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

- · Compatible with both 24V IP and DSI systems
- Replaces 1020 part numbers with one SKU, saving truck space
- · Reduces carrying costs with fewer parts

Simplify installation with the White-Rodgers connect app

- · Configure quickly, without power, before install
- · Set up using preloaded OEM settings
- · Diagnose fault codes & troubleshoot confidently
- · Connect without Wi-Fi, cell service, or login

Enhanced efficiency through innovative features

- 7-Segment Display for expanded configuration and detailed fault reporting
- Integrated Rajah and spade spark terminals, removing the need for external adapters







Electrical specifications

Specification	Value	Unit
Input Voltage	18-30	VAC
Input Current Max	800	mA
Line Frequency	50/60	Hz
Inducer Relay (120V)	3.0/6.0	FLA/LRA
Inducer Relay (240V)	1.5/3.0	FLA/LRA
Main Valve Relay (DSI)	4.0	Amp
Main Valve Relay (IP)	2.0	Amp
Pilot Valve Relay	2.0	Amp
Alarm Relay	1.0	Amp
Flame Loss Current	< 0.50	μA DC
Spark Rate	20	Hz
Spark Gap	0.1-0.2	inches

Simplify installs with the White-Rodgers Connect app



Timing specifications

Intermittent Pilot	Default	Options
Tries for Ignition	Continuous	1, 2, 3
Pre-Purge Duration (sec)	0	15, 30, 45
Flame Sense Type	Local	Remote

NOTE: No configuration needed when replacing Honeywell S8610U factory default control

Direct Spark Ignition	Options
Tries for Ignition	1, 2, 3
Trial for Ignition (sec)	4, 7, 10, 11, 15, 21
Pre-Purge Duration (sec)	30, 45, 0, 15
Post-Purge Duration (sec)	0, 5, 15, 30
Auto Restart Time (min)	5, 60

Near Field Communication (NFC) allows control interface with mobile via White-Rodgers Connect app; touch device to NFC mark on module for connection. The app functions without cellular/ Wi-Fi once downloaded.







Product feature	Fenwal 35-60, -61	Honeywell / Resideo S8910U	White-Rodgers 50D50U-843
Cross ref. #s	1 (individual SKUs)	425	1000+
Ignition type	DSI	IP	IP/DSI
User configuration	None	Dipswitch	7-segment LEDs
NFC + app	No	No	Yes
Inducer/PSW	Yes	No	Yes
Alarm output	Yes	No	Yes
On-board spark output	rajah or spade	Spade	rajah or spade



