

Product data sheet

Characteristics

RE7RB11MW

off-delay timing relay - 0.05..1 s - 240 V AC DC - 1OC

Product availability: Stock - Normally stocked in distribution facility

Price*: 189.00 USD



Main

| | |
|---------------------------|-------------------------|
| Commercial Status | Commercialised |
| Range of product | Zelio Time |
| Product or component type | Industrial timing relay |
| Component name | RE7 |
| Time delay type | K |
| Time delay range | 0.05 s...10 min |

Complementary

| | |
|---|---|
| Discrete output type | Relay |
| Contacts material | Silver with gold flashed contacts |
| Width pitch dimension | 0.89 in (22.5 mm) |
| [Us] rated supply voltage | 24...240 V AC/DC at 50/60 Hz |
| Voltage range | 0.85...1.1 Us |
| Connections - terminals | Screw terminals, clamping capacity: 2 x 2.5 mm ² flexible without cable end Screw terminals, clamping capacity: 2 x 1.5 mm ² flexible with cable end |
| Tightening torque | 5.31...9.73 lbf.in (0.6...1.1 N.m) |
| Setting accuracy of time delay | +/- 10 % of full scale |
| Repeat accuracy | +/- 0.2 % |
| Temperature drift | < 0.07 %/°C |
| Voltage drift | < 0.2 %/V |
| Minimum pulse duration | 1 s |
| Reset time | 50 ms |
| Maximum switching voltage | 250 V AC/DC |
| Mechanical durability | 20000000 cycles |
| [Ith] conventional free air thermal current | 5 A |
| [Ie] rated operational current | <= 3 A AC-15at 158 °F (70 °C) conforming to IEC 60947-5-1/1991/VDE 0660 <= 0.2 A DC-13 115 Vat 158 °F (70 °C) conforming to IEC 60947-5-1/1991/VDE 0660 <= 0.1 A DC-13 250 Vat 158 °F (70 °C) conforming to IEC 60947-5-1/1991/VDE 0660 <= 2 A DC-13 24 Vat 158 °F (70 °C) conforming to IEC 60947-5-1/1991/VDE 0660 |
| Minimum switching capacity | 12 V / 10 mA |
| Potentiometer characteristic | Linear 47 kOhm (+/- 20 %), 0.2 W, cable length: <= 82.02 ft (25 m) Z1Z2terminal(s) |
| Marking | CE |
| Overvoltage category | III conforming to IEC 60664-1 |
| [Ui] rated insulation voltage | 300 V between contact circuit and power supply CSA certified 300 V between contact circuit and control inputs CSA certified 250 V between contact circuit and power supply IEC certified 250 V between contact circuit and control inputs IEC certified |
| Supply disconnection value | > 0.1 Uc |
| Operating position | Any position without derating |
| Surge withstand | 2 kV conforming to IEC 61000-4-5 level 3 |

| | |
|-------------------------|--|
| Power consumption in VA | 3.2 VA 110 V 2.5 VA 48 V 6 VA 240 V 2 VA 24 V |
| Power consumption in W | 3.2 W 110 V 2 W 240 V 2 W 24 V 1 W 48 V |
| Peak current | 0.001 kA for 30 s on energisation |
| Terminal description | (15-16-18)OC_OFF (A1-A2)CO |
| Height | 3.07 in (78 mm) |
| Width | 0.89 in (22.5 mm) |
| Depth | 3.15 in (80 mm) |
| Product weight | 0.33 lb(US) (0.15 kg) |

Environment

| | |
|---------------------------------------|--|
| Immunity to microbreaks | 3 ms |
| Standards | EN/IEC 61812-1 |
| Product certifications | CSA GL UL |
| Ambient air temperature for storage | -40...185 °F (-40...85 °C) |
| Ambient air temperature for operation | -4...140 °F (-20...60 °C) |
| Relative humidity | 15...85 % (3K3) conforming to IEC 60721-3-3 |
| Vibration resistance | 0.35 mm (f = 10...55 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 15 gn 11 ms conforming to IEC 60068-2-27 |
| IP degree of protection | IP50 (housing) IP20 (terminals) |
| Pollution degree | 3 conforming to IEC 60664-1 |
| Dielectric strength | 2.5 kV |
| Non-dissipating shock wave | 4.8 kV |
| Resistance to electrostatic discharge | 8 kV (in air) conforming to IEC 61000-4-2 level 3 6 kV (in contact) conforming to IEC 61000-4-2 level 3 |
| Resistance to electromagnetic fields | 9.14 V/yd (10 V/m) conforming to IEC 61000-4-3 level 3 |
| Resistance to fast transients | 2 kV conforming to IEC 61000-4-4 level 3 |
| Disturbance radiated/conducted | CISPR 11 group 1 - class A CISPR 22 - class A |

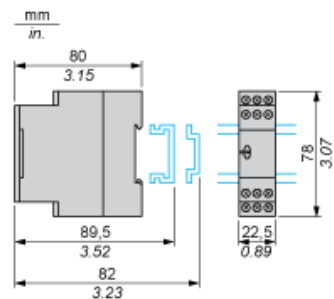
Ordering and shipping details

| | |
|-----------------------|---|
| Category | 22376 - RELAYS-MEASUREMENT(RM4) |
| Discount Schedule | CP2 |
| GTIN | 00785901515302 |
| Nbr. of units in pkg. | 1 |
| Product availability | Stock - Normally stocked in distribution facility |
| Returnability | Y |
| Country of origin | ID |

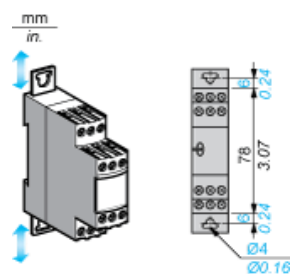
Contractual warranty

| | |
|-----------------|-----------|
| Warranty period | 18 months |
|-----------------|-----------|

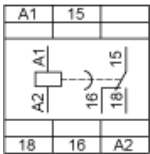
Rail Mounting



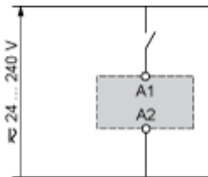
Screw Fixing



Internal Wiring Diagram



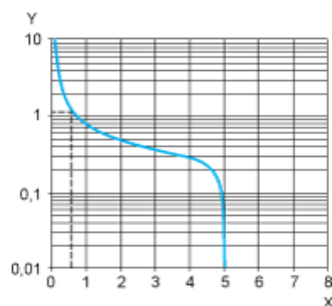
Recommended Application Wiring Diagram



Performance Curves

A.C. Load Curve 1

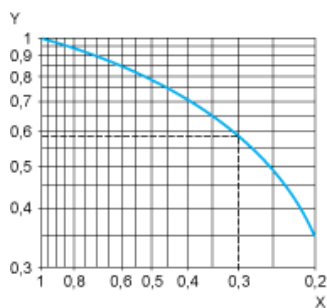
Electrical durability of contacts on resistive loading millions of operating cycles



X Current broken in A
Y Millions of operating cycles

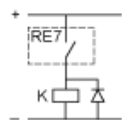
A.C. Load Curve 2

Reduction factor k for inductive loads (applies to values taken from durability curve 1).

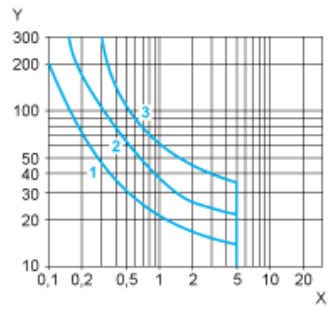


X Power factor on breaking ($\cos \phi$)
Y Reduction factor k

Example: An LC1-F185 contactor supplied with 115 V/50 Hz for a consumption of 55 VA or a current consumption equal to 0.1 A and $\cos \phi = 0.3$. For 0.1 A, curve 1 indicates a durability of approximately 1.5 million operating cycles. As the load is inductive, it is necessary to apply a reduction coefficient k to this number of cycles as indicated by curve 2. For $\cos \phi = 0.3$: $k = 0.6$. The electrical durability therefore becomes: 1.5×10^6 operating cycles $\times 0.6 = 900\,000$ operating cycles.



D. C. Load Limit Curve



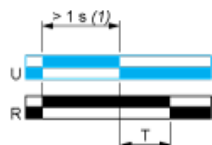
- X Current in A
Y Voltage in V
1 L/R = 20 ms
2 L/R with load protection diode
3 Resistive load

Function K: Delay on De-Energisation (Without Auxiliary Supply)

Description

On energisation, the output(s) R close(s). On de-energisation, timing period T starts and, at the end of this period, the output(s) R revert(s) to its/their initial state.

Function: 1 Output



- 1 If the Device has been stored, de-energised, for more than a month, it must be energised for about 15 seconds in order to activate it. Subsequently, it only takes 1 second to start the time delay.

⚠ WARNING

UNEXPECTED EQUIPMENT OPERATION

If the time is not complied with, the relay remains energised indefinitely.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Legend

□ Relay de-energised

■ Relay energised

□ Output open

■ Output closed

C Control contact

G Gate

R Relay or solid state output

R1/ 2 timed outputs

R2

The second output is instantaneous if the right position is selected

T Timing period

Ta Adjustable On-delay

-

Tr Adjustable Off-delay

-

U Supply