MTL4623L
SOLENOID/ ALARM DRIVER
loop-powered with line fault detection

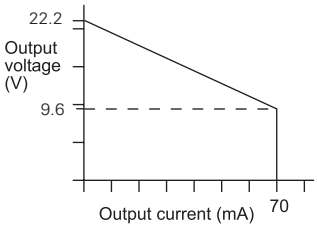
With the MTL4623L interface, an on/off device can be controlled by a voltage signal. It is suitable for driving loads such as solenoids. Line fault detection (LFD), which operates when the output is energised, is signalled by a solid-state switch which energises if a field line is open or short-circuited. Earth fault detection can be provided by connecting an MTL4220 earth leakage detector to terminal 3.

SPECIFICATION

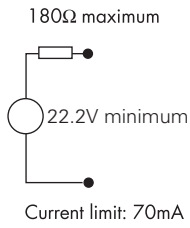
See also common specification

Number of channels
One

Minimum output voltage



Equivalent output circuit



Input voltage
20 to 35V dc

Output

Minimum output voltage:	9.6V at 70mA
Maximum output voltage:	24V from 180Ω
Current limit:	70mA

Output ripple
< 0.5% of maximum output, peak to peak

Response time
Output within 10% of final value within 100ms

Line fault detection (LFD)
Open or short circuit in field cabling energises solid state line fault signal
LFD transistor is switched on, provided that the field circuit impedance is > 55Ω and < 4kΩ.

Line fault signal characteristics

Maximum off-state voltage:	35V
Maximum off-state leakage current:	10µA
Maximum on-state voltage drop:	2V
Maximum on-state current:	50mA

Note: LFD signal is Zener-diode protected against inductive loads

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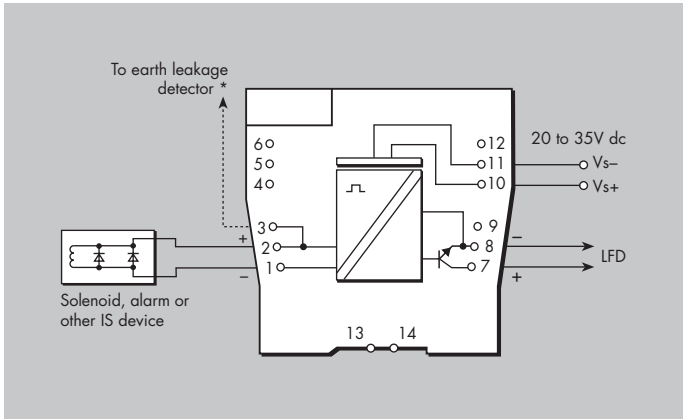

LED indicators
Yellow: output status, on when output active
Red: LFD indication, on when line fault detected

Maximum current consumption
125mA at 24V dc

Power dissipation within unit
1.4W with typical solenoid valve, output on