



GA-200-N OVERVIEW

GreenTrol introduces the GreenAlert model GA-200-N, a high quality, economical microprocessor controlled programmable alarm solution designed for installation in critical applications where programmable alarm features and BACnet connectivity are required. The GA-200-N includes a simple user interface and integral LCD display to permit device configuration and selection of alarm features and outputs. The programmable alarm feature includes options for low or high limit alarm with hysteresis; or for dead band alarm with upper/lower alarms as a percentage of set point. Local alarm notification is via front panel LED and LCD display. Remote alarm output options for dry relay contacts or for external LED drive (15mA typical). The analog input is field-programmable to accept 0-10VDC, 0-5VDC, 2-10VDC or 4-20mA and the BACnet® MS/TP or Modbus® RTU communications interface ensures interoperability with virtually all modern controls and building automation systems (BAS).

GA-200-N SPECIFICATIONS

System

Programmable Alarm Modes: High limit/Low limit alarm + hysteresis; Dead band alarm with upper and lower limits
Display Type:16 character LCD display panel
Status Indicator:Board-mounted 'Activity' LED indicating instrument health/status
Operating Temperature:-20 to 120°F [-28.9 to 48.9°C]
Operating Humidity:0 to 99% non-condensing;
Instrument must be protected from exposure to precipitation
Power Requirements:22.8-26.4AC (24VAC, +10% / -5%)

Analog Input/Output Interface

Analog Input:Selectable 0-10VDC, 0-5VDC, 2-10VDC (@20 mA max.) or 4-20 mA
Input Resolution:12-bit resolution (0-10VDC range)
Alarm Types:1. Dry relay contacts, 30VDC/24VAC @ 3amperes max. or as direct LED drive (15 mA typical)
2. Front panel red LED indicator indicating alarm activity
3. LCD display indicates alarm type

Wiring Interface:Rugged insulated plug-in terminal blocks for simple field wiring

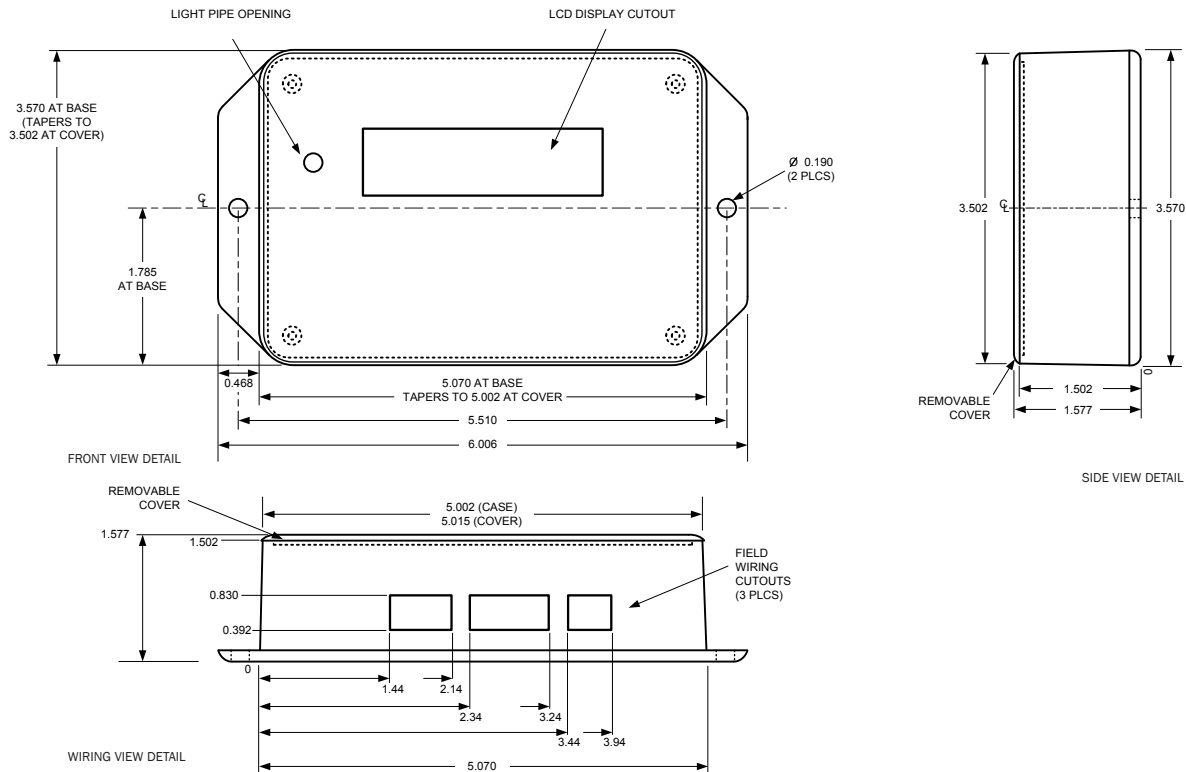
Power Supply

Power Supply:Internal high efficiency switching power supply; integral short circuit and thermal overload protection, and stable 5VDC linear regulator
Microcontroller:32-bit microcontroller/24.576 MHz bus with integral flash, RAM, and internal reset and watchdog features

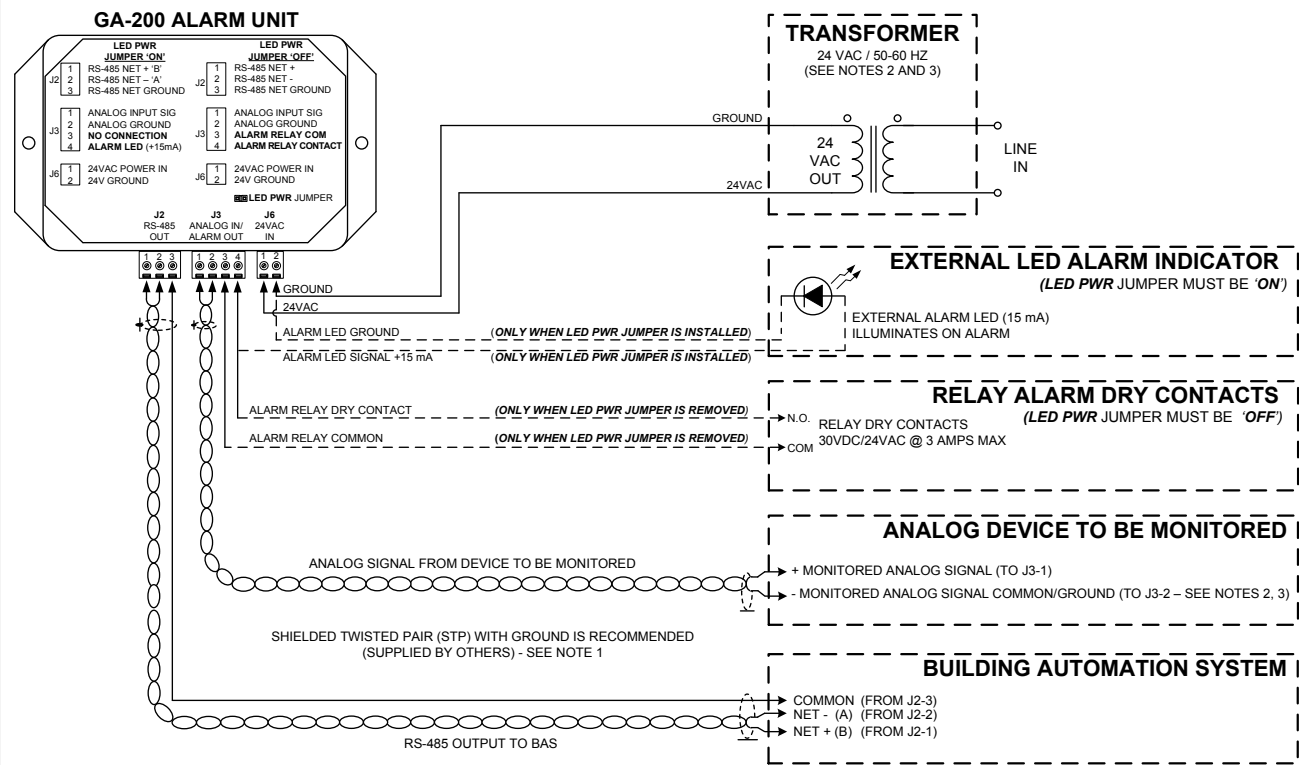
Enclosure

Enclosure Material:Durable electronic housing with removable cover
Enclosure Rating:UL94-5VA
Enclosure Dimensions:3.570 x 5.070 x 1.577 in (HxWxD) [90.68 x 128.78 x 40.06 mm], with two integral 0.468 in [11.89 mm] mounting flanges. Overall width with flanges 6.006 [152.55 mm]
Mounting:Two 0.190 in [4.83 mm] diameter holes on left/right mounting flanges
Standard Warranty:12 months

GA-200-N MECHANICAL DETAIL



GA-200 TYPICAL WIRING DIAGRAM



NOTES:

1. CONNECT ANALOG SIGNAL AND NETWORK CABLE DRAINS TO EARTH GROUND AT ONE END OF CABLE ONLY.
2. THE GA-200 IS A NON-ISOLATED DEVICE USING A HALF-WAVE RECTIFIER ON THE 24VAC POWER INPUT. IF MULTIPLE DEVICES ARE POWERED BY THE SAME TRANSFORMER OUTPUT, ALL GND CONNECTIONS MUST BE COMMON, OR AN ISOLATION TRANSFORMER MAY BE USED TO PREVENT EQUIPMENT DAMAGE.
3. ALL DEVICES ON MULTIPLE GA-200 INSTALLATIONS WITH A COMMON 24VAC SOURCE MUST BE WIRED IN-PHASE TO THE SAME TERMINALS (e.g.: TB2-1 to TB2-1, TB2-2 to TB2-2).
4. SHIELDED TWISTED PAIR (STP) WIRING WITH GROUND IS RECOMMENDED (SUPPLIED BY OTHERS).
5. DRY RELAY CONTACT RATING MAXIMUM 30VDC/24VAC @ 3 AMPS MAXIMUM.