

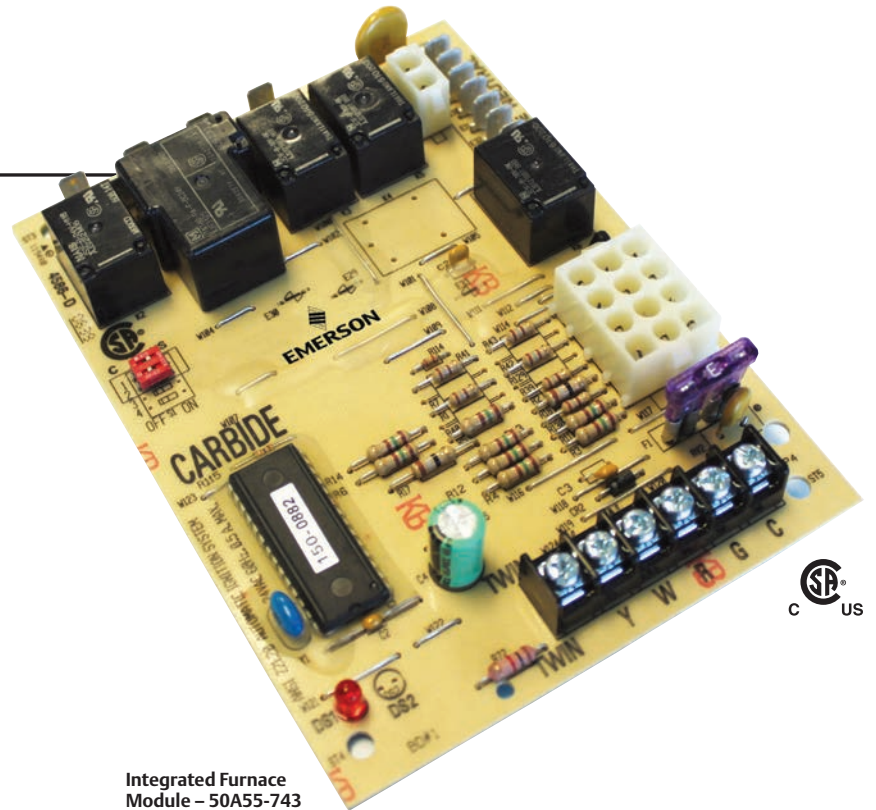
Single-Stage/HSI Integrated Furnace Control Kit

OEM Replacement

50A55-743

Replaces:

White-Rodgers 50T55-289 and 50A55-289 and Virtually All Goodman Single-Stage HSI Controls with 120V Ignitors.



Integrated Furnace Module – 50A55-743

Replace the Original with the Original.

50A55-743 simplifies installation and ensures peak system performance.

Easy Install Kit includes everything you need for quick and accurate replacement:

- Ignition Control Module
- Installation Instructions and OEM Cross-Reference

White
Rodgers™


EMERSON
Climate Technologies

Single-Stage HSI Integrated Furnace Control Kit

OEM Replacement

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50A55-743

Features

- 120 VAC Ignitor Output
- 120 VAC Humidifier Output
- 120 VAC Electronic Air Cleaner Output
- 120 VAC 2-Speed PSC Circulator Output
- Fuse Protection – 5 Amp
- Furnace Status LED
- Heat Fan OFF Delay (Dipswitch Selectable)
- Y, W, R, G, C, TWIN Terminals

50A55-743 Cross Reference

50A55-743 Replaces:

Goodman	White-Rodgers
0130F00005	50A55-289
0130F00005S	50A55-743
B1809926	50T55-289
B1809926S	
PCBBF110	
PCBBF110S	
PCBBF112	
PCBBF112S	
PCBBF123	
PCBBF123S	

NOTE: Can also use Universal Kit 50M56U-843

Specifications

Electrical Ratings [@ 77°F (25°C)]

Input Voltage: 25 VAC 50/60 Hz
Max. Input Current @ 25 VAC: 0.45 amp
Relay Load Ratings
Valve Relay: 1.5 amp @ 25 VAC 50/60 Hz 0.6 pf
Ignitor Relay: 6.0 amp @ 120 VAC 50/60 Hz (resistive)
Inducer Relay: 2.2 FLA–3.5 LRA @ 120 VAC
Circulator Relay: 14.5 FLA–25.0 LRA @ 120 VAC

Flame Current Requirements

Minimum current to insure flame detection: 1 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)

Mounting

Surface mount multipoise

Timing Specifications (@ 60 Hz * *)

	Maximum
Flame Establishing Time:	0.8 sec
Flame Failure Response Time:	2.0 sec

** At 50 Hz, all timing specifications should be increased by 20%

Gases Approved: Natural, Manufactured, Mixed,
Liquified Petroleum and LP Gas Air Mixtures are
all approved for use.

Dimensions

4.375" W x 5.875" H x 1.25" D

For Additional Information

Visit www.white-roddgers.com

Timing Specifications

(All times are in seconds unless noted otherwise)

50A55-743	
Pre-purge:	15
Ignitor warm-up: (1st 64 attempts)	7
Minimum ignitor warm-up:	5
Maximum ignitor warm-up:	9
Ignition activation period:	2
Trial for ignition period:	4
Retries:	2 times
Valve sequence period:	12
Interpurge:	30
Post-purge	15
Lockout time	300
Heat delay to fan ON	30
Heat delay to fan OFF*	90/120/150/180
Cool delay to fan ON	5
Cool delay to fan OFF	45
Auto reset	60 minutes
Humidifier	Yes
Electronic air cleaner	Yes

* These times will vary depending on option switch position. See OPERATION section for further information.