

MTL5522

SOLENOID/ALARM DRIVER

loop-powered, IIB

The MTL5522 is a loop-powered module which enables a device located in the hazardous area to be controlled from the safe area. The MTL5522 can drive a certified intrinsically safe low-power load, as well as non-energy-storing simple apparatus such as an LED. The unit's input/output isolation allows the control switch to be connected into either side of the 24V dc supply circuit.

SPECIFICATION

See also common specification

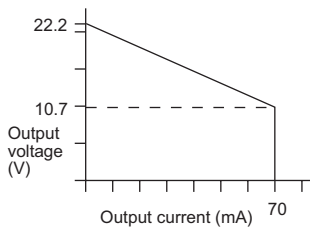
Number of channels

One

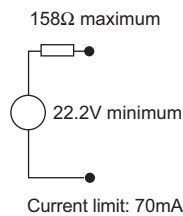
Location of load

Zone 0, IIB, T4-6 hazardous area if suitably certified
Div. 1, Group C hazardous location

Minimum output voltage



Equivalent output circuit



Input voltage

20 to 35V dc

Hazardous-area output

Minimum output voltage: 10.7V at 70mA
Maximum output voltage: 24V from 158Ω
Current limit: 70mA minimum

Output ripple

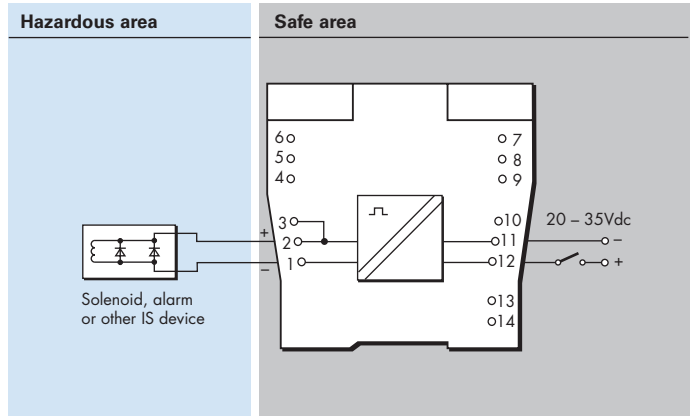
< 0.5% of maximum output, peak to peak

Response time

Output within 10% of final value within 100ms



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LED indicator

Yellow: output status, on when output active

Maximum current consumption

125mA (typ.) at 24V

Power dissipation within unit

1.4W at 24V

Safety description

$U_o=25V$ $I_o=166mA$ $P_o=1.04W$ $U_m = 253V$ rms or dc



SIL capable

These models have been assessed for use in IEC 61508 functional safety applications. SIL3 capable for a single device (HFT=0) when the required function is to de-energise the output. SIL1 capable for a single device (HFT=0) when the required function is to energise the output.

See data on MTL web site and refer to the safety manual.



Powering Business Worldwide

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