

# PLC-V8C/SC-24DC/EM - Extension module



2903095

<https://www.phoenixcontact.com/us/products/2903095>

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.

PLC logic extension module with 16 I/Os, for plug-in connection to eight PLC-INTERFACE terminal blocks for extending the basic module (a maximum of two extension modules can be connected to a basic module), screw connection



## Commercial data

Item number	2903095
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C424
Product key	DK2621
GTIN	4046356712835
Weight per piece (including packing)	128.4 g
Weight per piece (excluding packing)	120 g
Customs tariff number	85389099
Country of origin	DE

## Technical data

### Notes

Notes on operation	For proper use, the specifications of the installation directive (see Downloads) must be observed. For applications or use with third-party products, the specifications, and the safety and warning instructions of the respective third-party manufacturer must also be met.
--------------------	--

### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
----------	---

### Product properties

Product type	Extension module
Product family	PLC logic
Operating mode	100% operating factor

### Insulation characteristics: Air clearances and creepage distances

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

### Electrical properties

#### Air clearances and creepage distances

Rated insulation voltage	50 V
Rated surge voltage	0.8 kV

#### Supply

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 26.4 V DC
Maximum input current at $U_N$	65 mA
Protective circuit	Reverse polarity protection
	Surge protection

### Input data

#### Digital inputs

Number of inputs	8 (2 configurable as analog)
Description of the input	EN 61131-2, type 3
Input voltage	24 V DC
Signal level "0" signal	< 5 V
Signal level "1" signal	> 11 V
Input current "0" signal	< 1 mA
Input current "1" signal	typ. 2.5 mA
Status display	LED (yellow)

# PLC-V8C/SC-24DC/EM - Extension module



2903095

<https://www.phoenixcontact.com/us/products/2903095>

## Analog inputs

Number of inputs	2 (IN6 and IN7 are configurable as analog)
Input voltage range	0 V ... 10 V
Input resistance	> 3.5 kΩ

## Contact to PLC-INTERFACE

Number of inputs	≤ 8
Description of the input	technical data depends on the PLC-INTERFACE terminal block used
Input voltage	19 V DC
Typical current consumption	4 mA
Input resistance	< 100 mΩ

## Output data

Number of outputs	≤ 8
Nominal output voltage	24 V DC
Nominal current	9 mA

## Connection data

### COMBICON connection

Connection method	Screw connection
Stripping length	7 mm
Screw thread	M2
Number of connections	1
Number of positions	10
Note	Device supply and 8 x inputs
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
	0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> (Ferrule with plastic sleeve)
	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Ferrule without plastic sleeve)
Conductor cross-section AWG	28 ... 16

### PLC logic - bus

Connection method	Insulation displacement connection
Number of connections	1
Number of positions	4

## Signaling

Status display	LED (green)
----------------	-------------

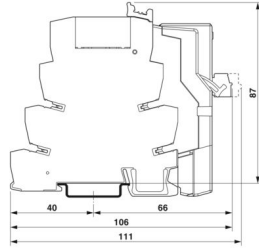
## Dimensions

# PLC-V8C/SC-24DC/EM - Extension module



2903095

<https://www.phoenixcontact.com/us/products/2903095>

Dimensional drawing	
Width	50 mm
Height	44 mm
Depth	106 mm (with relay)
	87 mm (with relay)

## Material specifications

Color	gray (RAL 7042)
-------	-----------------

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Max. permissible relative humidity (operation)	95 %

## Approvals

### CE

Certificate	CE-compliant
-------------	--------------

### UL, USA/Canada

Identification	Class I, Div. 2, Groups A, B, C, D T4
----------------	---------------------------------------

### UL, Canada

Identification	Class I, Zone 2, Ex ec IIC Gc T4 X
----------------	------------------------------------

### UL, USA

Identification	Class I, Zone 2, AEx ec IIC T4
----------------	--------------------------------

## Standards and regulations

### Air clearances and creepage distances

Standards/regulations	EN IEC 60664-1
-----------------------	----------------

## Mounting

Mounting type	Plug-in mounting
Assembly note	can be plugged onto 8 x PLC-INTERFACE terminal blocks

# PLC-V8C/SC-24DC/EM - Extension module



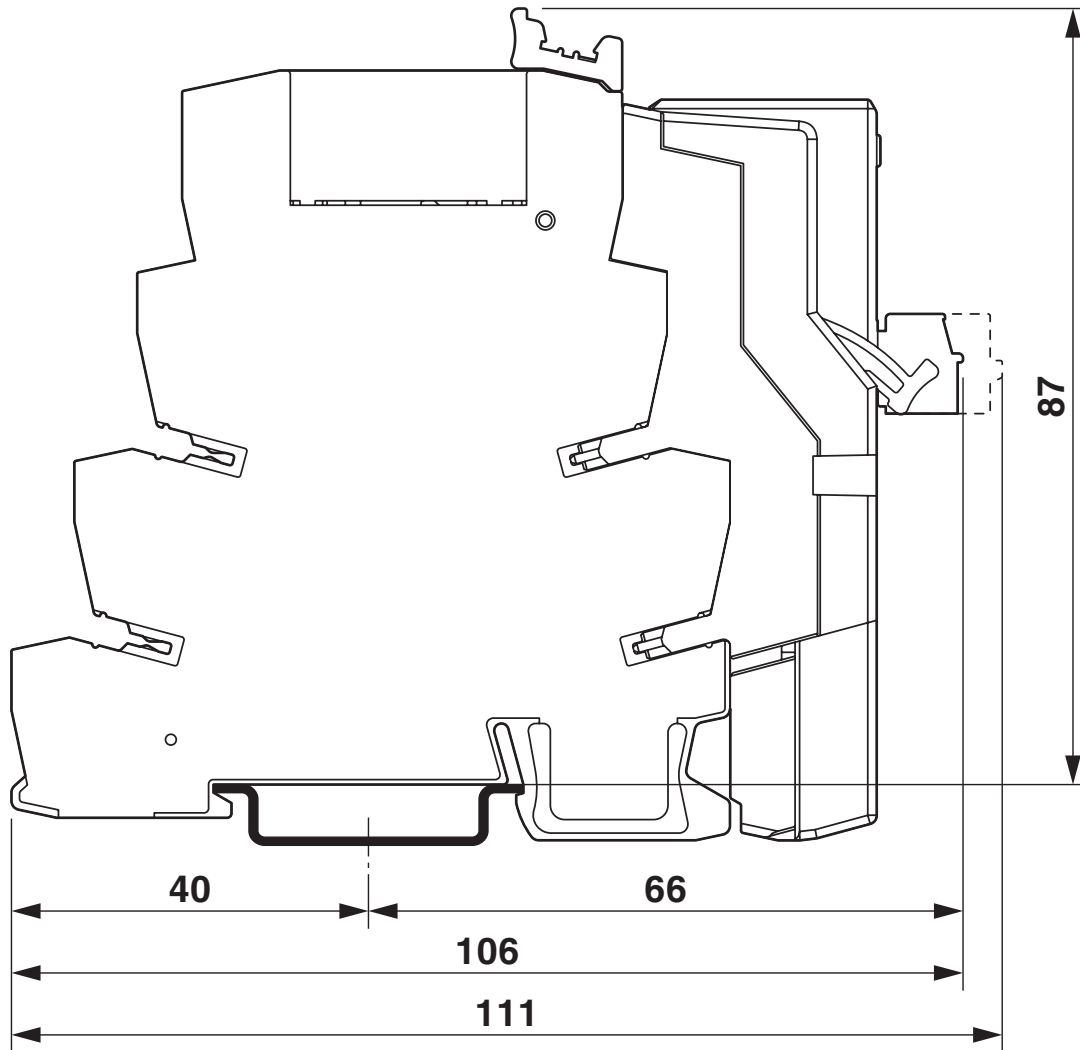
2903095

<https://www.phoenixcontact.com/us/products/2903095>

Mounting position	any
-------------------	-----

Drawings

Dimensional drawing





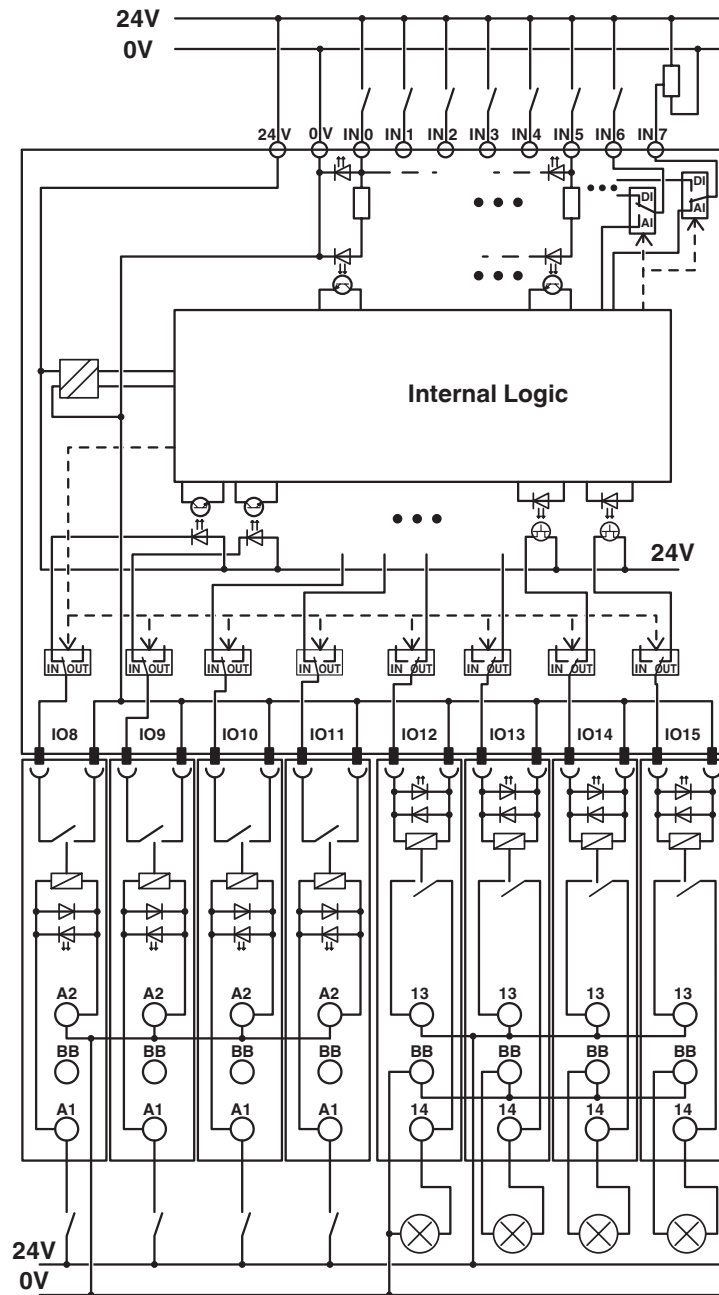
# PLC-V8C/SC-24DC/EM - Extension module

2903095

<https://www.phoenixcontact.com/us/products/2903095>



Circuit diagram

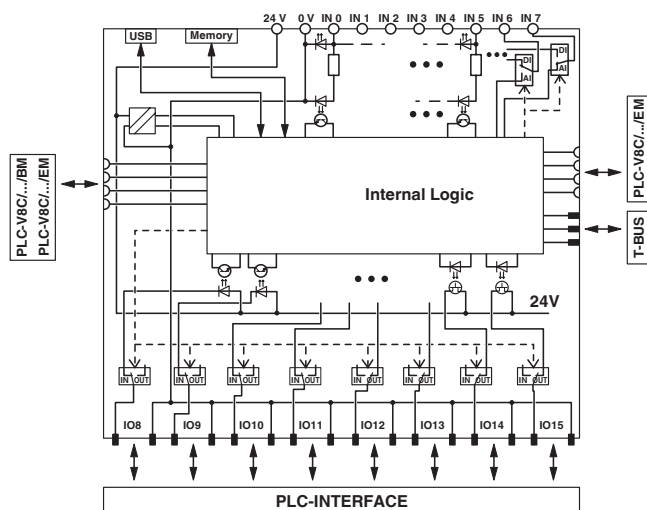


# PLC-V8C/SC-24DC/EM - Extension module

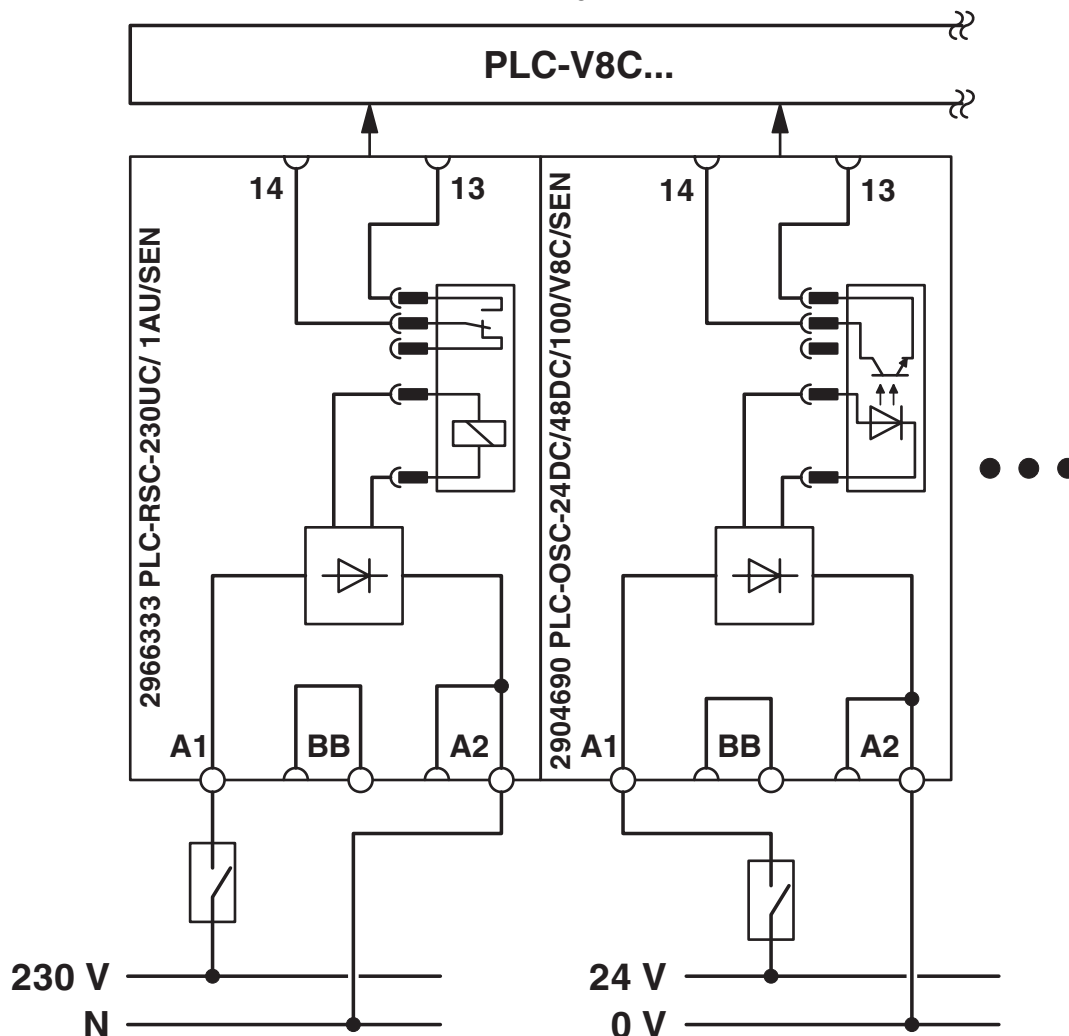
2903095

<https://www.phoenixcontact.com/us/products/2903095>

Circuit diagram



Circuit diagram



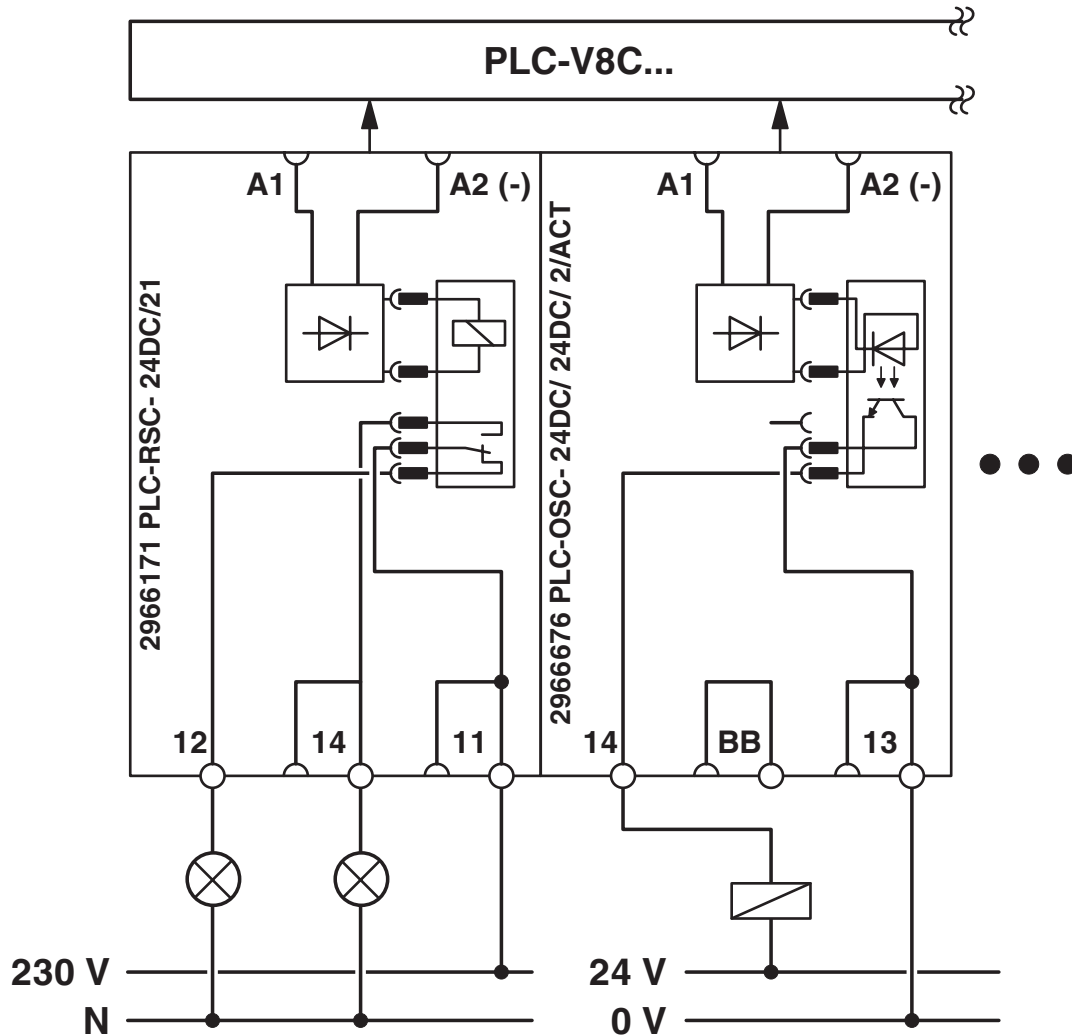
Basic circuit diagram: inputs via PLC-INTERFACE with the example of one input terminal block with relay (230 V AC) and one input terminal block with solid-state relay (24 V DC).

# PLC-V8C/SC-24DC/EM - Extension module

2903095

<https://www.phoenixcontact.com/us/products/2903095>

Circuit diagram



Basic circuit diagram: outputs via PLC-INTERFACE with the example of an output terminal block with relay, 1 changeover contact, and an output terminal block with solid-state relay.

# PLC-V8C/SC-24DC/EM - Extension module



2903095

<https://www.phoenixcontact.com/us/products/2903095>

## Classifications

### ECLASS

ECLASS-13.0

27242216

### ETIM

ETIM 9.0

EC001417

### UNSPSC

UNSPSC 21.0

39122300

# PLC-V8C/SC-24DC/EM - Extension module



2903095

<https://www.phoenixcontact.com/us/products/2903095>

## 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.)	Lead(CAS: 7439-92-1)
SCIP	40cfc8eb-9279-4786-851c-0fc0c8b6bda2

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](mailto:info@phoenixcon.com)