




Safety detection solutions

Key-operated switches

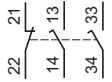
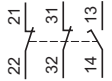
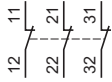
XCSA, XCSB and XCSC metal, turret head (1)

1 cable entry

Type of switch	Without locking of actuating key	With locking of actuating key, manual unlocking (2)		
				
	XCSA	XCSB	XCSC	

LED indication on opening of NC contacts	No	1 orange LED 24/48 V ~	1 orange LED 110/240 V ~	No (4)	No (4)
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References of switches without actuating key (5) (⊖ NC contact with positive opening operation) with 1 cable entry tapped ISO M20 x 1.5

3-pole 1 NC + 2 NO break before make, slow break (3)		XCSA502 ⊖	XCSA512 ⊖	XCSA522 ⊖	XCSB502 ⊖	XCSC502 ⊖
3-pole 2 NC + 1 NO break before make, slow break (3)		XCSA702 ⊖	XCSA712 ⊖	XCSA722 ⊖	XCSB702 ⊖	XCSC702 ⊖
3-pole 3 NC slow break (3)		XCSA802 ⊖	-	-	XCSB802 ⊖	XCSC802 ⊖
Weight (kg)	0.440	0.440	0.440	0.475	0.480	

References of switches without actuating key (5) with 1 cable entry tapped Pg 13.5

To order a switch with a Pg 13.5 cable entry, replace the last number (2) with 1 in the selected reference.
Example: XCSA502 becomes **XCSA501** (some Pg 13.5 references may not be available).





References of switches without actuating key (5) with 1 cable entry tapped 1/2" NPT

To order a switch with a 1/2" NPT cable entry, replace the last number (2) with 3 in the selected reference.
Example: XCSA502 becomes **XCSA503** (some 1/2" NPT references may not be available).

Complementary characteristics not shown under general characteristics (page 40)

Actuation speed	Maximum: 0.5 m/s, minimum: 0.01 m/s
Resistance to forcible withdrawal of actuating key (locked)	XCSB and XCSC: $F_{1max} = 1500$ N; $F_{2h} = 1150$ N
Mechanical durability	XCSA: > 1 million operating cycles XCSB and XCSC: 0.6 million operating cycles
Maximum operating rate	For maximum durability: 600 operating cycles per hour
Minimum force for extraction of actuating key (not locked)	≥ 20 N
Cable entry	XCSA, XCSB, XCSC: 1 cable entry Entry tapped ISO M20 x 1.5, clamping capacity 7 to 13 mm
Materials	Body: Zamak. Head: Zamak. Safety screws: 5-lobe torque. Protective plate: steel.





References of actuating keys

				
Description	Straight actuating key	Actuating key with wide fixing	Pivoting actuating key	Latch for sliding doors
For XCSA, XCSB or XCSC key-operated switches	XCSZ01	XCSZ02	XCSZ03	XCSZ05
Weight (kg)	0.020	0.020	0.095	0.600

- (1) Head adjustable in 90° steps through 360°. Blanking plug for operating head slot included with switch.
 (2) Unlocking by pushbutton for XCSB●●● and by key-operated lock for XCSC●●● (2 keys included with switch).
 (3) Schematic diagrams shown represent the contact states while the actuating key is inserted in the head of the switch.
 (4) 1 orange LED 24/48V ~ indicator available with the XCSZ31 accessory
 1 orange LED 110/240V ~ indicator available with the XCSZ32 accessory
 (5) Actuating keys to be ordered separately (see above).

Other versions: please consult our Customer Care Center.

References of actuating keys

				
Description	Straight actuating key	Actuating key with wide fixing	Pivoting actuating key	Latch for sliding doors
For XCSLF and XCSLE key-operated switches	XCSZ01	XCSZ02	XCSZ03	XCSZ05
Weight (kg)	0.020	0.020	0.095	0.600

Separate parts

PF090313



XCSZ90

Description	Used for	Unit reference	Weight kg
Blanking plugs for operating head slot (Sold in lots of 10)	XCSLF, XCSLE	XCSZ30	0.050
Keys for forced opening of interlocking device (Sold in lots of 10)	XCSLF	XCSZ25	0.100
Padlocking device to help prevent insertion of actuating key, for up to 3 padlocks (padlocks not included)	XCSLF, XCSLE	XCSZ90	0.055
Tool for forced opening of interlocking device (Sold in lots of 10)	XCSLE	XCSZ100	0.050
Cover safety kit consisting of: ■ 4 x 5-lobe torque screws ■ 1 magnetic screwdriver bit	XCSLF	XCSZ210	0.020
	XCSLE	XCSZ211	0.020

Characteristics

M23 connectors

Type of connection	Screw thread (metal clamping ring)
Degree of protection	IP 65 (with clamping ring correctly tightened)
Ambient air temperature	-25...+110 °C
Connection	To solder terminals. Maximum conductor c.s.a.: 1 mm ² Cable gland: no. 13 metal (Pg 13.5) Clamping capacity: 9 to 12 mm
LED signaling	–
Nominal voltage	60 V ~, 75 V ☐
Nominal current	7.5 A
Insulation resistance	> 10 ¹² Ω
Contact resistance	≤ 5 mΩ

Safety detection solutions

Safety interlock switches
Key-operated with solenoid, turret head
XCSE metal, 2 cable entries

Solenoid characteristics					
Load factor	100%				
Rated operational voltage	~ or --- 24 V	~ or --- 24 V	~ or --- 48 V	~ or --- 110/120 V	~ or --- 220/240 V
Voltage limits	Conforming to EN/IEC 60947-1 - 15%, + 10% of the rated operational voltage (including ripple on ---)				
Service life	20,000 hours				
Consumption	Inrush: 10 VA. Sealed: 10 VA				

LED indicator characteristics		
Rated insulation voltage	50 V conforming to EN/IEC 60947-1	250 V conforming to EN/IEC 60947-1
Current consumption	7 mA	7 mA
Rated operational voltage	~ or 24/48 V ---	110/240 V ~
Voltage limits	~ or 20...52 V --- (including ripple)	95...264 V ~ (including ripple)
Service life	100,000 hours	100,000 hours
Protection against overvoltages	Yes	Yes

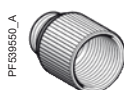
Separate components



PF000313
XCSZ90

Description	For use with	Key withdrawal positions from lock	Unit reference	Weight kg
Blanking plugs for operating head slot (Sold in lots of 10)	XCSE	–	XCSZ27	0.050
Keys for forced opening of interlocking device (Sold in lots of 10)	XCSE	–	XCSZ25	0.100

Padlocking device to help prevent insertion of actuating key, for up to 3 padlocks (padlocks not included)	XCSE	–	XCSZ90	0.055
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PF59550_A
DE9RA2012

Description	For use with	Unit reference	Weight kg
1/2" NPT conduit female, M20 male adapter (Sold in lots of 5)	XCSE	DE9RA2012	0.048
M20 x 1.5 female, Pg 13.5 male adapter (Sold in lots of 5)	XCSE	DE9RP13520	0.032

References of actuating keys



Description	Straight actuating key	Actuating key with wide fixing	Pivoting actuating key	Latch for sliding doors
For XCSE key-operated switches	XCSZ01	XCSZ02	XCSZ03	XCSZ05
Weight (kg)	0.020	0.020	0.095	0.600