

# Ignition Pilot Modules

## Y8610U Universal Retrofit Intermittent Pilot Gas Burner Ignition Systems



**Complete kit converts conventional standing pilot system to an intermittent pilot system. For use with 24 Vac gas-fired atmospheric furnaces, boiler and heating appliances.**

- Y8610U kits are for use with natural or LP gas. Provides 100 percent pilot gas shutoff if pilot fails to light. After 6-minute delay, trial for ignition is repeated.
- Ignition trail/delay sequence is repeated until the appliance lights or call for heat is removed.

**Application:** Provides electronic control of intermittent pilot ignition systems used on gas fired furnaces, boilers, and other heating appliances.

**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:** 60 Hz

**Flame Failure Response Time (sec):** 2.0 sec

**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 @ 24Vac

**Typical Gas Control:** VR8204, VR8304

**Typical Ignition Hardware:** Q345, Q3451

**Maximum Ambient Temperature:** -40 F to +165 F (-40 C to +74 C)

Product Number	Flame Sense	Ignition Trial Time (sec)	Ignition Trials To Lockout	PrePurge	Includes
Y8610U4001/U	Single Rod or Two Rods	15 or 90 seconds	continuous retry	0 or 30 seconds	VR8204A2142 valve (1/2 x 1/2; 3.5" WC setting; 150 kBtu/hr at 1" p.d.)
Y8610U6006/U	Single Rod or Two Rods	15 or 90 seconds	continuous retry	0 or 30 seconds	VR8304M3558 (1/2 x 3/4; 3.5" setting; 270kBtu/hr at 1 in. p.d.)

# 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/U	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/U	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.
Y8610U4001/U	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.	2.0 sec.
Y8610U6006/U	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/U	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, S89H1010	50E47 1-79, 101-179, 201-279, 301-379; 5047F1-79, 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/U	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
Y8610U4001/U	Nat or LP	Internal	Adapter for Pilot Burner Included	Internal Damper Connector	Y8610U3029	—	—	—
Y8610U6006/U	Nat or LP	Internal	Adapter for Pilot Burner Included	Internal Damper Connector	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)

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