# MTL4421RS GENERAL PURPOSE SWITCH OPERATED RELAY

CE

area

Safe o

with 24V logic override facility

The MTL4421RS enables an on/off device in a non-hazardous area to be controlled by a voltage signal from the control unit. It can drive loads such as solenoids, alarms, LEDs and other devices. Provided that 24V dc is applied to the override input, the solenoid/alarm can be operated by the control input. However, if the 24V dc signal is removed, the solenoid/alarm is turned off.

## **SPECIFICATION**

See also common specification

## Number of channels

One

Location of the load Safe-area

## Control input

Suitable for open collector or switch input logic drive or with external pull up.

 $0 = \langle 4V \text{ applied across terminals } 10 \& 11$ 

1 = >15V applied across terminals 10 & 11

#### **Override** input

A 24V logic signal must be applied across terminal 8 and 9 to allow the solenoid/alarm to be operated by the control input. If it is disconnected, the solenoid/alarm is off.

## **Control and override inputs**

<b>Control input state</b>	<b>Override</b> input	Output relay
0	OV	open
1	OV	open
0	24V	closed
1	24V	open

## **Relay output characteristic**

Normally open contacts Contact rating: 60W, 125VA Contact life expectancy: 0.5A, 15W /2A, 60W 1.8 x 10<sup>7</sup> / 10<sup>6</sup> operations at maximum load

## **Response time**

set-/release-/ reset time 3ms/ 5ms/ 2ms

## **LED** indicators

Green: one provided for power indication Amber: one provided for status, ON when relay is closed one provided for status, ON when output circuit is active

## **Power requirements**

28mA at 24V dc 24mA at 20V dc

37mA at 35V dc

## Power dissipation within unit

## 0.7W typical

#### Mounting

This module must not be placed next to intrinsic safety modules. Mounting on an alternative backplane is recommended. If mounted on the same backplane, 3 module positions must be left blank between IS and non-IS circuits. IS and non-IS wiring must be routed to maintain 50mm segregation.



Terminal	Function
1	Output +ve
4	Output -ve
5	Supply load +ve (Fused 1A)
6	Supply load -ve
8	Override +ve
9	Override -ve
10	Control +ve
11	Control -ve
13	Supply -ve
14	Supply +ve

