

Title: Calibration Of Megger D201 Ducter Digital OHM Meter (0 – 60 Ohms)

Scope

Work Instruction for the internal calibration of Megger D201 Ducter Digital Ohm Meter (0 – 60 ohms). 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 J.J. Instruments Decade Resistance Box.
- 1.2 H. Tinsley Standard Resistance Box.

Method

- 2.1 All calibration results must be entered on the results sheets (see appendix A).
- 2.2 Note the lab temp / relative humidity and enter on calibration results sheet.
- 2.3 Connect the UUT to the J.J. Instruments decade resistance box using four similar leads and carry out tests 1 to 16. Forward and reverse readings of the UUT must be recorded.
- 2.4 Connect the UUT to the H. Tinsley standard resistance box 50 Mohms terminals and carry out test 17.
- 2.5 Transfer the leads to the 5 mOhm terminals on the H. Tinsley standard resistance box and carry out test 17.
- 2.6 Complete the results sheet header and enter Pass / Fail.

- All records must be kept for audit purposes

References

Appendix A Calibration Results for Megger D201 Ducter Digital Ohm Meter (0 – 60 ohms)

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Appendix A

Calibration Results for Megger D201 Ducter Digital Ohm Meter (0 – 60 ohms)

Model Serial No
Date Result
Lab Temp / RH Operator
User Location Certificate No

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

Calibration accuracy $\pm$ (0.25% reading + 1 digit) 15 to 35° C

Test No	UUT Range OHMS	UUT Reading (F/R) OHMS	Applied Value OHMS	Allowed Limits	Result
1	60		1.026	1.01 / 1.03	Pass / Fail
2	60		2.026	2.01 / 2.03	Pass / Fail
3	60		3.026	3.00 / 3.04	Pass / Fail
4	60		4.026	4.00 / 4.04	Pass / Fail
5	60		5.026	5.00 / 5.04	Pass / Fail
6	60		6.026	6.00 / 6.04	Pass / Fail
7	60		7.026	6.99 / 7.05	Pass / Fail
8	60		8.026	7.99 / 8.05	Pass / Fail
9	60		9.026	8.99 / 9.05	Pass / Fail
10	60		10.026	9.99 / 10.05	Pass / Fail
11	60		20.026	19.96 / 20.08	Pass / Fail
12	60		30.026	29.94 / 30.11	Pass / Fail
13	60		40.026	39.91 / 40.13	Pass / Fail
14	60		50.026	49.89 / 50.16	Pass / Fail
15	6		5.026	5.00 / 5.04	Pass / Fail
16	600m		526m	524.6 / 527.4	Pass / Fail
17	60m		49.99m	49.85 / 50.13	Pass / Fail
18	6m		4.999m	4.985 / 5.013	Pass / Fail

The UUT was calibrated using the following equipment:

1. J.J. Instruments Decade Resistance Box S/N
2. H. Tinsley Standard resistance Box S/N

The uncertainty of measurement is estimated not to exceed:

1 to 10 ohms $\pm$ 0.05%
10 to 18 ohms $\pm$ 0.08%
5 mOhms to 50 mOhms $\pm$ 0.053%

The uncertainty limits quoted refer to the applied values only and do not relate to the stability of the UUT.