Single stage-120V ignitor HSI integrated furnace control kit

50A55-3797/Trane

OEM Direct

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



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 replaces:

Trane	White-Rodgers
CNT02789	50A55-474
CNT02891	50A55-476
CNT03799	50A55-3797
D341122P01	50A55-571
D341235P01	
D341396P01	
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

Operating temperature range

-40° to 175°F (-40° to 80°C)

Humidity range

5% to 93% relative humidity (non-condensing)

The White-Rodgers Mobile app:

Answers at your fingertips, with your smartphone or tablet.

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









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

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.



^{*}Measured with a DC microammeter in the flame probe lead