

JOB NAME: _____

LOCATION: _____

ENGINEER: _____

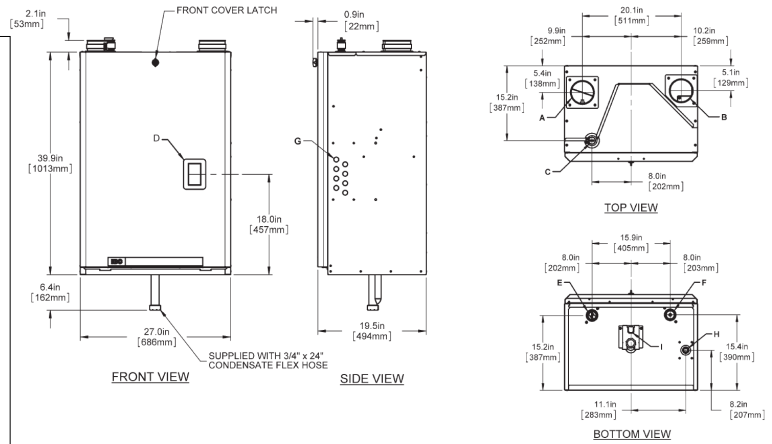
WHOLESALER: _____

CONTRACTOR: _____

FUEL: Natural Gas Propane

BTUH/INPUT: _____

BTUH/OUTPUT: _____



New bolt design available exclusively from IBC.

Description	SL 80-399
A Exhaust Outlet	4" Schedule 40
B Combustion Air	4" Schedule 40
C Safety Relief Valve & Air Vent	3/4" NPT - F
D Touch Screen 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

Specifications	SL 80-399
CSA Input (Natural Gas or Propane *) - MBH	80 - 399
CSA Input (Natural Gas or Propane *) - KW	23.4 - 117
CSA Output - MBH	77 - 382
CSA Output - KW	22.6 - 112
Combustion Efficiency (CSA 4.9—2010)	95.7%
Min gas pressure (Nat. Gas or Propane) - inch w.c.	5
Max gas pressure (Nat. Gas or Propane) - inch w.c.	14
Power (120Vac/60Hz) - Watts @ full fire - Watts (without pumps)	345
Weight (empty) - lbs/Kg	240 / 110
Pressure vessel water content - USG/Liters	7 / 26
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 ft
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 (°F/°C)	34°F / 1°C
Max water Temperature (electronic-limit) (°F/°C)	190°F / 88°C
Max water Temperature (mechanical hi-limit) (°F/°C)	200°F / 93°C
Max ΔT - supply / return (electronic fence)	40°F
Maximum equivalent vent length, each side 4"	200'
(Natural Gas or Propane)	
Air intake options: either direct vent or indoor supply	

Boilers are shipped with 30psi pressure relief valve.



Surface	Distance from combustible surfaces	Recommended distance for installation and service
Front	1"	24"
Rear	0"	0"
Left Side	1"	0" (to non-combustibles)
Right Side	1"	4" (min. for piping clearance)
Top	12"	12" (for vent connection)
Bottom	12"	12" (for condensate trap)

Exhaust pipe size	Maximum equivalent length
Sched.40; Rigid PPs	
4"	200'
90° long sweep elbow	Allow 8' equivalent
90° vent elbow	Allow 5' equivalent
45° elbow	Allow 3' equivalent
PPs 87-90° elbows	Allow 8' equivalent
Flexible PPs	
4" Flexible	160' (max) actual lineal x 1.2 = equivalent

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