Title: Calibration Of Megger Pat 2 Portable Appliance Tester

Scope

Work Instruction for the internal calibration of Megger PAT2 Portable Appliance Tester. 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. Test Box
2. 45^0 Instrument Balance Stand
3. Constant Voltage Transformer
4. Datron 9100 Calibrator
5. 5kV Electrostatic Voltmeter
6. Flash Test Lead
7. Flash Test Lead
8. Special Extension Lead
9. Clamp Meter

Method

1. All calibration results must be entered on the results sheets (see appendix A)
2. Note the lab temperature and R.H. and enter on results sheet.
3. Carry out tests 1, 2 and 3 and note results.
4. Carry out tests 4 and 5 using equipment 1 and 3.
5. Carry out test 6 using equipment 1, 3 and 4.
6. Carry out test 7 using equipment 1 and 3
7. Carry out test 8 using equipment 1, 3 and 4.
8. Carry out test 9 using equipment 3, 5 and 6.
9. Carry out test 10 using equipment 3, 5 and 7.
10. Carry out test 11 using equipment 4, 8 and 9
11. Complete results sheet head and enter Pass/Fail.

- All records must be kept for audit purposes

References

Appendix A Calibration Results for Megger PAT2 Portable Appliance Tester

Documents
Document Sharing Hub

Copyright Network Rail
Provided by IHS under license with Network Rail
No reproduction or networking permitted without license from IHS
Full document details: NR NR-L3-MTC-ME0201-CAL228 I 2008

Licensee=Weston Williamson/5989497001, User=sam, albett
Not for Resale, 03/27/2016 23:44:45 MDT

Title: Calibration Of Megger Pat 2 Portable Appliance Tester

Appendix A

Calibration Results for Megger PAT2 Portable Appliance Tester

Model ……Serial No ……..

Date ……..Result ……

Lab Temp / RH ……Operator ……

User ……Certificate No ……

The manufacturer does not quote accuracies so results obtained below are a guide to the correct operation of the PAT2.

Preliminary Tests

		Result
Test 1	Is pointer on zero – instrument horizontal?	Pass / Fail
Test 2	Instrument balance ± $^{1}/_{16}$ " at 45^{0} all planes	Pass / Fail
Test 3	PAT2 earth test – plug the instrument into CVT and connect the earth bond test point on PAT2 to three pin socket earth of PAT2 using earth bond lead – switch to test 1 and press test button. Does the instrument indicate less than 0.5ohm?	Pass / Fail
Test 4	Insert test box "plug 1" into PAT tester socket and connect the earth bond on PAT2 to TPI on test box. Set PAT2 switch to test 1 and press test button. Does instrument indicated 0.1 ohm ± $^{1}/_{16}$"?	Pass / Fail
Test 5	Insert test box "plug 2" into PAT tester socket and set PAT2 switch to test 2 and press test button. Does instrument indicate 2 Mohm ± $^{1}/_{16}$"?	Pass / Fail
Test 6	Insert test box "plug 3" into PAT tester socket and set PAT2 switch to test 3. Select the 20 mA AC range on the fluke 8842A and connect to blue sockets on top of the test box. Press the test button and, using pot on the test box, set the current as read on the fluke to 5mA. Does PAT2 indicate 5mA ± $^{1}/_{16}$"?	Pass / Fail
Test 7	Insert test box "plug 4" into PAT tester socket and set PAT2 switch to test 4 and press test button. Does PAT2 indicate at right hand edge of green band?	Pass / Fail

Documents
Document Sharing Hub

Copyright Network Rail
Provided by IHS under license with Network Rail
No reproduction or networking permitted without license from IHS
Full document details: NR NR-L3-MTC-ME0201-CAL228 I 2008

Licensee=Weston Williamson/5989497001, User=sam, albett
Not for Resale, 03/27/2016 23:44:45 MDT