

# Product data sheet

Specifications



## industrial timing relay - 3..300s - type A - 24 V AC/DC, 110..240 V AC- 1 C/O

RE8TA21BUTQ

⚠ Discontinued on: Jan 29, 2021

⚠ 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	3...300 s
Sale per indivisible quantity	10

### Complementary

Discrete output type	Relay
Contacts material	90/10 silver nickel contacts
Width pitch dimension	0.9 in (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	5.3...9.7 lbf.in (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
[Ith] conventional free air thermal current	8 A
Maximum [Ie] rated operational current	2 A DC-13 24 V 158 °F (70 °C) IEC 60947-5-1/1991 2 A DC-13 24 V 158 °F (70 °C) VDE 0660 3 A AC-15 24 V 158 °F (70 °C) IEC 60947-5-1/1991 3 A AC-15 24 V 158 °F (70 °C) VDE 0660 0.1 A DC-13 250 V 158 °F (70 °C) IEC 60947-5-1/1991 0.1 A DC-13 250 V 158 °F (70 °C) VDE 0660 0.2 A DC-13 115 V 158 °F (70 °C) IEC 60947-5-1/1991 0.2 A DC-13 115 V 158 °F (70 °C) VDE 0660

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

Minimum switching capacity	10 mA 12 V
Marking	CE
Overvoltage category	III IEC 60664-1
[UI] rated insulation voltage	250 V IEC 300 V CSA
Supply disconnection value	> 0.1 Uc
Operating position	Any position without derating
Surge withstand	2 kV IEC 61000-4-5 level 3
Power consumption in VA	0.7 VA 24 V 1.8 VA 110 V 8.5 VA 240 V
Maximum power consumption in W	0.5 W 24 V
Terminal description	ALT (A1-B1)CO (15-16-18)OC_OFF
Height	3.07 in (78 mm)
Width	0.9 in (22.5 mm)
Depth	3.1 in (80 mm)
Net Weight	0.24 lb(US) (0.11 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 IEC 60721-3-3
Vibration resistance	0.35 mm 10...55 Hz)IEC 60068-2-6
IP degree of protection	IP20 terminals) IP50 casing)
Pollution degree	3 IEC 60664-1
Dielectric test voltage	2.5 kV
Non-dissipating shock wave	4.8 kV
Resistance to electromagnetic fields	9.1 V/m (10 V/m) IEC 61000-4-3 level 3
Resistance to fast transients	2 kV IEC 61000-4-4 level 3
Disturbance radiated/conducted	CISPR 22 - class A CISPR 11 group 1 - class A

## Ordering and shipping details

Category	22376-RELAYS-MEASUREMENT(RM4)
Discount Schedule	CP2
GTIN	00785901546399
Returnability	No

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Country of origin

ID

## Contractual warranty

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Warranty

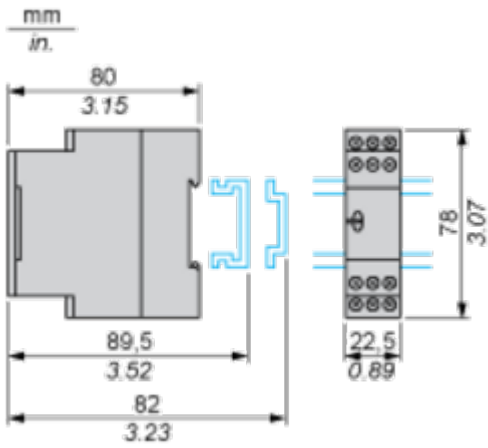
18 months

Dimensions Drawings

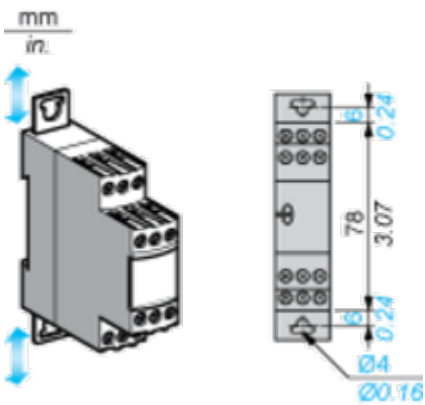
Width 22.5 mm

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Rail Mounting



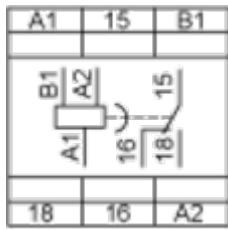
Screw Fixing



Connections and Schema

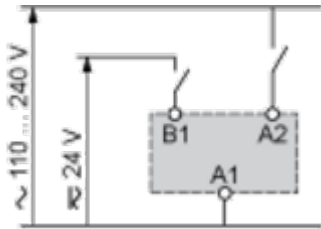
Internal Wiring Diagram

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Recommended Application Wiring Diagram

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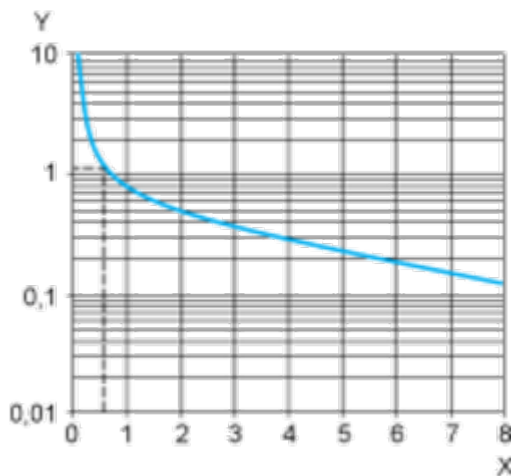
Performance Curves

Performance Curves

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**A.C. Load Curve 1**

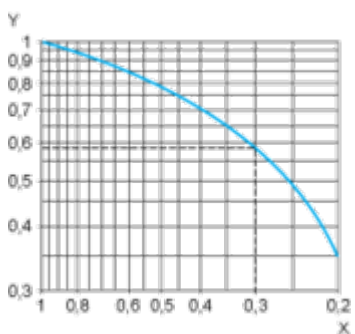
Electrical durability of contacts on resistive loading millions of operating cycles



X Current broken in A  
 Y Millions of operating cycles

**A.C. Load Curve 2**

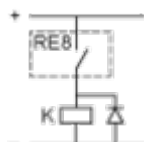
Reduction factor k for inductive loads (applies to values taken from durability curve 1).



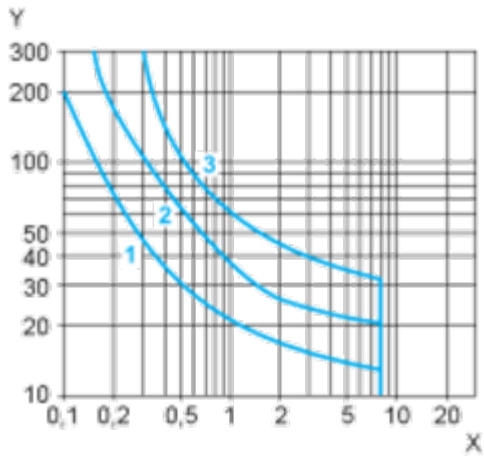
X Power factor on breaking (cos φ)  
 Y Reduction factor k

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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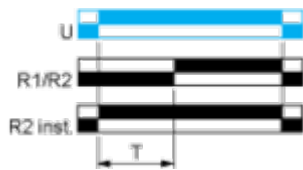
**Description**

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