

## S8610U Universal Intermittent Pilot Module



Field service replacement for most Honeywell, Robertshaw, Johnson, and UTEC (HSC) Intermittent Pilot Ignition Modules. Provides electronic control of most intermittent pilot ignition systems used on gas-fired furnaces, boilers, and other heating appliances.

- Provides ignition sequence, flame monitoring and safety shutoff for intermittent pilot central furnaces and heating appliances.
- Provides 100 percent pilot gas shutoff if pilot fails to light; after 6-minute delay, trial for ignition is repeated. Ignition trial/delay sequence is repeated until the appliance lights or call for heat is removed.
- For use with Natural or LP gas.
- For use in single rod or dual rod/remote sense applications. Includes relay contacts for use with any intermittent pilot gas control string with maximum 1.0A pilot or 2.0A main valve rating; Honeywell VR8204, VR8304 or VR8345M combination gas control recommended.
- Functional equivalent of S86, S8600, S8610 and S90 modules.
- Includes spark cable adapters to allow field replacement of both Honeywell and competitive controls without replacing existing spark cable.

**Application:** One or Two Rod Intermittent Pilot Control with continuous retry trial time with configurable lockout timing of 15 or 90 seconds and configurable prepurge of 30 seconds or no prepurge  
**Dimensions, Approximate:** 3 15/16 in. high x 5 7/16 in. wide x 2 5/8 in. deep (100 mm high x 138 mm wide x 67 mm deep)  
**Type of Gas:** Natural or LP  
**Electrical Ratings:** 24 Vac  
**Frequency:** 50/60 Hz  
**Flame Sense:** Single Rod or Two Rods  
**Ignition Sequence:** Continuous retry, after trial for ignition, pilot gas shuts off for 5 minutes, then another trial for pilot ignition takes place  
**Ignition Source:** Internal high voltage spark generator  
**Ignition System Type:** Intermittent Pilot

**Maximum Valve Load @ 24 Vac (Amps):** 1A Pilot, 2A Main @ 165 F; 1A Pilot, 1A Main @ 175 F  
**Typical Gas Control:** VR8204, VR8304  
**Typical Ignition Hardware:** Q345, Q3451, Q3452  
**Maximum Ambient Temperature:** (-40 C to +74 C) -40 F to +165 F  
**Approvals:**  
**Canadian Standards Association:** Design Certified

**Accessories:**  
**394800-30** 30 in. Ignition Cable with Right Angle Boot for use with S8600 family  
**394801-30** 30 in. Ignition Cable Assembly with straight boot for use with S8600 family

Product Number	Flame Failure Response Time (sec)	Ignition Trial Time (sec)	Between Trial Time (sec)	Ignition Trials To Lockout	Lockout Timing	PrePurge	Includes
• S8610U3009	2 seconds maximum	continuous retry	5 minute delay after failed trial for ignition.	continuous retry	Configurable to 15 seconds or 90 seconds	Configurable to 30 seconds or no prepurge	Damper connection with automatic vent damper plug

\* TRADELINE models • SUPER TRADELINE models

# Ignition Pilot Modules Selection Guide

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Universal Service Part	Applications			Timings				
	Ignition System	Flame Sensor	Ignition Sequence (Note 1)	Ignition Trials To Lockout (Note 1)	Ignition Trial Time	Between Trial Time	Pre-Purge	Flame Failure Response Time
S8910U1000	Line Volt Hot Surface Ignition	1 or 2 Rods	P	1 or 3 Field Selectable	4 sec. or 7 sec. Field Selectable	96 sec., 3 Trial Mode Only	32 sec.	1.5 sec
S8610U3009	Intermittent Pilot	1 or 2 Rods	C	C	15 sec. or 90 sec. Field Selectable	5 Minute Delay After Failed Trial for Ignition	0 sec. or 30 sec. Field Selectable	2.0 sec. max.
Y8610U6006	Intermittent Pilot	Single Rod	C	C	15 sec. or 90 sec. Field Selectable	5 Minute Delay After Failed Trial for Ignition	0 sec.	2.0 sec. max.

Features and Functions					Cross-Reference			
Universal Service Part	Type of Gas	Ignition Source	Typical Ignition Hardware	Includes	Honeywell	White-Rodgers	Robertshaw	Johnson Controls
S8910U1000	Nat or LP	Switched Line Voltage	Norton 201, Norton 271, Hot Surface Elements, Q354 Flame Rod	—	S89C1004, S89C1007, S89C1012, S89C1046, S89C1087, S89C1103, S89D1002, S89G1005, S89F1011, S89G1013, S89G1021, S89G1029, S89G1047, S89H1003, S89H1011, S89H1029, S89J1008, S89D1006, S89G1003, S89G1037, S89H1002, S890H1010	50E47 1-79, 101-179, 201-279, 301-379; 5047F 1-79, 101-179, 201-279, 301-379	HS780-17NL 104A, 306A, 308A; HS780-17NR 104A, 306A, 308A; HS780-34NL 108A, 304A, 306A, 308A, 312A; HS780-34NR 104A, 306A, 308A, 312A; HS780-34PL 308A	—
S8610U3009	Nat or LP	Internal	Q345, Q3451, Q3452	Internal Damper Connector	S86 Series, S90 Series, S8600 Series, S8610 Series, S8620 Series, S8660 Series, S8670 Series, S8680J1004	50D49-350, 50D49-360, 50D49-361, 50D50-843, 50D-401	710-713, 710-715, 735-737, 780-002, 780-003, 780-701, 780-715, 780-735, 780-736, 780-737, 780-845, SP710, SP715, SP720, SP730, SP735, SP750 Series	CSA42, 43, 44, 45, 46, 48, 49; G60, G65, G67, G770 Series
Y8610U6006	Nat or LP	Internal	Adapter for Pilot Burner Included	—	Y8610U3003	—	—	—

### Notes:

#### 1. Ignition Sequence

C = Continuous retry - After trial for ignition, pilot gas shuts off for 5 minutes, then another trial for pilot ignition takes place.

P = The number of trials for ignition and trial time is determined by the selection tab. If a selection tab is not installed, the module will operate at four seconds trial time and one ignition trial.

For a complete cross-reference, visit [www.customer.honeywell.com](http://www.customer.honeywell.com)