

# Manual Supplement

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This supplement contains information necessary to ensure the accuracy of the above manual. This manual is distributed as an electronic manual on the following CD-ROM:

CD Title: 52120A  
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## Change #1, 61605

On page 1-21:

Under **52120A/COIL 3 KA 25-Turn Coil**

In the next to last row of the **Accuracy** table, beginning with 0 A to 3 A, the third column entry of **Effective Current Amp-turns:**

Change: 0 to 100

To: 0 to 75

In the last row of the **Accuracy** table, beginning with 0 A to 1 A, the third column entry of **Effective Current Amp-turns:**

Change: 0 to 50

To: 0 to 25

Under **52120A/COIL 6 KA 50-Turn Coil**

In the fifth row of the **Accuracy** table, beginning with 0 A to 120 A, the third column entry of **Effective Current Amp-turns:**

Change: 0 to 3500

To: 0 to 6000

In the last row of the **Accuracy** table, beginning with 0 A to 13 A, the third column entry of **Effective Current Amp-turns:**

Change: 0 to 600

To: 0 to 650

## Change #2

On page 5-7, under **2 Amp Range Verification**, replace step 9 with:

9. Set the DMM ‘-c’ and ‘÷z’ stores to -0.4. Record the measure error.

## Change #3, 64263, 470, 471, 480

On page 1-5, add the following to the **Symbols** table:

Ã	Conforms to relevant South Korean EMC Standards.
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On page 1-16, remove **Transient overvoltage, Shock and Vibration, Electromagnetic Environment, Electromagnetic Compatibility, Indoor use only**, and **Agency Approvals** and replace with:

**Safety**..... 61010-1, Overvoltage II, Pollution Degree 2

**Electromagnetic Compatibility (EMC)**

International..... IEC 61326-1: Industrial Electromagnetic Environment

CISPR 11: Group 1, Class A

*Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.*

*Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a low-voltage power supply network that supplies buildings used for domestic purposes. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances.*

*Emissions that exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object.*

Korea (KCC) ..... Class A Equipment (Industrial Broadcasting & Communication Equipment)

*Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.*

USA (FCC) ..... 47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.

**Intrusion Protection** ..... IEC60529: IP20 Indoor use only.

On pages 1-19 and 1-20, replace the **Current Accuracy** tables with:

*Coverage factor  $k=2.58$  (99 % confidence level)*

### Current Accuracy

Frequency	Accuracy 1-year accuracy, $t_{cal}^{[1]} \pm 5^\circ\text{C} \pm(\% \text{ of output} + \% \text{ of range})$		
	% of Output	% of Range	
		LCOMP OFF <sup>[2]</sup>	LCOMP ON <sup>[3]</sup>
<b>2 Amp Range</b>			
DC <sup>[4]</sup>	0.010	0.005	0.005
10 Hz to 65 Hz	0.015	0.070	0.300
65 Hz to 300 Hz	0.030	0.070	0.500
300 Hz to 500 Hz	0.100	0.070	3.500
500 Hz to 1 kHz	0.100	0.070	6.000
1 kHz to 3 kHz	0.300	0.600	Not Specified
3 kHz to 6 kHz	1.000	1.600	Not Specified
6 kHz to 10 kHz	2.000	4.000	Not Specified
<b>20 Amp Range</b>			
DC <sup>[4]</sup>	0.010	0.005	0.005
10 Hz to 65 Hz	0.015	0.060	0.300
65 Hz to 300 Hz	0.030	0.060	1.200
300 Hz to 500 Hz	0.100	0.060	6.000
500 Hz to 1 kHz	0.100	0.060	9.000
1 kHz to 3 kHz	0.300	0.200	Not Specified
3 kHz to 6 kHz	1.000	0.400	Not Specified
6 kHz to 10 kHz	3.000	0.600	Not Specified
<b>120 Amp Range</b>			
DC <sup>[4]</sup>	0.010	0.005	0.005
10 Hz to 65 Hz	0.015	0.020	0.500
65 Hz to 300 Hz	0.030	0.030	0.700
300 Hz to 500 Hz	0.100	0.100	3.500
500 Hz to 1 kHz	0.100	0.100	6.000
1 kHz to 3 kHz	0.300	0.250	Not Specified
3 kHz to 6 kHz	1.000	0.450	Not Specified
6 kHz to 10 kHz	4.000	0.750	Not Specified
<p>[1] <math>t_{cal}</math> is the temperature at which calibration adjustment took place.</p> <p>[2] Maximum inductance for stability LCOMP OFF is 100 <math>\mu\text{H}</math>.</p> <p>[3] Maximum inductance for stability LCOMP ON is 1 mH.</p> <p>[4] Refer to DC Offset in the <i>Electrical Performance Limits</i> section.</p>			

**Coverage factor k=2.00 (95 % confidence level)**

**Current Accuracy**

Frequency	Accuracy 1-year accuracy, tcal <sup>[1]</sup> ±5 °C ±(% of output + % of range)		
	% of Output	% of Range	
		LCOMP OFF <sup>[2]</sup>	LCOMP ON <sup>[3]</sup>
<b>2 Amp Range</b>			
DC <sup>[4]</sup>	0.008	0.004	0.004
10 Hz to 65 Hz	0.012	0.054	0.233
65 Hz to 300 Hz	0.023	0.054	0.390
300 Hz to 500 Hz	0.078	0.054	2.720
500 Hz to 1 kHz	0.078	0.054	4.651
1 kHz to 3 kHz	0.233	0.465	Not Specified
3 kHz to 6 kHz	0.775	1.240	Not Specified
6 kHz to 10 kHz	1.550	3.100	Not Specified
<b>20 Amp Range</b>			
DC <sup>[4]</sup>	0.008	0.004	0.004
10 Hz to 65 Hz	0.012	0.047	0.233
65 Hz to 300 Hz	0.023	0.047	1.200
300 Hz to 500 Hz	0.078	0.047	6.000
500 Hz to 1 kHz	0.078	0.047	6.98
1 kHz to 3 kHz	0.233	0.155	Not Specified
3 kHz to 6 kHz	0.775	0.310	Not Specified
6 kHz to 10 kHz	2.330	0.470	Not Specified
<b>120 Amp Range</b>			
DC <sup>[4]</sup>	0.008	0.004	0.004
10 Hz to 65 Hz	0.012	0.016	0.390
65 Hz to 300 Hz	0.023	0.023	0.700
300 Hz to 500 Hz	0.078	0.078	3.500
500 Hz to 1 kHz	0.078	0.078	4.651
1 kHz to 3 kHz	0.233	0.194	Not Specified
3 kHz to 6 kHz	0.775	0.349	Not Specified
6 kHz to 10 kHz	3.101	0.581	Not Specified
[1] tcal is the temperature at which calibration adjustment took place. [2] Maximum inductance for stability LCOMP OFF is 100 µH. [3] Maximum inductance for stability LCOMP ON is 1 mH. [4] Refer to DC Offset in the <i>Electrical Performance Limits</i> section.			

**Change #4, 470, 481**

On page 1-16, replace **DC Offset** with:

**DC Offset** ..... Magnetic remanence that follows abrupt changes in output current level may cause small changes to dc current offset, up to 0.04 % range. It is good practice to correct for offsets in dc measurements and techniques such as dc reversal measurement which will result in best accuracy.

**Change #5, 742**

On page 5, replace the **How to Place and Rack Mount Product** section with:

**How to Place and Rack Mount the Product**

Always operate the Product in controlled electromagnetic environments such as calibration and measurement laboratories. Where RF transmitters, like mobile telephones, are not used.

This Product can be used on a bench-top or in a rack. Fluke does not have a rack mount kit for the 52120A. Fluke recommends that a drawer from the manufacturer of the rack be used.

*Note*

*There must be space on the sides of the Product for sufficient air flow.*

