

# Product datasheet

Specifications



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

RE8TA21BU

 **Discontinued on:** 31 Mar 2022

 **Discontinued**

**EAN Code:** 3389110327106

### 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	1

### Complementary

Discrete Output Type	Relay
Contacts Material	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
[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 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

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

Minimum Switching Capacity	at 12 V 10 mA
Marking	CE
Overvoltage Category	III conforming to IEC 60664-1
[Ui] Rated Insulation Voltage	250 V conforming to IEC 300 V conforming to CSA
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	0.7 VA at 24 V 1.8 VA at 110 V 8.5 VA at 240 V
Maximum Power Consumption In W	0.5 W at 24 V
Terminal Description	ALT (A1-B1)CO (15-16-18)OC_OFF
Height	78 mm
Width	22.5 mm
Depth	80 mm
Net Weight	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...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
Ip Degree Of Protection	IP20 (terminals) IP50 (casing)
Pollution Degree	3 conforming to IEC 60664-1
Dielectric Test Voltage	2.5 kV
Non-Dissipating Shock Wave	4.8 kV
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

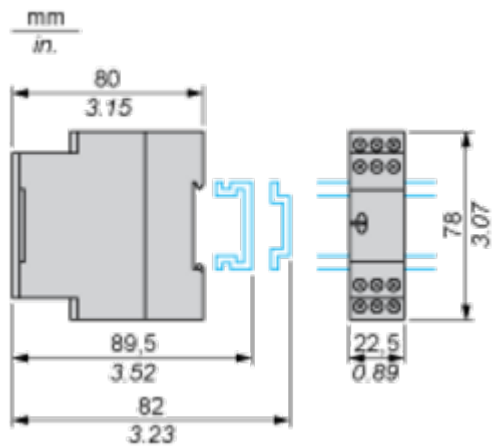
Warranty

18 months

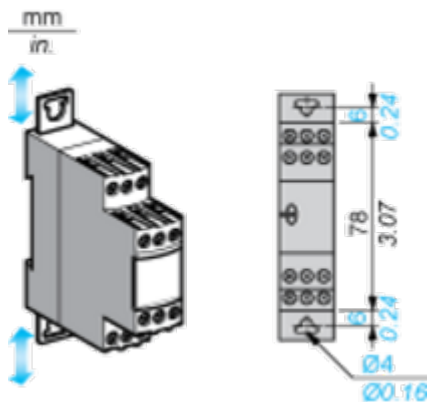
Dimensions Drawings

Width 22.5 mm

Rail Mounting



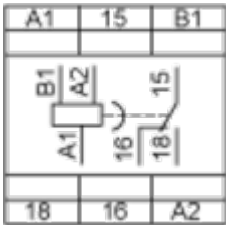
Screw Fixing



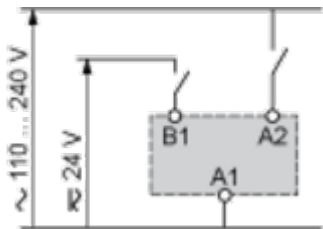
Connections and Schema

Internal Wiring Diagram

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Recommended Application Wiring Diagram

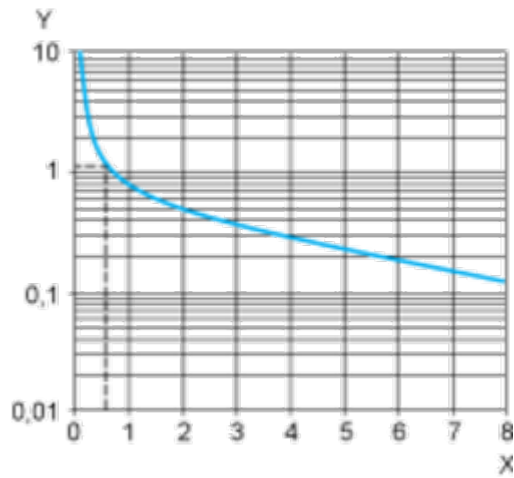


Performance Curves

Performance Curves

A.C. Load Curve 1

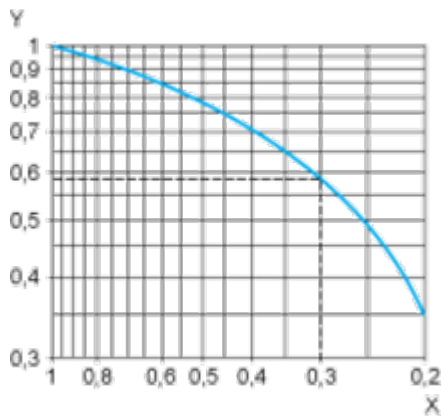
Electrical durability of contacts on resistive loading millions of operating cycles



X Current broken in A  
Y Millions of operating cycles

A.C. Load Curve 2

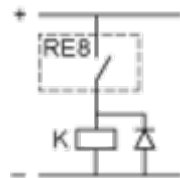
Reduction factor k for inductive loads (applies to values taken from durability curve 1).



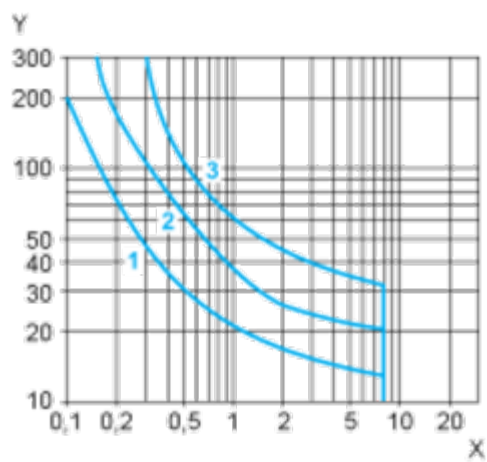
X Power factor on breaking (cos φ)  
Y Reduction factor k

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

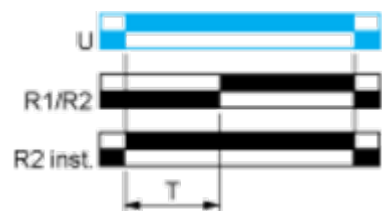
Description

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

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