

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.

- 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. | 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

| Flow Rate | | | Pressui | re Drop | |
|-----------|------|-----|---------|---------|--------|
| • | GPM | L/s | Ft | kPa | |
| • | 16.4 | 1.0 | 0.05 | 0.1 | 2 Pass |
| • | 16.4 | 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 | |

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.

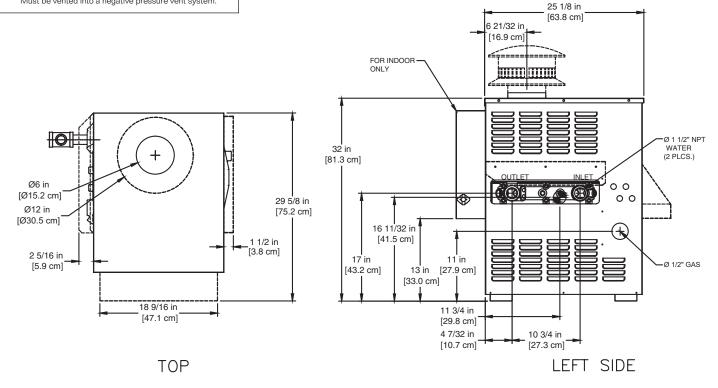


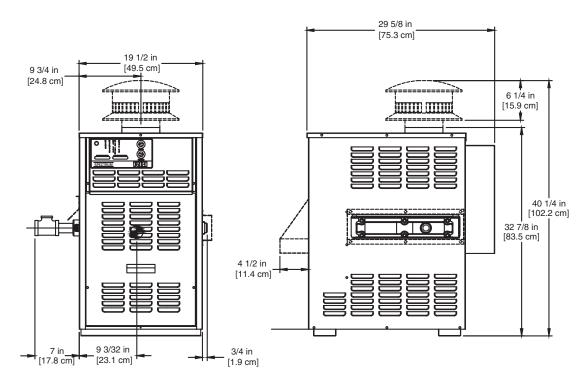
^{**} For incoming gas pressures lower than 5" WC natural or 11" WC propane, consult factory.

SPECTRUM 150

Category I Appliance

Must be vented into a negative pressure vent system.





RIGHT SIDE **FRONT**

NOTE: FOR OUTDOOR ONLY

- Notes:

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

 2. Dimensions are subject to change without notice.

RSUB-2-C

| 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 | Pressui | re 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 | |

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

| REP FIRM | |
|--------------|--|
| SUBMITTED BY | |
| JOB NAME | |
| ARCHITECT | |
| ENGINEER | |
| CONTRACTOR | |
| DATE | |

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.

SPECTRUM 200 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.) Ø7 in 00 32 in [Ø17.8 cm] 29 5/8 in [81.3 cm] Ø14 in [75.2 cm] [Ø35.6 cm] 16 11/32 in Ø 1/2" GAS [41.6 cm] 2 5/16 in 1 1/2 in 11 in 17 in [5.9 cm] [3.8 cm] [43.2 cm] 13 in [27.9 cm] [33.0 cm] 20 7/8 in 11 3/4 in [53.0 cm] [29.8 cm] 4 7/32 in 10 3/4 in [27.3 cm] [10.7 cm] LEFT SIDE TOP 25 15/32 in 22 7/8 in [64.7 cm] [58.1 cm] 11 23/32 in [29.8 cm] 6 1/4 in [15.9 cm] 32 7/8 in [83.5 cm] 40 1/4 in [102.2 cm] 4 1/2 in [11.4 cm] 7 in 10 21/32 in [27.1 cm] 3/4 in [1.9 cm]

RIGHT SIDE RSUB-3-C

NOTE: FOR OUTDOOR ONLY

FRONT

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 | 1.2 gal / 4.58 Liters | | |

^{*} Add circulator amps.

BOILER TEMPERATURE RISE / PRESSURE DROP

| | | 11.1°C | 20°F / | | 10°F / 5.5°C | | | |
|--------|---------------|--------|-----------|------|---------------|------|------|------|
| • | Pressure Drop | | Flow Rate | | Pressure Drop | | Rate | 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 | |

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

| REP FIRM | |
|--------------|--|
| SUBMITTED BY | |
| JOB NAME | |
| ARCHITECT | |
| ENGINEER | |
| CONTRACTOR | |
| DATE | |

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.

SPECTRUM 250 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 -Ø 1 1/2" NPT WATER (2 PLCS.) 32 in [81.3 cm] Ø8 in [Ø20.3 cm] Ø16 in 00 [Ø40.6 cm] 00 29 5/8 in [75.2 cm] 17[']in [43.2 cm] 1 1/2 in 16 11/32 in [3.8 cm] [41.5 cm] 2 5/16 in [5.9 cm] [27.9 cm] 13 in [[33.0 cm] Ø 3/4" GAS 24 1/4 in [61.6 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 26 1/4 in [75.3 cm] [66.7 cm] 13 1/8 in [33.3 cm] 8 1/4 in [21.0 cm] 32 7/8 in [83.5 cm] 42 1/4 in [107.3 cm] 4 1/2 in [11.4 cm] 7 in 12 1/4 in 3/4 in †[17.8 cm] [31.1 cm] [1.9 cm] **FRONT** RIGHT SIDE

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 | | | _ | | | |
|------|--------|---------------|------|-----------|-----|---------------|-----|--------|
| 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 | |
|--------------|--|
| SUBMITTED BY | |
| 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] [27.9 cm] 13 in [33.0 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:

- Dimensions are approximate and should not be used to "rough-in" equipment.
 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 | later Volume 1.4 gal / 5.11 Liters | | |

^{*} Add circulator amps.

BOILER TEMPERATURE RISE / PRESSURE DROP

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

[†] 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 |

| REP FIRM | |
|--------------|--|
| SUBMITTED BY | |
| JOB NAME | |
| ARCHITECT | |
| ENGINEER | |
| CONTRACTOR | |
| DATE | |

SPECTRUM 300

Category I Appliance

Must be vented into a negative pressure vent system.

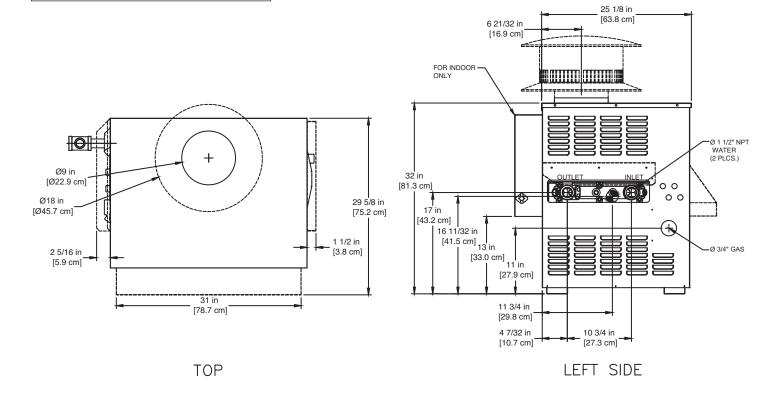


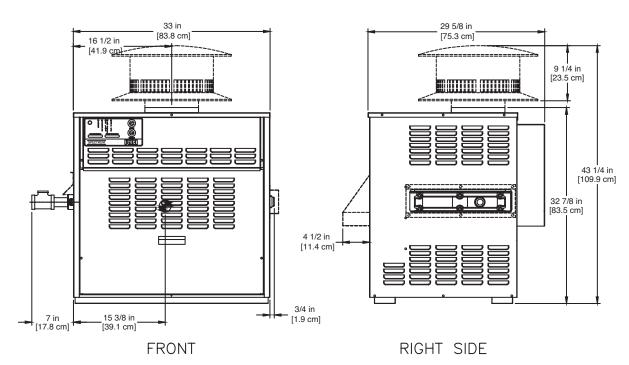
^{**} For incoming gas pressures lower than 5" WC natural or 11" WC propane, consult factory.

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 | | | | | 11.1°C | 20°F / | | | ′ 5.5°C | 10°F / | |
|--------|---------------|------|-----------|------|-------------------|--------|-----------|------|---------|---------|--------|------|
| | Pressure Drop | | Flow Rate | | ate Pressure Drop | | Flow Rate | | re Drop | Pressui | 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 | |
|--------------|--|
| SUBMITTED BY | |
| 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] RIGHT SIDE **FRONT**

NOTE: FOR OUTDOOR ONLY

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.

| 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 | ASME Sect IV Htg Surface 54.3 Sq. Ft. / 5.04 Sq. M. | | Max. 160 psig & 250°F | | |
|------------------------------------|-----------------------------------------------------|--|-----------------------|--|--|
| Water 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 | | | 20°F / 11.1°C | | | 10°F / 5.5°C | | | |
|--------|---------------|---------|------|------|---------------|---------|------|---------------|---------|---------|--------------|------|--|--|
| | re Drop | Pressui | Rate | Flow | re Drop | Pressui | Rate | Flow | re Drop | Pressui | 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 |

| REP FIRM | |
|--------------|--|
| SUBMITTED BY | |
| JOB NAME | |
| ARCHITECT | |
| ENGINEER | |
| CONTRACTOR | |
| DATE | |

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.