Product data sheet

Specifications



on-delay timing relay - 0.05..1 s - 24 V AC DC - 1OC

RE7TL11BU

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	A
Time delay range	0.05 s...300 h

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	0.85...1.1 Us
Connections - terminals	Screw terminals, 2 x 1.5 mm² flexible with cable end Screw terminals, 2 x 2.5 mm² 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	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 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
Marking	CE
Overvoltage category	III conforming to 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.

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

[Ui] rated insulation voltage	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
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	(15-16-18)OC_OFF (B1-A2)CO ALT
Height	3.07 in (78 mm)
Width	0.9 in (22.5 mm)
Depth	3.1 in (80 mm)
Net Weight	0.33 lb(US) (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…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 (f= 10…55 Hz) conforming to IEC 60068-2-6
Shock resistance	15 gn 11 ms IEC 60068-2-27
IP degree of protection	IP20 terminals) IP50 housing)
Pollution degree	3 IEC 60664-1
Dielectric strength	2.5 kV
Non-dissipating shock wave	4.8 kV
Resistance to electrostatic discharge	6 kV in contact IEC 61000-4-2 level 3 8 kV in air IEC 61000-4-2 level 3
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 11 group 1 - class A CISPR 22 - class A

Ordering and shipping details

Category	22376-RELAYS-MEASUREMENT(RM4)
Discount Schedule	CP2
GTIN	00785901481485

Returnability	No
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1

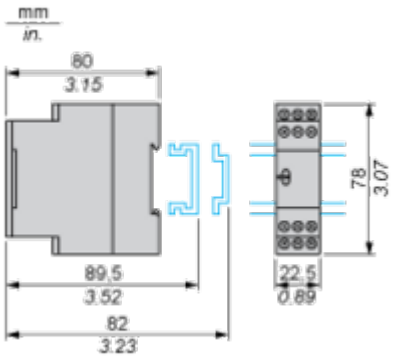
Contractual warranty

Warranty (in months)	18

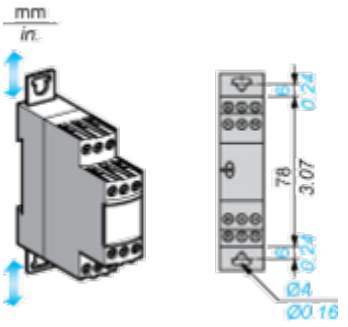
Dimensions Drawings

Width 22.5 mm

Rail Mounting

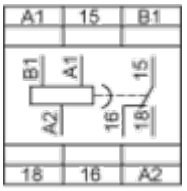


Screw Fixing



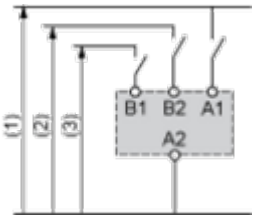
Connections and Schema

Internal Wiring Diagram



Recommended Application Wiring Diagram

Start on Energisation



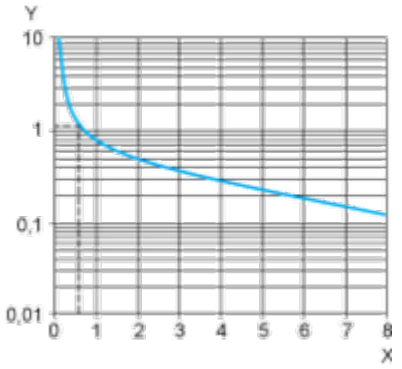
1 Supply
2 12…48 V
3 24 V

Performance Curves

Performance Curves

A.C. Load Curve 1

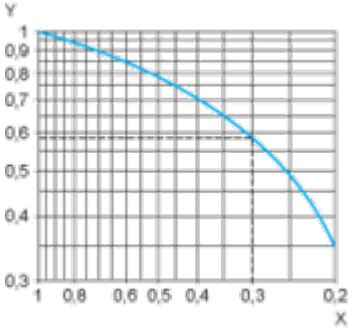
Electrical durability of contacts on resistive loading millions of operating cycles



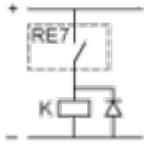
X Current broken in A
Y Millions of operating cycles

A.C. Load Curve 2

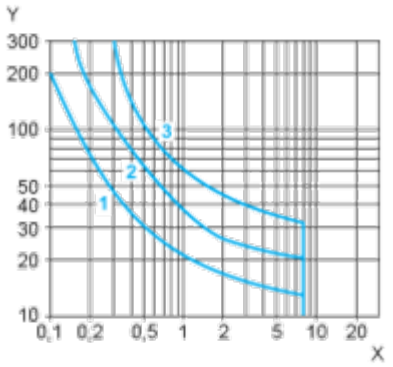
Reduction factor k for inductive loads (applies to values taken from durability curve 1).



X Power factor on breaking (cos 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 10^6 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

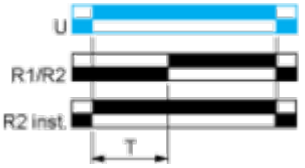
Description

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