

# TORUS 500

Category II or Category IV Appliance

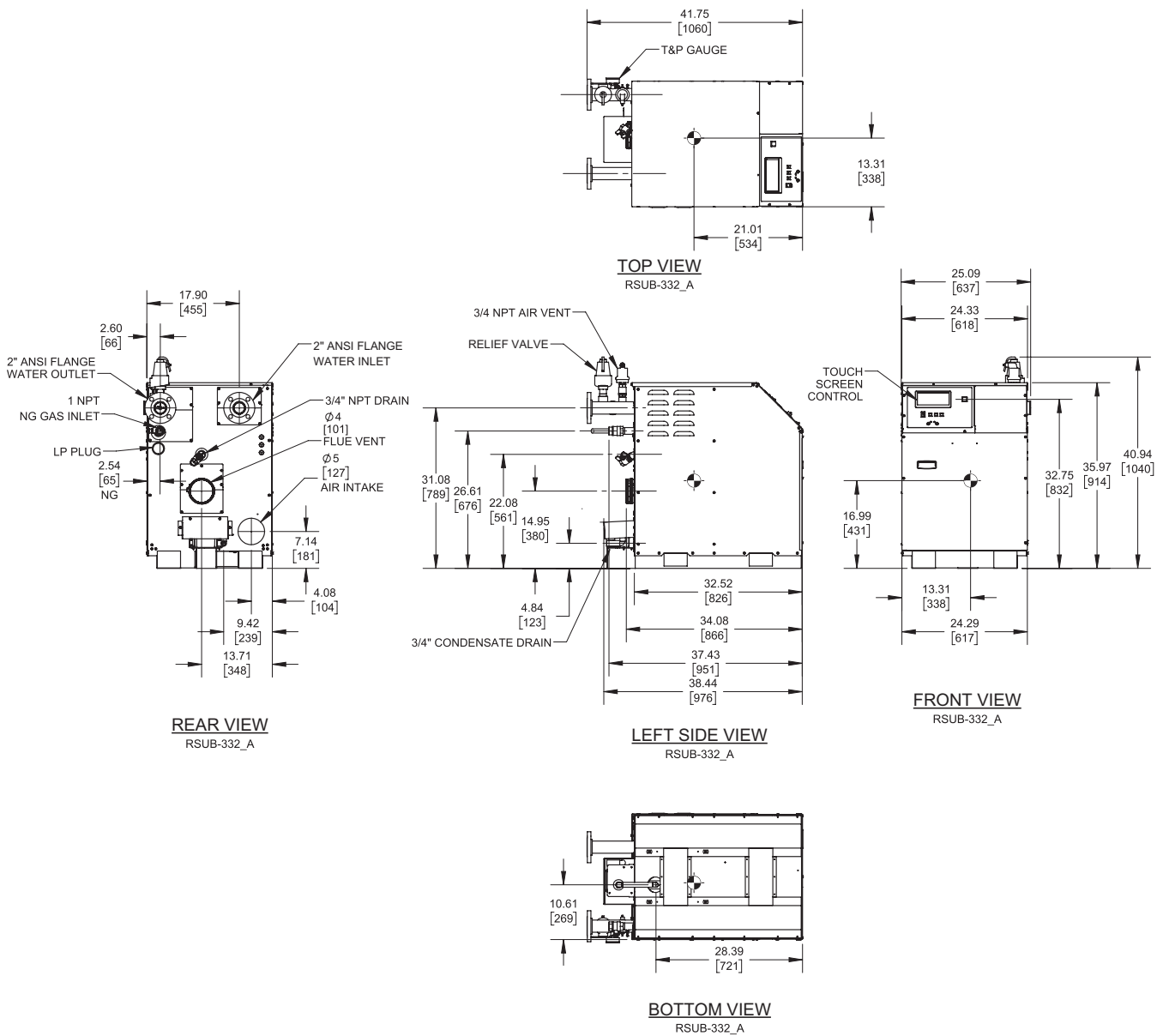
(see Installation and Operation Manual for venting information)

## CODE OPTIONS


CSD-1

FIRMWARE W/REMOTE  
TEST MANUAL RESET LWCO  
High and Low Gas Pressure Switches

## INDOOR UNIT



### Notes:

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

## BOILER CERTIFIED RATINGS & CAPACITIES

<b>Fuel Type</b>	Natural/Propane Gas	<b>Boiler FLA</b>	12.0*
<b>Input BTU/hr.</b>	500,000 / 146.54 kW	<b>Boiler HP</b>	14.40
<b>Output BTU/hr.</b>	482,000 / 141.26 kW	<b>Min. Gas Pressure Required</b>	4"W.C.
<b>Electrical Requirements</b>	120 VAC/60 Hz/1PH	<b>Max. Gas Pressure Allowed</b>	14" W.C.
		<b>Operating Weight</b>	425.69 lbs / 193.09 kg

## BOILER TRIM & CONTROLS

<b>Main Gas Valve</b>	Dungs MBC	<b>Air Switch</b>	Huba
<b>Firing Valve</b>	Apollo	<b>Flow Switch</b>	SIKA
<b>Ignition Control</b>	Fenwal	<b>Blocked Flue Switch</b>	Cleveland NS2
<b>Operating Control</b>	HeatNet®	<b>Blower Motor</b>	Ametek
<b>High Limit</b>	Jumo	<b>L.W.C.O.</b>	800
<b>Main Ball Valve</b>	Apollo	<b>Relief Valve (WB)</b>	3/4" x 3/4" set @ 50 psi
		<b>Relief Valve (WW)</b>	1" x 1" set @ 125 psi

Pump contactor strongly recommended for water heater applications.

## A.S.M.E.

<b>ASME Sect IV Fire Side</b>	39.1 Sq. Ft. / 3.63 Sq. M.	<b>Design Data</b>	Max. 160 psig & 210°F
<b>Htg Surface</b>		<b>Water Volume</b>	4.2 gal. / 15.90 Liters
<b>ASME Sect IV Water Side</b>	35.44 Sq. Ft. / 3.29 Sq. M.	<b>pH Level</b>	6.5-8.5
<b>Htg Surface</b>			

\* Add circulator amps.

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

20°F / 11.1°C				30°F / 16.7°C				40°F / 22.2°C			
Flow Rate		Pressure Drop		Flow Rate		Pressure Drop		Flow Rate		Pressure Drop	
GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa
48.2	3.0	12.2	36.4	32.1	2.0	5.4	16.2	24.1	1.5	3.1	9.1
Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)					
Min	Max	Min	Max	Min	Max	Min	Max				
24.1	48.2	20	40	6	100	0	100				

\*\* 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
1441	5445	960	3630	720	2723	576	2178	480	1815	412	1556

### Water Heater Min Flow Rates

Normal (4 to 12) gpg				Hard (12 to 15) gpg			
Flow Rate		Pressure Drop		Flow Rate		Pressure Drop	
gpm	L/s	Ft	kPa	gpm	L/s	Ft	kPa
36.1	2.3	6.8	20.4	48.3	3.0	6.8	20.4

<b>REP FIRM</b>	_____	<h1 style="margin: 0;">TORUS 500</h1> <p style="margin: 0;"><b>Category II or Category IV Appliance</b> (see Installation and Operation Manual for venting information)</p>  <p style="margin: 0;">A Division of Mestek, Inc. Westfield, MA 01085 (833) 265-5371</p>
<b>SUBMITTED BY</b>	_____	
<b>JOB NAME</b>	_____	
<b>ARCHITECT</b>	_____	
<b>ENGINEER</b>	_____	
<b>CONTRACTOR</b>	_____	
<b>DATE</b>	_____	

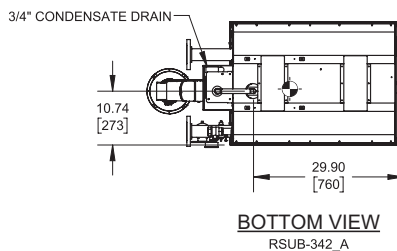
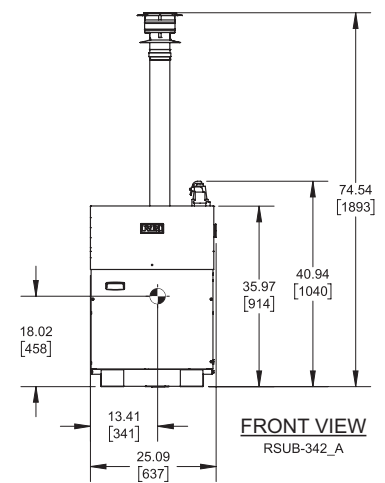
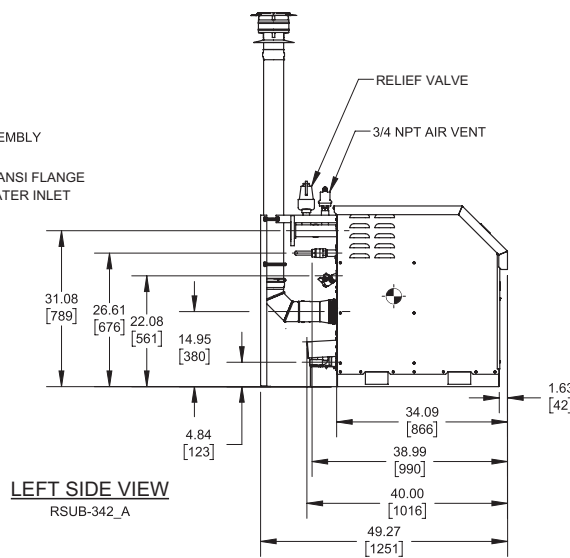
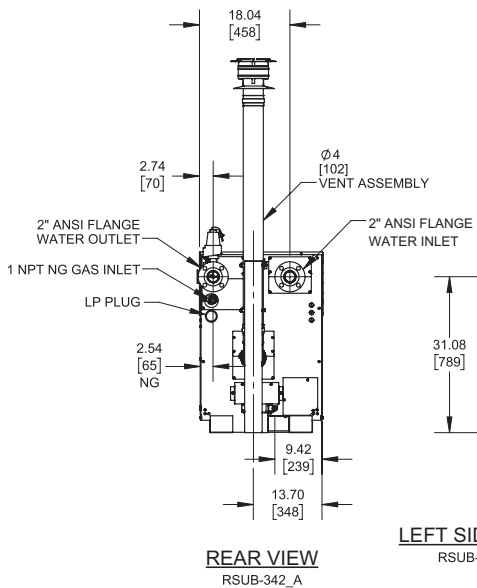
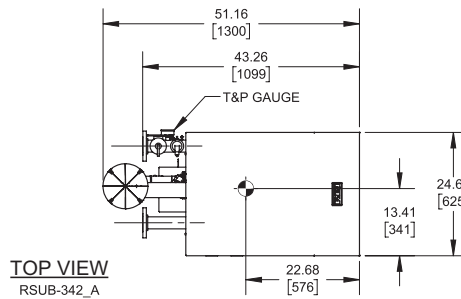
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<b>Electrical Requirements</b>	120 VAC/60 Hz/1PH	<b>Max. Gas Pressure Allowed</b>	14" W.C.
		<b>Operating Weight</b>	451.76 lbs / 204.91 kg

## BOILER TRIM & CONTROLS

<b>Main Gas Valve</b>	Dungs MBC	<b>Air Switch</b>	Huba
<b>Firing Valve</b>	Apollo	<b>Flow Switch</b>	SIKA
<b>Ignition Control</b>	Fenwal	<b>Blocked Flue Switch</b>	Cleveland NS2
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Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		
24.1	48.2	20	40	Factory Supplied		0					

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