

4



Safety Relays Safety Switches

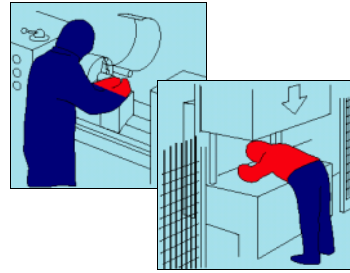


**ZANDER
AACHEN**

it works

Why safety technology?

To take preventive measures in order to protect those people, who are exposed to the danger outgoing from a machine. The CE-guidelines compellingly prescribe these measures.



To profit by ZANDER

1978

NET: First ZANDER-Safety-Switch with force guided safety contacts



1989



SR1: Emergency-stop-switching device, as the basis for the first expandable safety switching device system.

„benefit from our know-how“

1994

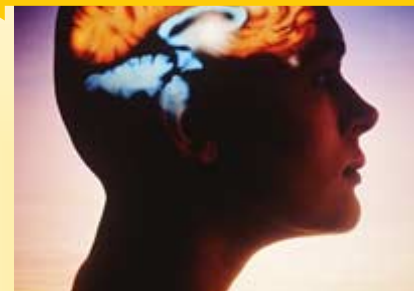


SR2S: The miniaturization progresses: As one of the first ZANDER offers an emergency stop relay with only 22,5mm width, up to safety category 4.

1998



The SR“C“-System: The safety switching devices in a new design are modular expandable. Non-time delayed and time delayed safety switching devices are realizable in any combination of a few standard components.



Our safety-know-how for you



„Tested safety system“

Most ZANDER-safety components are examined by independent testing institutes such as BG, TÜV, UL etc. Please, ask for details to the respective devices.

ZANDER for all cases



„ZANDER-safety everywhere“



ZANDER-safety components work everywhere: at machine tools, packaging machines, in the food industry, automobile industry...

We also bring your old machine to safe conditions - just ask us.

Only 4 modules solve all problems

The new safety emergency stop switching devices SR“C” are modular expandable:

e.g: **SR3C + SREC + SRTC =**

5 non-time delayed safety contacts

3 time delayed safety contacts

1 auxiliary contact

With only 67,5mm width



„modular expandable“

...is here, **ZANDER INNOVATIVE POWER OF SAFETY**

With only 4 modular basic components you can combine

- each desired number of safety contacts
 - any time-delayed safety contacts
- with extreme compact dimensions.**

Applications of emergency stop relays

Application		SR1C	SR2C	SR3C	SR4C	SREC	SRTC	S2HC	SR1
Manual emergency stop circuit		•	•	•	•	•	•	-	•
Turning door monitoring Flap monitoring		•	•	•	•	•	•	-	•
Sliding door monitoring		•	•	•	•	•	•	-	•
Switching mat monitoring		-	•	•	-	•	•	-	-
Two-hand control		-	-	-	-	-	-	•	-
Contact extension		-	-	-	-	•	•	-	-
Time-delayed emergency stop circuit		-	-	-	•	-	•	-	-

The complete range

The safety technology only from the professional!

ZANDER offers safety components according to the newest international regulations. We supply a general, complete program from the safety switch to the safety emergency stop switching device - cost-optimized for your application.

Nearly all components are tested and certified by independent institutes - tested security for our customers. We also like to help at your safety-relevant questions. Benefit from our experience!

ZANDER supplies a multiplicity of customized variants and special solutions apart from the standard components - ask us!



„everything from one hand“

Emergency-Stop-Switching Devices

- supervise the connected safety switches
- control and supervise the attached contactors
- switch safely and lock off at danger
- prevent automatic restart

Which device for which risk

A risk estimation of the endangerment outgoing from the machine is necessary for this. Depending on the determined category for safety-relevant parts of the control the applicable ZANDER safety switching devices can be selected.

The harmonized European standard EN954-1 describes the procedure.

„ZANDER Know How“

Risk estimation

S Degree of the injury

- S1 light injury
- S2 heavy irreversible injury or death

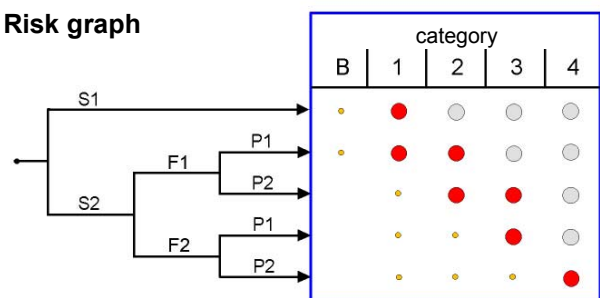
F Frequency and duration in the danger zone

- F1 rarely to more frequent and/or short duration
- F2 often and/or continuously

P Possibility for the avoidance of the endangerment

- P1 possible under certain circumstances
- P2 hardly possible

Risk graph

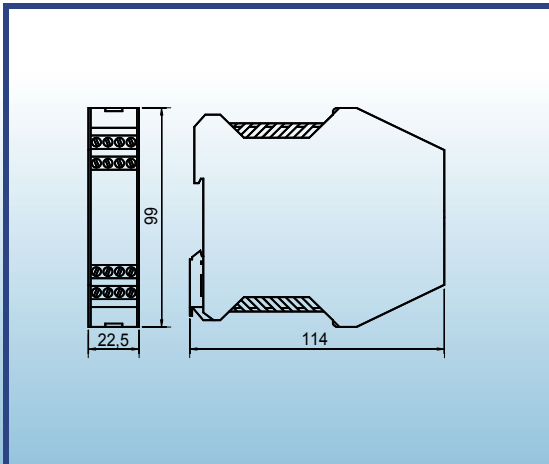
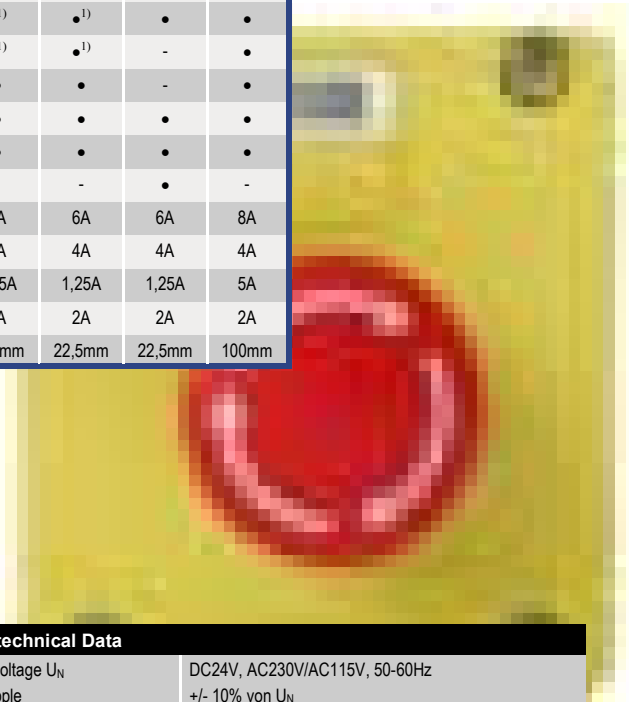


- preferred category for points of reference
- oversized measure regarding (determined) the risk
- Possible category, which requires additional measures

Technical data emergency stop relay

Type	SRLC	SR2C	SR3C	SR4C	SREC	SRTC	S2HC	SR1
Basic device	•	•	•	•	-	-	•	•
Extension device	-	-	-	-	•	•	-	-
Max. safety category	3	4	4	4	3	3	4/IIIC	3
Stop category	0	0	0	0/1	0	1	0	0
Safety contacts (non-time delayed)	2	2	3	1-3	3	-	2	3
Time delayed safety contacts	-	-	-	1-3	-	3	-	-
Auxiliary contacts	-	-	1	-	1	1	-	2
Manual start (push button)	•	•	•	•	• ¹⁾	• ¹⁾	•	•
Fault control start push button	-	•	•	•	• ¹⁾	• ¹⁾	•	•
Automatic start	•	•	•	•	• ¹⁾	• ¹⁾	-	•
Control 1-channel	•	•	•	•	•	•	-	•
Control 2-channel	•	•	•	•	•	•	•	•
Earth fault monitoring	-	•	•	•	•	•	•	•
Short circuit monitoring	-	•	•	•	-	-	•	-
Max. current AC12 / 250V	6A	6A	8A ²⁾	8A ²⁾	6A	6A	6A	8A
Max. current AC15 / 250V	4A	4A	3A	3A	4A	4A	4A	4A
Max. current DC12 / 24V	1,25A	1,25A	2A	3A	1,25A	1,25A	1,25A	5A
Max. current DC13 / 24V	2A	2A	2A	3A	2A	2A	2A	2A
Housing	22,5mm	22,5mm	22,5mm	22,5mm	22,5mm	22,5mm	22,5mm	100mm

- 1) depends on the basic device
2) max. sum current 15A



General technical Data

Operating voltage U_N	DC24V, AC230V/AC115V, 50-60Hz
Residual ripple	+/- 10% von U_N
Power consumption	approx. 1VA / 1,5W; SR1 ca. 6VA, 8W
Contacts	Safety contacts NO, auxiliary contacts NC
Contact rating	See selection table
Minimum current	24V, 20mA
External fuses for safety contacts	4A slow-blow /6A quick-blow; SR3C/SR4C/SR1: 6A slow-blow , 8A slow-blow
Service life	mechanical approx. 1×10^7 , electrical approx. 1×10^5
Wire width	2,5mm ²
Length of control lines	1000m at 0,75mm ²
Rated impulse withstand voltage	2,5kV (control voltage/ contacts)
Dielectric strength	4kV DIN VDE 0110-1:1997-04
Protection	IP20
Temperature range	DC24V: -15° - + 60°C; SR3C/SR4C: -15° - + 40°C AC230V/115V: -15° - + 40°C
Weight	approx 230g; SR1 700g
Mounting	Din rail according to DIN EN 50022-35

SRLC

Emergency-Stop-Relay
and safety guard monitoring according to EN60204-1. Single channel or dual channel emergency stop.



- Stop-category: 0
- Safety category: 3
- Control: 1- or 2-channel
- 2 Safety contacts
- Manual start
- Modular extendable with SREC, SRTC

Order-No operating voltage

472160 SRLC, AC230V
472161 SRLC, AC115V
472162 SRLC, AC/DC24V

Contact rating of safety con.

AC: 250V, 1500VA, 6A, AC-12
DC: 24V, 30W, 1,25A, DC-12

Safety contacts

2 NO

According to

VDE0113 part 1,
EN60204-1, EN954-1

Zertificate

CE, BG, cUL

SR2C

Emergency-Stop-Relay
and safety guard monitoring according to EN60204-1. Single channel or dual channel emergency stop.



- Stop-category: 0
- Safety category: 4
- Control: 1- or 2-channel
- Earth fault- and/or short circuit monitoring
- 2 Safety contacts
- Activation: manually or automatically
- Modular extendable with SREC, SRTC

Order-No operating voltage

472150 SR2C, AC230V
472151 SR2C, AC115V
472152 SR2C, AC/DC24V

Contact rating of safety con.

AC: 250V, 1500VA, 6A, AC-12
DC: 24V, 30W, 1,25A, DC-12

Safety contacts

2 NO

According to

VDE0113 part 1,
EN60204-1, EN954-1

Zertificate

CE, BG, cUL

SR3C

Emergency-Stop-Relay
and safety guard monitoring according to EN60204-1. Single channel or dual channel emergency stop.



- Stop-category: 0
- Safety category: 4
- Control: 1- or 2-channel
- Earth fault- and/or short circuit monitoring
- 3 Safety contacts
- Activation: manually or automatically
- Modular extendable with SREC, SRTC

Order-No operating voltage

472170 SR3C, AC230V
472171 SR3C, AC115V
472172 SR3C, AC/DC24V

Contact rating of safety con.

AC: 250V, 1500VA, 8A*, AC-12
DC: 24V, 30W, 1,25A, DC-12

Safety contacts

3 NO, 1 NC auxiliary contact

According to

VDE0113 part 1,
EN60204-1, EN954-1

Zertificate

CE, BG, cUL

SR4C

Emergency-Stop-Relay
and safety guard monitoring according to EN60204-1 with time delayed or non time delayed safety contacts.



- Stop-category: 0 for non time delayed, 1 for time delayed contacts
- Safety category: 4
- Control: 1- or 2-channel
- Earth fault- and/or short circuit monitoring
- 4 Safety contacts
- Activation: manually or automatically
- 3 variants with 1, 2 or 3 time delayed contacts.

Order-No operating voltage

472212 SR4C, DC24V, 3u./1del.
472222 SR4C, DC24V, 2u./2del.
472232 SR4C, DC24V, 1u./3del.

Contact rating of safety con.

AC: 250V, 1500VA, 8A*, AC-12
DC: 50V, 400W, 8A, DC-12

Safety contacts

4 NO

According to

VDE0113 part 1,
EN60204-1, EN954-1

Zertificate

CE, BG, cUL

* max. cumulating current 15A

SREC

Safety Contact-Expansion Unit

SREC expands the basic devices SRLC, SR2C, SR3C with 3 non-time delayed safety contacts. Actuation is done by safety contact of the basic device.



- Stop-category: 0
- Safety category: 3
- Control: basic device SR-series
- Earth fault monitoring
- 3 safety contacts
- With any number expandable: several SREC/SRTC at one basic device possible

Order-No operating voltage

472180 SREC, AC230V
472181 SREC, AC115V
472182 SREC, AC/DC24V

Contact rating of safety con.

AC: 250V, 1500VA, 6A, AC-12
DC: 24V, 30W, 1,25A, DC-12

Safety contacts

3 NO

According to

VDE0113 part 1
EN60204-1, EN954-1

Zertificate

CE, BG, cUL

SRTC

Time-delayed Emergency Stop Relay

SRTC expands the basic devices SRLC, SR2C, SR3C with 3 time-delayed safety contacts. Actuation is done by safety contact of the basic device.



- Stop-category: 1
- Safety category: 3
- Control: basic device SR-series
- Earth fault monitoring
- 3 safety contacts
- With any number expandable: several SREC/SRTC at one basic device possible
- Time-delay 1..30s continuously adjustable

Order-No operating voltage

472190 SRTC, AC230V
472191 SRTC, AC115V
472192 SRTC, AC/DC24V

Contact rating of safety con.

AC: 250V, 1500VA, 6A, AC-12
DC: 24V, 30W, 1,25A, DC-12

Safety contacts

3 time-delayed NO

According to

VDE0113 part 1
EN60204-1, EN954-1

Zertificate

CE, BG, cUL

S2HC

2-Hand-Relay

Supercompact Safety-Two-Hand-Control according to EN574, Typ III C, up to the highest safety category 4 according to EN954-1.



- Stop-category: 0
- Safety category: 4 type III C nach EN574
- Control: 2-channel
- Earth fault- and/or short circuit monitoring
- 3 safety contacts
- Internal error monitoring

Order-No operating voltage

472402 S2HC, AC/DC24V

Contact rating of safety con.

AC: 250V, 1500VA, 6A, AC-12
DC: 24V, 30W, 1,25A, DC-12

Safety contacts

2 NO

According to

EN574, EN954-1
EN60204-1, VDE0113 part 1

Zertificate

CE, BG

SR1

Emergency-Stop-Relay

and safety guard monitoring according to EN60204-1. Single channel or dual channel emergency stop. Speciality: max. switching voltage AC400V.



- Stop-category: 0
- Safety category: 3
- Control: 1- or 2-channel
- Earth fault monitoring
- 3 safety contacts
- Activation: manually or automatically
- Safety contacts up to AC400V

Order-No operating voltage

472000 SR1, AC230V
472001 SR1, AC115V
472002 SR1, DC24V

Contact rating of safety con.

AC: 250V, 2000VA, 8A, AC-12
DC: 24V, 120W, 5A, DC-12

Safety contacts

3 NO, 1NC/1NO aux. contact

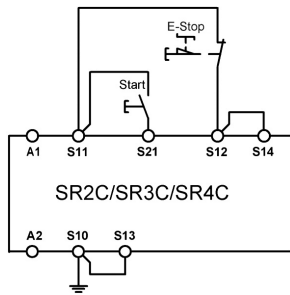
According to

VDE0113 part 1
EN60204-1, EN954-1

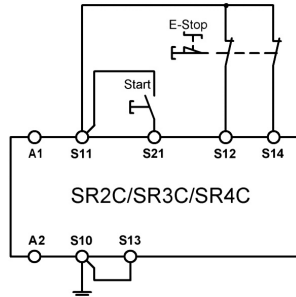
Zertificate

CE

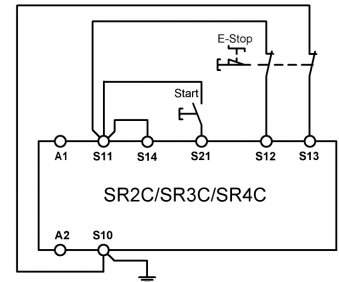
Control: single or dual-channel



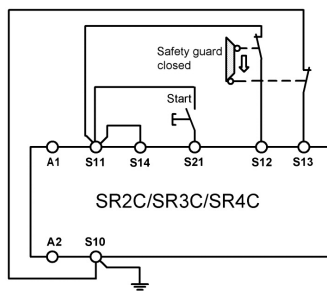
One channel emergency-stop application, up to safety category 3



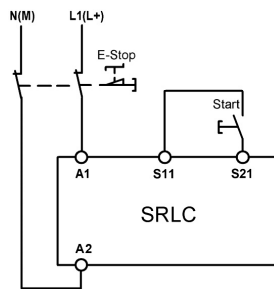
Two channel emergency-stop application with earth fault monitoring (without short circuit monitoring), up to safety category 3



Two channel emergency-stop application with earth fault monitoring and short circuit monitoring, up to safety category 4

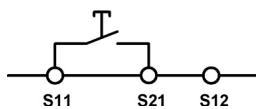


Two-channel safe-guard-monitoring with earth fault monitoring and short circuit monitoring, up to safety category 4

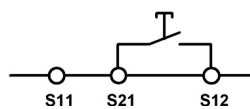


Dual-channel emergency stop (without fault monitoring of the emergency stop button and the supply lines, only manual start) up to safety category 3

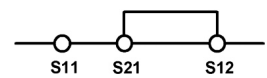
Start Performance



Monitored manual start, up to category 4; it is monitored that the start button has been opened before the emergency button is closed.

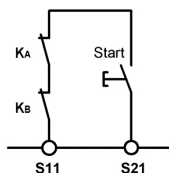


Manual start without monitoring, up to category 3



Automatic start (e.g. for safety gate application), up to category 3.

Feedback Circuit



The feedback circuit monitors contactors or the extension modules SREC or SRTC which are connected to the emergency stop relay. Ka, Kb are force-guided contacts of the connected contactor or extension module, up to category 3











Safety switches for all cases

We have the suitable safety switch for each application: tested, certified and optimally adapted to the ZANDER emergency stop switching devices - ask us.

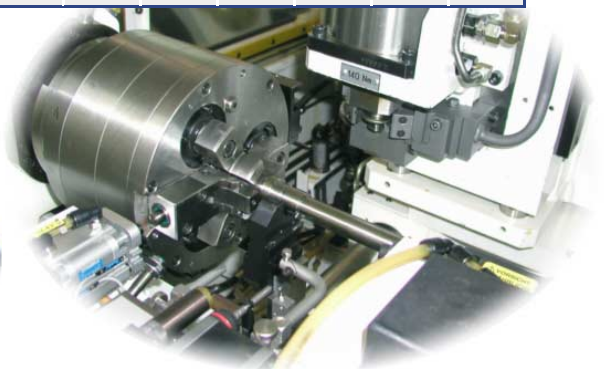
"everything fits together"



Applications safety switches

Application		ELF3	CADET3	TROJAN	SPRITE3	ENSIGN3	ROTACAM	IMP	LIFELINE	TITAN	CENTURION	FERROGARD	SIPHA
Turning door monitoring		•	•	•	•	•	•	-	-	•	•	•	•
Flap monitoring		•	•	•	-	-	-	-	-	•	•	•	•
Sliding door monitoring		•	•	•	-	-	-	•	-	•	•	•	•
Conveyor monitoring		-	-	-	-	-	-	-	•	-	-	-	-
Processing centers, robot ranges		-	-	-	-	-	-	-	•	-	-	-	-
Door monitoring with mechanical guard locking		-	-	-	-	-	-	-	-	•	•	-	-
Contactless monitoring		-	-	-	-	-	-	-	-	-	-	•	•
End position control		•	•	•	-	-	-	•	-	•	-	•	•

**Safety
&
Automation**



ELF 3

Safety Switch

With separate actuator for mounting at a guard door. The head is rotatable. Therefore ELF offers 8 different actuator entry positions.



cULus TÜV

- Miniature housing
- 2 N.C. safety contacts or 1 N.C. & 1 N.O.
- Ideal for small guard doors
- Rotatable head
- 8 possible positions
- Protection IP67



Order-No	Type/Actuator
901125	ELF3, 1N.C.&1N.O. Flat
901126	ELF3, 2N.O. Flat
901127	ELF3, 1N.C.&1N.O., 90°
901128	ELF3, 2N.O., 90°
Switching capacity	
AC: 250V, 500VA, 2A, AC-15 DC: 24V, 2A	
Safety contacts	
2 N.C.	
According to	
EN60947-5-1, EN60204-1, EN292, EN 1088	
Dimensions / conduit	
75x25x29mm / 1xM16	
Zertificate	
CE, cUL, TÜV	

CADET 3

Safety Switch

With separate actuator for mounting at a guard door. The head is rotatable. Therefore CADET offers 8 different actuator entry positions.



cULus TÜV

- Miniature housing
- 3 N.C. safety contacts or 2 N.C. / 1 N.O.
- Ideal for small guard doors
- Rotatable head
- 8 possible positions
- Protection IP67



Order-No	Type/Actuator
901010	CADET3, 2Ö/1S, Flat
901011	CADET3, 3Ö, Flat
901012	CADET3, 1Ö/1S 90°
901013	CADET3, 3Ö, 90°
Switching capacity	
AC: 250V, 500VA, 2A, AC-15 DC: 24V, 2A	
Safety contacts	
3 N.C. or 2 N.C. & 1 N.O. auxiliary contact	
According to	
EN60947-5-1, EN60204-1, EN292, EN 1088	
Dimensions / conduit	
91x31x31mm / 1xM16	
Zertificate	
CE, cUL, TÜV	

TROJAN 5

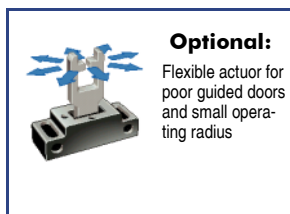
Safety Switch

With separate actuator for mounting at a guard door. The head is rotatable. 2 positiv breaking N.C. safety contacts and 1 auxiliary contact.



cULus TÜV

- 2 N.C. safety contacts 1 aux. contact
- Rotatable head
- 4 possible positions
- Actuator with self-ejecting mechanism
- Protection IP67
- Option: catch kit 50N retention force



Order-No	Type/Actuator
901120	TROJAN5, standard act.
901121	TROJAN5, flexible act.
901122	Catch kit (50N)
Switching capacity	
AC: 250V, 2A, AC-15 DC: 24V, 2A	
Safety contacts	
2 N.C., 1 N.O. (auxiliary contact)	
According to	
EN60947-5-1, EN60204-1, EN 1088, EN292	
Dimensions / conduit	
95x52x32mm / 3xM20	
Zertificate	
CE, BG, cUL	

TROJAN T15

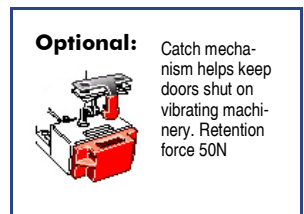
Safety Switch

With separate actuator for mounting at a guard door. The head is rotatable. Compact size, 2 positiv breaking N.C. or 1N.C. & 1N.O.



cULus TÜV

- 2 N.C. safety contacts or 1N.C. & 1N.O. aux.
- Rotatable head
- 4 possible positions
- Protection IP67
- Option: catch kit 50N retention force
- Option: flexible actuator



Order-No	Type
900130	TROJAN T15, 2N.C.
900131	TROJAN T15, 1N.C.&1N.O.
900122	Catch kit (50N)
900281	Flexible actuator
Switching capacity	
AC: 250V, 2A, AC-15 DC: 24V, 2A	
Safety contacts	
2 N.C. oder 1N.C. & 1 N.O. auxiliary contact	
According to	
EN60947-5-1, EN60204-1, EN 1088, EN292	
Dimensions / conduit	
75x52x32mm / 3xM20	
Zertificate	
CE, TÜV, cUL	

SPRITE3

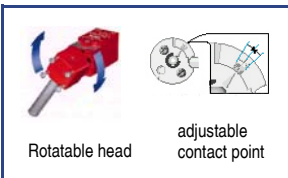
Hinge safety switch

Miniatur-safety switch with hinge operation. The rotation will be transferred to the actuator shaft.



cULus TÜV

- Ideal for small guard doors
- 2 N.C. safety contacts or 1N.C.& 1N.O. aux.
- Rotatable head
- 4 possible positions



Order-No Type	901032 SPRITE3, 1N.C.&1N.O. 901033 SPRITE3, 2N.C.
Switching capacity	AC: 250V, 500VA, 2A, AC-15 DC: 24V, 2A
Safety contacts	2 N.C. or 1N.C.&1N.O. auxiliary contact
According to	EN60947-5-1, EN60204-1, EN1088, EN292
Dimensions / conduit	75x25x29mm / 1xM16 Shaft 50mm
Zertificate	CE, TÜV, cUL

ENSIGN3

Hinge safety switch

Miniatur-safety switch with hinge operation. The rotation will be transferred to the actuator shaft.



cULus TÜV

- Compact size
- 3 N.C. safety contacts or 2N.C.& 1N.O. aux.
- Rotatable head
- 4 possible positions



Order-No Type/actuator dim.	901050 ENSIGN3, 2Ö, 1S, 80x10 901051 ENSIGN3, 3Ö, 80x10 901052 ENSIGN3, 2Ö, 1S, 60x8 901053 ENSIGN3, 3Ö, 60x8
Switching capacity	AC: 250V, 500VA, 2A, AC-15 DC: 24V, 2A
Safety contacts	3 N.C. or 2N.C.&1N.O. auxiliary contact
According to	EN60947-5-1, EN60204-1, EN1088, EN292
Dimensions / conduit	91x31x31mm / 1xM16 Shaft 80x10mm or 60x8mm
Zertificate	CE, cUL, TÜV

ROTACAM

Hinge safety switch

In heavy duty die cast alloy. The rotation will be transferred to the actuator shaft.



UL SP GS

- Extreme robust
- Protection IP66
- 2 N.C. safety contacts 1N.O. aux.
- Shaft can be used as hinge
- Adjustable cam



Order-No Type	901071 ROTACAM HS2 901073 ROTACAM P85
Switching capacity	AC: 250V, 500VA, 2A, AC-15 DC: 24V, 2A
Safety contacts	2 N.C. and 1N.O. aux. contact
According to	EN60947-5-1, EN60204-1, EN1088, EN292
Dimensions / conduit	99x65x40mm / 1x M20 Shaft 30x16mm (HS2) or 85x12,7mm (P85)
Zertificate	CE, BG, CSA, SUVA

IMP

Miniatur limit switch

Due to the extreme compact size the IMP will fit in the most confined spaces



SP

- Extreme compact
- 1 N.C safety contact, 1N.O. aux.
- Protection IP30

Connected via 3x5mm conduit entry break-outs.

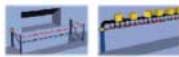
- IMP1: roller parallel to switch front
- IMP2: roller 90° to switch front

Order-No Type	900150 IMP1 900151 IMP2
Switching capacity	AC: 250V, 500VA, 2A, AC-15 DC: 24V, 2A
Safety contacts	1 N.C. and 1N.O. aux. contact
According to	EN60947-5-1, EN60204-1
Dimensions	54x25x23mm
Zertificate	CE, CSA

LIFELINE 3

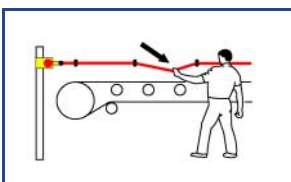
Rope safety switch

According to EN418. For spans up to 30m. A rope status indicator shows the correct rope set up.



TÜV cULus

- Switch lockout on rope pulled and rope slack
- Rope-status indicator
- Protection IP66
- Heavy duty die-cast aluminium alloy
- Standard DIN/EN50041 fixing centres



Order-No. Type

901175 LIFELINE3, 2N.C./2N.O.
901176 LIFELINE3, 3N.C./1N.O.
901177 LIFELINE3, 4N.C.

Switching capacity

AC: 250V, 500VA, 2A, AC-15
DC: 24V, 2A

Safety contacts

2-4N.C., up to 2N.O. (aux. cont.)

According to

EN60947-5-1, EN60204-1,
EN292, DIN EN 418

Dimensions / conduit

204x40x56mm / M20

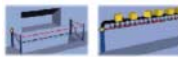
Zertificate

CE, TÜV, cUL

LIFELINE 4

Rope safety switch

Combination of rope pull switch and E-stop button according to EN418. Up to 75 meter span. Rope status indicator shows the correct set up.



cULus

- Incl. E-STOP Button
- Switch lockout on rope pulled and rope slack
- Rope-status indicator
- Protection IP66
- Heavy duty die-cast aluminium alloy



Rope status indicator

Order-No. Type

901164 LIFELINE4
900166 red rope, each meter

Switching capacity

AC: 250V, 500VA, 2A, AC-15
DC: 24V, 2A

Safety contacts

2N.C., 1N.O. (aux. contact)

According to

EN60947-5-1, EN60204-1,
EN292, DIN EN 418

Dimensions / conduit

200x69x85mm / 3xM20

Zertificate

CE, BG, cUL

Accessories

Rope Tensioner System LRTS

Unique rope tensioning system. The tensioner can be used in any rope position and can be installed in approx. 3 minutes.



LRTS contains 1 tensioner, 2 grippers, p. bolt and rope

- Up to 300mm of rope adjustment
- Up to 75m rope length
- No special tools required

Order-No. Type

900173 LRTS 5m rope
900175 LRTS 15m rope
900177 LRTS 30m rope
900179 LRTS 75m rope
900166 red rope, each meter
900167 p. bolt M8
900171 Tensioner spring
210mm 50N



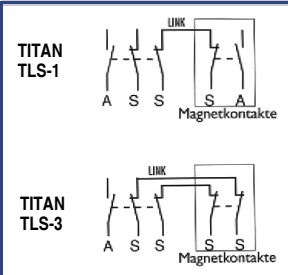
TITAN

Guard Locking Switch

In compact housing with separate actuator for installation at guard doors. A signal to the internal solenoid releases the lock mechanism. Rotatable head.



- Rotatable head
- 4 possible position
- Stainless steel entry slots
- Protection IP67
- Locking force 2000N
- 3NC/2NO or 4NC/1NO



Order-No Type

901560 TITAN TLS-1, ADC24V
901561 TITAN TLS-1, AC110V
901562 TITAN TLS-1, AC230V
901570 TITAN TLS-3, ADC24V
901571 TITAN TLS-3, AC110V
901572 TITAN TLS-3, AC230V

Switching capacity

AC: 250V, 2A, AC-15
DC: 24V, 2A

Safety contacts

TLS-1: 3Ö/1S, TLS-3: 4Ö/1S

According to

EN60947-5-1, EN60204-1, EN 1088, EN292

Dimensions / conduit

130x92x37mm / 3xM20

Zertificate

CE, BG, cUL

TITAN

Accessories

Available for TITAN TLS-GD2 are different actuators, locking cover with external override key and a sliding bolt actuator. Please order separately.



- Locking cover with override key
- Standard, flat or flexible actuator

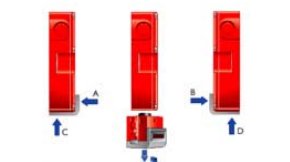
Optional:
Locking cover with override key

Optional:
Flexible actuator for poor guard alignment and small actuator radius

Sliding bolt actuator
140x40x34mm, lockable

Order-No Type

900280 Standard actuator
900283 Flat actuator
900284 Flexible actuator
900540 Locking cover
900285 sliding bolt actuator



CENTURION

Guard Locking Switch

With thumbwheel time delay. Locks the guard closed until the operator manually rotates the thumbwheel, retracting the shaft from the guard door.



- Manual time delay until machine run-down time is finished
- Stabil heavy duty case

RH-Version LH-Version

Order-No Type

901082 CENTURION -RH
901083 CENTURION -LH

Switching capacity

AC: 250V, 500VA, 2A, AC-15
DC: 24V, 2A

Safety contacts

2N.C., 1N.O. (aux. contact)

According to

EN60947-5-1, EN60204-1, EN292, DIN EN 418

Dimensions / conduit

98x64x41mm / M20

Zertificate

CE, BG, CSA



Any questions?

ZANDER - Hotline

+49 241-910501 16



.. together we'll find the solution

FERROGARD

Magnetic-safety switch

Non coded, with integrated overload protected safety contacts. Additional safety measurements can be required.



- High tolerance to misalignment
- Easy installation
- Protection IP65



Order-No Type / cable length

900180	FERROGARD1, 2m
900181	FERROGARD1, 4m
900182	FERROGARD2, 2m
900183	FERROGARD2, 4m
900184	FERROGARD3, intern
900185	FERROGARD4, intern
900187	FERROGARD6, 2m
900188	FERROGARD6, 4m

Switching capacity

1 N.C. safety contact:
only AC: 250V, 2A
ext. Fuse: 1.6A quick blow
aux. cont.: AC 250V/15VA/10W

Contacts / safety/aux.

FERROGARD1,6: 1N.C.
FERROGARD2,4: 1N.C./1N.O.
FERROGARD3: 1N.C./1N.O.

According to

EN60204-1, EN1088

Dimensions

FERROGARD 1,2 76x30x17mm
FERROGARD 3,4 69x50x36mm
FERROGARD 6 82x18x16mm

Zertificate

CE, CSA

SIPHA

Magnetic-safety switch

SIPHA is a coded magnetically based safety switch, which is used in connection with a SIPHA control unit.



- Coded Sensors
- Self-monitoring
- Protection IP67
- incl. actuator



Order-No Type / cable length

900401	SIPHA-Sensor S11, 3m
900402	SIPHA-Sensor S21, 3m
900403	SIPHA-Sensor S12, 3m
900404	SIPHA-Sensor S22, 3m
900410	SIPHA-Sensor S21, 10m
900409	SIPHA GD2, Steckverb.

Safety contacts

SIPHA S11, S21: 1 N.C./1 N.O.
SIPHA S12, S22, GD2:
1 N.C./1 N.O. and 1 N.C. aux.
contact each 1NC/1NO to the control unit

Operating distance

S11, S21: on 5mm, off 11mm
S12, S22: on 9mm, off 12mm
GD2: on 10mm, off 13mm

According to

EN60204-1, EN1088,
EN594-1 category 3

Dimensions / conduit

SIPHA S11,S12: 48x27x12mm
SIPHA S21,S22: 82x19x19mm
SIPHA GD2: 80x34x16mm

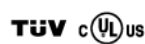
Zertificate

CE, TÜV, cUL

SIPHA

Control unit

For usage with SIPHA-sensor. Controls the sensors and offers safety contacts.



- Coded system
- 1/2 safety contacts, 1 auxiliary contact
- For 35mm DIN-rail

Order-No Type

900400	SIPHA1 ADC24V
900407	SIPHA2 DC24V/AC230V

Switching capacity

AC: 250V, 4A; DC: 30V, 2A
(safety contacts)

Safety contacts

SIPHA1: 1 N.O safety contact
1 N.C. aux. contact
SIPHA2: 2 N.O. safety contact
1 N.C. aux. contact

According to

EN60204-1, EN1088,
EN594-1 cat 3

Dimensions

SIPHA1: 81x22,5x99mm
SIPHA2: 73x45x120mm

Zertificate

CE, TÜV, cUL

Safety & Automation

50 years ZANDER AACHEN



Safety & Automation

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