

Title: Calibration Of Amprobe A.C. Clampmeter

Scope

Work Instruction for the internal calibration of Amprobe A.C. Clampmeters. 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 Datron 9100 Calibrator.
- 1.2 50 Turn Coil.

Method

- 2.1 All calibration results must be entered on the results sheets (see appendix A).
- 2.2 Note the lab temp / R.H. and enter on calibration results sheet.
- 2.3 Carry out tests 1 and 2.
- 2.4 Carry out tests 3 to 29 using items 1.1. and 1.2.
- 2.5 Carry out test 30 to 51 using item 1.1.
- 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 Amprobe A.C. Clampmeter

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Appendix A

Calibration Results for Amprobe A.C. Clampmeter

ModelSerial No

DateResult

Lab Temp / RHOperator

User LocationCertificate No

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

Test 1 Is the pointer on zero? Pass / Fail

Test 2 Instrument balance:
Does the pointer remain within $\pm 1\%$ at 45° all planes? Pass / Fail

Current Calibration

UUT accuracy: $\pm 3\%$ F.S.D.

Test No	UUT Range Amps	UUT Reading Amps	Calibrator Reading Amps x 50	Allowed Limits	Result
3	6	1		0.82 to 1.18	Pass / Fail
4	6	2		1.82 to 2.18	Pass / Fail
5	6	3		2.82 to 3.18	Pass / Fail
6	6	4		3.82 to 4.18	Pass / Fail
7	6	5		4.82 to 5.18	Pass / Fail
8	6	6		5.82 to 6.18	Pass / Fail
9	15	3		2.55 to 3.45	Pass / Fail
10	15	6		5.55 to 6.45	Pass / Fail
11	15	9		8.55 to 9.45	Pass / Fail
12	15	12		11.55 to 12.45	Pass / Fail
13	15	15		14.55 to 15.45	Pass / Fail
14	40	10		8.80 to 11.20	Pass / Fail
15	40	20		18.80 to 21.20	Pass / Fail
16	40	30		28.80 to 31.20	Pass / Fail
17	40	40		38.80 to 41.20	Pass / Fail
18	100	20		17.0 to 23.0	Pass / Fail
19	100	40		37.0 to 43.0	Pass / Fail
20	100	60		57.0 to 63.0	Pass / Fail
21	100	80		77.0 to 83.0	Pass / Fail
22	100	100		97.0 to 103.0	Pass / Fail
23	300	50		41.0 to 59.0	Pass / Fail
24	300	100		91.0 to 109.0	Pass / Fail
25	300	150		141.0 to 159.0	Pass / Fail
26	300	200		191.0 to 209.0	Pass / Fail
27	300	250		241.0 to 250.0	Pass / Fail
28	300	300		291.0 to 309.0	Pass / Fail