

TORUS 300 DUAL FUEL

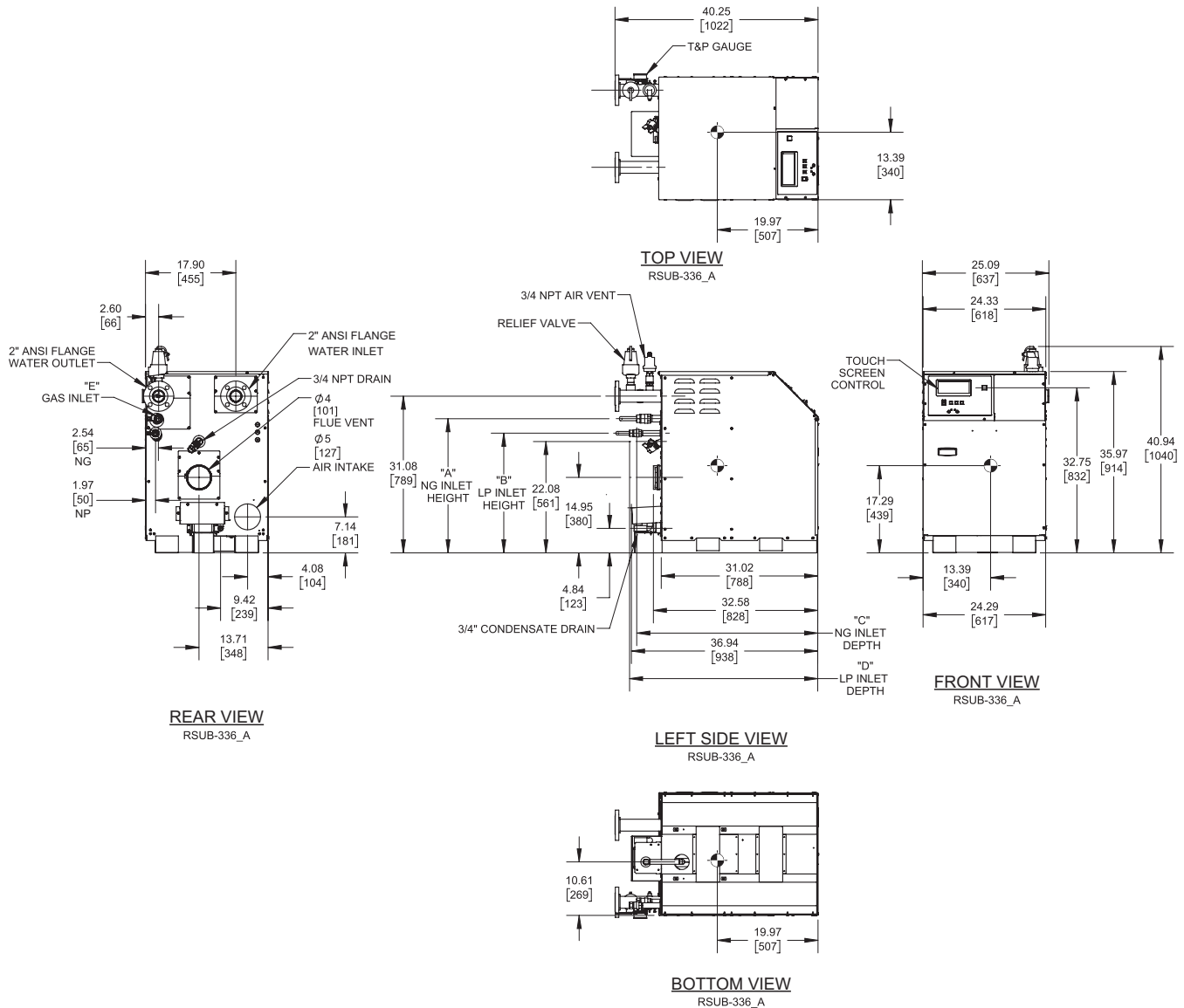
Category II or Category IV Appliance

(see Installation and Operation Manual for venting information)

CODE OPTIONS

CSD-1	FIRMWARE W/REMOTE TEST MANUAL RESET LWCO High and Low Gas Pressure Switches
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INDOOR UNIT



GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	27.17	-	35.88	-	1 NPT
LP	-	23.16	-	37.31	3/4 NPT

- 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	12.0*
Input BTU/hr.	300,000 / 87.92 kW	Boiler HP	8.69
Output BTU/hr.	291,000 / 85.28 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	418.20 lbs / 189.69 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" 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	34.8 Sq. Ft. / 3.23 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	3.8 gal. / 14.38 Liters
ASME Sect IV Water Side	31.5 Sq. Ft. / 2.92 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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
29.1	1.8	6.3	18.8	19.4	1.2	2.9	8.6	14.6	0.9	1.7	5.0
Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)					
Min	Max	Min	Max	Min	Max	Min	Max				
14.6	29.1	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
882	3335	588	2224	441	1668	353	1334	294	1112	252	953

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
30.5	1.9	6.9	20.6	40.6	2.6	12.1	36.3

REP FIRM _____
SUBMITTED BY _____
JOB NAME _____
ARCHITECT _____
ENGINEER _____
CONTRACTOR _____
DATE _____

TORUS 300 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

TORUS 300 DUAL FUEL

Category II or Category IV Appliance

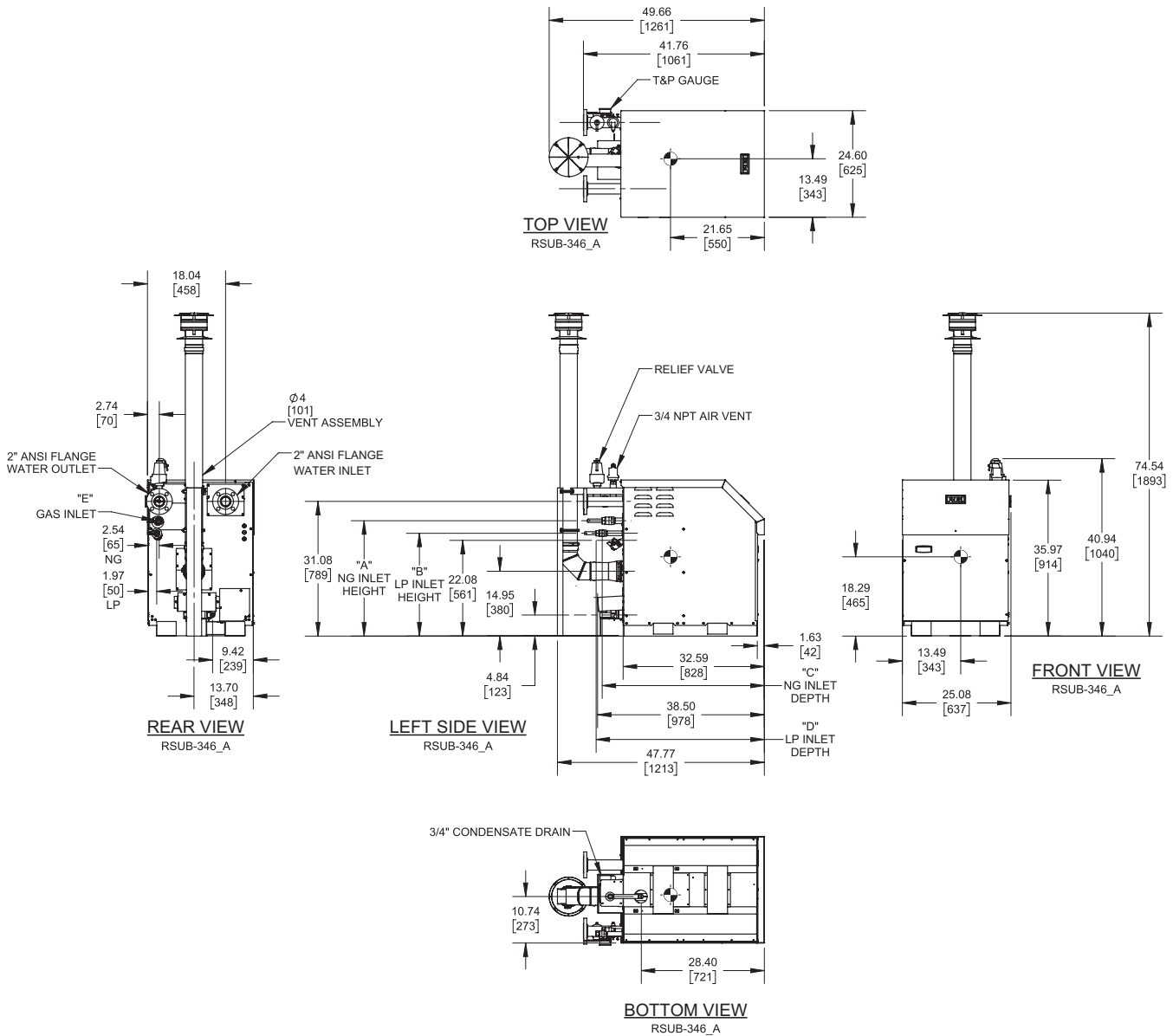
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CODE OPTIONS

CSD-1

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

OUTDOOR UNIT



GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	26.61	-	37.47	-	1 NPT
LP	-	27.72	-	38.84	3/4 NPT

Notes:

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BOILER CERTIFIED RATINGS & CAPACITIES

Fuel Type	Natural/Propane Gas	Boiler FLA	12.0*
Input BTU/hr.	300,000 / 87.92 kW	Boiler HP	8.69
Output BTU/hr.	291,000 / 85.28 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	443.69 lbs / 201.25 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" 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	34.8 Sq. Ft. / 3.23 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	3.8 gal. / 14.38 Liters
ASME Sect IV Water Side	31.5 Sq. Ft. / 2.92 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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
29.1	1.8	6.3	18.8	19.4	1.2	2.9	8.6	14.6	0.9	1.7	5.0

Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)	
Min	Max	Min	Max	Min	Max	Min	Max
14.6	29.1	20	40	Factory Supplied		0	

** 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
882	3335	588	2224	441	1668	353	1334	294	1112	252	953

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
30.5	1.9	6.9	20.6	40.6	2.6	12.1	36.3

REP FIRM _____
SUBMITTED BY _____
JOB NAME _____
ARCHITECT _____
ENGINEER _____
CONTRACTOR _____
DATE _____

TORUS 300 DUAL FUEL

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



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TORUS 350 DUAL FUEL

Category II or Category IV Appliance

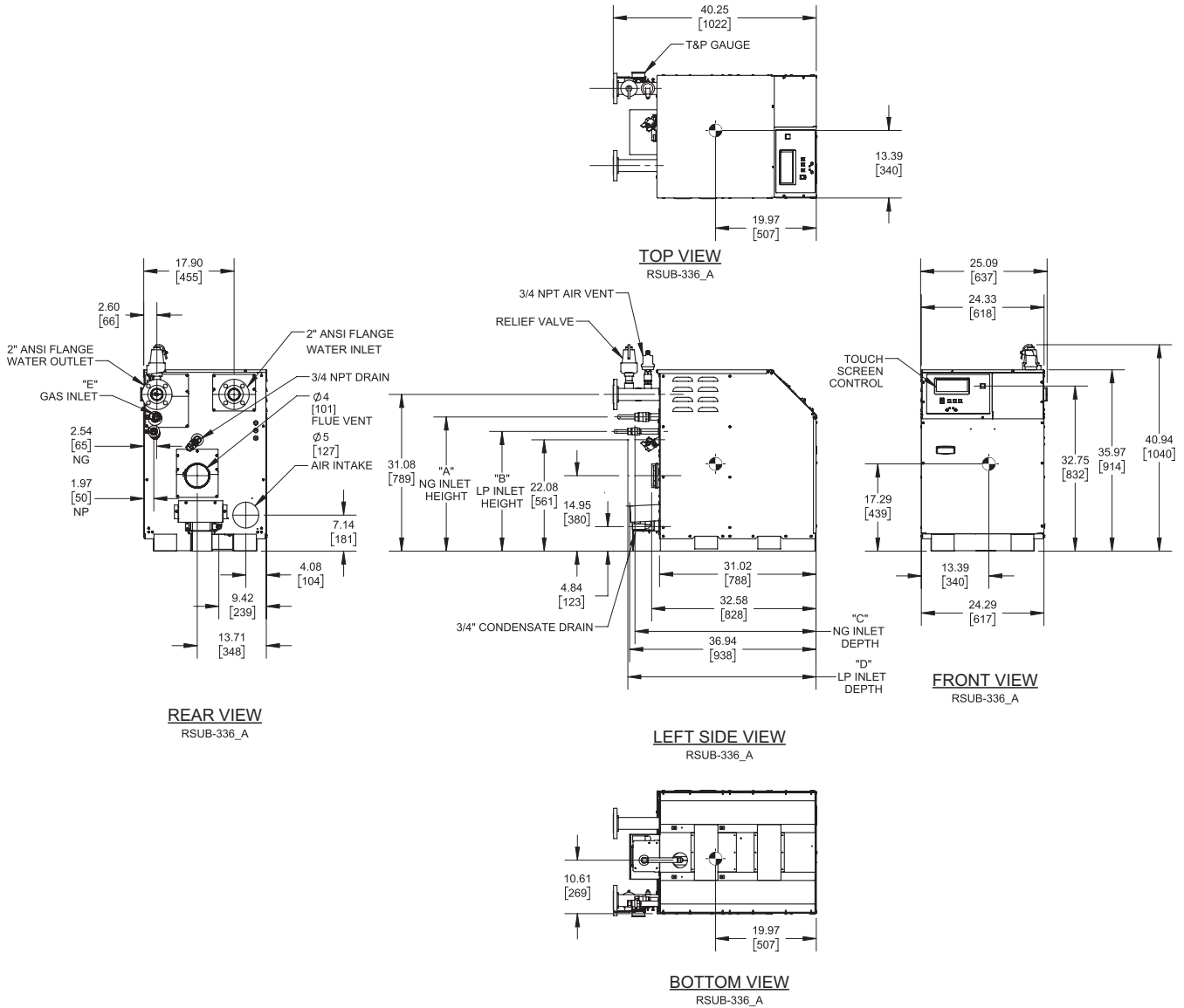
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CODE OPTIONS

CSD-1

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

INDOOR UNIT



GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	27.17	-	35.88	-	1 NPT
LP	-	23.16	-	37.31	3/4 NPT

Notes:

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4. Symbol indicates center of gravity.

BOILER CERTIFIED RATINGS & CAPACITIES

Fuel Type	Natural/Propane Gas	Boiler FLA	12.0*
Input BTU/hr.	349,000 / 102.28 kW	Boiler HP	10.08
Output BTU/hr.	337,483 / 98.90 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	418.20 lbs / 189.69 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" set @ 50 psi
		Relief Valve (WW)	1" x 1" set @ 125 psi

Pump contactor strongly recommended for water heater applications.

A.S.M.E.

ASME Sect IV Fire Side	34.8 Sq. Ft. / 3.23 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	3.8 gal. / 14.38 Liters
ASME Sect IV Water Side	31.5 Sq. Ft. / 2.92 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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
33.8	2.1	8.4	25.2	22.5	1.4	3.8	11.4	16.9	1.1	2.2	6.6
Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)					
Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
16.9	33.8	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
1016	3840	677	2560	508	1920	406	1536	339	1280	290	1097

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
30.2	1.9	6.8	20.3	40.3	2.5	12.0	35.8

REP FIRM _____
SUBMITTED BY _____
JOB NAME _____
ARCHITECT _____
ENGINEER _____
CONTRACTOR _____
DATE _____

TORUS 350 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

TORUS 350 DUAL FUEL

Category II or Category IV Appliance

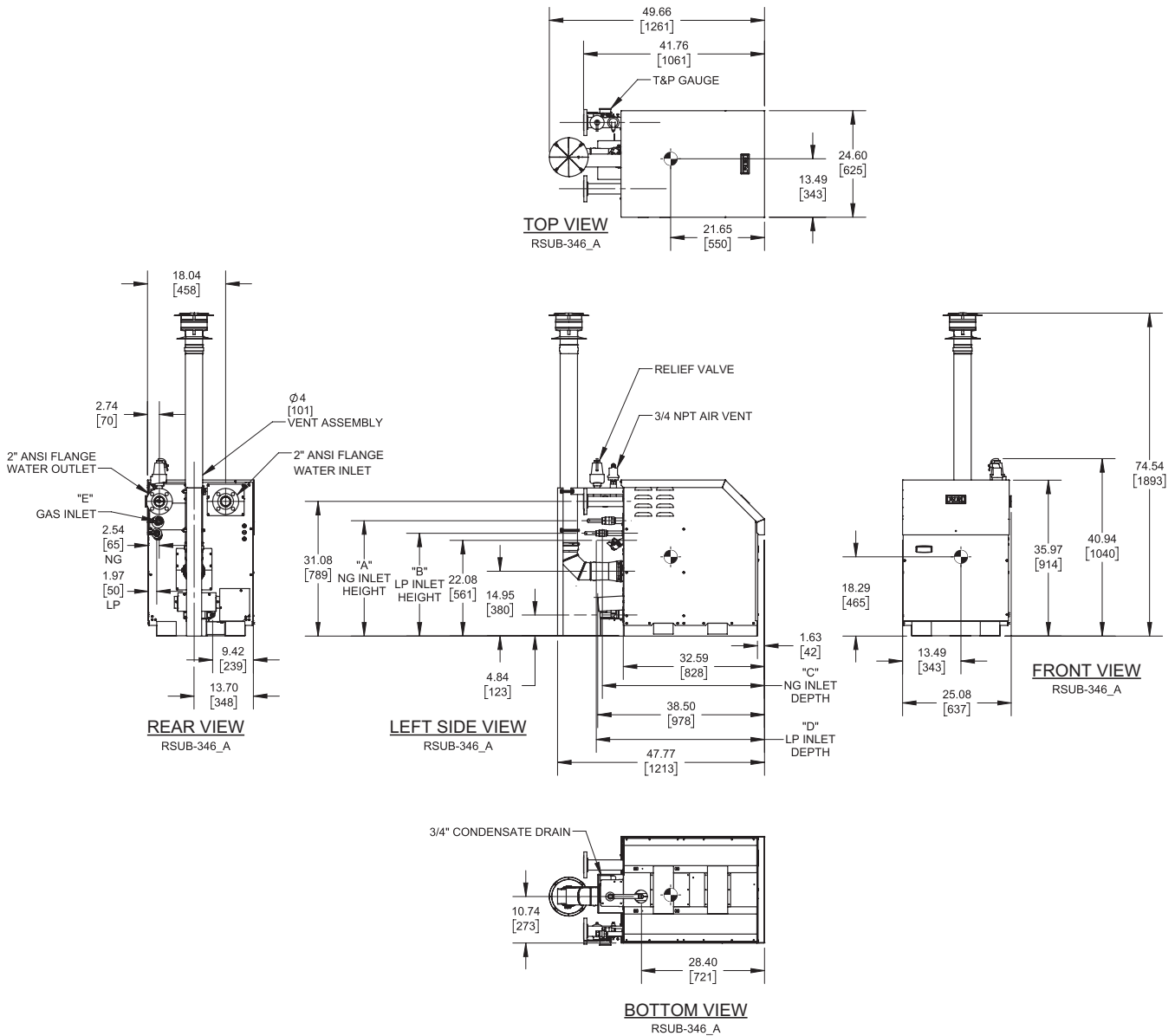
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CODE OPTIONS

CSD-1

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

OUTDOOR UNIT



GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	26.61	-	37.47	-	1 NPT
LP	-	27.72	-	38.84	3/4 NPT

Notes:

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4.  Symbol indicates center of gravity.

BOILER CERTIFIED RATINGS & CAPACITIES

Fuel Type	Natural/Propane Gas	Boiler FLA	12.0*
Input BTU/hr.	349,000 / 102.28 kW	Boiler HP	10.08
Output BTU/hr.	337,483 / 98.90 kW	Min. Gas Pressure Required	4" W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	443.69 lbs / 201.25 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" 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	34.8 Sq. Ft. / 3.23 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	3.8 gal. / 14.38 Liters
ASME Sect IV Water Side	31.5 Sq. Ft. / 2.92 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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
33.8	2.1	8.4	25.2	22.5	1.4	3.8	11.4	16.9	1.1	2.2	6.6

Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)	
Min	Max	Min	Max	Min	Max	Min	Max
16.9	33.8	20	40	Factory Supplied		0	

** 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
1016	3840	677	2560	508	1920	406	1536	339	1280	290	1097

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
30.2	1.9	6.8	20.3	40.3	2.5	12.0	35.8

REP FIRM	_____	TORUS 350 DUAL FUEL
SUBMITTED BY	_____	
JOB NAME	_____	
ARCHITECT	_____	
ENGINEER	_____	
CONTRACTOR	_____	
DATE	_____	Category II or Category IV Appliance (see Installation and Operation Manual for venting information)
		 RELIABLE. BOLD. INNOVATIVE.
		A Division of Mestek, Inc. Westfield, MA 01085 (413) 564-5515

TORUS 400 DUAL FUEL

Category II or Category IV Appliance

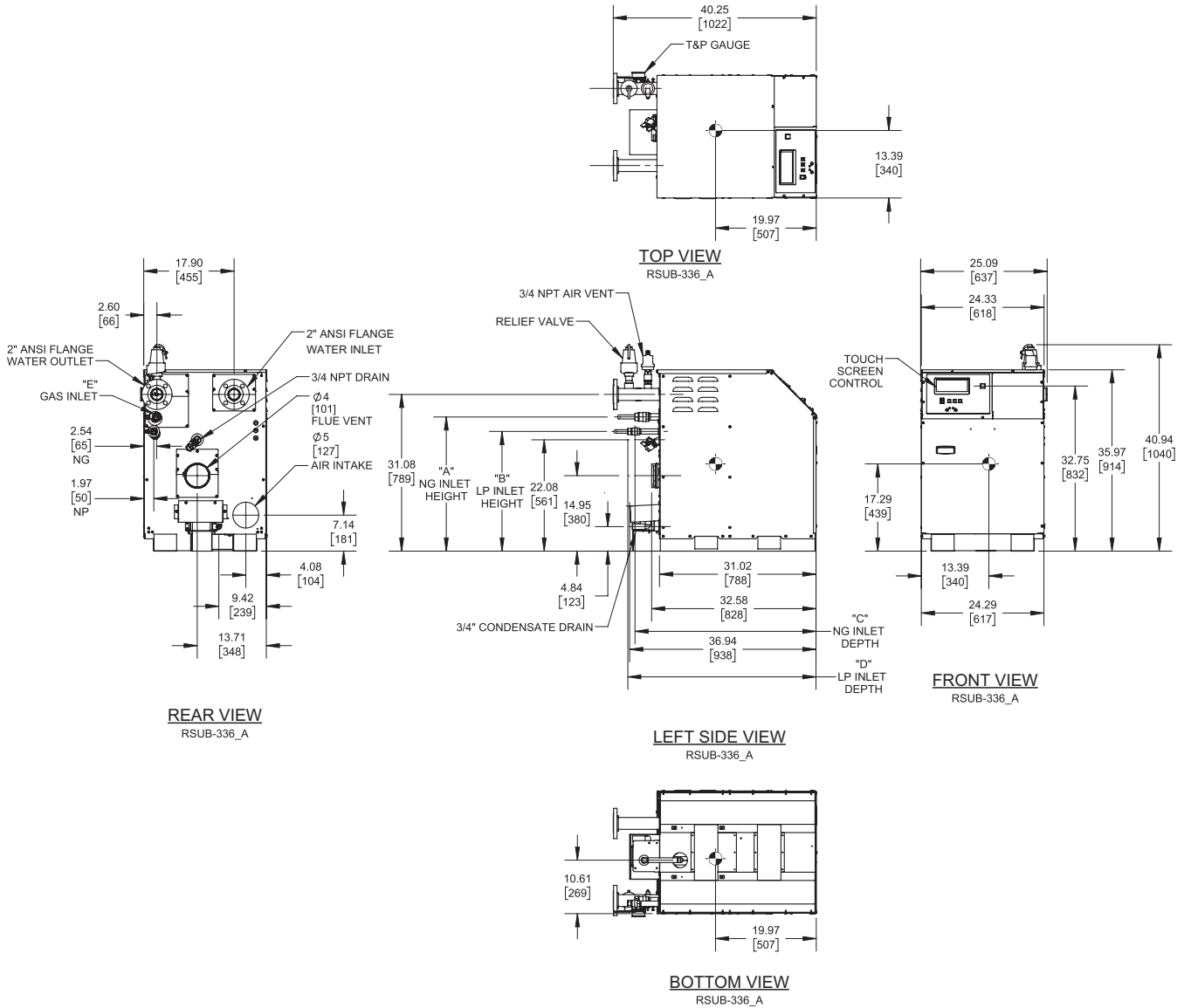
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CODE OPTIONS

CSD-1

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

INDOOR UNIT



GAS OPTION	"A"	"B"	"C"	"D"	"E"
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LP	-	23.16	-	37.31	3/4 NPT

Notes:

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4. Symbol indicates center of gravity.

BOILER CERTIFIED RATINGS & CAPACITIES

Fuel Type	Natural/Propane Gas	Boiler FLA	12.0*
Input BTU/hr.	399,000 / 116.93 kW	Boiler HP	11.50
Output BTU/hr.	385,035 / 112.84 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	418.20 lbs / 189.69 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" set @ 50 psi
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A.S.M.E.

ASME Sect IV Fire Side	34.8 Sq. Ft. / 3.23 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	3.8 gal. / 14.38 Liters
ASME Sect IV Water Side	31.5 Sq. Ft. / 2.92 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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
38.5	2.4	10.9	32.7	25.7	1.6	4.9	14.7	19.3	1.2	2.8	8.4
Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)					
Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
19.3	38.5	20	40	6	100	0	100				

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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
1174	4436	782	2957	587	2218	469	1774	391	1479	335	1267

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
30.7	1.9	7.0	20.9	41.0	2.6	12.4	37.0

REP FIRM	_____	TORUS 400 DUAL FUEL
SUBMITTED BY	_____	
JOB NAME	_____	
ARCHITECT	_____	
ENGINEER	_____	
CONTRACTOR	_____	
DATE	_____	Category II or Category IV Appliance (see Installation and Operation Manual for venting information)
		 RELIABLE. BOLD. INNOVATIVE.
		A Division of Mestek, Inc. Westfield, MA 01085 (413) 564-5515

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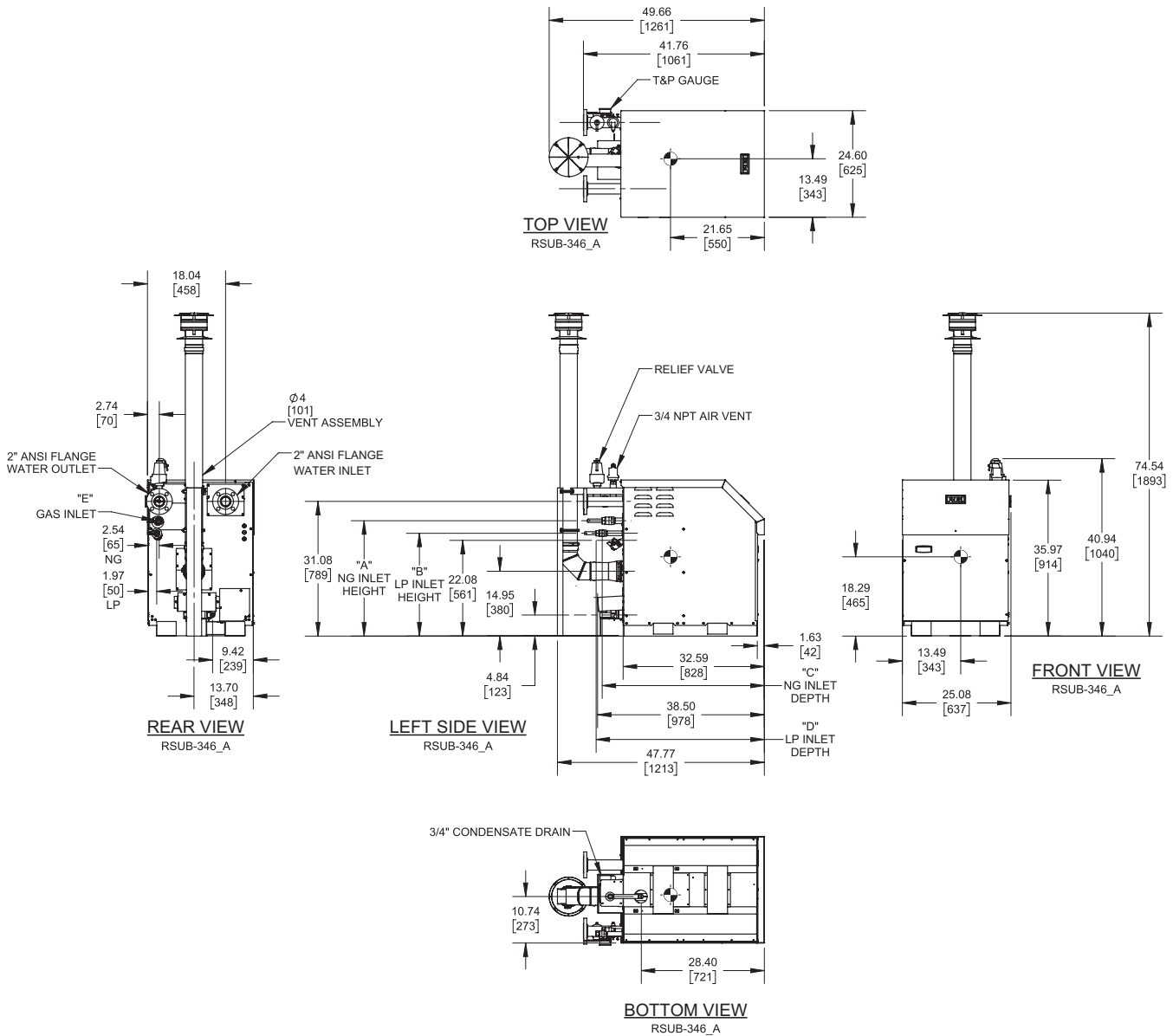
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Htg Surface		Water Volume	3.8 gal. / 14.38 Liters
ASME Sect IV Water Side	31.5 Sq. Ft. / 2.92 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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
38.5	2.4	10.9	32.7	25.7	1.6	4.9	14.7	19.3	1.2	2.8	8.4
Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)					
Min	Max	Min	Max	Min	Max	Min	Max				
19.3	38.5	20	40	Factory Supplied		0					

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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
1174	4436	782	2957	587	2218	469	1774	391	1479	335	1267

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
30.7	1.9	7.0	20.9	41.0	2.6	12.4	37.0

REP FIRM	_____	TORUS 400 DUAL FUEL Category II or Category IV Appliance (see Installation and Operation Manual for venting information)  RELIABLE. BOLD. INNOVATIVE. A Division of Mestek, Inc. Westfield, MA 01085 (413) 564-5515
SUBMITTED BY	_____	
JOB NAME	_____	
ARCHITECT	_____	
ENGINEER	_____	
CONTRACTOR	_____	
DATE	_____	

TORUS 500 DUAL FUEL

Category II or Category IV Appliance

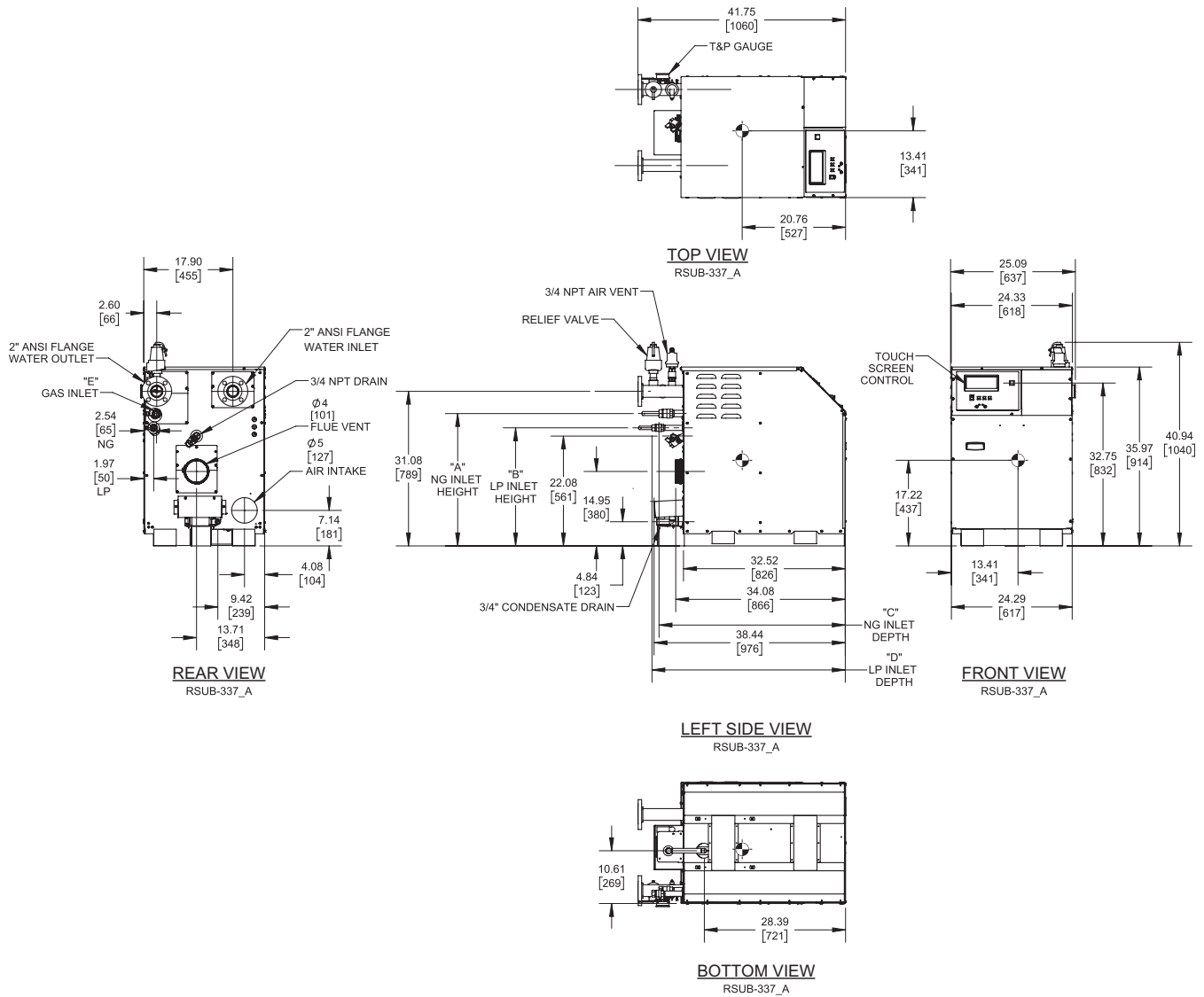
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CODE OPTIONS

CSD-1

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

INDOOR UNIT



GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	27.17	-	37.43	-	1 NPT
LP	-	23.16	-	38.86	3/4 NPT

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	12.0*
Input BTU/hr.	500,000 / 146.54 kW	Boiler HP	14.40
Output BTU/hr.	482,000 / 141.26 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	437.11 lbs / 198.27 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" 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	39.1 Sq. Ft. / 3.63 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	4.2 gal. / 15.90 Liters
ASME Sect IV Water Side	35.44 Sq. Ft. / 3.29 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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

REP FIRM	_____	TORUS 500 DUAL FUEL Category II or Category IV Appliance (see Installation and Operation Manual for venting information)  RELIABLE. BOLD. INNOVATIVE. A Division of Mestek, Inc. Westfield, MA 01085 (413) 564-5515
SUBMITTED BY	_____	
JOB NAME	_____	
ARCHITECT	_____	
ENGINEER	_____	
CONTRACTOR	_____	
DATE	_____	

TORUS 500 DUAL FUEL

Category II or Category IV Appliance

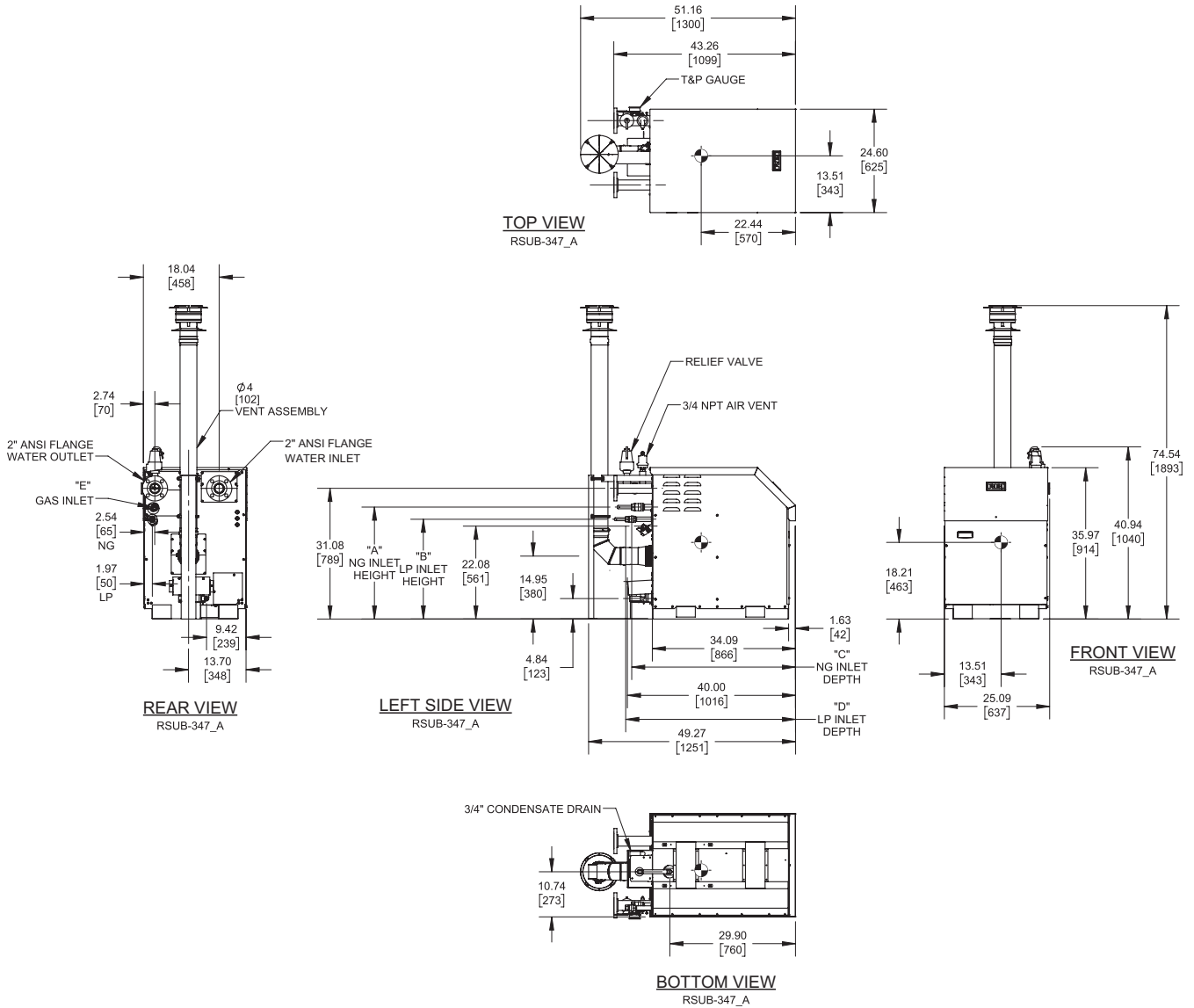
(see Installation and Operation Manual for venting information)

CODE OPTIONS

CSD-1

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

OUTDOOR UNIT



GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	27.17	-	39.00	-	1 NPT
LP	-	23.16	-	40.40	3/4 NPT

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	12.0*
Input BTU/hr.	500,000 / 146.54 kW	Boiler HP	14.40
Output BTU/hr.	482,000 / 141.26 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	463.23 lbs / 210.12 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" 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	39.1 Sq. Ft. / 3.63 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	4.2 gal. / 15.90 Liters
ASME Sect IV Water Side	35.44 Sq. Ft. / 3.29 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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	Factory Supplied		0					

** 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

REP FIRM	_____	TORUS 500 DUAL FUEL
SUBMITTED BY	_____	
JOB NAME	_____	
ARCHITECT	_____	
ENGINEER	_____	
CONTRACTOR	_____	
DATE	_____	Category II or Category IV Appliance (see Installation and Operation Manual for venting information)
		 RELIABLE. BOLD. INNOVATIVE.
		A Division of Mestek, Inc. Westfield, MA 01085 (413) 564-5515

TORUS 650 DUAL FUEL

Category II or Category IV Appliance

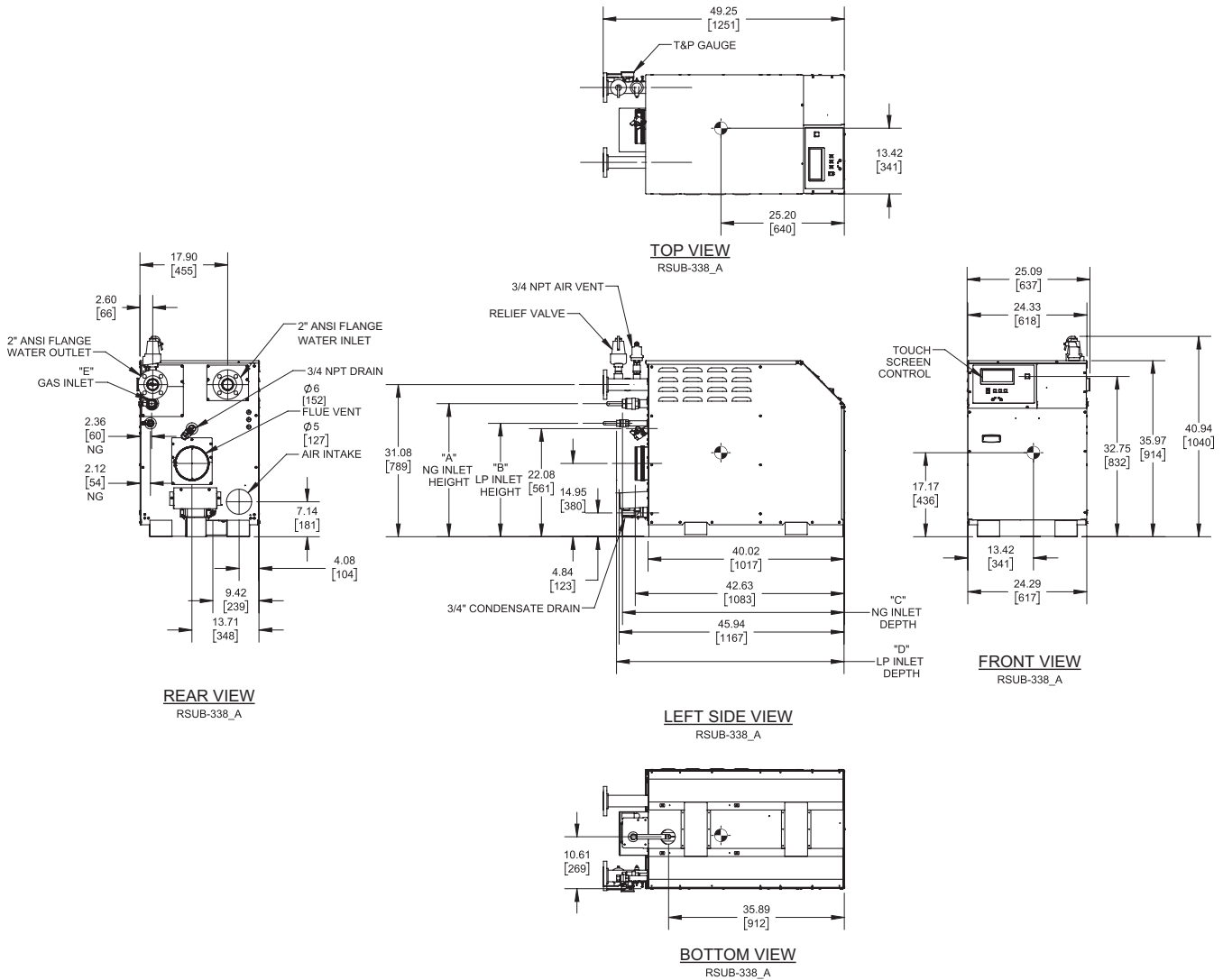
(see Installation and Operation Manual for venting information)

CODE OPTIONS

CSD-1

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

INDOOR UNIT



GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	27.17	-	45.25	-	1-1/4 NPT
LP	-	23.16	-	46.46	3/4 NPT

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	12.0*
Input BTU/hr.	650,000 / 190.49 kW	Boiler HP	18.70
Output BTU/hr.	625,950 / 183.45 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	499.54 lbs / 226.59 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" 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	52.2 Sq. Ft. / 4.85 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	5.6 gal. / 21.19 Liters
ASME Sect IV Water Side	47.25 Sq. Ft. / 4.39 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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
62.6	4.0	12.2	36.3	41.7	2.6	5.4	16.2	31.3	2.0	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
31.3	62.6	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
1892	7153	1262	4768	946	3576	757	2861	631	2384	541	2044

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
48.7	3.1	7.4	22.0	65.0	4.1	13.1	39.2

REP FIRM	_____	TORUS 650 DUAL FUEL Category II or Category IV Appliance (see Installation and Operation Manual for venting information)  RELIABLE. BOLD. INNOVATIVE. A Division of Mestek, Inc. Westfield, MA 01085 (413) 564-5515
SUBMITTED BY	_____	
JOB NAME	_____	
ARCHITECT	_____	
ENGINEER	_____	
CONTRACTOR	_____	
DATE	_____	

TORUS 650 DUAL FUEL

Category II or Category IV Appliance

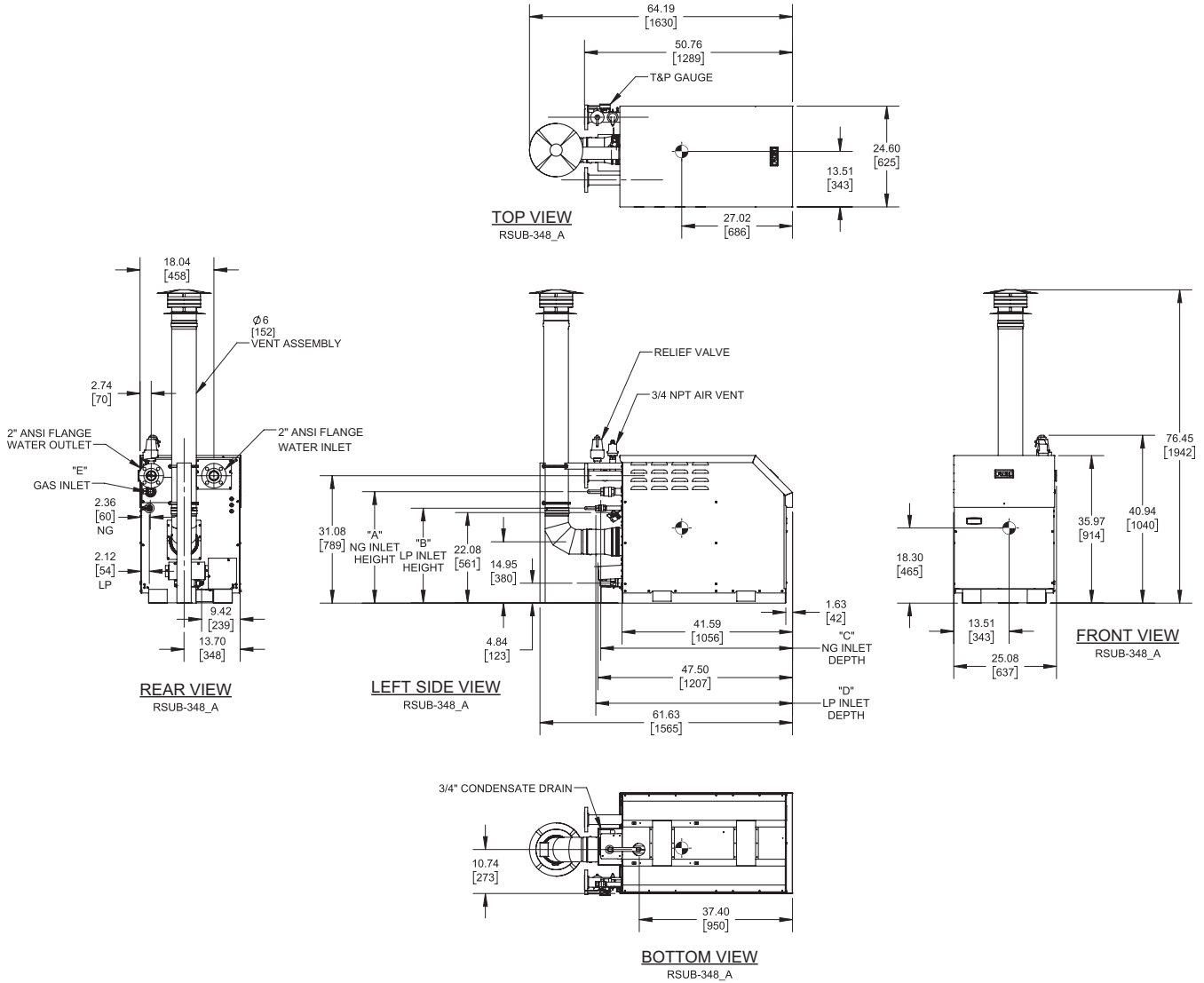
(see Installation and Operation Manual for venting information)

CODE OPTIONS

CSD-1

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

OUTDOOR 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.

GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	27.17	-	46.81	-	1-1/4 NPT
LP	-	23.16	-	50.00	3/4 NPT

BOILER CERTIFIED RATINGS & CAPACITIES

Fuel Type	Natural/Propane Gas	Boiler FLA	12.0*
Input BTU/hr.	650,000 / 190.49 kW	Boiler HP	18.70
Output BTU/hr.	625,950 / 183.45 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	530.99 lbs / 240.85 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" 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	52.2 Sq. Ft. / 4.85 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	5.6 gal. / 21.19 Liters
ASME Sect IV Water Side	47.25 Sq. Ft. / 4.39 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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	
62.6	4.0	12.2	36.3	41.7	2.6	5.4	16.2	31.3	2.0	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		
31.3		62.6		20		40		Factory Supplied			0	

** 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
1892	7153	1262	4768	946	3576	757	2861	631	2384	541	2044

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
48.7	3.1	7.4	22.0	65.0	4.1	13.1	39.2

REP FIRM _____
SUBMITTED BY _____
JOB NAME _____
ARCHITECT _____
ENGINEER _____
CONTRACTOR _____
DATE _____

TORUS 650 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

TORUS 800 DUAL FUEL

Category II or Category IV Appliance

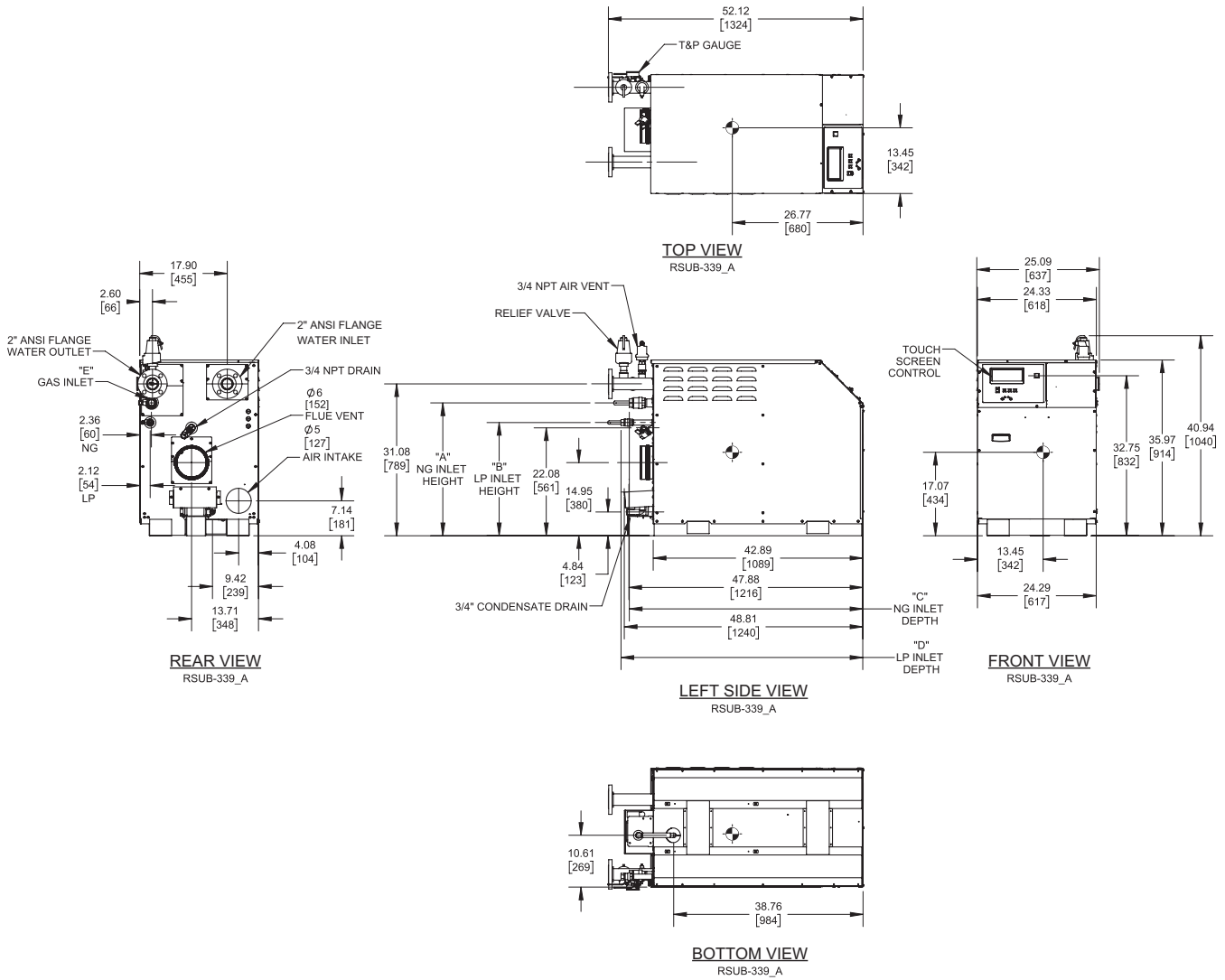
(see Installation and Operation Manual for venting information)

CODE OPTIONS

CSD-1

FIRMWARE W/REMOTE
TEST MANUAL RESET LWCO
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.

GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	27.17	-	47.78	-	1-1/4 NPT
LP	-	23.16	-	49.49	3/4 NPT

BOILER CERTIFIED RATINGS & CAPACITIES

Fuel Type	Natural/Propane Gas	Boiler FLA	12.0*
Input BTU/hr.	800,000 / 234.45 kW	Boiler HP	22.97
Output BTU/hr.	768,800 / 225.31 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	536.44 lbs / 243.32 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" 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	60.90 Sq. Ft. / 5.65 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	6.6 gal. / 24.98 Liters
ASME Sect IV Water Side	55.12 Sq. Ft. / 5.12 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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
76.9	4.9	13.4	39.9	51.3	3.2	5.9	17.8	38.5	2.4	3.4	10.1
Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)					
Min	Max	Min	Max	Min	Max	Min	Max				
38.5	76.9	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
2329	8803	1553	5869	1164	4402	932	3521	776	2934	665	2515

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
61.1	3.9	8.4	25.2	81.3	5.1	14.9	44.6

REP FIRM _____
SUBMITTED BY _____
JOB NAME _____
ARCHITECT _____
ENGINEER _____
CONTRACTOR _____
DATE _____

TORUS 800 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

TORUS 800 DUAL FUEL

Category II or Category IV Appliance

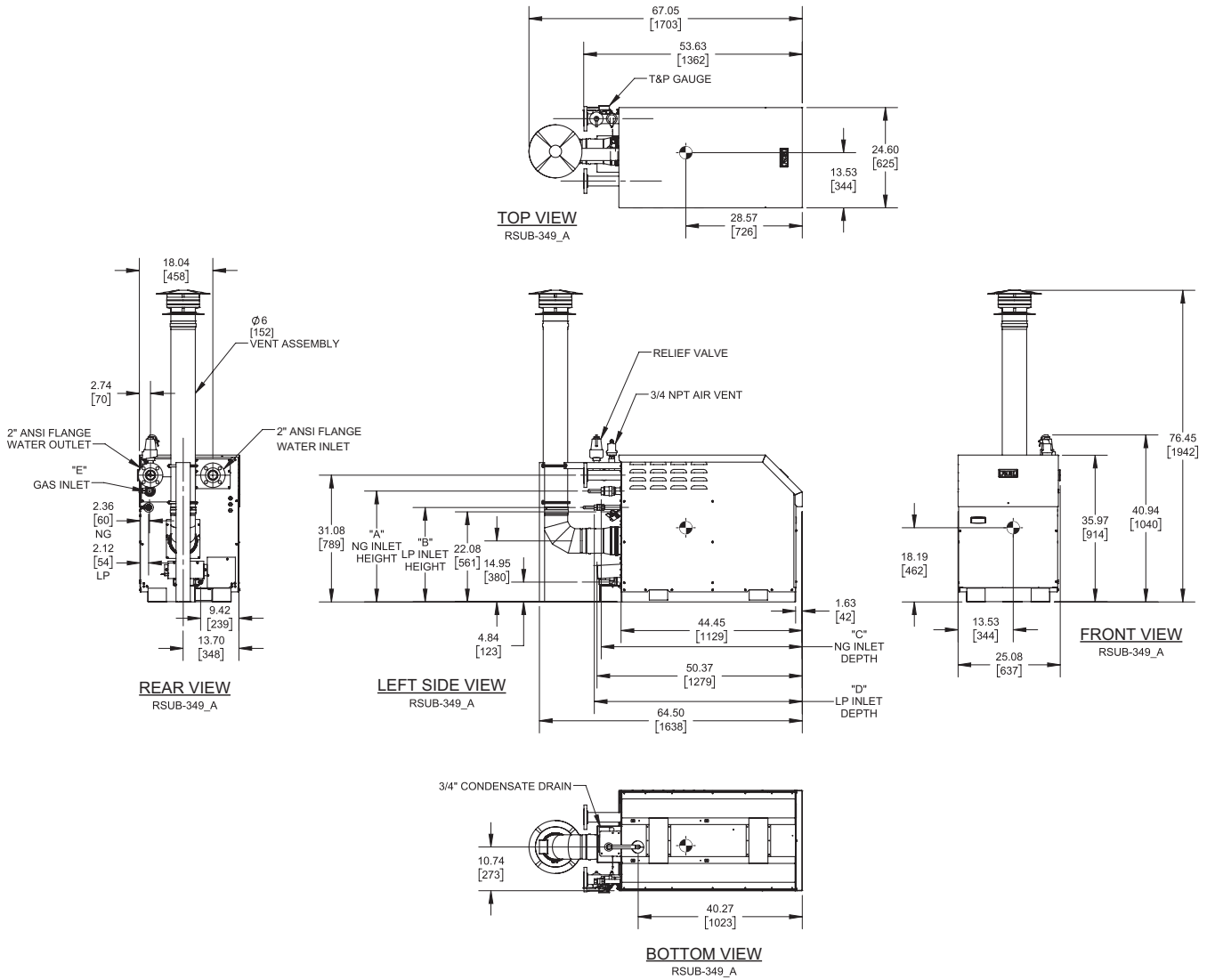
(see Installation and Operation Manual for venting information)

CODE OPTIONS

CSD-1

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

OUTDOOR UNIT



GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	27.17	-	49.35	-	1-1/4 NPT
LP	-	23.16	-	51.03	3/4 NPT

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	12.0*
Input BTU/hr.	800,000 / 234.45 kW	Boiler HP	22.97
Output BTU/hr.	768,800 / 225.31 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	569.07 lbs / 258.12 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 3/4" set @ 50 psi
		Relief Valve (WW)	1" x 1" set @ 125 psi

Pump contactor strongly recommended for water heater applications.

A.S.M.E.

ASME Sect IV Fire Side	60.90 Sq. Ft. / 5.65 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	6.6 gal. / 24.98 Liters
ASME Sect IV Water Side	55.12 Sq. Ft. / 5.12 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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
76.9	4.9	13.4	39.9	51.3	3.2	5.9	17.8	38.5	2.4	3.4	10.1
Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)					
Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
38.5	76.9	20	40	Factory Supplied				0			

** 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
2329	8803	1553	5869	1164	4402	932	3521	776	2934	665	2515

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
61.1	3.9	8.4	25.2	81.3	5.1	14.9	44.6

REP FIRM	_____	TORUS 800 DUAL FUEL Category II or Category IV Appliance (see Installation and Operation Manual for venting information)  RELIABLE. BOLD. INNOVATIVE. A Division of Mestek, Inc. Westfield, MA 01085 (413) 564-5515
SUBMITTED BY	_____	
JOB NAME	_____	
ARCHITECT	_____	
ENGINEER	_____	
CONTRACTOR	_____	
DATE	_____	

TORUS 1000 DUAL FUEL

Category II or Category IV Appliance

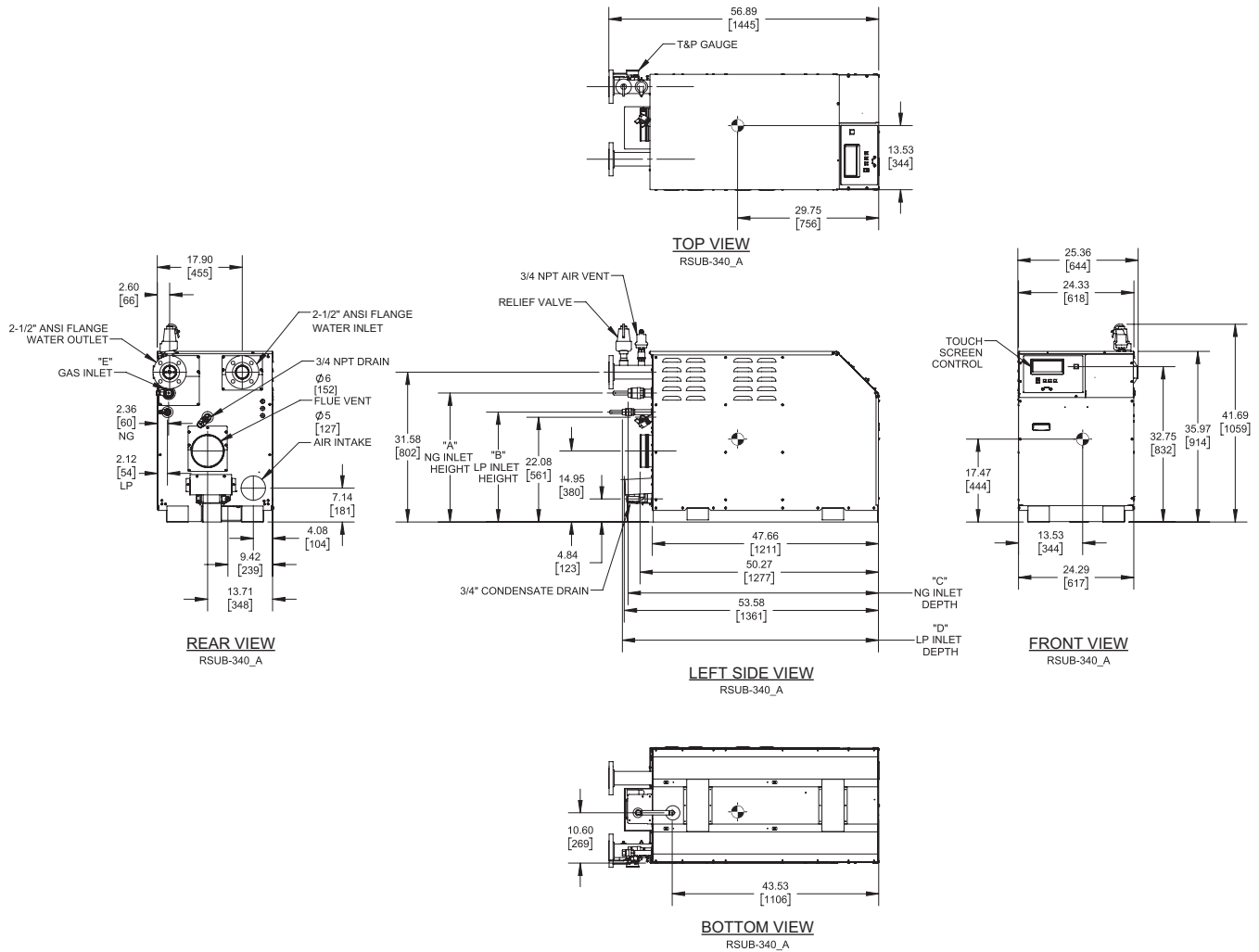
(see Installation and Operation Manual for venting information)

CODE OPTIONS

CSD-1

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

INDOOR UNIT



GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	27.17	-	52.79	-	1-1/4 NPT
LP	-	23.16	-	53.99	3/4 NPT

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	12.0*
Input BTU/hr.	999,000 / 292.77 kW	Boiler HP	28.65
Output BTU/hr.	959,040 / 281.067 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14" W.C.
		Operating Weight	620.25 lbs / 281.34 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 1" 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	75.4 Sq. Ft. / 7.00 Sq. M.	Design Data	Max. 160 psig & 210°F
Htg Surface		Water Volume	8.1 gal. / 30.66 Liters
ASME Sect IV Water Side	68.24 Sq. Ft. / 6.34 Sq. M.	pH Level	6.5-8.5
Htg Surface			

* 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
95.9	6.1	16.2	48.3	64.0	4.0	7.2	21.5	48.0	3.0	4.1	12.2

Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)	
Min	Max	Min	Max	Min	Max	Min	Max
48.0	95.9	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
2908	10993	1939	7329	1454	5497	1163	4397	969	3664	831	3141

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
73.4	4.6	9.5	28.3	97.9	6.2	16.8	50.3

REP FIRM	_____	TORUS 1000 DUAL FUEL	
SUBMITTED BY	_____		
JOB NAME	_____		
ARCHITECT	_____		
ENGINEER	_____		
CONTRACTOR	_____		
DATE	_____	Category II or Category IV Appliance (see Installation and Operation Manual for venting information)	
		RBI ® RELIABLE. BOLD. INNOVATIVE.	A Division of Mestek, Inc. Westfield, MA 01085 (413) 564-5515

TORUS 1000 DUAL FUEL

Category II or Category IV Appliance

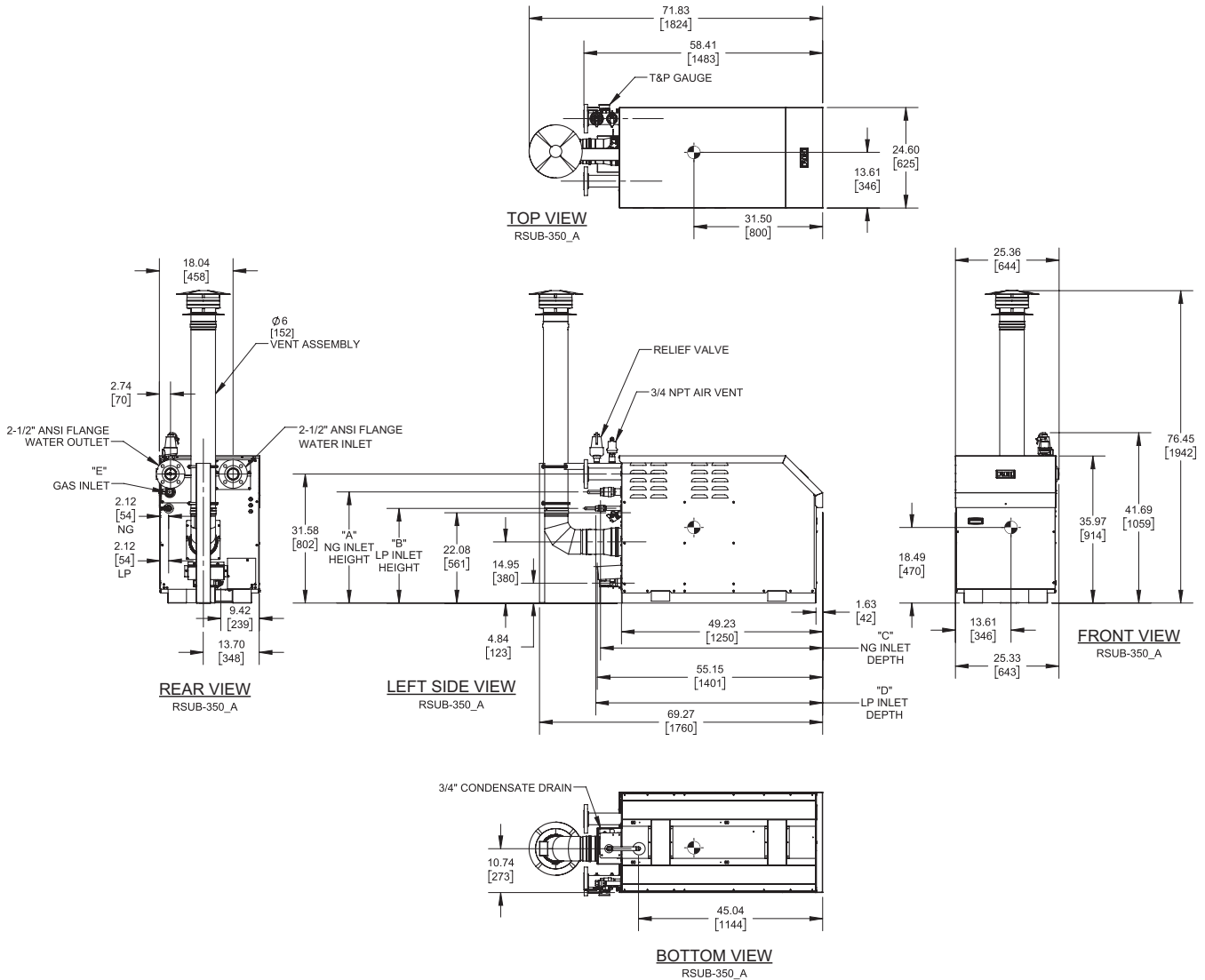
(see Installation and Operation Manual for venting information)

CODE OPTIONS

CSD-1

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

OUTDOOR UNIT



Notes:

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4. ⦿ Symbol indicates center of gravity.

GAS OPTION	"A"	"B"	"C"	"D"	"E"
NG	27.17	-	54.35	-	1-1/4 NPT
LP	-	23.16	-	55.53	3/4 NPT

BOILER CERTIFIED RATINGS & CAPACITIES

Fuel Type	Natural/Propane Gas	Boiler FLA	12.0*
Input BTU/hr.	999,000 / 292.77 kW	Boiler HP	28.65
Output BTU/hr.	959,040 / 281.067 kW	Min. Gas Pressure Required	4"W.C.
Electrical Requirements	120 VAC/60 Hz/1PH	Max. Gas Pressure Allowed	14"W.C.
		Operating Weight	654.85 lbs / 297.03 kg

BOILER TRIM & CONTROLS

Main Gas Valve	Dungs MBC	Air Switch	Huba
Firing Valve	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	Apollo	Relief Valve (WB)	3/4" x 1" set @ 50 psi
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Htg Surface			

* Add circulator amps.

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

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GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa
95.9	6.1	16.2	48.3	64.0	4.0	7.2	21.5	48.0	3.0	4.1	12.2
Flow GPM (Boiler)		Temp. Rise (°F) (Boiler**)		Vent Length (Equiv. Ft.)		Air Inlet Length (Equiv. Ft.)					
Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
48.0	95.9	20	40	Factory Supplied				0			

** 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)

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Water Heater Min Flow Rates							
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Flow Rate		Pressure Drop		Flow Rate		Pressure Drop	
gpm	L/s	Ft	kPa	gpm	L/s	Ft	kPa
73.4	4.6	9.5	28.3	97.9	6.2	16.8	50.3

REP FIRM	_____	TORUS 1000 DUAL FUEL
SUBMITTED BY	_____	
JOB NAME	_____	
ARCHITECT	_____	
ENGINEER	_____	
CONTRACTOR	_____	
DATE	_____	Category II or Category IV Appliance (see Installation and Operation Manual for venting information)
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