

Encapsulated Flame Relay

Provides Ignition and Flame Monitoring

Description:

- Encapsulated Flame Relay designed to survive the toughest environments
- Fast install by means of standard plug in connectors
- Flame Fail Light (red)
- Flame On Light (green)
- Plastic Housing
- Compact Size
- Micro Processor Based Ignition Control
- Ignition and flame monitoring for burner capacities less than 400,00 BTU/HR



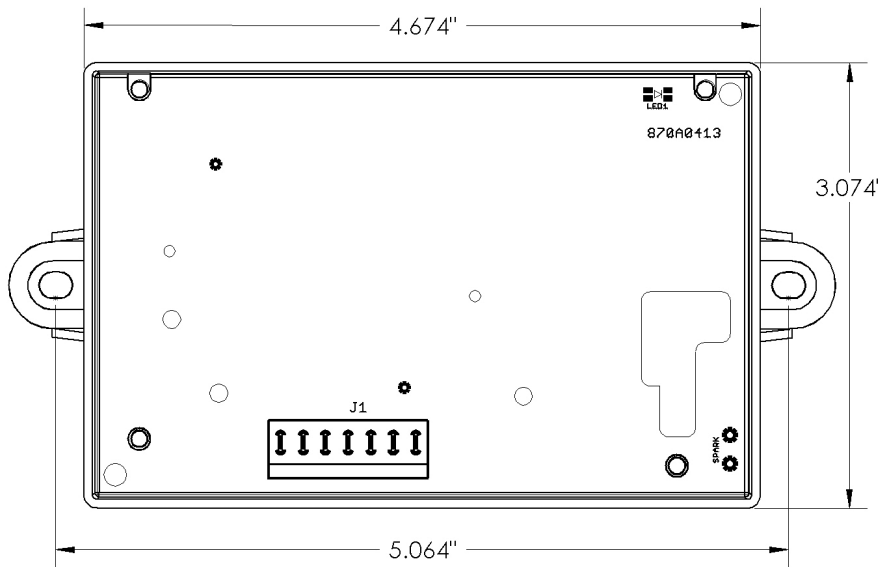
Part Number	Ignition Sensing Configuration	Input Voltage	Certification	Operating Temp
407589	Combined Electrode/Sensor	120VAC	CSA	-40°F to 176°F
407738	Separate Electrode & Sensor	120VAC	CSA	-40°F to 176°F

SPECIFICATIONS

Power Input:	120Vac 50/60Hz,+10,-15%
Power Consumption:	.2A without valve TYP.
Flame Sensing:	0.15uA minimum
Gas Types:	Natural, L.P. or Manufactured
Main Valve & Pilot:	4 Amps
Style:	Epoxy encapsulated in flame resistant enclosure 945VA
Temperature:	-40° to 176°F -40° to 80°C
Operation Humidity:	5% to 93% Relative Humidity (non-condensing)
Mounting Position:	Multipoise
Sensing Method:	Rectification
Electrical:	Heavy Duty Relays16A
Spark Gap:	0.20" Maximum
Connections:	1/4" Spade Spark Output 6 or 7 pin Header
Dimensions:	4.68"W x 3.08"D x 1.12"H
Mounting Holes:	5.064" center to center

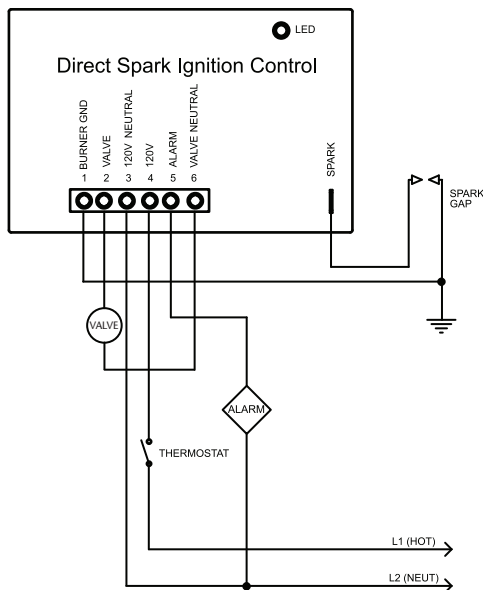


Encapsulated Flame Relay

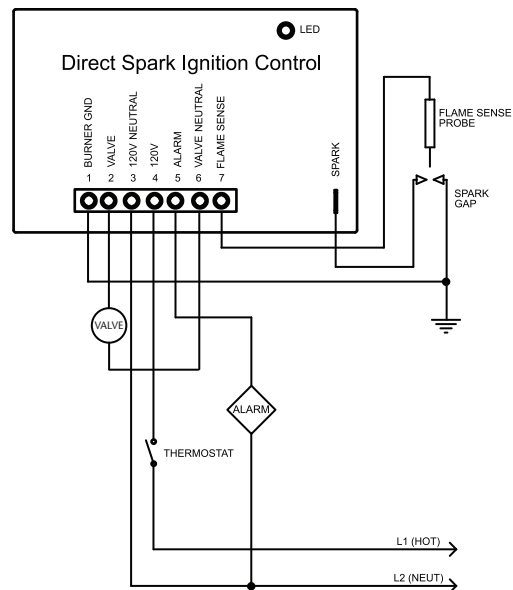


Terminal Designations:

- Pin 1 Burner Ground
- Pin 2 Valve Output
- Pin 3 Line Neutral
- Pin 4 Line Hot
- Pin 5 Alarm Output (option)
- Pin 6 Valve Neutral
- Pin 7 Flame Sense (external - 407738)



Note: Internal Flame Sense: 6 PIN CONNECTOR
Combined Electrode/Sensor Part No. 407589



Note: External Flame Sense: 7 PIN CONNECTOR
Separate Electrode/Sensor Part No. 407738

ERROR CODES

Red Flashes

Red Flashes	Error Definition	Error Type
1 flash, then pause	No flame in trial time	Lockout
2 flashes, then pause	Flame Sense stuck on	Lockout
3 flashes, then pause	Pilot/Main Relay failure	Lockout
4 flashes, then pause	Repetitive Flame loss error	Lockout
5 flashes, then pause	Rollout error	Lockout
6 flashes, then pause	ASP Airflow error	Lockout
7 flashes, then pause	Internal Control error	Lockout
On Solid Red	Line Voltage/Freq. Error	Standby

Led Indications, Normal Operations

Green, blinking rapidly	Trial for ignition
Green, on solid	Flame detected, pilot/main burners on