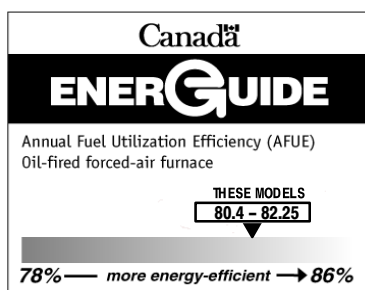




Illustrations and photographs are only representative.
Some product models may vary.



ONLY applies to applications in Canada where the furnace is installed in the conditioned space, per sections 5.35.1.2 and 4.7.1.1 of CSA standard B212 dated October 2000.

MULTI-POSITION OIL FURNACE

FEATURES

- **Fan Control Switch** – for continuous speed
- **Accessory terminals** – prewired for easy add-on electronic air cleaner and power humidifier. Air conditioning ready for easy add-on.
- **Large external front clean out** – for easy cleaning
- **Clean out** – sealed from blower compartment (no soot to spread)
- **Easy Access** – control panel
- **Sight Glass/View Port**
- **Test Ports** – factory installed to provide efficient access for set-up and service
- **“Easy Access” heat exchanger** – manufactured from heavy gauge steel
- **Multi-Speed Direct Drive Motors** – permanently lubricated for long life performance
- **Heavy-duty insulated cabinet** – for quiet operation
- **Approved for 2” (51mm) clearance to combustibles** – for tight installations
- **Stainless steel primary heat exchanger**
- **Precision balanced blower** – ensures quiet, efficient air distribution
- **Raised cabinet base** – allows air to circulate under the cabinet. Eliminates dampness
- **Approved vent** – Canada: chimney vent only
US: chimney or direct vent with approved side wall venter
- **Efficient** – AFUE Up to 82.25% Canada, 80.5% US
- **Front Flue (Breach)**
- **Shipped complete** – Vestibule, barometric damper, burners and nozzles are installed
- **Filters & filter rack** – Included

WARRANTY *

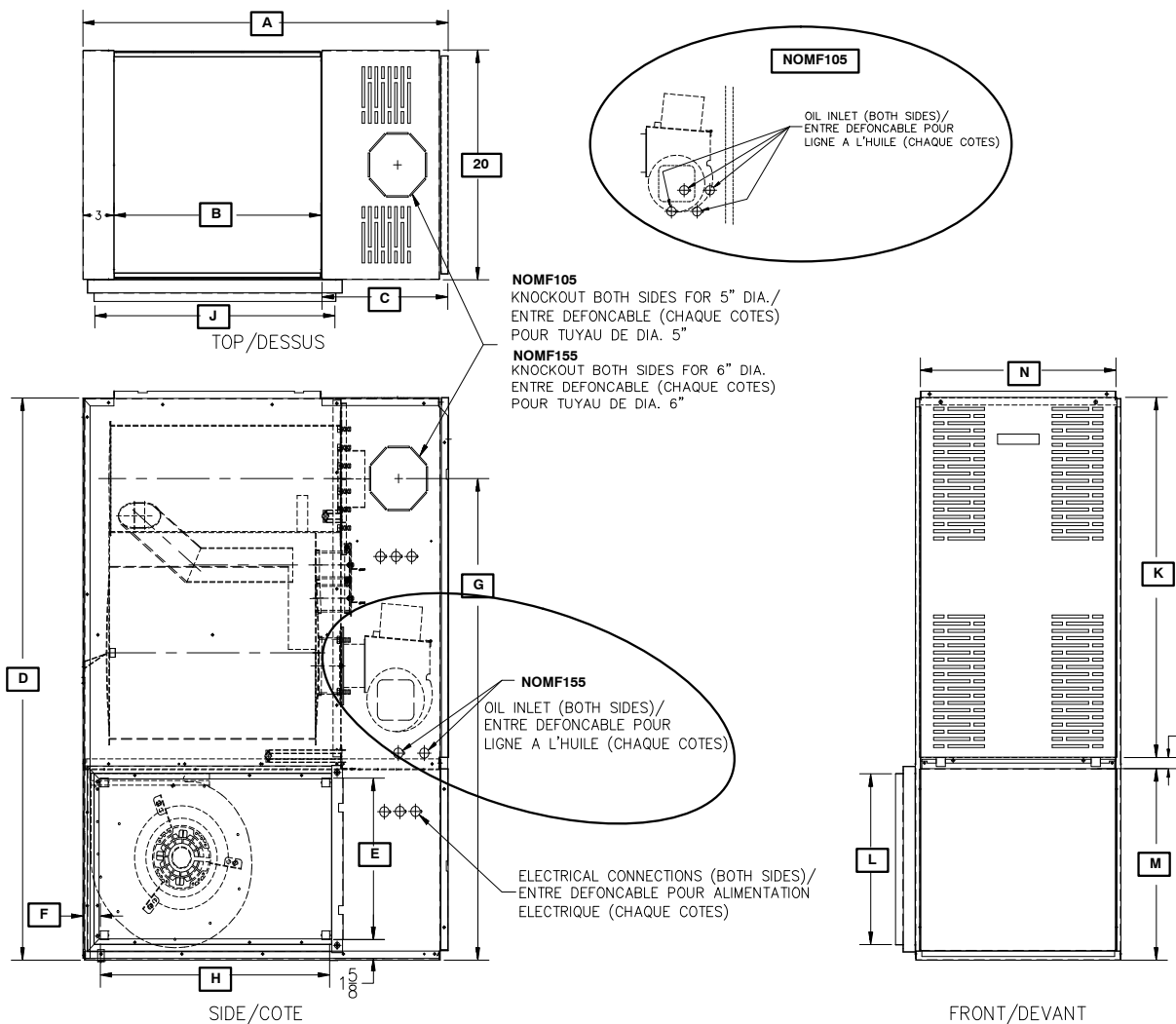
- Lifetime heat exchanger limited warranty with timely registration
- 5 year parts limited warranty
 - With timely registration, an additional 5 year parts limited warranty
- * Applies to original purchaser/homeowner, some limitations may apply. See warranty certificate for complete details.

Model Number	Input (BTU/h)	Efficiency AFUE		Cooling capacity @ .5 in. w.c. (125 Pa)	Dimensions in(mm) H x W x D†	Operating Wt. Lbs.(Kg)
		CANADA	US			
NOMF105D12	70,000–105,000	80.4–80.75	80.5	2 – 3 TON	48–3/4 x 20 x 35 (1238 x 508 x 889)	221 (100)
NOMF155E19	119,000–154,000	81.01–82.25	80.5	3 – 5 TON	53 x 20 x 39–1/2 (1346 x 508 x 1003)	270 (122)

† Depth with the burner

MODEL NUMBER IDENTIFICATION GUIDE													
MODEL NUMBER				N	O	M	F	105	D	12	#	REVISION	
FUEL				O = Oil									AIR FLOW
PRODUCT GROUP				U = Upflow H = Horizontal T = Upflow/Horizontal L = Lo-Boy									12 = 1200 CFM 19 = 1900 CFM
SERIES				F = Front Breech R = Rear Breech									SUPPLY PLENUM SIZE
				D = Downflow C = Downflow/Horizontal M = Multiposition									A = 20 x 20 B = 24 x 24 C = 21 ¹ / ₈ x 21 ¹ / ₂ D = 19 x 20
													INPUT, MBTUH

DIMENSIONS



Representative only, some models may vary in appearance.

DNS-0139 Rev.E

FURNACE DIMENSIONS - in(mm)

Model No.	A	B	C	D	E	F	G	H	J	K	L	M	N	Flue
in														
105D12	35	19-7/8	12	48-3/4	14	1-3/4	41-3/4	22	23	31-1/4	15	16-5/8	18-3/4	5
155E19	39-1/2	23-7/8	12-1/2	53	16	1-1/2	46-7/8	28	29	33-1/4	17	18-3/4	18-3/4	6
mm														
105D12	889	505	305	1238	356	45	1060	559	584	794	381	422	476	127
155E19	1003	607	318	1346	406	38	1191	711	737	845	432	476	476	152

MINIMUM INSTALLATION CLEARANCES FROM COMBUSTIBLE MATERIALS – in(mm)							
Models		NOMF105			NOMF155		
Location	Application	Upflow	Downflow	Horizontal	Upflow	Downflow	Horizontal
Sides	Furnace	0	2 (50.8)	2 (50.8)	0	2 (50.8)	2 (50.8)
	Supply plenum within 6' (1.8m) of furnace	1 (25.4)	2 (50.8)	1 (25.4)	1 (25.4)	2 (50.8)	1 (25.4)
Back	Furnace	0	1 (25.4)	0	0	1 (25.4)	0
Top	Furnace or plenum	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)
	Horizontal warm air duct within 6' (1.8m) of furnace	2 (50.8)	2 (50.8)	3 (76.2)	2 (50.8)	2 (50.8)	3 (76.2)
Bottom	Furnace – combustible floor with the subbase	0	0*	0*	0	0*	0*
Flue Pipe	Horizontally or below Flue Pipe	4 (101.6)	4 (101.6)	4 (101.6)	4 (101.6)	4 (101.6)	4 (101.6)
	Vertically above Flue Pipe	9 (228.6)	9 (228.6)	9 (228.6)	9 (228.6)	9 (228.6)	9 (228.6)
Front	Furnace	8 (203.2)	8 (203.2)	24 (609.6)	8 (203.2)	8 (203.2)	24 (609.6)
* If used with sub-base DFB101 or HFB101 respectively							

FURNACE SPECIFICATIONS							
Model:		NOMF105D12			NOMF155E19		
Rating and Performance							
Firing Rate (USGPH)*		.50	.65	.75	.85	1.00	1.10
Input (BTUh)*		70,000	91,000	105,000	119,000	140,000	154,000
Heating capacity (BTUh)*		57,000	74,000	85,000	97,000	115,000	126,000
Minimum – Temperature Rise*		31° – 47° C / 55° – 85° F			31° – 47° C / 55° – 85° F		
Flue draft with chimney – in. w.c. (Pa)		–0.06” to –0.025” (–15 to –6)			–0.06” to –0.025” (–15 to –6)		
Overfire pressure with chimney – in. w.c. (Pa)		max +0.025” (+6)			max +0.025” (+6)		
Flue draft with direct vent – in. w.c. (Pa)		NA			+0.10” to +0.25” (+25 to +62)		
Overfire pressure with direct vent – in. w.c. (Pa)		NA			+0.12” to +0.27” (+30 to +67)		
Beckett Burner, Model AFG53 (3450 rpm)		AFG F3 head			AFG F3 head		AFG F6 head
Tube insertion		2–7/8”			2–7/8”		2–7/8”
Low firing rate baffle		YES			YES		YES
Static disc, model		3–3/8” #31646			2–3/4” #3383		
Nozzle – (Delavan)		0.50 – 70W	0.55 – 70B	0.65 – 70B	0.75 – 70B	0.85 – 70B	0.85 – 70B
Pump Pressure (PSIG)*		100	140	130	130	140	170
Combustion air adjustment (turbulator/damper)		0 / 5	0 / 7	0 / 8	1 / 8	4 / 4	2 / 8
CANADIAN regulations and CSA B212 standard** AFUE %		80.68	80.4	80.75	82.25	81.01	81.36
US regulations and ASHRAE 103 standard AFUE %		80.5	80.5	80.5	80.5	80.5	80.5
Electrical System							
Volts – Hertz – Phase		115–60–1			115–60–1		
Operating voltage range		104 – 132			104 – 132		
Rated voltage Amp		12.2			15.7		
Minimum ampacity for wiring sizing		13.7			18.1		
Max. wire length – ft.(m)		26 (8)			26 (8)		
Max. fuse size (Amps.)		15			20		
Control transformer		40 VA			40 VA		
Ext. control power available,	Heating Cooling	40 VA 30 VA			40 VA 30 VA		
Blower Data							
Blower speed at 0.50 in. w.c. (125 Pa) static pressure		MED–LO	MED–HI	HIGH	MED–LO	MED–HI	HIGH
Motor (HP) / number of speeds		1/3 HP / 4 speeds			3/4 HP / 4 speeds		
Blower wheel size – in(mm)		10 x 10 (254 x 254)			12 x 10 (305 x 254)		
General Information							
Supply air opening (width x depth) – in(mm)		18–3/4 x 19–7/8 (476 x 505)			18–3/4 x 23–7/8 (476 x 607)		
Return air opening (depth x height, with factory filter rack) – in(mm)		15 x 23 (381 x 584)			17 x 29 (432 x 737)		
Filter quantity and size – in(mm)		(1) 16 x 24 (406 x 610)			(1) 20 x 30 (508 x 762)		
Weight – Lbs.(Kg)		221 (100)			270 (122)		
Air conditioning, maximum output (tons) at 0.5 ESP		3 tons			5 tons		

* **INPUT & OUTPUT ADJUSTMENT**

Pump pressure can be increased up to 180 PSIG. (200 PSIG with Becket burner at 1.10 USGPH)

Adjust flue gas temperature between 400 and 575 °F/204 and 301 °C

Adjust fan speed for air temperature rise of 55 to 85 °F/30 to 47 °C

** AFUE value established after minimum 20 hours of continuous operation.

BLOWER PERFORMANCE DATA (Air delivery - with air filter)**NOMF105D12**

EXTERNAL STATIC PRESSURE – in. w.c.				
Speed	0.20	0.30	0.40	0.50
High	1425	1350	1305	1250
Med-Hi	1130	1045	1000	950
Med-Lo	840	810	770	740

EXTERNAL STATIC PRESSURE – Pa				
Speed	50	75	100	125
High	672	637	616	590
Med-Hi	533	493	472	448
Med-Lo	396	382	363	349

NOMF155E19

EXTERNAL STATIC PRESSURE – in. w.c.				
Speed	0.20	0.30	0.40	0.50
High	2080	2041	1965	1864
Med-Hi	1892	1859	1770	1675
Med-Lo	1556	1475	1394	1318

EXTERNAL STATIC PRESSURE – Pa				
Speed	50	75	100	125
High	982	963	927	880
Med-Hi	893	877	835	790
Med-Lo	734	696	658	622

ACCESSORIES

Product Model No.	Burners	Horizontal Flow Base	Downflow Subbase	Downflow Flue Pipe Guard
NOMF105D12	Beckett AFG-F3 Shipped with Nozzle 0.65-70B	HFB101	DFB101	FPG101
NOMF155E19	Beckett AFG-F3* Shipped with Nozzle .75-70B			FPG102

*For larger input, F6 burner head will be required

ACCESSORY DESCRIPTION

Model No	Description
HFB101	Horizontal Flow Base
DFB101	Downflow Subbase
FPG101	Flue Pipe Guard for Downflow for NOMF105
FPG102	Flue Pipe Guard for Downflow for NOMF155
N03G006	Nozzle, Oil Burner, Delavan, 0.50 GPH/70° Type W for NOMF105
N03H008	Nozzle, Oil Burner, Delavan, 0.85 GPH/70° Type B (with F6 burner head) for NOMF155
N03H012	Nozzle, Oil Burner, Delavan, 0.65 GPH/70° Type B for NOMF105
N03H013	Nozzle, Oil Burner, Delavan, 0.75 GPH/70° Type B for NOMF155
N03H027	Nozzle, Oil Burner, Delavan, 0.55 GPH/70° Type B for NOMF105