



The new degree of comfort.™

Rheem High Efficiency Air Handler



RH1V/RH2V- Series

ECM Motor

Efficiencies up to 16 SEER



- Includes an energy efficient ECM® Motor, which in most applications, enhances the SEER rating of the outdoor unit. It also slowly ramps its speed up for quiet operation and enhanced customer satisfaction.
- Versatile 4-way convertible design for upflow, downflow, horizontal left and horizontal right applications.
- Nominal airflow up to 1.0" external static pressure.
- Factory-installed indoor coil.
- Sturdy cabinet construction with 1.0 inch [25.4 mm] of foil faced insulation for excellent sound and insulating characteristics.
- Field-installed auxiliary electric heater kits provide exact heat for indoor comfort. Kits include circuit breakers which meet U.L. and cUL requirements for service disconnect.
- Dip switch settings for selectable, customized cooling airflow over a wide variety of applications.
- On-demand dehumidification terminal that adjusts airflow to help control humidity for unsurpassed comfort in cooling mode.
- External filter required.
- Evaporator coil is constructed of aluminum fins bonded to internally grooved aluminum tubing.

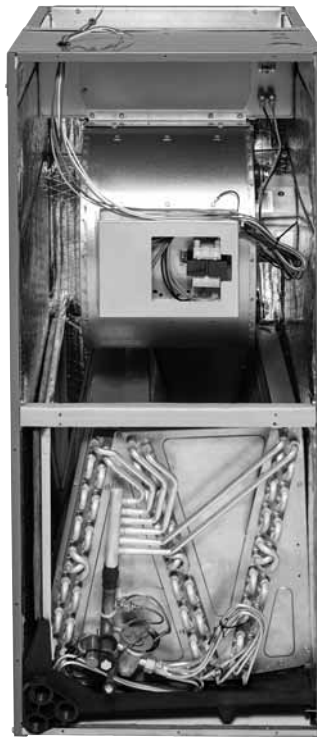


Engineering Features

RH1V/RH2V- Series

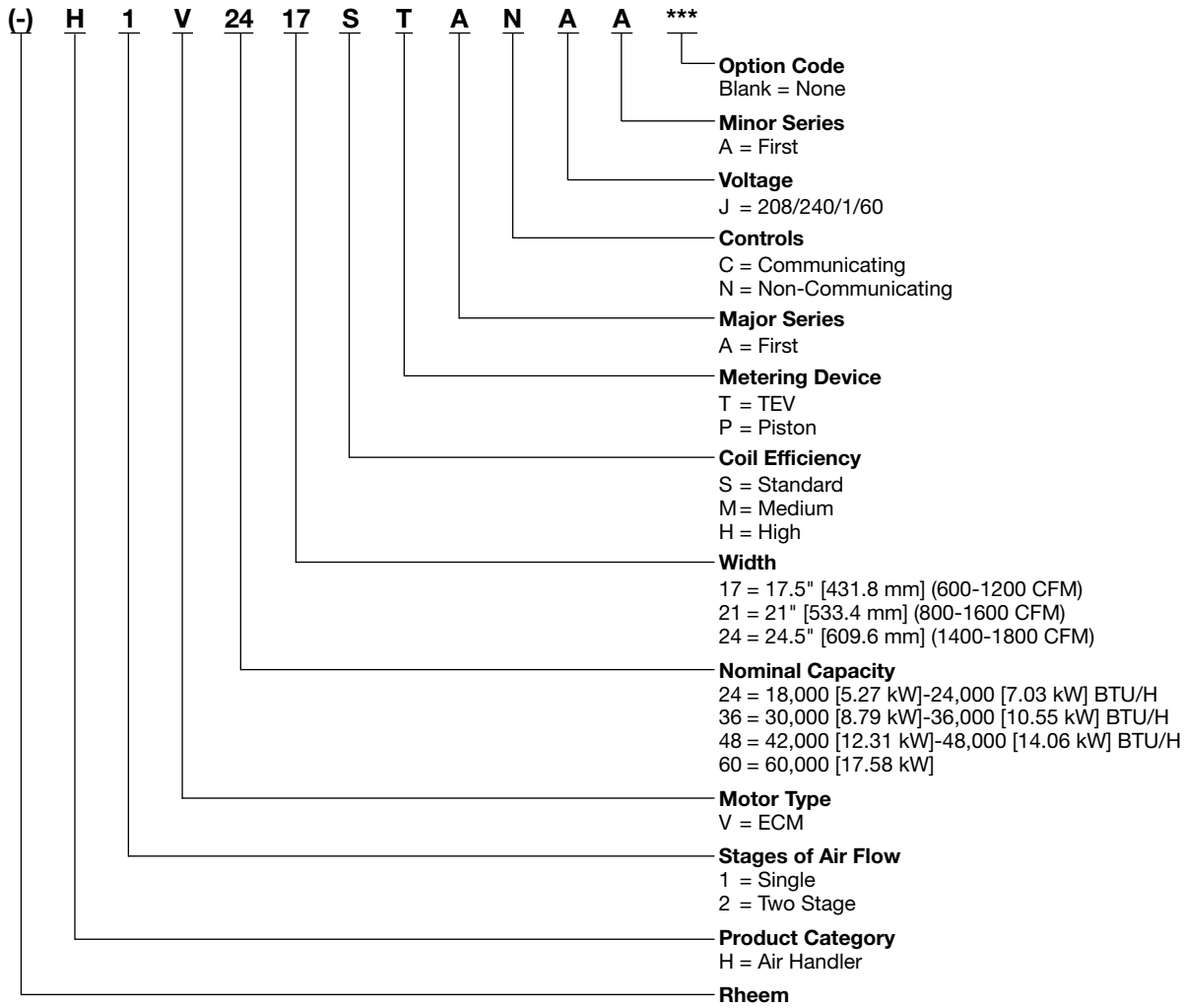
- Quiet, efficient ECM motor technology providing nominal airflow up to 1.0 inch [25 kPa] of external static pressure.
- Interface board with dip switches conveniently located in the blower compartment allows for precise, field selectable airflow to meet the requirements of particular applications.
- Selectable continuous fan “on” options.
- The most compact unit design available.
- Attractive pre-painted cabinet exterior.
- Rugged steel cabinet construction, designed for added strength and versatility.
- 1.0" foil faced insulation mechanically retained in blower compartment.
- Four leg rubber insulated motor mount.
- Field-installed auxiliary heater kit includes circuit breakers that meet UL and cUL requirements as a service disconnect switch.
- Blower housing with integrated controls, motor and blower. Slide out design for service and maintenance convenience.
- Field convertible for vertical upflow, vertical downflow, horizontal left hand or right hand air supply.
- Combustible floor base accessory available when required for downflow installations on combustible floors.
- Indoor coil design provides low air side pressure drop, high performance and extremely compact size. All coils come with PVC condensate elbow standard.
- 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 1½ inch [38 mm] conduit.
- Front refrigerant and drain connections.

[] Designates Metric Conversions





Air



[] Designates Metric Conversions

Available Models

RH1V2417STANJA
RH1V3617STANJA
RH1V3621MTANJA
RH1V3621HTANJA
RH1V4821STANJA
RH1V4821MTANJA
RH1V4824STANJA
RH1V6021STANJA
RH1V6024STANJA
RH2V2421HTACJA
RH2V3624HTACJA
RH2V4824HTACJA
RH2V6024HTACJA
RH2V2421MTANJA
RH2V3621MTANJA
RH2V4821MTANJA
RH2V6021MTANJA



Unit Dimensions

ELECTRICAL CONNECTIONS
MAY EXIT TOP OR EITHER SIDE
HIGH VOLTAGE CONNECTION 7/8" [22.2 mm],
1 1/2" [27.8 mm], 1 3/4" [50 mm] DIA. KNOCKOUTS.

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

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)

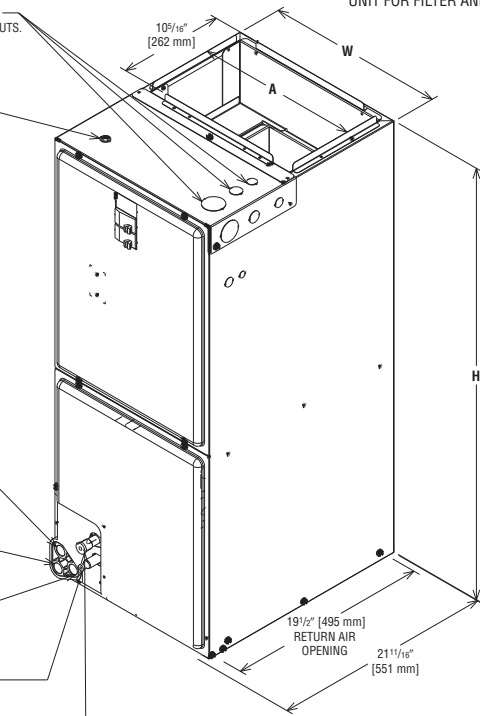
AUXILIARY DRAIN CONNECTION
3/4" [19.1 mm] FEMALE PIPE THREAD (NPT)
UPFLOW/DOWNFLOW APPLICATION ONLY

LIQUID LINE CONNECTION
COPPER (SWEAT)

VAPOR LINE CONNECTION
COPPER (SWEAT)

SUPPLY AIR ↑

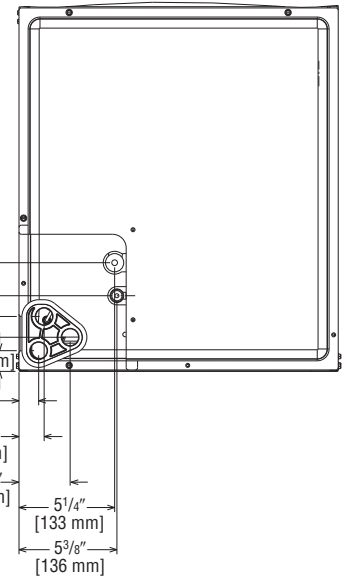
NOTE: 24" CLEARANCE REQUIRED IN FRONT OF UNIT FOR FILTER AND COIL MAINTENANCE.



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

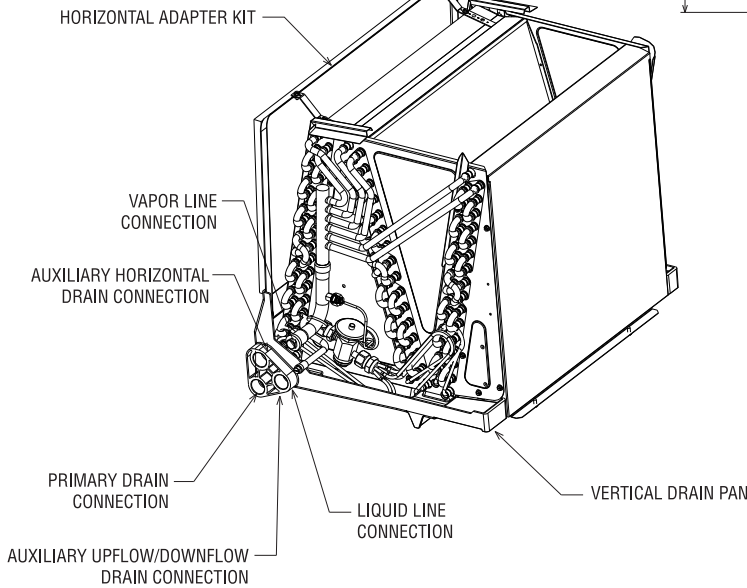
Return Air Opening Dimensions

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



Unit Dimensions & Weights

Model Size RH1V	Refrigerant Connections Sweat (In.) [mm] ID		Unit Width "W" In. [mm]	Unit Height "H" In. [mm]	Supply Duct "A" In. [mm]	Air Flow Coil (Nom.) [L/s]		Unit Weight/Shipping Weight (Lbs.) [kg]
	Liquid	Vapor				Lo	Hi	Unit With Coil (Max. KW)
2417ST	3/8 [9.53]	3/4 [19.05]	17 1/2 [445]	42 1/2 [1080]	16 [406]	600 [283]	800 [378]	82/96 [37/44]
3617ST	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]
3621HT	3/8 [9.53]	7/8 [22.23]	21 [533]	57 [1448]	19 1/2 [495]	1000 [472]	1200 [566]	135/147 [61/67]
3621MT	3/8 [9.53]	7/8 [22.23]	21 [533]	50 1/2 [1282]	19 1/2 [495]	1000 [472]	1200 [566]	126/142 [57/64]
4821MT	3/8 [9.53]	7/8 [22.23]	21 [533]	57 [1448]	19 1/2 [495]	1400 [661]	1600 [755]	141/153 [64/69]
4821ST	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]
4824ST	3/8 [9.53]	7/8 [22.23]	24 1/2 [622]	55 1/2 [1410]	23 [584]	1600 [755]	—	142/160 [64/72]
6021ST	3/8 [9.53]	7/8 [22.23]	21 [533]	57 [1448]	19 1/2 [495]	1600 [755]	1725 [814]	136/148 [62/67]
6024ST	3/8 [9.53]	7/8 [22.23]	24 1/2 [622]	55 1/2 [1410]	23 [584]	—	1800 [850]	162/179 [73/81]

Model Size (-)H2V	Unit Width "W" In. [mm]	Unit Height "H" In. [mm]	Supply Duct "A" In. [mm]	Matched to Outdoor Unit	Nominal Coil Airflow [L/s]				Unit Weight/Shipping Weight (Lbs.) [kg]
					1st Stage		2nd Stage		Unit With Coil (Max. KW)
					ODD*	Normal	ODD*	Normal	
2421HT	21 [533]	42 1/2 [1080]	19 1/2 [495]	(-)ARL/(-)ASL-024JEC	500 [236]	600 [283]	650 [307]	775 [366]	99/117 [45/51]
3624HT	24 1/2 [622]	55 1/2 [1410]	23 [584]	(-)ARL/(-)ASL-0935JEC	725 [342]	825 [389]	975 [460]	1175 [555]	129/146 [59/66]
				(-)ARL/(-)ASL-0935JEC	825 [389]	950 [448]	1000 [472]	1175 [555]	
4824HT	24 1/2 [622]	55 1/2 [1410]	23 [584]	(-)ASL-048JEC	825 [389]	1000 [472]	1300 [614]	1600 [755]	143/160 [65/72]
				(-)ARL-048JEC	1000 [472]	1200 [566]	1350 [637]	1600 [755]	
6024HT	24 1/2 [622]	55 1/2 [1410]	23 [584]	(-)ASL-060JEC	925 [437]	1050 [496]	1325 [625]	1700 [802]	159/176 [72/80]
				(-)ARL-060JEC	1025 [484]	1275 [602]	1400 [661]	1700 [802]	
2621MT	21 [533]	42 1/2 [1080]	19 1/2 [495]	(-)P1624	600 [283]	630 [297]	800 [378]	825 [389]	99/117 [45/51]
3621MT	21 [533]	50 1/2 [1282]	19 1/2 [495]	(-)P1636	800 [378]	825 [389]	1180 [557]	1200 [566]	135/147 [61/67]
4821MT	21 [533]	57 [1410]	19 1/2 [495]	(-)P1648	1200 [566]	1230 [580]	1600 [755]	1635 [771]	141/153 [64/69]
6024ST	24 1/2 [622]	55 1/2 [1410]	23 [584]	(-)P1660	1330 [627]	1350 [637]	1700 [802]	1730 [816]	159/176 [72/80]

*Maximum dehumidification airflow.

[] Designates Metric Conversions

Airflow Performance and Electrical Data (Cont.) RH1V

Model No. RH1V	Nominal Cooling Capacity Tons	Motor Speed From Factory	Nominal Air-Flow CFM	Blower Size/ Motor HP [W]	CFM Air Delivery/RPM/Watts—230 Volts (No Filter)										
					External Static Pressure—Inches W.C. [kPa]										
					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 [.24]	
4821MT No Heat	3.5 Ton	High	1400	10x10 3/4 [559]	CFM [L/s]	1393 [643]	1405 [663]	1410 [665]	1419 [670]	1422 [671]	1422 [671]	1419 [670]	1416 [668]	1407 [664]	1406 [664]
					RPM	769	830	886	958	1014	1069	1118	1152	1204	1232
					Watts	247	266	296	347	369	408	463	492	521	552
4821MT No Heat	4 Ton	High	1600	10x10 3/4 [559]	CFM [L/s]	1590 [750]	1605 [757]	1610 [760]	1625 [772]	1628 [768]	1628 [768]	1623 [766]	1620 [765]	1613 [761]	1599 [755]
					RPM	852	917	962	1034	1081	1132	1178	1220	1258	1292
					Watts	350	382	385	419	501	537	584	599	647	689
4821ST No Heat	3.5 Ton	High	1400*	10x10 3/4 [559]	CFM [L/s]	1395 [658]	1404 [663]	1413 [667]	1413 [667]	1411 [666]	1411 [666]	1402 [662]	1391 [656]	1380 [651]	1371 [647]
					RPM	731	807	859	910	968	1016	1057	1100	1128	1158
					Watts	240	273	308	349	383	411	436	468	496	513
4821ST with 20 kW Heat	3.5 Ton	High	1400*	10x10 3/4 [559]	CFM [L/s]	1379 [651]	1382 [652]	1386 [654]	1380 [651]	1373 [648]	1367 [645]	1353 [638]	1336 [631]	1320 [622]	1305 [616]
					RPM	765	846	902	958	1020	1073	1118	1166	1198	1233
					Watts	261	300	340	387	426	460	490	528	561	584
4821ST No Heat	4.0 Ton	High	1600	10x10 3/4 [559]	CFM [L/s]	1583 [747]	1583 [747]	1583 [747]	1590 [750]	1582 [747]	1566 [739]	1572 [742]	1556 [734]	1547 [730]	1539 [726]
					RPM	826	879	933	984	1025	1067	1119	1148	1176	1219
					Watts	342	375	410	454	486	523	552	585	614	616
4821ST with 25 kW Heat	4.0 Ton	High	1600	10x10 3/4 [559]	CFM [L/s]	1567 [740]	1559 [736]	1551 [732]	1550 [732]	1534 [724]	1511 [713]	1509 [712]	1485 [700]	1468 [692]	1452 [685]
					RPM	860	919	978	1035	1082	1129	1187	1222	1255	1304
					Watts	363	403	444	495	534	577	613	653	688	697
4824ST No Heat	4.0 Ton	High	1600*	11x11 3/4 [559]	CFM [L/s]	1607 [758]	1615 [762]	1622 [765]	1630 [769]	1637 [773]	1629 [769]	1621 [765]	1614 [762]	1606 [758]	1583 [747]
					RPM	612	698	747	788	835	870	914	950	981	1018
					Watts	225	297	334	359	410	439	469	502	532	568
4824ST with 25 kW Heat	4.0 Ton	High	1600*	11x11 3/4 [559]	CFM [L/s]	1587 [749]	1589 [750]	1589 [750]	1591 [751]	1591 [751]	1577 [744]	1562 [737]	1549 [731]	1534 [724]	1505 [710]
					RPM	658	748	802	847	899	938	987	1027	1062	1104
					Watts	246	325	369	401	459	495	532	572	609	652
6021ST No Heat	4.0 & 5.0 Ton	High	1600	10x10 3/4 [559]	CFM [L/s]	1574 [742]	1585 [748]	1591 [751]	1603 [757]	1607 [758]	1606 [758]	1597 [754]	1590 [750]	1581 [746]	1571 [741]
					RPM	849	905	948	1023	1071	1109	1160	1201	1226	1267
					Watts	325	342	387	418	466	507	552	610	628	657
6021ST No Heat	5.0 Ton	High	1700	10x10 3/4 [559]	CFM [L/s]	1669 [788]	1680 [793]	1686 [796]	1702 [803]	1703 [804]	1699 [802]	1687 [796]	1686 [796]	1677 [796]	1666 [786]
					RPM	882	946	995	1059	1107	1152	1181	1230	1249	1294
					Watts	379	394	442	485	541	598	610	659	679	723
6024ST No Heat	4.0 & 5.0 Ton	High	1600*	11x11 3/4 [559]	CFM [L/s]	1607 [758]	1615 [762]	1622 [765]	1630 [769]	1637 [773]	1629 [769]	1621 [765]	1614 [762]	1606 [758]	1583 [747]
					RPM	612	698	747	788	835	870	914	950	981	1018
					Watts	225	297	334	359	410	439	469	502	532	568
6024ST with 25 kW Heat	4.0 & 5.0 Ton	High	1600*	11x11 3/4 [559]	CFM [L/s]	1587 [749]	1589 [750]	1589 [750]	1591 [751]	1591 [751]	1577 [744]	1562 [737]	1549 [731]	1534 [724]	1505 [710]
					RPM	658	748	802	847	899	938	987	1027	1063	1104
					Watts	246	325	369	401	459	495	532	572	609	652
6024ST No Heat	5.0 Ton	High	1800	11x11 3/4 [559]	CFM [L/s]	1794 [847]	1808 [853]	1808 [853]	1808 [853]	1807 [853]	1807 [853]	1807 [853]	1800 [850]	1786 [843]	1772 [836]
					RPM	676	739	787	840	871	923	950	994	1028	1050
					Watts	330	376	416	465	504	554	576	624	662	694
6024ST with 30 kW Heat	5.0 Ton	High	1800	11x11 3/4 [559]	CFM [L/s]	1756 [829]	1770 [835]	1770 [835]	1769 [835]	1769 [835]	1769 [835]	1769 [835]	1762 [832]	1748 [825]	1734 [818]
					RPM	713	778	828	884	917	971	1000	1047	1083	1107
					Watts	361	410	453	505	547	600	625	676	717	752

WARNING: Observe airflow operating limits. Do not operate above 1.0 in. W.C. system external static.

*The airflow for continuous fan is set at 50% of the cooling airflow.

Blower Motor Electrical Data RH1V

Model No. RH1V	Voltage	Phase	Hertz	HP [W]	RPM	Speeds	Circuit Amps.	Minimum Circuit Ampacity	Maximum Circuit Protector
2417ST	208/240	1	60	1/3 [249]	300-1100	2	2.2	3.0	15
3621H/3617ST	208/240	1	60	1/2 [373]	300-1100	2	3.1	4.0	15
4821M/6021S/ 3621MT/4821ST	208/240	1	60	3/4 [559]	300-1100	2	4.0	5.0	15
6024ST	206/240	1	60	3/4 [559]	300-1100	2	4.4	6.0	15

[] Designates Metric Conversions

Airflow Performance Data RH2V (con't.)

Model Size RH2V	Nominal Cooling Capacity Tons	Motor Speed From Factory	Nominal Airflow CFM	Blower Size Motor H.P.	CFM Air Delivery/RPM/Watts-230 Volts (No Filter)										
					External Static Pressure-Inches W.C.										
					0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	
3621MT with 15kw heat	2.5 ton	High	1000	10x10 3/4	CFM	984	979	984	976	967	956	947	939	910	901
					RPM	627	689	780	849	919	971	1041	1092	1128	1174
					Watts	124	151	187	215	250	273	312	347	366	394
3621MT No heat	3.0 ton	High	1200	10x10 3/4	CFM	1175	1200	1203	1200	1200	1199	1202	1200	1197	1180
					RPM	646	740	783	851	911	958	1013	1056	1102	1144
					Watts	147	186	207	240	270	296	334	356	385	416
3621MT with 18kw heat	3.0 ton	High	1200	10x10 3/4	CFM	1159	1178	1176	1167	1162	1155	1153	1145	1137	1114
					RPM	680	779	826	899	963	1015	1074	1122	1172	1219
					Watts	168	213	239	278	313	345	388	416	450	487
4821MT No heat	3.5 ton	High	1400	10x10 3/4 Hp	CFM	1393	1405	1410	1419	1422	1422	1419	1416	1407	1406
					RPM	769	830	886	958	1014	1069	1118	1152	1204	1232
					Watts	247	266	296	347	369	408	463	492	521	552

Airflow Performance Data (-)H1V & (-)H2V Non-Communicating

Model Size (-)H1V (-)H2V	Nominal Cooling Capacity Tons	Motor Speed From Factory	Nominal Airflow CFM	Blower Size Motor H.P.	CFM Air Delivery/RPM/Watts-230 Volts (No Filter)										
					External Static Pressure-Inches W.C.										
					0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	
4821MT No heat	4	High	1600	10x10 3/4 Hp	CFM	1590	1605	1610	1625	1628	1628	1623	1620	1613	1599
					RPM	852	917	962	1034	1081	1132	1178	1220	1258	1292
					Watts	350	382	385	419	501	537	584	599	647	689
4821ST No heat	3.5	High	1400*	10x10 3/4	CFM	1395	1404	1413	1413	1411	1411	1402	1391	1380	1371
					RPM	731	807	859	910	968	1016	1057	1100	1128	1158
					Watts	240	273	308	349	383	411	436	468	496	513
4821ST with 20kw heat	3.5	High	1400*	10x10 3/4	CFM	1379	1382	1386	1380	1373	1367	1353	1336	1320	1305
					RPM	765	846	902	958	1020	1073	1118	1166	1198	1233
					Watts	261	300	340	387	426	460	490	528	561	584
4821ST No heat	4.0	High	1600	10x10 3/4	CFM	1583	1583	1583	1590	1582	1566	1572	1556	1547	1539
					RPM	826	879	933	984	1025	1067	1119	1148	1176	1219
					Watts	342	375	410	454	486	523	552	585	614	616
4821ST with 25kw heat	4.0	High	1600	10x10 3/4	CFM	1567	1559	1551	1550	1534	1511	1509	1485	1468	1452
					RPM	860	919	978	1035	1082	1129	1187	1222	1255	1304
					Watts	363	403	444	495	534	577	613	653	688	697
4824ST No heat	4.0	High	1600*	11x11 3/4	CFM	1607	1615	1622	1630	1637	1629	1621	1614	1606	1583
					RPM	612	698	747	788	835	870	914	950	981	1018
					Watts	225	297	334	359	410	439	469	502	532	568
4824ST with 25kw heat	4.0	High	1600*	11x11 3/4	CFM	1587	1589	1589	1591	1591	1577	1562	1549	1534	1505
					RPM	658	748	802	847	899	938	987	1027	1063	1104
					Watts	246	325	369	401	459	495	532	572	609	652
6021ST No heat	4 & 5	High	1600	10x10 3/4 Hp	CFM	1574	1585	1591	1603	1607	1606	1597	1590	1581	1571
					RPM	849	905	948	1023	1071	1109	1160	1201	1226	1267
					Watts	325	342	387	418	466	507	552	610	628	657
6021ST No heat	5	High	1700	10x10 3/4 Hp	CFM	1669	1680	1686	1702	1703	1699	1687	1686	1677	1666
					RPM	882	946	995	1059	1107	1152	1181	1230	1249	1294
					Watts	379	394	442	485	541	598	610	659	679	723
6024ST No heat	4.0 & 5.0	High	1600*	11x11 3/4	CFM	1607	1615	1622	1630	1637	1629	1621	1614	1606	1583
					RPM	612	698	747	788	835	870	914	950	981	1018
					Watts	225	297	334	359	410	439	469	502	532	568
6024ST with 25kw heat	4.0 & 5.0	High	1600*	11x11 3/4	CFM	1587	1589	1589	1591	1591	1577	1562	1549	1534	1505
					RPM	658	748	802	847	899	938	987	1027	1063	1104
					Watts	246	325	369	401	459	495	532	572	609	652
6024ST No heat	5.0	High	1800	11x11 3/4	CFM	1794	1808	1808	1808	1807	1807	1807	1800	1786	1772
					RPM	676	739	787	840	871	923	950	994	1028	1050
					Watts	330	376	416	465	504	554	576	624	662	694
6024ST with 30kw heat	5.0	High	1800	11x11 3/4	CFM	1756	1770	1770	1769	1769	1769	1769	1762	1748	1734
					RPM	713	778	828	884	917	971	1000	1047	1083	1107
					Watts	361	410	453	505	547	600	625	676	717	752

*To obtain the nominal airflow 600 CFM for 2417, 1000 CFM for 3617, 1400 CFM for 4821, and 1600 CFM for 4824/6024; the DIP switches 1 and 2 must be set for selection C or D. See Figure 25.