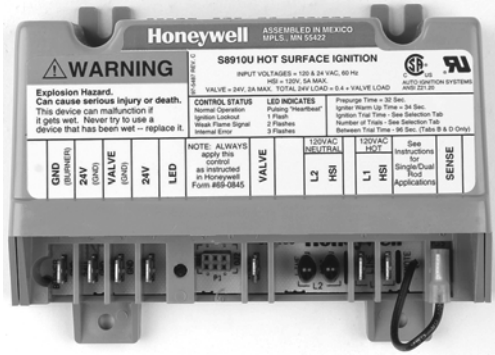


S8910 Universal Hot Surface Ignition Module



Universal Hot Surface Ignition Module is designed to provide easy field replacement of a wide range of hot surface ignition modules manufactured by Honeywell, Robertshaw and White-Rodgers. The S8910U Module provides operating control of a direct ignition system using a 120 Vac hot surface igniter.

- Replaces many White-Rodgers, Robertshaw and Honeywell hot surface ignition models.
- For 120 Vac (up to 5.0A) surface igniter (Norton 201/271 or equivalent).
- For local (single rod) or remote (dual rod) rectification type flame sensing.
- Contains easy-to-use instructions plus the accessories required to adapt the existing hot surface ignition module.
- Provides one or three ignition trials (four-second or seven-second trials) per call for heat; prepurge of 32 seconds or less; up to 96 seconds between purge trial times.
- Temperature range is -40 to +175 F (-40 to +79 C).

Application: Provide electronic control of direct hot surface ignition systems used on gas fired furnaces, boilers, and other heating appliances.

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

Type of Gas: Natural or LP
Electrical Ratings: 24 Vac
Frequency: 60 Hz

Flame Sense: Single Rod or Two Rods

Ignition Sequence: 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.

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

Ignition System Type: Direct Hot Surface Ignition

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

Typical Gas Control: VR8205, VR8305

Typical Ignition Hardware: Norton 201, Norton 271, Q354

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

Approvals:

Canadian Standards Association: Design Certified

Product Number	Flame Failure Response Time (sec)	Ignition Trial Time (sec)	Between Trial Time (sec)	Ignition Trials To Lockout	Lockout Timing	PrePurge
• S8910U1000	1.5 sec.	4 sec. or 7 sec.	(2) 96 sec.- 3 trial mode only	1 or 3	4 sec. or 7 sec.	32 seconds

* TRADELINE models • SUPER TRADELINE models

S89C Hot Surface Ignition Module



Provide operating control and system shutdown on loss of main burner flame in direct ignition central heat furnaces and heating appliances with hot surface igniter.

- S89C,G,J are for systems with a combination igniter- sensor.
- S89C lock out after one try for ignition. S89G,H provide three tries for ignition before lockout, with 30 sec. min. purge before second and third tries.
- Compatible with Norton 201 and 271 or equivalent hot surface igniters.
- Available with leadwires for line voltage connections.
- Modules can be used on either natural or LP gas; they provide 100 percent shutoff of gas on lockout.
- Modules have relay contacts for use with any direct ignition gas control with max. 2.0 A, 24 Vat rating.
- Modules use rectification principle for flame sensing. -40 F to +175 F (-40 C to +79 C) temperature rating.

Application: Provide electronic control of direct hot surface ignition systems used on gas fired furnaces, boilers, and other heating appliances.

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

Type of Gas: Natural or LP
Electrical Ratings: 24 Vac
Frequency: 60 Hz

Flame Sense: Single Rod

Ignition Sequence: Single trial for main burner ignition (then shut down and lockout)

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

Ignition System Type: Direct Hot Surface Ignition

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

Typical Gas Control: VR8205, VR8305

Typical Ignition Hardware: Norton 201

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

Approvals:

Canadian Standards Association: Design Certified

Product Number	Flame Failure Response Time (sec)	Ignition Trial Time (sec)	Ignition Trials To Lockout	Lockout Timing	PrePurge
S89C1087	2.0 sec. @ 2.5 microamp	6 sec.	1	6 sec.	None
S89C1095	2.0 sec. @ 2.5 microamp	15 sec.	1	15 sec.	None

Ignition Pilot Modules Selection Guide

Ignition Pilot Modules Selection Guide

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