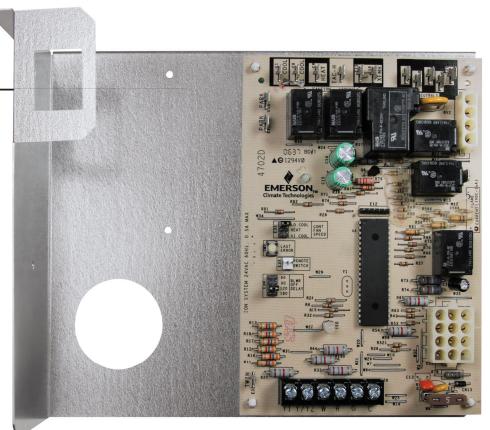
## York Single Stage HSI Integrated Furnace Control Kit

#### **OEM Replacement**

#### 50A56-956

#### Replaces:

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



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



## York Single Stage HSI Integrated Furnace Control Kit

### OEM Replacement

#### **Replaces:**

White-Rodgers 50A56-242 and 50A56-243 and Virtually All York Single Stage HSI Controls with 120V Ignitors 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 | ICM           |
| S1-03101266000 | ICM2808       |
| S1-03101267000 | (PCB Only)    |
| S1-03101267001 | (. 25 5))     |
| 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:  $1 \mu a DC^*$  Maximum current for non-detection:  $0.1 \mu a DC^*$  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-rodgers.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           |

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

