

Extension module - PSR-MC82-5NO-1NC-1DO-24DC-SP - 2702383

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Contact extension up to SILCL 3, Cat. 4, PL e in conjunction with suitable evaluation device, 5 enabling current paths, $U_s = 24\text{ V DC}$, plug-in spring-cage terminal block

The figure shows a version with a screw connection

Your advantages

- Up to Cat. 4/PL e according to ISO 13849-1, SILCL 3 according to IEC 62061 in conjunction with suitable evaluation device
- Low housing width of just 17.5 mm
- One or two-channel activation
- 5 enabling current paths, 1 confirmation current path, 1 digital signal output
- Automatic activation



Key commercial data

package_quantity	1
GTIN	4055626145488

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	116.6 mm
Depth	114.5 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C (observe derating)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Max. permissible relative humidity (operation)	75 % (on average, 85% infrequently, non-condensing)
Max. permissible humidity (storage/transport)	75 % (on average, 85% infrequently, non-condensing)
Shock	15g (In the event of stress caused by shock, contact reactions are possible for up to 6 ms.)

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Ambient conditions

Maximum altitude	max. 2000 m (Above sea level)
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Input data

Rated control circuit supply voltage U_s	24 V DC -20 % / +25 %
Rated control supply current I_s	typ. 80 mA
Power consumption at U_s	typ. 1.92 W
Inrush current	30 mA ($\Delta t = 7$ ms at U_s)
Typical response time	< 50 ms
Typ. starting time with U_s	< 50 ms (when controlled via A1/A2)
Typical release time	< 25 ms (when controlled via A1/A2)
Recovery time	< 100 ms
Status display	2 x green LEDs
Maximum switching frequency	0.5 Hz
Filter time	4 ms (at A1-A2 in the event of voltage dips at U_s)
Filter time	max. 1 ms (at A1/A2, test pulse width, blanking pulses/dark test)
Filter time	5 ms (at A1/A2, test pulse rate, blanking pulses/dark test)
Filter time	Where test pulse width < 1 ms: test pulse rate = 5 x test pulse width
Filter time	max. 1 ms (at A1/A2, test pulse width, switch-on pulses/light test)
Filter time	10 ms (at A1/A2; test pulse rate; switch-on pulses/light test)
Filter time	Deactivate switch-on pulses/light tests for safety applications.

Output data

Contact type	5 enabling current paths
Contact type	1 confirmation current path
Contact material	AgSnO ₂
Minimum switching voltage	5 V AC/DC
Maximum switching voltage	24 V DC (Enabling current path 23/24)
Maximum switching voltage	250 V AC/DC (all other enabling current paths, observe load curve)
Limiting continuous current	6 A (observe derating)
Inrush current, minimum	10 mA
Maximum inrush current	6 A
Sq. Total current	64 A ² (observe derating)
Switching capacity	min. 50 mW
Output fuse	10 A gL/gG (N/O contact)
Output fuse	6 A gL/gG (N/C contact)
Output fuse	6 A gL/gG (N/O contact, for low-demand applications)
Output fuse	4 A gL/gG (N/C contact, for low-demand applications)

Alarm outputs

Number of outputs	1 (digital, PNP)
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Alarm outputs

Voltage	typ. 23 V DC ($U_s - 1 V$)
Current	max. 100 mA
Maximum inrush current	500 mA ($\Delta t = 1 ms$ at U_s)
Short-circuit protection	Yes

General

Relay type	Electromechanical relay with forcibly guided contacts in accordance with EN 50205
Mechanical service life	10×10^6 cycles
Nominal operating mode	100% operating factor
Net weight	210.3 g
Mounting type	DIN rail mounting
Assembly instructions	See derating curve
Mounting position	vertical or horizontal
Degree of protection	IP20
Min. degree of protection of inst. location	IP54
Control	one and two channel
Housing color	yellow

Connection data

Connection method	Spring-cage connection
pluggable	Yes
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	1.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Stripping length	8 mm

Safety-related characteristic data

Stop category	0
Designation	IEC 61508 - High demand
Safety Integrity Level (SIL)	3 (In conjunction with suitable evaluating device)
Designation	IEC 61508 - Low demand
Safety Integrity Level (SIL)	3 (In conjunction with suitable evaluating device)
Designation	EN ISO 13849
Performance level (PL)	e (In conjunction with suitable evaluating device)
Category	4 (In conjunction with suitable evaluating device)
Designation	EN 62061
Safety Integrity Level Claim Limit (SIL CL)	3 (In conjunction with suitable evaluating device)

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Standards and Regulations

Shock	15g (In the event of stress caused by shock, contact reactions are possible for up to 6 ms.)
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178
Rated insulation voltage	250 V AC
Rated insulation voltage	250 V AC
Rated surge voltage/insulation	Basic insulation 4 kV between all current paths
Rated surge voltage/insulation	Basic insulation 4 kV between all current paths and housing
Rated surge voltage/insulation	Safe isolation, reinforced insulation 6 kV between input circuits and enabling current paths 33/34, 43/44, and 63/64
Degree of pollution	2
Overvoltage category	III
Vibration (operation)	10 Hz ...150 Hz, 2g (In the event of stress caused by vibration, contact reactions are possible for up to 1 ms.)
Conformance	CE-compliant

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
China RoHS	No hazardous substances above threshold values

Classifications

eCl@ss

eCl@ss 5.1	27371901
eCl@ss 6.0	27371819
eCl@ss 8.0	27371819
eCl@ss 9.0	27371819

ETIM

ETIM 3.0	EC001449
ETIM 4.0	EC001449
ETIM 5.0	EC001449
ETIM 6.0	EC001449

UNSPSC

UNSPSC 13.2	39121501
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Approvals

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

Approval details

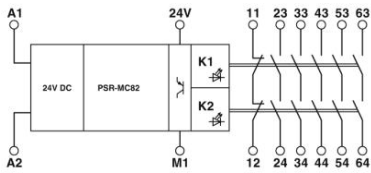
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Approvals

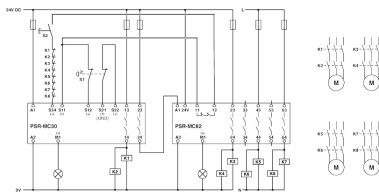
- UL Listed
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Drawings

Block diagram



Circuit diagram



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