



|  |                    |            |          |
|--|--------------------|------------|----------|
| Product designation                                | MINIATURE RELAYS   |            |          |
| Product type designation                           | HR301C             |            |          |
| <b>Contact characteristics</b>                     |                    |            |          |
| Contact configuration                              | 1 C/O              |            |          |
| Rated insulation voltage $U_i$ IEC/EN              | V                  | 250        |          |
| Rated impulse withstand voltage $U_{imp}$          | kV                 | 6          |          |
| IEC Conventional free air thermal current $I_{th}$ | A                  | 16         |          |
| Maximum instantaneous current                      | A                  | 60         |          |
| Rated current ( $I_n$ )                            | A                  | 16         |          |
| Relay control voltage                              | V                  | 230VAC     |          |
| Max contrrollable 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                                  |                    | m $\Omega$ | 100      |
| Contact material                                   | AgSnO <sub>2</sub> |            |          |
| <b>Operating times</b>                             |                    |            |          |
| Closing  |                    | ms         | 10       |
| Opening  |                    | ms         | 5        |
| <b>Operations</b>                                  |                    |            |          |
| Mechanical life                                    |                    | cycles     | 10000000 |
| Electrical life AC1                                |                    | cycles     | 50000    |
| <b>Coil characteristics</b>                        |                    |            |          |
| Average coil consumption AC at 20°C                |                    | VA         | 0.9      |
| Average coil consumption DC at 20°C                |                    | W          | 0.45     |
| Operating range                                    |                    |            |          |
|  | Closing            | % $U_n$    | 70...110 |
|  | Opening            | % $U_n$    | 20...55  |
| Maximum cycle frequency                            |                    | cycles/h   | 3600     |
| <b>Mechanical features</b>                         |                    |            |          |
| 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 |

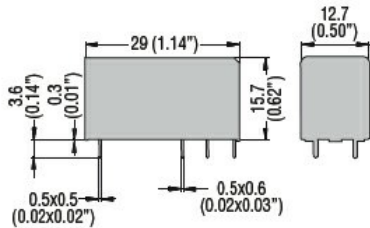
Storage temperature

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

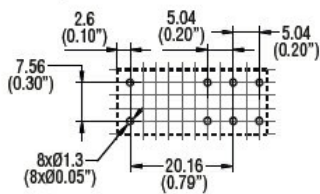
**Other features**

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

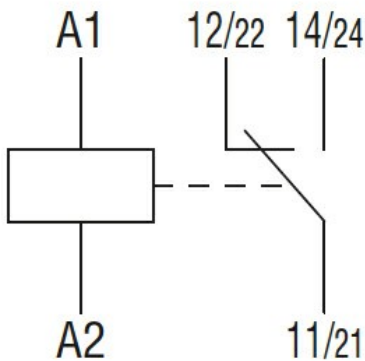
**Dimensions**



PCB layout



**Wiring diagrams**



**Certifications and compliance**

Compliance

IEC/EN 61810

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Certificates

CSA

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cURus

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EAC

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VDE

**ETIM classification**

ETIM 8.0

EC001437 -  
Switching relay