Product data sheet Characteristics

RE7TL11BU

on-delay timing relay - 0.05..1 s - 24 V AC DC - 10C



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 s300 h

Complementary

o impromornary		
Discrete output type	Relay	
Contacts material	90/10 silver nickel contacts	
Width pitch dimension	0.89 in (22.5 mm)	
[Us] rated supply voltage	110240 V AC 50/60 Hz 24 V AC/DC 50/60 Hz	
Voltage range	0.851.1 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	5.319.74 lbf.in (0.61.1 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 [le] 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 IEC 60664-1	
[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	0.89 in (22.5 mm)	
Depth	3.15 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	-40185 °F (-4085 °C)
Ambient Air Temperature for Operation	-4140 °F (-2060 °C)
Relative humidity	1585 % 3K3 IEC 60721-3-3
Vibration resistance	0.35 mm 1055 Hz)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	9.14 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	
Nbr. of units in pkg.	1	
Package weight(Lbs)	0.24 lb(US) (0.11 kg)	
Returnability	No	
Country of origin	ID	

Packing Units

Package 1 Height	0.270 dm	
Package 1 width	0.820 dm	
Package 1 Length	0.850 dm	

Contractual warranty

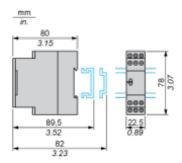
- Contraction in an array	
Warranty	18 months

Product data sheet Dimensions Drawings

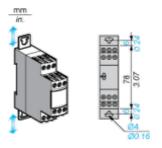
RE7TL11BU

Width 22.5 mm

Rail Mounting



Screw Fixing



Product data sheet Connections and Schema

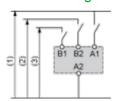
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Internal Wiring Diagram



Recommended Application Wiring Diagram

Start on Energisation



1 Supply

2 12...48 V

3 24 V

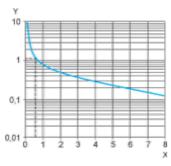
Product data sheet Performance Curves

RE7TL11BU

Performance Curves

A.C. Load Curve 1

Electrical durability of contacts on resistive loading millions of operating cycles

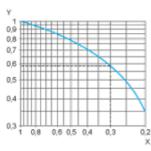


X Current broken in A

Y Millions of operating cycles

A.C. Load Curve 2

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



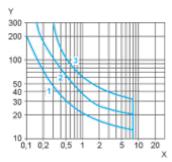
X Power factor on breaking ($\cos \phi$)

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:1.5 10⁶ 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

Product data sheet Technical Description

RE7TL11BU

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

С	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
Т	Timing period
Та -	Adjustable On-delay
Tr -	Adjustable Off-delay
U	Supply

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