

# MTL4403 HIGH-LEVEL TRIP AMPLIFIER



This single-channel non-IS unit derives its input from the safe-area output of the MTL4041B or MTL4073 and compares the loop current with a trip level in the range 4 to 20mA. Two trip points are provided and may be set by multiturn potentiometers accessible on the top of the unit. Each trip can be set to indicate a high or low alarm. Test points are provided so that the approximate trip value (1 to 5V) may be measured using a portable voltmeter. A normally-open relay contact and amber LEDs indicate the trip condition.

## SPECIFICATION

See also common specification

### Number of channels

One

### Location of signal source

Safe area only. Interface to hazardous area via suitable barrier/isolator.

### Input range

4 to 20mA into 25Ω

Common-mode input voltage: 8V max

Hysteresis: 1% nominal of input range

### Trip-point adjustment

Within 0.1% of input range over whole range

### Supply voltage effect on trip point

<0.1% for supply voltage change 20 to 35V dc

### Temperature effect on trip point

<0.02% of input range per °C

### Response time

20ms nominal

### Alarm functions

High alarm: relay energised when input less than trip point

Low alarm: relay energised when input greater than trip point

### Power supply failure protection

Relay de-energises if supply fails

### Alarm relay contacts

Single pole, normally open

### Contact rating

3A at 35V dc (on standard MTL backplanes)

Note that reactive loads must be adequately suppressed.

### LED indicators

Amber: one provided for each relay, ON when relay energised (not tripped)

Green: one provided for power indication

### Power requirements

37mA at 24V dc

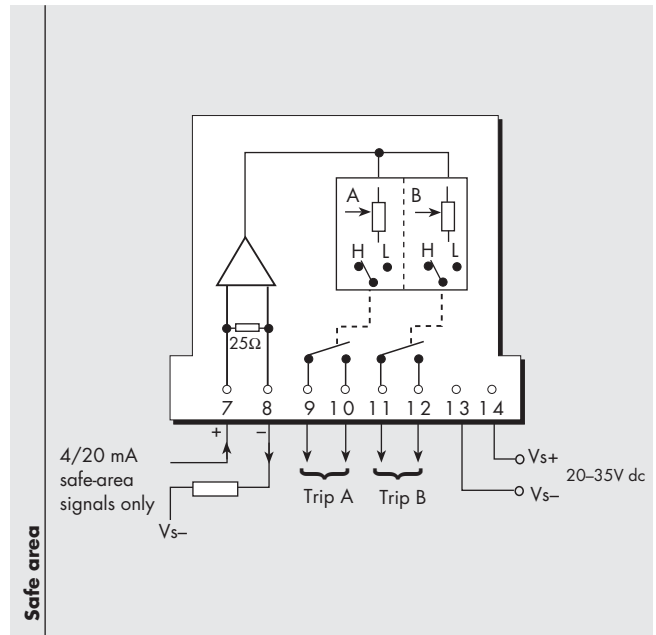
40mA at 20V dc

30mA at 35V dc

### Power dissipation within unit

0.8W at 24V

0.9W at 35V



Terminal	Function
7	Input +ve
8	Input -ve
9	Output trip A (normally open)
10	Output trip A (common)
11	Output trip B (normally open)
12	Output trip B (common)
13	Supply -ve
14	Supply +ve



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