

SERIES SRB 302X3

General Purpose Safety Controller (for dry contact monitoring)



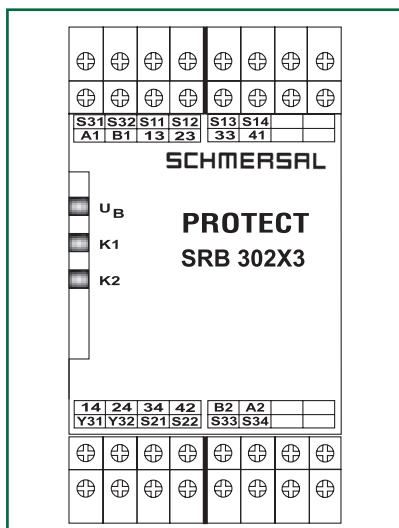
Description

The Model SRB 302X3 is a “general purpose” unit designed for use with safety devices having Normally-Closed (N.C.) switching outputs. It is equipped for connection of one input device in single- or dual-channel configuration. In addition it features feedback monitoring of positive-guided controlled loads, automatic or manual-monitored reset and cross-short recognition.

TECHNICAL FEATURES

| | |
|---|---|
| Input Voltage | <ul style="list-style-type: none"> • 24 VDC (terminals B1-B2) • 24 VAC (terminals B1-B2) • 115 VAC (terminals A1-A2) |
| # Discrete Input Devices Monitored | 1 (Single or Dual-Channel) |
| Compatible Input Device Contact Configuration | N.C. (dry contacts) |
| Number & Type Safety Outputs | 3 N.O. (dry contacts) |
| Number & Type Auxiliary (non-safety or signalling outputs) | 1 N.C. (dry contact) 1 N.O. (dry contact) |
| Typical Input Devices Monitored | <ul style="list-style-type: none"> • E-stops (N.C.) • Interlock switches (N.C.) |
| Type of Reset (selectable) | <ul style="list-style-type: none"> • Monitored-manual (trailing-edge) • Automatic |
| Feedback Monitoring | Yes |
| LED Displays | Green LEDs for: <ul style="list-style-type: none"> • K1-K2 (safety relay 1-2) • U_B (voltage at input terminals) |
| Conformity to Standards | UL, CSA, BG (CE-compliant) |
| Stop Category | 0 (3 safety outputs) |
| Safety Control Category Rating Per EN 954-1 | 4 |
| Selected Features | <ul style="list-style-type: none"> • Cross-short recognition • Selectable monitored-manual or automatic reset • Hybrid fuse • Feedback monitoring |

Front View



AVAILABLE MODELS

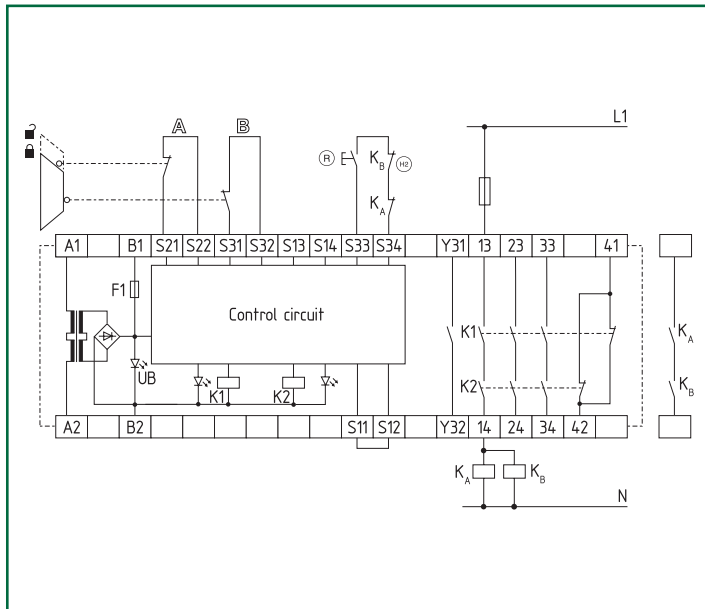
| Model Number | Operating Voltage |
|--------------|--------------------|
| SRB 302X3 | 24V AC/DC, 115V AC |

SERIES SRB 302X3

MECHANICAL SPECIFICATIONS

| | |
|--|---|
| Dimensions (W x H x D) | 45mm x 100mm x 121mm (1.8" x 3.9" x 4.75") |
| Ambient Operating Temperature Range | -25°C to +60°C (-13°F to +140°F) |
| Mechanical Life Expectancy | >10 ⁷ switching cycles |
| Weight | 450 gm |
| Mounting | DIN rail |

Typical Wiring Diagram



ELECTRICAL SPECIFICATIONS

| | |
|---|--|
| Operating Voltage | <ul style="list-style-type: none"> • 24 VDC -15% / +20%, residual ripple max. 160% • 24 VAC -15% / +10% (24 VDC/AC terminals B1-B2) • 115 VAC -15% / +10% (terminals A1-A2) |
| Power Consumption | 2.5 W, 5 VA max. |
| Fuse (input power) | Internal electronic fuse, tripping current > 1 A |
| Fuse (safety outputs) | 8 A slow-blow |
| Fuse (monitoring contacts) | |
| Contact 41-42 | 2 A slow-blow |
| Contact Y31-Y32 | 500mA slow-blow |
| Switching Capacity (safety outputs) | 230 VAC, 8 A Resistive (inductive with suppressor circuit) |
| Switching Capacity (monitoring contacts) | |
| Contact 41-42 | 24 VDC, 2 A |
| Contact Y31-Y32 | 24 VDC, 500mA |
| Application Category | AC 15 / DC 13 : EN 60947-5-1 |
| Pick-up Delay | ≤ 20 ms |
| Drop-out Delay | <ul style="list-style-type: none"> ≤ 20 ms (at emergency stop) ≤ 60 ms (at power failure) |
| Contact Type & Materials | AgSnO, self-cleaning, positive-guided |
| Contact Resistance | 100 mOhm (max. in new state) |
| Air Clearance & Creepage Distance | DIN VDE 011-1, 4 kV/2 |
| Cable Connections | <ul style="list-style-type: none"> • Self-lifting screw terminals for 13 to 20 AWG • Stranded or multi-core with wire end ferrule |
| Terminal Labeling | DIN EN 50 005 / DIN 50 013 |

Terminal Connections

