



|   |  |  |                     |          |          |
|---|--|--|---------------------|----------|----------|
| Product designation                               |  |  | MINIATURE<br>RELAYS |          |          |
| Product type designation                          |  |  | HR301C              |          |          |
| Contact characteristics                           |  |  |                     |          |          |
| Contact configuration                             |  |  | 1 C/O               |          |          |
| Rated insulation voltage Ui IEC/EN                |  |  | V                   | 250      |          |
| Rated impulse withstand voltage Uimp              |  |  | kV                  | 6        |          |
| IEC Conventional free air thermal current Ith     |  |  | A                   | 16       |          |
| Maximum instantaneous current                     |  |  | A                   | 60       |          |
| Rated current (In)                                |  |  | A                   | 16       |          |
| Relay control voltage                             |  |  | V                   | 48VDC    |          |
| Max contrallable power in                         |  |  | AC-1                | W        | 4000     |
|   |  |  | AC-15               | VA       | 300      |
| Rated operating power AC-1                        |  |  | VA                  | 4000     |          |
| Rated operating power AC-15                       |  |  | 230 VAC             | VA       | 300      |
| Single-phase motor control                        |  |  | 230VAC              | kW       | 0.4      |
| Rated operating current DC-1                      |  |  | 30V                 | A        | 12       |
|   |  |  | 110V                | A        | 0.3      |
|   |  |  | 220V                | A        | 0.1      |
| Minimum switching load                            |  |  | V / mA              | 5 / 100  |          |
| Contact impedance                                 |  |  | mΩ                  | 100      |          |
| Contact material                                  |  |  | AgSnO2              |          |          |
| Operating times                                   |  |  |                     |          |          |
| Closing   |  |  | ms                  | 10       |          |
| Opening   |  |  | ms                  | 5        |          |
| Operations  |  |  |                     |          |          |
| Mechanical life                                   |  |  | cycles              | 10000000 |          |
| Electrical life AC1                               |  |  | cycles              | 50000    |          |
| Coil characteristics                              |  |  |                     |          |          |
| Average coil consumption AC at 20°C               |  |  | VA                  | 0.9      |          |
| Average coil consumption DC at 20°C               |  |  | W                   | 0.45     |          |
| Operating range                                   |  |  | Closing             | % Un     | 75...110 |
|   |  |  | Opening             | % Un     | 10...30  |
| Maximum cycle frequency                           |  |  | cycles/h            | 3600     |          |
| Mechanical features                               |  |  |                     |          |          |
| Max socket terminal tightening torque             |  |  | Nm                  | 0.6      |          |
| Socket screw tightening tool (cross / flat blade) |  |  | PH1 / 4.5mm         |          |          |
| Conductor section                                 |  |  | AWG/Kcmil           |          |          |

|                    |        |                                 |
|--------------------|--------|---------------------------------|
|                    | min    | 20                              |
|                    | max    | 14                              |
| IEC                |        |                                 |
|                    | min    | mm <sup>2</sup> 0.5             |
|                    | max    | mm <sup>2</sup> 2.5             |
| Operating position | normal | Any                             |
| Fixing             |        | On 35mm DIN rail and with screw |

#### Ambient conditions

##### Temperature

##### Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +85 |

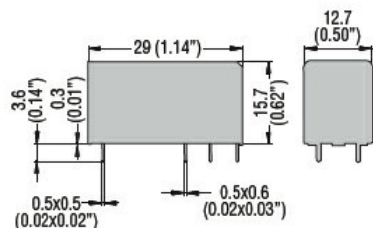
##### Storage temperature

|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +85 |

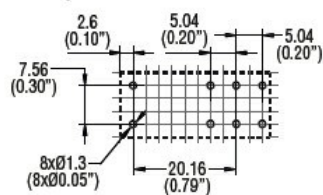
#### Other features

|                                       |    |
|---------------------------------------|----|
| Indication                            | No |
| Mechanical contact position indicator | No |
| Mechanical test actuator              | No |

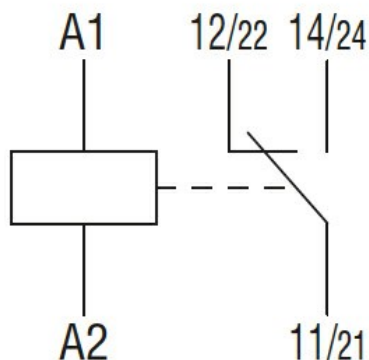
#### Dimensions



##### PCB layout



#### Wiring diagrams



#### Certifications and compliance

##### Compliance

IEC/EN 61810

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Certificates

CSA

cURus

EAC

VDE

ETIM classification

ETIM 8.0

EC002055 -  
Solid state relay