

Specification
Single Automatic Insulation Tester and Monitor
for
5000 Volt Generators

The generator stator winding insulation tested and monitored automatically by an insulation resistance tester that is permanently installed in or near the generator switchgear.

The automatic insulation resistance tester must have an analog meter display, to indicate insulation resistance in megohms with a color coded dial indicating green, yellow and red ranges; two LED's indicating "system active" on" and "alarm" conditions, along with two outputs for remote indication, an internal test and calibrate button, a manual reset button, one, form C contact for an external alarm and one form C contact that may be used to lockout the generator from operating when it is in an alarm condition if so desired.

The power source and control signal shall be 120 VAC fused at 1.5 amps. The output test voltage shall be 5000 VDC current limited to 350uA max. The automatic insulation resistance tester shall monitor the generator resistance only when the generator is off and automatically stop testing when the generator starts and shall activate an alarm signal when the stator insulation resistance drops below a minimum safe operating level in accordance with NEMA and IEEE standards.

On grounded generators a ground interrupter shall be installed on each generator to automatically disconnect the neutral lead of the generator from ground when the generator is off, to allow the automatic insulation resistance tester to test the stator windings. The ground interrupter shall have (2) safety interlocks to ensure that the generator will not operate unless the neutral lead is re-connected to ground. The ground interrupter shall include a ground closed indicator lamp and an output contact to activate the alarm/lockout system and alarm circuit in the automatic insulation resistance tester. The ground interrupter power source and control signal shall be 120VAC fused at 3 amps. The ground interrupter shall have a normally open contact rated at 800 amps at 480 volts.

These systems can be mounted in the generator switchgear or can be factory installed in a NEMA 4X enclosure or other as specified. They are to be wired in accordance with the manufacturers instructions enclosed with the systems. The system shall be a Model GP5000-G (for ungrounded systems) GP5000-G1 (for N.O. grounded systems) GP5000-G2 (for N.C. grounded systems) furnished by Meg-Alert, Inc., in Minocqua, WI or equal.