

Single relay - REL-MR-110DC/21HC/EX - 2908823

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Plug-in miniature power relay, RT III sealed with power contacts, 1 changeover contact, input voltage: 110 V DC, in connection with the corresponding PLC base approved in accordance with ATEX/IECEx (zone 2) and Ex zone class I, div. 2.

Why buy this product

- Switching current of up to 16 A
- RT III-proof (wash-proof)

Key Commercial Data

| | |
|------------------------|---|
| Packing unit | 10 STK |
| Minimum order quantity | 10 STK |
| GTIN |  4 055626 345178 |
| GTIN | 4055626345178 |

Technical data

Dimensions

| | |
|--------|---------|
| Width | 12.7 mm |
| Height | 29 mm |
| Depth | 15.7 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -40 °C ... 85 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Coil side

| | |
|--------------------------------|--------------------------------------|
| Nominal input voltage U_N | 110 V DC |
| Typical input current at U_N | 4.1 mA |
| Typical response time | 7 ms |
| Typical release time | 3 ms |
| Coil resistance | 26600 Ω \pm 15 % (at 20 °C) |

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Technical data

Coil side

| | |
|---|--------|
| Power dissipation for nominal condition | 0.45 W |
|---|--------|

Contact side

| | |
|--|------------------------|
| Contact type | 1 PDT |
| Type of switch contact | Single contact |
| Contact material | AgNi |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 12 V (at 10 mA) |
| Min. switching current | 10 mA (at 12 V) |
| Maximum inrush current | 50 A (20 ms) |
| Limiting continuous current | 16 A |
| Interrupting rating (ohmic load) max. | 384 W (at 24 V DC) |
| | 58 W (at 48 V DC) |
| | 48 W (at 60 V DC) |
| | 50 W (at 110 V DC) |
| | 80 W (at 220 V DC) |
| | 4000 VA (for 250 V AC) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 24 V, DC13) |
| | 0.2 A (at 110 V, DC13) |
| | 0.2 A (at 250 V, DC13) |
| | 6 A (at 24 V, AC15) |
| | 6 A (at 120 V, AC15) |
| | 6 A (at 250 V, AC15) |

General

| | |
|--|---|
| Test voltage relay winding/relay contact | 5 kV AC (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |
| Degree of protection | RT III (wash-proof) |
| Mechanical service life | 3x 10 ⁷ cycles |
| Mounting position | any |
| Assembly instructions | Can be aligned without spacing (> 70 °C ≥ 2.5 mm) |

Standards and Regulations

| | |
|-----------------------|------------|
| Standards/regulations | IEC 60664 |
| | EN 50178 |
| | EN 61810-1 |
| Degree of pollution | 3 |
| Overvoltage category | III |

Environmental Product Compliance

| | |
|------------|--|
| China RoHS | Environmentally Friendly Use Period = 50 |
|------------|--|

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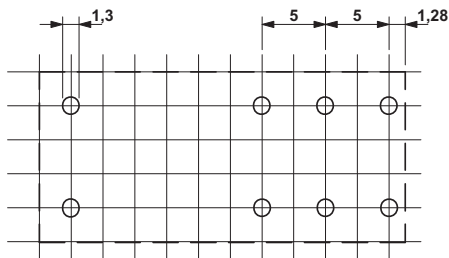
Technical data

Environmental Product Compliance

| | |
|--|---|
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |
|--|---|

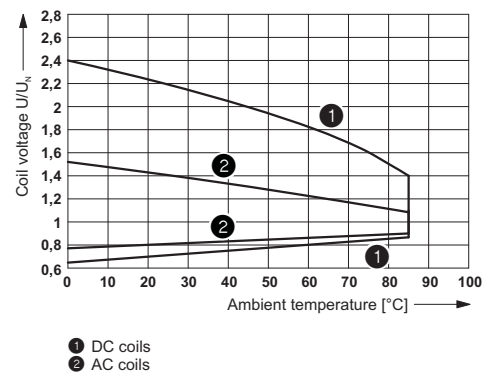
Drawings

Drilling diagram



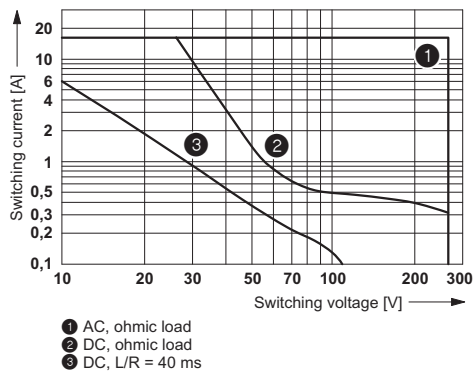
a = pitch division 2.5 mm

Diagram



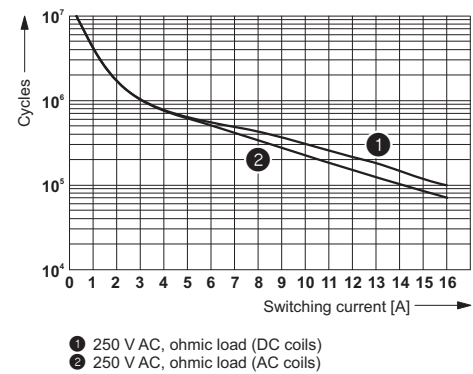
Operating voltage range

Diagram



Interrupting rating

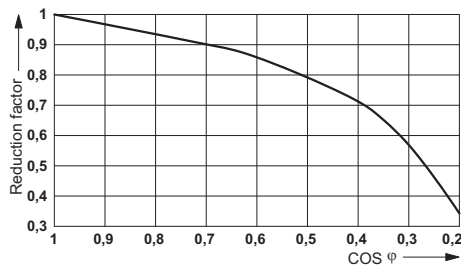
Diagram



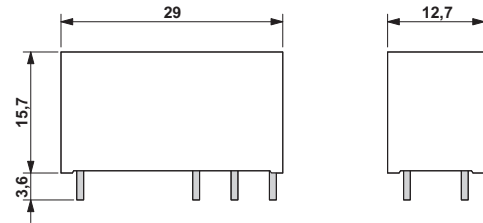
Electrical service life

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Diagram

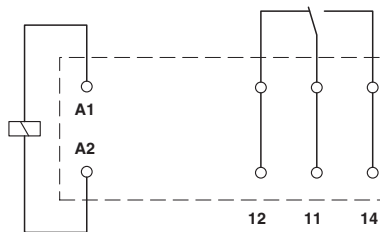


Dimensional drawing



Service life reduction factor with various cos phi

Circuit diagram



Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / VDE approval of drawings / EAC / cULus Recognized

Ex Approvals


Approval details


| | | | |
|---------------|--|---|---------------|
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 228652 |
|---------------|--|---|---------------|

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| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 228652 |
|----------------|--|---|---------------|

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Approvals

| | | | |
|--------------------------|---|---|----------|
| VDE approval of drawings |  | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40007758 |
|--------------------------|---|---|----------|

| | | | |
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| EAC |  | | RU C- DE.A*30.B.01082 |
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| cULus Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | |
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