

GC88 Digital Indicator

GC98・95 Digital Meter Relay

Overview

We offer a digital indicator series line-up with easy-to-read digital indication and alarm functions, easy wirings available for our various types of mating pressure transmitters and temperature transmitters.

Features

[GC88 Digital Indicator]

- Loop-powered LED indication by simply connect the indicator in series with the 4 to 20 mA loop. Now additional electrical power supply is needed for the indicator.
- 24 x 48 mm DIN size with compact and lightweight

[Digital Meter Relay]

- GC98 (24 x 48 mm size)
 - Series of mounting up to 6 indicators is available.
 - Simultaneous indication of measured value and setup value
- GC95 (48 x 96 mm size)
 - 85 to 264V AC free power source
 - 4 contacts for alarm output



GC88



GC98



GC95

RoHS



Specifications 1

Product name		Digital indicator	Digital meter relay	
Model		GC88	GC98	GC95
Size / Externals		 24 mm 48 mm	 24 mm 48 mm	 48 mm 96 mm
Applications		<ul style="list-style-type: none"> • Simply connect the indicator to transmitter in series with the 4 to 20 mA loop accommodating existing system 	<ul style="list-style-type: none"> • Suitable for checking alarm setup value and measurement value at the same time 	<ul style="list-style-type: none"> • Large LED indication where easy-to-read indication is preferable. • For applications where more than two alarms are required.
Functions and features		<ul style="list-style-type: none"> • Operates with 4 to 20 mA DC input signal • Space saving with 40 mm depth • LED indication 	<ul style="list-style-type: none"> • Simultaneous indication of measured value and setup value • Series of mounting (6 pcs) 	<ul style="list-style-type: none"> • Large LED indication (20 mm) • Relay contact output (4 Contacts) • Series of mounting (6 pcs)
Indication	Number of digits	3.5 digits	4 digits	4 digits
	Digit	-1.0.0 to 1.9.9.9	-1.9.9.9 to 9.9.9.9	-1.9.9.9 to 9.9.9.9
	Indication type	Red LED indicator	Green and red LCD indicators	Red LED indicator
	Character height	10.16 mm	10 mm	20 mm
Power source	DC	Operates with 4 to 20 mA DC input signal	24V DC±10%	24V DC±10%
	AC	—	—	85 to 264V AC (50/60Hz)
Input signal (Input impedance)	Voltage	—	1 to 5V DC (1MΩ)	1 to 5V DC (1MΩ)
		—	0 to 5V DC (1MΩ)	0 to 5, 0.5 to 4.5V DC (1MΩ)
	Current	4 to 20 mA DC	4 to 20 mA DC (250Ω)	4 to 20 mA DC (250Ω)

Specifications2

Product name		Digital indicator	Digital meter relay	
Model		GC88	GC98	GC95
Output signal	Contact	—	Relay contact (Independent 2 outputs) (Rating: 240V AC, 2A)	Relay contact (Independent 4 outputs) (Rating: 240V AC, 1 to 2A)
	Analog	—	—	4 to 20mA DC (600Ω and under) (Option)
Power supply	5V DC	—	—	5V DC±10% (5mA max.)
	24V DC	—	24V DC±10% (25mA max.)	24V DC±10% (25mA max.)
Sampling rate		2.5 Samples/sec.	2 Samples/sec.	2 Samples/sec.
Accuracy (Temperature range)		±(0.1%F.S.+1digit) (23°C±5°C)	±(0.1%F.S.+1digit) (23°C±5°C)	±(0.1%F.S.+1digit) (23°C±5°C)
Temperature coefficient		±(150ppm F.S./°C+1digit)	±(60ppm F.S./°C+1digit)	±(60ppm F.S./°C+1digit)
Current consumption		DC power 22 mA and under	DC power 100 mA and under (24V DC)	DC power 160 mA and under (24V DC)
		—	—	AC power 7VA and under (100V AC)
Withstand voltage (Between terminal and housing)		Between input and ground: 500V DC for 1 minute	Between input and ground: 1000V AC for 1 minute Between power and ground: 1500V AC for 1 minute	Between input and ground: 1000V AC for 1 minute Between power and ground: 1500V AC for 1 minute
Insulation resistance (Between terminal and housing)		—	Between input and ground: 500V DC 20MΩ Between power and ground: 500V DC 20MΩ	Between input and ground: 500V DC 20MΩ Between power and ground: 500V DC 20MΩ
Operating temperature		0 to 50°C	0 to 50°C	0 to 55°C
Operating humidity		35 to 85%RH (Non-condensing)	20 to 85%RH (Non-condensing)	20 to 85%RH (Non-condensing)
Weight		Approx. 30g	Approx. 83g	Approx. 235g
Function	Scaling	Analog setup: -100 to 1999	Digital setting: -1999 to 9999	Digital setting: -1999 to 9999
	Out of range display	Message displayed	Message displayed	Message displayed
	Alarm setting	—	Digital setting: Arbitrary upper and lower limit	Digital setting: Arbitrary upper and lower limit
	Filter (Damping)	—	0, 1 to 100 Seconds	0, 1 to 100 Seconds
Applicable standard		CE marking (GC98, GC95: U.L. and CSA Listed)		
Panel-cutout (mm)				

*1 OUT1/2 is 1A, OUT3/4 is 2A.

*2 When analog output is selected, OUT4 is allocated for terminal board (3 Contact outputs)

~Ideal for use in combination with our various transmitters~

*The GC88 dedicated for 2 wire system operates through power supply connected to mated transmitter.

*The GC9□ capable of electrical power supply is available for easy wiring just connecting to transmitter.

~Applicable sensors (Typical applications)~



KL14
Differential pressure
transmitter



KH15
Pressure transmitter



ZT15
Pressure transmitter



TH7□
Temperature transmitter



TH8□
Temperature transmitter

Dimensions and wiring

Model	Dimensions	Wiring
GC88	<p>*The adjustment volume is accessed at top of the rear panel.</p> <p>Unit: mm</p>	<ul style="list-style-type: none"> The input signal is only available for 4 to 20 mA (24VDC) 2 wire system.
GC98	<p>Unit: mm</p>	<ul style="list-style-type: none"> Input 4 to 20mADC, 2 wire system Input 1 to 5VDC, 3 wire system Input 0 to 5VDC, 3 wire system <p>*1 Wiring is different when power source in GC98 is not in use.</p>
GC95	<p>Unit: mm</p>	<ul style="list-style-type: none"> Input 4 to 20 mA DC, 2 wire system Input 1 to 5V DC, 3 wire system Input 0 to 5V DC, 3 wire system Input 0.5 to 4.5V DC, 3 wire system Analog output (Option) is isolated

Other Products

Digital Indicator / Digital Meter Relay

Contact us for other applications

Model	GC68	GC94	GC97
Application	<ul style="list-style-type: none"> ① Analog output scaling ② With loop check function 	<ul style="list-style-type: none"> ① Check alarm setting with a single operation ② Sensor power source isolation 	<ul style="list-style-type: none"> ① Directly connected input/output cables (Not terminal board) ② Installation in a space in limited space ③ Sensor power source isolation
Size	48(H)×48(W)×53(D)mm	48(H)×96(W)×95(D)mm	24(H)×48(W)×70(D)mm
Power source	24V DC	24V DC	24V DC
Input	1 to 5V DC, 4 to 20 mA DC	1 to 5, 0 to 5V DC, 4 to 20 mA DC	1 to 5, 0 to 5V DC, 4 to 20 mA DC
Output	Relay output x 2 (Independent) Analog 0 to 5V, 4 to 20 mA	Open collector or relay contact x 2 Analog 0 to 5V, 1 to 5V, 4 to 20 mA variable	Relay output x 2 (Independent)
Appearance			

