

SPECIFICATION

Automatic Insulation Tester and Monitor for Motors up to 5000 Volt

Motor controllers shall be equipped with an automatic insulation tester and monitor to continuously test and display the winding insulation condition when the motor is offline. The system power supply is to be mounted in the high voltage section of the control cabinet.

The power supply shall have a green “power on” L.E.D. indicator located on the faceplate. The power supply shall be furnished with a 15-foot high voltage test cable with a current limiting resistor & plug at one end and a high voltage plug connector installed at the other end. A high voltage fuse assembly shall be furnished loose to be installed in the test lead between the current limiting resistor and the power supply. The test voltage shall be 5000 VDC and current limited to 350 uA.

The system will have one set each of Form C latching alarm and lockout contacts with a manual reset. System will have an analog 1% meter display with a color-coded dial calibrated in meg-ohms of resistance and a remote indicating control panel is to be installed on the front panel of the low voltage section of the control cabinet.

Indicating means shall be a green “power on” L.E.D., a yellow “test on” L.E.D. and a red flashing “alarm” L.E.D. to indicate when the motor insulation has tested below the set point and the motor is now unsafe to operate. Control means shall be a “cal test” pushbutton switch to allow for system check and meter calibration, a latching “power on/off” switch and a “reset” pushbutton switch. A dry aux. run contact is required to provide a control signal to allow the system to test the motor only when it is not running and stop testing when the motor starts.

A set of Form C pre-alarm contacts and a yellow flashing “pre-alarm” L.E.D. indicator shall be provided to indicate when the insulation begins to breakdown into the yellow range of the meter display.

The automatic insulation tester and monitor shall be as manufactured by Meg-Alert, Inc., Minocqua, WI 54548 USA (715) 356-1499 model GP5000-MU or approved equal.