

RSUB-1-C

Spectrum 100 model boiler & water heater not available for sale in the U.S. market due to DOE regulations. Spectrum 100 model water heater not available for sale in Canada.

- Dimensions are approximate and should not be used to "rough-in" equipment.
 Dimensions are subject to change without notice.

Fuel Type	Natural/Propane Gas	Boiler FLA	1*
Input BTU/hr.	100,000 / 29 kW	Min. Gas Pressure Required	5" WC**
Output BTU/hr.	82,000 / 24 kW	Max. Gas Pressure Allowed	14" WC
Electrical Requirements	120VAC / 1 ph / 60 hz	Operating Weight	164 lbs. / 74 kg.

BOILER / WATER HEATER TRIM & CONTROLS

Gas Valve - INT	Honeywell VR8304M 1/2"	Ignition Control (SB)	Honeywell S9361A2085
Gas Valve	Honeywell VR8304Q 3/4"- 2 Stg.	Ignition Control (SW)	Honeywell S86IOM
Operating Control (SB/SW)	Honeywell - On/Off	Relief Valve - SW	3/4" x 3/4" set @ 125 psi
Operating Control (SW)	Jumo - 2 Stage	Relief Valve - SB	3/4" x 3/4" set @ 30 psi
High Limit (SB/SW)	Jumo	Flow Switch	TACO

A.S.M.E.

ASME Sect IV Htg Surface	19.1 Sq. Ft. / 1.77 Sq. M.	Design Data	Max. 160 psig & 250°F
Water Volume 1.1 gal / 4.05 Liters			

^{*} Add circulator amps.

BOILER TEMPERATURE RISE / PRESSURE DROP

	10°F / 5.5°C							
Flow Rate		Pressure Drop						
C	PM	L/s	Ft	kPa				
1	6.4	1.0	0.05	0.1	2 Pass			
1	6.4	1.0	0.34	1.0	4 Pass			

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
240	908	160	605	120	454	96	363	80	303	69	259

Spectrum 100 model boiler & water heater not available for sale in the U.S. market due to DOE regulations. Spectrum 100 model water heater not available for sale in Canada.

REP FIRM	
SUBMITTED BY	
JOB NAME	
ARCHITECT	
ENGINEER	
CONTRACTOR	
DATE	

SPECTRUM 100

Category I Appliance

Must be vented into a negative pressure vent system.



^{**} For incoming gas pressures lower than 5" WC natural or 11" WC propane, consult factory.

SPECTRUM 150 **Category I Appliance** Must be vented into a negative pressure vent system. 25 1/8 in [63.8 cm] 6 21/32 in [16.9 cm] FOR INDOOR ONLY Ø 1 1/2" NPT 32 in WATER (2 PLCS.) [81.3 cm] Ø6 in 00 [Ø15.2 cm] 29 5/8 in Ø12 in [75.2 cm] [Ø30.5 cm] 16 11/32 in [41.5 cm] 1 1/2 in [3.8 cm] 2 5/16 in 17 in 11 in Ø 1/2" GAS [5.9 cm] [43.2 cm] 13 in [27.9 cm] [33.0 cm] 18 9/16 in 11 3/4 in [47.1 cm] [29.8 cm] 4 7/32 in 10 3/4 in [10.7 cm] [27.3 cm] TOP LEFT SIDE 29 5/8 in [75.3 cm] 19 1/2 in 9 3/4 in [49.5 cm] [24.8 cm] **♣** 6 1/4 in [15.9 cm] 40 1/4 in [102.2 cm] 32 7/8 in [83.5 cm] 4 1/2 in [11.4 cm] 9 3/32 in [17.8 cm] [23.1 cm] [1.9 cm] **FRONT** RIGHT SIDE RSUB-2-C

Notes:

NOTE:

FOR OUTDOOR ONLY

Dimensions are approximate and should not be used to "rough-in" equipment.
 Dimensions are subject to change without notice.

Fuel Type	Natural/Propane Gas	Boiler FLA	1*
Input BTU/hr.	150,000 / 44 kW	Min. Gas Pressure Required	5" WC**
Output BTU/hr.	123,000 / 36 kW	Max. Gas Pressure Allowed	14" WC
Electrical Requirements	120VAC / 1 ph / 60 hz	Operating Weight	171 lbs. / 78 kg.

BOILER / WATER HEATER TRIM & CONTROLS

Gas Valve - INT	Honeywell VR8304M 1/2"	Ignition Control (SB)	Honeywell S9361A2085
Gas Valve	Honeywell VR8304Q 3/4"- 2 Stg.	Ignition Control (SW)	Honeywell S86IOM
Operating Control (SB/SW)	Honeywell - On/Off	Relief Valve - SW	3/4" x 3/4" set @ 125 psi
Operating Control (SW)	Jumo - 2 Stage	Relief Valve - SB	3/4" x 3/4" set @ 30 psi
High Limit (SB/SW)	Honeywell	Flow Switch	TACO

A.S.M.E.

ASME Sect IV Htg Surface	25.0 Sq. Ft. / 2.32 Sq. M.	Design Data	Max. 160 psig & 250°F
Water Volume	1.1 gal / 4.32 Liters		

 ^{*} Add circulator amps.

BOILER TEMPERATURE RISE / PRESSURE DROP

Flow Rate		Pressure Drop		
GPM	L/s	Ft	kPa	
24.6	1.6	0.13	0.4	2 Pass
24.6	1.6	0.94	2.8	4 Pass

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
360	1361	240	908	180	681	144	545	120	454	103	389

Spectrum 150 model boiler & water heater not available for sale in the U.S. market due to DOE regulations. Spectrum 150 model water heater not available for sale in Canada.

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JOB NAME	
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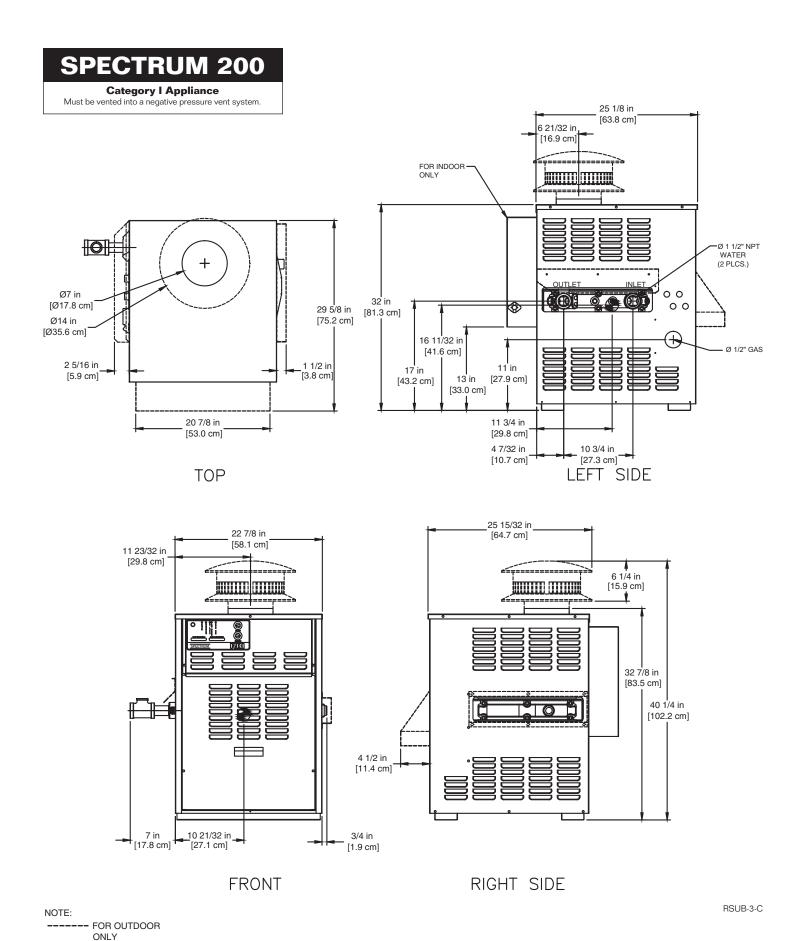
SPECTRUM 150

Category I Appliance

Must be vented into a negative pressure vent system.



^{**} For incoming gas pressures lower than 5" WC natural or 11" WC propane, consult factory.



Notes:

- Dimensions are approximate and should not be used to "rough-in" equipment.
 Dimensions are subject to change without notice.

Fuel Type	Natural/Propane Gas	Boiler FLA	1*
Input BTU/hr.	199,000 / 58 kW	Min. Gas Pressure Required	5" WC**
Output BTU/hr.	163,180 / 49 kW	Max. Gas Pressure Allowed	14" WC
Electrical Requirements	120VAC / 1 ph / 60 hz	Operating Weight	202 lbs. / 92 kg.

BOILER / WATER HEATER TRIM & CONTROLS

Gas Valve - INT	Honeywell VR8304M 1/2"	Ignition Control (SB)	Honeywell S9361A2085
Gas Valve	Honeywell VR8304Q 3/4"- 2 Stg.	Ignition Control (SW)	Honeywell S86IOM
Operating Control (SB/SW)	Honeywell - On/Off	Relief Valve - SW	3/4" x 3/4" set @ 125 psi
Operating Control (SW)	Jumo - 2 Stage	Relief Valve - SB	3/4" x 3/4" set @ 30 psi
High Limit (SB/SW)	Honeywell	Flow Switch	TACO

A.S.M.E.

ASME Sect IV Htg Surface	30.8 Sq. Ft. / 2.86 Sq. M.	Design Data	Max. 160 psig & 250°F
Water Volume	Water Volume 1.2 gal / 4.58 Liters		

^{*} Add circulator amps.

BOILER TEMPERATURE RISE / PRESSURE DROP

		11.1°C	20°F /		10°F / 5.5°C				
	re Drop	Pressu		Flow	Flow Rate Pressure Drop		Flow		
	kPa	Ft	L/s	GPM	kPa	Ft	L/s	GPM	
2 Pass	0.2	0.07	1.0	16.3	0.8	0.27	2.1	32.6	
4 Pass	1.6	0.54	1.0	16.3	5.7	1.95	2.1	32.6	

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
480	1815	320	1210	240	908	192	726	160	605	137	519

Spectrum 200 model boiler & water heater not available for sale in the U.S. market due to DOE regulations. Spectrum 200 model water heater not available for sale in Canada.

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JOB NAME	
ARCHITECT	
ENGINEER	
CONTRACTOR	
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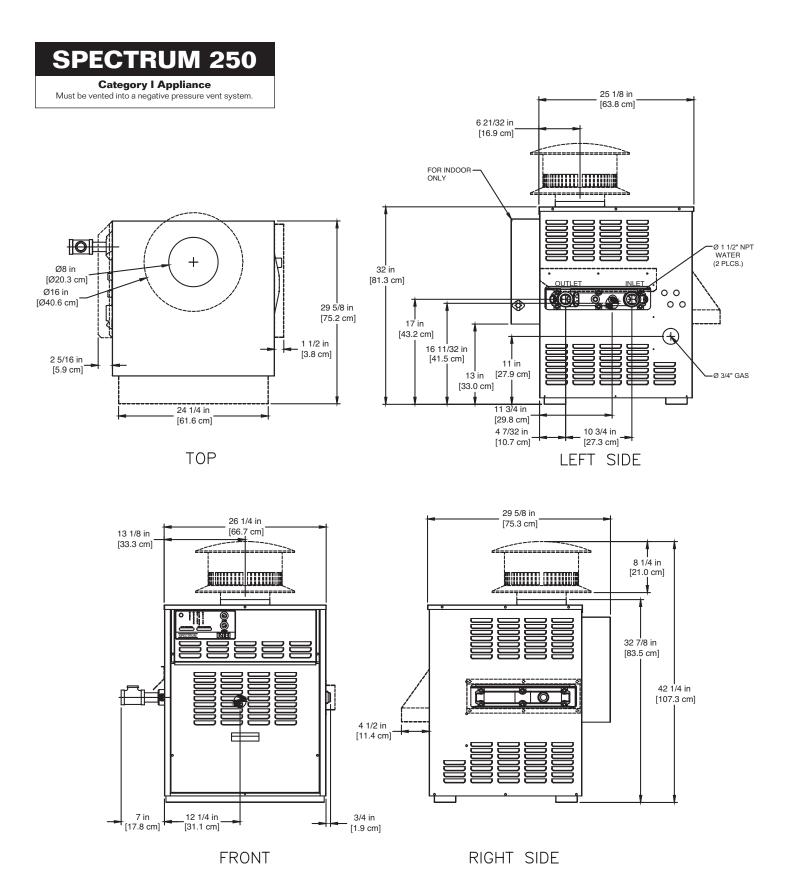
SPECTRUM 200

Category I Appliance

Must be vented into a negative pressure vent system.



^{**} For incoming gas pressures lower than 5" WC natural or 11" WC propane, consult factory.



NOTE: FOR OUTDOOR ONLY

RSUB-4-C

- Notes:

 1. Dimensions are approximate and should not be used to "rough-in" equipment.

 2. Dimensions are subject to change without notice.

Fuel Type	Natural/Propane Gas	Boiler FLA	1*
Input BTU/hr.	250,000 / 73 kW	Min. Gas Pressure Required	5" WC**
Output BTU/hr.	205,000 / 60 kW	Max. Gas Pressure Allowed	14" WC
Electrical Requirements	120VAC / 1 ph / 60 hz	Operating Weight	218 lbs. / 99 kg.

BOILER / WATER HEATER TRIM & CONTROLS

Gas Valve - INT	Honeywell VR8304M 3/4"	Ignition Control (SB)	Honeywell S9361A2085
Gas Valve	Honeywell VR8304Q 3/4"- 2 Stg.	Ignition Control (SW)	Honeywell S86IOM
Operating Control (SB/SW)	Honeywell - On/Off	Relief Valve - SW	3/4" x 3/4" set @ 125 psi
Operating Control (SW)	Jumo - 2 Stage	Relief Valve - SB	3/4" x 3/4" set @ 30 psi
High Limit (SB/SW)	Jumo	Flow Switch	TACO

A.S.M.E.

ASME Sect IV Htg Surface	36.7 Sq. Ft. / 3.41 Sq. M.	Design Data	Max. 160 psig & 250°F
Water Volume	Water Volume 1.3 gal / 4.85 Liters		

^{*} Add circulator amps.

BOILER TEMPERATURE RISE / PRESSURE DROP

10°F / 5.5°C					20°F /	11.1°C			
	Flow	Rate	Pressure Drop		Flow Rate		Pressure Drop		
	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa	
	41.0	2.6	0.49	1.4	20.5	1.3	0.14	0.4	2 Pass
	41.0	2.6	3.54	10.4	20.5	1.3	0.98	2.9	4 Pass

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
600	2269	400	1513	300	1134	240	908	200	756	171	648

Spectrum 250 model boiler not available for sale in the U.S. market due to DOE regulations.

REP FIRM	
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JOB NAME	
ARCHITECT	
ENGINEER	
CONTRACTOR	
DATE	

SPECTRUM 250

Category I Appliance

Must be vented into a negative pressure vent system.



^{**} For incoming gas pressures lower than 5" WC natural or 11" WC propane, consult factory.

SPECTRUM 300 Category I Appliance Must be vented into a negative pressure vent system. 25 1/8 in [63.8 cm] 6 21/32 in [16.9 cm] FOR INDOOR -ONLY Ø 1 1/2" NPT WATER (2 PLCS.) 32 in [81.3 cm] Ø8 in 00 [Ø20.3 cm] 29 5/8 in [75.2 cm] Ø16 in [Ø40.6 cm] 16 11/32 in [41.5 cm] 1 1/2 in 2 5/16 in [3.8 cm] 17 in 11 in -Ø 3/4" GAS [43.2 cm] [5.9 cm] 13 in [33.0 cm] [27.9 cm] 27 5/8 in 11 3/4 in [70.2 cm] [29.8 cm] 4 7/32 in 10 3/4 in [10.7 cm] [27.3 cm] TOP LEFT SIDE 29 5/8 in [75.3 cm] 29 5/8 in [75.2 cm] 14 13/16 in [37.6 cm] 8 1/4 in [21.0 cm] 42 1/4 in [107.3 cm] 32 7/8 in [83.5 cm] 4 1/2 in [11.4 cm] 13 13/16 in 3/4 in [1.9 cm] †[17.8 cm] [35.1 cm]

NOTE: FOR OUTDOOR ONLY

FRONT

RSUB-5-C

- Notes:

 1. Dimensions are approximate and should not be used to "rough-in" equipment.

 2. Dimensions are subject to change without notice.

RIGHT SIDE

Fuel Type	Natural/Propane Gas	Boiler FLA	1*
Input BTU/hr.	301,000 / 88 kW	Min. Gas Pressure Required	5" WC**
Output BTU/hr.	246,820 / 72 kW	Max. Gas Pressure Allowed	14" WC
Electrical Requirements	120VAC / 1 ph / 60 hz	Operating Weight	232 lbs. / 105 kg.

BOILER / WATER HEATER TRIM & CONTROLS

Gas Valve - INT	Honeywell VR8304M 3/4"	Ignition Control (SB On/Off)	Honeywell S9361A2085
Gas Valve	Honeywell VR8304Q 3/4"- 2 Stg.	Ignition Control (SB 2 Stg.)	Honeywell S86IOM
Operating Control (SB/SW)	Honeywell - On/Off	Ignition Control (SW)	Honeywell S86IOM
Operating Control (SB)	Jumo - 2 Stage	Relief Valve - SW	3/4" x 3/4" set @ 125 psi
High Limit (SB/SW)	Jumo	Relief Valve - SB	3/4" x 3/4" set @ 30 psi
		Flow Switch	TACO

A.S.M.E.

ASME Sect IV Htg Surface	42.5 Sq. Ft. / 3.95 Sq. M.	Design Data	Max. 160 psig & 250°F
Water Volume	1.4 gal / 5.11 Liters		

 ^{*} Add circulator amps.

BOILER TEMPERATURE RISE / PRESSURE DROP

	10°F /	5.5°C		20°F / 11.1°C			30°F / 16.7°C					
Flow	Rate	Pressu	re Drop	Flow	Flow Rate Pressure Drop		Flow Rate		Pressure Drop			
GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa	GPM	L/s	Ft	kPa	
49.4	3.1	0.80	2.4	24.7	1.6	0.22	0.7	16.5	1.0	0.10	0.3	2 Pass
49.4†	3.1†	5.79	17.1	24.7	1.6	1.60	4.7	16.5	1.0	0.80	2.2	4 Pass

[†] Flow exceeds recommended maximum use a greater temperature rise or consult manufacturer. Cupronickel heat exchanger should be considered.

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
720	2723	480	1815	360	1361	288	1089	240	908	206	778

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ARCHITECT
ENGINEER
CONTRACTOR
DATE

SPECTRUM 300

Category I Appliance

Must be vented into a negative pressure vent system.

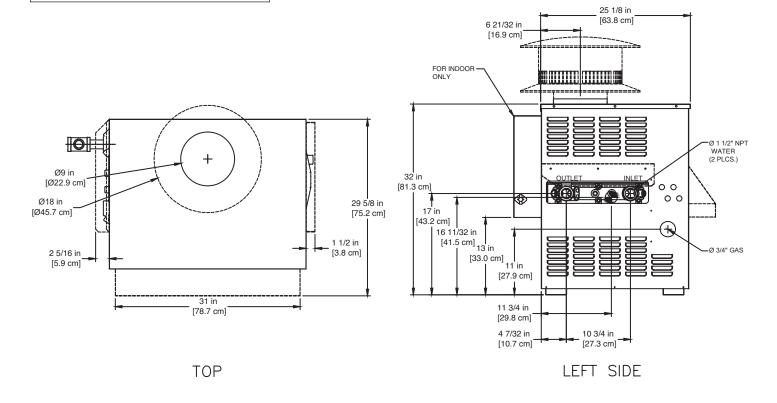


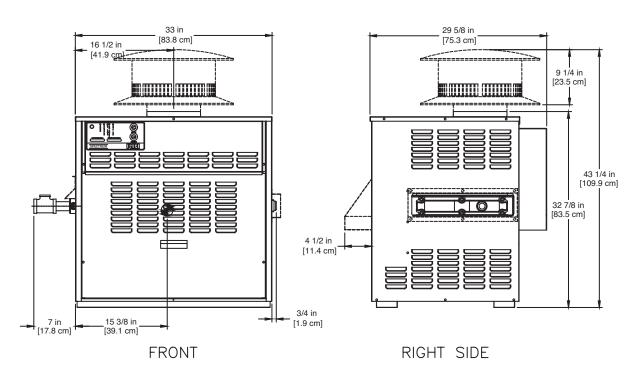
^{**} For incoming gas pressures lower than 5" WC natural or 11" WC propane, consult factory.

SPECTRUM 350

Category I Appliance

Must be vented into a negative pressure vent system.





NOTE: FOR OUTDOOR ONLY

RSUB-6-C

- Notes:

 1. Dimensions are approximate and should not be used to "rough-in" equipment.

 2. Dimensions are subject to change without notice.

Fuel Type	Natural/Propane Gas	Boiler FLA	1*
Input BTU/hr.	350,000 / 103 kW	Min. Gas Pressure Required	5" WC**
Output BTU/hr.	285,600 / 84 kW	Max. Gas Pressure Allowed	14" WC
Electrical Requirements	120VAC / 1 ph / 60 hz	Operating Weight	252 lbs. / 114 kg.

BOILER / WATER HEATER TRIM & CONTROLS

Gas Valve - INT	Honeywell VR8304M 3/4"	Ignition Control (SB On/Off)	Honeywell S9361A2085
Gas Valve	Honeywell VR8304Q 3/4"- 2 Stg.	Ignition Control (SB 2 Stg.)	Honeywell S86IOM
Operating Control (SB/SW)	Honeywell - On/Off	Ignition Control (SW)	Honeywell S86IOM
Gas Valve	Honeywell VR8304Q 3/4"- 2 Stg.	Relief Valve - SW	3/4" x 3/4" set @ 125 psi
High Limit (SB/SW)	Jumo	Relief Valve - SB	3/4" x 3/4" set @ 30 psi
		Flow Switch	TACO

A.S.M.E.

ASME Sect IV Htg Surface	48.5 Sq. Ft. / 4.50 Sq. M.	Design Data	Max. 160 psig & 250°F
Water Volume	1.4 gal / 5.38 Liters		

^{*} Add circulator amps.

BOILER TEMPERATURE RISE / PRESSURE DROP

	30°F / 16.7°C				20°F / 11.1°C				5.5°C	10°F /		
	re Drop	Pressu	Rate	Flow	re Drop	Pressu	Rate	Flow	re Drop	Pressu	Rate	Flow
	kPa	Ft	L/s	GPM	kPa	Ft	L/s	GPM	kPa	Ft	L/s	GPM
2 Pass	0.5	0.20	1.2	19.0	1.0	0.33	1.8	28.6	3.5	1.20	3.6	57.1
4 Pass	3.3	1.10	1.2	19.0	7.0	2.39	1.8	28.6	-	-	-	-

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
840	3176	560	2118	420	1588	336	1271	280	1059	240	908

REP FIRM	
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JOB NAME	
ARCHITECT	
ENGINEER	
CONTRACTOR	
DATE	

SPECTRUM 350

Category I Appliance

Must be vented into a negative pressure vent system.



^{**} For incoming gas pressures lower than 5" WC natural or 11" WC propane, consult factory.

SPECTRUM 400 Category I Appliance 25 1/8 in Must be vented into a negative pressure vent system. [63.8 cm] 6 21/32 in [16.9 cm] FOR INDOOR 32 in Ø 1 1/2" NPT WATER (2 PLCS.) [81.3 cm] Ø10 in [Ø25.4 cm] 00 17 in 00 29 5/8 in [75.2 cm] Ø20 in [Ø50.8 cm] [43.2 cm] 1 1/2 in 13 in [3.8 cm] [33.0 cm] 2 5/16 in Ø 3/4" GAS [5.9 cm] 16 11/32 in 11 in [27.9 cm] [41.5 cm] 11 3/4 in 34 3/8 in [29.8 cm] [87.3 cm] 4 7/32 in 10 3/4 in [10.7 cm] [27.3 cm] LEFT SIDE TOP 29 5/8 in 36 3/8 in [75.3 cm] [92.4 cm] 18 3/16 in [46.2 cm] 10 1/4 in [26.0 cm] 44 1/4 in [112.4 cm] 32 7/8 in [83.5 cm] 4 1/2 in [11.4 cm] 17 1/8 in 3/4 in [1.9 cm] [17.8 cm] [43.5 cm]

NOTE: FOR OUTDOOR ONLY

FRONT

RSUB-7-C

- Notes:

 1. Dimensions are approximate and should not be used to "rough-in" equipment.

 2. Dimensions are subject to change without notice.

RIGHT SIDE

Fuel Type	Natural/Propane Gas	Boiler FLA	1*
Input BTU/hr.	399,000 / 117 kW	Min. Gas Pressure Required	5" WC**
Output BTU/hr.	323,988 / 95 kW	Max. Gas Pressure Allowed	14" WC
Electrical Requirements	120VAC / 1 ph / 60 hz	Operating Weight	264 lbs. / 120 kg.

BOILER / WATER HEATER TRIM & CONTROLS

Gas Valve - INT	Honeywell VR8304M 3/4"	Ignition Control (SB On/Off)	Honeywell S9361A2085
Gas Valve	Honeywell VR8304Q 3/4"- 2 Stg	Ignition Control (SB 2 Stg.)	Honeywell S86IOM
Gas Valve	Honeywell VR8304Q 3/4"- 2 Stg.	Ignition Control (SW)	Honeywell S86IOM
Operating Control (SB)	Jumo - 2 Stage	Relief Valve - SW	3/4" x 3/4" set @ 125 psi
High Limit (SB/SW)	Jumo	Relief Valve - SB	3/4" x 3/4" set @ 30 psi
		Flow Switch	TACO

A.S.M.E.

ASME Sect IV Htg Surface	ME Sect IV Htg Surface 54.3 Sq. Ft. / 5.04 Sq. M.		Max. 160 psig & 250°F		
Nater Volume 1.5 gal / 5.64 Liters					

^{*} Add circulator amps.

BOILER TEMPERATURE RISE / PRESSURE DROP

	30°F / 16.7°C			20°F / 11.1°C				10°F / 5.5°C				
	re Drop	Pressu	Rate	Flow	re Drop	Pressu	Rate	Flow	re Drop	Pressu	Rate	Flow
	kPa	Ft	L/s	GPM	kPa	Ft	L/s	GPM	kPa	Ft	L/s	GPM
2 Pass	0.7	0.20	1.4	21.6	1.4	0.47	2.0	32.4	5.0	1.69	4.1	64.8
4 Pass	4.7	1.60	1.4	21.6	10.0	3.40	2.0	32.4	-	-	-	-

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
960	3630	640	2420	480	1815	384	1452	320	1210	274	1037

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JOB NAME	
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SPECTRUM 400

Category I Appliance

Must be vented into a negative pressure vent system.



^{**} For incoming gas pressures lower than 5" WC natural or 11" WC propane, consult factory.