

ITEM 092998 TZ1LE024RC18VAB-092998

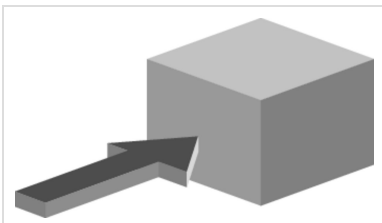
Description	Technical data	Accessories	Downloads
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Features

- › Emergency unlocking on the front with rotary knob
- › Two LED indicators, red and green
- › Plug connector M23 (RC18)
- › Actuating head fitted left

Approach direction



- › Figure
Horizontal
Can be adjusted in 90° steps

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 elements

SK For monitoring the door/actuator position

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

2131H Slow-action switching contact 3 NC $\ominus$ + 1 NO

3131H Slow-action switching contact 2 NC $\ominus$ + 2 NO

Emergency unlocking

Is used for the manual release of the guard locking without tools. The emergency unlocking mechanism must be returned to the locked state manually. Sealing can be fitted to protect against tampering. Lead seal kit and tool included (already pre-assembled on versions with plug connectors).

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	2
Number of door position NO contacts	1
Number of guard lock monitoring positively driven contacts	2
Number of guard lock monitoring NO contacts	2
Connection	1 x Plug connector RC18 ^[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	Black

Electrical connection ratings

Rated thermal current I_{th}	4 A [2]
Utilization category according to EN 60947-5-1	
AC-15	4A 110V [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	110 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

Additional feature	
092998	With mechanical release [7]

Reliability values acc. to EN ISO 13849-1

	Control of the guard locking
Category	Depending on external control of guard locking [8]
Performance Level	Depending on external control of guard locking [9]
PFH _D	Depending on external control of guard locking [10]
	Monitoring of guard locking and the safety guard position
B10 _D	3×10^6

in combination with Actuator BETAETIGER-Z-G

Mechanical values and environment

Overtravel	4 mm
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in combination with Actuator BETAETIGER-Z-GN

Mechanical values and environment

Overtravel	16 mm
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[1] 18 + PE

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

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

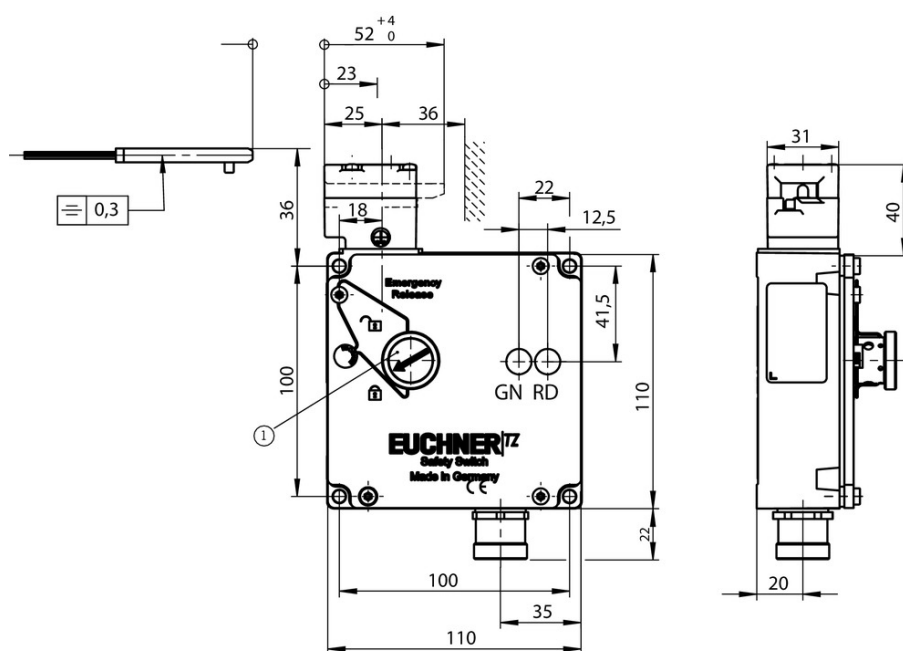
[6] 2 LEDs; green, red

[7] (Rotary knob, latching), special wiring

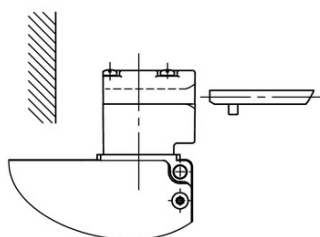
[8, 9, 10] LEDs have the same ground potential as the guard locking solenoid.

Dimension drawing

TZ.L...

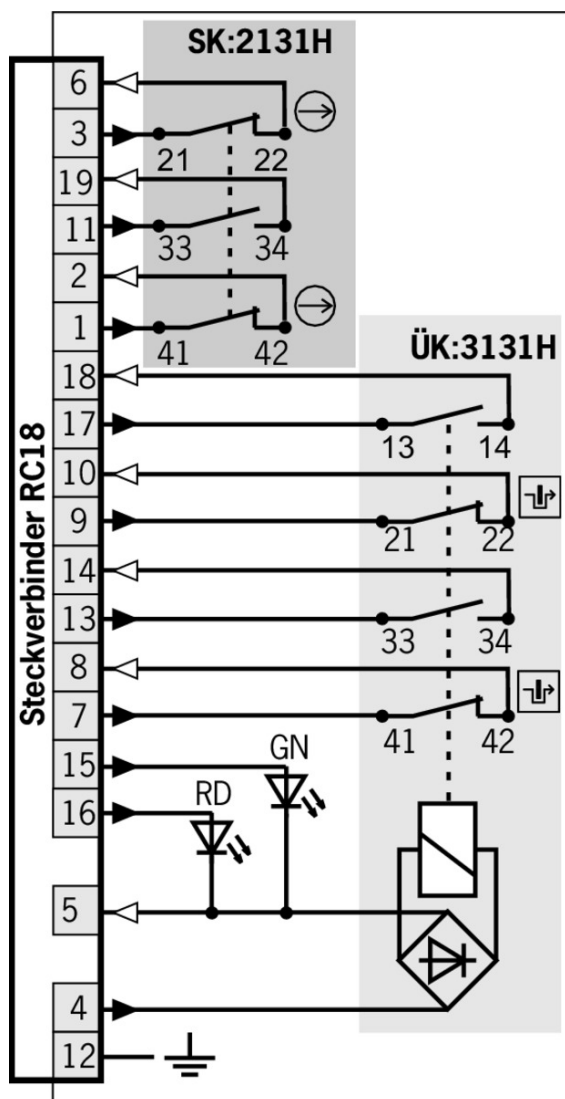


TZ.R...



Legende

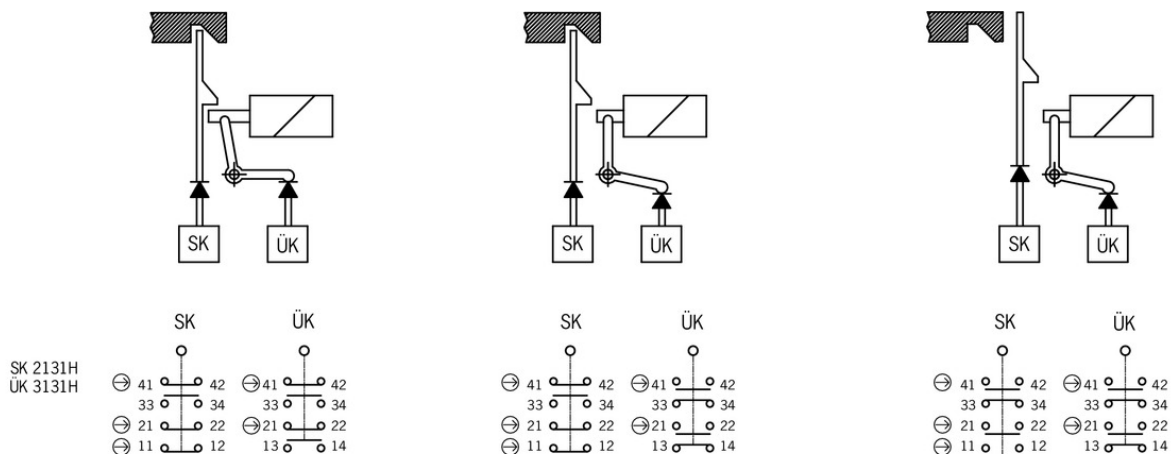
- 1 Emergency unlocking (rotary knob)



Legende

- Solenoid monitoring
- Door monitoring

Switching functions



Actuator

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



016849 BETAETIGER-Z-G

Features

- Two stainless safety screws per actuator



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

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



024299 RADIUSBETAETIGER-Z-R

Features

- Two stainless safety screws per actuator



074412 RADIUSBETAETIGER-Z-R/V25

Features

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



100406 RADIUSBETAETIGER-Z-R-C2194

▼ Features

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

▼ 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

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



074414 RADIUSBETAETIGER-Z-U/V25

▼ Features

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



048850 RADIUSBETAETIGER-Z-U

▼ Features

- › Two stainless safety screws per actuator

▼ 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

Bolt

▼ Bolt TZ-C... for safety switches TZ



057737 RIEGEL TZ-C

✓ Features

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



079799 RIEGEL TZ-C-NIRO

✓ Features

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



096058 RIEGEL TZ-C-NIRO-C2101

✓ Features

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



117194 RIEGEL TZ-C-NIRO-C2392

✓ Features

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

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



106280 BTC-TZ00-C-TH-00-X

✓ Features

- › Aluminum bolt

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

Connection material

- ▼ Connection cable with plug connector M23, 19-pin, 3m, straight



110302 C-M23F19-19XDIFPU03,0-MA-110302

- ▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 3 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector M23, 19-pin, 1.5m, straight



110301 C-M23F19-19XDIFPU01,5-MA-110301

- ▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 1.5 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector M23, 19-pin, 10m, straight



110304 C-M23F19-19XDIFPU10,0-MA-110304

- ▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 10 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector M23, 19-pin, 15m, straight



110305 C-M23F19-19XDIFPU15,0-MA-110305

- ▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 15 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector M23, 19-pin, 6m, straight



110303 C-M23F19-19XDIFPU06,0-MA-110303

▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 6 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector M23, 19-pin, 20m, straight



110306 C-M23F19-19XDIFPU20,0-MA-110306

▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 20 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector M23, 19-pin, 25m, straight



110307 C-M23F19-19XDIFPU25,0-MA-110307

▼ Features

- › M23 female plug, 19-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 25 m
 - › With flying lead
 - › Cores numbered, black
-

- ▼ Connection cable with plug connector M23 with option C1825, 25m, angled



092913 C-M23F19-19XDIFPU25,0-MA-092913

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Angled plug connector
 - › Cable exit A (right)
 - › PUR cable
 - › Cable length 25 m
 - › With flying lead
 - › Cores color-coded
-



092912 C-M23F19-19XDIFPU25,0-MA-092912

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Angled plug connector
 - › Cable exit C (left)
 - › PUR cable
 - › Cable length 25 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 20m, angled



092911 C-M23F19-19XDIFPU20,0-MA-092911

▼ Features

- › M23 plug connector, 18-pin + PE
- › Angled plug connector
- › Cable exit A (right)
- › PUR cable
- › Cable length 20 m
- › With flying lead
- › Cores color-coded



092910 C-M23F19-19XDIFPU20,0-MA-092910

▼ Features

- › M23 plug connector, 18-pin + PE
- › Angled plug connector
- › Cable exit C (left)
- › PUR cable
- › Cable length 20 m
- › With flying lead
- › Cores color-coded

▼ Connection cable with plug connector M23 with option C1825, 15m, angled



085196 C-M23F19-19XDIFPU15,0-MA-085196

▼ Features

- › M23 plug connector, 18-pin + PE
- › Angled plug connector
- › Cable exit A (right)
- › PUR cable
- › Cable length 15 m
- › With flying lead
- › Cores color-coded



077020 C-M23F19-19XDIFPU15,0-MA-077020

▼ Features

- › M23 plug connector, 18-pin + PE
- › Angled plug connector
- › Cable exit C (left)
- › PUR cable
- › Cable length 15 m
- › With flying lead
- › Cores color-coded

▼ Connection cable with plug connector M23 with option C1825, 10m, angled



092902 C-M23F19-19XDIFPU10,0-MA-092902

▼ Features

- › M23 plug connector, 18-pin + PE
- › Angled plug connector
- › Cable exit A (right)
- › PUR cable
- › Cable length 10 m

- › With flying lead
- › Cores color-coded



092901 C-M23F19-19XDIFPU10,0-MA-092901

▼ Features

- › M23 plug connector, 18-pin + PE
- › Angled plug connector
- › Cable exit C (left)
- › PUR cable
- › Cable length 10 m
- › With flying lead
- › Cores color-coded

▼ Connection cable with plug connector M23 with option C1825, 8m, angled



077019 C-M23F19-19XDIFPU08,0-MA-077019

▼ Features

- › RC18 plug connector, 18-pin + PE
- › Angled plug connector
- › Cable exit C (left)
- › PUR cable
- › Cable length 8 m
- › With flying lead
- › Cores color-coded



085195 C-M23F19-19XDIFPU08,0-MA-085195

▼ Features

- › M23 plug connector, 18-pin + PE
- › Angled plug connector
- › Cable exit A (right)
- › PUR cable
- › Cable length 8 m
- › With flying lead
- › Cores color-coded

▼ Connection cable with plug connector M23 with option C1825, 6m, angled



077018 C-M23F19-19XDIFPU06,0-MA-077018

▼ Features

- › M23 plug connector, 18-pin + PE
- › Angled plug connector
- › Cable exit C (left)
- › PUR cable
- › Cable length 6 m
- › With flying lead
- › Cores color-coded



085194 C-M23F19-19XDIFPU06,0-MA-085194

▼ Features

- › M23 plug connector, 18-pin + PE
- › Angled plug connector
- › Cable exit A (right)
- › PUR cable

- › Cable length 6 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 1.5m, angled



092907 C-M23F19-19XDIFPU01,5-MA-092907

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Angled plug connector
 - › Cable exit A (right)
 - › PUR cable
 - › Cable length 1.5 m
 - › With flying lead
 - › Cores color-coded
-



092906 C-M23F19-19XDIFPU01,5-MA-092906

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Angled plug connector
 - › Cable exit C (left)
 - › PUR cable
 - › Cable length 1.5 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 3m, angled



092909 C-M23F19-19XDIFPU03,0-MA-092909

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Angled plug connector
 - › Cable exit A (right)
 - › PUR cable
 - › Cable length 3 m
 - › With flying lead
 - › Cores color-coded
-



092908 C-M23F19-19XDIFPU03,0-MA-092908

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Angled plug connector
 - › Cable exit C (left)
 - › PUR cable
 - › Cable length 3 m
 - › With flying lead
 - › Cores color-coded
-

▼ Female connector RC18 angled with option C1825



077026 RC18WF-C1825

▼ Features

- › Plug connector M23, angled

- › Number of pins: 19-pin with screen bonding clamp

▼ Connection cable with plug connector M23 with option C1825, 1.5m, straight



092761 C-M23F19-19XDIFPU01,5-MA-092761

▼ Features

- › M23 plug connector, 18-pin + PE
- › Straight plug connector
- › PUR cable
- › Cable length 1.5 m
- › With flying lead
- › Cores color-coded

▼ Connection cable with plug connector M23 with option C1825, 8m, straight



077015 C-M23F19-19XDIFPU08,0-MA-077015

▼ Features

- › M23 plug connector, 18-pin + PE
- › Straight plug connector
- › PUR cable
- › Cable length 8 m
- › With flying lead
- › Cores color-coded

▼ Connection cable with plug connector M23 with option C1825, 6m, straight



077014 C-M23F19-19XDIFPU06,0-MA-077014

▼ Features

- › M23 plug connector, 18-pin + PE
- › Straight plug connector
- › PUR cable
- › Cable length 6 m
- › With flying lead
- › Cores color-coded

▼ Connection cable with plug connector M23 with option C1825, 10m, straight



092898 C-M23F19-19XDIFPU10,0-MA-092898

▼ Features

- › M23 plug connector, 18-pin + PE
- › Straight plug connector
- › PUR cable
- › Cable length 10 m
- › With flying lead
- › Cores color-coded

▼ Connection cable with plug connector M23 with option C1825, 25m, straight



092727 C-M23F19-19XDIFPU25,0-MA-092727

▼ Features

- › M23 plug connector, 18-pin + PE
- › Straight plug connector

- › PUR cable
 - › Cable length 25 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 15m, straight



077016 C-M23F19-19XDIFPU15,0-MA-077016

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 15 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 20m, straight



092726 C-M23F19-19XDIFPU20,0-MA-092726

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 20 m
 - › With flying lead
 - › Cores color-coded
-

▼ Connection cable with plug connector M23 with option C1825, 30m, straight



095993 C-M23F19-19XDIFPU30,0-MA-095993

▼ Features

- › M23 plug connector, 18-pin + PE
 - › Straight plug connector
 - › PUR cable
 - › Cable length 30 m
 - › With flying lead
 - › Cores color-coded
-

▼ Female plug RC18 straight



074616 RC18EF

▼ Features

- › Plug connector M23, straight
 - › Number of pins: 19-pin with screen bonding clamp
-

▼ Female plug RC18 angled



074617 RC18WF

▼ Features

- › Plug connector M23, angled
 - › Number of pins: 19-pin with screen bonding clamp
-

▼ Female plug RC18 straight with option C1825



077025 RC18EF-C1825

▼ Features

- › Plug connector M23, straight
- › Number of pins: 19-pin with screen bonding clamp

Spare parts

▼ Lead seal kit

087256 PLOMBENSATZ C1937

Function expansion

▼ Protective plate NZ.VZ/TZ

059136 SCHUTZBLECH NZ/TZ

▼ 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

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-SA for safety switches TZ



094401 EMP-SA

▼ Features

- › For vertical and horizontal mounting of safety switch TZ

▼ 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

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
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