# **XCKM3902H29EX**

limit switch XCKM - roller plunger - 2NC + NO - ATEX/IECEx





#### Main

Series name Standard format  Product or component type Limit switch  Device short name XCKM  Body type Fixed  Head type Plunger head  Material Metal  Fixing mode By the body  Movement of operating head Linear  Type of operator Steel spring return roller plunger  Switch actuation By 30° cam  Type of approach Lateral approach, 2 directions  Electrical connection Screw-clamp terminals, 1 x 0.342 x 0.75 mm²  Cable entry number 2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles 3  Contacts type and composition 2 NC + 1 NO  Contacts insulation form Zb  Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s  IP degree of protection IP66 conforming to IEC 60529	Range of product	OsiSense ATEX D
Device short name XCKM  Body type Fixed  Head type Plunger head  Material Metal  Fixing mode By the body  Movement of operating head Linear  Type of operator Steel spring return roller plunger  Switch actuation By 30° cam  Type of approach Lateral approach, 2 directions  Electrical connection Screw-clamp terminals, 1 x 0.342 x 0.75 mm²  Cable entry number 2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles 3  Contacts type and composition 2 NC + 1 NO  Contacts insulation form Zb  Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Series name	Standard format
Body type Fixed  Head type Plunger head  Material Metal  Fixing mode By the body  Movement of operating head Linear  Type of operator Steel spring return roller plunger  Switch actuation By 30° cam  Type of approach Lateral approach, 2 directions  Electrical connection Screw-clamp terminals, 1 x 0.342 x 0.75 mm²  Cable entry number 2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles 3  Contacts type and composition 2 NC + 1 NO  Contacts insulation form Zb  Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Product or component type	Limit switch
Head type Plunger head  Material Metal  Fixing mode By the body  Movement of operating head Linear  Type of operator Steel spring return roller plunger  Switch actuation By 30° cam  Type of approach Lateral approach, 2 directions  Electrical connection Screw-clamp terminals, 1 x 0.342 x 0.75 mm²  Cable entry number 2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles 3  Contacts type and composition 2 NC + 1 NO  Contacts insulation form Zb  Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Device short name	XCKM
Material Metal  Fixing mode By the body  Movement of operating head Linear  Type of operator Steel spring return roller plunger  Switch actuation By 30° cam  Type of approach Lateral approach, 2 directions  Electrical connection Screw-clamp terminals, 1 x 0.342 x 0.75 mm²  Cable entry number 2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles 3  Contacts type and composition 2 NC + 1 NO  Contacts insulation form Zb  Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Body type	Fixed
Fixing mode By the body  Movement of operating head Linear  Type of operator Steel spring return roller plunger  Switch actuation By 30° cam  Type of approach Lateral approach, 2 directions  Electrical connection Screw-clamp terminals, 1 x 0.342 x 0.75 mm²  Cable entry number 2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles 3  Contacts type and composition 2 NC + 1 NO  Contacts insulation form Zb  Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Head type	Plunger head
Movement of operating head  Linear  Type of operator  Switch actuation  By 30° cam  Type of approach  Electrical connection  Cable entry number  2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles  3  Contacts type and composition  Zb  Contact operation  Number of steps  1  Positive opening  Maximum actuation speed  Linear  Steel spring return roller plunger  By 30° cam  Lateral approach, 2 directions  2 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles  3  Contacts type and composition  Zb  Contact operation  Snap action  Number of steps  1  Positive opening  With  Maximum actuation speed  0.5 m/s	Material	Metal
Type of operator  Switch actuation  By 30° cam  Type of approach  Lateral approach, 2 directions  Electrical connection  Screw-clamp terminals, 1 x 0.342 x 0.75 mm²  Cable entry number  2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles  3  Contacts type and composition  Zb  Contacts insulation form  Zb  Contact operation  Number of steps  1  Positive opening  With  Minimum force for tripping  12 N  Maximum actuation speed  0.5 m/s	Fixing mode	By the body
Switch actuation By 30° cam  Type of approach Lateral approach, 2 directions  Electrical connection Screw-clamp terminals, 1 x 0.342 x 0.75 mm²  Cable entry number 2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles 3  Contacts type and composition 2 NC + 1 NO  Contacts insulation form Zb  Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Movement of operating head	Linear
Type of approach  Electrical connection  Screw-clamp terminals, 1 x 0.342 x 0.75 mm²  Cable entry number  2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles  3  Contacts type and composition  Zb  Contacts insulation form  Zb  Contact operation  Snap action  Number of steps  1  Positive opening  With  Minimum force for tripping  Maximum actuation speed  0.5 m/s	Type of operator	Steel spring return roller plunger
Electrical connection  Screw-clamp terminals, 1 x 0.342 x 0.75 mm²  Cable entry number  2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles  3  Contacts type and composition  Zb  Contacts insulation form  Zb  Contact operation  Snap action  Number of steps  1  Positive opening  With  Minimum force for tripping  12 N  Maximum actuation speed  0.5 m/s	Switch actuation	By 30° cam
Cable entry number  2 tapped entry (M20 x 1.5) for cable gland 1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles  3  Contacts type and composition  Zb  Contacts insulation form  Zb  Contact operation  Snap action  Number of steps  1  Positive opening  With  Minimum force for tripping  12 N  Maximum actuation speed  0.5 m/s	Type of approach	Lateral approach, 2 directions
1 tapped entry (M20 x 1.5) for cable gland (included), cable outer diameter: 713 mm  Number of poles 3  Contacts type and composition 2 NC + 1 NO  Contacts insulation form Zb  Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Electrical connection	Screw-clamp terminals, 1 x 0.342 x 0.75 mm <sup>2</sup>
Contacts type and composition 2 NC + 1 NO  Contacts insulation form Zb  Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Cable entry number	1 tapped entry (M20 x 1.5) for cable gland
Contacts insulation form Zb  Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Number of poles	3
Contact operation Snap action  Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Contacts type and composition	2 NC + 1 NO
Number of steps 1  Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Contacts insulation form	Zb
Positive opening With  Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Contact operation	Snap action
Minimum force for tripping 12 N  Maximum actuation speed 0.5 m/s	Number of steps	1
Maximum actuation speed 0.5 m/s	Positive opening	With
	Minimum force for tripping	12 N
IP degree of protection IP66 conforming to IEC 60529	Maximum actuation speed	0.5 m/s
	IP degree of protection	IP66 conforming to IEC 60529

#### Complementary

Body material	Zamak
Positive opening minimum force	36 N
Minimum actuation speed	0.01 m/min
Contact code designation	B300, AC-15 (240 V, Ie = 1.5 A) conforming to EN 60947-5-1 B300, AC-15 (240 V, Ie = 1.5 A) conforming to IEC 60947-5-1 appendix A R300, DC-13 (250 V, Ie = 0.1 A) conforming to EN 60947-5-1 R300, DC-13 (250 V, Ie = 0.1 A) conforming to IEC 60947-5-1 appendix A
[Ithe] conventional enclosed thermal current	6 A AC
[Ui] rated insulation voltage	400 V, pollution degree: 3 conforming to IEC 60947-1 300 V conforming to UL 508 300 V conforming to CSA C22.2 No 14
Resistance across terminals	<= 25 MOhm conforming to IEC 60255-7 category 3
[Uimp] rated impulse withstand voltage	4 kV conforming to IEC 60664 4 kV conforming to IEC 60947-1
Short-circuit protection	6 A cartridge fuse, type gG
Electrical durability	5000000 cycles DC-13 24 V 3 W, <= 3600 cyc/mn load factor: 0.5 conforming to IEC 60947-5-1 appendix C inductive DC 5000000 cycles DC-13 48 V 2 W, <= 3600 cyc/mn load factor: 0.5 conforming to IEC 60947-5-1 appendix C inductive DC 5000000 cycles DC-13 120 V 1 W, <= 3600 cyc/mn load factor: 0.5 conforming to IEC 60947-5-1 appendix C inductive DC
Mechanical durability	20000000 cycles

Marking	II2 D-Ex tb IIIC T85°C Db IP66/67
Width	63 mm
Height	64 mm
Depth	30 mm

### **Environment**

shock resistance	50 gn for 11 ms conforming to IEC 60068-2-27
vibration resistance	25 gn 10500 Hz IEC 60068-2-6
electrical shock protection class	Class I conforming to IEC 61140 Class I conforming to NF C 20-030
ambient air temperature for operation	-2060 °C
protective treatment	TC
dust zone	Zone 21 - 22
product certifications	INERIS 04ATEX0014X IEC-Ex INE 17.0020X
standards	EN/IEC 60079-0 EN/IEC 60079-31
directives	2014/34/EU - ATEX directive

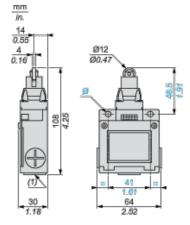
## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0922 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product end of life instructions	Need no specific recycling operations

### Contractual warranty

	•
Warranty period	18 months

### **Dimensions**



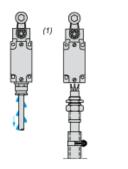
(1) 3 tapped entries M20 x 1.5

Ø: 2 elongated holes Ø 5.2 x 6.2

# **Mounting with Cable Entry**

Position of Cable Gland



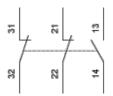




- (1) Recommended
- (2) To be avoided

### **Wiring Diagram**

3-pole NC + NC + NO Snap Action

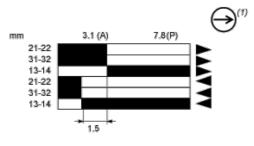


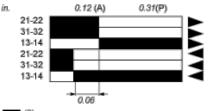
## **Characteristics of Actuation**

Switch Actuation by 30° Cam



### **Functionnal Diagram**





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