

# MTL4623/R

## SOLENOID/ALARM DRIVER

with line fault detection, IIC

With the MTL4623 interface, an on/off device can be controlled by a volt-free contact or logic signal. It is suitable for driving loads such as solenoids. Line fault detection (LFD), which operates irrespective of the output state, is signalled by a solid-state switch which de-energises MTL4623, or energises MTL4623R, 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.

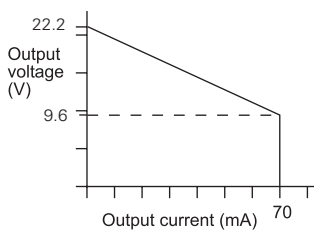
### SPECIFICATION

See also common specification

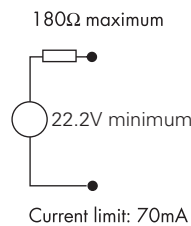
#### Number of channels

One

#### Minimum output voltage



#### Equivalent output circuit



#### 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

#### Control input

Suitable for switch contacts, an open collector transistor or logic drive. (Internal contact wetting voltage 12V @ 0.2mA contact closed. Not suitable for voltage control via series diode.)  
 Output turns on if input switch closed, transistor on or < 1.4V applied across control input  
 Output turns off if input switch open, transistor off or > 4.5V applied across control input

#### Response time

Output within 10% of final value within 100ms

#### Line fault detection (LFD)

Open or short circuit in field cabling de-energises\* solid state line-fault signal.

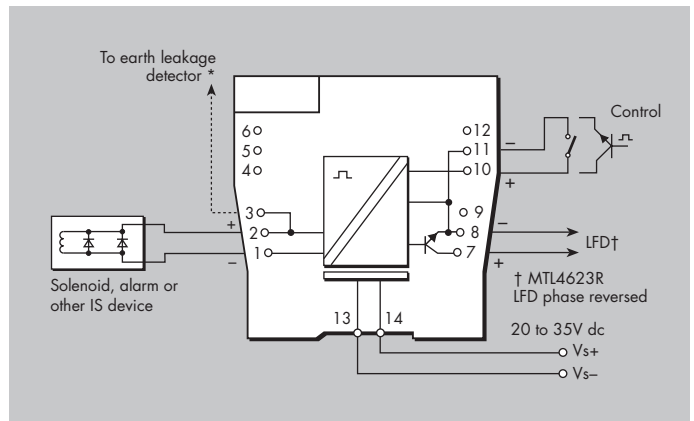
LFD transistor is switched on\*, provided that the field circuit impedance is > 55Ω and < 4kΩ.

\* These conditions are reversed for the MTL4623R. This is to permit parallel connection of alarms between modules to provide a group alarm output.

#### 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

### MTL4623 / MTL4623R



#### LED indicators

Green: power indication  
 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  
 2.0W worst case

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.



Powering Business Worldwide

**Eaton Electric Limited,**  
 Great Marlings, Butterfield, Luton  
 Beds, LU2 8DL, UK.  
 Tel: + 44 (0)1582 723633 Fax: + 44 (0)1582 422283  
 E-mail: mtlenquiry@eaton.com  
 www.mtl-inst.com

© 2016 Eaton  
 All Rights Reserved  
 Publication No.  
 EPS4623/R Rev 5 010916

**EUROPE (EMEA):**  
 +44 (0)1582 723633 mtlenquiry@eaton.com  
**THE AMERICAS:**  
 +1 800 835 7075 mtl-us-info@eaton.com  
**ASIA-PACIFIC:**  
 +65 6 645 9888 sales.mtlsing@eaton.com