

B FIT

Commercial High Efficiency Condensing Boilers and Water Heaters

399-1500 MBH

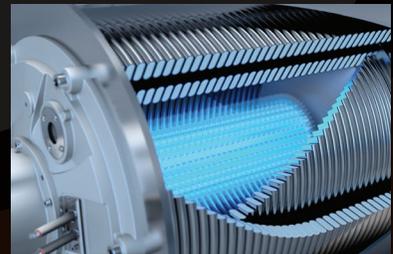


A **B**etter fit
for any boiler room

- Stackable/rackable
- Streamlines replacement
- Simplified specification & installation
- Reliability & serviceability



2000-3999 MBH



BOILER  **Connect**
C O M P A T I B L E

BTM **BRYAN**[®]
BOILERS

BFIT (399-1500 MBH)

Boilers & Water Heaters



- CSD-1 compliant
- Stackable, hardware included
- Zero clearance on sides & top
- Fits through 30" doorways
- Modbus connectivity, cascade up to 8 individual units
- Indoor/outdoor construction
- 10:1 turndown, natural gas or LP (400-1000 models)
- Easy service and maintenance – complete service access to burner, combustion chamber, and slide-out boiler control vestibule
- Warranty: 10-year limited heat exchanger, 1-year parts & burner



PRESSURE VESSEL

- Stainless steel watertube heat exchanger
- ASME Section IV-certified
- MAWP 160 PSIG
- CSD-1 compliant
- Stainless steel inlet and outlet manifolds (Boilers and Water Heaters)

COMBUSTION

- Stainless steel pre-mix burner
- Low NOx emissions (<10 ppm);
- Full modulation, 10:1 turndown
- 4" wc to 14" wc inlet gas pressure
- 8" wc LP min
- Direct spark ignition system
- High/low gas pressure switches w/ manual reset
- Combustion air switch

- Zero governor gas valve
- Variable speed combustion blower
- Air proving switch & blocked vent switch

VENTING

- 3-in-1 connector (400-1000 models)
- 100' equivalent exhaust, 100' equivalent intake (400-1000 models)
- 150' equivalent exhaust, 150' equivalent intake (1250 and 1500 models)
- CPVC, polypropylene or stainless steel acceptable
- Air intake – sealed combustion or room air
- Category II or IV venting
- Individual or common (engineered) venting systems

EQUIPMENT

- Concert™ control
- High limit w/ manual reset temp control

- Low water cutoff w/ manual reset
- Water flow switch
- Supply & return, and water temperature sensors
- Flue gas temperature sensor
- Condensate trap
- Blocked condensate switch
- Pressure & temperature gauge
- ASME safety temperature & pressure relief valve (boilers: 75 PSI, water heaters: 125 PSI)

ELECTRICAL

- High voltage printed circuit board (PCB)
- 120 VAC / 60 Hz / 1PH power supply
- 120 VAC manual reset external limit contacts
- Three sets of pump contacts
- PCB fused connections

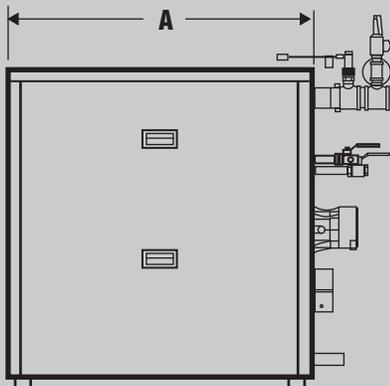
Printed circuit board (PCB)

- 24 VAC enable/disable sensor contacts
- 24 VAC proving switch or manual reset ext. limit contacts
- 24 to 120 VAC lockout alarm contacts
- DHW demand contacts
- Remote header sensor contacts
- DHW tank sensor contacts
- Peer-to-peer communication contacts
- EMS interface contacts
- Remote 4-20mA contacts

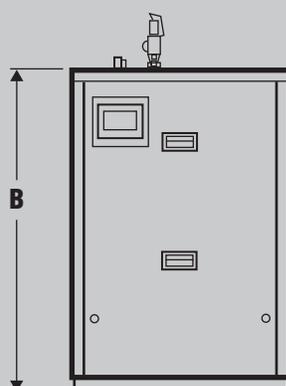
BFIT 400-1500 Dimensions (Inches)

Model*	A	B	Vent Connection	Gas Connection NPT	Supply (NPT)	Return (NPT)
BFIT & BFITV-400	36-1/2	38-1/2	4	3/4	2	2
BFIT & BFITV-500	36-1/2	38-1/2	4	3/4	2	2
BFIT & BFITV-650	53-7/8	38-1/2	6	1	2	2
BFIT & BFITV-800	53-7/8	38-1/2	6	1	2	2
BFIT & BFITV-1000	53-7/8	38-1/2	6	1	2	2
BFIT & BFITV-1250	55-3/8	40-1/4	8	1-1/4	2	2
BFIT & BFITV-1500	55-3/8	40-1/4	8	1-1/4	2	2

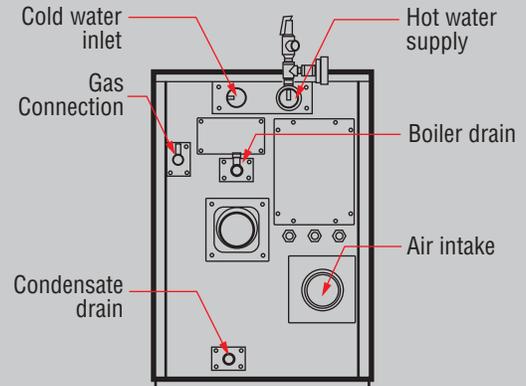
* Water heater models are "-V"



SIDE



FRONT

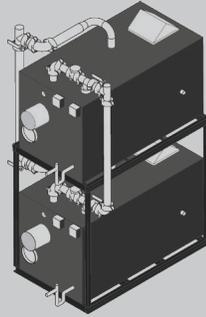


REAR

BFIT (2000-3999 MBH)

Boilers & Water Heaters

- CSD-1 compliant
- Stackable with optional racking system
- Modbus connectivity, cascade up to 8 individual units
- 5:1 turndown, natural gas or LP natural gas, LP, or dual fuel (NG/LP)
- Complete access to burner and combustion chamber for ease of service
- Warranty: 10-year limited heat exchanger, 1-year parts & burner



PRESSURE VESSEL

- Watertube stainless steel heat exchanger
- ASME Section IV-certified
- MAWP 160 PSIG
- CSD-1 compliant

COMBUSTION DESIGN

- Stainless steel pre-mix burner
- Low NOx emissions (<10 ppm)
- 4" wc to 14" wc inlet gas pressure
- 8" wc LP min
- Direct spark ignition system
- UV scanner
- High & low gas pressure switches w/ manual reset
- Zero governor gas valve

- Variable speed combustion blower
- Air proving switch
- Blocked vent switch

VENTING

- 150' equivalent exhaust, 150' equivalent intake
- CPVC, polypropylene or stainless steel acceptable
- Air intake, sealed combustion/room air
- Category II or IV venting
- Individual or common (engineered) venting systems

EQUIPMENT

- Concert™ control
- High limit w/ manual reset

- Low water cutoff w/ manual reset
- Water flow switch
- Supply & return water temperature sensors
- Flue gas temperature sensor
- Condensate trap
- Blocked condensate switch
- Pressure & temperature gauge
- ASME safety temperature & pressure relief valve (boilers: 30, 50, 60, 75, 100, 125, or 150 available, water heaters: 150 PSI standard)

ELECTRICAL

- High voltage printed circuit board (PCB)
- 120, 208 or 240 VAC / 60 Hz / 1PH power supply
- Three sets of pump contacts
- PCB fused connections

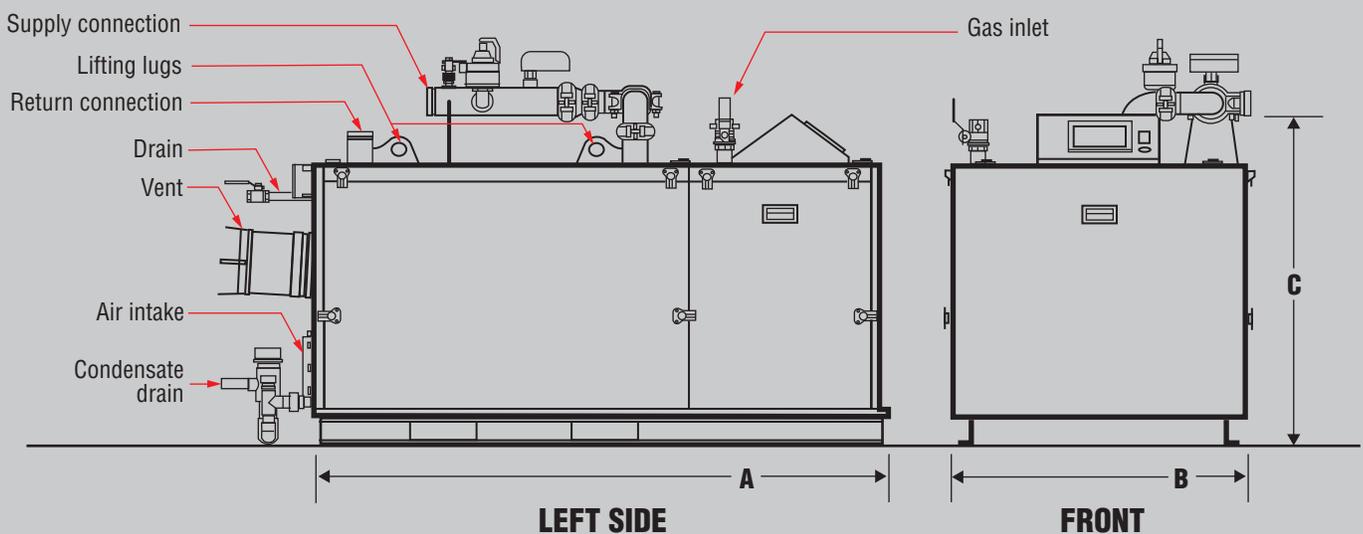
Printed Circuit Board (PCB)

- 24 VAC enable/disable sensor contacts
- 24 VAC proving switch or manual reset ext. limit contacts
- 24 to 120 VAC lockout alarm contacts
- DHW demand contacts
- Remote header sensor contacts
- DHW tank sensor contacts
- Outdoor air sensor contacts
- Peer-to-peer communication contacts
- EMS interface contacts
- Remote 4-20mA contacts

BFIT 2000-4000 Dimensions (Inches)

Model*	A	B	C	Vent Connection	Gas Connection NPT	Supply (grooved)	Return (grooved)
BFIT & BFITW-2000	66-1/8	34-1/4	42-3/4	8	1-1/4	3	2-1/2
BFIT & BFITW-2500	76	46	55	10	1-1/2	4	4
BFIT & BFITW-3000	76	46	55	10	1-1/2	4	4
BFIT & BFITW-3500	98	46	55	12	2	4	4
BFIT & BFITW-4000	98	46	55	12	2	4	4

* Water heater models are "-W"





Advanced Control System

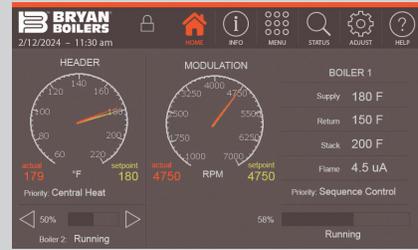
BFIT Ratings & Specifications						
Model	Input (MBH)		Gross Output (MBH)	DHW Recovery ² (GPH)	Thermal Efficiency (%)	Approx. Shipping Weight (lbs.)
	Min	Max				
BFIT-400 ³	40	399	387	—	97	460
BFITV-400 ^{1,3}	40	399	391	470	98	460
BFIT-500 ³	50	500	485	—	97	470
BFITV-500 ^{1,3}	50	500	490	588	98	470
BFIT-650 ³	65	650	631	—	97	530
BFITV-650 ^{1,3}	65	650	637	764	98	530
BFIT-800 ³	80	800	776	—	97	560
BFITV-800 ^{1,3}	80	800	784	941	98	560
BFIT-1000 ³	100	999	970	—	97	600
BFITV-1000 ^{1,3}	100	999	980	1176	98	600
BFIT-1250 ³	125	1250	1213	—	97	770
BFITV-1250 ^{1,3}	125	1250	1225	1485	98	770
BFIT-1500 ³	150	1500	1400	—	96	770
BFITV-1500 ^{1,3}	150	1500	1455	1764	97	770
BFIT-2000 ³	400	2000	1940	—	97	1217
BFITW-2000 ^{1,3}	400	2000	1959	2376	98	1217
BFIT-2500	500	2500	2425	—	97	2281
BFITW-2500 ^{1,3}	500	2500	2450	2970	98	2281
BFIT-3000	600	3000	2910	—	97	2281
BFITW-3000 ^{1,3}	600	3000	2940	3564	98	2281
BFIT-3500	700	3500	3395	—	97	2281
BFITW-3500 ^{1,3}	700	3500	3430	4158	98	2281
BFIT-4000	800	3999	3879	—	97	2281
BFITW-4000 ^{1,3}	800	3999	3920	4752	98	2281

NOTES:
 1. Water heater model
 2. Based on 40°F to 140°F temperature rise
 3. ENERGY STAR certified



BOILER Connect

Free smartphone app (App Store & Google Play) and bluetooth adapter available through your sales rep, Boiler Connect puts complete boiler control in the palm of your hand with real time status and adjustments. "Wizards" provide step-by-step instructions for start-up, service, and troubleshooting.



- Color touchscreen, real time readouts
- Intuitive navigation
- 3-level password protection



- Self-guided diagnostics
- Fault identification and correction
- Factory default settings
- Timed setback capability



- Time/date stamp on reports
- Stores up to 4 months of data
- Calculates cycle and run times
- Resettable

