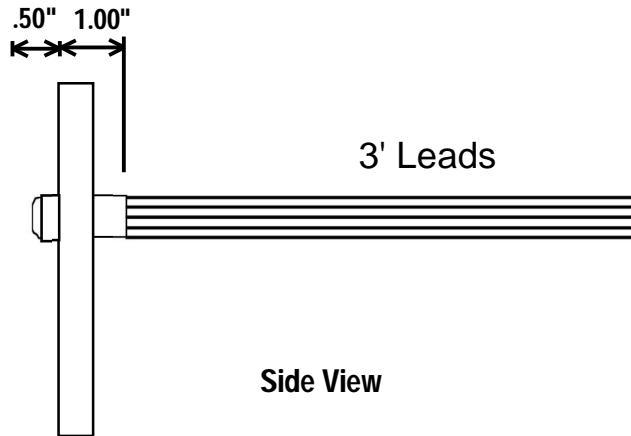
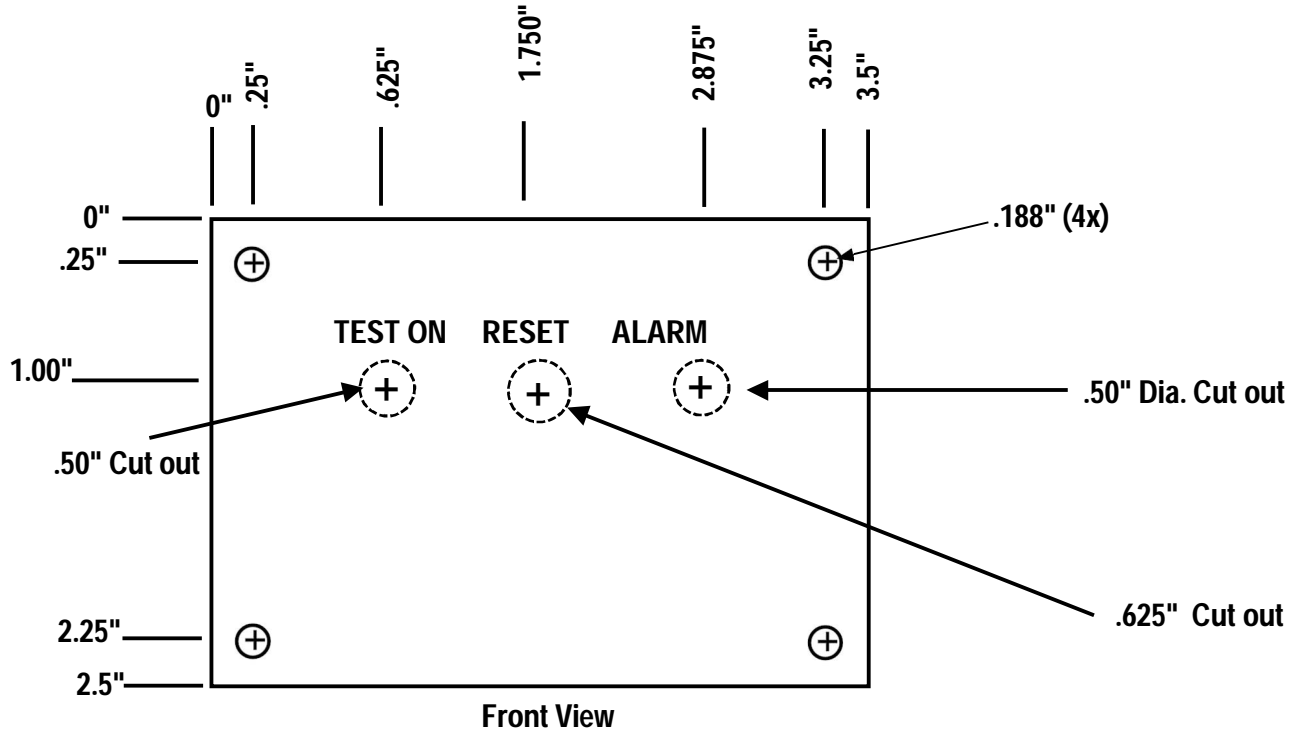


<p>MEGalert Safety By Choice Reliability By Design</p>	<p>Legend</p> <p> Remote Alarm</p> <p> Analog Meg-ohm Meter</p> <p> Motor Starter</p> <p> Shielded Wires</p> <p> RR- Remote Start Relay</p> <p> Customer Provided Wiring</p>	<p>Drawn By: KM Delamater</p>	<p>GP500-M-AS Typical Wiring Diagram</p>	<p>Date: 09/18/2019</p>
		<p>Checked: R. Zelm</p>		<p>Scale: None</p>

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-M-AS

Input power 120 +/- 10% VAC 50/60 Hz @ .05A 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 CATERGORY III

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. Mount the MotorGuard unit in the motor control cabinet using the din rail mounting bracket on the unit or mounting screws. On packaged units mount the enclosure near the MCC and wire MotorGuard(s) into each contactor.
3. Connect the input terminals (1) and (2) to a constant 120 VAC 50/60 Hz power source.
4. Connect terminals (3) and (4) to the meg-ohm meter. Observe correct polarity. Wire terminal (3) to the positive meter input and wire terminal (4) to the negative meter input.
5. 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.
6. Wire terminal (6) to the B phase motor lead or the A1 lead of a DC motor at the motor starter contactor as shown in wiring diagram. (NOTE: For partial winding or reduced voltage starter applications, contact the factory for proper wiring).

NOTE: D.C. shunt wound motors will require a second MotorGuard unit to test the field winding. Terminal (6) would then be wired to F1 when testing the field circuit.
7. Connect terminals (7) and (8) to a normally closed dry auxiliary contact on the motor starter.
8. Connect terminals (9), (10), (11), (15) and (16) to the remote LED/Switch plate located on the front door of the starter cabinet. Mount the plate using 4 mounting holes. Connect the green wire to terminal (10), connect both black leads to terminal (9) connect the red wire to terminal (11), connect the yellow wire to terminal (15) and connect the grey wire to terminal (16)
9. Terminals (12), (13) and (14) are dry contacts 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.

WARNING:

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



MotorGuard Operation Instructions Model: GP500-M-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

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 simulate an alarm condition. Turn power on to the MotorGuard, wait for approximately 10 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 now have changed state. If the alarm/lockout contacts 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/lockout contacts should return to their normal state. Turn off power to MOTORGUARD and remove the temporary resistor and turn power back on to MotorGuard.

NOTE: The MotorGuard unit will remain latched in an alarm condition, after the set point 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 (test on) LED turns off. This indicates that the motor starter auxiliary "normally closed" contact is operating correctly. The contact should be 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 MAINTENANCE

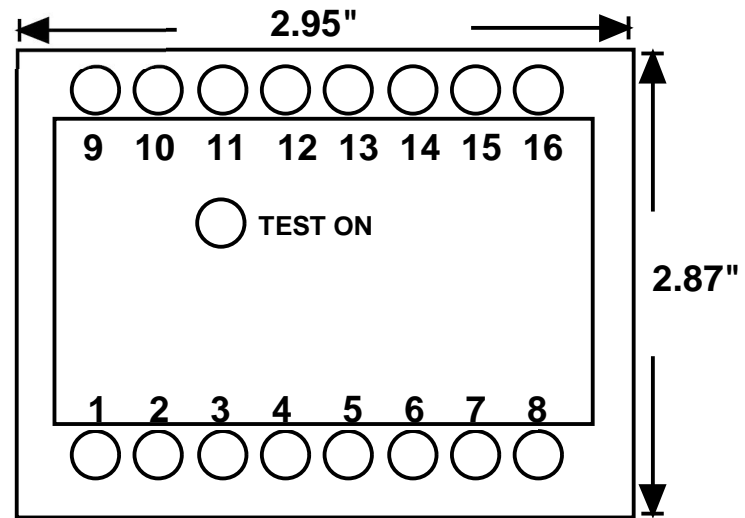
Only Qualified personnel shall perform maintenance of this device.

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

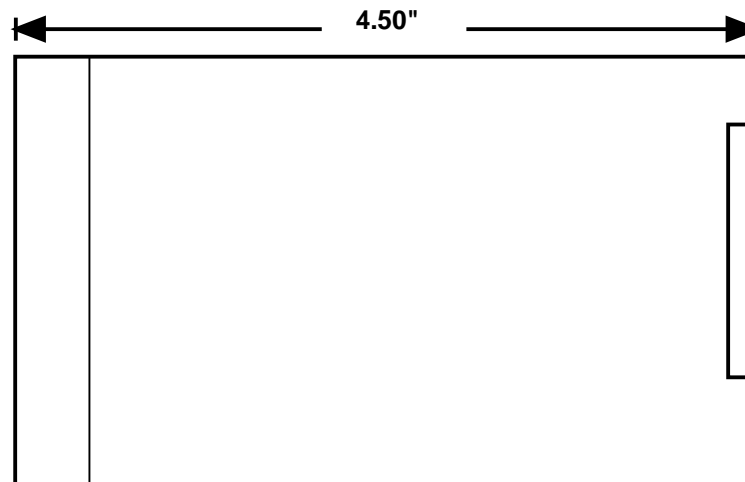
Only a 1.5A 250V AGC fuse shall be used with this device.



Model: GP500-M-AS



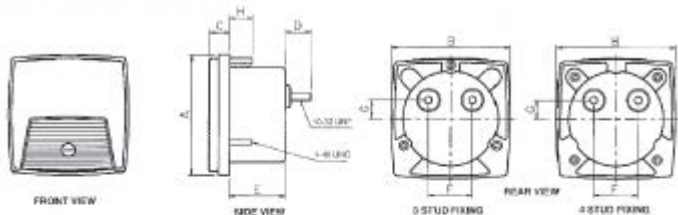
Front



Side View

Dimensions

Specify number of fixing studs when ordering 2 1/2" and 3 1/2" meters. 4 1/2" meters are supplied with 4 fixing studs.



	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
2 1/2" inch	68.6	68.6	11.8	14.6	32.0	25.4	10.4	12.7	55.9	31.0	46.5	26.9	23.9	47.8	23.9
3 1/2" inch	88.9	88.9	11.8	14.6	36.0	25.4	10.4	12.7	69.9	40.2	60.3	34.8	28.5	57.0	28.5
4 1/2" inch	112.0	123.2	12.7	16.3	30.5	28.4	0.38	12.7	70.9				51.6	90.4	50.8
	4.41	4.85	0.50	0.64	1.20	1.12	0.41	0.50	2.78				2.03	3.56	2.00

Panel cut-out

