

SCS 24VDC P1SIL3DS I**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

This safety relay is used in areas of process automation that require a functionally safe switch-off. The module meets the requirements for SIL3 according to EN 61508.

- Variant without monitoring circuit
- TUV certified and with "Approved Safety Function"
- cULus certified
- Optional compatible with Triconex[®] output modules Tricon[™], Trident[™], and Tri-GP[™]
- Multi-voltage input (24 - 230 V UC) in the monitoring circuit
- Externally accessible fuse

General ordering data

Version	SAFESERIES, Safety relay, 24 V DC (16...36 V DC), , Max. switching current, internal fuse : 5 A, SIL 3, EN 61508:2010
Order No.	2500980000
Type	SCS 24VDC P1SIL3DS I
GTIN (EAN)	4050118514322
Qty.	1 pc(s).

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Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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Technical data

Dimensions and weights

Depth	114.1 mm	Depth (inches)	4.492 inch
Height	117.3 mm	Height (inches)	4.618 inch
Net weight	0.001 g	Width	22.5 mm
Width (inches)	0.886 inch		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...50 °C
Humidity	95 %, no condensation		

Environmental Product Compliance

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

Rated control voltage	24 V DC (16...36 V DC)	Current consumption	50 mA
Status indicator	LED yellow	Protective circuit	Reverse polarity protection, Free-wheeling diode

Output (safety circuit)

Contact base material	AgNi	Contact design	1 x de-energised to safe (NO contact)
Max. permitted switching voltage	250 V AC / 30 V DC	Max. permitted switching current	5 A
Max. switching current, internal fuse	5 A	Max. switching current, external fuse	5 A
Max. switching capacity	1250 VA	Internal fuse	5 A time-lag
External back-up fuse	5 A time lag	Short circuit resistance	No
Switch-on time	≤ 25 ms	Switch-off time	≤ 30 ms
Min. switching capacity	10 mA @ 12 V		

Safety-related basic specifications

Device type	A	Hardware fault tolerance (HFT)	2
Safety category	SIL 3	Safety standard	EN 61508:2010
T _{proof}	12 Years		

General data

Rail	TS 35	Colour	black, yellow
Resistance to vibration	DNVGL-CG-0339, class A		

Insulation coordination

Creepage and clearance distance input – output	≥ 6 mm	Dielectric strength, Input/Output	3.51 kV _{eff} /5 s
Impulse withstand voltage	6 kV (1.2/50 µs)	Insulation coordination according to	EN 61010-2-201:2013 + AC:2013
Pollution severity	2	Protection degree	IP20
Rated voltage	300 V	Surge voltage category	III
Type of isolation at input and output	reinforced insulation		

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Further details of approvals / standards

Standards	EN 61010-2-201:2013 + AC:2013, EN 61326-1:2013, EN 61326-3-1:2008, EN 61326-3-2:2008	Certificate no. (cULus)	E141197
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Connection data

Wire connection method	Screw connection	Stripping length, rated connection	8 mm
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	Blade size	size PHO

Classifications

ETIM 6.0	EC001449	ETIM 7.0	EC001449
ECLASS 9.0	27-37-18-19	ECLASS 9.1	27-37-18-19
ECLASS 10.0	27-37-18-19	ECLASS 11.0	27-37-18-19

Approvals

Approvals



ROHS	Conform
UL File Number Search	E141197

Downloads

Approval/Certificate/Document of Conformity	TÜV Safety Approved certificate EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN
User Documentation	Sicherheitshandbuch - Deutsch Safety manual - English Beipackzettel / Package Insert - multilingual

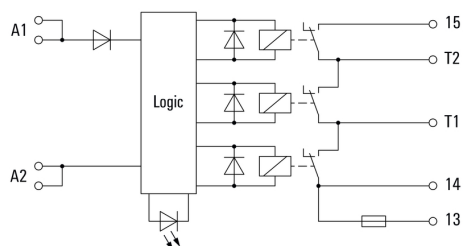
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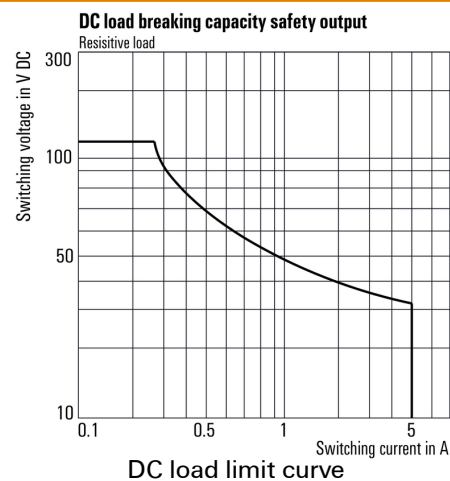
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Drawings

Wiring diagram



Graph



Dimensional drawing

