

# Product data sheet

Specifications



## off-delay timing relay - 0.05..1 s - 240 V AC DC - 10C

RE7RB11MW

⚠ Discontinued on: Jan 23, 2021

⚠ Discontinued

### Main

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	0.9 in (22.5 mm)
[Us] rated supply voltage	24...240 V AC/DC 50/60 Hz
Voltage range	0.85...1.1 Us
Connections - terminals	Screw terminals, 2 x 1.5 mm <sup>2</sup> flexible with cable end Screw terminals, 2 x 2.5 mm <sup>2</sup> flexible without cable end
Tightening torque	5.3...9.7 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
Maximum [Ie] rated operational current	2 A DC-13 24 V 158 °F (70 °C) IEC 60947-5-1/1991/VDE 0660 0.1 A DC-13 250 V 158 °F (70 °C) IEC 60947-5-1/1991/VDE 0660 0.2 A DC-13 115 V 158 °F (70 °C) IEC 60947-5-1/1991/VDE 0660 3 A AC-15 158 °F (70 °C) IEC 60947-5-1/1991/VDE 0660
Minimum switching capacity	10 mA 12 V
Potentiometer characteristic	Linear 47 kOhm +/- 20 %, 0.2 W 82.02 ft (25 m) Z1Z2
Marking	CE
Overvoltage category	III IEC 60664-1

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>[Ui] rated insulation voltage</b>	250 V between contact circuit and control inputs IEC 250 V between contact circuit and power supply IEC 300 V between contact circuit and control inputs CSA 300 V between contact circuit and power supply CSA
<b>Supply disconnection value</b>	> 0.1 Uc
<b>Operating position</b>	Any position without derating
<b>Surge withstand</b>	2 kV IEC 61000-4-5 level 3
<b>Power consumption in VA</b>	2 VA 24 V 6 VA 240 V 2.5 VA 48 V 3.2 VA 110 V
<b>Maximum power consumption in W</b>	1 W 48 V 2 W 24 V 2 W 240 V 3.2 W 110 V
<b>Peak current</b>	0.001 kA 30 s on energisation
<b>Terminal description</b>	(A1-A2)CO (15-16-18)OC_OFF
<b>Height</b>	3.07 in (78 mm)
<b>Width</b>	0.9 in (22.5 mm)
<b>Depth</b>	3.1 in (80 mm)
<b>Net Weight</b>	0.33 lb(US) (0.15 kg)

## Environment

<b>Immunity to microbreaks</b>	3 ms
<b>Standards</b>	EN/IEC 61812-1
<b>Product Certifications</b>	GL CSA UL
<b>Ambient Air Temperature for Storage</b>	-40...185 °F (-40...85 °C)
<b>Ambient Air Temperature for Operation</b>	-4...140 °F (-20...60 °C)
<b>Relative humidity</b>	15...85 % 3K3 IEC 60721-3-3
<b>Vibration resistance</b>	0.35 mm 10...55 Hz)IEC 60068-2-6
<b>Shock resistance</b>	15 gn 11 ms IEC 60068-2-27
<b>IP degree of protection</b>	IP20 terminals) IP50 housing)
<b>Pollution degree</b>	3 IEC 60664-1
<b>Dielectric strength</b>	2.5 kV
<b>Non-dissipating shock wave</b>	4.8 kV
<b>Resistance to electrostatic discharge</b>	6 kV in contact IEC 61000-4-2 level 3 8 kV in air IEC 61000-4-2 level 3
<b>Resistance to electromagnetic fields</b>	9.1 V/m (10 V/m) IEC 61000-4-3 level 3
<b>Resistance to fast transients</b>	2 kV IEC 61000-4-4 level 3
<b>Disturbance radiated/conducted</b>	CISPR 22 - class A CISPR 11 group 1 - class A

## Ordering and shipping details

<b>Category</b>	22376-RELAYS-MEASUREMENT(RM4)
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Discount Schedule	CP2
GTIN	00785901515302
Returnability	No
Country of origin	ID

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## Packing Units

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Unit Type of Package 1	PCE
Number of Units in Package 1	1

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## Contractual warranty

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Warranty	18 months
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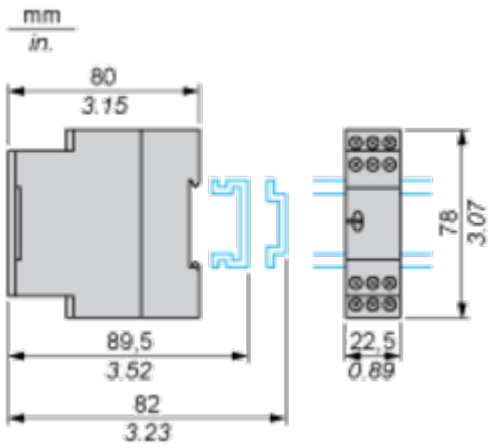
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Dimensions Drawings

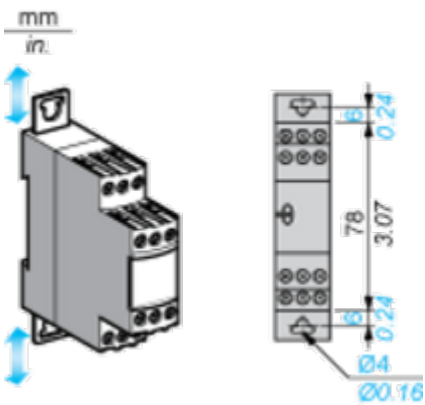
Width 22.5 mm

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Rail Mounting



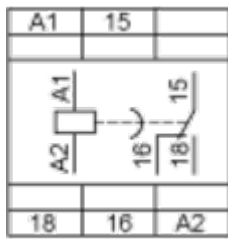
Screw Fixing



Connections and Schema

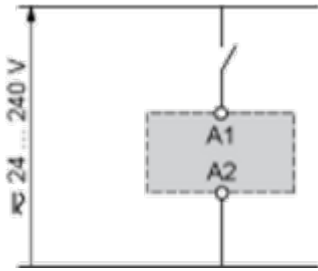
Internal Wiring Diagram

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Recommended Application Wiring Diagram

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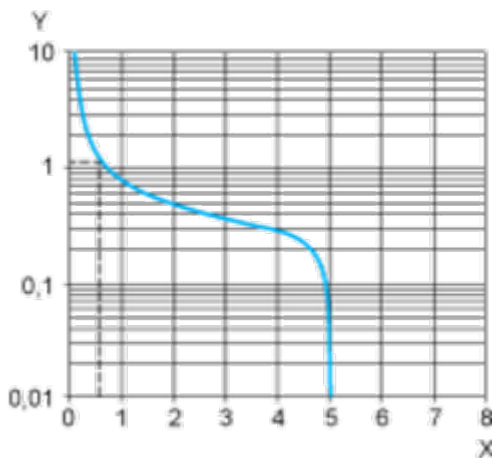
Performance Curves

Performance Curves

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**A.C. Load Curve 1**

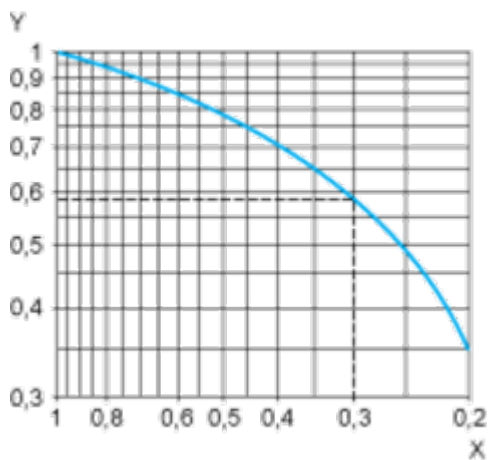
Electrical durability of contacts on resistive loading millions of operating cycles



X Current broken in A  
 Y Millions of operating cycles

**A.C. Load Curve 2**

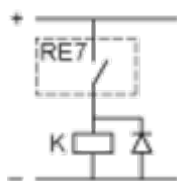
Reduction factor k for inductive loads (applies to values taken from durability curve 1).



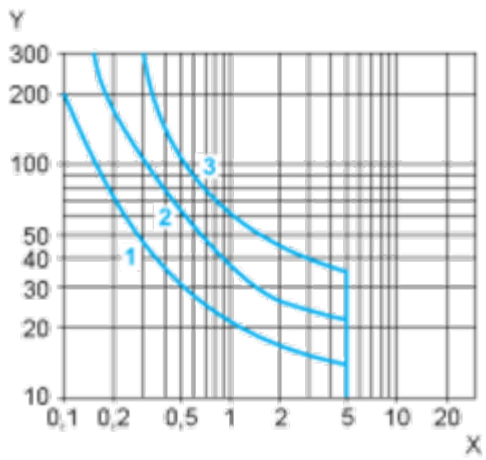
X Power factor on breaking (cos φ)  
 Y Reduction factor k

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 φ = 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 φ = 0.3: k = 0.6 The electrical durability therefore becomes: 1.5 10<sup>6</sup> operating cycles x 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

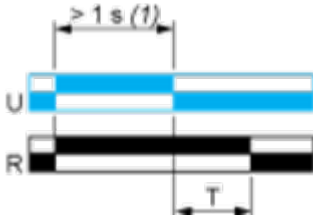
**Function K: Delay on De-Energisation (Without Auxiliary Supply)**

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**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**

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-  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