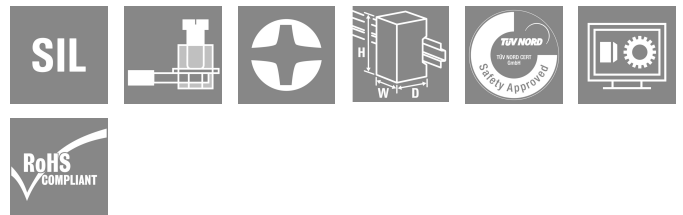


SCS 24VDC P1SIL3DS M

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 with monitoring circuit
- TUV certified and with "Approved Safety Function"
- cULus certified
- Multi-voltage input (24 - 230 V UC) in the monitoring circuit
- Available with G3 paint according to EN 60068-2-60
- 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.	1303760000
Type	SCS 24VDC P1SIL3DS M
GTIN (EAN)	4050118102703
Qty.	1 items

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Technical data

Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E223474

Dimensions and weights

Depth	114.1 mm	Depth (inches)	4.4921 inch
Height	117.3 mm	Height (inches)	4.6181 inch
Width	22.5 mm	Width (inches)	0.8858 inch
Net weight	200 g		

Temperatures

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

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	807f1906-ce90-4f93-8801-4b128b343e6b

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	<250 mA / <5 ms	Status indicator	LED yellow
Protective circuit	Reverse polarity protection, Free-wheeling diode		

Input (monitoring)

Rated control voltage	24 V UC...230 V UC \pm 10 %	Current consumption	23 mA @ 24 V DC, 4,4 mA @ 230 V AC
Status indicator	LED yellow	Protective circuit	Rectifier

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

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Output (monitoring)

Contact design	CO contact	Contact base material	AgNi 5µm Au
Max. permitted switching voltage	24 V DC	Max. allowed switching current	30 mA
Switch-on time	typ. 17 ms	Short circuit resistant	No
Min. switching capacity	1 mA @ 1 V		

Safety-related basic specifications

Tproof	12 a	Device type	A
Hardware fault tolerance (HFT)	2	Safety category	SIL 3
Safety standard	EN 61508:2010		

General data

Operating altitude	≤ 2000 m, above sea level	Mounting 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	≥ 5.5 mm
Dielectric strength for control side - load side	4 kVeff / 1 min	Dielectric strength to mounting rail	4 kVeff / 1 Min.
Impulse withstand voltage	6 kV (1.2/50 µs)	Protection degree	IP20

Further details of approvals / standards

Standards	EN 61000, EN 61326-3-2	Certificate no. (cULus)	E223474
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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 8.0	EC001449	ETIM 9.0	EC001449
ETIM 10.0	EC001449	ECLASS 14.0	27-37-18-19
ECLASS 15.0	27-37-18-19		

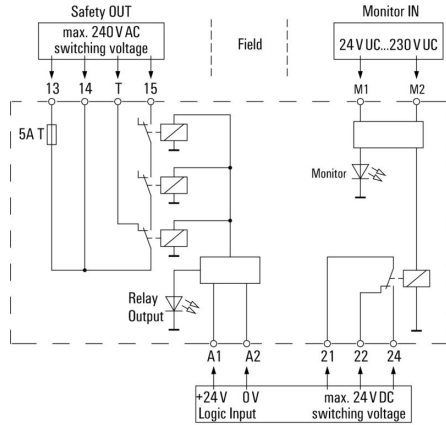
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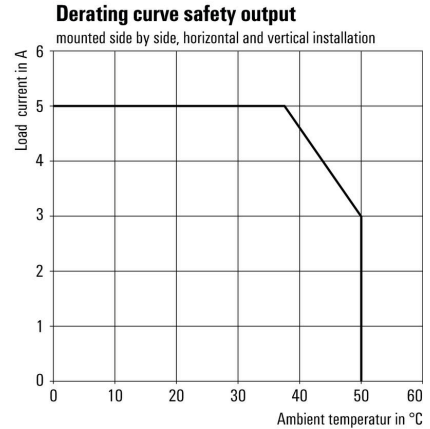
Drawings

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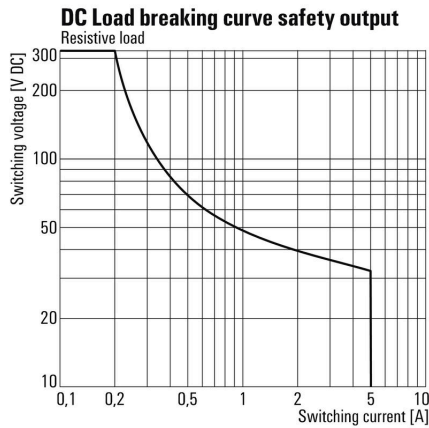
Wiring diagram



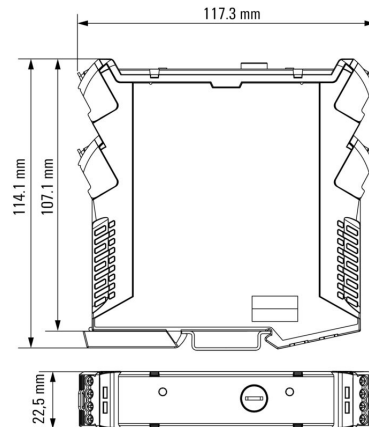
Derating curve



DC load limit curve



Dimensioned drawing



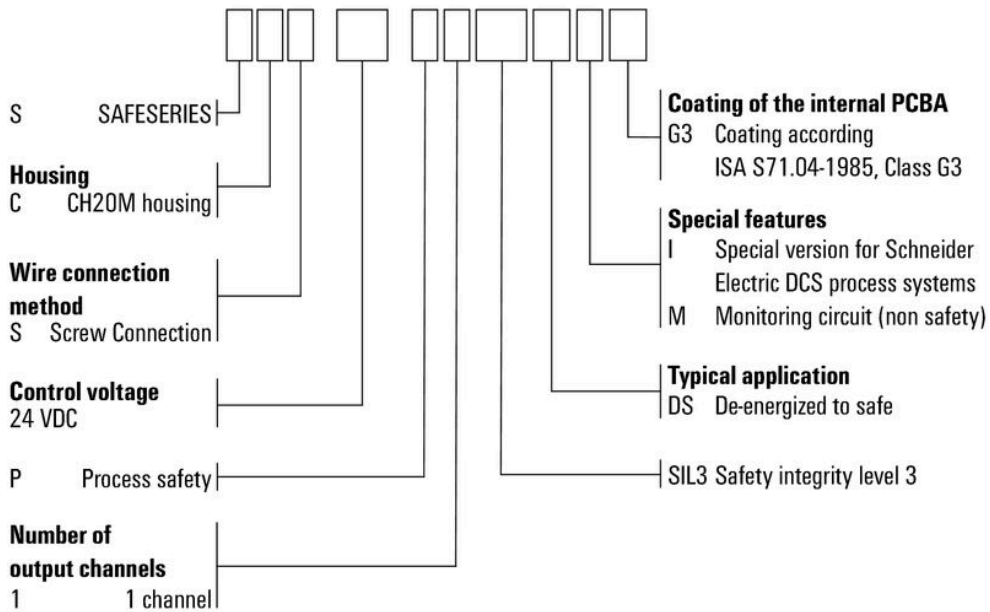
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Miscellaneous



Type codes