



21M51U-843 Kit

- Includes:
- Module
 - HotRod Ignitor Kit



21M51U-843 UNIVERSAL INTEGRATED HSI FURNACE CONTROL KIT

Replaces White-Rodgers 50M51-242 and 50M61-XXX's Two-Stage HSI Systems with 80V or 120V Ignitors

FEATURES

- 120 VAC 3-speed PSC (Permanent Split Capacitor) circulator output, two-speed inducer output, two-stage gas valve output.
- Pushbutton fault history retrieval.
- Furnace status LED – tri-color (green, red and amber).
- Heat fan off delay (dipswitch selectable), fan on delay for cooling.
- Auto second stage delay (dipswitch selectable).
- 120 VAC humidifier output/120 VAC electronic air cleaner output.

SPECIFICATIONS

Electrical Rating:

Input Voltage 24 VAC, 60 Hz (Class II transformer required)

Nom. Input Current @ 24 VAC 530 mA + MV

Relay Load Ratings:

Gas Valve Relays 1.5 amps @ 24 VAC, 60 Hz

Inducer Relays 2.2 FLA – 3.5 LRA @ 120 VAC

Circulator Relays 14.5 FLA – 25.0 LRA @ 120 VAC

Humidifier Load 1.0 amp max. @ 120 VAC

Electronic Air Cleaner Load 1.0 amp max. @ 120 VAC

Ignitor Relay 4.0 amps max. @ 132 VAC, 60 Hz

Flame Current Requirements:

Minimum current to insure flame detection 0.3 µA DC*

Maximum current for non-detection 0.1 µA DC*

Maximum allowable leakage resistance 100 M ohms

*Measured with a DC microammeter in the flame probe lead

Operating Temperature Range -40° to 175°F (-40 to 80°C)

Humidity Range 5% to 93% relative humidity (non-condensing)

Flame Failure Response Time 2.0 sec. max. @ 60Hz

TECHNICAL HELP

Wiring Diagram/Operation See pages 179–180

Model Number	Pre-Purge	Ignitor Warm-Up	Retries	Heat Delay to Fan ON	Heat Delay to Fan OFF	Cool Delay to Fan ON	Cool Delay to Fan OFF	Automatic Reset Time
21M51U-843	15	17	2	45	90/120/150/180	5	60	60 minutes

CROSS REFERENCE

21M51U-843 Replaces:

White-Rodgers	Trane	Goodman	Lennox
21M51U-843	KIT15943	20300001	18M3401
50M61-843	CNT03077	20300003	46M9901
50M61-288	CNT6424	PCBBF120S	83L9301
50M61-289	D344301P01	PCBBF125	
50M61-120	X13650839010		
50M61-495			
50M61-242			
50M61-495			