96G1EK
PRODUCT SPECIFICATIONS
SINGLE STAGE
CONSTANT TORQUE MOTOR

Configurations
- Upflow / Horizontal
- Downflow

Heat Exchanger Design
- Aluminized steel primary heat exchanger with crimped nonwelded construction
- AL 29-4C Stainless steel secondary heat exchanger

Burner
- Aluminized steel inshot burners for smooth ignition

Cabinet Design
- Compact 33" height
- Standardized widths for easy coil fit

Air Delivery System
- Multi-speed high efficiency (constant torque) blower motor
- Easily removable slide out blower design
- Enhanced cooling SEER ratings when applied with properly matched cooling equipment.

Controls
- Single stage gas valve
- Durable silicon nitride ignitor
- Self diagnostics saves last 10 fault codes regardless of power interruption
- Control features electronic air cleaner and humidifier terminals

Venting
- Designed certified for direct (2-pipe) and non direct (1-pipe) applications
- Easily vented with PVC pipe

Installation Features
- Left or right utility connection
- Design certified for direct and non-direct vent applications
- Zero step horizontal conversion
- Removable floor base (upflow / horizontal units) for bottom return air
- Complies with California's South Coast Air Quality Management district 40 ng/J Low NOx requirements

Warranty
10 year limited parts warranty / lifetime heat exchanger warranty available. See limited warranty document for details.

California Only
This product is not certified to be sold or installed in the South Coast Air Quality Management District (SCAQMD). It does not meet the SCAQMD Rule 1111 NOx emission limit of 14 Ng/J.
This product is not certified to be sold or installed in the San Joaquin Valley Air Pollution Control District (SJVAPCD). It does not meet the SJVAPCD Rule 4905 NOx emission limit of 14 Ng/J.

96G1EK
PRODUCT SPECIFICATIONS
SINGLE STAGE
CONSTANT TORQUE MOTOR

96 G 1 UH 070 B E 12 K - 01

AFUE
96% EFFICIENCY

GAS
GAS

STAGES
1 = 1 STAGE

CONFIGURATION
UH = UPFLOW/HORIZONTAL DF
= DOWN FLOW

BTUH INPUT
HEATING INPUT X 1000

CABINET WIDTH
B = 17.5" WIDTH
C = 21.0" WIDTH
D = 24.5" WIDTH

MAJOR REVISION
NUMERIC CODE

REFRIGERANT DETECTION
K = REFRIGERANT DETECTION-READY

CFM
12 = 3 TON ADD ON COOLING
16 = 4 TON ADD ON COOLING
20 = 5 TON ADD ON COOLING

BLOWER DRIVE
P = PSC
E = HIGH EFFICIENCY
V= VARIABLE SPEED

PHYSICAL AND ELECTRICAL DATA

	Model	Input (Btuh)	Output (Btuh)	AFUE (ICS)	Nominal Cooling Capacity	Gas Inlet (in.)	Volts/Hz/ Phase	Max. Time Delay Breaker or Fuse	Nominal Full Load Amps	Trans (VA)	Approx Shipping Weight (lbs)
Upflow / Horizontal	96G1UH030BE08K	30,000	29,000	96%	2 Ton	1/2	120-60-1	15	6.8	40	120
	96G1UH045BE12K	44,000	42,800	96%	3 Ton	1/2	120-60-1	15	6.8	40	124
	96G1UH070BE12K	66,000	63,900	96%	3 Ton	1/2	120-60-1	15	6.8	40	129
	96G1UH090CE16K	88,000	85,600	96%	4 Ton	1/2	120-60-1	15	8.4	40	152
	96G1UH110CE20K	110,000	107,200	96%	5 Ton	1/2	120-60-1	15	10.9	40	164
	96G1UH135DE20K	132,000	127,000	96%	5 Ton	1/2	120-60-1	15	10.9	40	174
Downflow	96G1DF045BE12K	44,000	42,000	96%	3 Ton	1/2	120-60-1	15	6.8	40	126
	96G1DF070BE16K	66,000	64,000	96%	4 Ton	1/2	120-60-1	15	8.4	40	139
	96G1DF090CE16K	88,000	86,000	96%	4 Ton	1/2	120-60-1	15	8.4	40	154
	96G1DF110CE20K	110,000	108,000	96%	5 Ton	1/2	120-60-1	15	10.9	40	162

Note: For vent length and clearances to combustibles, please reference installation instructions.

BLOWER PERFORMANCE DATA UPFLOW / HORIZONTAL

96G1UH030BE08K PERFORMANCE (Less Filter)

External Static Pressure in. w.c.	Temp Rise Rise Range °F	Air Volume / Watts at Various Blower Speeds									
		High		Medium-High		Medium		Medium-Low		Low	
		cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts
0.10	25-55	1374	346	1109	198	940	130	743	75	725	75
0.20		1346	360	1080	206	902	138	684	82	546	56
0.30		1321	370	1047	217	866	149	633	90	465	60
0.40		1295	384	1012	228	834	155	589	96	408	67
0.50		1265	395	985	235	794	165	540	107	351	72
0.60		1224	396	956	247	760	175	500	110	306	79
0.70		1152	379	929	256	730	180	453	120	266	84
0.80		1088	353	894	267	673	192	413	125	224	89
0.90		914	304	855	273	644	200	374	132	N/A	N/A
1.00		755	262	694	243	607	208	N/A	N/A	N/A	N/A

96G1UH045BE12K PERFORMANCE (Less Filter)

External Static Pressure in. w.c.	Temp Rise Rise Range °F	Air Volume / Watts at Various Blower Speeds									
		High		Medium-High		Medium		Medium-Low		Low	
		cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts
0.10	35-65	1393	360	1231	257	1140	201	910	115	857	99
0.20		1365	369	1195	268	1104	215	861	122	810	109
0.30		1333	383	1166	281	1070	224	826	132	760	118
0.40		1304	396	1140	293	1039	231	784	141	722	125
0.50		1254	392	1116	302	1002	246	728	149	673	131
0.60		1191	380	1089	311	969	255	687	157	625	141
0.70		1115	354	1047	324	941	265	651	165	582	147
0.80		987	318	976	311	906	273	601	170	537	155
0.90		858	282	859	283	835	268	555	181	489	161
1.00		713	251	703	248	713	243	497	189	444	168

96G1UH070BE12K PERFORMANCE (Less Filter)

External Static Pressure in. w.c.	Temp Rise Rise Range °F	Air Volume / Watts at Various Blower Speeds									
		High		Medium-High		Medium		Medium-Low		Low	
		cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts
0.10	35-65	1404	347	1256	256	1145	196	913	114	864	98
0.20		1374	361	1218	266	1102	206	870	119	811	103
0.30		1350	370	1192	278	1081	216	821	131	766	114
0.40		1319	384	1157	290	1043	225	780	136	721	123
0.50		1286	399	1133	300	1008	241	744	145	680	133
0.60		1241	393	1104	312	982	249	702	153	637	138
0.70		1169	373	1066	321	946	261	658	163	601	148
0.80		1064	341	1013	315	914	269	616	172	552	152
0.90		925	310	857	279	860	272	581	178	514	160
1.00		753	261	705	244	754	253	515	191	478	167

BLOWER PERFORMANCE DATA UPFLOW / HORIZONTAL

96G1UH090CE16K PERFORMANCE (Less Filter)

External Static Pressure in. w.c.	Temp Rise Rise Range °F	Air Volume / Watts at Various Blower Speeds									
		High		Medium-High		Medium		Medium-Low		Low	
		cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts
0.10	50-80	1684	395	1480	264	1356	209	1269	180	1147	142
0.20		1645	410	1448	281	1323	226	1236	191	1101	149
0.30		1626	422	1414	295	1294	238	1195	204	1070	162
0.40		1593	435	1381	307	1245	253	1158	213	1022	172
0.50		1564	451	1347	322	1210	261	1120	225	983	182
0.60		1529	465	1308	335	1175	274	1084	237	943	193
0.70		1481	463	1288	346	1143	288	1039	250	897	204
0.80		1395	442	1247	359	1103	297	1003	262	860	214
0.90		1290	412	1211	369	1067	309	960	272	813	225
1.00		1123	361	1097	351	1011	319	917	281	772	230

96G1UH110CE20K PERFORMANCE (Less Filter)

External Static Pressure in. w.g. / Temp Rise / Rise Range °F — Air Volume / Watts at Different Blower Speeds

Bottom Return Air, Side Return Air with Optional Return Air Base, Return Air from Both Sides or Return Air from Bottom and One Side.

Single Side Return Air - Air volumes in **bold** require field fabricated transition to accommodate 20 x 25 x 1 in. air filter in order to maintain proper air velocity.

		High		Med-High		Medium		Med-Low		Low		High		Med-High		Medium		Med-Low		Low	
		cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts
0.10	45-75	2160	658	1911	446	1742	346	1620	291	1438	220	**2093**	**644**	**1858**	**438**	1688	341	1590	281	1410	205
0.20		2124	676	1858	464	1693	361	1582	306	1388	230	**2064**	**655**	**1824**	**451**	1653	349	1546	296	1367	216
0.30		2084	688	1822	477	1658	373	1536	314	1336	239	**2033**	**669**	**1788**	**467**	1619	363	1511	306	1321	228
0.40		2051	703	1797	492	1615	386	1497	328	1288	250	**1996**	**686**	**1749**	**482**	1580	376	1473	322	1275	239
0.50		2024	718	1754	508	1581	397	1452	342	1247	261	**1971**	**704**	1709	498	1543	392	1436	330	1230	251
0.60		1993	734	1716	519	1537	413	1414	353	1203	270	**1941**	**720**	1676	512	1503	403	1387	347	1184	262
0.70		1942	742	1680	535	1500	423	1381	361	1157	277	**1903**	**734**	1644	524	1468	419	1351	356	1140	271
0.80		1877	721	1644	547	1465	434	1342	372	1121	288	**1855**	**732**	1606	542	1424	430	1313	369	1105	282
0.90		1789	693	1614	563	1423	450	1294	386	1061	300	**1780**	**707**	1571	554	1386	443	1273	380	1061	293
1.00		1696	654	1580	573	1395	461	1267	396	1014	310	**1675**	**670**	1535	569	1352	456	1238	392	1019	302

96G1UH135DE20K PERFORMANCE (Less Filter)

External Static Pressure in. w.g. / Temp Rise / Rise Range °F — Air Volume / Watts at Different Blower Speeds

Bottom Return Air, Side Return Air with Optional Return Air Base, Return Air from Both Sides or Return Air from Bottom and One Side.

Single Side Return Air - Air volumes in **bold** require field fabricated transition to accommodate 20 x 25 x 1 in. air filter in order to maintain proper air velocity.

		High		Med-High		Medium		Med-Low		Low		High		Med-High		Medium		Med-Low		Low	
		cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts
0.10	45-75	2425	901	2247	714	2033	556	1821	406	1633	306	**2340**	**883**	**2167**	**694**	**1995**	**534**	1780	392	1611	291
0.20		2392	919	2214	730	1998	572	1787	420	1598	316	**2303**	**901**	**2125**	**715**	**1956**	**551**	1752	402	1560	306
0.30		2361	933	2179	752	1954	588	1745	436	1549	331	**2277**	**912**	**2095**	**733**	**1920**	**566**	1711	417	1527	316
0.40		2326	956	2151	771	1931	599	1694	450	1508	343	**2253**	**933**	**2067**	**748**	**1882**	**581**	1670	433	1479	329
0.50		2291	971	2120	785	1885	617	1666	462	1465	356	**2215**	**951**	**2037**	**762**	**1850**	**595**	1634	444	1444	342
0.60		2249	990	2078	802	1852	633	1622	476	1420	366	**2188**	**967**	**2007**	**781**	**1816**	**608**	1601	460	1404	355
0.70		2223	1006	2049	819	1815	646	1583	489	1376	378	**2159**	**989**	**1973**	**797**	1779	627	1565	474	1363	368
0.80		2181	1001	2002	832	1782	660	1548	501	1340	388	**2127**	**1004**	**1938**	**815**	1742	638	1525	487	1315	380
0.90		2061	928	1974	846	1743	678	1507	515	1298	401	**2096**	**1023**	**1906**	**828**	1716	655	1487	501	1276	390
1.00		1937	869	1933	857	1680	703	1478	527	1263	414	**1997**	**936**	**1870**	**840**	1670	670	1441	513	1237	399

BLOWER PERFORMANCE DATA DOWNFLOW

96G1DF045BE12K PERFORMANCE (Less Filter)

External Static Pressure in. w.c.	Temp Rise Rise Range °F	Air Volume / Watts at Various Blower Speeds									
		High		Medium-High		Medium		Medium-Low		Low	
		cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts
0.10	30-60	1385	331	1230	242	1125	192	890	113	843	98
0.20		1356	346	1201	255	1089	203	854	119	800	105
0.30		1327	359	1162	259	1058	212	814	127	761	110
0.40		1301	365	1136	267	1023	219	776	133	719	118
0.50		1270	376	1106	278	990	224	735	139	678	124
0.60		1239	377	1075	286	950	234	690	145	628	131
0.70		1179	368	1039	294	927	240	647	152	588	136
0.80		1098	347	1017	305	890	249	609	158	548	142
0.90		1011	326	967	305	862	257	574	164	513	148
1.00		892	296	879	286	817	262	538	171	476	155

96G1DF070BE16K PERFORMANCE (Less Filter)

External Static Pressure in. w.c.	Temp Rise Rise Range °F	Air Volume / Watts at Various Blower Speeds									
		High		Medium-High		Medium		Medium-Low		Low	
		cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts
0.10	35-65	1712	502	1493	347	1320	251	1219	208	974	124
0.20		1682	516	1462	362	1282	262	1177	217	926	132
0.30		1650	529	1426	372	1244	273	1135	226	874	140
0.40		1619	541	1392	383	1204	281	1091	235	821	147
0.50		1592	556	1353	393	1161	290	1047	243	771	155
0.60		1542	554	1319	404	1121	299	1002	251	718	161
0.70		1484	546	1281	412	1078	308	959	260	659	168
0.80		1417	532	1245	423	1038	318	915	269	603	176
0.90		1341	514	1207	434	999	328	871	277	551	184
1.00		1232	485	1160	440	959	336	825	286	487	193

96G1DF090CE16K PERFORMANCE (Less Filter)

External Static Pressure in. w.c.	Temp Rise Rise Range °F	Air Volume / Watts at Various Blower Speeds									
		High		Medium-High		Medium		Medium-Low		Low	
		cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts
0.10	50-80	1714	379	1510	269	1378	215	1302	185	1172	148
0.20		1679	389	1469	279	1321	223	1238	194	1109	153
0.30		1639	396	1436	287	1288	235	1201	206	1066	163
0.40		1604	408	1384	300	1232	241	1150	209	1014	171
0.50		1569	419	1343	305	1199	249	1106	225	954	176
0.60		1510	432	1298	315	1150	258	1051	232	917	185
0.70		1487	441	1260	323	1101	267	1003	232	862	191
0.80		1422	437	1218	332	1054	275	952	241	807	199
0.90		1321	416	1175	344	1012	283	904	249	749	207
1.00		1197	383	1124	349	970	291	861	259	694	215

96G1EK
PRODUCT SPECIFICATIONS
SINGLE STAGE
CONSTANT TORQUE MOTOR

BLOWER PERFORMANCE DATA DOWNFLOW

96G1DF110CE20KPERFORMANCE(LessFilter)

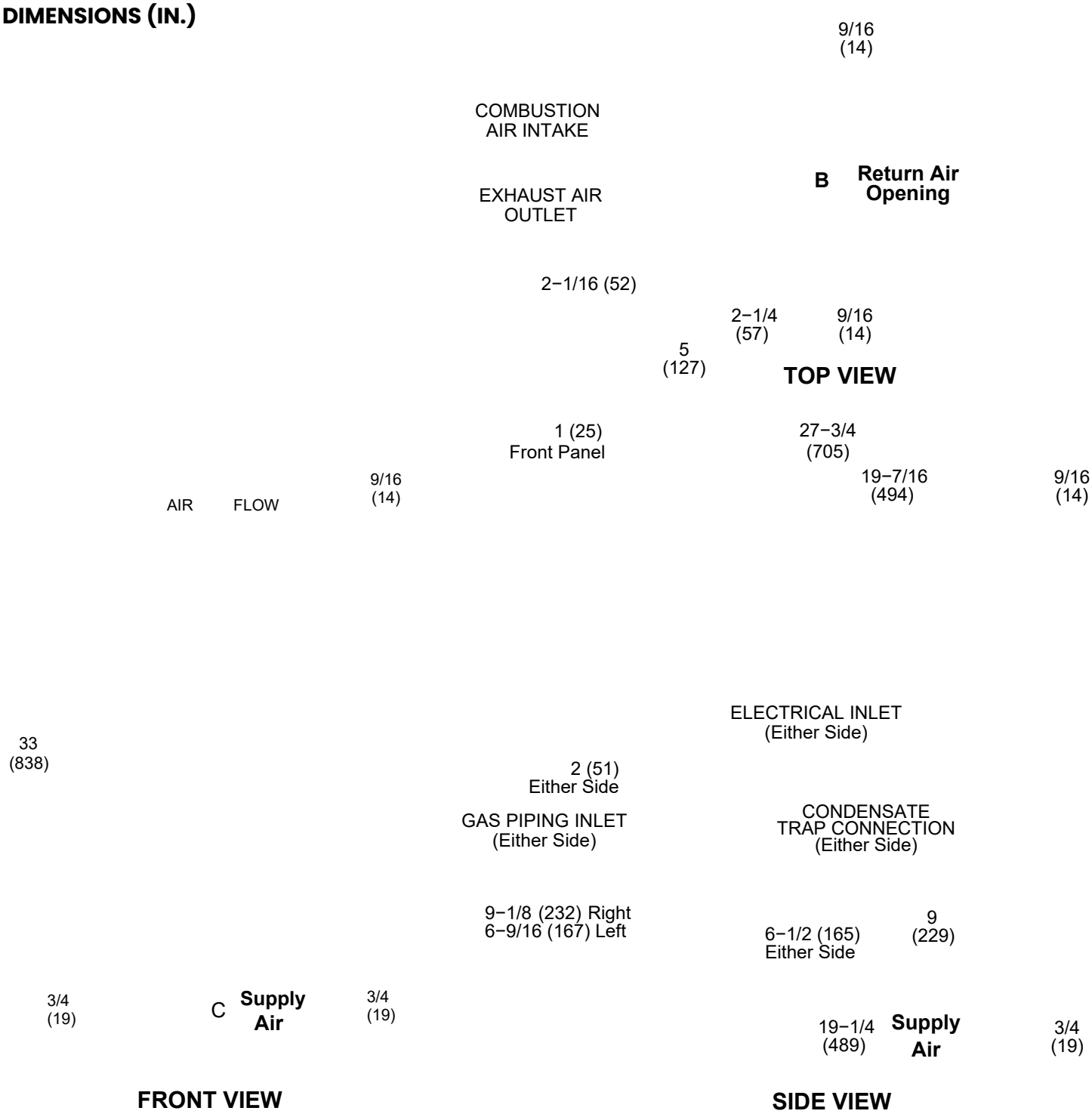
External Static Pressure in. w.c.	Temp Rise Rise Range °F	Air Volume / Watts at Various Blower Speeds									
		High		Medium-High		Medium		Medium-Low		Low	
		cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts	cfm	Watts
0.10	40-70	2169	679	1929	479	1770	369	1656	308	1474	227
0.20		2121	697	1877	492	1712	383	1598	317	1417	236
0.30		2083	710	1835	502	1673	392	1543	330	1371	245
0.40		2038	721	1798	515	1627	403	1502	338	1315	253
0.50		2006	732	1747	528	1573	414	1449	351	1265	263
0.60		1966	743	1707	538	1527	420	1402	359	1197	272
0.70		1927	760	1667	547	1475	432	1352	368	1146	279
0.80		1890	767	1623	558	1434	445	1313	379	1093	288
0.90		1844	768	1575	568	1389	453	1254	388	1026	296
1.00		1728	750	1540	578	1337	463	1205	397	980	304

DIMENSIONS (IN.)



	Model	A	B	C	D
Upflow / Horizontal	96G1UH030BE08K	17-1/2	16-3/8	16	7-5/8
	96G1UH045BE12K	17-1/2	16-3/8	16	7-5/8
	96G1UH070BE12K	17-1/2	16-3/8	16	7-5/8
	96G1UH090CE16K	21	19-7/8	19-1/2	9-3/8
	96G1UH110CE20K	21	19-7/8	19-1/2	9-3/8
	96G1UH135DE20K	24-1/2	23-3/8	23	11-1/8

DIMENSIONS (IN.)



	Model	A	B	C
Downflow	96G1DF045BE12K	17-1/2	16-3/8	16
	96G1DF070BE16K	17-1/2	16-3/8	16
	96G1DF090CE16K	21	19-7/8	19-1/2
	96G1DF110CE20K	21	19-7/8	19-1/2

ACCESSORY LIST

Catalog Number	Description
	External Filter Rack kits
1.841018	1 pack (16 x 25)
1.841039	10 pack (16 x 25)
	Natural to LP kits
11K50	1-Stage
11K45	High Altitude 1-Stage
17H62	30K BTUH
	High Altitude Pressure Switch Kits
11U66	4,501 - 7,500 ft [030, 045]
11U70	4,501 - 7,500 ft [070, 090, 110]
11U69	7,501 - 10,000 ft [030, 045]
11U68	7,501 - 10,000 ft [070]
11U64	7,501 - 10,000 ft [090, 110]
	Return Air Base
68W62	17.5" B Width
68W63	21.0" C Width
68W64	24.5" D Width
	Downflow Combustible Flooring Base
11M60	17.5" B Width
11M61	21.0" C Width
	Horizontal Suspension Kit
51W10	80% & 90% Kit
	Flush Mount Termination (90% Furnaces only) US Only
51W11	2" & 3" Vent Version
	Concentric Vent Kit (90% Furnaces only) US Only
71M80	1-1/2" Vent Version
69M29	2" Vent Version
60L46	3" Vent Version
	Concentric Vent Kit (90% Furnaces only) Canada Only
44W92	1-1/2" and 2" Vent Version
44W93	3" Vent Version
	Transformer (75VA)
	Recommended when furnace is used with zoning or defrost thermostats and other 24V accessories requiring a higher VA rating
27J32	Circuit breaker (furnished) is wired in series
	Replaces the standard 40VA transformer

For vent length and clearances to combustibles, please reference installation instructions.
All specifications and illustrations subject to change without notice and without incurring obligations.