The Power Flame Model CGO dual fuel burner presents optimum state-of-the-art design for maximum combustion efficiency and operating dependability. These packaged combustion systems will fire all types of gaseous fuels, as well as #2 or similar distillate liquid fuels. The Model CGO HTD (High Turndown) will fire natural gas at turndowns up to 10 to 1. The flame retention firing head incorporates a single nozzle pressure atomizing assembly for liquid fuels and a nozzle mix multiport combustor for gaseous fuels. The unique air sandwich firing head design produces full range stable performance in both positive or negative combustion chambers. Operating system adjustments have been minimized to provide trouble-free start up and operation.

The Model CGO provides efficient combustion without the aid of refractory or other costly flame support devices. Options include the premix and low gas pressure firing heads for limited size combustion chamber configurations or low gas pressure conditions. Modular design produces added flexibility for a wide range of optional features. All Power Flame packaged combustion systems are factory fire-tested.

### Power Flame's Versatile High Performance Gas-Light Oil Burner

- **Adjustable Premix Firing Head**: Produces optimum fuel-air mixture within the premix combustion zone*
- **Circular Furnace Opening**: No special cutting of combustion chamber front plate
- **Low Gas Pressure Firing Head**: Added flexibility of application for low gas pressure conditions*
- **Characterized Fuel Metering**: Varicam® provides adjustable and accurately repeatable fuel-air ratios throughout the firing range*
- **Total Access Panel**: Swing out, easily removable top and front panels give total access to state-of-the-art, compact DIN rail mounted components
- **Graphic Burner Management System**: Director® graphic annunciation of critical burner functions*
- **Alpha System™**: LED indicators, switches and operator annunciator. (Optional additional 6-light board shown on right.)
STANDARD EQUIPMENT
- Alpha System™ LED indicators (power, demand, main fuel, FSG alarm, customer selectable) & control switch
- Pressure regulators, pilot and main gas cocks
- Oil valve, nozzle assembly, manual fuel selector switch
- Air safety switch & leakage test cock
- Gas electric pilot and gas ignition transformer

ADDED FEATURES
X-Standard O-Optional NA-Not Available

- Flame Safeguard with UV and prepurge with interrupted pilot
- On-Off diaphragm gas valve with fixed air control manual adjustment
- Low-Hi-Off motorized gas valve with automatic air control
- Low-Hi-Low motorized gas valve with automatic air control
- Integral 2 stage fuel unit (C1, C2 single stage)
- Remote mounted stage fuel unit (single stage for C-6-C8)
- Dual gas B and dual oil safety valves
- High and Low gas pressure switches
- Direct spark ignition (oil)
- Low fire oil start with automatic air control
- Man/Auto switch - manual potentiometer - modulation only

MODEL CR (For low centerline applications)

MODEL C

DIMENSIONS (inches) Standard Models.

RATINGS & SPECIFICATIONS

1. Capacities listed are based on 0.20" W.C. positive pressure, except for C5-GO-30B, which is rated for 250 BHP at +1.2" W.C. Refer to capacity curves for derates based upon combustion chamber pressure.
2. At inlet to main manual shutoff cock to obtain P/F certified ratings with optimum fuel/air ratios from low to high fire settings.
3. For On-Off and modulating firing modes only. Refer to C Manual for capacities on other modes.
4. Varicam® has 14 adjustable set-points to maintain optimum fuel/air ratios from low to high fire settings.

5,000 MBH and below may be replaced by one (1) proof of closure valve; above 5,000 MBH one (1) of the safety valves will include proof of closure feature.

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