

# Product data sheet

Specifications



Limit switch, Limit switches XC Standard, XCKM, thermoplastic roller lever plunger, 1NC+1 NO, slow, M20

XCKM521H29

## Main

|                               |                                                                             |
|-------------------------------|-----------------------------------------------------------------------------|
| Range of product              | Telemecanique Limit switches XC Standard                                    |
| Series name                   | Standard format                                                             |
| Product or component type     | Limit switch                                                                |
| Device short name             | XCKM                                                                        |
| Body type                     | Fixed                                                                       |
| Head type                     | Plunger head                                                                |
| Material                      | Metal                                                                       |
| Body material                 | Zamak                                                                       |
| Fixing mode                   | By the body                                                                 |
| Movement of operating head    | Linear                                                                      |
| Type of operator              | Spring return roller lever plunger thermoplastic                            |
| Type of approach              | Lateral approach, 1 direction                                               |
| Cable entry                   | 3 entries tapped for M20 x 1.5 cable gland, cable outer diameter: 7...13 mm |
| Number of poles               | 2                                                                           |
| Contacts type and composition | 1 NC + 1 NO                                                                 |
| Contact operation             | Slow-break, break before make                                               |

## Complementary

|                                |                                                                                                                                                                 |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch actuation               | By 30° cam                                                                                                                                                      |
| Electrical connection          | Screw-clamp terminals, clamping capacity: 1 x 0.5...2 x 2.5 mm²                                                                                                 |
| Contacts insulation form       | Zb                                                                                                                                                              |
| Number of steps                | 1                                                                                                                                                               |
| Positive opening               | With                                                                                                                                                            |
| Positive opening minimum force | 24 N                                                                                                                                                            |
| Minimum force for tripping     | 8 N                                                                                                                                                             |
| Minimum actuation speed        | 6 m/min                                                                                                                                                         |
| Maximum actuation speed        | 1.5 m/s                                                                                                                                                         |
| Contact code designation       | A300, AC-15 (Ue = 240 V), Ie = 3 A conforming to EN/IEC 60947-5-1 appendix A<br>Q300, DC-13 (Ue = 250 V), Ie = 0.27 A conforming to EN/IEC 60947-5-1 appendix A |

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Ithe] conventional enclosed thermal current | 10 A AC                                                                                                                                                                                                                                                                                                                                                                                                                               |
| [Ui] rated insulation voltage                | 300 V conforming to UL 508<br>500 V (pollution degree 3) conforming to IEC 60947-1<br>300 V conforming to CSA C22.2 No 14                                                                                                                                                                                                                                                                                                             |
| Maximum resistance across terminals          | 25 MOhm conforming to IEC 60255-7 category 3                                                                                                                                                                                                                                                                                                                                                                                          |
| [Uimp] rated impulse withstand voltage       | 6 kV conforming to IEC 60664<br>6 kV conforming to IEC 60947-1                                                                                                                                                                                                                                                                                                                                                                        |
| Short-circuit protection                     | 10 A cartridge fuse, type gG                                                                                                                                                                                                                                                                                                                                                                                                          |
| Electrical durability                        | 5000000 cycles, DC-13, inductive load type, 120 V, 4 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C<br>5000000 cycles, DC-13, inductive load type, 24 V, 7 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C<br>5000000 cycles, DC-13, inductive load type, 48 V, 10 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C |
| Mechanical durability                        | 20000000 cycles                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Width                                        | 64 mm                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Height                                       | 64 mm                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Depth                                        | 30 mm                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Net weight                                   | 0.3 kg                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Terminals description ISO n°1                | (21-22)NC<br>(13-14)NO                                                                                                                                                                                                                                                                                                                                                                                                                |

## Environment

|                                       |                                                                                         |
|---------------------------------------|-----------------------------------------------------------------------------------------|
| Shock resistance                      | 50 gn for 11 ms conforming to EN/IEC 60068-2-27                                         |
| Vibration resistance                  | 25 gn (f= 10...500 Hz) conforming to EN/IEC 60068-2-6                                   |
| IP degree of protection               | IP66 conforming to EN/IEC 60529                                                         |
| IK degree of protection               | IK05 conforming to EN 50102                                                             |
| Electrical shock protection class     | Class I conforming to IEC 61140<br>Class I conforming to NF C 20-030                    |
| Ambient air temperature for operation | -25...70 °C                                                                             |
| Ambient air temperature for storage   | -40...70 °C                                                                             |
| Protective treatment                  | TC                                                                                      |
| Product certifications                | CSA<br>UL<br>CCC                                                                        |
| Standards                             | IEC 60947-5-1<br>EN 60947-5-1<br>EN 60204-1<br>CSA C22.2 No 14<br>IEC 60204-1<br>UL 508 |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 3.3 cm  |
| Package 1 Width              | 6.5 cm  |
| Package 1 Length             | 14.8 cm |
| Package 1 Weight             | 310.0 g |
| Unit Type of Package 2       | S02     |

|                              |           |
|------------------------------|-----------|
| Number of Units in Package 2 | 32        |
| Package 2 Height             | 15.0 cm   |
| Package 2 Width              | 30.0 cm   |
| Package 2 Length             | 40.0 cm   |
| Package 2 Weight             | 10.383 kg |

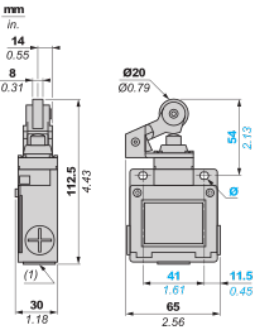
Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                                                                                 |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                                                                                     |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                                                                                                                                                                                                                                                     |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                                                                                   |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                                                                                                                   |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                                                                                         |
| 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="#">www.P65Warnings.ca.gov</a> |

Contractual warranty

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

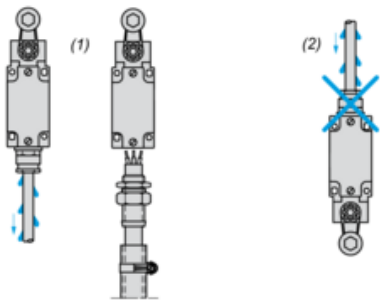
Dimensions



- (1) 3 tapped entries M20 x 1.5
- Ø : 2 elongated holes Ø 5.2 x 6.2

Mounting with Cable Entry

Position of Cable Gland

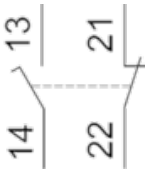


- (1) Recommended
- (2) To be avoided

Wiring Diagram

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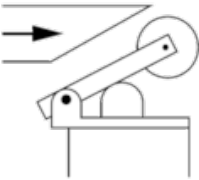
2-pole N/C + N/O Break before Make, Slow Break



Characteristics of Actuation

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Switch Actuation by 30° Cam



Functionnal Diagram

