

# Solid-state contactor - ELR 1-SC-230AC/600AC-30 - 1032922

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Single-phase solid-state contactor, input voltage: 230 V AC, output current: 30 A, zero voltage switch



## Key Commercial Data

|                                      |               |
|--------------------------------------|---------------|
| Packing unit                         | 1 pc          |
| GTIN                                 |               |
| GTIN                                 | 4055626536477 |
| Weight per Piece (excluding packing) | 259.000 g     |
| Custom tariff number                 | 85362010      |
| Country of origin                    | Malta         |

## Technical data

### Dimensions

|        |         |
|--------|---------|
| Width  | 17.8 mm |
| Height | 110 mm  |
| Depth  | 103 mm  |

### Ambient conditions

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

### Input data

|                               |                                |
|-------------------------------|--------------------------------|
| 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           | $\leq 5$ V AC/DC ("0" signal)  |
|                               | $\geq 20$ V AC/DC ("1" signal) |

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## Technical data

### Input data

|                           |           |
|---------------------------|-----------|
| 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                | 250 mA ... 30 A (see to derating) |
| Rated operating current at AC-51  | 30 A                              |
| Rated operating current at AC-53a | 15 A (T <sub>A</sub> = 25 °C)     |
|                                   | 5 A (T <sub>A</sub> = 40 °C)      |
| Leakage current                   | < 3 mA (In off state)             |
| Residual voltage                  | < 1.6 V                           |
| Surge current                     | 600 A (t = 10 ms)                 |
| Type of protection                | Varistor                          |

### General

|                       |                                       |
|-----------------------|---------------------------------------|
| 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 <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross section flexible | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross section AWG      | 18 ... 12                                   |

### Connection data 2

|                                  |   |
|----------------------------------|---|
| Connection name                  | Load circuit                              |
| Connection method                | Screw connection                          |
| Stripping length                 | 12 mm                                     |
| Screw thread                     | M4  |
| Conductor cross section solid    | 2.5 mm <sup>2</sup> ... 6 mm <sup>2</sup> |
| Conductor cross section flexible | 1 mm <sup>2</sup> ... 4 mm <sup>2</sup>   |
| Conductor cross section AWG      | 14 ... 10                                 |

### Standards and Regulations

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

# Solid-state contactor - ELR 1-SC-230AC/600AC-30 - 1032922

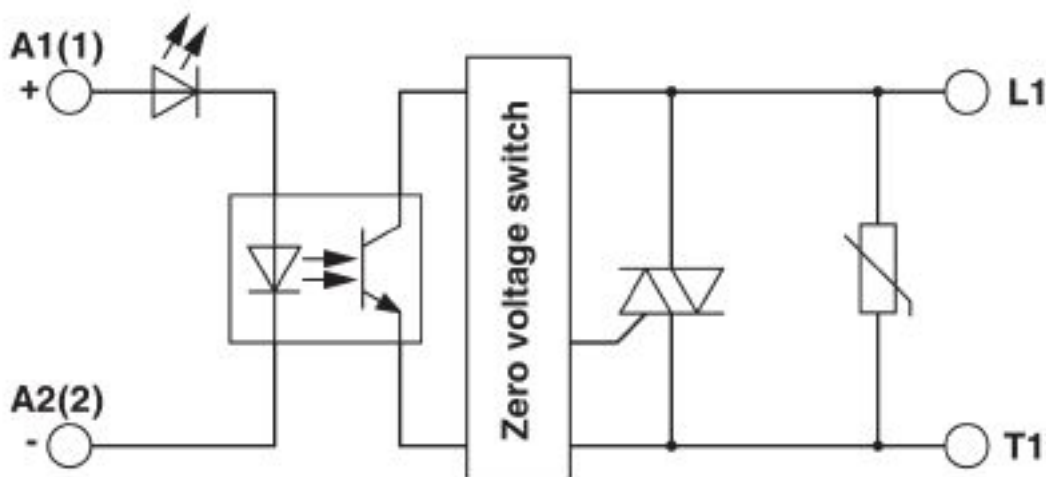
## Technical data

### Standards and Regulations

|  |          |
|--|----------|
|  | EN 55011 |
|--|----------|

## Drawings

Block diagram



## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 6.0 | 27371000 |
| eCl@ss 7.0 | 27371014 |
| eCl@ss 8.0 | 27371014 |
| eCl@ss 9.0 | 27371014 |

### ETIM

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

## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed


#### Ex Approvals

## Solid-state contactor - ELR 1-SC-230AC/600AC-30 - 1032922


### Approvals

#### Approval details

|           |   |   |               |
|-----------|---|---|---------------|
| UL Listed |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 323771 |
|-----------|---|---|---------------|

|            |   |   |               |
|------------|---|---|---------------|
| cUL Listed |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 323771 |
|------------|---|---|---------------|

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

|              |  |  |  |
|--------------|--|--|--|
| cULus Listed |  |  |  |
|--------------|--|--|--|