

# PLC-V8L/FLK14/OUT/M - System connection



2304306

<https://www.phoenixcontact.com/us/products/2304306>

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V8 adapter for 8 x PLC-INTERFACE (14 mm), controller: PLC system cabling of output cards, connection 1: IDC/FLK pin strip 1x 14-position, connection 2: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), connection 3: Screw connection 1x 2-position, number of channels: 8, control logic: minusschaltend

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 2304306       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | C421          |
| Product key                          | DK21D1        |
| GTIN                                 | 4017918932916 |
| Weight per piece (including packing) | 125.5 g       |
| Weight per piece (excluding packing) | 76 g          |
| Customs tariff number                | 85389099      |
| Country of origin                    | DE            |

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## Technical data

### Product properties

|                     |                  |
|---------------------|------------------|
| Product type        | Interface module |
| Product family      | PLC-INTERFACE    |
| Number of positions | 14               |
| No. of channels     | 8                |

### Insulation characteristics: Air clearances and creepage distances

|                      |                       |
|----------------------|-----------------------|
| Insulation           | Functional insulation |
| Overvoltage category | II                    |
| Pollution degree     | 2                     |

### Electrical properties

|                         |                       |
|-------------------------|-----------------------|
| Operating voltage range | 18 V DC ... 33.6 V DC |
| Current (per branch)    | ≤ 1 A                 |
| Current (Power supply)  | ≤ 3 A                 |

### Air clearances and creepage distances

|                          |                    |
|--------------------------|--------------------|
| Rated insulation voltage | 50 V               |
| Rated surge voltage      | 0.5 kV (1.2/50 µs) |

### Supported controller SIEMENS S7-1500

|                   |                           |
|-------------------|---------------------------|
| Suitable I/O card | 6ES7522-1BP50-0AA0        |
|                   | 6ES7523-1BP50-0AA0 (DQ32) |

### Supported controller ABB S800 I/O

|                   |       |
|-------------------|-------|
| Suitable I/O card | DO814 |
|                   | DO818 |

### Supported controller MITSUBISHI MELSEC Q

|                   |         |
|-------------------|---------|
| Suitable I/O card | QX42    |
|                   | QX42-S1 |
|                   | QH42P   |

### Supported controller MITSUBISHI MELSEC L

|                   |          |
|-------------------|----------|
| Suitable I/O card | LY41NT1P |
|                   | LY42NT1P |

## Connection data

### Connection 1 (control level)

|                                  |                   |
|----------------------------------|-------------------|
| Connection in acc. with standard | IEC 60603-13      |
| Connection method                | IDC/FLK pin strip |
| Number of connections            | 1                 |
| Number of positions              | 14                |
| Insertion/withdrawal cycles      | > 50              |

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|       |         |
|-------|---------|
| Pitch | 2.54 mm |
|-------|---------|

## Connection 2 (field level)

|                   |                                                |
|-------------------|------------------------------------------------|
| Connection method | Plug-in connection                             |
| Note              | Can be snapped onto 8x PLC-INTERFACE terminals |

## Connection 3 (supply)

|                                                                         |                                                        |
|-------------------------------------------------------------------------|--------------------------------------------------------|
| Connection method                                                       | Screw connection                                       |
| Stripping length                                                        | 8 mm                                                   |
| Screw thread                                                            | M3                                                     |
| Number of connections                                                   | 1                                                      |
| Number of positions                                                     | 2                                                      |
| Conductor cross-section rigid                                           | 0.2 mm² ... 4 mm²                                      |
| Conductor cross-section rigid (2 conductors with same cross section)    | 0.2 mm² ... 1.5 mm²                                    |
| Conductor cross-section flexible                                        | 0.2 mm² ... 2.5 mm²                                    |
|                                                                         | 0.25 mm² ... 2.5 mm² (Ferrule without plastic sleeve)  |
|                                                                         | 0.25 mm² ... 2.5 mm² (Ferrule with plastic sleeve)     |
| Conductor cross-section flexible (2 conductors with same cross section) | 0.2 mm² ... 1.5 mm²                                    |
|                                                                         | 0.25 mm² ... 0.75 mm² (Ferrule without plastic sleeve) |
|                                                                         | 0.5 mm² ... 1.5 mm² (TWIN ferrule with plastic sleeve) |
| Conductor cross-section AWG                                             | 24 ... 12                                              |
| Tightening torque                                                       | 0.5 Nm ... 0.6 Nm                                      |
| Pitch                                                                   | 5 mm                                                   |

## Signaling

|                           |           |
|---------------------------|-----------|
| Status display present    | yes       |
| Operating voltage display | Green LED |

## Dimensions

### Item dimensions

|        |          |
|--------|----------|
| Width  | 112.3 mm |
| Height | 41 mm    |
| Depth  | 56.17 mm |

## Material specifications

|                                        |                             |
|----------------------------------------|-----------------------------|
| Color                                  | gray (RAL 7042)             |
| Flammability rating according to UL 94 | V0                          |
| Housing insulation material            | Polyamide PA non-reinforced |

## Environmental and real-life conditions

### Ambient conditions

|                                              |                  |
|----------------------------------------------|------------------|
| Degree of protection (Module)                | IP20             |
| Degree of protection (Installation location) | ≥ IP54           |
| Ambient temperature (operation)              | -40 °C ... 70 °C |

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|                                         |                  |
|-----------------------------------------|------------------|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Altitude                                | ≤ 2000 m         |

## Approvals

### UKCA

|             |                |
|-------------|----------------|
| Certificate | UKCA-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 |
|----------------|--------------------------------|

### Shipbuilding approval

|             |            |
|-------------|------------|
| Certificate | TAE0000196 |
|-------------|------------|

### Shipbuilding data

|             |                                                                                         |
|-------------|-----------------------------------------------------------------------------------------|
| Temperature | D                                                                                       |
| Humidity    | A                                                                                       |
| Vibration   | C                                                                                       |
| EMC         | B                                                                                       |
| Enclosure   | Required protection according to the Rules shall be provided upon installation on board |

## EMC data

|                               |                                        |
|-------------------------------|----------------------------------------|
| Electromagnetic compatibility | Conformance with EMC directive         |
| Low Voltage Directive         | Conformance with Low Voltage Directive |

## Standards and regulations

### Air clearances and creepage distances

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

## Mounting

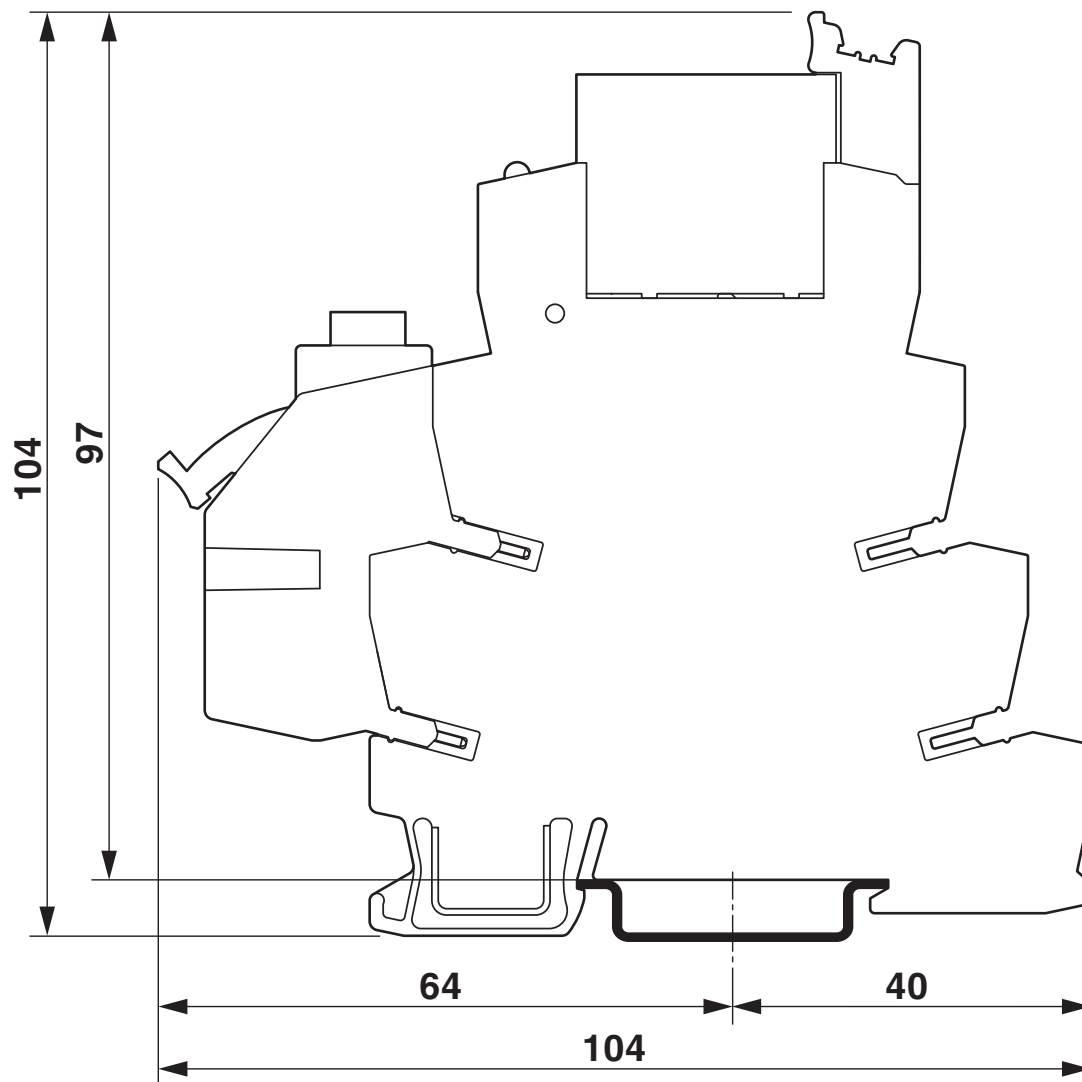
|                   |                           |
|-------------------|---------------------------|
| Mounting type     | Plug-on assembly          |
| Assembly note     | in rows with zero spacing |
| Mounting position | any                       |

## 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. |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Drawings

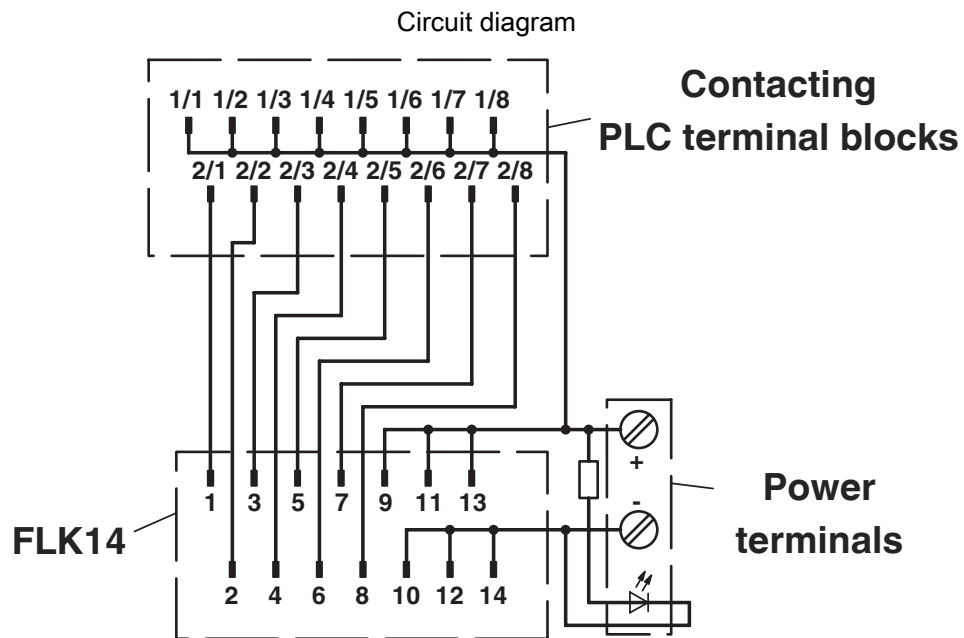
Dimensional drawing



# PLC-V8L/FLK14/OUT/M - System connection

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PLC-V8L/FLK14/OUT/M connection scheme

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2304306>

|                                                                                                                                 |                       |                       |                   |                             |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>cUL Recognized</b><br>Approval ID: E238705 |                       |                       |                   |                             |
|                                                                                                                                 | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                                           |                       |                       |                   |                             |
|                                                                                                                                 | 24 V                  | 1 A                   | -                 | -                           |

|                                                                                                                                |                       |                       |                   |                             |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>UL Recognized</b><br>Approval ID: E238705 |                       |                       |                   |                             |
|                                                                                                                                | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                                          |                       |                       |                   |                             |
|                                                                                                                                | 24 V                  | 1 A                   | -                 | -                           |

|                                                                                                                              |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|  <b>DNV GL</b><br>Approval ID: TAE0000196 |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

|                                                                                                                                    |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|  <b>UL Listed</b><br>Approval ID: FILE E 172140 |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

|                                                                                                                                     |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|  <b>cUL Listed</b><br>Approval ID: FILE E 172140 |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

|                                                                                                                               |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|  <b>cUL Listed</b><br>Approval ID: E199827 |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

|                                                                                                                              |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|  <b>UL Listed</b><br>Approval ID: E199827 |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27141152 |
| ECLASS-15.0 | 27141152 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002780 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

## Environmental product compliance

### EU RoHS

|                                         |      |
|-----------------------------------------|------|
| Fulfills EU RoHS substance requirements | Yes  |
| Exemption                               | 6(c) |

### 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.) | Hexahydromethylphthalic anhydride(CAS: n/a) |
|                                     | Lead(CAS: 7439-92-1)                        |
| SCIP                                | 4ab30cf3-0e55-4654-a447-63bfa0105459        |