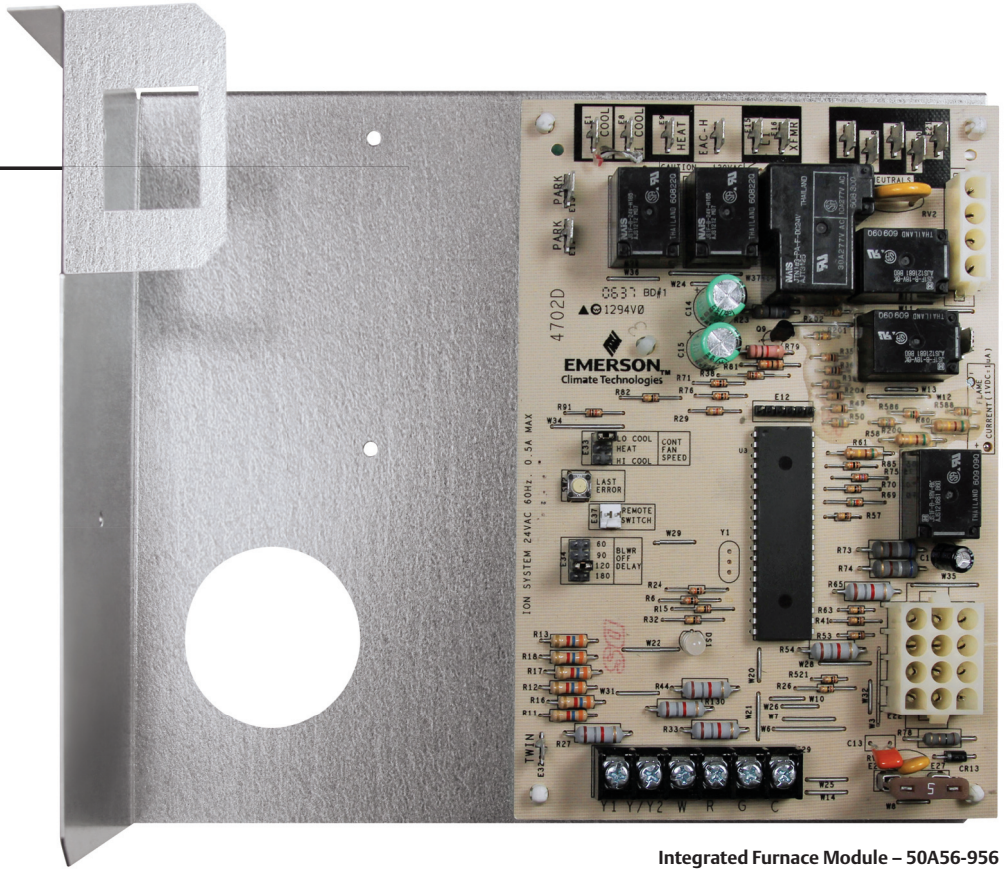
York Single Stage HSI Integrated Furnace Control Kit

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

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

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-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

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

White-Rodgers

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Markham, Ontario 905-948-3411
www.white-rodgers.com
www.emersonclimate.com

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