

TC-2KS50-DO16-ESD-AR-RS - Module carrier



2904113

<https://www.phoenixcontact.com/us/products/2904113>

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Termination carrier for redundantly connecting 16 PSR-FSP modules to digital output cards of the Yokogawa ProSafe-RS controller, via two KS50 connectors, 50-pos. Solution for Emergency Shut Down (ESD) applications. Suitable for Yokogawa SDV541 card.

Your advantages

- Mechanically decoupled PCB
- Robust aluminum profile with integrated DIN rail
- Side parts with integrated end clamps
- Redundant system connection, 50-pos. (KS/AKB-compatible)
- Simple or redundant supply, decoupled from diode, protected against polarity reversal
- Error message in the event of power supply failure or fuse fault
- Relay output (N/O contact, floating) and flashing LED for error message
- Undervoltage monitoring at input at < 18 V DC
- Suitable for safe state off applications
- Cable sets for signal connection are not supplied as standard and must be ordered separately

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 2904113 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | C420 |
| Product key | DK274C |
| GTIN | 4046356783743 |
| Weight per piece (including packing) | 1,447 g |
| Weight per piece (excluding packing) | 1,447 g |
| Customs tariff number | 85366990 |
| 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 | Module carrier |
| Insulation characteristics: Air clearances and creepage distances | |
| Insulation | Basic insulation |

Electrical properties

| | |
|---|-----------------------------|
| Max. permissible current | 1 A (Per signal/channel) |
| Nominal voltage U_N | 24 V DC (21.1 V ... 26.4 V) |
| Air clearances and creepage distances | |
| Rated insulation voltage | 50 V |
| Rated surge voltage | 0.5 kV |
| Supported controller: YOKOGAWA ProSafe-RS | |
| Suitable I/O card | SDV541 |

Supply

| | |
|-----------------------------------|---------------------------------------|
| Designation | Device supply |
| Fuse | 2.5 A on PCB, slow-blow (replaceable) |
| Input voltage range | 21.1 V ... 26.4 V |
| Input current | ≤ 2 A |
| Redundant supply | yes, decoupled from diodes |
| Polarization and surge protection | Yes |
| Output name | Switching output |
| Contact switching type | 1 N/C contact (alarm = open) |

Connection data

Power supply

| | |
|-------------------------------|--|
| Connection method | Screw connection |
| Stripping length | 7 mm |
| Number of connections | 1 |
| Number of positions | 6 |
| Conductor cross-section rigid | 0.14 mm ² ... 2.5 mm ² |

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| | |
|----------------------------------|--|
| Conductor cross-section flexible | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross-section AWG | 24 ... 12 |

Controller level

| | |
|-----------------------|-------------------------|
| Connection method | Yokogawa, KS compatible |
| Number of connections | 2 |
| Number of positions | 50 |

Signaling

| | |
|----------------|-------------------------------|
| Status display | 2 x red LED (error) |
| | 2x green LEDs (PWR1 and PWR2) |

Dimensions

| | |
|--------|----------|
| Width | 304 mm |
| Height | 170 mm |
| Depth | 159.5 mm |

Environmental and real-life conditions

Ambient conditions

| | |
|---|----------------------------------|
| Degree of protection | IP00 |
| Ambient temperature (operation) | -20 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C |
| Permissible humidity (operation) | 5 % ... 95 % (non-condensing) |
| Shock | 15g, according to IEC 60068-2-27 |
| Vibration (operation) | 2g, according to IEC 60068-2-6 |

Approvals

UL, USA/Canada

| | |
|----------------|---------------------------------------|
| Identification | UL 61010 Listed |
| | Class I, Div. 2, Groups A, B, C, D T4 |
| | Class I, Zone 2, Group IIC |

Standards and regulations

Air clearances and creepage distances

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

Mounting

| | |
|-------------------|----------------------|
| Mounting type | DIN rail mounting |
| Assembly note | No end clamp |
| Mounting position | vertical, horizontal |

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2904113>

|  UL Listed Approval ID: E330267 | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 50 V | 1 A | - | - |

|  cUL Listed Approval ID: E330267 | | | | |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 50 V | 1 A | - | - |

|  cUL Listed Approval ID: E199827 | | | | |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 50 V | 1 A | - | - |

|  UL Listed Approval ID: E199827 | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 50 V | 1 A | - | - |

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Classifications

ECLASS

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

ETIM

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|-----------|----------|
| ETIM 10.0 | EC002780 |
|-----------|----------|

UNSPSC

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

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Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 6(c), 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 | e79ac243-77e8-4e78-87f6-8bc9a82403d2 |

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