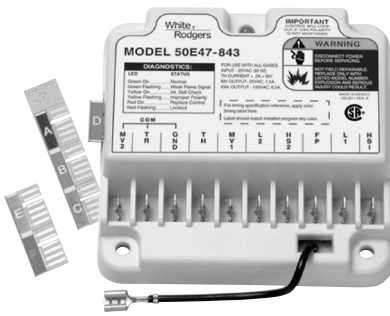


**50E47-843****UNIVERSAL 50E47-843 NON-INTEGRATED HSI  
IGNITION MODULE**

The Universal 50E47-843 Replaces White-Rodgers 50E47 Modules and Many Competitive Silicon Carbide, Non-Integrated Modules. Includes a Complete Module Cross Reference and Program Keys for Fast and Accurate Replacement.

**FEATURES**

- Program keys for multiple timing selections.
- Tri-colored LED indicator for diagnostics.
- Direct and indirect flame sense compatible.
- Universal design for maximum versatility.

**SPECIFICATIONS**

|                                      |                                                                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Dimensions . . . . .                 | 4.13"W x 4.13"H x 1.5"D                                                                                                           |
| Electrical rating . . . . .          | Input 18 to 30 VAC, 25 VAC nominal,<br>Max. input current @ 25 VAC; .250mA @ 28 VAC                                               |
| Relay load settings . . . . .        | Valve relay: 1.5 amps @ 28 VAC, 50 / 60 Hz, .6 pA<br>Ignitor relay: 1.52A, 120 VAC, 50 / 60 Hz resistive                          |
| Operating temperature . . . . .      | -40° to +175°F (-40° to +80°C)                                                                                                    |
| Humidity range . . . . .             | 95% RH (non-condensing) max.                                                                                                      |
| Mounting . . . . .                   | Surface mount or 4" x 4 junction box                                                                                              |
| Applications . . . . .               | For use with all gases                                                                                                            |
| Flame current requirements . . . . . | Min. current to insure flame: 2 µADC<br>Min. current for non-detection: 0.2 µADC<br>Max. allowable leakage resistance: 100 M Ohms |
| Agency . . . . .                     | A.G.A. and C.G.A. design certified                                                                                                |

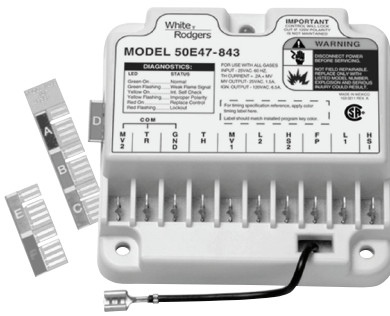
**TECHNICAL HELP**

Wiring operation and troubleshooting . . . . . See pages 204-207

| Model Number     | PROGRAM KEY (COLOR) | TRIAL FOR IGNITION | RETRIES | PREPURGE | IGNITOR WARMUP |
|------------------|---------------------|--------------------|---------|----------|----------------|
| <b>50E47-843</b> | A (blue)            | 4 Sec.             | 0       | 30 Sec.  | 45 Sec.        |
|                  | B (red)             | 4 Sec.             | 2       | 30 Sec.  | 45 Sec.        |
|                  | C (green)           | 7 Sec.             | 0       | 30 Sec.  | 45 Sec.        |
|                  | D (violet)          | 7 Sec.             | 2       | 30 Sec.  | 45 Sec.        |
|                  | E (orange)          | 4 Sec.             | 2       | 30 Sec.  | 17 Sec.        |
|                  | F (yellow)          | 7 Sec.             | 2       | 30 Sec.  | 17 Sec.        |

**CROSS REFERENCE****50E47-843 Replaces:**

|               |           |           |           |                 |                 |                 |              |
|---------------|-----------|-----------|-----------|-----------------|-----------------|-----------------|--------------|
| 0050050       | 50D47-160 | 50E47-120 | 50F47-101 | 780-910         | HS780-17NR-312A | HS780-34PL-106A | S89C1004     |
| 025-25436-000 | 50D47-161 | 50E47-130 | 50F47-140 | 832-002         | HS780-17PL-106A | HS780-34PL-108A | S89C1012     |
| 02525436700   | 50D47-170 | 50E47-140 | 50F47-160 | 832-005         | HS780-17PL-108A | HS780-34PL-304A | S89C1046     |
| 025-25436-700 | 50D47-20  | 50E47-150 | 50F47-40  | 833-002         | HS780-17PL-304A | HS780-34PL-306A | S89C1079     |
| 1001346       | 50D47-260 | 50E47-160 | 50F47-60  | 995395          | HS780-17PL-306A | HS780-34PL-308A | S89C1087     |
| 10376732      | 50D47-270 | 50E47-161 | 50G47-1   | 99796380        | HS780-17PL-308A | HS780-34PR-106A | S89C1103     |
| 120-08027     | 50D47-40  | 50E47-170 | 50G47-130 | 99905232        | HS780-17PR-104A | HS780-34PR-108A | S89D1002     |
| 1300-4928     | 50D47-50  | 50E47-20  | 50G47-140 | C6411102        | HS780-17PR-108A | HS780-34PR-304A | S89G1005     |
| 1380694       | 50D47-60  | 50E47-260 | 50G47-150 | CNT03776        | HS780-17PR-306A | HS780-34PR-306A | S89G1013     |
| 2076-0184     | 50D47-70  | 50E47-30  | 50G47-160 | CNT03794        | HS780-34NL-106A | HS780-34PR-308A | S89G1021     |
| 350760        | 50D47-905 | 50E47-40  | 50G47-40  | HS780-17NL-104A | HS780-34NL-108A | S8610U1000      | S89G1047     |
| 3591-1306     | 50D47-915 | 50E47-50  | 50G47-60  | HS780-17NL-106A | HS780-34NL-304A | S890C1007       | S89H1003     |
| 3XA74         | 50D47-925 | 50E47-560 | 6279527   | HS780-17NL-108A | HS780-34NL-306A | S890D1006       | S89H1011     |
| 4CZ50         | 50D47-935 | 50E47-60  | 780-780   | HS780-17NL-304A | HS780-34NL-308A | S890G1003       | S89H1029     |
| 4E954         | 50D47-945 | 50E47-70  | 780-783   | HS780-17NL-306A | HS780-34NL-312A | S890G1011       | S89J1008     |
| 4E955         | 50D47-955 | 50E47-841 | 780-784   | HS780-17NL-308A | HS780-34NR-104A | S890G1029       | X13130437070 |
| 4E956         | 50D47-965 | 50E47-843 | 780-785   | HS780-17NR-104A | HS780-34NR-106A | S890G1037       | X13130437080 |
| 50D47-1       | 50D47-975 | 50E47-850 | 780-786   | HS780-17NR-106A | HS780-34NR-304A | S890H1002       | X324601      |
| 50D47-101     | 50E47-1   | 50E47-851 | 780-787   | HS780-17NR-108A | HS780-34NR-306A | S890H1010       |              |
| 50D47-120     | 50E47-10  | 50E47-860 | 780-788   | HS780-17NR-304A | HS780-34NR-308A | S890H1028       |              |
| 50D47-140     | 50E47-101 | 50E47-861 | 780-789   | HS780-17NR-306A | HS780-34NR-312A | S8910U          |              |
| 50D47-150     | 50E47-110 | 50E47-870 | 780-790   | HS780-17NR-308A | HS780-34PL-104A | S8910U1000      |              |

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IGNITION MODULE**

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**FEATURES**

- Program keys for multiple timing selections.
- Tri-colored LED indicator for diagnostics.
- Direct and indirect flame sense compatible.
- Universal design for maximum versatility.

**SPECIFICATIONS**

|                                      |                                                                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Dimensions . . . . .                 | 4.13"W x 4.13"H x 1.5"D                                                                                                           |
| Electrical rating . . . . .          | Input 18 to 30 VAC, 25 VAC nominal,<br>Max. input current @ 25 VAC; .250mA @ 28 VAC                                               |
| Relay load settings . . . . .        | Valve relay: 1.5 amps @ 28 VAC, 50 / 60 Hz, .6 pA<br>Ignitor relay: 1.52A, 120 VAC, 50 / 60 Hz resistive                          |
| Operating temperature . . . . .      | -40° to +175°F (-40° to +80°C)                                                                                                    |
| Humidity range . . . . .             | 95% RH (non-condensing) max.                                                                                                      |
| Mounting . . . . .                   | Surface mount or 4" x 4 junction box                                                                                              |
| Applications . . . . .               | For use with all gases                                                                                                            |
| Flame current requirements . . . . . | Min. current to insure flame: 2 µADC<br>Min. current for non-detection: 0.2 µADC<br>Max. allowable leakage resistance: 100 M Ohms |
| Agency . . . . .                     | A.G.A. and C.G.A. design certified                                                                                                |

**TECHNICAL HELP**

Wiring operation and troubleshooting . . . . . See pages 204-207

| Model Number     | PROGRAM KEY (COLOR) | TRIAL FOR IGNITION | RETRIES | PREPURGE | IGNITOR WARMUP |
|------------------|---------------------|--------------------|---------|----------|----------------|
| <b>50E47-843</b> | A (blue)            | 4 Sec.             | 0       | 30 Sec.  | 45 Sec.        |
|                  | B (red)             | 4 Sec.             | 2       | 30 Sec.  | 45 Sec.        |
|                  | C (green)           | 7 Sec.             | 0       | 30 Sec.  | 45 Sec.        |
|                  | D (violet)          | 7 Sec.             | 2       | 30 Sec.  | 45 Sec.        |
|                  | E (orange)          | 4 Sec.             | 2       | 30 Sec.  | 17 Sec.        |
|                  | F (yellow)          | 7 Sec.             | 2       | 30 Sec.  | 17 Sec.        |

**CROSS REFERENCE****50E47-843 Replaces:**

|               |           |           |           |                 |                 |                 |              |
|---------------|-----------|-----------|-----------|-----------------|-----------------|-----------------|--------------|
| 0050050       | 50D47-160 | 50E47-120 | 50F47-101 | 780-910         | HS780-17NR-312A | HS780-34PL-106A | S89C1004     |
| 025-25436-000 | 50D47-161 | 50E47-130 | 50F47-140 | 832-002         | HS780-17PL-106A | HS780-34PL-108A | S89C1012     |
| 02525436700   | 50D47-170 | 50E47-140 | 50F47-160 | 832-005         | HS780-17PL-108A | HS780-34PL-304A | S89C1046     |
| 025-25436-700 | 50D47-20  | 50E47-150 | 50F47-40  | 833-002         | HS780-17PL-304A | HS780-34PL-306A | S89C1079     |
| 1001346       | 50D47-260 | 50E47-160 | 50F47-60  | 995395          | HS780-17PL-306A | HS780-34PL-308A | S89C1087     |
| 10376732      | 50D47-270 | 50E47-161 | 50G47-1   | 99796380        | HS780-17PL-308A | HS780-34PR-106A | S89C1103     |
| 120-08027     | 50D47-40  | 50E47-170 | 50G47-130 | 99905232        | HS780-17PR-104A | HS780-34PR-108A | S89D1002     |
| 1300-4928     | 50D47-50  | 50E47-20  | 50G47-140 | C6411102        | HS780-17PR-108A | HS780-34PR-304A | S89G1005     |
| 1380694       | 50D47-60  | 50E47-260 | 50G47-150 | CNT03776        | HS780-17PR-306A | HS780-34PR-306A | S89G1013     |
| 2076-0184     | 50D47-70  | 50E47-30  | 50G47-160 | CNT03794        | HS780-34NL-106A | HS780-34PR-308A | S89G1021     |
| 350760        | 50D47-905 | 50E47-40  | 50G47-40  | HS780-17NL-104A | HS780-34NL-108A | S8610U1000      | S89G1047     |
| 3591-1306     | 50D47-915 | 50E47-50  | 50G47-60  | HS780-17NL-106A | HS780-34NL-304A | S890C1007       | S89H1003     |
| 3XA74         | 50D47-925 | 50E47-560 | 6279527   | HS780-17NL-108A | HS780-34NL-306A | S890D1006       | S89H1011     |
| 4CZ50         | 50D47-935 | 50E47-60  | 780-780   | HS780-17NL-304A | HS780-34NL-308A | S890G1003       | S89H1029     |
| 4E954         | 50D47-945 | 50E47-70  | 780-783   | HS780-17NL-306A | HS780-34NL-312A | S890G1011       | S89J1008     |
| 4E955         | 50D47-955 | 50E47-841 | 780-784   | HS780-17NL-308A | HS780-34NR-104A | S890G1029       | X13130437070 |
| 4E956         | 50D47-965 | 50E47-843 | 780-785   | HS780-17NR-104A | HS780-34NR-106A | S890G1037       | X13130437080 |
| 50D47-1       | 50D47-975 | 50E47-850 | 780-786   | HS780-17NR-106A | HS780-34NR-304A | S890H1002       | X324601      |
| 50D47-101     | 50E47-1   | 50E47-851 | 780-787   | HS780-17NR-108A | HS780-34NR-306A | S890H1010       |              |
| 50D47-120     | 50E47-10  | 50E47-860 | 780-788   | HS780-17NR-304A | HS780-34NR-308A | S890H1028       |              |
| 50D47-140     | 50E47-101 | 50E47-861 | 780-789   | HS780-17NR-306A | HS780-34NR-312A | S8910U          |              |
| 50D47-150     | 50E47-110 | 50E47-870 | 780-790   | HS780-17NR-308A | HS780-34PL-104A | S8910U1000      |              |