Product datasheet

Specifications

industrial timing relay - 0.1..10 s - type C - 24 V AC/DC - 1 C/O

RE8RA11BTQ

Discontinued on: Jan 29, 2021 AD

Discontinued

Main

Range of product	Zelio Time
Product or component type	Optimum industrial timing relay
Component name	RE8
Time delay type	C
Time delay range	0.1...10 s
Sale per indivisible quantity	10

Complementary

Discrete output type	Relay
Contacts material	90/10 silver nickel contacts
Width pitch dimension	22.5 mm
[Us] rated supply voltage	24 V AC/DC 50/60 Hz
Voltage range	0.9...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	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
Minimum switching capacity	at 12 V 10 mA

Input voltage	24 V Y1 terminal(s)
Maximum switching current	10 mA (Y1)
Input compatibility	2-wire sensors DC with leakage current < 1 mA <50 m Y1 terminal(s)
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
Maximum power consumption in W	0.5 W at 24 V
Terminal description	(A1-A2)CO (15-16-18)OC_ON (Y1)UNUSED
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	UL CSA GL
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

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Use Longer

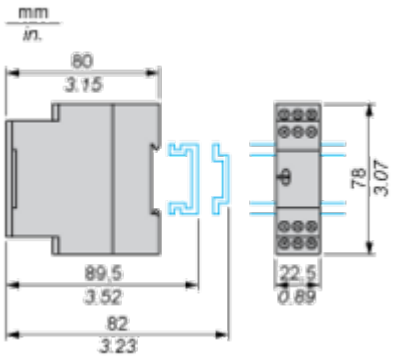
Lifetime extension

Repair	No

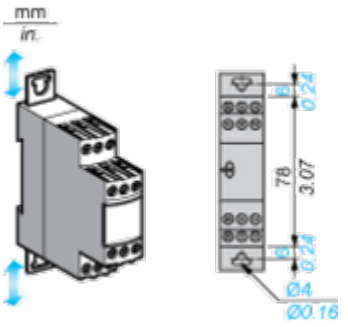
Dimensions Drawings

Width 22.5 mm

Rail Mounting

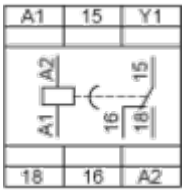


Screw Fixing

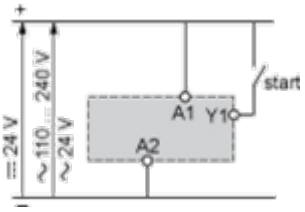


Connections and Schema

Internal Wiring Diagram

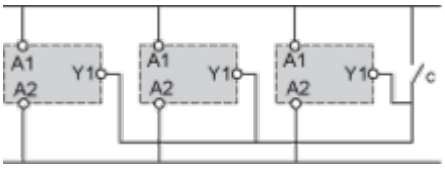


Recommended Application Wiring Diagram



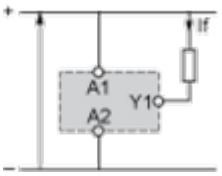
Control of Several Relays

Control of several relays with a single external control contact



The external control contact C may be an electronic control device, for example a true-wire sensor. In this case A1-A2= 24 Vdc and the control device can only control-up to a maximum of 4 relays.

Connection of a 2-Wire Sensor



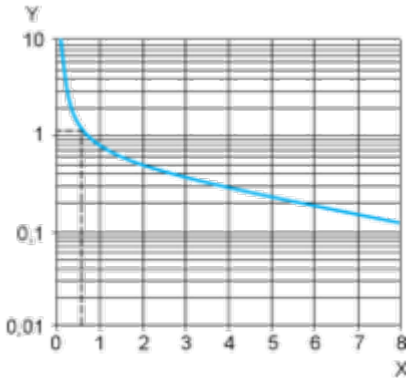
Leakage current (open state) if < 1 mA.

Performance Curves

Performance Curves

A.C. Load Curve 1

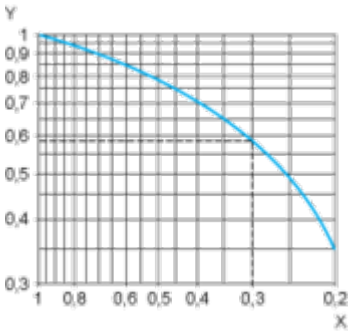
Electrical durability of contacts on resistive loading millions of operating cycles



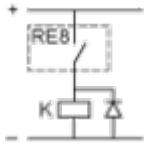
X Current broken in A
Y Millions of operating cycles

A.C. Load Curve 2

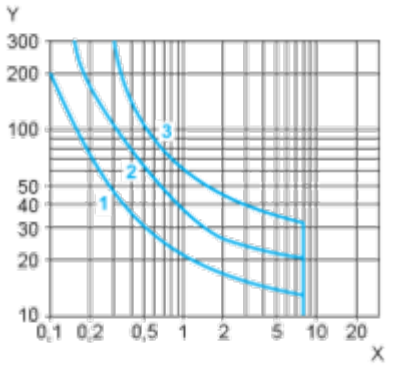
Reduction factor k for inductive loads (applies to values taken from durability curve 1).



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

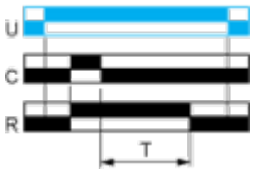
Technical Description

Function C : Off-Delay Relay with Control Signal

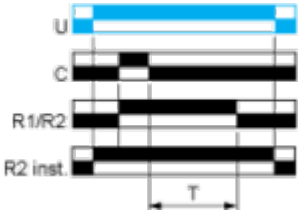
Description

After power-up and closing of the control contact C, the output R closes. When control contact C re-opens, timing T starts. At the end of the timing period, the output(s) R revert(s) to its/their initial state. 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