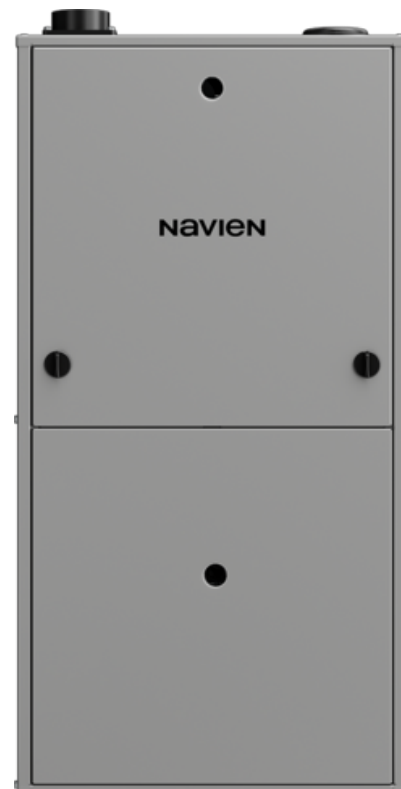


- **Variable Speed ECM Blower** provides consistent airflow up to 1" inWC
- **2-Stage Heating** with adaptive staging option
- **Supports 2-stage Cooling**
- **AFUE Ratings—96% (NG/LP)**
- **Dual Fuel Compatible**
- **4-way Multi-position:** upflow, downflow, horizontal left and horizontal right
- **Zero Clearance** in all positions, approved for closets and alcoves
- **Modular heat exchanger and blower for simple service**
- **T140 Aluminized Wrinkle Bent Primary Heat Exchanger Tubes**
- **29-4C Stainless Steel Heat Recovery Coil**
- **Self Diagnostic Integrated Furnace Control** with fault codes for simple troubleshooting.
- **Concentric Venting Approved**
- **Propane Conversion Kit** (Purchased separately)
- **High Altitude Certified:** 5,400ft* w/o conversion, up to 10,000ft (with conversion)
- **Flexible Condensate Trap Mounting** for easy service
- **Sealed Vestibule and Blower Compartments** provides quiet operation
- **IAQ Compatibility** – Supports EAC, HUM, and UV light

*LP Conversion required above 2000ft



MODEL NUMBER NOMENCLATURE										
Example	N	D	F	600	050	M	2	V	3	B
	I	II	III	IV	V	VI	VII	VIII	IX	X
I	Brand N = Navien									
II	Product Tier D = Deluxe									
III	Product F = Furnace									
IV	Model Series									
V	Nominal Capacity 050 = 50,000 Btu/h 070 = 70,000 Btu/h 090 = 90,000 Btu/h 105 = 105,000 Btu/h									
VI	Orientation M = Multi-position									
VII	Gas Valve 2 = 2 Stage									
VIII	Blower Type V = Variable Speed									
IX	Nominal Cooling Airflow 3 = 3 Ton 4 = 4 Ton 5 = 5 Ton									
X	Cabinet Width B = 17.5" C = 22.5"									

OPTIONAL ACCESSORIES

	Residential Neutralizer GXXX002212
	Replacement Media GXXX001323
	Residential Neutralizer with Pump GXXX002585
	Replacement Media GXXX002586
	NG to LP Conversion Kit 30043636A

SPECIFICATIONS

Items		NDF600-050--B	NDF600-070--B	NDF600-070--C	NDF600-090--C	NDF600-105--C
Applications		Residential, Light Commercial				
Installation Orientation		Upflow / Horizontal Right / Horizontal Left / Downflow				
Venting Type		Forced Draft Direct Vent / Non-Direct Vent				
Maximum Vent Length	2 in	75 ft				
	3 in	100 ft				
Ignition		Hot Surface Igniter				
Natural Gas Supply Pressure		5.0 - 10.5 in WC				
Propane Gas Supply Pressure		11.0 - 13.0 in WC				
Natural Gas Manifold Pressure (High / Low)		3.5 / 1.4 in WC				
Propane Gas Manifold Pressure (High / Low)		10.0 / 5.0 in WC				
Gas Connection Size		½ in NPT				
Condensate Drain Size		0.84 in (Sized for ½" Sched. 40 Tee Fitting)				
Materials	Primary Heat Exchanger	T140 Aluminized Steel				
	Condensing Heat Exchanger	29-4C Stainless Steel				
Venting	Exhaust	1½ - 3 in	2 - 3 in			
	Intake					
	Materials	PVC, CPVC, PVC-DWV*				
Clearance to Combustibles		0 in**				
Electrical Data	Volts / Hz / Phase	120 / 60 / 1				
	Max Breaker or Fuse	15 amp				
	Wire Size	14 awg				
Unit Dimensions	H x W x D in (mm)	34.0 x 17.5 x 29.5 (864 x 445 x 749)	34.0 x 17.5 x 29.5 (864 x 445 x 749)	34.0 x 22.5 x 29.5 (864 x 572 x 749)	34.0 x 22.5 x 29.5 (864 x 572 x 749)	34.0 x 22.5 x 29.5 (864 x 572 x 749)
Unit Weight	lb (kg)	128 (58.1)	138 (62.6)	156 (70.8)	164 (74.4)	168 (76.2)
Shipping Weight	lb (kg)	130 (59.0)	140 (63.5)	159 (72.1)	168 (76.2)	171 (77.6)
Shipping Dimensions	H x W x D in (mm)	35.0 x 20.0 x 33.0 (889 x 508 x 838)	35.0 x 20.0 x 33.0 (889 x 508 x 838)	35.0 x 25.0 x 33.0 (889 x 635 x 838)	35.0 x 25.0 x 33.0 (889 x 635 x 838)	35.0 x 25.0 x 33.0 (889 x 635 x 838)
*See Installation Manual for regional venting material requirements						
**Applicable for all sides except top plenum						

HEATING CAPACITY AND EFFICIENCY

Items		NDF600-050--B	NDF600-070--B	NDF600-070--C	NDF600-090--C	NDF600-105--C
Input [BTU/h]	Max Heat	53,000	70,000	70,000	88,000	105,000
	Min Heat	37,000	49,000	49,000	61,000	74,000
Output [BTU/h]	Max Heat	50,000	67,000	67,000	84,000	101,000
	Min Heat	35,000	47,000	47,000	59,000	71,000
AFUE		96%				
Certified Temperature Rise Range [°F (°C)]	High Fire	40-70 (22-39)				
	Low Fire	35-65 (19-36)				
Burner Control		2-Stage				

BLOWER DATA

Items		NDF600-050--B	NDF600-070--B	NDF600-070--C	NDF600-090--C	NDF600-105--C
External Static Pressure (inWC)	Heating	0.12 - 0.5	0.15 - 0.5		0.2 - 0.5	
	Cooling	0.1 - 1.0*				
Nominal Cooling Airflow (TON)	@400CFM	1.5 - 3.0	1.5 - 3.0	1.5 - 4.0	2 - 5.0	2 - 5.0
	@350CFM	1.5 - 3.5	1.5 - 3.5	1.5 - 4.5	2-5.5	2-5.5
Circulator Blower	Horsepower	1/2	1/2	3/4	1	1
	Motor Speed & Type	Variable Speed ECM				

*Cooling airflow certified up to 0.5", see installation manual for additional information regarding airflow.

BLOWER AIRFLOW

NDF600-050M2V3B																
Airflow	W1 - Low Heat				W2 - High Heat				Y1 - Low Cool				Y2 - High Cool			
Tap	A (Max)	B	C	D	A (Max)	B	C	D	A	B	C	D	A	B	C	D
ESP (In W.C.) / Tons (Cooling)	-	-	-	-	-	-	-	-	3T	2.5T	2T	1.5T	3T	2.5T	2T	1.5T
1*	637	N/A	554	527	808	N/A	719	696	817	701	607	430	1081	1032	838	675
0.9*	656		558	536	811		731	702	823	705	610	440	1143	1041	841	678
0.8*	658		564	542	813		738	708	827	710	615	450	1198	1055	846	680
0.7*	659		569	548	815		745	715	832	715	619	460	1253	1069	850	682
0.6*	661		577	556	824		751	718	835	718	621	468	1268	1072	861	675
0.5	663		585	565	833		756	722	838	722	623	476	1283	1076	871	669
0.4	665		586	566	841		767	732	850	732	624	487	1282	1075	877	675
0.3	668		587	567	849		778	743	862	743	625	497	1282	1074	883	680
0.2	671		598	578	844		773	738	860	740	635	508	1278	1069	879	684
0.1	675		608	589	839		767	732	857	738	645	520	1273	1064	874	688

* ESP values above 0.5" W.C. are listed for cooling reference only. Do not operate above 0.5" W.C. in heating mode. Always check and follow the unit's rating plate for approved installation limits.

NDF600-070M2V3B																
Airflow	W1 - Low Heat				W2 - High Heat				Y1 - Low Cool				Y2 - High Cool			
Tap	A (Max)	B	C	D	A (Max)	B	C	D	A	B	C	D	A	B	C	D
ESP (In W.C.) / Tons (Cooling)	-	-	-	-	-	-	-	-	3T	2.5T	2T	1.5T	3T	2.5T	2T	1.5T
1*	782	N/A	700	737	984	N/A	887	944	766	584	497	324	1193	992	790	538
0.9*	811		716	754	997		896	958	779	634	515	342	1194	998	800	557
0.8*	809		703	748	997		893	960	772	636	512	337	1195	997	792	562
0.7*	807		690	741	997		889	963	765	638	509	332	1197	995	784	566
0.6*	793		687	734	988		877	948	760	629	499	331	1193	987	776	560
0.5	779		683	727	979		866	934	755	620	489	329	1189	980	767	554
0.4	775		672	718	965		856	925	747	608	473	311	1183	967	762	537
0.3	772		661	709	952		847	916	740	596	458	293	1177	953	758	520
0.2	765		652	704	946		845	907	735	589	451	281	1170	948	750	512
0.1	758		644	699	941		843	898	731	583	445	269	1163	943	741	504

* ESP values above 0.5" W.C. are listed for cooling reference only. Do not operate above 0.5" W.C. in heating mode. Always check and follow the unit's rating plate for approved installation limits..

BLOWER AIRFLOW

NDF600-070M2V4C																
Airflow	W1 - Low Heat				W2 - High Heat				Y1 - Low Cool				Y2 - High Cool			
Tap	A (Max)	B	C	D	A (Max)	B	C	D	A	B	C	D	A	B	C	D
ESP (In W.C.) / Tons (Cooling)	-	-	-	-	-	-	-	-	3T	2.5T	2T	1.5T	3T	2.5T	2T	1.5T
1*	743	N/A	665	630	1028	N/A	964	857	1020	739	602	425	1641	1172	956	760
0.9*	763		684	652	1044		975	873	1033	755	623	440	1621	1188	970	777
0.8*	777		701	669	1057		991	890	1049	771	642	459	1638	1195	986	793
0.7*	791		718	687	1069		1007	907	1064	787	660	479	1655	1201	1001	809
0.6*	808		735	704	1077		1016	923	1074	802	677	501	1664	1208	1013	822
0.5	824		753	722	1084		1025	939	1085	818	694	523	1673	1215	1024	834
0.4	830		756	732	1089		1030	945	1085	830	705	548	1670	1222	1028	847
0.3	836		759	743	1094		1036	951	1085	842	716	573	1668	1229	1032	860
0.2	842		757	736	1094		1034	951	1085	842	709	603	1666	1229	1033	861
0.1	849		756	729	1094		1031	950	1086	842	701	634	1664	1229	1033	863

*ESP values above 0.5" W.C. are listed for cooling reference only. Do not operate above 0.5" W.C. in heating mode. Always check and follow the unit's rating plate for approved installation limits.

NDF600-090M2V5C																
Airflow	W1 - Low Heat				W2 - High Heat				Y1 - Low Cool				Y2 - High Cool			
Tap	A (Max)	B	C	D	A (Max)	B	C	D	A	B	C	D	A	B	C	D
ESP (In W.C.) / Tons (Cooling)	-	-	-	-	-	-	-	-	3T	2.5T	2T	1.5T	3T	2.5T	2T	1.5T
1*	991	N/A	865	898	1292	N/A	1158	1191	1407	1106	806	656	1946	1706	1257	1044
0.9*	995		883	910	1293		1172	1199	1410	1114	823	669	1991	1712	1245	1052
0.8*	1006		891	920	1304		1181	1214	1412	1123	835	686	2045	1719	1256	1065
0.7*	1017		898	929	1314		1190	1229	1415	1131	847	703	2098	1727	1267	1077
0.6*	1030		909	934	1318		1194	1233	1419	1138	851	715	2151	1728	1273	1084
0.5	1043		919	938	1323		1197	1236	1424	1146	855	727	2203	1729	1279	1091
0.4	1040		917	945	1330		1200	1239	1426	1154	861	723	2201	1729	1277	1091
0.3	1038		915	952	1337		1202	1242	1428	1163	868	719	2199	1729	1275	1091
0.2	1040		917	952	1337		1201	1239	1429	1151	854	701	2196	1729	1275	1085
0.1	1041		918	953	1336		1200	1236	1431	1139	841	684	2194	1729	1275	1080

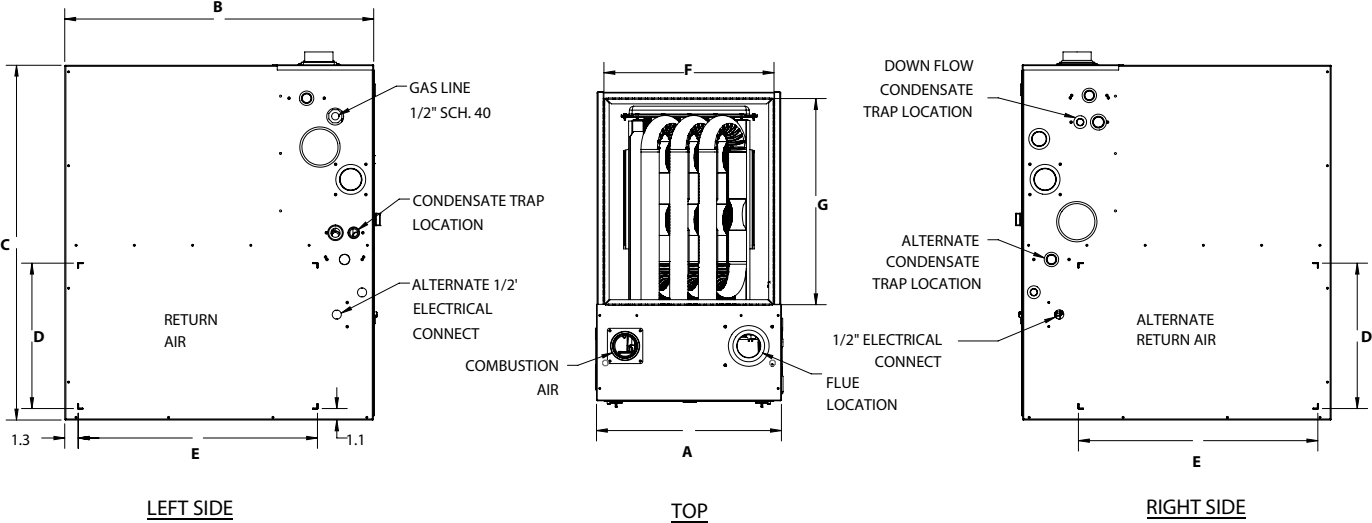
* ESP values above 0.5" W.C. are listed for cooling reference only. Do not operate above 0.5" W.C. in heating mode. Always check and follow the unit's rating plate for approved installation limits.

BLOWER AIRFLOW

NDF600-105M2V5C																
Airflow	W1 - Low Heat				W2 - High Heat				Y1 - Low Cool				Y2 - High Cool			
Tap	A (Max)	B	C	D	A (Max)	B	C	D	A	B	C	D	A	B	C	D
ESP (In W.C.) / Tons (Cooling)	-	-	-	-	-	-	-	-	3T	2.5T	2T	1.5T	3T	2.5T	2T	1.5T
1*	1162	N/A	1049	1098	1595	N/A	1451	1490	1394	1085	801	660	2058	1666	1239	1070
0.9*	1204		1061	1115	1611		1452	1491	1390	1101	819	676	2111	1671	1246	1042
0.8*	1214		1076	1125	1617		1460	1499	1397	1099	836	694	2124	1677	1255	1062
0.7*	1225		1091	1135	1623		1467	1507	1403	1097	852	711	2136	1682	1264	1081
0.6*	1226		1100	1149	1626		1474	1514	1411	1111	862	723	2137	1687	1271	1090
0.5	1227		1110	1163	1629		1481	1522	1418	1125	871	735	2138	1692	1279	1098
0.4	1235		1114	1164	1640		1490	1530	1429	1143	876	737	2135	1698	1288	1101
0.3	1243		1118	1165	1651		1499	1537	1439	1161	882	738	2132	1704	1296	1104
0.2	1246		1117	1164	1648		1501	1543	1442	1162	871	728	2132	1701	1300	1110
0.1	1248		1116	1163	1645		1504	1548	1445	1163	861	718	2133	1698	1303	1115

* ESP values above 0.5" W.C. are listed for cooling reference only. Do not operate above 0.5" W.C. in heating mode. Always check and follow the unit's rating plate for approved installation limits.

DIMENSIONS



Input (kBtu/h)	Width (A)	Depth (B)	Height (C)	Supply Air (F X G)	Return Air (D X E)
50	17 ½" (445 mm)	29 ½" (749 mm)	34" (864 mm)	16 ¼" X 19 ⅝" (413 mm X 499 mm)	14" X 23" (356 mm X 584 mm)
70-3					
70-4	21 ¼" X 19 ⅝" (540 mm X 499 mm)				
90					
105					