# MTL4616 SWITCH/ PROXIMITY DETECTOR INTERFACE 2-channel, with line fault detection

The MTL4616 enable two loads to be controlled by a switch or proximity detector. When selected, open or short circuit conditions in the field wiring are detected by the line-fault-detect (LFD) facility and also indicated on the top of the module. Phase reversal for each channel is selected by a switch on the side of the module and output is provided by changeover relay contacts.

# SPECIFICATION

### See also common specification

### Number of channels

### Two

### Inputs

Inputs conforming to BS EN60947–5–6:2001 standards for proximity detectors (NAMUR)

# Voltage applied to sensor

# 7 to 9V dc from $1k\Omega \pm 10\%$

# Input/output characteristics

Normal phase

Outputs closed if input > 2.1mA (<  $2k\Omega$  in input circuit) Outputs open if input < 1.2mA (>  $10k\Omega$  in input circuit) Hysteresis:  $200\mu$ A ( $650\Omega$ ) nominal

### Line fault detection (LFD) (when selected)

User-selectable via switches on the side of the unit. Line faults are indicated by an LED for each channel. The channel output relay is de-energised if an input line fault is detected. Open-circuit alarm on if  $l_{in} < 50\mu$ A Open-circuit alarm off if  $l_{in} > 250\mu$ A Short-circuit alarm on if  $R_{in} < 100\Omega$ Short-circuit alarm off if  $R_{in} > 360\Omega$ Note: Resistors must be fitted when using the LFD facility with a contact input  $500\Omega$  to  $1k\Omega$  in series with switch  $20k\Omega$  to  $25k\Omega$  in parallel with switch

Two single-pole relays with changeover contacts Note: reactive loads must be adequately suppressed

### **Relay characteristics**

Response time: 10ms maximum Contact rating: 10W, 0.5A, 35V dc

### MTL4616



### LED indicators

Green: power indication Yellow: two: channel status, on when output energised Red: two: LFD indication, on when line fault detected

# Maximum current consumption

35mA at 24V Power dissipation within unit 0.84W at 24V

The given data is only intended as a product description and should not be regarded as a legal warranty of proper ties or guarantee. In the interest of further technical developments, we reserve the right to make design changes



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