

SBR-5G SBR-5LG

Ultra Low-NOx Burner





SBR-5G Gas Only 8.4 - 21.0 MMBtu 250 - 500 BHP

The SBR-5 series is designed for a variety of boiler types such as firetubes, heaters, and watertubes. Capable of less than 5 ppm NOx emissions with





FGR, the SBR-5 features a unique firing head design to achieve controlled combustion, leading to low emissions with 3% O2. Advanced technology allows the SBR-5 to offer Ultra-Low NOx, low CO emissions and up to 6:1 turndown on natural gas.

Standard Equipment

- 120/1/60 Control circuit, various motor voltages
- Panel signal lights: power on, main fuel, ignition, and flame failure
- Burner-mounted junction box with remote panel
- Combustion air proving switch
- Main shutoff fuel valves
- Gas-Electric ignition
- Electronic parallel positioning with capacity control

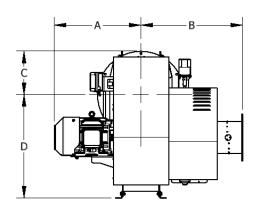
| S = STANDARD O = OPTIONAL N/A = NOT AVAILABLE | 200 | 250 | 300 | 350 | 400 | 500 |
|--|-----|-----|-----|-----|-----|-----|
| Flame Safeguard | S | S | S | S | S | S |
| Self-Check Flame Safeguard | 0 | 0 | 0 | 0 | 0 | 0 |
| 3600 RPM Combustion Fan | S | S | S | S | S | S |
| Full Modulation Firing | S | S | S | S | S | S |
| Parallel Positioning System | S | S | S | S | S | S |
| Dry Oven | S | S | S | S | S | S |
| O ₂ Trim | S | S | S | S | S | S |
| Variable Frequency Drive (VFD) | 0 | 0 | 0 | 0 | 0 | 0 |
| High and Low Gas Pressure Switches | S | S | S | S | S | S |
| Normally Open (N.O.) Vent Valve or Leakage Detection | S | S | S | S | S | S |
| Main Gas Regulator and (2) Gas Shutoff Cocks, (2) Automatic Main Shutoff ValvesS | | S | S | S | S | S |
| Gas Flow Control Valves Mounted on Burner Piping | S | S | S | S | S | S |

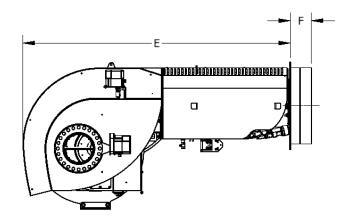
| BURNER MODEL | FRAME SIZE | GAS INPUT (MBH) | BHP @ 80% EFF. | MOTOR HP | GAS PRESSURE REQUIRED (PSI) | RECOMMENDED FURNACE DIAMETER | RECOMMENDED FURNACE LENGTH | FURNACE PRESSURE |
|-----------------|---------------|-----------------------|----------------------|-------------|--------------------------------------|------------------------------------|----------------------------------|---------------------|
| SBR5G-84 | 3 | 8,400 | 200 | 15 | 5 | 27 | 120 | 3.5 |
| SBR5G-105 | 3 | 10,500 | 250 | 20 | 5 | 34 | 128 | 2.7 |
| SBR5G-126 | 3 | 12,600 | 300 | 25 | 5 | 34 | 134 | 3.7 |
| SBR5G-147 | 4 | 14,700 | 350 | 30 | 5 | 37 | 135 | 3.7 |
| SBR5G-168 | 4 | 16,800 | 400 | 40 | 5 | 37 | 143 | 3.6 |
| SBR5G-210 | 4 | 21,000 | 500 | 40 | 5 | 45 | 146 | 4.3 |

Notes:

- 1. For values outside guidelines, connect with factory to evaluate possibilities of usage of SBR-5
- 2. SBR-5G Elevation is 0~2000
- 3. SBR-5G Ambient Temperature consists of 60~100 (°F)
- 4. SBR-5G NOx (ppm, @3% O2) Burning Natural Gas is ≤30

- 5. SBR-5G NOx (ppm, @3% O2) Burning #2 Fuel Oil is uncontrolled
- 6. SBR-5G CO (ppm @3% O2) Burning Natural Gas and #2 Fuel Oil is $\leq\!100$
- 7. SBR-5G Turndown Burning Natural Gas is Up to 6:1
- 8. SBR-5G Operating Excess O2 is 3.0~3.5
- 9. SBR-5G has FGR





Dimensions are for reference only. Dimensions and specifications are subject to change without notice.

| BURNER SIZE (BHP) | 250 | 300 | 350 | 400 | 500 |
|--|------|------|-------|-------|-------|
| Width | | | | | |
| Center Line to left side - A (inch) | 29.3 | 28.9 | 34.0 | 31.8 | 31.8 |
| Center Line to right side - B (inch) | 34.5 | 34.5 | 34.9 | 41.5 | 41.5 |
| Height | | | | | |
| Center Line to top - C (inch) | 14.7 | 16.7 | 18.2 | 18.2 | 18.2 |
| Center Line to bottom side - D (inch) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| Length | | | | | |
| Mounting flange to back of burner - E (inch) | 90.7 | 90.7 | 101.7 | 101.7 | 101.7 |
| Dryoven Depth - F (inch) | 7.0 | 8.0 | 8.0 | 9.0 | 9.0 |
| Shipping Weight | | | | | |
| Approximate Shipping Weight (lb) | 2300 | 2500 | 2800 | 3000 | 3000 |

SBR-5G Gas Only 25.2 - 42 MMBtu 600 - 1000 BHP

The ProFire SBR-5 series is designed for a variety of boiler types such as firetubes, heaters, and watertubes. Capable of less than 5 ppm NOx emissions with FGR, the SBR-5 series features a unique firing head design to achieve controlled combustion, leading to low emissions with 3% O2. Advanced technology allows the SBR-5 series to offer Low-NOx, low CO emissions and up to 6:1 turndown on natural gas.



Standard Equipment

- 120/1/60 Control circuit, various motor voltages
- Panel signal lights: power on, main fuel, ignition, and flame failure
- Burner-mounted junction box with remote panel
- Combustion air proving switch

- Main shutoff fuel valves
- Gas-Electric ignition
- Hinged rear-access cover
- Electronic parallel positioning with capacity control
- Top-mounted blower

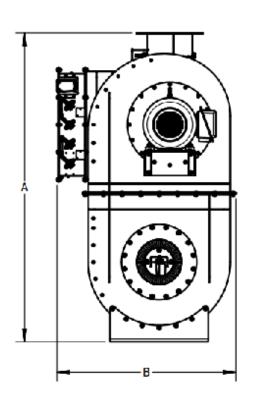
| S = STANDARD O = OPTIONAL N/A = NOT AVAILABLE | 600 | 700 | 800 | 900 | 1000 |
|--|-----|-----|-----|-----|------|
| Flame Safeguard | S | S | S | S | S |
| Self-Check Flame Safeguard | 0 | 0 | 0 | 0 | 0 |
| 3600 RPM Combustion Fan | S | S | S | S | S |
| Full Modulation Firing | S | S | S | S | S |
| Parallel Positioning System | S | S | S | S | S |
| Dry Oven | S | S | S | S | S |
| O ₂ Trim | S | S | S | S | S |
| Variable Frequency Drive (VFD) | 0 | 0 | 0 | 0 | 0 |
| High and Low Gas Pressure Switches | S | S | S | S | S |
| Normally Open (N.O.) Vent Valve or Leakage Detection | S | S | S | S | S |
| Main Gas Regulator and (2) Gas Shutoff Cocks, (2) Automatic Main Shutoff ValvesS | S | S | S | S | S |
| Gas Flow Control Valves Mounted on Burner Piping | S | S | S | S | S |

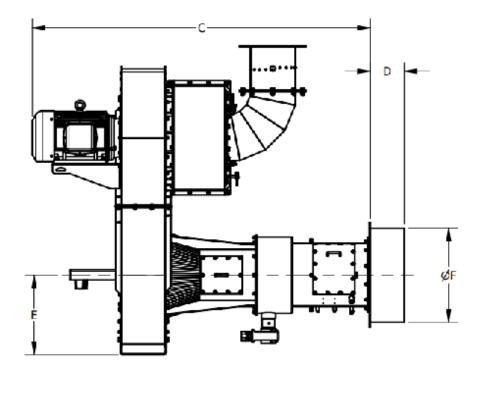
| BURNER MODEL | FRAME SIZE | GAS INPUT (MBH) | BHP @ 80% EFF. | MOTOR HP | GAS PRESSURE REQUIRED (PSI) | RECOMMENDED FURNACE DIAMETER | RECOMMENDED FURNACE LENGTH | FURNACE PRESSURE |
|-----------------|---------------|-----------------------|----------------------|-------------|--------------------------------------|------------------------------------|----------------------------------|---------------------|
| SBR5G-252 | 5 | 25,200 | 600 | 50 | 5 | 45 | 152 | 5.6 |
| SBR5G-294 | 5 | 29,400 | 700 | 60 | TBD | 50 | 160 | 5.4 |
| SBR5G-336 | 5 | 33,600 | 800 | 75 | TBD | 50 | 160 | 7.0 |
| SBR5G-378 | 5 | 37,800 | 900 | 75 | TBD | 52 | 200 | 3.5 |
| SBR5G-420 | 5 | 42,000 | 1000 | 75 | TBD | 52 | 200 | 4.1 |

Notes:

- For values outside guidelines, connect with factory to evaluate possibilities of usage of SBR-5
- 2. SBR-5G Elevation is 0~2000
- 3. SBR-5G Ambient Temperature consists of 60~100 (°F)
- 4. SBR-5G NOx (ppm, @3% O2) Burning Natural Gas is \leq 30

- 5. SBR-5G NOx (ppm, @3% O2) Burning #2 Fuel Oil is uncontrolled
- 6. SBR-5G CO (ppm @3% O2) Burning Natural Gas and #2 Fuel Oil is \leq 100
- 7. SBR-5G Turndown Burning Natural Gas is Up to 6:1
- 8. SBR-5G Operating Excess O2 is 3.0~3.5
- 9. SBR-5G has FGR





Dimensions are for reference only. Dimensions and specifications are subject to change without notice.

| BURNER SIZE (BHP) | 600 | 700 | 800 | 900 | 1000 |
|----------------------|-------|-------|-------|-------|-------|
| Α | 109.1 | 109.1 | 115.1 | 115.1 | 115.1 |
| В | 63.4 | 63.4 | 69.4 | 69.4 | 69.4 |
| С | 119.6 | 119.6 | 125.6 | 125.6 | 125.6 |
| D | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 |
| E | 28.1 | 28.1 | 31.1 | 31.1 | 31.1 |
| F | 33.3 | 33.3 | 35.8 | 35.8 | 35.8 |

SBR-5LG 8.4 - 21.0 MMBtu 250 - 500 BHP

The SBR-5 series is designed for a variety of boiler types such as firetubes, heaters, and watertubes. Capable of less than 5 ppm NOx emissions with





FGR, the SBR-5 features a unique firing head design to achieve controlled combustion, leading to low emissions with 3% O2. Advanced technology allows the SBR-5 to offer Low-NOx, low CO emissions and up to 6:1 turndown on natural gas.

Standard Equipment

- 120/1/60 control unit, various motor voltages
- Panel signal lights: power on, main fuel, ignition, and flame failure
- Burner-mounted junction box with remote panel
- Combustion air proving switch
- Main shutoff fuel valves
- Gas-Electric Ignition
- Fuel changeover switch
- Electronic parallel positioning with capacity control

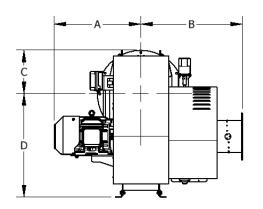
| S = STANDARD O = OPTIONAL N/A = NOT AVAILABLE | 200 | 250 | 300 | 350 | 400 | 500 |
|--|-----|-----|-----|-----|-----|-----|
| Flame Safeguard | S | S | S | S | S | S |
| Self-Check Flame Safeguard | 0 | 0 | 0 | 0 | 0 | 0 |
| 3600 RPM Combustion Fan | S | S | S | S | S | S |
| Full Modulation Firing | S | S | S | S | S | S |
| Parallel Positioning System | S | S | S | S | S | S |
| Dry Oven | S | S | S | S | S | S |
| O ₂ Trim | S | S | S | S | S | S |
| Variable Frequency Drive (VFD) | 0 | 0 | 0 | 0 | 0 | 0 |
| High and Low Gas Pressure Switches | S | S | S | S | S | S |
| Normally Open (N.O.) Vent Valve or Leakage Detection | S | S | S | S | S | S |
| Main Gas Regulator and (2) Gas Shutoff Cocks, (2) Automatic Main Shutoff ValvesS | S | S | S | S | S | S |
| Gas Flow Control Valves Mounted on Burner Piping | S | S | S | S | S | S |

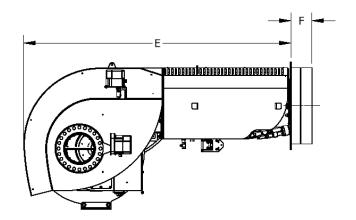
| BURNER MODEL | FRAME SIZE | GAS INPUT (MBH) | BHP @ 80% EFF. | MOTOR HP | GAS PRESSURE REQUIRED (PSI) | RECOMMENDED FURNACE DIAMETER | RECOMMENDED FURNACE LENGTH | FURNACE PRESSURE |
|-----------------|---------------|-----------------------|----------------------|-------------|--------------------------------------|------------------------------------|----------------------------------|---------------------|
| SBR5G-84 | 3 | 8,400 | 200 | 15 | 5 | 27 | 120 | 3.5 |
| SBR5G-105 | 3 | 10,500 | 250 | 20 | 5 | 34 | 128 | 2.7 |
| SBR5G-126 | 3 | 12,600 | 300 | 25 | 5 | 34 | 134 | 3.7 |
| SBR5G-147 | 4 | 14,700 | 350 | 30 | 5 | 37 | 135 | 3.7 |
| SBR5G-168 | 4 | 16,800 | 400 | 40 | 5 | 37 | 143 | 3.6 |
| SBR5G-210 | 4 | 21,000 | 500 | 40 | 5 | 45 | 146 | 4.3 |

Notes:

- 1. For values outside guidelines, connect with factory to evaluate possibilities of usage of SBR-5
- 2. SBR-5G Elevation is 0~2000
- 3. SBR-5G Ambient Temperature consists of 60~100 (°F)
- 4. SBR-5G NOx (ppm, @3% O2) Burning Natural Gas is \leq 30

- 5. SBR-5G NOx (ppm, @3% O2) Burning #2 Fuel Oil is uncontrolled
- 6. SBR-5G CO (ppm @3% O2) Burning Natural Gas and #2 Fuel Oil is $\leq\!100$
- 7. SBR-5G Turndown Burning Natural Gas is Up to 6:1
- 8. SBR-5G Operating Excess O2 is 3.0~3.5
- 9. SBR-5G has FGR





Dimensions are for reference only. Dimensions and specifications are subject to change without notice.

| BURNER SIZE (BHP) | 250 | 300 | 350 | 400 | 500 |
|--|------|------|-------|------|------|
| Width | | | | | |
| Center Line to left side - A (inch) | 29.3 | 28.9 | 34.0 | 31.8 | 31.8 |
| Center Line to right side - B (inch) | 34.5 | 34.5 | 34.9 | 41.5 | 41.5 |
| Height | | | | | |
| Center Line to top - C (inch) | 14.7 | 16.7 | 18.2 | 18.2 | 18.2 |
| Center Line to bottom side - D (inch) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| Length | | | | | |
| Mounting flange to back of burner - E (inch) | 90.7 | 90.7 | 101.7 | 01.7 | 01.7 |
| Dryoven Depth - F (inch) | 7.0 | 8.0 | 8.0 | 9.0 | 9.0 |
| Shipping Weight | | | | | |
| Approximate Shipping Weight (lb) | 2300 | 2500 | 2800 | 3000 | 3000 |

SBR-5LG 25.2 - 42 MMBtu 600 - 1000 BHP

The ProFire SBR-5 series is designed for a variety of boiler types such as firetubes, heaters, and watertubes. Capable of less than 5 ppm NOx emissions with FGR, the SBR-5 series features a unique firing head design to achieve controlled combustion, leading to low emissions with 3% O2. Advanced technology allows the SBR-5 series to offer Low-NOx, low CO emissions and up to 6:1 turndown on natural gas.



Standard Equipment

- 120/1/60 Control circuit, various motor voltages
- Panel signal lights: power on, main fuel, ignition, and flame failure
- Burner-mounted junction box with remote panel
- Combustion air proving switch

- Main shutoff fuel valves
- Gas-Electric ignition
- Hinged rear-access cover
- Electronic parallel positioning with capacity control
- Top-mounted blower

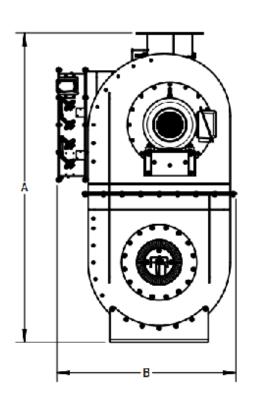
| S = STANDARD O = OPTIONAL N/A = NOT AVAILABLE | 600 | 700 | 800 | 900 | 1000 |
|--|-----|-----|-----|-----|------|
| Flame Safeguard | S | S | S | S | S |
| Self-Check Flame Safeguard | 0 | 0 | 0 | 0 | 0 |
| 3600 RPM Combustion Fan | S | S | S | S | S |
| Full Modulation Firing | S | S | S | S | S |
| Parallel Positioning System | S | S | S | S | S |
| Dry Oven | S | S | S | S | S |
| O ₂ Trim | S | S | S | S | S |
| Variable Frequency Drive (VFD) | 0 | 0 | 0 | 0 | 0 |
| High and Low Gas Pressure Switches | S | S | S | S | S |
| Normally Open (N.O.) Vent Valve or Leakage Detection | S | S | S | S | S |
| Main Gas Regulator and (2) Gas Shutoff Cocks, (2) Automatic Main Shutoff ValvesS | S | S | S | S | S |
| Gas Flow Control Valves Mounted on Burner Piping | S | S | S | S | S |

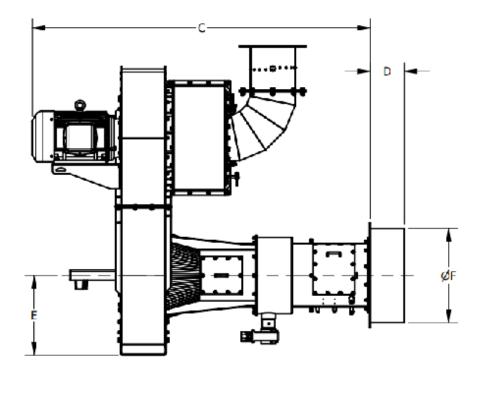
| BURNER MODEL | FRAME SIZE | GAS INPUT (MBH) | BHP @ 80% EFF. | MOTOR HP | GAS PRESSURE REQUIRED (PSI) | RECOMMENDED FURNACE DIAMETER | RECOMMENDED FURNACE LENGTH | FURNACE PRESSURE |
|-----------------|---------------|-----------------------|----------------------|-------------|--------------------------------------|------------------------------------|----------------------------------|---------------------|
| SBR5G-252 | 5 | 25,200 | 600 | 50 | 5 | 45 | 152 | 5.6 |
| SBR5G-294 | 5 | 29,400 | 700 | 60 | TBD | 50 | 160 | 5.4 |
| SBR5G-336 | 5 | 33,600 | 800 | 75 | TBD | 50 | 160 | 7.0 |
| SBR5G-378 | 5 | 37,800 | 900 | 75 | TBD | 52 | 200 | 3.5 |
| SBR5G-420 | 5 | 42,000 | 1000 | 75 | TBD | 52 | 200 | 4.1 |

Notes:

- For values outside guidelines, connect with factory to evaluate possibilities of usage of SBR-5
- 2. SBR-5G Elevation is 0~2000
- 3. SBR-5G Ambient Temperature consists of 60~100 (°F)
- 4. SBR-5G NOx (ppm, @3% O2) Burning Natural Gas is \leq 30

- 5. SBR-5G NOx (ppm, @3% O2) Burning #2 Fuel Oil is uncontrolled
- 6. SBR-5G CO (ppm @3% O2) Burning Natural Gas and #2 Fuel Oil is $\leq\!100$
- 7. SBR-5G Turndown Burning Natural Gas is Up to 6:1
- 8. SBR-5G Operating Excess O2 is 3.0~3.5
- 9. SBR-5G has FGR





Dimensions are for reference only. Dimensions and specifications are subject to change without notice.

| BURNER SIZE (BHP) | 600 | 700 | 800 | 900 | 1000 |
|----------------------|-------|-------|-------|-------|-------|
| Α | 109.1 | 109.1 | 115.1 | 115.1 | 115.1 |
| В | 63.4 | 63.4 | 69.4 | 69.4 | 69.4 |
| С | 119.6 | 119.6 | 125.6 | 125.6 | 125.6 |
| D | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 |
| E | 28.1 | 28.1 | 31.1 | 31.1 | 31.1 |
| F | 33.3 | 33.3 | 35.8 | 35.8 | 35.8 |



351 21st Street, Monroe, WI 53566 USA 608.325.3141 · info@ind-comb.com ind-comb.com