

Title: Calibration Of Megger BM7 – 500 Insulation And Continuity Tester

Scope Work Instruction for the internal calibration of Megger BM7-500 Insulation and Continuity Testers. To be used in the absence of a manufacturers calibration instruction

Preparation

Calibration must be carried out using Category A Master instruments as required.

Equipment required;-

- 1.1 45° Instrument Balance Stand.
- 1.2 Keithley DMM Model 136.
- 1.3 Load Resistor.
- 1.4 Megadek High Resistance Box.
- 1.5 J.J. Instruments Decade Resistance Box.

Method

- 2.1 All calibration results must be entered on the results sheets (see appendix A)
- 2.2 Note the lab. temperature / R.H. and enter onto the results sheet.
- 2.3 Carry out test 1
- 2.4 Carry out test 2 using item 1.1
- 2.5 Carry out test 3 using items 1.2 and 1.3
- 2.6 Carry out tests 4 to 9 using item 1.4
- 2.7 Carry out tests 10 to 15 using item 1.5
- 2.8 Complete the results sheet header and enter Pass / Fail

- All records must be kept for audit purposes

References

Appendix A Calibration Results for Megger BM7-500 Insulation and Continuity Tester

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Appendix A

Calibration Results for Megger BM7-500 Insulation and Continuity Tester

Model Serial No

Date Result

Lab Temp / RH Operator

User Location Certificate No

Accuracies quoted are from manufacturer's specifications or relevant British Standard.

Movement Check

Test 1 Is pointer on zero – instrument horizontal? Pass / Fail

Test 2 Instrument Balance - $\pm 1.6\text{mm}$ at 45° all planes Pass / Fail

Insulation Range – D.C. Output Voltage Accuracy $\pm 10\%$ for 1M ohm load

Test No	Specified Output Volts	Allowed Limits	Output Volts	Result
1	500	450 - 550		Pass / Fail

Insulation Range – Calibration

Test No	Resistor Value Mohms	Specified Accuracy	Result
4	INF	$\pm 1.6\text{mm}$	Pass / Fail
5	100	$\pm 1.6\text{mm}$	Pass / Fail
6	10	$\pm 1.6\text{mm}$	Pass / Fail
7	1	$\pm 1.6\text{mm}$	Pass / Fail
8	0.1	$\pm 1.6\text{mm}$	Pass / Fail
9	0	$\pm 1.6\text{mm}$	Pass / Fail

Continuity Range - Calibration

Test No	Resistor Value ohms	Specified Accuracy	Result
10	100	$\pm 1.6\text{mm}$	Pass / Fail
11	50	$\pm 1.6\text{mm}$	Pass / Fail
12	10	$\pm 1.6\text{mm}$	Pass / Fail
13	1	$\pm 1.6\text{mm}$	Pass / Fail
14	0.5	$\pm 1.6\text{mm}$	Pass / Fail
15	0	$\pm 1.6\text{mm}$	Pass / Fail