Product data sheet
Characteristics

RE8RA41FUTQ
industrial timing relay - 20..1800 s - type C - 110..240 V AC - 1 C/O

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Commercial Status	End of commercialisation
Range of product	Zelio Time
Product or component type	Optimum industrial timing relay
Component name	RE8
Time delay type	C
Time delay range	20...1800 s
Sale per indivisible quantity	10

Complementary

Discrete output type	Relay
Contacts material	90/10 silver nickel contacts
Width pitch dimension	0.89 in (22.5 mm)
[Us] rated supply voltage	110...240 V ACat 50/60 Hz
Voltage range	0.9...1.1 Us
Connections - terminals	Screw terminals 2 x 2.5 mm², flexible cable without cable end Screw terminals 2 x 1.5 mm², flexible cable with cable end
Tightening torque	5.31...9.73 lbf.in (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
[Ie] rated operational current	<= 0.2 Aat 115 V, DC-13for 158 °F (70 °C) conforming to VDE 0660 <= 0.2 Aat 115 V, DC-13for 158 °F (70 °C) conforming to IEC 60947-5-1/1991 <= 0.1 Aat 250 V, DC-13for 158 °F (70 °C) conforming to VDE 0660 <= 0.1 Aat 250 V, DC-13for 158 °F (70 °C) conforming to IEC 60947-5-1/1991 <= 3 Aat 24 V, AC-15for 158 °F (70 °C) conforming to VDE 0660 <= 3 Aat 24 V, AC-15for 158 °F (70 °C) conforming to IEC 60947-5-1/1991 <= 2 Aat 24 V, DC-13for 158 °F (70 °C) conforming to VDE 0660 <= 2 Aat 24 V, DC-13for 158 °F (70 °C) conforming to IEC 60947-5-1/1991
Minimum switching capacity	10 mAat 12 V
Input voltage	110...240 V (Y1)
Maximum switching current	10 mA (Y1)
Input compatibility	2-wire sensors DC with leakage current < 1 mA, cable length: <= 164.04 ft (50 m) (Y1)
Marking	CE
Overvoltage category	III conforming to IEC 60664-1
[Ui] rated insulation voltage	300 V conforming to CSA 250 V conforming to IEC
Supply disconnection value	> 0.1 Uc

Operating position	Any position without derating factor
Surge withstand	2 kV conforming to IEC 61000-4-5 level 3
Power consumption in VA	8.5 VAat 240 V 1.8 VAat 110 V
Terminal description	(15-16-18)OC_ON (A1-A2)CO (Y1)UNUSED
Height	3.07 in (78 mm)
Width	0.89 in (22.5 mm)
Depth	3.15 in (80 mm)
Product weight	0.24 lb(US) (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...185 °F (-40...85 °C)
Ambient air temperature for operation	-4...140 °F (-20...60 °C)
Relative humidity	15...85 % 3K3 conforming to IEC 60721-3-3
Vibration resistance	0.35 mm 10...55 Hz conforming to IEC 60068-2-6
IP degree of protection	IP50 (casing) IP20 (terminals)
Pollution degree	3 conforming to IEC 60664-1
Dielectric test voltage	2.5 kV
Non-dissipating shock wave	4.8 kV
Resistance to electrostatic discharge	8 kV in air conforming to IEC 61000-4-2 level 3 6 kV in contact conforming to IEC 61000-4-2 level 3
Resistance to electromagnetic fields	9.14 V/yd (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

Ordering and shipping details

Category	22376 - RELAYS-MEASUREMENT(RM4)
Discount Schedule	CP2
GTIN	00785901930686
Nbr. of units in pkg.	10
Product availability	Non-Stock - Not normally stocked in distribution facility
Returnability	N
Country of origin	ID

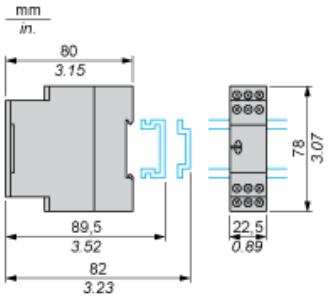
Contractual warranty

Warranty period	18 months

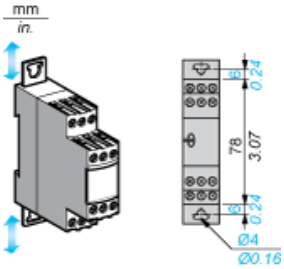
RE8RA41FUTQ

Width 22.5 mm

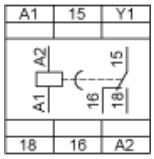
Rail Mounting



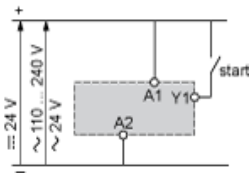
Screw Fixing



Internal Wiring Diagram

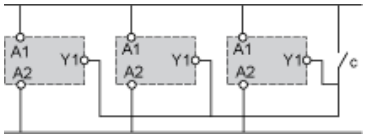


Recommended Application Wiring Diagram



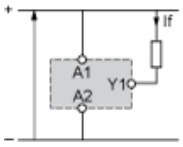
Control of Several Relays

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

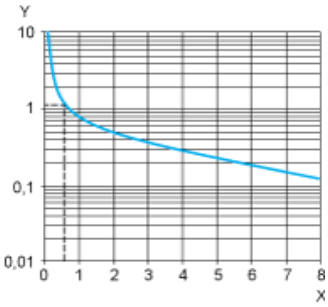


Leakage current (open state) if < 1 mA.

Performance Curves

A.C. Load Curve 1

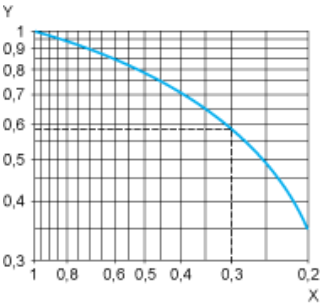
Electrical durability of contacts on resistive loading millions of operating cycles



X Current broken in A
Y Millions of operating cycles

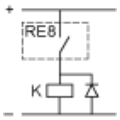
A.C. Load Curve 2

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

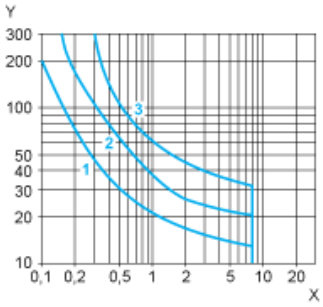


X Power factor on breaking (cos ϕ)
Y Reduction factor k

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



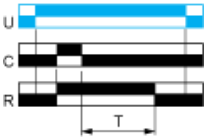
X Current in A
Y Voltage in V
1 L/R = 20 ms
2 L/R with load protection diode
3 Resistive load

Function C : Off-Delay Relay with Control Signal

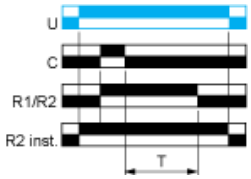
Description

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