



NTI COMPASS

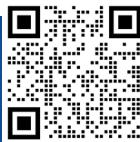
FLOOR STANDING BOILER

INSTALL-READY BY DESIGN

The NTI Compass Series are high-efficiency floor standing boilers without the install-day surprises. So you can replace the boiler, not the room.

KEY FEATURES:

- **Floor-standing Design Fits Existing Boiler Sites**
- **No Wall Construction, Stands, or Major Re-piping**
- **Up to 96% AFUE High-Efficiency Performance**
- **10:1 Modulation**
- **Brass Internal Components**
- **Built-in ECM Pump**
- **Combi & Heat-Only Models**



FEATURES AND BENEFITS

Designed for real-world retro-fit jobs - the NTI Compass Series delivers high-efficiency performance in a floor-standing boiler built for straightforward replacement, with minimal rework, less labor, and predictable installs.

- **Integrated ECM Pump with Primary & Secondary Piping**

If the system already has primary/secondary piping, just close the internal valve and use the system piping.

- **User Friendly Interface with Start-Up Wizard & Wi-Fi Diagnostics**

Easy configuration and effortless setup with NTI's intuitive control interface. Multiple language options are available in the settings.

- **Floor Standing Design Easily Fits Existing Boiler Installs**

Drops right into existing footprint with every component readily accessible, and ample working space during installs. Choose between direct vent or indoor combustion air. Each vent is furnished with a test port for accurate set up and adjustments.

- **Left- or Right-Hand Piping Connections**

All plumbing connections (CH, DHW, condensate drain, gas) are independently reversible from side to side.

- **Models Available in Both Combi & Heat Only**

Both models incorporate robust hydraulic components fabricated from solid brass and a reliable 3-way valve to divert boiler water for space heating or domestic hot water heating.



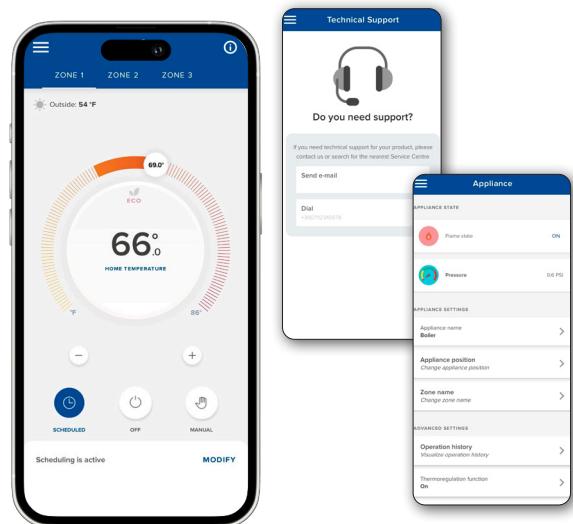
ADDITIONAL TECHNICAL FEATURES

- Integrated 2-zone controller (2x CH inputs and outputs)
- Optional NTI 3-Zone Controller communicates directly with boiler control (expands zone management to 5 zones)
- Adjustable Outdoor Reset via outdoor sensor (included) or internet weather data (via Wi-Fi)
- Cascade up to 8 boilers
- Indirect water heater ready - either with tank thermostat or sensor
- Field convertible to LP (kit included)
- Extremely quiet sealed cabinet design
- Optional 4-20mA or 0-10V input
- CH, DHW, and 2 pump outputs
- Integrated easy-to-service DHW filter
- Error history included
- High-energy ignition transformer

SMART CONNECTIVITY WITH **NTI**

The Compass series is Wi-Fi enabled to allow remote diagnostic and 24/7 monitoring via the NTI Remote Contractor web-based diagnostic service capability:

- Contractors can remotely manage single & multi-boiler installations
- Accessible data includes boiler readings, settings, status, history, statistics, troubleshooting & more, in real time, in an easy-to-view format
- All settings are remotely adjustable, & all changes tracked
- Service issues can be investigated remotely through viewing any past or current boiler errors
- Blocking errors promptly trigger an email notification allowing contractors to proactively notify customers of service issues with viewable log graph for easy reference
- NTI's Tech Support can connect to view boiler diagnostics



AIC® VERTICAL FIRE TUBE HEAT EXCHANGER

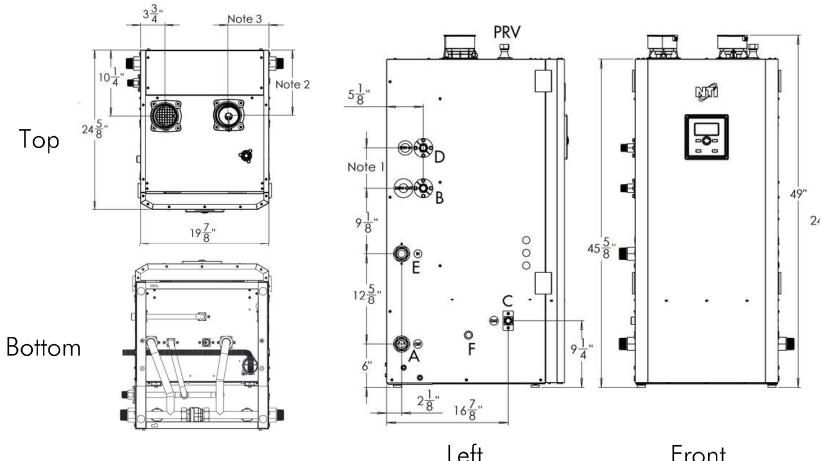
The NTI Compass series features a durable fire tube heat exchanger from AIC®, made from high-quality SA-240 S43932 Chromium stainless steel. Its down-fired design resists combustion chamber fouling, scale, and magnetite formation. Innovative dimpled tubes maximize heat extraction while keeping the unit compact and reliable.



PRODUCT DIMENSIONS

A	Central Heating Supply
B	Supply to Indirect Water Heater; *DHW Out
C	Gas Inlet
D	Return from Indirect Water Heater; *DHW In
E	Central Heating Return
F	Condensate Drain
PRV	Pressure Relief Valve
NOTE 1	Combi = 8-3/4" System = 5-5/8"
NOTE 2	NC085-110 = 11" NC150-199 = 10-1/4"
NOTE 3	NC085-110 = 6" NC150-199 = 6-3/8"

*For Combi models



PRODUCT SPECIFICATIONS

MODEL	NC085	NC110	NC150	NC199	NC110C	NC150C	NC199C		
Capacity	Input Rating CH ¹	MBH	8.5-85	11-110	15-150	19.9-199	11-110	15-150	19.9-199
	Input Rating DHW ¹								
	Heating Capacity ^{1,2}		79	101	138	184	101	138	184
	Net AHRI Rating, Water ²		69	88	120	160	88	120	160
	Modulation (turndown)	Ratio				10:1			
Performance	AFUE	%	96			95			
DHW Flow	35°F Rise	GPM				5.8	7.9	10.5	
	45°F Rise					4.5	6.1	8.2	
	77°F Rise					2.6	3.6	4.8	
Venting Length ^{3,4}	2" Min-Max Exhaust	Ft				6-100			
	2" Min-Max Inlet					0-100			
	3" Min-Max Exhaust					6-150			
	3" Min-Max Inlet					0-150			
Volume	Water Content	Gallons	2.6	3.5	4.2	2.7	3.6	4.3	
Weight	Approx "Full Boiler"	Lbs	176	192	209	178	195	212	
	Shipping		193	203	214	194	204	215	
Safety Devices		Flame Rectifier Probe, Temperature Limit Control (190°F), Water Pressure Switch (Min. 8 PSI), Freeze Protection, Condensate Trap, Flue Temperature High Limit Sensor (199°F)							

¹ Listed Input and Output Ratings are at minimum vent lengths at an altitude of 0 -2000 ft. Numbers will be lower with longer venting and/or altitude greater than 2000 ft.

² Ratings based on standard test procedures prescribed by the US Department of Energy and certified to ANSI Z21.13/CSA 4.9

³ The NTI Compass requires a special venting system. Use only the vent materials and methods detailed in these installation instructions.

⁴ It is permissible to use SS Vent material, however, only PVC/CPVC/PP can be directly inserted into the applicable adapters.

100% CHECKED AND TESTED

Every single NTI product undergoes a rigorous internal process of automated quality, efficiency and safety tests before coming to you.



f WWW.NTIBoilers.COM