



GC-S1R

Safety relay output unit



*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

Specifications

Model		GC-S1R
Input/output points	Safety inputs	-
	Safety outputs	
	Safety relay output	1 (3a)
	AUX outputs	-
	Test outputs	
Safety input specifications	Input device	
	Input type	
	ON level (voltage/current)	
	OFF level (voltage/current)	
	Short-circuit current	
	Protection circuit	
	Maximum cable length	
Safety output specifications	Output type	
	Maximum load current	
	Residual voltage (during ON)	
	Leakage current (during OFF)	
	Maximum capacitive load	
	Load wiring resistance	
	Protection circuit	
	Maximum cable length	
Safety relay output specifications	Output type	Relay (3a) (Externally-protected outputs)*1
	Rated load (resistance load)	250 VAC 6A / 30 VDC 6A*2
	Rated load (inductive load)	240 VAC 2A (AC-15) / 24 VDC 1A (DC-13)
	Relay output mechanical life	Resistance load (250 VAC 6A/30 VDC 6A): Min. 100,000 times Resistance load (250 VAC 1A/30 VDC 1 A): Min. 500,000 times Inductive load (AC-15: 240 VAC 2 A): Min. 100,000 times ($\cos\phi = 0.3$) Inductive load (DC-13: 24 VDC 1 A): Min. 100,000 times (L/R = 48 ms)
	Maximum cable length	Max. 100 m 328.1 *
	B10d	With rated load: 400,000 With low load: 2,000,000
Test output specifications	Output type	-
	Maximum load current	
	Protection circuit	
	Maximum cable length	
AUX output specifications	Output type	
	Maximum load current	

	Residual voltage (during ON)	
	Leakage current (during OFF)	
	Protection circuit	
	Maximum cable length	
Applicable standards	EMC	EMS: IEC 61131-2/-6, EN61131-2/-6, EMI: IEC 61131-2, FCC Part15B Class A, ICES-003, Class A
	Safety	IEC 61508, EN 61508 SIL3, IEC62061 SIL CL3, ISO/EN 13849-1:2015 Cat. 4, PL e, UL1998
Dimensions		39.6×95×90 mm 1.56"×3.74"×3.54" (W×D×H)
Power supply	Power voltage	-
	Power consumption	Max. 80 mA
Environmental resistance	Ambient temperature	-10 to +55 °C 14 to 131 °F (No freezing)
	Relative humidity	5 to 85% (No condensation)
	Storage temperature	-25 to +70 °C -13 to 158 °F (No freezing)
	Operating altitude	Max. 2000 m 6561.7'
	Overtoltage category	II (III for relay output part)
	Pollution degree	2
	Vibration resistance	Frequency: 5 to 9 Hz, Half amplitude: 3.5 mm 0.14" Frequency: 9 to 150 Hz, Acceleration: 10 m/s ² 10 times each in X, Y, Z directions
	Shock resistance	Acceleration: 150 m/s ² , Operating time: 11 ms, 3 times each in X, Y, Z directions
Material		Polycarbonate
Weight		Approx. 180 g

*1 To comply with the requirements of IEC61131-2, connect 10 A fast blow fuse (IEC 60217) in series to each contact.

*2 Check the derating characteristics described later.

Dimensions

* Download CAD file or product manual for larger image/text and more detail.

