### INSTALLATION AND MAINTENANCE INSTRUCTIONS

# **TYCO**Fire Protection Products

## Model: ADCS130-Mk2 Supervised Relay Control Module

#### **SPECIFICATIONS**

Normal Operating Voltage: 15 to 32 VDC Maximum Current Draw: 6.5mA (LED On)

Operating Current: 350µA@1 communication every 5 seconds

EOL Resistance: 47k Ohms

Ralay Rating: 2A@30VDC resistive

Supply Voltage: 30VDC

Temperature Range: 0°C to 49°C (32°F to 120°F) Humidity: 10% to 93% Non-condensing

Dimensions: Module 120mm (H) × 108mm (W) × 34mm (D) Face Plate (124mm x 124mm)

#### **BEFORE INSTALLING**

This information is included as a quick reference installation guide. Refer to the MX4428 Installation Manual (LT0070) and the MPR Engineering Manual (LT0140) for detailed system information. If the module is to be installed in an existing operational system, inform the operator and local authority that the system will be temporarily out of service. Disconnect power to the control panel before installing the modules.

#### **GENERAL DESCRIPTION**

The ADCS130-Mk2 Supervised Relay Control Module provides a single switched supervised output on the MPR addressable loop of an MX4428 fire alarm system. The module address is set in the range 1-99 using two rotary switches on the module.

The ADCS130-Mk2 supervises the output wiring for open or short circuit faults when the output is de-energised. On command from the MX4428 the output is energised, and switches a nominal 24VDC supply connected to the ADCS130-Mk2 through to the output wiring to energise the diode-coupled loads. As polarity reversal supervision is used on the output wiring, each load device must either incorporate or be wired with a series diode.

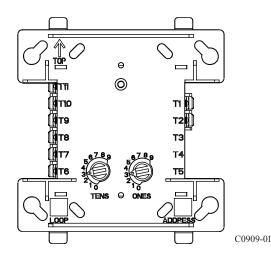
By directly powering a separate relay from the external supply, the ADCS130-Mk2 can also supervise the 24V supply for failure.

The ADCS130-Mk2 includes a red LED on the front that is illuminated when the output is energised.

The ADCS130-Mk2 is supplied with a plastic front cover and is suitable for mounting on a double-gang electrical flush or surface mounting box.

The ADCS130-Mk2 can directly replace an ADC130 configured and programmed for supervised output operation.

#### FIGURE 1. CONTROLS AND INDICATORS:



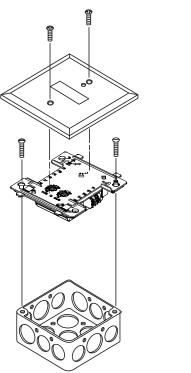
#### **COMPATIBILITY REQUIREMENTS**

To ensure proper operation, this module must be connected to the MPR addressable loop of an MX4428 fire alarm system.

#### MOUNTING

The ADCS130-Mk2 mounts directly to a double gang electrical box (see Figure 2). The box must have a minimum depth of 50mm.

#### FIGURE 2. MODULE MOUNTING



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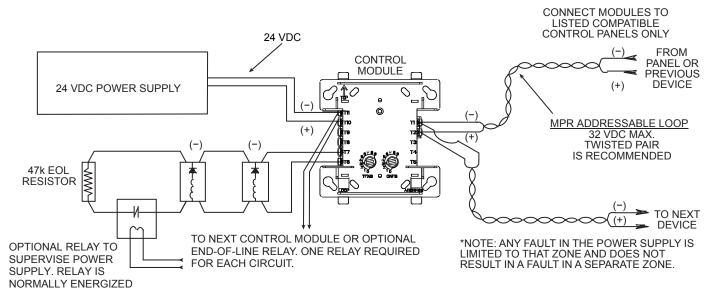
#### **WIRING**

NOTE: All wiring must conform to applicable local codes, standards and regulations.

- Install module wiring in accordance with the job drawings and appropriate wiring diagrams, see Figure 3.
- 2. Set the address on the module per job drawings.
- Secure module to electrical box (supplied by installer), as shown in Figure 2.

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#### FIGURE 3. TYPICAL WIRING DIAGRAM



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#### **▲**WARNING

All relay switch contacts are shipped in the standby state (open) state, but may have transferred to the activated (closed) state during shipping. To ensure that the switch contacts are in their correct state, modules must be made to communicate with the panel before connecting circuits controlled by the module.

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