

JOB NAME: _____

LOCATION: _____

ENGINEER: _____

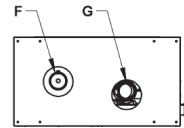
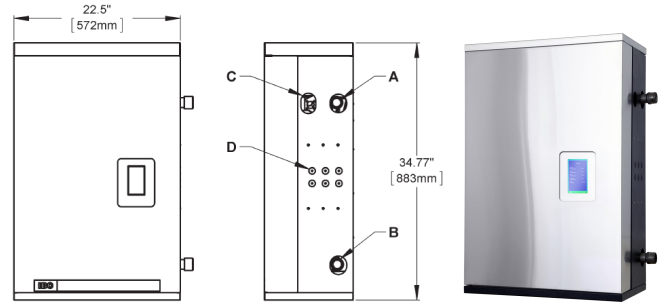
WHOLESALER: _____

CONTRACTOR: _____

FUEL: Natural Gas Propane

BTUH/INPUT: _____

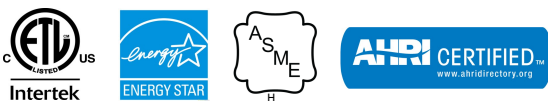
BTUH/OUTPUT: _____



Description	VFC
A Water Outlet	1 1/4" NPT - M
B Water Inlet	1 1/4" NPT - M
C Gas Inlet	1/2" NPT - M
D Knock Outs (6)	1/2"
E Touch Screen Display	2-1/4" x 4"
F Exhaust Vent	4.0" Hole
G Combustion Air	4.0" Hole

Specifications	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	12 - 60
CSA Output - KW	4.1 - 41	12.7 - 70.0
A.F.U.E	95%	95%
Min gas pressure (Nat. Gas or Propane) - inch w.c.	5	5
Max gas pressure (Nat. Gas or Propane) - inch w.c.	14	14
Power (120Vac/60Hz) - Watts @ full fire - Watts	57	57
Weight (empty) - lbs/Kg	150 / 68	153 / 70
Pressure vessel water content - USG/Liters	2.4 / 9	2.4 / 9
Min boiler flow rate - USgpm	4	8
Max boiler flow rate - USgpm	16	25
Max operating pressure - psig	80	80
Min water pressure - psig	8	8
Normal flue temp @ 100°F boiler return water temp - High Fire	100°F to 105°F	100°F to 105°F
Normal flue temp @ 160°F boiler return water temp - High Fire	160°F to 165°F	160°F to 165°F
Approved installation altitude - ASL	0 - 12,000 ft	0 - 12,000 ft
Ambient temperature - Low (°F/°C)	32°F / 0°C	32°F / 0°C
Ambient temperature - High (°F/°C)	122°F / 50°C	122°F / 50°C
Max relative humidity (non-condensing)	90%	90%
Min water Temperature (°F/°C)	34°F / 1°C	34°F / 1°C
Max water Temperature (electronic-limit) (°F/°C)	190°F / 88°C	190°F / 88°C
Max water Temperature (mechanical hi-limit) (°F/°C)	200°F / 93°C	200°F / 93°C
Max Δ T - supply / return (electronic fence)	40°F	40°F
Maximum equivalent vent length each side 2"	50'	N/A
Maximum equivalent vent length each side 3" (Natural Gas or Propane)	120'	240'
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	2"	24"
Rear	0"	0"
Left Side	0"	8" (min. for vent run)
Right Side	2"	18"
Top	6"	10"

Exhaust pipe size	Maximum equivalent length
Sched.40; Rigid PPs	
2" (15-150 only)	50' (each side)
3" (15-150)	120'
3" (45-225)	240'
90° vent elbow	Allow 8' equivalent
45° elbow	Allow 3' equivalent
PP's 87-90° elbows	Allow 8' equivalent
Flexible PPs	
2" Flexible	Not Allowed
3" Flexible (VFC 15-150)	60' (max) actual lineal x 1.5 = equivalent
3" Flexible (VFC 45-225)	60' (max) actual lineal x 3 = equivalent

Note : Unused intake travel cannot be added to the exhaust. Unequal intake and exhaust piping is allowed

Boiler Head Loss					
Flow rate (gpm)	4	8	12	16	20
Head loss @ flow (ft wc)	0.7'	2.5'	5.0'	8.3'	12.3'

Pressure vessel head loss