

TORUS 1500 DUAL FUEL

Category II or Category IV Appliance

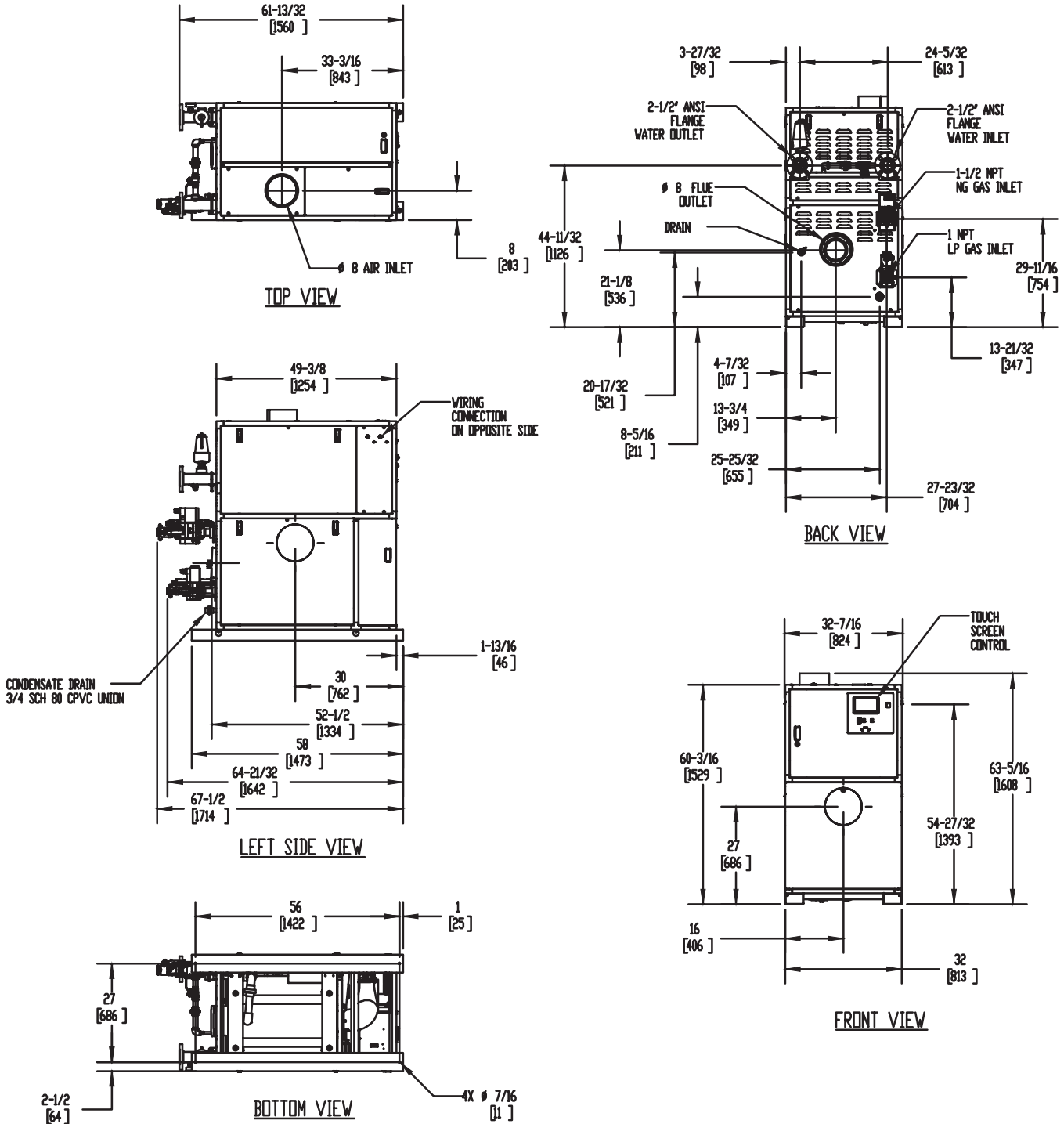
(see Installation and Operation Manual for venting information)

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.
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

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

* 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

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

Flow GPM		Temp. Rise** (°F)		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.

REP FIRM	_____	TORUS 1500 DUAL FUEL 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
SUBMITTED BY	_____	
JOB NAME	_____	
ARCHITECT	_____	
ENGINEER	_____	
CONTRACTOR	_____	
DATE	_____	

TORUS 1500 DUAL FUEL

Category II or Category IV Appliance

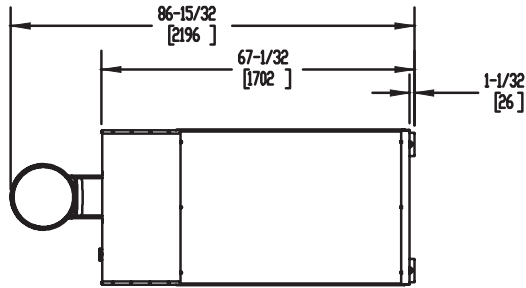
(see Installation and Operation Manual for venting information)

CODE OPTIONS

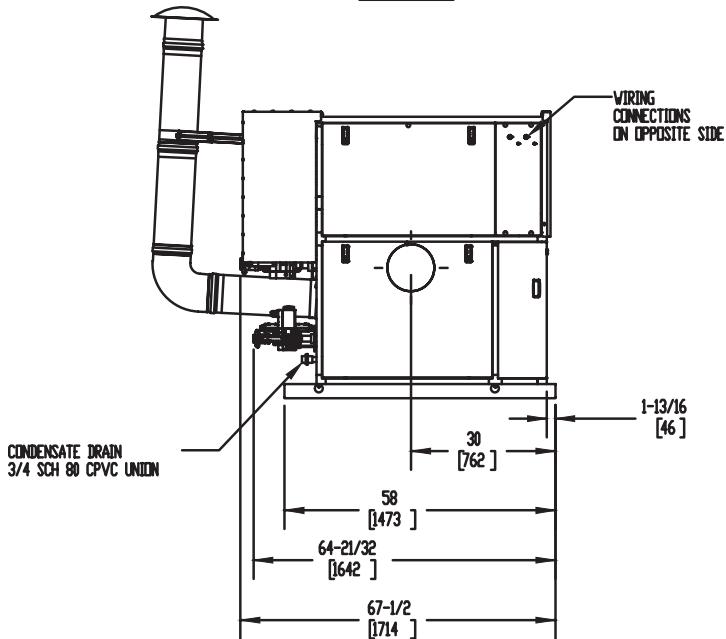
CSD-1

FIRMWARE W/REMOTE
TEST MANUAL RESET LWCO

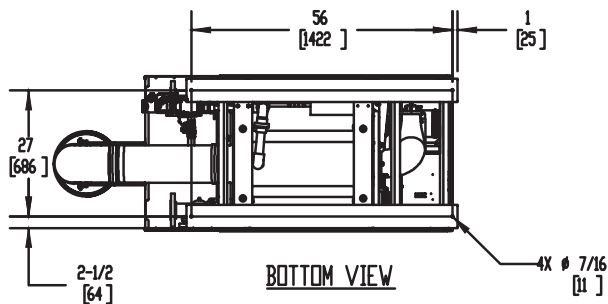
OUTDOOR UNIT



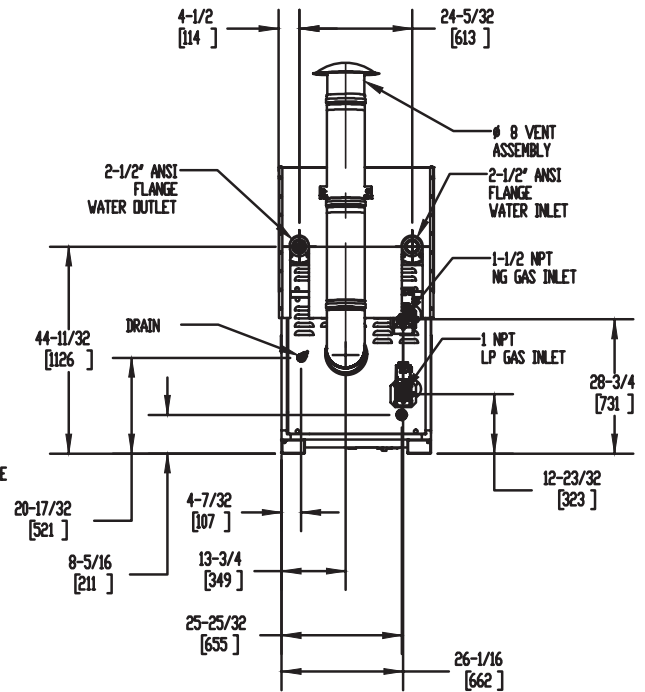
TOP VIEW



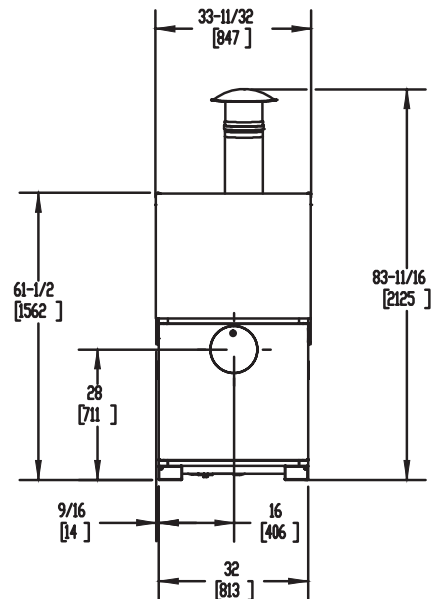
LEFT SIDE VIEW



BOTTOM VIEW



BACK VIEW



FRONT VIEW

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

Fuel Type	Natural/Propane Gas	Boiler FLA	21.0*
Input BTU/hr.	1,500,000 / 440 kW	Boiler HP	43.25
Output BTU/hr.	1,444,500 / 423 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 Htg Surface	119.8 Sq. Ft. / 11.13 Sq. M.	Design Data	Max. 160 psig & 210°F
ASME Sect IV Water Side Htg Surface	111.08 Sq. Ft. / 10.32 Sq. M.	Water Volume	13 gal. / 49.2 Liters

* 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
144.5	9.1	16.3	48.8	96.3	6.1	8.1	24.1	72.3	4.6	5.0	14.9	57.8	3.7	3.5	10.4	48.2	3.0	2.6	7.7

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

Flow GPM				Temp. Rise** (°F)				Vent Length (Equiv. Ft.)				Air Inlet Length (Equiv. Ft.)			
Min		Max		Min		Max		Min		Max		Min		Max	
48.2		144.5		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.

REP FIRM	_____	TORUS 1500 DUAL FUEL 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
SUBMITTED BY	_____	
JOB NAME	_____	
ARCHITECT	_____	
ENGINEER	_____	
CONTRACTOR	_____	
DATE	_____	