

SERIES SRB 301X1

General Purpose Safety Controller (for dry contact monitoring)



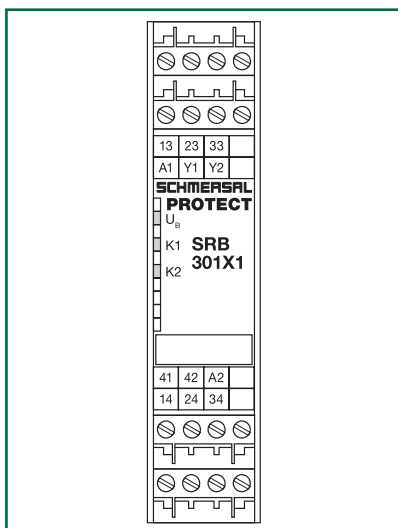
Description

The Model SRB 301X1 is a “general purpose” unit designed for use with safety devices having Normally-Closed (N.C.) dry contacts. It is equipped for connection of one monitored input device in single-channel configuration. In addition it features user-selectable manual or automatic reset, and feedback monitoring of positive-guided controlled loads.

TECHNICAL FEATURES

Input Voltage	24 VAC/DC
# Discrete Input Devices Monitored	1 (Single 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 contacts)
Typical Input Devices Monitored	<ul style="list-style-type: none"> E-stops (N.C.) Interlock devices (N.C.)
Type of Reset (selectable)	<ul style="list-style-type: none"> Manual (24V leading 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	2
Selected Features	<ul style="list-style-type: none"> Selectable monitored-manual or automatic reset Hybrid fuse Feedback monitoring

Front View



AVAILABLE MODELS

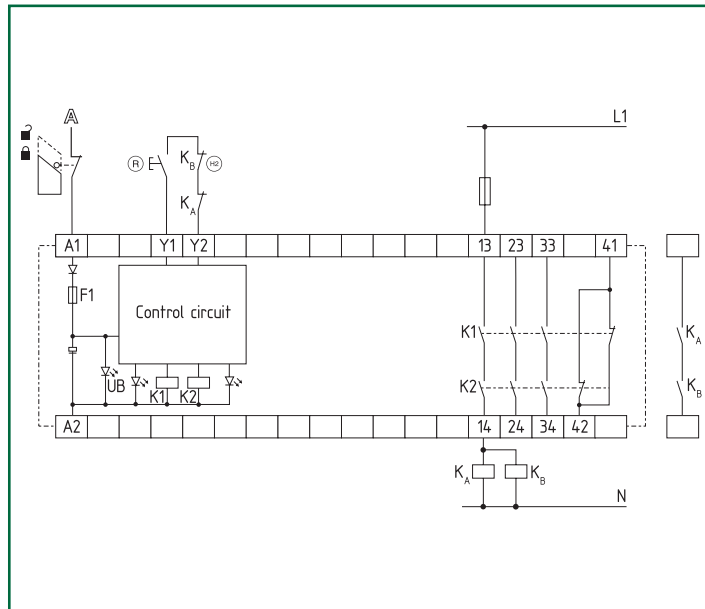
Model Number	Operating Voltage
SRB 301X1	24V AC/DC

SERIES SRB 301X1

MECHANICAL SPECIFICATIONS

Dimensions (W x H x D)	22.5mm x 100mm x 121mm (0.9" 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	220 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%
Power Consumption	1.4 W, 3.2 VA max.
Fuse (input power)	Internal electronic fuse, tripping current > 1 A
Fuse (safety outputs)	8 A slow-blow (recommended)
Switching Capacity (safety outputs)	230 VAC, 8 A Resistive (inductive with suppressor circuit)
Switching Capacity (auxiliary contacts)	(41-42), 24 VDC, 2 A
Application Category	AC 15 / DC 13 : EN 60947-5-1
Pick-up Delay	≤ 55 ms
Drop-out Delay	≤ 50 ms
Contact Type & Material	AgSnO, self-cleaning, positive-guided
Contact Resistance	100 mOhm (max. in new state)
Air Clearance & Creepage Distance	DIN VDE 0110-1, 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

