

Bacharach's GDA-400 four channel controller is designed to provide simultaneous display and alarm functions for up to four monitors with 4-20 mA inputs. A graphic LCD displays monitored data as gas type and concentration, bar graphs and 30 minute trends. Three adjustable alarm levels are provided per channel. Relay outputs allow control of audible and visual alarms, strobes, horns, and other alarm events.

## **Easy Configuration and Simple Calibration**

The Bacharach GDA-400 is equipped with a fault and three alarm levels per channel with features such as ON/OFF delays, latching relays, and alarm acknowledgement. A dedicated horn driver circuit for a local audible alarm is also standard. Two standard, 5-amp alarm relays are configurable via the "alarm voting" menu to trigger relays based upon various alarm combinations. If more relays are required an optional relay board can be added.

The GDA-400 is easy to configure and offers flexibility to meet the most demanding applications. A realtime clock and calendar are standard and non-volatile memory retains all configuration data indefinitely. Options such as 4-20 mA outputs, discrete relays for each alarm are easily added. RS-485 (Modbus<sup>®</sup> RTU) or Ethernet (Modbus<sup>®</sup> TCP) ports are also available for sending data to PC's, PLC's, DCS's, or other controllers. The GDA-400 also has complete calibration functionality for each input channel. This unique feature allows maintenance and service personnel to use the controller to calibrate the Bacharach GDX-150 simple sensor.



## **GDA-400** Features & Benefits:

- Continuous monitoring and control of up to four gas transmitters
- Graphic LCD for real time monitoring and 30-minute trends
- Complete calibration functionality for each input channel
- Non-volatile memory retains all configuration data
- Optional discrete channel alarm relays

GDA-400 Specifications	
Inputs:	Available Inputs Include 4-20 mA with Precision 100 ohm Terminating Resistor (0-2 Volt Inputs may be Accepted by Removing the Socketed Terminating Resistor) and Bridge Sensor Inputs with Adjustable Sensor Excitation and Balance settings
Dimensions:	8.0" x 10.0" x 6.25" (20.32 cm x 25.4 cm x 15.875 cm)
Housing Options:	NEMA 4X / IP66 Wall Mount Approved for Div 2 NEMA 7 Explosion-proof Wall Mount Div 1 (Available Upon Request)
User Interface:	128 x 64 Pixel Graphic LCD with Backlight Displays Bar Graphs and Engineering Units. 6 Discrete LED's Indicate Alarm Status, CAL MODE, Keypad
Common Alarm Relays:	2 Standard 5-amp 30 VDC or 250 VAC Resistive Form C
Discrete Alarm Relays:	6 optional 5-amp 30 VDC or 250 VAC Resistive Form C
Serial Ports (Optional):	Slave RS-485 Port Equipped with Tx / Rx LED's Protocol = Modbus <sup>®</sup> RTU
Analog Outputs (Optional):	10 bit 4-20 mA Output. Max Load 800 ohms with Nominal 24 VDC Power Supply
Ambient Temperature Range:	13° to 122° F (-25° to +50° C)
Power:	100-240 VAC / 24 VDC are Standard Primary Power Supplies
Approvals:	CSA/UL Div 2 (Pending)
	NEMA 7 = Div 1, Gr. B; EN55011 & EN61000; CE Mark

## GDA-400 Ordering Information

5700-0400 GDA-400 4 Channel Base Controller, w/Display, NEMA 4X Enclosure

All controllers are ordered based on purchasers required options. Each option is a separate part number and can be added to the base controller at any time. When a base controller is ordered with additional accessory options, these options are installed during the time of manufacturing.

GDA-400 Options		
5700-0014	GDA-400 4-20 mA Input Card	
5700-0020	GDA-400 Bridge Sensor Input Card	
5700-0015	GDA-400 Alarm Relay Output Card	
5700-0019	GDA-400 4-20 mA Output Card	
5700-0017	GDA-400 RS-232 / RS-485 Modbus® RTU Output Card	
5700-0029	50 Watt Power Supply (Needed if 24 VDC Required Exceeds 10 Watts)	

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