# MTL4611
## SWITCH/ PROXIMITY DETECTOR INTERFACE
1-channel, with line fault detection

The MTL4611 enables a load 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 the 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**
One

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

**Voltage applied to sensor**
7 to 9V dc from 1kΩ ±10%

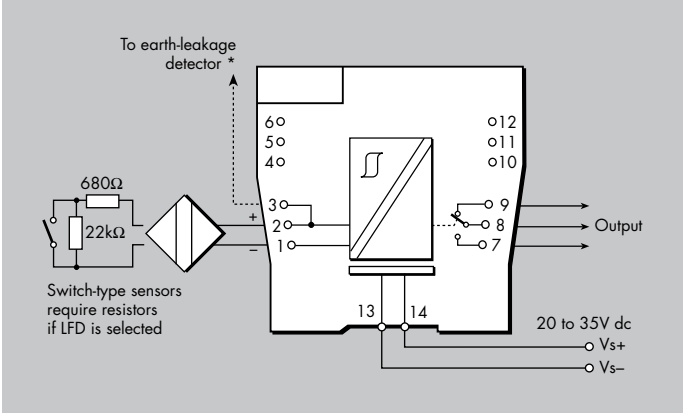
**Input/output characteristics**
Normal phase
Outputs closed if input > 2.1mA (< 2kΩ in input circuit)
Outputs open if input < 1.2mA (> 10kΩ in input circuit)
Hysteresis: 200µA (650Ω) nominal

**Line fault detection (LFD) (when selected)**
User-selectable via switches on the side of the unit. A line fault is indicated by an LED. The channel output relay is de-energised if an input line fault is detected.
Open-circuit alarm on if $I_{in}$ < 50µA
Open-circuit alarm off if $I_{in}$ > 250µA
Short-circuit alarm on if $R_{in}$ < 100Ω
Short-circuit alarm off if $R_{in}$ > 360Ω
*Note: Resistors must be fitted when using the LFD facility with a contact input*
*500Ω to 1kΩ in series with switch*
*20kΩ to 25kΩ in parallel with switch*

**Output**
Single pole relay with changeover contacts
*Note: reactive loads must be adequately suppressed*

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

**MTL4611**




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

**Maximum current consumption**
25mA at 24V

**Power dissipation within unit**
0.6W at 24V

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