

**SAFESERIES
SCS 24VDC P2SIL3DSES****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

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Germany

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The SCS 24 V DC PS2SIL3DSES safety relay should be used in areas where a functionally safe switch-off or switch-on is required. The requirements of EN 61508, SIL 3 can be satisfied with this module.

- Energised / and de-energised to safe
- All-pole switch-off possible
- Test inputs to check the relay contacts
- Externally accessible fuse
- TÜV certified "Safety Approved"

General ordering data

Type	SCS 24VDC P2SIL3DSES
Order No.	1319270000
Version	SAFESERIES, Safety relay, 24 V DC -15 / +20%, 35 mA, Max. switching current, internal fuse : 5 A (refer to derating curve), SIL 3, DIN EN 61508
GTIN (EAN)	4050118125115
Qty.	1 pc(s).

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Technical data
Dimensions and weights

Width	22.5 mm	Width (inches)	0.886 inch
Height	117.3 mm	Height (inches)	4.618 inch
Depth	114.1 mm	Depth (inches)	4.492 inch
Net weight	200 g		

Temperatures

Humidity	40 °C / 93 % rel. humidity, no condensation	Operating temperature, max.	50 °C
Operating temperature, min.	-25 °C	Storage temperature, max.	85 °C
Storage temperature, min.	-40 °C	Operating temperature	-25 °C...50 °C
Storage temperature	-40 °C...85 °C		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Input (safety circuit)

Rated control voltage	24 V DC -15 / +20%	Current consumption	45 mA
Guaranteed current consumption of 24 VDC -10%	35 mA	Inrush current	≤ 80 mA / 40 ms
Pull-in/drop-out voltage DC coil	17 V / 12.5 V (DTS)	Status indicator	LED yellow
Protective circuit	Rectifier		

Test inputs (safety circuit)

Rated control voltage	24 V DC	Number of test inputs	2
Status indicator	LED red flashing: test input is triggered		

Output (safety circuit)

Contact base material	AgNi 0.15 gold flashed	Contact design	1 x de-energised to safe (NO contact), 1 x energised to safe (NO contact)
Max. permitted switching voltage	250 V AC	Max. permitted switching current	8 A
Max. switching current, internal fuse	5 A (refer to derating curve)	Max. switching current, external fuse	5 A (refer to derating curve)
Max. switching capacity	2000 VA	Internal fuse	5 A time-lag
External back-up fuse	5 A time lag	Short circuit resistance	No
Switch-on time	< 5.5 ms (DTS), < 5 ms (ETS)	Switch-off time	< 4 ms (DTS), < 4 ms (ETS)
Min. switching capacity	10 mA @ 12 V		

Safety-related basic specifications

Device type	A	Hardware fault tolerance (HFT)	1
Safety category	SIL 3	Safety standard	DIN EN 61508

General data

Rail	TS 35	Colour	black, yellow
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Technical data
Insulation coordination

Rated voltage	300 V	Surge voltage category	III
Pollution severity	2	Protection degree	IP20
Dielectric strength, Input/Output	4 kV _{eff} / 1 min	Creepage and clearance distance input – output	≥ 5.5 mm
Dielectric strength output – output	4 kV _{eff} / 1 min	Creepage and clearance distance output – output	≥ 5.5 mm
Dielectric strength to mounting rail	4 kV _{eff} / 1 Min.	Impulse withstand voltage	6 kV (1.2/50 µs)

Further details of approvals / standards

Standards	EN 50178, EN 61000, EN 61326-3-2
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Connection data

Wire connection method	Screw connection	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	1.5 mm ²
Clamping range, min.	0.13 mm ²	Clamping range, max.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 12
Wire cross-section, solid, min.	0.2 mm ²	Wire cross-section, solid, max.	2.5 mm ²
Wire connection cross-section, finely stranded, min.	0.2 mm ²	Wire connection cross section, finely stranded, max.	2.5 mm ²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.2 mm ²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.2 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	2.5 mm ²
Twin wire-end ferrules, min.	0.5 mm ²	Twin wire-end ferrules, max.	1.5 mm ²
Blade size	size PHO		

Classifications

ETIM 5.0	EC001437	ETIM 6.0	EC001449
eClass 6.2	27-37-16-01	eClass 7.1	27-37-16-01
eClass 8.1	27-37-16-01	eClass 9.0	27-37-18-19
eClass 9.1	27-37-18-19		

Approvals

Approvals



ROHS

Conform

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Technical data

Downloads

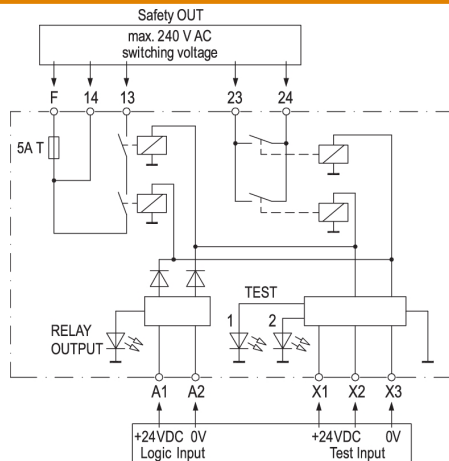
Approval/Certificate/Document of Conformity	TUV Safety Approved certificate EU Konformitätserklärung / EU Declaration of Conformity
Brochure/Catalogue	CAT 4.2 ELECTR 18/19 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	Beipackzettel / Package Insert – multilingual Safety manual – English Sicherheitshandbuch – Deutsch

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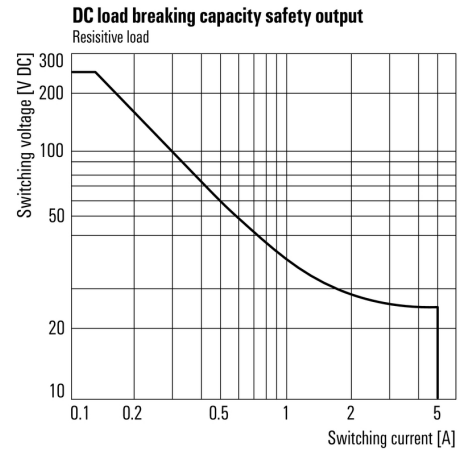
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Drawings

Wiring diagram



DC load limit curve



Dimensioned drawing

