

# MTL2211 SWITCH OPERATED RELAY

## 2-channel

The MTL2211 enables two 500VA safe-area loads to be controlled independently through two relays by two light-duty on/off switches in a hazardous area. The two input circuits are independently fully floating and are unaffected by each other. Each relay is provided with two sets of changeover contacts, which are connected in parallel within the unit for maximum reliability. Applications include the operation of medium-powered electrical equipment such as alarms, lights, and small electrical motors, or contactors for controlling higher-powered equipment.

### SPECIFICATION

See also 'Common specification'

#### Number of channels

Two, independently fully floating

#### Location of switches

Zone 0, IIC, T6 hazardous area  
Div 1, Group A, hazardous area

#### Voltage applied to each switch

2.5V dc from 680  
 $\Omega$

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

Relay energised if  $<200\Omega$  in switch circuit  
Relay de-energised if  $>500\Omega$  in switch circuit  
Hysteresis, nominal  $100\Omega$

#### Power supply failure protection

Both relays de-energised if supply fails

#### Broken line protection (each channel)

Relay de-energised if either line broken

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

(Enabled by connecting terminal 3 or 7 to earth)  
Relay de-energised if  $<1k\Omega$  to earth, total for both lines  
Relay not de-energised if  $>7.5k\Omega$  to earth, total for both lines

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

(Enabled by connecting terminal 3 or 7 to MTL4220)  
Fault on either line proclaimed: unit continues working

#### Response time (each channel)

50ms, nominal

#### Contacts (each channel)

1-pole changeover, duplicated within unit

#### Contact rating

250V:5A:500VA (ac), resistive loads, reactive loads must be suppressed  
250V:5A:250W (dc), resistive loads, reactive loads must be suppressed

#### Contact life expectancy

$3 \times 10^5$  operations at maximum load

#### LED indicator (each channel)

ON when associated relay energised (safe condition)

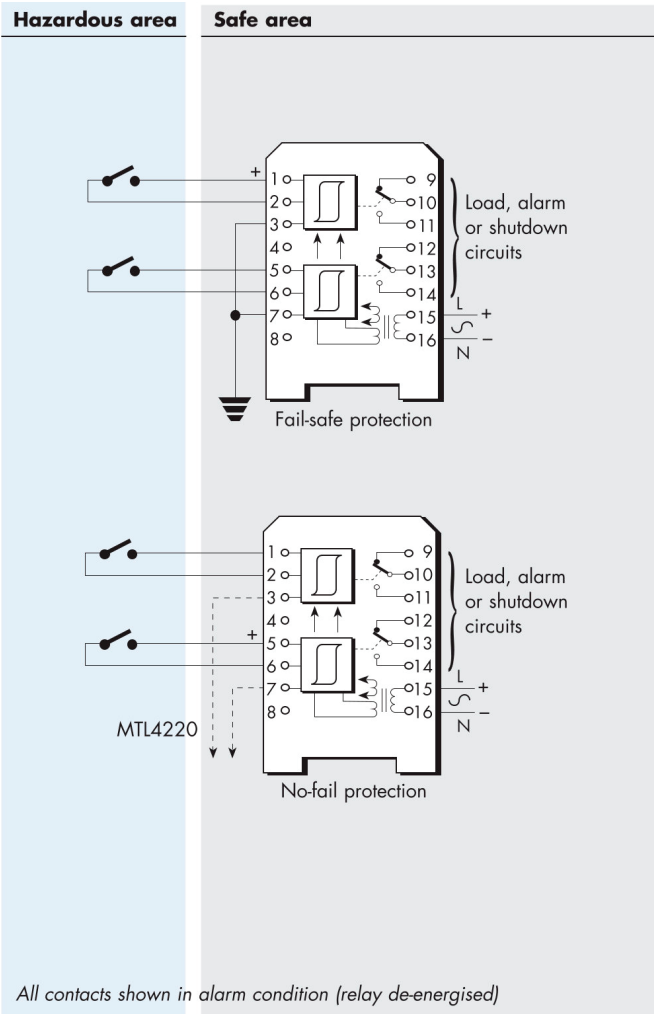
#### Consumption

1.7 to 2.5W (ac versions)  
110mA (24V dc version)

#### Ambient temperature limits

-20 to +50°C (ac versions, close packed)  
-20 to +45°C (24V dc versions at 26V, close packed)  
-20 to +60°C (all versions, at least 5mm apart)  
-40 to +80°C (all versions, storage)

### MTL2211



#### Safety description (each channel)

7V, 300 $\Omega$ , 22mA

#### FM max entity parameters (each channel)

Voc = 8.3V, Isc = 21.7mA, Ca = 5.5 $\mu$ F, La = 75mH



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