

# STERLING MODEL "GF" STAINLESS STEEL GAS FIRED UNIT HEATER



GFS-5

## DESCRIPTION

The Sterling Model "GF" gas-fired unit heater offers a highly efficient, extremely durable alternative to the traditional clam shell design. These propeller type stainless steel units combine the latest tubular heat exchanger and inshot burner technology with the quality and reliability you have come to know from Sterling. Units are available in sizes 150, 250 and 400 MBH.

Standard energy saving features like the direct spark ignition and power venting reduces standby losses and offers improved seasonal efficiencies. The Model "GF" unit is certified by ETL as providing 83% thermal (combustion) efficiency.

## TUBULAR HEAT EXCHANGER

The Sterling tubular heat exchanger has been designed to provide maximum and uniform heat transfer. The low pressure drop associated with this design enables heated air to be evenly distributed to the conditioned space. This curved, non-welded serpentine design experiences less thermally induced stress making it highly durable for significantly longer service life. Sterling Model "GF" tubular heat exchangers are constructed of heavy duty 20-gauge 409 stainless steel.

## DIRECT SPARK IGNITION SYSTEM

Sterling Model "GF" units utilize a direct spark pilotless ignition of the burner, providing fast heat delivery. This highly reliable and efficient ignition system incorporates an integrated electronic control board to regulate the system sequence of operation, including an onboard LED indicator for simple troubleshooting.

## VENTING

The Sterling Model "GF" unit heater is ETL certified in accordance with categories I and III venting requirements. This certification allows units to be vented both vertically and horizontally using either single wall or double wall venting materials. This venting flexibility of the Model "GF" unit heater makes installation easier and more cost effective by allowing the installer to utilize existing venting components.

## CONTROL ACCESSIBILITY

Designed with the service person in mind, every component of the Sterling Model "GF" is easily accessible. Ignition and fan controls are located in one centrally located control panel. The access door provides control isolation as well as a pleasing exterior appearance.

## STANDARD FEATURES

- Inshot burner design
- 20-gauge stainless steel jacket and components.
- Main control panel
- 120/1/60 supply voltage
- Power vented
- 20-gauge 409 stainless steel heat exchanger
- 120/24 volt control transformer
- Direct spark ignition
- Individually adjustable and removable louvers
- Single stage combination gas valve
- 115/1/60 volt fan motor with internal overload protection
- 5 year heat exchanger, flue collector and burner warranty.



# STERLING

HVAC PRODUCTS

260 North Elm St., Westfield, MA 01085  
(413) 564-5540 Fax: (413) 562-5311  
www.sterlinghvac.com



PROJECT: \_\_\_\_\_

UNIT TAG: \_\_\_\_\_

# GF STAINLESS STEEL TUBULAR PROPELLER PERFORMANCE AND DIMENSIONAL DATA



Model GF Unit Size	150	250	400
<b>PERFORMANCE DATA†</b>			
Input - BTU/Hr.	150,000	250,000	400,000
(kW)	(43.9)	(73.2)	(117.1)
Output - BTU/Hr.	124,500	207,500	332,000
(kW)	(36.4)	(60.7)	(97.2)
Thermal Efficiency (%)	83	83	83
Free Air Delivery - CFM	2,400	3,450	5,800
(cu. m/s)	(1.133)	(1.629)	(2.738)
Air Temperature Rise - Deg. F	47	54	51
(Deg. C)	(26)	(30)	(28)
Full Load Amps at 120V	6.9	8.0	13.5
<b>MOTOR DATA:</b>			
Motor HP (Qty.)	1/4	1/3	(2) 1/3
Motor kW	(0.19)	(0.25)	(0.25)
Motor Type	PSC	PSC	PSC
R.P.M.	1,140	1,140	1,140
Amps @ 115V	4.7	5.8	11.6
<b>DIMENSIONAL DATA - inches (mm)</b>			
"A" Overall Height to Top of Flue	33-3/4 (857)	33-3/4 (857)	34 (864)
"B" Jacket Width of Unit	20-3/4 (527)	32-3/4 (831)	50-3/4 (1289)
"C" Width to Centerline Flue	13-3/8 (340)	19-3/8 (492)	28-3/8 (721)
"D" Depth to Rear of Housing	11 (279)	11 (279)	12-1/4 (311)
"E" Hanging Distance Width	18-5/8 (473)	30-5/8 (778)	48-5/8 (1235)
"F" Discharge Opening Width	18-3/4 (476)	30-3/4 (781)	48-3/4 (1238)
"G" Depth to Centerline Flue	4-3/4 (121)	4-3/4 (121)	5-1/8 (130)
"L" Overall Unit Width	25-1/4 (641)	37-1/4 (946)	55-1/4 (1403)
"M" Flue Size Diameter* - in.	5	5	6
(Dia.-mm)	(127)	(127)	(152)
Fan Diameter - in. (Qty.)	16	18	(2) 18
Gas Inlet- Natural Gas (in.)	1/2	1/2	3/4
Gas Inlet- LP Gas (in.)	1/2	1/2	3/4
Approximate Unit Weight - lbs.	155	211	335
(kg)	(70)	(96)	(152)
Approximate Ship Weight - lbs.	195	261	395
(kg)	(88)	(118)	(179)

† Ratings shown are for unit installations at elevations between 0 and 2,000 ft (0 to 610m). For unit installations in U.S.A. above 2,000 ft. (610m), the unit input must be field derated 4% for each 1,000 ft. (305m) above sea level; refer to local codes, or in absence of local codes, refer to the latest edition of the National Fuel Gas Code, ANSI Standard Z223.1 (N.F.P.A. No. 54). For installations in Canada, any reference to deration at altitudes in excess of 2,000 ft. (610m) are to be ignored. At altitudes of 2,000 ft. to 4,500 ft. (610 to 1372m), the unit must be field derated and be so marked in accordance with the ETL certification. See unit installation manual for field deration information.

\* Flue collar is factory supplied with unit; to be field installed per included instructions.

LEGEND: PSC = PERMANENT SPLIT CAPACITOR

