

Universal Two-stage furnace control for PSC blower motors

21M51U-843

Simplifies stocking, installation and ensures peak system performance



Universal replacement kit

Replaces most White-Rodgers **50A51**, **50M51**, and **50M61** two-stage HSI controls with 80V or 120V ignitor.

Kit includes:

- Ignition control 50M51-843
- HotRod universal ignitor kit 21D64-2
- Trane ignitor mounting bracket
- Installation instructions and cross references



Easy installation

- Cover allows flexibility during mounting
- Added dipswitches to trial for ignition and blower delays
- Additional blower motor wire extensions



*Now replaces
50A51 applications*

WHITE-RODGERS
by **COPELAND**

Features:

- 120 VAC ignitor output
- 120 VAC two-speed inducer output
- 120 VAC humidifier output
- 120 VAC electronic air cleaner output
- 2-stage gas valve output
- 120 VAC 3-speed PSC blower motor output
- Fuse protection-3 amp
- Tri-Color LED and status codes
- Selectable W2 delay when used with single stage thermostat
- Selectable trial for ignition timing
- Pushbutton fault recall
- YLO, Y, W1, W2, R, G, C, O, twin terminals
- Flame current test pads
- Cover for additional mounting options
- Blower motor wire extensions

Specifications:

Electrical ratings [@ 77°F (25°C)]

Input voltage: 120 VAC, 60 Hz
(Class II transformer required)

Max. input current @ 24 VAC
800mA + MV

Flame current requirements

Minimum current to ensure flame detection:

0.3 µA DC*

* Measuring with a DC voltmeter (1 VDC = 1µa)

Operating temperature range

-40° to 176°F (-40 to 80°C)

Humidity range

5% to 95% relative humidity (non-condensing)

Gases approved

Natural, manufactured, mixed, liquid petroleum, and LP gas air mixtures are all approved for use

Dimensions

Board: 4.82" W x 8" H x 1.25" D

Cover: 5.12" W x 9.13" H x 1.45" D

Agency approval

CSA

1 year limited warranty

Timing specifications (All times are in seconds unless noted otherwise)

15	17	2 times	15	300	30/45*	90*/120/150/180	5	0/60*	Off*/10m/Auto/20m	4*/7	60 minutes
Pre-purge		Retries	Post-purge	Lockout time	Heat ON delay	Heat OFF delay	Cool ON delay	Cool OFF delay	W2 delay	Trial for ignition	Auto reset

* Denotes factory default

Cross reference

Amana/Goodman

10207708 PCBBF115
10207712 PCBBF115S
10207713 PCBBF116
10207713 PCBBF116S
20300001 PCBBF120S
20300003 PCBBF125
50A51-215 **Armstrong**
50A51-225 43207001
50A51-235 44957001
50M61-288 50A51-210
50M61-289 50A51-211
PCB00114 R43207001
PCB00115 R44957001
PCB00116 **Johnstone**
PCBBF114 L39-373
PCBBF114S L39-376

L42-300

L42-301

L42-302

Lennox Industries

100869-03

18M3401

39M26

46M9901

50M61-120

63W26

83L9301

Y4151

Trane/

American Standard

1006225

1148167

21M51-495

50A51-405

50A51-495

50M51-495

50M61-495

CNT01308

CNT02184

CNT03077

CNT05122

CNT06424

CNT07566

CNT1308

CNT2184

CNT6424

D330934P01

D330937P01

D340021P01

D341418P01

D341418P02

D344301P01

KIT15943

KIT17858

X13650839010

White-Rodgers

21M51U-843

50M61-843

York International

18381

18384

265903

449573

50A51-242

50A51-243

50M51-242

542767

67298

872670

S1-03101290000

S1-03101909000

S1-03102954000

S1-03103009000

S1-03109117000

S1-03109168000

S1-33102954000

S1-33103009000

S1-33109117000

S1-33109168000

The White-Rodgers Mobile app:

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

