

## SPECIFICATION

### Number of channels

One

Location of RTD

Zone 0, IIC, T4 hazardous area

Div. 1, Group A, hazardous location

### Resistance source

2-, 3-, or 4-wire\* RTDs to BS 1904/DIN 43760 (100 Ω at 0° C)

\*user selectable by switches (factory set for 3-wire)

### Resistance range

10 Ω to 400 Ω

### RTD excitation current

200 μA nominal

### Output configuration

2, 3 or 4 wires (independent of mode selected for hazardous area terminals)

### Output range

10 Ω to 400 Ω (from a 100 μA to 5mA source)

### Temperature drift

±10mΩ/°C typical (0.01%/°C @ 100 Ω)

### Response time

To within 4% of final value within 1s

### Safety drive on open-circuit sensor

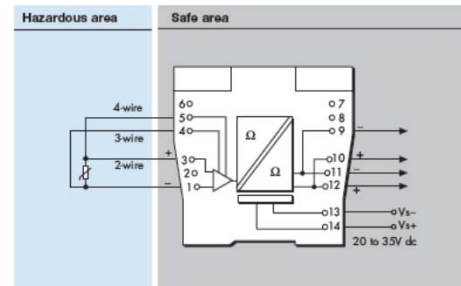
Upscale to 420 Ω nominal

### Transfer accuracy@20° C

<0.15 Ω at excitation current 1 – 5mA

<0.25 Ω at excitation current 0.5 – 1mA

## Wiring



### LED indicator

Green: power indication

### Power requirements, Vs

55mA at 24V

65mA at 20V

45mA at 35V

### Maximum power dissipation within unit

1.4W at 24V

1.6W at 35V

### Safety description

Terminals 1 and 3

U<sub>o</sub> = 1.1V

I<sub>o</sub> = 7mA

P<sub>o</sub> = 2mW

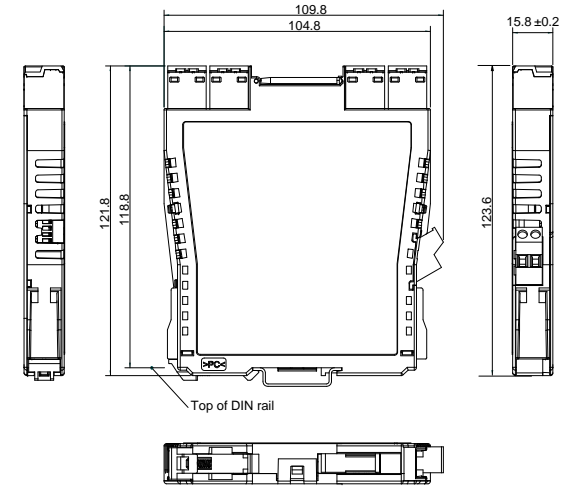
Non-energy-storing apparatus ≤ 1.5V, ≤ 0.1A, ≤ 25mW; can be connected without further certification into any IS loop with an open circuit voltage < 28V.

Terminals 1 and 3 and 4 and 5

U<sub>o</sub> = 6.6V

I<sub>o</sub> = 76mA

P<sub>o</sub> = 0.13W



### Isolation

250V rms, tested at 1500V rms minimum, between safe- and hazardous-area terminals.

50V between safe-area circuits and power supply

### Supply voltage

20 – 35V dc

### Location of units

Safe area

### Terminals

Accepts conductors of up to 2.5mm<sup>2</sup> stranded or single-core  
Mounting

T-section 35mm DIN rail (7.5 or 15mm) to EN 50022

### Ambient temperature limits

–20 to +60° C (–6 to +140° F) operating

–40 to +80° C (–40 to +176° F) storage

### Humidity

5 to 95% relative humidity

### Weight

Approximate (except where indicated)

MTL5500 150g

### Connectors

Each unit is supplied with signal connectors, as applicable.

When using crimp ferrules for the hazardous or non-hazardous (safe) signal connectors the metal tube length should be 12mm and the wire trim length 14mm.

REV.	PROJECT NAME:	Cooper Industries Japan K.K.	Model name		MTL5582B	
REV.	USER NAME :	TEL: +81-(0)3-5420-1281 FAX: +81-(0)3-5420-2405	SIZE	FSCM NO	Drawing No.	rev
REV.	JOB NAME :	DATE: 6/July/2017			SS-MTL5582B	-
	Ref no.:	CHKD T.IWANE	DRAWN K.KUSAKABE	SCALE	N/A	SHEET 1 / 1