

Spring Loaded 25 A Kelvin Probes



TEST PROBE

Copyright© Chauvin Arnoux®, Inc. d.b.a. AEMC® Instruments. All rights reserved.

No part of this documentation may be reproduced in any form or by any means (including electronic storage and retrieval or translation into any other language) without prior agreement and written consent from Chauvin Arnoux®, Inc., as governed by United States and International copyright laws.

This documentation is provided “as is,” without warranty of any kind, express, implied, or otherwise. Chauvin Arnoux®, Inc. has made every reasonable effort to ensure that this documentation is accurate; but does not warrant the accuracy or completeness of the text, graphics, or other information contained in this documentation. Chauvin Arnoux®, Inc. shall not be liable for any damages, special, indirect, incidental, or inconsequential; including (but not limited to) physical, emotional or monetary damages due to lost revenues or lost profits that may result from the use of this documentation, whether or not the user of the documentation has been advised of the possibility of such damages.

TABLE OF CONTENTS






1. INTRODUCTION	5
1.1 PRECAUTIONS FOR USE	6
1.2 ORDERING INFORMATION	6
2. PRODUCT FEATURES.....	7
2.1 SPRING LOADED PISTOL 25 A KELVIN PROBE	8
3. OPERATION	9
4. SPECIFICATIONS.....	10
4.1 ENVIRONMENTAL CONDITIONS	10
4.2. MECHANICAL SPECIFICATIONS	10
4.2.1 Pistol-grip Kelvin Probe.....	10
4.3 ELECTRICAL SAFETY	10
5. MAINTENANCE.....	11
5.1 CLEANING.....	11
5.2 REPAIR	11
5.3 TECHNICAL AND SALES ASSISTANCE	11
5.4 LIMITED WARRANTY.....	12
5.4.1 Warranty Repairs	12

1. INTRODUCTION

Thank you for purchasing AEMC® Instruments **Spring Loaded 25 A Kelvin Probes**. This test probe is designed for use with AEMC® Instruments Micro-ohmmeters Model 6240 and 6255 or equivalent.

For best results from your instrument and for your safety, read the enclosed operating instructions carefully and comply with the precautions for use. Only qualified and trained operators should use this product.

Symbols and Definitions

	CAUTION - Risk of Danger! Indicates a WARNING . Whenever this symbol is present, the operator must refer to the user manual before operation
	Indicates Important information to acknowledge
	This product complies with the Low Voltage & Electromagnetic Compatibility European directives (73/23/CEE & 89/336/CEE)
	The UKCA marking certifies that the product is compliant with the requirements that apply in the United Kingdom, specifically regarding Low-Voltage Safety, Electromagnetic Compatibility, and the Restriction of Hazardous Substances
	In the European Union, this product is subject to a separate collection system for recycling electrical and electronic components in accordance with directive WEEE 2002/96/EC

Definition of Measurement Categories (CAT)

- CAT IV:** Corresponds to measurements performed at the primary electrical supply (< 1000 V).
Example: primary overcurrent protection devices, ripple control units, and meters.
- CAT III:** Corresponds to measurements performed in the building installation at the distribution level.
Example: hardwired equipment in fixed installation and circuit breakers.
- CAT II:** Corresponds to measurements performed on circuits directly connected to the electrical distribution system.
Example: measurements on household appliances and portable tools.

1.1 PRECAUTIONS FOR USE

The protection offered by this accessory is compromised if it is used in unapproved, unspecified, or improper ways. These safety warnings are provided to ensure the safety of personnel and proper operation of the instrument.

- Observe the maximum voltage, intensity, and measurement category. Do not use the accessory on networks where the voltage or category exceeds those stated in this manual.
- Observe the conditions of use (e.g. temperature, humidity, altitude, degree of pollution and location of use).
- Do not use the accessory if it is open, damaged, or incorrectly reassembled.
- Any repairs must be carried out by trained and qualified personnel using appropriate safety precautions.

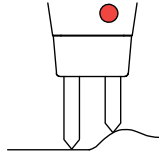
1.2 ORDERING INFORMATION

Kelvin Probes Pistol Grip, 10 ft, 25 A Spring Loaded**Cat. #2118.84**
Kelvin Probes Pistol Grip, 20 ft, 25 A Spring Loaded**Cat. #2118.85**

2. PRODUCT FEATURES

The pistol-grip spring loaded 25 A test probes can measure low resistances very accurately using micro-ohmmeters with (.157 to .236) in (4 to 6) mm diameter binding posts or .157 in (4 mm) diameter safety terminals.

- The pistol-grip spring loaded test probes ensure good contact at the measurement point even if the surface is uneven.



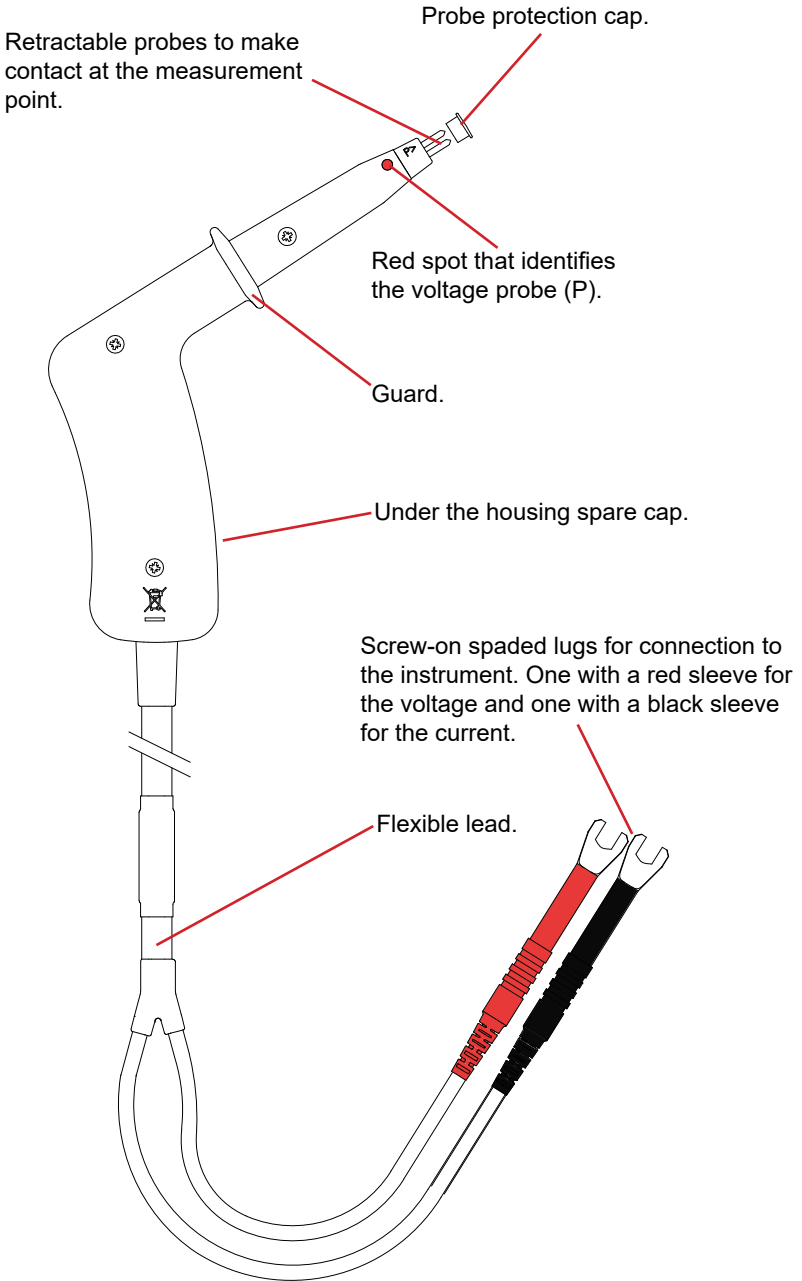
- Each 25 A test probe has very low resistance.
- The measurement is made in 4-wire mode, so lead resistance compensation is not necessary.



NOTE: At the other end of the leads, there are .157 in (4 mm) diameter safety terminals that spaded lugs .236 in (6 mm) diameter screw into.

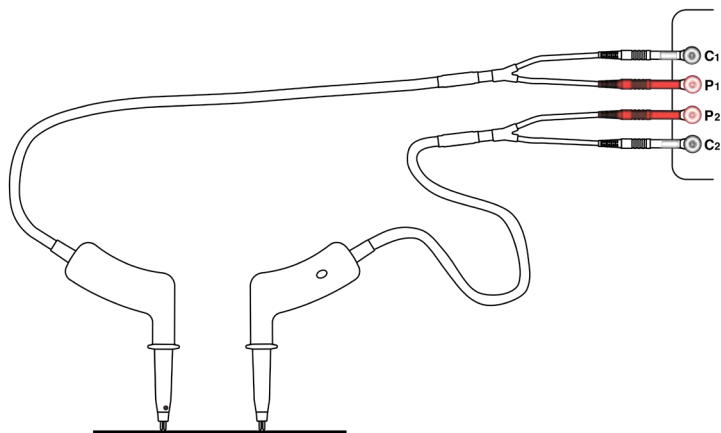
These probes can be used with micro-ohmmeters having either binding posts from (.157 to .236) in (4 to 6) mm in diameter or safety terminals .157 in (4 mm) in diameter.

2.1 SPRING LOADED PISTOL 25 A KELVIN PROBE



3. OPERATION

- Connect the two spring loaded 25 A test probes to the four terminals of the instrument.
- Loosen the nuts on the binding posts. Insert the spaded lugs while carefully connecting the red leads to the voltage terminals (P). Then, tighten the nut.



- If the instrument has safety terminals, unscrew the spaded lugs to make the connection.

For details of the measurement configuration, technical specifications and error messages, refer to the user manuals for the meters being used.

4. SPECIFICATIONS

4.1 ENVIRONMENTAL CONDITIONS

Indoor use.

Operating Range: (14 to 131) °F (-10 to 55) °C and (10 to 85) % RH

Storage Range: (-40 to 158) °F (-40 to 70) °C and (10 to 90) % RH

Degree of Pollution: 2

Altitude: < 6,561.68 ft (2000 m)

Altitude Storage: < 32,808.4 ft (10,000 m)

4.2. MECHANICAL SPECIFICATIONS

4.2.1 Pistol-grip Kelvin Probe

Dimensions (L x H x D):

grip (4.25 x 1.57) in (108 x 40) mm

probe (6.06 x 1.18) in (154 x 30) mm

thickness 1.1 in (28 mm)

Diameter of the probes: .079 in (2 mm)

Center-to-center distance between the probes: .138 in (3.5 mm)

Travel of the probes: .276 in (7 mm)

Lead: 10.33 ft (3.15 m) long

Spaded lugs: for diameters from (.157 to .236) in (4 to 6) mm

Safety terminals: diameter of .157 in (4 mm)

Weight: **10 ft:** Set of two: (2 x 14.82) oz (2 x 420) g

20 ft: Set of two: (2 x 29.64) oz (2 x 840) g

Resistance: approximately (2 x 25) mΩ

Protection index: IP 40 according to IEC 60 529

IK 04 according to IEC 50102

Drop test: According to IEC 61010-1

4.3 ELECTRICAL SAFETY

Electrical safety according to IEC 61010-031, IEC 61557-4, IEC 61557-14

Maximum current: 25 A for 1 min

Maximum voltage: 300 V CAT III

5. MAINTENANCE

Use only factory specified replacement parts. AEMC® Instruments will not be held responsible for any accident, incident, or malfunction following a repair completed other than by its service center or by an approved repair center.

5.1 CLEANING



WARNING: Disconnect the accessory completely.

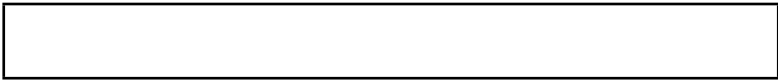
- Use a soft cloth lightly dampened with soapy water.
- Rinse with a wet cloth and then dry with a dry cloth.
- Do not submerge the instrument in water.
- Do not use alcohol, solvents, or hydrocarbons.

5.3 TECHNICAL AND SALES ASSISTANCE

If you are experiencing any technical problems or require any assistance with the proper operation or application of your instrument, please call, mail, fax, or e-mail our technical support team.

5.4 LIMITED WARRANTY

The instrument is warranted to the owner for a period of two years from the date of original purchase against defects in manufacture. This limited warranty is given by AEMC® Instruments, not by the distributor from whom it was purchased. This warranty is void if the unit has been tampered with, abused, or if the defect is related to service not performed by AEMC® Instruments.



NOTES:



08/23
99-MAN 100567 v01