

Solid-state relay terminal block - DEK-OV- 12DC/ 24DC/ 10



2961749

<https://www.phoenixcontact.com/pc/products/2961749>

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Power solid-state relay terminal block, input: DC voltage, output: DC voltage, input voltage: 12 V DC

Your advantages

- EB-DIK insertion bridges
- Actuator version available
- Labeling and mounting with user-friendly modular terminal blocks
- Wear-free switching of up to 24 V DC/10 A or 240 V AC/800 mA
- Integrated output protective circuit
- Electrical isolation between input and output at up to 2.5 kVrms
- Zero voltage switch at AC output
- Integrated input circuit
- Status indicator

Commercial Data

Item number	2961749
Packing unit	10 pc
Minimum order quantity	1 pc
Product Key	CK61D2
Catalog Page	Page 443 (C-5-2019)
GTIN	4017918927943
Weight per Piece (including packing)	25.34 g
Weight per Piece (excluding packing)	25.34 g
Customs tariff number	85364190
Country of origin	CN

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Technical Data

Notes

Order information:	The housing is open on one side. The appropriate cover is D-DEK 1,5 GN (2716949).
Note on application	Use of EB 80-DIK... bridges in the DEK terminal blocks: Absorption of humidity from the ambient air as well as an unfavorable tolerance between a larger number of DEK terminal blocks and the EB 80-DIK... bridge may cause (minor) expansion of the DEK housing. When the EB 80-DIK... bridges are used, therefore, it is recommended that these be disconnected after about 10 to 12 DEK terminal blocks and a wire bridge to the next DEK terminal block be inserted in their place.

Product properties

Product type	Solid-state relay module
Application	Output function
Operating mode	100% operating factor

Insulation characteristics

Overvoltage category	III
Pollution degree	2
Insulation	Basic insulation

Electrical properties

Test voltage Input/output	2.5 kV AC (Input/output)
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Input data

Nominal input voltage U_N	12 V DC
Input voltage range in reference to U_N	0.8 ... 1.2
Input voltage range	9.6 V DC ... 14.4 V DC
Switching threshold "0" signal in reference to U_N	≤ 0.4
Switching threshold "1" signal in reference to U_N	≥ 0.8
Typical input current at U_N	4.7 mA
Typical response time	250 μ s
Typical turn-off time	800 μ s
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection Surge protection
Transmission frequency	100 Hz

Output data

Contact type	1 N/O contact
Design of digital output	electronic
Output voltage range	5 V DC ... 30 V DC
Limiting continuous current	10 A (see derating curve)

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Surge current	100 A (t = 20 ms)
Voltage drop at max. limiting continuous current	< 50 mV
Output circuit	3-conductor, ground-referenced
Protective circuit	Reverse polarity protection
	Surge protection

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 14
Tightening torque	0.5 Nm

Dimensions

Width	6.2 mm
Height	80 mm
Depth	56 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

Standards and regulations

Standards/regulations

Standards/regulations	IEC 60947-5-1
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Mounting

Mounting type	DIN rail mounting
Assembly instructions	in rows with zero spacing
Mounting position	any

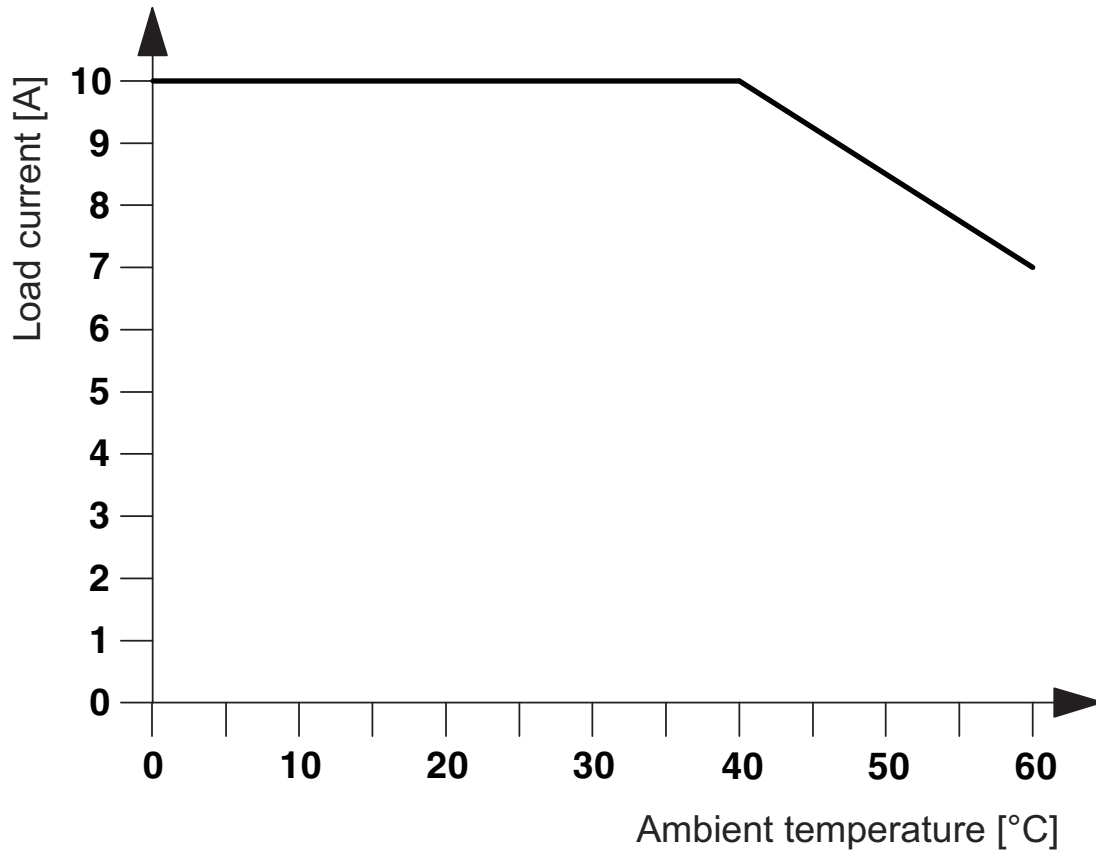
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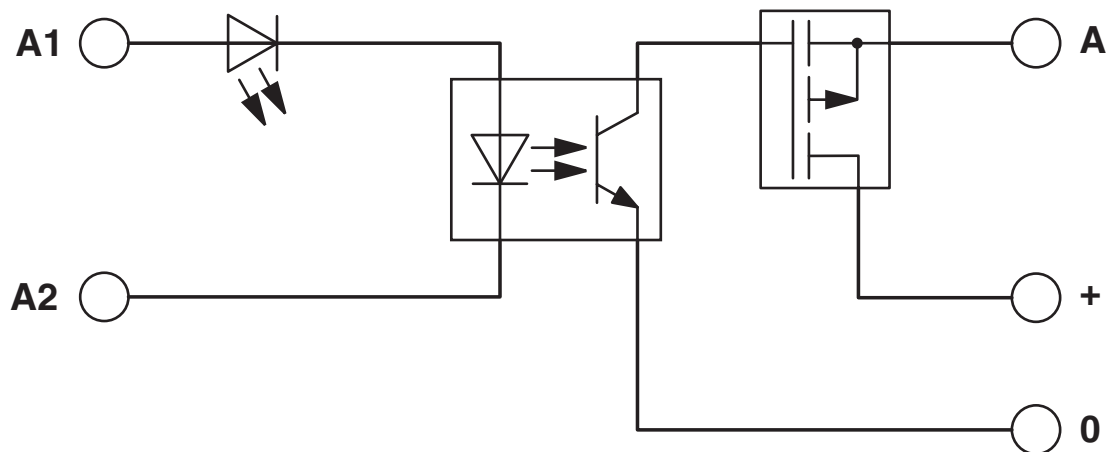
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Drawings

Diagram



Circuit diagram



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Approvals



cUL Recognized
Approval ID: FILE E 238705



UL Recognized
Approval ID: FILE E 238705



EAC
Approval ID: TR_TS_D_00573_c

cULus Recognized

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Classifications

ECLASS

ECLASS-9.0	27371604
ECLASS-10.0.1	27371604
ECLASS-11.0	27371604

ETIM

ETIM 8.0	EC001504
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UNSPSC

UNSPSC 21.0	39122300
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Environmental Product Compliance


REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

 Note: Applying some accessories below might limit this product.


Insertion bridge

Insertion bridge - EB 2- DIK RD - 2716693

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Insertion bridge, pitch: 6.15 mm, color: red

 Max. current carrying capacity: 26 A


Insertion bridge

Insertion bridge - EB 3- DIK RD - 2716745

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Insertion bridge, pitch: 6.15 mm, color: red

 Max. current carrying capacity: 26 A

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Insertion bridge

Insertion bridge - EB 4- DIK RD - 2716758

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Insertion bridge, pitch: 6.15 mm, color: red

 Max. current carrying capacity: 26 A


Insertion bridge

Insertion bridge - EB 5- DIK RD - 2716761

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Insertion bridge, pitch: 6.15 mm, color: red

 Max. current carrying capacity: 26 A

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Insertion bridge

Insertion bridge - EB 10- DIK RD - 2716774

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Insertion bridge, pitch: 6.15 mm, color: red

 Max. current carrying capacity: 26 A


Insertion bridge

Insertion bridge - EB 2- DIK BU - 2716648

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Insertion bridge, pitch: 6.15 mm, color: blue

 Max. current carrying capacity: 26 A

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Insertion bridge

Insertion bridge - EB 3- DIK BU - 2716651

<https://www.phoenixcontact.com/pc/products/2716651>

Insertion bridge, pitch: 6.15 mm, color: blue



 Max. current carrying capacity: 26 A


Insertion bridge

Insertion bridge - EB 4- DIK BU - 2716664

<https://www.phoenixcontact.com/pc/products/2716664>

Insertion bridge, pitch: 6.15 mm, color: blue



 Max. current carrying capacity: 26 A

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Insertion bridge

Insertion bridge - EB 5- DIK BU - 2716677

<https://www.phoenixcontact.com/pc/products/2716677>



Insertion bridge, pitch: 6.15 mm, color: blue

 Max. current carrying capacity: 26 A


Insertion bridge

Insertion bridge - EB 10- DIK BU - 2716680

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Insertion bridge, pitch: 6.15 mm, color: blue

 Max. current carrying capacity: 26 A

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Insertion bridge

Insertion bridge - EB 80- DIK BU - 2715940

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Insertion bridge, pitch: 6.2 mm, color: blue

 Max. current carrying capacity: 26 A


Insertion bridge

Insertion bridge - EB 80- DIK RD - 2715953

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Insertion bridge, pitch: 6.2 mm, color: red

 Max. current carrying capacity: 26 A

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Insertion bridge

Insertion bridge - EB 80- DIK WH - 2715788

<https://www.phoenixcontact.com/pc/products/2715788>



Insertion bridge, pitch: 6.15 mm, color: white

 Max. current carrying capacity: 26 A

Separating plate

Separating plate - D-DEK 1,5 GN - 2716949

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Cover for setting the end of a terminal row, color: green

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Sensor/actuator terminal block

Sensor/actuator terminal block - DIKD 1,5 - 2715979

<https://www.phoenixcontact.com/pc/products/2715979>



Sensor/actuator terminal block, nom. voltage: 250 V, nominal current: 24 A, connection method: Screw connection, 1st, 2nd and 3rd level, Rated cross section: 2.5 mm², cross section: 0.2 mm² - 4 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

Zack marker strip

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003

<https://www.phoenixcontact.com/pc/products/1051003>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

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Zack marker strip

Zack marker strip - ZB 6,LGS:FORTL.ZAHLEN - 1051016

<https://www.phoenixcontact.com/pc/products/1051016>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Zack marker strip

Zack marker strip - ZB 6/WH-100:UNBEDRUCKT - 5060935

<https://www.phoenixcontact.com/pc/products/5060935>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 1000

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