

## Solid-state contactor - ELR 1- 24DC/600AC-20 - 2297138

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Single-phase solid-state contactor, input voltage: 24 V DC, output current: 20 A, zero voltage switch

### Why buy this product

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



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 132022

### Technical data

#### Input data

Input name	Device supply
Input voltage range	4 V DC ... 32 V DC
Typical input current at $U_N$	approx. 12 mA
Switching threshold	$\leq 1$ V DC ("0" signal) $\geq 4$ V DC ("1" signal)
Transmission frequency	25 Hz
Operating voltage display	Green LED

#### Output data load output

Operating voltage range	42 V AC ... 660 V AC (45/65 Hz)
Load current range	350 mA ... 20 A (see to derating)
Rated operating current at AC-51	20 A
Rated operating current at AC-53a	5 A
Leakage current	< 3 mA (In off state)
Residual voltage	< 1.6 V

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## Technical data

### Output data load output

Surge current	250 A (t = 10 ms)
Protective circuit	RCV circuit RCV circuit

### Connection data, control circuit

Connection name	Control circuits
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M4
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

### Connection data load circuit

Connection name	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

## General

Test voltage input/output	4 kV <sub>rms</sub>
Mounting position	Vertical (horizontal DIN rail)
Assembly instructions	Can be aligned with ≥ 22.5 mm spacing
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

## Dimensions

Width	22.5 mm
Height	103 mm
Depth	103 mm

## Ambient conditions

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

## Standards and Regulations

Connection in acc. with standard	CUL
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	EN 55011

## Classifications

### eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371601
eCl@ss 5.1	27371601
eCl@ss 6.0	27371601
eCl@ss 7.0	27371601
eCl@ss 8.0	27371014

### ETIM

ETIM 2.0	EC000066
ETIM 3.0	EC000066
ETIM 4.0	EC000066
ETIM 5.0	EC002055

### UNSPSC

UNSPSC 6.01	30211915
UNSPSC 7.0901	39121514
UNSPSC 11	39121514
UNSPSC 12.01	39121514
UNSPSC 13.2	39121514

## Approvals

### Approvals

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#### Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

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#### Ex Approvals

# Solid-state contactor - ELR 1- 24DC/600AC-20 - 2297138

## Approvals

Approvals submitted

### Approval details

UL Recognized

cUL Recognized

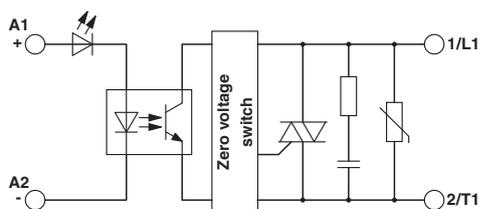
EAC

EAC

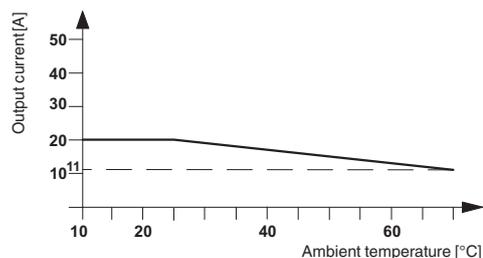
cULus Recognized

## Drawings

Block diagram



Diagram



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