

Trane Single Stage — 120V Ignitor HSI Integrated Furnace Control Kit

OEM Replacement

50A55-3797

Replaces:

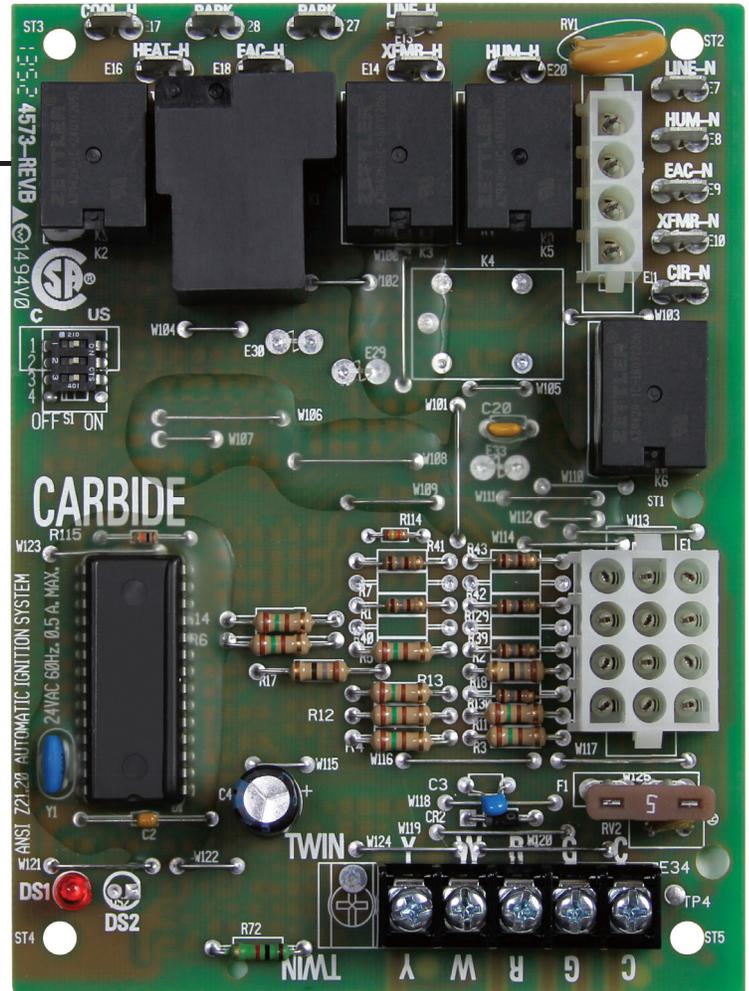
White-Rodgers and Trane Single Stage HSI Controls with 120V Ignitors

Direct Replacement Is Fast and Easy.

50A55-3797 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



Integrated Furnace Module – 50A55-3797



White-Rodgers™


EMERSON™
Climate Technologies

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Replaces:

White-Rodgers and Trane Single Stage
HSI Controls with 120V Ignitors

50A55-3797

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

50A55-3797 Cross Reference

50A55-3797 Replaces:

Trane	White-Rodgers
CNT02789	50A55-474
CNT02891	50A55-476
CNT03799	50A55-3797
D341122P01	50A55-571
D341235P01	
D341235P03	

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

4.4" W x 5.9" H x 1.25" D

For Additional Information

Visit www.white-rodgers.com

Timing Specifications

(All times are in seconds unless noted otherwise)

50A55-3797	
Pre-purge	0
Ignitor warm-up (1st 64 attempts)	17
Minimum ignitor warm-up	11
Maximum ignitor warm-up	21
Ignition activation period	3
Trial for ignition period	4
Retries	2 times
Valve sequence period	12
Interpurge	60
Post-purge	5
Lockout time	300
Heat delay to fan ON	45
Heat delay to fan OFF*	60/100/140/180
Cool delay to fan ON	2
Cool delay to fan OFF	0/180
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.