

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

Klingenbergstraße 26

D-32758 Detmold

Germany

Fon: +49 5231 14-0

Fax: +49 5231 14-292083

www.weidmueller.com



The SCS 24 V DC P1SIL3DS safety relay should be used in areas where a functionally safe switch-off is required. The requirements of EN 61508, SIL 3 can be satisfied with this module.

- Without monitoring circuit
- Externally accessible fuse
- TÜV certified "Safety Approved"

General ordering data

Type	SCS 24VDC P1SIL3DS
Order No.	1303890000
Version	SAFESERIES, Safety relay, 24 V DC $\pm$ 20%, 35 mA, Max. switching current, internal fuse : 5 A (refer to derating curve), SIL 3, DIN EN 61508
GTIN (EAN)	4050118102697
Qty.	1 pc(s).

SAFESERIES SCS 24VDC P1SIL3DS

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

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	177 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
------------	----------------

Input (safety circuit)

Rated control voltage	24 V DC $\pm$ 20%	Current consumption	42 mA
Guaranteed current consumption of 24 VDC -10%	35 mA	Inrush current	< 250 mA / < 5 ms
Status indicator	LED yellow	Protective circuit	Reverse polarity protection, Free-wheeling diode

Output (safety circuit)

Contact base material	AgNi 0.15 gold flashed	Contact design	NO contact
Max. permitted switching voltage	250 V AC / 30 V DC	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	typ. 7 ms	Switch-off time	typ. 14 ms
Min. switching capacity	10 mA @ 12 V		

Safety-related basic specifications

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

General data

Rail	TS 35	Colour	black, yellow
Noxious gas resistance to EN 60068-2-60	Yes (art. No.: 1304040000 only)		

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	$\geq$ 5.5 mm
Dielectric strength to mounting rail	4 kV _{eff} / 1 Min.	Impulse withstand voltage	6 kV (1.2/50 μ s)

SAFESERIES
SCS 24VDC P1SIL3DS

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data**Further details of approvals / standards**

Standards	EN 50178, EN 61000, EN 61326-3-2	Certificate no. (cULus)	E223474
-----------	----------------------------------	-------------------------	---------

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		

Ratings IECEx/ATEX/cUL

Certificate no. (cULus)	E223474
-------------------------	---------

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		

Approvals

Approvals



ROHS	Conform
------	---------

Downloads

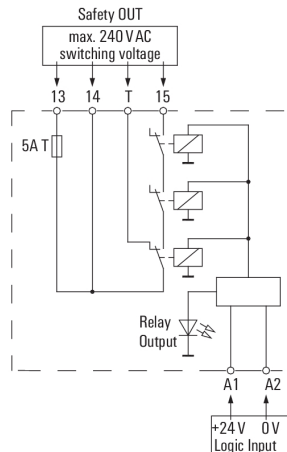
Approval/Certificate/Document of Conformity	TÜV Safety Approved certificate EU Konformitätserklärung / EU Declaration of Conformity
Brochure/Catalogue	CAT 4.2 ELECTR 18/19 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	Beipackzettel / Package Insert - multilingual Safety manual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

SAFESERIES SCS 24VDC P1SIL3DS

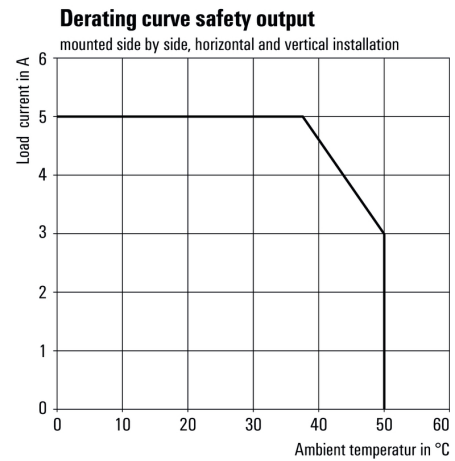
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings

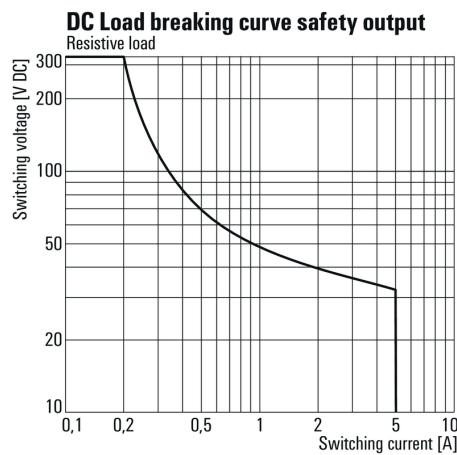
Wiring diagram



Derating curve



DC load limit curve



Dimensioned drawing

