# SMK Smoke Power Converter Module Installation Sheet

## Operation

The SMK Smoke Power Converter Module provides a backup power source for two-wire smoke circuits connected to a Signature data circuit. The SMK monitors the operating power from the power supply. When power begins to degrade, the SMK provides the necessary operating voltage to the two-wire smoke detection circuits.

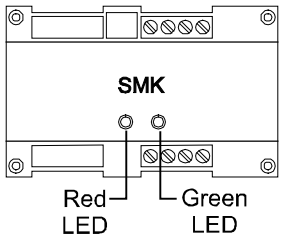
**LED operation**

The module provides two LEDs that show its status.

Normal: Green LED flashes

Alarm/active: Red LED flashes

**Figure 1: LED location**

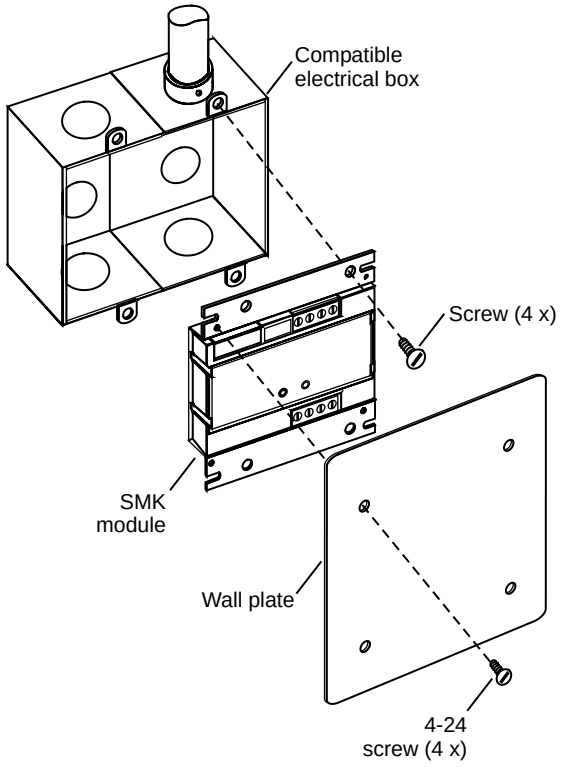



## Installation

**WARNING:** This module will not operate without electrical power. As fires frequently cause power interruption, you should discuss further safeguards with your local fire protection specialist.

**Note:** The module is shipped from the factory as an assembled unit; it contains no user-serviceable parts and should not be disassembled.

**Figure 2: Module installation**



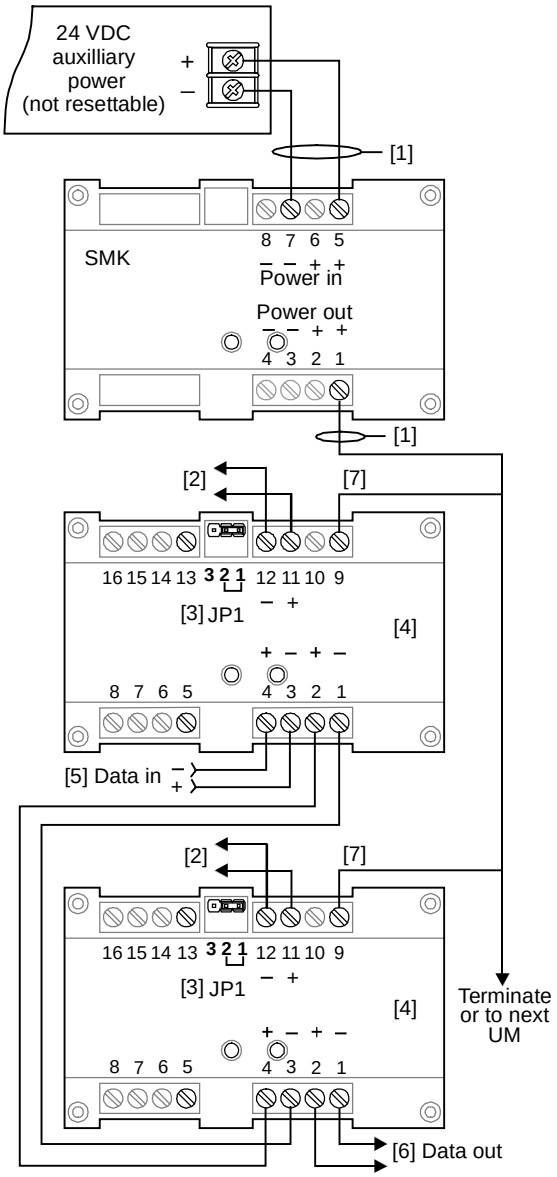

**To install the module:**

1. Verify that all field wiring is free of opens, shorts, and ground faults.
2. Make all wiring connections as shown in “Wiring.”
3. Mount the module on the electrical box using screws provided with the electrical box.
4. Mount the wall plate on the module using #4-24 x 1/2 in. (13 mm) self-tapping screws.

## Wiring

Wire in accordance with NFPA 72 and CAN/ULC-S524. Be sure to observe the polarity of the terminals on the terminal block as shown in the diagram.

**Figure 3: Module wiring**




[1] 1 volt drop, maximum
[2] To compatible 2-wire smoke detectors
[3] Install a jumper on pins 1 and 2 of JP1
[4] Universal Module (UM) set to personality code 13, 14, 20, or 21
[5] From control panel or previous device
[6] To next device
[7] Wire to smoke power according to your local AHJ
8. All wiring is supervised and power-limited
9. For detailed information regarding the UM, refer to the appropriate installation sheet

## Specifications

| | |
|---|---|
| Input voltage (not resettable) | 21.9 to 28.3 VDC |
| Output voltage | 24 VDC nom. at 200 mA, max., special applications |
| Ground fault impedance | 10 kΩ |
| Storage temperature range | –4 to 140°F (–20 to 60°C) |
| Compatible electrical boxes | North American 4 inch square x 2-1/2 in. (64 mm) deep 2 gang box<br>Standard 4 in. square box 1-1/2 in. (38 mm) deep |
| Wire size | 14, 16, or 18 AWG wire (1.5, 1.0, or 0.75 $mm^2$) (Sizes 16 and 18 AWG are preferred) |
| Operating environment | |
| Temperature | 32 to 120°F (0 to 49°C) |
| Relative humidity | 0 to 93% noncondensing |

## Contact information

For contact information, see www.edwardsfiresafety.com.

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