

ITEM 126258 CTP-I2-AP-U-HA-AZC-SA-126258

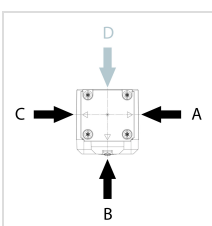
Description	Technical data	Accessories	Downloads
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Features

- › Safety switch with guard locking and integrated evaluation electronics
- › Guard locking suitable for process protection only
- › Short circuit monitoring
- › 2 safety outputs (semiconductor outputs)
- › Up to category 4/PL e according to EN ISO 13849-1
- › With plug connector M12
- › Unicode
- › Door monitoring output
- › Approach direction A, B and C (default setting on delivery)

Approach direction



- › Figure
Horizontal
Can be adjusted in 90° steps

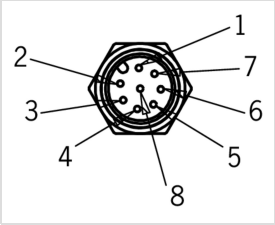
Unicode evaluation

Each actuator is unique. The switch detects only taught-in actuators. Additional actuators can be taught in. Only the last actuator taught in is detected.

Guard locking type

CTP-I2 Guard locking actuated by power-ON applied and spring released (open-circuit current principle).

Connector assignment

Plug connector (view of connection side)	Pin	Designation	Function	Conductor coloring of connection cable
	1	IMP	Guard locking solenoid control input, 24 V DC	WH
	2	UB	Operating voltage of AP electronics, 24 V DC	BN
	3	FO1A	Safety output, channel 1	GN
	4	FO1B	Safety output, channel 2	YE
	5	OI	Diagnostics output	GY
	6	OD	Door monitoring output	PK
	7	OL	Guard locking monitoring output	BU
	8	0 V	Operating voltage of AP electronics, 0 V/control input of guard locking solenoid, 0 V	RD

Approvals



Mechanical values and environment

Housing material

Switch head cover Die-cast zinc

Safety switch housing	Fiber glass reinforced thermoplastic
Weight	
	Net 0,42 kg
Ambient temperature	
At $U_B = 24V$ DC	-20 ... +55 °C
Degree of protection	IP67 / IP69 / IP69K [1]
Resilience to vibration	In acc. with EN IEC 60947-5-3
Mechanical life	1×10^6
Installation position	Any
Ready delay	max.1 s
Switching frequency	max.0,5 Hz
Connection	1 plug connector M12, 8-pin
Approach speed	20 m/min
Guard locking principle	Open-circuit current principle
Locking force F_{max}	3900 N
Locking force F_{Zh}	3000 N [2]
Retention force	20 N
Extraction force	20 N
Actuating force	10 N
Overtravel	5 mm

Electrical connection ratings

Test-pulse interval	min.100 ms
Test pulses	max.0,3 ms [3]
Operating voltage DC	
	U_{UB} 24 V DC -15% ... 15% Reverse polarity protected, regulated, residual ripple < 5%, PELV
Current consumption	
	I_{UB} 40 mA
	I_{IMP} 400 mA
Utilization category according to EN 60947-5-2	
	DC-13 24V 150mA [4]
Solenoid operating voltage DC	
	U_{IMP} 24 V DC -15% ... +10% Reverse polarity protected, regulated, residual ripple < 5%, PELV
Fusing	
External (operating voltage U_B)	0,25 ... 2 A
External (solenoid operating voltage IMP)	0,5 ... 8 A
Rated insulation voltage U_i	max.50 V
Rated impulse withstand voltage U_{imp}	max.0,5 kV
Power consumption	6 W
EMC protection requirements	In acc. with EN IEC 60947-5-3
Solenoid duty cycle	100 %

Degree of contamination (external, according to EN 60947-1)	3
Safety class EN IEC 61140	III
Switching load According to UL	24V DC, class 2 [5]
Safety outputs FO1A / FO1B	
Type of output	2 semiconductor outputs, p-switching, short circuit-proof
Switching current Per safety output FO1A / FO1B	1 ... 150 mA
Output voltage HIGH U(FO1A) / U(FO1B) LOW U(FO1A) / U(FO1B)	UB-1,5 ... UB V DC 0 ... 1 V DC
Off-state current I _r	max.0,25 mA
Switch-on time	max.400 ms
Discrepancy time Both safety outputs	In acc. with EN IEC 60947-5-3max.10 ms
Monitoring output OD	
Type of output	p-switching, short circuit-proof
Switching current	1 ... 50 mA
Output voltage	0,8xUB ... UB V DC
Monitoring output OI	
Type of output	p-switching, short circuit-proof
Switching current	1 ... 50 mA
Output voltage	0,8xUB ... UB V DC
Monitoring output OL	
Type of output	p-switching, short circuit-proof
Switching current	1 ... 50 mA
Output voltage	0,8xUB ... UB V DC

Operating distance

Repeat accuracy R According to EN 60947-5-2	10 %
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Miscellaneous

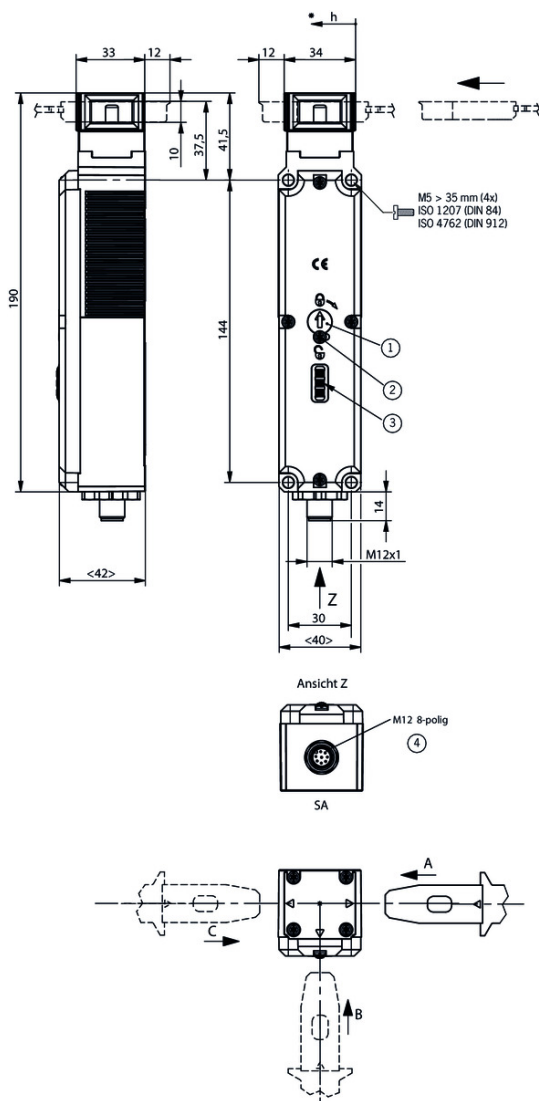
For the approval according to UL the following applies	Operation only with UL class 2 power supply, or equivalent measures see operating instructions
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Reliability values acc. to EN ISO 13849-1

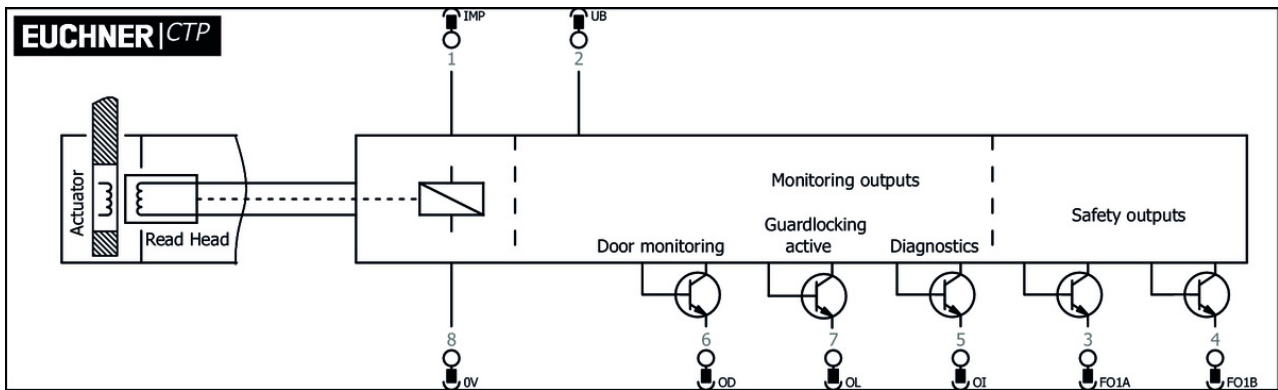
Performance Level	PL e
Category	4
PFH _D	4.1 x 10 ⁻⁹

- [1] Screwed tight plug connector/mating component
- [2] $F_{zh} = F_{max}/1.3$ Depending on the actuator used
- [3] Applies for a load with $C \leq 30nF$ and $R \leq 20k\Omega$
- [4] Caution: outputs must be protected with a free-wheeling diode in case of inductive loads
- [5] Alternatively see operating instructions

Dimension drawing



Wiring diagram



Actuator

✓ Bent actuator for safety switches CTP



122668 A-C-H-W-SST-122668

✓ Features

- › Actuator bent at bottom
- › Two safety screws included



122667 A-C-H-W-SST-122667

✓ Features

- › Actuator bent at top
- › Two safety screws included

✓ Hinged actuator for safety switch CTP



122675 A-C-H-RO-LS-122675

✓ Features

- › Hinged actuator for doors hinged at the top
- › Two safety screws included



122676 A-C-H-RU-LS-122676

✓ Features

- › Hinged actuator for doors hinged at the bottom
- › Two safety screws included



122671 A-C-H-RL-LS-122671

✓ Features

- › Hinged actuator for doors hinged on the left
- › Two safety screws included



122672 A-C-H-RR-LS-122672

✓ Features

- › Hinged actuator for doors hinged on the right
- › Two safety screws included

▼ Straight actuator for safety switch CTP



126015 A-C-H-G-SST-126015

▼ Features

- › Straight actuator
 - › Two safety screws included
-

Function expansion

▼ Lockout mechanism CTP



123411 AE-L-C-H-123411

▼ Features

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

▼ Lock for auxiliary release for safety switches CTP/TP/STP



084177 SCHLOSS TP VERSCHIEDENSCHLIESSEND

▼ Features

- › Lock unique locking
 - › Key removable in “unlocked” and “locked” positions
-



109212 SCHLOSS TP GLEICHSCHLIESSEND C2293

▼ Features

- › Identical locking
 - › Key can be removed only in “locked” position
-



086236 SCHLOSS TP GLEICHSCHLIESSEND

▼ Features

- › Identical locking
 - › Key removable in “unlocked” and “locked” positions
-

▼ Emergency unlocking for safety switches CTP/TP/STP



099877 NOTENTSPERRUNG TP/STP

▼ Release with automatic reset for safety switches CTP/TP/STP



103110 ENTRIEGELUNG RUECKSTELLEND TP/STP

▼ Handle for wire front release



124204 AY-HDL-124204

▼ Features

- › Suitable for all wire front releases



099795 AY-HDL-099795

✓ Features

- › Suitable for all wire front releases

✓ Wire front release



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)



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)



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)



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)



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)



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)

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-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 AM-P for safety switches CTP



126026 AM-P-126026

- ▼ Features

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

Connection material

- ▼ Connection cable with angled plug connector M12, 8-pin, 20m



120998 C-M12F08-08X025PU20,0-MA-120998

- ▼ Features

- › M12 female plug, 8-pin
 - › Angled plug connector
 - › Cable outlet A (right)
 - › PUR cable
 - › Cable length 20 m
 - › With flying lead
-



120999 C-M12F08-08X025PU20,0-MA-120999

- ▼ Features

- › M12 female plug, 8-pin
 - › Angled plug connector
 - › Cable outlet C (left)
 - › PUR cable
 - › Cable length 20 m
 - › With flying lead
-

- ▼ Connection cable with angled plug connector M12, 8-pin, 10m



113188 C-M12F08-08X025PU10,0-MA-113188

▼ Features

- › M12 female plug, 8-pin
 - › Angled plug connector
 - › Cable outlet A (right)
 - › PUR cable
 - › Cable length 10 m
 - › With flying lead
-



113189 C-M12F08-08X025PU10,0-MA-113189

▼ Features

- › M12 female plug, 8-pin
 - › Angled plug connector
 - › Cable outlet C (left)
 - › PUR cable
 - › Cable length 10 m
 - › With flying lead
-

▼ Connection cable with plug connector M12, 8-pin, 5m



115112 C-M12F08-08X025PU05,0-MA-115112

▼ Features

- › M12 female plug, 8-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 5 m
 - › With flying lead
-



100177 C-M12F08-08X025PV05,0-MA-100177

▼ Features

- › M12 female plug, 8-pin
 - › Straight plug connector
 - › PVC cable
 - › Cable length 5 m
 - › With flying lead
-

▼ Connection cable with plug connector M12, 8-pin, 10m



115113 C-M12F08-08X025PU10,0-MA-115113

▼ Features

- › M12 female plug, 8-pin
 - › Straight plug connector
 - › PUR cable
 - › Cable length 10 m
 - › With flying lead
-



100178 C-M12F08-08X025PV10,0-MA-100178

▼ Features

- › M12 female plug, 8-pin
- › Straight plug connector
- › PVC cable
- › Cable length 10 m

- › With flying lead

▼ Connection cable with plug connector M12, 8-pin, 20m



115114 C-M12F08-08X025PU20,0-MA-115114

▼ Features

- › M12 female plug, 8-pin
- › Straight plug connector
- › PUR cable
- › Cable length 20 m
- › With flying lead



100179 C-M12F08-08X025PV20,0-MA-100179

▼ Features

- › M12 female plug, 8-pin
- › Straight plug connector
- › PVC cable
- › Cable length 20 m
- › With flying lead

▼ Connection cable with plug connector M12, 8-pin, 30m



115257 C-M12F08-08X025PU30,0-MA-115257

▼ Features

- › M12 female plug, 8-pin
- › Straight plug connector
- › PUR cable
- › Cable length 30 m
- › With flying lead



115116 C-M12F08-08X025PV30,0-MA-115116

▼ Features

- › M12 female plug, 8-pin
- › Straight plug connector
- › PVC cable
- › Cable length 30 m
- › With flying lead

Bolt

▼ Bolts for safety switches series CTP



123653 RIEGEL CTP-AC-123653

▼ Features

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

▼ Bolt CTP-GFK for safety switch CTP



123657 RIEGEL CTP-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

▼ Bolt BTC-CTP-S for safety switch CTP



123659 BTC-CTP-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

Instructions

▼ Bezpečnostní informace CTP (-AR/-AP)


	Doc. no.	Version	Language	Download
Sicherheitsinformation CTP (-AR/-AP)	2138087	02-11/17		0.7 MB
Información de seguridad CTP (-AR/-AP)				
Information de sécurité CTP (-AR/-AP)				
Informazioni sulla sicurezza CTP (-AR/-AP)				
Safety Information CTP (-AR/-AP)				
Bezpečnostní informace CTP (-AR/-AP)	2138087	02-11/17		0.2 MB
安全情報 CTP (-AR/-AP)	2138087	02-11/17		0.3 MB
Informação de segurança CTP (-AR/-AP)	2138087	02-11/17		0.2 MB
Информация о безопасности CTP (-AR/-AP)	2138087	02-11/17		0.3 MB
Güvenlik bilgisi CTP (-AR/-AP)	2138087	02-11/17		0.3 MB
安全信息 CTP (-AR/-AP)	2138087	02-11/17		0.3 MB


▼ 操作指示書トランスポンダー型コード化安全スイッチ プロセス保護用ガード・ロック内蔵CTP-I.-AP ユニコード/マルチコード

	Doc. no.	Version	Language	Download
Betriebsanleitung Transpondercodierter Sicherheitsschalter mit Zuhaltung für den Prozessschutz CTP-I.-AP Uni-/Multicode	2126290	04-05/18		3.2 MB
Mode d'emploi Interrupteur de sécurité à codage par transpondeur avec interverrouillage pour protection du process CTP-I.-AP uni-/multicode	2126290	04-05/18		3.3 MB
Manual de instrucciones Interruptor de seguridad con codificación por transponder con bloqueo para la protección de procesos CTP-I.-AP Unicode/Multicode	2126290	04-05/18		3.2 MB

操作指示書トランスポンダー型コード化安全スイッチ プロセス保護用ガード・ロック内蔵CTP-I.-AP ユニコー ド/マルチコード	2126290	04-05/18		 3.6 MB
Operating Instructions Transponder-Coded Safety Switch with Guard Locking for Process Protection CTP-I.-AP Unicode/Multicode	2126290	04-05/18		 3.2 MB
Istruzioni di impiego Finecorsa di sicurezza con codifica a transponder con meccanismo di ritenuta per la protezione del processo CTP-I.-AP Uni-/Multicode	2126290	04-05/18		 3.2 MB







Catalogs

-  Transpondercodierte Sicherheitsschalter - Verriegelungseinrichtungen und Zuhaltungen
 Transponder-coded safety switches - Interlocking devices and guard locking devices
 Interruptores de seguridad con codificación por transponder - Dispositivos de enclavamiento y
 bloqueos Interrupteurs de sécurité à codage par transpondeur - Dispositifs de verrouillage et
 interverrouillages

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Transpondercodierte Sicherheitsschalter - Verriegelungseinrichtungen und Zuhaltungen	127594	02-01/18		 5.2 MB
Interrupteurs de sécurité à codage par transpondeur - Dispositifs de verrouillage et interverrouillages	137558	02-01/18		 5.2 MB
Interruptores de seguridad con codificación por transponder - Dispositivos de enclavamiento y bloqueos	137560	02-01/18		 5.2 MB
Transponder-coded safety switches - Interlocking devices and guard locking devices	127595	02-01/18		 5.1 MB

Declaration of conformity

-  EU-Konformitätserklärung

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EU-Konformitätserklärung EU declaration of conformity Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità	2123042	06-08/18	    	 0.4 MB