

# Manufactured for quality and performance since 1906, that's LONGEVITY.



Saves Space



Saves Time



Saves Money





The Cascade System features multiple, high efficiency, fully modulating, low water content boilers, where off cycle losses are substantially reduced and dissipated heat from stored water is far less than a single large capacity boiler.

PART #	DESCRIPTION	# OF MANI- FOLDS	TOTAL INPUT MBH	TOTAL OUTPUT MBH	NET AHRI RATING MBH	EDR WATER tt <sup>2</sup>	TOTAL WATER CONTENT (GAL)	LENGTH	HEIGHT	DEPTH
CPS500	CASCADE: 2 - 250 Gallant Boiler-Less Boilers	1						86"	72"	36"
	CASCADE: 2 - 250 Gallant Boiler-With Boilers		43.6-480	444	386	2,579	23			
CPS600	CASCADE: 2 - 299 Gallant Boiler-Less Boilers	1						86"	72"	36"
	CASCADE: 2 - 299 Gallant Boiler-With Boilers		72.5-598	556	484	3,225	29			
CPS800	CASCADE: 2 - 399 Gallant Boiler-Less Boilers	1						86"	72"	36"
	CASCADE: 2 - 399 Gallant Boiler-With Boilers		72.5-798	759	660	4,399	29			
CPS1000	CASCADE: 4 - 250 Gallant Boiler -Less Boilers	2						154"	72"	36"
	CASCADE: 4 - 250 Gallant Boiler-With Boilers		43.6-960	888	772	5,148	38			
CPS1200	CASCADE: 3 - 399 Gallant Boiler Less Boilers	1						113"	72"	36"
	CASCADE: 3 - 399 Gallant Boiler-With Boilers		72.5-1,197	1,138	990	6,599	39			
CPS1600	CASCADE: 4 - 399 Gallant Boiler-Less Boilers	2						154"	72"	36"
	CASCADE: 4 - 399 Gallant Boiler-With Boilers		72.5-1,596	1,518	1,320	8,799	50			
CPS2000	CASCADE: 5 - 399 Gallant Boiler-Less Boilers	2						181"	72"	36"
	CASCADE: 5 - 399 Gallant Boiler-With Boilers		72.5-1,995	1,897	1,650	10,999	59			

GALLANT CASCADE OPTIONAL EQUIPMENT								
PART #	DESCRIPTION	PART #	DESCRIPTION					
MDRKIT05	System Temperature Sensor for Cascade (Immersion)	PTSENS12	System Temperature Sensor for Cascade (strap on)					
PSCAS17	CSD-1 Kit Cascade: CSD-1 For P/S	PTCON22	ProtoNode BMS, BACnet®, Modbus					
PSNEU03	Condensate Neutralizer Kit	PTCON23	ProtoNode BMS LonWorks®					

## Optional Common Vent System (for 299 and 399 boilers only)



#### 2 Boiler Common Vent (PSVKITO4)

- ULC S636 approved vent system
- Single penetration
- Prefit piping to reduce installation time
- 6" Connection



#### **3 Boiler Common Vent (PSVKIT05)**

- Terminations and flashing available
- Polypropylene construction
- 6" Connection

Note 1: Input and output ratings are shown for sea level applications. The GALLANT Solo automatically derates the input at approximately 2% for every 1,000 feet of altitude. No alteration to the boiler or burner system is required.

Note 2: GALLANT Solo 399 output ratings are based off a thermal efficiency of 95.1%. GALLANT Solo 250 output is based on DOE heating capacity.

Note 3: The IBR rating is based on piping and pick up allowance of 1.15. This allowance should be sufficient for standard radiation requirements.

Note 4: Equivalent Direct Radiation (EDR) is based on 150 Btu/h per square foot at  $170^{\circ}$ F average supply temperature.

Note 5: Minimum recommended system iron pipe size is based on temperature differential of 20°F.

Note 6: Minimum recommended natural gas header size is based on using schedule 40 metallic pipe 0.30" w.c. pressure drop and 100 feet of total equivalent length at inlet gas pressure of less than 2 psi. Consult National Fuel Gas Code for alternate sizing.

### **Product Data**

#### **CPS STANDARD EQUIPMENT**

- Gallant Solo 250 or 399 boilers
- Cascade manifold
- Hydronic Separator with 3" flanged supply and return connections
- Grundfos circulator (1 per boiler)
- ANSI flange kit
- Air vent
- Installation hardware

#### **OPTIONAL EQUIPMENT**

- Common venting manifold kit
- CSD-1 Kits complete with low water cut-off and fittings