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DUAL FIRED COMBI BOILER SFC 99 / 125 / 199





LANOVATIVE 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. COPPER Marenne

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THE LATEST IN HUDRONIC TECHNOLOGY

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

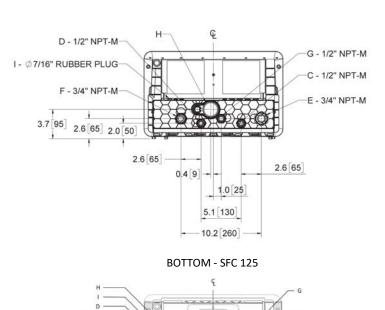
- 30-year track record, 2 million installations worldwide
- Innovative state of the art electronic control
- Compatible with standard Propylene Glycol
- Built-in bypass valve to prevent temperature fluctuations (SFC 199)
- No need for a 3-way valve or secondary DHW plate heat exchanger
- Will accept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

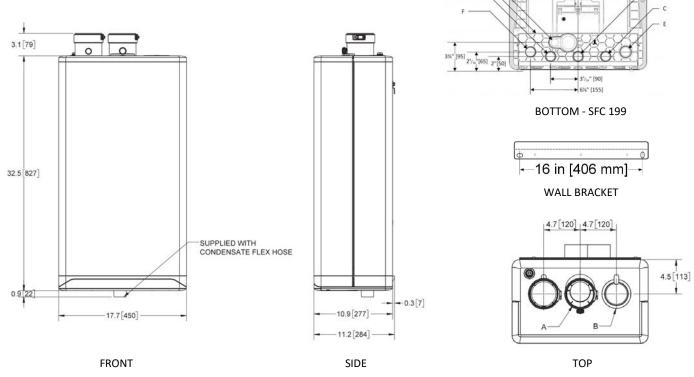
EFFICIENT

- Up to 96% 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



	DESCRIPTION	SFC 125	SFC 199
А	Exhaust outlet	3" Schedule 40	3" Schedule 40
В	Combustion air	3" Schedule 40	3" Schedule 40
С	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
Е	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
Н	Condensate outlet	3/4" Hose	3/4" Hose
I	Control Wiring Passage	7/16" Rubber Plug	7/16" Rubber Plug





Touch Panel Control Indicators

5. Tap / Faucet

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.

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TOUCH PANEL	FUNCTION		τοι	JCH PANI	EL		FUNCT	TION	
1. Numerical display	Main display		6.	Radiator			Space	heating indicator	
2. Plus & Minus	Temperature adjust	ment	7.	Wrench			Servic	e / Reset	
3. Flame	Burner ON indicator		8.	Return ar	row		Enter	/ Save	
4. Dot	Power ON indicator		9.	Numerica	l display		Servic	e display	

DHW indicator

ALL THE HOT WATER AND HEATING YOU'LL EVER NEED

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SFC - COMBI Technical Information

SPECIFICATIONS	SFC 99	SFC 125	SFC 199
CSA Input (Natural Gas or Propane) – MBH	15.5 - 99	16.5 - 99	28.3 - 125
CSA Input (Natural Gas or Propane) – KW	4.54 - 29.0	4.84 - 29.0	8.3 - 36.6
CSA Output – MBH	14.8 - 88.9	15.8 - 88.9	27.1 - 111
CSA Output - KW	4.34 - 26.0	4.63 - 26.0	7.94 - 32.5
DHW - CSA Input (Natural Gas or Propane) - MBH	15.5 - 99	16.5 - 125	28.3 - 199
DHW - CSA Input (Natural Gas or Propane) - KW	4.54 - 29.0	4.84 - 36.6	8.29 - 58.3
A.F.U.E	96%	95%	95%
Min gas pressure (Nat. Gas or Propane) – inch w.c.	4	4	4
Max Gas Pressure (Nat. Gas or Propane) – inch w.c.	14	14	14
Power (120Vac/60Hz) - Watts @ full fire with internal pump	120	120	120
Weight (empty) – Ibs/Kg	85 / 39	85 / 39	84 / 38
Pressure vessel water content – USG/Liters	0.5/1.9	0.5/1.9	0.19/.72
Max boiler flow rate - USgpm	10	10	12
Min boiler flow rate - USgpm	2	2	2
Max operating pressure – Space Heating Coil - psig	43.5	43.5	43.5
Max operating pressure – Domestic Hot Water Coil - psig	150	150	150
Min water pressure - psig	8	8	8
Approved installation altitude - ASL	10,000 ft	10,000 ft	10,000 ft
Ambient temperature – Low (°F/°C)	32/0	32/0	32/0
Ambient temperature – High (°F/°C)	122/50	122/50	122/50
Max relative humidity (non-condensing)	90%	90%	90%
Min water temperature - Space Heating (°F/°C)	50/10	50/10	50/10
Max water temperature – Space Heating (°F/°C)	194/90	194/90	194/90
Min water temperature – Domestic Hot Water (°F/°C)	104/40	104/40	104/40
Max water temperature – Domestic Hot Water (°F/°C)	149/65	149/65	149/65
Min flow rate to activate DHW heating - USgpm	0.5	0.5	0.5
Max flow rate DHW heating - USgpm	4.0	4.0	7.0
Max equivalent vent length 2" (each side)	35'	35'	35'
Max equivalent vent length 3" (each side)	120'	120'	120'
Domestic hot water delivery: @70°F/ 39°C temp. rise	2.4 GPM	3.2 GPM	5.0 GPM



	COMBUSTIBLE SURFACES	FOR INSTALLATION AND SERVICE
Front	2″	24″
Rear	0"	0"
Left Side	1.5″	6"
Right Side	4″	6"
Тор	2″	24″
Bottom	8″	24"



VENTING	MAXIMUM EQUIVALENT LENGTH			
Schedule 40 PVC, CPVC or PPs				
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			
PPs				
PPs 87-90' Elbow	Allow 8 equivalent feet			
Flex PPS				
3" PPs Flex	(Max. 35) actual feet times 1.4			



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