KE-IO3101-M

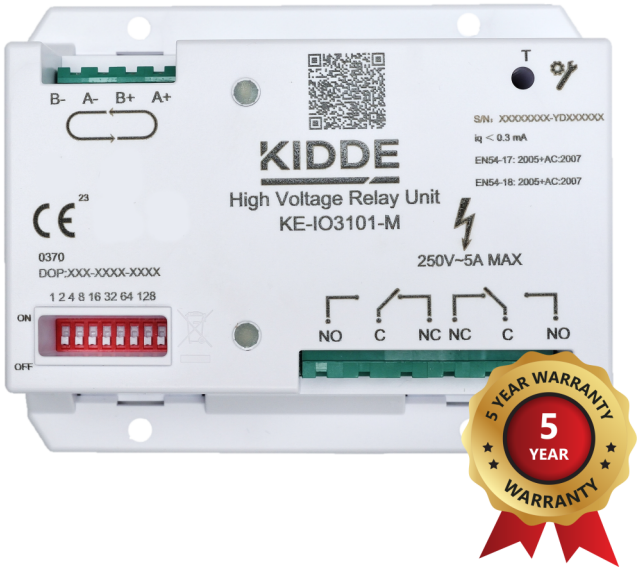
Excellence series intelligent addressable mains switching output unit with isolator

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-IO3101-M is an Excellence series addressable mains relay unit with integrated short circuit loop isolation. Powered directly from the Excellence loop, it offers double pole, potential free, change-over relay contacts.



Applications

The KE-IO3101-M is designed for controlling the main electrical supply of ancillary, mains powered equipment. The unit is ideal for the control of door release circuits, extract fans and dampers. The relay may be programmed to be activated by any single device, groups of devices or all system devices. All types of system input signals can be arranged to operate the KE-IO3101-M which can include control panel indicators, zonal outputs, call points or detectors. Both normally closed and normally open relay connections are provided, which if wired incorrectly, can simply be reconfigured in the programming of the unit.

The KE-IO3101-M 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. It is intended for installation for installation inside the equipment to be switched, thereby offering savings in installation costs

Installation & Maintenance Features

The KE-IO3101-M is connected to the CIE via a 2-wire communication loop that carries both power and 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

- Loop powered, saving external supply and installation cost
- Provides an addressable, mains rated output with double pole, potential free change over contacts
- Normally Open / Normally Closed programmable for full installation flexibility
- Freely programmable to operate from any combination of input triggers
- DIN or wall mounted
- Local test features for ease of validation
- Local, clear operation status indication for ease of use

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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	Loop powered
Operating voltage	17 to 29 VDC
Current consumption	300 µA @ 24 VDC (quiescent) 2.5 mA @ 24 VDC (active)
Communication voltage	4 to 11 V (pulsed)

Output

Output quantity	1 x Dual
Output type and rating	Double pole, change over - 1 A @ 60 VDC / 5 A @ 250 VAC (resistive load)
Cable specification	0.13 to 3.31 mm² (12 to 26 AWG) 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

Physical

Physical dimensions	109 × 88 × 40 mm (W x H x D)
Net weight	220 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 mm² (12 to 26 AWG) 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
IP rating	IP30

Regulatory

Compliancy	CE, REACH, RoHS 3, WEEE
Certification	CPR
Standards	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
Interface unit	N-IO-SBX-2G	Single module box with DIN rail (large)

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As a company of innovation, Kidde Global Solutions reserves the right to change product specifications without notice. For the latest product specifications, visit firesecurityproducts.com online or contact your sales representative.

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