

# PLC-V8C/SC-24DC/BM - Controller



2903094

<https://www.phoenixcontact.com/pc/products/2903094>

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 basic logic module, generation 1, with 16 I/Os, can be plugged onto 8 digital PLC-INTERFACE terminal blocks, can be extended to 48 I/Os, realtime clock, accommodates memory module and Bluetooth adapter (firmware update required, see downloads), screw connection

## Commercial data

Item number	2903094
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	CK2611
Catalog page	Page 455 (C-7-2015)
GTIN	4046356712842
Weight per piece (including packing)	132.1 g
Weight per piece (excluding packing)	132.1 g
Customs tariff number	85371098
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	Base unit
Product family	PLC logic
Operating mode	100% operating factor

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

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

### Electrical properties

#### Air clearances and creepage distances between the power circuits

Rated insulation voltage	50 V
Rated surge voltage	0.8 kV

#### Real-time clock

Realtime clock	yes
Buffer period	24 h (Capacitor)
Accuracy realtime clock	±2 s/d

#### Supply

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 26.4 V DC
Maximum input current at $U_N$	120 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

# PLC-V8C/SC-24DC/BM - Controller



2903094

<https://www.phoenixcontact.com/pc/products/2903094>

Signal level "1" signal	> 11 V
Input current "0" signal	< 1 mA
Input current "1" signal	2.5 mA
Status display	LED (yellow)

## 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

### Programming connection

Connection method	Micro USB type B
Number of connections	1

### INTERFACE system

Connection method	Spring-cage connection
Stripping length	6 mm
Number of connections	1
Number of positions	3

# PLC-V8C/SC-24DC/BM - Controller



2903094

<https://www.phoenixcontact.com/pc/products/2903094>

Conductor cross section rigid	0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
Conductor cross section AWG	26 ... 20

## PLC logic - bus

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

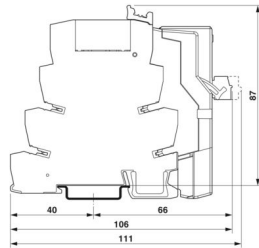
## Memory

Connection method	S-PORT (socket)
Number of connections	1
Number of positions	12
Note	For connecting the memory module

## Signaling

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

## Dimensions

Dimensional drawing	
Width	50 mm
Height	44 mm 106 mm (with relay)
Depth	82.5 mm 87 mm (with relay)

## Material specifications

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

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 45 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Max. permissible relative humidity (operation)	95 %

## Approvals

# PLC-V8C/SC-24DC/BM - Controller



2903094

<https://www.phoenixcontact.com/pc/products/2903094>

## CE

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

## Standards and regulations

### Air clearances and creepage distances between the power circuits

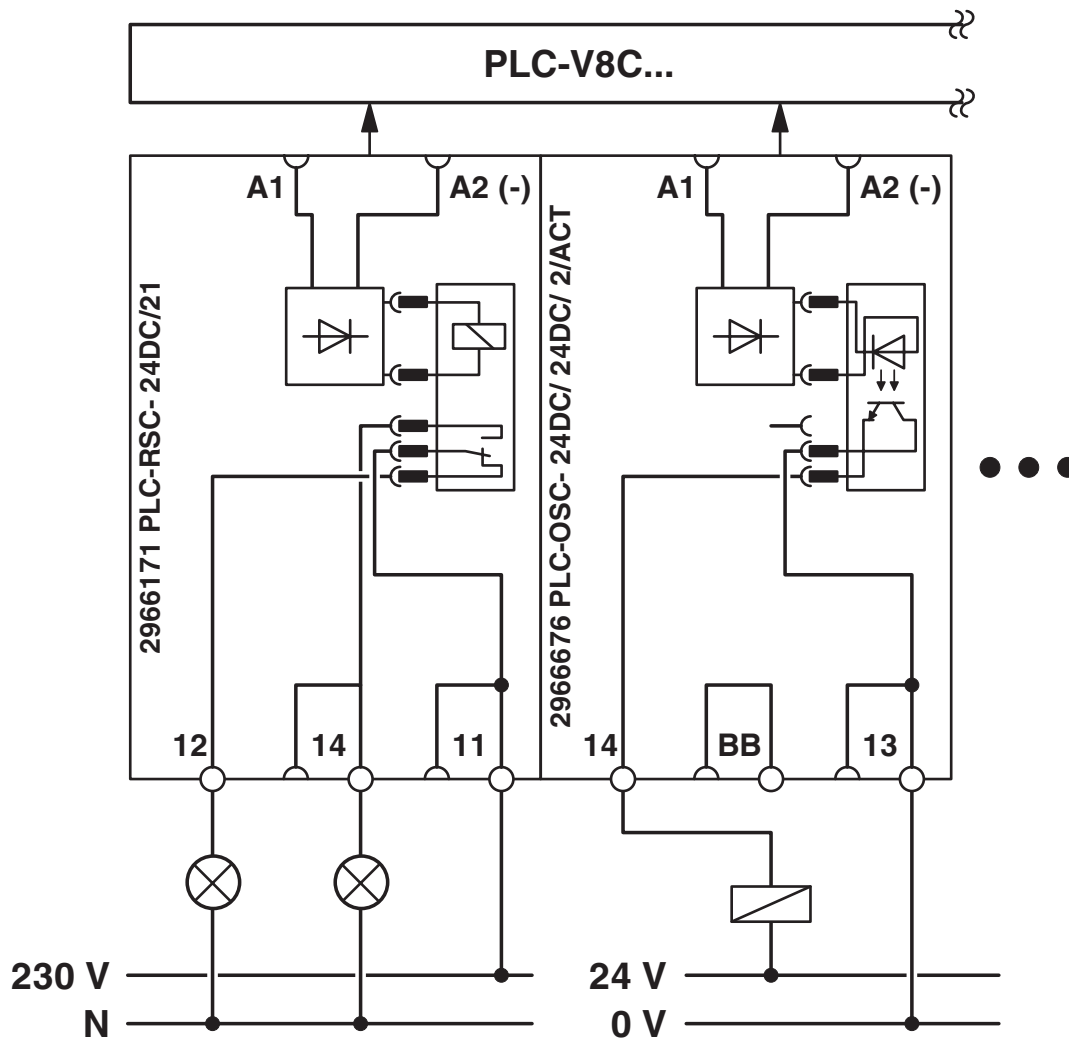
Standards/regulations	DIN EN 50178
-----------------------	--------------

## Mounting

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

## Drawings

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.

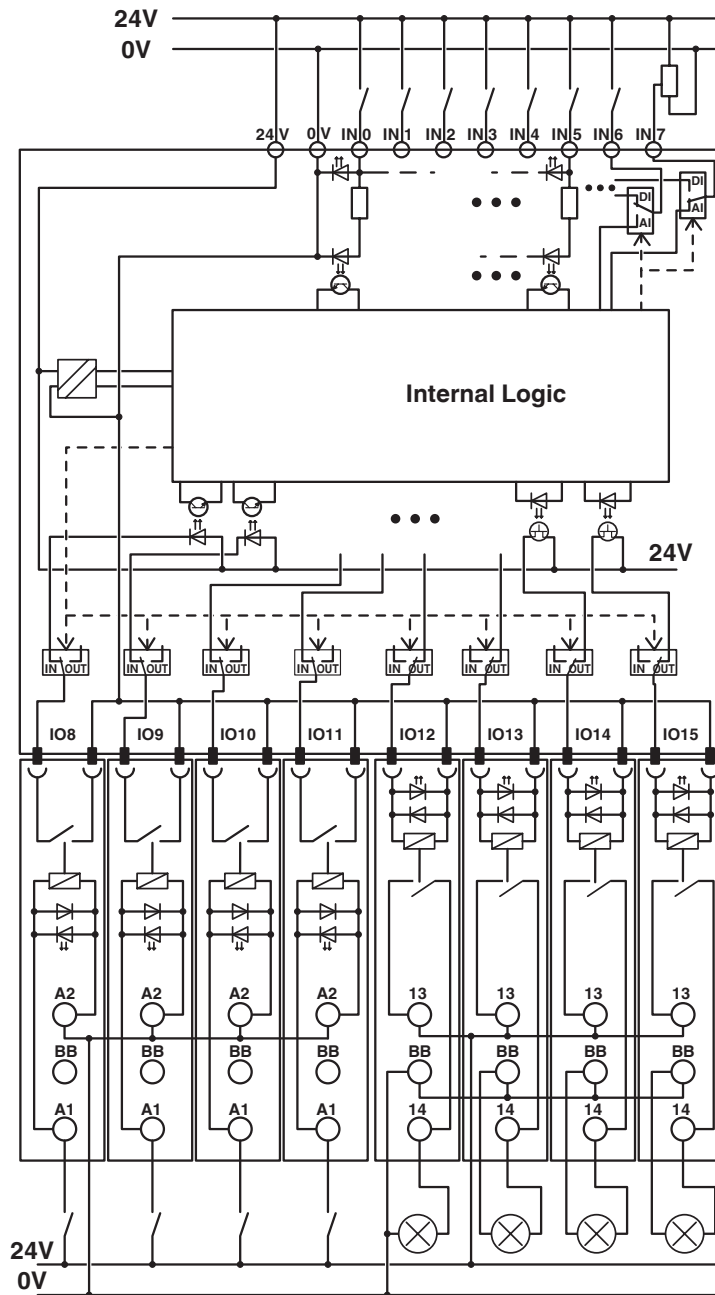
# PLC-V8C/SC-24DC/BM - Controller

2903094

<https://www.phoenixcontact.com/pc/products/2903094>



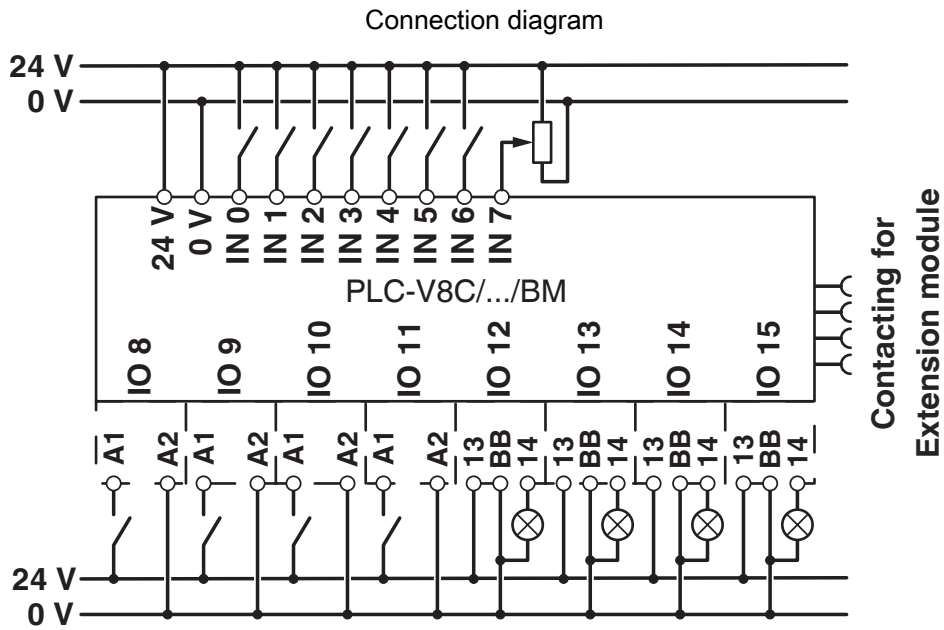
Circuit diagram



# PLC-V8C/SC-24DC/BM - Controller

2903094

<https://www.phoenixcontact.com/pc/products/2903094>



Contacting for  
Extension module

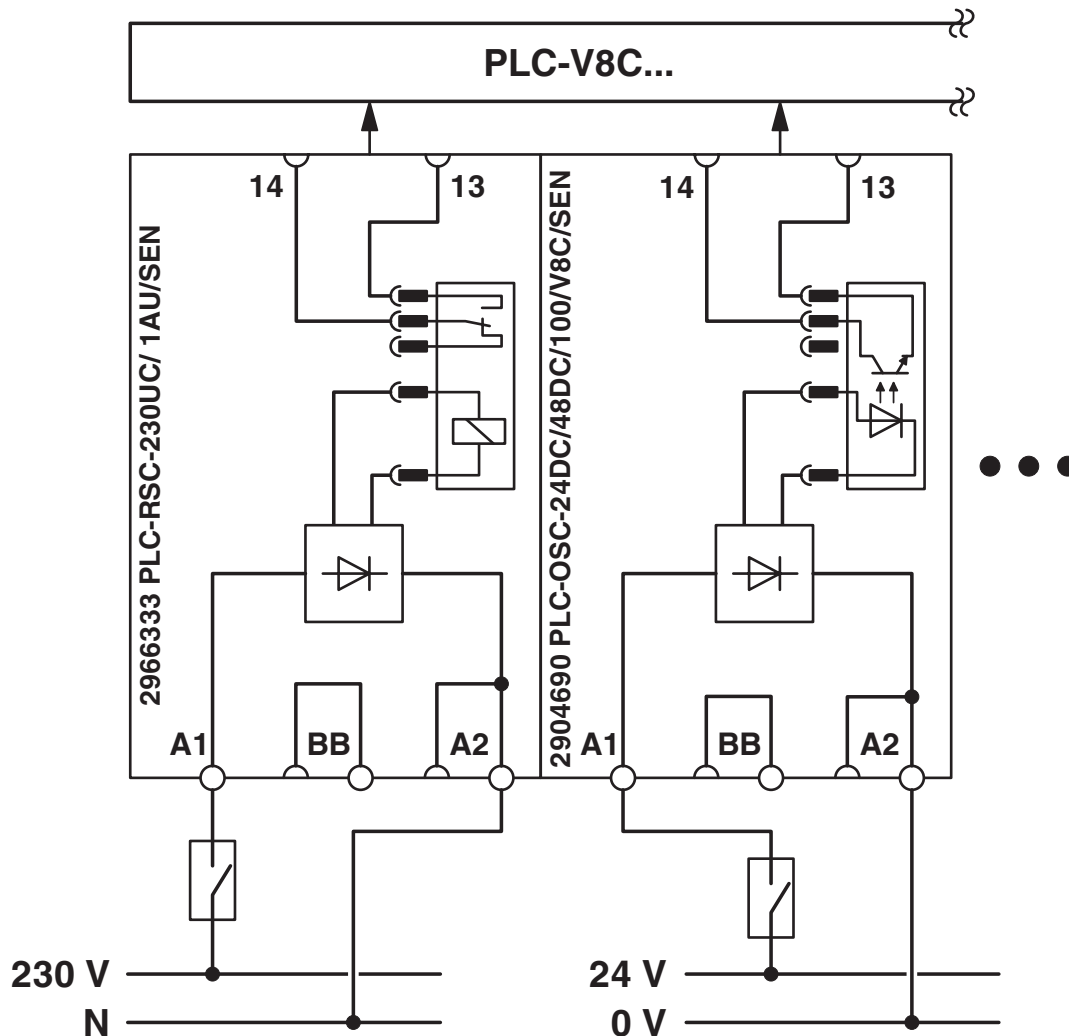


# PLC-V8C/SC-24DC/BM - Controller

2903094

<https://www.phoenixcontact.com/pc/products/2903094>

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).

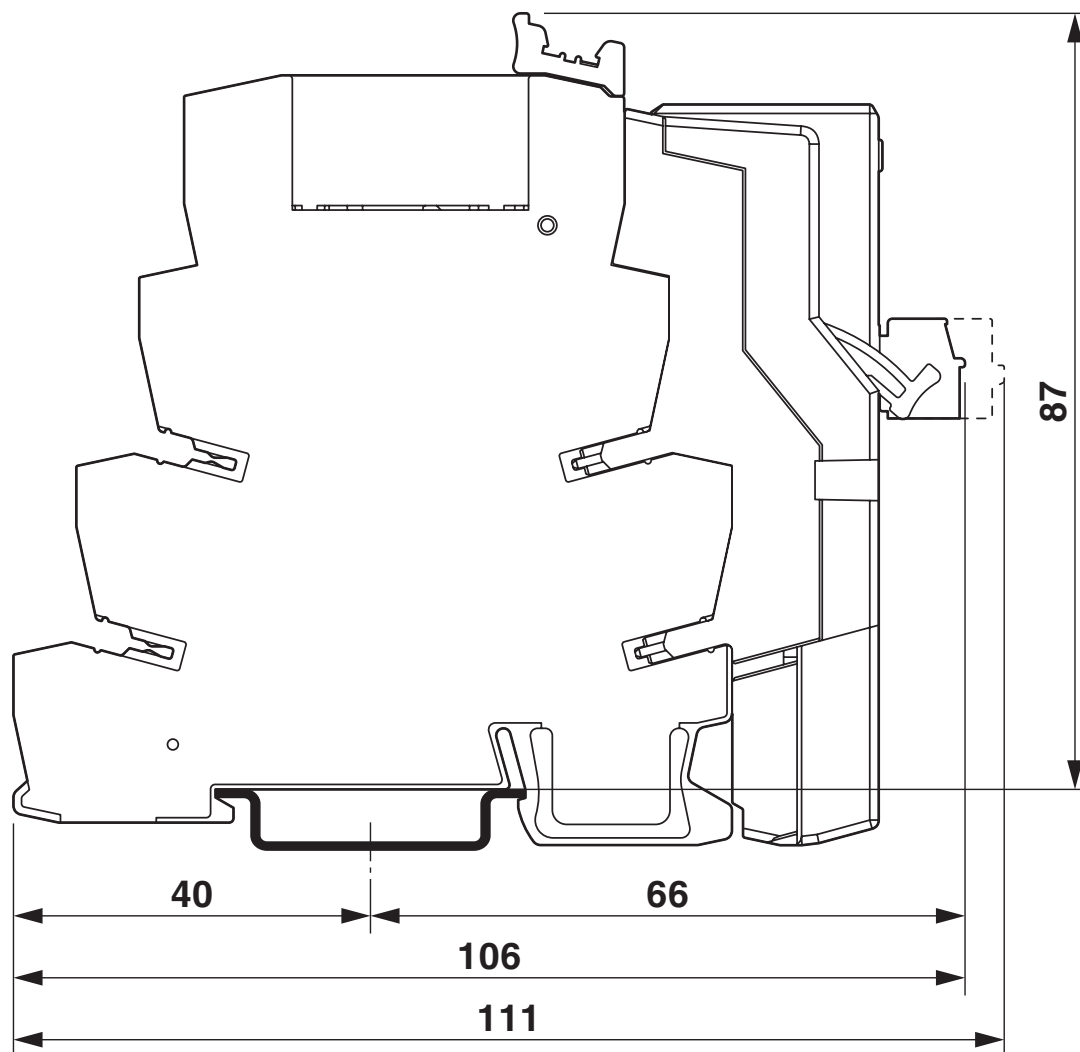
# PLC-V8C/SC-24DC/BM - Controller



2903094

<https://www.phoenixcontact.com/pc/products/2903094>

Dimensional drawing



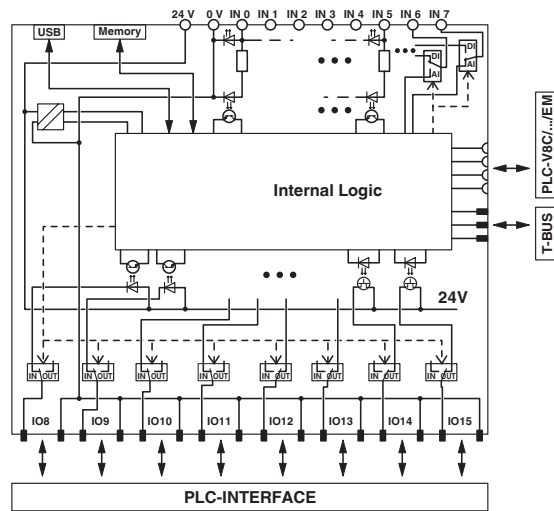
# PLC-V8C/SC-24DC/BM - Controller

2903094

<https://www.phoenixcontact.com/pc/products/2903094>



Circuit diagram



# PLC-V8C/SC-24DC/BM - Controller



2903094

<https://www.phoenixcontact.com/pc/products/2903094>

## Classifications

### ECLASS

ECLASS-11.0	27242216
-------------	----------

# PLC-V8C/SC-24DC/BM - Controller



2903094

<https://www.phoenixcontact.com/pc/products/2903094>

## 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 2024 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

[info@phoenixcontact.com](mailto:info@phoenixcontact.com)