

**ITEM 099658 STA3A-2131A024L024RC18**

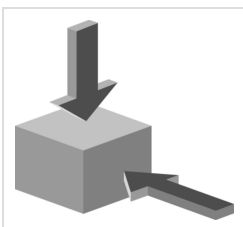
Description	Technical data	Accessories	Downloads
-------------	----------------	-------------	-----------



**Features**

- › Auxiliary release on the front
- › With door monitoring contact
- › Plug connector M23 (RC18)

**Approach direction**



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

**Solenoid operating voltage**

- › AC/DC 24 V +10%, -15%

## LED function display

A function display (2 LEDs, red and green) is available for the following voltage ranges:

- › AC/DC 24 V +10%, -15%

---

## Guard locking type

**STA3** Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the guard locking solenoid.

---

## Switching element

**2131** Slow-action switching contact 2 NC  $\ominus$  + 1 NO + 1 NC (door monitoring contact)

---

## Auxiliary release

Is used for releasing the guard locking with the aid of a tool. To protect against tampering, the auxiliary release is sealed with sealing lacquer.

## Approvals



## Mechanical values and environment

Housing material	Alloy - die-cast
Weight	Net 0,6 kg
Ambient temperature	-20 ... 70 °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 NC contacts	1
Number of guard lock monitoring positively driven contacts	2
Number of guard lock monitoring NO contacts	1
Connection	1 x Plug connector RC18 <b>[1]</b>
Approach speed	max. 20 m/min
Actuation frequency	1200 1/h

Guard locking principle	Closed-circuit current principle
Locking force $F_{max}$	3000 N
Locking force $F_{Zh}$	2300 N
Retention force	20 N
Extraction force	30 N
Actuating force	35 N
Insertion depth	min.24,5 mm

### Electrical connection ratings

Rated thermal current $I_{th}$	4 A
Utilization category according to EN 60947-5-1	AC-15 4A 50V 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 $U_i$	50 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 %
Display module	24 V -15% ... +10%

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

	<b>Control of the guard locking</b>
Category	Depending on external control of guard locking [2]
Performance Level	Depending on external control of guard locking [3]
$PFH_D$	Depending on external control of guard locking [4]
	<b>Monitoring of guard locking and the safety guard position</b>
$B10_D$	$11,5 \times 10^6$

**in combination with Actuator BETAETIGER-S-GT-SN**

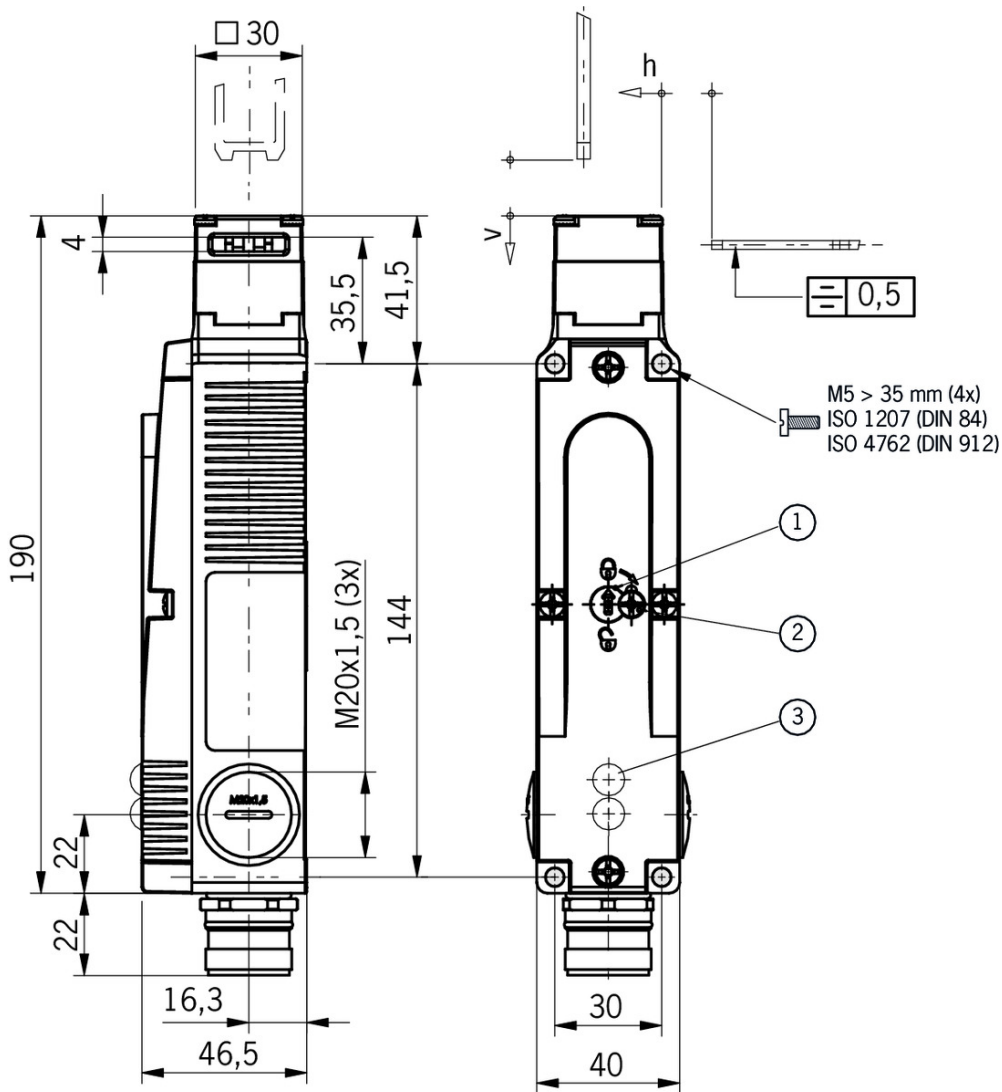
### Mechanical values and environment

Overtravel	5 mm
------------	------

[1] 18-pin + PE

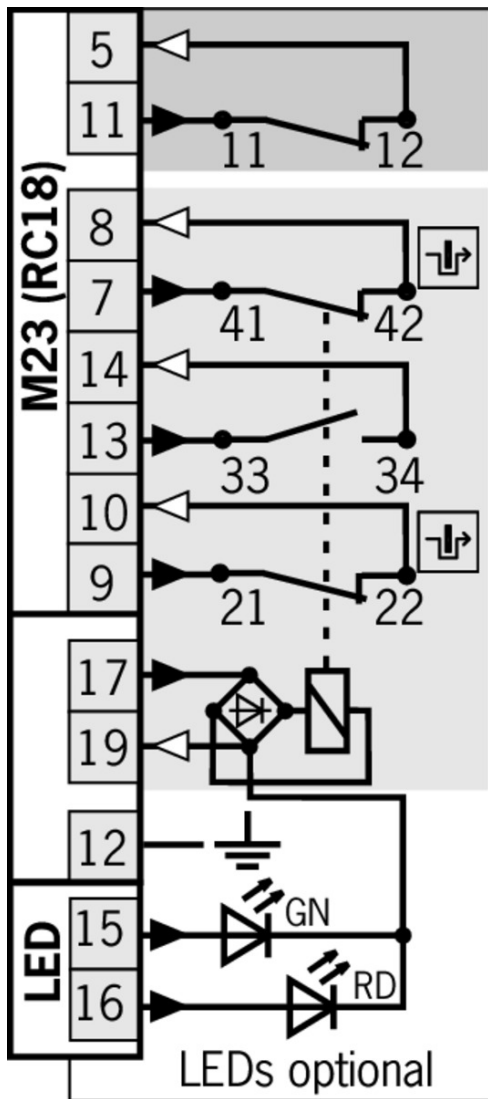
[2, 3, 4] LEDs have the same ground potential as the guard locking solenoid.

### Dimension drawing



### Legende

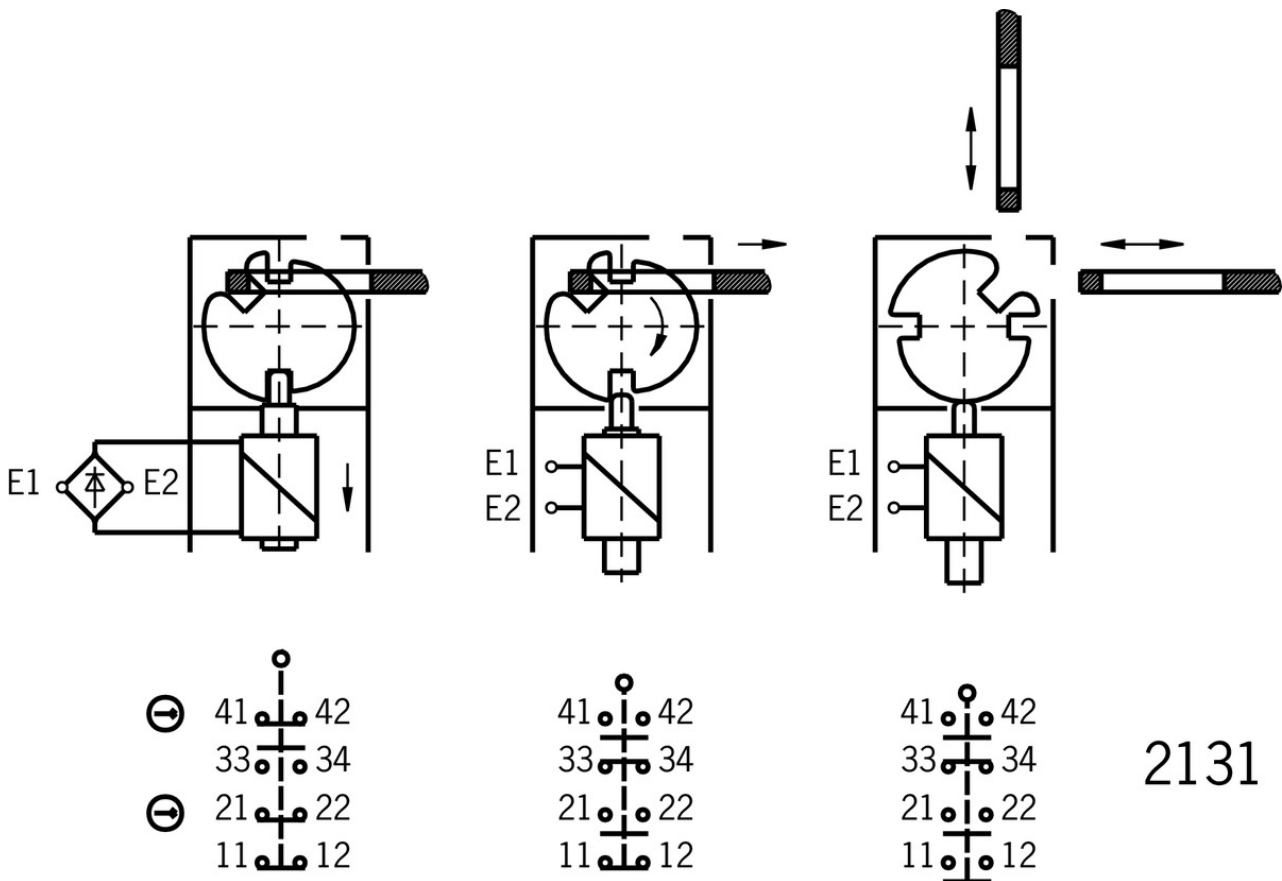
- 1 Auxiliary release
- 2 Locking screw
- 3 LED indicator



**Legende**

- Solenoid monitoring
- Door monitoring

## Switching functions



## Bolt

▼ Bolt BTC-ST/G... without escape release for safety switches STA, STP, SGP and SGA



**106284** BTC-ST/G-S-TH-00-X

▼ Features

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

▼ Bolt S-... for safety switches STA, STP, SGP and SGA



**096384** RIEGEL S-A

▼ Features

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



**096385** RIEGEL S-C

▼ Features

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

- › Actuator included

- ▼ Bolt STP-GFK for safety switches STA, STP, SGP and SGA



**098121** RIEGEL STP-GFK

▼ Features

- › Fiber glass reinforced plastic bolt
- › For doors hinged on the left or right
- › Can be locked in open position with padlocks
- › Actuator included

## 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

- ▼ Switch bracket TP/STP GFK



**096613** SCHALTERAUFNAHME TP/STP GFK

▼ Features

- › Switch bracket made of fiber glass reinforced plastic
- › For left or right hinged doors

## Function expansion

- ▼ Insertion funnel for safety switches SGP/STA/STP/STM/SGA



**093157** EINFUEHRTRICHTER-S

- ▼ Built-in LED



**087423** EINBAULEUCHTE LED M20X1,5



**095510** EINBAULEUCHTE LED-F M20X1,5

Emergency unlocking for safety switches STA



**099876** NOTENTSPERRUNG STA

Lockout bar STA/STP/SGA/SGP/STM



**105701** SPERREINSATZ STP/STA

Features

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

Handle for escape release for safety switches TP/STP/STA



**105329** FE-GRIFF

Wire front release



**096230** AE-B-A1-02,0-096230

Features

- › Can be used as escape release or emergency unlocking
- › No automatic return
- › Sheath length 2 m (rope length 6 m)



**097747** AE-B-A1-02,0-F-097747

Features

- › Can be used as escape release or emergency unlocking
- › automatic return
- › Sheath length 2 m (rope length 6 m)



**098313** AE-B-A1-03,0-098313

Features

- › Can be used as escape release or emergency unlocking
- › No automatic return
- › Sheath length 3 m (rope length 6 m)



**111233** AE-B-A1-03,0-F-111233

Features

- › Can be used as escape release or emergency unlocking
- › automatic return
- › Sheath length 3 m (rope length 6 m)



**098314** AE-B-A1-04,0-098314

Features

- › Can be used as escape release or emergency unlocking



- › No automatic return
- › Sheath length 4 m (rope length 6 m)



**125582** AE-B-A1-06,0-125582

✓ Features

- › Can be used as escape release or emergency unlocking
- › No automatic return
- › Rope length 6 m (without sheath)



**124770** AE-B-A1-06,0-F-124770

✓ Features

- › Can be used as escape release or emergency unlocking
- › automatic return
- › Rope length 6 m (without sheath)

## Actuator

✓ Actuator S for safety switches SGA/SGP/STA/STP/STM



**097861** BETAETIGER-S-G-SN-C2115

✓ Features

- › Two safety screws included
- › Physically compatible with TP actuator P-G



**095738** BETAETIGER-S-GT-SN

✓ Features

- › Two safety screws included
- › Actuators with rubber bushings

✓ Actuator S, bent, for safety switches SGA/SGP/STA/STP/STM



**095740** BETAETIGER-S-WQT-SN

✓ Features

- › Two safety screws included

✓ Actuator L for safety switches SGA/SGP/STA/STP/STM for insertion funnel



**095739** BETAETIGER-S-GT-LN

✓ Features

- › Two safety screws included
- › Actuators with rubber bushings

✓ Actuator L, bent, for safety switches SGA/SGP/STA/STP/STM for insertion funnel



**095741** BETAETIGER-S-WQT-LN

✓ Features

- › Two safety screws included
- › Actuators with rubber bushings

---

▼ Hinged actuator S top/bottom for safety switches SGA/SGP/STA/STP/STM



**095315** RADIUSBETAETIGER-S-OU-SN

▼ Features

- › Actuators made of stainless steel
- › Two safety screws included
- › For doors hinged at top and bottom

---

▼ Hinged actuator S left/right for safety switches SGA/SGP/STA/STP/STM



**096838** RADIUSBETAETIGER-S-LR-SN

▼ Features

- › Actuators made of stainless steel
- › Two safety screws included
- › For doors hinged on right and left

---

▼ Hinged actuator L top/bottom, for safety switches SGA/SGP/STA/STP/STM for insertion funnel



**096697** RADIUSBETAETIGER-S-OU-LN

▼ Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator
- › For doors hinged at top and bottom

---

▼ Hinged actuator L left/right, for safety switches SGA/SGP/STA/STP/STM for insertion funnel



**096844** RADIUSBETAETIGER-S-LR-LN

▼ Features

- › Actuators made of stainless steel
- › Two stainless safety screws per actuator
- › For doors hinged on right and left

---

## Connection material

▼ 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
-

▼ Replacement crimp contacts for female connector RC18

**094309** CRIMPKONTAKT BUCHSE RCF

▼ Features

- › 19 crimp sockets
  - › Conductor cross-section 19 x 0.75 - 1 mm<sup>2</sup>
  - › For plug connector RC18
- 

▼ Female plug RC18 straight with option C1825



**077025** RC18EF-C1825

▼ Features

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

▼ Female connector RC18 angled with option C1825



**077026** RC18WF-C1825

▼ Features

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

▼ Replacement crimp contacts for female connector RC18 with option C1825

**094310** CRIMPKONTAKT BUCHSE RCF-C1825

▼ Features

- › 19 crimp sockets
  - › Conductor cross-section 16 x 0.25 - 0.5 mm<sup>2</sup> and 3 x 0.75 - 1 mm<sup>2</sup>
  - › For plug connector RC18..C1825
- 

▼ 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, 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, 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, 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, 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, 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, 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, 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

☑ Connection cable with plug connector M23 with option C1825, 40m, straight



**102490** C-M23F19-19XDIFPU40,0-MA-102490

☑ Features

- › M23 plug connector, 18-pin + PE
- › Straight plug connector
- › PUR cable
- › Cable length 40 m
- › With flying lead
- › Cores color-coded

## Instructions

☑ Инструкция по эксплуатации Предохранительный выключатель STA...

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter STA... Manual de instrucciones del interruptor de seguridad STA... Mode d'emploi pour les interrupteurs de sécurité STA... Operating Instructions Safety Switch STA...	2096775	08-12/17		5.8 MB
Инструкция по эксплуатации Предохранительный выключатель STA...	2096775	08-12/17		1.7 MB
使用说明书 安全开关 STA...	2096775	08-12/17		1.6 MB
Istruzioni d'impiego dei finecorsa di sicurezza STA...	2096775	08-12/17		1.5 MB

## Catalogs

☑ Bezpečnostní spínače s plastovým pouzdem Sicherheitsschalter mit Kunststoffgehäuse Safety Switches with Plastic Housing Interruptores de seguridad con carcasa plástica Interrupteurs de sécurité avec boîtier plastique 塑料壳体 的安全开关

Doc. no. Version Language Download

Sicherheitsschalter mit Kunststoffgehäuse	096955	11-03/18		6.6 MB
Interrupteurs de sécurité avec boîtier plastique	100677	11-03/18		6.6 MB
Interruptores de seguridad con carcasa plástica	104855	11-03/18		6.6 MB
Bezpečnostní spínače s plastovým pouzdrém	121649	11-03/18		6.6 MB
Safety Switches with Plastic Housing	096956	11-03/18		6.6 MB
塑料壳体 的安全开关	116243	11-03/18		6.2 MB

Sicherheitsschalter mit Metallgehäuse Safety Switches with Metal Housing Bezpečnostní spínače s kovovým pouzdrém 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 pouzdrém	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 Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità EU declaration of conformity	2077153	25-02/17	    	0.3 MB
EU prohlášení o shodě 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	2077153	25-02/17	        	0.5 MB

## CAD data

CAD data for this item on TraceParts