



GC-1000

Main controller Standard type



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

Specifications

Model		GC-1000
Input/output points	Safety inputs	16
	Safety outputs	6
	Safety relay output	-
	AUX outputs	4
	Test outputs	
Maximum number of connectable expansion units		10*1
Maximum number of connectable remote I/O modules		4
GC-Link ports		2 ports
Safety input specifications	Input device	Contact output device or PNP output device
	Input type	Type3
	ON level (voltage/current)	Min. 11 V/2 mA
	OFF level (voltage/current)	Max. 5 V/1.5 mA
	Short-circuit current	Si 0 to 3: Approx. 5 mA Si 4 to 15: Approx. 3 mA
	Protection circuit	Surge protection circuit, wrong wiring protection circuit
	Maximum cable length	Max. 100 m 328.1'
Safety output specifications	Output type	PNP transistor output (DC-13, Type 0.5, Protected outputs)*2
	Maximum load current	500 mA
	Residual voltage (during ON)	Max. 2.0 V
	Leakage current (during OFF)	Max. 0.5mA
	Maximum capacitive load	0.5 µF
	Load wiring resistance	Max. 2.5Ω
	Protection circuit	Overcurrent protection circuit, reverse connection protection circuit
	Maximum cable length	Max. 30 m 98.4'
Safety relay output specifications	Output type	-
	Rated load (resistance load)	
	Rated load (inductive load)	
	Relay output mechanical life	
	Maximum cable length	
	B10d	
Test output specifications	Output type	PNP transistor output*3
	Maximum load current	100 mA
	Protection circuit	Overcurrent protection circuit, reverse connection protection circuit
	Maximum cable length	Max. 100 m 328.1' *4
AUX output specifications	Output type	Transistor output (PNP/NPN selectable by wiring)

		PNP output (DC-13, Type 0.1, Protected outputs)*2*3
	Maximum load current	PNP: 100 mA, NPN: 20 mA
	Residual voltage (during ON)	Max. 2.0 V
	Leakage current (during OFF)	Max. 0.5 mA
	Protection circuit	Overcurrent protection circuit, reverse connection protection circuit
	Maximum cable length	Max. 30 m 98.4'
Communication interface	USB	USB2.0
	Ethernet	100BASE-TX STP (shielded twisted pair) cable of Category 5 or higher
Network functionality		EtherNet/IP™ *5, PROFINET, Modbus/TCP, MC protocol, UDP
Others	LCD display	1.77-inch color LCD
	Display buttons	4 points (3 operation keys + 1 BACK key)
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/EN13849-1:2015 Cat. 4, PL e, UL1998
Dimensions		60×95×90 mm 2.36"×3.74"×3.54" (W×D×H)
Power supply	Power voltage	24 VDC (-30 to +20%) Class 2
	Power consumption	Max. 200 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'
	Overvoltage category	II
	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. 260 g

*1 The bus extension unit "GC-B30" is not included in this number, and only one set of "GC-B30" can be used per setup.

*2 Paragraph 6.4.6 Temporary overload of IEC 61131-2 supports up to 1.2 times the maximum load current.

*3 AUX outputs (NPN output) and test outputs do not comply with paragraph 6.4.6 of IEC 61131-2.

*4 When the test output is branched and connected to multiple safety input devices, the total branched cable length must not exceed 400 m [1312.3'](#).

*5 EtherNet/IP™ is a trademark of ODVA. inc.

Dimensions

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

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