



# SFC

SUPERFLOW



# COMBI

DUAL FIRED  
COMBI BOILER  
**SFC 125 / SFC 199**



# IBC

# INNOVATIVE Labyrinth Heat Exchanger Design

Our SFC combi provides not only high-efficiency space heating, but unrivalled domestic hot water efficiency too. We call this 'Double HE'. The secret lies in our patented **two-in-one** heat exchanger that ensures optimal heat transfer and minimal heat loss.

Flue gases are condensed with both space heating and domestic hot water production ensuring heat extraction to the fullest extent possible.

Our SFC Combi boiler assures you unrivalled high efficiency and economical operation year in, year out.



## Easy Maintenance

1. Pump (ECM)
2. Exhaust Fitting
3. Burner Fan
4. Heat Exchanger
5. Rear Flue Duct
6. Gas Valve
7. Touch Pad Control
8. Condensate Trap
9. Air Intake
10. Cover
11. Inlet Gas Line
12. Outlet Gas Tube



## 5 Moving Parts

Fan, Bypass Valve, Pump, Gas Valve & Damper

The SFC Superflow contains cutting-edge, solid-state electronics to control its gas valve, fan and ignition.

By doing so, we've succeeded in reducing the number of moving parts, made servicing simple and increased reliability.



CUTTING-EDGE  
COMFORT

## THE ONLY FULLY CONDENSING COMBI BOILER ON THE MARKET

You expect your combi boiler to provide enough hot water for both your kitchen and bathroom, as well as enough heat to make your home cozy and warm. Our SFC Combi is designed to do just that. Whatever your exact heating and hot water requirements may be, our SFC combi boiler is sure to be a perfect match for you.

### SIMPLE

Mount > Connect > Plug-in > Enjoy endless heat & hot water

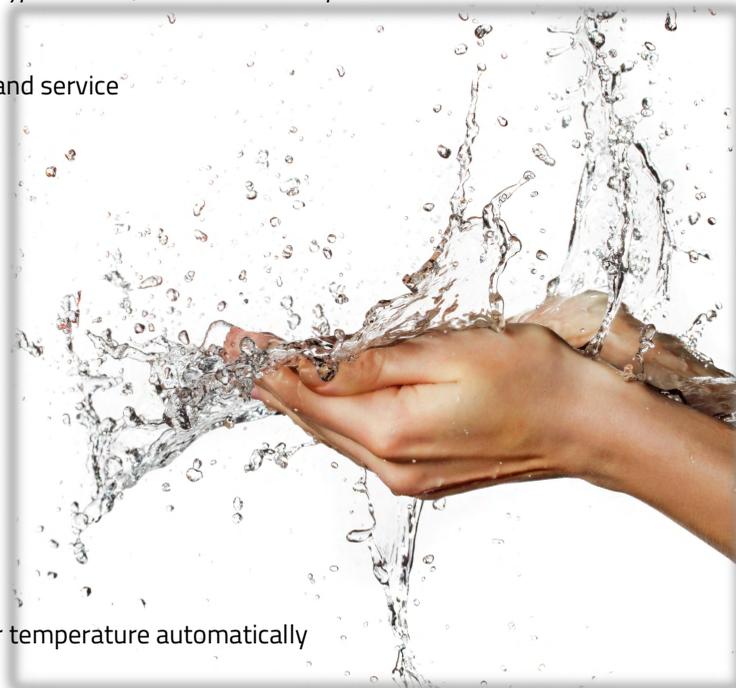
- 2 independent copper waterways embedded in a cast aluminum block
- A total of 5 moving parts - Unparalleled in the industry (*Fan, Pump, Bypass Valve, Gas Valve & Damper*)
- New illuminated touchscreen control display panel
- Contractor friendly, reduced internal parts, easy to install, maintain and service

### RELIABLE

- 30-year track record, 2 million installations worldwide
- Innovative state of the art electronic control
- Compatible with standard Propylene Glycol
- Built-in bypass valve to prevent temperature fluctuations (SFC 199)
- No need for a 3-way valve or secondary DHW plate heat exchanger
- Will accept a 0-10 VDC signal

### EFFICIENT

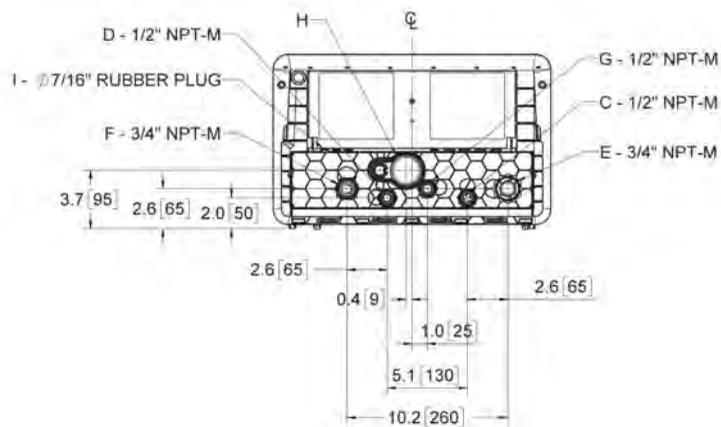
- 95% AFUE with full ASME-rated heat exchanger
- Packaged with a high-efficiency variable speed pump (ECM)
- Outdoor reset technology increases efficiency by lowering the water temperature automatically
- Advanced modulating temperature control



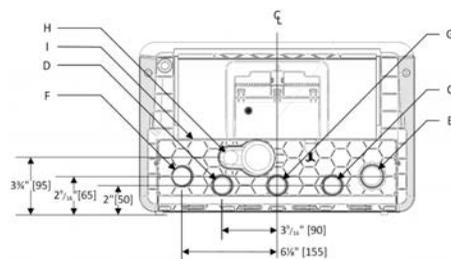
# SFC - COMBI

## Dimensions

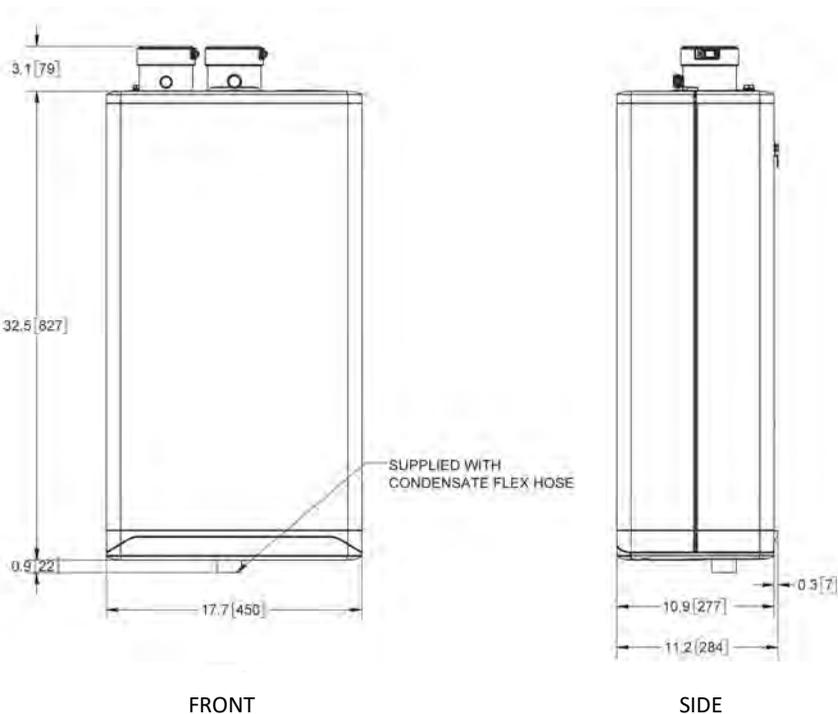
DESCRIPTION	SFC 125	SFC 199
A Exhaust outlet	3" Schedule 40	3" Schedule 40
B Combustion air	3" Schedule 40	3" Schedule 40
C Cold dom. water connection	1/2" Male NPT	3/4" Male NPT
D Hot dom. water connection	1/2" Male NPT	3/4" Male NPT
E Heating water inlet (return)	3/4" Male NPT	3/4" Male NPT
F Heating water outlet (supply)	3/4" Male NPT	3/4" Male NPT
G Gas inlet	1/2" Male NPT	3/4" Male NPT
H Condensate outlet	3/4" Hose	3/4" Hose
I Control Wiring Passage	7/16" Rubber Plug	7/16" Rubber Plug



BOTTOM - SFC 125

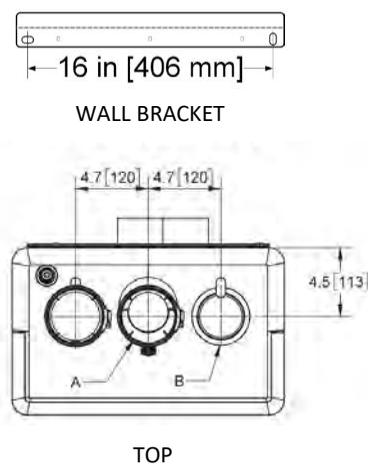


BOTTOM - SFC 199



FRONT

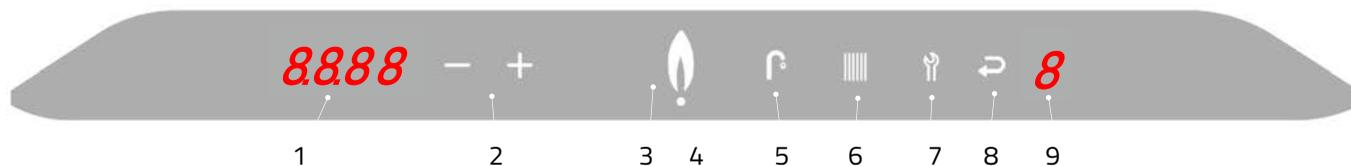
SIDE



TOP

## Touch Panel Control Indicators

The SFC controller functions as an interactive touch-sensitive panel with buttons that light up, showing indicators such as numbers, icons, or letters. Some of these lit indicators signify boiler operational status. Other indicators enable you to program the boiler.



TOUCH PANEL	FUNCTION	TOUCH PANEL	FUNCTION
1. Numerical display	Main display	6. Radiator	Space heating indicator
2. Plus & Minus	Temperature adjustment	7. Wrench	Service / Reset
3. Flame	Burner ON indicator	8. Return arrow	Enter / Save
4. Dot	Power ON indicator	9. Numerical display	Service display
5. Tap / Faucet	DHW indicator		

**ALL THE HOT WATER  
AND HEATING  
YOU'LL EVER NEED**



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## Technical Information



SPECIFICATIONS	SFC 125	SFC 199
CSA Input (Natural Gas or Propane) – MBH	16.5 - 99	28.3 - 125
CSA Input (Natural Gas or Propane) – KW	4.84 - 29.0	8.29 - 36.6
CSA Output – MBH	15.8 - 88.9	27.1 - 111
CSA Output - KW	4.63 - 26.0	7.94 - 32.5
DHW - CSA Input (Natural Gas or Propane) - MBH	16.5 - 125	28.3 - 199
DHW - CSA Input (Natural Gas or Propane) - KW	4.84 - 36.6	8.29 - 58.3
A.F.U.E	95%	95%
Min gas pressure (Nat. Gas or Propane) – inch w.c.	4	4
Max Gas Pressure (Nat. Gas or Propane) – inch w.c.	14	14
Power (120Vac/60Hz) - Watts @ full fire with internal pump	120	120
Weight (empty) – lbs/Kg	85 / 39	84 / 38
Pressure vessel water content – USG/Liters	0.5/1.9	0.19/7.2
Max boiler flow rate - USgpm	10	12
Min boiler flow rate - USgpm	2	2
Max operating pressure – Space Heating Coil - psig	43.5	43.5
Max operating pressure – Domestic Hot Water Coil - psig	150	150
Min water pressure - psig	8	8
Approved installation altitude - ASL	10,000 ft	10,000 ft
Ambient temperature – Low (°F/°C)	32/0	32/0
Ambient temperature – High (°F/°C)	122/50	122/50
Max relative humidity (non-condensing)	90%	90%
Min water temperature – Space Heating (°F/°C)	50/10	50/10
Max water temperature – Space Heating (°F/°C)	194/90	194/90
Min water temperature – Domestic Hot Water (°F/°C)	104/40	104/40
Max water temperature – Domestic Hot Water (°F/°C)	149/65	149/65
Min flow rate to activate DHW heating - USgpm	0.5	0.5
Max flow rate DHW heating - USgpm	4.0	7.0
Max equivalent vent length 2" (each side)	35'	35'
Max equivalent vent length 3" (each side)	120'	120'
Domestic hot water delivery: @70°F/ 39°C temp. rise	3.2 GPM	5.0 GPM

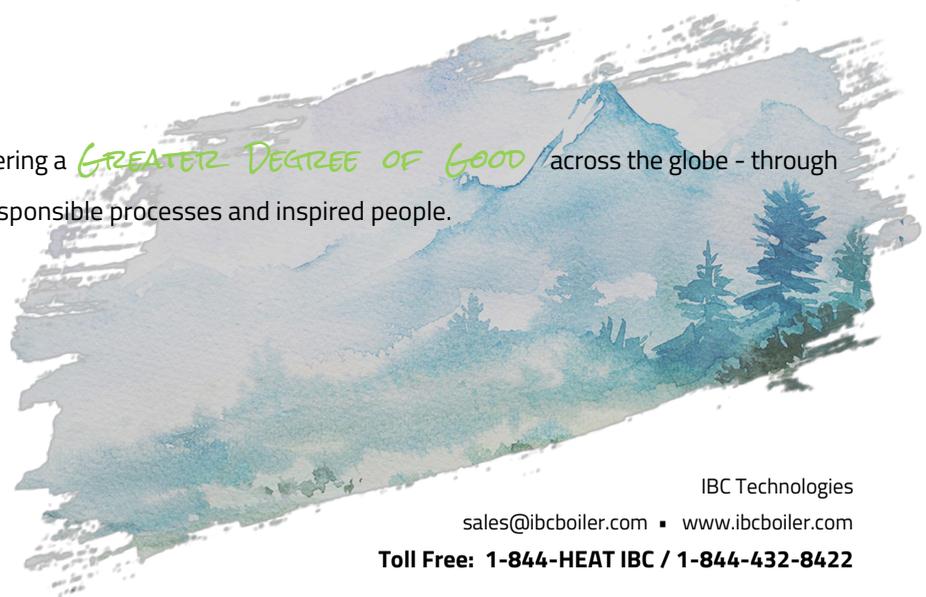
SURFACE	DISTANCE FROM COMBUSTIBLE	RECOMMENDED DISTANCE FOR INSTALLATION AND
Front	2"	24"
Rear	0"	0"
Left Side	1.5"	6"
Right Side	4"	6"
Top	2"	24"
Bottom	8"	24"



VENTING	MAXIMUM EQUIVALENT LENGTH
<b>Schedule 40 PVC, CPVC or PPs</b>	
2"	35'
3"	120'
2" or 3" 90' Long Sweep Vent Elbow	Allow 5 equivalent feet
2" or 3" 90' Short Sweep Vent Elbow	Allow 8 equivalent feet
2" or 3" 45' Vent Elbow	Allow 3 equivalent feet
<b>PPs</b>	
PPs 87-90' Elbow	Allow 8 equivalent feet
<b>Flex PPS</b>	
3" PPs Flex	(Max. 35) actual feet times 1.4



We are committed to delivering a *GREATER DEGREE OF GOOD* across the globe - through our intelligent products, responsible processes and inspired people.



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