TORUS 300

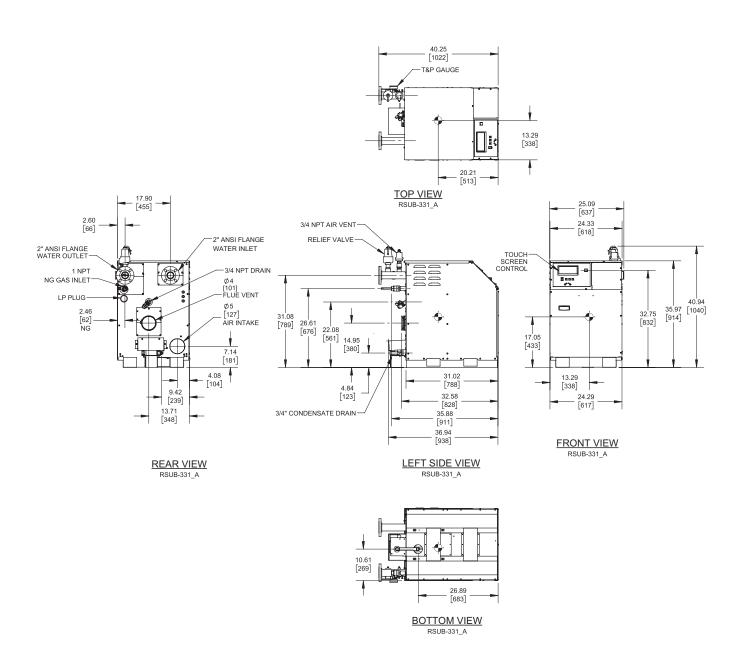
Category IV appliance

(see Installation and Operation Manual for venting information)

CODE OPTIONS

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

INDOOR UNIT



Notes:

- Dimensions are approximate and should not be used to "rough-in" equipment.
- Dimensions are subject to change without notice.
 All dimensions are in inches (mm).
 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	406.93 lbs / 184.58 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		re Drop	Flow Rate		Pressure Dron		Flo Ra	ow ite	Pressure Drop		e Drop	
GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa	a l	GPM	L/s	Ff	t	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
Flo	ow GPM (Bo	oiler)	Temp	. Rise (°F)	(Boiler**)	(Boiler**) Vent Length (Equiv		v. Ft.)	Air Inlet Length (Equiv.			μιίν. Ft.)	
Min		Max	Min	Max		Min	Min M		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℃	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

Category IV Appliance

(see Installation and Operation Manual for venting information)



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TORUS 300

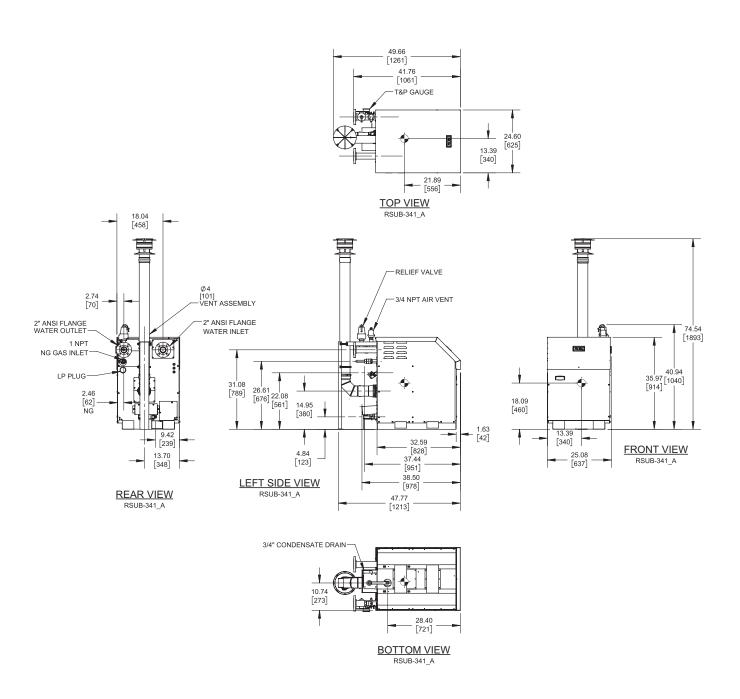
Category IV appliance

(see Installation and Operation Manual for venting information)

CODE OPTIONS

FIRMWARE W/REMOTE CSD-1 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.
- Dimensions are subject to change without notice.
 All dimensions are in inches (mm).
 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	432.37 lbs / 196.12 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	
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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/		40°F / 22.2°C					
	Flow Rate Pres		Pressure Drop		Flow Rate		Pressure Drop		ow ate	Pr	essure (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
		•										
Flo	Flow GPM (Boiler) Temp. Rise (°F) (Boiler**)			oiler**)	Vent	: Length (Ed	quiv. Ft.)	Air Inlet Length (Equiv. Ft.)				
Min		Max	Min		Max	Min		Max	Min		Λ	Лах
14.6		29.1	20		40	Fa	actory Supi	ory 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℃	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	v Rate Pressure Drop		re 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

Category II or Category IV Appliance

(see Installation and Operation Manual for venting information)



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