Universal Single Stage Furnace Control for PSC Blower Motors 50M56U-843



Replaces over 400 single stage HSI controls with 80V or 120V ignitors





Universal Replacement Kit

Ignition control 50M56-843 Quick-connect wiring harnesses HotRod[™] Universal Ignitor Kit 21D64-2 Installation instructions and OEM cross reference



Easy Installation

Mounting design fits all OEM models Simple Rollout jumper 75% of all applications install without adapter harnesses 24V or 120V humidifier



Advanced Diagnostics

Simple pushbutton fault recall Tri-Color LED & status codes Flame current test pins Fault code label on control



Included

HotRod™ Universal Ignitor Kit 21D64-2

For ECMx blower motors use 50X57-843



WHITE-RODGERS[®]

Universal Single Stage Furnace Control for PSC Blower Motors

50M56U-843 Replaces over 400 single stage HSI controls with 80V or 120V ignitors

COMPETITIVE COMPARISON

Choose White-Rodgers for maximum cross reference and ease of installation

FEATURES	WHITE-RODGERS	BRAND X		
For single stage & psc blower	✓	\checkmark		
Cross references	400	200		
Ignitor voltage serviced	80V & 120V	120V		
Blower delay dipswitches	4	4		
Tri-color LED displays	\checkmark	\checkmark		
Rollout accessory	Easy jumper	Wire		
Flame test pins/pads	\checkmark	×		
Full cover	✓	Tray		
Fault code label	\checkmark	×		
Fault recall & clearing	Simple pushbutton	Jumper R & D terminals		
Electronic air cleaner output	✓	✓		
Humidifier output	24V or 120V	120V		
Fuse, twinning, test mode	\checkmark	\checkmark		

SPECIFICATIONS:

Electrical Rating [@ 77°F (25°C)]

Input Voltage: 25 VAC 50/60 Hz Max Input Current: 0.45 amp @ 25 VAC

Flame Current Requirements

Minimum current to insure flame detection: .25 µa DC* Maximum current for non-detection: 0.1 µa DC* Maximum allowable leakage resistance: 100 M ohms * Measuring with a DC voltmeter (1 VDC = 1µa)

Operating Temperature Range

-40° to 176° F (-40° to 80° C)

Timing Specifications

(All times are in seconds unless noted otherwise)

Humidity Range

5 - 95% relative humidity (non-condensing)

Gases Approved

Natural, Manufactured, Mixed, Liquefied Petroleum, and LP Gas-Air Mixtures are all approved for use

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

Pre-purge	lgnitor warm-up (adaptive)	Retries	Post-purge	Lockout time	Heat ON delay	Heat OFF delay	Cool ON delay	Cool OFF delay	Auto reset	Flame establishment	Flame failure response
15	17-19	4 times	5	5 mins	30*/45	60/90/120*/180	2	2/60*	60 mins	0.8	2.0

THE WHITE-RODGERS MOBILE APP:

- Cross referencing - Product information - Product selection



* Denotes factory default

R-4819 (9/21)

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Universal Single Stage Furnace Control for ECMx Blower Motors 50X57-843

The industry's only universal control for ECMx blower motors



Universal Replacement

Services Carrier, Lennox, Trane and York models

Reduce inventory and save time by eliminating extra trips



Easy Installation

Mounting design fits all OEM models Simple Rollout jumper Factory wiring plugs directly into the control 24V or 120V humidifier



Advanced Diagnostics

Simple pushbutton fault recall Tri-Color LED & status codes Flame current test pins Fault code label on control













Universal Single Stage Furnace Control for ECMx Blower Motors

50X57-843 The industry's only universal control for ECMx blower motors

SPECIFICATIONS:

Electrical Rating [@ 77°F (25°C)]

Input Voltage: 25 VAC 50/60 Hz Max Input Current: 0.8 amp @ 25 VAC

Flame Current Requirements

Minimum current to insure flame detection: $.31 \mu a DC^*$ Maximum current for non-detection: $0.1 \mu a DC^*$ Maximum allowable leakage resistance: 100 M ohms * Measuring with a DC voltmeter ($1 \text{ VDC} = 1 \mu a$)

Operating Temperature Range

-40° to 176° F (-40° to 80° C)

Timing Specifications

(All times are in seconds unless noted otherwise)

Humidity Range

5 - 95% relative humidity (non-condensing)

Gases Approved

Natural, Manufactured, Mixed, Liquefied Petroleum, and LP Gas-Air Mixtures are all approved for use

York / ICI Brands

S1 03102951001

542760

Dimensions

5.625" W x 8.25" L x 1.50" D (with tabs) 5.25" W x 7.25" L x 1.50" D (tabs removed)

Agency Approvals

UL

1 Year Limited Warranty

Pre-purge	lgnitor warm-up (adaptive, starts at 17)	Retries	Post-purge	Lockout time	Heat ON delay	Heat OFF delay	Cool ON delay	Cool OFF delay	Auto reset	Flame establishment	Flame failure response
15	5-21	3 times	15	250 (seconds)	25	60/90/120*/180	3	3/90*	60 mins	0.8	2.5

* Denotes factory default

50X57-843 CROSS REFERENCE REPLACEMENT:

Carrier / ICP Brands 1183386 1184412 CEPL130934-01	Grainger 115Z36 115Z39 116J02	607436-01 607436-02 79W84 85W79	D342359P01 D342359P02 D342359P03 D342359P04
CEPL130934-02			
CEPL131011-01	Johnstone	Trane American	White-Rodgers
CEPL131011-02	L45-086	Standard Brands	50A67-476-01
HK42FZ027		CNT04711	50A67-476-02
HK42FZ033	Lennox Brands	CNT06664	50A67-507-01
HK42FZ039	103217-01	CNT07737	50A67-507-02
HK42FZ047	103217-02	CNT07738	50X57-843

80V application which requires 120V ignitor upgrade^{*} *Suggested upgrade is our HotRod™ Ignitor



The White-Rodgers Mobile App:

- Cross referencing
- Product information
- Product selection



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