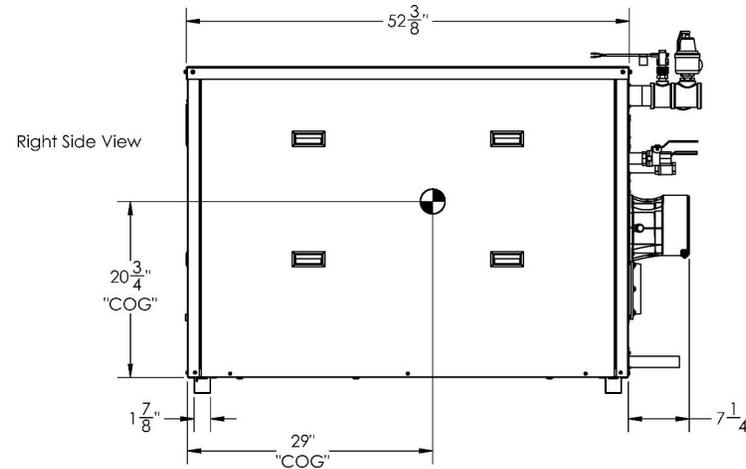
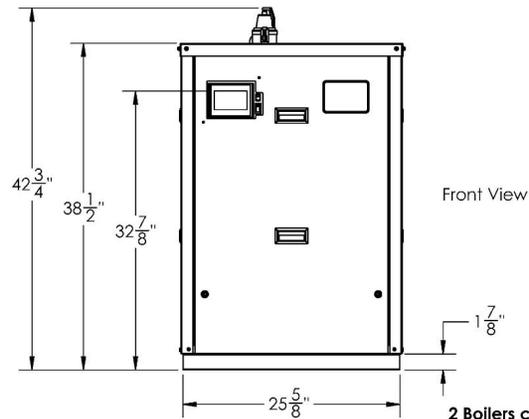
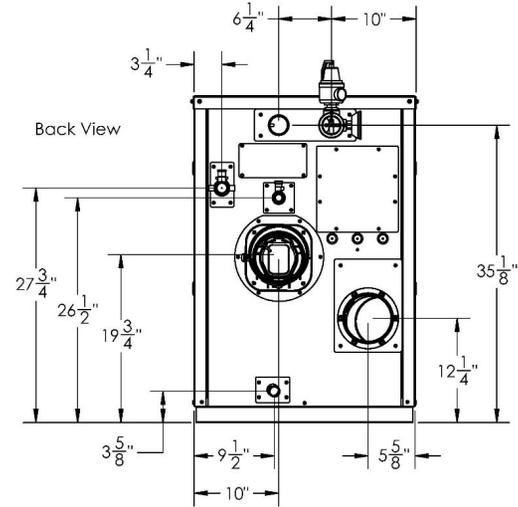
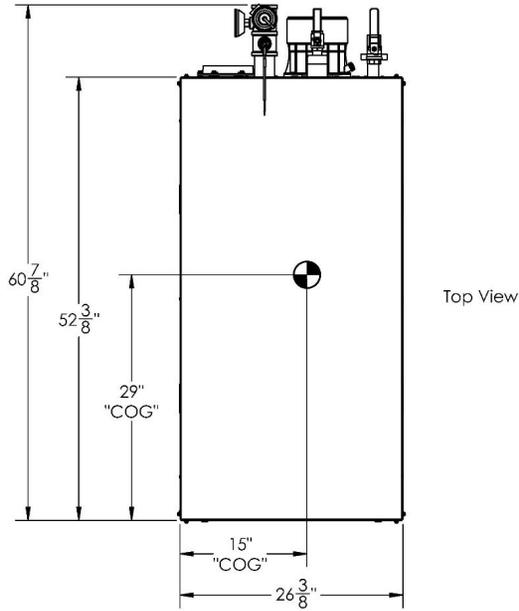




Boiler SUBMITTAL DATA SHEET



2 Boilers can be stacked vertically with included bracket kit.



783 N Chili Ave | Peru, IN 46970

BFIT-800 C

Appliance Certified for use as Boiler or DHW

Boiler Technology Leadership Since 1916
HOT WATER SYSTEMS

www.bryanboilers.com

Updated 2/24/26

ABC260201



Boiler SUBMITTAL DATA SHEET

RATINGS AND CAPACITIES		
Input - Low fire:	80,000	BTU/HR
Input - High Fire:	800,000	BTU/HR
Output - High Fire:	776,000	BTU/HR
Boiler Horsepower:	23	BHP
Recovery Rate (based on 100°F temperature rise):	950	Gallons Per Hour (GPH)
Thermal / Combustion Efficiency %:	97	
Heating Surface:	61	Sq.Ft.
Water Vol. (gal):	7	Gallons
Fuel:	Natural Gas or LP	
Firing Rate:	Full Modulation	
Burner Turndown:	10:1	
Low NOx Emissions:	<10 ppm	
Inlet Gas Pressure (NG):	4" (Min.) / 14" (Max.)	
Inlet Gas Pressure (LP):	8" (Min.) / 14" (Max.)	
Approx. Shipping Weight (lb):	560	lbs.

ASME Section IV (Max 160 PSIG / 210°F)
 Setpoint range is 60-185°F
 Adjustable, manual reset high limit setting of ≤ 200°F.
 ASME H stamp MAWT is 210°F for the vessel. (For max setpoint, see Setpoint range.)
 ETL Certified to ANSI Z21.13 / CSA 4.9 & ANSI Z21.10.3 / CSA/4.3
 ETL Certified to UL 795 / CSA 3.1 & NSF / ANSI Standard 372



DIMENSIONS / CONNECTIONS		
Height:	38 1/2	(Note 1)
Width:	25 5/8	(Note 2)
Length:	52 3/8	(Note 3)
Water Outlet Pipe (FNPT):	2	
Water Inlet Pipe (MNPT):	2	
Vent Connection:	6	
Air Intake Connection:	6	
Condensate Drain (PVC):	1	
Drain Line Connection:	3/4	
Gas Inlet Connection (FPT):	1	

FLOWS AND PRESSURE DROPS		
Delta T	Flow (GPM)	Head Loss (ft)
20°	78	12.8
30°	52	7.0
40°	39	4.6

Electrical Requirements: (Appliance Only)				
Model	Voltage	Phase	Hz	Max. Amp Draw
400	120	1	60	7
500				7
650				8
800				8
1000				8
1250-1500				10

BOILER ALTERNATIVE RELIEF VALVE KITS (75 PSI STD.)			
<input type="checkbox"/>	30 PSI	<input type="checkbox"/>	100 PSI
<input type="checkbox"/>	50 PSI	<input type="checkbox"/>	125 PSI
<input type="checkbox"/>	60 PSI	<input type="checkbox"/>	150 PSI

Water Heater T&P Relief Valve Kits		
<input type="checkbox"/>	125 PSI	
<input type="checkbox"/>	150 PSI	

- | NOTES: |
|---|
| 1. Height dimension is from floor to top of jacket. |
| 2. Length is from jacket front to jacket rear. |
| 3. Dimensions shown are for reference only |
| 4. Refer to manual for gas supply piping charts |



Boiler SUBMITTAL DATA SHEET

STANDARD EQUIPMENT

PRESSURE VESSEL DESIGN

Stainless Steel Heat Exchanger
 ASME Section IV Certified, "H" Stamp
 MAWP 160 PSIG & Max Temp 210°F
 Setpoint range is 60-185°F
 Adjustable, manual reset high limit setting of ≤ 200°F.
 ASME H stamp MAWT is 210°F for the vessel. (For max setpoint, see Setpoint range.)
 Ten Year Limited Pressure Vessel Warranty

COMBUSTION DESIGN

Stainless Steel Pre-Mix Burner
 Low NOx Emissions (< 10 ppm)
 Full Modulation, 10:1 Turndown
 Natural Gas or Propane
 4" wc (8" wc Propane) to 14" wc inlet gas pressure
 Direct Spark Ignition System
 High/Low gas pressure switches, manual reset
 Variable Speed Combustion Blower
 Blocked Vent Switch

VENTING

Category II or IV Venting
 Individual or Common (Engineered) Vent System
 Vertical or Horizontal
 3-in-1 Vent Connector: Accepts CPVC, PP or Stainless Steel
NOTE: PVC venting requires CPVC Vent kit; Consult I&O Manual.
 Includes built-in vent gas sensor test port
 Direct Vent & Sealed or Room Air or Outdoor Ready
 Outdoor installations require the optional outdoor exhaust vent kit

* Flue system material shall be capable of continuous operation at 210°F or higher and shall be certified to UL 1738 – venting system for gas-burning appliances cat II, III and IV.

APPLIANCE EQUIPMENT

Indoor / Outdoor Construction (Field Convertible)
 Stainless steel water piping suitable for boiler or domestic (potable) water applications
 Concert™ Control (24 Vac)
 High Limit Temp Control, Manual Reset
 Low water cutoff, manual reset
 Water Flow Switch
 Supply & Return Water Temperature Sensors
 Flue Gas Temperature Sensor
 Condensate trap
 Blocked Condensate Switch
 Pressure & Temperature Gauge
 ASME 75 PSI Relief Valve Standard (Available 30, 50, 60,100, 125 or 150 psig)
 NOTE: Stacking Brace Kit (PN# 111405-00 included with all 400-1500 models. Kit includes 2 braces & 8 self-drilling screws.
 NOTE: For stacking outdoor boilers, consult factory

ELECTRICAL DESIGN

Models 400-500	-120 VAC Only	AMP Draw: 7.0 Amps
Models 650-1000	-120 VAC Only	AMP Draw: 8.0 Amps
Models 1250-1500:	-120 VAC Only	AMP Draw: 10.0 Amps

24VAC/5VDC - Low Voltage PCB

- EMS Communications
 (Dual RJ45 Jacks for Peer-To-Peer or Modbus)
- Boiler Options (Sensors)
- Pumps (Boiler, DHW, System) & Auxiliary Devices



Boiler SUBMITTAL DATA SHEET

OPTIONAL EQUIPMENT

- Hydronic Kit (Boiler Circulation Pump, Pump Flange Kit and Condensate Neutralizer)
- Water Heater Pump (Circulation Pump & Pump Flange Kit) 4-12 GPG Water Hardness 12-15 GPG Water Hardness
- External High Limit Temperature Control, Manual Reset
- Condensate Neutralizer
- Supply Header Temperature Sensor: Direct Immersion Well Immersion (with Well)
- Outdoor Air Temperature Sensor (Wired)
- Domestic Hot Water Sensor with Well Kit
- EMS Signal Converter Kit (Converts Energy or Building Management System 0-10v signal to 4-20mA)
- Alarm Buzzer with Silencing Switch
- PVC /CPVC Vent Kit PN# 111569-01, Sizes 400-500 PN# 111569-02, Sizes 650-1000 PN# 113404-01, Sizes 1250-1500
- Outdoor Vent Kit PN# 110644-01, Sizes 400-500 PN# 110645-01, Sizes 650-1000 PN# 113442-01, Sizes 1250-1500 (8")
- Universal Communications Gateway BACnet, Metasys N2, Modbus LonWorks
- Conductor Sequencing Panel Optional Isolation Relay Board

The Conductor manages multiple condensing & non-condensing, small & large heat output, new and/or existing boilers (full modulation or on-off), and steam or hot water applications. It helps improve system efficiency by selecting and modulating the right boiler to match operating conditions. The Conductor offers a single point boiler plant Energy Management System (EMS) interface including Modbus TCP/IP, Modbus RTU RS485, BACnet/IP and BACnet MSTP standard. If LonWorks needed, add for the separate LonWorks gateway.

- Water Heater Storage Tank Model: _____ Size: _____

EXTENDED WARRANTY

- 3-Year Parts 5-Year Parts 10-Year Parts 5-Year Parts/Labor 10-Year Parts/Labor



Boiler SUBMITTAL DATA SHEET

CONCERT CONTROL FEATURES



Dashboard - Color Touchscreen Display, 4"

- Intuitive Icon Navigation
- "Quick" Setup Menus
- *Real Time BTU/H Display

Two (2) Temperature Demand Inputs

- Outdoor Air Reset Curve for Each Input
- Time of Day Setback Capability
(Envirocom Thermostat must be installed)

Three (3) Pump Control

- Boiler Pump With On/Off or Variable Speed Control
- Domestic Hot Water (DHW) Pump
- System Pump
- Alternative Control to Combustion
- Air Damper or Standby Loss Damper
- Pump Overrun for Heat Dissipation
- Pump Exercise
- Pump Rotor Seizing Protection

Peer-to-Peer Boiler Communications

- Multiple Size Boiler Sequencing Up to 8 Units
- *Two (2) Boiler Start/Stop Trigger
- Lead Boiler Automatic Rotation

Energy Management System (EMS) Interface

- *Firing Rate and Water Temperature Based
 - Algorithms for Multiple Boilers; loss of EMS signal defaults to local boiler settings
- 420mAdc Input/Output (010Vdc Optional Converter)
- ModBus Input/Output (BACnet or LonWorks Optional Gateway)
- Simultaneous Interface with Peer-to-Peer

USB Data Port Transfer

- Upload Settings Between Boilers
- Download Parameters for Troubleshooting
- Import Data into .CRV Formatted Files for Performance Analysis

* Unique to Concert

Energy Efficiency Enhancer

- Anticycling Technology
- Multiple boiler base load common rate
- Outdoor Air Temperature Reset Curve
- Warm Weather Shutdown
- Boost Temperature & Time
- Ramp Delay
- Overtemperature Safeguarding

Self-Guiding Diagnostics

- Identifies Fault
- Describes Possible Problems
- Provides Corrective Actions
- Time/Date Stamp on Alarms and Lockouts

Unmatched Archives

- Historical Trends Collects Up to 4 months Data
- Event History Up to 3000 Alarms, Lockouts and Cycle & Run Times
- Alarm Limit String Faults, Holds, Lockouts and Others
- Cycle & Run Time Boilers & Pumps
- Resettable (Lockouts/Alarms/Cycles & Run Time)

Domestic Hot Water Priority

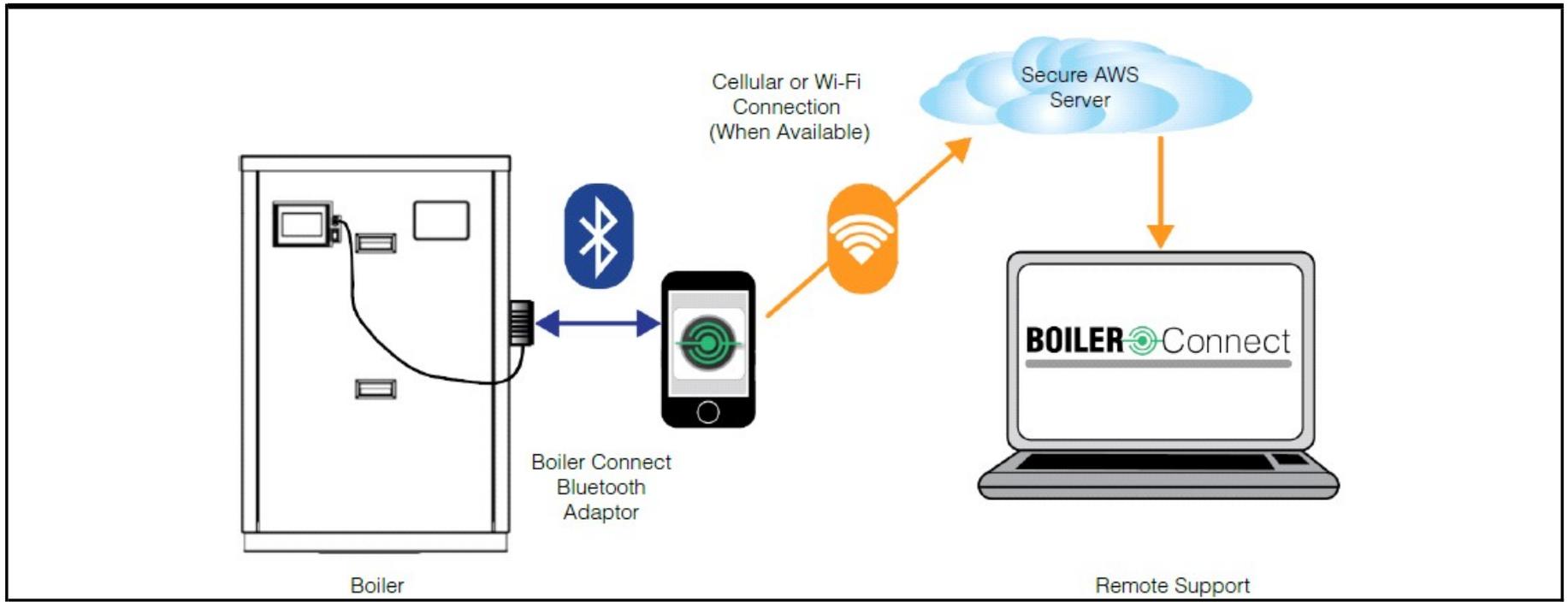
- DHW Tank Piped With Priority in the Boiler Loop
- DHW Tank Piped as a Zone in the System With the Pumps Controlled by the Concert Control
- DHW Modulation Limiting
- Status Screens
- Sensor Monitoring and Control

Other Features

- Factory Default Settings
 - Three Level Password Security
 - Frost Protection
- Contractor Contacts (Up to 3)
- Low Water Flow Safety Control & Identification
- Proportional Integral Derivative (PID) Parameters for Central Heat, DHS, Sequencer and Fan

Boiler Connect Compatible

Requires one (1) Boiler Connect Bluetooth Adapter Kit (PN# 113329-01) per install or cascade)



BOILER Connect

BOILER CONNECT FEATURES

- Bluetooth adapter connects to the Boiler Connect App
- English or Spanish language
- Start-up, Troubleshooting Tips and Service Wizards
- Data logs, Service and Status Reports sent to the cloud
- Live Data Sharing (Cellular Service Required) with Technical Service Representative