YAMATAHA BURNER CONTROLS

IFS 258

- High cycle operation
- Flame detection with flame rod or UV detector
- Checks electronic circuits during start up
- Dry contacts for fault and burner operation
- Adjustable flame current threshold eliminates UV radiation from other sources
- Start/stop/reset switch on front of unit
- Single electrode operation
- Micro Amp test points on the face of control
- Can be programmed to restart or immediate fault lock-out following flame failure
- Models also available with CE certification
- Status lights on front of control unit

Application

The IFS 258 is a burner control unit for use in multi burner systems and single burner systems. The unit can be used with on/off, high/low or proportional control systems. An external approved timer is required to provide the purge time.

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Specification

Operating Limits

Operating Temperature:	-4 ˚F to 140 ˚F (-20 ˚C to 60 ˚C)
Operating Voltage:	115 Vac, +10%, -15%, 50/60 Hz
Power Consumption:	19 VA (7 W)
Output Current:	2A per output at 115 Vac Total maximum current 2.5 A
Flame Sense Current:	> 2 µA
Avg. Number of Operations:	1,000,000 (dependent on power factor) 270,000 when configured for single electrode operation

Materials of construction

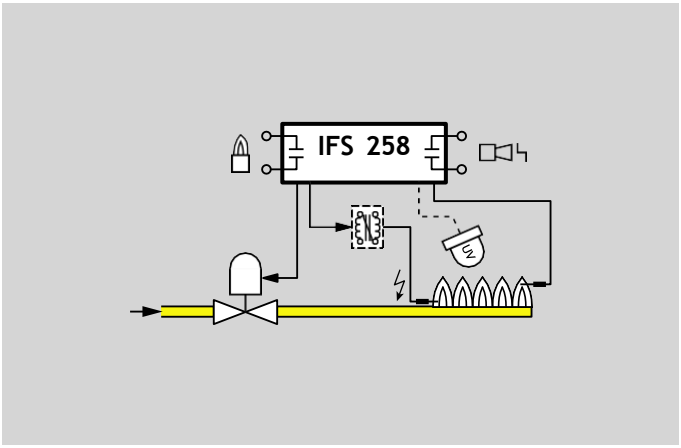
Housing made of impact and heat resistant plastic. Type of enclosure is IP 40 (NEMA 1). In the area of the test points it is IP 30.

Features

The automatic burner control monitors the flame with either flame rod or UV detector. Using a flame rod, ignition and monitoring of a burner with only one electrode is possible (single electrode operation).

On the front of the automatic burner control unit there are two test points for measuring the flame current, and three indicator lights for burner unit on, flame on, and flame failure information.

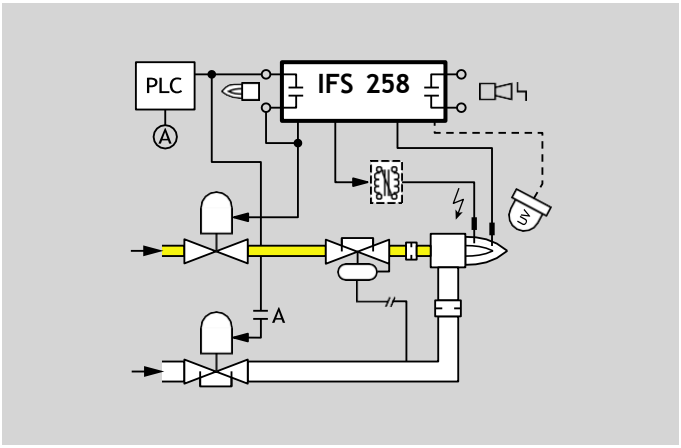
Application Examples



Atmospheric burners

Control: On/Off.

IFS 258 can be programmed for immediate fault lockout or restart following flame failure.



Forced draft burners

Control: High/Low or High/Low/Off.

The burner starts with low fire. After the operating status signal is transmitted to the PLC, the PLC opens the air valve to switch the burner to high fire.

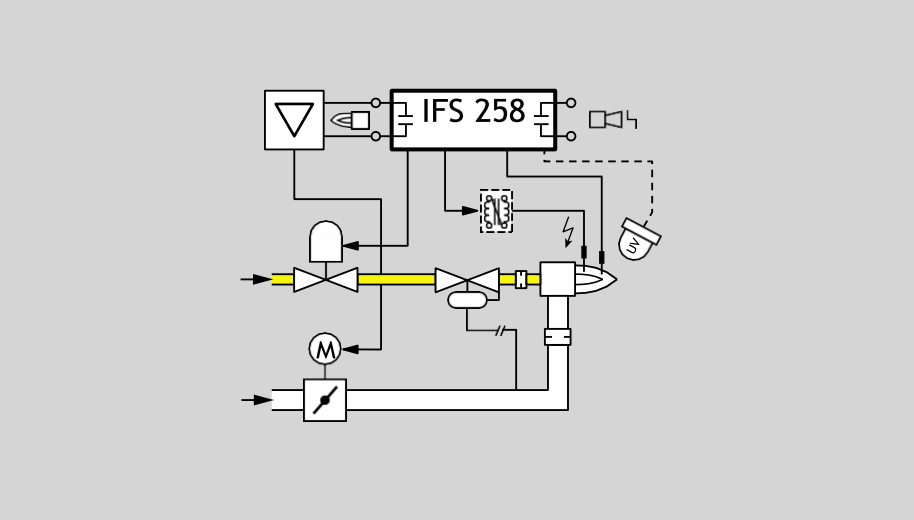
The IFS 258 should be programmed to immediate fault lockout or restart following flame failure.

Forced draft burners

Control: Proportional

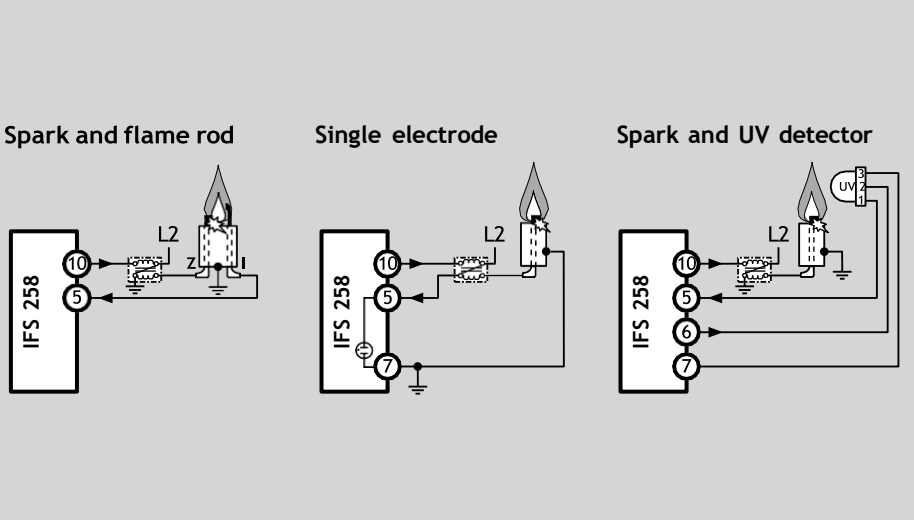
The burner is ignited when the air valve is in the ignition position (low fire). Once the burner is ignited, the burner “ON” signal contact is closed. The burner “ON” contact can be used to allow the controller to modulate the air butterfly valve throughout the control range. The gas is controlled with an air/fuel ratio regulator cross-connected to the burner air supply piping.

The IFS 258 should be programmed for immediate fault lockout following flame failure.



Flame management options

The IFS 258 is capable of flame management using UV detectors or flame rod. Using a flame rod, it is possible to perform ignition and flame monitoring with only one electrode, as shown in the figure. When using a flame rod, the ground terminal of the burner must be connected to terminal #7 of the IFS unit to avoid damage.

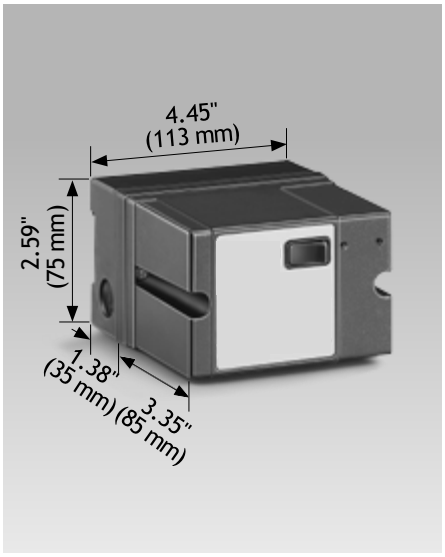


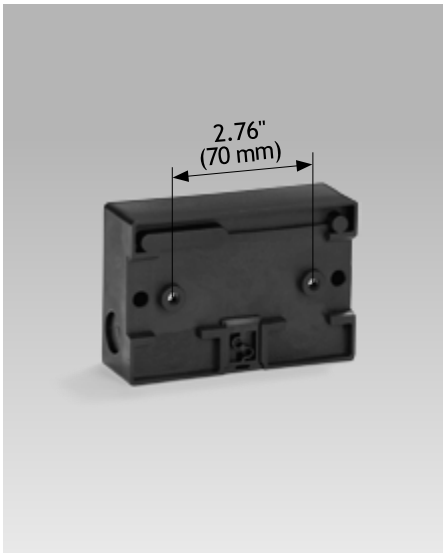
Dimensions

Overall Dimensions L x W x H:
4.45 inches x 4.72 inches x 2.95 inches
(113 mm x 120 mm x 75 mm)

Spacing for screw mounting:
2.76 inches (70 mm)

Weight: 1 lb (510 g)





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Order information

IFS	Automatic Burner Control Unit
2	Series 2
5	Flame rod or UV
8	Switchable, immediate lockout following flame failure or restart
T	T-Product
-3	Safety period on start up: 3 seconds
-5	Safety period on start up: 5 seconds
-10	Safety period on start up: 10 seconds
/2	Flame failure response time: 2 seconds
R	Voltage 115 Vac, 50/60 Hz

Standard models:
IFS 258T- 3/2R
IFS 258T-5/2R
IFS 258T-10/2R

The IFS 258 unit must be used in conjunction with an interference-suppressed spark plug boot.