

Engineering Submittal Gallant Solo 299



CTRLMax Control System

- Graphical display with 6 navigation buttons
- EZ Setup allows quick and easy boiler settings adjustment
- Presets allow quick configuration of 4 circulator outputs
- Each circulator output is fully configurable for custom applications
- Outdoor temperature reset to maximize efficiency
- Accepts two space heating call inputs with independent outdoor reset curves
- Simultaneously heat dual temperature heating systems with built-in mixing valve control
- Domestic hot water priority with optional time-out
- Integrated cascade control for up to 6 Prestige boilers
- 0-10 VDC Modulation input
- Modbus building management system (BMS) interface, LonWorks® and BACnet® interface optional
- Adjustable warm weather shutdown
- Adjustable boiler freeze protection
- Logging function records sensor readings for system optimization and troubleshooting
- Describes lockouts in plain english and suggests solutions while storing last 8 errors

Gallant Solo Features

- Light weight construction for wall mounting
- Approved for zero clearance to combustibles
- 4" PVC, CPVC, PP, or AL29-4C venting up to 100 equivalent feet
- Limited 5 year warranty on parts, except igniter
- Limited 10 year warranty on heat exchanger

Approvals

- 95% AFUE Efficiency
- ENERGY STAR Qualified
- ANSI Z21.13 and CSA 4.9 Boiler Standards Compliance
- ASME Boiler Certification – ASME "H" Stamp

Stainless Steel Fire Tube Heat Exchanger

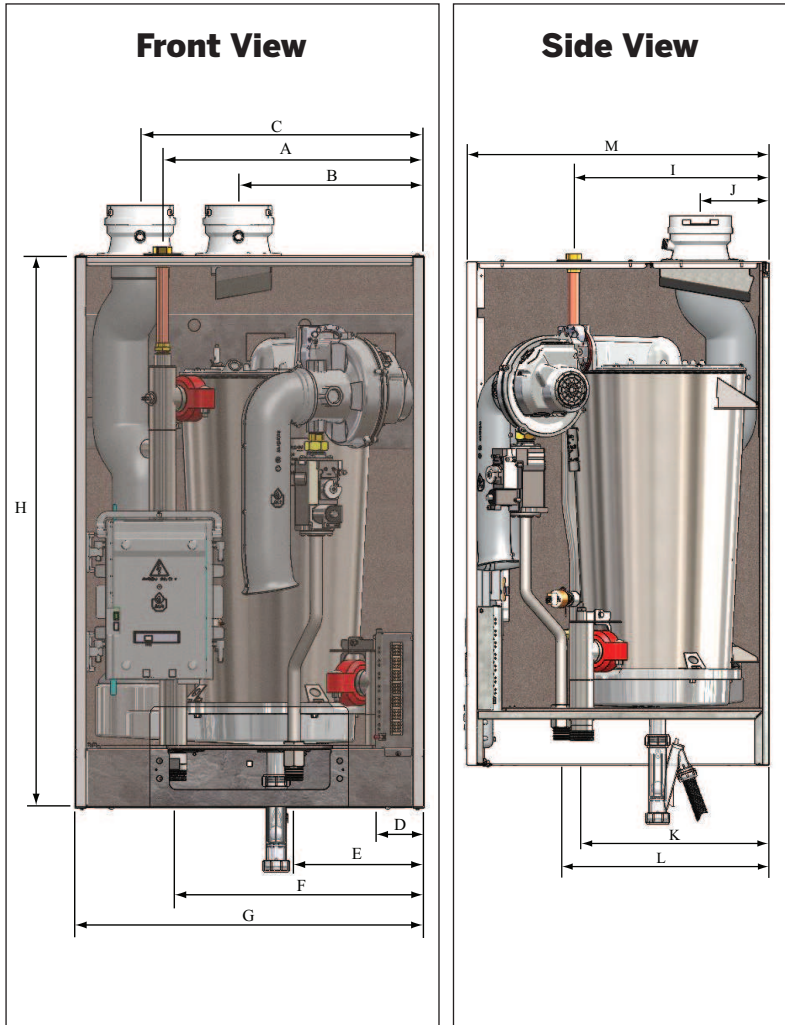
- 439 Stainless Steel heat exchanger construction for corrosion resistance
- Low pressure drop minimizes circulator size
- High water content provides stable temperature control
- Self cleaning flue ways reduce maintenance
- Suitable for use with propylene glycol up to 50% concentration

Standard Equipment

- Stainless steel premix burner
- Direct spark ignition with variable speed blower
- Full modulation with turndown ratio of 4.1:1
- Automatic air vent
- ASME 30 PSI pressure relief valve
- Integrated pressure and temperature gauge
- Outdoor temperature sensor
- Automatic low water cutoff feature with early warning
- High temperature manual reset limit safety control
- Terminal block for circulator output
- Low voltage terminal strip with removable jumpers for manual or automatic reset limits
- Swing out control for easy access and servicing
- Alarm and flame status contacts
- Polypropylene condensate pan and internal flue pipe
- Polypropylene vent/air connections with test ports

Project / Location: _____	Date: _____
Consulting Engineer / Architect: _____	
Mechanical Contractor: _____	

Boiler Dimensions



Letter	Connection	Dimension in [mm]
A	3/4" NPSC Pressure Relief Valve	18-5/8" [473]
B	4" Combustion Air Inlet	13-1/4" [336]
C	4" Vent Outlet	20-1/4" [514]
D	1-1/2" NPT Boiler Return	3-1/4" [82]
E	1" NPT Gas Connection	9-1/4" [236]
F	1-1/2" NPT Boiler Supply	17-7/8" [454]
G	Boiler Width	24-7/8" [632]
H	Boiler Height	39-3/8" [1000]
I	3/4" NPSC Pressure Relief Valve	15-1/4" [388]
J	4" Combustion Air Inlet & 4" Vent Outlet	5-3/8" [136]
K	1" NPT Gas Connection	16-1/4" [412]
L	1-1/2" NPT Boiler Return & Supply	14-5/8" [372]
M	Boiler Depth	23-5/8" [600]

Boiler Specifications

Model	Fuel	Input Modulation (MBH)	AFUE	DOE Heating Capacity (MBH)	Net AHRI (MBH)	Boiler Water Volume (gal)	Power	Shipping Weight (Lbs)
Solo 299	Natural Propane	72.5 - 299	95%	278	242	7.4	120/1/60 FLA: 10A	210

Pressure Drop Curve vs Grundfos Circulators

