

# XCRES181EX

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



## 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 1 x 0.34...2 x 1.5 mm <sup>2</sup>                 |
| Cable entry number                            | 1 tapped entry Pg 13.5 cable gland (included) 0.35...0.47 in (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                   | 5.31 lbf.in (0.6 N.m)                                                    |
| Maximum actuation speed                       | 4.92 ft/s (1.5 m/s)                                                      |
| IP degree of protection                       | IP65 conforming to IEC 60529                                             |

## Complementary

|                                     |                                                                                                                                                                                                                                        |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum actuation speed             | 0.01 m/min                                                                                                                                                                                                                             |
| Maximum displacement angle          | 90 °<br>-90 °                                                                                                                                                                                                                          |
| Contact code designation            | A300, AC-15 (Ue = 240 V), Ie = 3 A EN 60947-5-1<br>A300, AC-15 (Ue = 240 V), Ie = 3 A IEC 60947-5-1 appendix A<br>Q300, DC-13 (Ue = 250 V), Ie = 0.27 A EN 60947-5-1<br>Q300, DC-13 (Ue = 250 V), Ie = 0.27 A IEC 60947-5-1 appendix A |
| [Ui] rated insulation voltage       | 300 VUL 508<br>500 VNF C 20-040 group C<br>500 V 3)IEC 60947-1<br>500 V 3)VDE 0110                                                                                                                                                     |
| Maximum resistance across terminals | 25 MOhm IEC 60255-7 category 3<br>25 MOhm NF C 93-050 method A                                                                                                                                                                         |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                                        |                                                                                                                                                                                                                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage | 6 KV IEC 60664<br>6 kV IEC 60947-1                                                                                                                                                                                                                                                 |
| Short-circuit protection               | 10 A cartridge fuse gG                                                                                                                                                                                                                                                             |
| Electrical durability                  | 5000000 Cycles, DC-13, inductive, 120 V, 4 W 3600 cyc/mn 0.5, DC IEC 60947-5-1 appendix C<br>5000000 Cycles, DC-13, inductive, 24 V, 10 W 3600 cyc/mn 0.5, DC IEC 60947-5-1 appendix C<br>5000000 cycles, DC-13, inductive, 48 V, 7 W 3600 cyc/mn 0.5, DC IEC 60947-5-1 appendix C |
| Mechanical durability                  | 10000000 cycles                                                                                                                                                                                                                                                                    |
| Marking                                | II2 D-Ex tb IIIC T85°C Db IP66/67                                                                                                                                                                                                                                                  |
| Width                                  | 3.35 in (85 mm)                                                                                                                                                                                                                                                                    |
| Height                                 | 3.74 in (95 mm)                                                                                                                                                                                                                                                                    |
| Depth                                  | 2.95 in (75 mm)                                                                                                                                                                                                                                                                    |

## Environment

|                                       |                                           |
|---------------------------------------|-------------------------------------------|
| Shock resistance                      | 68 gn IEC 60068-2-27                      |
| Vibration resistance                  | 9 gn 10...500 Hz)IEC 60068-2-6            |
| Electrical shock protection class     | Class I IEC 60536<br>Class I NF C 20-030  |
| Ambient Air Temperature for Operation | -4...140 °F (-20...60 °C)                 |
| Protective treatment                  | TC                                        |
| Dust zone                             | Zone 21 - 22                              |
| Product Certifications                | INERIS 04ATEX0014X<br>IEC-Ex INE 16.0048X |
| Standards                             | EN/IEC 60079-31<br>EN/IEC 60079-0         |
| Directives                            | 2014/34/EU - ATEX directive               |

## Ordering and shipping details

|                       |                                    |
|-----------------------|------------------------------------|
| Category              | 22449 - LIMIT SWITCHES,ACCESSORIES |
| Discount Schedule     | T                                  |
| GTIN                  | 3389118027916                      |
| Nbr. of units in pkg. | 1                                  |
| Package weight(Lbs)   | 2.30 lb(US) (1.043 kg)             |
| Returnability         | No                                 |
| Country of origin     | FR                                 |

## Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Package 1 Height             | 3.74 in (9.5 cm)        |
| Package 1 width              | 3.66 in (9.3 cm)        |
| Package 1 Length             | 9.25 in (23.5 cm)       |
| Unit Type of Package 2       | CAR                     |
| Number of Units in Package 2 | 1                       |
| Package 2 Weight             | 2.36 lb(US) (1.07 kg)   |
| Package 2 Height             | 3.74 in (9.5 cm)        |
| Package 2 width              | 3.54 in (9 cm)          |
| Package 2 Length             | 9.06 in (23 cm)         |
| Unit Type of Package 3       | S03                     |
| Number of Units in Package 3 | 8                       |
| Package 3 Weight             | 20.44 lb(US) (9.273 kg) |
| Package 3 Height             | 11.81 in (30 cm)        |
| Package 3 width              | 11.81 in (30 cm)        |
| Package 3 Length             | 15.75 in (40 cm)        |

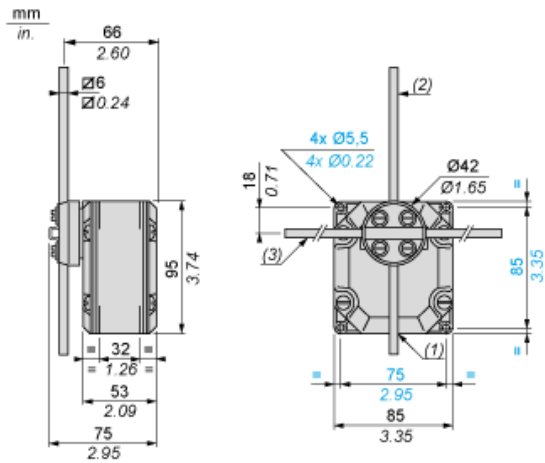
## Offer Sustainability

|                           |                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| California proposition 65 | 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> |
| REACH Regulation          | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                                                                                                                 |
| EU RoHS Directive         | Not applicable, out of EU RoHS legal scope                                                                                                                                                                                                                                                                                                                                        |
| Environmental Disclosure  | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                                                                                                                     |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

## Dimensions



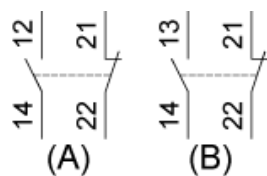
- (1) 1 tapped entry for n° 13 cable gland.
- (2) Rod length: 200 mm.
- (3) Rod length: 200 mm.

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## Wiring Diagram

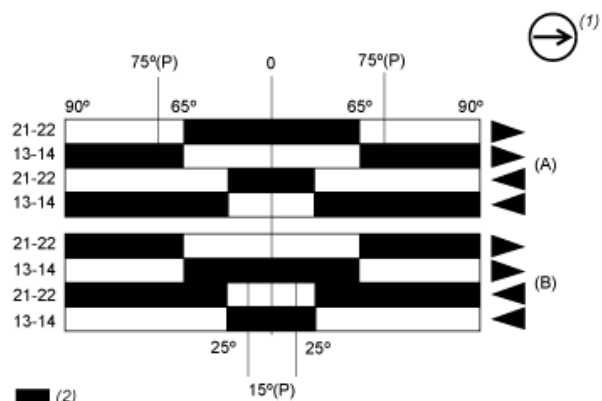
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### Two 2-pole NC + NO Snap Action



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

## Functionnal Diagram



- (P) Positive opening point
- (A) 1st contact
- (B) 2nd contact
- (1) NC contact with positive opening operation
- (2) Closed
- (3) Open
- (4) Tripping
- (5) Resetting

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