

# Coupling relay - PSR-SCP- 24DC/ETP/1X1 - 2986711

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Coupling relay for SIL 3 low demand applications, couples digital output signals to the periphery, 1 enabling current path, module for F&G applications, test pulse filter, plug-in screw connection, 17.5 mm width

## Product Features

- Narrow 17.5 mm housing
- Up to SIL 3 according to IEC 61508
- Long service life thanks to filtering of controller test pulses
- One enabling current path
- Couples digital output signals from failsafe controllers to I/O devices (valves, etc.) for electrical isolation and power adaptation



## Key commercial data

package_quantity	1
GTIN	4046356540797

## Technical data

Note:

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

Width	17.5 mm
Height	99 mm
Depth	114.5 mm

## Ambient conditions

Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 65 °C
Max. permissible humidity (storage/transport)	≤ 85 % (Condensation and icing are not permitted based on the average annual temperature)
Max. permissible humidity (storage/transport)	≤ 85 % (On an individual basis, condensation and icing are not permitted)
Shock	15 g
Vibration (operation)	2 g

## Input data

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## Technical data

### Input data

Nominal input voltage $U_N$	24 V DC
Input voltage range	20.4 V DC ... 26.4 V DC
Input voltage range in reference to $U_N$	0.85 ... 1.1
Typical input current at $U_N$	75 mA
Typical inrush current	200 mA
Typical response time	30 ms
Recovery time	1 s

### Output data

Contact type	1 enabling current path
Contact material	AgNi, gold-flashed
Maximum switching voltage	250 V AC (125 V DC)
Minimum switching voltage	15 V AC/DC
Limiting continuous current	5 A (N/O contact, pay attention to the derating)
Maximum inrush current	5 A
Inrush current, minimum	100 mA
Sq. Total current	$25 A^2 (I_{TH2} = I_{12} + \dots + I_{N2})$
Switching capacity min.	1.5 W

### General

Relay type	Electromagnetic dust-proof relay
Mechanical service life	Approx. $10^7$ cycles
Mounting position	optional (Observe derating)
Assembly instructions	In rows with zero spacing
Stop category	0
Name	Air and creepage distances between the power circuits
Standards/regulations	DIN EN 50178
Rated surge voltage / insulation	6 kV/safe isolation (through protective impedance)
Rated insulation voltage	250 V AC
Pollution degree	2
Surge voltage category	III

### Connection data

Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
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

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## 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	27371819
eCl@ss 7.0	27371819
eCl@ss 8.0	27371819

### ETIM

ETIM 2.0	EC001449
ETIM 3.0	EC001449
ETIM 4.0	EC001449
ETIM 5.0	EC001449

### UNSPSC

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

## approvals

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Functional Safety /

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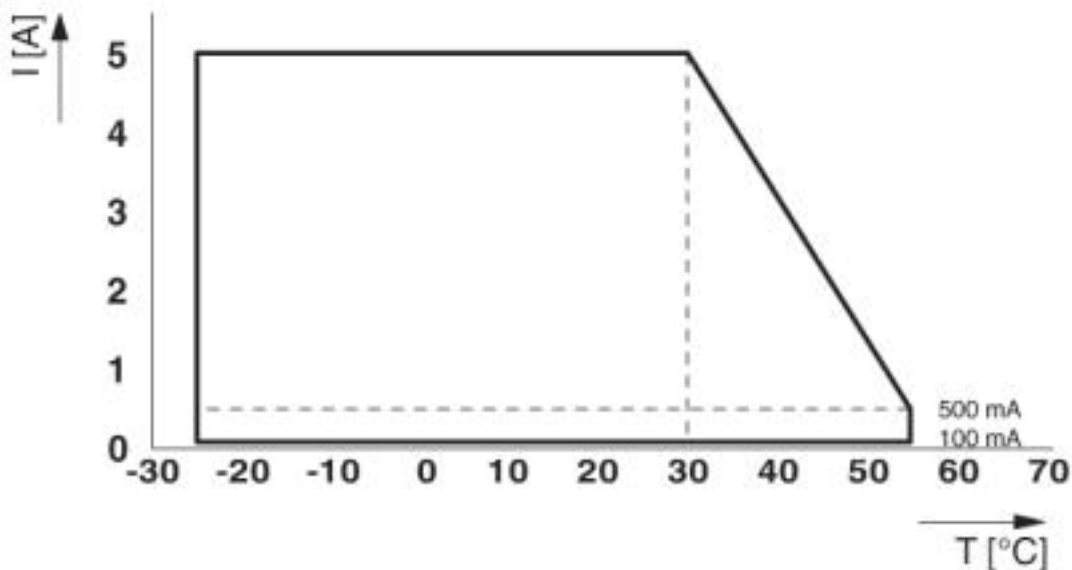
### Approval details

<b>Functional Safety</b>
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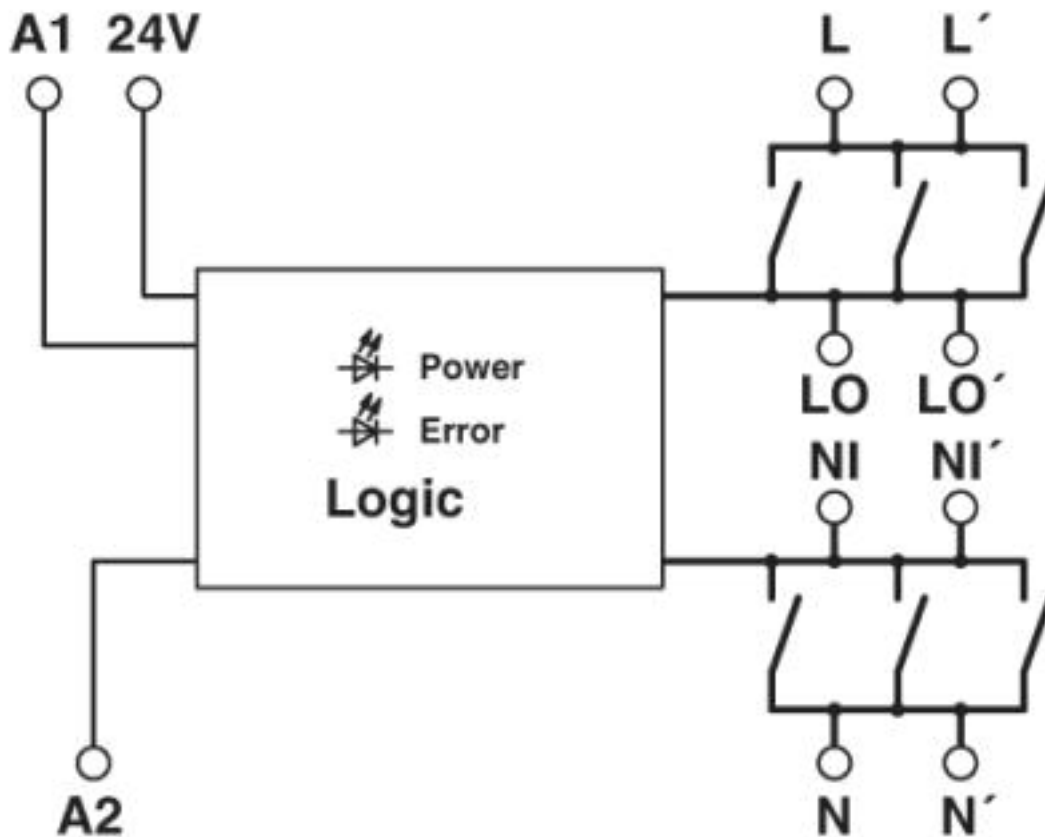
## Drawings

# Coupling relay - PSR-SCP- 24DC/ETP/1X1 - 2986711

Diagram

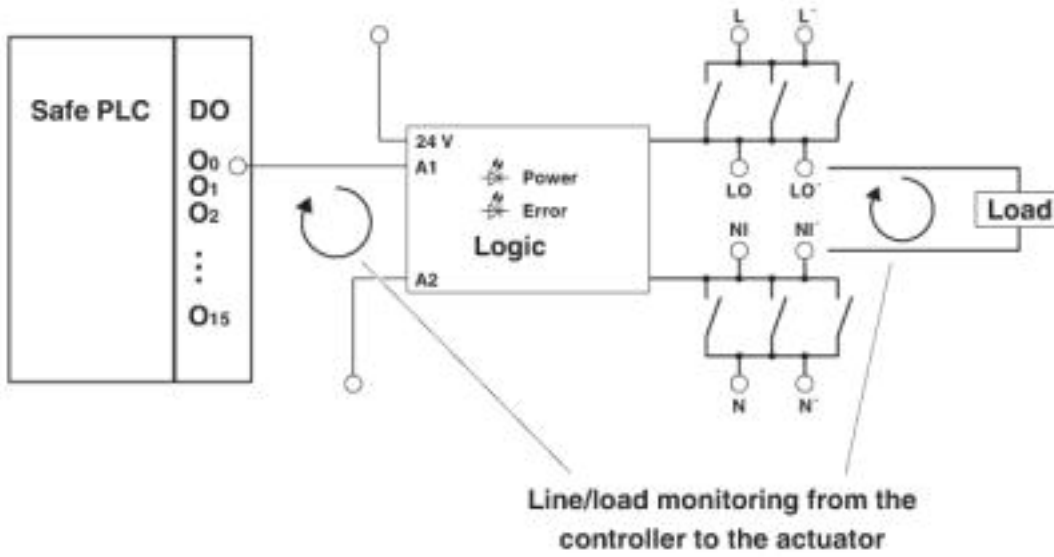


Circuit diagram



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Circuit diagram



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