MTL4521/L - MTL5521 SOLENOID/ ALARM DRIVER

loop-powered, IIC

The MTLx521 and the MTL4521L are loop-powered modules which enable a device located in the hazardous area to be controlled from the safe area. They can all drive a certified intrinsically safe low-power load, as well as non-energy-storing simple apparatus such as an LED.

SPECIFICATION

See also common specification

Number of channels

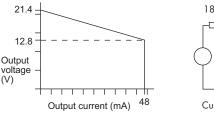
One

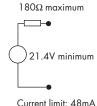
Location of load

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

Minimum output voltage (MTLx521)

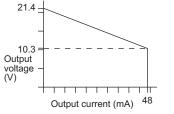
Equivalent output circuit

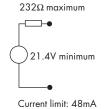




Minimum output voltage (MTL4521L)

Equivalent output circuit





Input voltage

20 to 35V dc

Hazardous-area output (MTLx521)

Minimum output voltage: 12.8V at 48mA Maximum output voltage: 24V from 180Ω Current limit: 48mA

Hazardous-area output (MTL4521L)

Minimum output voltage: 10.3V at 48mA Maximum output voltage: 24V from 232Ω Current limit: 48mA

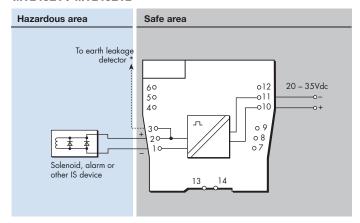
Output ripple

< 0.5% of maximum output, peak to peak

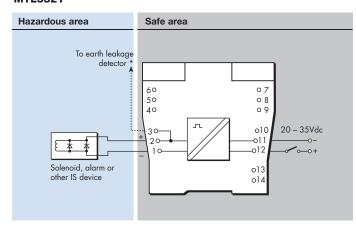
Response time

Output within 10% of final value within 100ms

MTL4521 / MTL4521L



MTL5521



* Signal plug HAZ1-3 is required for access to this function

LED indicato

Yellow: output status, on when output active

Maximum current consumption

90mA at 24V

Power dissipation within unit

1.4W at 24V

Safety description (MTLx521)

 $U_0 = 25V$ $I_0 = 147 \text{mA}$ $P_0 = 0.92 \text{W}$ $U_m = 253 \text{V}$ rms or dc

Safety description (MTL4521L)

 $U_o = 25V$ $I_o = 108mA$ $P_o = 0.68W$ $U_m = 253V$ rms or dc

SIL capable

These models have been assessed for use in IEC 61508 functional safety applications. See data on MTL web site.

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.

