

50D50-842

TECH PAGE

# 50D50-842 UNIVERSAL DIRECT SPARK IGNITION CONTROL KIT FOR ALL GASES

Microprocessor Based Gas Ignition Control for Heating Appliance Using Either Natural or LP Gas. Proof of Flames is Accomplished. The Unit is Designed as a Direct Spark Ignition Source

### **FEATURES**

- · Color LED indicator for diagnostics.
- 1/4" and 3/16" quick connect terminals.
- · Program keys. · Damper interface.

#### SPECIFICATIONS

Electrical Ratings	Input 18-30 VAC, 25 VAC nominal
Maximum Input Current @ 25 VAC	0.2A + MV @ 25°C
Ambient Operating Range	-40° to +175°F
Flame Establishment Time	.8 sec
Mounting	Multipoise
Agency Approvals	CSA USA / CANADA

#### 50D50-842 CONFIGURATION OPTIONS (All Times in Seconds)

Model Number	Key	Trial for Ignition	Prepurge	Retries	Interpurge
50D50-842	A	4	0	2	90 sec.
	В	4	30	2	90 sec.
	С	7	0	2	90 sec.
	D	7	30	2	90 sec.
	E	7	0	0	N/A
	F	7	30	0	N/A
	G	11	0	0	N/A
	Н	11	30	0	N/A



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TECH PAGE

# 50D50-843 UNIVERSAL PROVEN PILOT SPARK **CONTROL KIT FOR ALL GASES**

Microprocessor Based Gas Ignition and Primary Safety Control Designed for Interrupted Spark and Burner Supervision of All Gases Used in Gas Fired Appliance Applications

# **FEATURES**

- · Field service replacement for most Honeywell, Robertshaw, Johnson Controls and UTEC Intermittent Pilot Ignition Controls.
- · Provides ignition, proof of ignition and precise timing. · Works with single rod or dual rod remote sensor.
- · Color LED indicator

for diagnostics.

## SPECIFICATIONS

Electrical Ratings	Input 18-30 VAC, 25 VAC nominal
Maximum Input Current @ 25 VAC	0.2A + MV + PV @ 25°C
Flame Out Recognition Time	8 seconds
Ambient Operating Range	-40° to +176°F (-40° to +80°C)
Dimensions	4.13″L x 4.13″W x 1.5″H
Agency Approvals	CSA USA/CANADA

#### 50D50-843 CONFIGURATION OPTIONS (All Times in Seconds)

Model Number	Key	Reset Time	Prepurge	Retries	Safety Time
50D50-843	А	300	0	Continuous	90
	В	300	30	Continuous	90
	С	300	0	Continuous	30
	D	300	30	Continuous	30
	E	300	0	2	60
	F	300	30	2	60
	G	300	0	Continuous	15
	Н	N/A	30	N/A	Continuous
	l	300	0	Continuous	4
	J	300	30	Continuous	4

# 50D50-842 WIRING





Fig. 1 – Typical hookup for White-Rodgers replacement with separate flame sense and spark probes

Fig. 2 – Typical hookup for White-Rodgers replacement with direct flame sense through single spark/sense probe

NOTE: Max length of spark cable should be less than 3ft (0.9m) and rated at 15kV. The cable must not run in continuous contact with any metal surface or spark voltage is greatly reduced. Use ceramic or plastic standoff insulators as required. Ensure burner is grounded directly to module for spark return path.



Fig. 3 – Typical hookup for White-Rodgers replacement with separate flame-sense and spark probes







Fig. 4 – Typical hookup for White-Rodgers replacement with direct flame sense through single spark/sense probe



Fig. 6 – Typical hookup for White-Rodgers replacement with damper vent and direct flame sense through single spark/sense probe

NOTE: Max length of spark cable should be less than 3ft (0.9m) and rated at 15kV. The cable must not run in continuous contact with any metal surface or spark voltage is greatly reduced. Use ceramic or plastic standoff insulators as required. Ensure burner is grounded directly to module for spark return path.

50D50-843 WIRING