

NFB-C Series



NFB-C Condensing Commercial Fire Tube Boilers



Human innovation
meets robotic precision

Optional LonWorks & Modbus/BACnet gateways

Navien's proprietary equipment
data converts to LonWorks,
BACnet MS/TP, BACnet/IP and
Modbus TCP protocols.





Navien NFB-C series commercial fire tube boilers

Navien's high efficiency fire tube condensing technology makes NFB-C hard to beat and the easy choice for today's commercial boiler applications

- Robotic and automated manufacturing technology for unmatched quality control
- In-house designed and built components, for system matched compatibility...unlike most competitors who use the same out-sourced parts to build their boilers
- Lower installation costs with our innovative engineered compact wall hung design, intuitive controls, top or bottom piping connections and flexible venting options
- Lower operating costs with the industry's leading thermal efficiency at TE 97.5%...Energy Star approved
- Best-in-class training and technical support
- One of the industry's best warranties

TE 97.5%

FIRE TUBE STAINLESS
STEEL
HEAT EXCHANGER

TDR UP TO 15:1

BACNET/LONWORKS
BMS COMMUNICATION
CAPABLE

160 PSI
A S M E
WORKING
PRESSURE

**TOP & BOTTOM
PIPING**

 **APPROVED**

Patented stainless steel fire tube heat exchanger

Navien's ASME-certified, "H" stamped stainless steel fire tube heat exchangers are in-house designed and built by the latest in robotic and automated technology, reducing high stress point weld failures common on other boilers.

Low profile burner removes easily and improves serviceability, unlike other's bulky cylindrical burners.

Innovative heat exchanger design allows water to fill to the top eliminating extra combustion chamber insulation and improving durability.

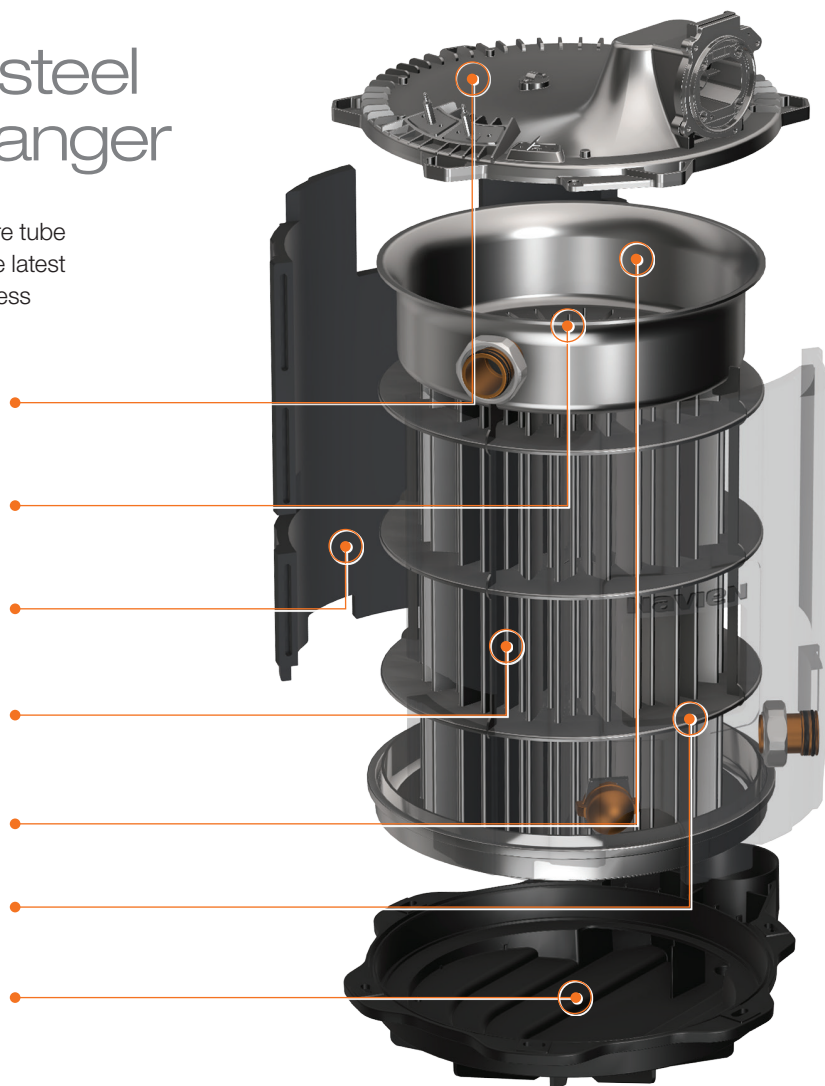
EPP exterior insulation reduces heat loss and increases efficiency.

Turbulators inside the tubes increase structural strength and create a cyclone effect of flue gases maximizing heat transfer and efficiency.

One-piece combustion chamber minimizes number of weld points prone to corrosion.

New diaphragm design optimizes water flow and improves performance.

Non-metallic drain pan prevents corrosion caused by acidic condensate, unlike competitor's metal pans.



Advanced 7" touch screen controls

Easy intuitive navigation for setup, troubleshooting and operation.



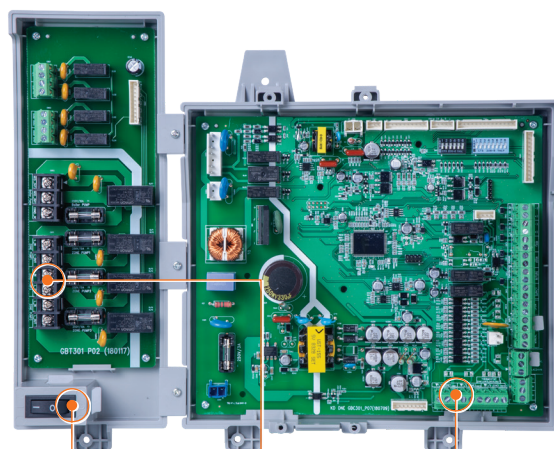
Built-in USB port

Download boiler data and settings. Upload software updates and boiler settings.



Built-in hardware connects boiler pump & 3 zone pumps

All integrated into the NFB-C circuit board. Also includes a DHW priority zone.

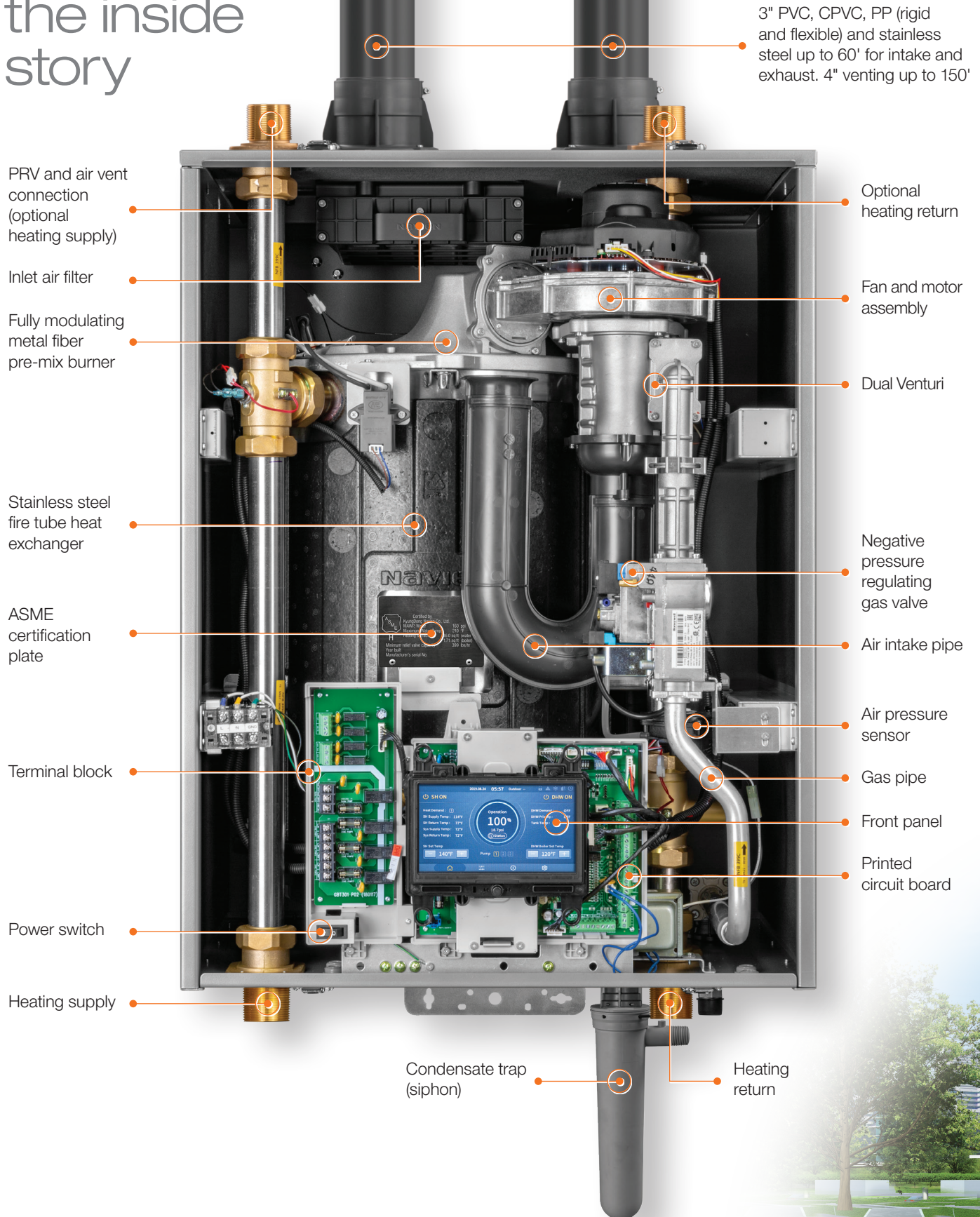


Easy access on/off power switch.

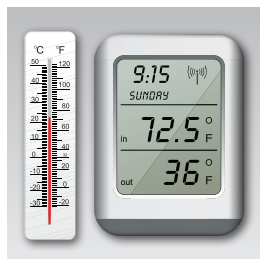
Dry contact relays for boiler pump and 3 zone pumps.

Low voltage terminal for up to 3 thermostats.

NFB-C: the inside story



Compare these advantages to other boilers



15:1 industry leading turndown ratio

The sophisticated gas flow control system provides a high turn down ratio which reduces energy waste and excessive boiler cycling while also enhancing temperature control for DHW.



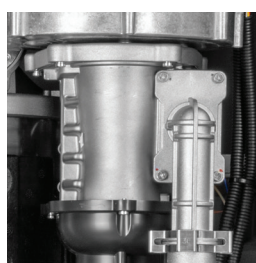
Multiple venting options

Low exhaust gas temperatures allow use of PVC, CPVC, polypropylene (rigid and flexible) and stainless steel venting reducing installation time and costs. System can use 3" venting for up to 60', or up to 150' with 4" venting.



Space saving

The sleek wall-hung design uses much less space than traditional floor standing boilers, making installations a lot easier.



Dual Venturi and field gas convertibility

Dual Venturi system creates better combustion control and turn down ratio. Orifice for easy field gas convertibility from NG to LP. Conversion kits included with every NFB-C series boiler.



Advanced controls

All system setup, operations and troubleshooting available at your fingertips with the 7" color display panel. Intuitive text information makes everything easier.



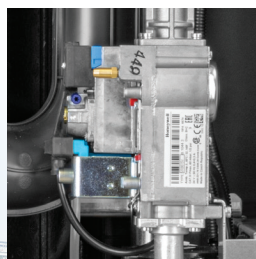
Air intake filter

This heavy duty inlet air filter has easy access for cleaning and filter replacement.



Top and bottom piping

Easy pipe connections for floor or wall hung installations.



Low gas pressure operation

Negative pressure regulating gas valve ensures maximum performance all the way down to 3.5" of water column on natural gas and 8" of water column on propane gas.



Cascading & common venting

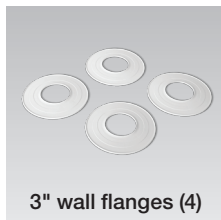
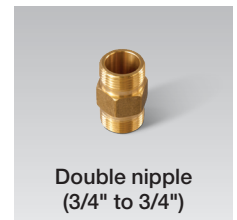
Cascade up to 32 units and common vent up to 4 units

With our cascading technology, when a unit gets up to 80% capacity the next unit will start to help meet the hydronic heating requirements. This boiler sequence will continue until all units are generating the needed hydronic heat. The Navien cascading system also balances out the workload of each unit for longer life.



NFB-C included extras

When you open the box, you will find these components included with every NFB-C boiler



NFB-C series optional boiler accessories



NaviLink™ Wi-Fi control

This add-on accessory will enable customers with smartphones and tablets to control temperatures remotely, access usage data and receive diagnostic notifications on all Navien products (NPE-A2, NPE-S2, NCB-H, NFC-H, NFB-H, NFB-C, NHB).

PBCM-AS-001



Pressure relief valves

75 PSI

GXXX001931

150 PSI

GXXX001946



Lg. Commercial neutralizer

Designed to neutralize the condensate of up to:
11 units NFB-301C; 9 units NFB-399C
GXXX002367

Replacement media for large commercial neutralizer

GXXX002369



Commercial neutralizer

Designed to neutralize the condensate of up to:
3 units NFB-301C; 2 units NFB-399C
GXXX002366

Replacement media for commercial neutralizer

GXXX002368



Ready-Link® communication cable

Required to cascade and common vent multiple NFB-C units.

GXXX000546



SmartZone+ pump controller

Zone pump controller designed to work with NFB-C series units allowing control from 2 to 6 zone pumps. Adding the SmartZone control will also allow expansion of the built in NFB zoning

2 Zones: PFMZ-02P-001

3 Zones: PFMZ-03P-001

4 Zones: PFMZ-04P-001

6 Zones: PFMZ-06P-001



Universal temperature sensor

GXXX001769



NFB-C common vent collar kit

Required for common vent installations with NFB-C.

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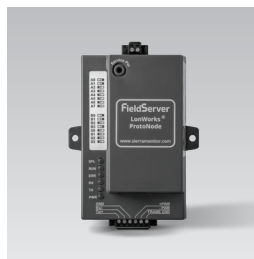
Includes cascade cable (GXXX000546) and common vent collar damper.



Modbus/BACnet gateway & power adaptor

Converts proprietary equipment data to BACnet MS/TP, BACnet/IP and Modbus TCP building automation protocols. Built-in Wi-Fi capability allows connection without accessing facility's LAN network. Includes gateway, power supply, connectors and set up instructions.

GXXX001932



LonWorks gateway & power adaptor

Converts proprietary equipment data to LonWork protocol. Includes gateway, power supply, connectors and set up instructions.

GXXX001933



Ready-Link® commercial rack system

Base and add-on will include pipe support brackets.

Base

GFFM-KDIZUS-007

Add-on

GFFM-KDIZUS-008

Dimensions

