



# SCDA129R

## Two-hand Control Safety Relay Module



### Product overview

The SCDA129R is a logic unit for monitoring and accessing two-hand control devices in accordance with EN 574 Safety Class IIIC.

**Inputs:** The two input switches must start each other within 0.5s and will only be in the "on" state when both switches are held down at the same time. If one or both of the switches are in the released state, the output transitions to the Off state. The machine restarts only when both switches are released and then held down at the same time.

**Output:** Has two normally open safety outputs and one normally closed auxiliary output. The safety output has separate and redundant internal contacts that support safety functions, and the auxiliary output is a non-safety output dedicated to providing external signals about the status of the safe output. The safety relay module can automatically detect whether the contact is correctly judged and closed.

### Characteristics

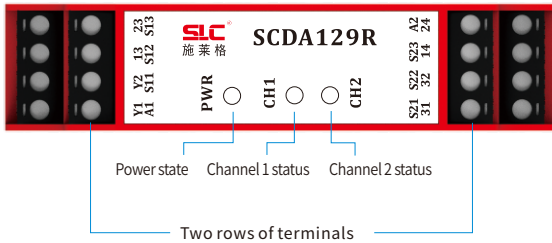
- ◆ Complies with ISO 13849-1 Category 4
- ◆ Complies with EN 574 safety category IIIC
- ◆ Two N.O. safety outputs (contacts)
- ◆ Automatic reset
- ◆ Removable terminals
- ◆ Complies with GB/T 196 71
- ◆ Safety Category IIIC
- ◆ Two-hand control unit
- ◆ One N.C. auxiliary output (contact)
- ◆ 22.5mm wide housing

### Technical parameters

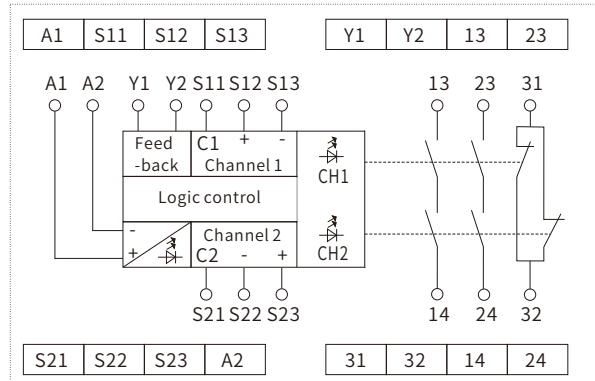
| Security level   |   |
|--|---|
| Standard   | EN 574, GB/T 19671  |
| Security classification                                    | Meets ISO 13849-1 category 4  |
| Power supply   |   |
| Enter the power supply                                     | 24V /DC   |
| Power consumption  | 2W  |
| Input  |   |
| Secure input   | 1 N.C.+ 1 N.O.  |
| Enter Sync   | < 0.5 s   |
| Maximum input resistance                                   | 40 Ω  |
| Reposition   | Automatic reset   |
| Power-on delay/recovery time                               | 1s/500ms  |
| Response time  | 20ms  |
| Output   |   |
| Safe output  | 2 N.O. redundant normally open outputs  |
| Auxiliary contact output                                   | 1 N.C. normally closed outputs  |
| Shock rated withstand voltage                              | 2500V   |
| The minimum current is not switched for a specific voltage | 10mA/10V  |
| Output fuse  | External 6A slow melt or 10A fast melt  |
| Electrical life  | 1×10 <sup>5</sup> 次(1NO:3A 24VDC,Resistive load,1s on 9s off)<br>1×10 <sup>5</sup> 次(1NO:6A 250VAC,Resistive load,1s on 9s off) |
| Mechanical life  | 2,000,000 operations  |
| Environmental and physical characteristics                 |   |
| Enclosure rating/terminal protection                       | IP40/IP20   |
| Operating temperature                                      | -5...+55°C  |
| Vibration resistance                                       | 10...55Hz,0.35mm  |
| Impact resistance  | 10g,16ms,100 shocks   |
| Installation   | 35mm DIN rail   |
| Weight (g)   | 150   |
| Maximum conductor specifications                           | 0.2...4mm <sup>2</sup>  |

※ Depending on the product configuration and manufacturing process, the actual product size and weight may vary, please refer to the actual product

## Panel description

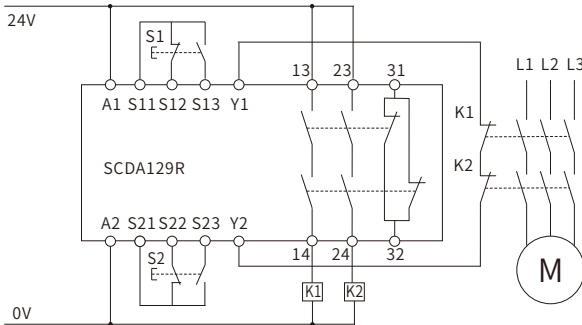


## Block diagram

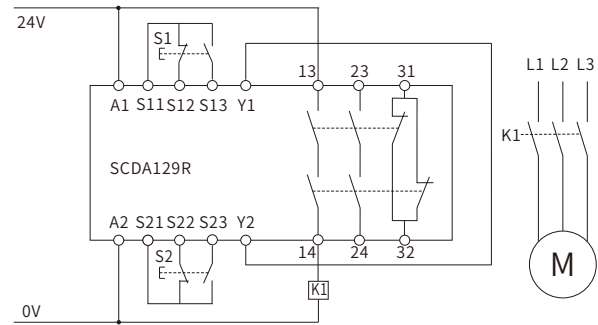


## Description of wiring diagrams for typical applications

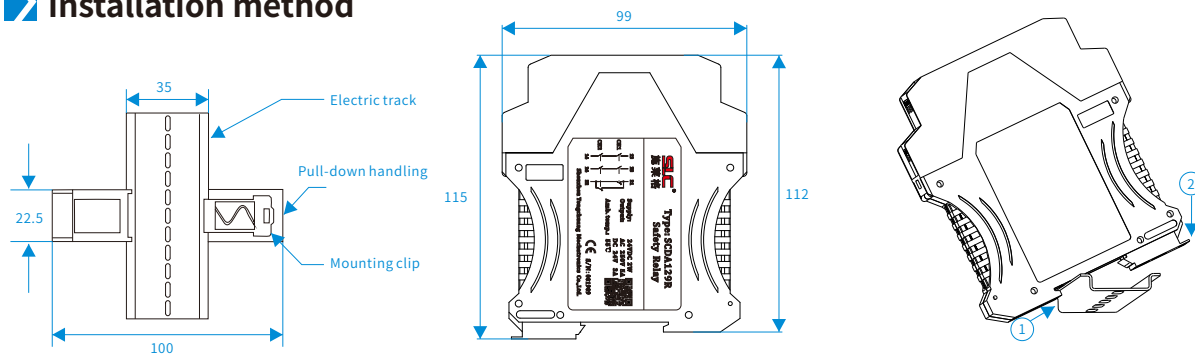
Two-hand control, dual channel, automatic reset, output monitoring



Two-handed control, dual channel, automatic reset, no output monitoring



## Installation method



※Function description: The safety relay module should be installed in the electronic control box with a protection type of IP54 or above installed with a DIN rail (35mm) and fixed in the electronic control box.

**Warning**

- ◆ Constantly closed output cannot be used as safe output.
- ◆ Please confirm the wiring when the power is turned off.
- ◆ Please confirm that the change of power supply voltage does not exceed the rated range.
- ◆ The power supply must have the function of output overvoltage and overcurrent protection.
- ◆ Not used in flammable and explosive environments.

1. The fixed plastic card position of the SCD A series safety module is diagonally stuck to the side of the installation rail;

2. Put down the guide rail and press the SCD A series safety module, so that its hardware movable buckle is clasped to the other side of the guide rail.