

# XRBA45100

Standard duty screw limit switch, XR and XF,  
bare drive shaft, 4 C/O, 78:1, right hand



## Main

|                                |                                                                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Range of product               | XR and XF                                                                                                                               |
| Product or component type      | Standard duty screw limit switch                                                                                                        |
| Device short name              | XRBA                                                                                                                                    |
| Product specific application   | Position control of moving parts of hoisting or materials handling equipment<br>Liquid level control in pumping systems                 |
| Material                       | Aluminium alloy: body housing<br>Aluminium alloy: cover<br>Stainless steel: input drive shaft                                           |
| Type of operator               | Bare drive shaft                                                                                                                        |
| Operating position             | Right-hand side                                                                                                                         |
| Maximum revolution speed       | 1000 rpm of input drive shaft                                                                                                           |
| Number of poles                | 1                                                                                                                                       |
| Contact operation              | Snap action                                                                                                                             |
| [Ie] rated operational current | A300, AC-15, Ue = 240 V, Ie = 3 A conforming to EN/IEC 60947-5-1<br>Q300, DC-13, Ue = 250 V, Ie = 0.27 A conforming to EN/IEC 60947-5-1 |
| Product compatibility          | XRBZ947                                                                                                                                 |

## Complementary

|                                              |                                                                       |
|----------------------------------------------|-----------------------------------------------------------------------|
| Reduction ratio                              | 78:1                                                                  |
| Operating torque                             | 5 N.m at 20 °C                                                        |
| Mechanical durability                        | 15000000 cycles                                                       |
| Contacts type and composition                | 4 C/O                                                                 |
| [Ithe] conventional enclosed thermal current | 10 A                                                                  |
| [Ui] rated insulation voltage                | 250 V conforming to EN/IEC 60947-1                                    |
| [Uimp] rated impulse withstand voltage       | 6 kV conforming to EN/IEC 60947-1                                     |
| Maximum resistance across terminals          | 25 MOhm                                                               |
| Short-circuit protection                     | 10 A cartridge fuse type gG                                           |
| Connections - terminals                      | Captive screw clamp terminals, 2 x 1.5 mm <sup>2</sup> with cable end |

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|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrical durability        | 500000 Cycles AC-15 50/60 Hz inductive at 12 V, 65 VA, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles AC-15 50/60 Hz inductive at 127 V, 450 VA, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles AC-15 50/60 Hz inductive at 220 V, 530 VA, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles AC-15 50/60 Hz inductive at 24 V, 108 VA, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles AC-15 50/60 Hz inductive at 48 V, 216 VA, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles AC-15 50/60 Hz resistive at 12 V, 18 VA, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles AC-15 50/60 Hz resistive at 127 V, 165 VA, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles AC-15 50/60 Hz resistive at 220 V, 220 VA, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles AC-15 50/60 Hz resistive at 24 V, 35 VA, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles AC-15 50/60 Hz resistive at 48 V, 700 VA, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles DC-13 inductive at 110 V, 130 W, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles DC-13 inductive at 12 V, 55 W, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles DC-13 inductive at 220 V, 135 W, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles DC-13 inductive at 24 V, 84 W, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles DC-13 inductive at 48 V, 110 W, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles DC-13 resistive at 110 V, 65 W, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles DC-13 resistive at 12 V, 27 W, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles DC-13 resistive at 220 V, 67 W, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 Cycles DC-13 resistive at 24 V, 39 W, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1<br>500000 cycles DC-13 resistive at 48 V, 50 W, operating rate <3600 cyc/h, load factor 0.5 EN/IEC 60947-5-1 |
| Adaptation for potentiometer | With, ratio 2 (1.933)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Cable entry                  | 1 entry tapped for Pg 16 cable gland, clamping capacity: 10...14 mm<br>1 entry tapped for Pg 9 cable gland, clamping capacity: 5...8 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Net weight                   | 1.5 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Environment

|                                       |                                                                    |
|---------------------------------------|--------------------------------------------------------------------|
| 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                      | 80 gn for 11 ms                                                    |
| Vibration resistance                  | > 5 gn (f= 10...60 Hz)                                             |
| IP degree of protection               | IP55 conforming to EN/IEC 60529<br>IP557 conforming to NF C 20-010 |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 13 cm    |
| Package 1 Width              | 15 cm    |
| Package 1 Length             | 23.5 cm  |
| Package 1 Weight             | 1.665 kg |

## Contractual warranty

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