINGLE	26.0/30.0	5.2	39/44	40/45
	RXBH-1724710J-1	7.2/9.6	1/60	2-4.8	SINGLE	34.6/40.0	5.2	50/57	50/60
	RXBH-1724A15J-1	10.8/14.4	1/60	3-4.8	SINGLE	51.9/60.0	5.2	72/82	80/90
	RXBH-1724A15J-1	3.6/4.8	1/60	1-4.8	MULTIPLE CKT 1	17.3/20.0	5.2	29/32	30/35
		7.2/9.6	1/60	2-4.8	MULTIPLE CKT 2	34.6/40.0	0	44/50	45/50
	RXBH-1724A18J-1	12/8/17	1/60	3-5.68	SINGLE	61.6/70.8	5.2	84/95	90/100
	RXBH-1724A18J-1	4.3/5.7	1/60	1-5.68	MULTIPLE CKT 1	20.5/23.6	5.2	33/36	35/40
		8.5/11.3	1/60	1-5.68	MULTIPLECKT2	41.1/47.2	0	52/59	60/60
	RXBH-24A20J-1	14.4/19.2	1/60	4-4.8	SINGLE	69.2/80	5.2	93/107	100/110
	RXBH-24A20J-1	7.2/9.5	1/60	2-4.8	MULTIPLE CKT 1	34.6/40.0	5.2	50/57	50/60
		7.2/9.6	1/60	2-4.8	MULTIPLE CKT 2	34.6/40.0	0	44/50	45/50
	RXBH-24A25J-1	18.0/24.0	1/60	6-4.0	SINGLE	86.4/99.9	5.2	115/132	125/150
	RXBH-24A25J-1 (4-ton only)	6.0/8.0	1/60	2-4.0	MULTIPLE CKT 1	28.8/33.3	5.2	43/49	45/50
		6.0/8.0	1/60	2-4.0	MULTIPLE CKT 2	28.8/33.3	0	36/42	40/45
		6.0/8.0	1/60	2-4.0	MULTIPLE CKT 3	28.8/33.3	0	36/42	40/45
	RXBH-1724A070-1	5.4/7.2	3/60	3-2.4	SINGLE	15.0/17.3	5.2	26/29	30/30
	RXBH-1724A10C-1	7.2/9.6	3/60	3-3.2	SINGLE	20.0/23.1	5.2	32/36	35/40
	RXBH-1724A15C-1	10.8/14.4	3/60	3-4.8	SINGLE	30.0/34.6	5.2	44/50	45/50
	RXBH-1724A18C-1	12.8/17.0	3/60	3 - 5.68	SINGLE	35.6/41.0	5.2	51/58	60/60
	RXBH-24A20C-1	14.4/19.2	3/60	6-3.2	SINGLE	40.0/46.2	5.2	57/65	60/70
	RXBH-24A20C-1	7.2/9.6	3/60	3-3.2	MULTIPLE CKT 1	20.0/23.1	5.2	32/36	35/40
		7.2/9.6	3/60	3-3.2	MULTIPLE CKT 2	20.0/23.1	0	25/29	25/30
	RXBH-24A25C-1	18.0/24.0	3/60	6-4.0	SINGLE	50.0/57.8	5.2	69/79	70/80
	RXBH-24A25C-1 (4-ton only)	9.0/12.0	3/60	3-4.0	MULTIPLE CKT 1	25.0/28.9	5.2	38/43	40/45
		9.0/12.0	3/60	3-4.0	MULTIPLE CKT 2	25.0/28.9	0	32/37	35/40
4221S (480V)	RXBH-24A07D	7.2	3/60	3-2.4	SINGLE	8.7	1.9	14	15
	RXBH-24A10D	9.6	3/60	3-3.2	SINGLE	11.6	1.9	17	20
	RXBH-24A15D	14.4	3/60	3-4.8	SINGLE	17.3	1.9	24	25
	RXBH-24A18D	17	3/60	6-2.84	SINGLE	20.4	1.9	28	30
	RXBH-24A20D	19.2	3/60	6-3.2	SINGLE	23.2	1.9	32	35
4821S (480V)	RXBH-24A07D	7.2	3/60	3-2.4	SINGLE	8.7	2.2	14	15
	RXBH-24A10D	9.6	3/60	3-3.2	SINGLE	11.6	2.2	18	20
	RXBH-24A15D	14.4	3/60	3-4.8	SINGLE	17.3	2.2	25	25
	RXBH-24A18D	17	3/60	6-2.84	SINGLE	20.4	2.2	29	30
	RXBH-24A20D	19.2	3/60	6-3.2	SINGLE	23.2	2.2	32	35
	RXBH-24A25D	24	3/60	6-4.0	SINGLE	28.8	2.2	39	40

? Heater Kit Connection Type A = Breaker B = Terminal Block C = Pullout Disconnect

Electrical Data – With Electric Heat (Con't.)

Air Handler Model SH1PY	Heater Model No.	Heater kW (208/240V)	PH/HZ	No. Elements kW Per	Type Supply Circuit Single Circuit Multiple Circuit	Heater Amps.	Motor Amps.	Minimum Circuit Ampacity	Maximum Overcurrent Protection
6024S (208/240V)	RXBH-1724705J-1	3.6/4.8	1/60	1-4.8	SINGLE	17.3/20.0	5.2	29/32	30/35
	RXBH-1724707J-1	5.4/7.2	1/60	2-3.6	SINGLE	26.0/30.0	5.2	39/44	40/45
	RXBH-1724710J-1	7.2/9.6	1/60	2-4.8	SINGLE	34.6/40.0	5.2	50/57	50/60
	RXBH-1724A15J-1	10.8/14.4	1/60	3-4.8	SINGLE	51.9/60.0	5.2	72/82	80/90
	RXBH-1724A15J-1	3.6/4.8	1/60	1-4.8	MULTIPLE CKT1	17.3/20.0	5.2	29/32	30/35
		7.2/9.6	1/60	2-4.8	MULTIPLE CKT 2	34.6/40.0	0	44/50	45/50
	RXBH-1724A18J-1	12.8/17.0	1/60	3/5/68	SINGLE	61.6/70.8	5.2	84/95	90/100
	RXBH-1724A18J -1	4.3/5.7	1/60	1/5/68	MULTIPLE CKT 1	20.5/23.6	5.2	33/36	35/40
		8.5/11.3	1/60	2/5/68	MULTIPLECKT2	41.1/47.2	0	52/59	60/60
	RXBH-24A20J-1	14.4/19.2	1/60	4-4.8	SINGLE	69.2/80	5.2	93/107	100/110
	RXBH-24A20J-1	7.2/9.6	1/60	2-4.8	MULTIPLE CKT 1	34.6/40.0	5.2	50/57	50/60
		7.2/9.6	1/60	2-4.8	MULTIPLE CKT 2	34.6/40.0	0	44/50	45/50
	RXBH-24A25J-1	18.0/24.0	1/60	6-4.0	SINGLE	86.4/99.9	5.2	115/132	125/150
	RXBH-24A25J-1	6.0/8.0	1/60	2-4.0	MULTIPLE CKT 1	28.8/33.3	5.2	43/49	45/50
		6.0/8.0	1/60	2-4.0	MULTIPLE CKT 2	28.8/33.3	0	36/42	40/45
		6.0/8.0	1/60	2-4.0	MULTIPLE CKT 3	28.8/33.3	0	36/42	40/45
	RXBH-24A30J-1	21.6/28.8	1/60	6-4.8	SINGLE	103.8/120	5.2	137/157	150/175
	RXBH-24A30J-1	7.2/9.6	1/60	2-4.8	MULTIPLE CKT 1	34.6/40.0	5.2	50/57	50/60
		7.2/9.6	1/60	2-4.8	MULTIPLE CKT 2	34.6/40.0	0	44/50	45/50
		7.2/9.6	1/60	2-4.8	MULTIPLE CKT 3	34.6/40.0	0	44/50	45/50

? Heater Kit Connection Type A = Breaker B = Terminal Block C = Pullout Disconnect

Electrical Wiring

Power Wiring

- Field wiring must comply with the National Electrical Code (C.E.C. in Canada) and any applicable local ordinance.
- Supply wiring must be 75°C minimum copper conductors only.
- See electrical data for product Ampacity rating and Circuit Protector requirement.

Accessories

• Combustible Floor Base RXHB-

Model Cabinet Size	Combustible Floor Base Model Number
17	RXHB-17
21	RXHB-21
24	RXHB-24

- Jumper Bar Kit 3 Ckt. to 1 Ckt. RXBJ-A31** is used to convert single phase multiple three circuit units to a single supply circuit. Kit includes cover and screw for line side terminals.
- Jumper Bar Kit 2 Ckt. to 1 Ckt. RXBJ-A21** is used to convert single phase multiple two circuit units to a single supply circuit. Kit includes cover and screw for line side terminals.
- Note:** No jumper bar kit is available to convert three phase multiple two circuit units to a single supply circuit.
- Auxiliary Horizontal Overflow Pan Accessory RXBM-**

Nominal Cooling Capacity-Tons	Auxiliary Horizontal Overflow Pan Accessory Model Number
1 1/2 - 3	RXBM-AC48
3 1/2 - 5	RXBM-AC61

Grounding

- This product must be sufficiently grounded in accordance with National Electrical Code (C.E.C. in Canada) and any applicable local ordinance.
- A grounding lug is provided.

• Auxiliary Electric Heater Kits RXBH-

Heater Kits include circuit breakers which meet UL and cUL requirements for service disconnect. See the Electric Heat Electrical Data in this specification sheet for specific Heater Kit Model numbers.

• Horizontal Adapter Kit RXHH-

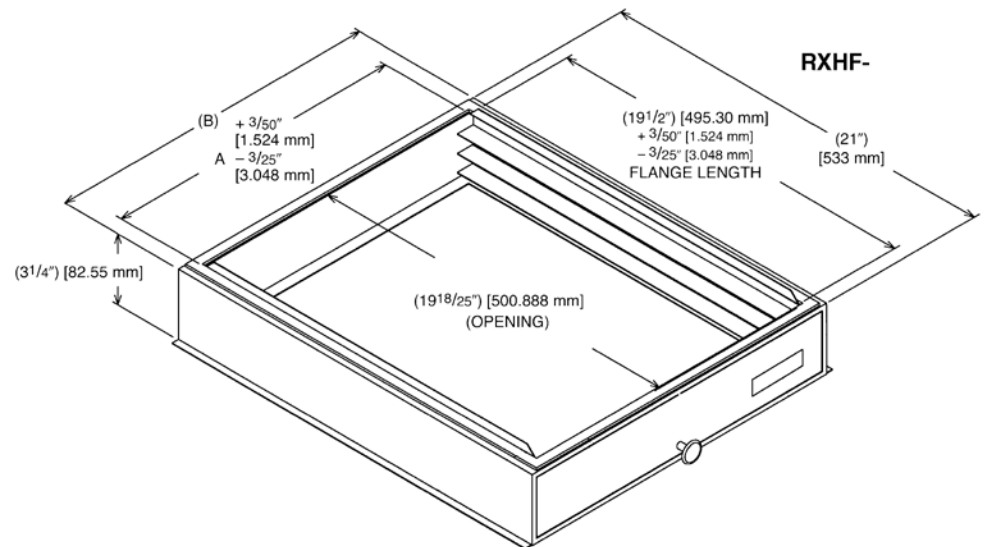
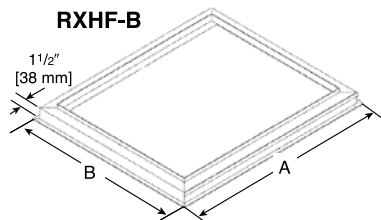
This horizontal adapter kit is used to convert Upflow/Downflow only models to horizontal flow. See the following table to order proper horizontal adapter kit.

Coil Model	Horizontal Adapter Kit Model Number (Single Qty.)	Horizontal Adapter Kit Model Number (10-Pack Qty.)
2414	RXHH-A01	RXHH-A01 x 10
2417	RXHH-A02	RXHH-A02 x 10
3617/3621	RXHH-A03	RXHH-A03 x 10
3821/4821/4824	RXHH-A04	RXHH-A04 x 10
3621HT/4821MT/6021ST	RXHH-06	RXHH-06 x 10
6024	RXHH-A05	RXHH-A05 x 10

• External Filter Base RXHF-

Model Cabinet Size	Filter Size In. [mm]	Part Number*	A	B
17	16 x 20 [406 x 508]	RXHF-17	15.70	17.5
21	20 x 20 [508 x 508]	RXHF-21	19.20	21.0
24	25 x 20 [635 x 508]	RXHF-24	22.70	25.5

*Accommodates 1" or 2" filter



[] Designates Metric Conversions



GENERAL TERMS OF LIMITED WARRANTY*

Russell® By Rheem will furnish a replacement for any part of this product which fails in normal use and service within the applicable periods stated, in accordance with the terms of the limited warranty.

Conditional Parts
(Registration Required)..... Ten (10) Years

***For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.**

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.

© 2025 Rheem Manufacturing Company. Russell By Rheem trademarks owned by Rheem Manufacturing Company.

In keeping with its policy of continuous progress and product improvement, Russell by Rheem reserves the right to make changes without notice.

5600 Old Greenwood Road
Fort Smith, Arkansas 72908 • www.russellbyrheem.com