

# IBC

## Better Boilers

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### VFC 15-150 / VFC 45-225

15,000 to 150,000 BTU/HR

45,000 to 225,000 BTU/HR

#### Condensing Boiler

- VFC 15-150 has Industry Leading 10:1 turn-down modulation 15,000 to 150,000 Btu/hr
- VFC 45-225 has 5:1 turndown modulation
- Sustained high efficiency across firing range even at high temperatures
- Unmatched durability from our exclusive 316Ti stainless steel 80 Psi "Super Coil" heat exchanger
- 95% AFUE Qualifies for top grants and rebates
- Built in 3-load priority management since 2003
- Contractor friendly with easy to use controls, wiring and serviceability
- Control 4 independent pumps directly from the boiler without additional relays
- Go anywhere venting options
- IBC exclusive Outdoor Reset Technology increases efficiency by lowering the water temp automatically
- Certified for altitudes up to 8,000 feet
- IBC Boilers are not de-rated because of longer vent runs.
- Limited Lifetime Residential Warranty



# High Performance Heating

# IBC

Energy Saving Technologies

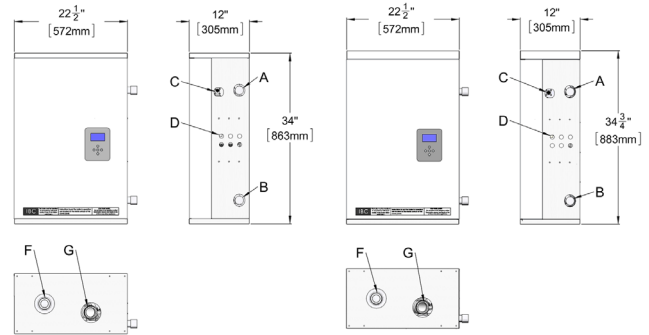
## VFC 15-150 / VFC 45-225 CONDENSING BOILERS



Intertek



	DESCRIPTION	SIZE
A	Water Outlet	1-1/4" NPT-M
B	Water Inlet	1-1/4" NPT-M
C	Gas Inlet	1/2" NPT - F
D	Knock-outs (6)	1/2"
E	LCD Display	2 3/4" x 1 1/2"
F	Exhaust Vent	2" NPT-M
G	Combustion Air	2" Schedule 40 intake pipe



VFC 15-150 dimensions

VFC 45-225 dimensions

SPECIFICATION	VFC 15-150	VFC 45-225
CSA Input (Natural Gas or Propane) - MBH	15 - 150	45 - 225
CSA Input (Natural Gas or Propane) - kW	4.4 - 44	13 - 66
CSA Output - MBH	14 - 139	41 - 206
CSA Output - kW	4.1 - 41	12 - 60
AFUE	95.0%	95.0%
Minimum gas supply pressure (Natural Gas or Propane) - inch w.c.	3	3
Maximum gas supply pressure (Natural Gas or Propane) - inch w.c.	14	14
Power use (120Vac/60Hz) @ full fire - Watts	57 (less pumps)	158 (less pumps)
Weight (empty) - lbs / Kg	150 / 68	153 / 70
Pressure vessel water content - USG / Litres	2.4 / 9	2.4 / 9
Maximum boiler flow rate - USgpm	16	25
Minimum boiler flow rate - USgpm	4	8
Maximum operating water pressure† - psig	80	80
Minimum water pressure - psig	8	8
Normal flue temperature @ 100°F boiler return water temperature - high fire	100 to 105 °F 37.8 to 40.5°C	100 to 105 °F 37.8 to 40.5°C
Normal flue temperature @ 160°F boiler return water temperature - high fire	160 to 165 °F 71.1 to 73.9°C	160 to 165 °F 71.1 to 73.9°C
Approved installation altitude - ASL	0 - 8000'	0 - 8000'
Ambient temperature - Low °F / °C - High °F / °C	32°F / 0°C 122°F / 50°C	32°F / 0°C 122°F / 50°C
Max. relative humidity (non-condensing)	90%	90%
Minimum return fluid temp.	34°F / 1°C	34°F / 1°C
Maximum supply fluid temp. (electronic hi-limit)	190°F / 87.7°C	190°F / 87.7°C
Maximum supply fluid temp. (mechanical hi-limit)	200°F / 93.3°C	200°F / 93.3°C
Max. ΔT - supply/return (electronic fence)	35°F	35°F
Maximum equivalent vent length - 2"	50'	N/A
Maximum equivalent vent length - 2 1/2"	70'	N/A
Each side (vent & air intake) - 3"	120'	240'
(Natural Gas or Propane) - direct vent or indoor air supply		

† Ships with 30 psi relief valve - 75 psi relief valve available for higher pressure applications

BOILER HEAD LOSS VFC 15-150, VFC 45-225					
Flow rate (gpm)	4	8	12	16	20
Head @ flow (ft wc)	0.7'	2.5'	5.0'	8.3'	12.3'

Pressure vessel head loss

SURFACE	DISTANCE FROM COMBUSTIBLES	FOR SERVICE
Front	2"	24"
Rear	0"	0"
Left Side	0"	8" (for vent run)
Right Side	2"	18" (piping clearance)
Top	6"	10"
Bottom	0"	24" trap clearance 15" for 15-150 with Sched. 40

Clearances from boiler cabinet

EXHAUST AND AIR INTAKE PIPE SIZE	MAXIMUM EQUIVALENT LENGTH
Sched. 40 / Rigid PPs	
2" (15-150 only)	50' (each side)
2 1/2" (15-150 only)	70' (each side)
3" (15-150)	120' (each side)
3" (45-225)	240' (each side)
90° vent elbow	allow 8' equivalent
45° elbow	allow 3' equivalent
PPs 87-90° elbows	allow 8' equivalent
PPs Flexible	
3" PPs Flexible (15-150)	60' max. - Refer to I & O Manual
3" PPs Flexible (45-225)	60' max. - Refer to I & O Manual

Maximum exhaust venting and air intake length

Air intake options: either direct vent or indoor supply

Approved vent materials: CPVC or Polypropylene (PPs) vent component systems approved under ULC-S636 Standard for Type BH Gas Venting Systems, or stainless steel Type BH venting systems. Permitted PPs materials comprise Single Wall Rigid pipe and fittings and Flexible. PVC and non-S636 material may be permitted in some U.S. jurisdictions. Refer to I & O Manual for more detail.

## FEATURES AT A GLANCE

- Built-in Outdoor Reset control of water temperature
- Built-in 3-load priority management and switching
- 316Ti Stainless Steel 80 Psi "Super Coil" HX
- Go anywhere venting options
- 10:1 Turndown Modulation of burner VFC 15-150
- 5:1 Turndown Modulation of burner VFC 45-225
- 95.0% AFUE (qualifies for top grants and rebates)

Your IBC Authorized Distributor

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