

SCS 24VDC P1SIL3DS

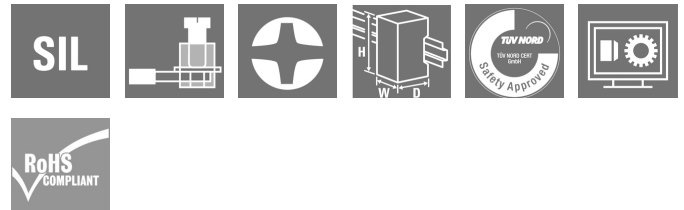
Weidmüller Interface GmbH & Co. KG

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 $\pm$ 20%, 35 mA, Max. switching current, internal fuse : 5 A (refer to derating curve), SIL 3, EN 61508:2010
Order No.	1303890000
Type	SCS 24VDC P1SIL3DS
GTIN (EAN)	4050118102697
Qty.	1 pc(s).

Creation date August 18, 2023 3:34:37 PM CEST

Catalogue status 04.08.2023 / We reserve the right to make technical changes.

SCS 24VDC P1SIL3DS

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

Depth	114.1 mm	Depth (inches)	4.492 inch
Height	117.3 mm	Height (inches)	4.618 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	177 g		

Temperatures

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

Input (safety circuit)

Connection designation (safety circuit)	A1, A2	Rated control voltage	24 V DC $\pm$ 20%
Current consumption	42 mA	Guaranteed current consumption of 24 VDC -10%	35 mA
Inrush current	$\leq$ 170 mA	Status indicator	LED yellow
Protective circuit	Reverse polarity protection, Free-wheeling diode		

Output (safety circuit)

Connection designation (safety output)	13, 14, 15	Contact design	1 x de-energised to safe (NO contact)
Contact base material	AgNi 0.15 gold flashed	Max. permitted switching voltage	250 V AC / 30 V DC
Max. permitted switching current	5 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	1250 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	T _{proof}	12 a
Hardware fault tolerance (HFT)	2	Safety category	SIL 3
Safety standard	EN 61508:2010		

General data

Operating altitude	$\leq$ 2000 m, above sea level	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	Pollution severity	2
Surge voltage category	III	Clearance and creepage distances for control side - load side	$\geq$ 5.5 mm
Dielectric strength for control side - load side	4 kV _{eff} / 1 min	Dielectric strength to mounting rail	4 kV _{eff} / 1 Min.
Impulse withstand voltage	6 kV (1.2/50 μ s)	Protection degree	IP20

SCS 24VDC P1SIL3DS

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Further details of approvals / standards

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

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
ETIM 8.0	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	ECLASS 12.0	27-37-18-19

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	807f1906-ce90-4f93-8801-4b128b343e6b

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E223474

Downloads

Approval/Certificate/Document of Conformity	TÜV Safety Approved certificate EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data – STEP
Engineering Data	WSCAD, EPLAN
User Documentation	Beipackzettel / Package Insert - multilingual Safety manual - English Sicherheitshandbuch - Deutsch
Catalogues	Catalogues in PDF-format
Brochures	

Creation date August 18, 2023 3:34:37 PM CEST

Catalogue status 04.08.2023 / We reserve the right to make technical changes.

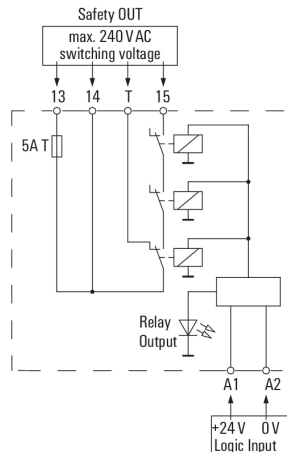
SCS 24VDC P1SIL3DS

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

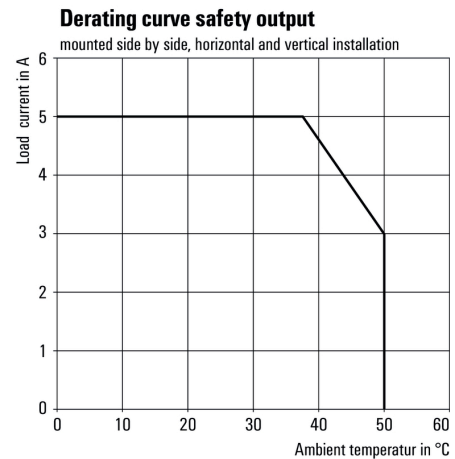
www.weidmueller.com

Drawings

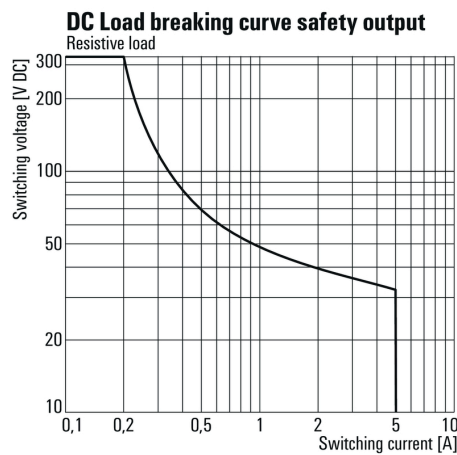
Wiring diagram



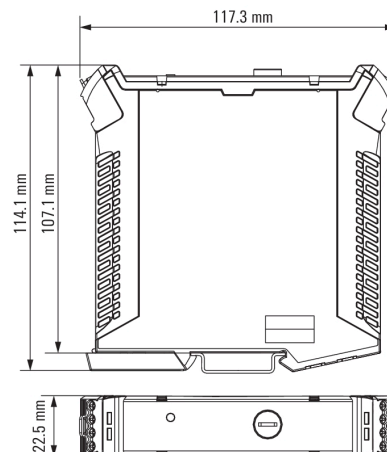
Derating curve



DC load limit curve



Dimensioned drawing



SCS 24VDC P1SIL3DS

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

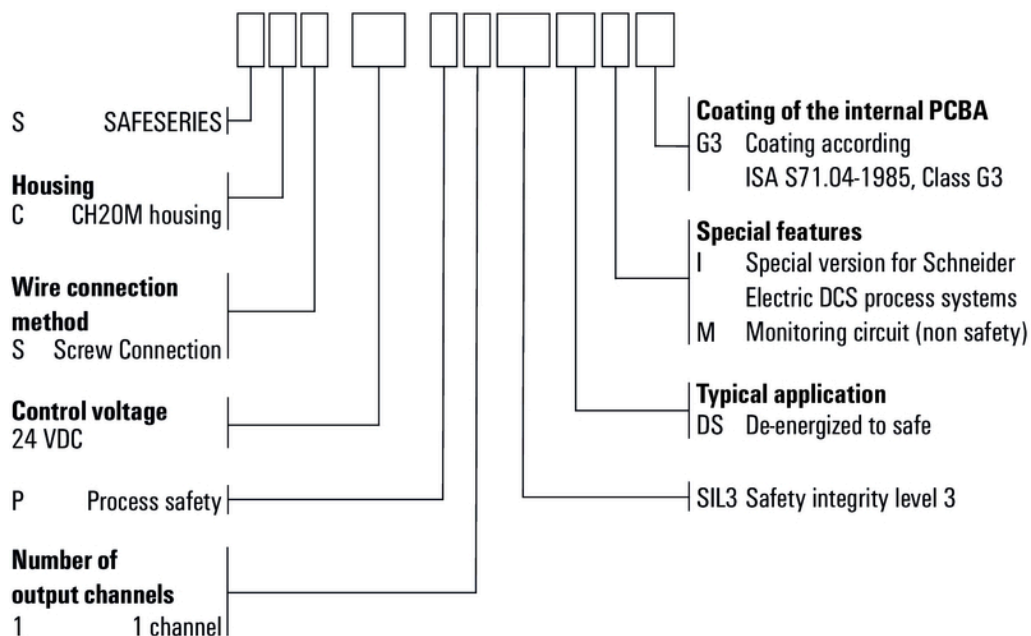
D-32758 Detmold

Germany

www.weidmueller.com

Drawings

Miscellaneous



Type codes