

# MTL2242 SOLENOID/ ALARM DRIVER

## 4-channel

The MTL2242 unit is a 4-channel version of the MTL2241 which enables up to four hazardous-area devices to be controlled independently by safe-area volt-free contacts or logic signals. The four output circuits are interconnected and can be paralleled, if required, to provide more power. Refer to the MTL2241 for details of applications, etc.

### SPECIFICATION

See also 'Common specification'

#### Number of channels

Four, interconnected, fully floating

#### Location of loads

Zone 0, IIC, T4–T6 hazardous area if suitably certified  
Div 1, Group A, hazardous area

#### Input/output characteristic (each channel)

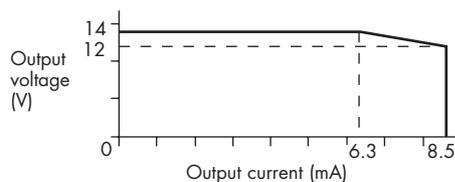
Turns on if  $<27k\Omega^*$  or  $<1V$  applied

Turns off if  $>54k\Omega^*$  or  $>2V$  applied

Hysteresis,  $13k\Omega^*$  or  $0.5V$ , nominal

**\*Divide by 4 if all inputs paralleled**

#### Minimum output voltage (each channel)



#### Maximum output voltage

17.5V constant, current limited at 12mA

#### Power supply failure protection

Load(s) de-energised if supply fails

#### Broken line protection

Load(s) de-energised if any combination of leads goes open circuit

#### 'Fail-safe' earth fault protection (each channel)

Enabled by connecting terminal 8 to earth

#### 'No-fail' earth fault protection (each channel)

Enabled by connecting terminal 8 to MTL2220

Fault on any line proclaimed: unit continues working

#### Response time

$<10ms$

#### LED indicator (each channel)

ON when associated hazardous-area load energised

#### Consumption

2.4 to 3.6W (ac versions)

160mA (24V dc version)

#### Ambient temperature limits

$-20$  to  $+40^\circ C$  (ac versions, close packed)

$-20$  to  $+30^\circ C$  (dc version at 26V, close packed)

$-20$  to  $+55^\circ C$  (ac versions, at least 5mm apart)

$-20$  to  $+50^\circ C$  (dc version at 26V, at least 5mm apart)

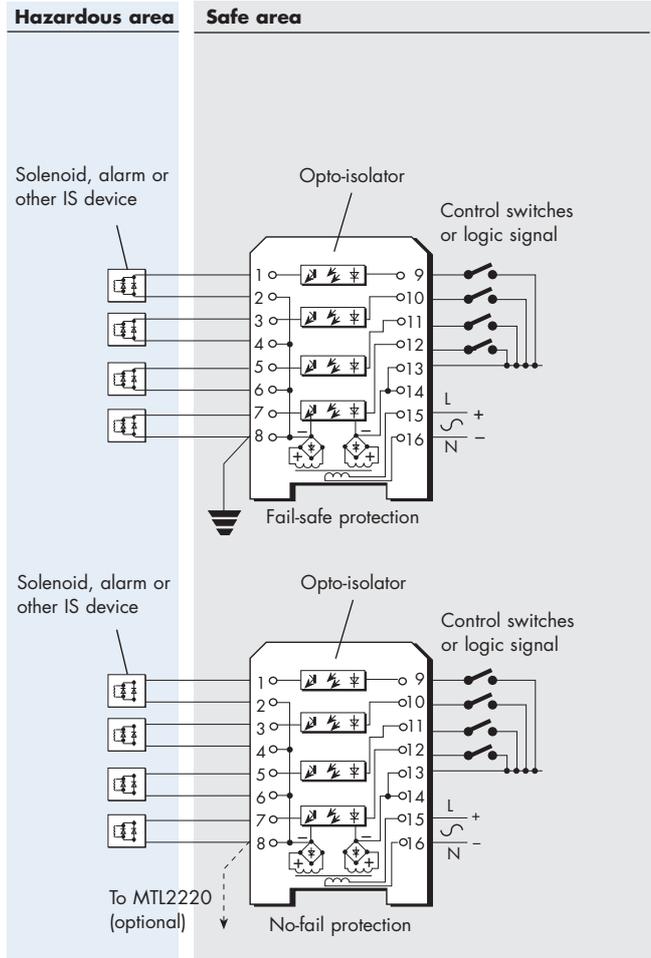
$-40$  to  $+80^\circ C$  (all versions, storage)

#### Safety description (each channel or up to 4 channels connected in parallel)

28V,  $300\Omega$ , 93mA

#### FM max entity parameters

$V_{OC} = 34.0V$ ,  $I_{SC} = 110.4mA$ ,  $C_A = 0.09\mu F$ ,  $L_A = 3.5mH$



See also MTL2000 approvals, maximum cable parameters, dimensions and ordering information



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