

780-910 UNIVERSAL HOT SURFACE IGNITION MODULE UNI-KIT®

The 780-910 Universal Hot Surface Ignition Module Uni-Kit is designed for use on gas fired systems. It is equipped with a self diagnostic green LED for quick troubleshooting. The LED indicates if the system is in normal operation, has gone into lockout, has a weak flame signal, or has an internal error (a defective module).

FEATURES

The 780-910 Uni-Kit will easily replace the widest variety of hot surface ignition modules found in the field today. Including systems using:

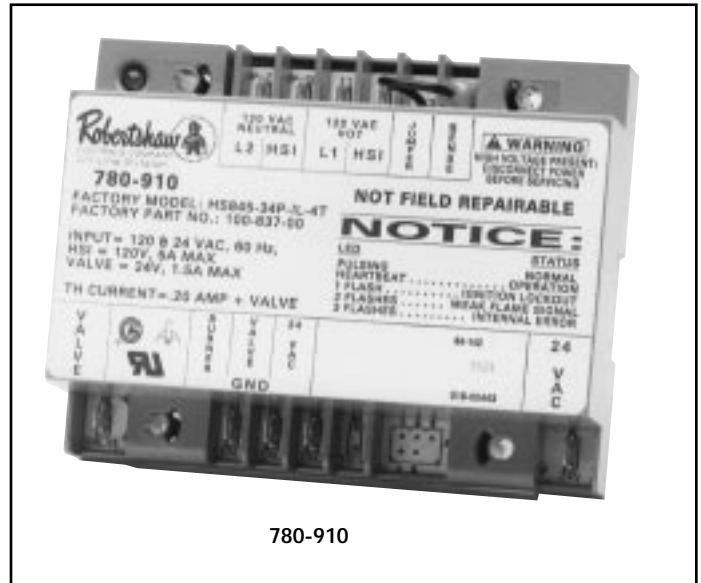
- Local (sense through the Hot Surface Ignitor) or Remote Flame Sensors
- Single or three ignition attempts
- 4 or 7 second ignition trial time
- 17 or 34 second ignitor warm up time
- 34 seconds or less pre-purge
- Natural or L.P. gas controls
- 120 VAC Hot Surface ignitors

This kit provides all the necessary instructions and hardware needed to replace most hot surface modules manufactured by Robertshaw, Honeywell and White-Rodgers.

The 780-910 provides 100% lockout and complete gas shut off if main burner does not light after the selected trial for ignition sequence has been completed. An ignition sequence is initiated by a call for heat by a room thermostat or a switch which provides power to the Ignition Control Unit (ICU). After a 34 second pre-purge cycle the ICU will start the selected ignitor warm up time (17 or 34 seconds.)

At the end of the ignitor warm up time, the gas valve is opened and will supply gas to the main burner for 4 or 7 seconds. In normal operation the main burner will light and the gas valve will remain open as long as there is a call for heat. After several seconds the ignitor is turned off and the sensor (local or remote) is activated.

If the main burner does not light the ICU will (depending on what option was chosen) go into lockout or retry. When 3 ignition attempts are being used the ICU will try again 2 more times. If the ICU fails to establish proof of flame it will then go into lockout. The module can be reset by opening system switch or thermostat contacts (lowering the set temperature below the room temperature) for a minimum of 10 seconds.



780-910

SPECIFICATIONS

The 780-910 comes equipped with field selectable options; flame sense (local or remote), ignition trial times and ignitor warm up times. The flame sense option is determined by a factory installed black jumper wire. For local sense (sensing through the ignitor) the jumper must be connected to the "sense" terminal. For remote sense (a flame rod) the black jumper wire must be removed.

Ignition attempts and timing options are set by using a combination of four field removable tabs. The Cross-Reference charts in the instruction sheet will indicate the combination of tabs recommended for removal to match the specification of a specific ignition module.

Electrical rating	
Supply voltage	120 VAC, 50/60 Hz
Control input voltage	24 VAC, 50/60 Hz
Maximum ignitor current	5 amps resistive
Maximum valve current	1.5 amps at 24 VAC
Thermostat anticipator current	1 A + load
Ambient temperature	-40° to 176°F
Operating humidity	95% at 104°F

FOR REPLACEMENT REMOTE SENSORS SEE PARTS & ACCESSORIES - PAGE C85.

CROSS-REFERENCE - ROBERTSHAW

Replaces Robertshaw Model Number	Replaces Robertshaw Model Number	Replaces Robertshaw Model Number	Replaces Robertshaw Model Number	Replaces Robertshaw Model Number	Replaces Robertshaw Model Number
HS780-17PL-304A	HS780-34PR-308A	HS780-34NL-306A	100-812-08	100-812-27	100-813-01
HS780-17PL-306A	HS780-17NL-104A	HS780-34NL-308A	100-812-09	100-812-28	100-813-03
HS780-17PL-308A	HS780-17NL-106A	HS780-34NL-312A	100-812-10	100-812-29	100-813-04
HS780-17PR-104A	HS780-17NL-108A	HS780-34NR-104A	100-812-11	100-812-30	100-813-05
HS780-17-PR-108A	HS780-17NL-304A	HS780-34NR-106A	100-812-12	100-812-31	100-813-06
HS780-17PR-306A	HS780-17NL-306A	HS780-34NR-304A	100-812-13	100-812-32	780-780
HS780-17PR-308A	HS780-17NL-308A	HS780-34NR-306A	100-812-14	100-812-33	780-782
HS780-34PL-104A	HS780-17NR-104A	HS780-34NR-308A	100-812-15	100-812-34	780-783
HS780-34PL-106A	HS780-17NR-106A	HS780-34NR-312A	100-812-17	100-812-36	780-784
HS780-34PL-108A	HS780-17NR-108A	HS780-17PL-106A	100-812-18	100-812-37	780-785
HS780-34PL-304A	HS780-17NR-304A	HS780-17PL-108A	100-812-19	100-812-38	780-786
HS780-34PL-306A	HS780-17NR-306A	100-812-01	100-812-20	100-812-39	780-787
HS780-34PL-308A	HS780-17NR-308A	100-812-02	100-812-21	100-812-40	780-788
HS780-34PR-106A	HS780-17NR-312A	100-812-03	100-812-22	100-812-41	780-789
HS780-34PR-108A	HS780-34NL-106A	100-812-04	100-812-23	100-812-42	780-790
HS780-34PR-304A	HS780-34NL-108A	100-812-05	100-812-24	100-812-44	
HS780-34PR-306A	HS780-34NL-304A	100-812-06	100-812-25	100-812-45	

CROSS-REFERENCE - HONEYWELL

Replaces Honeywell Model Number	Replaces Honeywell Model Number	Replaces Honeywell Model Number	Replaces Honeywell Model Number	Replaces Honeywell Model Number	
S89C1004	S89C1103	S89G1047	S890C1007	S890G1037	
S89C1012	S89D1002	S89H1003	S890D1006	S890H1002	
S89C1046	S89G1005	S89H1011	S890G1003	S890H1010	
S89C1079	S89G1013	S89H1029	S890G1011	S890H1028	
S89C1087	S89G1021	S89J1008	S890G1029	S8910U1000	