

SAFETY RELAY MODULE TSRU - Safety relay Unit



斯邁德網站



SMARTSCAN Taiwan Co. Ltd.
www.smartscan.com.tw



Certi. No79Q13722



TD0401BT



SAFETY RELAY UNIT

TSRU series - safety relay unit

TSRU slim safety relay module is an general wiring module for safety relative control device on the safety circuit, especial used for hard-wire circuit wiring. It can be used conection for many safety device as emergency stop unit, interlock device for safet gate, safety mat, safety light curtain, and so on. The slotted connector is easier for wiring work. The slim body but good heat consumption.

TSRU Feature

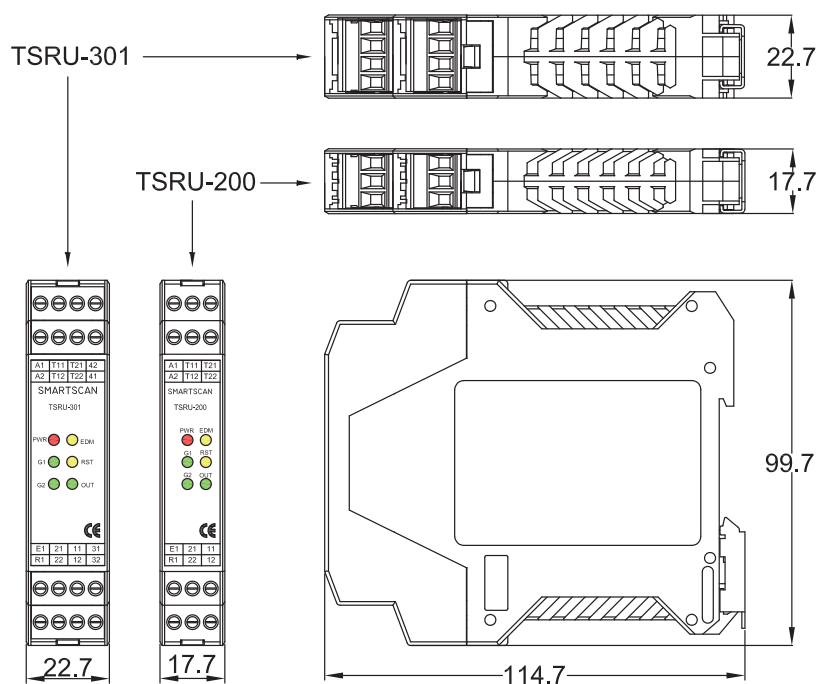
- Slim appearance and good heat consumption
- Power supply DC 24V
- The application can reach and comply with highest level of international standard
- Varoius output model can be chosen by practical applliaction (2A · 3A1B)
- With function of Auto-reset or Munal reset by wiring way

General Specification

Model No.	TSRU-200	TSRU-200-VD	TSRU-301	TSRU-301-VD
Power requirement	DC 24V			
Reset mode	Manual reset / Auto-reset			
Power consumption	DC 200 mA (MAX)			
Mode of output contact	2A (NO)		3A(NO)1B(NC)	
Responce time	20msec (not include responce of relay contact)			
Responce time ¹	≤ 30msec (relay closing contact)			
Responce time ²	≤ 30msec (relay releasing contact)			
Life of relay contact	More than 10 ⁷ operation(No load)			
Operation temperature	0°C to +50°C			
IP Rating	IP20			
Safety Level	IEC 62061(SIL3) · EN ISO13849-1 (PLe, Category 4)			
Dimension	17.7mm*99.7mm*114.7mm		22.7mm*99.7mm*114.7mm	

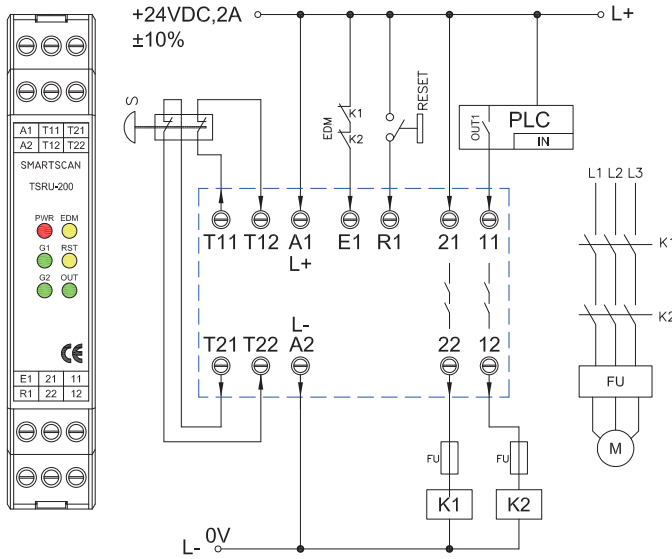
Application

- Interlock Gate
- Emergency Stop unit
- Safety switches
- Safety light curtain
- 2 Hands controller



TSRU-200 Recommended wiring diagram

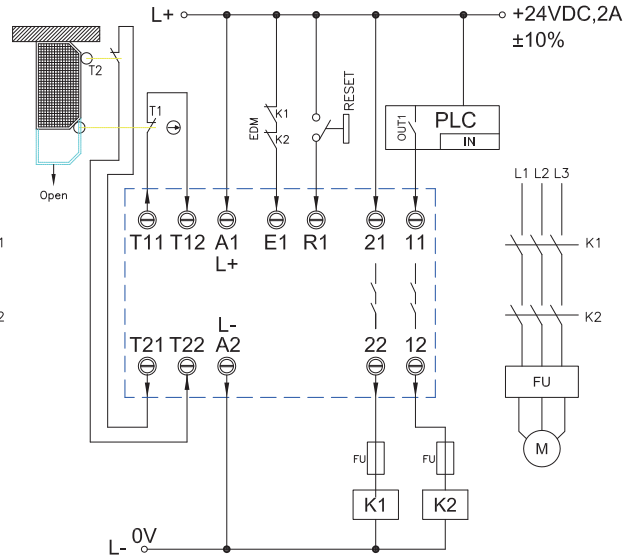
For emergency stop unit



E-STOP dual-channel inputs with detection of shorts across contacts

Category 4 / PL e

For interlock device of safety gate(door)

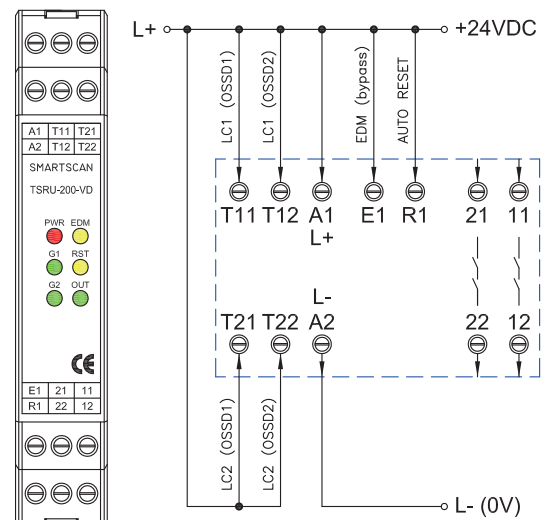
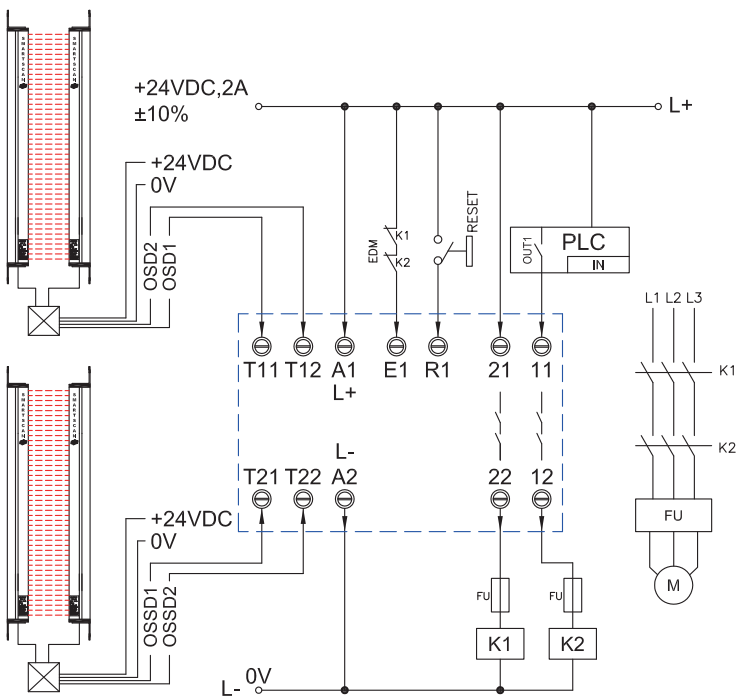


Safety door dual-channel inputs with detection of shorts across contacts

Category 4 / PL e

TSRU-200-VD Recommended wiring diagram

For safety light curtain application

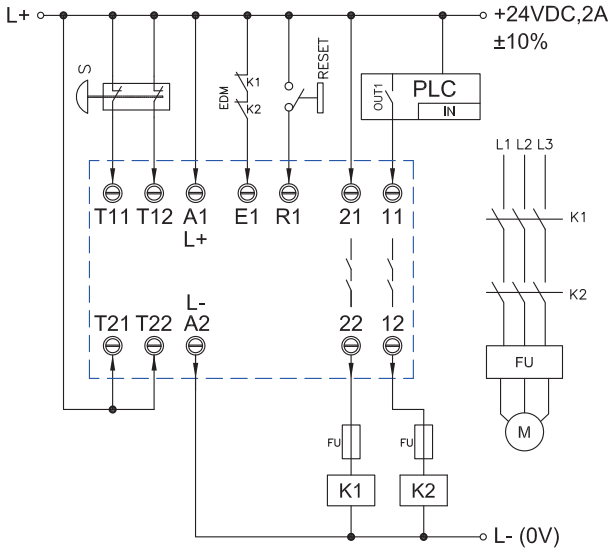


Dual-channel inputs for light curtain or photoelectric sensor, detection of shorts across contacts via ESPE equipment

Category 4 / PL e

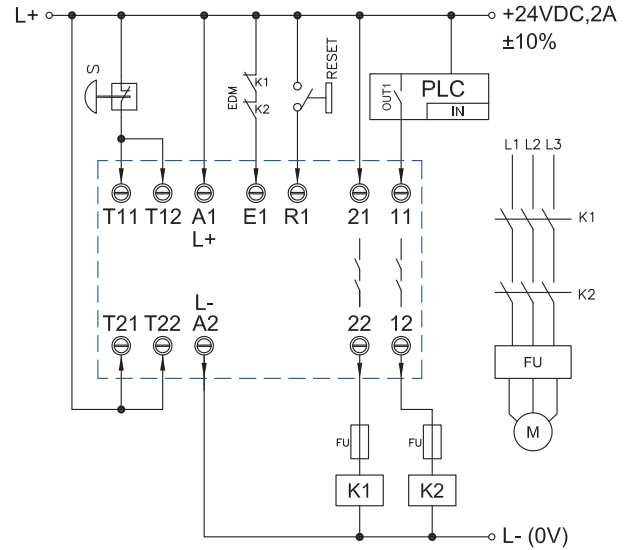
TSRU-200-VD Recommended Wiring Diagram

For emergency stop unit



E-STOP dual-channel inputs without detection of shorts across contacts

Category 3 / PL d

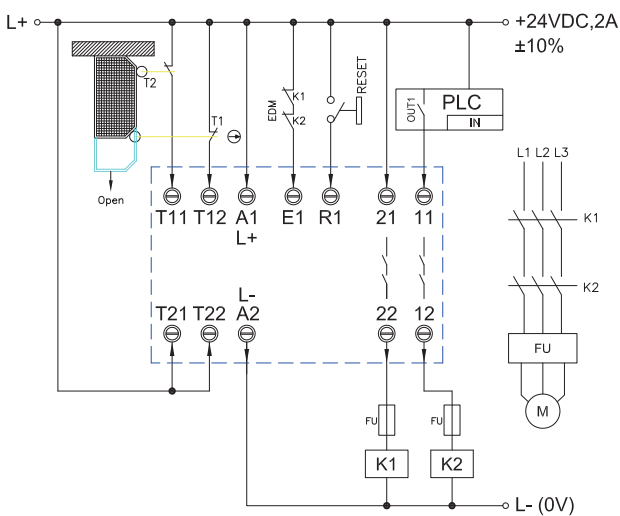


E-STOP single-channel input without detection of shorts across contacts

Category 2 / PL c

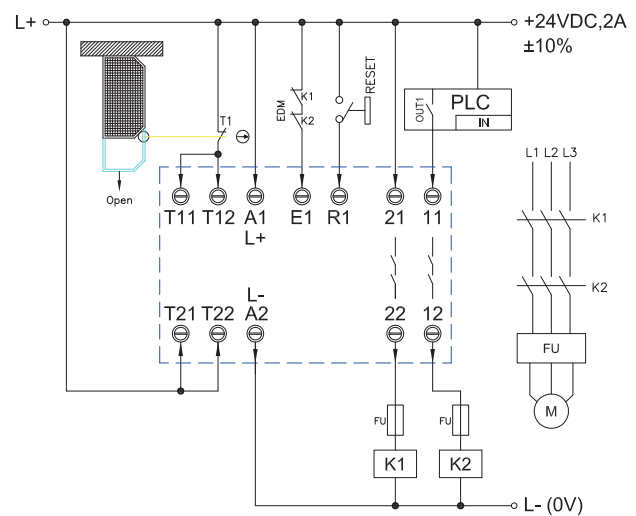
TSRU-200-VD Recommended Wiring diagram

For interlock device of safety gate(door)



Safety door dual-channel inputs without detection of shorts across contacts

Category 3 / PL d

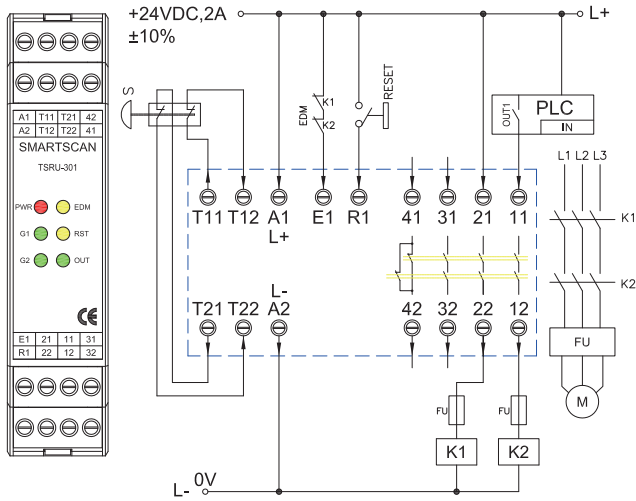


Safety door single-channel inputs without detection of shorts across contacts

Category 2 / PL c

TSRU-301 Recommended Wiring Diagram

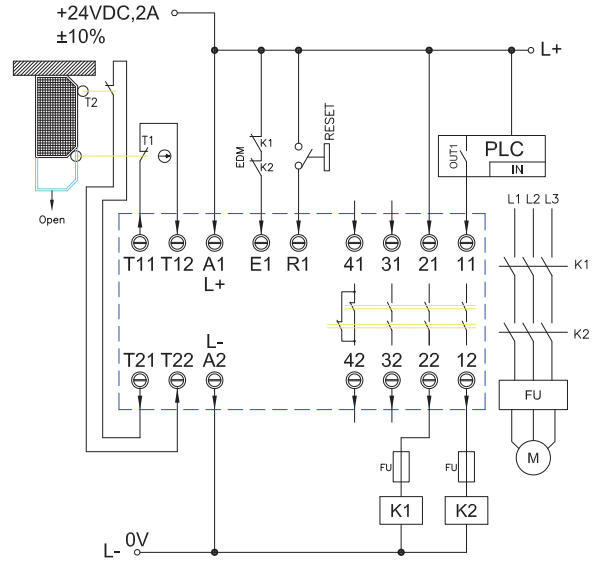
For emergency stop unit



E-STOP dual-channel inputs with detection of shorts across contacts

Category 4 / PL e

For interlock device of safety gate(door)

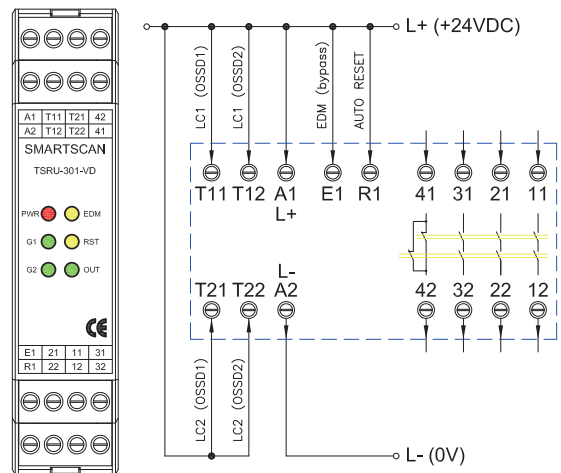
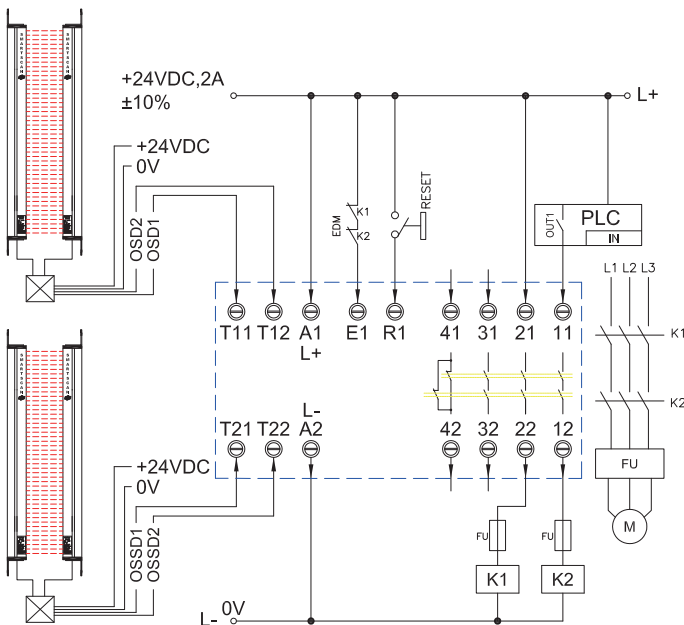


Safety door dual-channel inputs with detection of shorts across contacts

Category 4 / PL e

TSRU-301-VD Recommended Wiring Diagram

For safety light curtain application

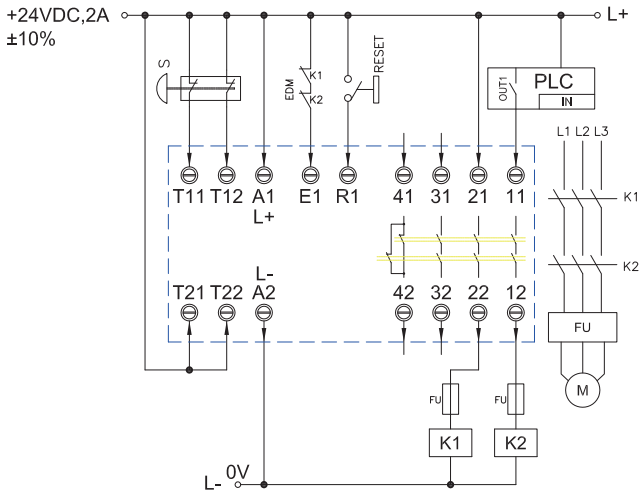


Dual-channel inputs for light curtain or photoelectric sensor, detection of shorts across contacts via ESPE equipment

Category 4 / PL e

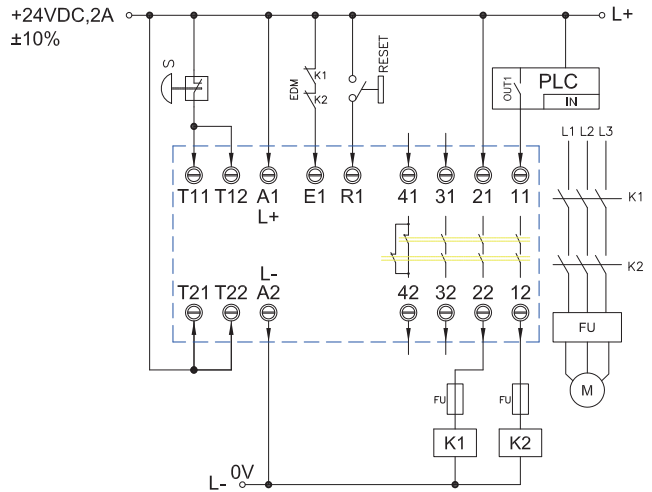
TSRU-301-VD Recommended Wiring Diagram

For emergency stop(E-Stop) unit



E-STOP dual-channel inputs
without detection of shorts
across contacts

Category 3 / PL d

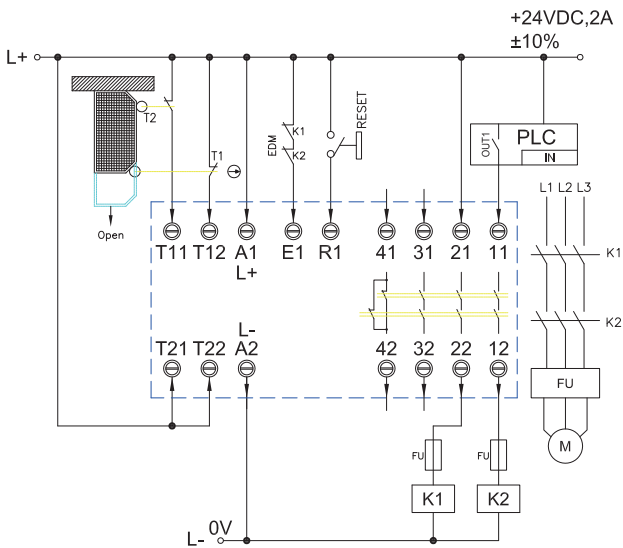


E-STOP single-channel input
without detection of shorts
across contacts

Category 2 / PL c

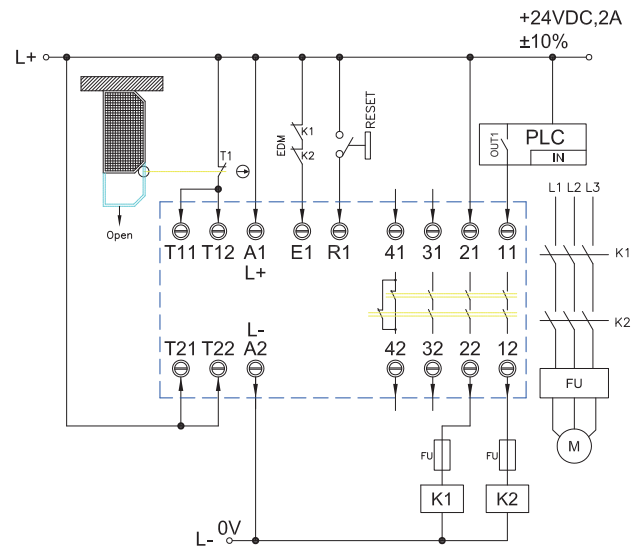
TSRU-301-VD Recommended Wiring Diagram

For interlock device of safety gate(door)



Safety door dual-channel
inputs without detection of
shorts across contacts

Category 3 / PL d



Safety door single-channel
inputs without detection of
shorts across contacts

Category 2 / PL c

2 Hands control device

Comply with international and European standards ISO 13851 TYPE III C · Get approved and certificate from well-known notified body. In addition to reducing the internal wiring complexity, the two hands device can always reduce accident in operation.

Feature

- Power Supply DC 24V
- Simplified complexity through the module device
- With external device monitoring function
- comply with ISO13851 TYPE III C standard

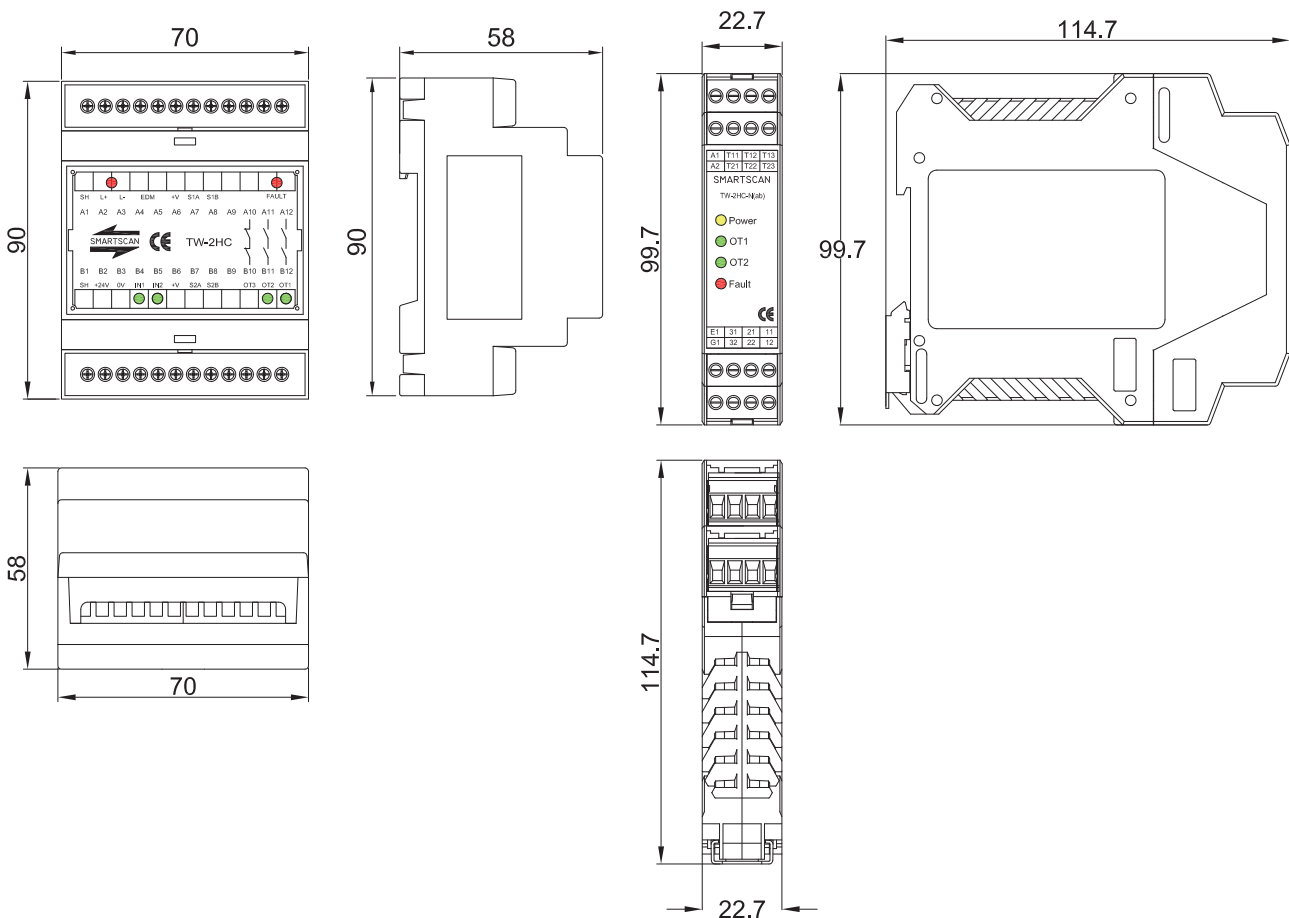
General Specification

Model No.	TW-2HC		TW-2HC-N	
Power requirement	DC 24V			
Input contact format	1A1B	2A	1A1B	2A
External signal monitor	PNP*2		No	
Power consumption	DC 200 mA (MAX)			
Output Contact	2A1B			
External Monitoring	circuit contact			
Response Time	20msec (Not included relay response)			
Response time ¹	≤ 30msec (relay closing contact)			
Response time ²	≤ 30msec (relay releasing contact)			
Life of safety relay	More than 10 ⁷ (no load)			
Operation temperature	0°C to +50°C			
IP rating	IP40		IP20	
Safety Standard	ISO 13851 TYPE III C ; EN 574 TYPE III C ; ISO 13849 PL e ; IEC 62061 SIL3			
Dimension	70mm*58mm*90mm		22.7mm*99.7mm*114.7mm	

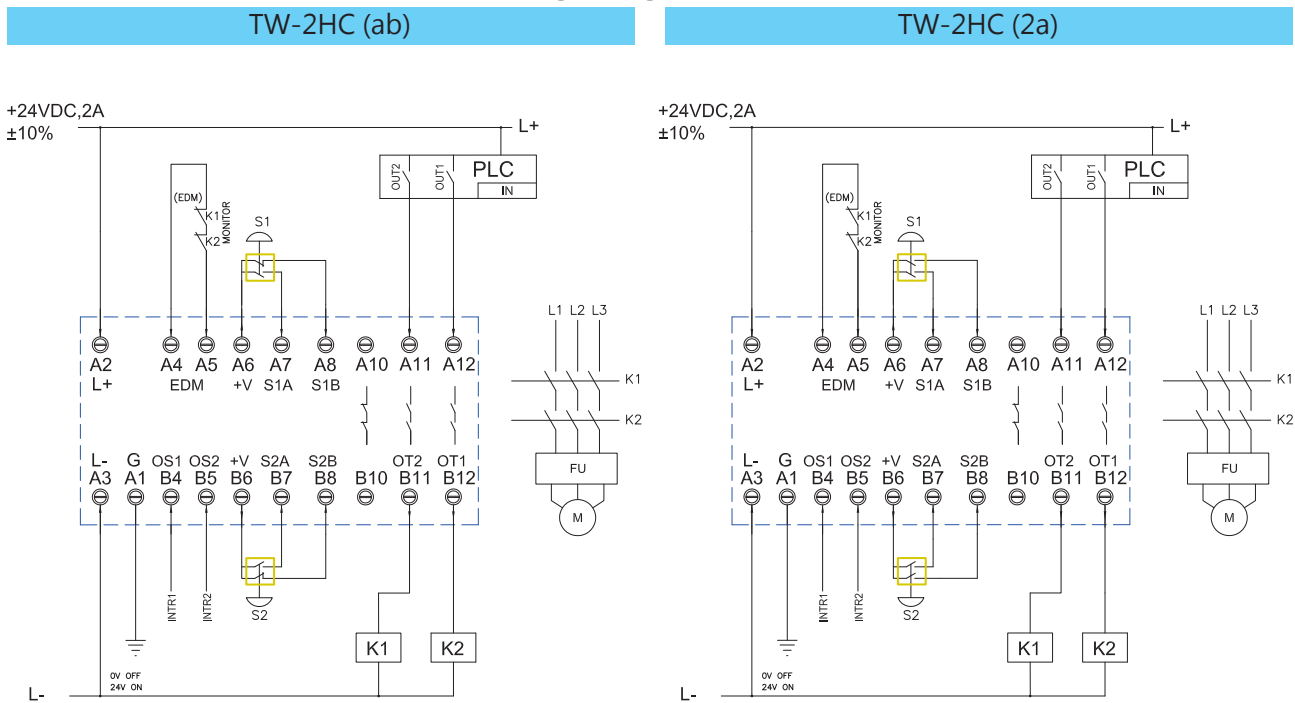


TW-2HC

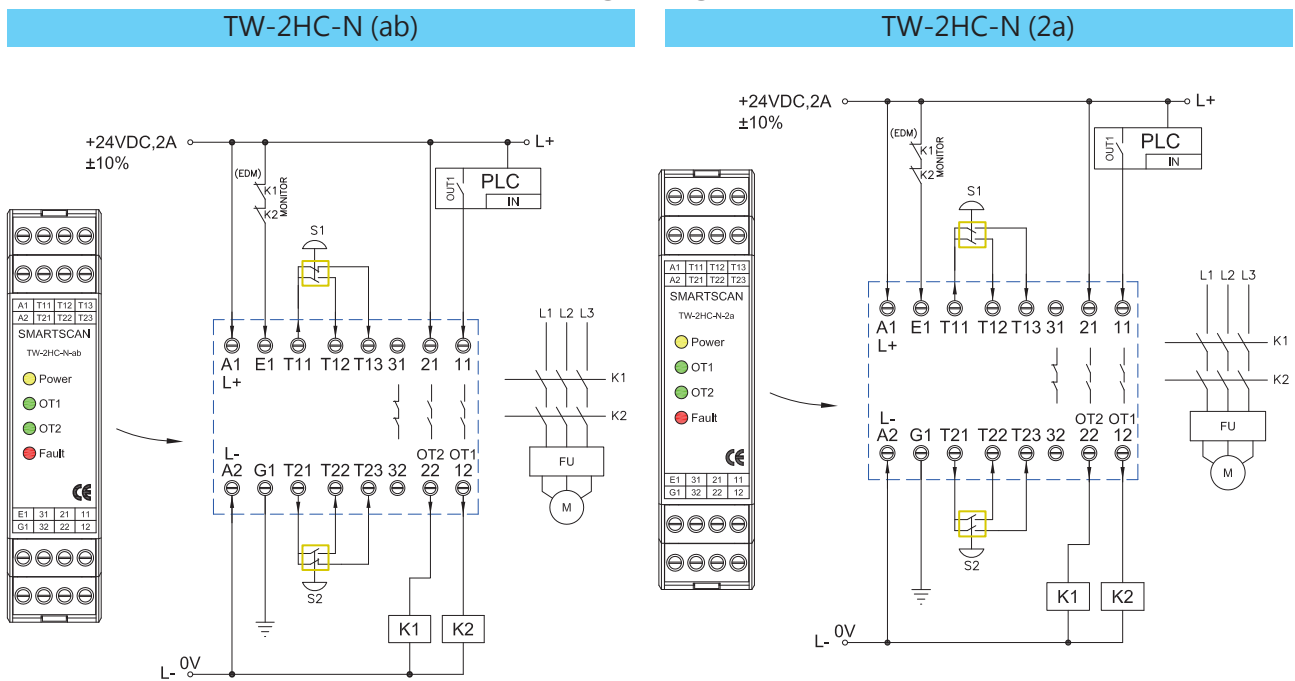
TW-2HC-N



TW-2HC Recommended Wiring diagram



TW-2HC-N Recommended Wiring Diagram



Sales



Service

SMARTSCAN SMARTSCAN TW LTD.
www.smartscan.com.tw

2F, No.5, 10th road Taichung Industrial
Prak, Taichung City, Taiwan, R.O.C.

TEL : 04-2359 8885 FAX : 04-2359 9423

E-mail : Sales01.smartscan@gmail.com
Sales02.smartscan@gmail.com