

# Ficha técnica del producto

Especificaciones



## industrial timing relay - 3..300 s - type C - 110..240 V AC - 1 C/O

RE8RA21FUTQ

! Discontinuado el: 20 octubre 2022

! Discontinuado

### Principal

|                                     |                                          |
|-------------------------------------|------------------------------------------|
| Gama de producto                    | Zelio Time                               |
| Tipo de producto o componente       | Reles de temporizador industrial Optimum |
| Nombre del componente               | RE8                                      |
| Tipo de tiempo de retraso           | C                                        |
| Rango de temporización              | 3...300 s                                |
| Se vende en cantidades indivisibles | 10                                       |

### Complementario

|                                                     |                                                                                                                                                |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Tipo de salida digital                              | Relé                                                                                                                                           |
| Material de contactos                               | Contactos plata níquel 90/10                                                                                                                   |
| Dimensión de paso de anchura                        | 22.5 mm                                                                                                                                        |
| [Us] tensión de alimentación asignada               | 110...240 V CA 50/60 Hz                                                                                                                        |
| Rango de tensiones                                  | 0,9...1,1 Us                                                                                                                                   |
| Conexiones - terminales                             | Terminales de tornillo, 2 x 1.5 mm <sup>2</sup> Flexible Con terminal<br>Terminales de tornillo, 2 x 2.5 mm <sup>2</sup> Flexible Sin terminal |
| Par de apriete                                      | 0.6...1.1 N.m                                                                                                                                  |
| Precisión ajuste de temporización                   | +/- 20 % de escala completa                                                                                                                    |
| Precisión de repetición                             | < 1 %                                                                                                                                          |
| Variación de tensión                                | < 2.5 %/V                                                                                                                                      |
| Variación de temperatura                            | < 0,2 %/°C                                                                                                                                     |
| Duración de impulso mínima                          | 26 ms                                                                                                                                          |
| Tiempo de rearme                                    | 50 ms                                                                                                                                          |
| Tensión de conmutación máxima                       | 250 V                                                                                                                                          |
| Endurancia mecánica                                 | 20000000 Ciclos                                                                                                                                |
| [I <sub>th</sub> ] corriente térmica convencional   | 8 A                                                                                                                                            |
| Maximum [I <sub>e</sub> ] rated operational current | 2 A DC-13 24 V en 70 °C acorde a IEC 60947-5-1/1991<br>2 A DC-13 24 V en 70 °C acorde a VDE 0664                                               |

3 A AC-15 24 V en 70 °C acorde a IEC 60947-5-1/1991  
 3 A AC-15 24 V en 70 °C acorde a VDE 0664  
 0.1 A DC-13 250 V en 70 °C acorde a IEC 60947-5-1/1991  
 0.1 A DC-13 250 V en 70 °C acorde a VDE 0664  
 0.2 A DC-13 115 V en 70 °C acorde a IEC 60947-5-1/1991  
 0.2 A DC-13 115 V en 70 °C acorde a VDE 0664

|                                               |                                                                          |
|-----------------------------------------------|--------------------------------------------------------------------------|
| <b>Capacidad mínima de conmutación</b>        | 10 mA en 12 V                                                            |
| <b>Tensión de entrada</b>                     | 110...240 V Y1 terminales                                                |
| <b>Intensidad de conmutación máxima</b>       | 10 mA - tipo de cable: Y1)                                               |
| <b>Fase marcador</b>                          | Sensores de 2 cables CC con corriente de fuga < 1 mA <50 m Y1 terminales |
| <b>Marca</b>                                  | CE                                                                       |
| <b>Categoría de sobretensión</b>              | III acorde a IEC 60664-1                                                 |
| <b>[Ui] tensión asignada de aislamiento</b>   | 250 V acorde a IEC<br>300 V acorde a CSA                                 |
| <b>Valor de desconexión de sumini</b>         | > 0.1 Uc                                                                 |
| <b>Posición de funcionamiento</b>             | Cualquier posición sin reducción de la potencia nominal                  |
| <b>Resistencia a sobretensiones</b>           | 2 kV acorde a IEC 61000-4-5 nivel 3                                      |
| <b>Consumo de potencia en VA</b>              | 1.8 VA en 110 V<br>8.5 VA en 240 V                                       |
| <b>Descripción del terminal</b>               | (A1-A2)CO<br>(Y1)UNUSED<br>(15-16-18)OC_ON                               |
| <b>Altura</b>                                 | 78 mm                                                                    |
| <b>Ancho</b>                                  | 22.5 mm                                                                  |
| <b>Profundidad</b>                            | 80 mm                                                                    |
| <b>Peso del producto</b>                      | 0.11 kg                                                                  |
| <b>Entorno</b>                                |                                                                          |
| <b>Inmunidad a microcortes</b>                | 3 ms                                                                     |
| <b>Normas</b>                                 | EN/IEC 61812-1                                                           |
| <b>Certificaciones de producto</b>            | GL<br>CSA<br>UL                                                          |
| <b>Temperatura ambiente de almacenamiento</b> | -40...85 °C                                                              |
| <b>Temperatura ambiente de funcionamiento</b> | -20...60 °C                                                              |
| <b>Humedad relativa</b>                       | 15...85 % 3K3 acorde a IEC 60721-3-3                                     |
| <b>Resistencia a las vibraciones</b>          | 0,35 mm (f = 10...55 Hz) acorde a IEC 60068-2-6                          |
| <b>Grado de protección IP</b>                 | IP20 - tipo de cable: terminales)<br>IP50 - tipo de cable: Caja)         |
| <b>Grado de contaminación</b>                 | 3 acorde a IEC 60664-1                                                   |
| <b>Tensión de ensayo dieléctrico</b>          | 2.5 kV                                                                   |
| <b>Onda de choque no disipada</b>             | 4.8 kV                                                                   |
| <b>Resistencia a campos electromagnéticos</b> | 10 V/m acorde a IEC 61000-4-3 nivel 3                                    |
| <b>Resistencia a transitorios rápidos</b>     | 2 kV acorde a IEC 61000-4-4 nivel 3                                      |
| <b>Perturbación radiada/conducida</b>         | CISPR11, grupo 1, clase A<br>CISPR22 - clase A                           |

# Garantía contractual

---

Periodo de garantía 18 months

# Ficha técnica del producto

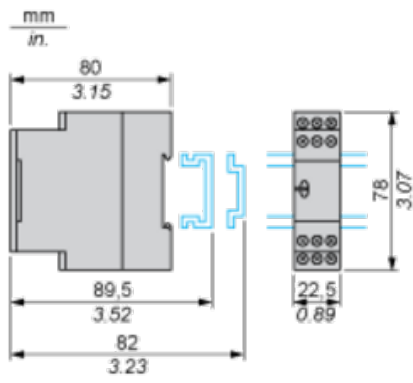
Dimensions Drawings

# RE8RA21FUTQ

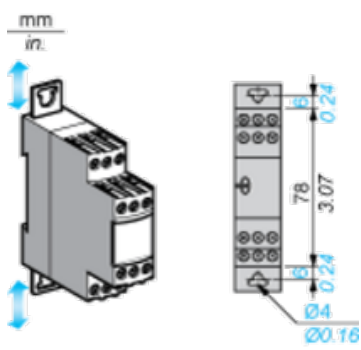
Width 22.5 mm

---

## Rail Mounting



## Screw Fixing



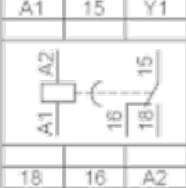
# Ficha técnica del producto

Connections and Schema

# RE8RA21FUTQ

## Internal Wiring Diagram

---



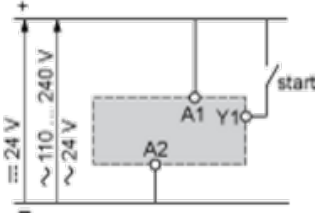
# Ficha técnica del producto

Connections and Schema

# RE8RA21FUTQ

## Recommended Application Wiring Diagram

---



# Ficha técnica del producto

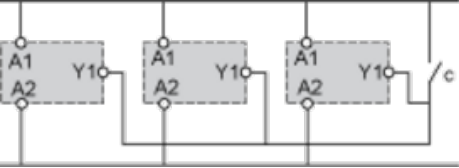
Connections and Schema

# RE8RA21FUTQ

## 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.

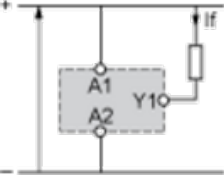
# Ficha técnica del producto

Connections and Schema

# RE8RA21FUTQ

## Connection of a 2-Wire Sensor

---



Leakage current (open state) if < 1 mA.



# Ficha técnica del producto

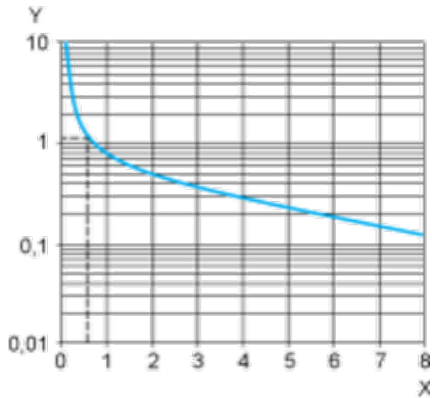
# RE8RA21FUTQ

## Performance Curves

### Performance Curves

#### A.C. Load Curve 1

Electrical durability of contacts on resistive loading millions of operating cycles

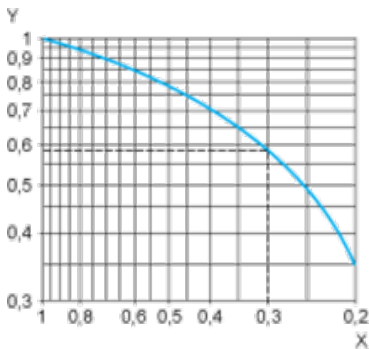


X Current broken in A

Y Millions of operating cycles

#### A.C. Load Curve 2

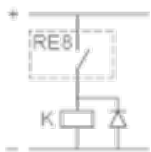
Reduction factor k for inductive loads (applies to values taken from durability curve 1).



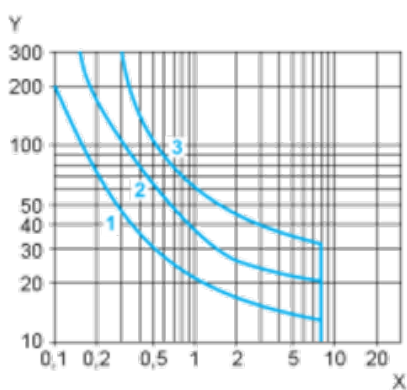
X Power factor on breaking (cos φ)

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<sup>6</sup> 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

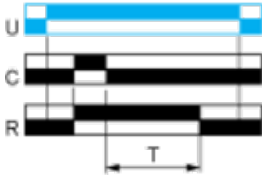
### Function C : Off-Delay Relay with Control Signal

---

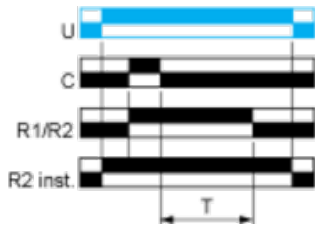
#### Description

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.)

# Ficha técnica del producto

Technical Description


# RE8RA21FUTQ

## 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                                                               |

## Reemplazo(s) recomendado(s)

RE8RA21FUTQ se reemplaza por:

1x



Harmony, Relé temporizador modular, 8 A, 1 CO, 1 s..100 h, off delay, 24 V DC / 24...240 V AC/DC

RE17RCMU