

HVAC EQUIPMENT

For Residential, Industrial & Commercial Applications



 **STERLING**
HVAC PRODUCTS





HVAC Equipment

Sterling HVAC, the most recognized name in the game, has been producing industry leading high efficiency heating products for over 50 years. From traditional Unit Heaters to Rooftop and Indoor Make-Up Air units, Sterling HVAC has the solution to fit every residential, commercial or industrial application.

A division of Mestek, Inc. a family of over 36 specialty HVAC related manufacturers, Sterling HVAC proudly manufactures all of its products in Farmville, North Carolina USA.

Known as a true innovator Sterling HVAC designs, engineers and manufactures all of their heating products “in-house” and sets the standard for performance and quality across the industry.

Sterling HVAC provides unparalleled factory support from sales and technical resources to full application engineering support. For additional information or to speak with a Sterling HVAC representative please call toll free 800-490-2290 or visit our website at www.sterlinghvac.com.

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Gas-Fired High Efficiency Unit Heater

The Matrix is a high efficiency condensing unit heater, featuring industry leading performance efficiencies of +93%. The perfect solution for light commercial/commercial applications Matrix is ideal for more corrosive environments due to its ZM coated steel corrosion resistant cabinet. The Matrix unit heaters reduce fuel usage and emissions and provide significant cost savings each heating season. The Matrix is available in eight sizes 50,000 - 400,000 BTU/h (14.654 - 117.228 kW).

Matrix incorporates a tri-metal condensing stainless steel heat exchanger to maximize heat transfer while using the traditional standard efficiency gas controls to minimize cost.

Matrix is the most advanced, value-priced, high efficiency condensing unit heater on the market.

FEATURES AND BENEFITS

- +93% Efficiency at Full Input
- 8 Sizes 50,000 - 400,000 BTU/h (14.654 - 117.228 kW)
- Sizes 50,000 - 150,000 BTU/h (14.654 - 43.961 kW)
Certified for Residential Use as a Utility Heater
- ZM Coated Steel Corrosion Resistant Cabinet
- Tri-Metal Heat Exchanger for Improved Thermal Heat Transfer
- Separated or Standard Combustion All-In-One Units
- Optional Gas Conversion Kit (NG or LP)
- In-Shot Burners
- Direct Spark Ignition System
- PVC/CPVC Vent Compatible
- Multiple Voltage Options
- Condensate Float Switch and Trap Included
- Optional Condensate Pump and Condensate Neutralizer
- Single Stage Gas Control
- 10-Year Heat Exchanger, Flue Collector and Burner Warranty



MODEL XH



SPECIFICATIONS

MBH Input	50	100	150	200	250	300	350	400
MBH Output	48	96	145	191	243	283	328	372
Thermal Efficiency	96%	96%	97%	96%	97%	94%	94%	93%
Air Temp. Rise - °F	64	50	47	50	53	56	51	58
Free Air Delivery (CFM)	691	1830	2869	3567	4154	4675	6087	6124
Motor HP (qty)	1/14 (2)	1/2	1/2 (2)	1/2 (2)	1 (2)	1 (2)	1 (2)	1 (2)
Gas Connection Size	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"
Flue Size	2"	2"	3"	4"	4"	4"	4"	4"





Condensing Unit Heater

Sterling's **Nexus** brings gas-fired unit heaters to unprecedented levels of efficiency. Nexus carries a +95% Certified Thermal Efficiency rating combined with the latest innovations, including a tri-metal stainless steel heat exchanger and a state-of-the-art proprietary combustion control system.

Efficiency matters...not only is the **Nexus** the most energy efficient unit heater available, it is the most environmentally friendly too. Reduced emissions, low fuel utilization and a reduced carbon footprint give **Nexus** our green stamp of approval!



State-of-the-Art Control Platform

- 2-Stage, Modulating Outdoor Reset, Modulating Indoor Reset
- 2-10 VDC/4-20 mA Input for BMS Communication
- Modbus Standard
- LED Diagnostic Lights (External)
- Single Thermostat or Outdoor Sensor can Control Multiple Units



Application Flexibility

- NG/LP Single Orifice Field Conversion
- PVC/CPVC Vent Compatible
- Separated or Standard Combustion All-In-One
- Multiple Voltage Configurations
- OSHA Fan Guards
- Durable Brushed Stainless Steel Cabinet
- Condensate Float Switch and Trap Standard
- Optional Condensate Pump and Condensate Neutralizer
- Residentially Certified for use as a Utility Heater

Electronically Air/Fuel Coupled

- Proprietary Design for Optimal Efficiency
- Premix Burner Technology
- 3:1 Full Modulation
- Maximum Efficiency through Precision Modulation
- SafeSense Blocked Inlet and Flue Sensing Technology
- Unit Auto-Adjusts for Altitude Requiring No Field Modifications
- Unit Will Maintain Fuel Air Ratio with Partial Blockage Without Decreasing Performance Until Safety Trip

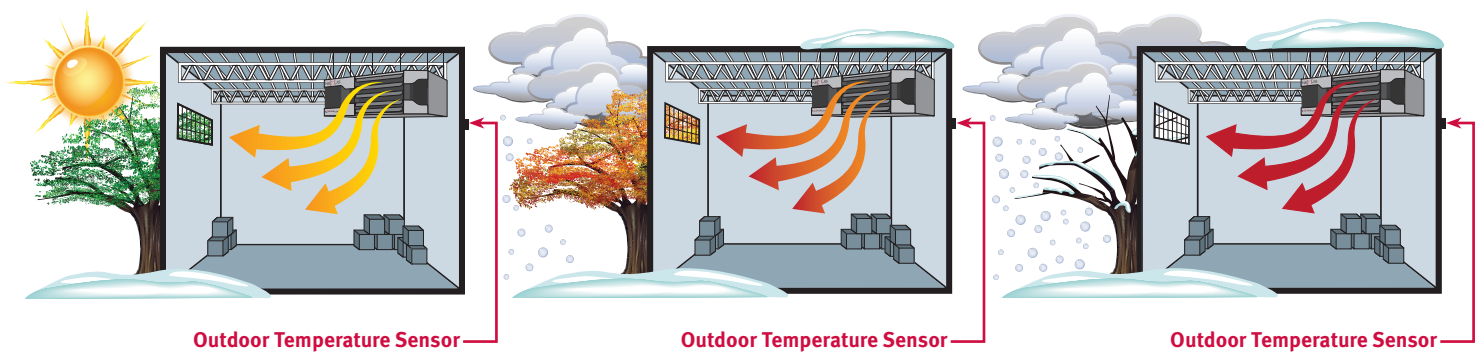
Tri-Metal Hybrid Heat Exchanger

- Full Condensing Efficiencies at all Firing Rates
- +95% Efficiency at Full Input
- All Stainless Steel Tube for Enhanced Corrosion Protection
- Brass and Aluminum Fins for Improved Thermal Heat Transfer



Outdoor Air Reset Modulation

Units automatically vary discharge temperatures based on the outside air temperature providing seamless modulation for optimum efficiencies. By running at lower discharge temperatures subject to the outdoor temperatures, units run longer at higher efficiency resulting in less cycling, lower fuel costs, and increased occupancy comfort. As the outdoor temperature drops, discharge temperatures increase and vice versa. Outdoor air reset is optimal in regions with substantial daily temperature swings.



SPECIFICATIONS

MBH Input	50	100	150	200	300	400
MBH Output	48	96	143	192	285	384
Thermal Efficiency	97%	96%	95%	96%	95%	96%
Air Temp. Rise - °F	57	55	50	55	55	55
Free Air Delivery (CFM)	790	1616	2661	3232	4848	6464
Motor HP (qty)	1/14 (2)	1/2	1/2 (2)	1/2 (2)	1 (2)	1 (2)
Gas Connection Size	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
Flue Size	2"	2"	2"	3"	4"	4"



Low Profile Unit Heaters

GG Series gas-fired unit heaters combine the latest tubular heat exchanger technologies with a unique single-orifice burner system for superior durability, reliability and performance. GG Series propeller units are available in sizes from 30,000 - 120,000 BTU/h (8.792 - 35.169 kW) and offer industry leading operating efficiencies in a compact low-profile design perfect for applications where space is limited. Units are ready for standard or separated combustion all in one unit. Optional combustion air inlet kits available for concentric venting.

Residential Garage Certified

All GG Series units are covered by a limited 10-year heat exchanger warranty and are ETL certified for residential garage installations. Units come standard with LP gas conversion kits and everything needed for applications in dusty or damp environments.

FEATURES AND BENEFITS

- +82% Thermal Efficiency
- Residential Certification: For Use as a Garage Utility Heater
- Standard or Separated Combustion All-In-One Units
- Single Orifice Burner System
- Direct Spark Ignition
- 20-Gauge Tubular Heat Exchangers
- 20-Gauge Jacket Panels with Baked Enamel Finish
- Power Vented
- OSHA Fan Guard
- Terminal Strip Low Voltage Wiring
- LP Gas Conversion Kit Included
- Easy Access Control Panel
- 321 Stainless Steel Burner Box
- 10-Year Heat Exchanger Warranty



AXE brings together all of the Sterling HVAC “cross over equipment” under one umbrella. Our GG, XF & XC Series unit heaters now all come separated and standard combustion out of the box. Sterling HVAC is committed to providing superior products combined with outstanding value and convenience to our customers.



MODEL GG



SPECIFICATIONS

MBH Input†	30	45	60	75	90	105	120
MBH Output†	24	37	49	61	73	86	98
Free Air Delivery CFM	370	550	740	920	1,100	1,300	1,475
Motor HP	1/20	1/20	1/12	1/12	1/10	1/10	1/10
Flue Size Diameter							
Standard Combustion	4"	4"	4"	4"	4"	4"	4"
Separated Combustion	4"	4"	4"	4"	5"	5"	5"

†Ratings shown are for unit installations at elevations between 0 and 2,000 ft. (0 to 610m). For installations above 2,000 ft. (610m), the unit input must be derated 4% for each 1,000 ft. (305m) above 2,000 ft. refer to local codes, or refer to the latest edition of the National Fuel Gas Code, ANSI Standard Z223.1 (NFPA No. 54).

See unit installation manual for deration information.

Commercial & Light Commercial Unit Heaters

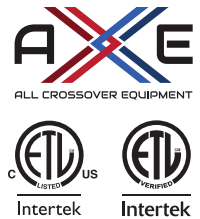
XF/XC Series

The Sterling “XF/XC” Series Convertible Venting Type Tubular Gas-Fired Unit Heater offers a highly efficient, extremely durable alternative to the traditional clam shell design. These propeller and blower type units combine the latest tubular heat exchanger and in-shot burner technology with the quality and reliability you have come to know from Sterling. Units are available in sizes 100 to 400 MBH (29.307 - 117.228 kW) and have been certified by ETL as providing 83% thermal (combustion) efficiency.

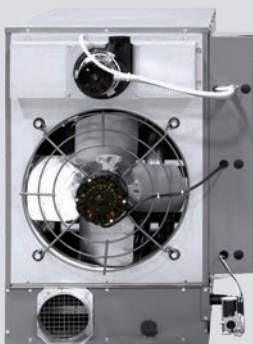
Notably, the “XF/XC” unit heaters are designed so they can be installed in either standard or separated combustion venting configurations without requiring modification to the unit itself. Located on the rear cover panel of each unit, combustion air inlet collars are left open in a standard combustion venting configuration. When set up for separated combustion, combustion air piping is connected to the inlet collars so that the burners, spark ignitor, and flue system are enclosed within the unit, allowing the entire combustion process to remain unaffected by the atmosphere in the space where the heater is located. Separated combustion venting configurations should be used where dusty, dirty or mildly corrosive conditions exist, or where high humidity or slightly negative pressures prevail.

FEATURES AND BENEFITS

- Standard or Separated Combustion All-in-One Units
- 20-Gauge Aluminized Steel Tubular Heat Exchanger
- 83% Thermal Efficiency
- Power Venter
- 20-Gauge Steel Cabinetry with Baked Enamel Finish
- Direct Spark Ignition System
- Redundant Single Stage Gas Valve
- Rear Burner Access for Ease of Service
- Individually Adjustable and Removable Horizontal Louvers
- 10-Year Heat Exchanger, Flue Collector and Burner Warranty



MODEL XF



MODEL XC



SPECIFICATIONS

MBH Input†	100	125	150	175	200	250	300	350	400
MBH Output†	83	103	124	145	166	207	249	290	332
Free Air Delivery CFM XF	1,600	2,200	2,400	2,850	3,200	3,450	5,000	5,600	5,800
Free Air Delivery CFM XC	1,181	1,476	1,771	2,067	2,362	2,953	3,501	4,134	4,724
Motor HP (Qty) XF	1/10	1/4	1/4	1/3	1/3	1/3	1/4(2)	1/3(2)	1/3(2)
Motor HP (Qty) XC	1/4	1/2	1/2	3/4	3/4	1	1	1-1/2	1-1/2
*Flue Size Diameter	5"	5"	5"	5"	5"	5"	6"	6"	6"

†Ratings shown are for unit installations at elevations between 0 and 2,000 ft. (0 to 610m). For installations above 2,000 ft. (610m), the unit input must be derated 4% for each 1,000 ft. (305m) above 2,000 ft. refer to local codes, or refer to the latest edition of the National Fuel Gas Code, ANSI Standard Z223.1 (NFPA No. 54).

See unit installation manual for deration information.

*Flue collar is factory supplied with unit; to be field installed per included instructions on 150/400 MBH sizes.



Tubular Duct Furnace

TD Series

Designed for use with existing systems for any ducted air application, the TD Series duct furnace is the latest addition to the tubular product line. Coupled with Sterling's "In-Shot" burner technology, TD units are built for superior durability, reliability and performance. Units are available in 7 sizes (100-400 MBH [29.307 - 117.228 kW]) and offer industry leading efficiencies with a limited 10 year heat exchanger warranty.

The TD duct furnace is designed so that it can be easily field converted to separated combustion using the optional "Air Inlet Kit" or "Combustion Air Inlet Kit". The unit can also be easily converted from right to left hand without requiring any additional parts.

FEATURES AND BENEFITS

- In-Shot Burner Design
- 20-Gauge Steel Jacket with Baked Enamel Finish
- Double Wall Construction
- 115/1/60 Supply Voltage
- Direct Spark Ignition
- Redundant Single-Stage Gas Valve
- 115/24 Volt Controls transformer
- Power Venter
- 20-Gauge Aluminized Steel Heat Exchanger
- For Natural or Propane Gas
- 10-Year Heat Exchanger, Flue Collector and Burner Warranty
- 82% Thermal Efficiency
- Four Point Suspension
- Easy Access Control Panel
- Left Hand Control Access – Field Convertible to Right Hand



MODEL TD



SPECIFICATIONS

MBH Input - BTU/Hr.†	100	150	200	250	300	350	400
MBH Output - BTU/Hr.†	82	123	164	205	246	287	328
Thermal Efficiency	82%	82%	82%	82%	82%	82%	82%
Minimum Temperature Rise - °F	30	30	30	30	30	30	30
Maximum CFM	2528	3792	5057	6321	7585	8849	10114
Pressure Drop	0.65	0.44	0.54	0.76	0.69	0.76	0.70
Maximum Temperature Rise	100	100	100	100	100	100	100
Minimum CFM	758	1137	1517	1896	2275	2654	3034
Pressure Drop	0.07	0.03	0.04	0.08	0.03	0.07	0.08

†Ratings shown are for unit installations at elevations between 0 and 2,000 ft. (0 to 610m). For installations above 2,000 ft. (610m), the input must be derated 4% for each 1,000 ft. (305m) above 2,000 ft.; refer to local codes, or refer to the latest edition of the National Fuel Gas Code, ANSI Standard Z223.1 (NFPA No. 54).

See unit installation manual for deration information.



Hydronic Unit Heaters

HS Series

Sterling HS Series horizontal unit heaters are available in both serpentine and header type units. Serpentine units offer outputs from 8,030 to 35,900 BTUs (2.353 - 10.521 kW) and are ideal for hot water installations with limited clearances. Header type horizontal units range from 18,000 to 360,000 BTUs (5.275 - 105.506 kW) and can operate with either hot water or steam. Both units are furnished with totally enclosed motors as standard equipment, explosion proof motors are optional.

VS Series

Sterling VS Series vertical unit heaters are designed for installations requiring down flow air delivery. Offered in 15 sizes ranging from 41,300 to 705,000 BTU (12.104 - 206.615 kW). Low output (increased airflow) units are available for high ceiling applications, steam or hot water operation.

HS FEATURES AND BENEFITS

- Copper Coils w/Aluminum Fins
- 20-Gauge Cabinetry
- 115/1/60 Volt Motor
- Thermal Over Load Protection
- Adjustable Louvers

VS FEATURES AND BENEFITS

- Copper Coils w/Aluminum Fins
- Totally Enclosed Motors
- Standard Units are Field Convertible to Low Output by Removing Air Port Knockouts Located on Top of the Unit
- Thermal Over Load Protection
- 4-Point Suspension



MODEL HS
Header Type



MODEL HS
Serpentine Type



MODEL VS



SPECIFICATIONS

Model	Type	Motor H.P. Range	BTU Output Range	CFM Range
HS (Serpentine Coil)	Horizontal	16W-1/20	8,030-35,900	245-850
HS (Header Type Coil)	Horizontal	16W-1/2	18,000-360,000	395-5,500
VS (Standard Unit)	Vertical	1/40-3	41,300-705,000	598-11,000
VS (Low Output Unit)	Vertical	1/40-3	34,800-620,000	668-11,900



Indoor Duct Furnaces

QVED/QVES Series

The QVED and QVES are power vented indoor duct furnaces. QVED offers bottom burner access while the model QVES offers side access. Both models offer high efficiencies that achieve annual fuel savings of up to 25% over conventional natural vented duct furnaces. Also featured are a factory installed power venter and sealed flue collector that controls combustion and excess air during on cycles. Spark ignition is standard.

QVSD Series

The Sterling QVSD Series separated combustion indoor duct furnace is designed to be installed in mildly hostile environments where dust, dirt, and mild corrosives exist. The QVSD also performs well in atmospheres with humidity or slightly negative pressures. The burners, pilot and flue system are enclosed within the unit. The entire combustion process is literally unaffected by the atmosphere in the space where the unit is located.

FEATURES AND BENEFITS

- 80% Thermal Efficiency
- 100-400 MBH (29.307 - 117.228 kW)
- Aluminized Steel Heat Exchanger - 20-Gauge
- Optional 409 and 321 Stainless Steel Heat Exchangers
- Single Stage Gas Valve
- Optional 2-Stage and Modulating Gas Valves
- Optional Air Flow Prove Switch
- Spark Ignition
- Natural or LP Gas Available
- Easy Burner Access with Individual Removable Burners
- Factory Test Fired
- 1-Year Warranty



MODEL QVED



SPECIFICATIONS

MBH Input [†]	100	150	200	250	300	350	400
MBH Output [†]	80	120	160	200	240	280	320
MODEL QVED/QVES							
Min Temp. Rise	30	30	30	30	30	30	30
Max CFM	2,469	3,704	4,938	6,173	7,407	8,642	9,877
Pressure Drop	0.90	0.75	0.75	0.80	0.90	0.90	0.90
Max Temp. Rise	80	80	80	80	80	80	80
Min CFM	929	1,389	1,852	2,315	2,778	3,241	3,704
Pressure Drop	0.12	0.15	0.14	0.14	0.13	0.13	0.14
MODEL QVSD							
Min Temp. Rise	20	20	20	20	20	20	20
Max CFM	3,700	5,550	7,401	9,251	11,101	12,951	14,801
Pressure Drop	2.03	1.81	1.9	1.96	2	2.02	2.05
Max Temp. Rise	90	90	90	90	90	90	90
Min CFM	822	1,233	1,645	2,056	2,467	2,878	3,289
Pressure Drop	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Flue Size Diameter	4"	4"	5"	5"	6"	6"	6"

[†]Published ratings are shown for elevations up to 2,000 ft. (610m) above sea level. For higher elevations derate 4% for each 1,000 ft. (305m) above sea level.
In Canada, derate 10% for altitudes 2,000 to 4,500 ft. (610 to 1372m).

Oil Fired Unit Heaters

QVOF Series

Sterling's QVOF Series oil-fired unit heater is designed to operate on number 1 & 2 fuel oils. Available in seven sizes ranging from 70 to 560 MBH (20.515 - 164.120 kW; .50 to 4.00 GPH) all units are factory assembled and ready to install.

FEATURES AND BENEFITS

- Heavy Duty 18-Gauge Heat Exchanger
- Energy Efficient Flame Retention Beckett® Burner
- Adjustable Discharge Air Louvers
- Fan/Limit Control
- Four Point Suspension
- CAD Cell Burner Safeguard Control
- 115/1/60

MODEL QVOF



SPECIFICATIONS

MBH Input	70	105	126	231	312	375	560
MBH Output	56	84	100	184	250	300	450
Firing Rate #2 Fuel Oil (GPH)	0.5	0.75	0.9	1.65	2.25	2.75	4
Free Air Delivery CFM	1,050	1,750	2,000	3,200	3,400	5,000	6,000
Motor HP (Qty)	1/4	1/4	1/4	1/4	1/2	1/2	1/3 (2)
Flue Size Diameter	7"	7"	7"	8"	9"	9"	10"

Cabinet Blowers

Cabinet Blowers (Models CAB 1 - 4)

Sterling cabinet blowers have been designed for high static pressure applications in conjunction with an indoor duct furnace. Cabinet blowers have been specially matched for use with a single Sterling indoor duct furnace to provide maximum efficiencies.

FEATURES AND BENEFITS

- Four Sizes with Capacities Ranging from 1,250 to 8,000 CFM (0.590 - 3.776 cu. m/s)
- Removable Side Inspection Panels
- Floor Mounted Motors (1-3 HP, 56Hz Frames or Larger)
- Duct Furnace Transition Piece when Ordered with Duct Furnace
- Available with 1 in. (25 mm) Washable or Throw Away Filters

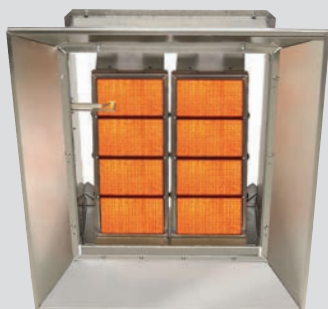
MODEL CAB



SPECIFICATIONS

Model	CAB1	CAB2	CAB3	CAB4
Minimum CFM	1,250	2,000	2,250	5,000
Maximum CFM	2,000	3,000	5,000	8,000

MODEL RSD



SPECIFICATIONS

Model Number	Gas Type	MBH Input	Model Number	Gas Type	MBH Input
RSD30	Natural	30	RSD80	Natural	80
RSD33	Propane	33	RSD100	Natural	100
RSD35	Natural	35	RSD100	Propane	99
RSD40	Natural	40	RSD120	Natural	120
RSD60	Natural	60	RSD132	Propane	132
RSD66	Propane	66	RSD140	Natural	140
RSD70	Natural	70	RSD160	Natural	160

MODEL RSG



SPECIFICATIONS

Model Number	MBH Input
RSG025	25
RSG035	35
RSG045	45

MODEL RSW



SPECIFICATIONS

Model	Input BTU/hr -High	Input BTU/hr -Low
RSW35	35,000	24,000
RSW50	50,000	34,000

Infrared Heaters

RSD Series – High Intensity

Sterling RSD Series high intensity infrared heaters are available with inputs of 30 to 160 MBH (8.792 - 46.891 kW). Units have a special honeycomb tile design for increased radiant output.

FEATURES AND BENEFITS

- Direct Spark Ignition – 100% Shut Off
- Natural or LP Gas
- Heavy Gauge Aluminized Steel Burner Housing
- 24 Control
- 4-Point Suspension
- Highly Efficient Aluminum Reflectors
- 5-Year Burner Warranty

RSG Series – Residential Low Intensity

Sterling RSG Series low intensity infrared heaters are residentially certified and available with inputs of 25 to 40 MBH (7.327 - 13.188 kW). All units are field assembled and utilize Sterling's integral tube/reflector hanging system. The burner is of the box type design and is totally enclosed to protect against dust and moisture.

FEATURES AND BENEFITS

Burner Box

- Totally Enclosed Design
- Direct Spark Ignition – 100% Shut Off
- Natural or LP Gas
- Factory Test Fired
- 10-Year Burner Warranty

Radiant Tube

- Heat Treated Aluminized Steel Tube
- Compact Tube Size with Overall Unit Length of 9'2" (2.794 m) for Ease of Installation
- U-Tube Design for Even Heat Distribution
- 5-Year Tube Warranty

SUNSCAPE RSW Series – Wind & Rain Resistant Outdoor Patio Heater

SunScape's tinted ceramic glass design provides protection from adverse wind and weather conditions, extending the season for your outdoor dining and entertainment areas. Available with 35 and 50 MBH (10.257 - 14.654 kW) input capacities and optional accessories like a heat shield to reduce overhead clearances and an adjustable mounting bracket.

FEATURES AND BENEFITS

- Wind Resistance up to 45 MPH (72.4 km/h)
- Two Stage Gas Control Options with Either Thermostat, 3 Position Switch, or Wireless Remote Control
- Natural or LP Gas
- Potted (Water Resistant) Direct Spark Ignition Module
- Extremely Quiet Operation
- Horizontal or Angle Mounting up to 60°
- High Efficiency Ceramic Tiles
- 115/1/60 Supply Voltage
- Totally Enclosed Burner Prevents Heat Rollout
- 3-Year Limited Warranty on Burner Assembly, 1-year Limited Warranty on Controls

RSS/RSU Series – Commercial Low Intensity

Sterling RSS/RSU Series low intensity infrared heaters are available with inputs of 40 to 200 MBH (11.723 - 58.614 kW) and system lengths of 10 to 70 feet (3.05 to 21.34 m). All units are field assembled and utilize Sterling's integral tube/reflector hanging system. The burner is of the box type design and is totally enclosed to protect against dust and moisture.

FEATURES AND BENEFITS

Burner Box

- Totally Enclosed Design
- Direct Spark Ignition – 100% Shut Off
- Heavy Duty Cast Iron Burner
- Natural or LP Gas
- LED Indicator Light for Ease of Trouble Shooting
- Factory Test Fired
- 10-Year Burner Warranty

Radiant Tube

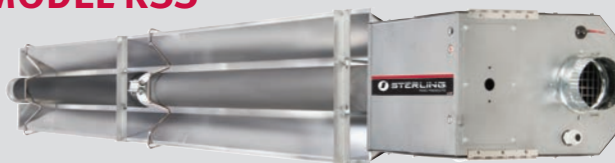
- Heat Treated Aluminized Steel or Alumitherm Steel on First 10 Feet (3.05 m) of Unit
- Hot Rolled Steel on Remainder of Unit
- Optional Complete Heat Treated Aluminized Steel
- Integral Tube Integrity Safety System
- 5-Year Tube Warranty

RSM Series – Millivolt Ceramic Heaters

FEATURES AND BENEFITS

- Capacities from 26,000 to 104,000 Btu/hr (7.62 - 30.48 kW)
- Millivolt standing pilot operation with 100% gas shut-off safety control
- No electricity required to operate
- Requires 750 mV thermostat (part #42489010) for proper operation
- Aluminized steel construction
- Aluminum reflectors. Optional reflector extensions available
- Suitable for horizontal or angle mount up to 30°
- Indirect vented operation. Requires mechanical or gravity ventilation

MODEL RSS



SPECIFICATIONS

Model Number	MBH Input	System Length		Flue Size
		Min.	Max.	
RSS/U040	40	10'	20'	4"
RSS/U050	50	20'	40'	4"
RSS/U075	75	20'	40'	4"
RSS/U100	100	30'	50'	4"
RSS/U125	125	30'	60'	4"
RSS/U150	150	40'	60'	4"
RSS/U175	175	50'	70'	4"
RSS/U200	200	50'	70'	4"

MODEL RSU



MODEL RSM



SPECIFICATIONS

Model Number	Gas Type	Input Btu/hr
RSM30-N1C	Natural	26,000
RSM30-L1C	Propane	26,000
RSM50-N1C	Natural	52,000
RSM50-L1C	Propane	52,000
RSM100-N1C	Natural	104,000
RSM100-L1C	Propane	104,000

MODEL RT Duct Furnace



MODEL PV Duct Furnace



MODEL EV



MODEL AH



Outdoor Duct Furnaces

RT and PV Series

Sterling outdoor duct furnaces utilize the same quality components as our indoor line of equipment. Installed in a weatherproof enclosure, these furnaces can be used with standard air handling systems or included in a Sterling packaged unit.

Inputs range from 100 to 1,200 MBH (29.307 - 351.685 kW) and are ETL approved for a 20° to 90°F (11° to 50 °C) temperature rise. Available as either natural (RT) or power vented (PV) and for use with natural or LP gas.

Evaporative Coolers

EV Series

Sterling EV Series evaporative coolers are available in four sizes ranging from 800 to 8,500 CFM (0.378 - 4.012 cu. m/s). Units utilize 8 in. (203 mm) CELdek® media as standard, optional 12 in. (203 or 305 mm) CELdek® and 8 in. or 12 in. GLASdek® media are available.

Sterling evaporative coolers are available as stand alone units or factory assembled arrangements including a Sterling air handler.

Air Handlers

AH Series

Sterling AH Series air handlers are divided into two classifications “Standard” and “High CFM”. Standard air handlers have a CFM range of 1,500 to 8,000 CFM (0.708 - 3.776 cu. m/s) and are available factory assembled with evaporative coolers and downturn plenums. High CFM air handlers have a CFM range of 3,000 to 15,000 CFM (1.416 - 7.079 cu. m/s) and are available factory assembled with coil cabinets (up to 20 tons) and downturn plenums.

Indirect Fired Make-Up Air Systems

RT and PV Series

Sterling RT and PV Series indirect fired make-up air systems are available in multiple configurations and vary depending on the specific application. Standard and High CFM Blower cabinets are designed to be mounted on a common heavy duty skid rail with up to three outdoor gas-fired duct furnaces. Other cabinets include downturn plenums, coil cabinets with factory installed coils and evaporative coolers.

Multiple factory installed gas and air controls are available including DDC control packages, electronic stage controllers, building pressurization controllers, and a variety of mixed air controllers.

The packaged unit is certified by ETL, an exclusive for Sterling.

ME Series

Sterling ME Series indirect fired make-up air systems are similar to the outdoor model "PV" with the exception that the model QVES duct furnaces are utilized. Heating capacities range from 100 to 1,200 MBH (29.307 - 351.685 kW) with airflows up to 9,800 CFM (4.625 cu. m/s).

Multiple factory installed gas and air controls are available including DDC control packages, electronic stage controllers, enthalpy controlled economizers, building pressurization controllers and a variety of other mixed air control packages.

All indoor make-up air units are factory assembled on a 4 in. heavy duty common skid rail allowing the unit to be suspended for overhead installations.

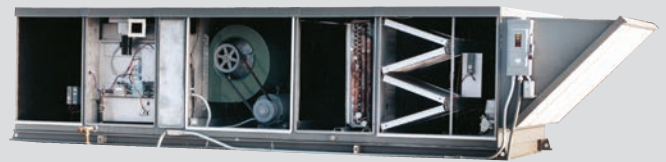
MS Series

Sterling MS Series separated combustion indoor make-up air systems are similar to the ME unit except a separated combustion type duct furnace is utilized. Separated combustion units are designed to be installed in dusty, dirty and mildly corrosive environments or where local codes require outside air to be used for combustion. Heating capacities range from 100 to 1,200 MBH (29.307 - 351.685 kW) with airflows from 900 to 14,800 CFM (0.425 - 6.985 cu. m/s).

FEATURES AND BENEFITS

- ETL Certified Outdoor Packaged Units
- Outdoor and Indoor Models
- Heating Capacities from 100 to 1,200 MBH (29.307 - 351.685 kW)
- CFM Ranges from 800–14,000 CFM (0.3776 - 6.607 cu. m/s)
- Dedicated Control Cabinet Isolated from the Air Stream
- Natural (RT) or Power Vented (PV, ME, MS) Duct Furnaces
- Motors Sizes up to 15HP
- Draw-Thru Coil Cabinet with Stainless Steel Drip Pan
- Factory Installed Heating And Cooling Coils
- Evaporative Coolers with Standard 8" (203 mm) or Optional 12" (305 mm) Media
- 1" (25 mm) Washable Filters (Standard)
- 20-Gauge Cabinetry made from Highly Corrosion Resistant Coated Steel
- 20-Gauge Aluminized Steel Heat Exchangers
- Over 40 Standard Gas and Air Control Packages
- Heavy Duty Centrifugal Blowers
- Factory Assembled and Mounted Air Hood
- Factory Fire Tested
- Hinged Access Doors

TYPICAL OUTDOOR PV UNIT



TYPICAL INDOOR MS UNIT



MATRIX SPECIFICATIONS - METRIC VALUES

Input (kW)	14.6	29.3	43.9	58.6	73.2	87.9	102.5	117.2
Output (kW)	14.0	28.1	42.6	56.0	71.1	82.8	96.0	109.0
Air Temp. Rise (°C)	35.6	27.8	26.1	27.8	29.4	31.1	28.3	32.2
Free Air Delivery (cu. m/s)	0.326	0.863	1.354	1.683	1.960	2.206	2.872	2.890
Flue Size (mm)	51	51	76	102	102	102	102	102

NEXUS SPECIFICATIONS - METRIC VALUES

Input (kW)	14.6	29.3	43.9	58.6	87.9	117.2
Output (kW)	4.9	9.8	14.6	19.5	29.3	39.1
Air Temp. Rise (°C)	31.7	30.6	27.8	30.6	30.6	30.6
Free Air Delivery (cu. m/s)	0.373	0.763	1.255	1.525	2.288	3.050
Flue Size (mm)	51	51	51	76	102	102

GG SPECIFICATIONS - METRIC VALUES

Input† (kW)	8.8	13.2	17.6	22.0	26.4	30.8	35.2
Output† (kW)	7.2	10.9	14.5	18.0	21.6	25.2	28.8
Air Temp. Rise (°C)	33	33	33	33	33	33	33
Free Air Delivery (cu. m/s)	0.175	0.260	0.349	0.434	0.519	0.614	0.696
Flue Size (mm)							
Standard Combustion	102	102	102	102	102	102	102
Separated Combustion	102	102	102	102	127	127	127

† Ratings shown are for unit installations at elevations between 0 to 610m. For installations above 610m, the unit input must be derated 4% for each 305m above 610m, refer to local codes, or refer to the latest edition of the National Fuel Gas Code, ANSI Standard Z223.1 (NFPA No. 54).

See unit installation manual for deration information.

XF & XC SPECIFICATIONS - METRIC VALUES

Input† (kW)	29.3	36.6	43.9	51.2	58.6	73.2	87.8	102.5	117.1
Output† (kW)	24.3	30.4	36.4	42.5	48.6	60.7	72.9	85.1	97.2
Free Air Delivery XF (cu. m/s)	0.756	1.039	1.133	1.346	1.511	1.629	2.361	2.644	2.738
Free Air Delivery XC (cu. m/s)	0.557	0.697	0.836	0.976	1.115	1.394	1.652	1.951	2.230
*Flue Size (mm)	127	127	127	127	127	127	152	152	152

† Ratings shown are for unit installations at elevations between 0 to 610m. For installations above 610m, the unit input must be derated 4% for each 305m above 610m, refer to local codes, or refer to the latest edition of the National Fuel Gas Code, ANSI Standard Z223.1 (NFPA No. 54).

See unit installation manual for deration information.

* Flue collar is factory supplied with unit; to be field installed per included instructions on 43.9 - 117.1 kW Input sizes.

TD SPECIFICATIONS - METRIC VALUES

Input† (kW)	29.3	43.9	58.6	73.2	87.8	102.5	117.1
Output† (kW)	24.0	36.0	48.0	60.0	72.0	84.1	96.1
Min. Temp. Rise (°C)	17	17	17	17	17	17	17
Max. Free Air Delivery (cu. m/s)	1.193	1.789	2.386	2.983	3.579	4.176	4.773
Pressure Drop (kPa)	0.16	0.11	0.13	0.19	0.16	0.19	0.17
Max. Temp. Rise (°C)	56	56	56	56	56	56	56
Min. Free Air Delivery (cu. m/s)	0.357	0.536	0.715	0.894	1.074	1.252	1.431
Pressure Drop (kPa)	0.017	0.007	0.009	0.019	0.007	0.017	0.019

† Ratings shown are for unit installations at elevations between 0 to 610m. For installations above 610m, the unit input must be derated 4% for each 305m above 610m, refer to local codes, or refer to the latest edition of the National Fuel Gas Code, ANSI Standard Z223.1 (NFPA No. 54).

See unit installation manual for deration information.

HS & VS SPECIFICATIONS - METRIC VALUES

Model	Type	Output Range kW	Free Air Delivery Range cu. m/s
HS (Serpentine Coil)	Horizontal	2.35-10.52	0.115-0.401
HS (Header Type Coil)	Horizontal	5.28-105.51	0.186-2.596
VS (Standard Unit)	Vertical	12.10-206.62	0.282-5.191
VS (Low Output Unit)	Vertical	10.20-181.70	0.315-5.616

QVED, QVES, QVSD SPECIFICATION - METRIC VALUES

MBH Input† (kW)	29.3	44.0	58.6	73.3	87.9	102.6	117.2
MBH Output† (kW)	23.4	35.1	46.9	58.6	70.3	82.0	93.7
MODEL QVED/QVES							
Min. Temp. Rise (°C)	17	17	17	17	17	17	17
Max. Free Air Delivery (cu. m/s)	1.165	1.748	2.331	2.914	3.496	4.079	4.662
Pressure Drop (kPa)	0.22	0.19	0.19	0.20	0.22	0.22	0.22
Max. Temp. Rise (°C)	44	44	44	44	44	44	44
Min. Free Air Delivery (cu. m/s)	0.438	0.656	0.874	1.093	1.311	1.530	1.748
Pressure Drop (kPa)	0.03	0.04	0.03	0.03	0.03	0.03	0.03
MODEL QVSD							
Min. Temp. Rise (°C)	11	11	11	11	11	11	11
Max. Free Air Delivery (cu. m/s)	1.746	2.620	3.493	4.366	5.240	6.113	6.986
Pressure Drop (kPa)	0.51	0.45	0.47	0.49	0.50	0.50	0.51
Max. Temp. Rise (°C)	50	50	50	50	50	50	50
Min. Free Air Delivery (cu. m/s)	0.388	0.582	0.776	0.970	1.164	1.358	1.552
Pressure Drop (kPa)	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Flue Size (mm)	102	102	127	127	152	152	152

† Published ratings are shown for elevations up to 610m above sea level. For higher elevations, derate 4% for each 305m above sea level. In Canada, derate 10% for altitudes 610 to 1372m.

QVOF SPECIFICATIONS - METRIC VALUES

Input (kW)	20.51	30.77	36.93	67.70	91.44	109.90	164.12
Output (kW)	16.41	24.62	29.31	53.93	73.27	87.92	131.88
Free Air Delivery (cu. m/s)	0.496	0.826	0.944	1.510	1.605	2.360	2.832
Flue Size (mm)	177.8	177.8	177.8	203.2	228.6	228.6	254

RSD SPECIFICATIONS - METRIC VALUES

Model Number	Gas Type	kW Input	Model Number	Gas Type	kW Input
RSD30	Natural	8.792	RSD80	Natural	23.446
RSD33	Propane	9.671	RSD100	Natural	29.307
RSD35	Natural	10.257	RSD100	Propane	29.014
RSD40	Natural	11.723	RSD120	Natural	35.169
RSD60	Natural	17.584	RSD132	Propane	38.685
RSD66	Propane	19.343	RSD140	Natural	41.030
RSD70	Natural	20.515	RSD160	Natural	46.891

RSG SPECIFICATIONS - METRIC VALUES

Model Number	kW Input
RSG025	7.327
RSG035	10.257
RSG045	13.188

RSW SPECIFICATIONS - METRIC VALUES

Model	kW Input - High	kW Input - Low
RSW35	10.257	7.034
RSW50	14.654	9.964

RSS/RSU SPECIFICATIONS - METRIC VALUES

Model Number	kW Input	System Length		Flue Size
		Min.	Max.	
RSS/U040	11.723	3.05 m	6.10 M	101.6 mm
RSS/U050	14.654	6.10 m	12.19 M	101.6 mm
RSS/U075	21.980	6.10 m	12.19 M	101.6 mm
RSS/U100	29.307	9.14 m	15.24 M	101.6 mm
RSS/U125	36.634	9.14 m	18.29 M	101.6 mm
RSS/U150	43.961	12.19 m	18.29 M	101.6 mm
RSS/U175	51.287	15.24 m	21.34 M	101.6 mm
RSS/U200	58.614	15.24 m	21.34 M	101.6 mm

RSM SPECIFICATIONS - METRIC VALUES

Model Number	Gas Type	kW Input
RSM30-N1C	Natural	7.62
RSM30-L1C	Propane	7.62
RSM50-N1C	Natural	15.24
RSM50-L1C	Propane	15.24
RSM100-N1C	Natural	30.48
RSM100-L1C	Propane	30.48

