

DEK-OV- 24DC/240AC/800 - Solid-state relay terminal block



2964649

<https://www.phoenixcontact.com/us/products/2964649>

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.



Power solid-state relay terminal block, input: 24 V DC, output: 10 - 253 V AC/800 mA, terminal block width: 6.2 mm

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
- Zero voltage switch at AC output
- Integrated input circuit
- Electrical isolation between input and output at up to 2.5 kVrms
- Status indicator

Commercial data

Item number	2964649
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	DK61A1
GTIN	4017918131043
Weight per piece (including packing)	21 g
Weight per piece (excluding packing)	21 g
Customs tariff number	85364190
Country of origin	CN

DEK-OV- 24DC/240AC/800 - Solid-state relay terminal block



2964649

<https://www.phoenixcontact.com/us/products/2964649>

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
Product family	DEK
Application	Output function
Operating mode	100% operating factor

Insulation characteristics: Standards/regulations

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	15.09.2025
------------------------------	------------

Electrical properties

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

Input data

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.8 ... 1.2
Input voltage range	19.2 V DC ... 28.8 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	10.7 mA
Typical response time	< 10 ms
Typical turn-off time	< 10 ms
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection
Transmission frequency	10 Hz

Output data

Contact switching type	1 N/O contact
------------------------	---------------

DEK-OV- 24DC/240AC/800 - Solid-state relay terminal block



2964649

<https://www.phoenixcontact.com/us/products/2964649>

Design of digital output	electronic
Output voltage range	10 V AC ... 253 V AC (50/60 Hz)
Limiting continuous current	0.8 A (see derating curve)
Maximum inrush current	30 A (t = 10 ms)
Min. load current	10 mA
Leakage current	1.2 mA (in off state)
Phase angle cos phi min	0.5
Max. load value	4.5 A ² s
Peak offstate voltage	600 V (Periodic peak reverse voltage)
Voltage drop at max. limiting continuous current	≤ 1 V
Output circuit	2-conductor floating, zero voltage switch
Protective circuit	RCV circuit; RCV circuit

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	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	0.4 Nm ... 0.5 Nm

Dimensions

Width	6.2 mm
Height	80 mm
Depth	56 mm

Material specifications

Color	green (RAL 6021)
-------	------------------

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
-----------------------	---------------

Mounting

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

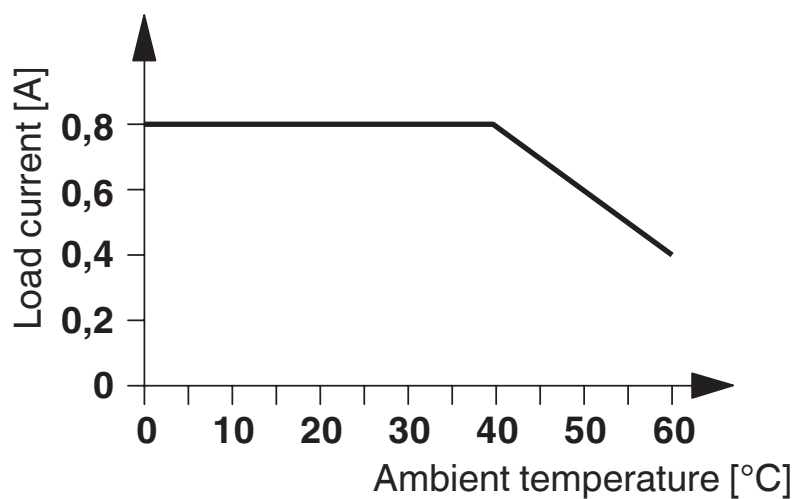
DEK-OV- 24DC/240AC/800 - Solid-state relay terminal block

2964649

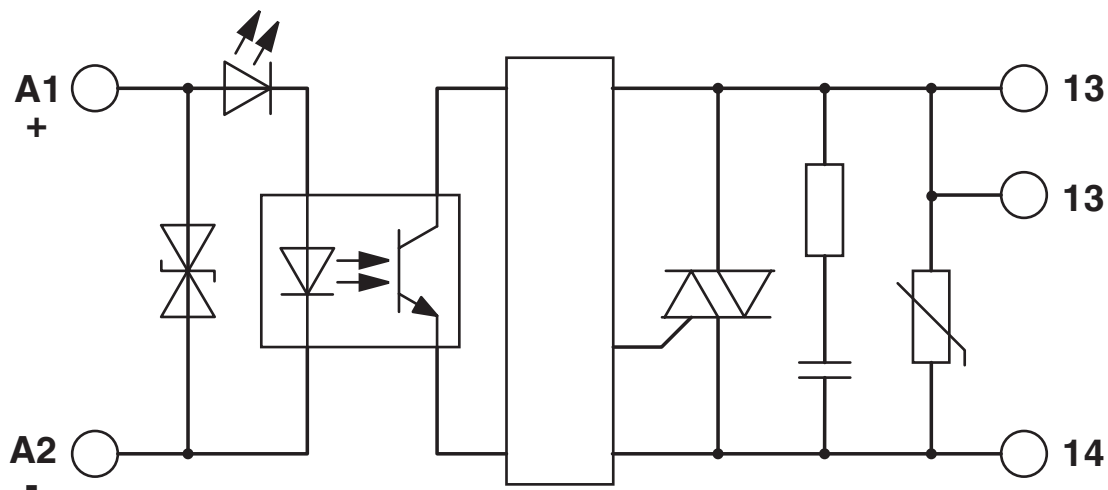
<https://www.phoenixcontact.com/us/products/2964649>

Drawings

Diagram



Circuit diagram



1 = zero voltage switch

DEK-OV- 24DC/240AC/800 - Solid-state relay terminal block



2964649

<https://www.phoenixcontact.com/us/products/2964649>

Approvals

📄 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2964649>



EAC

Approval ID: RU*C-DE.*08.B.00010

DEK-OV- 24DC/240AC/800 - Solid-state relay terminal block



2964649

<https://www.phoenixcontact.com/us/products/2964649>

Classifications

ECLASS

ECLASS-13.0	27371604
ECLASS-15.0	27371604

ETIM

ETIM 9.0	EC001504
----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

DEK-OV- 24DC/240AC/800 - Solid-state relay terminal block



2964649

<https://www.phoenixcontact.com/us/products/2964649>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

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.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)
SCIP	7b343808-7acb-455b-b153-3239259532b6

Phoenix Contact 2025 © - 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