Condensing Gas
Hot Water Boiler

Commercial NFB700-C Series Fire Tube Boilers
Technical Data Sheet

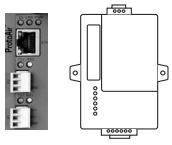
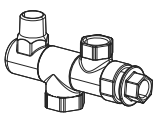
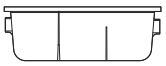
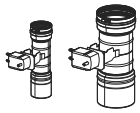
- Certified design according to the latest version of **ANSI Z21.13 - CSA 4.9** standards for indoor commercial boiler applications
- Gas Input Ranges
  NFB700-500C - 499,000 to 40,000 BTUh
  NFB700-600C - 599,000 to 40,000 BTUh
  NFB700-800C - 799,000 to 66,000 BTUh
  NFB700-1000C - 999,000 to 66,000 BTUh
- **Turndown Ratio (TDR)** up to 15:1
- **Patented Stainless Steel Fire Tube Heat Exchanger** designed for durability, low pressure loss, and super-efficient operation at pressures up to **160 psi**
- **NFB700-500/600C** Venting - Compatible with **4" PVC vent up to 150 ft**
  NFB700-800/1000C Venting **- Compatible with 6" PVC vent up to 150 ft***
  (* with no elbows)
- **LCD Color Front Panel** - allows adjustment of hot water temperatures and boiler functions including Outdoor Reset Curve settings, pump operation, Integrated Low Water Safety Control, indirect DHW priority, and unit output capacity
- **Low Voltage Terminal Strip** - contacts for thermostat or zone controller, indirect DHW tank thermostat, outdoor reset, 24 VAC device relay, air handler interrupt, and required safety/control switches
- **High Voltage Terminal Strip** - dry contacts provided for use with boiler, system, and DHW pump wiring**
  (2A max per pump)**
- **Temperature Options** - two boiler operating setpoints: hydronic heating temperature and DHW (indirect) settings range from **77°F (25°C) up to 194°F (90°C)**
- Built-in **Wi-Fi** Control for monitoring and remote operation
- **Ready-Link Cascade Compatible** for up to 8 units with the use of Communication Cables #**GXXX000546**
- **Common Vent Compatible** - allows cascade systems to use a single exhaust and/or intake pipe for **up to 4 units** with the use of the Common Vent Backflow Damper Collar Kit
- **Outdoor Reset Sensor** (included) - the unit controls will sense outdoor ambient temperatures and adjust the boiler operation for maximum comfort and efficiency
- **Universal Temperature Sensor** (optional) - additional temperature controls provide optimum heating system performance #**GXXX001769**
- **AHRI** - Certified **Thermal Efficiency**
  NFB700-500/600/800/1000C - 97.5% (NG/LPG)
- Compatible with **Natural Gas (NG)** and **Propane (LPG)*****
  (*** requires installation of included Field Conversion Kit by a qualified gas servicer)
- Certified by **CSA, ASME H-Stamp, SCAQMD** (Rule 1146.2 Type 1 - Complies with 14 ng/J or 20 ppm NOx @ 3% O2)
- **10-Year** Heat Exchanger**/3-Year Parts** Warranty
  (see Navien Limited Warranty)
- **Optional accessories** are available *(see below)*



Floor Standing Design** featuring **Rear Water** and **Gas Connections - Compatible** with **4" or 6" PVC Vent



Large Color LCD Front Panel** with **Advanced Hydronic Operation** and **Temperature and Status Display

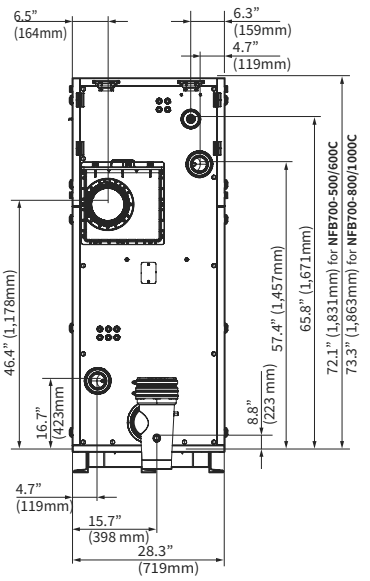
						
Pressure Relief Valve (GXXX001931 - 75 PSI) (GXXX001946 - 150 PSI)	**BMS Gateway Module** (GXXX001932 - Modbus/BACnet) (GXXX001933 - LonWorks)	**Universal Adapter** (TBD)	**Condensate Neutralizer** (**GXXX002366** - For use with 1-2 units) (**GXXX002367** - For use with 4 units)	**Zone Pump Controller** (PFMZ-04P-001 - For 4 Zones) (PFMZ-06P-001 - For 6 Zones)	**Common Vent Damper Kit** (4" - GXXX002990) (6" - GXXX002991)	**Universal Temperature Sensor (with clip)** (GXXX001769)

Navien

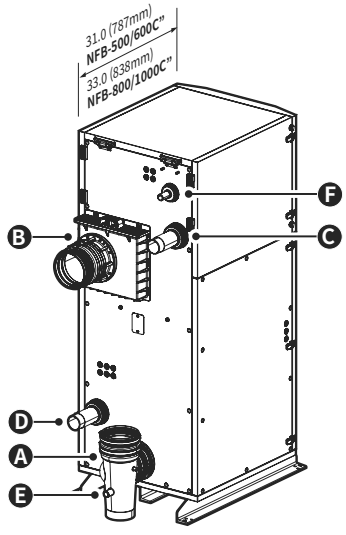
Condensing Gas
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Technical Data Sheet

Dimensions



Rear View



Angle View

Connection Size

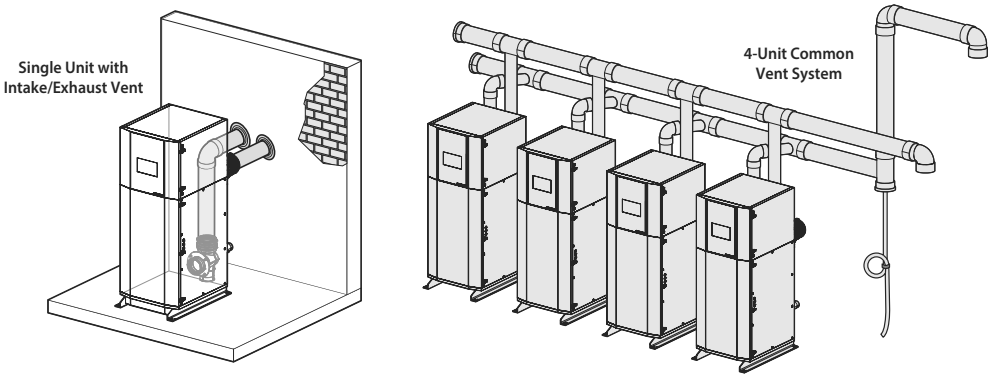
	Description	NFB700-500C NFB700-600C	NFB700-800C NFB700-1000C
A	Exhaust Gas Vent	4 in	6 in
B	Air Intake	4 in	6 in
C	Heating Supply	2 in	2½ in
D	Heating Return	2 in	2½ in
E	Condensate Outlet	1 in	1 in
F	Gas Connection	1 in	1-1/4 in

Navien Commercial Condensing Boiler Space Heating Ratings — AHRI CERTIFIED® www.ahridirectory.org — **Other Specifications**

Model Number[1]	Heating Input (MBH) Min.	Heating Input (MBH) Max.	Gross Output[2] (MBH)	Net AHRI Rating Water[3] (MBH)	Thermal Efficiency[2] (%)	Boiler Water Content (Gallons)	Water Pressure	Water Connection Size Min. Max. (Supply / Return)
NFB700-500C	40	499	486	422	97.5	26.1	12-160 psi	2 in NPT
NFB700-600C	40	599	584	507	97.5			
NFB700-800C	66	799	779	676	97.5	36.5		2.5 in NPT
NFB700-1000C	66	999	974	846	97.5			

		NFB700-500C / NFB700-600C	NFB700-800C / NFB700-1000C
Dimensions		28.3 in (W) x 31.0 in (D) x 72.1 in (H)	28.3 in (W) x 33.0 in (D) x 73.3 in (H)
Boiler Weight		551 lb (250 kg)	728 lb (330 kg)
Boiler Weight with Water		578 lb (262 kg)	765 lb (347 kg)
Installation Type		Floor Standing	
Venting Type		Forced Draft Direct Vent	
Ignition		Electronic Ignition	
Natural Gas Supply Pressure (from source)		3.5 in-10.5 in WC	
Propane Gas Supply Pressure (from source)		8.0 in-13.0 in WC	
Natural Gas Manifold Pressure		-0.06 to -0.87 in WC	-0.03 to -1.85 in WC
Propane Gas Manifold Pressure		-0.01 to -0.92 in WC	-0.01 to -0.90 in WC
Gas Connection Size		1 in NPT	
Power Supply	Main Supply	120 V AC, 60 Hz	
	Maximum Power Consumption	Less than 12 amperes	
Materials	Casing	Cold-rolled carbon steel	
	Heat Exchangers	Stainless Steel	
Venting	Exhaust	4 in PVC, CPVC, approved polypropylene approved stainless steel 4 in Special Gas Vent Type BH (Class III, A/B/C)	6 in PVC, CPVC, approved polypropylene approved stainless steel 6 in Special Gas Vent Type BH (Class III, A/B/C)
	Intake	4 in PVC, CPVC, polypropylene, stainless steel 4 in Special Gas Vent Type BH (Class III, A/B/C)	6 in PVC, CPVC, polypropylene, stainless steel 6 in Special Gas Vent Type BH (Class III, A/B/C)
Safety Devices		Flame Rod, APS, Ignition Operation Detector, Water Temperature High Limit Sensor, Exhaust Temperature High Limit Sensor, LWCO (Low Water Cut Off), High Gas Pressure Switch, Low Gas Pressure Switch	

Installation Examples



**Navien reserves the right to change specifications at any time without prior notice*