

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

Klingenbergstraße 16

D-32758 Detmold

Germany

Fon: +49 5231 14-0

Fax: +49 5231 14-292083

www.weidmueller.com



The feed-in of fuel must be interrupted as soon as a boiler plant meets any safety criterion. With the SCS 24 V DC P2SIL3ES safety relay, you can conduct an emergency shut-down of the fuel supply to furnaces up to safety requirement level SIL 3.

- Positively-driven contacts acc. to EN 50205 type B
- 2-channel design
- Usage acc. to EN 50156 (electrical equipment for furnaces)
- TÜV certified "Safety Approved"

**General ordering data**

Type	SCS 24VDC P2SIL3ES
Order No.	<a href="#">1319280000</a>
Version	SAFESERIES, Safety relay, 24 V DC $\pm 15\%$ , 24 VDC +15% / -10% during auto-start, 35 mA, 6, SIL 3, DIN EN 61508, EN ISO 13849-1 (PLe)
GTIN (EAN)	4050118125078
Qty.	1 pc(s).

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**Technical data**
**Dimensions and weights**

Width	22.5 mm	Width (inches)	0.886 inch
Height	119.6 mm	Height (inches)	4.709 inch
Depth	114.1 mm	Depth (inches)	4.492 inch
Net weight	292 g		

**Temperatures**

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

**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, power, LED yellow, signal	Protective circuit	Reverse polarity protection, Free-wheel diode
Short-circuit detection	Yes, max 4 s up to switch- off (Polyfuse)		

**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		

**Output (safety circuit)**

External back-up fuse	5 A time lag
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**Technical data**
**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	6 A	Max. switching current, external fuse	5 A
Max. switching capacity	2000 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	20 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
T <sub>proof</sub>	12 Years	Safety category	SIL 3
Safety standard	DIN EN 61508, EN ISO 13849-1 (PLe)		

**General data**

Mounting rail	TS 35
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**Insulation coordination**

Rated voltage	300 V	Surge voltage category	III
Pollution severity	2	Protection degree	IP20
Dielectric strength input - output	4 kV <sub>eff</sub> / 1 min	Creepage and clearance distance input - output	≥ 5.5 mm
Dielectric strength output - output	4 kV <sub>eff</sub> / 1 min	Creepage and clearance distance output - output	≥ 5.5 mm
Dielectric strength to mounting rail	4 kV <sub>eff</sub> / 1 min.	Impulse withstand voltage	6 kV (1.2/50 μs)

**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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**Technical data****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 <sup>2</sup>
Clamping range, min.	0.13 mm <sup>2</sup>	Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 12
Wire cross-section, solid, min.	0.2 mm <sup>2</sup>	Wire cross-section, solid, max.	2.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded, min.	0.2 mm <sup>2</sup>	Wire connection cross section, finely stranded, max.	2.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.2 mm <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.2 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	2.5 mm <sup>2</sup>
Twin wire-end ferrules, min.	0.5 mm <sup>2</sup>	Twin wire-end ferrules, max.	1.5 mm <sup>2</sup>
Blade size	size PHO		

**Classifications**

ETIM 5.0	EC001437	ETIM 6.0	EC001449
eClass 6.2	27-37-16-01	eClass 7.1	27-37-16-01
eClass 8.1	27-37-16-01	eClass 9.0	27-37-16-01
eClass 9.1	27-37-18-19		

**Approvals**

Approvals



ROHS Conform

**Downloads**

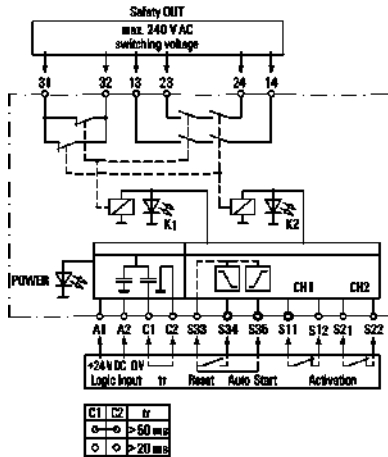
Approval/Certificate/Document of Conformity	<a href="#">TUV Safety Approved certificate</a> <a href="#">TUV type certification</a> <a href="#">DE_PA_5600_160318_002.pdf</a>
Brochure/Catalogue	<a href="#">CAT 4.2 ELECTR 15/16 EN</a>
Engineering Data	<a href="#">EPLAN_WSCAD</a>
User Documentation	<a href="#">1412550000.pdf</a> <a href="#">Manual</a>

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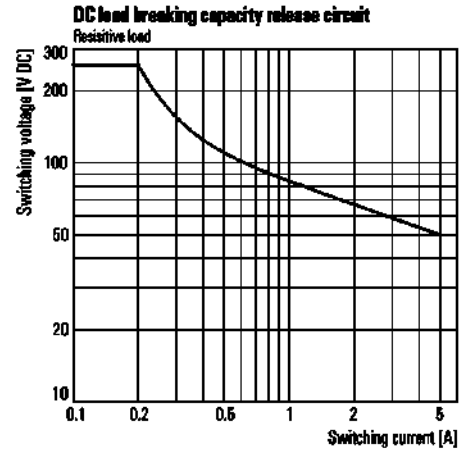
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**Drawings**

**Wiring diagram**



**DC load limit curve**



**Dimensioned drawing**

