

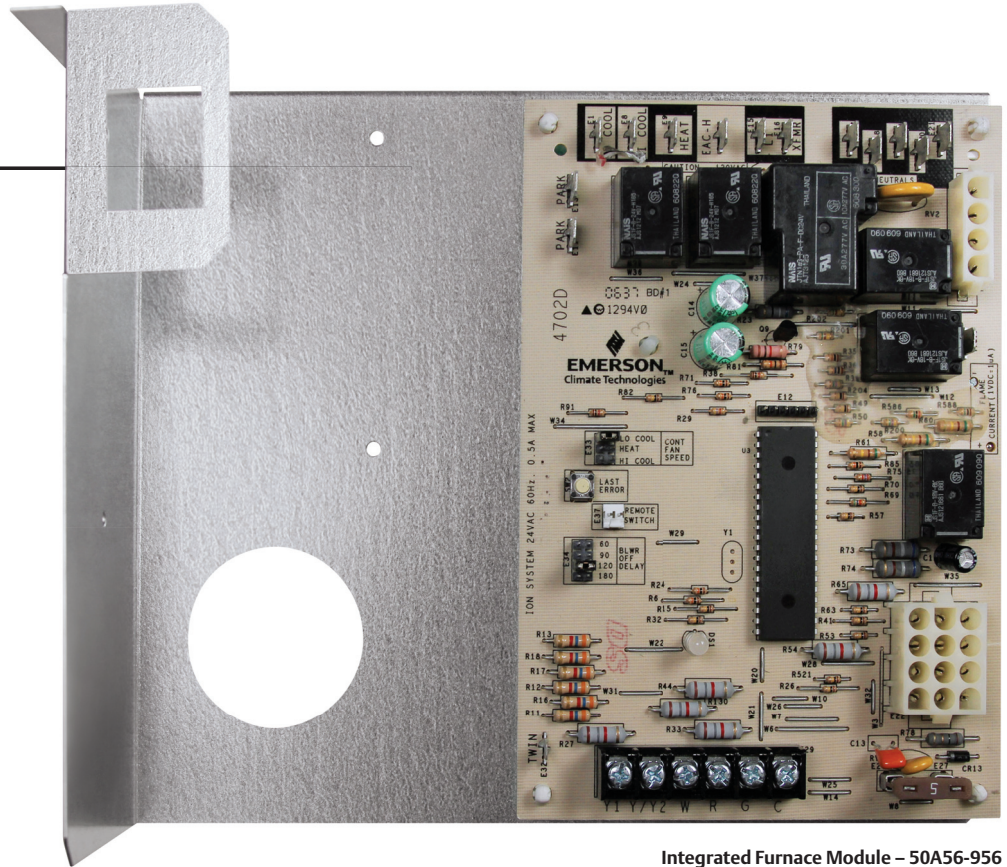
York Single Stage HSI Integrated Furnace Control Kit

OEM Replacement

50A56-956

Replaces:

White-Rodgers 50A56-242
and 50A56-243 and
Virtually All York Single Stage
HSI Controls with 120V Igniters



Integrated Furnace Module – 50A56-956

Direct Replacement Is Fast and Easy.

50A56-956 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
- Replacement Control Box



White-Rodgers™

EMERSON™
Climate Technologies

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50A56-956

Features

- Selectable Continuous Fan Speed
- System Diagnostics LED with Fault Recall
- Twin
- Third Fan Speed
- Two-Stage Cooling Y2 Input
- 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
- Heat Fan OFF Delay (Dipswitch Selectable)
- Y, Y2, W, R, G, C, TWIN Terminals

50A56-956 Cross Reference

50A56-956 Replaces:

| York | White-Rodgers |
|----------------|---------------|
| 265901 | 50A56-242 |
| 265902 | 50A56-243 |
| 539617 | 50A56-956 |
| S1-03100662000 | |
| S1-03101250000 | |
| S1-03101266000 | ICM |
| S1-03101267000 | ICM2808 |
| S1-03101267001 | (PCB Only) |
| S1-03101284000 | |
| S1-03101933000 | |
| S1-03101972000 | |
| S1-03101973000 | |
| S1-03109167000 | |
| S1-33102956000 | |
| S1-33103010000 | |

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

4.825" W x 7" H x 1.25" D

For Additional Information

Visit www.white-rodders.com

Timing Specifications

(All times are in seconds unless noted otherwise)

| 50A56-956 | |
|----------------------------|---------------|
| Pre-purge | 0 |
| Ignitor warm-up | 17 |
| Minimum ignitor warm-up | 17 |
| Maximum ignitor warm-up | 27 |
| Ignition activation period | 2 |
| Trial for ignition period | 7 |
| Retries | 2 times |
| Valve sequence period | 21 |
| Interpurge | 15 |
| Post-purge | 15 |
| Lockout time | 140 |
| Heat delay to fan ON | 30 |
| Heat delay to fan OFF* | 60/90/120/180 |
| Cool delay to fan ON | 0 |
| Cool delay to fan OFF | 60 |
| 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.