

SCS 24VDC P2SIL3ES**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Especially for areas of process automation in which the functionally safe shutdown of the fuel supply to combustion plants is necessary. The relay complies with SIL3 and meets the requirements of EN ISO 13849-1 (PLe).

- TUV certified "Approved Safety Function"
- Forcibly guided contacts according to EN 61810-3 Type B
- 2-channel design suitable for protection of human and machine
- Can be used for electrical equipment of combustion plants according to EN 50156

General ordering data

Version	SAFESERIES, Safety relay, 24 V DC $\pm 15\%$, 24 VDC $+15\%$ / -10% during auto-start, 35 mA, 5, SIL 3, DIN EN 61508, EN ISO 13849-1 (PLe)
Order No.	1319280000
Type	SCS 24VDC P2SIL3ES
GTIN (EAN)	4050118125078
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	119.6 mm	Height (inches)	4.709 inch
Net weight	292 g	Width	22.5 mm
Width (inches)	0.886 inch		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...55 °C
Humidity	40 °C / 93 % rel. humidity, no condensation		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Supply

Status display	LED green: supply, Yellow LED: signal	Protective circuit	Reverse polarity protection, Free-wheeling diode
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Input (power supply)

Connection designation	A1, A2, C1, C2	Rated control voltage	24 V DC $\pm 15\%$, 24 VDC +15% / -10% during auto- start
Current consumption	55 mA (release circuit enabled), 6 mA (release circuit not enabled)	Guaranteed current consumption at 24 V DC -10%	35 mA
Inrush current	750 mA / 5 ms (for starting with S33/S34 (start circuit)), 2 A / 20 ms (for starting with A1/A2 (autostart))	Response time	with bridge via C1/C2: typ. 50 ms, without bridge via C1/C2: typ. 20 ms
Status display	LED green: supply, Yellow LED: signal	Protective circuit	Reverse polarity protection, Free-wheeling diode
Short-circuit detection	Yes, max. 4 s up to disconnection (thermistor)		

Starting circuit

Anschlussbezeichnung	S33, S34, S35	Operating voltage	22 V DC, from internal power supply
Function	falling edge (button via S33/S34), rising edge (permanent bridge via S33/S35)		

Monitoring circuit

Connection designation	S11, S12, S21, S22	Input	2, each externally bridgeable
Operating voltage	22 V DC, from internal power supply		

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Output (release circuit)

Connection designation	13, 14, 23, 24	Contact design	2 NO positively-driven (EN 50205 type B)
Contact base material	AgSnO	Switching voltage AC, max.	250 V
Max. permissible switching current	5 A	Max. switching current, external fuse	5 A
Max. switching capacity	1250 VA	External back-up fuse	5 A time lag
Turn-on time	55 ms (C1/C2 bridged, switched via A1/A2), 30 ms (opening/closing of monitoring circuit)	Turn-off time	55 ms (C1/C2 bridged, switched via A1/A2), 15 ms (opening/closing of monitoring circuit)
Min. switching capacity	10 mA @ 12 V		

Feedback output

Connection designation	31, 32	Contact design	1 NC positively-driven (EN 50205 type B)
Switching voltage AC, max.	250 V	Max. switching current.	1 A

Safety-related basic specifications

Device type	A	Hardware fault tolerance (HFT)	1
Safety category	SIL 3	Safety standard	DIN EN 61508, EN ISO 13849-1 (PLe)
T _{proof}	12 Years		

Load side

Inrush current	750 mA / 5 ms (for starting with S33/S34 (start circuit)), 2 A / 20 ms (for starting with A1/A2 (autostart))
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General data

Rail	TS 35	Colour	black, yellow
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Insulation coordination

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

Further details of approvals / standards

Standards	EN 50178, EN 61000, EN 61326-3-2, EN ISO 13849-1 (PLe)	Equipment for furnaces	EN 50156
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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 PH0

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

Downloads

Approval/Certificate/Document of Conformity	TUV Safety Approved certificate EG-Baumusterprüfbescheinigung / EC type-examination certificate EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Beipackzettel / Package Insert - multilingual Sicherheitshandbuch – Deutsch Safety manual – English

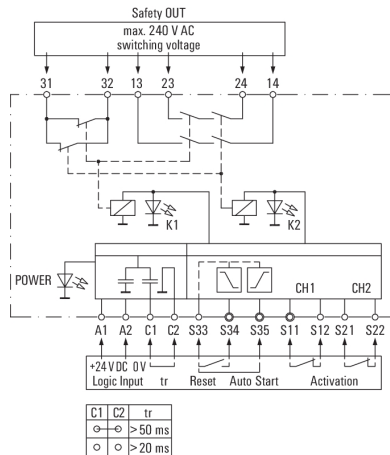
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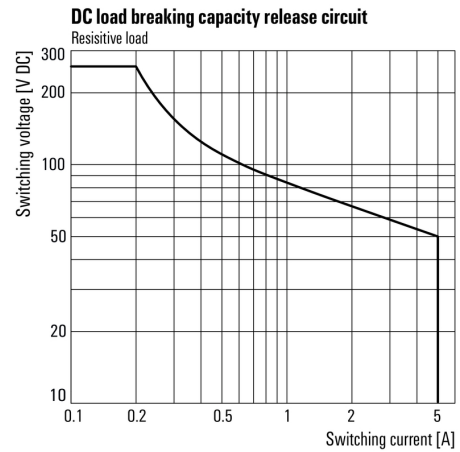
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Drawings

Wiring diagram



DC load limit curve



Dimensioned drawing

