## Product data sheet

Characteristics

RE22R2MMU
Multifunction Timer Relay - 24VDC/24.. 240 V
AC-2 C/O

Product availability: Non-Stock - Not normally stocked in distribution facility


| Breaking capacity | 2000 VA |
| :---: | :---: |
| Minimum switching current | 10 mA 5 V |
| Maximum switching current | 8 mA |
| Maximum switching voltage | 250 V |
| Electrical durability | 100000 cycles resistive, 8 A 250 V , AC |
| Mechanical durability | 10000000 cycles |
| Rated impulse withstand voltage | 5 KV 1.2... 50 нs IEC 60664-1 5 kV IEC 61812-1 |
| Power on delay | 100 ms |
| Safety reliability data | $\begin{aligned} & \text { MTTFd }=182.6 \text { years } \\ & \text { B10d }=170000 \end{aligned}$ |
| Mounting position | Any position in relation to normal vertical mounting plane |
| Mounting support | 35 mm DIN rail EN/IEC 60715 |
| Status LED | Green LED flashing)timing in progress <br> Green LED steady)power ON <br> Yellow LEDrelay energised |
| Width | 0.89 in (22.5 mm) |
| Product weight | 0.20 lb (US) ( 0.09 kg ) |

## Environment

| Dielectric strength | 2.5 kV 1 mA/1 minute 50 Hz IEC 61812-1 |
| :---: | :---: |
| Standards | IEC 61812-1 <br> EN 61000-6-1 <br> EN 61000-6-2 <br> EN 61000-6-3 <br> EN 61000-6-4 |
| Directives | 2004/108/EC - electromagnetic compatibility 2006/95/EC - low voltage directive |
| Product certifications | CULus <br> CSA <br> CE <br> China RoHS <br> CCC <br> RCM <br> GL <br> EAC |
| Ambient air temperature for operation | $-4 . . .140{ }^{\circ} \mathrm{F}\left(-20 \ldots 60^{\circ} \mathrm{C}\right)$ |
| Ambient air temperature for storage | $-22 \ldots 140{ }^{\circ} \mathrm{F}\left(-30 \ldots 60^{\circ} \mathrm{C}\right)$ |
| IP degree of protection | Housing IP40 IEC 60529 <br> Terminal block IP20 IEC 60529 <br> Front face IP40 IEC 60529 |
| Vibration resistance | $20 \mathrm{~m} / \mathrm{s}^{2} 10 \ldots 150 \mathrm{~Hz}$ )IEC 60068-2-6 |
| Shock resistance | $15 \mathrm{gn} 11 \mathrm{~ms} \mathrm{IEC} \mathrm{60068-2-27}$ |
| Relative humidity | 93 \%, without condensation IEC 60068-2-30 |
| Electromagnetic compatibility | Electrostatic discharge immunity test 6 kV contact discharge)level 3 EN/IEC 61000-4-2 <br> Electrostatic discharge immunity test 8 kV air discharge)level 3 EN/IEC 61000-4-2 <br> Fast transients immunity test 1 kV capacitive connecting clip)level 3 IEC 61000-4-4 <br> Fast transients immunity test 2 kV direct contact)level 3 IEC 61000-4-4 <br> Surge immunity test 1 kV differential mode)level 3 IEC 61000-4-5 <br> Surge immunity test 2 kV common mode)level 3 IEC 61000-4-5 <br> Radiated radio-frequency electromagnetic field immunity test $10 \mathrm{~V} 0.15 \ldots 80$ <br> MHz)level 3 IEC 61000-4-6 <br> Electromagnetic field immunity test $10 \mathrm{~V} / \mathrm{m} 80 \mathrm{MHz} . .1 \mathrm{GHz}$ )level 3 IEC 61000-4-3 <br> Immunity to microbreaks and voltage drops $30 \% 500 \mathrm{~ms}$ ) IEC 61000-4-11 Immunity to microbreaks and voltage drops 100 \% 20 ms ) IEC 61000-4-11 Conducted and radiated emissionsclass B EN 55022 |

Ordering and shipping details

| Category | 22376 －RELAYS－MEASUREMENT（RM4） |
| :--- | :--- |
| Discount Schedule | CP2 |
| GTIN | 00785901507352 |
| Package weight（Lbs） | $0.09 \mathrm{~kg} \mathrm{(0.2} \mathrm{lb(US))}$ |
| Returnability | No |
| Country of origin | ID |

Offer Sustainability

| Sustainable offer status | Green Premium product |
| :---: | :---: |
| California proposition 65 | WARNING：This product can expose you to chemicals including：Lead and lead compounds which is known to the State of California to cause Carcinogen \＆Re－ productive harm．For more information go to www．p65warnings．ca．gov |
| REACh Regulation | 廌REACh Declaration |
| EU RoHS Directive | Pro－active compliance（Product out of EU RoHS legal scope）$\underbrace{\text { E }} \mathrm{EU}$ RoHS Decla－ ration |
| Mercury free | Yes |
| RoHS exemption information | 㢴Yes |
| China RoHS Regulation | 水China RoHS Declaration |
| Environmental Disclosure | －Product Environmental Profile |
| Circularity Profile | 廌End Of Life Information |



| A1 | 15 | 25/21 |
| :---: | :---: | :---: |
|  |  |  |
| 18 | 16 | A2 |
| 28/24 | 26/22 | Y1 |

Wiring Diagram


## Description

The timing period T begins on energization. After timing, the output(s) relay close(s).


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function Ac: On- and Off-Delay Relay with Control Signal

## Description

After power-up, closing of the control contact Y1 causes the timing period T to start (timing can be interrupted by operating the Gate control contact G). At the end of this timing period, the relay closes.
When control contact Y 1 re-opens, the timing $T$ starts. At the end of this timing period $T$
At the end of this timing period T , the output reverts to its initial position (timing can be interrupted by operating the Gate control contact G ).


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function At : Power on Delay Relay (Summation) with Control Signal

## Description

After power-up, the first opening of control contact Y1 starts the timing. Timing can be interrupted each time control contact closes. When the cumulative total of time periods elapsed reaches the pre-set value $T$, the output relay closes.

$T=t 1+t 2+t 3$

Function B : Interval Relay with Control Signal

## Description

After power-up, pulsing or maintaining control contact $Y 1$ starts the timing $T$. The output relay closes for the duration of the timing period $T$ then reverts to its initial state.


Function Bw : Double Interval Relay with Control Signal

## Description

On closing and opening of control contact Y 1 , the output relay closes for the duration of the timing period T .


Function C : Off-Delay Relay with Control Signal

## Description

After power-up and closing of the control contact Y 1 , the output relay closes. When control contact Y 1 re-opens, timing T starts. At the end of the timing period, the output(s) relay revert(s) to its/their initial state.


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

## Function D : Symmetrical Flasher Relay (Starting Pulse Off)

## Description

Repetitive cycle with two timing periods $T$ of equal duration, with output(s) relay changing state at the end of each timing period $T$.


Before power-up Y1 should be permanently connected to A1.
2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

## Function D : Symmetrical Flasher Relay (Starting Pulse On)

## Description

Repetitive cycle with two timing periods $T$ of equal duration, with output(s) relay changing state at the end of each timing period $T$.


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function H : Interval Relay

## Description

On energization of the relay, timing period $T$ starts and the output(s) relay close(s). At the end of the timing period $T$, the output(s) relay revert(s) to its/their initial state


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

## Legend

$\square$ Relay de-energised
Relay energised
$\square$ Output open
Output closed

| Y1: | Control contact |
| :--- | :--- |
| R1/ | 2 timed outputs |
| R2: |  |
| R2 | The second output is instantaneous if the right position is selected |
| inst. : |  |
| T: | Timing period |
| U : | Supply |

## Function Ht : Interval Relay (Summation) with Control Signal

## Description

On energization, the output relay closes for the duration of a timing period $T$ then reverts to its initial state.
Pulsing or maintaining control contact Y 1 will again close the output relay.
Timing $T$ is only active when control contact $Y 1$ is released and so the output relay will not revert to its initial state until after a time $\mathrm{t} 1+\mathrm{t} 2+\mathrm{t} 3$ The relay memories the total, cumulative opening time of control contact Y 1 and, once the set time T is reached, the output relay reverts to its initial state.

$T=t 1+t 2+t 3$

## Legend

$\square$ Relay de-energised
$\square$ Relay energised
Output open
$\square$ Output closed

Y1: Control contact
R1/ 2 timed outputs

R2
R2 The second output is instantaneous if the right position is selected inst.
T: Timing period
U: Supply

