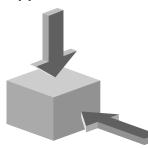
# STP3A-2131A024M (Order no. 091493)

# Safety switch STP with door monitoring contact

- Actuating head made of metal
- Auxiliary release on the front
- With door monitoring contact



## Approach direction



Horizontal and vertical Can be adjusted in 90° steps

# Solenoid operating voltage

▶ AC/DC 24 V +10%, -15%

# Guard locking type

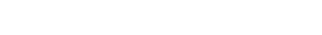
STP3 Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the guard locking solenoid.

## Switching element

<sup>2131</sup> Slow-action switching contact 2 NC  $\rightarrow$ + 1 NO + 1 NC (door monitoring contact)

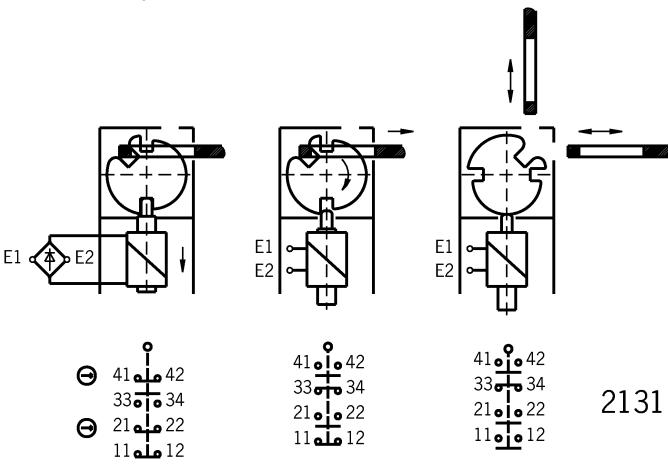
## Auxiliary release

This is used for releasing the guard locking with the aid of a tool. To protect against tampering, the auxiliary release is sealed with sealing lacquer.



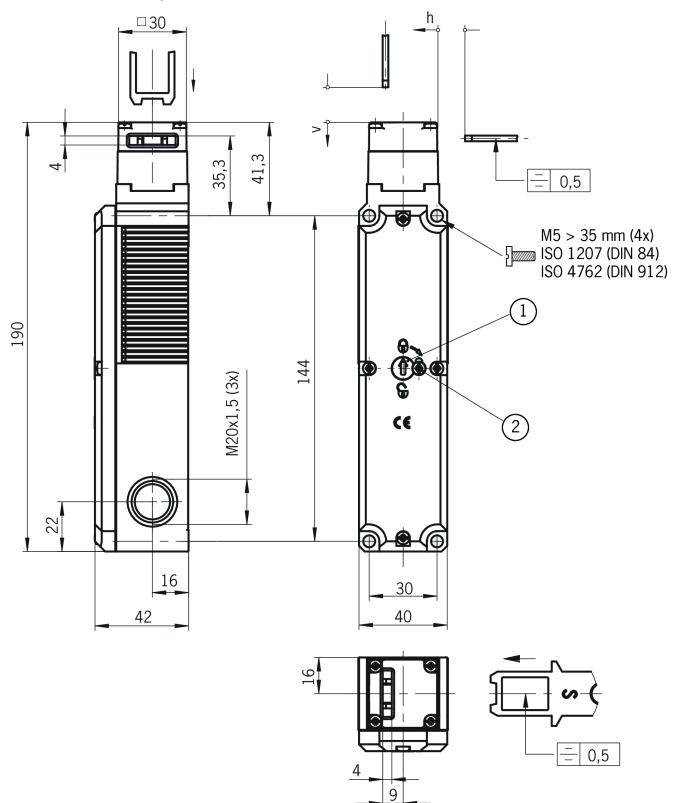
STP3A-2131A024M (Order no. 091493)

# **Functional drawings**



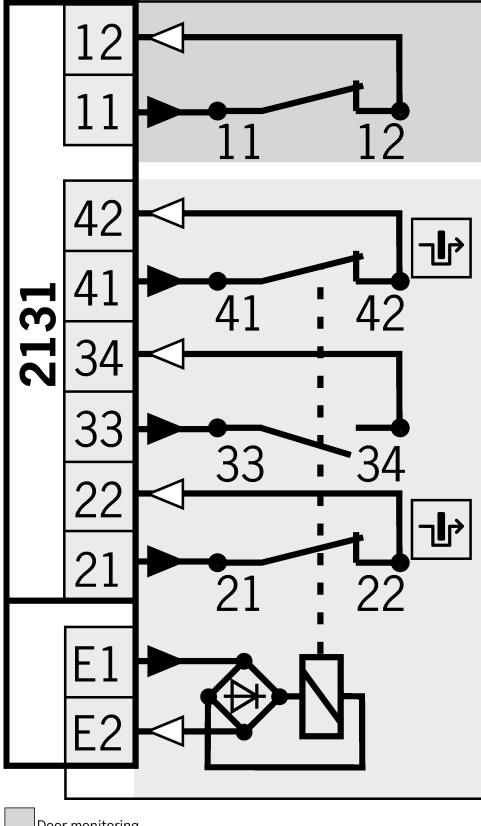
**EUCHNER** 

# **Dimensional drawings**



1 Auxiliary release 2 Locking screw

**Connection examples** 



Door monitoring

Solenoid monitoring



# **Technical data**

### Approvals



#### **Electrical connection values**

Power consumption	8 W
Connection cross section	0.34 1.5 mm²
Rated insulation voltage U <sub>i</sub>	250 V
Rated impulse withstand voltage U <sub>imp</sub>	2.5 kV
Utilization category	
AC-15	4 A 230 V
DC-13	4 A 24 V
Short circuit protection according to IEC 60269-1	4A gG
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 <sub>th</sub>	4 A
Mechanical values and environment	

Approach speed	max. 20 m/min
Approach direction	A
Connection type	
3 x	M20 x 1.5
Number of door position NC contacts	1
Number of guard lock monitoring NO contacts	1



Number of guard lock monitoring positively driven contacts		2
Extraction force		30 N
Actuation frequency		max. 1200 1/h
Actuating force		35 N
Installation orientation		any
Insertion depth		24.5 mm
Mechanical life		1 x 10 <sup>6</sup>
Retention force		20 N
Switching principle		Slow-action switching contact
Degree of protection		IP67
Ambient temperature		−20 +55 °C
Material		
Ca	ontact	Silver alloy, gold flashed
Ho	ousing	Reinforced thermoplastic
Locking force F <sub>max</sub>		2500 N
Locking force F <sub>Zh</sub>		2000 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 the guard position	5x10 <sup>6</sup>	20 y
Monitoring of the guard position	Important! Values valid at DC-13 100 mA/24V	
Monitoring of guard locking	5x10 <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 gu	ard locking	20 y



#### In combination with actuator ACTUATOR-S-GT-SN

Overtravel

5 mm

# Downloads

All documentation for this material can be found on our website: <u>https://www.euchner.de/en-us/a/091493/?#downloads-tab</u>

# Ordering data

Ordernumber	091493
Item designation	STP3A-2131A024M
Gross weight	0,516kg
Customs tariff number	85365019000
ECLASS	27-27-26-03 Safety switch with guard control



# Accessories

### Actuator

#### Actuator S for safety switch SGA/SGP/STA/STP/STM



095738 BETAETIGER-S-GT-SN

**097861** BETAETIGER-S-G-SN-C2115 Two safety screws included

Two safety screws included

Actuator with rubber bush

▶ Physically compatible with TP actuator P-G

#### Actuator S for safety switch SGA/SGP/STA/STP/STM for insertion funnel



095739 BETAETIGER-S-GT-LN

- Two safety screws included
   Actuator with rubbar bush
- Actuator with rubber bush

#### Actuator S, bent, for safety switch SGA/SGP/STA/STP/STM

	<b>095740</b> BETAETIGER-S-WQT-SN	<ul> <li>Two safety screws included</li> </ul>
100	105808 BETAETIGER-S-WT-SN-C2115	<ul> <li>Two stainless-steel safety screws per actuator</li> <li>Actuator with rubber bush</li> <li>Minimum door radius 300 mm</li> </ul>
A C	115073 BETAETIGER-S-W-SN-C2115	<ul> <li>Two stainless-steel safety screws per actuator</li> <li>Minimum door radius 300 mm</li> </ul>

#### Actuator S, bent, for safety switch SGA/SGP/STA/STP/STM for insertion funnel



095741 BETAETIGER-S-WQT-LN

105809 BETAETIGER-S-WT-LN-C2115

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

Two safety screws included
Actuator with rubber bush

Minimum door radius 300 mm

#### Hinged actuator S, left/right, for safety switch SGA/SGP/STA/STP/STM



096838 RADIUSBETAETIGER-S-LR-SN Actuator made of stainless steel
Two safety screws included
For doors hinged on the right and left



#### Hinged actuator S, left/right, for safety switch SGA/SGP/STA/STP/STM for insertion funnel



#### 096844

RADIUSBETAETIGER-S-LR-LN

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

#### Hinged actuator S, top/bottom, for safety switch SGA/SGP/STA/STP/STM



# 095315

RADIUSBETAETIGER-S-OU-SN

- Actuator made of stainless steel
- Two safety screws included
- For top-hinged and bottom-hinged doors

#### Hinged actuator S, top/bottom, for safety switch SGA/SGP/STA/STP/STM for insertion funnel



096697 RADIUSBETAETIGER-S-OU-LN

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

#### **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 wire front release (bowden)



**099795** AY-HDL-099795 suitable for all wire front releases

#### Insertion funnel for safety switch SGP/STA/STP/STM/SGA



**093157** EINFUEHRTRICHTER-S

LED set



**098035** STP LED SET

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

	<b>084177</b> AE-K-A1-DULK1-84177	<ul> <li>Lock unique locking</li> <li>Key removable in "unlocked" and "locked" positions</li> </ul>
الله منه	<b>086236</b> AE-K-A1-IULK1-86236	<ul> <li>Identical locking</li> <li>Key removable in "unlocked" and "locked" positions</li> </ul>
الله منه	<b>109212</b> AE-K-A1-IUK2-109212	<ul> <li>Identical locking</li> <li>Key can be removed only in "unlocked" position</li> </ul>
الله منه	<b>121917</b> AE-K-A1-ILK1-121917	<ul> <li>Identical locking</li> <li>Key removable in "locked" position</li> </ul>
Lockout bar	STA/STP/SGA/SGP/STM	
	105701 SPERREINSATZ STP/STA	<ul> <li>Prevents unintentional closing of the door</li> <li>Can be secured with padlocks</li> </ul>

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



103110 AE-R-A1-103110

### Wire front release (bowden)

P	<b>096230</b> AE-B-A1-02,0-096230	<ul> <li>Can be used as escape release or emergency release</li> <li>no automatic return</li> <li>Sheath length 2 m (rope length 6 m)</li> </ul>
P	<b>097747</b> AE-B-A1-02,0-F-097747	<ul> <li>Can be used as escape release or emergency release</li> <li>automatic return</li> <li>Sheath length 2 m (rope length 6 m)</li> </ul>
P	<b>098313</b> AE-B-A1-03,0-098313	<ul> <li>Can be used as escape release or emergency release</li> <li>no automatic return</li> <li>Sheath length 3 m (rope length 6 m)</li> </ul>
P	<b>098314</b> AE-B-A1-04,0-098314	<ul> <li>Can be used as escape release or emergency release</li> <li>no automatic return</li> <li>Sheath length 4 m (rope length 6 m)</li> </ul>

	<b>111233</b> AE-B-A1-03,0-F-111233	<ul> <li>Can be used as escape release or emergency release</li> <li>automatic return</li> <li>Sheath length 3 m (rope length 6 m)</li> </ul>
-	<b>125582</b> AE-B-A1-06,0-125582	<ul> <li>Can be used as escape release or emergency release</li> <li>no automatic return</li> <li>Rope length 6 m (without sheath)</li> </ul>
	<b>124770</b> AE-B-A1-06,0-F-124770	<ul> <li>Can be used as escape release or emergency release</li> <li>automatic return</li> <li>Rope length 6 m (without sheath)</li> </ul>

# Metal bolt

#### Bolt BTC-ST/G... without escape release for safety switches STA, STP, SGP and SGA

<ul> <li>Aluminum bolt</li> <li>For doors hinged on the left or right</li> <li>Can be locked in open position with padlocks</li> <li>Actuator included</li> </ul>

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

	<b>159951</b> BTM-UNIP-S-TH-00-X-159951	<ul> <li>Steel bolt</li> <li>For doors hinged on the left or right</li> <li>Can be locked in open position with padlocks</li> <li>Actuator not included</li> </ul>
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### Bolt for safety switch STA, STP, SGP and SGA

	<b>096384</b> RIEGEL S-A	<ul> <li>Bolt for safety switch STA, STP, SGP and SGA</li> <li>Steel bolt</li> <li>For doors hinged on the right</li> <li>Suitable for a door gap of approx. 15 mm</li> </ul>
	<b>096385</b> RIEGEL S-C	<ul> <li>Bolt for safety switch STA, STP, SGP and SGA</li> <li>Steel bolt</li> <li>For doors hinged on the left</li> <li>Suitable for a door gap of approx. 15 mm</li> </ul>

### **Mounting accessories**

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





#### 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

## **Plastic bolt**

Bolt for safety switch STA, STP, SGP and SGA



098121

RIEGEL STP-GFK

- Bolt for safety switch STA, STP, SGP and SGA
- Fiber glass reinforced plastic bolt
- For doors hinged on the left or right
- Suitable for a door gap of approx. 7 mm

### Spare parts

Replacement key for auxiliary key release



**099434** ERSATZSCHLUESSELPAAR GLEICHSCHL. 0354