

Two-Stage HSI Integrated Furnace Control for Variable Speed (ECM) Motors

21V51U-843

Replace 54 part numbers on two-stage
systems with 80V or 120V ignitors



Universal Replacement Control

Reduce inventory

HotRod™ Ignitor included for 80V or 120V
replacement

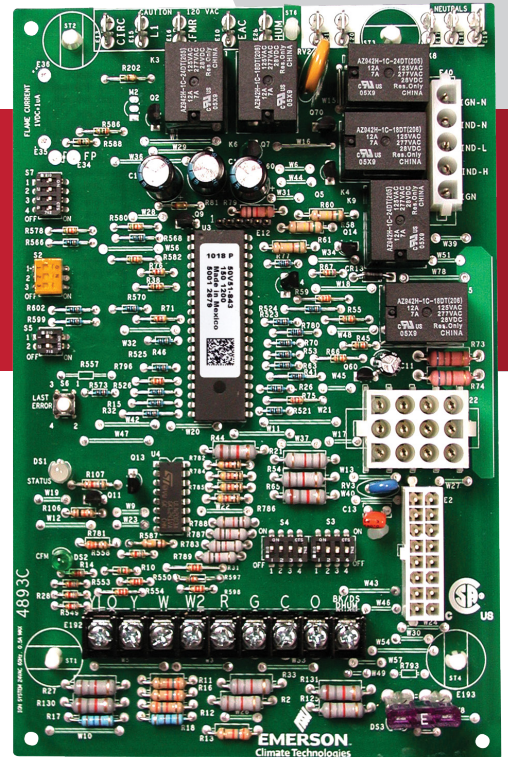
Provides proper signals to 5 different
manufacturer ECMs



Advanced Diagnostics

Push-button fault recall with tri-color LED

CFM indicator LED



WHITE-RODGERS™


EMERSON™

Two-Stage HSI Integrated Furnace Control for Variable Speed Motors

SPECIFICATIONS:

Electrical Ratings: [@ 77°F (25°C)]

Input Voltage 25 VAC 50/60 Hz
 Max. Input Current..... .45A @ 25 VAC

Flame Current Requirements:

Min. Current to ensure flame detection 0.25 µA DC*
 Max. current for non-detection 0.1 µA DC*
 Max. allowable leakage resistance 100 M Ohms
 * Measured with a DC voltmeter (1 VDC = 1 µA)

Operating Temp Range: -40° to 176°F (-40 to 80°C)

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

Dimensions: 5.625" W x 8.25" L x 1.50" D (with tabs)
 5.25" W x 7.0" L x 1.50" D (tabs removed)

Agency Approvals: CSA - USA / Canada

1 Year Limited Warranty

TIMING SPECIFICATIONS:

Note: Timing in seconds unless otherwise noted.

Pre-purge	15
Ignitor warm-up	17
Trial for ignition period	4
Ignition activation period	3
Retries	2 Times
Valve sequence period	12
Interpurge	60
Post-purge	15
Lockout time	300
Heat delay to fan on	45
Heat delay to fan off*	90/120/150/180
Cool delay to fan on	5
Cool delay to fan off	60
Delay to fan on	0
Flame failure response time @ 60 Hz	2.0 Sec. Max.
Auto reset	60 Minutes

CROSS REFERENCES:

Lennox	Amana/Goodman	PCBBF106S	American Standard / Trane	D341420P02*	S1-03102977000
18M9901*	50V51-288	PCBBF107S	50V51-507*	X13650840010*	S1-33102977000
100870-01*	50V51-289	PCBBF124	50V61-480*	CNT04018*	S1-03109169000
100870-03*	50V51-290	PCBBF124S	50V61-486*	CNT04352*	S1-33109169000
19W60*	B1809925	20300002*	50V61-507*	CNT05120*	
49M5901*	B1809927	20300004*	KIT15815*	York	Coleman/Evcon/ Luxaire/York
63W27*	B1809927S	20300006*	CNT03078*	265904	50V51-243
Y4152*	PCB00106	50V61-288*	D156245P01*	449572	Coleman/Evcon/ Luxaire/York
50V61-120*	PCB00106S	50V61-289*	D341420P01*	642768	50V61-143*
50V61-121*	PCBBF106	PCBBF121*		S1-03102955000	
		PCBBF121S*		S1-33102955000	

Note: The Installer may have to modify existing ignitor hole to accommodate the new 21D64-2, with ceramic diameter (.394").
 * **21D64-2 Ignitor Note:** In these applications, the existing 80V ignitor must be replaced by the 120V 21D64-2 ignitor.

THE WHITE-RODGERS MOBILE APP:

- Latest cross reference
- Installation instructions
- Spec sheets
- Product selection

