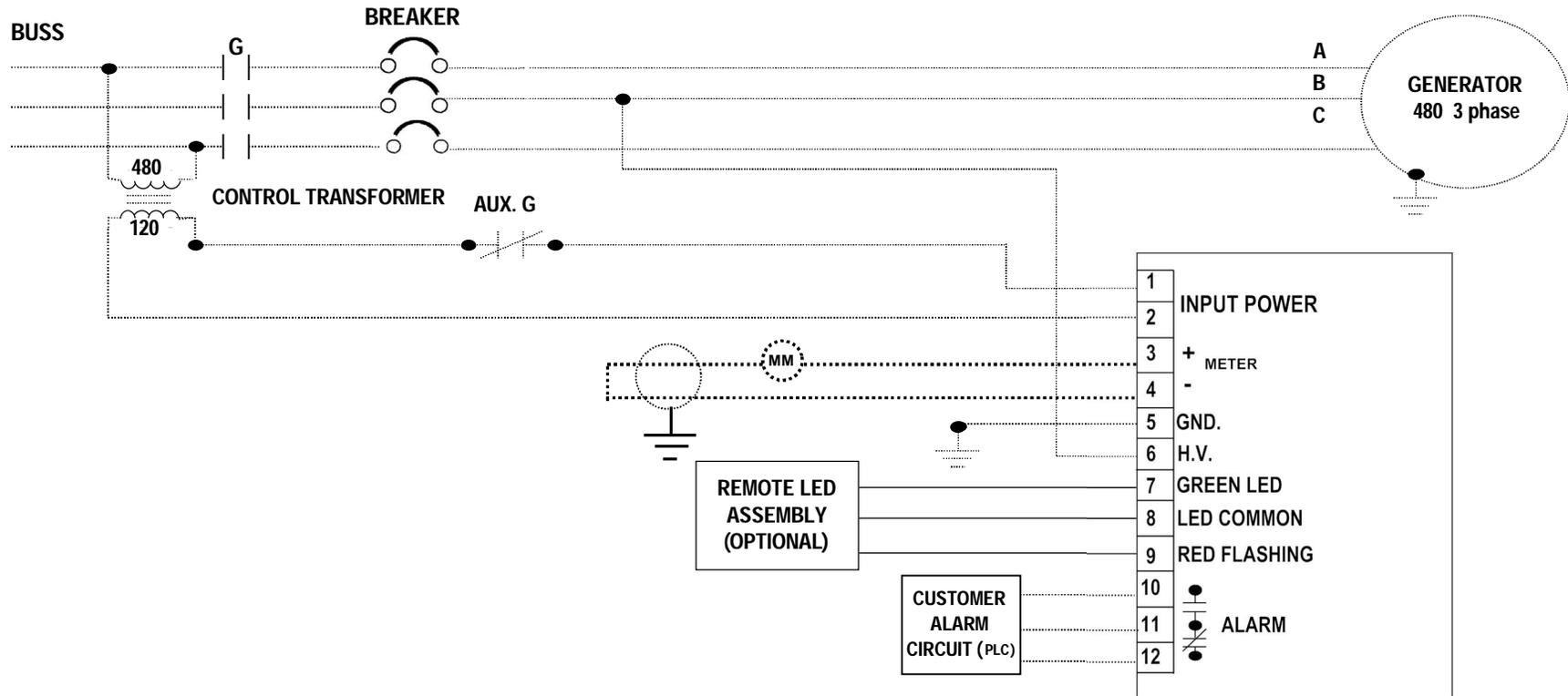


GP500-WG



LEGEND	
	Meg-Ohm Meter
	Shielded Wires
	Generator Breaker
..... Customer Provided Wiring	

GP500-WG Typical Wiring Diagram		DRAWN BY	DATE
 Meg-Alert, Inc. 715-356-1499 <small>Reliability by Design</small>	K Tesch		4/24/20
	CHECKED R. Zelm	SCALE None	SHEET NO. 1



Tech. Support: 800-778-5689

Installation Instructions

Meg-Alert Model: GP500-WG

1. Mount the GenGuard unit in the generator control cabinet using the mounting bracket provided with the unit.
2. Locate a dry normally closed auxiliary contact on the generator load contactor or run signal contact (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. Connect terminals (3) and (4) to the meter. Observe correct polarity; terminal (3) is positive and terminal (4) is negative. *NOTE: When using 4-20mA transducer option, wire transducer input in series with meter connections. (See drawings).*
4. Wire terminal (5) to a common ground buss or directly to the equipment ground of the generator. *NOTE: Terminal (5) must be electrically connected to a good clean generator ground in order to achieve an accurate meg-ohm reading while testing.*
5. Wire terminal (6) to the B phase generator lead at the generator circuit breaker as shown in wiring diagram.
6. Terminal (7), (8), and (9) are outputs to the remote LED plate. Drill two (2) 1/2 inch holes in the desired location on the front door of the generator control panel, 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 generator 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.



Tech. Support: 800-778-5689

Operation Instructions

Meg-Alert Model: GP500-WG

1. Apply input power to terminals (1) and (2) and observe the green (test on) LED. It should be on when the GenGuard is testing and off when the generator is running. Perform the following tests to insure the GenGuard is operating correctly and has been installed properly.
2. To test the alarm and lockout alarm circuit, turn off power and place a temporary jumper between terminal (5) and (6) to simulate an alarm condition. Turn on power; wait approximately 10 to 15 seconds or until the GenGuard trips on an alarm. The green (test on) LED should turn off and the red flashing (alarm) LED should turn on indicating the generator 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 generator should now be in an alarm state.
4. If the lockout contacts have been wired into the generator start circuit, the generator should now be prevented from being operated.
5. Turn off power and remove the temporary jumper from terminal (5) and (6). Turn power back on and press the “reset” button on front of the GenGuard unit to clear the alarm. 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.

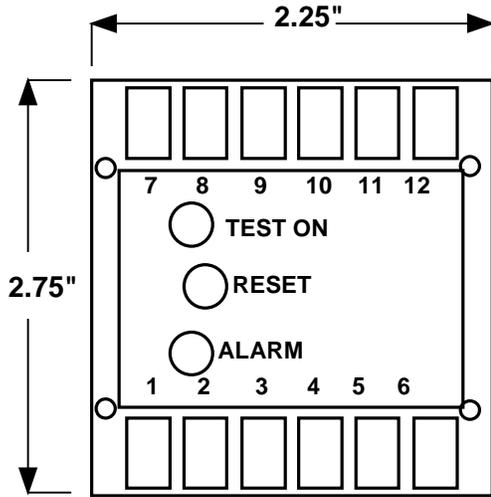
NOTE: The GenGuard unit will remain latched in an alarm condition, after the set point is exceeded, until the reset button is pressed or the power is removed from the unit. If manual reset feature is not supplied on GenGuard the unit will reset automatically when insulation level is above set point.

6. Start the generator being tested and observe that the green (test on) LED turns off. This indicates that the generator contactor auxiliary “normally closed” contact is operating correctly. The contact should interrupt power to the GenGuard unit whenever the generator being tested is operating.

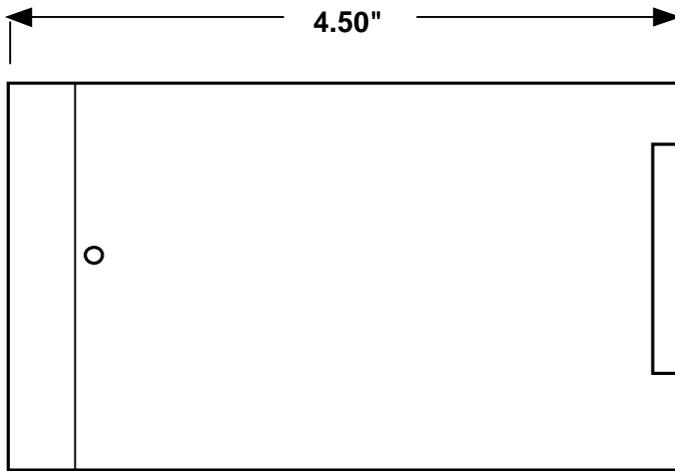
NOTE: A run switch contact may be used to turn the GenGuard on and off if contactor Aux. contact is not available.

7. Stop the generator, the green (test on) LED should be on again, indicating the GenGuard unit is testing the generator and the insulation reading is good. The system has now been fully tested and is ready for normal operation.

**Models GP500/GP500-M/GP500-WG
ENCLOSURE DIMENSIONS**



FRONT VIEW

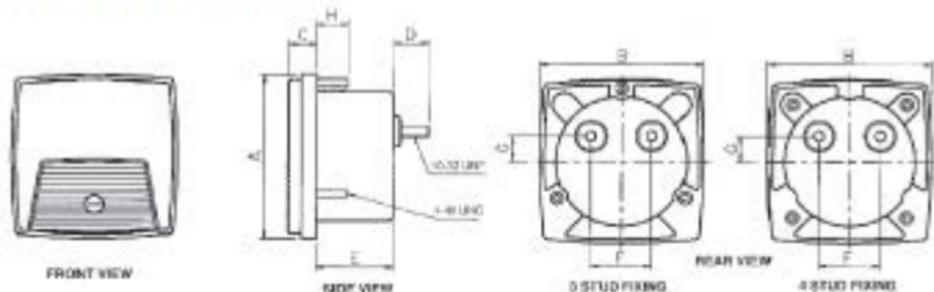


SIDE VIEW

09/7/11	
	Drawing Number: 1051-E

Dimensions

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



	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
2/1mm	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
inch	2.70	2.70	0.46	0.57	1.26	1.00	0.41	0.50	2.20	1.22	1.83	1.06	0.94	1.88	0.94
3/1mm	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
inch	3.5	3.5	0.46	0.57	1.42	1.00	0.41	0.50	2.75	1.58	2.37	1.37	1.12	2.24	1.12
4/1mm	112.0	123.2	12.7	16.3	30.5	28.4	0.38	12.7	70.9				51.6	90.4	50.8
inch	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

