

# Hot Surface Ignition Module

50E47U-843



Replace over 325+ HSI module part numbers for multiple applications that use 24V, 120V or 240V ignitors

## SIMPLIFY SETUP WITH THE WHITE-RODGERS CONNECT APP

- Simple configuration without power prior to install
- Select preloaded OEM settings with Auto-Set
- Diagnose fault codes and troubleshoot confidently
- No Wi-Fi, cell service or login required

## STREAMLINE INVENTORY

- Universal replacement for Fenwal, Honeywell, UTEC, ICM & Robertshaw
- Multiple voltage for 24V, 120V and 240V ignitors
- Energizes an inducer motor and monitors a pressure switch

## EASY INSTALLATION & DIAGNOSTICS

- Easy-install harness converts old board wiring
- Onboard digital display provides alternate configuration, operation status, diagnostics & real-time flame current

## INTEGRATED THERMOSTAT FEATURE

- Use F67-8535 (sold separately) to maintain temperature without an external thermostat in infrared and tube heaters



## APPLICATIONS INCLUDE:

- Pool heaters
- Water heaters
- Unit heaters
- Gas furnaces
- Boilers
- Cooking equipment
- Laundry equipment
- Infrared heaters

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## ELECTRICAL SPECIFICATIONS

| Specification                        | Value            | Unit    |
|--------------------------------------|------------------|---------|
| Input Voltage (control)              | 18-30            | VAC     |
| Input Voltage (Line – L1 & L2)       | 24*, 120 or 240* | VAC     |
| Input Current                        | Max 800          | mA      |
| Line Frequency                       | 50/60            | Hz      |
| Inducer Relay at 120V                | 3.0/6.0          | FLA/LRA |
| Inducer Relay at 240V                | 1.5/3.0          | FLA/LRA |
| Gas Valve Relay Max                  | 4.0              | Amp     |
| Flame Current to Indicate Flame Loss | <0.50            | µA DC   |
| Flame Sense Test Pins                | 1VDC = 1 µA      | VDC     |

\*24V or 240V input only applicable when replacing Fenwal modules.

## TIMING SPECIFICATIONS

| Options                          | Selection                             |
|----------------------------------|---------------------------------------|
| Tries for ignition               | 1, 3                                  |
| Trial for Ignition (seconds)     | 7, 4, 10, 15                          |
| Ignitor heat-up period (seconds) | 17, 4, 6, 7, 20, 34, 40, 45           |
| Pre-purge (seconds)              | 32, 0, 8, 13, 15, 17, 30, 34, 45      |
| Inter-purge (seconds)            | 96, 0, 15, 17, 30, 45, 60, 64, 77, 90 |
| Post-purge (seconds)             | 0, 30, 45, 60, 120                    |
| Inducer/Pressure switch option   | Off, normal, dual                     |
| Flame sense type                 | Local or remote                       |
| Reset to default                 | No or yes                             |
| Integrated thermostat            | Off or on                             |

## OPERATING

**TEMP RANGE:** ..... -40° to 176°F (-40 to 80°C)

**HUMIDITY RANGE:**...5% to 95% relative humidity  
.....(non-condensing)

**1-YEAR LIMITED WARRANTY**

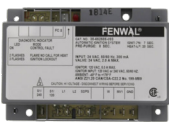





## WHITE-RODGERS MOBILE APP:



Get the latest **cross references**, installation resources, spec sheets, and more on your phone or tablet. **Download today.**



## COMPETITIVE COMPARISON

|                          |  |  |  |  |  |  |
|--------------------------|---|---|---|--|---|---|
| Options                  | Fenwal 35-65, 66  | Robertshaw 780-787  | ICM 283   | Honeywell / Resideo S89103000  | (current) White-Rodgers 50E47-843   | (New) White-Rodgers 50E47U-843  |
| Flame Sense Type         | Either/Or   | Remote  | Both  | Both   | Both  | Both  |
| Gas Valve Contact Rating | 2A  | 1.5   | 1.5   | 2A   | 1.5A  | 2A  |
| Control Voltage          | 24V 50/60Hz   | 24V 60Hz  | 24V 60Hz  | 24V 60Hz   | 24V 60Hz  | 24V 50/60Hz   |
| Ignitor Voltage          | 24/120/240V   | 120V  | 120V  | 120V   | 120V  | 24/120/240V   |
| Inducer/PSW              | Yes   | No  | No  | No   | No  | Yes   |
| Mobile App               | No  | No  | No  | No   | No  | WR Connect  |
| Configuration            | None  | None  | Dipswitches   | Dipswitches  | Keys  | App or Push Buttons   |
| Display                  | Single LED Bulb   | None  | Single LED Bulb   | Single LED Bulb  | Single LED Bulb   | 3 Digit 7-Segment   |
| Diagnostics              | Count LED Flashes   | None  | Count LED Flashes   | Count LED Flashes  | Count LED Flashes   | Read on display or app  |
| Flame Current Test       | No  | No  | No  | Test pads  | No  | Digital Readout or Test Pins  |
| Integrated Thermostat    | No  | No  | No  | No   | No  | Yes   |