

ESRS Safety Control Module



Performance Level: PL e

Category: Cat.4

ESRS Safety Control Module

ESRS is a configurable safety control module that supports input for a variety of switch type safety components (such as emergency button, safety door switch, safety light curtain, LiDAR, two-hand button, etc.). With a maximum of 6 safety components inputs, 2 relay safety outputs, and 4 semiconductor outputs. The configuration software of it can set the safety control logic to meet the needs of various field applications.

Product Feature

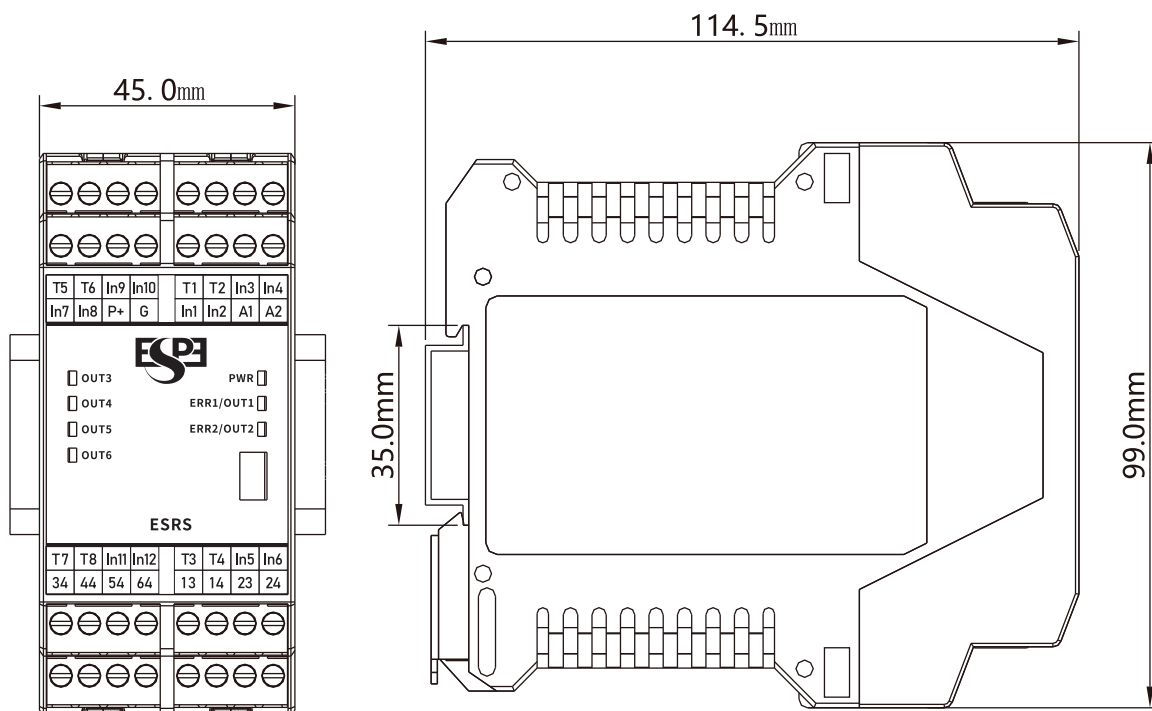
- Designed in accordance with ISO13849-1(Category4, PL e).
- Relay output: 2 normally open contacts.
- Transistor output: 4 PNP signal output.
- Self-diagnose and redundant circuit design.
- Intuitive status indicator for easy operation status diagnosis.
- Detachable terminal for easy maintenance.
- Configurable control logic.
- Support a variety of safety input signals.

Safety Control Module

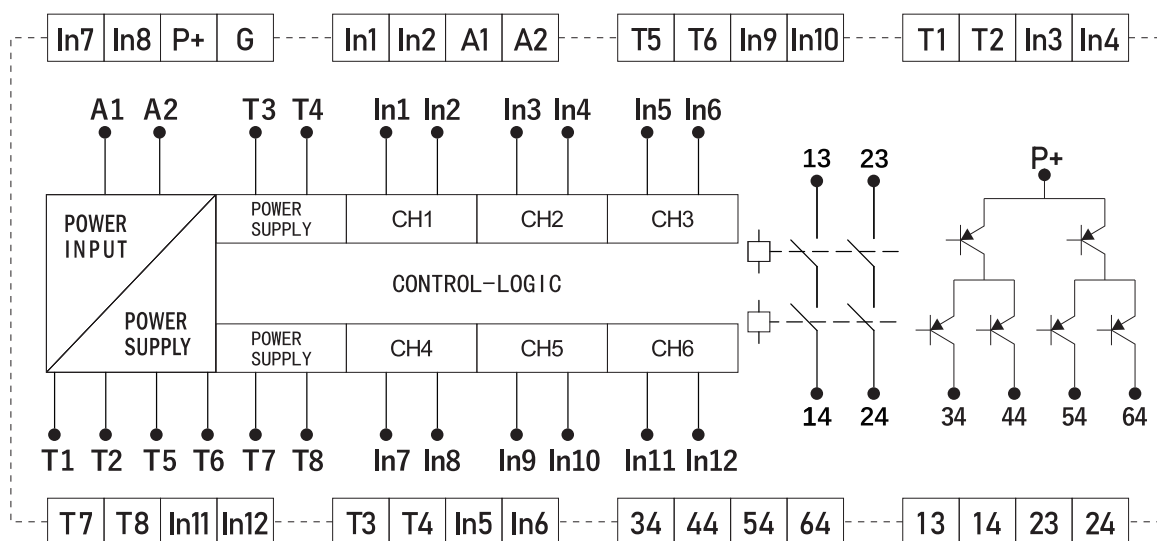
Product Parameter

Electrical Data	
Power Supply	20V-30VDC
Electricity Break	≤110mA(24VDC)
Input Feature	
Channel	6
Input Current	≤50mA(24VDC)
Wire Resistance	≤15Ω
Support Device	Emergency stop, safety gate, safety light curtain, safety mat, two-hand button, interlock switch, reset button
Output Feature	
Contacts	2NO
Material of Contacts	AgSnO ²
Fuse Protection	10A fast; 6A slow
Switching Capacity	5A/250VAC; 5A/24VDC
Semiconductor Feature	
Output	4PNP
Drive Power	2A(24VDC)
Time Feature	
Operation Time	≤100ms
Release Time	≤30ms
Restore Time	≤100ms
Power Break Time	20ms
Ambient Feature	
Electro Magnetic Compatibility	EN60947, EN61000-6-2, EN61000-6-4
Vibration	Frequency: 10Hz~55Hz; Amplitude: 0.35mm
Ambient Temperature	-20~+60°C
Storage Temperature	-40~+85°C
Relative Humidity	10%~90%
Insulating Feature	
Overvoltage Level	III
Pollution Level	2
Rated Insulating Voltage	250VAC
Rated Impact Voltage	6000V(1.2/50us)
Dielectric Strength	1500VAC, 1min
Clearance & Creepage	EN60947-1
Certificates	
Safety Level	SIL3
Safety Level (SIL/PL)	PL e
Safety Category	Cat.4

Size Diagram



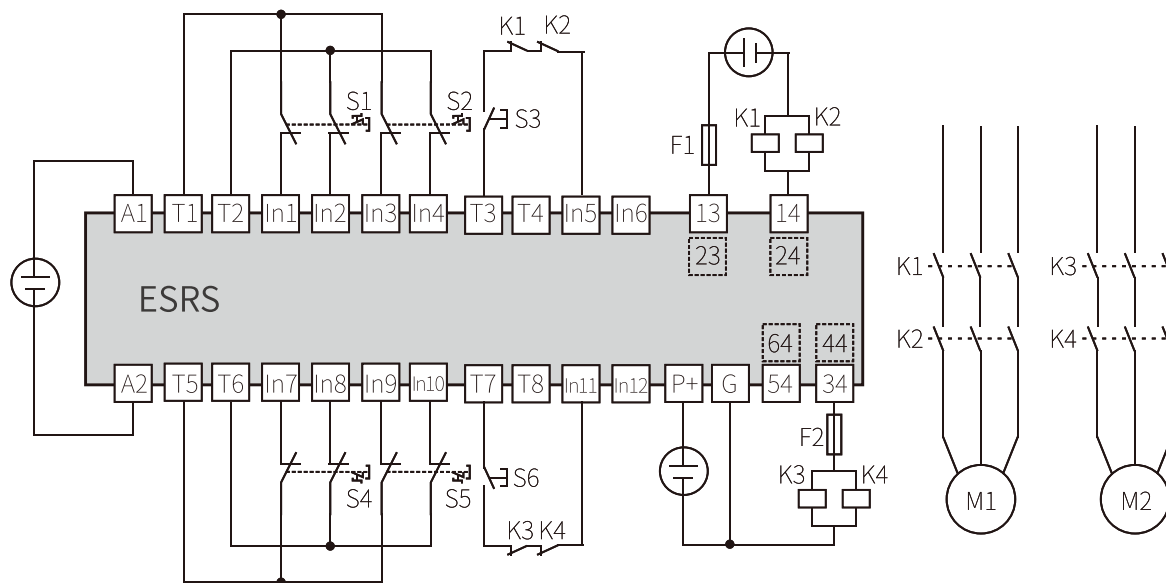
Panel Function



Safety Control Module

Connection Diagram

4 channel emergency button input



2 channel two-hand button input

