

Hipot Tester

Models H110, H115, H210 & H215

Programmable Digital Electrical Safety Testers



The AEMC® Hipot Testers are designed for AC/DC Withstanding Voltage Testing and Insulation Resistance Testing (IR), providing a safe and accurate test environment for the operator.

The testers comply with the requirement of the electrical equipment and appliance testing standard, UL, CSA and other international standards. The testers can be used for withstanding voltage tests of the various types of electrical equipment and components.

The testers include AC Withstanding voltage test, DC Withstanding voltage test and Insulation Resistance test.

Features

- **No load setup of trip current and output voltage.** A safe way to setup trip current and output voltage without having the high voltage activated, or the use of a load resistor.
- **Large 24 x 2 character LCD with adjustable backlight.** Provides a clear display of all test parameters, including test, step, mode, status, output voltage, trip current and test time.
- **Quick and easy setup from the front panel.** A user-friendly interface provides a quick and easy way to set all parameters.
- **Electronic ramping and testing.** Digitally controlled ramping and test time.
- **Line and load regulation.** Linear amplifier and feedback – control maintains the output voltage independently from load variations.
- **Selectable output frequency.** 50/60Hz operation is selectable through the “UTILITY” setup.
- **Adjustable ARC detect level.** ARC detect level can be programmed in the “UTILITY” setup.
- **Storage of up to 6 tests, 6 steps for each test.** Provides the user with a choice for testing different types of products or different test scenarios.
- **Adjustable output voltage during test.** A special test mode in step 0 allows the user the ability to manually adjust the output voltage during test.
- **Flashing high voltage indicator.** A flashing red LED warns that high voltage is present at the output.
- **PLC remote control.** The 9-pin interface provides:
inputs: START, RESET
outputs: TEST, PASS, FAIL
- **Data lock function.** Front panel can be locked or unlocked by the “UTILITY” setup to prevent unauthorized changes to the setup.

Applications

- Test dielectric strength of electrical insulation
- Test ground circuit continuity of 3-wire appliances and devices
- Detect workmanship defects, such as nicks in wires and components mounted incorrectly
- Locate defective components
- Measure insulation resistance

	H110	H115	H210	H215
AC Hipot – 5kV	✓	✓	✓	✓
DC Hipot – 6kV	—	—	✓	✓
Continuity	✓	✓	✓	✓
Arc Detection	✓	✓	✓	✓
Insulation Resistance (IR)	—	✓	—	✓



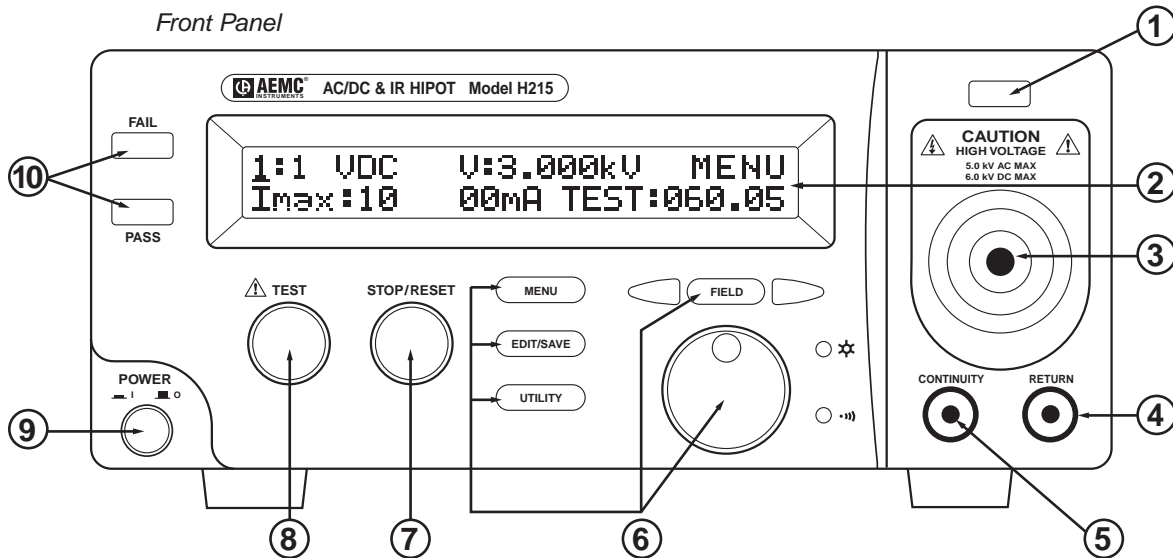
Model H215 tests a board for leakage with optional HV Test Pistol.

Specifications

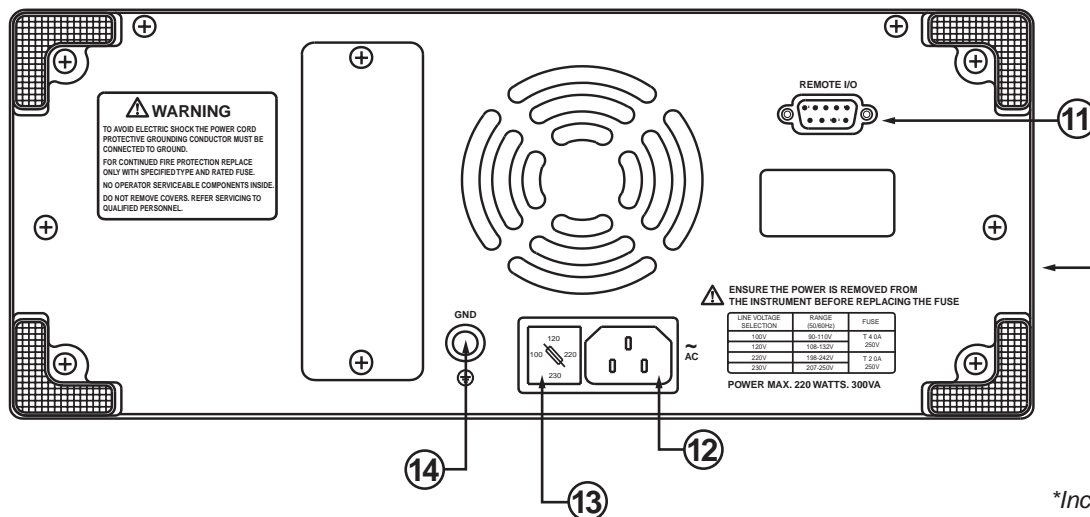
MODELS	H110	H115	H210	H215
ELECTRICAL				
AC HIPOT				
Voltage Range	100V to 5000V _{AC} (5kV)			
Voltage Step Resolution	5V			
Voltage Regulation	±1% of Reading ± 5cts			
Accuracy	±1% of Reading ± 5cts (>500V)			
Test Frequency	50Hz or 60Hz (selectable)			
Current	0.10mA to 20mA in 0.01mA steps			
Max Current Output	20mA @ 5kV _{AC}			
Accuracy	±1% of Reading ± 5cts			
Ramp and Test Time	0.000s to 999.9s			
DC HIPOT				
Voltage Range	–	–	100V to 6000V _{DC} (6kV)	
Voltage Step Resolution	–	–	5V	
Voltage Regulation	–	–	±1% of Reading ± 5cts	
Accuracy	–	–	±1% of Reading ± 5cts (>500V)	
Trip Current	–	–	0.10mA to 7.50mA in 0.01mA steps	
Max Current Output	–	–	10mA @ 6kV _{DC}	
Accuracy	–	–	±1% of Reading ± 5cts	
Ramp and Test Time	–	–	0.000s to 999.9s	
INSULATION RESISTANCE (IR)				
DC Test Voltage	–	500V and 1000V	–	500V and 1000V
Measurement Range	–	1 to 9900MΩ	–	1 to 9900MΩ
Accuracy	1 to 500MΩ	±5% of Reading	–	±5% of Reading
	501 to 2000MΩ	±10% of Reading	–	±10% of Reading
Test Time	–	0.000s to 999.9s	–	0.000s to 999.9s
CONTINUITY CHECK				
Resistance Range	0.001Ω to 1.500Ω			
Test Current	100mA (0.1A)			
Detect Accuracy	0.1Ω @ 1Ω			
Test Time	0.000s to 999.9s			
ARC DETECT				
Detect Current	Selectable in 2mA steps from 2 to 20mA			
STORAGE				
Programmable test sequences	6			
Steps per test sequence	6			
REMOTE INTERFACE (DB-9 CONNECTOR)				
Outputs	Test, Pass and Fail			
Inputs	Start and Reset			
Output Breakdown Voltage	± 350V			
Continuous Load Current	± 100mA			
POWER SUPPLY				
	100V, 120V, 220V, 230V ± 10% @ 50/60Hz (selectable on rear panel)			
MECHANICAL				
Operating Temperature	32° to 104°F (0° to 40°C) @ 80% RH max			
Storage Temperature	14° to 158°F (-10° to 70°C) @ 70% RH max			
Operating Environment	Indoor use only: altitude up to 6500 ft (2000m). Ambient temperature: 32° to 104°F (0° to 40°C) Relative humidity: 80% max. Installation Category II. Pollution degree 2			
Dimensions	17.5 x 13 x 5.8" (446 x 330 x 149mm)			
Weight	26.5 lbs (12kg)			
SAFETY				
Safety Rating	EN 61010-1			
CE Mark	Yes			

Construction

Front Panel



Rear Panel



*Includes carry handle on side

- | | | |
|-----------------------------|--------------------------|---------------------------------------|
| 1. High voltage indicator | 6. Program/setup keys | 11. Remote interface DB-9 connector |
| 2. 24 x 2 character LCD | 7. Stop/Reset button | 12. AC power outlet |
| 3. High voltage output jack | 8. Test button | 13. Fuse holder/line voltage selector |
| 4. Ground jack | 9. Power On/Off switch | 14. Ground terminal |
| 5. Continuity jack | 10. Pass/Fail indicators | |

*HV Test Lead
Lead set with test
probe included*



*HV Test Pistol (6 ft)
Model SP02
Catalog #2117.88
(optional)*



*HV Test Lead 9 ft (3m)
(unterminated without test pistol)
Catalog #2117.89*



ORDERING INFORMATION

CATALOG NO.

Hipot Tester Model H110 (5kVAC)	Cat. #2117.81
Hipot Tester Model H115 (5kVAC and IR)	Cat. #2117.82
Hipot Tester Model H210 (5kVAC/6kVDC)	Cat. #2117.83
Hipot Tester Model H215 (5kVAC/6kVDC and IR)	Cat. #2117.84

All models include tester, lead set with test probe, DB-9 connector and user manual

Accessories

HV Test Pistol Model SP02	Cat. #2117.88
HV Test Lead 9 ft (3m) unterminated at one end (same as SP02 Lead)	Cat. #2117.89

Contact Us

United States & Canada:

Chauvin Arnoux®, Inc.
d.b.a. AEMC® Instruments
200 Foxborough Blvd.
Foxborough, MA 02035 USA
(508) 698-2115 • Fax (508) 698-2118
www.aemc.com

Customer Support – for placing an order, obtaining price & delivery:
customerservice@aemc.com

Sales Department – for general sales information:
sales@aemc.com

Repair and Calibration Service – for information on repair & calibration, obtaining a user manual:
repair@aemc.com

Technical and Product Application Support – for technical and application support:
techinfo@aemc.com

Webmaster – for information regarding www.aemc.com:
webmaster@aemc.com

South America, Central America, Mexico, Caribbean, Australia & New Zealand:

Chauvin Arnoux®, Inc.
d.b.a. AEMC® Instruments
15 Faraday Drive
Dover, NH 03820 USA
(978) 526-7667 • Fax (978) 526-7605
export@aemc.com
www.aemc.com

All other countries:

Chauvin Arnoux SCA
190, rue Championnet
75876 Paris Cedex 18, France
33 1 44 85 45 28 • Fax 33 1 46 27 73 89
info@chauvin-arnoux.com
www.chauvin-arnoux.com