

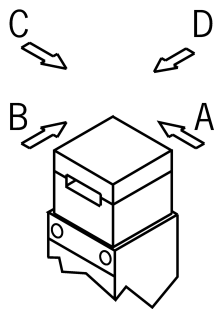
TZ2RE024RC18VAB-C1826 (Order no. 085181)

Safety switch TZ, plug connector M23 (RC18), special wiring

- Plug connector M23 (RC18)
- Auxiliary release
- LED indicator
- Actuating head fitted right
- Open-circuit current principle



Approach direction



Horizontal

Can be adjusted in 90° steps

Guard locking principle

Open-circuit current (power on to lock): On a guard with guard locking based on the open-circuit current principle, the guard is locked until the power supply to the guard locking solenoid is interrupted. Unlocking is by spring force. The term electrical guard locking is also used.

LED indicator

The switch has two freely assignable LED indicators (red and green).

Switching element

SK 2131 Slow-action switching contact

Contacts for door monitoring: 2 positively driven contacts $\rightarrow$ + 1 NO contact

ÜK 3131 Slow-action switching contact

Contacts for guard locking: 2 positively driven contacts $\uparrow$ + 2 NO contact

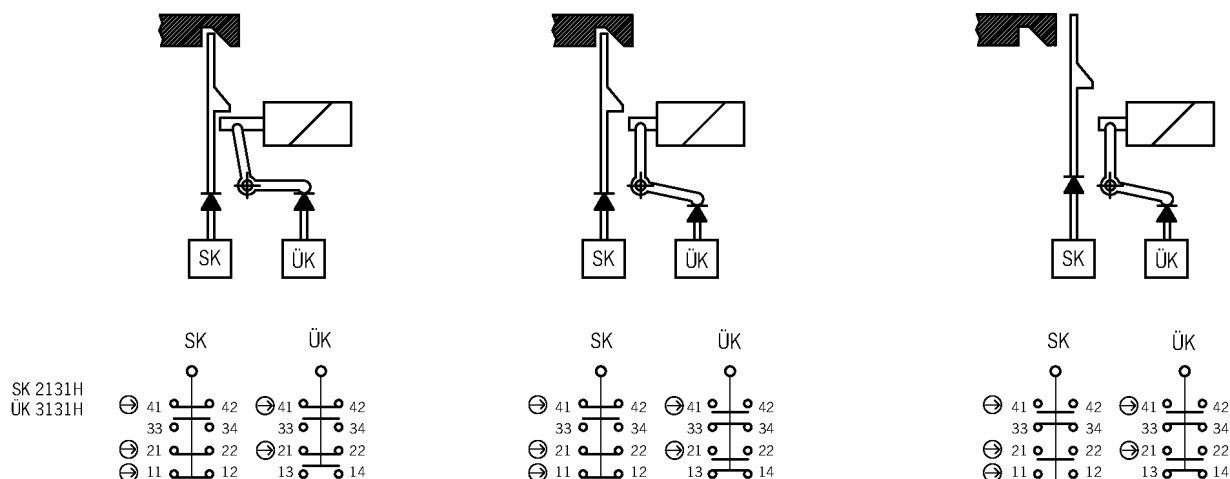
Auxiliary release

The auxiliary release on the front makes it possible to access the machine if there is a malfunction, e.g. a power failure. Unlocking is performed using a tool or a key. The auxiliary release must be protected against misuse (sealing, lacquer).

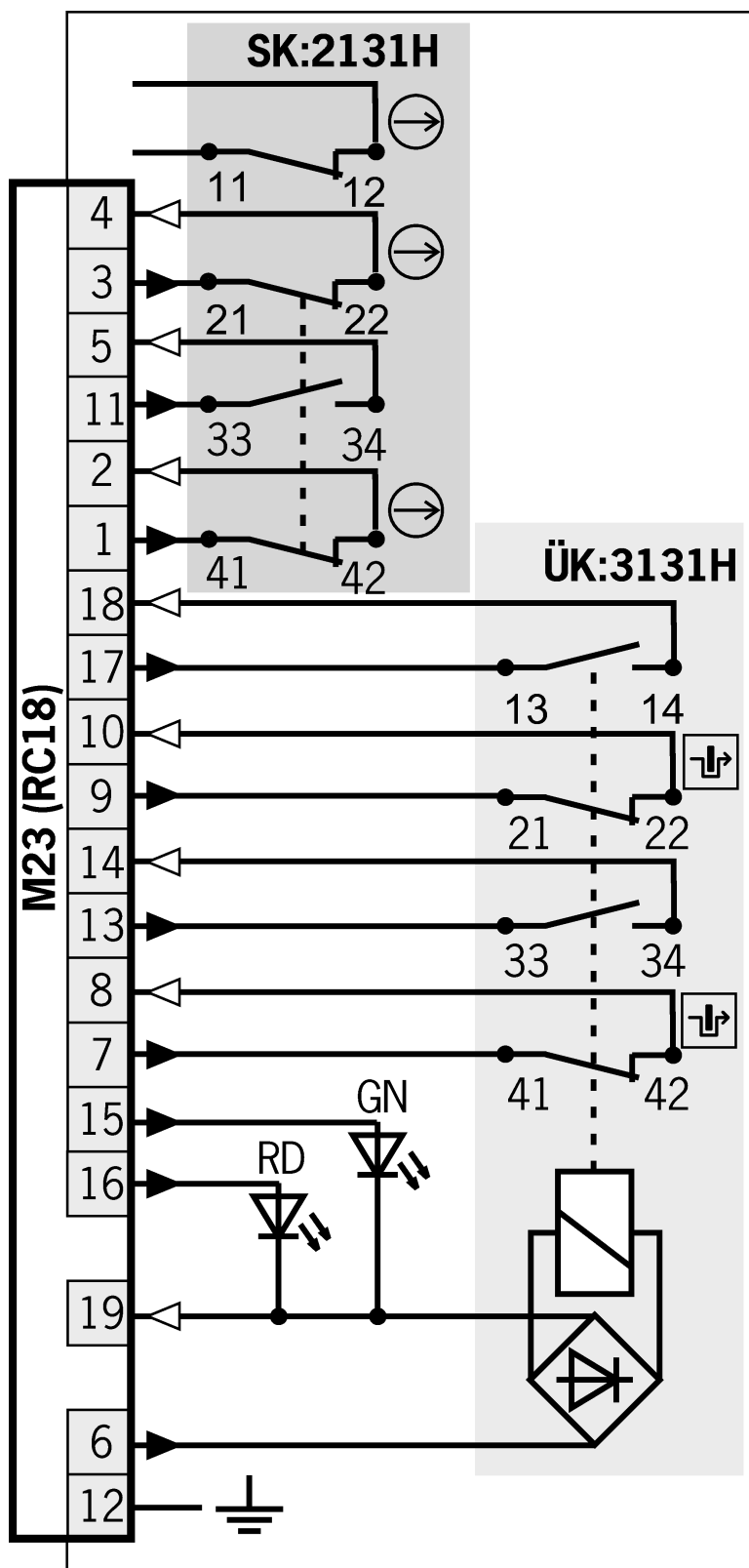
Accessories required

Actuator is not included.

Functional drawings



Connection examples



Door monitoring

Solenoid monitoring

Technical data

Approvals



Operating and display elements

LED display

Operating voltage corresponds to the solenoid voltage
(2 LEDs; green, red)

Electrical connection values

Fuse	max. 4 A gG (>70 °C => 2 A gG)
------	-----------------------------------

Power consumption	10 W
-------------------	------

Rated insulation voltage U_i	50 V
--------------------------------	------

Rated impulse voltage U_{imp}	1.5 kV
---------------------------------	--------

Utilization category

AC-15	4 A 50 V (>70 °C => 2 A)
-------	-----------------------------

DC-13	4 A 24 V (>70 °C => 2 A)
-------	-----------------------------

Solenoid operating voltage

AC/DC	24 V -15% ... +10%
-------	--------------------

Solenoid duty cycle	100 %
---------------------	-------

Switching voltage

min. at 10 mA	12 V
---------------	------

Switching current

min. at 24 V	1 mA
--------------	------

thermal rated current I_{th}	4 A (>70 °C => 2 A)
--------------------------------	------------------------

Mechanical values and environment

Anfahrgeschwindigkeit	max. 20 m/min
-----------------------	---------------

Approach direction

Actuating head on the right A

Connection type	
1 x	Plug connector RC18 (18-pin + PE)
Number of door position NO contacts	1
Number of guard lock monitoring NO contacts	2
Number of door position positively driven contacts	2
Number of guard lock monitoring positively driven contacts	2
Extraction force	30 N
Actuation frequency	max. 1200 1/h
Actuating force	35 N
Lid	black
Installation orientation	any
Insertion depth	52 mm
Storage temperature	-25 ... 80 °C
Mechanical life	1 x 10 ⁶
Retention force	10 N
Switching principle	Slow-action switching contact
Degree of protection	IP65
Ambient temperature	-25 ... 80 °C
Material	
Contact	Silver alloy, gold flashed
Housing	Anodized die-cast alloy
Locking force $F_{\max}$	2000 N
Locking force F_{Zh}	1500 N
Guard locking principle	Open-circuit current principle

Characteristic values according to EN ISO 13849-1 and EN IEC 62061

	B10_D	Mission time
--	------------------------	---------------------

Monitoring of the guard position	3×10^6	20 y
	Important! Values valid at DC-13 100 mA/24V	
Guard lock monitoring	3×10^6	20 y
	Important! Values valid at DC-13 100 mA/24V	

Miscellaneous

C number	
	C1826 Special wiring

In combination with actuator ACTUATOR-Z-GN

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

In combination with actuator ACTUATOR-Z-G

Overtravel	4 mm
------------	------

Downloads

All documentation for this material can be found on our website:

<https://www.euchner-usa.com/en-us/a/085181/?#downloads-tab>

Ordering data

Ordernumber	085181
Item designation	TZ2RE024RC18VAB-C1826
Gross weight	1,27kg
Customs tariff number	85365019000
ECLASS 11.0	27-27-26-03 Safety switch with guard control

Accessories

Actuator

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



016849

BETAETIGER-Z-G

Two stainless-steel safety screws per actuator



074411

BETAETIGER-Z-G/V25

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



072251

BETAETIGER-Z-GN

Two stainless-steel safety screws per actuator



097436

BETAETIGER-Z-GME

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

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



048850

RADIUSBETAETIGER-Z-U

Two stainless-steel safety screws per actuator

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



024298

RADIUSBETAETIGER-Z-L

Two stainless-steel safety screws per actuator



100407

RADIUSBETAETIGER-Z-L-C2194

Two stainless-steel safety screws per actuator
Smaller door radii

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



024299

RADIUSBETAETIGER-Z-R

Two stainless-steel safety screws per actuator



100406

RADIUSBETAETIGER-Z-R-C2194

Two stainless-steel safety screws per actuator
Smaller door radii

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



057950

RADIUSBETAETIGER-Z-O

Two stainless-steel safety screws per actuator

Connection material

Connecting cable with plug connector M23 with option C1825, 1.5 m, angled



092906

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

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



092907

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

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

Connecting cable with plug connector M23 with option C1825, 1.5 m, straight



092761

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

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

Connecting cable with plug connector M23 with option C1825, 10 m, angled



092901

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

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



092902

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

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

Connecting cable with plug connector M23 with option C1825, 10 m, straight



092898

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

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

Connecting cable with plug connector M23 with option C1825, 15 m, angled



077020

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

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



085196

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

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

Connecting cable with plug connector M23 with option C1825, 15 m, straight



077016

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

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

Connecting cable with plug connector M23 with option C1825, 20 m, angled



092910

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

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



092911

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

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

Connecting cable with plug connector M23 with option C1825, 20 m, straight



092726

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

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

Connecting cable with plug connector M23 with option C1825, 25 m, angled



092912

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

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



092913

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

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

Connecting cable with plug connector M23 with option C1825, 25 m, straight



092727

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

M23 plug connector, 18-pin + PE
Straight plug connector
PUR cable
Cable length 25 m
With flying lead
Cores color-coded

Connecting cable with plug connector M23 with option C1825, 3 m, angled



092908

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

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



092909

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

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

Connecting cable with plug connector M23 with option C1825, 30 m, straight



095993

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

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

Connecting cable with plug connector M23 with option C1825, 6 m, angled



077018

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

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

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

Connecting cable with plug connector M23 with option C1825, 6 m, straight



077014

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

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

Connecting cable with plug connector M23 with option C1825, 8 m, angled



077019

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

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

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

Connecting cable with plug connector M23 with option C1825, 8 m, straight



077015

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

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

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



110301

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

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

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



110304

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

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

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



110305

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

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

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



110306

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

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

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



110307

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

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

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



110302

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

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

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



110303

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

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

Plug connector M23 with option C1825, angled



167836

AC-PC-M23F19W-C1825-167836

Female plug M23, with union nut, angled
Number of pins: 18-pin + PE (with shield spring)
Conductor cross-section: $16 \times 0.14 \dots 0.56 \text{ mm}^2 + 3 \times 0.5 \dots 1.0 \text{ mm}^2$
Cable diameter: 9...15 mm
for self-assembly
Crimp contacts included

Plug connector M23 with option C1825, straight



167838

AC-PC-M23F19G-C1825-167838

Female plug M23, with union nut, straight
Number of pins: 18-pin + PE (with shield spring)
Conductor cross-section: $16 \times 0.14 \dots 0.56 \text{ mm}^2 + 3 \times 0.5 \dots 1.0 \text{ mm}^2$
Cable diameter: 9...15 mm
for self-assembly
Crimp contacts included

Plug connector M23, angled



167837

AC-PC-M23F19W-167837

Female plug M23, with union nut, angled
Number of pins: 18-pin + PE (with shield spring)
Conductor cross-section: $0.5 \dots 1.0 \text{ mm}^2$
Cable diameter: 10...14 mm
for self-assembly
Crimp contacts included

Plug connector M23, straight



167839

AC-PC-M23F19G-167839

Female plug M23, with union nut, straight
Number of pins: 18-pin + PE (with shield spring)
Conductor cross-section: $0.5 \dots 1.0 \text{ mm}^2$
Cable diameter: 9...15 mm
for self-assembly
Crimp contacts included

Function expansion

Lockout bar NZ.VZ/TZ, 3 holes



046730

SPERREINSATZ-Z-046730

Prevents unintentional closing of the door
Can be secured with padlocks



091305

SPERREINSATZ MIT KETTE

Prevents unintentional closing of the door
Can be secured with padlocks

Protective plate NZ.VZ/TZ

059136

SCHUTZBLECH NZ/TZ

Metal bolt

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



106278

BTC-TZ00-A-TH-00-X

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

Bolt TZ-A... for safety switch TZ



117193

RIEGEL TZ-A-NIRO-C2392

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

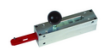
Bolt for safety switches NZ.VZ, NZ.VZ.VS and TZ



028357

RIEGEL NZ/TZ-S1

Bolt for safety switches NZ.VZ, NZ.VZ.VS and TZ
Aluminum bolt
For doors hinged on the left or right.
Spring catch in open position
Suitable for a door gap of approx. 15 mm



028359

RIEGEL NZ/TZ-S2

Bolt for safety switches NZ.VZ, NZ.VZ.VS and TZ
Aluminum bolt
For doors hinged on the left or right.
Spring catch in open position
Suitable for a door gap of approx. 15 mm

Bolts for safety switches series TZ



057736

RIEGEL TZ-A

Bolts for safety switches series TZ
Steel bolt
For doors hinged on the right
Suitable for a door gap of approx. 15 mm



079798

RIEGEL TZ-A-NIRO

Stainless steel bolt
For doors hinged on the right
Suitable for a door gap of approx. 15 mm



096057

RIEGEL TZ-A-NIRO-C2101

Bolts for safety switches series TZ
Stainless steel bolt
For doors hinged on the right
Suitable for a door gap of approx. 15 mm

Mounting accessories

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



093457
EMP-B1

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



093458
EMP-B2

Mounting plates EMP-SA for safety switch TZ



094401
EMP-SA

For vertical and horizontal mounting of safety switch TZ

Safety screws M5 x 10

073455
M5X10-NIRO/V100

Safety screws M5 x 10
Packaging unit 100 pieces

Safety screws M5 x 16

073456
M5X16/V100

Safety screws M5 x 16
Packaging unit 100 pieces

Safety screws for actuators, M5 x 25

073457
M5X25/V100

Safety screws M5 x 25
Packaging unit 100 pieces

Spare parts

Lead seal kit

048257
PLOMBENSATZ TZ