

## ITEM 083000 TX3C-A024BH12

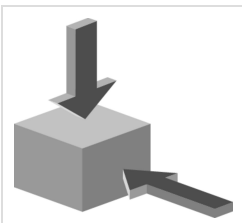
| Description | Technical data | Accessories | Downloads |
|-------------|----------------|-------------|-----------|
|-------------|----------------|-------------|-----------|



### Features

- › Auxiliary release on the front
- › Release under load possible
- › With door monitoring contact
- › Plug connector BH12

### Approach direction



- › Figure  
Horizontal and vertical  
Can be adjusted in 90° steps

### Solenoid operating voltage

- › AC/DC 24 V +10%, -15%

## LED function display

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

## Guard locking type

**TX3** Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the solenoid. Release under load possible.

## Switching element

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

## 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                                       | IP65                                    |
| 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 NO contacts                        | 1 Switches green LED                    |
| Number of guard lock monitoring positively driven contacts | 2                                       |
| Number of guard lock monitoring NO contacts                | 1 Switches red LED                      |
| Connection   | 1 x Plug connector BHA12 <sup>[1]</sup> |
| Approach speed   | max. 20 m/min                           |
| Actuation frequency  | 1200 1/h                                |

|                         |                                      |
|-------------------------|--------------------------------------|
| Guard locking principle | Closed-circuit current principle [2] |
| Locking force $F_{max}$ | 1700 N                               |
| Locking force $F_{Zh}$  | 1300 N                               |
| Retention force         | min.50 N [3]                         |
| Extraction force        | 35 N                                 |
| Actuating force         | 35 N                                 |
| Insertion depth         | min.32 mm                            |

### Electrical connection ratings

|   |   |
|---|---|
| Rated thermal current $I_{th}$                    | 4 A [4]   |
| Utilization category according to EN 60947-5-1    | AC-15 4A 24V [5]<br>DC-13 4A 24V [6]                      |
| Solenoid operating voltage                        | AC/DC 24 V -15% ... +10%                                  |
| Short circuit protection according to IEC 60269-1 | (Fuse) 4A gG [7]  |
| 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 [8]   |
| Solenoid duty cycle                               | 100 %   |
| LED indicator                                     | Operating voltage corresponds to the solenoid voltage [9] |

### Reliability values acc. to EN ISO 13849-1

|                   | Control of the guard locking                              |
|-------------------|---|
| Category          | Depending on external control of guard locking [10]       |
| Performance Level | Depending on external control of guard locking [11]       |
| PFH <sub>D</sub>  | Depending on external control of guard locking [12]       |
|                   | 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 |
|------------|------|

in combination with Actuator BETAETIGER-X-GNQ, 079742, 098082, 097906

## Mechanical values and environment

|            |      |
|------------|------|
| Overtravel | 8 mm |
|------------|------|

[1] 11-pin + PE

[2, 3] Unlocking under load

[4, 5, 6]  $> 70^{\circ}\text{C} \Rightarrow 2\text{A}$

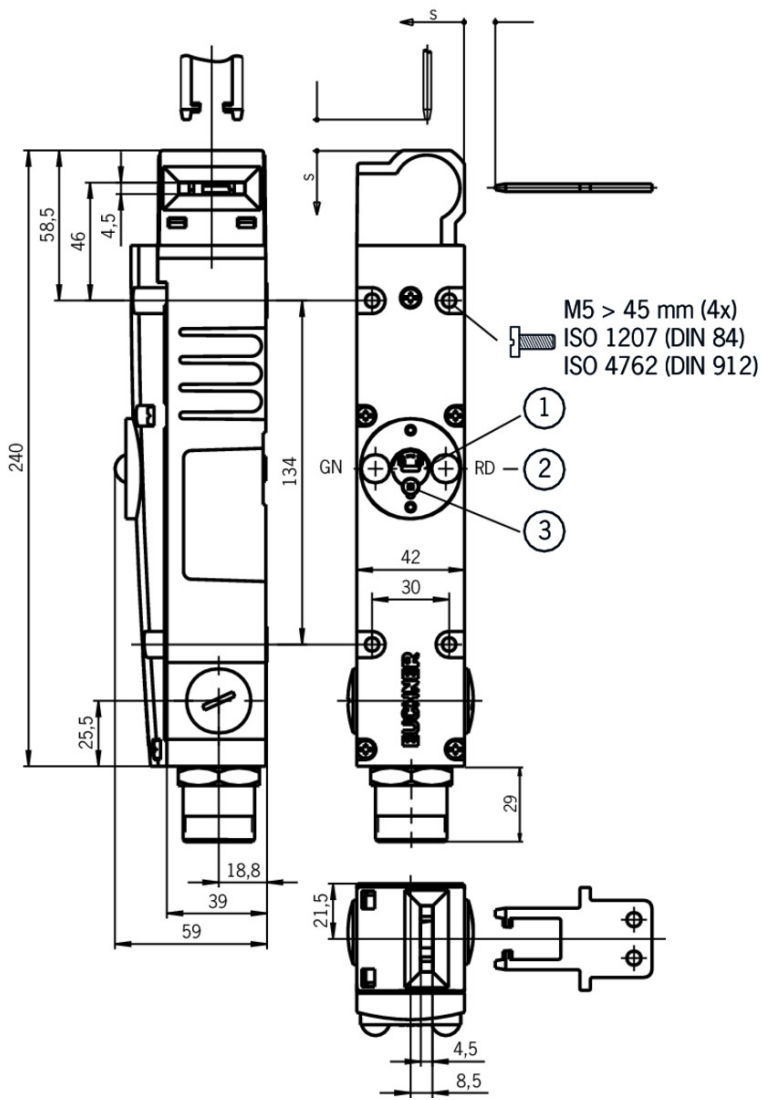
[7]  $> 70^{\circ}\text{C} \Rightarrow 2\text{A gG}$

[8] At the instant switched on 48W

[9] 2 LEDs; green, red

[10, 11, 12] LEDs have the same ground potential as the guard locking solenoid.

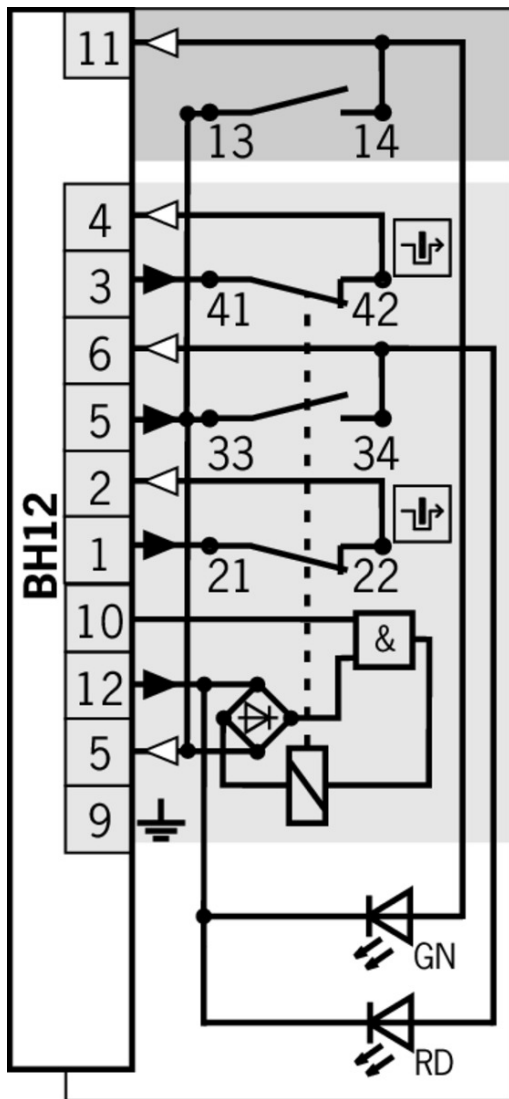
## Dimension drawing



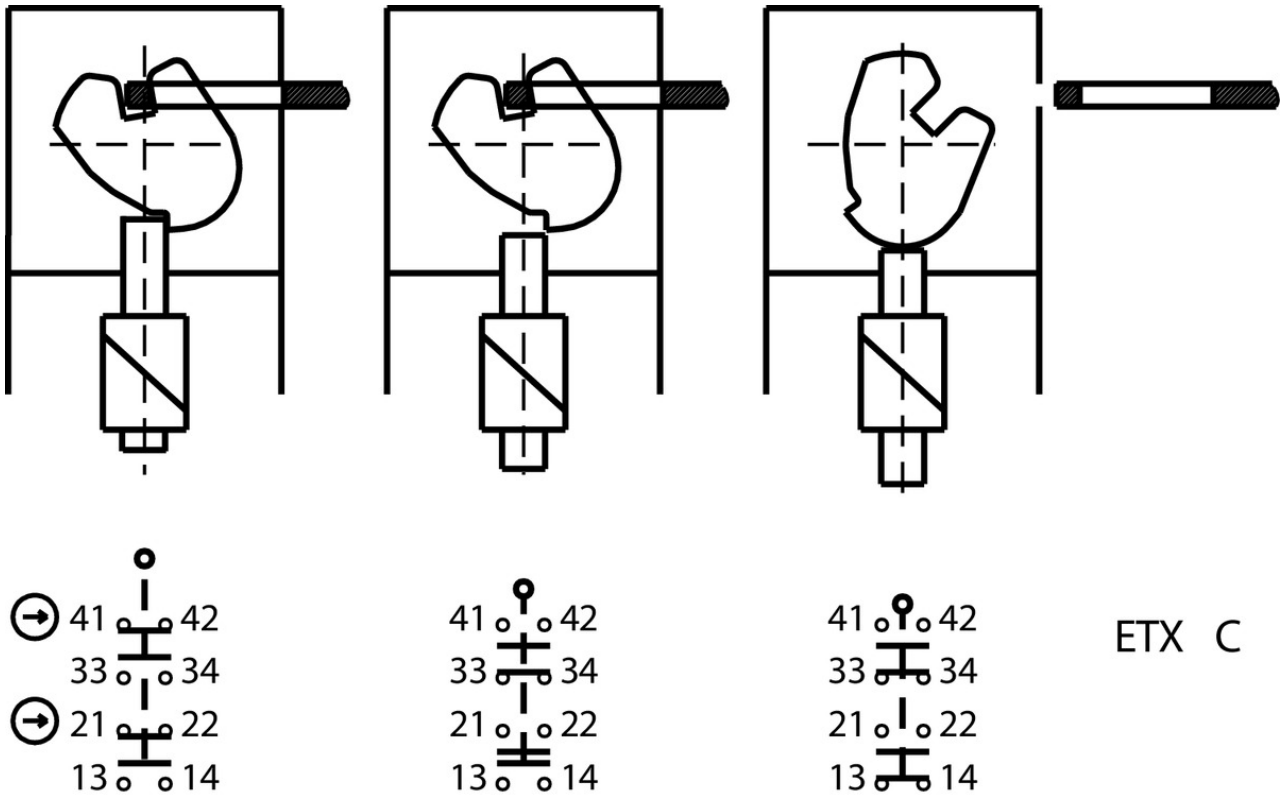
## Legende

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

ETX C



## Switching functions



## Mounting accessories

- 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

- 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

## Function expansion

- Lockout mechanism NX/TX



**096098** SPERREINSATZ TX

### Features

- › Prevents unintentional closing of the door
- › Can be secured with padlocks

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▼ Emergency unlocking for safety switches TX



**094771** NOTENTSPERRUNG TX

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▼ Release with automatic reset for safety switches TX



**094773** ENTRIEGELUNG RUECKSTELLEND TX1/3

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▼ Lock for mechanical release for safety switches TX



**079796** SCHLOSS TX VERSCHIEDENSCHLIESSEND



**079795** SCHLOSS TX GLEICHSCHLIESSEND

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## Actuator

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▼ 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

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▼ 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

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▼ 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

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▼ 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
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#### ✓ 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
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## Bolt

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#### ✓ 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
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#### ✓ 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
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## Spare parts

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#### ✓ Lead seal kit

#### **087256** PLOMBENSATZ C1937

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## 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...           |          |          |  |  |

## 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