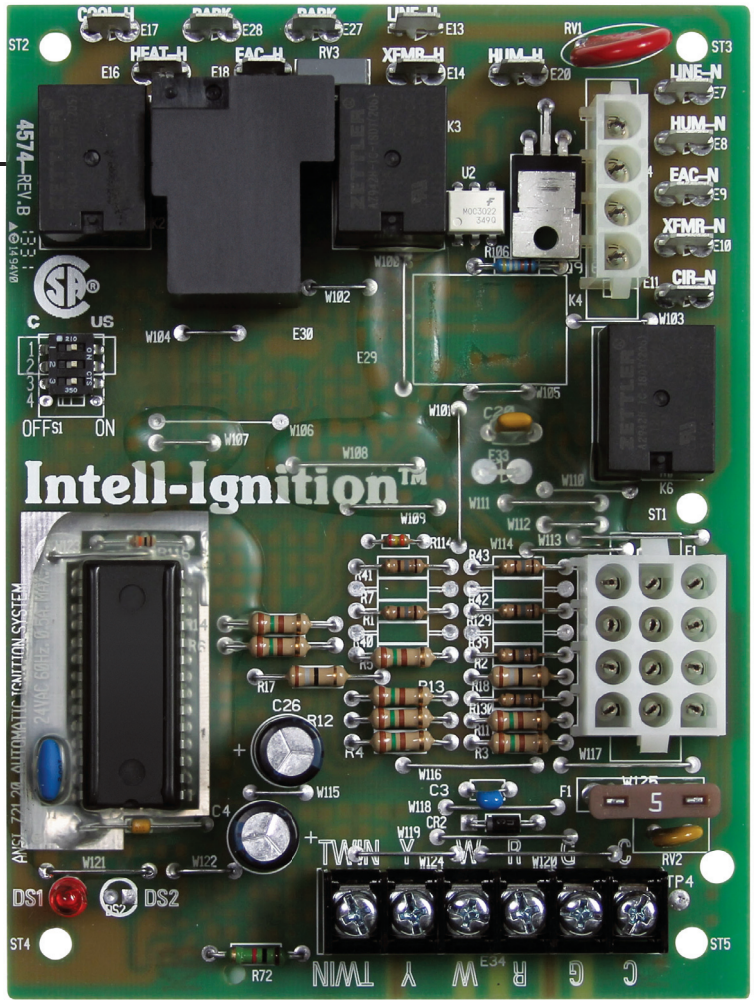
Trane Single Stage — 80V Ignitor HSI Integrated Furnace Control Kit

OEM Replacement

50A65-5165

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



Integrated Furnace Module – 50A65-5165

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

White-Rodgers™

EMERSON™
Climate Technologies

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

OEM Replacement

Replaces:
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50A65-5165

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

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.

White-Rodgers

Saint Louis, Missouri 314-553-3600
Markham, Ontario 905-948-3411
www.white-rodgers.com
www.emersonclimate.com

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EMERSON Climate Technologies