



More Features



IBC Better Boilers



SL 40-399G3

40,000 to 399,000 BTU/H

Commercial / Large Residential Condensing Boiler

- **New Touch Screen V-10 Boiler Control**
Express set up, Remote monitoring & diagnostics, Easy USB programmability, Optional true native BACnet, Intuitive alert system.
- Multi-boiler communication up to 9.5 million Btu/h (24 boilers) without additional controls.
- PVC/CPVC/PPs approved - venting up to 400 feet.
- Built-in CSA/UL approved LWCO and manual reset high limit.
- With 24 boilers turndown ratio is 240:1 = min. firing rate range is 40,000 Btu/h all the way up to 9.5 million Btu/h in 1000 Btu/h increments.
- Built-in multiple zone pump control - up to 4 zones replacing the need for external pump controls.
- Built-in outdoor reset control of water temperature.
- **MFZ Technology:** Patented moisture management system. Protects and ensures long life for all components in the boiler.
- New and innovative side bolt heat exchanger lid configuration.
- DDC Control 0-10 VDC or 4-20 mA without additional controls.
- Optional 316 Ti titanium heat exchanger.

- DHW opt out priority for multi boiler systems.
- The most advanced stainless steel fire tube boiler on the market today.
- Reverse flow detection.
- Unmatched safety features.
- Easier to install and service.
- Various Multiplex Racking options available.

V-10 PORTAL
A secure method of remotely managing your SL Boiler from any location.

Boiler control on the go!

Your Local IBC Experts:
Francis Plumbing & Heating ClimateCARE
phone: 613-224-0041 email: office@francisplumbing.com
chat on our website: www.FrancisPlumbing.com

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SL 40-399G3 Condensing Boiler

Specifications	SL 40-399G3
CSA Input (Natural Gas or Propane *) - MBH	40 - 399
CSA Input (Natural Gas or Propane *) - KW	11.7 - 117
CSA Output - MBH	38.4 - 383
CSA Output - KW	11.2 - 112
Combustion Efficiency (BTS-2000 Thermal Efficiency)	96%
Min gas pressure (NG or Propane) - inch w.c.	4
Max gas pressure (NG or Propane) - inch w.c.	14
Ambient temperature - Low (°F/°C)	32°F / 0°C
Ambient temperature - High (°F/°C)	122°F / 50°C
Max relative humidity (non-condensing)	90%
Min water temperature	34°F / 1°C
Max programmable water temperature limit	190°F / 88°C
Max water temperature lockout limit	201°F / 94°C
Max Δ T - supply / return (electronic fence)	40°F
Power use (120Vac/60Hz) - Watts @ full fire - Watts	190 (less pumps)
Weight (empty) - lbs/Kg	240 / 110
Heating Surface Area - ft² / m²	36.65 / 3.40
Pressure vessel water content – USG/Liters	6.66 / 25.2
Max boiler flow rate - USgpm	45
Min boiler flow rate - USgpm	20
Max operating pressure - psig	80
Min water pressure - psig	8
Approved installation altitude - ASL	0 - 12,000'
Maximum equivalent vent length, each side (Natural Gas or Propane)	4" 200'
Air intake options: either direct vent or indoor supply	

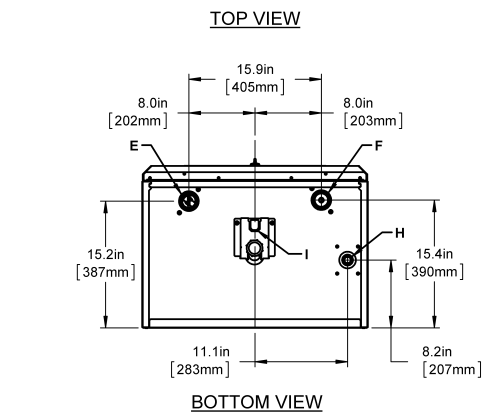
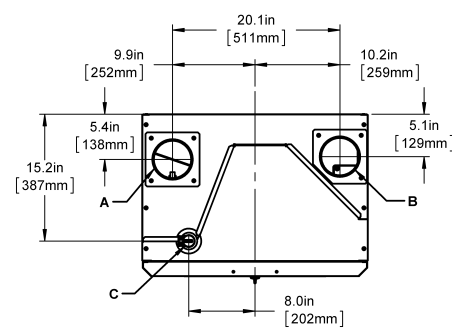
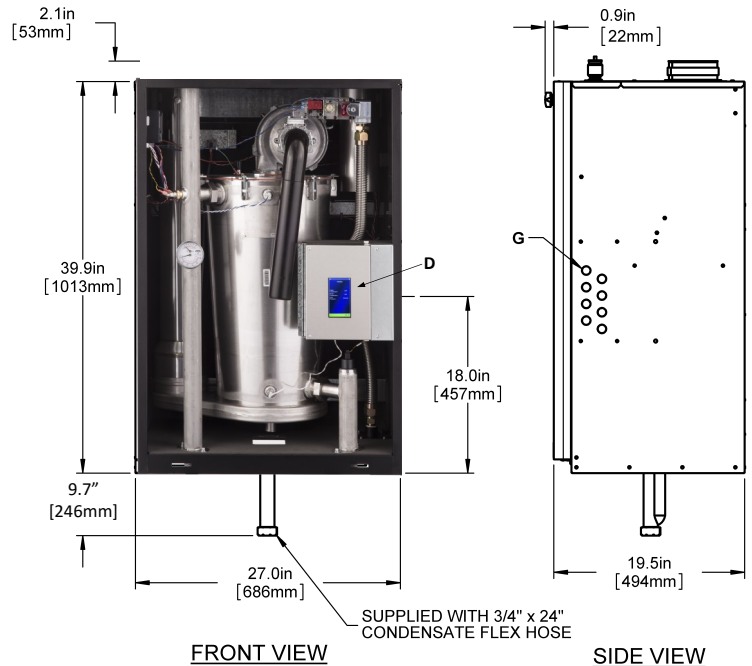
Fuel Conversions: NG boilers require an LP conversion kit - Part #P302 to be ordered separately if converting a boiler from NG to LP. LP boilers require a NG conversion kit - Part #P303 to be ordered separately if converting an LP boiler to NG.

Boilers are shipped with 30psi pressure relief valve.

Description	SL 40-399
A Exhaust outlet	4" Schedule 40
B Combustion air	4" Schedule 40
C Safety relief valve & air vent	3/4" NPT - F
D Touchscreen display	2-1/4" x 4"
E Water outlet	1 1/2" NPT - M
F Water inlet	1 1/2" NPT - M
G Knock-outs (8)	1/2"
H Gas inlet	3/4" NPT - F
I Condensate outlet	3/4" Hose

Exhaust pipe size	Maximum equivalent length
Sched.40; Rigid PPs	
4"	200'
90° Vent elbow	allow 8' equivalent
90° Long sweep elbow	allow 5' equivalent
45° Elbow	allow 3' equivalent
PPs 87-90° Elbows	use 8' equivalent
3" SS Sidewall Terminal (SST)	allow 65' equivalent
3" CPVC (to adapt to the SST)	for each 1' allow 3.2' equivalent
Flexible PPs	
4" Flexible	160' max, using 1.2 x for equivalent length

Surface	Distance from combustible surfaces	Recommended distance for installation and service
Front	2"	24"
Rear	0"	0"
Left side	1"	0" (to non-combustibles)
Right side	1"	4" (for electric and gas if required)
Top	12"	12" (for vent connection)
Bottom	12"	12" (for condensate trap and piping)



New 399 heat exchanger bolt design

Boiler Head Loss						
Flow rate (gpm)	20	25	30	35	40	45
Head loss @ flow (ft wc)	1.0'	1.5'	2.0'	3.0'	4.0'	6.0'

Pressure vessel head loss

www.ibcboiler.com



As part of our continuous product improvement, IBC reserves the right to change specifications and design without notice.

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