

Product datasheet

Specifications



adjustable symmetrical flashing relay - 0.05..1 s - 24 V AC DC - 2OC

RE7CP13BU

⚠ Discontinued on: 1 Jun 2016

EAN Code: 3389110311754

⚠ Discontinued

Main

| | |
|-------------------------------|-------------------------|
| Range Of Product | Zelio Time |
| Product Or Component Type | Industrial timing relay |
| Contacts Type And Composition | 2 C/O |
| Component Name | RE7 |
| Time Delay Type | D |
| Time Delay Range | 0.05 s...300 h |

Complementary

| | |
|---|---|
| Discrete Output Type | Relay |
| Contacts Material | 90/10 silver nickel contacts |
| Width Pitch Dimension | 22.5 mm |
| [Us] Rated Supply Voltage | 110...240 V AC 50/60 Hz 24 V AC/DC 50/60 Hz 42...48 V AC/DC 50/60 Hz |
| Voltage Range | 0.85...1.1 Us |
| Connections - Terminals | Screw terminals, 2 x 1.5 mm ² flexible with cable end Screw terminals, 2 x 2.5 mm ² flexible without cable end |
| Tightening Torque | 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 | 20 ms |
| Reset Time | 50 ms |
| Maximum Switching Voltage | 250 V AC/DC |
| Mechanical Durability | 20000000 cycles |
| [Ith] Conventional Free Air Thermal Current | 8 A |
| Maximum [Ie] Rated Operational Current | 2 A DC-13 24 V at 70 °C conforming to IEC 60947-5-1/1991/VDE 0660 0.1 A DC-13 250 V at 70 °C conforming to IEC 60947-5-1/1991/VDE 0660 0.2 A DC-13 115 V at 70 °C conforming to IEC 60947-5-1/1991/VDE 0660 3 A AC-15 at 70 °C conforming to IEC 60947-5-1/1991/VDE 0660 |
| Minimum Switching Capacity | at 12 V 10 mA |
| Potentiometer Characteristic | Linear 47 kOhm (+/- 20 %), 0.2 W, cable length <25 m Z1Z2 terminal(s) |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|--------------------------------|--|
| Marking | CE |
| Overvoltage Category | III conforming to IEC 60664-1 |
| [Ui] Rated Insulation Voltage | 250 V between contact circuit and control inputs IEC certified 250 V between contact circuit and power supply IEC certified 300 V between contact circuit and control inputs CSA certified 300 V between contact circuit and power supply CSA 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 | 2 VA at 48 V 1.2 VA at 24 V 12.5 VA at 240 V 2.8 VA at 110 V |
| Maximum Power Consumption In W | 0.8 W at 24 V 1.6 W at 48 V |
| Terminal Description | ALT (B1-A2)CO (Z2)UNUSED (25-26-28)OC_ON (Z1)UNUSED (15-16-18)OC_ON |
| Height | 78 mm |
| Width | 22.5 mm |
| Depth | 80 mm |
| Net Weight | 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...85 °C |
| Ambient Air Temperature For Operation | -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 for 11 ms conforming to IEC 60068-2-27 |
| Ip Degree Of Protection | IP20 (terminals) IP50 (housing) |
| Pollution Degree | 3 conforming to IEC 60664-1 |
| Dielectric Strength | 2.5 kV |
| Non-Dissipating Shock Wave | 4.8 kV |
| Resistance To Electrostatic Discharge | 6 kV in contact conforming to IEC 61000-4-2 level 3 8 kV in air conforming to IEC 61000-4-2 level 3 |
| Resistance To Electromagnetic Fields | 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 |

Packing Units

| | |
|------------------------------|-----|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |

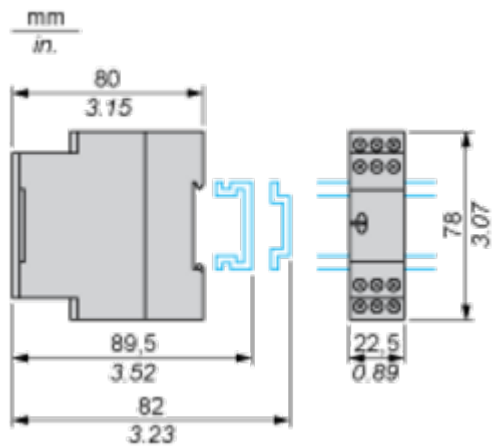
Contractual warranty

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

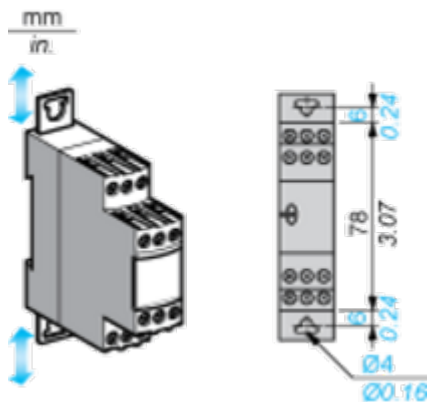
Dimensions Drawings

Width 22.5 mm

Rail Mounting

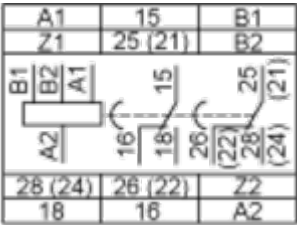


Screw Fixing



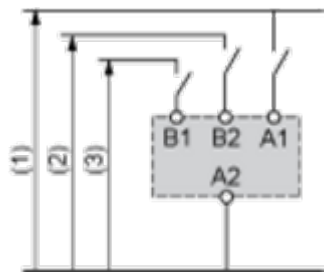
Connections and Schema

Internal Wiring Diagram



Recommended Application Wiring Diagram

Start on Energisation



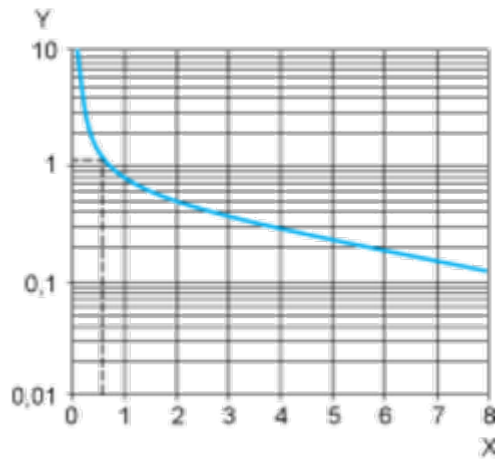
- 1 Supply
- 2 12...48 V
- 3 24 V

Performance Curves

Performance Curves

A.C. Load Curve 1

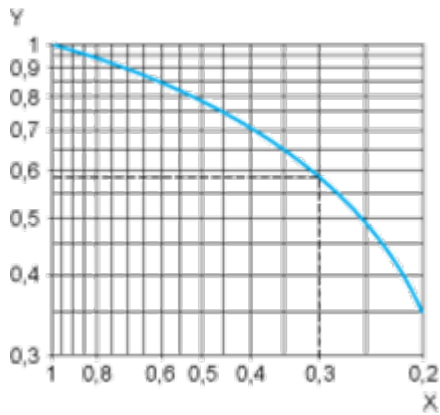
Electrical durability of contacts on resistive loading millions of operating cycles



X Current broken in A
Y Millions of operating cycles

A.C. Load Curve 2

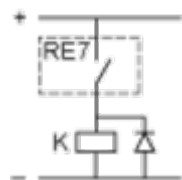
Reduction factor k for inductive loads (applies to values taken from durability curve 1).



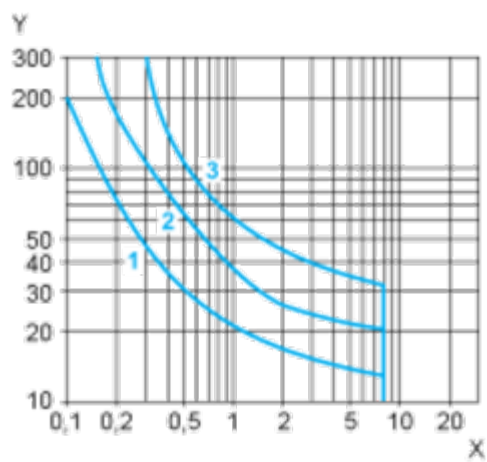
X Power factor on breaking ($\cos \phi$)
Y Reduction factor k

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: $1.5 \cdot 10^6$ 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

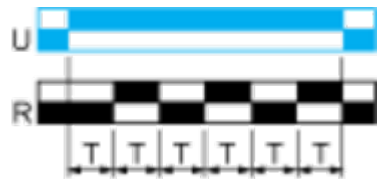
Technical Description

Function D : Symmetrical Flasher Relay (Starting Pulse Off)

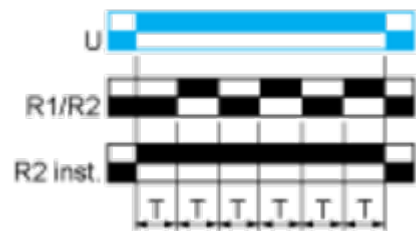
Description

Repetitive cycle with two timing periods T of equal duration, with output(s) R changing state at the end of each timing period T.
The second output can be either timed or instantaneous.

Function: 1 Output





Function: 2 Outputs



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

Legend

| | |
|---|--------------------|
|  | Relay de-energised |
|  | Relay energised |
|  | Output open |
|  | Output closed |

| | |
|----------|--|
| C | Control contact |
| G | Gate |
| R | Relay or solid state output |
| R1/R2 | 2 timed outputs |
| R2 inst. | The second output is instantaneous if the right position is selected |
| T | Timing period |
| Ta - | Adjustable On-delay |
| Tr - | Adjustable Off-delay |
| U | Supply |