

Safety module - PSR-SCP- 24DC/TS/S - 2986229

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://download.phoenixcontact.com>)



Freely configurable safety module with 20 safe inputs and 4 safe outputs; 4 alarm, 2 clock, and 2 ground switching outputs; diagnostics possible via bus gateways, up to SILCL 3, Cat.4/PL e, SIL 3, EN 50156, plug-in screw connection terminal blocks

Product Features

- Flexible extension with safe inputs and outputs
- Including IFS-CONFSTICK memory stick for easily storing and saving the configuration
- Easy graphical configuration with the SAFECONF software
- Option for connecting fieldbus gateways for diagnostics and signaling functions
- Multifunctional use for a wide range of safety functions
- Easy graphical configuration instead of complex programming
- Quick startup thanks to comprehensive simulation and test functions
- Quick startup thanks to user-friendly simulation and test options
- Freely configurable safety module for monitoring emergency stops, safety doors, light grids, etc.
- Up to Cat. 4/PL e according to ISO 13849-1, SILCL 3 according to IEC 62061, SIL 3 according to IEC 61508
- With 20 safe inputs, 4 safe outputs, 4 alarm outputs, and 2 clock outputs on a design width of just 67.5 mm
- EN 50156



Key commercial data

| | |
|------------------|---------------|
| package_quantity | 1 |
| GTIN | 4046356477192 |

Technical data

Note:

| | |
|-------------------------|---|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---|

Dimensions

| | |
|--------|----------|
| Width | 67.5 mm |
| Height | 99 mm |
| Depth | 114.5 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -20 °C ... 55 °C |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C |

Safety module - PSR-SCP- 24DC/TS/S - 2986229

Technical data

Input data

| | |
|---|-----------------------------------|
| Nominal input voltage U_N | 24 V DC |
| Input voltage range in reference to U_N | 0.85 ... 1.1 |
| Typical input current at U_N | 110 mA |
| Maximum response time | < 30 ms |
| Bypassing voltage dips | 20 ms |
| Recovery time | < 10 s |
| Protective circuit | Surge protection Suppressor diode |
| Status display | 4 LEDs (green, red) |
| Number of safe inputs | 20 |
| Nominal voltage U_N | 24 V DC |
| Typical current consumption | 4 mA |
| Signal level "0" signal | < 5 V |
| Signal level "1" signal | > 11 V |
| Permissible cable length | 2000 m |
| Error detection time at 1-channel structure | < 1 s |

Output data

| | |
|--------------------------------------|--|
| Contact type | 20 safe digital inputs |
| Contact type | 4 safe semiconductor outputs |
| Contact type | 4 alarm outputs |
| Contact type | 2 grounded switching outputs |
| Contact type | 4 clock outputs |
| Number of safe semiconductor outputs | 4 (Cat.4 / ISO 13849) |
| Number of ground switching outputs | 2 |
| Nominal voltage U_N | 24 V DC |
| Limiting continuous current | 2 A (see derating curve) |
| Max. capacitive load | 1 μ F (When using electromechanical components (e.g., contactors), the capacitive load can be disregarded.) |
| Max. inductive load | (A suitable and effective protective circuit is to be provided for inductive loads. A recommended measure is the use of free-wheeling diodes.) |
| Test pulses | < 1 ms (To ground) |
| Short-circuit protection | Yes |
| Clock outputs | Yes |
| Number of outputs | 2 |
| Nominal voltage U_N | 24 V DC (A1 / A2) |
| Limiting continuous current | 100 mA |
| Test pulses | < 100 ms |
| Short-circuit protection | Yes |
| Alarm outputs | Yes |
| Number of outputs | 4 |
| Nominal voltage U_N | 24 V DC (A1 / A2) |

Safety module - PSR-SCP- 24DC/TS/S - 2986229

Technical data

Output data

| | |
|-----------------------------|--------|
| Limiting continuous current | 100 mA |
| Short-circuit protection | Yes |

General

| | |
|---|---|
| Mounting position | Horizontal |
| Category according to EN 13849-1 | 4 |
| Name | Air and creepage distances between the power circuits |
| Standards/regulations | DIN EN 50178 |
| Rated surge voltage / insulation | 0.8 kV / Basic isolation |
| Rated insulation voltage | 50 V |
| Pollution degree | 2 |
| Surge voltage category | III |
| Housing material | Polyamide PA non-reinforced |
| Number of possible safe extension modules | 10 |
| Interfaces | USB |

Connection data

| | |
|--|---------------------|
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section stranded min. | 0.2 mm ² |
| Conductor cross section stranded max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 24 |
| Conductor cross section AWG/kcmil max | 12 |
| Stripping length | 7 mm |
| Screw thread | M3 |
| Connection method | Screw connection |

classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27371102 |
| eCl@ss 4.1 | 27371102 |
| eCl@ss 5.0 | 27371901 |
| eCl@ss 5.1 | 27371901 |
| eCl@ss 6.0 | 27371001 |
| eCl@ss 7.0 | 27371001 |
| eCl@ss 8.0 | 27371001 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC001449 |
| ETIM 3.0 | EC001449 |
| ETIM 4.0 | EC001449 |
| ETIM 5.0 | EC001449 |

Safety module - PSR-SCP- 24DC/TS/S - 2986229

classifications

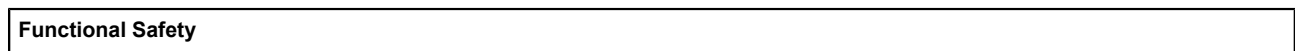
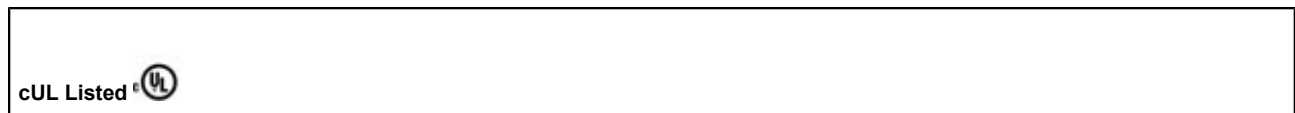
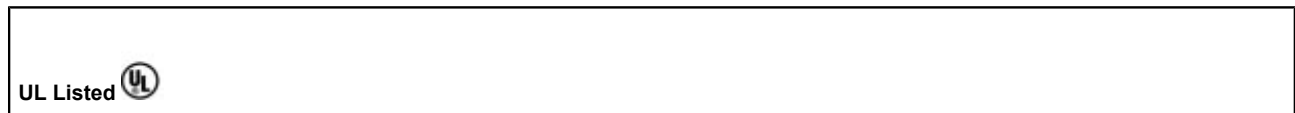
UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211901 |
| UNSPSC 7.0901 | 39121501 |
| UNSPSC 11 | 39121501 |
| UNSPSC 12.01 | 39121501 |
| UNSPSC 13.2 | 39121501 |

approvals

UL Listed / cUL Listed / Functional Safety / cULus Listed /

Approval details



accessories

Starter kit

ILC 130 SBT V2 STARTERKIT - 2700993



Memory block

Safety module - PSR-SCP- 24DC/TS/S - 2986229

accessories

IFS-CONFSTICK - 2986122



Adapter cable

CABLE-USB/MINI-USB-3,0M - 2986135



Configuration set

PSR-SAFECONF-BOX-EN - 2986164



PSR-SAFECONF-BOX-DE - 2986151



DIN rail connector

ME 22,5 TBUS 1,5/ 5-ST-3,81 GN - 2707437



Safety module - PSR-SCP- 24DC/TS/S - 2986229

accessories

PSR-TBUS - 2890425



Gateways/Proxies

EM-PB-GATEWAY-IFS - 2297620



Solid-state contactor

PSR-FTB/20/86 - 2904477



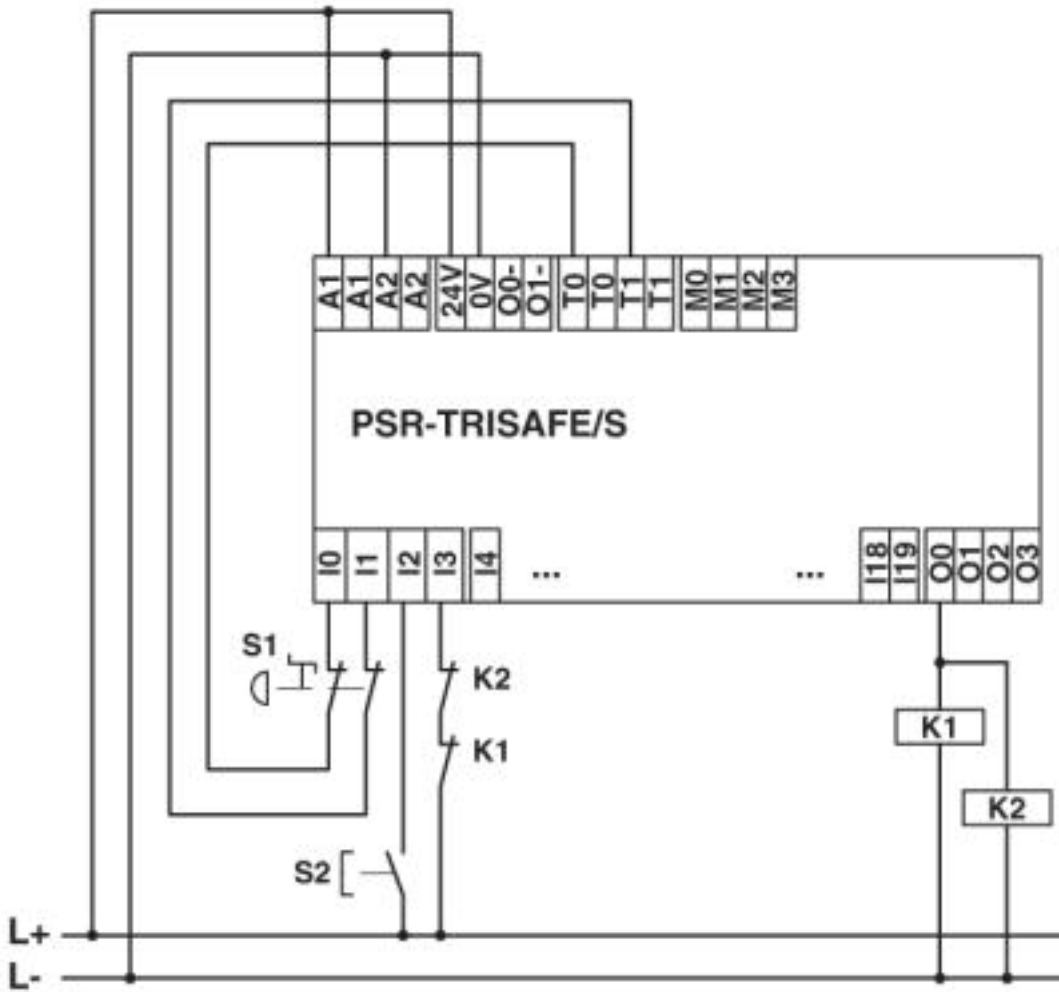
PSR-FTB/1.5/11.5 - 2904476



Drawings

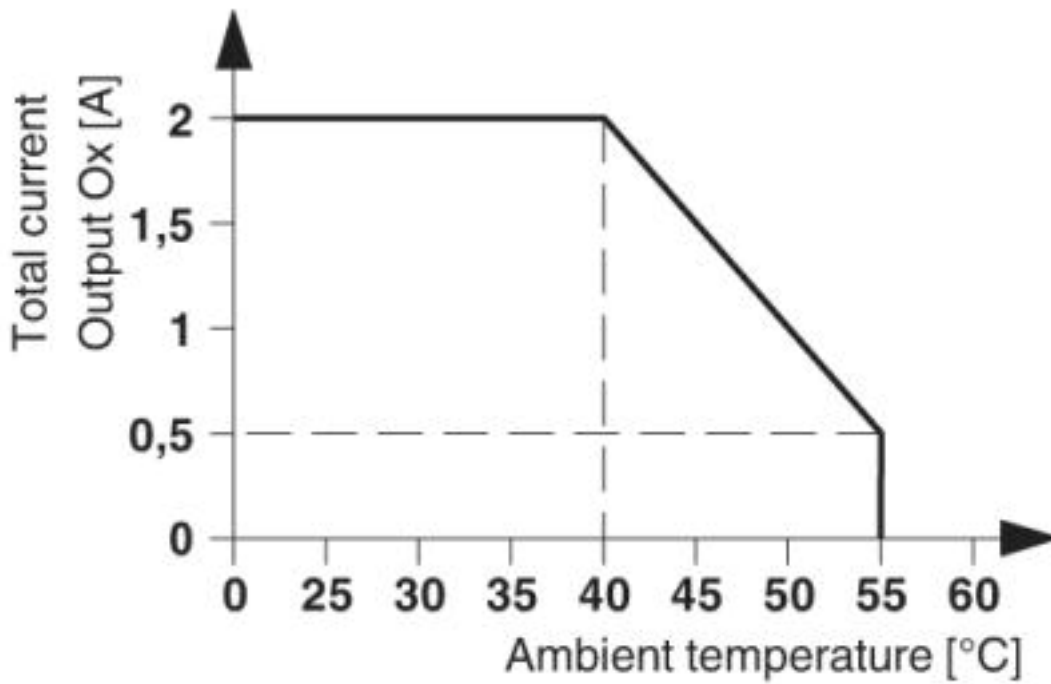
Safety module - PSR-SCP- 24DC/TS/S - 2986229

Application drawing



Safety module - PSR-SCP- 24DC/TS/S - 2986229

Diagram



Circuit diagram

