## Mavien



NFC-H Series Condensing FireTube Combi-boilers

## **Ratings & Specifications**

	Model			
	NFC-250/175H	NFC-250/200H		
	Product #	Approvals		
CSA	Yes	Yes		
SCAQMD 1146.2 (NOx, <20 ppm)	Yes	Yes		
Low lead (<0.25%, DHW only)	Yes	Yes		
ASME	Yes "H" stamp	Yes "H" stamp		
AHRI Number	206368824	206368825		
Energy Star	Yes	Yes		
	Space Heat	ing Ratings		
AFUE, %	95.0	95.0		
Heating Capacity, BTU/H	161,000	183,000		

#### Applications

Air Handler	Closed Loop Hydronic Heating Systems	
For NFC technical dra	awings of specific installations and requirements please visit Navieninc.com	

#### Product Features NFC-H: The Inside Story

#### **Heating Input Ranges**

Model	Heating (BTU/H)	DHW (BTU/H)
NFC-250/175H	13,300–175,000	13,300-210,000
NFC-250/200H	13,300–199,900	13,300-210,000

QuickFacts

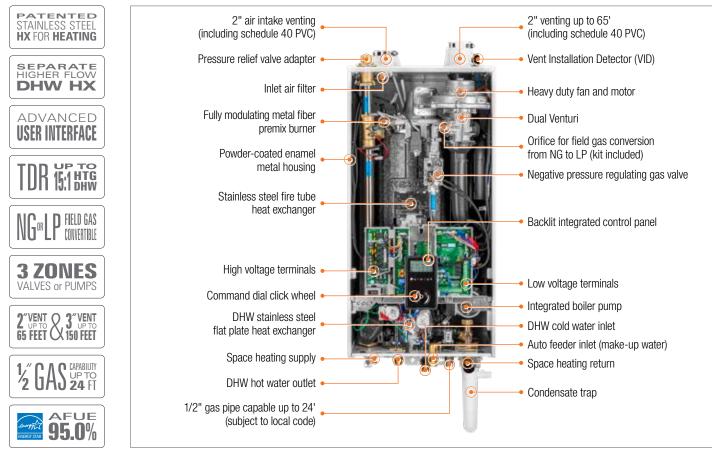
#### **Temperature Range Settings**

Item	Item Temperature Range °F (°C) Remarks		Remarks
Crease besting	Supply	77–185 (25–85)	Actual supply and return temperatures vary
Space heating	Return	68-158 (20-70)	depending on the selected outdoor reset curve.
DHW		86-140 (30-60)	

### Warranty

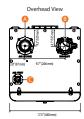
Туре	Residential*	Commercial
Heat exchanger	10 years	5 years
Parts*	5 years	3 years
Labor	1 year	1 year
*Applies to single family residential location	IS.	·

For complete details please refer to the full warranty at Navieninc.com.



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#### Dimensions



### **Ratings & Specifications**

Model Navien Combination Condensing Boiler Space Heating Ratings					Other Space Heating Specifications					
Number <sup>1</sup>			Heating Input (BTU/H)		Heating Capacity <sup>2</sup>	Net AHRI Rating	AFUE <sup>2</sup>	Water	Water Connection Size	Water
	Min	Max	(BTU/H)	Water <sup>3</sup> (BTU/H)	%	Pressure	(Supply, Return)	Volume		
NFC-250/175H	13,300	175,000	161,000	140,000	05.0 10.00 m	95.0	10, 00 poi	1" NPT	4.5	
NFC-250/200H	13,300	199,900	183,000	159,000	95.0	12–80 psi		gallons		

<sup>1</sup> Ratings are the same for natural gas models converted to propane use. <sup>2</sup> Based on U.S. Department of Energy (DOE) test procedures.

 $^{3}$  The net AHRI water ratings shown are based on a piping and pickup allowance of 1.15.

Consult Navien before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.





		onneccion.
	Air Intake	Φ2"
B	Exhaust Gas Vent	Φ2"
0	PRV-Air Vent Connection	Φ 3/4"
0	Heating Supply	Φ1"
•	Heating Return	Φ1"
6	Gas Connection	Φ 3/4"
G	Condensate Outlet	Φ 1/2"
6	Cold Water Inlet (DHW)	Φ 3/4"
0	Hot Water Outlet (DHW)	Φ 3/4"
0	Auto Feeder Inlet (Make-up Wat	er) Φ1/2"

Navien Combination Condensing Boiler Domestic Hot Water Ratings			Other Domestic Hot Water Specifications				
Model Input Ratings		ings (BTU/H)	Water Pressure	Minimum Flow Rate	Flow Rate 45°F (25°C)	DHW Connection Size	
Number	Min	Max	PSI	GPM (L/m)	Temp Rise GPM (L/m)	Supply	Return
NFC-250/175H	13.300	210.000	15-150	0 5 (1 0)	7.9 (30.0)	3/4" NPT	3/4" NPT
NFC-250/200H	13,300	210,000	10-100	0.5 (1.9)	7.9 (30.0)	3/4 NP1	3/4 NP1

Item		Mode	el	NFC-250/175H and	NFC-250/200H Series
	item	NFC-250/175H	NFC-250/200H	Temp. Rise	Flow Rate
Dimensions		17.3" W x 17.3" D x 33.5" H		°F (°C)	GPM (L/m) <sup>1</sup>
Boiler weig	ght	141 lb (64 kg)		35 (19)	10.8 (40.9)
Boiler weig	ght with water	170 lb (77 kg)			. ,
Installation	n type	Indoor wall-hung		40 (22)	9.5 (35.8)
Venting typ	De	Forced draft direct vent		45 (25)	8.4 (31.8)
Ignition		Electronic ignition		50 (28)	7.6 (28.6)
Natural Ga	is supply pressure (from source)	3.5" to 10.5" WC		55 (31)	6.9 (26.0)
Propane G	as supply pressure (from source)	8.0" to 13.5" WC		60 (33)	6.3 (23.8)
Natural Ga	is manifold pressure	-0.03" to -0.92" WC			. ,
Propane Gas manifold pressure		-0.02" to -0.77" WC	67 (37)	5.6 (21.4)	
Gas connection size		3/4" NPT	70 (39)	5.4 (20.4)	
Power	Main supply	120V AC, 60Hz		77 (43)	4.9 (18.6)
supply	Maximum power consumption	Less than 15 amperes		80 (44)	4.7 (17.9)
Materials	Casing	Cold-rolled carbon steel		85 (47)	4.4 (16.8)
Wateriais	Heat exchanger	Stainless steel		. ,	. ,
		2" or 3" PVC, CPVC, approved poly		90 (50)	4.2 (15.9)
	Exhaust	2" or 3" special gas vent type BH (C 2" or 3" stainless steel	lass III, A/B/C)	100 (56)	3.8 (14.3)
Venting	Intake	2" or 3" stanless steel 2" or 3" PVC, CPVC, polypropylene 2" or 3" special gas vent type BH (C 2" or 3" stainless steel	lass III, A/B/C)	<sup>1</sup> Max GPM based on instal	lation conditions.
	Vent clearance	0" to combustibles			
Safety dev	ices	Flame rod, APS, ignition operation c limit switch, exhaust temperature hi sensor, burner high limit fuse, vent i	gh limit sensor, water pressure		

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.

**Optional Accessories** 

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NaviLink <sup>®</sup> Wi-Fi Control PBCM-AS-001 NaviLink <sup>®</sup> Cable GXXX001659	Commercial Neutralizer (up to 16 units) GXXX001325 Commercial Replacement Media GXXX001329	Light Commercial Neutralizer (up to 6 units) GXXX001324 Light Commercial Replacement Media GXXX001328	Residential Neutralizer (1 unit) GXXX001322 Residential Replacement Media GXXX001323	Universal Temperature Sensor GXXX001769	Common Vent Collar Kit 30014367B Includes cascade cable (GXXX000546), common vent collar damper and VID jumper cable.	NaviClean <sup>™</sup> Magnetic Filter for Boilers GXXX001727	
	Q.			0		<b>)</b>	Base Add-on
Combi-boiler Primary Manifold Kit 30026576A	Cascade Cable GXXX000546	Zone Pump Controller 2 Zones: PFMZ-02P-001 3 Zones: PFMZ-03P-001 4 Zones: PFMZ-04P-001 6 Zones: PFMZ-06P-001	PeakFlow®E Anti-scale System GXXX001725 PeakFlow®E Replacement Media GXXX001726 PeakFlow® Replacement Media GXXX001327	HotButton® Components Wall Plate GXXX001427 Push Button GXXX001426	NaviCirc <sup>™</sup> Recirculation NaviCirc <sup>™</sup> PFFW-SXX-001 NaviCirc <sup>™</sup> Kit 30022965A	Valve	Ready-Link® Rack Base (V3) and Add-on Rack(s) Base (V3) GFFMKDIZUS-005 Add-on (V3) GFFMKDIZUS-006

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