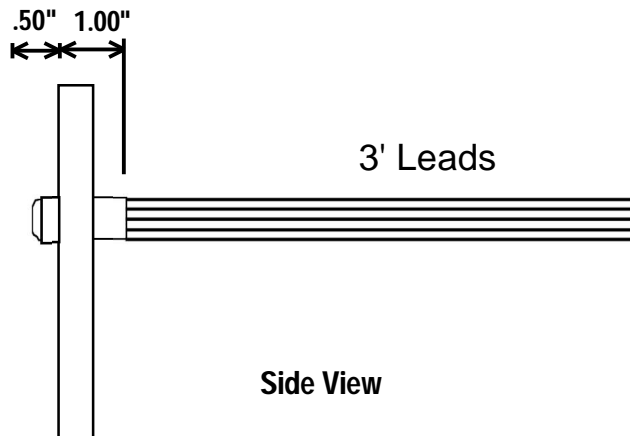
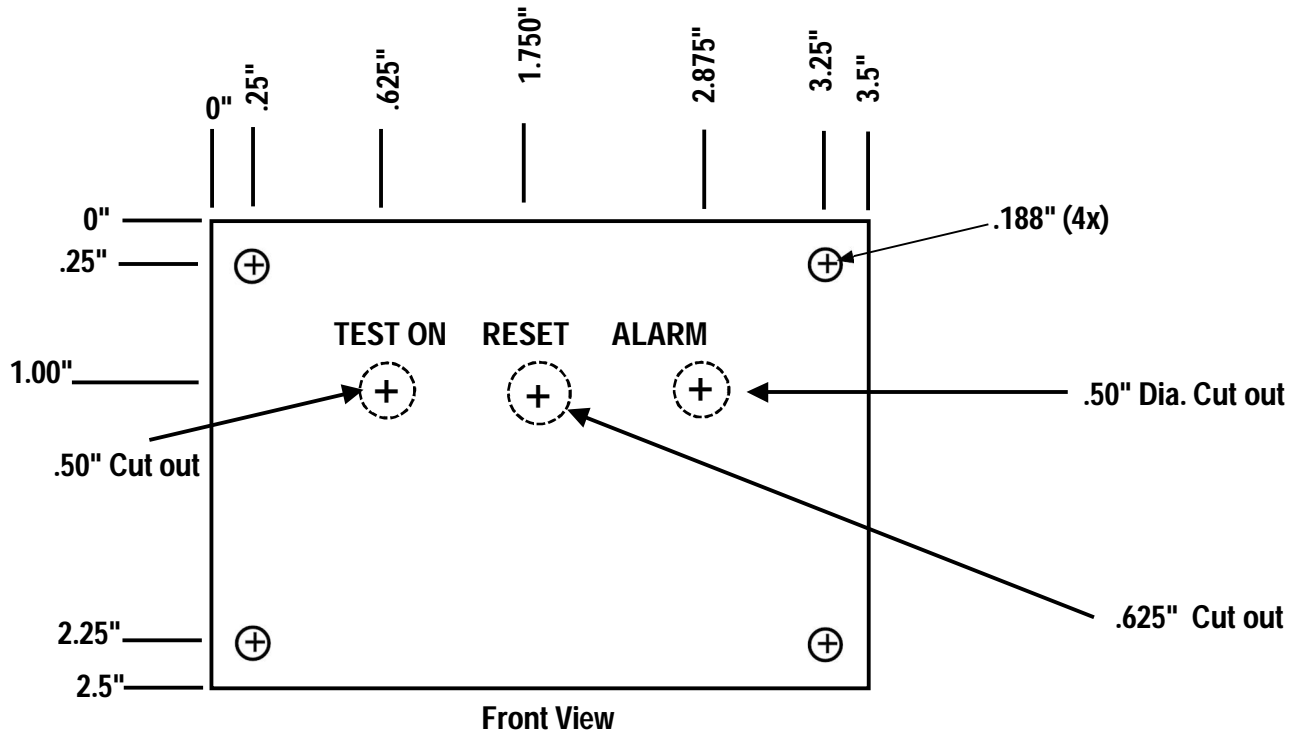


	Legend Remote Alarm RR- Remote Start Relay Motor Starter Customer Provided Wiring	Drawn By: KM Delamater	GP500-AS Typical Wiring Diagram	Date: 09/18/2019
		Checked: R. Zelm		Scale: None

GP8011-M-AS & GP8011-G-AS
Remote LED Plate Assembly



TB9	Black - Commons
TB10	Green - Test On
TB11	Red - Alarm
TB15	Yellow - Reset
TB16	Grey - Reset



MotorGuard Installation Instructions Model: GP500-AS

Input power 120 +/- 10% VAC 50/60 Hz @ .5A Max.

Test Voltage 500 VDC @ 200uA Max.

Unit to be installed in a "clean" and "dry" environment, in a switchgear or a NEMA type enclosure.

Ambient Temp. -20° F to 140° F

Maximum relative humidity 80% for temperatures up to 31° C decreasing linearly to 50% relative humidity at 40°

Pollution degree 2 Altitude up to 2000m

Wiring: 16 AWG, 600V switchboard wire

MEASUREMENT CATEGORY III

NOTE: If unit is installed in an enclosure, please skip to # 4.

1. The device is a Class 1 according to IEC 61010-1 for electric safety and chassis must be grounded to the main protective earth in the end application.
2. Position din rail inside Cable starter housing for clearance and ease of wire installation. Drill four (2) holes for #10 screws and install rail(s). Snap CableGuard onto rail. If back pan mounting is desired drill two holes for #10 screws and mount CableGuard using holes provided in the enclosure.
3. To install the remote LED/Switch assembly, drill four (4) $\frac{1}{8}$ " holes and cut out a $2 \frac{3}{4}$ " x $3 \frac{5}{8}$ " clearance hole for the assembly. Mount the assembly using the mounting holes provided in the panel (panel is normally located near the meter indicator).
4. Install warning stickers (provided with the CableGuard) on terminal boxes of equipment to be tested.

All wiring should be 16/18 AWG. Torque requirements 1.3 NM or 1.0 FT-LBF.

5. Connect the input terminals (1) and (2) to a constant 120 VAC 50/60 Hz power source.
6. Terminals (3) and (4) are normally closed dry contacts used for the motor lock-out function to disable the start circuit.
7. Wire terminal (5) to a common ground buss or directly to the common equipment ground of the motor. NOTE: Terminal (5) must be electrically connected to a good clean motor ground in order to achieve an accurate meg-ohm reading while testing.
8. Wire terminals (6) to the B phase motor lead or the A1 of a DC motor starter contactor as shown in wiring diagram. (NOTE: For partial winding or reduced voltage starter applications, contact the factory for proper wiring).
9. Connect terminals (7) and (8) to a normally closed dry auxiliary contact on the motor starter.
10. Connect (9), (10), (11), (15) and (16) to the remote LED plate located on the front door of the starter cabinet. Mount the plate using 4 mounting holes. Connect green wire to terminal (10), connect both black leads to terminal (9) and connect the red wire terminal (11), connect the yellow wire to terminal (15) and connect the grey wire to terminal (16).
11. Terminals (12), (13) and (14) are dry contact and can be wired to a PLC input or plant alarm system to indicate a motor alarm condition or can be wired to interrupt the start circuit of the motor when it is in an alarm condition.
12. Connect (pre-alarm) terminals (17), (18), and (19) to an alarm panel or PLC, if desired.



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Ambient Temp. -20° F to 140° F

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Pollution degree 2 Altitude up to 2000m

Wiring: 16 AWG, 600V switchboard wire

MEASUREMENT CATERGORY III

1. Apply input power to terminals (1) and (2) and observe the green (test on) LED. It should be on when the MotorGuard is testing and off when the motor is running. Perform the following tests to insure the MotorGuard is operating correctly and has been installed properly.
2. To test the alarm, ensure the motor is not running. Remove power to the MotorGuard. Place a temporary one meg-ohm resistor between terminal (5) and (6) to stimulate an alarm condition. Turn power on to the MotorGuards, wait for approximately 1- to 15 seconds or until the MotorGuard trips on an alarm. The green (test on) LED should turn off and the red flashing (alarm) LED should turn on indicating the motor insulation level is below the set-point.
3. The alarm/lockout contacts should have changed state. If the alarm/lockout have been wired into an alarm system, the alarm should now be activated. If the alarm/lockout contacts have been wired to disable the start circuit then the motor will not start when the circuit is activated.
4. Press the reset button to restore the MotorGuard to a test condition. The red flashing (alarm) LED should now turn off and the green (test on) LED should turn on. The alarm/lockouts should return to their normal state. Turn off power to MotorGuard and remove the temporary resistor and turn the power back on to MotorGuard.

NOTE: The MotorGuard unit will now remain latched in an alarm condition, after the setpoint is exceeded, until the reset button is pressed or the power is removed from the unit.

5. Start the motor being tested and observe that the green LED turns off. This indicates that the motor starter auxiliary "normally closed" contact is operating correctly. The contact should open whenever the motor being tested is online.
6. Stop the motor, the green (test on) LED should turn on again, indicating the MotorGuard unit is testing the motor and the insulation reading is good. The system has now been fully tested and is ready for normal operation.

EQUIPMENT MAINTENACE

Only Qualified personnel shall perform maintenance of this device.

Before use all cables shall be checked for cracking or damage.

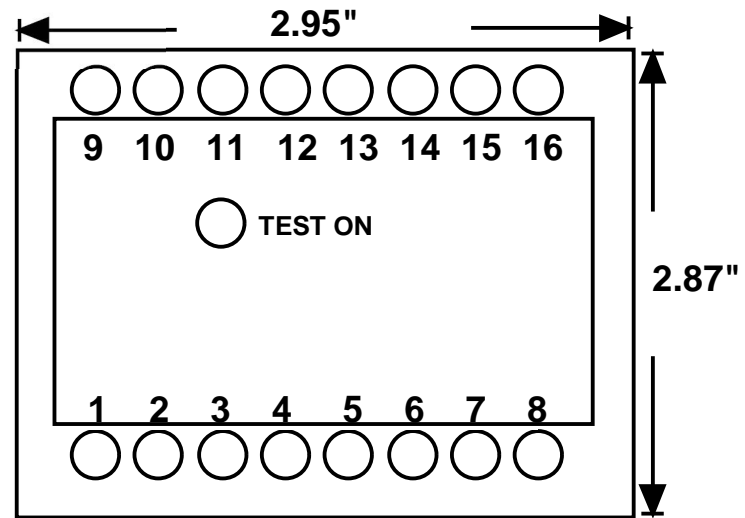
Only a 1.5A 250V AGC fuse shall be used with this device.

WARNING:

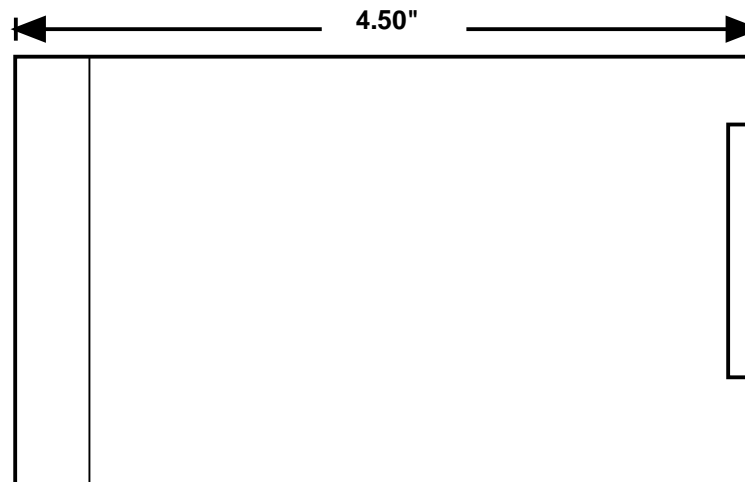
Before servicing any equipment being tested with a CableGuard system, one must turn off and lockout the CableGuard power and short the Cable windings to ground in order to remove any possible residual capacitive charge that may be present in the unit.



Model: GP500-AS



Front



Side View