

# ELR W3- 24DC/500AC- 0,4I - Hybrid motor starter



2297824

<https://www.phoenixcontact.com/us/products/2297824>

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"4 in 1" three-phase solid-state reversing contactor with 24 V DC input, 0.4 A output current and adjustable overload shutdown

## Commercial data

Item number	2297824
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DK7422
GTIN	4046356361965
Weight per piece (including packing)	270.8 g
Weight per piece (excluding packing)	247.3 g
Country of origin	DE

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## Technical data

### Product properties

Product type	Hybrid motor starters
Product family	CONTACTRON
Operating mode	100% operating factor

Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	safe isolation
Overvoltage category	III
Degree of pollution	2

### Electrical properties

Number of phases	3
Service life electrical	$3 \times 10^7$ cycles
Maximum power dissipation for nominal condition	1.5 W
Reversing frequency	$\leq 2$ Hz
Maximum power dissipation	1.5 W
Minimum power dissipation	1.1 W

Air clearances and creepage distances between the power circuits

Rated insulation voltage	500 V
Rated surge voltage	6 kV

### Supply

Rated control circuit supply voltage $U_S$	24 V DC
Control supply voltage range	19.2 V DC ... 30 V DC
Rated control supply current $I_S$	40 mA
Protective circuit	Surge protection
	Reverse polarity protection

### Input data

#### Control

Input name	Control input right/left
Rated actuating voltage $U_C$	24 V DC
Triggering voltage range	19.2 V DC ... 30 V DC
Rated actuating current $I_C$	5 mA
Switching threshold	9.6 V ("0" signal)
	19.2 V ("1" signal)
Typical response time	< 35 ms
Typical turn-off time	< 40 ms

### Output data

#### AC output

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Rated operating voltage $U_e$	500 V AC
Operating voltage range	42 V AC ... 550 V AC
Mains frequency	50/60 Hz
Load current range	120 mA ... 400 mA

## Acknowledge output

Note	Confirmation 01: floating changeover contact
Contact switching type	1 changeover contact
Switching capacity in accordance with IEC 60947-5-1	3 A (230 V, AC15)
	2 A (24 V (DC13))

## Connection data

### Control circuits

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 14

### Load circuit

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 14

## Signaling

Status display	LED (yellow)
Operating voltage display	Green LED
Error indication	Red LED

## Dimensions

Width	22.5 mm
Height	107 mm
Depth	114 mm

## Material specifications

Flammability rating according to UL 94 (Housing)	V0 (Housing)
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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C

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Ambient temperature (storage/transport)
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-40 °C ... 80 °C
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## Approvals

### ATEX

Identification
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Ex II (2) G
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Ex II (2) D
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Certificate
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PTB 07 ATEX 3145
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### UL approval

Certificate
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NLDX.E228652
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## Standards and regulations

### Standards/regulations

Standards/regulations
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DIN EN 50178
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EN 60947
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### Power station requirements

Standards/regulations
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DWR 1300/ZXX01/DD/7080.8d
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### Air clearances and creepage distances between the power circuits

Standards/regulations
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DIN EN 50178
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## Mounting

Mounting type
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DIN rail mounting
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Assembly note
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can be aligned with spacing = 20 mm
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Mounting position
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Vertical (horizontal DIN rail)
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## Environmental product compliance

China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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