

## ITEM 097623 TX1B-A024MC2129

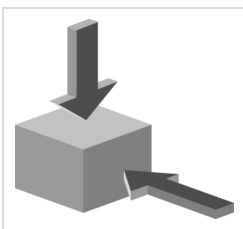
Description	Technical data	Accessories	Downloads
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### Features

- › Auxiliary release on the front
- › With door monitoring contact
- › Separate plug connector for solenoid monitoring and door monitoring with solenoid operating voltage
- › For direct connection to PROFI-safe inputs/outputs

### Approach direction



#### › Figure

Horizontal and vertical  
Can be adjusted in 90° steps

### Solenoid operating voltage

- › AC/DC 24 V +10%, -15%

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## LED function display

The switch has a function display (2 LEDs, red and green). The LED voltage is same as the solenoid operating voltage.

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## Guard locking type

**TX1** Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the solenoid.

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## Switching element

**ETX B** Slow-action switching contact 2 NC  $\ominus$  / 1 NO + 1 NC (door monitoring contact)

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## Auxiliary release

Is used for releasing the guard locking with the aid of a tool. The auxiliary release must be sealed to prevent tampering (for example with sealing lacquer).

## Approvals



## Mechanical values and environment

Housing material	Die-cast alloy, cathodically dipped
Weight	Net 0,8 kg
Ambient temperature	-20 ... 80 °C
Degree of protection	IP67
Mechanical life	1 x 10 <sup>6</sup>
Contact material	Silver alloy, gold flashed
Switching principle	Slow-action switching contact
Installation position	Any
Number of door position NC contacts	1
Number of guard lock monitoring positively driven contacts	2 Switches green LED
Number of guard lock monitoring NO contacts	1 Switches red LED
Connection	2 x Plug connector M12 [1]
Approach speed	max. 20 m/min

Actuation frequency	1200 1/h
Guard locking principle	Closed-circuit current principle
Locking force $F_{max}$	1700 N
Locking force $F_{Zh}$	1300 N
Retention force	50 N [2]
Extraction force	35 N
Actuating force	35 N
Insertion depth	min.32 mm

### Electrical connection ratings

Rated thermal current $I_{th}$	4 A
Utilization category according to EN 60947-5-1	AC-15 4A 60V 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 $U_i$	63 V
Rated impulse withstand voltage $U_{imp}$	1,5 kV
Switching voltage	Min. at 10mA 12 V
Switching current	Min. at 24V 1 mA
Power consumption	8 W
Solenoid duty cycle	100 %
LED indicator	Operating voltage corresponds to the solenoid voltage [3]

### Miscellaneous

C number	C2129 [4]
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### Reliability values acc. to EN ISO 13849-1

	Control of the guard locking
Category	Depending on external control of guard locking [5]
Performance Level	Depending on external control of guard locking [6]
PFH <sub>D</sub>	Depending on external control of guard locking [7]
	Monitoring of guard locking and the safety guard position
B10 <sub>D</sub>	$6 \times 10^6$

**in combination with Actuator BETAETIGER-X-GQ, 079740**

**Mechanical values and environment**

Overtravel	1 mm
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**in combination with Actuator BETAETIGER-X-GNQ, 079742, 098082, 097906**

**Mechanical values and environment**

Overtravel	8 mm
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[1] 2 x 5-pin; PE only on C1

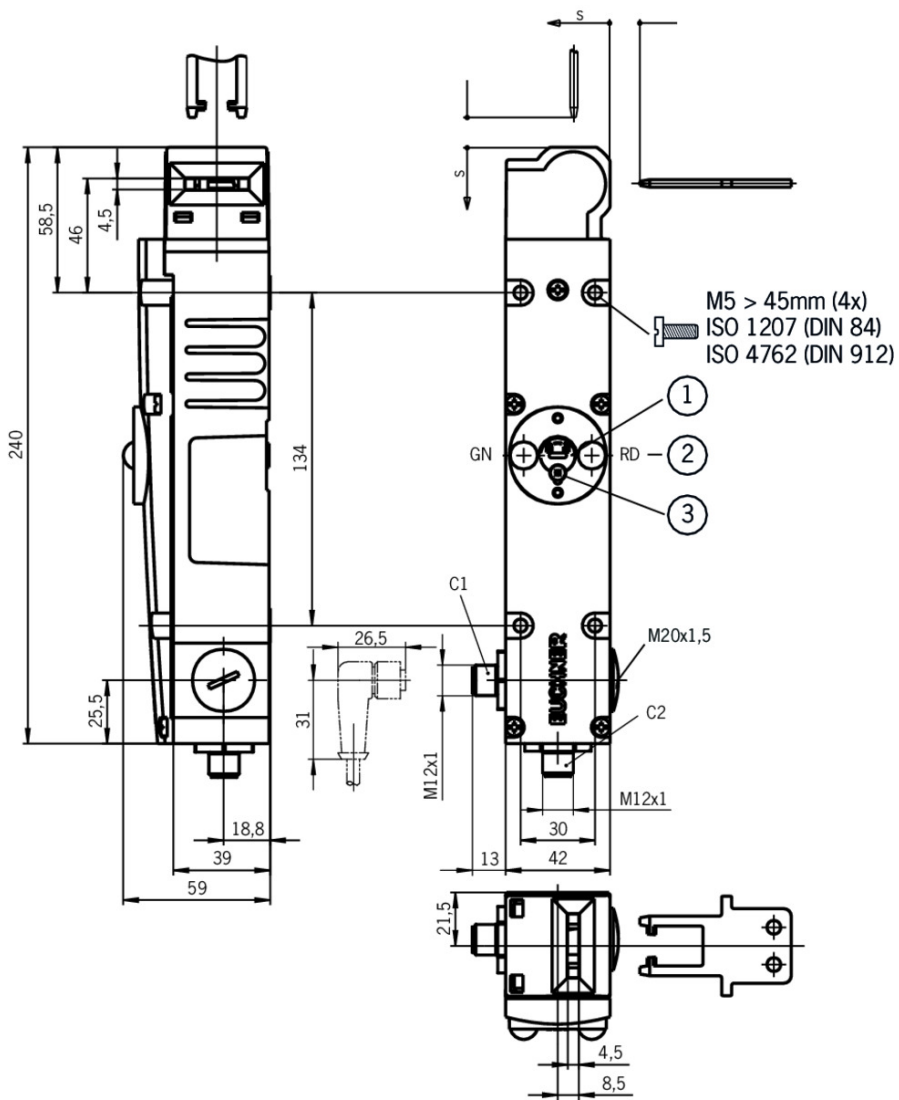
[2] Release under load

[3] 2 LEDs; green, red

[4] With late positively driven NC contact, internal wiring according to customer specification

[5, 6, 7] LEDs have the same ground potential as the guard locking solenoid.

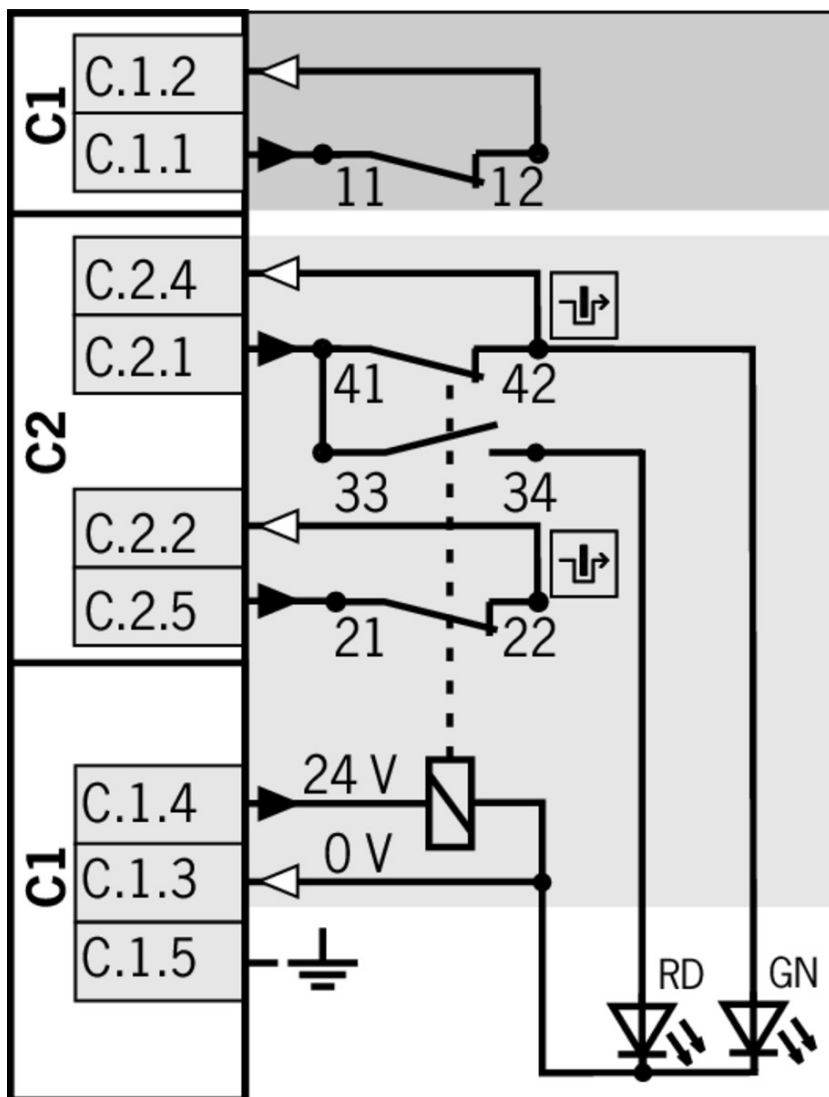
## Dimension drawing



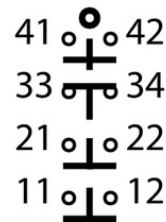
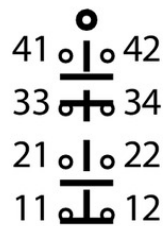
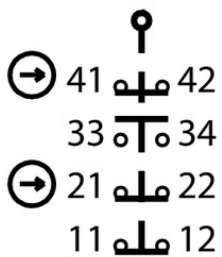
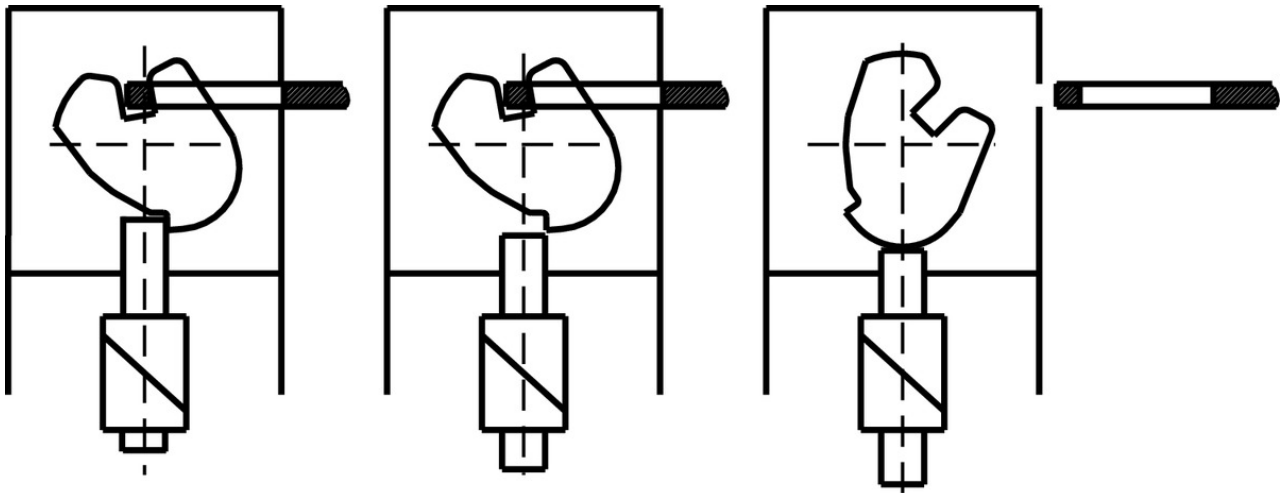
## Legende

- 1 Auxiliary release
- 2 LED indicator
- 3 Locking screw

ETX B



## Switching functions



ETX B

## Actuator

- ▼ Bent actuator for safety switches NX/TX, increased overtravel



### **079742** BETAETIGER-X-WNQ

#### ▼ Features

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

- ▼ Actuators for safety switches NX/TX



### **079739** BETAETIGER-X-GQ

#### ▼ Features

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

- ▼ Bent actuator for safety switches NX/TX



### **079740** BETAETIGER-X-WQ

#### ▼ Features

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

- ✓ Actuators for safety switches NX/TX, increased overtravel



**079741** BETAETIGER-X-GNQ

✓ Features

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

- ✓ Hinged actuator left/right for safety switches NX/TX



**098082** RADIUSBETAETIGER-X-LR-N

✓ Features

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

- ✓ Hinged actuator top/bottom for safety switches NX/TX



**097906** RADIUSBETAETIGER-X-OU-N

✓ Features

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

## Mounting accessories

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



**093457** EMP-B1

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



**093458** EMP-B2

- ✓ 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

## Function expansion

- ✓ Lockout mechanism NX/TX



**096098** SPERREINSATZ TX

✓ Features

- › Prevents unintentional closing of the door



- › Can be secured with padlocks

- ▼ Emergency unlocking for safety switches TX



**094771** NOTENTSPERRUNG TX

- ▼ Lock for mechanical release for safety switches TX



**079795** SCHLOSS TX GLEICHSCHLIESSEND



**079796** SCHLOSS TX VERSCHIEDENSCHLIESSEND

- ▼ Release with automatic reset for safety switches TX



**094773** ENTRIEGELUNG RUECKSTELLEND TX1/3

## Bolt

- ▼ Bolt TX-A for safety switches TX and NX



**082990** RIEGEL TX-A

- ▼ Features

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

- ▼ Bolt TX-C for safety switches TX and NX



**082991** RIEGEL TX-C

- ▼ Features

- › Steel bolt
- › For doors hinged on the left
- › Can be locked in open position with padlocks
- › Actuator and switch bracket included

## Connection material

- ▼ Cable glands M12x1.5



**086327** EKVM12/04






## Spare parts

### Lead seal kit

**087256** PLOMBENSATZ C1937













## Instructions

### Betriebsanleitung Sicherheitsschalter TX...

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter TX...	079777	07-01/17		 4.4 MB
Mode d'emploi pour les interrupteurs de sécurité TX...				
Istruzioni di impiego dei finecorsa di sicurezza TX...				
Operating Instructions Safety Switches TX...				







## Catalogs












### Sicherheitsschalter mit Metallgehäuse Safety Switches with Metal Housing Bezpečnostní spínače s kovovým pouzdem Interrupteurs de sécurité avec boîtier métallique 金属壳体 的安全开关 Interruptores de seguridad con carcasa metálica

	Doc. no.	Version	Language	Download
Sicherheitsschalter mit Metallgehäuse	100319	11-03/18		 7.9 MB
Interrupteurs de sécurité avec boîtier métallique	100676	11-03/18		 7.9 MB
Interruptores de seguridad con carcasa metálica	104856	11-03/18		 14.0 MB
Safety Switches with Metal Housing	100369	11-03/18		 7.9 MB
Bezpečnostní spínače s kovovým pouzdem	121650	11-03/18		 7.9 MB
金属壳体 的安全开关	102453	11-03/18		 8.2 MB

## Declaration of conformity

### EU prohlášení o shodě

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung	2077153	25-02/17		 0.3 MB
Declaración UE de conformidad				
Déclaration UE de conformité				
Dichiarazione di conformità				
EU declaration of conformity				

EU prohlášení o shodě	2077153	25-02/17		 0.5 MB
EU-overensstemmelseserklæring				
Δήλωση συμμόρφωσης της ΕΕ				
EU-vaatimustenmukaisuusvakuutus				
EU-típusbizonyítvány				
EU-conformiteitsverklaring				
Deklaracja zgodności UE				
Declaração de Conformidade UE				
Declarația de conformitate UE				
EÚ vyhlásenie o zhode				

**CAD data**

CAD data for this item on TraceParts