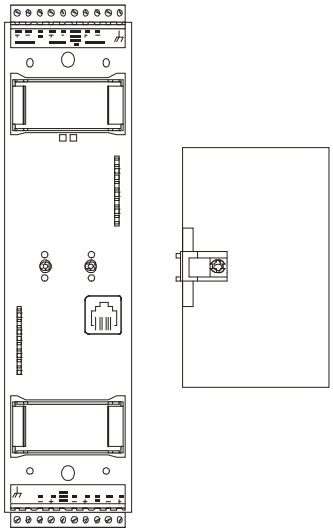
3-SSDC2-E and 3-SDDC2-E Signature Controller Module Installation Sheet



Description

The 3-SSDC2-E and 3-SDDC2-E Signature controller modules provide up to two Class A or Class B Signature data circuits for detectors and modules. The 3-SSDC2-E provides one circuit and the 3-SDDC2-E provides two circuits. See Table 1 for a description of each module.

The controller module also provides a connection for powering conventional two-wire smoke detector circuits on Signature Series modules.

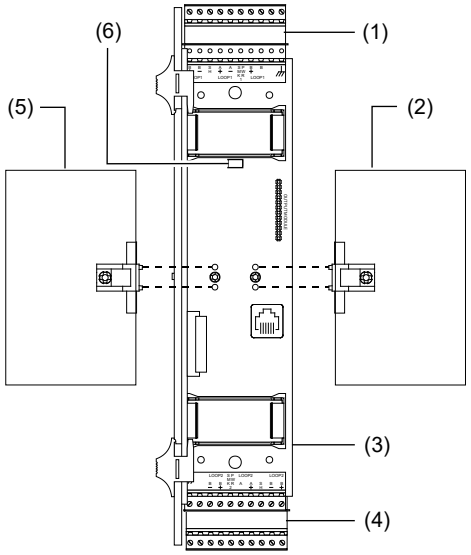
The module requires one space on the rail chassis and is secured to the rail using snap rivet fasteners. The module features a hinged front panel for mounting displays or a blank protective faceplate.

Table 1: Model description and content

Number	Description	Contains
3-SSDC2-E	Single circuit controller module	(1) Rail module (1) Signature Data Circuit Card (1) Filter card (P/N 7990089) (2) Ferrite clamps (P/N 2250002) (1) Bracket (1) Rivet (1) Nylon screw
3-SDDC2-E	Two circuits controller module	(1) Rail module (2) Signature Data Circuit Card (2) Filter cards (P/N 7990089) (4) Ferrite clamps (P/N 2250002) (1) Bracket (2) Rivet (2) Nylon screw

Number	Description	Contains
3-SDC1-E	Single-to-two circuit module kit	(1) Signature Data Circuit Card (1) Filter card (P/N 7990089) (2) Ferrite clamps (P/N 2250002) (1) Bracket (1) Rivet (1) Nylon screw

Figure 1: Signature controller module components



(1) Filter card for circuit 1
(2) 3-SDC1-E for circuit 1
(3) 3-SSDC2-E / 3-SDDC2-E Signature controller module
(4) Filter card for circuit 2
(5) 3-SDC1-E for circuit 2
(6) Kapton label covering the bus communication LEDs

Installation

Install and wire this module in accordance with applicable national and local codes, ordinances, and regulations.

Cautions

- Equipment damage hazard. This product is sensitive to electrostatic discharge (ESD). To avoid damage, follow accepted ESD handling procedures.
- Equipment damage hazard. Do not plug rail modules into the rail chassis assembly while voltages are present on the rail. Failure to de-energize the control panel before plugging in the rail module may result in equipment damage.
- Equipment damage hazard. Do not flex the filter card or exert excessive pressure on the field wiring connectors when installing the filter card. See Figure 3.
- Equipment damage hazard. Do not connect field wiring or connect/disconnect the terminal block without supporting the back edge of the filter card to avoid flexing the filter card.

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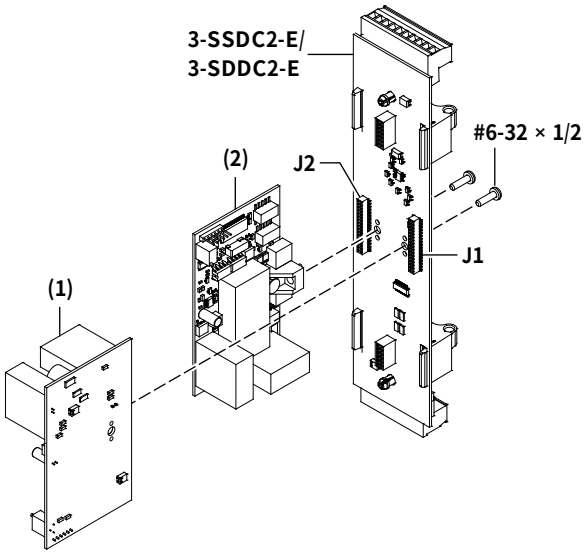
To install the 3-SSDC2-E or 3-SDDC2-E

1. Connect the 3-SDC1-E data circuit card for circuit 1 to the circuit 1 connectors on the back of the controller module. See Figure 2.
2. Place a Kapton label over the bus communication LEDs. See Figure 1. The power supply module (3-PPS/M-230-E, 4-PPS/M) includes a sheet of Kapton labels for this purpose.
3. If a control-display module is required, install it at this time. Refer to the installation instructions provided with the control-display module.
4. Plug the filter card for circuit 1 into the top connector on the rail module. Push down on one side while adding support on the other side to prevent flexing. See Figure 3.
5. Snap-rivet the controller module onto the rail.
6. Before connecting the field wiring, test the field wiring for opens or shorts. When the circuit checks out properly, connect it to the appropriate terminals as shown in "Wiring" below.

To convert a 3-SSDC2-E into a 3-SDDC2-E

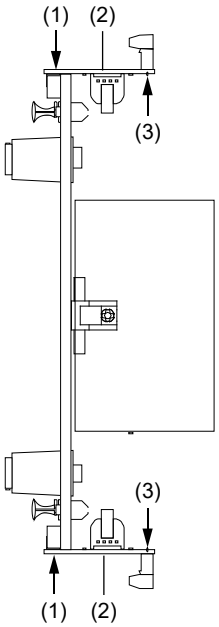
1. Remove the 3-SSDC2-E from the rail.
2. Connect a 3-SDC1-E data circuit card for circuit 2 to the circuit 2 connectors on the back of the controller module. See Figure 2.
3. Plug the filter card for circuit 2 into the bottom connector on the rail module. Push down on one side while adding support on the other to prevent flexing. See Figure 3.
4. Snap-rivet the controller module onto the rail.
5. Before connecting the field wiring, test the field wiring for opens or shorts. When the circuit checks out properly, connect it to the appropriate terminals as described in "Wiring" below.
6. In the 3-SDU project database, redefine the 3-SSDC2-E as a 3-SDDC2-E.

Figure 2: Interface card installation



(1) 3-SDC1-E for circuit 1 (2) 3-SDC1-E for circuit 2

Figure 3: Filter card installation



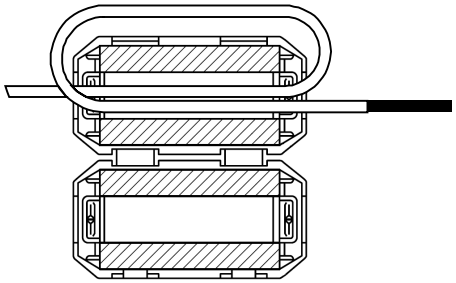
(1) Push down to connect filter card to the module
(2) Filter card
(3) Push up for support when installing or removing the filter card

Installing the ferrite clamp

1. Install a ferrite clamp around each pair of field wires entering or leaving the cabinet.

   Note: Install the ferrite clamp at a point closest to the cabinet.
2. Loop the wires once around the ferrite clamp as shown in Figure 5.

Figure 4: Installing the ferrite clamp



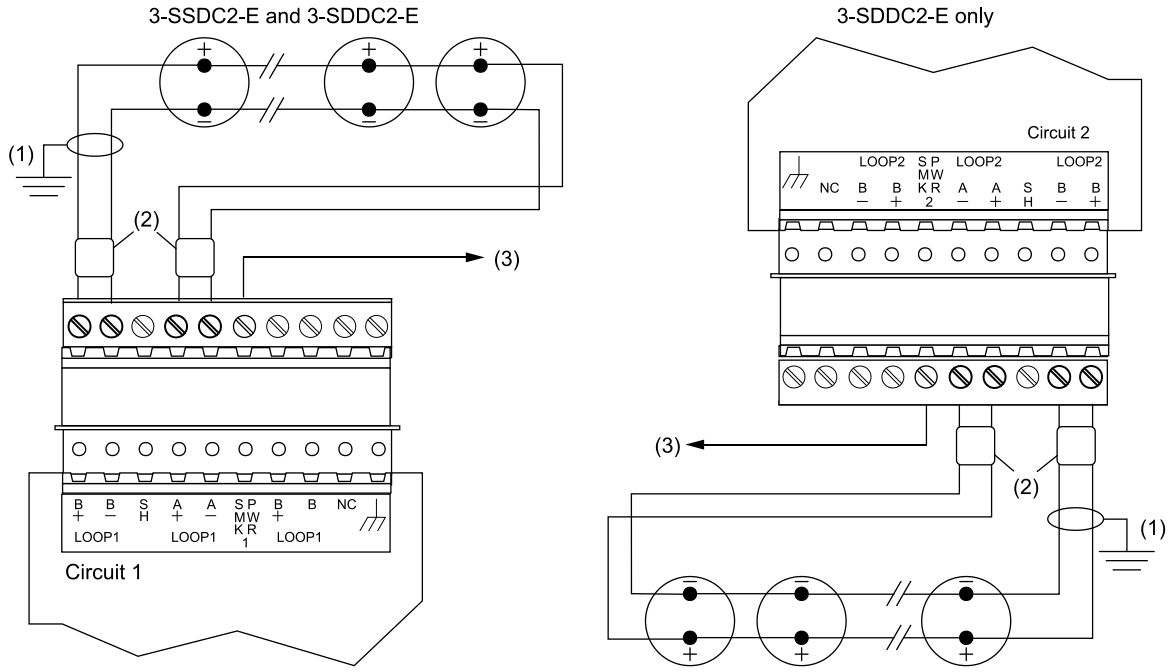
Wiring

Connect field wiring as shown in Figure 5.

Notes

- Wiring is supervised and power-limited.
- Polarity is indicated for normal monitoring of the circuit's electrical integrity.

Figure 5: Wiring the 3-SSDC2-E and 3-SDDC2-E



(1) Shields (if used) must be continuous, insulated, and connected to earth ground
(2) Ferrite Clamp
(3) Optional SMOKE_POWER_OUT

Specifications

Circuit resistance	100 Ω max. with 250 devices
Circuit capacitance	0.33 μF, max.
Isolators	
Devices between isolators	32 max.
Resistance between isolators	18 Ω max.
Standby current including a full loop of device	
3-SSDC2-E	144 mA
3-SDDC2-E	264 mA
Alarm current including a full loop of devices	
3-SSDC2-E	204 mA
3-SDDC2-E	336 mA
Smoke power	19.95 VDC
Wire size	0.75 to 3.00 sq. mm
Termination	Removable plug-in terminal strips on module
Installation	1 LRM space on rail chassis
Module configuration	
3-SSDC2-E	1 Signature data circuit card
3-SDDC2-E	2 Signature data circuit cards
Circuit configuration	Class A DCLA
Circuit capacity	125 detectors and 125 modules per circuit
Operating environment	
Temperature	0 to 49°C
Relative humidity	0 to 93% noncondensing at 32°C

Regulatory information

For regulatory information, refer to the *EST3 European Marketplace Manual* (P/N 270925) or *EST4 European Marketplace Manual* (P/N 3102838).

Contact information

For contact information, see www.edwardsfiresafety.com.