



Main

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| Range of product | Harmony Electromechanical Relays |
| Series name | Power |
| Product or component type | DIN rail/panel mount relay |
| Device short name | RPF |
| Contacts type and composition | 2 C/O |
| [Uc] control circuit voltage | 12 V DC |
| Control type | Without lockable test button |
| Shape of pin | Flat |
| Contacts material | Silver tin oxide |
| [Ithe] conventional enclosed thermal current | 25 A at -40...55 °C relays side by side without a gap 30 A at -40...55 °C 13 mm gap between two relays |
| Resistive rated load | 25 A at 28 V DC 30 A at 250 V AC |
| Utilisation coefficient | 10 % |

Complementary

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|--|--|
| Mounting support | DIN rail Panel |
| Control circuit voltage limits | 9.6...13.2 V |
| [Ie] rated operational current | 30 A at 277 V (AC) NO conforming to UL 20 A at 28 V (DC) NO conforming to UL 30 A at 250 V (AC) NO conforming to IEC 25 A at 28 V (DC) NO conforming to IEC 3 A at 277 V (AC) NC conforming to UL 3 A at 28 V (DC) NC conforming to UL 3 A at 250 V (AC) NC conforming to IEC 3 A at 28 V (DC) NC conforming to IEC |
| [Ui] rated insulation voltage | 250 V conforming to IEC 300 V conforming to UL |
| [Uimp] rated impulse withstand voltage | 4 kV during 1.2/50 µs |
| Maximum switching voltage | 250 V conforming to IEC |
| Maximum switching capacity | 7500 VA/700 W |
| Minimum recommended switching capacity | 6000 mW 500 mA / 12 V for NO 170 mW 10 mA / 6 V for NC |
| Operating rate | <= 1200 cycles/hour under load <= 18000 cycles/hour no-load |
| Mechanical durability | 5000000 cycles |
| Electrical durability | 100000 cycles for resistive load |
| Average coil consumption | 1.7 W |
| Drop-out voltage threshold | >= 0.1 Uc |
| Operate time | 25 ms |
| Release time | 25 ms |
| Average resistance | 86 Ohm at 20 °C +/- 10 % |
| Safety reliability data | B10d = 100000 |
| Protection category | RT II |
| Test levels | Level A group mounting |
| Operating position | Any position |

| | |
|---------------------|------------------|
| CAD overall width | 33.7 mm |
| CAD overall height | 68.5 mm |
| CAD overall depth | 39.2 mm |
| Net weight | 0.082 kg |
| Device presentation | Complete product |

Environment

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|---------------------------------------|---|
| Dielectric strength | 2000 V AC between poles with basic 4000 V AC between coil and contact with reinforced 1500 V AC between contacts with micro disconnection |
| Standards | UL 508 CSA C22.2 No 14 IEC 61810-1 |
| Product certifications | CE[RETURN]CSA[RETURN]GOST[RETURN]JUL |
| Ambient air temperature for storage | -40...85 °C |
| Ambient air temperature for operation | -40...55 °C |
| Vibration resistance | 3 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles in operation 10 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles not operating |
| IP degree of protection | IP40 conforming to IEC 60529 |
| Shock resistance | 10 gn for in operation 30 gn for not operating |
| Pollution degree | 3 |

Packing Units

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|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 4.4 cm |
| Package 1 Width | 3.37 cm |
| Package 1 Length | 6.85 cm |
| Package 1 Weight | 92.5 g |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 10 |
| Package 2 Height | 5 cm |
| Package 2 Width | 14.2 cm |
| Package 2 Length | 19.9 cm |
| Package 2 Weight | 925 g |
| Unit Type of Package 3 | S02 |
| Number of Units in Package 3 | 60 |
| Package 3 Height | 15 cm |
| Package 3 Width | 30 cm |
| Package 3 Length | 40 cm |
| Package 3 Weight | 6.15 kg |

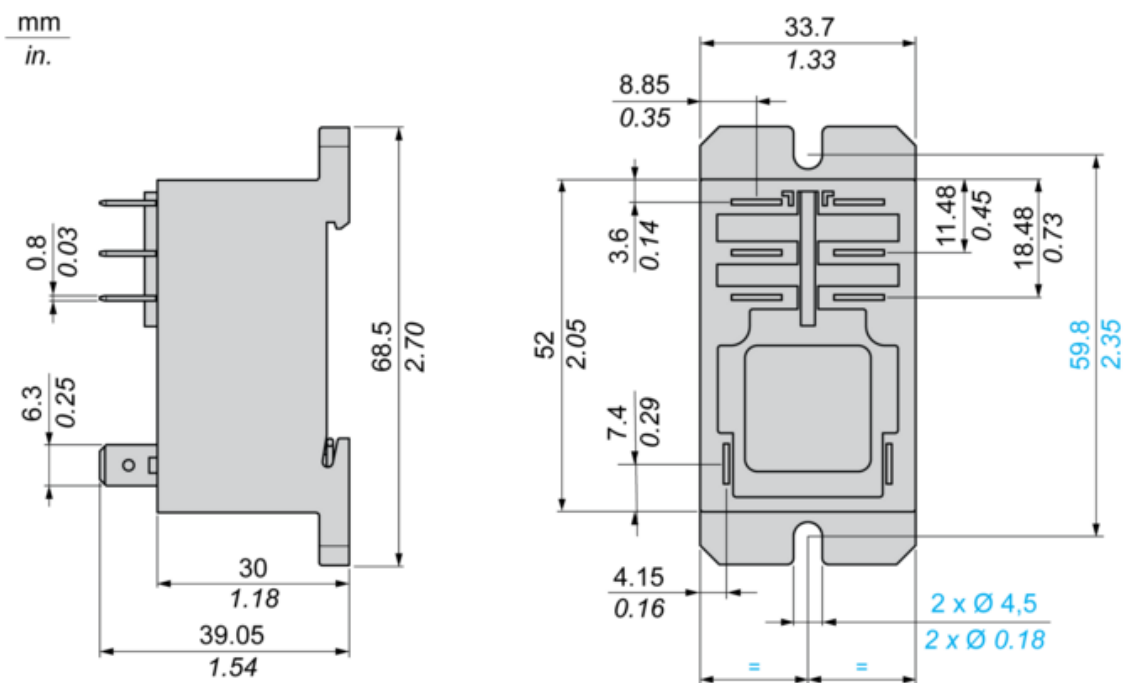
Offer Sustainability

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|----------------------------|--|
| Sustainable offer status | Green Premium product |
| REACH Regulation |  REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration |
| China RoHS Regulation |  China RoHS Declaration |
| RoHS exemption information |  Yes |
| Environmental Disclosure |  Product Environmental Profile |
| Circularity Profile | No need of specific recycling operations |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

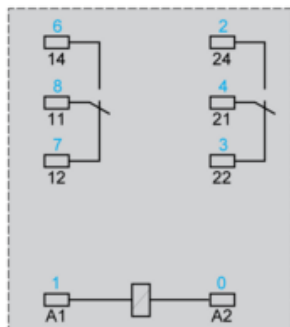
Contractual warranty

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|----------|-----------|
| Warranty | 18 months |
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Dimensions



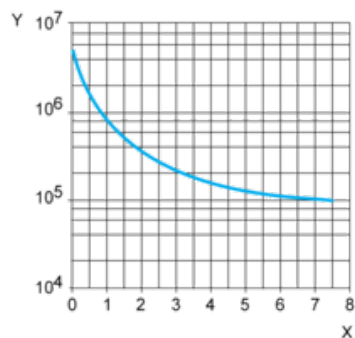
Wiring Diagram



Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

AC Resistive load

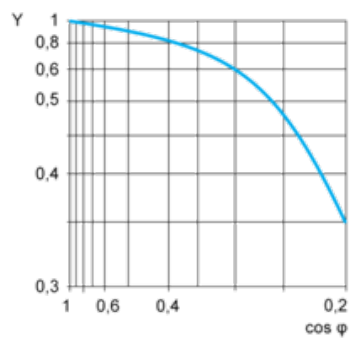


X Switching capacity (kVA)

Y Durability (number of operating cycles)

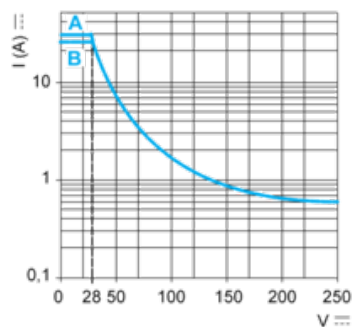
AC Reduction coefficient for inductive load (depending on power factor $\cos \phi$)

Durability (inductive load) = durability (resistive load) x reduction coefficient.



Y reduction coefficient

Maximum switching capacity on DC resistive load



A 30 A

B 25 A

Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.