



## QuickFacts

## **NFB-C Series**

## Condensing Fire Tube Commercial Boilers

## **Navien Certification Summary**

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

## **Gas Input Ranges**

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

<sup>\*15:1</sup> single boiler; 10:1 individual boilers when cascaded.

## **Temperature Setting Range**

Item		Temperature Setting Range	e 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	Residential Applications	Commercial Applications	
Heat exchangers	15 year limited*	10 years	
Parts	5 years	3 years	
Labor	1 year	1 year	

<sup>\*12</sup> years full plus 3 years prorated.

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

## **Product Features**







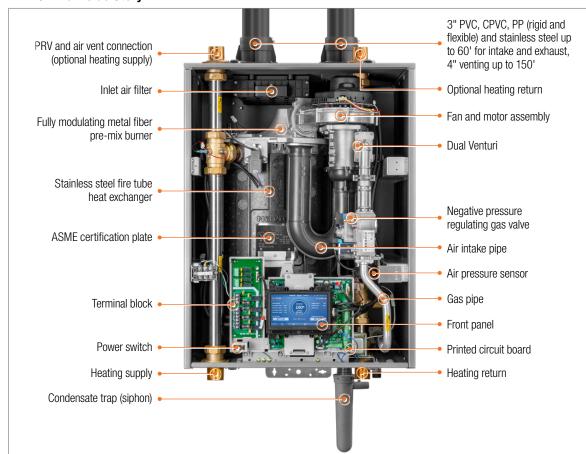








## **NFB-C: The Inside Story**

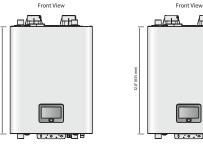


#### **Dimensions**

# Overhead View

NFB-301C

# NFB-399C Overhead View



Supply Connections	Supply Connections			
22.7 (30.5 mm) (20.5 mm) (	16.2" (450 mm)  16.2" (450 mm)  16.2" (450 mm)  16.2" (450 mm)  17.2" (550 mm)  22" (550 mm)  25" (550 mm)			

#### Air Intake Air Intake B Exhaust Gas Vent B Exhaust Gas Vent PVR-Air Vent Connection (Optional Heating Supply) PVR-Air Vent Connection (Optional Heating Supply) Optional Heating Return Heating Supply Optional Heating Return Heating Supply Φ 1-1/2" Φ 1-1/2" Φ 1-1/4" Ф 1-1/4" Condensate Outlet Ф 3/4\* Condensate Outlet Ф 3/4\* Heating Return Φ 1-1/2" Gas Connection Φ 3/4" Gas Connection Φ 3/4"

### **Ratings & Specifications**

ı	Navien Commercial Condensing Boiler Space Heating Ratings					Ratings	Other Specifications		
	Model (MBH) Number <sup>1</sup>		Heating Net AHRI Capacity <sup>2</sup> Rating Water	Net AHRI Rating Water <sup>3</sup>	Thermal Efficiency <sup>2</sup>	Boiler Water	Water Pressure	Water Connection Size	
Num	nber'	Min	Max	(MBH)	(МВН)	(%)	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

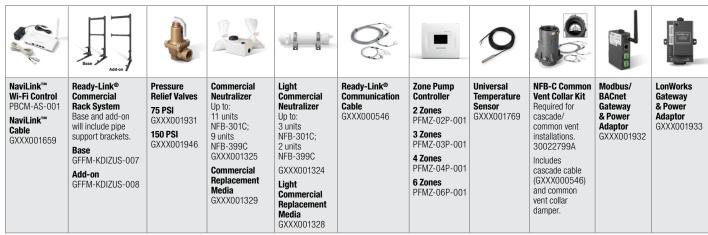
<sup>&</sup>lt;sup>1</sup> Ratings are the same for Natural Gas models converted to Propane use.

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

ltem			Model			
			NFB-301C	NFB-399C		
Dimensions			25.1" W x 22.3" D x 32.8" H			
Boiler weight		Empty	243 lb (110 kg)	278 lb (126 kg)		
		With water	307 lb (139 kg)	371 lb (168 kg)		
Installation type			Indoor wall-hung			
Venting type			Forced draft direct vent and non-o	direct vent (single pipe)		
Ignition			Electronic ignition			
Natural Gas sup	ply pressur	e (from source)	3.5" to 10.5" WC			
Propane Gas su	pply pressu	ire (from source)	8.0" to 13.5" WC			
Natural Gas manifold pressure			-0.06" to -0.87" WC	-0.03" to -1.85" WC		
Propane Gas manifold pressure			-0.01" to -0.92" WC	-0.01" to -0.90" WC		
Gas connection size			3/4" NPT			
Dower cumply	Main supply		120V AC, 60Hz			
Power supply	Maximum power consumption		Less than 12 amperes			
Materials	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 clea	arance	0" to combustibles			
Safety devices			Flame rod, APS, LWCO, water temperature high limit switch, exhaust temperature high limit sensor, water pressure sensor			

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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<sup>&</sup>lt;sup>2</sup> Based on U.S. Department of Energy (DOE) test procedures.

<sup>&</sup>lt;sup>3</sup> The NET AHRI Water Ratings shown are based on a piping and pickup allowance of 1.15.