

CZSR8001-2A2B
Output: 2NO, 2NC

CZSR8001-2A2B is suitable for E-STOP pushbuttons, safety gates input, with 2NO(Normal open) and 2NC(Normal close) safety relays. It can choose single or dual channel operation, manual or automatic reset, with function of short circuit monitoring between channels.

Specification

Power:

Supply voltage: 24V DC/AC
Voltage tolerance: 0.85~1.1
Current consumption: DC supply: $\leq 90\text{mA}$, 24V DC
AC supply: $\leq 180\text{mA}$, 24V AC

Input:

Input current: $\leq 50\text{mA}$ (24V DC)
Cable resistance: $\leq 15\Omega$
Input devices: E-STOP pushbuttons, safety gates

Output:

Number of contacts: 2NO+2NC
Contact material: AgSnO₂+0.2 μm Au
External contact fuse protection: 10A quick, or 6A slow
Utilisation category in accordance with EN60947-5-1:
AC-15, 5A/230V; DC-13, 5A/24V

Times:

Switch-on delay:
with automatic reset, E-STOP operation: $\leq 300\text{ms}$
with automatic reset, power-on delay: $\leq 300\text{ms}$
with manual reset, manual reset: $\leq 150\text{ms}$
Delay-on de-energisation:
with E-STOP: $\leq 30\text{ms}$
with power failure: $\leq 100\text{ms}$
Recovery time:
After E-STOP: $\leq 30\text{ms}$
After power failure: $\leq 100\text{ms}$
Supply interruption before de-energisation: 20ms

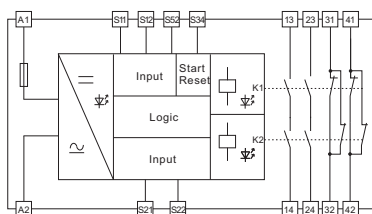
Environmental Characteristics

EMC: In accordance with EN60947, EN61000-6-2, EN61000-6-4
Vibration frequency: 10~55Hz
Vibration amplitude: 0.35mm
Clearance and creepage: In accordance with EN 60947-1
Overvoltage category: III
Pollution degree: 2
Protection type: IP20
Rated insulation voltage: 250V AC
Rated impulse voltage: 4000V(1.2/50 μs)
Dielectric strength: 1500V AC,1min
Ambient temperature: -20~+60 $^{\circ}\text{C}$
Storage temperature: -40~+85 $^{\circ}\text{C}$
Relative humidity: 10%~90%
Mechanical endurance: over 10⁷ times



Dimensions:114.5mm × 99.0mm × 22.5mm

Block diagram



Safety-related characteristic data

Performance level(PL): PLe in accordance with EN ISO 13849
Category(Cat.): Cat.4 in accordance with EN 954-1
Mission time(T_m): 20 years in accordance with EN ISO 13849
Diagnostic coverage(DC/DC_{avg}): 99% in accordance with EN ISO 13849
Safety integrity level(SIL): SIL3 in accordance with IEC61508, IEC62061
Hardware fault tolerant(HFT): 1 in accordance with IEC61508, IEC62061
Safe failure fraction(SFF): 99% in accordance with IEC61508, IEC62061
Average frequency of dangerous failure(PFH_d): 3.09E-10/h in accordance with IEC61508, IEC62061
Stop Category: 0 in accordance with EN60204-1

B_{tot}:

DC-13, Rated voltage(U_e)=24V:

Rated current(I _e)	5A	2A	1A
Cycles	300,000	2,000,000	7,000,000

AC-15, Rated voltage(U_e)=230V:

Rated current(I _e)	5A	3A	1A
Cycles	200,000	230,000	380,000