

ESRS Series Safety Control Module



Performance Level: PLe
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 features

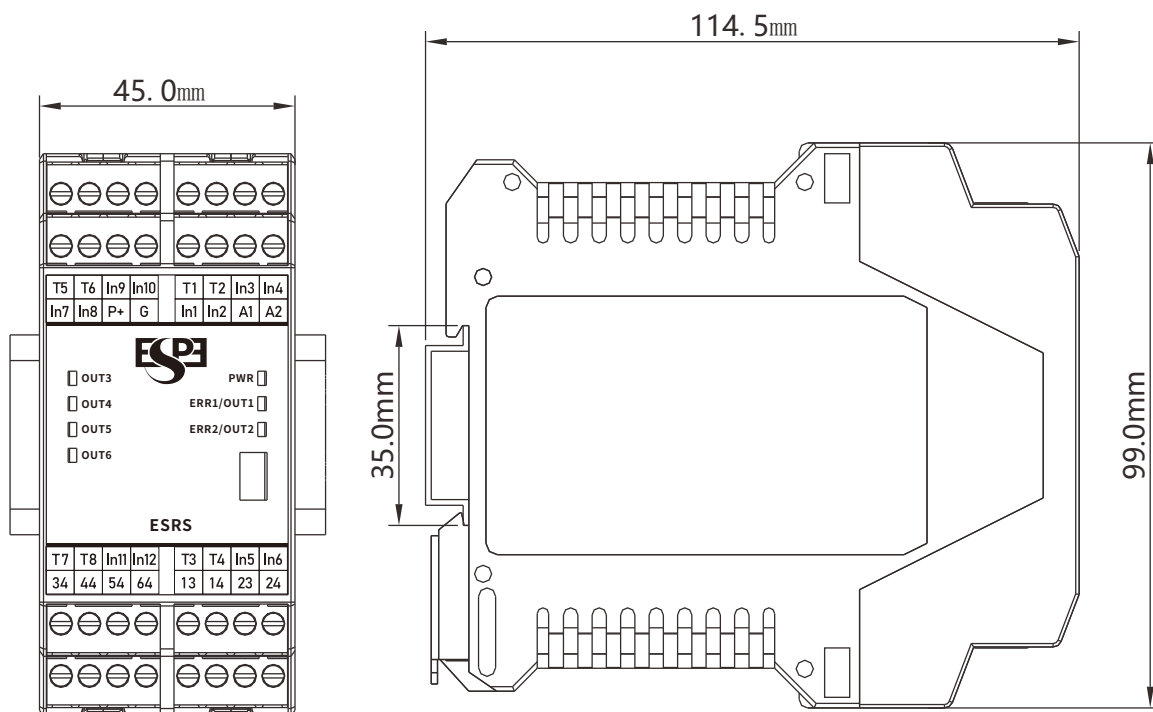
- Designed in accordance with ISO13849-1(Category4, PLe).
- Relay output: 2 normally open contacts.
- Transistor output: 4 PNP signal output.
- Self-diagnose and redundant circuit design.
- Intuitive status indicator for easy operation status diagnosis.
- Detachable terminal for easy maintenance.
- Configurable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

Safety Control Module

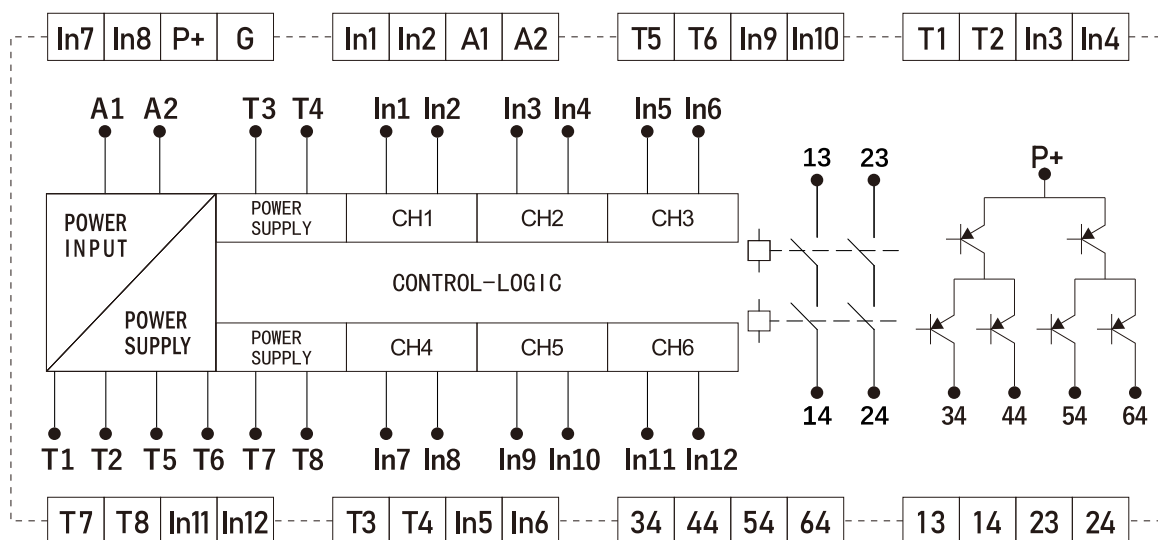
Product parameter

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, safetygate, 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°C~+60°C
Storage temperature	-40°C~+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



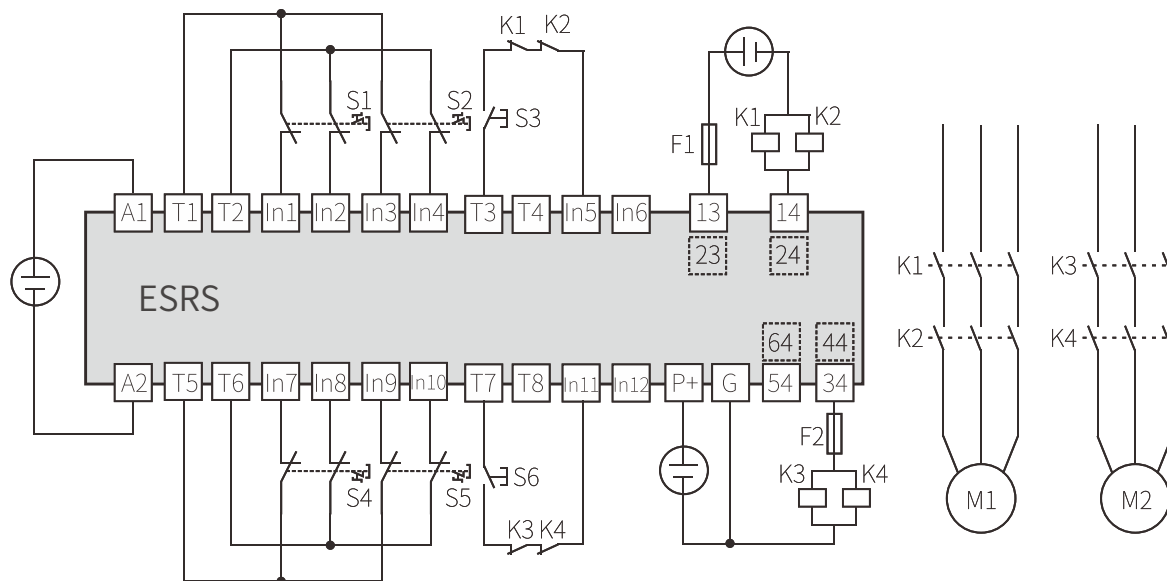
Panel function



Safety Control Module

Connection diagram

4 channel emergency button input



2 channel two-hand button input

