



Installation Instructions

Meg-Alert Model: GP500

1. Mount the Meg-Alert unit in the motor control cabinet using the mounting bracket provided with the unit.
2. Locate a dry normally closed auxiliary contact on the motor starter contactor (one may need to be installed). Wire one side of the input power through the normally closed contact to terminal (1). Wire the other side of the input power to terminal (2). (See wiring diagram).
3. Terminal (3) and (4) are dry contacts and can be wired to interrupt the motor controller start circuit to lockout the motor from starting during a motor alarm condition, if so desired. These terminals may also be used as an additional alarm signal if lockout is not needed.
4. Wire terminal (5) to a common ground buss or directly to the 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.*
5. Wire terminal (6) to the load side of the B phase motor lead 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.*
6. Terminal (7), (8), and (9) are outputs to the remote LED plate. Drill two (2) 5/16 inch holes in the desired location on the front door of the motor starter housing, and feed the LED leads through the opening and mount the plate using 4 mounting holes or adhesive. Connect the green wire to terminal (7), connect both black leads to terminal (8), and connect the red wire to terminal (9).
7. Terminal (10), (11), and (12) are dry contacts and can be wired to a PLC input or plant alarm system to indicate a motor alarm condition.

WARNING:

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



Operation Instructions Meg-Alert Model: GP500

1. Apply input power to terminals (1) and (2) and observe the green (test on) LED. It should be on when the Meg-Alert is testing and off when the motor is running. Perform the following tests to insure the Motor Guard is operating correctly and has been installed properly.
2. To test the alarm and lockout alarm circuit, place a temporary jumper between terminal (5) and (6) to simulate an alarm condition. Hold the jumper across the terminals for approximately 10 to 15 seconds or until the Motor Guard 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. The alarm and lockout contacts should now have changed state.
3. If the alarm contacts have been wired into an alarm system, the motor should now be in an alarm state.
4. If the lockout contacts have been wired into the motor start circuit, the motor should now be prevented from being started.
5. Remove the temporary jumper from terminal (5) and (6) and press the reset button to restore the Motor Guard to a test condition. The red (alarm) LED should now turn off and the green (test on) LED should turn on. The alarm and lockout contacts should return to their normal state.

NOTE: The Motor Guard unit will remain latched in a alarm condition, after the set point is exceeded, until the reset button is pressed or the power is removed from the unit.

6. 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 interrupt power to the Motor Guard unit whenever the motor being tested is online.
7. Stop the motor, the green (test on) LED should be on again, indicating the Motor Guard unit is testing the motor and the insulation reading is good. The system has now been fully tested and is ready for normal operation.