Dual Input Module

EM220E

Instruction Sheet

R10116GB0

Schneider Electric Fire & Security Oy

Sokerilinnantie 11 C
FI-02600 Espoo, Finland
Tel: +358 10 446 511
Website: www.schneider-electric.com
Document number: R10116GB0
Published: 10.05.2019

© 2018 – Schneider Electric. All Rights Reserved. This information is only to be used as guidance. Subject to changes and errors.

Contents

1 Dual Input Module EM220E

The EM220E input module (FFS06717020) provides two contact monitoring circuits for supervision of devices external to the fire detection system. Applications include monitoring of automatic extinguishing systems, smoke ventilation shutters, fire doors. Action on activation can be selected with the WinFXNet configuration tool. The modules have built-in short circuit isolators.

1.1 Addressable AP200-series I/O-modules

The AP200 series of Input/Output-modules (I/O-modules) offers several features for a variety of monitoring and control functions in Esmi Sense FDP and FX 3NET fire detection system.

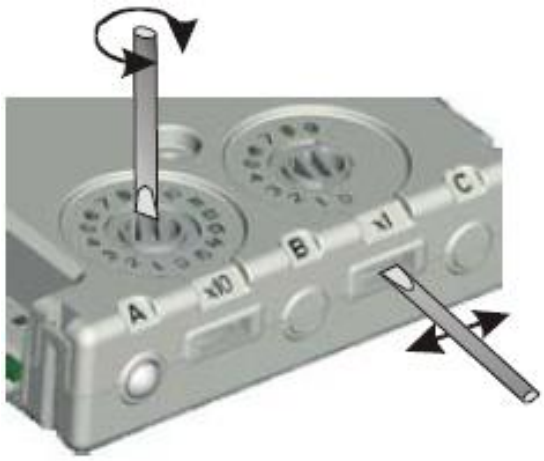
Compact construction enables more units to be mounted in installation boxes.

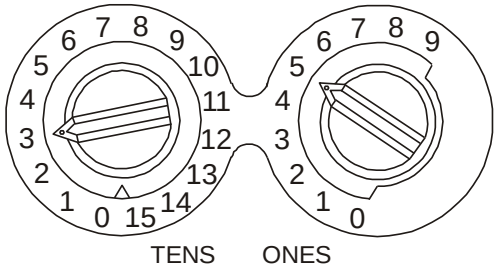
The module has a wide range of input/output combinations. Built in short circuit isolators save installation costs as separate isolator units are not needed.

Tri-colour LEDs for status indication, separate for each input/output indicates the status at a glance.

1.2 Address setting

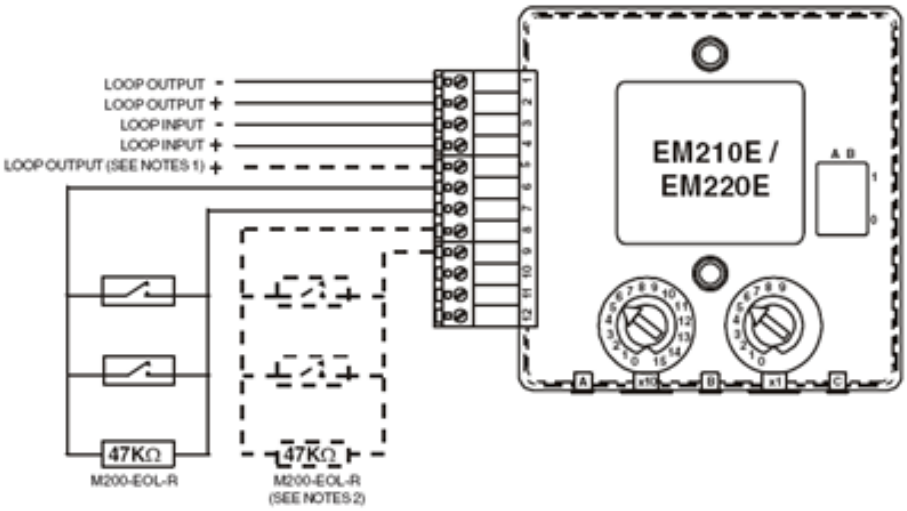
All modules are addressable. The address setting is done with two rotary switches, accessible either on the wide side or the front edge, depending on means of mounting. The dual input and dual input – single output modules are automatically assigned to two and three consecutive addresses.





Rotary switches

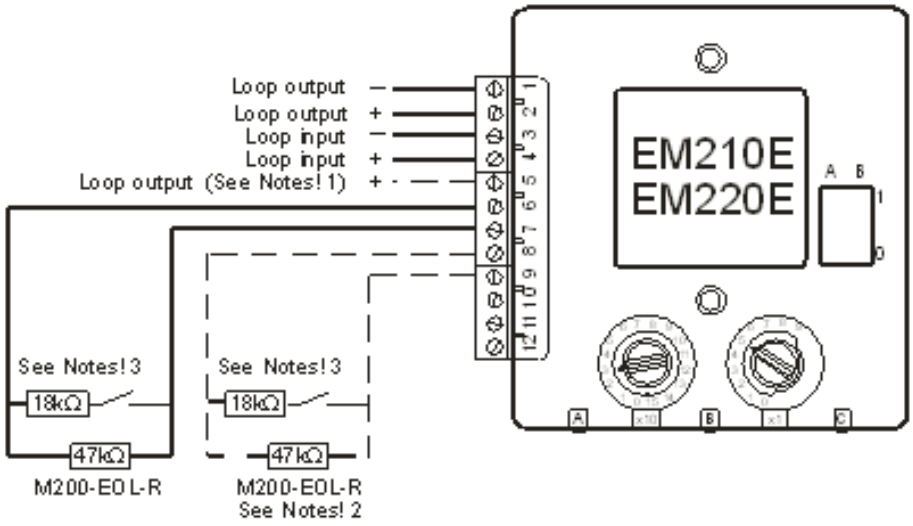
1.3 EM220E Dual Input Module Wiring



Notes!

1. If short circuit isolation is not required, loop output+ should be wired to terminal 5 and not 2. Terminal 5 is internally connected to terminal 4.
2. The dashed line circuit connected to terminals 8 and 9 should only be used with the EM220E.

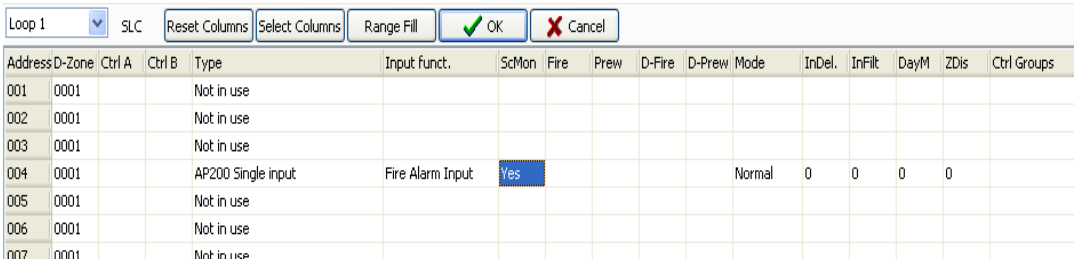
1.4 EM220E Dual Input Module with short circuit monitoring



Notes!

1. If short circuit isolation is not required, loop output+ should be wired to terminal 5 and not 2. Terminal 5 is internally connected to terminal 4.
2. The dashed line circuit connected to terminals 8 and 9 should only be used with the EM220E.
3. If the input is short circuit monitored, 18kΩ resistor is connected in series with the input switch.

1.5 Configuration of the short circuit monitored input



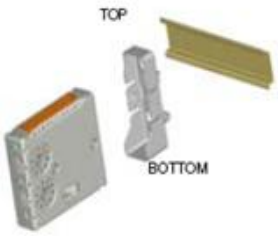
Address	D-Zone	Ctrl A	Ctrl B	Type	Input funct.	ScMon	Fire	Prew	D-Fire	D-Prew	Mode	InDel.	InFilt	DayM	ZDis	Ctrl Groups
001	0001			Not in use												
002	0001			Not in use												
003	0001			Not in use												
004	0001			AP200 Single input	Fire Alarm Input	Yes					Normal	0	0	0	0	
005	0001			Not in use												
006	0001			Not in use												
007	0001			Not in use												

1.6 Mechanical fitting

The 200-series of modules can be fitted in two different ways:

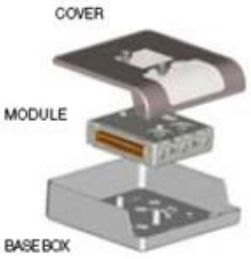
- in a surface mounting box M200-SMB
- with a DIN rail mounting clip M200-DIN

The surface mounting box has a transparent cover that enables verification of address setting and visibility of LEDs, without cover removal.



M200 Module DIN-rail mount

Several modules in DIN rail mounting



M200 Module in SMB

1.7 Electrical connections

The modules have plug-in terminals for easy connection/disconnection. Please see table overleaf for terminal numbering. Installation instructions for schematics of connections above are also found with the product.

The DIN rail clip clips to one side of the module, enabling several modules to be mounted right next to each other on a DIN rail. The address switches are accessible through the slots in the front edge, next to the indicators.

1.8 Terminals

Terminal	EM210E / EM220E	EM201E with fault monitored output	EM201E with non-monitored output	EM221E
1	Loop (-) out	Loop (-) out	Loop (-) out	Loop (-) out
2	Loop (+) out, note 1)	Loop (+) out, note 1)	Loop (+) out, note 1)	Loop (+) out, note 1)
3	Loop (-) in	Loop (-) in	Loop (-) in	Loop (-) in
4	Loop (+) in	Loop (+) in	Loop (+) in	Loop (+) in
5	Loop (+) out, note 1)	Loop (+) out, note 1)	Loop (+) out, note 1)	Loop (+) out, note 1)
6	Monitoring circuit 1	Linked to term. 7	Not used	Monitoring circuit 1
7	Monitoring circuit 1	Linked to term. 6	Relay contact NC	Monitoring circuit 1
8	Mon. circ. 2 (EM220E)	Control output (-)	Relay contact C	Monitoring circuit 2
9	Mon. circ. 2 (EM220E)	Control output (+)	Not used	Monitoring circuit 2
10	Not used	External power (+)	Not used	Relay contact NC
11	Not used	External power (-)	Relay contact NO	Relay contact C
12	Not used	Ext. power fault (-)	Not used	Relay contact NO

Note! 1) If short circuit isolation is not needed, the ‘Loop (+) out’ is connected to terminal 5, otherwise to terminal 2