

The Automeg

By M.P. Electronics



What The Automeg Does •

The Automeg unit checks the monitor insulation for weak spots (low impedance paths) and gives a warning via a "Low Meg" Alarm Relay contact and a "Low Meg" LED indicator that the motor insulation is degrading.

Why Is This Important? •

This "Low Meg" warning allows the end user to evaluate their motor's windings, and clean, rewind, or re-insulate the motor windings rather than replace a failed motor.

How Does The Automeg Work? •

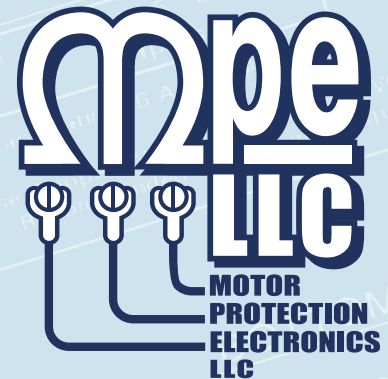
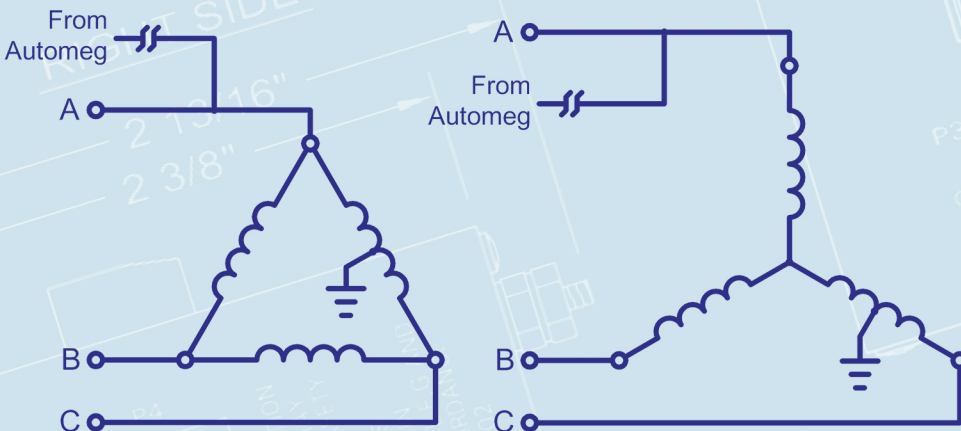
When a motor is called to run, the Automeg applies a 500 VDC potential to one leg of the motor. If the windings are good, (ie. no current flow to ground), the Automeg unit removes the 500 VDC signal and closes the permissive run contact (pins 3 & 4) allowing the control signal to energize the motor starter.

The Automeg works with both Star and Delta connected motors, and requires connection to only one motor lead as shown below. If a low impedance path within a winding exists, (shown below) the 500 VDC will find the path to ground, no matter which phase winding of the motor is compromised. Imagine the connection from the Automeg connected to Phase B or Phase C, instead of Phase A - the applied voltage will find it's way to the grounded case.

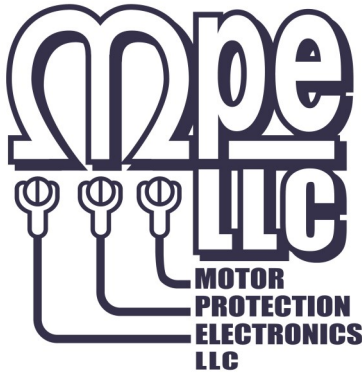
If the Automeg sees 1 Megohm or less to ground, the Alarm Relay contact closes (pins 10 & 11), the "Low Meg" LED is energized, and the permissive run contact (pins 3 & 4) is disabled.



**3 year
Warranty**



Order from: **C A Briggs Company**; 622 Mary Street; Suite 101 - Warminster, PA 18974
 Phone: 267-673-8117 - Fax: 267-673-8118; E-Mail: Sales@cabriggs.com - www.cabriggs.com



AUTOMEG

Automatic Insulation Tester
Electric Motor Insulation Monitor



UL FILE # E138380

**MADE IN
THE U.S.A.**

*Automeg units require the use of an SD12-PC socket.



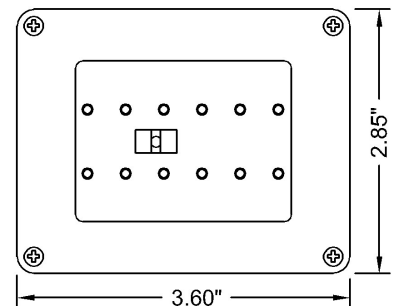
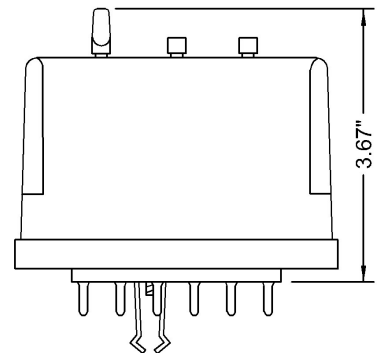
OPERATION

When power is applied, the power LED comes on. When a motor start signal is applied to pin 3, the middle LED comes on, showing that the 500VDC is being applied to the motor winding. If the winding is good, the Automeg completes the megging operation, and the motor start signal is then connected from pin 3 to pin 4.

If the winding is bad, the Low Meg LED comes on, and the motor start signal will not be available at pin 4 to engage the motor starter. To unlatch the Low Meg alarm contact, depress the Motor Reset pushbutton. The Low Meg Alarm contacts, pins 10 and 11, are a normally open relay contact that closes upon the Low Meg Alarm condition.

An Emergency Bypass Switch is provided to bypass the megging process. Placing this switch in the bypass mode disables the megging circuit, and engages the motor start relay circuit, pins 3 and 4.

The Meg Test Button is used to verify that the Automeg unit will provide an indication for a Low Meg condition should the condition occur.

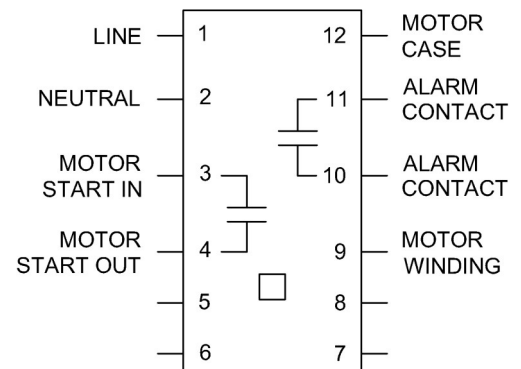


NOTES

1. A 1 Amp fuse is required at Pin 9 to protect the leakage circuit.
2. Use an Isolation contactor when using Automeg with Soft Starts and VFD's.
3. Periodically depress the Meg Test pushbutton to ensure that the unit displays the Low Meg LED indication
4. Periodically check that the Emergency Bypass Switch is not in the Bypass position.

SPECIFICATIONS

Input Power:	120VAC, 50-60Hz, 5.9VA (Pins 1,2)
Internal DC Voltage:	500VDC
Relay Contact Rating:	3A Normal, 30A Inrush 360VA Pilot Duty
Motor Run Relay:	SPST (Pins 3,4)
Low Meg Alarm Relay:	SPST (Pins 10,11)
Operating Temperature:	-20 to +60 °C
Storage Temperature:	-45 to +85 °C
Case:	Polycarbonate
Base:	Rhynite



ORDERING INFORMATION

With Socket: AITWS
Without Socket: AITWOS