

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



2297167

<https://www.phoenixcontact.com/us/products/2297167>

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 documentation. Our General Terms of Use for Downloads are valid.



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

## Your advantages

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

## Commercial Data

Item number	2297167
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	C05
Product Key	CK7123
Catalog Page	Page 49 (C-5-2017)
GTIN	4046356131995
Weight per Piece (including packing)	257.3 g
Weight per Piece (excluding packing)	257.3 g
Customs tariff number	85362010
Country of origin	MT

## Technical Data

### Product properties

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

### Electrical properties

Number of phases	1
Mains type	1-phase
Test voltage (Input/output)	4 kV <sub>rms</sub> (50 Hz, 1 min., input/output)

### Input data

#### Control

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)
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	30 A
Rated operating current at AC-53a	15 A
Peak offstate voltage	1200 V
Mains frequency	45 Hz 65 Hz
Load current range	150 mA ... 30 A (see to derating)
Leakage current	< 3 mA (In off state)
Residual voltage	< 1.6 V
Surge current	400 A (t = 10 ms)
Max. load value	1800 A <sup>2</sup> s
Protective circuit	RCV circuit
Phase angle cos phi min	0.5

### Connection data

#### Control circuits

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M4

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



2297167

<https://www.phoenixcontact.com/us/products/2297167>

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	20 ... 14

## Load circuit

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M4
Conductor cross section solid	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section flexible	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG	20 ... 12

## LED signaling

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

## Dimensions

Width	22.5 mm
Height	103 mm
Depth	103 mm

## 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

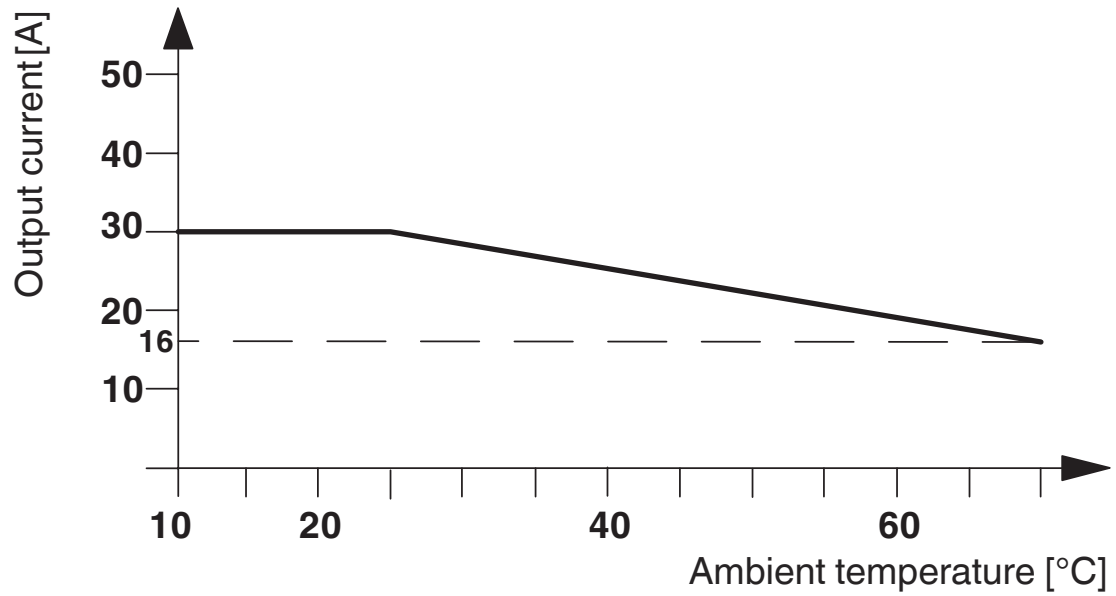
Standards/regulations	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 55011

## Mounting

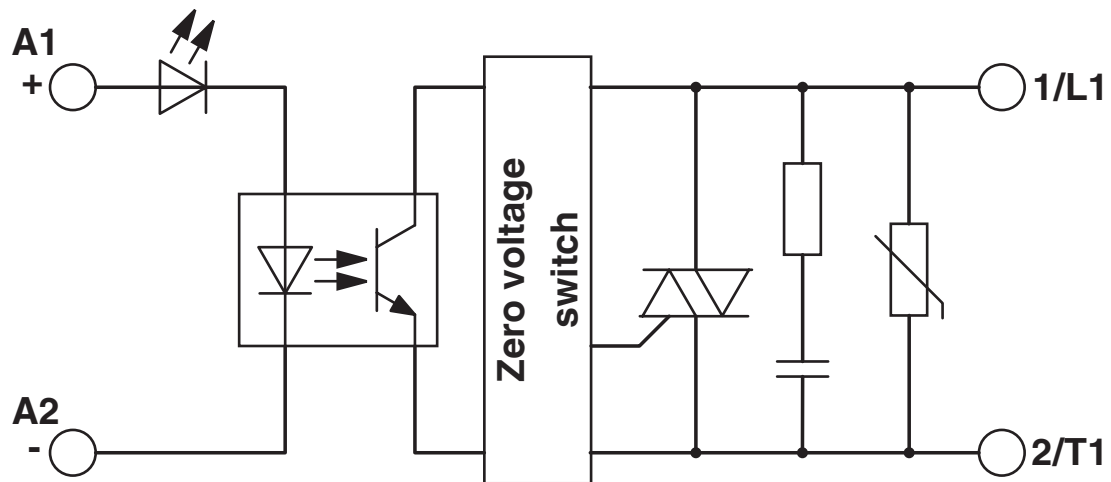
Mounting type	DIN rail mounting
Assembly instructions	Can be aligned with $\geq 22.5$ mm spacing
Mounting position	Vertical (horizontal DIN rail)

## Drawings

Diagram



Block diagram



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



2297167

<https://www.phoenixcontact.com/us/products/2297167>

## Classifications

### ECLASS

ECLASS-10.0.1	27371014
ECLASS-11.0	27371014

### ETIM

ETIM 7.0	EC002055
----------	----------

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



2297167

<https://www.phoenixcontact.com/us/products/2297167>

## Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"
------------	--

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)