



Main

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| Range of product | XR and XF |
| Product or component type | Single-stage heavy duty screw limit switch |
| Device short name | XR2 |
| Product specific application | Liquid level control in pumping systems Position control of moving parts of hoisting or materials handling equipment |
| Material | Sheet steel (enclosure) |
| Type of operator | Drive shaft, end fittings with sprocket key and washer |
| Maximum revolution speed | 350 rpm of input drive shaft |
| Theoretical number of turns | 80 of input drive shaft |
| Number of poles | 1 |

Complementary

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| Mechanical durability | 10000000 cycles |
| Number of turns | <= 6 of threaded shaft |
| Threaded shaft screw pitch | 4 mm |
| Operating finger radius | 40 mm |
| Length of developed helical travel | 4 mm |
| Differential snap over angle | 30 ° contact actuators measured at finger |
| Repeat accuracy | 0.02 % on the tripping point |
| Number of teeth | 16 (pinion A) 16 (pinion C) 59 (pinion B) 59 (pinion D) |
| Actual number of turns | 81.586 (input drive shaft) |
| Contacts type and composition | 3 NC |
| Contact operation | Snap action |
| [Ie] rated operational current | A300, AC-15 (Ue = 240 V, Ie = 3 A) conforming to EN/IEC 60947-5-1 Q300, DC-13 (Ue = 250 V, Ie = 0.27 A) conforming to EN/IEC 60947-5-1 |
| [Ithe] conventional enclosed thermal current | 20 A |
| [Ui] rated insulation voltage | 600 V conforming to CSA C22.2 No 14 500 V conforming to EN/IEC 60947-1 |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to EN/IEC 60947-1 |

Disclaimer: 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

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| Resistance across terminals | <= 25 MOhm |
| Short-circuit protection | 20 A cartridge fuse type gG |
| Connections - terminals | Screw clamp terminals, connection capacity: 2 x 1.5 mm ² with or without cable end Screw clamp terminals, connection capacity: 2 x 2.5 mm ² without cable end |
| Electrical durability | <p>10000000 cycles AC-15 50/60 Hz inductive at 12 V, 220 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz inductive at 127 V, 740 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz inductive at 220 V, 750 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz inductive at 24 V, 440 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz inductive at 380 V, 750 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz inductive at 48 V, 600 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz inductive at 500 V, 750 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz resistive at 12 V, 220 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz resistive at 127 V, 500 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz resistive at 220 V, 500 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz resistive at 24 V, 350 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz resistive at 380 V, 520 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz resistive at 48 V, 450 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles AC-15 50/60 Hz resistive at 500 V, 520 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 inductive at 110 V, 330 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 inductive at 12 V, 220 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 inductive at 220 V, 280 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 inductive at 24 V, 450 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 inductive at 440 V, 240 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 inductive at 48 V, 400 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 resistive at 110 V, 35 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 resistive at 12 V, 55 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 resistive at 220 V, 32 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 resistive at 24 V, 45 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 resistive at 440 V, 30 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>10000000 cycles DC-13 resistive at 48 V, 38 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>3000000 cycles AC-15 50/60 Hz inductive at 12 V, 240 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>3000000 cycles AC-15 50/60 Hz inductive at 127 V, 1900 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>3000000 cycles AC-15 50/60 Hz inductive at 220 V, 2200 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>3000000 cycles AC-15 50/60 Hz inductive at 24 V, 450 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>3000000 cycles AC-15 50/60 Hz inductive at 380 V, 2200 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>3000000 cycles AC-15 50/60 Hz inductive at 48 V, 800 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>3000000 cycles AC-15 50/60 Hz inductive at 500 V, 2200 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>3000000 cycles AC-15 50/60 Hz resistive at 12 V, 240 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> <p>3000000 cycles AC-15 50/60 Hz resistive at 127 V, 1300 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1</p> |

3000000 cycles AC-15 50/60 Hz resistive at 220 V, 1500 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles AC-15 50/60 Hz resistive at 24 V, 450 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles AC-15 50/60 Hz resistive at 380 V, 1500 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles AC-15 50/60 Hz resistive at 48 V, 800 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles AC-15 50/60 Hz resistive at 500 V, 1500 VA, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 inductive at 110 V, 330 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 inductive at 12 V, 220 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 inductive at 220 V, 280 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 inductive at 24 V, 450 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 inductive at 440 V, 240 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 inductive at 48 V, 400 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 resistive at 110 V, 95 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 resistive at 12 V, 135 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 resistive at 220 V, 90 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 resistive at 24 V, 115 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 resistive at 440 V, 85 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1
 3000000 cycles DC-13 resistive at 48 V, 105 W, operating rate 3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1

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| Cable entry | Removable gland plate |
| Product weight | 12 kg |

Environment

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| Standards | EN/IEC 60947-5-1 |
| Protective treatment | TC |
| Ambient air temperature for operation | -25...70 °C |
| Ambient air temperature for storage | -40...70 °C |
| Shock resistance | 50 gn for 11 ms |
| Vibration resistance | > 5 gn (10...55 Hz) |
| IP degree of protection | IP54 conforming to EN/IEC 60529 |

Offer Sustainability

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| RoHS (date code: YYWW) | Will be compliant on 4Q2013 Will be compliant on 4Q2013 |
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Contractual warranty

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| Warranty period | 18 months |
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