Product data sheet
Characteristics

RE7RB11MW
off-delay timing relay - 0.05..1 s - 240 V AC DC - 1OC

Main

Range of Product	Zelio Time
Product or Component Type	Industrial timing relay
Component name	RE7
Time delay type	K
Time delay range	0.05 s...10 min

Complementary

Discrete output type	Relay
Contacts material	Silver with gold flashed contacts
Width pitch dimension	0.89 in (22.5 mm)
[Us] rated supply voltage	24...240 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	5.31…9.74 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	1 s
Reset time	50 ms
Maximum switching voltage	250 V AC/DC
Mechanical durability	20000000 cycles
[Ith] conventional free air thermal current	5 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
Potentiometer characteristic	Linear 47 kOhm +/- 20 %), 0.2 W 82.02 ft (25 m) Z1Z2
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	2 VA 24 V 6 VA 240 V 2.5 VA 48 V 3.2 VA 110 V

Maximum power consumption in W	1 W 48 V 2 W 24 V 2 W 240 V 3.2 W 110 V
Peak current	0.001 kA 30 s on energisation
Terminal description	(A1-A2)CO (15-16-18)OC_OFF
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	GL CSA 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
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 22 - class A CISPR 11 group 1 - class A

Ordering and shipping details

Category	22376-RELAYS-MEASUREMENT(RM4)
Discount Schedule	CP2
GTIN	00785901515302
Package weight(Lbs)	0.24 lb(US) (0.110 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

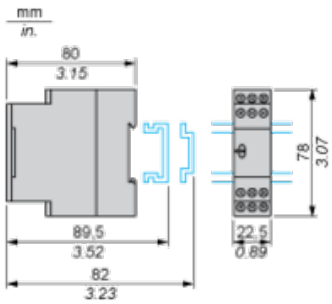
Contractual warranty

Warranty	18 months

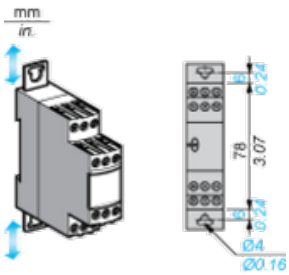
RE7RB11MW

Width 22.5 mm

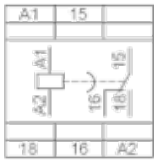
Rail Mounting



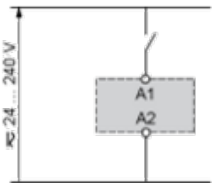
Screw Fixing



Internal Wiring Diagram



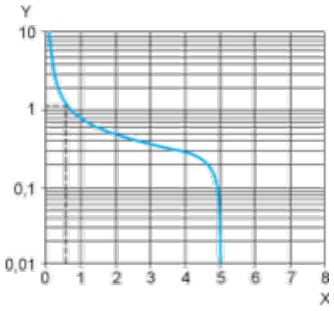
Recommended Application Wiring Diagram



Performance Curves

A.C. Load Curve 1

Electrical durability of contacts on resistive loading millions of operating cycles

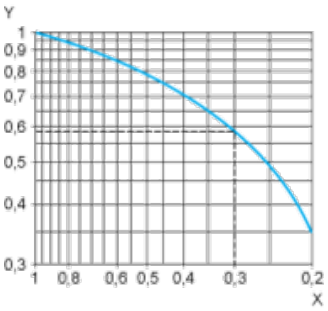


X Current broken in A

Y Millions of operating cycles

A.C. Load Curve 2

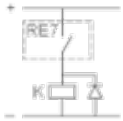
Reduction factor k for inductive loads (applies to values taken from durability curve 1).



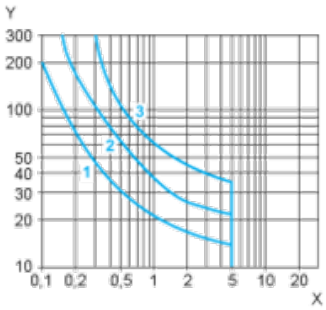
X Power factor on breaking (cos ϕ)

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

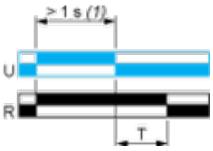
3 Resistive load

Function K: Delay on De-Energisation (Without Auxiliary Supply)

Description

On energisation, the output(s) R close(s). On de-energisation, timing period T starts and, at the end of this period, the output(s) R revert(s) to its/their initial state.

Function: 1 Output



1 If the Device has been stored, de-energised, for more than a month, it must be energised for about 15 seconds in order to activate it. Subsequently, it only takes 1 second to start the time delay.

⚠ WARNING

UNEXPECTED EQUIPMENT OPERATION

If the time is not complied with, the relay remains energised indefinitely.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

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

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