

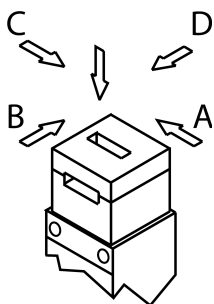
## TP3-4121A024SR11 (Order no. 088206)

### TP safety switch, plug connector(s) M26 (SR11), contacts for door position

- ▶ Plug connector M26 (SR11)
- ▶ Contacts for the door position
- ▶ Auxiliary release
- ▶ Closed-circuit current principle



#### Approach direction



Horizontal and vertical

Can be adjusted in 90° steps

Increased overtravel for horizontal approach direction


If increased play is required when the door is closed, an actuator with overtravel is available. With this actuator the door can move slightly in the actuating direction when closed. This is important, for example, if safety doors have a rubber end stop. Using an actuator with overtravel, the continuous pressure from the compressed rubber can be reduced. In this way the load is reduced on the switch head and the door mechanism.

#### Guard locking principle

Power to unlock: On a guard with guard locking based on the closed-circuit current principle, the guard is locked by spring force until the guard locking solenoid is supplied with power. Unlocking is by solenoid force. The term mechanical guard locking is also used.

#### Switching element

4121 Slow-action switching contact

Contacts for guard locking: 2 positively driven contacts 

Contacts for door monitoring: 1 NC contact 1 NO contact

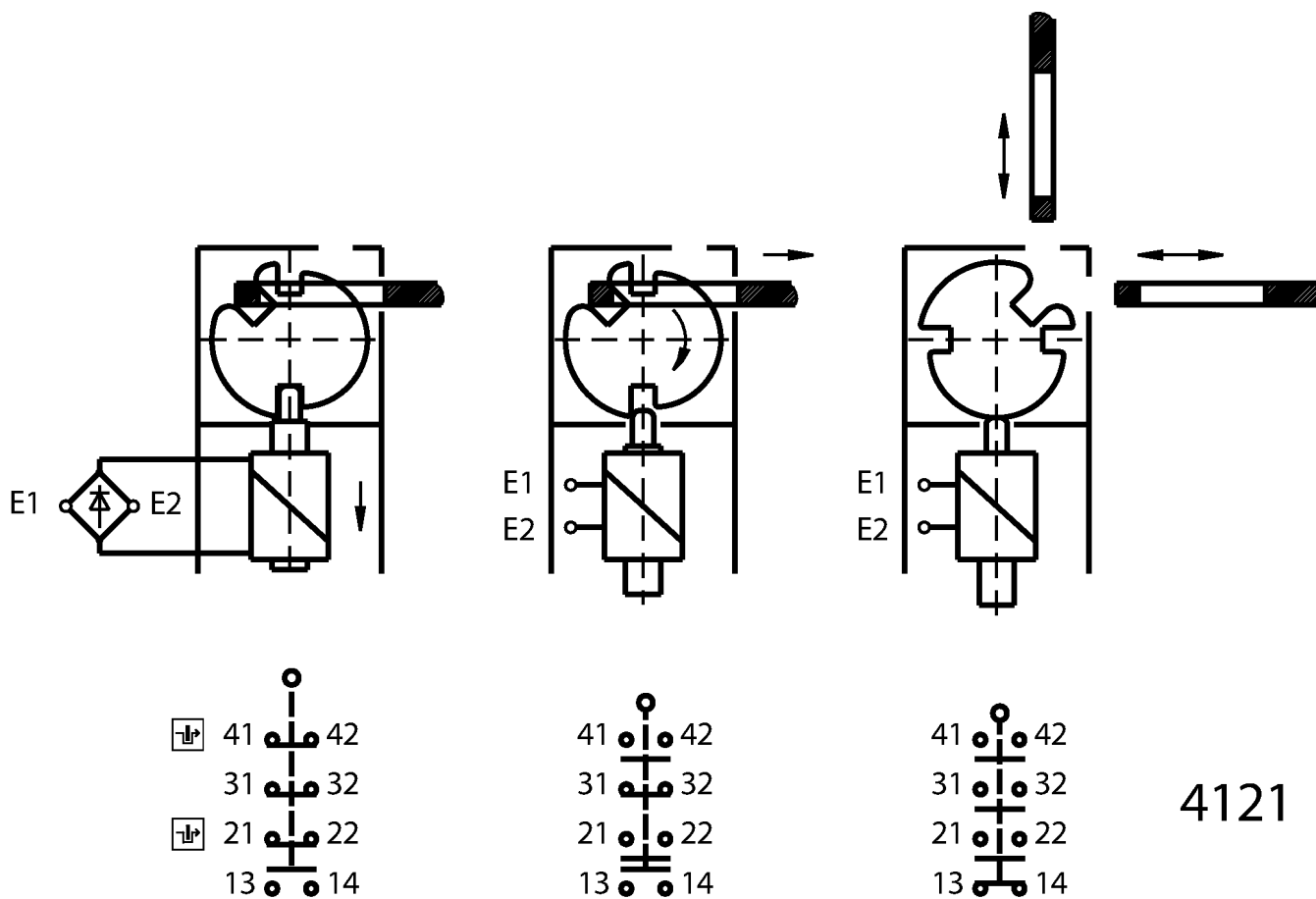
## Auxiliary release

The auxiliary release on the front makes it possible to access the machine if there is a malfunction, e.g. a power failure. Unlocking is performed using a tool or a key. The auxiliary release must be protected against misuse (sealing, lacquer).

## Accessories required

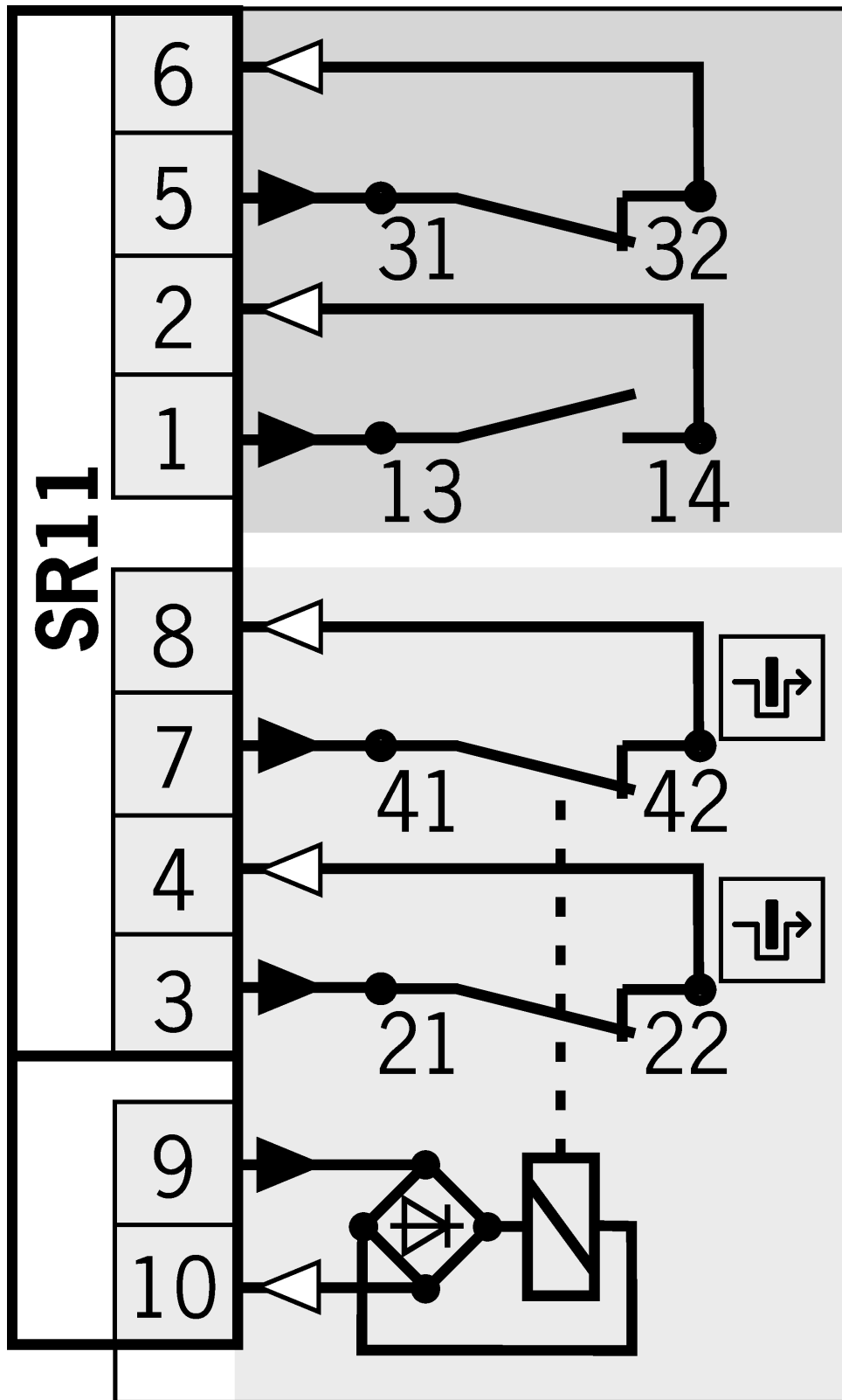
Actuator is not included.

## Functional drawings





Connection examples



square\_grey\_dark.eps Door monitoring

square\_grey\_light.eps Solenoid monitoring

## Technical data

### Approvals



### Electrical connection values

Fuse	max. 4 A gG	
Power consumption	8 W	
Rated insulation voltage $U_i$	50 V	
Rated impulse voltage $U_{imp}$	1.5 kV	
Utilization category		
	AC-15	4 A 50 V
	DC-13	4 A 24 V
Solenoid operating voltage		
	AC/DC	24 V -15% ... +10%
Solenoid duty cycle	100 %	
Switching voltage		
	min. at 10 mA	12 V
Switching current		
	min. at 24 V	1 mA
thermal rated current $I_{th}$	4 A	

### Mechanical values and environment

Approach speed	max. 20 m/min	
Connection type		
	1 x	Plug connector SR11
Number of door position NC contacts	1	
Number of door position NO contacts	1	
Number of guard lock monitoring positively driven contacts	2	
Extraction force	20 N	
Actuation frequency	max. 1200 1/h	

Actuating force	10 N
Installation orientation	any
Mechanical life	1 x 10 <sup>6</sup>
Retention force	10 N
Switching principle	Slow-action switching contact
Degree of protection	IP65
Ambient temperature	-20 ... 55 °C
<b>Material</b>	
	Housing Reinforced thermoplastic
	Contact Silver alloy, gold flashed
Locking force F <sub>max</sub>	1300 N
Locking force F <sub>Zh</sub>	1000 N
Guard locking principle	Closed-circuit current principle

### Characteristic values according to EN ISO 13849-1 and EN IEC 62061

	B10 <sub>D</sub>	Mission time
Monitoring of guard locking	3x10 <sup>6</sup>	20 y
	Important! Values valid at DC-13 100 mA/24V	

	PL	Maximum SIL	Category	Mission time
Control of guard locking	Depending on external control of guard locking			20 y

### In combination with actuator ACTUATOR-P-GT

Horizontal overtravel	2 mm
Vertical overtravel	1.5 mm

### In combination with actuator ACTUATOR-P-GNT

Horizontal overtravel	7 mm
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## Downloads

All documentation for this material can be found on our website:

<https://www.euchner.de/en-us/a/088206/?#downloads-tab>

**Ordering data**

Ordernumber	088206
Item designation	TP3-4121A024SR11
Gross weight	0,493kg
Customs tariff number	85365019000
ECLASS	27-27-26-03 Safety switch with guard control

## Accessories

### Actuator

#### Actuator for safety switch NP/GP/TP, increased overtravel



**074570**

BETAETIGER-P-GN

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator



**074576**

BETAETIGER-P-GNT

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator
- ▶ Actuator with rubber bush

#### Actuators for safety switches NP/GP/TP



**059226**

BETAETIGER-P-G

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator



**070046**

BETAETIGER-P-GT

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator
- ▶ Actuator with rubber bush

#### Bent actuator for safety switch NP/GP/TP



**059227**

BETAETIGER-P-W

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator



**070038**

BETAETIGER-P-WT

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator
- ▶ Actuator with rubber bush

#### Bent actuator for safety switch NP/GP/TP, increased overtravel



**074571**

BETAETIGER-P-WN

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator



**074577**

BETAETIGER-P-WNT

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator
- ▶ Actuator with rubber bush

#### Hinged actuator, left/right, for safety switch NP/GP/TP



**059440**

RADIUSBETAETIGER-P-LR

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator
- ▶ For doors hinged on the right and left

#### Hinged actuator, left/right, for safety switch NP/GP/TP, increased overtravel



**074573**

RADIUSBETAETIGER-P-LRN

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator
- ▶ For doors hinged on the right and left

## Hinged actuator, top/bottom, for safety switch NP/GP/TP



**070050**  
RADIUSBETAETIGER-P-OU

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator
- ▶ For top-hinged and bottom-hinged doors

## Hinged actuator, top/bottom, for safety switch NP/GP/TP, increased overtravel



**074572**  
RADIUSBETAETIGER-P-OUN

- ▶ Actuator made of stainless steel
- ▶ Two stainless-steel safety screws per actuator
- ▶ For top-hinged and bottom-hinged doors

## Connection material

### Connecting cable with plug connector SR11, 10 m



**077630**  
C-M26F12-12X1,00PU10,0-MA-077630

- ▶ Female plug SR11, 11-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 10 m
- ▶ With flying lead

### Connecting cable with plug connector SR11, 15 m



**077631**  
C-M26F12-12X1,00PU15,0-MA-077631

- ▶ Female plug SR11, 11-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 15 m
- ▶ With flying lead

### Connecting cable with plug connector SR11, 20 m



**096632**  
C-M26F12-12X1,00PU20,0-MA-096632

- ▶ Female plug SR11, 11-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 20 m
- ▶ With flying lead

### Connecting cable with plug connector SR11, 25 m



**094749**  
C-M26F12-12X1,00PU25,0-MA-094749

- ▶ Female plug SR11, 11-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 25 m
- ▶ With flying lead

### Connecting cable with plug connector SR11, 5 m



**077629**  
C-M26F12-12X1,00PU05,0-MA-077629

- ▶ Female plug SR11, 11-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 5 m
- ▶ With flying lead

## Plug connector SR11 for safety switches NZ and TZ



**054773**  
SR11WF

- ▶ Crimp contacts
- ▶ 90° angled optional
- ▶ Cable optional
- ▶ Coding shells



**070859**  
SR11EF

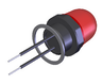
- ▶ Crimp contacts
- ▶ Cable optional
- ▶ Coding shells

**091296**  
SR11AM2-M20

- ▶ Crimp contacts
- ▶ Cable optional
- ▶ Coding shells

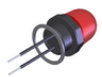
## Function expansion

### Built-in LED, light shines to front



**095510**  
EINBAULEUCHTE LED-F M20X1,5

### Built-in LED, light shines to side



**087423**  
EINBAULEUCHTE LED M20X1,5

## Emergency release for safety switch CTP/CTA/TP/STP/MGB2



**099877**  
AE-M-A1-99877

## Handle for escape release for safety switch TP/STP/STA



**105329**  
FE-GRIFF

## Handle for wire front release (bowden)



**099795**  
AY-HDL-099795

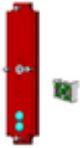
- ▶ suitable for all wire front releases

## Insertion funnel for safety switch NP..A/GP/TP..A



**086237**  
EINFUEHRTRICHTER-P

## LED set



**093752**

TP LED SET

▶ LED set

## Latch spring for increased retention force

**076501**

RASTFEDER NP/TP

## Lock for auxiliary release for safety switch CTP/CTA/TP/STP



**084177**

AE-K-A1-DULK1-84177

▶ Lock unique locking  
▶ Key removable in “unlocked” and “locked” positions



**086236**

AE-K-A1-IULK1-86236

▶ Identical locking  
▶ Key removable in “unlocked” and “locked” positions



**109212**

AE-K-A1-IUK2-109212

▶ Identical locking  
▶ Key can be removed only in “unlocked” position



**121917**

AE-K-A1-ILK1-121917

▶ Identical locking  
▶ Key removable in “locked” position

## Lockout bar NP/GP/TP



**096105**

SPERREINSATZ TP

▶ Prevents unintentional closing of the door  
▶ Can be secured with padlocks

## Release with automatic reset for safety switch CTP/CTA/TP/STP/MGB2/MGBS



**103110**

AE-R-A1-103110

## Wire front release (bowden)



**096230**

AE-B-A1-02,0-096230

▶ Can be used as escape release or emergency release  
▶ no automatic return  
▶ Sheath length 2 m (rope length 6 m)



**097747**

AE-B-A1-02,0-F-097747

- ▶ Can be used as escape release or emergency release
- ▶ automatic return
- ▶ Sheath length 2 m (rope length 6 m)



**098313**

AE-B-A1-03,0-098313

- ▶ Can be used as escape release or emergency release
- ▶ no automatic return
- ▶ Sheath length 3 m (rope length 6 m)



**098314**

AE-B-A1-04,0-098314

- ▶ Can be used as escape release or emergency release
- ▶ no automatic return
- ▶ Sheath length 4 m (rope length 6 m)



**111233**

AE-B-A1-03,0-F-111233

- ▶ Can be used as escape release or emergency release
- ▶ automatic return
- ▶ Sheath length 3 m (rope length 6 m)



**125582**

AE-B-A1-06,0-125582

- ▶ Can be used as escape release or emergency release
- ▶ no automatic return
- ▶ Rope length 6 m (without sheath)



**124770**

AE-B-A1-06,0-F-124770

- ▶ Can be used as escape release or emergency release
- ▶ automatic return
- ▶ Rope length 6 m (without sheath)

## Metal bolt

### Bolt BTC-T/GP... without escape release for safety switches GP and TP



**106301**

BTC-T/GP-S-TH-00-X

- ▶ Aluminum bolt
- ▶ For doors hinged on the left or right
- ▶ Can be locked in open position with padlocks
- ▶ Actuator included

### Bolt BTM-UNIP-S... for safety switches TP, STP, STA, CTP and CTA



**159951**

BTM-UNIP-S-TH-00-X-159951

- ▶ Steel bolt
- ▶ For doors hinged on the left or right
- ▶ Can be locked in open position with padlocks
- ▶ Actuator not included

## Bolt for safety switches GP and TP



**084430**  
RIEGEL TP-A

- ▶ Bolt for safety switches GP and TP
- ▶ Steel bolt
- ▶ For doors hinged on the right
- ▶ Suitable for a door gap of approx. 15 mm



**084432**  
RIEGEL TP-C

- ▶ Bolt for safety switches GP and TP...A
- ▶ Steel bolt
- ▶ For doors hinged on the left
- ▶ Suitable for a door gap of approx. 15 mm

## Bolt for safety switches NP, GP and TP



**073535**  
RIEGEL 0 NP/TP OHNE RASTUNG

- ▶ Bolt for safety switches NP... and TP...A
- ▶ Steel bolt
- ▶ For doors hinged on the left or right
- ▶ Suitable for a door gap of approx. 6 mm



**073536**  
RIEGEL 1 NP/TP 1X RASTUNG ZU

- ▶ Bolt for safety switches NP...AS, TP...A and GP
- ▶ Steel bolt
- ▶ For doors hinged on the left or right
- ▶ Suitable for a door gap of approx. 15 mm

## Mounting accessories

### Mounting plates EMP-B1 for actuators for safety switches CTP, CTA, TP...A, STA, STP, TX and TZ



**093457**  
EMP-B1

### Mounting plates EMP-B2 for actuators for safety switches CTP, CTA, TP...A, STA, STP, TX and TZ



**093458**  
EMP-B2

### Mounting plates EMP-SB for safety switches CTP, CTA, TP...A, STA, STP and TX



**093456**  
EMP-SB

- ▶ For vertical and horizontal mounting of safety switches CTP, CTA, TP...A, STA, STP and TX

## Switch bracket CTP/TP/STP GFK



**096613**  
SCHALTERAUFNAHME TP/STP GFK

- ▶ Switch bracket made of fiber glass reinforced plastic
- ▶ For doors hinged on the left or right

## Switch bracket for bolt NP/TP



**073539**

SCHALTERAUFNAHME TP

- ▶ Switch bracket made of steel
- ▶ For doors hinged on the left or right

## Plastic bolt

### Bolt TP-GFK for safety switches TP and GP



**096616**

RIEGEL TP-GFK

- ▶ Fiber glass reinforced plastic bolt
- ▶ For doors hinged on the left or right
- ▶ Can be locked in open position with padlocks
- ▶ Actuator included