

SIM-EI-120AC/TTL/100 - Miniature solid-state relay



2271196

<https://www.phoenixcontact.com/us/products/2271196>

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.



The figure shows version SIM-EI-5DC/TTL/100

Input solid-state relay, with protective circuit in input and output circuits, input: 120 V AC, output: TTL logic level, max. 100 mA

Commercial data

Item number	2271196
Packing unit	10 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	DK61F1
GTIN	4017918054236
Weight per piece (including packing)	20.3 g
Weight per piece (excluding packing)	20.3 g
Country of origin	DE

SIM-EI-120AC/TTL/100 - Miniature solid-state relay



2271196

<https://www.phoenixcontact.com/us/products/2271196>

Technical data

Product properties

Product type	Single solid-state relay
Data management status	
Date of last data management	05.09.2025

Electrical properties

Test voltage (Input/output)	2.5 kV (50 Hz, 1 min., input/output)
-----------------------------	--------------------------------------

Input data

Nominal input voltage U_N	120 V AC
Input voltage range in reference to U_N	0.9 ... 1.1
Input voltage range	108 V AC ... 132 V AC
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	2.1 mA
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection; Varistor
Transmission frequency	3 Hz

Output data

Design of digital output	electronic
Output voltage range	3 V DC ... 5.25 V DC
Limiting continuous current	100 mA
Fan out	1
Voltage drop at max. limiting continuous current	0.3 V
Output circuit	3-conductor, ground-referenced
Protective circuit	Reverse polarity protection; Polarity protection diode Free running; Freewheeling diode
Output resistor	approx. 390 Ω

Dimensions

Dimensional drawing	
Width	13 mm
Height	29 mm
Depth	25 mm

Environmental and real-life conditions

SIM-EI-120AC/TTL/100 - Miniature solid-state relay



2271196

<https://www.phoenixcontact.com/us/products/2271196>

Ambient conditions

Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

Standards and regulations

Standards/regulations	DIN VDE 0110
-----------------------	--------------

Mounting

Assembly note	can be aligned with spacing ≥ 2 mm
Mounting position	any

SIM-EI-120AC/TTL/100 - Miniature solid-state relay

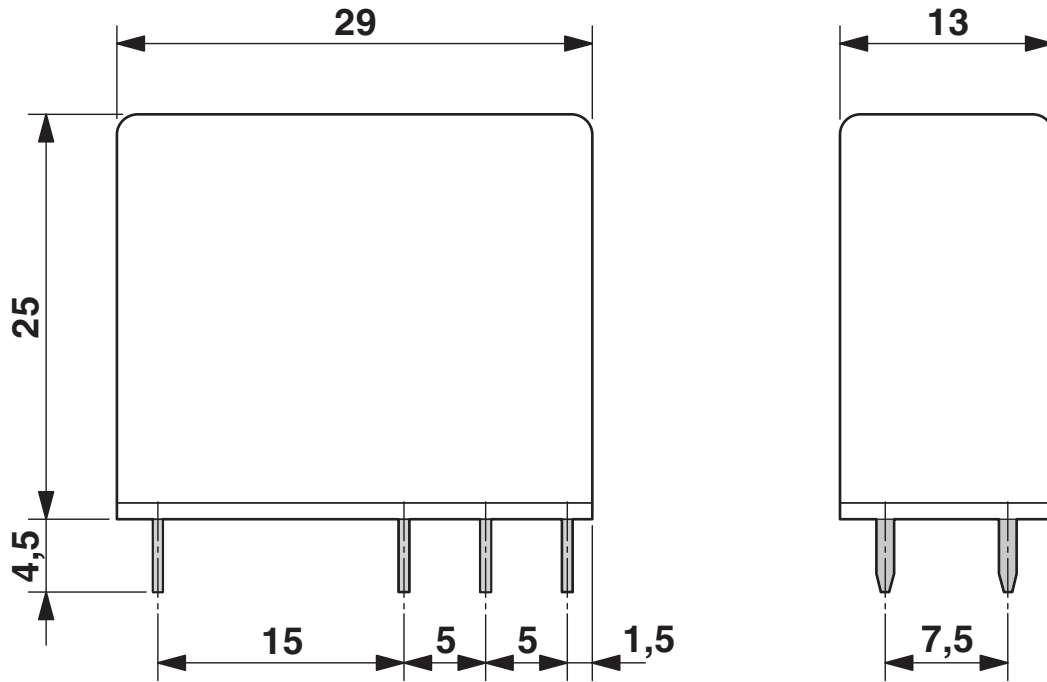


2271196

<https://www.phoenixcontact.com/us/products/2271196>

Drawings

Dimensional drawing



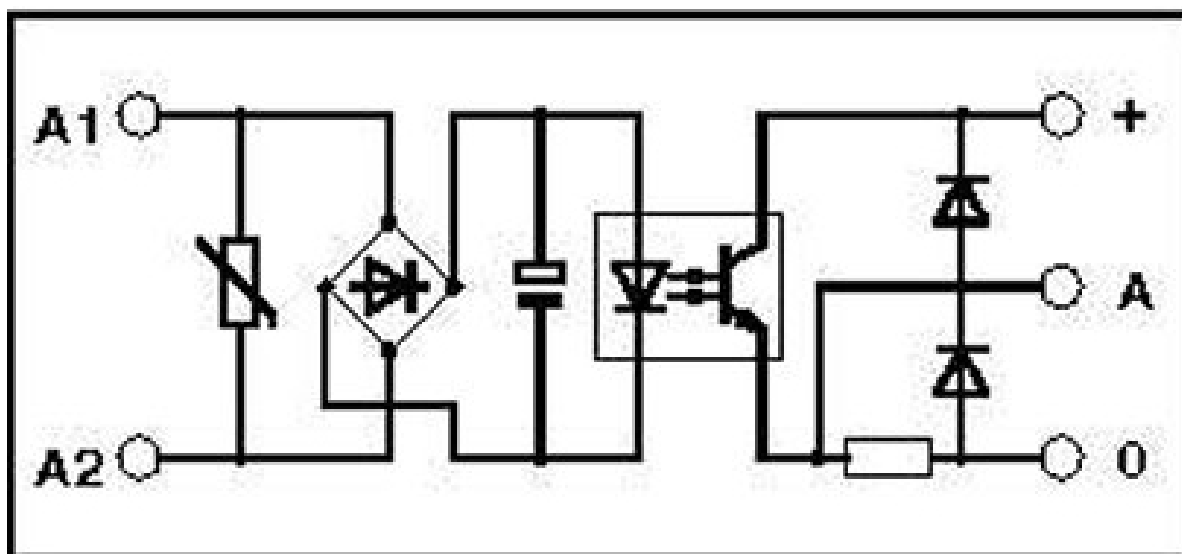
2271196

<https://www.phoenixcontact.com/us/products/2271196>

Schematic diagram



Circuit diagram



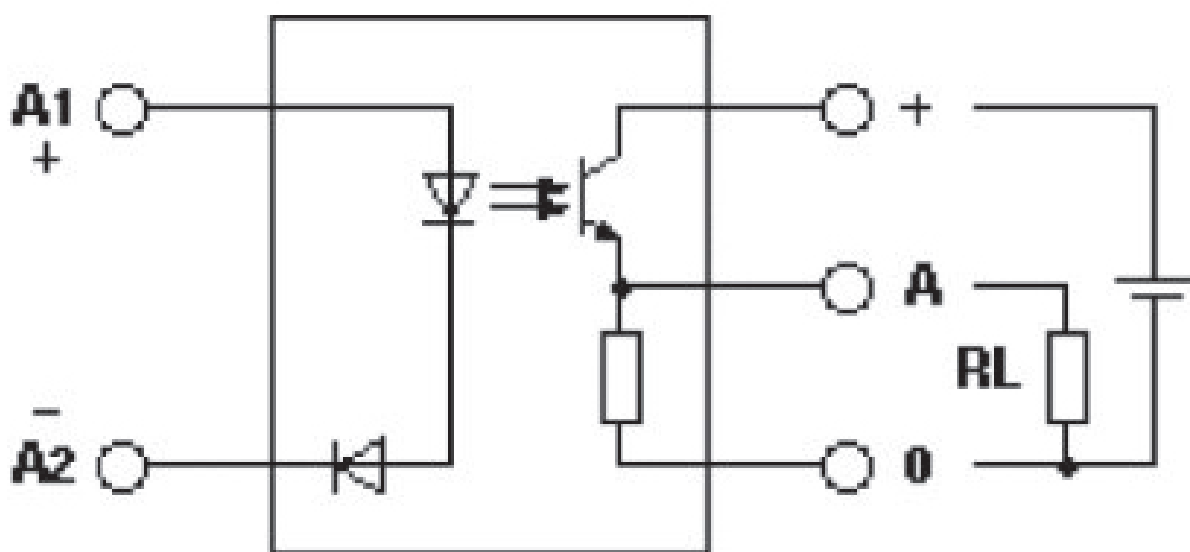
SIM-EI-120AC/TTL/100 - Miniature solid-state relay



2271196

<https://www.phoenixcontact.com/us/products/2271196>

Circuit diagram



SIM-EI-120AC/TTL/100 - Miniature solid-state relay



2271196

<https://www.phoenixcontact.com/us/products/2271196>

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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - 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