

2903684

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Plug-in industrial relay with power contacts and additional hard gold plating, 4 changeover contacts, test button, status LED, mechanical switching position indicator, coil voltage: 120 V AC

Commercial data

| Item number | 2903684 |
|--------------------------------------|---------------------|
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Sales key | C460 |
| Product key | CK694A |
| Catalog page | Page 300 (C-5-2019) |
| GTIN | 4046356758970 |
| Weight per piece (including packing) | 35.15 g |
| Weight per piece (excluding packing) | 33.7 g |
| Customs tariff number | 85364900 |
| Country of origin | PL |



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Technical data

Product properties

| Product type | Single relay |
|------------------------------|-----------------------------------|
| Operating mode | 100% operating factor |
| Mechanical service life | approx. 2x 10 ⁷ cycles |
| Data management status | |
| Date of last data management | 02.05.2024 |
| Article revision | 02 |
| Insulation characteristics | |
| Insulation | Basic insulation |
| Overvoltage category | II |
| Pollution degree | 2 |

Electrical properties

| Service life electrical | see diagram |
|--|--|
| Maximum power dissipation for nominal condition | 1.56 W |
| Test voltage (Winding/contact) | 2.5 kV _{rms} (50 Hz, 1 min., winding/contact) |
| Test voltage (Changeover contact/changeover contact) | 2 kV _{rms} (50 Hz, 1 min., changeover contact/changeover contact) |
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 2.5 kV |

Input data

Coil side

| Nominal input voltage U _N | 120 V AC |
|---|--|
| Input voltage range | 93.6 V AC 165.6 V AC (20 °C) |
| Mains frequency | 50/60 Hz |
| Drive and function | monostable |
| Drive (polarity) | non-polarized |
| Typical input current at U _N | 13 mA |
| Typical response time | 5 ms 15 ms (depending on phase relation) |
| Typical release time range | 5 ms 20 ms (depending on phase relation) |
| Status display | LED (yellow) |

Output data

Switching

| C.M.C.III.Ig | |
|------------------------|--|
| Contact switching type | 4 changeover contacts |
| Type of switch contact | Single contact |
| Contact material | AgNi, hard gold-plated |
| Note | If the specified maximum values for multi-layer contact relays are exceeded, the gold plating is destroyed. The maximum values of the power contact relay are then valid. This can result in a shorter |



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| | service life than with a pure power contact. |
|---------------------------------------|--|
| Maximum switching voltage | 30 V AC |
| | 36 V DC |
| Minimum switching voltage | 2 V (At 24 mA) |
| Limiting continuous current | 50 mA |
| Maximum inrush current | 50 mA |
| Min. switching current | 2 mA (24 V DC) |
| Interrupting rating (ohmic load) max. | 1.2 W (at 24 V DC) |
| Switching capacity min. | 48 mW |

Switching: when the gold layer is destroyed

| Note | the following values are applicable if a gold layer is destroyed |
|---------------------------------------|--|
| Contact material | AgNi |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 5 V (At 24 mA) |
| Limiting continuous current | 6 A |
| Maximum inrush current | 16 A (20 ms, N/O contacts) |
| Min. switching current | 5 mA (at 24 V) |
| Interrupting rating (ohmic load) max. | 144 W (at 24 V DC) |
| | 124 W (at 48 V DC) |
| | 108 W (at 60 V DC) |
| | 52 W (at 110 V DC) |
| | 48 W (at 220 V DC) |
| | 1500 VA (for 250 V AC) |
| Switching capacity | 2 A (at 24 V, DC13) |
| | 0.22 A (at 120 V, DC13) |
| | 0.11 A (at 250 V, DC13) |
| | 1.5 A (at 24 V, AC15) |
| | 1.5 A (at 120 V, AC15) |
| | 1 A (at 240 V, AC15) |
| | |

Connection data

| | Connection method | Plug-in connection |
|-----|-------------------|--------------------|
| Dii | mensions | |
| | Width | 21.2 mm |
| | Height | 27.5 mm |
| | Depth | 35.6 mm |

Environmental and real-life conditions

Ambient conditions

| Degree of protection | RTI |
|---------------------------------|--------------|
| Ambient temperature (operation) | -40 °C 55 °C |



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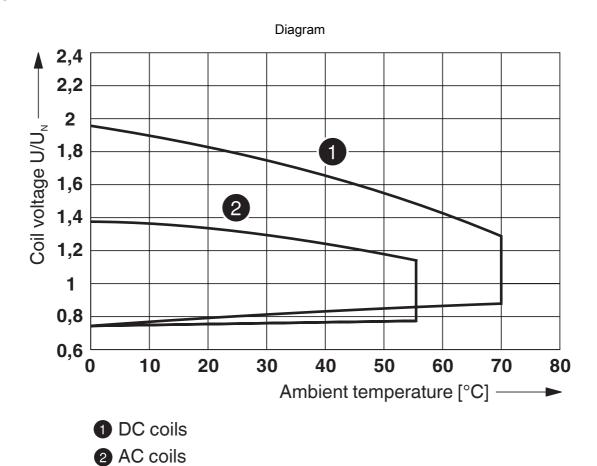
| Ambient temperature (storage/transport) | -40 °C 85 °C |
|---|----------------------------|
| Approvals | |
| Corrosive gas test | |
| Identification | ISA-S71.04. G3 Harsh Group |
| | EN 60068-2-60 |
| Standards and regulations | |
| Standards/regulations | IEC 60664 |
| | IEC 61810 |
| Mounting | |
| Mounting position | any |



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Drawings



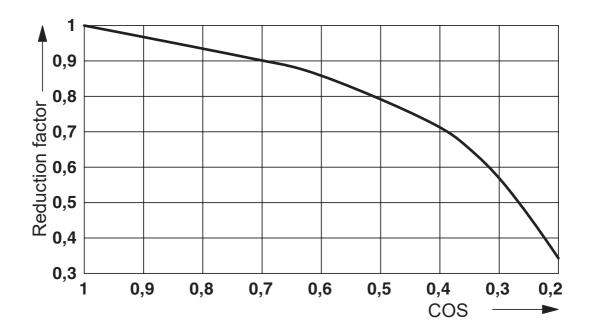
Operating voltage range



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Diagram

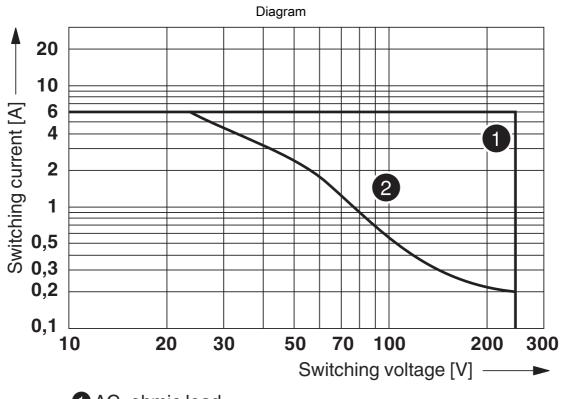


Service life reduction factor



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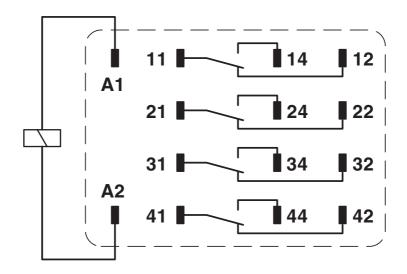
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- 1 AC, ohmic load
- 2DC, ohmic load

Interrupting rating

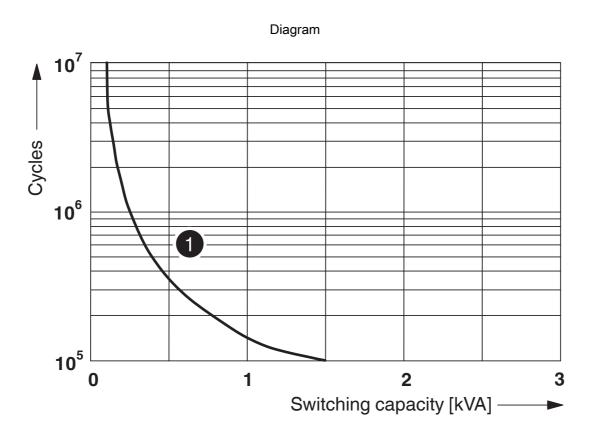
Circuit diagram





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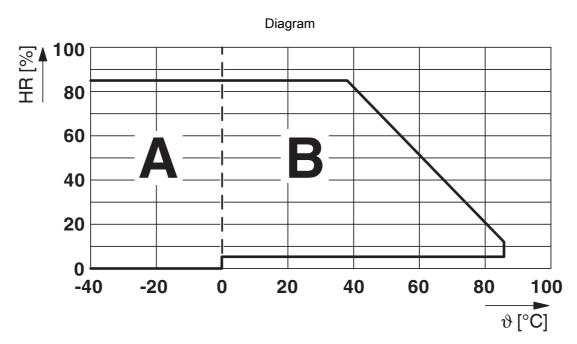
1 250 V AC, Ohmic load

Electrical service life



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Permissible humidity for operation and storage.

The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented

Area B: Condensation at ambient temperatures > 0°C must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature ≤ 25°C.



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Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2903684



CSA

Approval ID: 256725



cUL Recognized

Approval ID: FILE E 172140



UL Recognized

Approval ID: FILE E 172140



EAC

Approval ID: RU*C-DE.*08.B.00010



VDE Zeichengenehmigung

Approval ID: 40040427

cULus Recognized



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Classifications

UNSPSC 21.0

ECLASS

| ECLASS-11.0 | 27371601 |
|-------------|----------|
| ECLASS-12.0 | 27371601 |
| ECLASS-13.0 | 27371601 |
| | |
| ETIM | |
| ETIM 9.0 | EC001437 |
| | |
| UNSPSC | |

39122300



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Environmental product compliance

EU RoHS

| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--|
| China RoHS | |
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |
| EU REACH SVHC | |
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |

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