

KE-IU3111-ZME

Excellence series intelligent addressable zone monitoring unit with isolator (ext. power)

General

The innovative Excellence series of intelligent addressable devices offers advanced features for reliability and peace of mind. Coupled with features for ease of installation and maintenance on new fire detection systems, it's a perfect match for exceptional overall performance.

The Excellence series input/output devices are designed to provide much needed flexibility to input monitoring and output switching. These modules, combined with the powerful features of a Kidde Excellence series addressable CIE, give customers versatility for diverse applications.

The KE-IU3111-ZME is an Excellence series addressable 2-wire zone monitor with integrated short circuit loop isolation. It offers an interface between conventional fire devices and an Excellence series addressable CIE, and enables the CIE to monitor the operation of up to 32 conventional devices in standard, or up to 20 detectors in intrinsically safe configurations.

Applications

The KE-IO3111-ZME is designed to allow the inclusion of any conventional fire zone into an Excellence addressable loop. With selectable support for multiple operating modes, it offers unmatched flexibility. Supported modes include:

Regulatory

* EN54-13 and BS5839 (head-out)

Special applications

* CleanMe™ (maintenance), Intrinsic safe

Standard

* Detector, manual call point or mixed zones

The KE-IU3111-ZME may be located anywhere on the Kidde Excellence loop where it occupies only 1 of 128 available addresses. Housed in a low profile molding, the interface is designed to clip directly onto a standard DIN rail fixing or be installed in a suitable wall mount housing.

Installation & Maintenance Features

The KE-IU3111-ZME is connected to the CIE via a 2-wire communication loop that carries the control data. Tri-Colour LED indicators positioned on the front face of the unit provide the engineer with clear identification of the operational state of the unit, as well as the status of any input and/or output control. Additional manual test facilities on the unit allows local testing without the need for control panel intervention, saving time during installation and commissioning.

Excellence series devices use an advanced digital data communications protocol with extensive error correction algorithms to ensure system reliability.



Details

- Externally powered, allowing for the maximum number of devices to be installed on the loop
- Provides an addressable, convectional zone for standard or intrinsic safe applications
- Provides full zone supervision for standard, EN54-13 and BS5839 zone operation
- Supports CleanMe™ for reporting maintenance alerts from conventional detectors
- Supports detector only, MCP only and mixed zones
- Supports DIN or wall mounting for installation flexibility
- Local, clear operation status indication for ease of maintenance
- Local test features for ease of validation

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Technical specifications

General

Status indication	Tri-coloured LEDs
Compatibility	Kidde Commercial Excellence Systems
Addressing method	DIP Switches
Address range	1 to 128

Electrical

Power supply type	24 VDC
Operating voltage	17 to 29 VDC (loop) 22 to 28 VDC (external)
Current consumption	From the loop: 250 µA @ 24 VDC (standby), 2.5 mA @ 24 VDC (alarm) From the external supply: 12 mA @ 24 VDC (standby), 32 mA @ 24 VDC (alarm)
Cable specification	PSU: 0.5 to 4.9 mm ² shielded/unshielded twisted-pair

Input

Input quantity	1
Input type and rating	Supervised zone, <35 mA
Input states	Active, Fault, Normal, Open, Short
Supervisory voltage	14.3 to 23 VDC (application specific)
Alarm resistor	100 Ω ±5% (MCP) / 160 to 470 Ω ±5% (Detector)
Termination resistor	Application specific
Cable specification	Zone: 0.5 to 4.9 mm ² shielded/unshielded twisted-pair, < 2 km

Output

Output quantity	1
Output type and rating	NO/COM/NC relay, 2 A @ 30 VDC (resistive load)
Cable specification	Relay: 0.13 to 3.31 mm ² shielded/unshielded twisted-pair

Isolation

Type	Negative line break
Loop current	2.5 mA (active)
Series resistance	<0.08 Ω
Switch current	1.05 A (continuous) / 1.4 A (short)
Leakage current	<1 mA
Isolation voltage	14 to 15.5 VDC
Reconnect voltage	14 to 15.5 VDC
Impedance requirements	≤32 devices between isolators
Quantity per loop	≤128
Maximum impedance to first isolator	13 Ω
Maximum impedance between isolators	13 Ω

Physical

Physical dimensions	148 x 102 x 27 mm
Net weight	145 g
Colour	Signal white (RAL 9003)
Mounting type	DIN-rail, Surface mount, Wall mount
Material	PC / ABS
Cable specification	Loop: 0.13 to 3.31 mm ² shielded/unshielded twisted-pair (< 52 Ω / 500 nF)

Environmental

Vandal proof	No
Operating temperature	-22 to +55°C
Storage temperature	-30 to +65°C
Relative humidity	10 to 93% noncondensing
Environment	Indoor, Outdoor
IP rating	IP30 (without enclosure)

Regulatory

Compliance	CE, REACH, RoHS 3, WEEE
Certification	CPR
Standards	EN54-13, EN54-17, EN54-18

Compatible products

Category	Reference	Description
Enclosures	N-IO-MBX-1	DIN Rail Module Box
Enclosures	N-IO-MBX-2	DIN Rail Module Box