

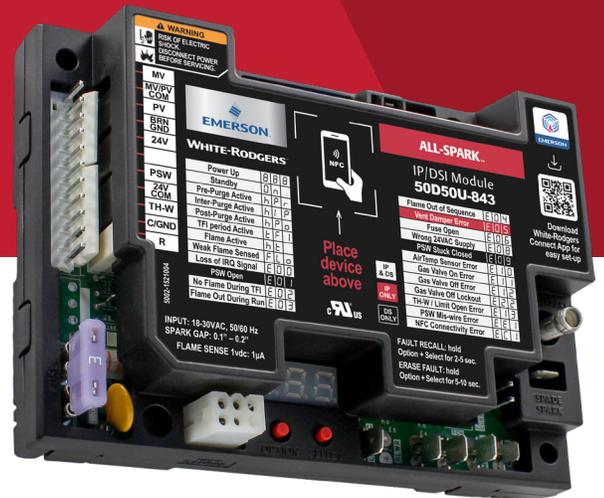
All-Spark™

Intermittent Pilot / Direct Spark Ignition Module

50D50U-843



Replace over 1000 24V IP + DSI part numbers and speed up install with the White-Rodgers Connect app



Streamline Inventory

Configurable for both 24V intermittent pilot (IP) and direct spark ignition (DSI) systems

Easy-install harness converts old board wiring to fit All-Spark

Applications include: gas furnaces, water heaters, boilers, cooking & laundry equipment, unit heaters, infrared / tube heaters



Simplify Installation with the White-Rodgers Connect App

Quick configuration without power, prior to install

Auto-Set by entering replacement part number for automatic configuration

Diagnose fault codes and troubleshoot confidently



Increase Efficiency with Innovative Features

7-Segment Display provides additional configuration options and expanded fault code message reporting

Rajah and spade spark terminals on-board eliminate need for external adapter

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



ELECTRICAL SPECIFICATIONS

SPECIFICATION	VALUE	UNIT
Input Voltage	18-30	VAC
Input Current Max	1000	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
Main Gas Valve Relay Max Rating (Direct Spark System Only)	4.0	Amp
Main Gas Valve Relay Max Rating (Intermittent Pilot System)	2.0	Amp
Pilot Gas Valve Relay Max Rating	2.0	Amp
Alarm Relay	1.0	Amp
Flame Current to indicate Flame Loss	< 0.50	µA DC
Spark Rate	20	Hz
Spark Gap	0.1-0.2	Inches

TIMING SPECIFICATIONS

INTERMITTENT PILOT	DEFAULT OPTION	OTHER OPTIONS
Tries for Ignition	Continuous	1, 2, 3
Trial for Ignition (seconds)	90	4, 15, 30, 60
Pre-Purge Duration (seconds)	0	15, 30, 45
Inter-Purge Duration (seconds)	0	15, 30, 45
Flame Sense Type	Local	Remote
Auto Restart Time (minutes)	5	60

DIRECT SPARK IGNITION	OPTIONS
Tries for Ignition	1, 2, 3
Trial for Ignition (seconds)	4, 7, 10, 11, 15, 21
Pre-Purge Duration (seconds)	30, 45, 0, 15
Inter-Purge Duration (seconds)	30, 45, 90, 0, 15
Post-Purge Duration (seconds)	0, 5, 15, 30
Flame Sense Type	Local, Remote
Auto Restart Time (minutes)	5, 60
Inducer / Pressure Switch Option	On, Off

No configuration needed when replacing Honeywell S8610U factory default control

1-Year Warranty

SIMPLIFY INSTALLS WITH THE WHITE-RODGERS CONNECT APP



Near Field Communication (NFC) creates an interface between the control and your mobile device with the White-Rodgers Connect app. Place mobile device in contact with the NFC marking on module to enable a connection.

Once downloaded, the White-Rodgers Connect App does not require cellular or WiFi service to use.



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COMPETITIVE COMPARISON

Product Feature	Fenwal 35-60, -61	Honeywell S8610U	All-Spark™ 50D50U-843
Cross Ref. #s	1 (individual SKUs)	425	1000+
Ignition Type	DSI	IP	IP/DSI
User Configuration	None	Dipswitch	App or Push Buttons
NFC + App	No	No	Yes
Inducer/PSW	Yes	No	Yes
Alarm Output	Yes	No	Yes
On-Board Spark Output	Rajah or Spade	Spade	Rajah and Spade
Integrated Thermostat	No	No	Added in 2022