

## Controller - PLC-V8C/SC-24DC/SAM2 - 2907445


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PLC logic standalone logic module, generation 2, with 16 I/Os, for plug-in connection to 8 digital or analog PLC-INTERFACE terminal blocks, cannot be extended, integrated realtime clock, micro USB socket, accommodates memory block and Bluetooth adapter, screw connection



### Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 1 pc  |
| GTIN         | <br>4 055626 218175 |
| GTIN         | 4055626218175   |

### Technical data

#### Dimensions

|        |        |
|--------|--------|
| Width  | 50 mm  |
| Height | 106 mm |
| Depth  | 87 mm  |

#### Ambient conditions

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

#### Power supply

|   |                             |
|---|-----------------------------|
| Supply voltage                          | 24 V DC                     |
| Supply voltage range                    | 19.2 V DC ... 26.4 V DC     |
| Typical input current at U <sub>N</sub> | 40 mA                       |
| Maximum input current at U <sub>N</sub> | 160 mA                      |
| Protective circuit                      | Reverse polarity protection |
|   | Surge protection            |
| Status display                          | Green LED                   |

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## Technical data

### Input data (digital)

|                          |                              |
|--------------------------|------------------------------|
| 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           | Yellow LED                   |

### Input data (analog)

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

### Input data (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    |

### General

|                            |   |
|----------------------------|---|
| Realtime clock accuracy    | ±2 s/d  |
| Realtime clock buffer time | 96 h (Capacitor)                                      |
| Color                      | gray  |
| Mounting position          | any   |
| Assembly instructions      | can be plugged onto 8 x PLC-INTERFACE terminal blocks |
| Operating mode             | 100% operating factor                                 |
| Degree of protection       | IP20  |

### Connection data

|                       |                              |
|-----------------------|------------------------------|
| Connection name       | 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 |

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## Technical data

### Connection data

|                                  |  |
|----------------------------------|--|
| Conductor cross section solid    | 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> (Ferrules without plastic sleeve) |
| Conductor cross section AWG      | 28 ... 16  |

### Connection data 2

|                       |                        |
|-----------------------|------------------------|
| Connection name       | Programming connection |
| Connection method     | Micro USB type B       |
| Number of connections | 1                      |

### Connection data 3

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

### Standards and Regulations

|                          |  |
|--------------------------|--|
| Designation              | Air clearances and creepage distances between the power circuits |
| Standards/regulations    | DIN EN 50178   |
| Rated insulation voltage | 50 V   |
| Rated surge voltage      | 0.8 kV   |
| Insulation               | Basic insulation   |
| Degree of pollution      | 2  |
| Overvoltage category     | III  |
| Conformance              | CE-compliant   |

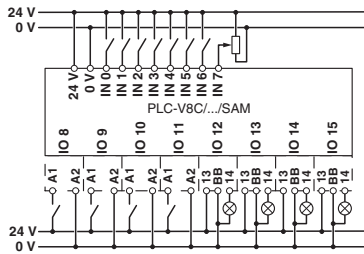
### Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

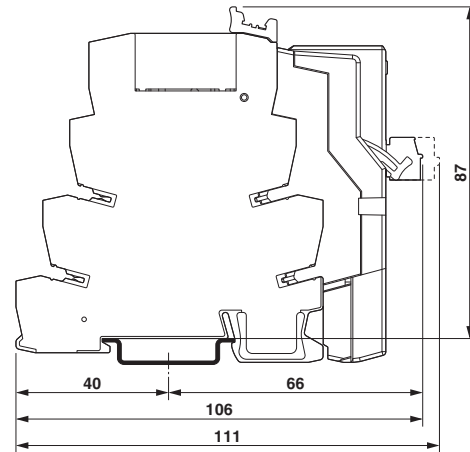
## Drawings

# Controller - PLC-V8C/SC-24DC/SAM2 - 2907445

Connection diagram

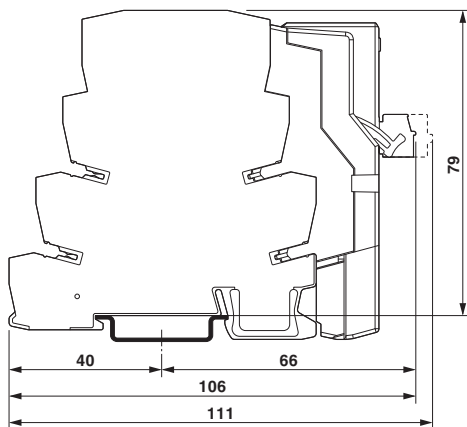


Dimensional drawing

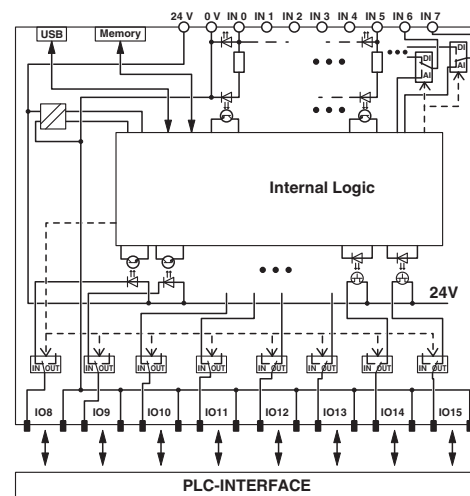


PLC logic with relay

Dimensional drawing



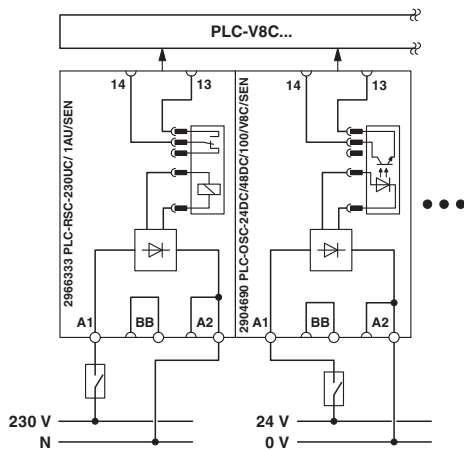
Circuit diagram



PLC logic with analogue terminals

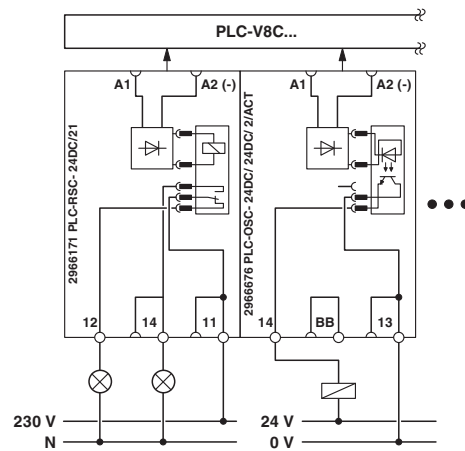
# Controller - PLC-V8C/SC-24DC/SAM2 - 2907445

Circuit diagram



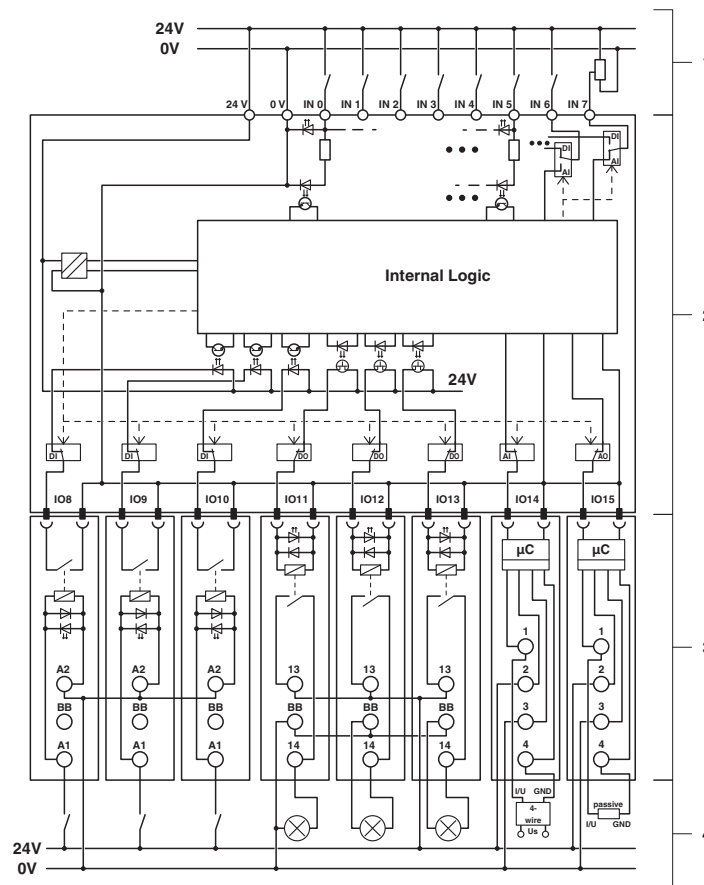
Basic circuit diagram: inputs via PLC-INTERFACE with the example of one input terminal block with relay (230 V AC) and one input terminal block with solid-state relay (24 V DC).

Circuit diagram



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

Circuit diagram



- 1 Field connection via COMBICON connector
- 2 PLC -V8C/#

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3 PLC-INTERFACE terminal blocks  
4 Field connection via PLC-INTERFACE terminal blocks

## Approvals

### Approvals

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Approvals

UL Listed / cUL Listed / EAC / cULus Listed

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Ex Approvals

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### Approval details

|           |  |   |               |
|-----------|--|---|---------------|
| UL Listed |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 172140 |
|-----------|--|---|---------------|

|            |  |   |               |
|------------|--|---|---------------|
| cUL Listed |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 172140 |
|------------|--|---|---------------|

|     |  |  |                          |
|-----|--|--|--------------------------|
| EAC |  |  | RU C-<br>DE.A*30.B.01082 |
|-----|--|--|--------------------------|

|              |  |  |  |
|--------------|--|--|--|
| cULus Listed |  |  |  |
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