

# Product data sheet

Specifications



## Limit switch, Limit switches XC Standard, XCR, square rod 6 mm crossed, 2NC + 2 NO, ATEX/IECEX

XCRE181EX

### Main

Range of product	OsiSense ATEX D
Series name	Special format
Product or component type	Limit switch
Product specific application	For hoisting and mechanical handling applications
Device short name	XCR
Body type	Fixed
Head type	Rotary head
Material	Metal
Fixing mode	By the body
Movement of operating head	Rotary
Type of operator	Stay put crossed rods lever metal square rod 6 mm
Switch actuation	By any moving part
Type of approach	Lateral approach, 2 directions
Electrical connection	Screw-clamp terminals, clamping capacity: 1 x 0.34...2 x 1.5 mm <sup>2</sup>
Cable entry number	1 tapped entry for Pg 13.5 cable gland (included) 9...12 mm
Number of poles	4
Contacts type and composition	2 x (1 NC + 1 NO)
Contacts insulation form	Zb
Contact operation	Snap action
Number of steps	1
Contact block per direction [control circuit]	2 per direction
Positive opening	With
Minimum force for tripping	0.7 N
Minimum torque for tripping	0.6 N.m
Maximum actuation speed	1.5 m/s
IP degree of protection	IP65 conforming to IEC 60529

## Complementary

<b>Minimum actuation speed</b>	0.01 m/min
<b>Maximum displacement angle</b>	90 ° -90 °
<b>Contact code designation</b>	A300, AC-15 (Ue = 240 V), Ie = 3 A conforming to EN 60947-5-1 A300, AC-15 (Ue = 240 V), Ie = 3 A conforming to IEC 60947-5-1 appendix A Q300, DC-13 (Ue = 250 V), Ie = 0.27 A conforming to EN 60947-5-1 Q300, DC-13 (Ue = 250 V), Ie = 0.27 A conforming to IEC 60947-5-1 appendix A
<b>[Ui] rated insulation voltage</b>	300 V conforming to UL 508 500 V conforming to NF C 20-040 group C 500 V (pollution degree 3) conforming to IEC 60947-1 500 V (pollution degree 3) conforming to VDE 0110
<b>Maximum resistance across terminals</b>	25 MOhm conforming to IEC 60255-7 category 3 25 MOhm conforming to NF C 93-050 method A
<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60664 6 kV conforming to IEC 60947-1
<b>Short-circuit protection</b>	10 A cartridge fuse, type gG
<b>Electrical durability</b>	5000000 cycles, DC-13, inductive load type, 120 V, 4 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, inductive load type, 24 V, 10 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, inductive load type, 48 V, 7 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C
<b>Mechanical durability</b>	10000000 cycles
<b>Marking</b>	II2 D-Ex tb IIIC T85°C Db IP66/67
<b>Width</b>	85 mm
<b>Height</b>	95 mm
<b>Depth</b>	75 mm

## Environment

<b>Shock resistance</b>	68 gn conforming to IEC 60068-2-27
<b>Vibration resistance</b>	9 gn (f= 10...500 Hz) conforming to IEC 60068-2-6
<b>Electrical shock protection class</b>	Class I conforming to IEC 60536 Class I conforming to NF C 20-030
<b>Ambient air temperature for operation</b>	-20...60 °C
<b>Protective treatment</b>	TC
<b>Dust zone</b>	Zone 21 - 22
<b>Product certifications</b>	INERIS 04ATEX0014X IEC-Ex INE 16.0048X
<b>Standards</b>	EN/IEC 60079-31 EN/IEC 60079-0
<b>Directives</b>	2014/34/EU - ATEX directive

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	9.5 cm
<b>Package 1 Width</b>	9.3 cm
<b>Package 1 Length</b>	23.5 cm
<b>Package 1 Weight</b>	1.043 kg
<b>Unit Type of Package 2</b>	S03

<b>Number of Units in Package 2</b>	8
<b>Package 2 Height</b>	30 cm
<b>Package 2 Width</b>	30 cm
<b>Package 2 Length</b>	40 cm
<b>Package 2 Weight</b>	8.825 kg

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

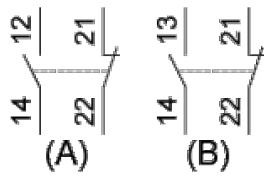
<b>Warranty</b>	18 months
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**Wiring Diagram**

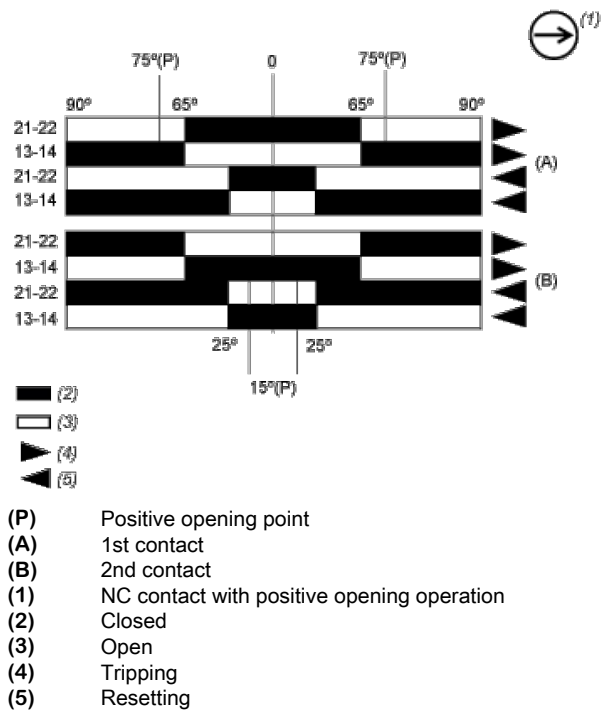
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**Two 2-pole NC + NO Snap Action**



- (A) 1<sup>st</sup> contact
- (B) 2<sup>nd</sup> contact

Functionnal Diagram



Recommended replacement(s)