

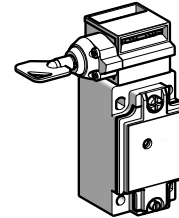
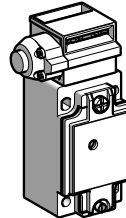
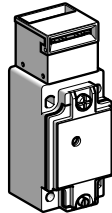
Safety solutions using Preventa

Safety switches

Metal, turret head (1), types XCS-A, B, C and E

Cable entries tapped for Pg 13.5 (n° 13) cable gland

Type of switch	Without locking of key	With locking of key, manual unlocking (2)
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LED indication on opening of N/C contacts	Without	1 orange LED ≈ 24/48 V	1 orange LED ≈ 110/240 V	Without	1 orange LED ≈ 24/48 V	1 orange LED ≈ 110/240 V	Without	1 orange LED ≈ 24/48 V	1 orange LED ≈ 110/240 V
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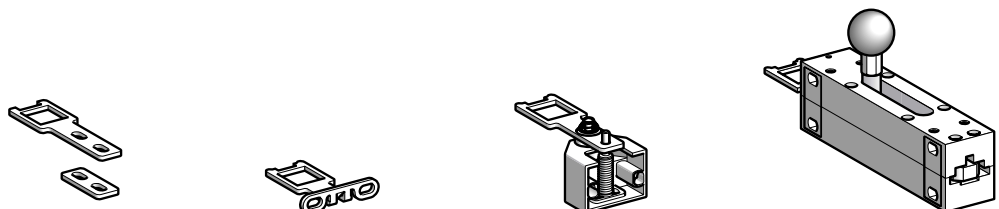
References of switches without operating key (⊖ N/C contact with positive opening operation)

3-pole N/C + N/O + N/O (2 N/O staggered) slow break (3)		XCS-A501 ⊖	XCS-A511 ⊖	XCS-A521 ⊖	XCS-B501 ⊖	XCS-B511 ⊖	XCS-B521 ⊖	XCS-C501 ⊖	XCS-C511 ⊖	XCS-C521 ⊖
3-pole N/C + N/C + N/O (N/O staggered) slow break (3)		XCS-A701 ⊖	XCS-A711 ⊖	XCS-A721 ⊖	XCS-B701 ⊖	XCS-B711 ⊖	XCS-B721 ⊖	XCS-C701 ⊖	XCS-C711 ⊖	XCS-C721 ⊖
3-pole N/C + N/C + N/C slow break (3)		⊖	XCS-A801	-	⊖	XCS-B801	-	-	XCS-C801	-
Weight (kg)		0.440	0.440	0.440	0.475	0.475	0.475	0.480	0.480	0.480

Complementary characteristics not shown under general characteristics (page 32921/3)

Actuation speed	Maximum: 0.5 m/s, minimum: 0.01 m/s
Resistance to forcible key withdrawal	XCS-B and XCS-C : 1500 N; XCS-E : 2000 N
Mechanical durability	XCS-A and XCS-E : > 1 million operating cycles XCS-B and XCS-C : 0.6 million operating cycles
Maximum operating rate	For maximum durability: 600 operating cycles per hour
Minimum force for positive opening	20 N
Cable entry	XCS-A , XCS-B , XCS-C : 1 cable entry. XCS-E : 2 cable entries. Entries tapped for n° 13 cable gland conforming to NF C 68-300 (DIN Pg 13.5). Clamping capacity 9 to 12 mm.

References of operating keys

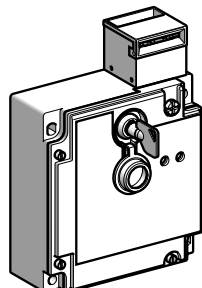


Description	Straight key	Wide key	Pivoting key	Latch for sliding doors
For limit switches XCS-A, B, C, E	XCS-Z01	XCS-Z02	XCS-Z03	XCS-Z05
Weight (kg)	0.020	0.020	0.095	0.600

(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.

(2) Unlocking by pushbutton for XCS-B●●● and by key operated lock for XCS-C●●●.

Type of switch	With interlocking, locking by electromagnet
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Type of interlocking	Locking on de-energisation and unlocking on energisation of electromagnet (2). To order a limit switch with locking on energisation and unlocking on de-energisation of the electromagnet, replace the 2 nd number by 5 in the references shown below. Example: XCS-E5311 becomes XCS-E5511 .			
LED indication	Orange LED: "guard open" signalling. Green LED: "guard closed and locked" signalling.			
Supply voltage of electromagnet	~ or --- 24 V (50/60 Hz on ~)	~ or --- 48 V (50/60 Hz on ~)	~ or --- 110/120 V (3) (50/60 Hz on ~)	~ or --- 220/240 V (3) (50/60 Hz on ~)

References of switches without operating key (⊕ N/C contact with positive opening operation)

3-pole N/C + N/O + N/O (2 N/O staggered) slow break (4)		XCS-E5311 ⊕	XCS-E5321 ⊕	XCS-E5331 ⊕	XCS-E5341 ⊕
3-pole N/C + N/C + N/O (N/O staggered) slow break (4)		XCS-E7311 ⊕	XCS-E7321 ⊕	XCS-E7331 ⊕	XCS-E7341 ⊕
3-pole N/C + N/C + N/C slow break (4)		XCS-E8311 (5) ⊕	XCS-E8321 (5) ⊕	XCS-E8331 (5) ⊕	XCS-E8341 (5) ⊕
Weight (kg)	1.140	1.140	1.140	1.140	

Electromagnet characteristics

Load factor	100 %			
Rated operational voltage	~ or --- 24 V	~ or --- 48 V	~ or --- 110/120 V	~ or --- 220/240 V
Voltage limits	- 20 % + 10 % of the rated operational voltage (including ripple on ---) conforming to IEC EN EN 947-1			
Service life	20,000 hours			
Consumption	Inrush: 10 VA. Sealed: 10 VA			

LED indicator characteristics

Rated insulation voltage	50 V conforming to IEC EN 947-1	250 V conforming to IEC EN 947-1
Current consumption	7 mA	7 mA
Rated operational voltage	~ or --- 24/48 V	~ 110/240 V
Voltage limits	~ or --- 20...52 V (including ripple on ---)	~ 95...264 V (including ripple on ---)
Service life	100,000 hours	100,000 hours
Protection against overvoltages	Yes	Yes

(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.

(2) A key operated lock enables the forced opening of the interlocking device, allowing key withdrawal and subsequent opening of the N/C safety contacts.

(3) For use on --- 110/120 V or --- 220/240 V, remove the LED indicator module.

(4) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.

(5) Units supplied with a single green LED.

Limit switches

For safety solutions using Preventa
Metal, turret head (1), types XCS-A, B, C and E
1 or 2 cable entries M20 x 1.5 (2)

Type of switch	Without locking of key			With locking of key, manual unlocking (3)		
LED indication on opening of N/C contacts	Without	1 orange LED ~ 24/48 V	1 orange LED ~ 110/240 V	Without	1 orange LED ~ 24/48 V	1 orange LED ~ 110/240 V

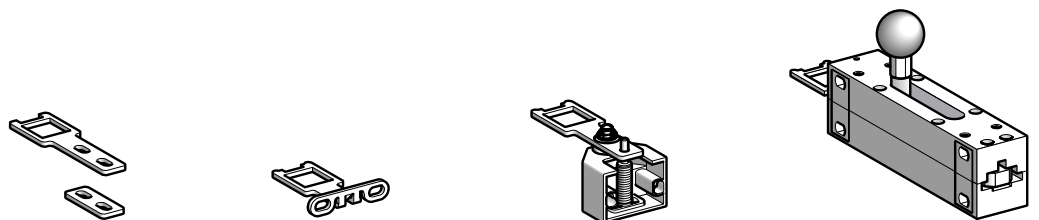
References of switches without operating key (⊖ N/C contact with positive opening operation)

3-pole N/C + N/O + N/O (2 N/O staggered) slow break (4)		XCS-A502 ⊖	XCS-A512 ⊖	XCS-A522 ⊖	XCS-B502 ⊖	XCS-B512 ⊖	XCS-B522 ⊖	XCS-C502 ⊖	XCS-C512 ⊖	XCS-C522 ⊖
3-pole N/C + N/C + N/O (N/O staggered) slow break (4)		XCS-A702 ⊖	XCS-A712 ⊖	XCS-A722 ⊖	XCS-B702 ⊖	XCS-B712 ⊖	XCS-B722 ⊖	XCS-C702 ⊖	XCS-C712 ⊖	XCS-C722 ⊖
3-pole N/C + N/C + N/C slow break (4)		XCS-A802 ⊖	-	-	XCS-B802 ⊖	-	-	XCS-C802 ⊖	-	-
Weight (kg)	0.440	0.440	0.440	0.475	0.475	0.475	0.480	0.480	0.480	0.480

Complementary characteristics not shown under general characteristics (page 32921/3)

Actuation speed	Maximum: 0.5 m/s, minimum: 0.01 m/s
Resistance to forcible key withdrawal	XCS-B and XCS-C : 1500 N; XCS-E : 2000 N
Mechanical durability	XCS-A and XCS-E : > 1 million operating cycles XCS-B and XCS-C : 0.6 million operating cycles
Maximum operating rate	For maximum durability: 600 operating cycles per hour
Minimum force for positive opening	20 N
Cable entry	XCS-A , XCS-B , XCS-C : 1 cable entry. XCS-E : 2 cable entries Entries tapped M20 x 1.5 for ISO cable gland. Clamping capacity 7 to 13 mm

References of operating keys



Description	Straight key	Wide key	Pivoting key	Latch for sliding doors
For limit switches XCS-A, B, C, E	XCS-Z01	XCS-Z02	XCS-Z03	XCS-Z05
Weight (kg)	0.020	0.020	0.095	0.600

(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.

(2) For cable entries tapped for n° 13 (Pg 13.5) cable gland, replace the last number in the reference by 1 (see page 32922/2).

Example: XCS-A502 becomes **XCS-A501**.

(3) Unlocking by pushbutton for XCS-B●●● and by key operated lock for XCS-C●●●.

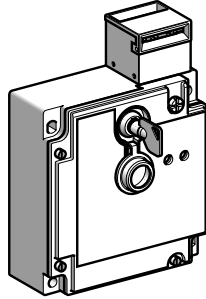
(4) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.

Limit switches

For safety solutions using Preventa
Metal, turret head (1), types XCS-A, B, C and E
1 or 2 cable entries M20 x 1.5 (2)

Type of switch

With interlocking, locking by electromagnet



Type of interlocking

Locking on de-energisation and unlocking on energisation of electromagnet (3).
To order a limit switch with locking on energisation and unlocking on de-energisation of the electromagnet, replace the 2nd number by **5** in the references shown below.
Example: **XCS-E5312** becomes **XCS-E5512**.

LED indication

Orange LED: "guard open" signalling.
Green LED: "guard closed and locked" signalling.

Supply voltage of electromagnet

~ or = 24 V
(50/60 Hz on ~)

~ or = 48 V
(50/60 Hz on ~)

~ or = 110/120 V (4)
(50/60 Hz on ~)

~ or = 220/240 V (4)
(50/60 Hz on ~)

References of switches without operating key (⊖ N/C contact with positive opening operation)

3-pole N/C + N/O + N/O (2 N/O staggered) slow break (5)		XCS-E5312 ⊖	XCS-E5322 ⊖	XCS-E5332 ⊖	XCS-E5342 ⊖
3-pole N/C + N/C + N/O (N/O staggered) slow break (5)		XCS-E7312 ⊖	XCS-E7322 ⊖	XCS-E7332 ⊖	XCS-E7342 ⊖
3-pole N/C + N/C + N/C slow break (5)		XCS-E8312 (6) ⊖	XCS-E8322 (6) ⊖	XCS-E8332 (6) ⊖	XCS-E8342 (6) ⊖
Weight (kg)	1.140	1.140	1.140	1.140	1.140

Electromagnet characteristics

Load factor	100 %			
Rated operational voltage	~ or = 24 V	~ or = 48 V	~ or = 110/120 V	~ or = 220/240 V
Voltage limits	- 20 % + 10 % of the rated operational voltage (including ripple on =) conforming to IEC EN 947-1			
Service life	20,000 hours			
Consumption	Inrush: 10 VA. Sealed: 10 VA			

LED indicator characteristics

Rated insulation voltage	50 V conforming to IEC EN 947-1	250 V conforming to IEC EN 947-1
Current consumption	7 mA	7 mA
Rated operational voltage	~ or = 24/48 V	~ 110/240 V
Voltage limits	~ or = 20...52 V (including ripple on =)	~ 95...264 V (including ripple on =)
Service life	100,000 hours	100,000 hours
Protection against overvoltages	Yes	Yes

(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.

(2) For cable entries tapped for n° 13 (Pg 13.5) cable gland, replace the last number in the reference by **1** (see page 32922/3).

Example: XCS-E5312 becomes **XCS-E5311**.

(3) A key operated lock enables the forced opening of the interlocking device, allowing key withdrawal and subsequent opening of the N/C safety contacts.

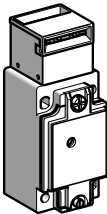
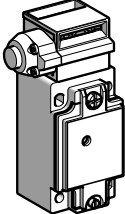
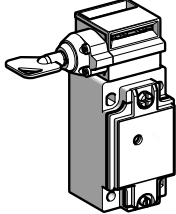
(4) For use on = 110/120 V or = 220/240 V, remove the LED indicator module.

(5) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.

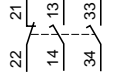
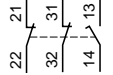
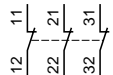
(6) Units supplied with a single green LED.

Safety solutions using Preventa

Safety switches
Metal, turret head (1), types XCS-A, B, C and E
Cable entries tapped 1/2" NPT

Type of switch	Without locking of key			With locking of key, manual unlocking (2)		
						
LED indication on opening of N/C contacts	Without	1 orange LED ≈ 24/48 V	1 orange LED ≈ 110/240 V	Without	1 orange LED ≈ 24/48 V	1 orange LED ≈ 110/240 V

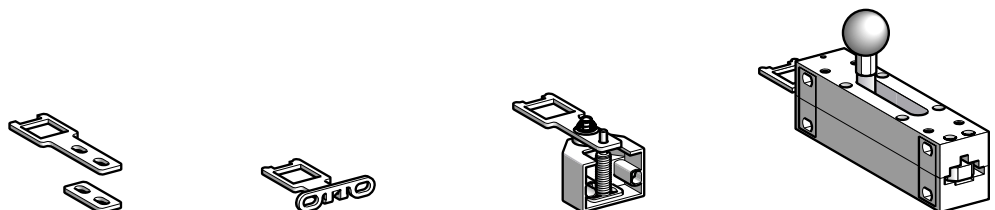
References of switches without operating key (⊖ N/C contact with positive opening operation)

3-pole N/C + N/O + N/O (2 N/O staggered) slow break (3)		XCS-A503 ⊖	XCS-A513 ⊖	XCS-A523 ⊖	XCS-B503 ⊖	XCS-B513 ⊖	XCS-B523 ⊖	XCS-C503 ⊖	XCS-C513 ⊖	XCS-C523 ⊖
3-pole N/C + N/C + N/O (N/O staggered) slow break (3)		XCS-A703 ⊖	XCS-A713 ⊖	XCS-A723 ⊖	XCS-B703 ⊖	XCS-B713 ⊖	XCS-B723 ⊖	XCS-C703 ⊖	XCS-C713 ⊖	XCS-C723 ⊖
3-pole N/C + N/C + N/C slow break (3)		XCS-A803 ⊖	-	-	XCS-B803 ⊖	-	-	XCS-C803 ⊖	-	-
Weight (kg)	0.440	0.440	0.440	0.475	0.475	0.475	0.480	0.480	0.480	0.480

Complementary characteristics not shown under general characteristics (page 32921/3)

Actuation speed	Maximum: 0.5 m/s, minimum: 0.01 m/s
Resistance to forcible key withdrawal	XCS-B and XCS-C : 1500 N; XCS-E : 2000 N
Mechanical durability	XCS-A and XCS-E : > 1 million operating cycles XCS-B and XCS-C : 0.6 million operating cycles
Maximum operating rate	For maximum durability: 600 operating cycles per hour
Minimum force for positive opening	20 N
Cable entry	XCS-A , XCS-B , XCS-C : 1 cable entry. XCS-E : 2 cable entries. Entries tapped for 1/2" NPT (USAS B2-1) conduit.

References of operating keys



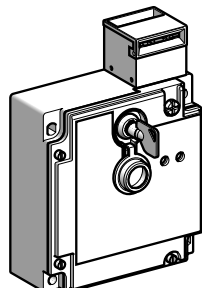
Description	Straight key	Wide key	Pivoting key	Latch for sliding doors
For limit switches XCS-A, B, C, E	XCS-Z01	XCS-Z02	XCS-Z03	XCS-Z05
Weight (kg)	0.020	0.020	0.095	0.600

- (1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.
(2) Unlocking by pushbutton for XCS-B●●● and by key operated lock for XCS-C●●●.
(3) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.

Dimensions: pages 32923/3 and 32923/4
Schemes: page 32923/5

Type of switch

With interlocking, locking by electromagnet



Type of interlocking	Locking on de-energisation and unlocking on energisation of electromagnet (2). To order a limit switch with locking on energisation and unlocking on de-energisation of the electromagnet, replace the 2 nd number by 5 in the references shown below. Example: XCS-E5313 becomes XCS-E5513 .			
LED indication	Orange LED: "guard open" signalling. Green LED: "guard closed and locked" signalling.			
Supply voltage of electromagnet	~ or --- 24 V (50/60 Hz on ~)	~ or --- 48 V (50/60 Hz on ~)	~ or --- 110/120 V (3) (50/60 Hz on ~)	~ or --- 220/240 V (3) (50/60 Hz on ~)

References of switches without operating key (⊖ N/C contact with positive opening operation)

3-pole N/C + N/O + N/O (2 N/O staggered) slow break (4)		XCS-E5313 ⊖	XCS-E5323 ⊖	XCS-E5333 ⊖	XCS-E5343 ⊖
3-pole N/C + N/C + N/O (N/O staggered) slow break (4)		XCS-E7313 ⊖	XCS-E7323 ⊖	XCS-E7333 ⊖	XCS-E7343 ⊖
3-pole N/C + N/C + N/C slow break (4)		XCS-E8313 (5) ⊖	XCS-E8323 (5) ⊖	XCS-E8333 (5) ⊖	—
Weight (kg)	1.140	1.140	1.140	1.140	1.140

Electromagnet characteristics

Load factor	100 %			
Rated operational voltage	~ or --- 24 V	~ or --- 48 V	~ or --- 110/120 V	~ or --- 220/240 V
Voltage limits	- 20 % + 10 % of the rated operational voltage (including ripple on ---) conforming to IEC EN 947-1			
Service life	20,000 hours			
Consumption	Inrush: 10 VA. Sealed: 10 VA			

LED indicator characteristics

Rated insulation voltage	50 V conforming to IEC EN 947-1	250 V conforming to IEC EN 947-1
Current consumption	7 mA	7 mA
Rated operational voltage	~ or --- 24/48 V	~ 110/240 V
Voltage limits	~ or --- 20...52 V (including ripple on ---)	~ 95/264 V (including ripple on ---)
Service life	100,000 hours	100,000 hours
Protection against overvoltages	Yes	Yes

(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.

(2) A key operated lock enables the forced opening of the interlocking device, allowing key withdrawal and subsequent opening of the N/C safety contacts.

(3) For use on --- 110/120 V or --- 220/240 V, remove the LED indicator module.

(4) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.

(5) Units supplied with a single green LED.