

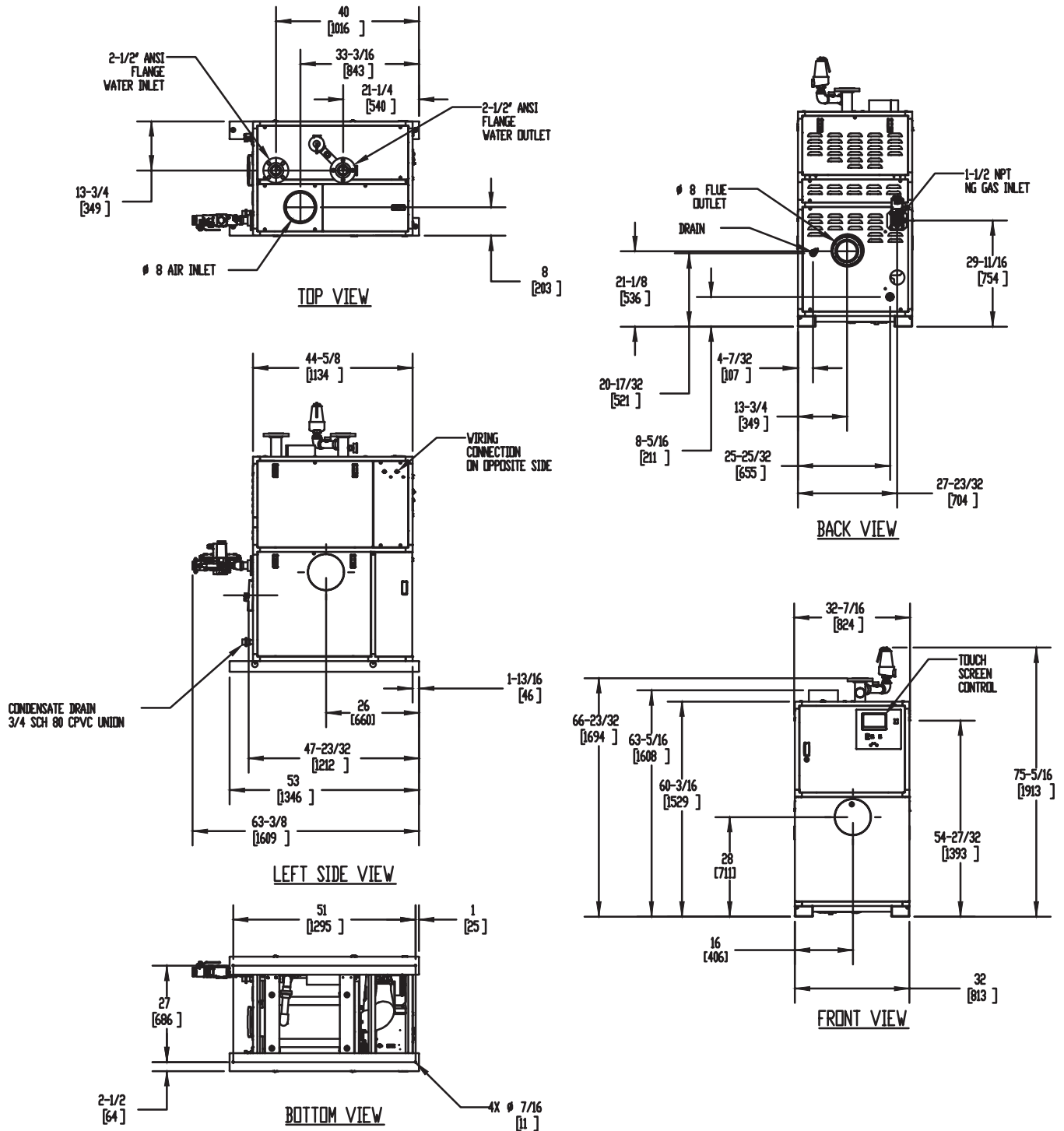
# TORUS 1250 VERTICAL

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
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## 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.

# TORUS 1250 VERTICAL

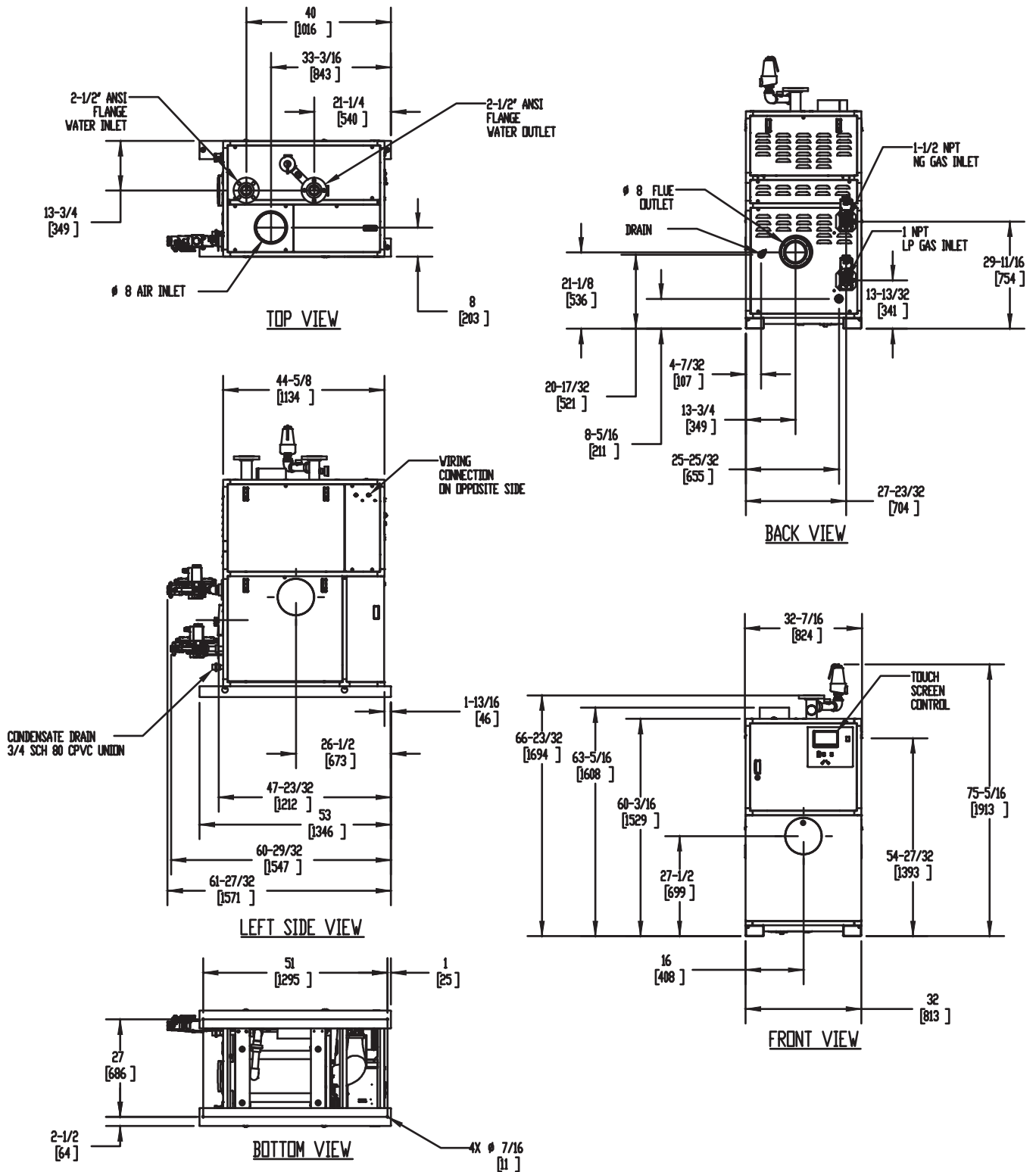
Category II or Category IV Appliance  
(see Installation and Operation Manual for venting information)

## CODE OPTIONS

CSD-1

FIRMWARE W/REMOTE  
TEST MANUAL RESET LWCO

## DUAL FUEL UNIT



### Notes:

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## BOILER CERTIFIED RATINGS & CAPACITIES

<b>Fuel Type</b>	Natural/Propane Gas	<b>Boiler FLA</b>	17.14*
<b>Input BTU/hr.</b>	1,250,000 / 366 kW	<b>Boiler HP</b>	36.04
<b>Output BTU/hr.</b>	1,206,250 / 353 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>	1084 lbs / 492 kg

## BOILER TRIM & CONTROLS

<b>Main Gas Valve</b>	Dungs MBC	<b>Air Switch</b>	Huba
<b>Firing Valve</b>	1" 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>	1 1/2" Apollo	<b>Relief Valve (WB)</b>	1" x 1-1/4" 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>	100.17 Sq. Ft. / 9.31 Sq. M.	<b>Design Data</b>	Max. 160 psig & 210°F
<b>Htg Surface</b>		<b>Water Volume</b>	11 gal. / 41.6 Liters
<b>ASME Sect IV Water Side</b>	92.93 Sq. Ft. / 8.63 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				50°F / 27.8°C				60°F / 33.3°C			
Flow Rate		Pressure Drop		Flow Rate		Pressure Drop		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	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa
120.7	7.6	15.4	45.9	80.4	5.1	7.3	21.7	60.3	3.8	4.7	13.9	48.3	3.0	3.6	10.7	40.2	2.5	3.0	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	
40.2		120.7		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
3639	13755	2426	9170	1819	6878	1456	5502	1213	4585	1040	3930

### 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
99.0	6.2	10.5	31.4	132.0	8.3	18.3	54.7

**REP FIRM** \_\_\_\_\_  
**SUBMITTED BY** \_\_\_\_\_  
**JOB NAME** \_\_\_\_\_  
**ARCHITECT** \_\_\_\_\_  
**ENGINEER** \_\_\_\_\_  
**CONTRACTOR** \_\_\_\_\_  
**DATE** \_\_\_\_\_

## TORUS 1250 VERTICAL

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



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 Westfield, MA 01085  
 (413) 564-5515

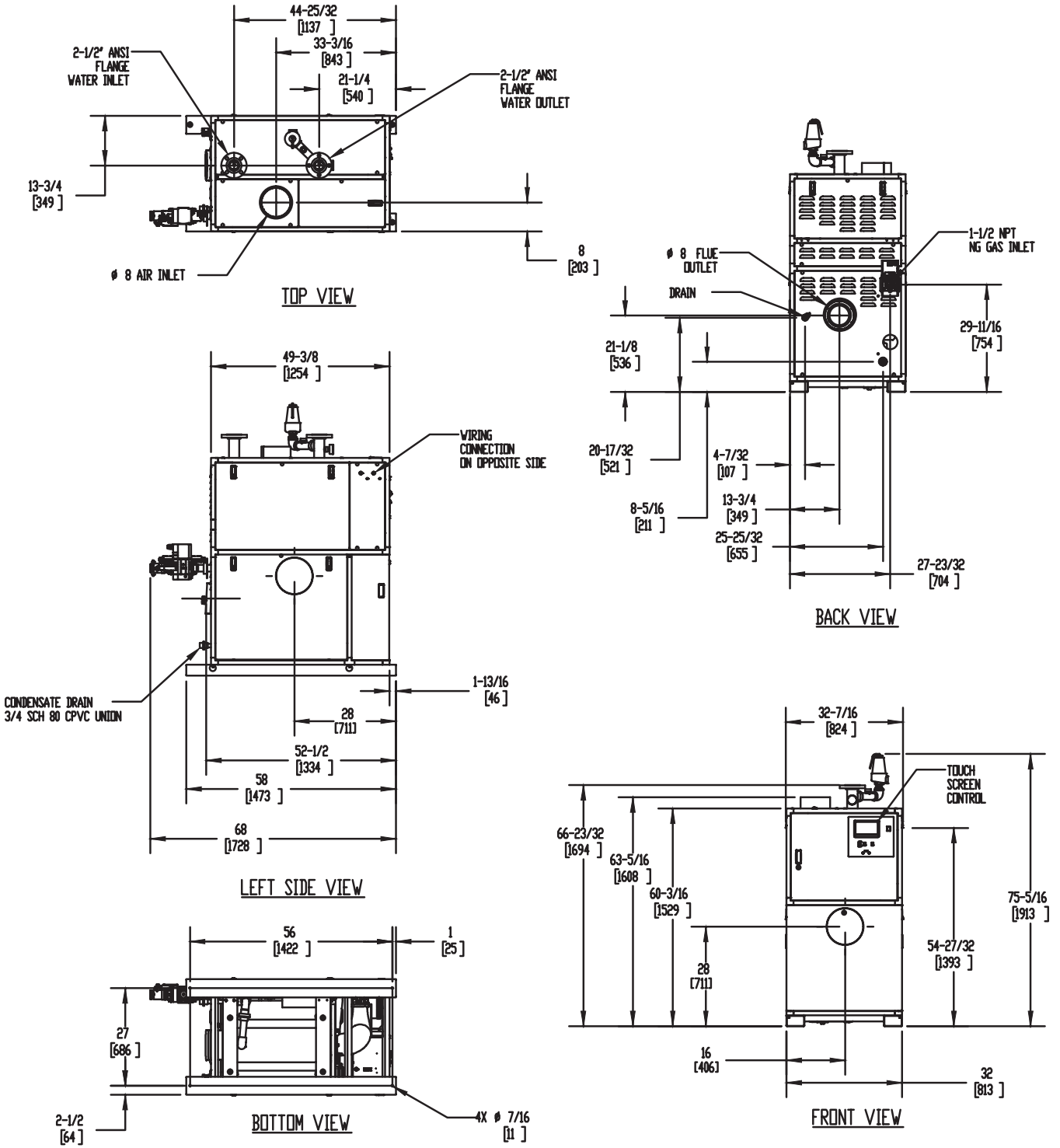
# TORUS 1500 VERTICAL

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
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## INDOOR UNIT



### Notes:

1. Dimensions are approximate and should not be used to "rough-in" equipment.
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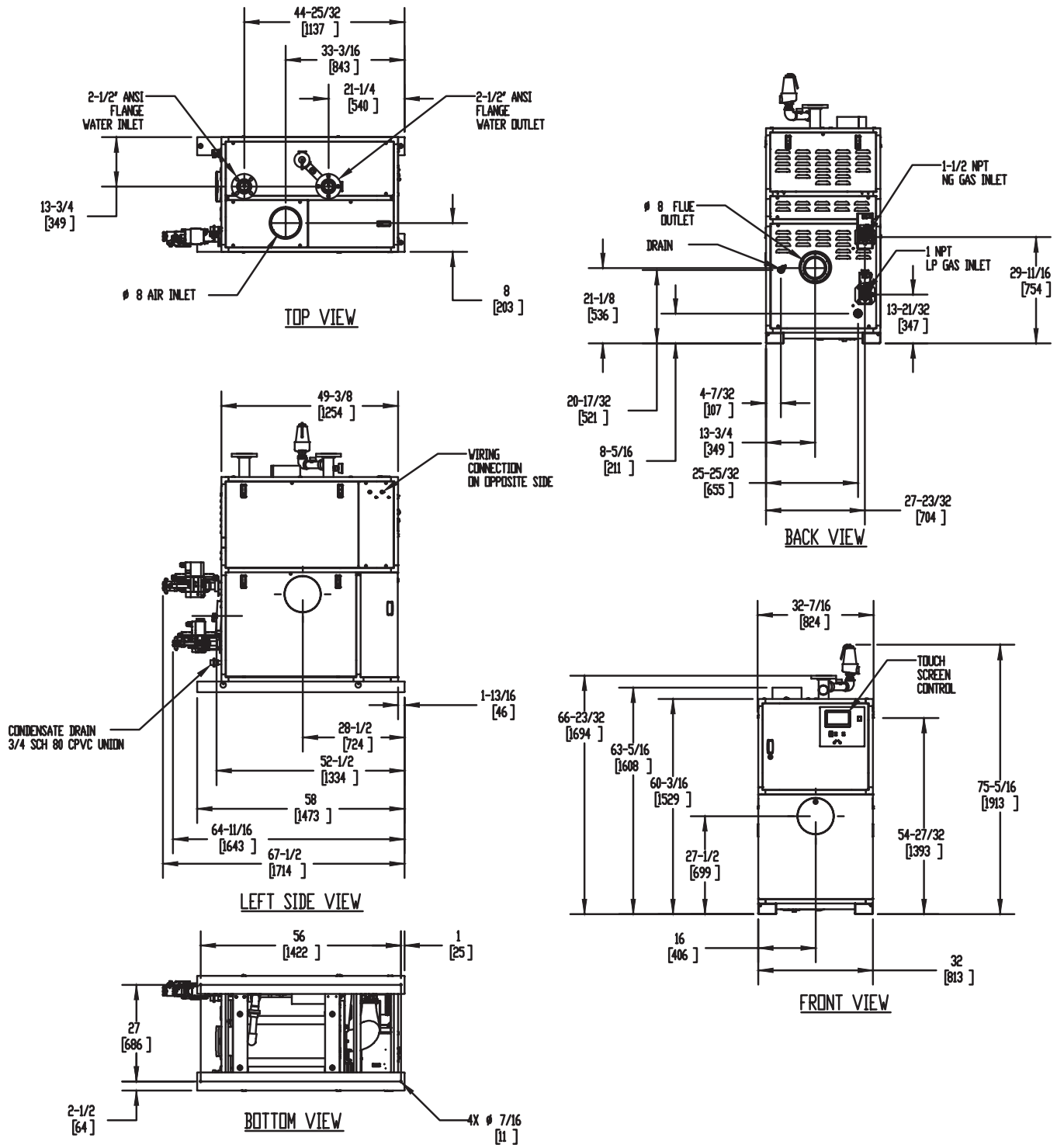
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Category II or Category IV Appliance  
(see Installation and Operation Manual for venting information)

## CODE OPTIONS

CSD-1	FIRMWARE W/REMOTE TEST MANUAL RESET LWCO
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## DUAL FUEL UNIT



### Notes:

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## BOILER CERTIFIED RATINGS & CAPACITIES

<b>Fuel Type</b>	Natural/Propane Gas	<b>Boiler FLA</b>	21.0*
<b>Input BTU/hr.</b>	1,500,000 / 440 kW	<b>Boiler HP</b>	43.25
<b>Output BTU/hr.</b>	1,447,500 / 424 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>	1183 lbs / 537 kg

## BOILER TRIM & CONTROLS

<b>Main Gas Valve</b>	Dungs MBC	<b>Air Switch</b>	Huba
<b>Firing Valve</b>	1" 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>	1 1/2" Apollo	<b>Relief Valve (WB)</b>	1" x 1-1/4" 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 Htg Surface</b>	119.8 Sq. Ft. / 11.13 Sq. M.	<b>Design Data</b>	Max. 160 psig & 210°F
<b>ASME Sect IV Water Side Htg Surface</b>	111.08 Sq. Ft. / 10.32 Sq. M.	<b>Water Volume</b>	13 gal. / 49.2 Liters
		<b>pH Level</b>	6.5-8.5

\* 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				50°F / 27.8°C				60°F / 33.3°C			
Flow Rate		Pressure Drop		Flow Rate		Pressure Drop		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	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 GPM (Boiler)				Temp. Rise (°F) (Boiler**)				Vent Length (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		Pressure 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)



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 Westfield, MA 01085  
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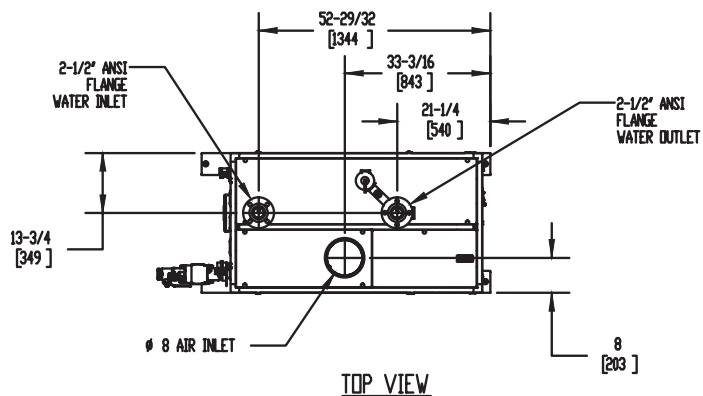
# TORUS 2000 VERTICAL

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

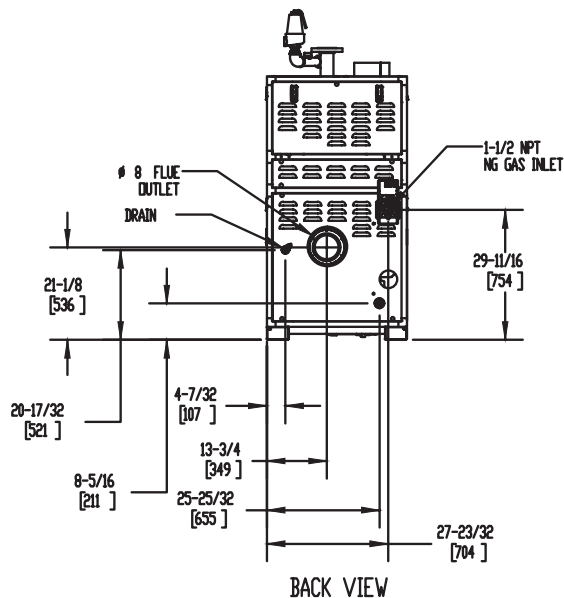
## CODE OPTIONS

CSD-1	FIRMWARE W/REMOTE TEST MANUAL RESET LWCO
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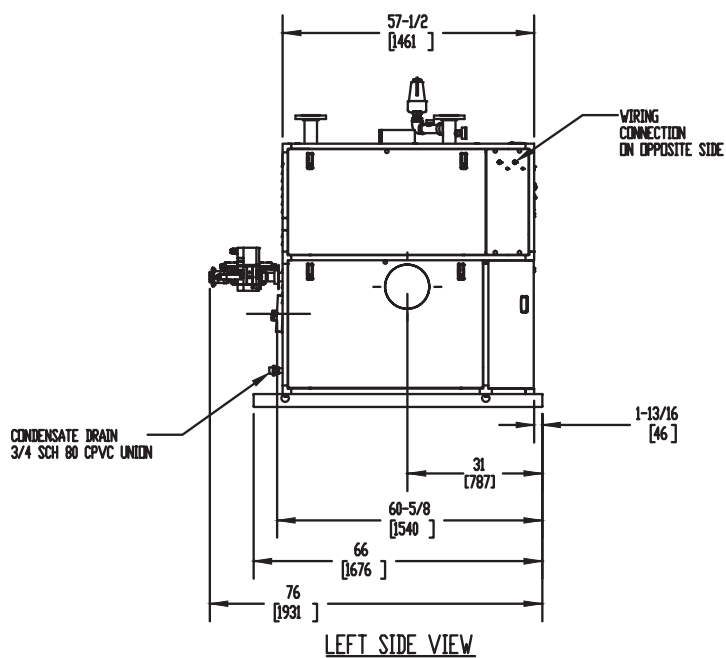
## INDOOR UNIT



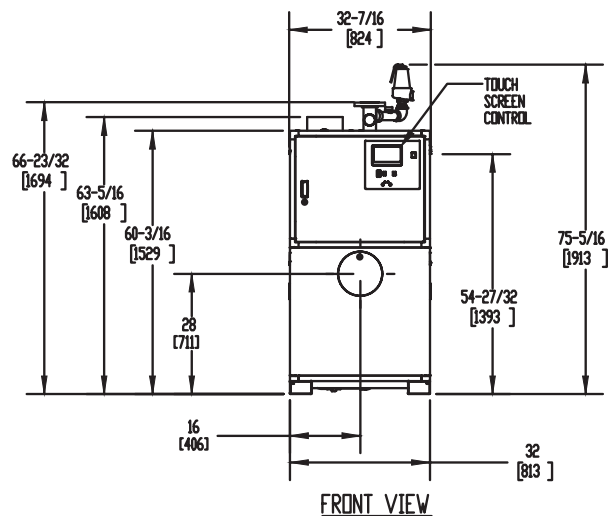
TOP VIEW



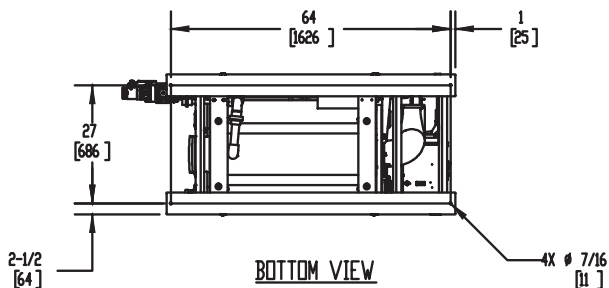
BACK VIEW



LEFT SIDE VIEW




FRONT VIEW



BOTTOM VIEW

### Notes:

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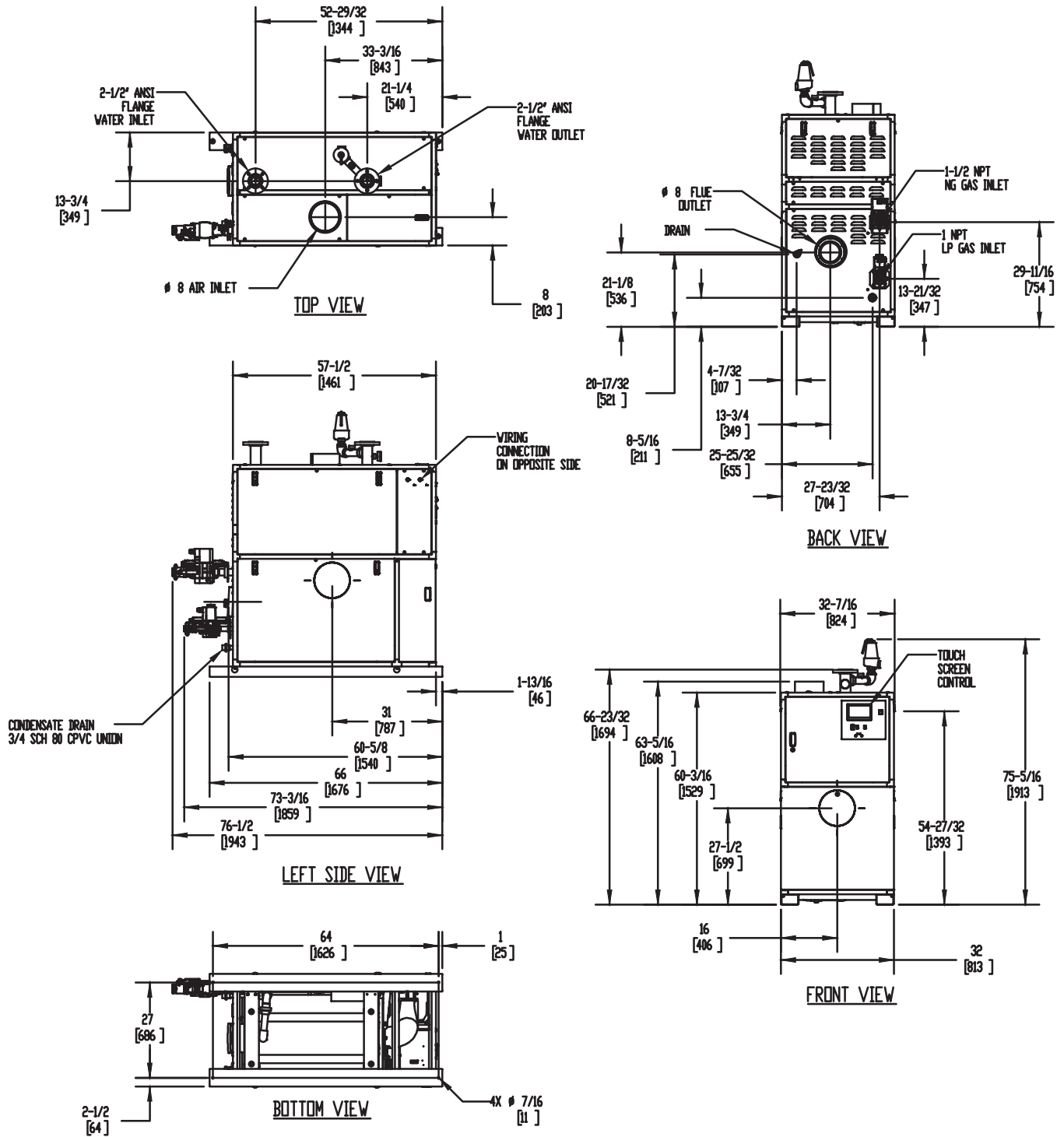
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Category II or Category IV Appliance  
(see Installation and Operation Manual for venting information)


## CODE OPTIONS

CSD-1	FIRMWARE W/REMOTE TEST MANUAL RESET LWCO
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## DUAL FUEL UNIT



### Notes:

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## BOILER CERTIFIED RATINGS & CAPACITIES

<b>Fuel Type</b>	Natural/Propane Gas	<b>Boiler FLA</b>	25.6
<b>Input BTU/hr.</b>	1,999,000 / 586 kW	<b>Boiler HP</b>	57.66
<b>Output BTU/hr.</b>	1,929,035 / 565 kW	<b>Min. Gas Pressure Required</b>	4" W.C.
<b>Electrical Requirements</b>	230 VAC/60 Hz/1PH	<b>Max. Gas Pressure Allowed</b>	14" W.C.
		<b>Operating Weight</b>	1388 lbs / 630 kg

## BOILER TRIM & CONTROLS

<b>Main Gas Valve</b>	Dungs MBC	<b>Air Switch</b>	Huba
<b>Firing Valve</b>	1 1/2" 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>	1 1/2" Apollo	<b>Relief Valve (WB)</b>	1" x 1-1/4" 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>	153.19 Sq. Ft. / 14.23 Sq. M.	<b>Design Data</b>	Max. 160 psig & 210°F
<b>Htg Surface</b>		<b>Water Volume</b>	16.9 gal. / 64 Liters
<b>ASME Sect IV Water Side</b>	141.93 Sq. Ft. / 13.19 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				50°F / 27.8°C				60°F / 33.3°C			
Flow Rate		Pressure Drop		Flow Rate		Pressure Drop		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	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa
193.0	12.2	20.1	60.1	128.7	8.1	9.9	29.7	96.5	6.1	6.1	18.2	77.2	4.9	4.2	12.5	64.3	4.1	3.1	9.2

Flow GPM (Boiler)				Temp. Rise (°F) (Boiler**)				Vent Length (Equiv. Ft.)				Air Inlet Length (Equiv. Ft.)			
Min		Max		Min		Max		Min		Max		Min		Max	
64.3		193.0		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
5819	21997	3880	14665	2910	10999	2328	8799	1940	7332	1663	6285

### 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
138.0	8.7	11.2	33.5	183.0	11.5	18.3	54.7

**REP FIRM** \_\_\_\_\_  
**SUBMITTED BY** \_\_\_\_\_  
**JOB NAME** \_\_\_\_\_  
**ARCHITECT** \_\_\_\_\_  
**ENGINEER** \_\_\_\_\_  
**CONTRACTOR** \_\_\_\_\_  
**DATE** \_\_\_\_\_

## TORUS 2000 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

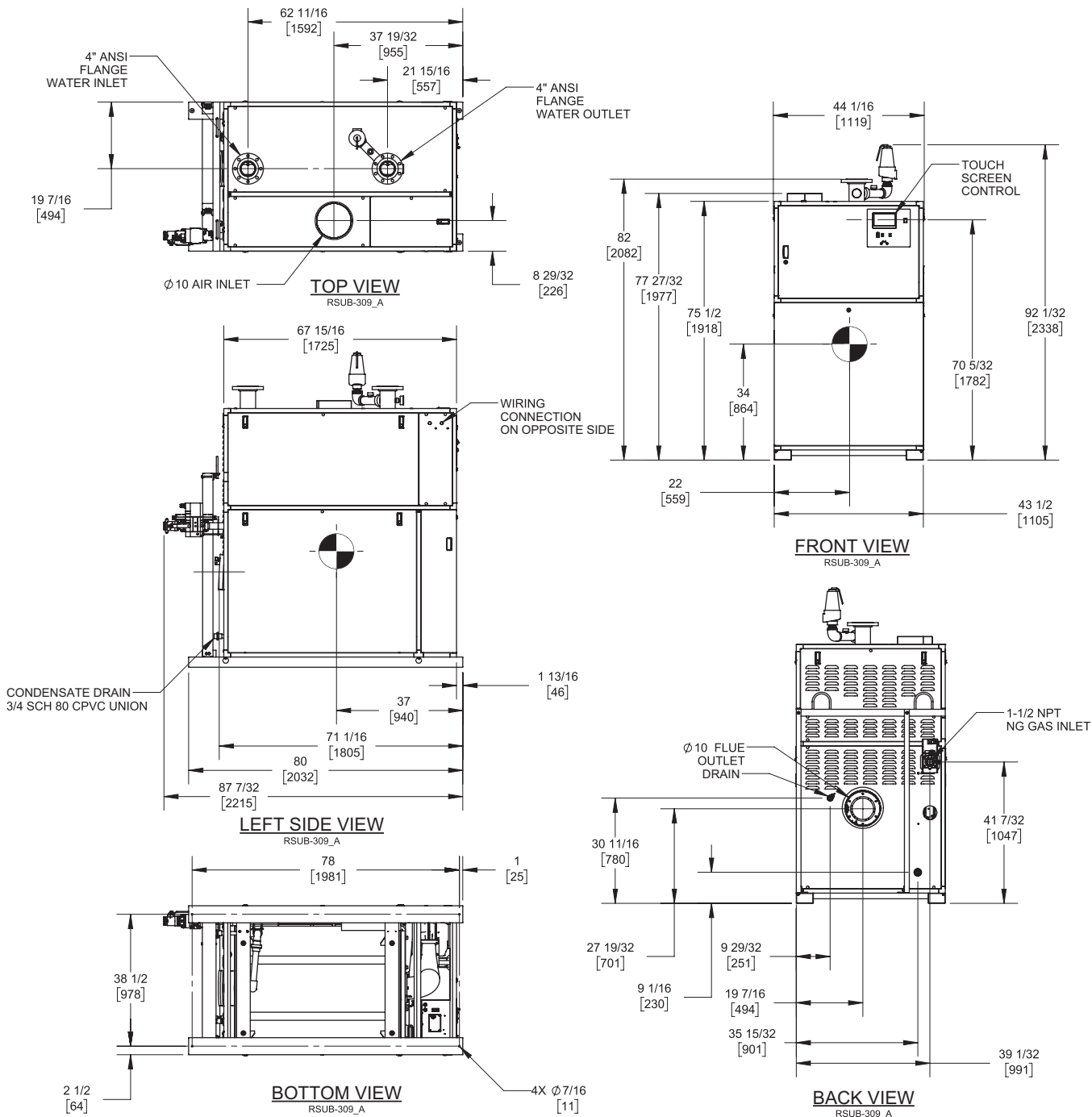
# TORUS 2500 VERTICAL

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
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## INDOOR UNIT



### Notes:

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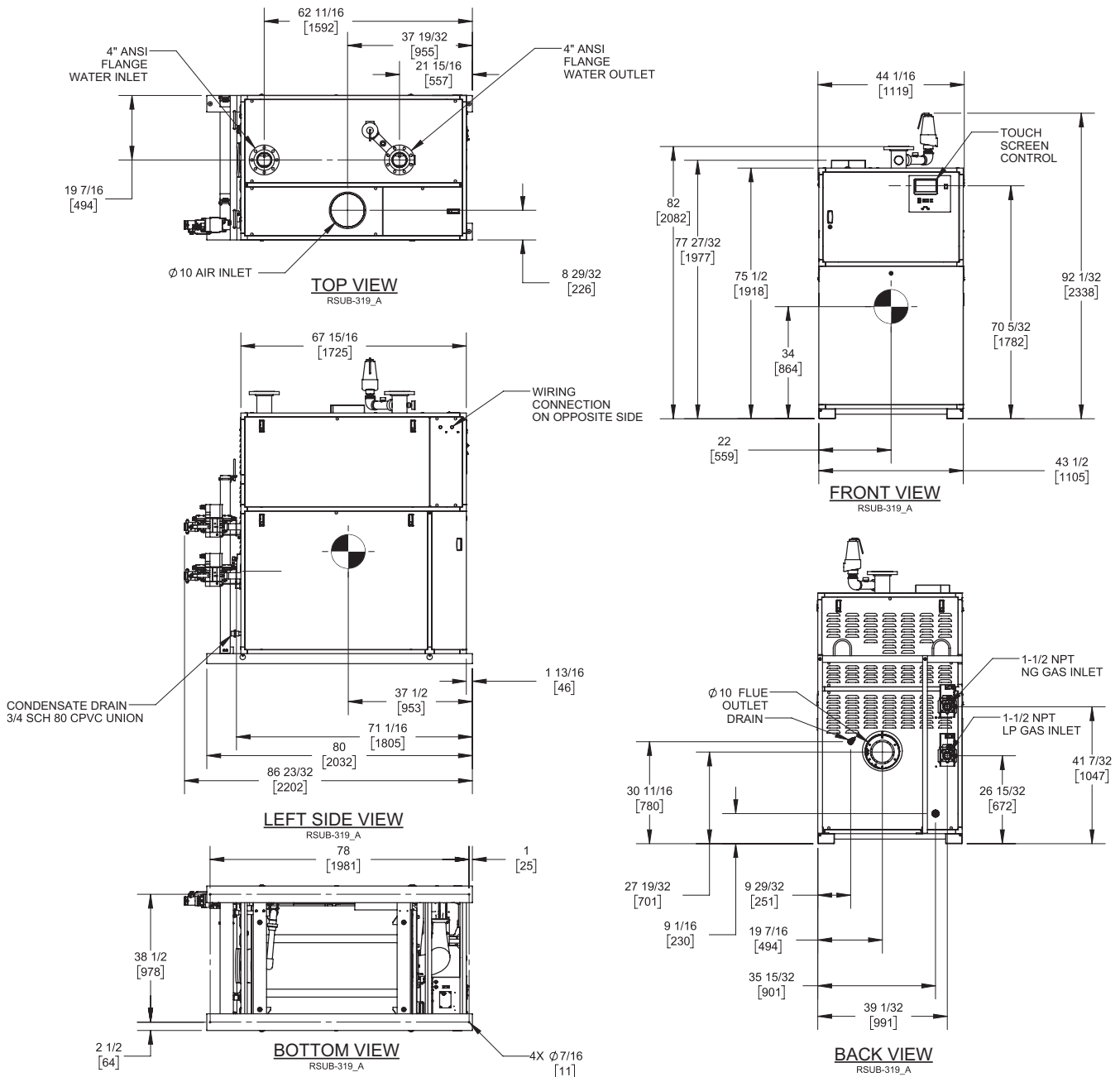
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Category II or Category IV Appliance  
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## CODE OPTIONS

CSD-1	FIRMWARE W/REMOTE TEST MANUAL RESET LWCO
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## DUAL FUEL UNIT



### Notes:

1. Dimensions are approximate and should not be used to "rough-in" equipment.
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## BOILER CERTIFIED RATINGS & CAPACITIES

<b>Fuel Type</b>	Natural/Propane Gas	<b>Boiler FLA</b>	15.05*
<b>Input BTU/hr.</b>	2,500,000 / 733 kW	<b>Boiler HP</b>	72.45
<b>Output BTU/hr.</b>	2,435,000 / 713 kW	<b>Min. Gas Pressure Required</b>	4" W.C.
<b>Electrical Requirements</b>	230 VAC/60 Hz/3PH	<b>Max. Gas Pressure Allowed</b>	14" W.C.
		<b>Operating Weight</b>	2311 lbs / 1048 kg

## BOILER TRIM & CONTROLS

<b>Main Gas Valve</b>	Dungs MBC	<b>Air Switch</b>	Huba
<b>Firing Valve</b>	1 1/2" 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>	1 1/2" Apollo	<b>Relief Valve (WB)</b>	1" x 1 1/2" set @ 50 psi
		<b>Relief Valve (WW)</b>	1 1/2" x 1 1/2" set @ 125 psi

Pump contactor strongly recommended for water heater applications.

## A.S.M.E.

<b>ASME Sect IV Fire Side Htg Surface</b>	300.69 Sq. Ft. / 27.94 Sq. M.	<b>Design Data</b>	Max. 160 psig & 210°F
<b>ASME Sect IV Water Side Htg Surface</b>	277.23 Sq. Ft. / 25.76 Sq. M.	<b>Water Volume</b>	24.9 gal. / 94.3 Liters
		<b>pH Level</b>	6.5-8.5

\* 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				50°F / 27.8°C				60°F / 33.3°C			
Flow Rate		Pressure Drop		Flow Rate		Pressure Drop		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	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa
243.8	15.4	16.2	48.3	162.6	10.3	9.2	27.4	121.9	7.7	6.2	18.4	97.5	6.2	4.5	13.5	81.3	5.1	3.5	10.4

Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)	
Min	Max	Min	Max	Min	Max	Min	Max
81.3	243.8	20	60	10	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
7278	27511	4852	18340	3639	13755	2911	11004	2426	9170	2079	7860

### 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
214.0	13.5	13.4	40.1	285.0	18.0	20.2	60.4

**REP FIRM** \_\_\_\_\_  
**SUBMITTED BY** \_\_\_\_\_  
**JOB NAME** \_\_\_\_\_  
**ARCHITECT** \_\_\_\_\_  
**ENGINEER** \_\_\_\_\_  
**CONTRACTOR** \_\_\_\_\_  
**DATE** \_\_\_\_\_

## TORUS 2500 VERTICAL

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



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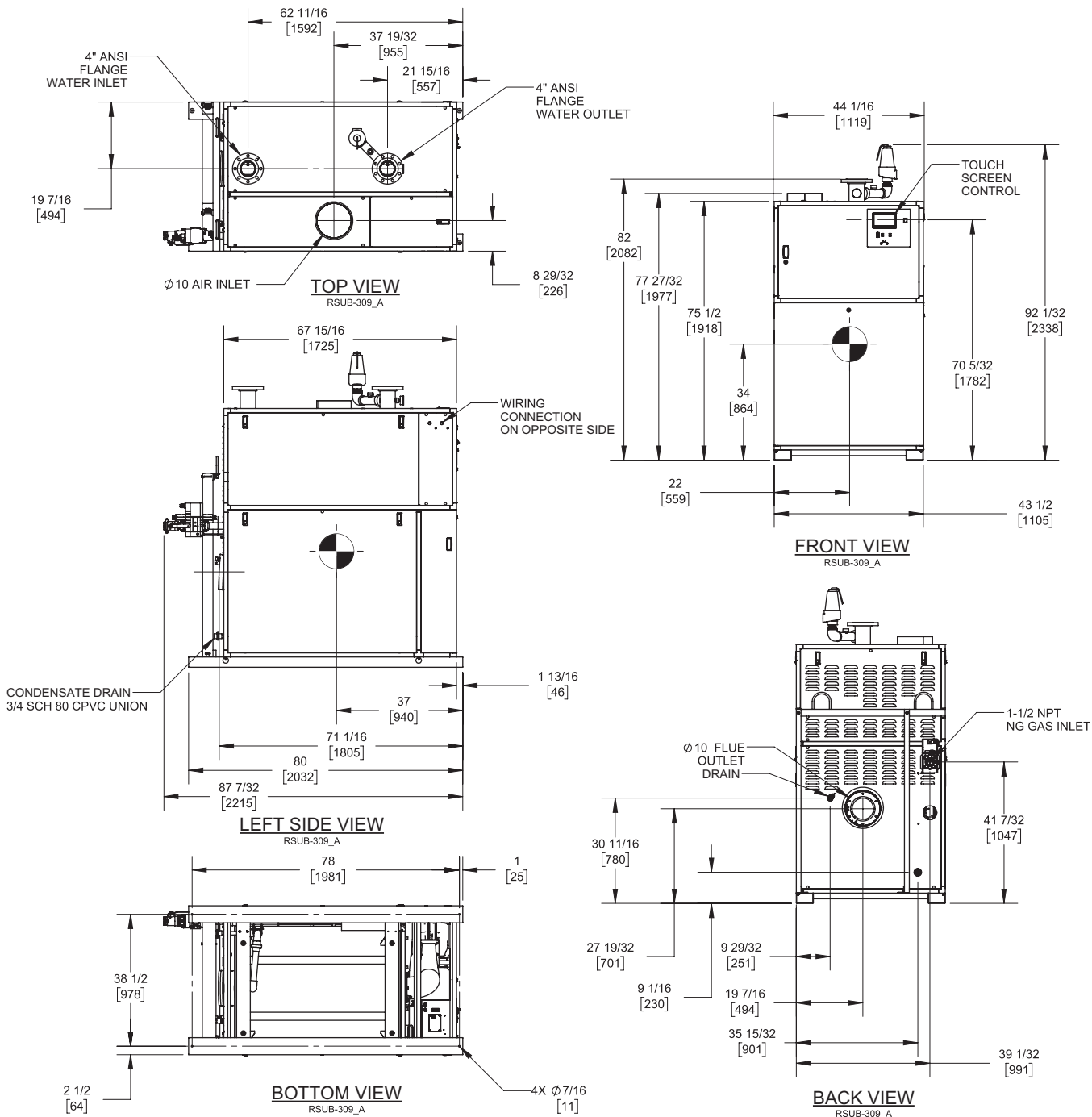
# TORUS 3000 VERTICAL

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:

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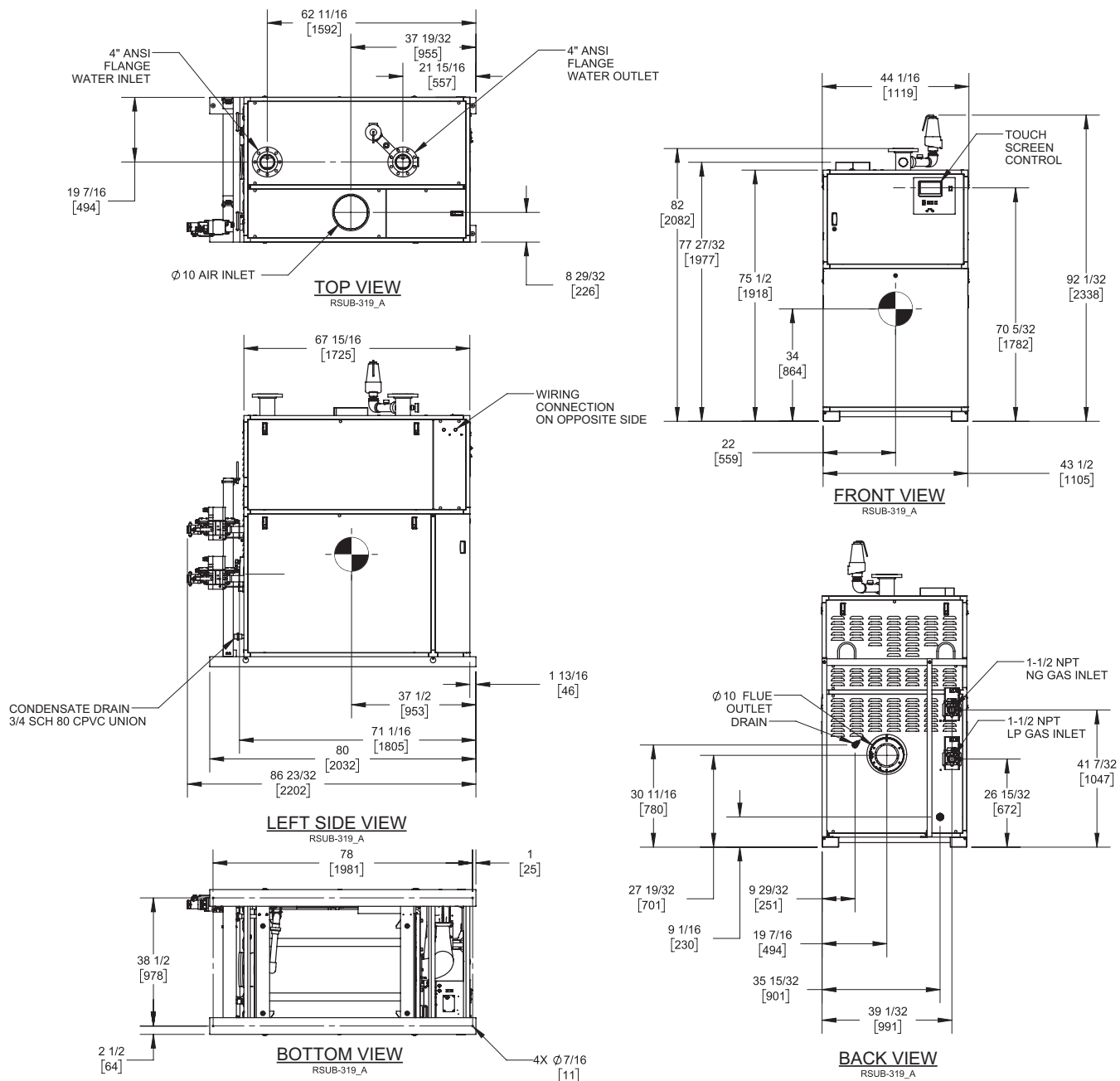
# TORUS 3000 VERTICAL

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
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## DUAL FUEL 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>	15.05*
<b>Input BTU/hr.</b>	3,000,000 / 879 kW	<b>Boiler HP</b>	87.39
<b>Output BTU/hr.</b>	2,925,000 / 857 kW	<b>Min. Gas Pressure Required</b>	4" W.C.
<b>Electrical Requirements</b>	230 VAC/60 Hz/3PH	<b>Max. Gas Pressure Allowed</b>	14" W.C.
		<b>Operating Weight</b>	2311 lbs / 1048 kg

## BOILER TRIM & CONTROLS

<b>Main Gas Valve</b>	Dungs MBC	<b>Air Switch</b>	Huba
<b>Firing Valve</b>	1 1/2" 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>	1 1/2" Apollo	<b>Relief Valve (WB)</b>	1" x 1 1/2" set @ 50 psi
Pump contactor strongly recommended for water heater applications.		<b>Relief Valve (WW)</b>	1 1/2" x 1 1/2" set @ 125 psi

## A.S.M.E.

<b>ASME Sect IV Fire Side Htg Surface</b>	300.69 Sq. Ft. / 27.94 Sq. M.	<b>Design Data</b>	Max. 160 psig & 210°F
<b>ASME Sect IV Water Side Htg Surface</b>	277.23 Sq. Ft. / 25.76 Sq. M.	<b>Water Volume</b>	24.9 gal. / 94.3 Liters
		<b>pH Level</b>	6.5-8.5

\* 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				50°F / 27.8°C				60°F / 33.3°C			
Flow Rate		Pressure Drop		Flow Rate		Pressure Drop		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	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa
292.6	18.5	21.0	62.7	195.1	12.3	11.8	35.3	146.3	9.2	7.9	23.7	117.0	7.4	5.8	17.4	97.5	6.2	4.5	13.5

Flow GPM (Boiler)				Temp. Rise (°F) (Boiler**)				Vent Length (Equiv. Ft.)				Air Inlet Length (Equiv. Ft.)			
Min		Max		Min		Max		Min		Max		Min		Max	
97.5		292.6		20		60		10		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
8824	33353	5882	22235	4412	16676	3529	13341	2941	11118	2521	9529

### 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
214.0	13.5	13.4	40.1	285.0	18.0	20.2	60.4

**REP FIRM** \_\_\_\_\_  
**SUBMITTED BY** \_\_\_\_\_  
**JOB NAME** \_\_\_\_\_  
**ARCHITECT** \_\_\_\_\_  
**ENGINEER** \_\_\_\_\_  
**CONTRACTOR** \_\_\_\_\_  
**DATE** \_\_\_\_\_

## TORUS 3000 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

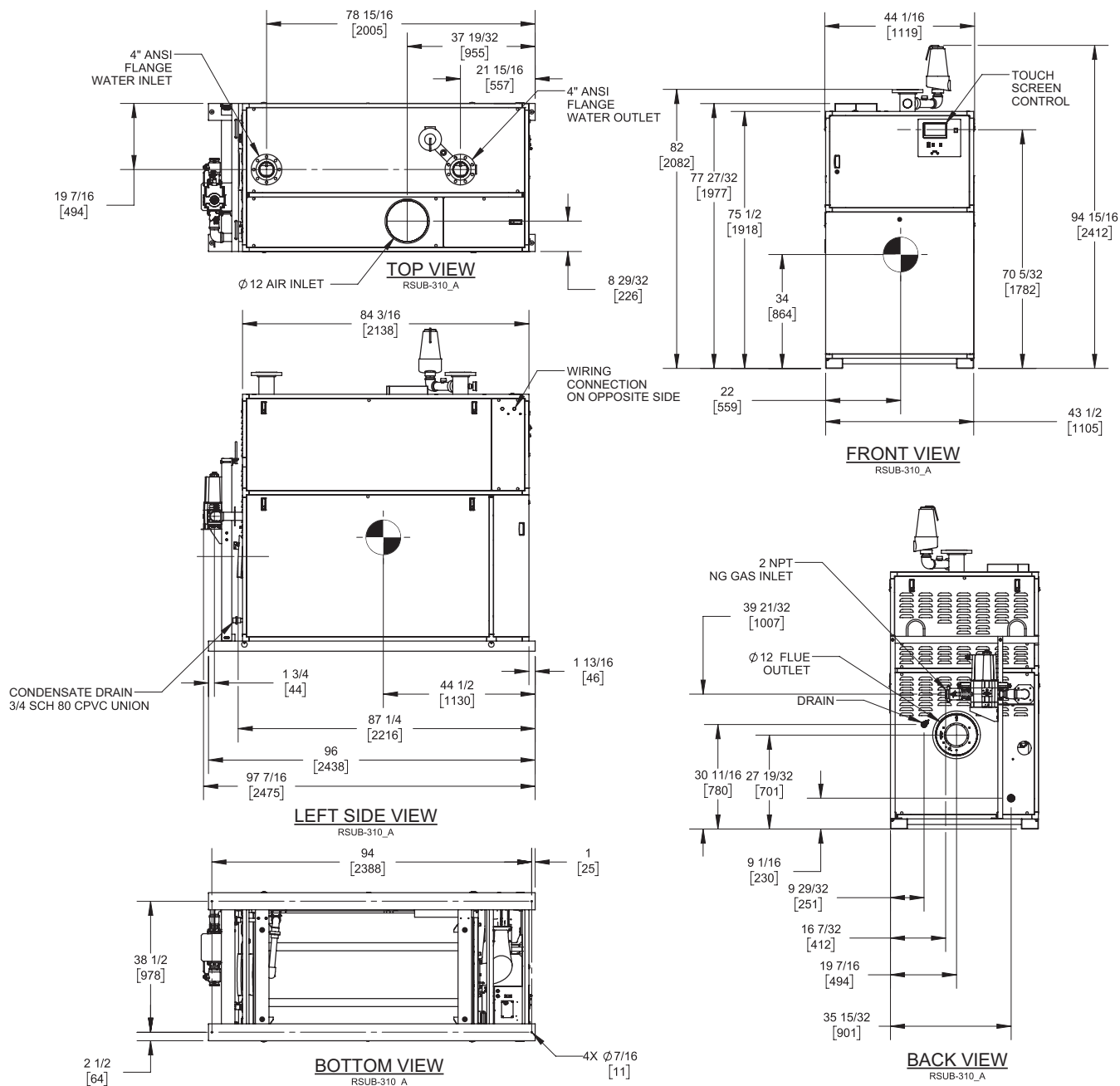
# TORUS 4000 VERTICAL

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
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## 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.



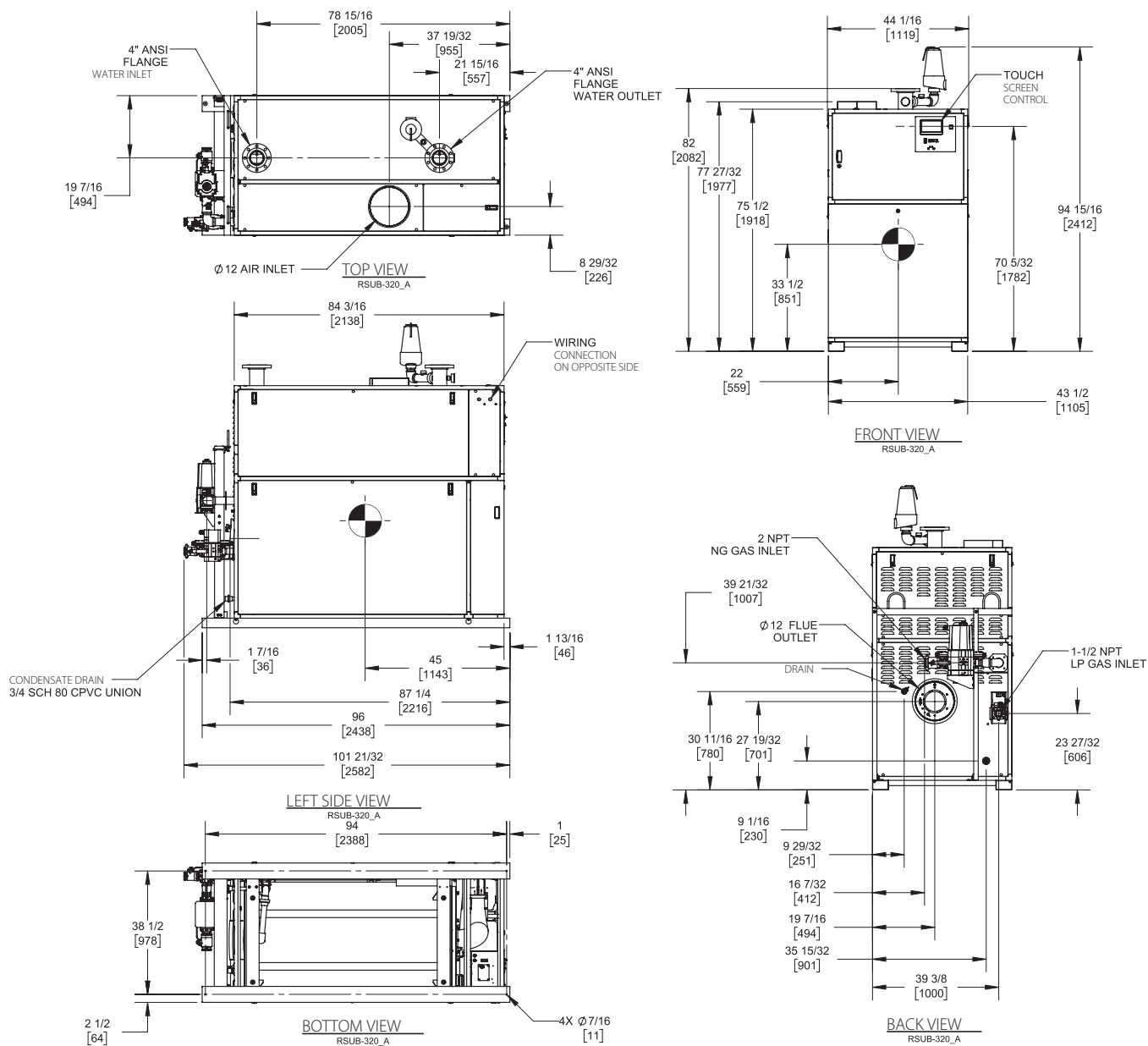
# TORUS 4000 VERTICAL

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.
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>	19.9*
<b>Input BTU/hr.</b>	4,000,000 / 1172kW	<b>Boiler HP</b>	116.52
<b>Output BTU/hr.</b>	3,900,000 / 1143 kW	<b>Min. Gas Pressure Required</b>	4" W.C.
<b>Electrical Requirements</b>	230 VAC/60 Hz/3PH	<b>Max. Gas Pressure Allowed</b>	14" W.C.
		<b>Operating Weight</b>	2866 lbs / 1300 kg

## BOILER TRIM & CONTROLS

<b>Main Gas Valve</b>	Dungs MBC	<b>Air Switch</b>	Huba
<b>Firing Valve</b>	2" 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>	2" Apollo	<b>Relief Valve (WB)</b>	1" x 1 1/2" set @ 50 psi
		<b>Relief Valve (WW)</b>	1 1/2" x 1 1/2" set @ 125 psi

Pump contactor strongly recommended for water heater applications.

## A.S.M.E.

<b>ASME Sect IV Fire Side</b>	402.93 Sq. Ft. / 37.43 Sq. M.	<b>Design Data</b>	Max. 160 psig & 210°F
<b>Htg Surface</b>		<b>Water Volume</b>	41.3 gal. / 156.3 Liters
<b>ASME Sect IV Water Side</b>	371.25 Sq. Ft. / 34.49 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				50°F / 27.8°C				60°F / 33.3°C			
Flow Rate		Pressure Drop		Flow Rate		Pressure Drop		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	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa
390.2	24.6	19.9	59.6	260.1	16.4	10.1	30.2	195.1	12.3	6.5	19.3	156.1	9.8	4.7	14.0	130.1	8.2	3.7	10.9

Flow GPM (Boiler)				Temp. Rise (°F) (Boiler**)				Vent Length (Equiv. Ft.)				Air Inlet Length (Equiv. Ft.)			
Min		Max		Min		Max		Min		Max		Min		Max	
130.1		390.2		20		60		12		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
11765	44471	7843	29647	5882	22235	4706	17788	3922	14824	3361	12706

### 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
280.0	6.2	11.4	34.1	372.0	8.3	18.4	55.0

**REP FIRM** \_\_\_\_\_  
**SUBMITTED BY** \_\_\_\_\_  
**JOB NAME** \_\_\_\_\_  
**ARCHITECT** \_\_\_\_\_  
**ENGINEER** \_\_\_\_\_  
**CONTRACTOR** \_\_\_\_\_  
**DATE** \_\_\_\_\_

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