## Specifications (continued)

## Outputs (continued)

| Insulation resistance | : $1000 \mathrm{M} \Omega$ minimum at 500 V dc |
| :---: | :---: |
| Dielectric strength | : 3000 V ac, $50 / 60 \mathrm{~Hz}$ for 1 minute between coil and contacts <br> 1000 V ac, $50 / 60 \mathrm{~Hz}$ for 1 minute between contacts |
| Service life | : 300000 at 2 A (resistive load) 100000 at $2 \mathrm{~A}(\mathrm{~L} / \mathrm{R}=7 \mathrm{~ms}$ - see above for definition) |
| Electrical Connections |  |
| Wire gauge | : $2,0 \mathrm{~mm}^{2}$ (maximum) \# |
| \# For manageable cabling to the modules, a conductor size of up to $0,5 \mathrm{~mm}^{2}$, with a maximum overall outside diameter of 2 mm , is recommended. |  |
| Power Supply (from base) |  |
| Voltage | $\begin{aligned} & : 12 \vee(15 \% \\ & 5 \vee(5 \% \text { from base } \end{aligned}$ |
| Current consumption | : 125 mA maximum on 12 V 60 mA maximum on 5 V |
| Indicators (LEDs) |  |
| $8 \times \mathrm{O} / \mathrm{P}$ (Output) (red) | LED ON = Relay energized (contact closed) |
| Identification Codes |  |
| Scan code | : 13 |
| Module ID | : 12 |
| Environment |  |
| Operating temperature | : $-25^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}\left(-13^{\circ} \mathrm{F}\right.$ to $\left.+140^{\circ} \mathrm{F}\right)$ |
| Storage temperature | : $-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.+158^{\circ} \mathrm{F}\right)$ |
| Relative humidity | : $95 \%$ at $40^{\circ} \mathrm{C}\left(104{ }^{\circ} \mathrm{F}\right)$ (non-condensing) |
| Mass |  |
| Including packaging | : 390 g (13,8 oz) |
| Excluding packaging | : 300 g (10,6 oz) |
| Ordering Information |  |
| Order Code | M1372A |

## Maxiflex 1000 Series 8-Channel Relay Output (8RO) Module <br> Model No. M1372A

## General Description

The M1372A 8RO provides 8 sets of potential-free, normally open relay contacts and displays he status on a $2 \times 4$ LED matrix.

The M1372A can be inserted or removed while the system is live.

## Module Positioning

The M1372A must be inserted in one of the I/O positions of the Maxiflex base.
Refer to the Maxiflex bases General instructions (P/N 98-8952-930-00X) for more detail on base layout, module insertion and module removal.

## Electrical Installation

Power for the module is drawn from the base so the only field connections required are to the output terminals.

An important feature of the relays contacts are that loads of differing voltages (ac and/or dc) can be switched as each set of contacts is fully isolated. Each relay coil has a fly-wheel diode for emf fly-back protection. In addition, a snubber circuit across the contacts dissipates high frequency spark energy when the contacts open under load.

Figure 1: Layout of the 7I/O Master base


Note: The exact position of the 1/0 module will depend on the system configuration.

Figure 2: Layout of the M1372A


Note: The LEDs can only be seen when illuminated, as they are located behind the LED cover.

Figure 3: Electrical connections


## Specifications

Outputs

Quantity
Conductor size
Contact type
Operating current
Operating voltage
Maximum switching capacity

Minimum load
Contact resistance

## Operate time

Release time
Operating frequency
: 8
: $1,5 \mathrm{~mm}^{2}$ (recommended maximum)
: SPST (Single Pole Single Throw)
: 5 A (maximum)
: 250 V ac (maximum)
125 V dc (maximum)
1250 VA or 150 W for resistive load
500 VA or 60 W for inductive load with $\mathrm{L} / \mathrm{R} \circledR$
7 ms where $\mathbf{L}=$ inductance of load in henrys and $\mathbf{R}=$ resistance of load in ohms and $\mathbf{L} / \mathbf{R}=$ time constant in seconds
: 5 V dc at 10 mA
: $30 \mathrm{~m} \Omega$ maximum
: 10 ms maximum
: 10 ms maximum
: (mechanical) 18000 operations/hour (electrical) 1800 operations/hour under rated load

