

Solid-state contactor - ELR 1-230AC/600AC-50 - 2297183

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Single-phase solid-state contactor, input voltage: 230 V AC, output current: 50 A, zero voltage switch

Your advantages

- ✓ High switching frequency
- ✓ Wear and bounce-free
- ✓ 24 V DC and 230 V AC input voltage versions



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 132008 |
| GTIN | 4046356132008 |
| Weight per Piece (excluding packing) | 420.600 g |
| Custom tariff number | 85362010 |
| Country of origin | Malta |

Technical data

Dimensions

| | |
|--------|--------|
| Width | 45 mm |
| Height | 103 mm |
| Depth | 103 mm |

Ambient conditions

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

Solid-state contactor - ELR 1-230AC/600AC-50 - 2297183

Technical data

Input data

| | |
|-------------------------------|---|
| Input name | Control input |
| Rated actuating voltage U_c | 230 V AC |
| Triggering voltage range | 24 V AC ... 275 V AC |
| Rated actuating current I_c | approx. 17 mA |
| Switching threshold | ≤ 6 V AC ("0" signal) ≥ 22 V AC ("1" signal) |
| Transmission frequency | 6 Hz |
| Operating voltage display | Green LED |

Output data load output

| | |
|-----------------------------------|-----------------------------------|
| Output name | Load output |
| Operating voltage range | 42 V AC ... 660 V AC |
| Load current range | 150 mA ... 50 A (see to derating) |
| Rated operating current at AC-51 | 50 A |
| Rated operating current at AC-53a | 30 A |
| Leakage current | < 3 mA (In off state) |
| Residual voltage | < 1.6 V |
| Surge current | 1900 A (t = 10 ms) |
| Type of protection | RCV circuit |

General

| | |
|---------------------------|--|
| Test voltage input/output | 4 kV _{rms} |
| Mounting position | Vertical (horizontal DIN rail) |
| Assembly instructions | Can be aligned with ≥ 22.5 mm spacing |

Connection data

| | |
|----------------------------------|---|
| Connection name | Control circuits |
| Connection method | Screw connection |
| Stripping length | 8 mm |
| Screw thread | M3 |
| Conductor cross section solid | 0.5 mm ² ... 4 mm ² |
| Conductor cross section flexible | 0.5 mm ² ... 4 mm ² |
| Conductor cross section AWG | 20 ... 14 |

Connection data 2

| | |
|-------------------|------------------|
| Connection name | Load circuit |
| Connection method | Screw connection |
| Stripping length | 8 mm |
| Screw thread | M5 |

Solid-state contactor - ELR 1-230AC/600AC-50 - 2297183

Technical data

Connection data 2

| | |
|----------------------------------|--|
| Conductor cross section solid | 4 mm ² ... 25 mm ² |
| Conductor cross section flexible | 4 mm ² ... 25 mm ² |
| Conductor cross section AWG | 12 ... 3 |

Standards and Regulations

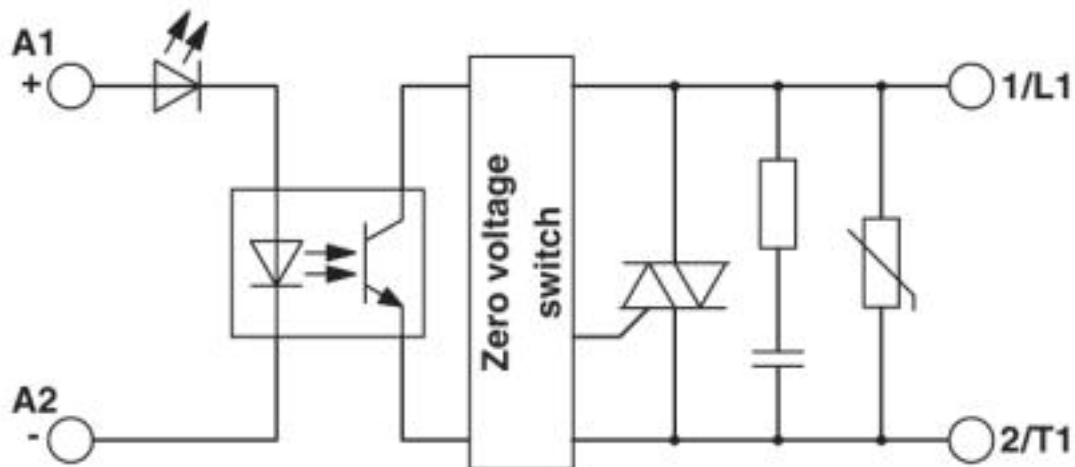
| | |
|----------------------------------|-----------------------|
| Connection in acc. with standard | CUL |
| Designation | Standards/regulations |
| Standards/regulations | EN 61000-4-2 |
| | EN 61000-4-3 |
| | EN 61000-4-4 |
| | EN 61000-4-5 |
| | EN 61000-4-6 |
| | EN 55011 |

Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

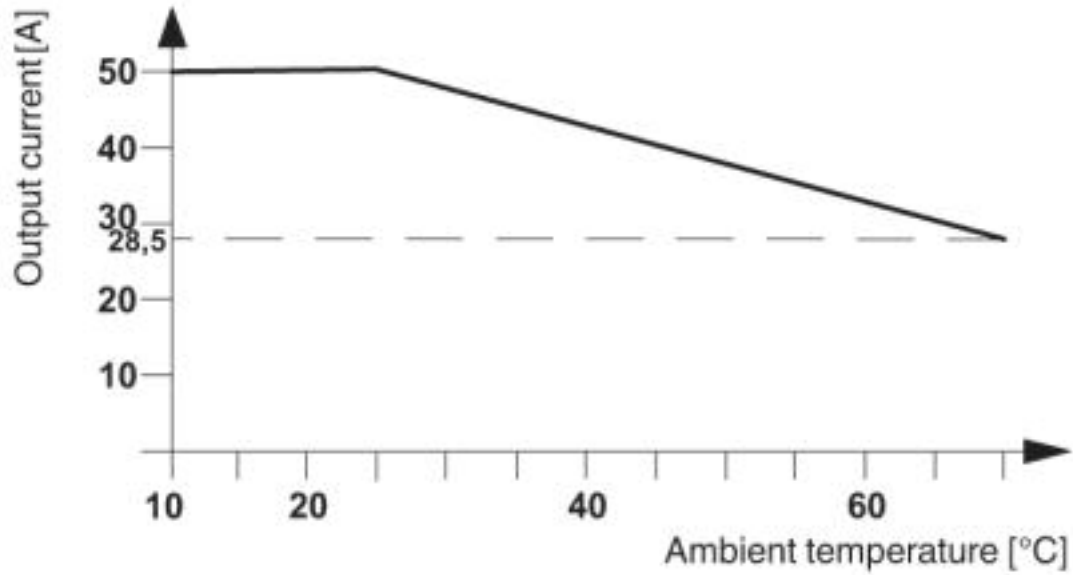
Drawings

Block diagram



Solid-state contactor - ELR 1-230AC/600AC-50 - 2297183

Diagram



Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27371100 |
| eCl@ss 4.1 | 27371100 |
| eCl@ss 5.0 | 27371000 |
| eCl@ss 5.1 | 27371000 |
| eCl@ss 6.0 | 27371000 |
| eCl@ss 7.0 | 27371014 |
| eCl@ss 8.0 | 27371014 |
| eCl@ss 9.0 | 27371014 |

ETIM

| | |
|----------|----------|
| ETIM 4.0 | EC002055 |
| ETIM 5.0 | EC002055 |
| ETIM 6.0 | EC002055 |
| ETIM 7.0 | EC002055 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211915 |
| UNSPSC 7.0901 | 39121514 |
| UNSPSC 11 | 39121514 |
| UNSPSC 12.01 | 39121514 |

Solid-state contactor - ELR 1-230AC/600AC-50 - 2297183

Classifications

UNSPSC

| | |
|-------------|----------|
| UNSPSC 13.2 | 39121529 |
|-------------|----------|

Approvals


Approvals


Approvals

UL Recognized / cUL Recognized / EAC / cULus Recognized


Ex Approvals

Approval details

| | | | |
|---------------|--|---|---------------|
| UL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 195083 |
|---------------|--|---|---------------|

| | | | |
|----------------|---|---|---------------|
| cUL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 195083 |
|----------------|---|---|---------------|

| | | | |
|-----|---|--|--------------------------|
| EAC |  | | RU C- DE.A*30.B.01082 |
|-----|---|--|--------------------------|

| | | | |
|------------------|---|--|--|
| cULus Recognized |  | | |
|------------------|---|--|--|