

## Multi-Function Installation Tester Model C.A 6117



Cat. #2138.07

**Measures voltage, current via clamp, power, waveforms, and harmonics; includes DataView® software**

Multi-function instrument for testing voltage, current via clamp, power, waveforms and harmonics. Stores up to 1,000 tests, which can be downloaded and processed with DataView® (included).

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| CONTINUITY / RESISTANCE   |   |
|---|---|
| I Rated / Range / Resolution  | I > 200mA / 39.99Ω / 0.01Ω / ± (1.5% of R + 2cts)<br>12mA / 39.99Ω & 399.9Ω / 0.01 & 0.1Ω / ± (1.5% of R + 5cts) with beep  |
| Range / Resolution / Accuracy   | 4 kΩ / 1Ω / ±(1.5% of R + 5cts) 40 kΩ - 400kΩ / 10Ω - 100Ω / ±(1.5% of R + 2cts)  |
| INSULATION  |   |
| Rated Voltage   | Utest: 50 / 100 / 250 / 500 / 1000VDC   |
| Range / Resolution / Accuracy   | 0.01MΩ to 2GΩ / 10kΩ to 1MΩ / ±(5% of R + 3cts)   |
| Short Circuit Current   | ≤ 3mA   |
| GROUND  |   |
| 3P GROUND<br>Range / Resolution / Accuracy  | 0.50 to 40Ω / 0.01Ω / ±(2% of R + 10cts) 40Ω to 15kΩ / 0.1 to 1Ω / ±(2% of R + 2cts)<br>15 to 40kΩ / 10Ω / ±(10% of R + 2cts)   |
| Others  | Measurement of resistance of auxiliary stakes RH & RS (up to 40kΩ)  |
| Ufk   | Complies with SEV 3569  |
| 1P SELECTIVE GROUND<br>Range / Resolution / Accuracy  | 0.20 to 39.99Ω - 40 to 399.9Ω / 0.01 to 0.1Ω / ±(10% of R + 10cts) (ISel via clamp)   |
| LOOP IMPEDANCE (Zs (L-PE0 AND Zi (L-N OR L-L) – 1P LIVE GROUND                                  |   |
| Live Ground<br>Installation Voltage / Frequency   | 90 to 500 V / 15.8 to 17.5Hz - 45 to 65Hz   |
| High-current mode with TRIP<br>Zs (L- PE) & Zi (L- N or L - L)<br>Range / Resolution / Accuracy | Max. test current: 7.5 A<br>(0.050) 0.100 to 0.5Ω / 0.001Ω / ±(10% of R + 20cts) • 0.5Ω to 3.999Ω / 0.001Ω / ±(5% of R + 20cts) 3.999 to 39.99Ω / 0.01Ω / ±(5% of R + 2cts) • 39.99 to 399.99Ω / 0.1Ω / ±(5% of R + 2cts)                                     |
| NO TRIP mode (Zs (L – PE) Only)   | Test current 6mA – 9mA – 12mA (as required) 0.20 to 0.99Ω / 0.01Ω / ±(15% of R + 10cts) 1.00 to 1.99Ω / 0.01Ω / ± (15% of R + 3cts) 2.00 to 39.99 / 0.01Ω / ± (10% of R + 3cts) 40.00 to 399.9Ω / 0.1Ω ± (5% of R + 2cts) 400 to 3999Ω / 1Ω ±(5% of R + 2cts) |

For more details, download the datasheet or user manual at [www.aemc.com](http://www.aemc.com)

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|  |  |
|--|--|
| Calculation of IK short circuit current (PFC (Zs), I Sc PSCC (Zi)) | Fault current and short-circuit current: 0.1 to 20kA   |
| Integrated Fuse Table  | Yes  |
| Voltage drop V%(Zi)  | -40% to +40%   |
| Others   | Measurement of the resistive and inductive components of Zs and Zi impedances  |
| AC and type RCDs   |  |
| Installation voltage / Frequency                                   | 90 to 500V / 15.8 to 17.5Hz and 45 to 65Hz   |
| IΔn  | 10/30/100/500/650/1,000 (90V - 280V) or variable ramp and pulse test   |
| N-trip test  | At ½ IΔn – Duration 1000ms or 2000ms   |
| Ramp mode  | 0.2 to 0.5 x IΔn(Uf) / 0.3 x IΔn to 1.06 IΔn increments of 3.3% x IΔn  |
| Trip test: R:<br>Range / Resolution / Accuracy                     | 0.2 to 0.5 x IΔn(Uf) / 0.5 x IΔn / 2 x IΔn(selective) / 5 x IΔn<br>Pulse: 0 to 500ms/0.1 and 1ms / 2ms, Ramp mode: 0 to 200 ms / 0.1 ms / 2 ms |
| B-Type RCDs  |  |
| Installation Voltage / Frequency                                   | 90 to 275V / 15.8 to 17.5Hz and 45 to 65Hz   |
| IΔn: ramp / pulse 2 x IΔn<br>pulse 4 x IΔn                         | 10/30/100/500mA<br>10/30/100/500 mA with pulse 4 IΔn<br>Duration: 150 ms with 4 x IΔn or 300 ms with 2 x IΔn                                   |
| Test in ramp mode  | 0.2 x IΔn to 2.2 x IΔn   |
| Trip test: 2 x IΔn<br>4 x IΔn                                      | IΔn ≤ 200 mA: 2.2 x 2 x IΔn<br>IΔn ≤ 200 mA: 1.1 x 2 x IΔn<br>IΔn ≤ 100 mA: 2.2 x 4 x IΔn  |
| OTHER MEASUREMENTS   |  |
| Current by Current Probe C177A                                     | 5.0mA to 199.9A  |
| Current by Current Probe MN77                                      | (1mA*) 5.0mA to 19.99A   |
| Voltage  | 0 to 550VAC/DC / DC and 158 to 500Hz   |
| Frequency  | 10 to 500Hz  |
| Phase rotation   | 20 to 500VAC   |
| Active power   | 0 to 110kW single phase – 0 to 330kW three-phase<br>Simultaneous display of voltage and current waveforms                                      |
| Harmonics  | Voltage and Current / up to 50th order / THD-F / THD-R   |
| GENERAL SPECIFICATIONS   |  |
| Display  | Large 5.7" backlit graphic color LCD 320 x 240 pixels  |
| Storage/Communication  | USB for data transfer to Dataview software (Included)  |
| Power Supply   | Rechargeable battery Lithium-Ion 10.8V, 5.8Ah  |
| Battery Life   | Up to 30 hours   |
| Protection   | IP 53 / IK04   |
| Dimension / Weight   | 11 x 7.48 x 5.04" (280 x 190 x 128mm) 4.85 lbs (2.2 kg)  |

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|--------|---|
| EMC    | IEC61326-1  |
| Safety | IEC61010-1 – 600V CAT III – 300V CAT IV – IEC 61557 |

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