CONV.ZONE MOD.200S RES.EOL

EM210EA-CZR

Instruction Sheet

R10267GB1

Schneider Electric
www.se.com/buildings

R10267GB1
February 2024

© 2022-2024 – Schneider Electric. All Rights Reserved. This information is only to be used as guidance. Subject to changes and errors.

Contents

Safety Information 4

1 CONV.ZONE MOD.200S RES. EOL EM210EA-CZR 4

1.1 Specifications 4
1.1.1 Intelligent loop 4
1.1.2 Conventional zone 5
1.1.3 General 5
1.1.4 Dimensions 5

2 Installation 6

2.1 Short Circuit Isolators 6
2.2 Wiring 7
2.2.1 Power taken from external 24Vdc power supply of from the panel 24Vdc output 7
2.2.2 Power taken from the addressable loop 7
2.3 Address setting 8

Safety Information

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

1 CONV.ZONE MOD.200S RES. EOL EM210EA-CZR

The CONV.ZONE MOD.200S RES. EOL EM210EA-CZR (FFS06717032) is used to link a zone of conventional devices to an intelligent system controlled by an addressable panel. The CZR has a resistor built in, making it especially suitable for connection to a conventional zone that operates in a hazardous area requiring intrinsically safe (IS) equipment. The module must only be connected to Schneider Electric control panels using analogue addressable communication protocols for monitoring and control.

NOTE: When an intrinsically safe system is used on the loop, a short on the sensor side of the barrier will result in an alarm. Only a short on the module side of the safety barrier will generate a fault signal. A single tri-colour LED indicates the status of the module. In normal conditions, the LED can be set by command from the control panel to blink green when the module is polled. In the case of a fire alarm on the conventional zone, the LED is switched on constant red by panel command. If a fault is detected on the conventional zone or the zone supply voltage drops below 12V, or a fault with the external power supply is signaled, the LED will blink yellow if enabled on the control panel. When a short circuit is detected on the loop to either side of the module, the LED is switched to show a constant yellow light.

This module does not require maintenance.

1.1 Specifications

1.1.1 Intelligent loop

Max. Standby Current (@24 V and 25oC)

External Supply Conventional Zone:

No Communication: 120 µA

Max. Standby Current (@24 V and 25oC)

Conventional Zone connected to resistive EOL only (no detectors),

Loop Powered Conventional Zone:

No Communication: 6.3 mA

LED Current (Red): 1.3 mA

LED Current (Yellow): 4.5 mA

1.1.2 Conventional zone

External Supply Voltage: 12 to 28.5 V

18 to 28.5 V if conventional zone is loop powered

Maximum Standby Load Current:

2.8 mA for detectors at 18 V

3.8 mA for detectors at 24 V

Maximum Zone Load: 60 mA (limited internally)

Maximum Conventional Line Resistance: 50 Ω

End of Line Resistor: 3.9 kΩ, 5% (supplied)

1.1.3 General

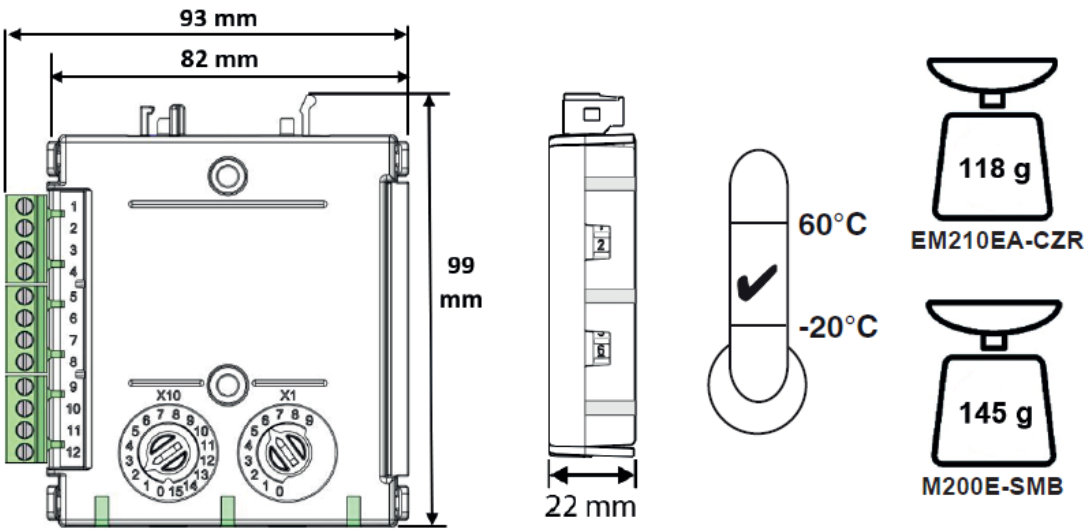
Humidity: 5% to 95% relative humidity (non-condensing)

Operating temperature range -20ºC to +60ºC

Ingress protection: IP44 mounted in M200E-SMB

Maximum Wire Gauge: 2.5 mm²

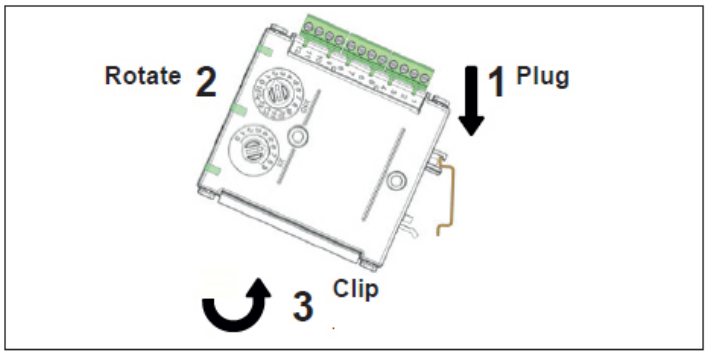
1.1.4 Dimensions



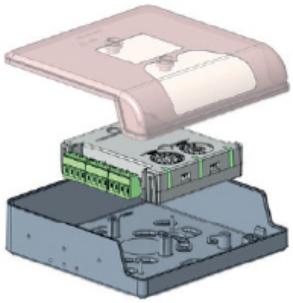
2 Installation

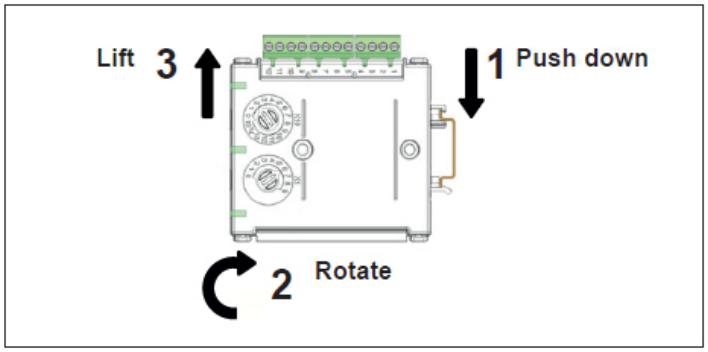
EM200 series modules can be mounted in several ways:

1:2 DIN



1:1 M200E-SMB





1:1 An M200E-SMB custom low profile surface-mounting box. The SMB Base is affixed to mounting surface, and then the module and cover are screwed onto the base using the two screws supplied. Box dimensions: 132 mm (H) x 137 mm (W) x 40 mm (D)

1:2 The DIN bracket on top allows mounting onto standard 35 mm x 7.5 mm "Top Hat" DIN rail inside a control panel or other suitable enclosure. Install and remove as shown in Figure 1:2

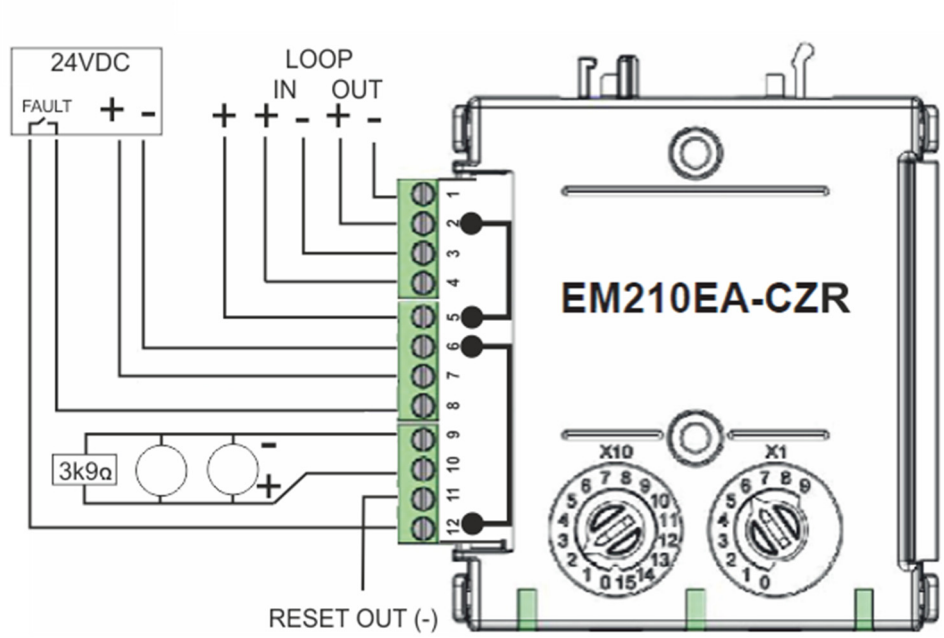
Wiring to all series EM200 modules is via plug in type terminals capable of supporting conductors up to 2.5 mm².

2.1 Short Circuit Isolators

All EM200 series modules are provided with short circuit monitoring and isolators on the intelligent loop. If required the isolators may be wired out of the loop to facilitate the use of the modules on high current loaded loops, for example if sounders are used. To achieve this, the loop out positive should be wired to terminal 5 rather than terminal 2.

2.2 Wiring

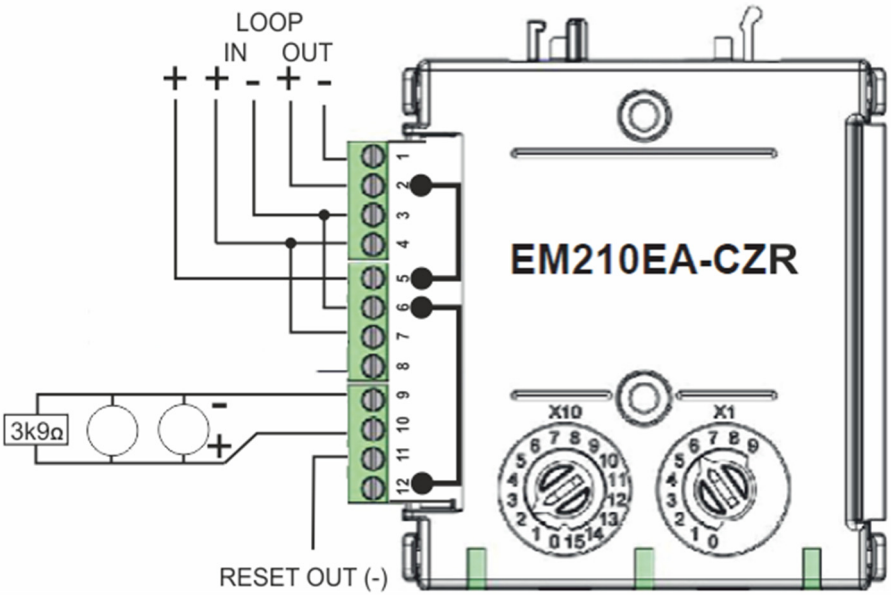
2.2.1 Power taken from external 24Vdc power supply of from the panel 24Vdc output



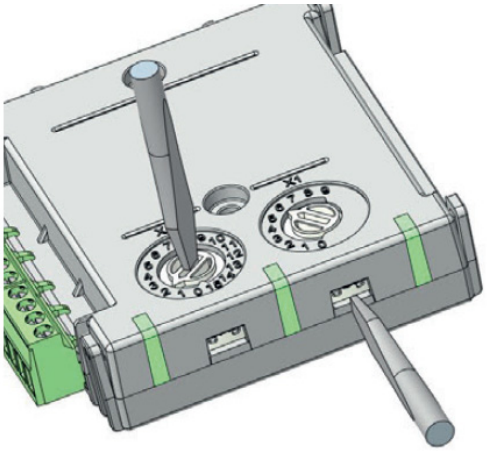
2.2.2 Power taken from the addressable loop

NOTE!

To avoid addressable loop overloading only one module / loop can be powered like this.



2.3 Address setting

The module address is selected by means of rotary decade address switches (see Figure 3). A screwdriver should be used to rotate the wheels to select the desired address, either from the front or the top of the module.

Note: The number of addresses available will be dependent on panel capability, check the panel documentation for information on this.