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Safe coupling relay with force-guided contacts, 5 N/O contacts, 2 N/C contacts, 1-channel, plug-in screw terminal block, width: 22.5 mm

### Your advantages

- ☑ Suitable up to category 1, PL c (EN ISO 13849-1), SILCL 1 (EN 62061), SIL 1 (IEC 61508)
- ☑ Safe readback due to force-guided signal contact in accordance with EN 50205
- ☑ Easy proof test according to IEC 61508 thanks to integrated signal contact
- ☑ One or two-channel activation
- 5 enabling current paths, 2 confirmation current paths



## **Key Commercial Data**

Packing unit	1 pc
GTIN	4 017918 482145
GTIN	4017918482145

### Technical data

#### Note

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

Width	22.5 mm
Height	114.5 mm
Depth	99 mm

#### Ambient conditions

Ambient temperature (operation)	-20 °C 55 °C
Ambient temperature (storage/transport)	-40 °C 85 °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)



## Technical data

## Ambient conditions

Maximum altitude

	, ,
nput data	
Rated control circuit supply voltage U <sub>s</sub>	24 V AC/DC -15 % / +10 %
Rated control supply current I <sub>S</sub>	typ. 47 mA
Power consumption at U <sub>S</sub>	typ. 1.2 W
Inrush current	typ. 350 mA DC ( $\Delta t$ < 1 $\mu s$ at $U_s$ )
	typ. 350 mA AC ( $\Delta t$ = 2 ms at U <sub>s</sub> )
Typ. starting time with U <sub>s</sub>	typ. 20 ms (when controlled via A1)
Typical release time	typ. 20 ms (when controlled via A1)
Recovery time	< 500 ms

1 x green LED

0.5 Hz

Surge protection Varistor

max. 2000 m (Above sea level)

### Output data

Protective circuit

Operating voltage display

Maximum switching frequency

Contact type	5 enabling current paths
	2 confirmation current paths
Contact material	AgSnO <sub>2</sub>
Maximum switching voltage	230 V AC/DC (Observe the load curve)
Minimum switching voltage	5 V AC/DC
Limiting continuous current	6 A (N/O contact)
	3 A (N/C contact)
Maximum inrush current	6 A
Inrush current, minimum	10 mA
Sq. Total current	72 A <sup>2</sup>
Interrupting rating (ohmic load) max.	144 W (N/O contact, 24 V DC, τ = 0 ms)
	288 W (N/O contact, 48 V DC, τ = 0 ms)
	240 W (N/O contact, 60 V DC, τ = 0 ms)
	110 W (N/O contact, 110 V DC, τ = 0 ms)
	88 W (N/O contact, 220 V DC, τ = 0 ms)
	1380 VA (N/O contact, 230 V AC, τ = 0 ms)
Maximum interrupting rating (inductive load)	42 W (N/O contact, 24 V DC, τ = 40 ms)
	42 W (N/O contact, 48 V DC, τ = 40 ms)
	42 W (N/O contact, 60 V DC, τ = 40 ms)
	42 W (N/O contact, 110 V DC, τ = 40 ms)
	42 W (N/O contact, 220 V DC, τ = 40 ms)
Switching capacity	min. 50 mW
Mechanical service life	10x 10 <sup>6</sup> cycles
Switching capacity (360/h cycles)	4 A (24 V (DC13))
	4 A (250 V (AC15))



## Technical data

## Output data

Switching capacity according to IEC 60947-5-1	3 A (24 V (DC13))
	3 A (250 V (AC15))
Output fuse	10 A gL/gG (N/O contact)
	4 A gL/gG (N/O contact, for low-demand applications)
	6 A gL/gG (N/C contact)

### General

Relay type	Electromechanical relay with force-guided contacts in accordance with IEC/EN 61810-3
Nominal operating mode	100% operating factor
Net weight	175 g
Mounting position	vertical or horizontal
Mounting type	DIN rail mounting
Degree of protection	IP20
Min. degree of protection of inst. location	IP54
Housing material	PBT
Housing color	yellow

### Connection data

Connection method	Screw connection
pluggable	Yes
Conductor cross section solid	0.2 mm² 2.5 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross-section AWG	24 12
Stripping length	7 mm
Screw thread	M3

## Safety-related characteristic data

Stop category	0
Designation	IEC 61508 - High demand
Safety Integrity Level (SIL)	1
Designation	IEC 61508 - Low demand
Safety Integrity Level (SIL)	1
Designation	EN ISO 13849
Performance level (PL)	С
Category	1
Safety Integrity Level Claim Limit (SIL CL)	1

## Standards and Regulations

Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178
Rated insulation voltage	250 V
Rated surge voltage/insulation	Safe isolation 4 kV between all current paths and housing



## Technical data

## Standards and Regulations

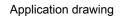
Degree of pollution	2
Overvoltage category	II
Shock	15g (In the event of stress caused by shock, contact reactions are possible for up to 2 ms.)
Vibration (operation)	10 Hz 150 Hz, 2g (In the event of stress caused by vibration, contact reactions are possible for up to 1 ms.)
Conformance	CE-compliant

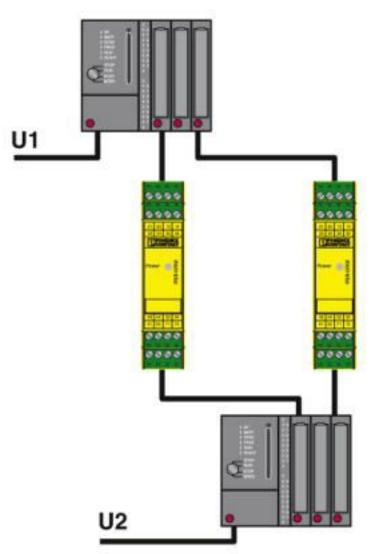
## **Environmental Product Compliance**

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







Reliable signal exchange between two systems with confirmation function.

## Classifications

## eCl@ss

eCl@ss 10.0.1	27371601
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371601
eCl@ss 8.0	27371601



## Classifications

eCl	@ss
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	eCl@ss 9.0	27371601
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### **ETIM**

ETIM 2.0	EC000196
ETIM 3.0	EC001449
ETIM 4.0	EC001449
ETIM 5.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

### **UNSPSC**

UNSPSC 6.01	30211901
UNSPSC 7.0901	39121501
UNSPSC 11	39121501
UNSPSC 12.01	39121501
UNSPSC 13.2	39121501
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

## Approvals

Approvals

Approvals

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

Ex Approvals

## Approval details

UL Listed http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 140324

cUL Listed



http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

FILE E 140324



## Approvals



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