

navien

QuickFacts

NDF600 Series



Condensing 2-Stage Gas Furnace

Product Features



96% AFUE high-efficiency condensing.



Dual-fuel compatibility optimizes energy savings when paired with a heat pump.



Zero clearance allows simple installation for closets or alcoves.



2-stage operation minimizes temperature swings by adjusting between low and high fire.



4-way multi-position installation: upflow, downflow, horizontal left and horizontal right.



High altitude certified up to 5400 ft* without conversion. Approved for NG and LP installations up to 10,000 ft.



Modular blower and heat exchanger assemblies for easy maintenance.



Variable speed ECM motor simplifies airflow setup and helps reduce callbacks.

*For NG only, LP conversion required above 2000 ft.

Specifications

Items		NDF600-050M2V3B	NDF600-070M2V3B	NDF600-070M2V4C	NDF600-090M2V5C	NDF600-105M2V5C
Applications		Residential, light commercial				
Installation type		Upflow / horizontal right / horizontal left / downflow				
Venting type		Forced draft direct vent / non-direct vent				
Maximum vent length	2.0 in	75 ft				
	3.0 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		1/2 in NPT				
Condensate drain size		0.84 in (sized for 1/2" Schedule 40 tee fitting)				
Materials	Primary heat exchanger	T140 aluminized steel				
	Condensing heat exchanger	29-4C stainless steel				
Venting	Exhaust	1-1/2 in – 3 in	2.0 in – 3.0 in			
	Intake					
	Materials					
Clearance to combustibles		PVC, CPVC, PVC-DWV* 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 x 17.5 x 29.5 – (864 x 445 x 749)			34 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 dimensions	H x W x D – in (mm)	35 x 20 x 33 – (889 x 508 x 838)			35 x 25 x 33 – (889 x 635 x 838)	
Certifications						

*See installation manual for regional venting material requirements.

**Applicable for all sides except top plenum.

Navien reserves the right to change specifications at any time without prior notice. Please refer to www.navieninc.com to verify you have the most current information.

Heating capacity and efficiency

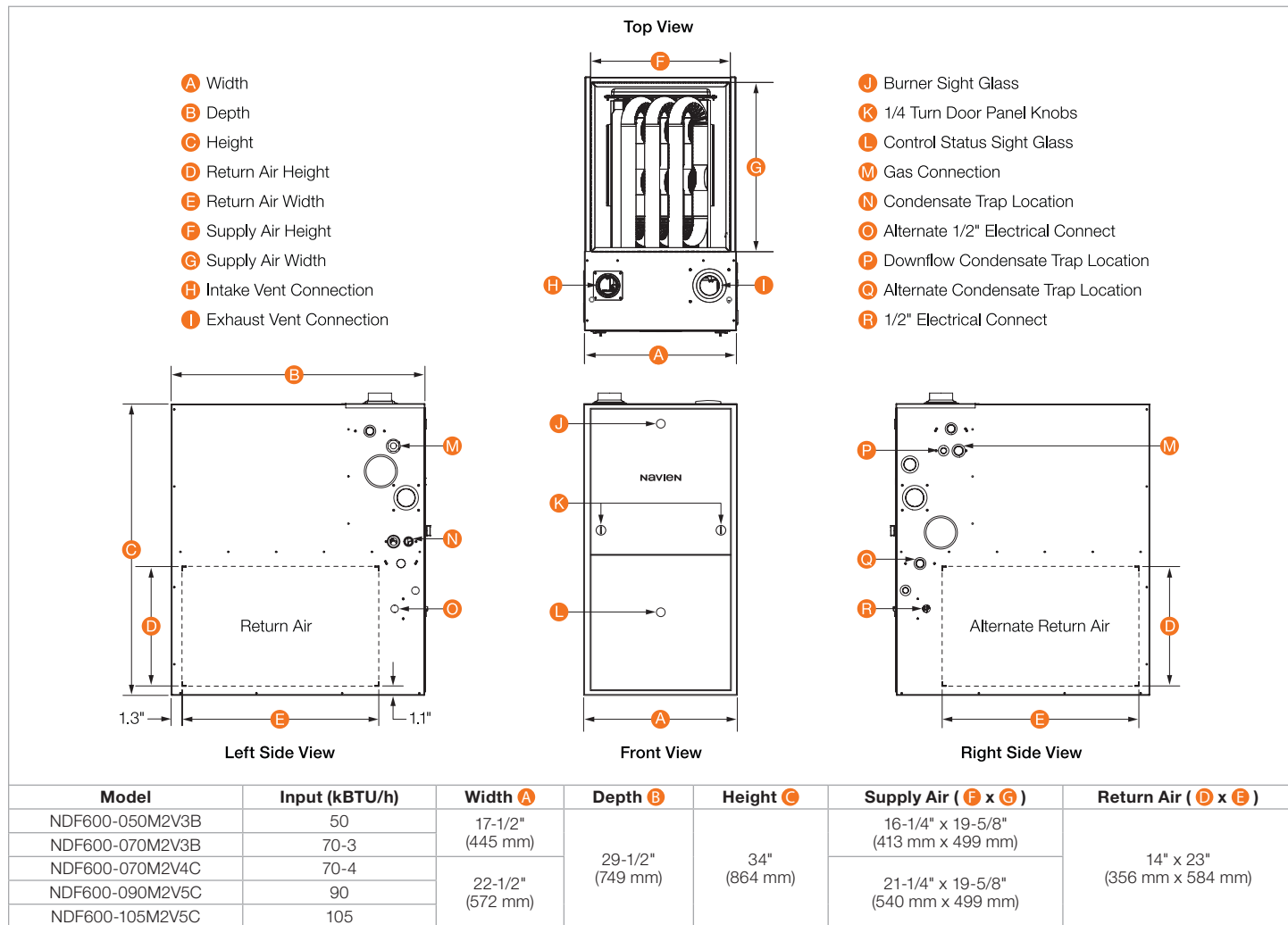
Items		NDF600-050M2V3B	NDF600-070M2V3B	NDF600-070M2V4C	NDF600-090M2V5C	NDF600-105M2V5C
Installation type		Upflow / horizontal right / horizontal left / downflow				
Input (BTU/h)	Max heat	53,000	70,000	70,000	88,000	105,000
	Min heat	36,000	49,000	49,000	60,000	73,000
Output (BTU/h)	Max heat	50,000	67,000	67,000	84,000	101,000
	Min heat	34,000	47,000	47,000	57,000	70,000
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		NDF600-050M2V3B	NDF600-070M2V3B	NDF600-070M2V4C	NDF600-090M2V5C	NDF600-105M2V5C
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)	@400 CFM	1.5–3.0		1.5–4.0	2.0–5.0	
	@350 CFM	1.5–3.5		1.5–4.5	2.5–5.5	
Circulator blower	Horsepower	1/2 hp		3/4 hp	1 hp	
	Motor speed & type	Variable speed ECM				

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

Dimensions



NDF Warranty

NDF – Coverage Table for Labor and Parts Only			
Residential ²			Commercial
Parts ¹	Registered ³	10 years	1 year
	Non-registered ⁴	5 years	
Labor	90 days		
NDF – Coverage Table for Combustion Heat Exchanger Only			
Residential ²			Commercial
Registered ³		Limited lifetime	10 years
Non-registered ⁴		20 years	

¹Refers to all internal functional components of the unit.

²Applies only to a single-family dwelling that services one (1) living unit. Any property converted or utilized to service two or more separate dwelling units, regardless of the municipal address, is automatically classified as a Commercial application and is subject to the reduced warranty period.

³Refers to coverages for units registered within 60 days of the Commencement Date.

⁴Refers to coverages for units registered 61 days or more after the Commencement Date; Secondary Owners.

Navien's warranty (which may be changed without prior notice) is subject to the terms and conditions found at www.navieninc.com/warranties.

Accessories and components are subject to change or discontinuation without notice. Images are for illustrative purposes only and actual products may vary based on current vendor availability. Navien reserves the right to substitute equivalent accessories or components from alternative vendors as necessary.

For the most up-to-date product information and current accessory availability, please visit navieninc.com or contact your local Navien representative.

We are @Navieninc everywhere



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