

# Product datasheet

Specifications



## industrial timing relay - 20..1800s - type A - 24 V AC/DC, 110..240 V AC - 1 C/O

RE8TA41BUTQ

⚠ Discontinued on: Jan 23, 2021 AD

⚠ Discontinued

## Main

Range of product	Zelio Time
Product or component type	Optimum industrial timing relay
Component name	RE8
Time delay type	A
Time delay range	20...1800 s
Sale per indivisible quantity	10

## 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
Voltage range	0.9...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	0.6...1.1 N.m
Setting accuracy of time delay	+/- 20 % of full scale
Repeat accuracy	< 1 %
Voltage drift	< 2.5 %/V
Temperature drift	< 0.2 %/°C
Minimum pulse duration	26 ms
Reset time	50 ms
Maximum switching voltage	250 V
Mechanical durability	20000000 cycles
[I <sub>th</sub> ] conventional free air thermal current	8 A
Maximum [I <sub>e</sub> ] rated operational current	2 A DC-13 24 V at 70 °C conforming to IEC 60947-5-1/1991 2 A DC-13 24 V at 70 °C conforming to VDE 0660 3 A AC-15 24 V at 70 °C conforming to IEC 60947-5-1/1991 3 A AC-15 24 V at 70 °C conforming to VDE 0660 0.1 A DC-13 250 V at 70 °C conforming to IEC 60947-5-1/1991 0.1 A DC-13 250 V at 70 °C conforming to VDE 0660 0.2 A DC-13 115 V at 70 °C conforming to IEC 60947-5-1/1991 0.2 A DC-13 115 V at 70 °C conforming to VDE 0660

<b>Minimum switching capacity</b>	at 12 V 10 mA
<b>Marking</b>	CE
<b>Overvoltage category</b>	III conforming to IEC 60664-1
<b>[UI] rated insulation voltage</b>	250 V conforming to IEC 300 V conforming to CSA
<b>Supply disconnection value</b>	> 0.1 U <sub>c</sub>
<b>Operating position</b>	Any position without derating
<b>Surge withstand</b>	2 kV conforming to IEC 61000-4-5 level 3
<b>Power consumption in VA</b>	0.7 VA at 24 V 1.8 VA at 110 V 8.5 VA at 240 V
<b>Maximum power consumption in W</b>	0.5 W at 24 V
<b>Terminal description</b>	(15-16-18)OC_OFF (A1-B1)CO ALT
<b>Height</b>	78 mm
<b>Width</b>	22.5 mm
<b>Depth</b>	80 mm
<b>Net weight</b>	0.11 kg

## Environment

<b>Immunity to microbreaks</b>	3 ms
<b>Standards</b>	EN/IEC 61812-1
<b>Product certifications</b>	UL GL CSA
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Ambient air temperature for operation</b>	-20...60 °C
<b>Relative humidity</b>	15...85 % 3K3 conforming to IEC 60721-3-3
<b>Vibration resistance</b>	0.35 mm (f= 10...55 Hz) conforming to IEC 60068-2-6
<b>IP degree of protection</b>	IP20 (terminals) IP50 (casing)
<b>Pollution degree</b>	3 conforming to IEC 60664-1
<b>Dielectric test voltage</b>	2.5 kV
<b>Non-dissipating shock wave</b>	4.8 kV
<b>Resistance to electromagnetic fields</b>	10 V/m conforming to IEC 61000-4-3 level 3
<b>Resistance to fast transients</b>	2 kV conforming to IEC 61000-4-4 level 3
<b>Disturbance radiated/conducted</b>	CISPR 11 group 1 - class A CISPR 22 - class A

## Contractual warranty

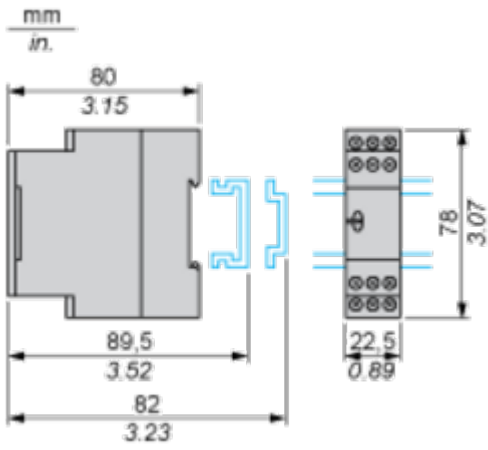
<b>Warranty</b>	18 months
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Dimensions Drawings

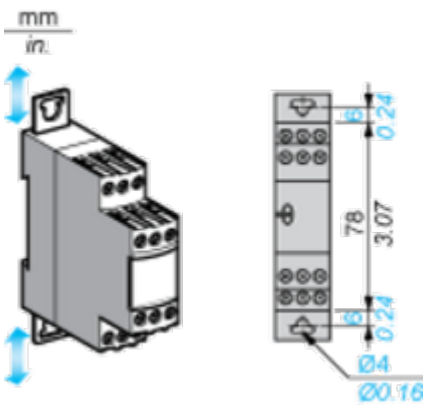
Width 22.5 mm

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Rail Mounting



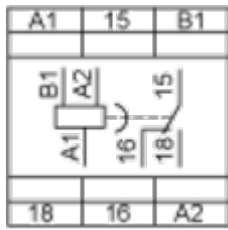
Screw Fixing



Connections and Schema

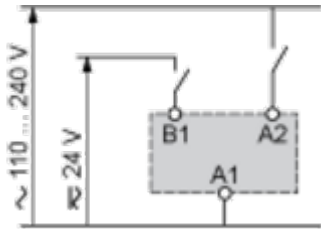
Internal Wiring Diagram

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Recommended Application Wiring Diagram

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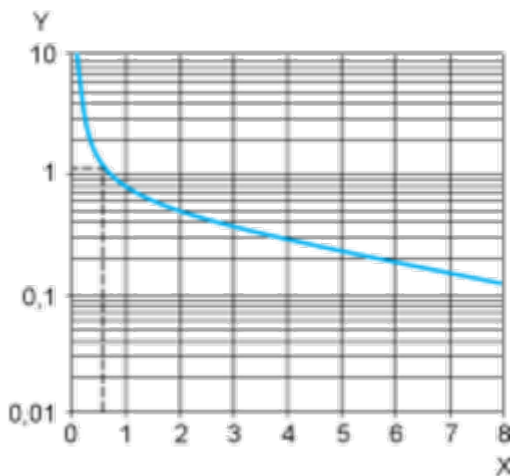
Performance Curves

Performance Curves

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**A.C. Load Curve 1**

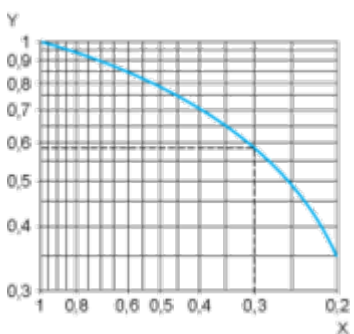
Electrical durability of contacts on resistive loading millions of operating cycles



X Current broken in A  
 Y Millions of operating cycles

**A.C. Load Curve 2**

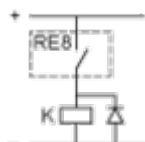
Reduction factor k for inductive loads (applies to values taken from durability curve 1).



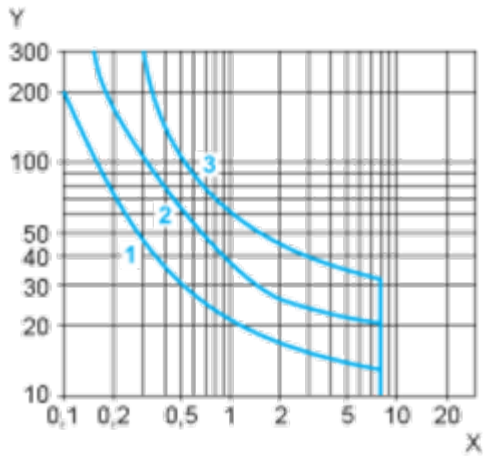
X Power factor on breaking (cos φ)  
 Y Reduction factor k

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 A : Power on Delay Relay

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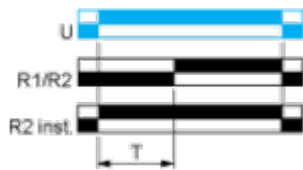
**Description**

The timing period T begins on energisation. After timing, the output(s) R close(s). 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**

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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