

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



2903095

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

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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.
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### Utilization restriction

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

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## 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)
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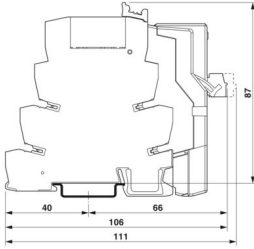
## Dimensions

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

## Material specifications

Color	gray (RAL 7042)
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## 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
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### UL, USA/Canada

Identification	Class I, Div. 2, Groups A, B, C, D T4
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### UL, Canada

Identification	Class I, Zone 2, Ex ec IIC Gc T4 X
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### UL, USA

Identification	Class I, Zone 2, AEx ec IIC T4
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## Standards and regulations

### Air clearances and creepage distances

Standards/regulations	EN IEC 60664-1
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## Mounting

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

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Mounting position	any
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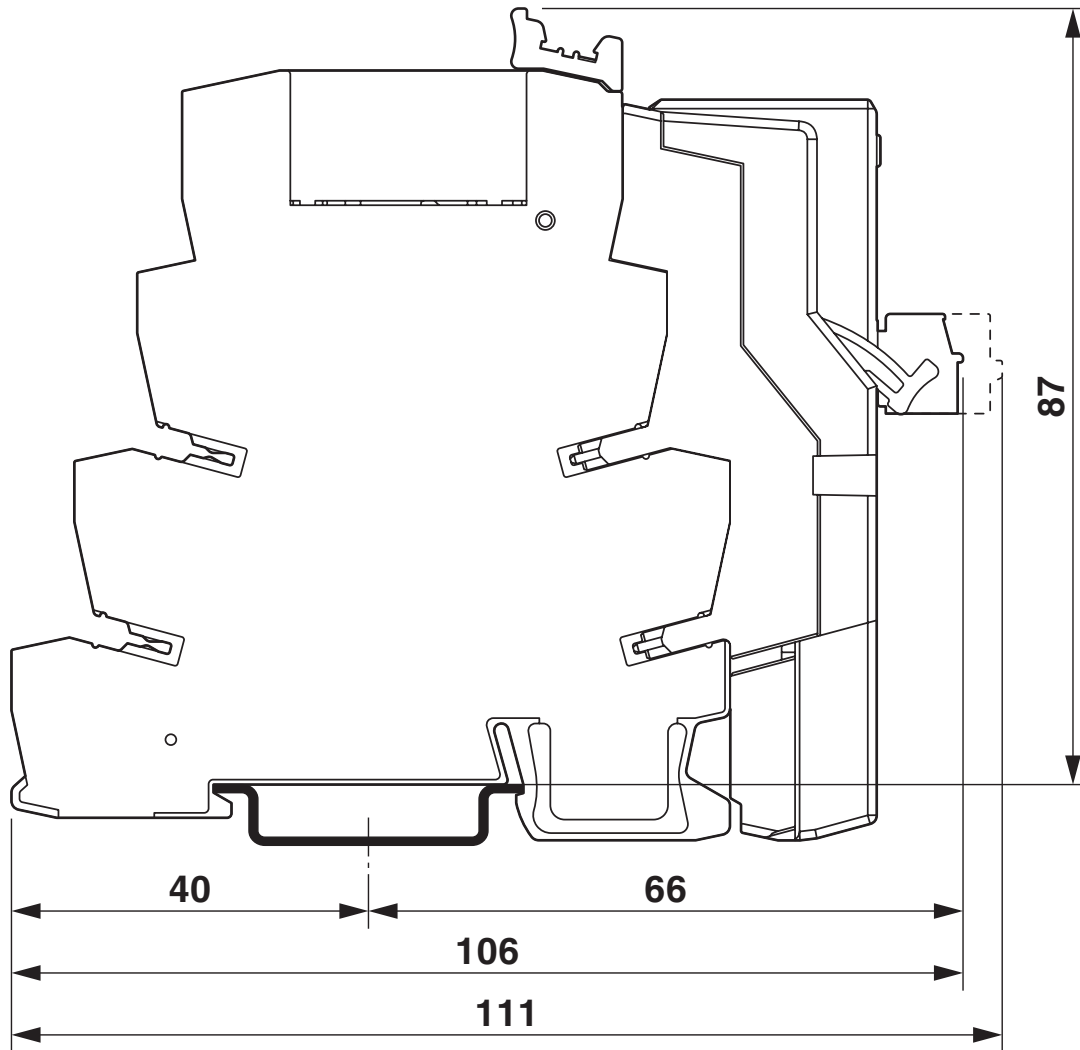


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## Drawings

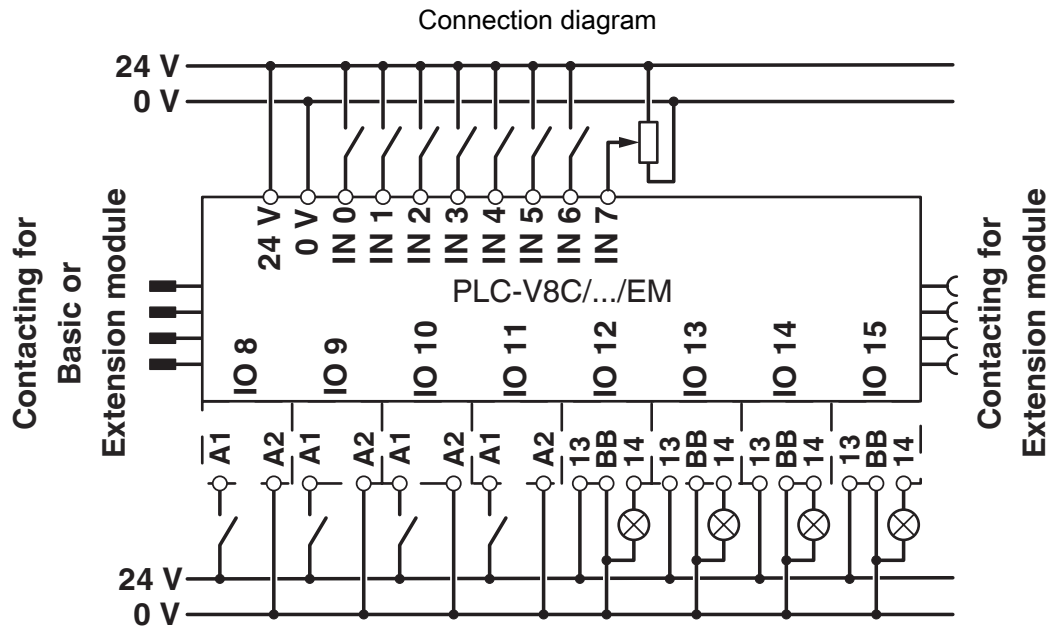
Dimensional drawing



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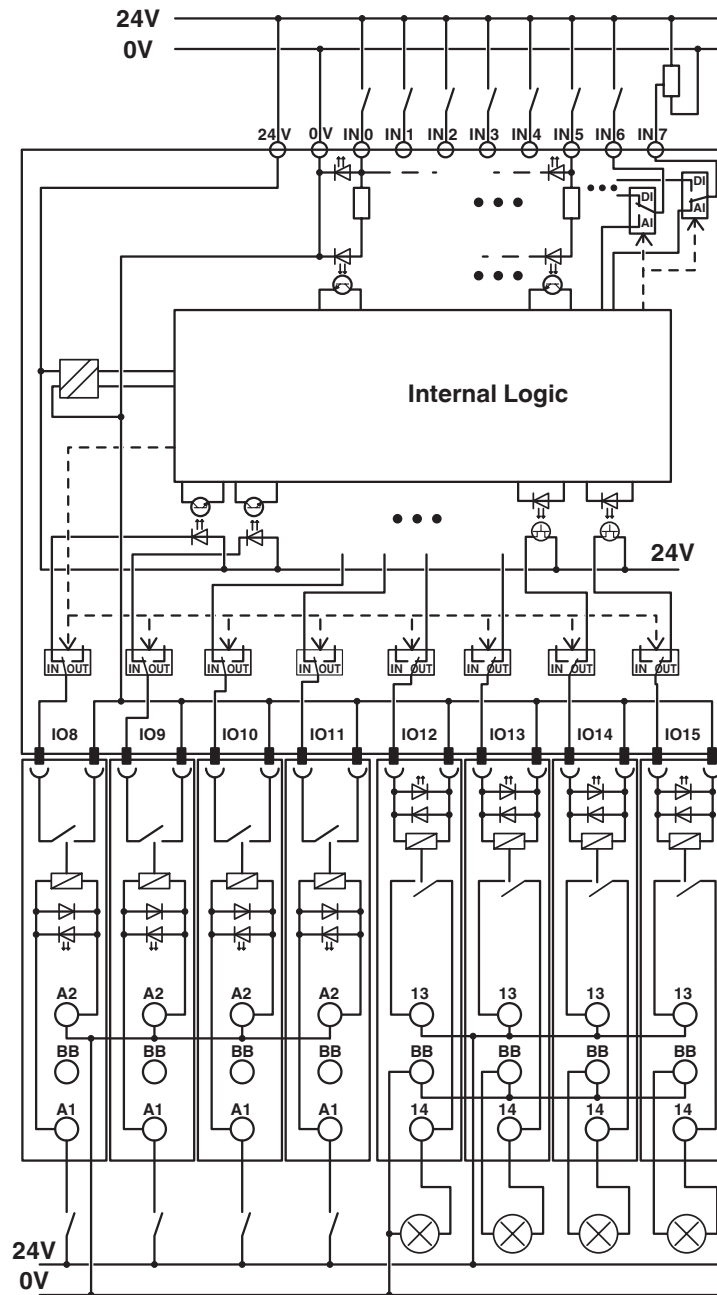
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Circuit diagram

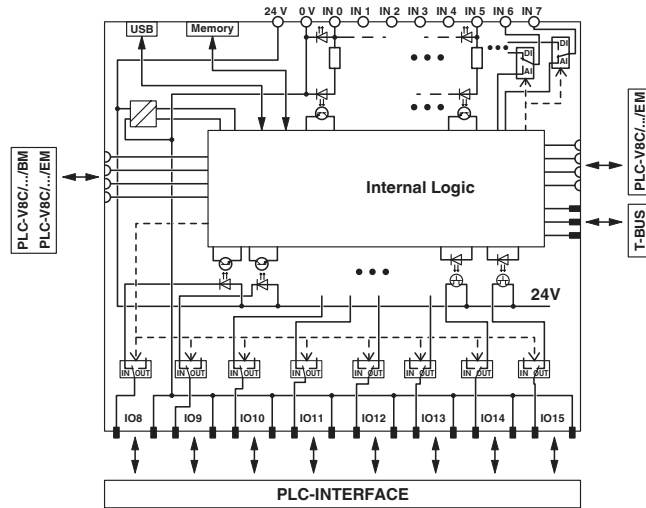


# PLC-V8C/SC-24DC/EM - Extension module

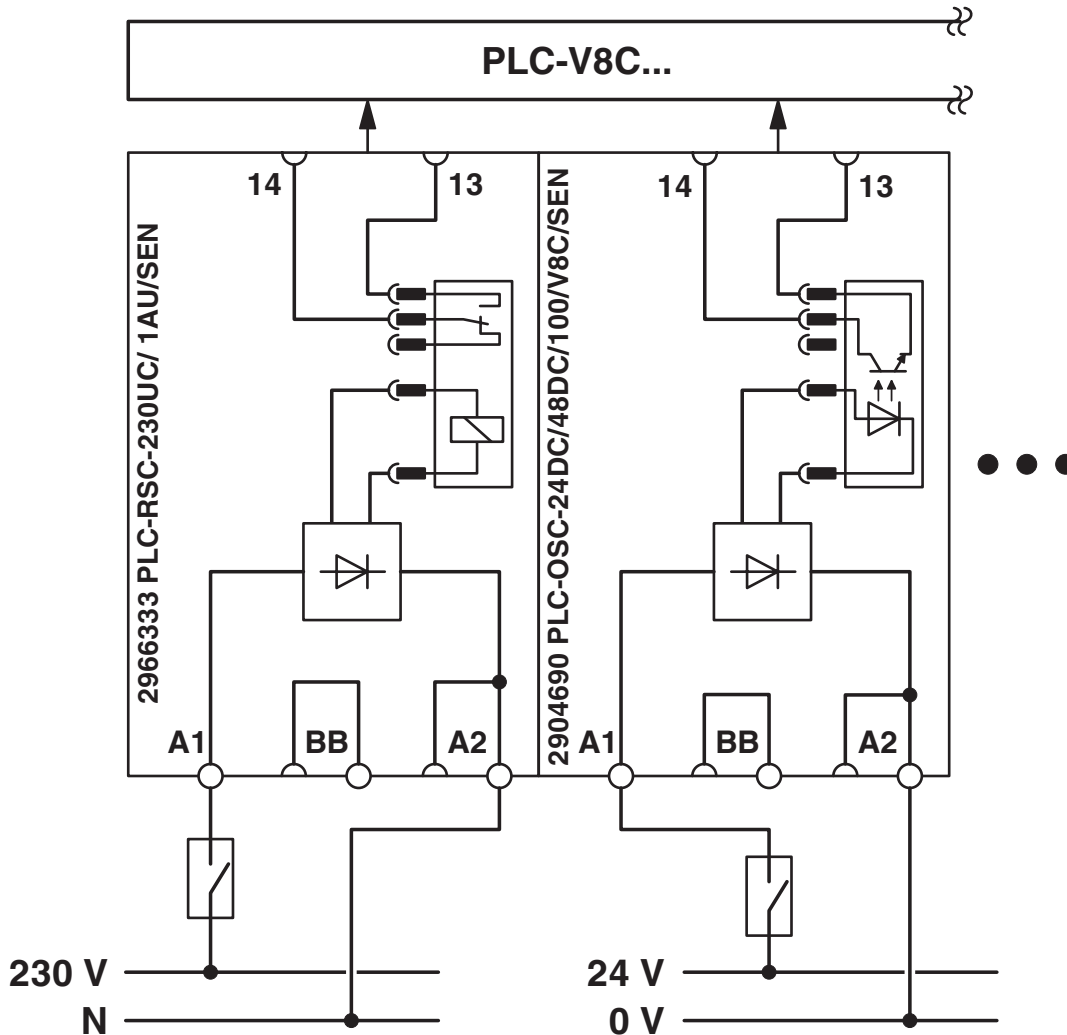
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Circuit diagram

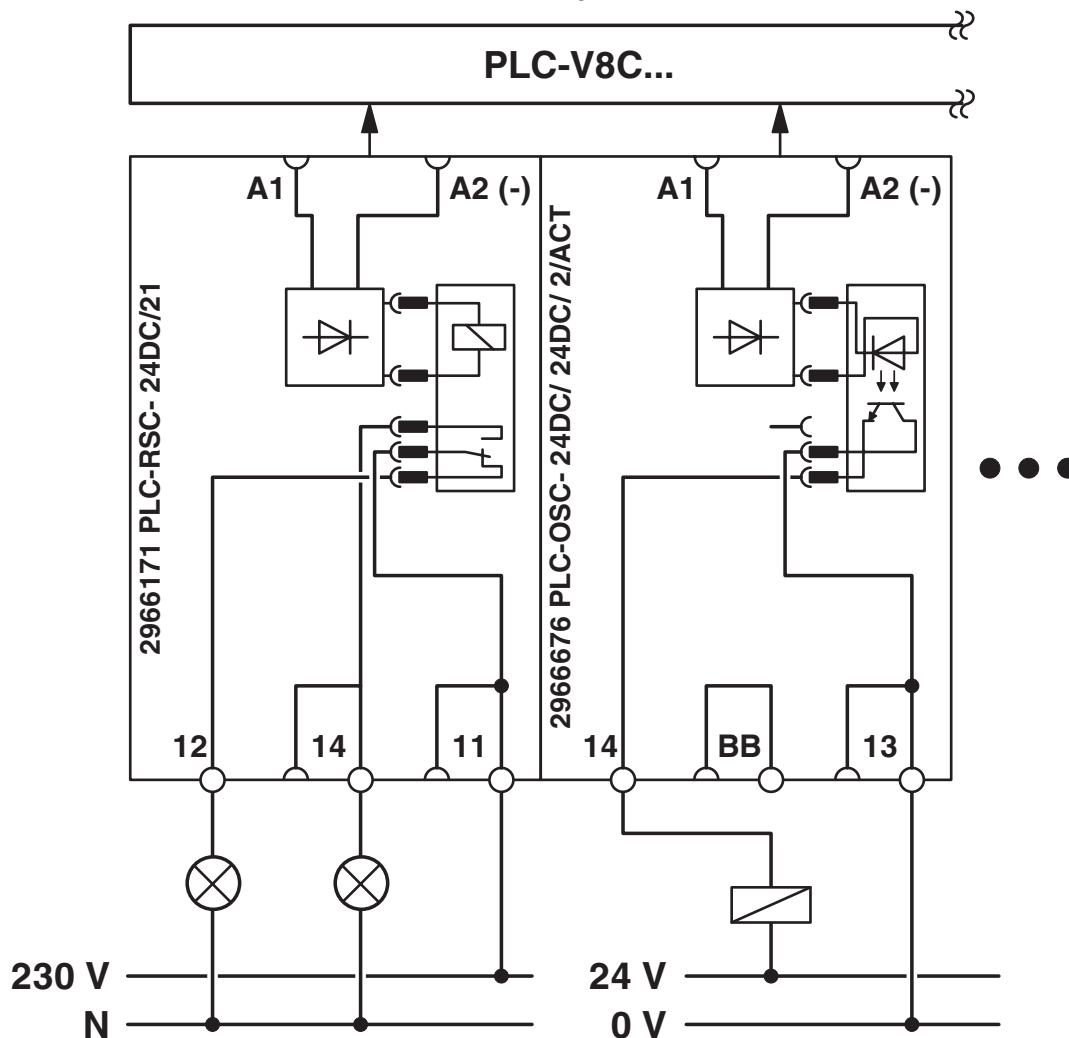


Circuit diagram



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).

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.

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## Classifications

### ECLASS

ECLASS-13.0

27242216

### ETIM

ETIM 9.0

EC001417

### UNSPSC

UNSPSC 21.0

39122300

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## 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

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