

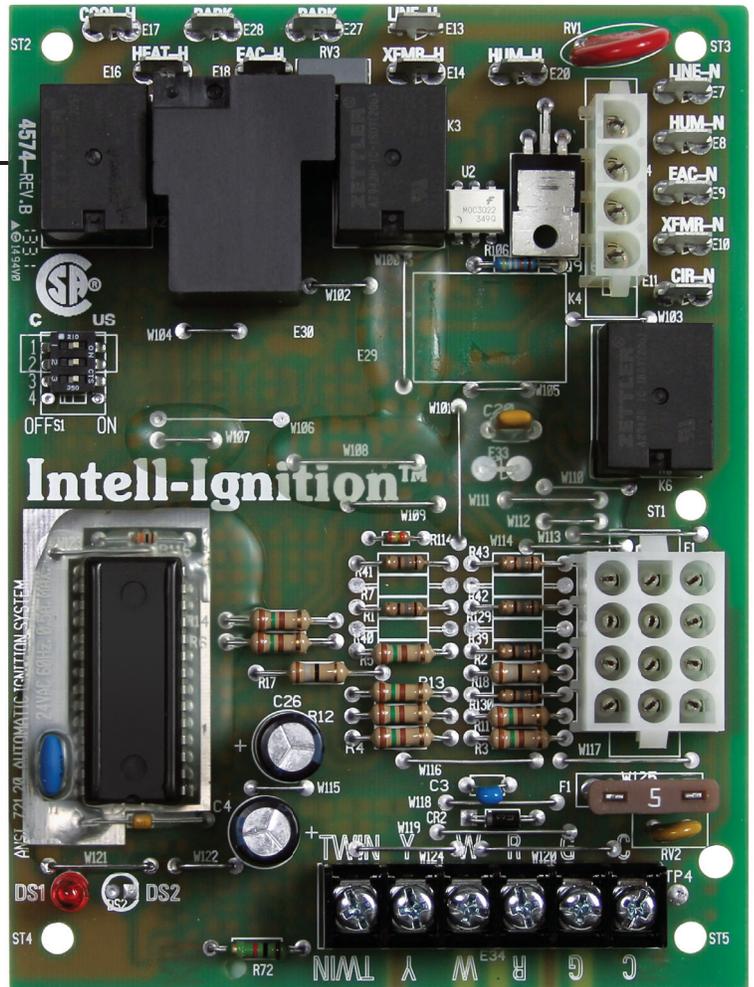
# Trane Single Stage — 80V Ignitor HSI Integrated Furnace Control Kit

OEM Replacement

## 50A65-5165

**Replaces:**

White-Rodgers and Trane Single Stage  
HSI Controls with 80V Ignitors



## Direct Replacement Is Fast and Easy.

50A65-5165 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 – 50A65-5165



White-Rodgers™

  
**EMERSON™**  
Climate Technologies

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## Features

- 80 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

## 50A65-5165 Cross Reference

50A65-5165 Replaces:

Trane	White-Rodgers
CNT03076	50A65-474
CNT03798	50A65-475
CNT05164	50A65-476
CNT05165	50A65-5165
D341213P01	
D341396P01	
D341396P03	
D341396P04	
D341396P05	

## 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: 2.0 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](http://www.white-rodgers.com)

## Timing Specifications

(All times are in seconds unless noted otherwise)

50A65-5165	
Pre-purge	0
Ignitor warm-up	20
Ignition activation period	2
Trial for ignition period	5
Retries	2 times
Valve sequence period	15
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	0/80
Auto reset	15 minutes
Humidifier	Yes
Electronic air cleaner	Yes

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