

# White-Rodgers 50A55-843

# Universal

## Universal Replacement Integrated Module for Silicon Carbide Ignition

- Replaces Most White-Rodgers and OEM Integrated Ignition Modules for Silicon Carbide Applications
- Extensive Model Cross-Reference Provided
- Diagnostic LED
- Additional Jumpers to Extend the Length of the Connections

## 50A55-843

Universal Integrated Module  
for Silicon Carbide Ignition  
Replaces over 100 OEM and  
Aftermarket Models



## Simplify Your Inventory.

Go with the Leader and Stock One Model That Replaces Them All.

The 50A55-843 Universal Silicon Carbide Integrated Ignition module employs a microprocessor which continually monitors, analyzes and controls the proper operation of the gas burner, inducer and fan. This one module will replace most of the 50A5X-XXX integrated ignition carbide modules that have been

manufactured by White-Rodgers for most OEM applications. The Universal Module includes an extensive cross-reference, additional jumper wires, additional wiring harness and a jumper for Trane applications. The module also has terminals for powering a humidifier and electronic air cleaner.

White  
Rodgers™

  
**EMERSON™**  
Climate Technologies

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### Application

Gas-Fired Forced-Air Furnaces with Integrated Furnace Control Module with a Silicon Carbide Ignitor

### Specifications

Electrical Rating at 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 A @ 25 VAC, 50/60 Hz, 0.6f  
Ignitor Relay 6.0 A @ 120 VAC, 50/60 Hz (resistive)  
Inducer Relay 2.2 FLA-3.5 FLA @ 120 VAC  
Circulator Relay 14.5 FLA-25.0 FLA @ 120 VAC

Operating Temperature:  
-40° to 175°F (-40° to 80°C)

Humidity Range:  
5% to 93%

| Model Number         | Pre-Purge             | Trial for Ignition | Ignition Activation Period | Valve Sequence  | Inter-Purge | Post-Purge | Lockout | Heat Delay to Fan On | Heat Delay to Fan Off |
|----------------------|-----------------------|--------------------|----------------------------|-----------------|-------------|------------|---------|----------------------|-----------------------|
| <b>50A55-843</b>     | 30                    | 4                  | 1                          | 12              | 60          | 15         | 300     | 30, 45               | 60, 90, 120, 180      |
| Cool Delay to Fan On | Cool Delay to Fan Off | Air Cleaner Tap    | Humidifier Tap             | Initial Warm-up | Retries     | Twin       |         |                      |                       |
| 5                    | 45, 90                | Yes                | Yes                        | 17              | 2 Times     | Yes        |         |                      |                       |

### Model Cross-Reference

#### 50A55-843 Replaces These Integrated Silicon Carbide Ignition Modules

|               |           |             |              |
|---------------|-----------|-------------|--------------|
| 031-00662-000 | 30757     | 50A50-296   | 75671        |
| 031-00662-700 | 350486    | 50A50-298   | 75672        |
| 031-01250-000 | 50A50-110 | 50A50-405   | 78712        |
| 031-01250-700 | 50A50-111 | 50A50-406   | 8068142      |
| 031-01266-000 | 50A50-112 | 50A50-408   | 8068561      |
| 031-01266-700 | 50A50-113 | 50A50-438   | 8068563      |
| 031-01284-000 | 50A50-130 | 50A50-471   | 83388        |
| 084141        | 50A50-131 | 50A50-472   | 99958174     |
| 1010806       | 50A50-142 | 50A50-473   | 99958175     |
| 102077-02     | 50A50-143 | 50A50-474   | D330927P01   |
| 102077-03     | 50A50-205 | 50A50-475   | D330930P01   |
| 10207704      | 50A50-206 | 50A50-571   | D330934P01   |
| 102077-04     | 50A50-207 | 50A55143    | D340035P01   |
| 10207706      | 50A50-208 | 50A55-143   | D340774P01   |
| 102077-09     | 50A50-209 | 50A55-241   | D341122P01   |
| 10207710      | 50A50-210 | 50A55-245   | D341235P02   |
| 10207714      | 50A50-215 | 50A55-250   | D341235P03   |
| 12L4201       | 50A50-216 | 50A55-285   | PCBBF117     |
| 1380686       | 50A50-229 | 50A55-286   | X13120666010 |
| 1380698       | 50A50-230 | 50A55-288   | X13130436-01 |
| 1380699       | 50A50-240 | 50A55-438   | X13130436-02 |
| 14028         | 50A50-241 | 50A55-474   | X13130436-04 |
| 14029         | 50A50-245 | 50A55-571   | X13130436010 |
| 14030         | 50A50-285 | 50A55-843   | X13130436040 |
| 14031         | 50A50-286 | 52537074000 | X13640678040 |
| 117284        | 50A50-288 | 52537077000 | X13650597010 |
| 194300330001  | 50A50-295 | 56L8501     | X445901      |

### See our other Universal Replacement Ignition Modules:

Non-Integrated Module for Silicon Carbide Ignitor  
50E47-843



Integrated Module for Nitride Ignitor  
50A65-843



Direct Spark Ignition Module  
50D50-842



Intermittent Spark Pilot Module  
50D50-843



Universal Single Stage HSI Integrated Furnace Control Kit  
50M56U-843



Universal Two-Stage HSI Integrated 3-Speed (PSC) Circulator Furnace Control Kit  
21M51U-843



Universal Two-Stage HSI Integrated Variable Speed (ECM) Circulator Furnace Control Kit  
21V51U-843

