

Approved FDP/FX loop device combination in Ex i areas

Instruction Sheet
R10269GB2

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1 Approved FDP/FX loop device combination in Ex i areas

This document describes loop devices and intrinsically safe devices that are compatible with each other and with FDP221, FDP252, and FDP 292; FXL, FX, FXM and FXS and FX101S fire detection panels.

⚠ WARNING
<p>COMPROMISED FUNCTIONALITY Comply with the requirements stated in this document. Failure to follow these instructions can result in death, serious injury or equipment damage.</p>

1.1 Devices covered in this document

Part number	Type marking	Description
FFS06717031	EM210E-CZR	Addressable SLC, Conventional zone module with resistive EOL
FFS06717032	EM210EA-CZR	Addressable SLC, Conventional zone module with resistive EOL. (New version that will replace EM210E-CZR)
FFS00438210	EXB-2000/P+F	Barrier unit for hazardous areas, Including barrier Pepperl+Fuchs KFDO-CS-Ex1.51P
FFS06725720	IS ORB-OP-52027-APO	Conventional, intrinsically safe optical smoke detector
FFS06725721	IS ORB-OH-53027-APO	Conventional, intrinsically safe multisensor smoke detector
FFS06725741	ORB-HT-51151-APO	Conventional, intrinsically safe BS heat detector
FFS06725750	ORB-HT-51145-APO	Conventional, intrinsically safe A1R heat detector
FFS06725751	ORB-HT-51157-APO	Conventional, intrinsically safe A1S heat detector
FFS06723707	ECC201N9	Conventional, intrinsically safe manual call point. Note! Alarm resistor of 470 ohms must be connected in series with alarm switch. The resistor is not included.
FFS06725722	ORB-MB-50018-APO	Conventional, intrinsically safe base for conventional detectors

1.2 Requirements for installations

- 1) External power supply must be used to supply power to the conventional zone in Conventional zone module EM210E/EA-CZR.
- 2) The minimum external supply voltage for the conventional zone module EM210E/EA-CZR is 21 V measured at the module terminals with maximum load of 60 mA.
- 3) The maximum line resistance in the conventional zone before the barrier is 10 ohms. After the barrier the maximum line resistance is 10 ohms.
- 4) 20 devices may be connected after barrier EXB-2000/P+F.
- 5) In the manual call point an alarm resistor of **470 ohm** must be connected in series with the alarm switch.

Important: Do not install any devices before barrier in the conventional zone.

Important: Ground unused wires and any cable shields in hazardous area according to local Ex i regulations.

Note: Short circuit after barrier in the conventional zone is always detected as a fire alarm.

1.3 Diagram and connections

