

ITEM 079693 TZ1RE024BHA-C1902

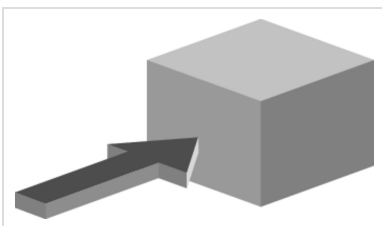
| Description | Technical data | Accessories | Downloads |
|-------------|----------------|-------------|-----------|
|-------------|----------------|-------------|-----------|



Features

- › Without auxiliary release
- › Protective plate for switch head
- › Two LED indicators, red and green
- › Plug connector MR12
- › Actuating head fitted right

Approach direction



- › Figure
Horizontal
Can be adjusted in 90° steps

Protective plate for switch head

Makes it more difficult to tamper with the switch.

Solenoid operating voltage and LED function display

› 24 V AC/DC -15%, +10%

Guard locking type

TZ1 Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the solenoid.

Switching element

SK For monitoring the door/actuator position

ÜK For monitoring the guard locking (built-in solenoid)

2121H Slow-action switching contact 4 NC⊖

Approvals



Mechanical values and environment

| | |
|--|---|
| Housing material | Anodized die-cast alloy |
| Weight | Net 1,2 kg |
| Ambient temperature | -25 ... 80 °C |
| Degree of protection | IP65 |
| Mechanical life | 1 x 10 ⁶ |
| Contact material | Silver alloy, gold flashed |
| Switching principle | Slow-action switching contact |
| Installation position | Any |
| Number of door position positively driven contacts | 3 |
| Number of guard lock monitoring positively driven contacts | 4 Switches green LED |
| Connection | 1 x Plug connector BHA12 ^[1] |
| Approach speed | max.20 m/min |
| Actuation frequency | 1200 1/h |
| Guard locking principle | Closed-circuit current principle |
| Locking force F _{max} | 2000 N |
| Locking force F _{Zh} | 1500 N |
| Retention force | 10 N |
| Extraction force | 30 N |
| Actuating force | 35 N |

| | |
|-----------------|-----------|
| Insertion depth | min.52 mm |
| Cover lid | Red |

Electrical connection ratings

| | |
|---|---|
| Rated thermal current I_{th} | 4 A [2] |
| Utilization category according to EN 60947-5-1 | AC-15 4A 230V [3] DC-13 4A 24V [4] |
| Solenoid operating voltage | AC/DC 24 V -15% ... +10% |
| Short circuit protection according to IEC 60269-1 | (Fuse) 4A gG [5] |
| Rated insulation voltage U_i | 250 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 | 10 W |
| Solenoid duty cycle | 100 % |
| LED indicator | Operating voltage corresponds to the solenoid voltage [6] |

Miscellaneous

| | |
|----------|----------------------------------|
| C number | C1902 Without mechanical release |
|----------|----------------------------------|

Reliability values acc. to EN ISO 13849-1

| | |
|-------------------|--|
| | Control of the guard locking |
| Category | Depending on external control of guard locking [7] |
| Performance Level | Depending on external control of guard locking [8] |
| PFH_D | Depending on external control of guard locking [9] |
| | Monitoring of guard locking and the safety guard position |
| $B10_D$ | 3×10^6 |

in combination with Actuator BETAETIGER-Z-GN

Mechanical values and environment

| | |
|------------|-------|
| Overtravel | 16 mm |
|------------|-------|

in combination with Actuator BETAETIGER-Z-G

Mechanical values and environment

| | |
|------------|-------|
| Overtravel | 16 mm |
|------------|-------|

[1] 11-pin + PE; positively driven NC contact for the door position and positively driven NC contacts for the guard lock monitoring connected in series, NC contact for the door position and NC contact for the guard lock monitoring connected in series

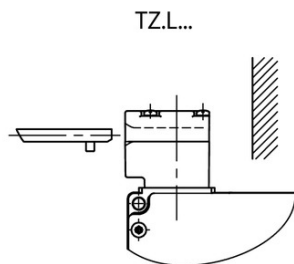
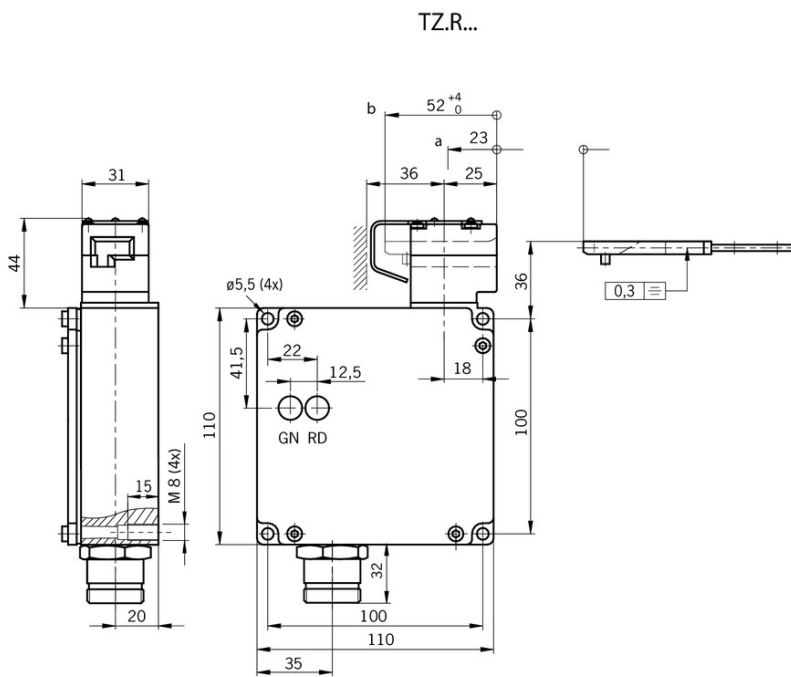
[2, 3, 4] $>70^{\circ}\text{C} \Rightarrow 2\text{A}$

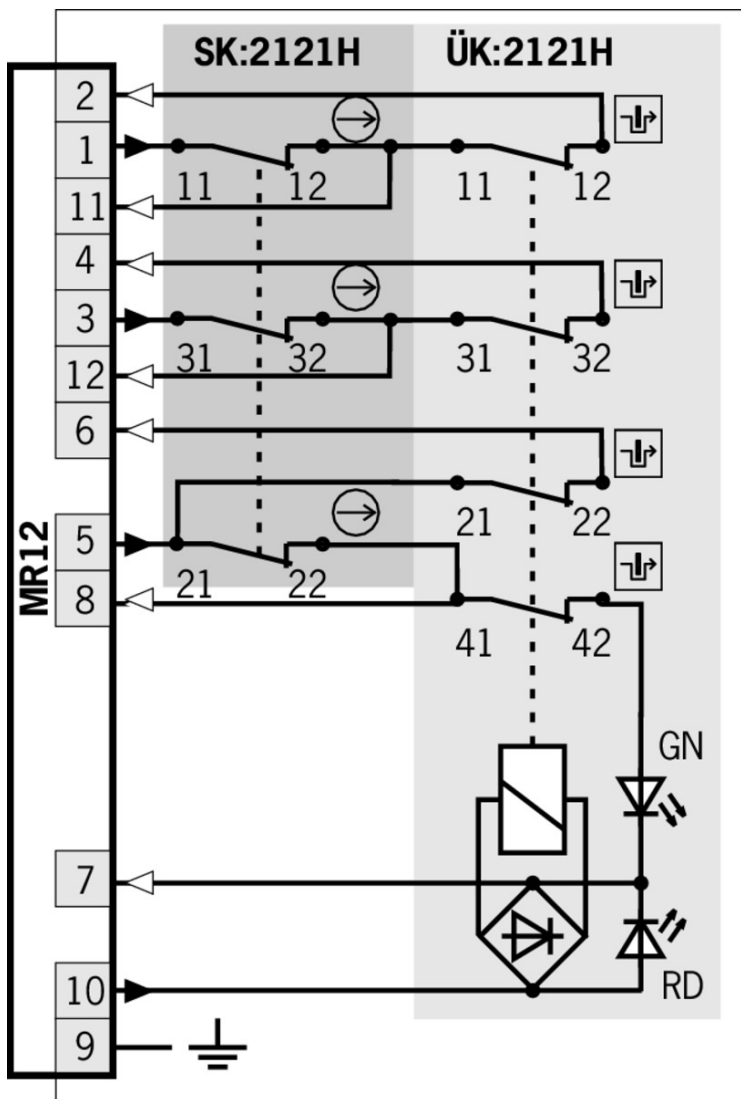
[5] $> 70^{\circ}\text{C} \Rightarrow 2\text{A gG}$

[6] 2 LEDs; green, red

[7, 8, 9] LEDs have the same ground potential as the guard locking solenoid.

Dimension drawing

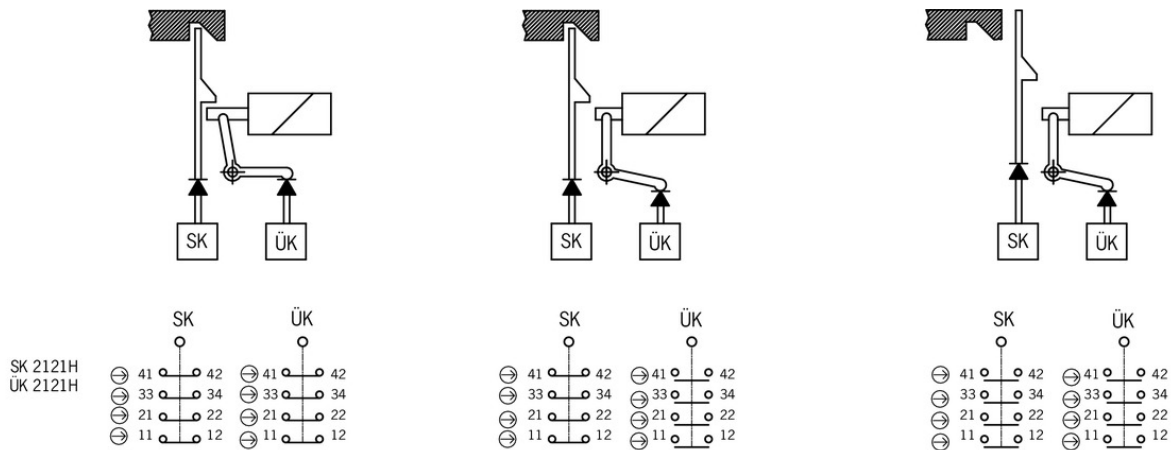




Legende

- Solenoid monitoring
- Door monitoring

Switching functions



Actuator

Actuators for safety switches NZ.VZ, NZ.VZ.VS and TZ



074411 BETAETIGER-Z-G/V25

Features

- › Two stainless safety screws per actuator
- › Packaging unit 25 pieces



072251 BETAETIGER-Z-GN

Features

- › Two stainless safety screws per actuator



097436 BETAETIGER-Z-GME

Features

- › Made of solid stainless steel
- › Two stainless safety screws per actuator



016849 BETAETIGER-Z-G

Features

- › Two stainless safety screws per actuator

Hinged actuator right for safety switches NZ.VZ, NZ.VZ.VS and TZ



074412 RADIUSBETAETIGER-Z-R/V25

Features

- › Two stainless safety screws per actuator
- › Packaging unit 25 pieces



024299 RADIUSBETAETIGER-Z-R

Features

- › Two stainless safety screws per actuator



100406 RADIUSBETAETIGER-Z-R-C2194

✓ Features

- › Two stainless safety screws per actuator
- › Smaller door radii

✓ Hinged actuator top for safety switches NZ.VZ, NZ.VZ.VS and TZ



057950 RADIUSBETAETIGER-Z-O

✓ Features

- › Two stainless safety screws per actuator



074415 RADIUSBETAETIGER-Z-O/V25

✓ Features

- › Two stainless safety screws per actuator
- › Packaging unit 25 pieces

✓ Hinged actuator bottom for safety switches NZ.VZ, NZ.VZ.VS and TZ



048850 RADIUSBETAETIGER-Z-U

✓ Features

- › Two stainless safety screws per actuator



074414 RADIUSBETAETIGER-Z-U/V25

✓ Features

- › Two stainless safety screws per actuator
- › Packaging unit 25 pieces

✓ Hinged actuator left for safety switches NZ.VZ, NZ.VZ.VS and TZ



024298 RADIUSBETAETIGER-Z-L

✓ Features

- › Two stainless safety screws per actuator



100407 RADIUSBETAETIGER-Z-L-C2194

✓ Features

- › Two stainless safety screws per actuator
- › Smaller door radii



074413 RADIUSBETAETIGER-Z-L/V25

✓ Features

- › Two stainless safety screws per actuator
- › Packaging unit 25 pieces

Bolt

✓ Bolts NZ/TZ-S1 and NZ/TZ-S2 for safety switches NZ.VZ, NZ.VZ.VS and TZ



028359 RIEGEL NZ/TZ-S2

✓ Features

- › Aluminum bolt
- › For doors hinged on the left or right. Cone grip top.
- › Spring catch in open position
- › Can be locked in open position with padlocks
- › Actuator included



028357 RIEGEL NZ/TZ-S1

✓ Features

- › Aluminum bolt
- › For doors hinged on the left or right. Cone grip bottom.
- › Spring catch in open position
- › Can be locked in open position with padlocks
- › Actuator included

✓ Bolt TZ-A... for safety switches TZ



096057 RIEGEL TZ-A-NIRO-C2101

✓ Features

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



079798 RIEGEL TZ-A-NIRO

✓ Features

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



057736 RIEGEL TZ-A

✓ Features

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



117193 RIEGEL TZ-A-NIRO-C2392

✓ Features

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

✓ Bolt BTC-TZ00... without escape release for safety switch TZ



106278 BTC-TZ00-A-TH-00-X

✓ Features

- › Aluminum bolt

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

Mounting accessories

- ▼ Mounting plates EMP-SA for safety switches TZ



094401 EMP-SA

- ▼ Features

- › For vertical and horizontal mounting of safety switch TZ
-

- ▼ 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

- ▼ 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 actuators, M5 x 16

073456 M5X16/V100

- ▼ Features

- › Safety screws M5 x 16
 - › Packaging unit 100 pieces
-

- ▼ Safety screws M5 x 25

073457 M5X25/V100

- ▼ Features

- › Safety screws M5 x 25
 - › Packaging unit 100 pieces
-

Function expansion

- ▼ Lockout mechanism NZ.VZ/TZ, 3 holes



091305 SPERREINSATZ MIT KETTE

▼ Features

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



046730 SPERREINSATZ-Z-046730

▼ Features

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

▼ Protective plate NZ.VZ/TZ

059136 SCHUTZBLECH NZ/TZ

▼ Lockout mechanism NZ.VZ/TZ, 5 holes

086538 SPERREINSATZ-Z-086538

▼ Features

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

▼ Adapter NZ/TZ 45/30



079033 ADAPTER NZ/TZ 45/30

▼ Features

- › The adapter NZ/TZ 45/30 is used to compensate for different profiles, doors/frame 45/30

Connection material

▼ Connection cable with plug connector MR12, 12-pin, 6m



100961 C-MINF12-12X1,0PV06,0-MA-100961

▼ Features

- › MR12 female plug, 12-pin
- › Straight plug connector
- › PVC cable
- › Cable length 6 m
- › With flying lead



102522 C-MINF12-12X1,0PU06,0-MA-102522

▼ Features

- › MR12 female plug, 12-pin
- › Straight plug connector
- › PUR cable
- › Cable length 6 m
- › With flying lead

▼ Connection cable with plug connector MR12, 12-pin, 3.6m



100967 C-MINF12-12X1,0PU03,6-MA-100967

▼ Features

- › MR12 female plug, 12-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 3.6 m
 - › With flying lead
-



100960 C-MINF12-12X1,0PV03,6-MA-100960

▼ Features

- › MR12 female plug, 12-pin
 - › Straight plug connector
 - › PVC cable
 - › Cable length 3.6 m
 - › With flying lead
-

▼ Connection cable with plug connector MR12, 12-pin, 9.1m



102523 C-MINF12-12X1,0PU09,1-MA-102523

▼ Features

- › MR12 female plug, 12-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 9.1 m
 - › With flying lead
-



100962 C-MINF12-12X1,0PV09,1-MA-100962

▼ Features

- › MR12 female plug, 12-pin
 - › Straight plug connector
 - › PVC cable
 - › Cable length 9.1 m
 - › With flying lead
-

▼ Connection cable with plug connector MR12, 12-pin, 15.2m



102525 C-MINF12-12X1,0PU15,2-MA-102525

▼ Features

- › MR12 female plug, 12-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 15.2 m
 - › With flying lead
-

▼ Connection cable with plug connector MR12, 12-pin, 18.2m



102526 C-MINF12-12X1,0PU18,2-MA-102526

▼ Features

- › MR12 female plug, 12-pin
- › Straight plug connector

- › PUR cable
- › Cable length 18.2 m
- › With flying lead

✓ Connection cable with plug connector MR12, 12-pin, 12.1m



102524 C-MINF12-12X1,0PU12,1-MA-102524

✓ Features

- › MR12 female plug, 12-pin
- › Straight plug connector
- › PUR cable
- › Cable length 12.1 m
- › With flying lead

Instructions

✓ Betriebsanleitung Sicherheitsschalter TZ...

| | Doc. no. | Version | Language | Download |
|---|----------|----------|------------------|----------|
| Betriebsanleitung Sicherheitsschalter TZ... Operating Instructions TZ... Safety Switch Manual de instrucciones del interruptor de seguridad TZ... Mode d'emploi Interrupteur de sécurité TZ... Istruzioni di impiego dei finecorsa di sicurezza TZ... | 2088062 | 09-05/18 | | 6.9 MB |
| Instrukcja obsługi wyłącznika bezpieczeństwa TZ... | 2088062 | 09-05/18 | | 1.8 MB |
| Manual de instruções da chave de segurança TZ... | 2088062 | 09-05/18 | | 1.5 MB |
| Руководство по эксплуатации предохранительных выключателей TZ... | 2088062 | 09-05/18 | | 1.9 MB |
| Návod na obsluhu – bezpečnostný spínač TZ... | 2088062 | 09-05/18 | | 1.8 MB |
| 使用说明书安全开关 TZ... | 2088062 | 09-05/18 | | 1.6 MB |

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 |



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