# Mavien



# **NFB-C Series** Condensing Fire Tube Commercial Boilers

#### **Navien Certification Summary**

	Model				
	NFB-301C	NFB-399C			
	Product Approvals				
CSA	Yes	Yes Yes			
SCAQMD 1146.2 (NOx, <20 ppm)	Yes	Yes			
ASME	Yes "H" stamp	Yes "H" stamp			
AHRI Number	201925233	201786061			
Energy Star	Yes	Yes			
	Space Heating Ratings				
Thermal Efficiency %	97.5	97.5			
Space Heating Gross Output, MBH	293	389			

#### **Gas Input Ranges**

Model	Range (MBH)	TDR
NFB-301C	20-301	15:1*
NFB-399C	26-399	15:1*

**Quick**Facts

#### **Temperature Setting Range**

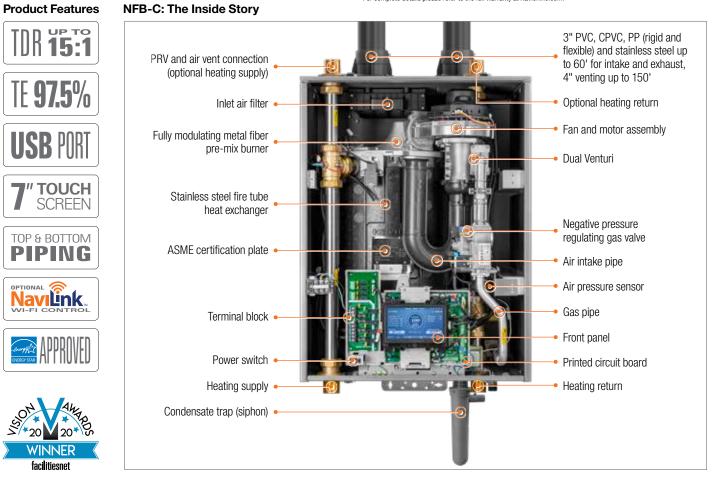
Ite	Item Temperature Setting Range		Remarks
Space	Supply	77–190°F (25–88°C)	Actual supply and return temperatures vary
Heating	Return	68–158°F (20–70°C)	depending on the selected outdoor reset curve.

### Warranty

Туре	<b>Residential Applications</b>	<b>Commercial Applications</b>		
Heat exchangers	15 year limited*	10 years		
Parts	5 years	3 years		
Labor	1 year	1 year		

\*12 years full plus 3 years prorated.

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



Dimensions



Front View

10.00.00 B

**G O** 

Connection Size NFB-301C

Φ3\*

Φ3\*

Ф 1-1/4"

Φ 1-1/4" Φ 1-1/4"

Φ 3/4\*

Φ 1-1/4"

Φ 3/4"

**Optional Accessories** 

Supply Connections

ß

Air Intake
B Exhaust Gas Vent

PVR-Air Vent Connection (Optional Heating Supply)

Optional Heating Return
Heating Supply

G Condensate Outlet

G Heating Return

Gas Connection

28.83

Overhead View

Front View

2.8" (835 mm)

П

0 **8** 

Air Intake
B Exhaust Gas Vent

PVR-Air Vent Connection (Optional Heating Supply)

Optional Heating Return
Heating Supply

Condensate Outlet

G Heating Return

Gas Connection

10.00.0000円円

G

ġ

0

Connection Size NFB-399C

Φ3\*

Φ3\*

Φ 1-1/2"

Φ 1-1/2" Φ 1-1/2"

Ф 3/4\*

Φ 3/4"

Φ 1-1/2"

Supply Connections

NFB-399C

## **Ratings & Specifications**

Navien Commercial Condensing Boiler Space Heating Ratings						Other Specifications			
Model	Model (MBH) Number <sup>1</sup>		Heating Capacity <sup>2</sup>	Net AHRI Rating Water <sup>3</sup>	Thermal Efficiency <sup>2</sup>	Boiler Water	Water Pressure	Water Connection Size	
Number	Min	Max	(MBH)	(MBH)	(%)	Content (Gallons)	(PSI)	(Supply, Return)	
NFB-301C	20	301	293	255	97.5	7.6	12-160	1-1/4" NPT	
NFB-399C	26	399	389	338	97.5	9.6	12-100	1-1/2" NPT	

<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.

<sup>3</sup> 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.

Item		Model					
item			NFB-301C	NFB-399C			
Dimensions			25.1" W x 22.3" D x 32.8" H				
Deiles weicht		Empty	243 lb (110 kg)	278 lb (126 kg)			
Boiler weight		With water	307 lb (139 kg)	371 lb (168 kg)			
Installation type			Indoor wall-hung				
Venting type			Forced draft direct vent and no	n-direct vent (single pipe)			
Ignition			Electronic ignition				
Natural Gas sup	ply pressur	e (from source)	3.5" to 10.5" WC				
Propane Gas su	oply pressu	ire (from source)	8.0" to 13.5" WC				
Natural Gas mar	nifold press	-0.03" to -1.85" WC					
Propane Gas ma	inifold pres	sure	-0.01" to -0.90" WC				
Gas connection	size		3/4" NPT				
Device events	Main supply		120V AC, 60Hz				
Power supply	Maximum power consumption		Less than 12 amperes				
	Casing		Cold-rolled carbon steel				
Materials	Heat exchangers		Stainless steel				
	Exhaust		3" or 4" PVC, CPVC, PP and SS 3" or 4" special gas vent type BH (Class III, A/B/C)				
Venting	Intake		3" or 4" PVC, CPVC, PP and SS 3" or 4" special gas vent type BH (Class III, A/B/C)				
	Vent clearance		O" to combustibles	0" to combustibles			
Safety devices			Flame rod, APS, LWCO, water exhaust temperature high limit				

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.

		Ł	23	aj 42			9			
NaviLink <sup>™</sup> Wi-Fi Control PBCM-AS-001 NaviLink <sup>™</sup> Cable GXXX001659	Fi Control Commercial M-AS-001 Rack System iLink™ Base and add-on will include pipe upport brackets	Relief Valves     Net       75 PSI     Up       GXXX001931     NFF       150 PSI     9 ui       GXXX001946     NFF       GXX     Cor       Rej     Methods       Main     Methods       Main     Methods       Main     Methods       Main     Methods       Main     Methods	Commercial Neutralizer Up to: 11 units NFB-301C; 9 units NFB-309C GXXX001325 Commercial Replacement	Light Commercial Neutralizer Up to: 3 units NFB-301C; 2 units NFB-399C GXXX001324	Ready-Link® Communication Cable GXXX000546	Zone Pump Controller 2 Zones PFMZ-02P-001 3 Zones PFMZ-03P-001 4 Zones PFMZ-04P-001 6 Zones	Temperature Sensor GXXX001769   3P-001   4P-001	Vent Collar Kit Required for cascade/ common ventBACnet Gatewa & Powe Adaptor	Modbus/ BACnet Gateway & Power Adaptor GXXX001932	LonWorks Gateway & Power Adaptor GXXX001933
			Media GXXX001329	Light Commercial Replacement Media GXXX001328		6 Zones PFMZ-06P-001				

Navien Inc., 20 Goodyear, Irvine, CA 92618 800-519-8794 NavienInc.com



TECHNOLOGY

THE LEADER IN CONDENSING