MTL5021 SOLENOID/ ALARM DRIVER

loop-powered, IIC

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The MTL5021 enables a device located in the hazardous area to be controlled by a switch in the safe area. The MTL5021 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

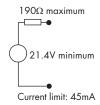
Number of channels

One

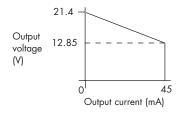
Location of load

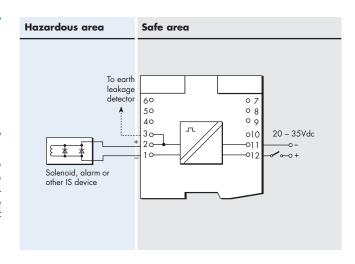
Zone 0, IIC, T4--6 hazardous area if suitably certified Div. 1, Group A hazardous location

Equivalent circuit



Minimum output voltage





Terminal	Function
1	Output -ve
2	Output +ve
3	Earth leakage detection
11	Supply –ve
12	Supply +ve

LED indicator

Yellow: status

Input voltage

20 to 35V dc

Hazardous-area output

Minimum output voltage: 12.85V at 45mA Maximum output voltage: 24V from 170Ω Current limit: 45mA

Maximum current consumption (with 45mA output)

90mA at 24V

110mA at 20 to 35V dc

Maximum power dissipation within unit

1.4W at 24V typical 1.8W at 35V maximum

Safety description

25V, 170Ω, 147mA, $U_m = 250V$ rms or dc