Manual Supplement

Manual Title:i1000s CalibrationSupplement Issue:1Part Number:1574933Issue Date:7/01Print Date:May 2001Page Count:2

Revision/Date:

This supplement contains information necessary to ensure the accuracy of the above manual. Enter the corrections in the manual if either one of the following conditions exist:

- 1. The revision letter stamped on the indicated PCA is equal to or higher than that given with each change.
- 2. No revision letter is indicated at the beginning of the change.



i1000s Calibration Manual Supplement

Change #1

On page 8, Table 4, under Recommended Model,

Replace:

| Digital Multimeter Hp 3458A or equivalent |
|---|
|---|

With:

| Digital Multimeter |
|--------------------|
|--------------------|

Delete the following from Table 4,

| AC/DC Shunt IET Labs-DCCS-200 0.1Ω - 0.1% r |
|---|
|---|

Replace the entire *Phase Shift* section, Table 5 and Figure 3 with the following:

Phase Shift Test

To check Phase Shift performance, set up the equipment as shown in Figure 3.

- 1. Center the Current Probe around the coil.
- 2. Set the calibrator output to 1V (phase meter reference input), 1A and 50 Hz, per step 1 of Table 5. Performance Test Steps.
- 3. Verify that the phase meter reading is within the "Phase in Deg" limits of Table 5.

| | | | 5520A | 5500A Coil | | i1000s mV Output | | Phase in Deg. | | | |
|---|----------|----------|--------|---------------|--------|---------------------|--------|---------------|------|--|--|
| Step | Coil | Range | Output | I. Prim. | Freq. | Min. | Max. | Min. | Max. | | |
| 1 | 50 turn | 1 mV/A | 1 A | 50.0 A | 50 Hz | 48.5 | 51.5 | -3.0 | 3.0 | | |
| 2 | 50 turn | 1 mV/A | 2 A | 100 A | 400 Hz | 98.0 | 102.0 | N/A | N/A | | |
| 3 | 50 turn | 1 mV/A | 4 A | 200 A | 60 Hz | 197.0 | 203.0 | -2.0 | 2.0 | | |
| 4 | 50 turn* | 1 mV/A | 14 A | 700 A | 50 Hz | 692.0 | 708.0 | -2.0 | 2.0 | | |
| 5 | 1 turn | 10 mV/A | 5 A | N/A | 50 Hz | 44.0 | 56.0 | -15.0 | 15.0 | | |
| 6 | 50 turn | 10 mV/A | 0.4 A | 20 A | 50 Hz | 191.0 | 209.0 | -10.0 | 10.0 | | |
| 7 | 50 turn | 10 mV/A | 2 A | 100 A | 50 Hz | 975.0 | 1025.0 | -10.0 | 10.0 | | |
| 8 | 1 turn | 100 mV/A | 0.50 A | N/A | 50 Hz | 38.5 | 61.5 | N/A | N/A | | |
| 9 | 1 turn | 100 mV/A | 2.00 A | N/A | 50 Hz | 184.0 | 216.0 | -15.0 | 15.0 | | |
| 10 | 1 turn | 100 mV/A | 10 A | N/A | 50 Hz | 960.0 | 1040.0 | -15.0 | 15.0 | | |
| * 700 A/ 50 Hz in 1 mV/A range has a TUR of 3.3 | | | | | | | | | | | |

Table 5. Performance Test Steps

- 4. Continuing to use 1V as the phase meter reference input, set the calibrator output for the remaining steps listed in Table 5. Steps 2 and 8 do not require phase tests.
- 5. Verify that the phase meter readings meet the "Phase in Deg" limits for each step.

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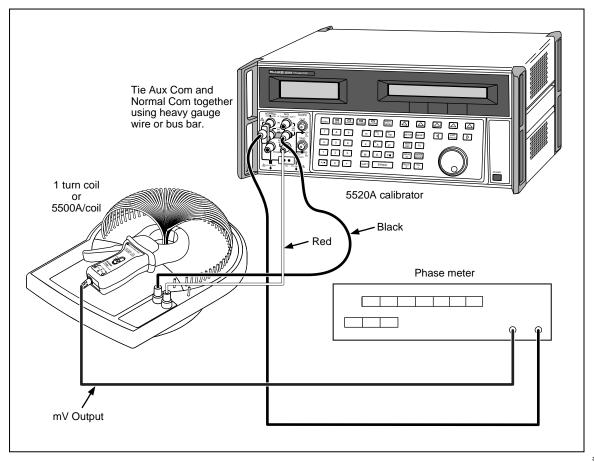


Figure 3. Phase Check Setup

akp03f.eps

mV Output Test

- 1. Connect the equipment as shown in Figure 5.
- 2. Set the calibrator output and coil for each step of Table 5.
- 3. Verify that the voltmeter reading is within the "i1000S mV Output" limits of Table 5.

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