

ELR 1-SC-230AC/600AC-20 - Solid-state contactor



1032920

<https://www.phoenixcontact.com/us/products/1032920>

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Single-phase solid-state contactor, input voltage: 230 V AC, output current: 20 A, zero voltage switch

Commercial data

| | |
|--------------------------------------|--------------------|
| Item number | 1032920 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | C471 |
| Product key | CK7122 |
| Catalog page | Page 48 (C-5-2019) |
| GTIN | 4055626537849 |
| Weight per piece (including packing) | 263.6 g |
| Weight per piece (excluding packing) | 258.3 g |
| Customs tariff number | 85364900 |
| Country of origin | MT |

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Technical data

Product properties

| | |
|--------------|-----------------------|
| Product type | Solid-state contactor |
|--------------|-----------------------|

Electrical properties

| | |
|---|---------|
| Number of phases | 1 |
| Maximum power dissipation for nominal condition | 20 W |
| Mains type | 1-phase |

Input data

Control

| | |
|-------------------------------|--------------------------------|
| Input name | Control input |
| Rated actuating voltage U_C | 230 V AC |
| Triggering voltage range | 24 V AC ... 275 V AC |
| | 24 V DC ... 190 V DC |
| Rated actuating current I_C | approx. 17 mA |
| Switching threshold | ≤ 5 V AC/DC ("0" signal) |
| | ≥ 20 V AC/DC ("1" signal) |
| Operating voltage display | Green LED |
| Transmission frequency | 6 Hz |

Output data

Load output

| | |
|-----------------------------------|-----------------------------------|
| Operating voltage range | 42 V AC ... 660 V AC |
| Rated operating current at AC-51 | 20 A |
| Rated operating current at AC-53a | 5 A ($T_A = 25$ °C) |
| | 5 A ($T_A = 40$ °C) |
| Peak offstate voltage | 1200 V |
| Mains frequency | 45 Hz |
| | 65 Hz |
| Load current range | 150 mA ... 20 A (see to derating) |
| Leakage current | < 3 mA (In off state) |
| Residual voltage | < 1 V |
| Surge current | 325 A ($t = 10$ ms) |
| Max. load value | 525 A ² s |
| Protective circuit | Varistor |
| Phase angle cos phi min | 0.5 |

Connection data

Control circuits

| | |
|-------------------|------------------|
| Connection method | Screw connection |
|-------------------|------------------|

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| | |
|----------------------------------|---|
| Stripping length | 8 mm |
| Screw thread | M3 |
| Conductor cross section rigid | 0.5 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.5 mm ² ... 2.5 mm ² |
| Conductor cross section AWG | 18 ... 12 |

Load circuit

| | |
|----------------------------------|---|
| Connection method | Screw connection |
| Stripping length | 12 mm |
| Screw thread | M4 |
| Conductor cross section rigid | 2.5 mm ² ... 6 mm ² |
| Conductor cross section flexible | 1 mm ² ... 4 mm ² |
| Conductor cross section AWG | 14 ... 10 |

Protective conductor connection

| | |
|-------------------|----------------|
| Connection method | Ring cable lug |
| Screw thread | M5 |
| Tightening torque | 1.5 Nm |

Signaling

| | |
|---------------------------|-----------|
| Operating voltage display | Green LED |
|---------------------------|-----------|

Dimensions

| | |
|--------|--------|
| Width | 18 mm |
| Height | 110 mm |
| Depth | 103 mm |

Material specifications

| | |
|-------|-----------------|
| Color | gray (RAL 7042) |
|-------|-----------------|

Environmental and real-life conditions

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -30 °C ... 70 °C |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C |

Standards and regulations

Standards/regulations

| | |
|-----------------------|--------------|
| Standards/regulations | EN 61000-4-2 |
| | EN 61000-4-3 |
| | EN 61000-4-4 |
| | EN 61000-4-5 |
| | EN 55011 |

Mounting

| | |
|---------------|-------------------|
| Mounting type | DIN rail mounting |
|---------------|-------------------|

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| | |
|-----------------------|--|
| Assembly instructions | Can be aligned with ≥ 22.5 mm spacing |
| Mounting position | Vertical (horizontal DIN rail) |

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27371003 |
| ECLASS-12.0 | 27371003 |
| ECLASS-13.0 | 27371003 |

ETIM

| | |
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| ETIM 9.0 | EC000066 |
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UNSPSC

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| UNSPSC 21.0 | 39122300 |
|-------------|----------|

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Environmental product compliance

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|------------|--|
| China RoHS | Environmentally Friendly Use Period = 25; |
| | For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads" |

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