

Ignition Pilot Modules

S8910U3000 Universal Hot Surface Ignition Module



One universal ignition module covers the most common timing and flame sensing configurations. The Honeywell S8910U Universal Hot Surface Ignition Module is the only model you need to replace more than 800 Honeywell and competitive controls. LED status indicators and microammeter ports simplify troubleshooting. Field configurable DIP switches make it quick and simple to match the characteristics of the old control.

- Replaces over 800 White-Rodgers, Robertshaw and Honeywell hot surface ignition models.
- For 120 Vac (up to 5.0A) surface igniter (Norton 201/271 or equivalent).
- S8910U 3000 Series has LED status indicator and microammeter ports for easy troubleshooting
- For local (single rod) or remote (dual rod) rectification type flame sensing.
- Contains easy-to-use cross reference and instructions plus the accessories required to replace the existing hot surface ignition module.
- Provides one or three ignition trials (four-second or seven-second trials) per call for heat.
- Field selectable number of ignition trials and trial time based on unit being replaced.
- Igniter warm up time: 7 (12 seconds second and third trial), 17 (27 seconds second and third trial), 34, or 45 seconds

Typical Ignition Hardware: Norton 201, Norton 271, Q354

Approximate, Dimensions: 5 1/4 in. high x 4 1/16 in. wide x 1 15/16 in. deep (133 mm high x 103 mm wide x 49 mm deep)

Electrical Ratings: 24 Vac

Frequency: 50 Hz; 60 Hz

Ambient Temperature Range: -40°F to +175°F (-40°C to +79°C)

Approvals, CSA: Design Certified

Tradeline Value: Tradeline

Flame Failure Response Time (sec): 1.5 sec

Ignition System Type: Direct Hot Surface Ignition

Ignition Sequence: The number of trials for ignition and trial time is determined by the dip switch selection.

Typical Gas Control: VR8205, VR8305

Type of Gas: Natural or LP

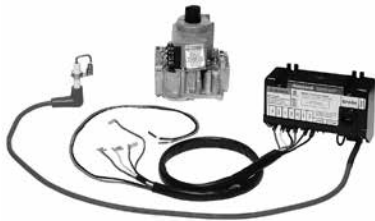
Ignition Source: Line Voltage (120 VAC) Hot Surface Element (Norton Model 201 or 270)

Lockout Timing: 4 sec. or 7 sec.

Maximum Valve Load @ 24 Vac (Amps): 2A

Material Number	Flame Sense	Ignition Trial Time (sec)	Between Trial Time (sec)	Ignition Trials To Lockout	PrePurge
S8910U3000/U	Single Rod or Two Rods	4 sec. or 7 sec.	(2) 96 sec (32 Seconds Prepurge and 64 seconds interpurge)	1 or 3	32 seconds

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 trial/delay sequence is repeated until the appliance lights or call for heat is removed.

Typical Ignition Hardware: Q345, Q3451

Approximate, Dimensions: 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)

Electrical Ratings: 24 Vac

Frequency: 60 Hz

Ambient Temperature Range: -40°F to +165°F (-40°C to +74°C)

Flame Failure Response Time (sec): 2.0 sec

Ignition System Type: Intermittent Pilot

Ignition Sequence: Continuous retry, after trial for ignition, pilot gas shuts off for 5 minutes, then another trial for pilot ignition takes place

Typical Gas Control: VR8204, VR8304

Type of Gas: Natural or LP

Ignition Source: Internal high voltage spark generator

Lockout Timing: 15 or 90 seconds

Maximum Valve Load @ 24 Vac (Amps): 1A Pilot, 2A Main @ 24Vac

Material 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	Igniter Warm-Up Time
S8910U3000/U	Line Volt Hot Surface Ignition	1 or 2 Rods	Z	1 or 3 Field Selectable	4 sec. or 7 sec. Field Selectable	96 sec. (32 sec. prepurge and 64 sec. interpurge)	32 sec.	1.5 sec. maximum	7 (12 sec. 2nd and 3rd trial), 17 (27 sec. 2nd and 3rd trial), 34 or 45 sec.
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
S8910U3000/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, S8910U1000/U	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	—
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.

Z = The number of ignition trials, trial time, between trial time, prepurge, and igniter warm-up times are determined by the appropriate dip switch selection. Please refer to the instruction guide for appropriate timing selection.

For a complete cross-reference, visit www.customer.honeywell.com