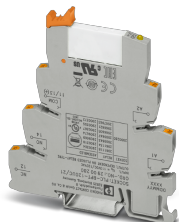


Relay Module - PLC-RPT-120UC/21 - 2900304

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




PLC-INTERFACE, consisting of PLC-BPT.../21 basic terminal block with Push-in connection and plug-in miniature relay with power contact, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/110 V DC

Your advantages

- ✓ Slim design
- ✓ Efficient connection to system cabling using V8 adapter
- ✓ RT III sealed relay
- ✓ Safe isolation according to DIN EN 50178 between coil and contact
- ✓ Functional plug-in bridges
- ✓ Integrated input circuit and interference suppression circuit



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 10 pc |
| GTIN |  4 046356 507165 |
| GTIN | 4046356507165 |

Technical data

Note

| | |
|-------------------------|---|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
| Type of note | Notes on operation |
| Note | Separating plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or FBST 500.... |

Dimensions

| | |
|--------|--------|
| Width | 6.2 mm |
| Height | 80 mm |
| Depth | 94 mm |

Relay Module - PLC-RPT-120UC/21 - 2900304

Technical data

Ambient conditions

| | |
|---|-------------------|
| Ambient temperature (operation) | -40 °C ... 55 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Degree of protection | RT III (Relay) |
| | IP20 (Relay base) |

Coil side

| | |
|---|-----------------------------------|
| Nominal input voltage U_N | 120 V AC |
| | 110 V DC |
| Typical input current at U_N | 3.5 mA (at $U_N = 120$ V AC) |
| | 3 mA (at $U_N = 110$ V DC) |
| Typical response time | 6 ms |
| Typical release time | 15 ms |
| Protective circuit | Bridge rectifier Bridge rectifier |
| Operating voltage display | Yellow LED |
| Power dissipation for nominal condition | 0.42 W |

Contact side

| | |
|---------------------------------------|---|
| Contact type | 1 changeover contact |
| Type of switch contact | Single contact |
| Contact material | AgSnO |
| Maximum switching voltage | 250 V AC/DC (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...) |
| Minimum switching voltage | 5 V (at 100 mA) |
| Min. switching current | 10 mA (at 12 V) |
| Maximum inrush current | 10 A (4 s) |
| Limiting continuous current | 6 A |
| Interrupting rating (ohmic load) max. | 140 W (at 24 V DC) |
| | 20 W (at 48 V DC) |
| | 18 W (at 60 V DC) |
| | 23 W (at 110 V DC) |
| | 40 W (at 220 V DC) |
| | 1500 VA (for 250 V AC) |
| Switching capacity | 2 A (at 24 V, DC13) |
| | 0.2 A (at 110 V, DC13) |
| | 0.1 A (at 220 V, DC13) |
| | 3 A (at 24 V, AC15) |
| | 3 A (at 120 V, AC15) |
| | 3 A (at 230 V, AC15) |

General

| | |
|--------------|--|
| Test voltage | 4 kV AC (50 Hz, 1 min., winding/contact) |
|--------------|--|

Relay Module - PLC-RPT-120UC/21 - 2900304

Technical data

General

| | |
|--|---------------------------|
| Operating mode | 100% operating factor |
| Flammability rating according to UL 94 | V0 (Housing) |
| Mechanical service life | 2x 10 ⁷ cycles |
| Mounting position | any |
| Assembly instructions | in rows with zero spacing |

Connection data

| | |
|----------------------------------|--|
| Connection name | Coil side |
| Connection method | Push-in connection |
| Stripping length | 8 mm |
| Conductor cross section solid | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.14 mm ² ... 2.5 mm ² |
| | 0.2 mm ² ... 2.5 mm ² (Single ferrule) |
| | 2x 0.5 mm ² ... 1 mm ² (TWIN ferrule) |
| Conductor cross section AWG | 26 ... 14 |

Connection data 2

| | |
|----------------------------------|--|
| Connection name | Contact side |
| Connection method | Push-in connection |
| Stripping length | 8 mm |
| Conductor cross section solid | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.14 mm ² ... 2.5 mm ² |
| | 0.2 mm ² ... 2.5 mm ² (Single ferrule) |
| | 2x 0.5 mm ² ... 1 mm ² (TWIN ferrule) |
| Conductor cross section AWG | 26 ... 14 |

Standards and Regulations

| | |
|----------------------------------|--|
| Connection in acc. with standard | CUL |
| Designation | Standards/regulations |
| Standards/regulations | IEC 60664 |
| | IEC 60664A |
| | DIN VDE 0110 |
| | DIN EN 50178/VDE 0160 (in relevant parts) |
| | DIN EN 50178/VDE 0160 |
| | IEC 60255/DIN VDE 0435 (in relevant parts) |
| Pollution degree | 3 |
| Overvoltage category | III |

Conformance/approvals

| | |
|----------------|----------------------------|
| Designation | Corrosive gas test |
| Identification | ISA-S71.04. G3 Harsh Group |
| | EN 60068-2-60 |

Relay Module - PLC-RPT-120UC/21 - 2900304

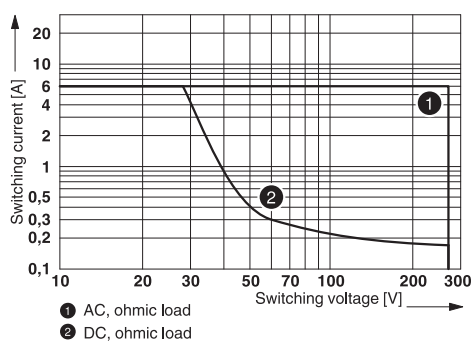
Technical data

Environmental Product Compliance

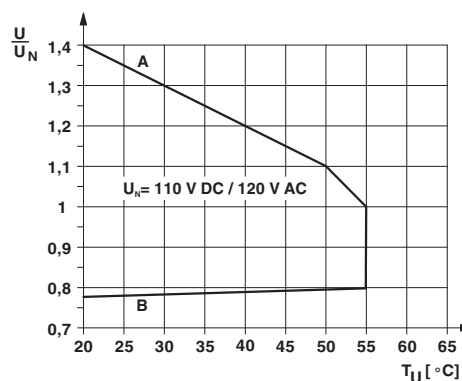
| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Diagram



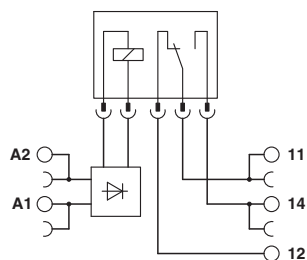
Diagram



Interrupting rating

Curve A
 Maximum permissible continuous voltage U_{max} with limiting continuous current on the contact side (see relevant technical data)
 Curve B
 Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)

Circuit diagram



Relay Module - PLC-RPT-120UC/21 - 2900304

Articles in set

Relay base - PLC-BPT-120UC/21 - 2900280



6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/DC

Single relay - REL-MR- 60DC/21 - 2961118



Plug-in miniature power relay, with power contact, 1 changeover contact, input voltage 60 V DC

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27371601 |
| eCl@ss 11.0 | 27371601 |
| eCl@ss 4.0 | 27371000 |
| eCl@ss 4.1 | 27371000 |
| eCl@ss 5.0 | 27371600 |
| eCl@ss 5.1 | 27371600 |
| eCl@ss 6.0 | 27371600 |
| eCl@ss 7.0 | 27371601 |
| eCl@ss 9.0 | 27371601 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC001437 |
| ETIM 3.0 | EC001437 |
| ETIM 4.0 | EC001437 |
| ETIM 6.0 | EC001437 |
| ETIM 7.0 | EC001437 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211916 |
| UNSPSC 7.0901 | 39121515 |
| UNSPSC 11 | 39121515 |
| UNSPSC 12.01 | 39121515 |
| UNSPSC 13.2 | 39122334 |
| UNSPSC 18.0 | 39122334 |

Relay Module - PLC-RPT-120UC/21 - 2900304

Classifications

UNSPSC

| | |
|-------------|----------|
| UNSPSC 19.0 | 39122334 |
| UNSPSC 20.0 | 39122334 |
| UNSPSC 21.0 | 39122334 |

Approvals

Approvals

Approvals

DNV GL / UL Listed / UL Recognized / cUL Recognized / cUL Listed / RC FRT / EAC / EAC / cULus Recognized / cULus Listed

Ex Approvals

Approval details

| | | | |
|----------------|--|---|---------------|
| DNV GL | | https://approvalfinder.dnvgl.com/ | TAE0000196-03 |
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 238705 |
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 238705 |
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
| RC FRT | | | B.00094 |

Relay Module - PLC-RPT-120UC/21 - 2900304

Approvals

| | | |
|-----|--|-----------------|
| EAC | | TR_TS_D_00573_c |
|-----|--|-----------------|

| | | |
|-----|--|-------------------------|
| EAC | | RU*C- DE.*08.B.00010 |
|-----|--|-------------------------|

| | | |
|------------------|--|--|
| cULus Recognized | | |
|------------------|--|--|

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

Accessories

Accessories

Bridge

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



Continuous plug-in bridge, length: 500 mm, color: red

Continuous plug-in bridge - FBST 500-PLC BU - 2966692



Continuous plug-in bridge, length: 500 mm, color: blue

Continuous plug-in bridge - FBST 500-PLC GY - 2966838



Continuous plug-in bridge, length: 500 mm, color: gray

Relay Module - PLC-RPT-120UC/21 - 2900304

Accessories

Single plug-in bridge - FBST 6-PLC RD - 2966236



Single plug-in bridge, length: 6 mm, number of positions: 2, color: red

Single plug-in bridge - FBST 6-PLC BU - 2966812



Single plug-in bridge, length: 6 mm, number of positions: 2, color: blue

Single plug-in bridge - FBST 6-PLC GY - 2966825



Single plug-in bridge, length: 6 mm, number of positions: 2, color: gray

Single plug-in bridge - FBST 8-PLC GY - 2967688



Single plug-in bridge, length: 8 mm, number of positions: 2, color: gray

Controller board

System connection - PLC-V8/FLK14/OUT - 2295554



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: Screw connection 1x, connection 2: IDC/FLK pin strip 1x 14-position, connection 3: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: plusschaltend

Relay Module - PLC-RPT-120UC/21 - 2900304

Accessories

System connection - PLC-V8/FLK14/OUT/M - 2304102



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: Screw connection 1x, connection 2: IDC/FLK pin strip 1x 14-position, connection 3: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: minusschaltend

Adapter module - PLC-V8/D15S/OUT - 2296058



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: Screw connection 1x, connection 2: D-SUB pin strip 1x 15-position, connection 3: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: plusschaltend

System connection - PLC-V8/D15B/OUT - 2296061



V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: Screw connection 1x, connection 2: D-SUB socket strip 1x 15-position, connection 3: Plug connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: plusschaltend

DIN rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

Relay Module - PLC-RPT-120UC/21 - 2900304

Accessories

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

Relay Module - PLC-RPT-120UC/21 - 2900304

Accessories

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

End cap - NS 35/ 7,5 CAP - 1206560



DIN rail end piece, for DIN rail NS 35/7.5

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

Relay Module - PLC-RPT-120UC/21 - 2900304

Accessories

DIN rail, unperforated - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

Relay Module - PLC-RPT-120UC/21 - 2900304

Accessories

End cap - NS 35/15 CAP - 1206573



DIN rail end piece, for DIN rail NS 35/15

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

Labeled terminal marker

Zack marker strip - ZB 6 CUS - 0824992



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Zack marker strip - ZB 6,LGS:FORTL.ZAHLEN - 1051016



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Zack marker strip - ZB 6,QR:FORTL.ZAHLEN - 1051029



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Relay Module - PLC-RPT-120UC/21 - 2900304

Accessories

Zack marker strip - ZB 6,LGS:GLEICHE ZAHLEN - 1051032



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: Identical numbers 1 or 2, etc. up to 100, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Marker for terminal blocks - ZB 6,LGS:L1-N,PE - 1051414



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Marker for terminal blocks - ZB 6,LGS:U-N - 1051430



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: U, V, W, N, GND, U, V, W, N, GND, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Marker for terminal blocks - UC-TM 6 CUS - 0824589



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 80

Marker for terminal blocks - UCT-TM 6 CUS - 0829602



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

Partition plate

Relay Module - PLC-RPT-120UC/21 - 2900304

Accessories

Separating plate - PLC-ATP BK - 2966841



Separating plate, 2 mm thick, required at the start and end of a PLC terminal strip. Furthermore, it is used for: visual separation of groups, safe isolation of different voltages of neighboring PLC relays in acc. with DIN VDE 0106-101, isolation

Power module

Power terminal block - PLC-ESK GY - 2966508



Power terminal block, for the input of up to four potentials, for mounting on NS 35/7.5

Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Terminal marking

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 6.15 x 10.5 mm, Number of individual labels: 10

Marker for terminal blocks - UC-TM 6 - 0818085



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 80

Relay Module - PLC-RPT-120UC/21 - 2900304

Accessories

Marker for terminal blocks - UCT-TM 6 - 0828736



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

Spare parts

Relay base - PLC-BPT-120UC/21 - 2900280



6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/DC

Single relay - REL-MR- 60DC/21 - 2961118



Plug-in miniature power relay, with power contact, 1 changeover contact, input voltage 60 V DC

Phoenix Contact 2021 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>