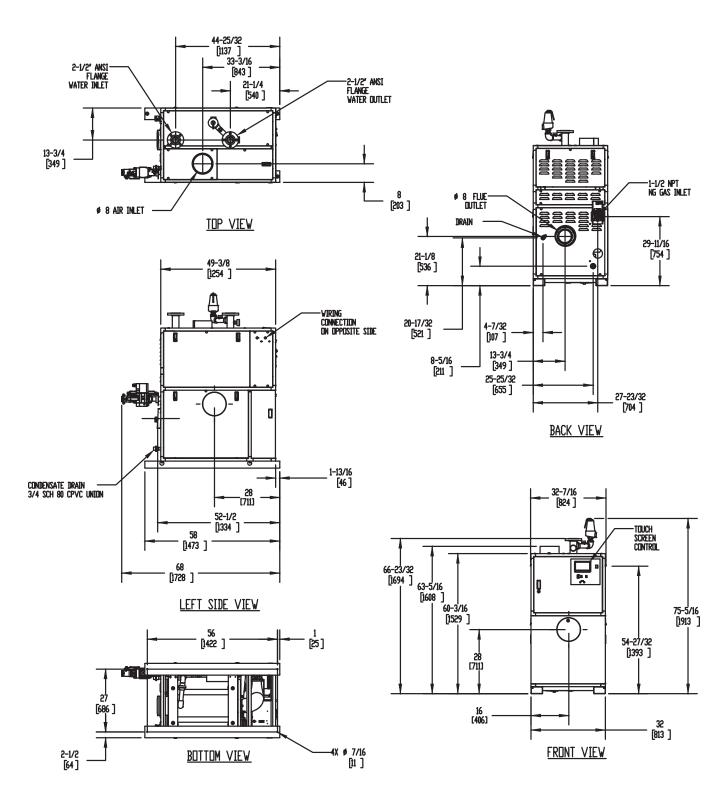
# **TORUS 1500 VERTICAL**

Category II or Category IV Appliance (see Installation and Operation Manual for venting information) **CODE OPTIONS** 

CSD-1 FIRMWARE W/REMOTE TEST MANUAL RESET LWCO

**INDOOR UNIT** 



Notes:

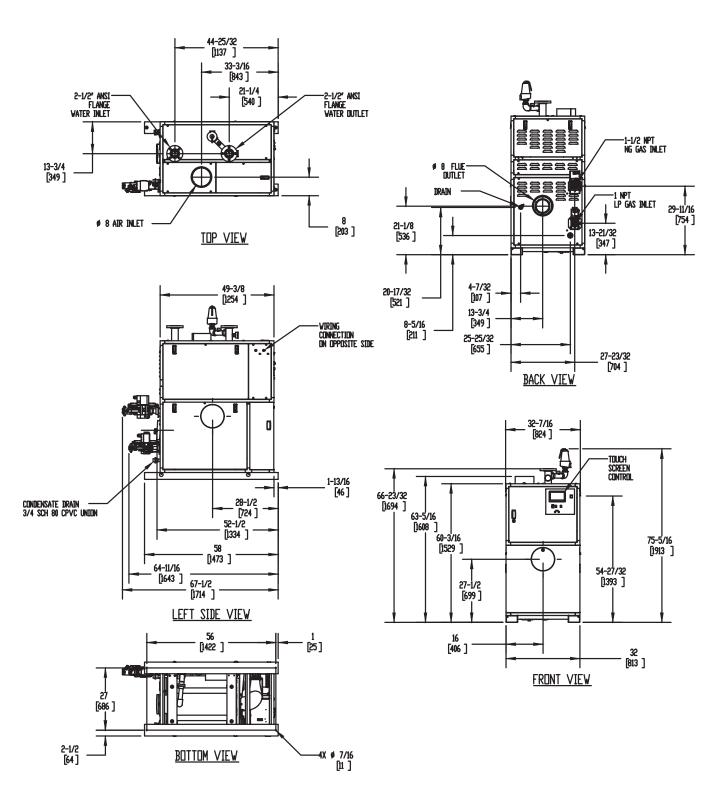
- 1. Dimensions are approximate and should not be used to "rough-in" equipment.
- Dimensions are subject to change without notice.
  All dimensions are in inches (mm)
- All dimensions are in inches (mm).
  Symbol indicates center of gravity.

# TORUS 1500 VERTICAL

Category II or Category IV Appliance (see Installation and Operation Manual for venting information) **CODE OPTIONS** 

CSD-1 FIRMWARE W/REMOTE TEST MANUAL RESET LWCO

### **DUAL FUEL UNIT**



#### Notes:

- 1. Dimensions are approximate and should not be used to "rough-in" equipment.
- Dimensions are subject to change without notice.
  All dimensions are in inches (mm).
- 4. Symbol indicates center of gravity.

#### **BOILER CERTIFIED RATINGS & CAPACITIES**

Fuel Type	Natural/Propane Gas	Boiler FLA	21.0*
Input BTU/hr.	1,500,000 / 440 kW	Boiler HP	43.25
Output BTU/hr.	1,447,500 / 424 kW	Min. Gas Pressure Required	4" W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	1183 lbs / 537 kg

#### **BOILER TRIM & CONTROLS**

Main Gas Valve	Dungs MBC	Air Switch	Huba	
Firing Valve	1" Apollo	Flow Switch	SIKA	
Ignition Control	Fenwal	Blocked Flue Switch	Cleveland NS2	
Operating Control	HeatNet®	Blower Motor	Ametek	
High Limit	Jumo	L.W.C.O.	800	
Main Ball Valve	1 1/2" Apollo	Relief Valve (WB)	1" x 1-1/4" set @ 50 psi	
Pump contactor strongly recommended	for water heater applications.	Relief Valve (WW)	1" x 1" set @ 125 psi	

#### A.S.M.E.

ASME Sect IV Fire Side	119.8 Sq. Ft. / 11.13 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	13 gal. / 49.2 Liters
ASME Sect IV Water Side	111.08 Sq. Ft. / 10.32 Sq. M.	pH Level	6.5-8.5
Htg Surface			

\* Add circulator amps.

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#### **BOILER TEMPERATURE RISE / PRESSURE DROP (Based on Full Input)**

	20°F /	11.1°C		30°F / 16.7°C		40°F / 22.2°C			50°F / 27.8°C				60°F / 33.3°C						
	ow ate		sure op		ow ate		sure op		ow ite		sure op	Flo Ra	ow ate		sure op	Flo Ra	ow ite		sure op
GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa
144.8	9.1	16.4	49.0	96.5	6.1	8.1	24.2	72.4	4.6	5.0	14.9	57.9	3.7	3.5	10.4	48.3	3.0	2.6	7.8

Flow GPN	И (Boiler)	Temp. Rise (°	°F) (Boiler**)	Vent Length	ı (Equiv. Ft.)	Air Inlet Length (Equiv. Ft.)		
Min	Max	Min	Max	Min	Max	Min	Max	
48.3	144.8	20	60	8	160	0	160	

\*\* Min/Max delta t reflects boiler operation at full input. For applications requiring operation above/below these parameters please consult factory.

### WATER HEATER HOURLY RECOVERY CAPACITY (GPH & LPH)

40°F	22°C	60°F	33°C	80°F	44°C	100°F	56°C	120°F	67°C	140°F	78°C
4367	16506	2911	11004	2183	8253	1747	6603	1456	5502	1248	4716

	Water Heater Min Flow Rates						
	Normal (4	to 12) gpg		Hard (12 to 15) gpg			
Flow	Rate	Pressu	re Drop	Flow	Rate	Pressure Drop	
gpm	L/s	Ft	kPa	gpm	L/s	Ft	kPa
110.0	6.9	10.1	30.2	147.0	9.3	16.8	50.2

REP FIRM	
SUBMITTED BY	
JOB NAME	
ARCHITECT	
ENGINEER	
CONTRACTOR	
DATE	

## **TORUS 1500 VERTICAL**

#### Category II or Category IV Appliance

(see Installation and Operation Manual for venting information)



A Division of Mestek, Inc. Westfield, MA 01085 (413) 564-5515