ITEM 084285 TP3-2131A024MC1743
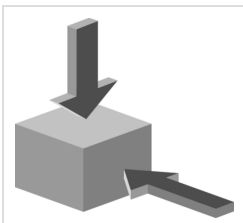
Description	Technical data	Accessories	Downloads

Features

> Auxiliary release on the front
> Escape release from the rear
> With door monitoring contact
> Increased horizontal overtravel

Approach direction

> Figure
Horizontal and vertical
Can be adjusted in 90° steps
Increased overtravel for horizontal approach direction

Solenoid operating voltage

> AC/DC 24 V +10%, -15%

Guard locking type

TP3 Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the guard locking solenoid.

Switching element

2131 Slow-action switching contact 2 NC $\ominus$ + 1 NO + 1 NC (door monitoring contact)

Escape release

This is used for manual release of guard locking from within the danger area without tools. With identification of On/Off position.

Approvals

Mechanical values and environment

Housing material	Reinforced thermoplastic
Weight	
Net	0,5 kg
Ambient temperature	-20 ... 55 °C
Degree of protection	IP67
Mechanical life	1×10^6
Contact material	Silver alloy, gold flashed
Switching principle	Slow-action switching contact
Installation position	Any
Number of door position positively driven contacts	2
Number of NC contacts	1
Number of NO contacts	1
Connection	
3 x	M20 x 1.5
Approach speed	
max.	20 m/min
Actuation frequency	1200 1/h
Guard locking principle	Closed-circuit current principle
Locking force F_{max}	1300 N
Locking force F_{Zh}	1000 N
Retention force	10 N
Extraction force	20 N

Actuating force	10 N

Electrical connection ratings

rated thermal current I_{th}		4 A
Utilization category according to EN 60947-5-1		
	AC-15	4A 50V
	DC-13	4A 24V
Solenoid operating voltage		
	AC/DC	24 V -15% … +10%
Short circuit protection according to IEC 60269-1		
	(Fuse)	4A gG
Rated insulation voltage U_i		50 V
Rated impulse withstand voltage U_{imp}		2,5 kV
Switching voltage		
	Min. at 10mA	12 V
Switching current		
	Min. at 24V	1 mA
Power consumption		8 W
Solenoid duty cycle		100 %
Connection cross-section		0,34 … 1,5 mm²

Miscellaneous

C number		
	C1743	Escape release short

Reliability values according to EN ISO 13849-1

	Monitoring of guard locking and the safety guard position
$B10_D$	3×10^6
	Control of the guard locking
Category	Depending on external control of guard locking
Performance Level	Depending on external control of guard locking
PFH_D	Depending on external control of guard locking

in combination withActuator BETAETIGER-P-GT

Mechanical values and environment

Overtravel A B C D E	2 mm
Overtravel K L M N	1,5 mm

in combination withActuator BETAETIGER-P-GNT

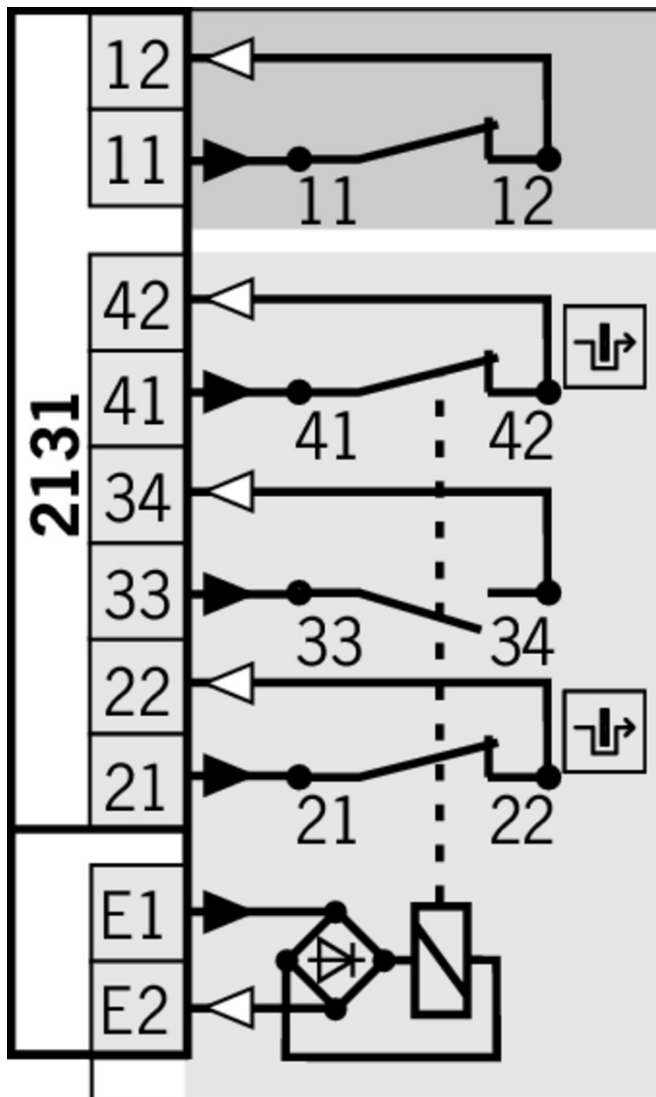**Mechanical values and environment**

Overtravel A B C D E	7 mm

Dimension drawing

M5 > 35 mm (4x)
ISO 1207 (DIN 84)
ISO 4762 (DIN 912)
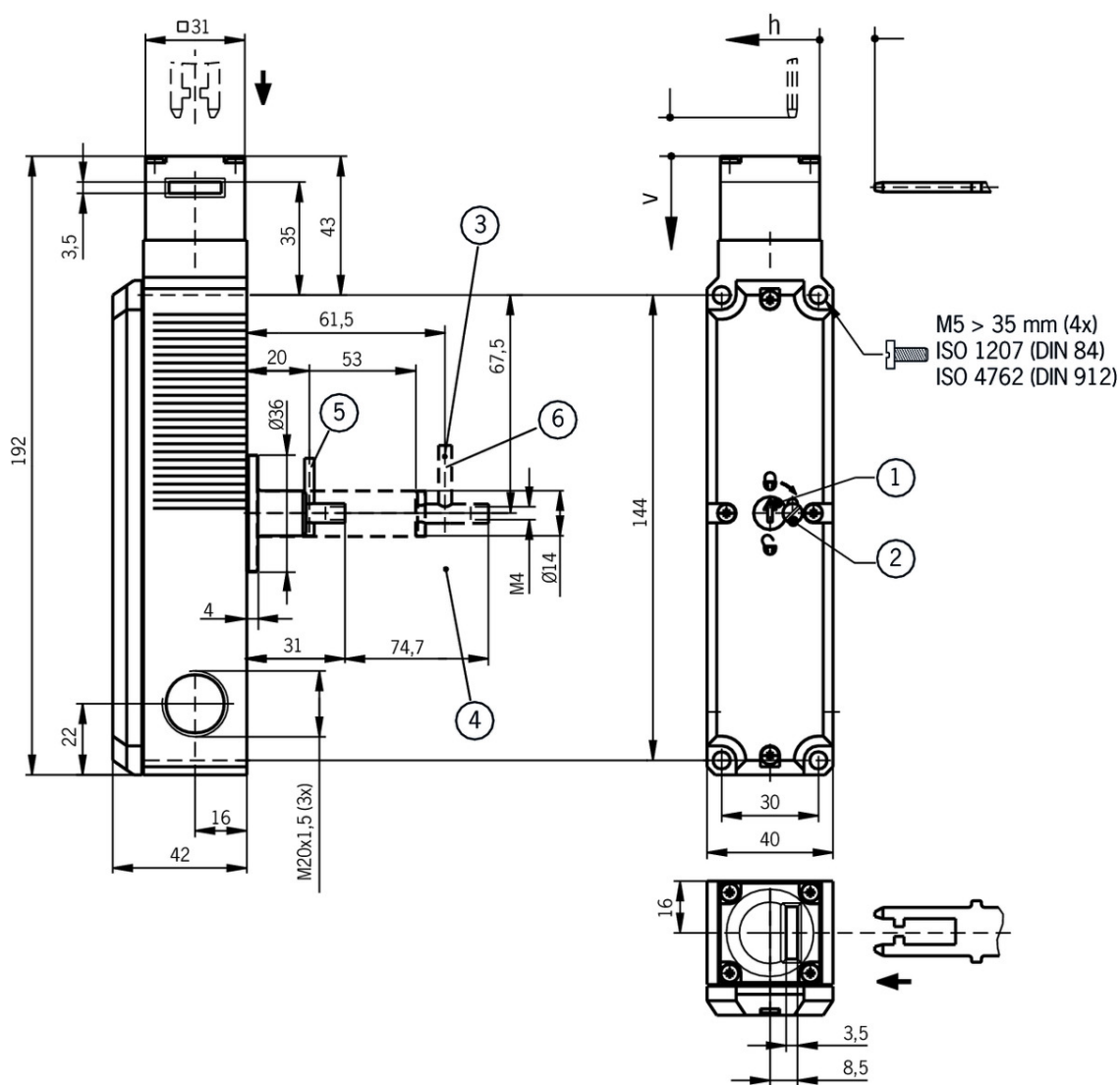
Legende
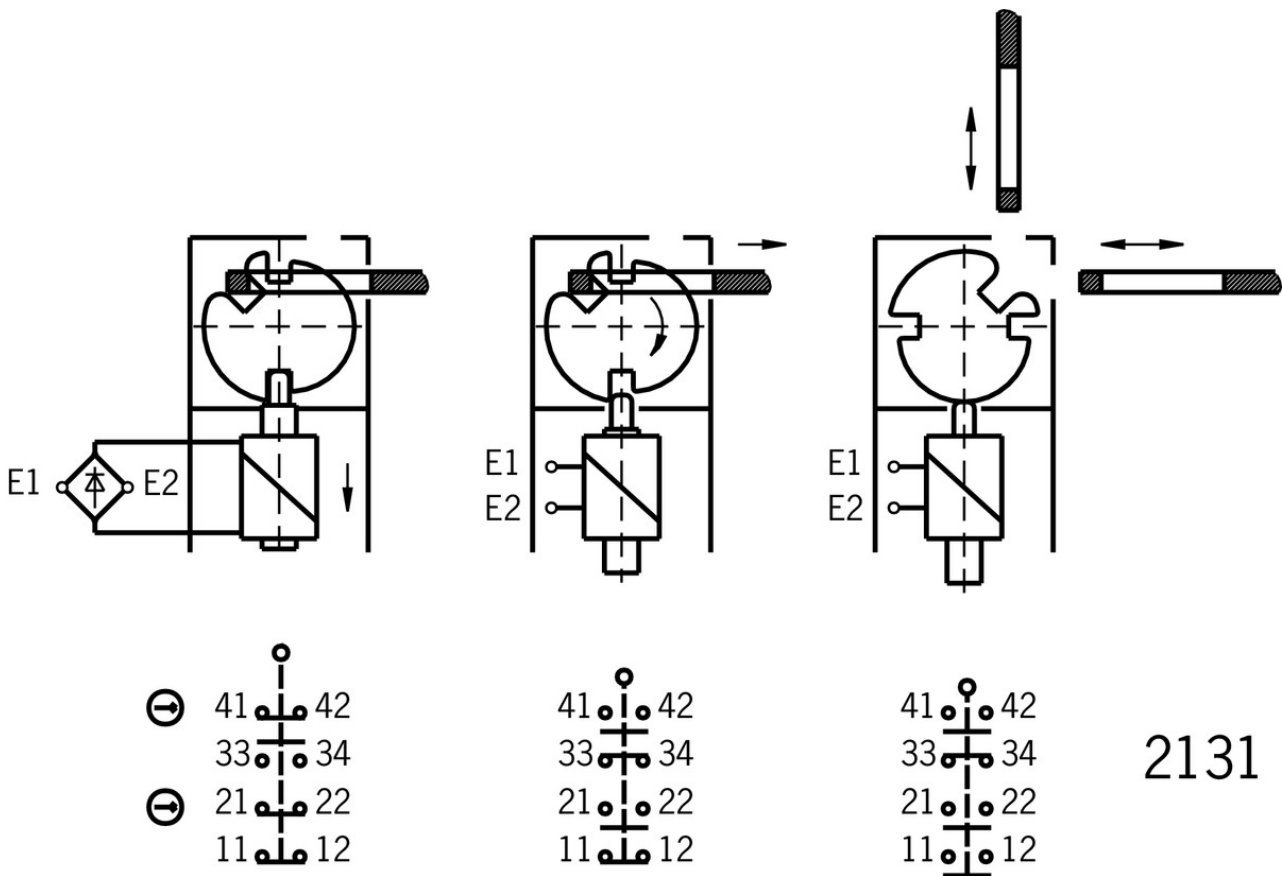
1 Auxiliary release

2 Locking screw

3 Escape release, basic position

4 Escape release, unlocked position

5 Escape release, short actuator shaft

6 Escape release, long actuator shaft

2131

Legende

Solenoid monitoring

Door monitoring

Switching functions

E1 ⊕ E2

41 ⊖ 42
33 ⊖ 34
21 ⊖ 22
11 ⊖ 12

41 ⊖ 42
33 ⊖ 34
21 ⊖ 22
11 ⊖ 12

41 ⊖ 42
33 ⊖ 34
21 ⊖ 22
11 ⊖ 12

2131

Function expansion

☑ Lock for auxiliary release for safety switches CTP/TP/STP

109212 SCHLOSS TP GLEICHSCHLIESSEND C2293
☑ Features
› Identical locking
› Key can be removed only in "locked" position

084177 SCHLOSS TP VERSCHIEDENSCHLIESSEND
☑ Features
› Lock unique locking
› Key removable in "unlocked" and "locked" positions

086236 SCHLOSS TP GLEICHSCHLIESSEND
☑ Features
› Identical locking
› Key removable in "unlocked" and "locked" positions

☑ Handle for wire front release

099795 AY-HDL-099795
☑ Features
› Suitable for all wire front releases

Wire front release

098314 AE-B-A1-04,0-098314
- **Features**
  - Can be used as escape release or emergency unlocking
  - No automatic return
  - Sheath length 4 m (rope length 6 m)

096230 AE-B-A1-02,0-096230
- **Features**
  - Can be used as escape release or emergency unlocking
  - No automatic return
  - Sheath length 2 m (rope length 6 m)

098313 AE-B-A1-03,0-098313
- **Features**
  - Can be used as escape release or emergency unlocking
  - No automatic return
  - Sheath length 3 m (rope length 6 m)

097747 AE-B-A1-02,0-F-097747
- **Features**
  - Can be used as escape release or emergency unlocking
  - automatic return
  - Sheath length 2 m (rope length 6 m)

111233 AE-B-A1-03,0-F-111233
- **Features**
  - Can be used as escape release or emergency unlocking
  - automatic return
  - Sheath length 3 m (rope length 6 m)

124770 AE-B-A1-06,0-F-124770
- **Features**
  - Can be used as escape release or emergency unlocking
  - automatic return
  - Rope length 6 m (without sheath)

125582 AE-B-A1-06,0-125582
- **Features**
  - Can be used as escape release or emergency unlocking
  - No automatic return
  - Rope length 6 m (without sheath)

Release with automatic reset for safety switches CTP/TP/STP

103110 ENTRIEGELUNG RUECKSTELLEND TP/STP

Lockout bar NP/GP/TP

096105 SPERREINSATZ TP
Features
- Prevents unintentional closing of the door
- Can be secured with padlocks

Built-in LED

095510 EINBAULEUCHTE LED-F M20X1,5

087423 EINBAULEUCHTE LED M20X1,5

LED set

093752 TP LED SET
Features
- LED set

Emergency unlocking for safety switches CTP/TP/STP

099877 NOTENTSPERRUNG TP/STP

Latch spring for increased retention force

076501 RASTFEDER NP/TP

Insertion funnel for safety switches NP..A/GP/TP..A

086237 EINFUEHRTRICHTER-P

Bolt

Bolt BTC-T/GP... with escape release for safety switches GP and TP

106302 BTC-T/GP-S-TH-01-F
Features
- Aluminum bolt
- For doors hinged on the left or right
- Lever for escape release from the danger area
- Pushbutton in open position
- Can be locked in open position with padlocks
- Actuator included

Bolt 0 NP/TP for safety switches NP, GP and TP

073535 RIEGEL 0 NP/TP OHNE RASTUNG

Features

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

Bolt 1 NP/TP for safety switches NP, GP and TP

073536 RIEGEL 1 NP/TP 1X RASTUNG ZU

Features

- Steel bolt
- For doors hinged on the left or right
- Can be locked in open position with padlocks
- Actuator included
- Detent mechanism closed position

Bolt TP/GP... with escape release for safety switches GP and TP

086186 RIEGEL TP-AF

Features

- Steel bolt
- Lever for escape release from the danger area
- For doors hinged on the right
- Detent knob in open position
- Can be locked in open position with padlocks
- Actuator included

086188 RIEGEL TP-CF

Features

- Steel bolt
- Lever for escape release from the danger area
- For doors hinged on the left
- Detent knob in open position
- Can be locked in open position with padlocks
- Actuator included

Bolt TP/GP... for safety switches GP and TP

084430 RIEGEL TP-A

Features

- Steel bolt
- For doors hinged on the right
- Can be locked in open position with padlocks
- Actuator included

084432 RIEGEL TP-C

Features

- Steel bolt
- For doors hinged on the left

- › Can be locked in open position with padlocks
- › Actuator included

Bolt TP-GFK-F with escape release for safety switches TP and GP

097602 RIEGEL TP-GFK-F

Features

- › Fiber glass reinforced plastic bolt
- › For doors hinged on the left or right
- › Lever for escape release from the danger area
- › Detent knob in open position
- › Can be locked in open position with padlocks
- › Actuator included

Bolt TP-GFK for safety switches TP and GP

096616 RIEGEL TP-GFK

Features

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

Actuator

Actuators for safety switches NP/GP/TP

059226 BETAETIGER-P-G

Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator

070046 BETAETIGER-P-GT

Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator
- › Actuators with rubber bushings

Bent actuator for safety switches NP/GP/TP

059227 BETAETIGER-P-W

Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator

070038 BETAETIGER-P-WT

Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator
- › Actuators with rubber bushings

Actuators for safety switches NP/GP/TP, increased overtravel

074570 BETAETIGER-P-GN
Features
- Actuators made of stainless steel
- Two stainless safety screws per actuator

074576 BETAETIGER-P-GNT
Features
- Actuators made of stainless steel
- Two stainless safety screws per actuator
- Actuators with rubber bushings

Bent actuator for safety switches NP/GP/TP, increased overtravel

074571 BETAETIGER-P-WN
Features
- Actuators made of stainless steel
- Two stainless safety screws per actuator

074577 BETAETIGER-P-WNT
Features
- Actuators made of stainless steel
- Two stainless safety screws per actuator
- Actuators with rubber bushings

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

074573 RADIUSBETAETIGER-P-LRN
Features
- Actuators made of stainless steel
- Two stainless safety screws per actuator
- For doors hinged on right and left

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

074572 RADIUSBETAETIGER-P-OUN
Features
- Actuators made of stainless steel
- Two stainless safety screws per actuator
- For doors hinged at top and bottom

Hinged actuator left/right for safety switches NP/GP/TP

059440 RADIUSBETAETIGER-P-LR
Features
- Actuators made of stainless steel
- Two stainless safety screws per actuator
- For doors hinged on right and left

⌄ Hinged actuator top/bottom for safety switches NP/GP/TP

070050 RADIUSBETAETIGER-P-OU
⌄ Features
- › Actuators made of stainless steel
- › Two stainless safety screws per actuator
- › For doors hinged at top and bottom

Mounting accessories

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

093458 EMP-B2

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

093457 EMP-B1

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

093456 EMP-SB
⌄ Features
- › For vertical and horizontal mounting of safety switches TP...A, STA, STP and TX

⌄ Safety screws M5 x 25

073457 M5X25/V100
⌄ Features
- › Safety screws M5 x 25
- › Packaging unit 100 pieces

⌄ Safety screws for actuators, M5 x 10

073455 M5X10-NIRO/V100 NZ/TZ
⌄ Features
- › Safety screws M5 x 10
- › Packaging unit 100 pieces

⌄ Safety screws for safety switches M4 x 14, large head

086232 M4X14-NIRO/V100
⌄ Features
- › Safety screws M4 x 14 (large head)
- › Packaging unit 100 pieces

Switch bracket for bolt NP/TP

073539 SCHALTERAUFNAHME TP

Features

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

Switch bracket TP/STP GFK

096613 SCHALTERAUFNAHME TP/STP GFK

Features

> Switch bracket made of fiber glass reinforced plastic
> For left or right hinged doors

Connection material

Cable glands M20x1.5

086233 EKPM20/06 086233

Instructions

Operating Instructions Safety Switches TP...

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter TP... Operating Instructions Safety Switches TP... Manual de instrucciones Interruptores de seguridad TP... Mode d'emploi pour les interrupteurs de sécurité TP... Istruzioni di impiego dei finecorsa di sicurezza TP...	084123	14-12/14	🇩🇪 🇬🇧 🇪🇸 🇫🇷 🇮🇹	📄 7.1 MB
Návod k použití Bezpečnostní spínač TP...	084123	14-12/14	🇨🇿	📄 2.1 MB
Driftsvejledning for sikkerhedsafbryder TP...	084123	14-12/14	🇩🇰	📄 1.5 MB
Instruções de operação das chaves de segurança TP...	084123	14-12/14	🇵🇹	📄 1.5 MB

Catalogs

Safety Switches with Plastic Housing

	Doc. no.	Version	Language	Download
Sicherheitsschalter mit Kunststoffgehäuse	096955	10-10/12	🇩🇪	📄 18.8 MB
Safety Switches with Plastic Housing	096956	10-10/12	🇬🇧	📄 18.7 MB

Interrupteurs de sécurité avec boîtier plastique	100677	10-10/12	🇫🇷	🔴 19.2 MB
Interruptores de seguridad con carcasa plástica	104855	10-10/12	🇪🇸	🔴 18.7 MB
Bezpečnostní spínače s plastovým pouzdrem	121649	10-10/12	🇨🇿	🔴 6.8 MB

Declaration of conformity

☑ EU declaration of conformity

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung EU declaration of conformity Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità	2077153	25-02/17	🇩🇪🇬🇧🇪🇸🇫🇷🇮🇹	🔴 0.3 MB
EU prohlášení o shodě EU-overensstemmelseserklæring Δήλωση συμμόρφωσης της ΕΕ EU-vaatimustenmukaisuusvakuutus EU-típusbizonyítvány EU-conformiteitsverklaring Deklaracja zgodności UE Declaração de Conformidade UE Declaraţia de conformitate UE EÚ vyhlásenie o zhode	2077153	25-02/17	🇨🇿🇩🇰🇬🇷🇫🇮🇭🇺🇳🇱🇵🇱🇧🇷🇷🇴🇸🇰	🔴 0.5 MB

CAD data

CAD data for this item on TraceParts