

PRODUCT DATA SHEET

MTL5561 Fire and Smoke Detector Interface

FEATURES

- Two fully independent circuits
- **DIN Rail mount**
- Zone O, 11C,T4-6 class



PRODUCT DESCRIPTION

The MTL5561 is a zone powered 2 channel interface for use with conventional smoke detectors located in hazardous areas. In operation, the triggering of a detector causes a corresponding change in the safe-area current. The unit features reverse input polarity protection.

TECHNICAL SPECIFICATIONS

Number of Channels	Two, fully floating.
Location of Fire and Smoke Detectors	Zone O, IIC, T4–6 hazardous area if suitably certified Div. 1, Group A, hazardous area
Input Voltage	6 to 30Vdc
Current Range	1 to 40mA, nominal
Quiescent Safe-Area Current at 20°C	(Hazardous Area terminals open circuit) < 400μA at Vin = 24V per channel
Integral Input Polarity Protection	Input circuit protected against reverse polarity
Min Output Voltage at 20°C	For Vin \leq 25V: Vout = Vin - (0.38 x current in mA) - 2V For Vin > 25V: Vout = 22.5V - (0.35 x current in mA)
Max Output Voltage	28V from 300Ω
Transfer Accuracy at 20°C	Better than 400µA
Temperature Drift	< 4μΑ/°C (0°C to 60°C) < 15μΑ/°C (-20°C to 0°C)
Response Time to Step Input	Settles to within 5% of final value within 1.5ms
Power Dissipation Within Unit	0.7W maximum at 24V with 40mA signal (each channel) 0.9W maximum at 30V with 40mA signal (each channel)
Safety Description for Each Channel	Uo= 28V Io=93mA Po= 0.65W Um= 253V RMS/DC

- 1. To maintain isolation between the two channels, separate earth leakage detectors are needed.
- 2. The earth leakage detectors introduce a 100µA, 1Hz ripple to the field circuit.

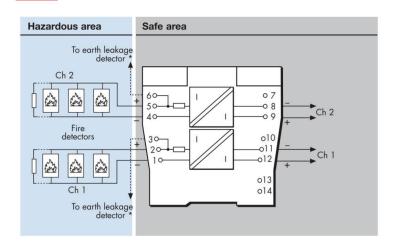




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SCHEMATIC DIAGRAM



APPROVALS

✓ IECEx Certificate of Conformity - Cert No. IECEx ITA 08.0009x

Note: This is an indent item, lead times may apply.

