

# XCMD2102L5

Limit switch, Limit switches XC Standard, XCMD, steel roller plunger, 1NC+1 NO, snap, 5 m



## Main

|                               |  |
|-------------------------------|--|
| Range of Product              | Telemecanique Limit switches XC Standard |
| Series name                   | Standard format                          |
| Product or Component Type     | Limit switch                             |
| Device short name             | XCMD                                     |
| Sensor design                 | Miniature                                |
| Body type                     | Fixed                                    |
| Head type                     | Plunger head                             |
| Material                      | Metal                                    |
| Body Material                 | Zamak                                    |
| Head material                 | Zamak                                    |
| Fixing Mode                   | By the body                              |
| Movement of operating head    | Linear                                   |
| Type of operator              | Spring return roller plunger metal       |
| Type of approach              | Lateral approach, 2 directions           |
| Number of poles               | 2  |
| Contacts type and composition | 1 NC + 1 NO                              |
| Contact operation             | Snap action                              |

## Complementary

|  |  |
|--|--|
| Switch actuation                       | By 30° cam   |
| Electrical connection                  | Removable cable connector  |
| Cable length                           | 16.40 ft (5 m)   |
| Cable composition                      | 5 x 0.75 mm <sup>2</sup>   |
| Wire insulation material               | PvR  |
| Contacts insulation form               | Zb   |
| Positive opening                       | With   |
| Positive opening minimum force         | 35 N   |
| Minimum force for tripping             | 7 N  |
| Maximum actuation speed                | 1.64 ft/s (0.5 m/s)  |
| Contact code designation               | B300, AC-15 (Ue = 240 V), Ie = 1.5 A EN/IEC 60947-5-1 appendix A<br>R300, DC-13 (Ue = 250 V), Ie = 0.1 A EN/IEC 60947-5-1 appendix A   |
| [Ui] rated insulation voltage          | 300 V 3)UL 508<br>400 V 3)IEC 60947-5-1<br>300 V 3)CSA C22.2 No 14   |
| [Uimp] rated impulse withstand voltage | 4 KV IEC 60664<br>4 kV IEC 60947-1   |
| Short-circuit protection               | 6 A cartridge fuse gG  |
| Electrical durability                  | 5000000 Cycles, DC-13, 120 V, 1 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C<br>5000000 Cycles, DC-13, 24 V, 3 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C<br>5000000 cycles, DC-13, 48 V, 2 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C |
| Mechanical durability                  | 10000000 cycles  |
| Width                                  | 1.18 in (30 mm)  |
| Height                                 | 1.97 in (50 mm)  |
| Depth                                  | 0.63 in (16 mm)  |

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.

## Environment

|                                       |  |
|---------------------------------------|--|
| Shock resistance                      | 25 gn 18 ms IEC 60068-2-27   |
| Vibration resistance                  | 5 gn 10...500 Hz)IEC 60068-2-6   |
| IP degree of protection               | IP66 conforming to IEC 60529<br>IP67 conforming to IEC 60529<br>IP68 conforming to IEC 60529 |
| IK degree of protection               | IK06 EN 62262  |
| Overvoltage category                  | Class I  |
| Ambient Air Temperature for Operation | -13...158 °F (-25...70 °C)   |
| Product Certifications                | CSA<br>UL  |
| Standards                             | EN 60947-5-1<br>UL 508<br>IEC 60947-5-1<br>CSA C22.2 No 14                                   |




## Ordering and shipping details

|                   |                                    |
|-------------------|------------------------------------|
| Category          | 22413-LIMIT SWITCH, IEC, MINIATURE |
| Discount Schedule | T                                  |
| GTIN              | 3389110301151                      |
| Returnability     | Yes                                |
| Country of origin | ID                                 |

## Packing Units

|                              |                           |
|------------------------------|---------------------------|
| Unit Type of Package 1       | PCE                       |
| Number of Units in Package 1 | 1                         |
| Package 1 Height             | 1.18 in (3.0 cm)          |
| Package 1 Width              | 7.87 in (20.0 cm)         |
| Package 1 Length             | 7.87 in (20.0 cm)         |
| Package 1 Weight             | 17.85 oz (506.0 g)        |
| Unit Type of Package 2       | P06                       |
| Number of Units in Package 2 | 160                       |
| Package 2 Height             | 23.62 in (60.0 cm)        |
| Package 2 Width              | 31.50 in (80.0 cm)        |
| Package 2 Length             | 23.62 in (60.0 cm)        |
| Package 2 Weight             | 206.98 lb(US) (93.884 kg) |
| Unit Type of Package 3       | S03                       |
| Number of Units in Package 3 | 20                        |
| Package 3 Height             | 11.81 in (30.0 cm)        |
| Package 3 Width              | 11.81 in (30.0 cm)        |
| Package 3 Length             | 15.75 in (40.0 cm)        |
| Package 3 Weight             | 23.87 lb(US) (10.826 kg)  |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| 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          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a>  |
| Mercury free               | Yes   |
| RoHS exemption information |  Yes   |

---

|                          |   |
|--------------------------|---|
| Environmental Disclosure | <a href="#">Product Environmental Profile</a> |
| Circularity Profile      | <a href="#">End Of Life Information</a>       |

---

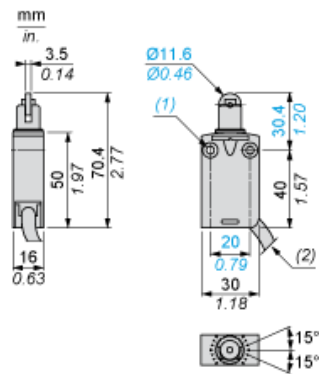
### Contractual warranty

---

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

---

Dimensions



- (1) 2 fixing holes  $\text{Ø} 4.2$  mm, counterbored  $\text{Ø} 8$  mm by 4 mm deep.
- (2) External diameter of cable 7.5 mm.

---

Mounting

---

Sweep of Connecting Cable



- (1) Recommended
- (2) To be avoided

---

Setting-up

---

Plunger or Multi-directional Heads



---

## Wiring Diagram

---

### 2-pole NC + NO Snap Action



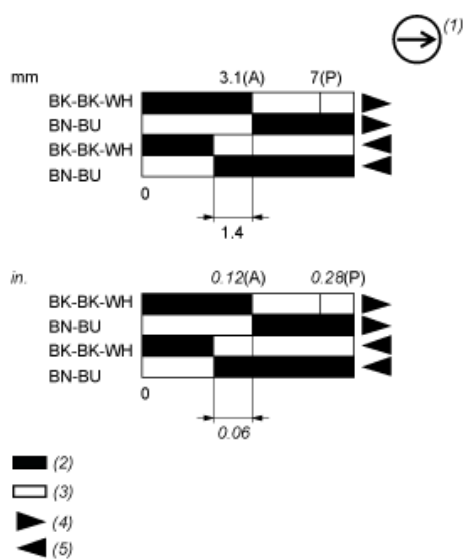
(BK) Black  
(BK- Black White  
WH)  
(BU) Blue  
(BN) Brown  
(GN- Green Yellow  
YE)

Characteristics of Actuation

Switch Actuation by 30° Cam



Functional Diagram



- (P) Positive opening point
- (A) Cam displacement
- (1) NC contact with positive opening operation
- (2) Closed
- (3) Open
- (4) Tripping
- (5) Resetting
- (BK) Black
- (BK- Black White
- WH)
- (BU) Blue
- (BN) Brown