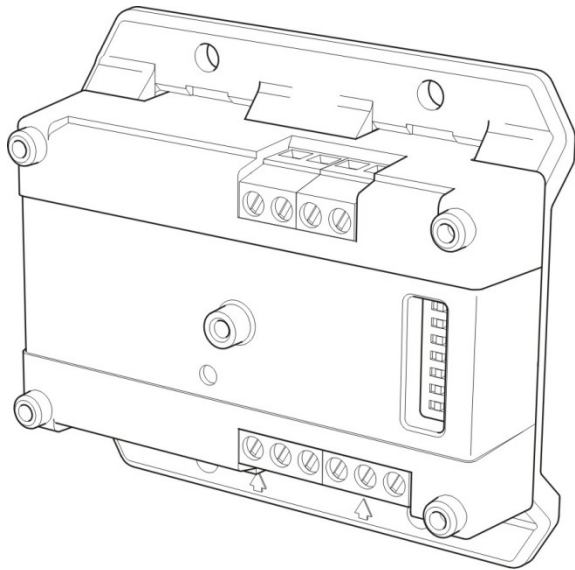


# A50E-2 Line Relay Unit Installation Sheet



## Description

The A50E-2 Line Relay Unit is an addressable device used to provide one Form C change over dry relay contact to control external appliances (door closers, fans, dampers, etc.) or equipment shutdown. The system firmware ensures that the relay is in the proper ON/OFF state. Upon command from the control panel, the relay energizes. TB2-6 and TB2-7 provide a normally-closed relay connection; TB2-7 and TB2-8 provide a normally-open relay connection. One device address is required.

Up to 127 devices can be assigned to the loop. All devices incorporate a binary DIP switch enabling them to be given a unique address. A red LED indicator illuminates when the unit has activated.

## Installation

### Notes

- This module complies with the requirements of EN 54-18. If the module is used in conditions or circumstances that do not comply with those tested for and allowed in EN 54-18, operation may be impaired, and the supplier will not be liable for any injury suffered or damage caused as a result. You must contact our technical support department for advice if the device is to be used in conditions that differ from those prescribed in EN 54-18.
- This module will *not* operate without electrical power. As fires frequently cause power interruption, we suggest you discuss further safeguards with your local fire protection specialist.

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**WARNING:** Electrocutation hazard. Dangerous voltages may be present at terminals even when the power is shut off. Take proper precautions to avoid injury or death.

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**Note:** The A50E-2 Line Relay Unit is shipped from the factory as an assembled unit; it contains no user-serviceable parts and should *not* be disassembled

### To install the device:

1. Verify that all field wiring is free of opens, shorts, and ground faults.
2. Make all wiring connections as shown in Figure 1.

### Notes:

- If a 2 in. (51 mm) 1-gang box is used, conduit can enter the electrical box through only one knockout hole.
- If a 2-1/2 in. (64 mm) 1-gang box is used, conduit can enter the electrical box through one or both knockout holes.

### Mounting

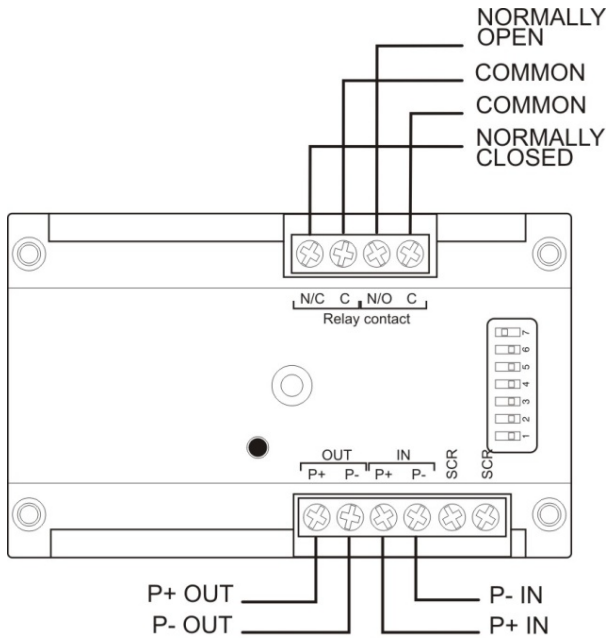
The A50E-2 can be mounted using any of three methods:

- A DIN rail method for mounting multiple/single units
- Adaptor plates for accessory box mounting
- Single box mounting

The unit can be mounted in a European 100mm square box. The terminal blocks will accept 14, 16, or 18 AWG wire (0.75, 1.0, 1.5, mm<sup>2</sup>). Sizes 16 and 18 AWG are preferred.

# Wiring

Figure 1: Wiring the A50E-2 Line Relay Unit



## Setting the address

The A50E-2 Line Relay Unit contains a seven-segment DIP switch. The switch is used to set the device address in binary code. The switch may be set to represent any address from 1 to 127.

In the ON position, a switch represents its code value. In the OFF position it represents a zero. See the table below.

Switch number	1	2	3	4	5	6	7
Code value	1	2	4	8	16	32	64

To arrive at the address number of a device, add the code values of all switches that are in the ON position, for example switches 2, 3, and 6 set to ON represent address 38 (2 + 4 + 32).

## Specifications

Application	Indoor use
Operating environment	
Temperature	-10 (±3) to +55 (±2)°C
Relative humidity	20 to 95% noncondensing
Indication	LED (red) flashing on activation
Operating voltage	20 volt pulsed analog loop (19.5 to 20.5 VDC). Max line drop 4 VDC
Standby current	600 µA
Alarm current	700 µA

Relay contact rating	
DC	
Voltage	30 VDC max.
Current	1 A
AC	
Voltage	40 VDC
Current	0.30 A
Power factor resistive load	1 PF
Power factor inductive load (L/R = 7 mS)	0.4 PF

## Regulatory information

Manufacturer	UTC Fire & Security South Africa (Pty) Ltd. 555 Voortrekker Road, Maitland, Cape Town 7405, PO Box 181 Maitland, South Africa  EU authorized manufacturing representative: UTC Fire & Security B.V. Kelvinstraat 7, 6003 DH Weert, Netherlands
Year of manufacture	The year of manufacture, in the format YYDDD, is located on the product barcode label, as shown below.



Product type	Type A for indoor use
Certification	
CPD certificates	0832-CPD-0965
EN 54	EN 54-18:2005
	2002/96/EC (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: <a href="http://www.recyclethis.info">www.recyclethis.info</a> .

## Contact information

For contact information, see [www.utcfireandsecurity.com](http://www.utcfireandsecurity.com).