

# TORUS 1250 DUAL FUEL

## Category II or Category IV Appliance

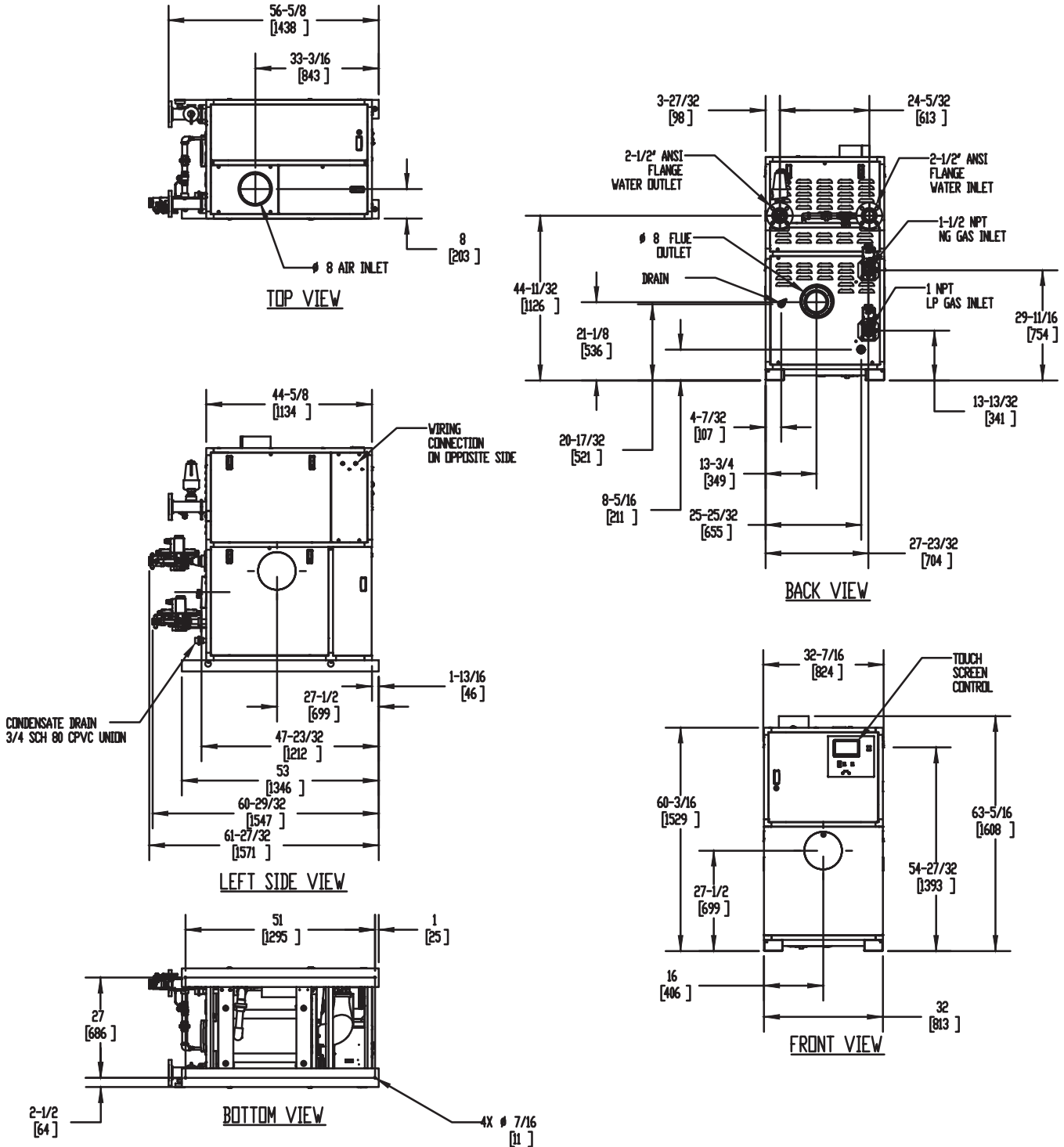
(see Installation and Operation Manual for venting information)

## 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

|                                |                     |                                   |                   |
|--------------------------------|---------------------|-----------------------------------|-------------------|
| <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 |
| Pump contactor strongly recommended for water heater applications. |               | <b>Relief Valve (WW)</b>   | 1" x 1" set @ 125 psi    |

## A.S.M.E.

|                                            |                              |                     |                       |
|--------------------------------------------|------------------------------|---------------------|-----------------------|
| <b>ASME Sect IV Fire Side Htg Surface</b>  | 100.17 Sq. Ft. / 9.31 Sq. M. | <b>Design Data</b>  | Max. 160 psig & 210°F |
| <b>ASME Sect IV Water Side Htg Surface</b> | 92.93 Sq. Ft. / 8.63 Sq. M.  | <b>Water Volume</b> | 11 gal. / 41.6 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 |
| 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 |

## 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 |

| Flow GPM |       | Temp. Rise** (°F) |     | 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.

|                     |       |                                                                                                                         |
|---------------------|-------|-------------------------------------------------------------------------------------------------------------------------|
| <b>REP FIRM</b>     | _____ | <b>TORUS 1250 DUAL FUEL</b>                                                                                             |
| <b>SUBMITTED BY</b> | _____ |                                                                                                                         |
| <b>JOB NAME</b>     | _____ |                                                                                                                         |
| <b>ARCHITECT</b>    | _____ |                                                                                                                         |
| <b>ENGINEER</b>     | _____ |                                                                                                                         |
| <b>CONTRACTOR</b>   | _____ |                                                                                                                         |
| <b>DATE</b>         | _____ | <b>Category II or Category IV Appliance</b><br>(see Installation and Operation Manual for venting information)          |
|                     |       |  <b>RELIABLE. BOLD. INNOVATIVE.</b> |
|                     |       | A Division of Mestek, Inc.<br>Westfield, MA 01085<br>(413) 564-5515                                                     |

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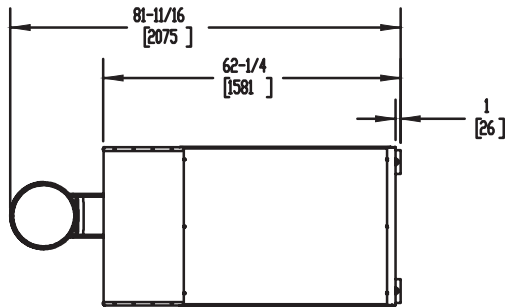
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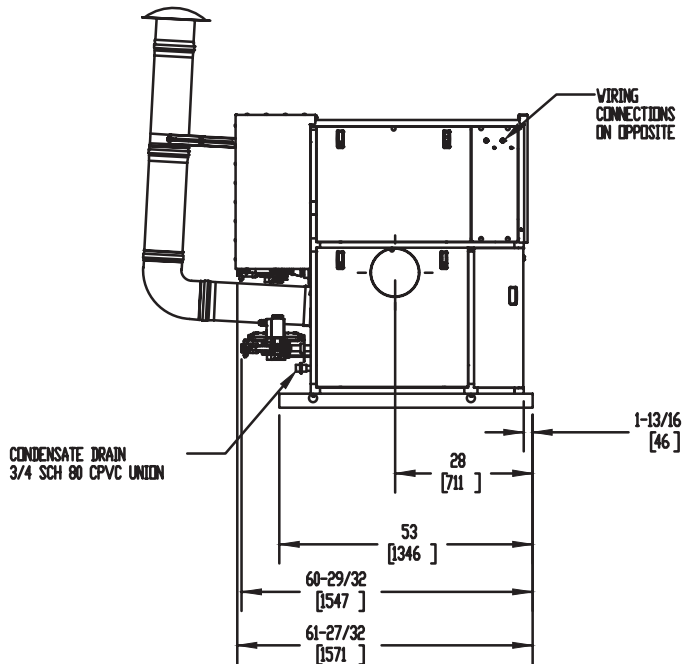
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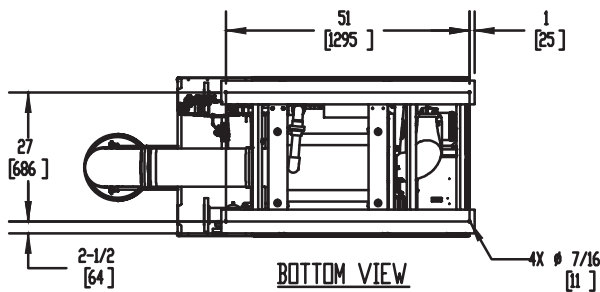
## OUTDOOR UNIT



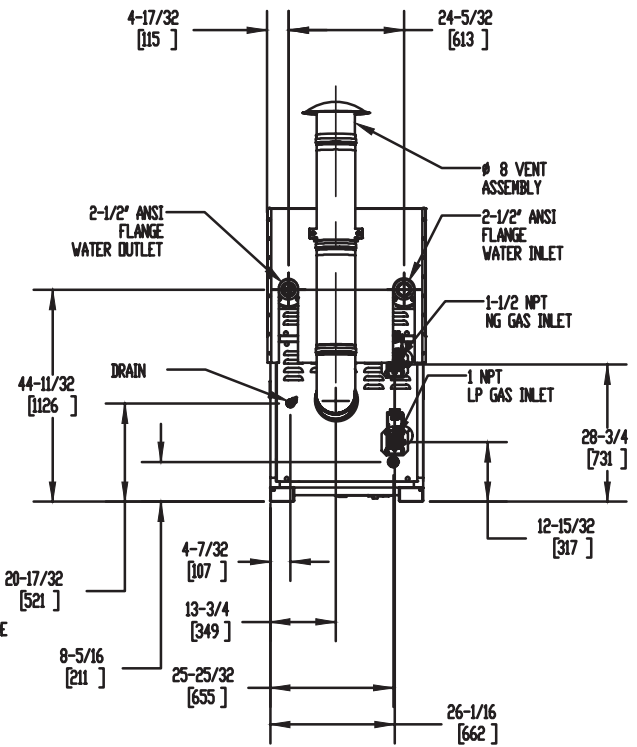
TOP VIEW



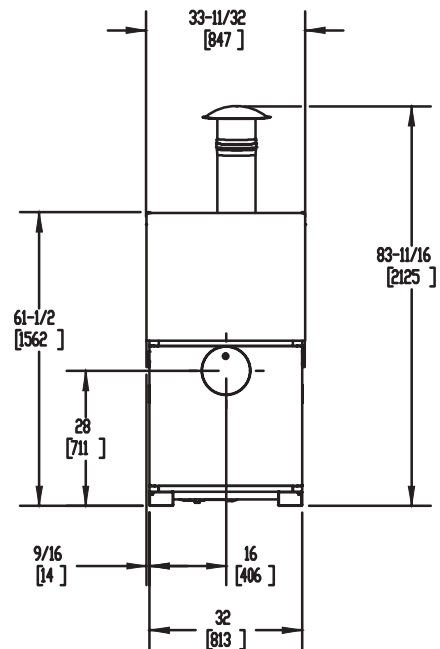
LEFT SIDE VIEW



BOTTOM VIEW



BACK VIEW



FRONT VIEW

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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>           | 1084 lbs / 492 kg |

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| <b>Operating Control</b>                                           | HeatNet®      | <b>Blower Motor</b>        | Ametek                   |
| <b>High Limit</b>                                                  | Jumo          | <b>L.W.C.O.</b>            | 800                      |
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| 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 |
| 120.4         | 7.6 | 153           | 45.7 | 80.3          | 5.1 | 7.2           | 21.6 | 60.2          | 3.8 | 4.6           | 13.9 | 48.2          | 3.0 | 3.6           | 10.6 | 40.1          | 2.5 | 3.0           | 9.1 |

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|----------|-------|-------------------|-----|--------------------------|-----|-------------------------------|-----|
| Min      | Max   | Min               | Max | Min                      | Max | Min                           | Max |
| 40.1     | 120.4 | 20                | 60  | 8                        | 160 | 0                             | 160 |

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|                     |       |                                                                                                                         |
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