



Installation Instructions

Meg-Alert Models: GP500-4M, 6M, 8M and 9M

NOTE: If the Meg-Alert is ordered with an enclosure, please skip steps 1, 2, and 3.

1. Drill four(4) $\frac{1}{4}$ -inch holes and mount the Meg-Alert power supply, using the mounting holes in the bracket assembly.
2. Drill one(1) 4-inch and four(4) $\frac{5}{16}$ -inch holes, and mount the meter indicator in the front panel of the MCC or generator control panel (use the drill hole pattern provided with the meter).
3. Cut an opening 6"H x 7"W and drill four(4) $\frac{3}{16}$ -inch holes in the front of the MCC panel. Mount the switching unit using the mounting holes in the faceplate (use switching assembly panel as a pattern).
4. Install warning stickers (provided with the Meg-Alert) on the motor terminal and control boxes of all equipment to be tested.
5. Connect the TB10 input terminals (1) and (2) to the input power source (see nameplate for the correct voltage). If DC input is used, observe the correct polarity; terminal (1) is positive, and terminal (2) is negative.
6. Use shielded wire to connect TB10 terminals (3) and (4) to RAC system, when it is supplied with the Meg-Alert.
7. Use shielded wire to connect TB10 terminals (5) and (6) to the meter indicator. Observe the correct polarity: terminal (5) is positive, and terminal (6) is negative.
8. Connect TB10 terminal (7) to the common mechanical ground of equipment being tested.
9. Use shielded wire to connect terminals (1) through (18) on the switching unit to a normally closed contact on each motor starter. The contact should be closed when the motor is not running (see drawing provided with switching unit).
10. Connect the shielded 25-pin cable (provided with Meg-Alert) to the connector on the Meg-Alert power supply and switching unit.
11. IF SAFETY LOCKOUT IS REQUIRED: Connect terminals (1) and (2) on TB1-TB9 on the Meg-Alert power supply in series with one side of the motor starter coil on each motor (see drawing provided with Meg-Alert).
12. Connect terminals (3), (4), and (5) on TB1-TB9 to alarm panel or PLC inputs.
13. Connect terminal (6) on TB1-TB9 to the B phase of the winding to be tested on each motor (see drawing provided with the Meg-Alert). The test lead B phase connection should be consistent on all motors being tested by a multiple output Meg-Alert. This will eliminate phase to phase potential back at the Meg-Alert terminal block. All three phases and power cables are therefor tested from the B phase connection point through the internal neutral connection in the motor windings.



Operation Instructions

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1. After installation is completed on the unit, apply voltage to the Meg-Alert power supply and observe the yellow flashing (test) LED on the switching unit and meter indicator.
2. Place the switching unit into manual and press the select button until the channel indicator sequences through all the channels one (1) time. Next select each piece of equipment (while it is idle) to see that the yellow (test) LED flashes and the meter indicator shows the value of the insulation.
3. Start each motor and select it with the switching unit in manual, to see that the yellow test LED does not flash. When the equipment selected is in operation, the yellow LED should stop flashing and the meter indicator should go to infinity. This indicates that the Meg-Alert has sensed the unit is running and it will not test that piece of equipment.
4. Allow the unit to be powered up for approximately 10 minutes. In manual, select the #0 position on the switching unit. Then press the test button and observe the meter. It should go to the "TEST" mark (usually at 1 MEG Ohms). If it doesn't, check the voltage at input terminals (1) and (2) and compare to serial number tag specification, or call the factory for calibration instructions.
5. In manual, select the #1 position on the switching unit. Then press and hold the test button for approximately 10 seconds. The meter should go to the test position and the unit should go into an alarm fault condition. The corresponding red LED on the switching unit should start flashing. The corresponding alarm/lockout contacts will now have changed state, which indicates that the Meg-Alert systems are operating properly.
6. Press the reset button to clear the alarm condition. The red LED should stop flashing. *NOTE: The motor must be selected by the switching unit before it can be reset.*
7. Repeat steps 5 and 6 for each motor to ensure all circuitry is operating correctly.
8. Place the switching unit into AUTO and observe the selecting display. The switching unit should select each motor at a preset time interval, which is usually about (30) seconds.
9. When it reaches the last unit it will select ZERO, which is a blank position. The cycle will then be repeated until the unit is placed into the manual mode. The system is now ready for normal operation.

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 presented in the unit.