

SAFETY RELAY UNIT

Applications

- Interlock Gate
- Emergency Stop unit
- Safety switches
- Safety light curtain



Introduction to the TSRU series

The TSRU Low Profile Series safety modules are ideal for independent hardwired connections in mechanical power control systems. This series of safety modules can be used with a variety of safety devices and provide solutions for various safety level requirements: such as safety gates, Emergency stop switch (E-stop), safety light curtain, etc., and provide two modes: manual and automatic reset to meet the needs of use.

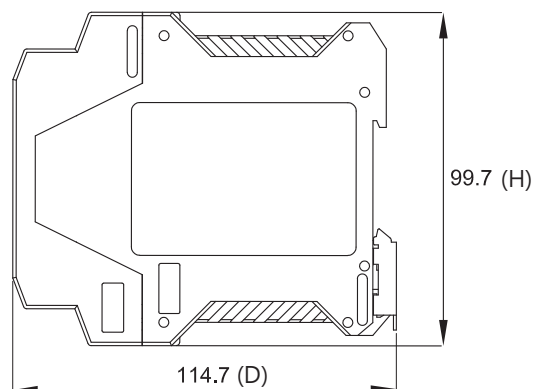
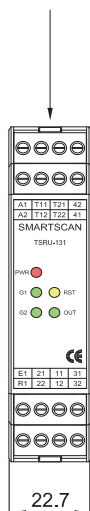
TSRU series feature

- Low profile housing.
- DC 24V power supply.
- Emergency stop.
- Various output contacts for customers to choose from (2A, 3A1B).
- Manual return mode/automatic reset mode.

General specifications

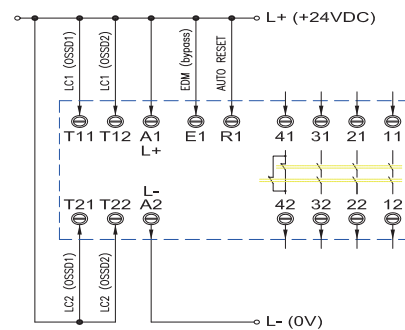
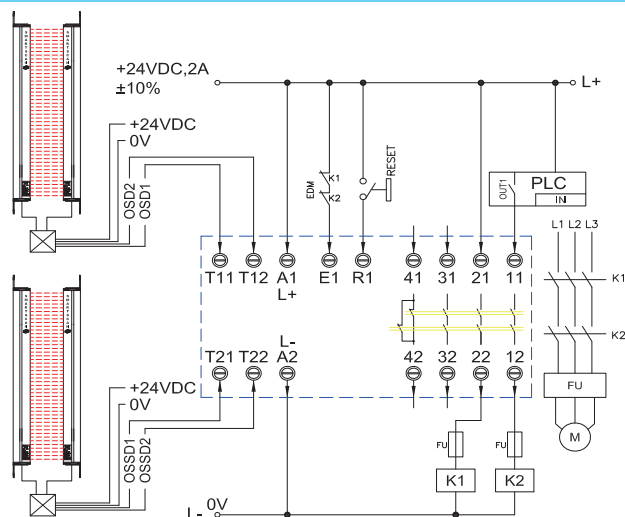
Model No.	TSRU-301-VD
Power supply	DC 24V
Reset mode	Manual reset / Auto reset
Current consumption	DC 120 mA (MAX)
Output contacts	3A(NO)1B(NC)
Reaction time	20msec (not include response of relay contact)
Contact closing time	$\leq 30\text{msec}$
Contacts release time	$\leq 30\text{msec}$
Relay mechanical life	more than 10^7 operation (No load)
Operating temperature	0°C to +50°C
IP Rating	IP20 (Ingress Protection) Ratings
Safety level	IEC 62061(SIL3) ISO13849-1(PLe) Category4
Width(mm)	22.7mm
High & Depth(mm)	99.7mm*114.7mm

TSRU-301



TSRU-301-VD Recommended wiring diagram

For safety light curtain application

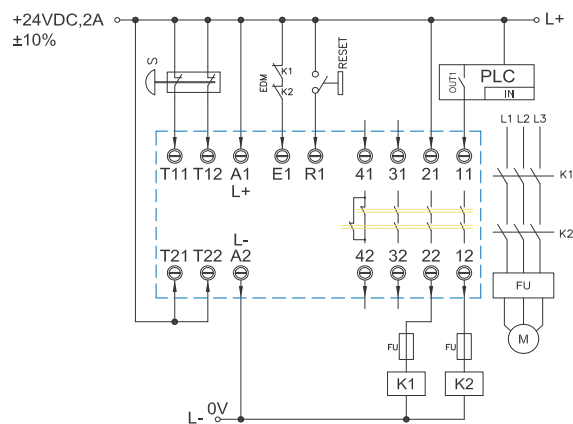


Dual-channel inputs for light curtain or photoelectric sensor, detection of shorts contacts via ESPE equipment

Category 4 / PL e

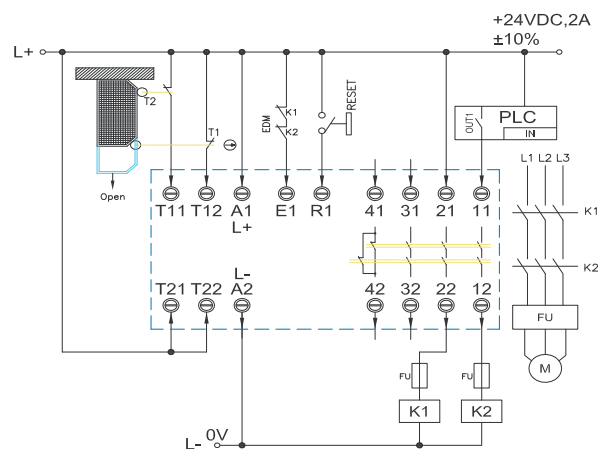
TSRU-301-VD Recommended wiring diagram

For emergency stop unit



E-STOP dual-channel inputs without detection of shorts contacts
Category 3 / PL d

For interlock device of safety gate(door)



Safety door dual-channel inputs without detection of shorts contacts
Category 3 / PL d