



Electrical Power Testing

Level III Selected General References

Candidates are NOT permitted to bring references into the test center.

The following publications can provide some of the job knowledge required by an electrical power testing technician. While these books may help you prepare for the exam, they are NOT permitted in the test center.

- 29 CFR 1910: Occupational Safety and Health Standards. Occupational Safety & Health Administration.
- 29 CFR 1926: Safety and Health Regulations for Construction.
- 41-1335: manufacturer's instruction book, Westinghouse.
- 72A-1140: M4000 Insulation Analyzer User Guide, 2000. Doble Engineering.
- ANSI/NEMA MG 1 (2011): Motors and Generators. National Electrical Manufacturers Association.
- ANSI Z535.4 (2011): Product Safety Signs and Labels, National Electrical Manufacturers Association.
- ANSI/NETA ATS: Acceptance Testing Specifications for Electrical Power Equipment and Systems, InterNational Electrical Testing Association. ****2009 edition ending 4/24/16; 2013 edition beginning 4/25/16****
- ANSI/NETA ECS (2015): Electrical Commissioning Specifications for Electrical Power Equipment and Systems, InterNational Electrical Testing Association.
- ANSI/NETA MTS: Maintenance Testing Specifications for Electrical Power Distribution Equipment and Systems, InterNational Electrical Testing Association. ****2007 edition ending 4/24/16; 2015 edition beginning 4/25/16****
- ASTM E1934 - 99a (2014): Standard Guide for Examining Electrical and Mechanical Equipment with Infrared Thermography, ASTM International.
- Buss, E. William, Earley, Mark W., and Jones, Ray A. NFPA 70E Handbook for Electrical Safety in the Workplace, Second Edition: National Fire Protection Association. ****ending 4/24/16****
- Carbon Brush and Holder Technical Handbook, 2013. Morgan Advanced Materials.
- Class 6055-31: SquareD Type VR Vacuum Circuit Breaker Instruction Bulletin, 2008. Schneider Electric.
- Don A. Genutis. "Infrared Inspections and Applications." NETA World, Winter 2006-2007.
- Electrical Power Equipment Maintenance and Testing, 2nd edition. Paul Gill, CRC Press.
- Electrical Safety in the Workplace, 2000. Ray A. Jones, National Fire Protection Association.
- GE Digital Energy and XD Electric. IEC Capacitive and Coupling Capacitor Voltage Transformers (CVT and CCVT). General Electric Company.
- GEK-26423D: Ground Distance Relay Instructions, 1993. General Electric.
- GEK-45307K: Transformer Differential Relay with Percentage and Harmonic Restraint, 1990. General Electric.
- GEK-45405G: Differential Voltage Relays, 2014. General Electric.
- Getting Down to Earth: A Practical Guide to Earth Resistance Testing, 2010. Megger.
- Handbook for Electricity Metering. Edison Electric Institute. ****9th edition ending 4/24/16; 10th edition beginning 4/25/16****

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Level III Selected General References, continued

IEEE 18: Shunt Power Capacitors, Institute of Electrical and Electronics Engineers. ****2002 edition ending 4/24/16; 2012 edition beginning 4/25/16****

IEEE 81: Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System, Institute of Electrical and Electronics Engineers. ****1983 edition ending 4/24/16; 2012 edition beginning 4/25/16****

IEEE 141 (1993): Electric Power Distribution for Industrial Plants, Institute of Electrical and Electronics Engineers.

IEEE 142 (2007): Grounding of Industrial and Commercial Power Systems, Institute of Electrical and Electronics Engineers.

IEEE 242 (2001): Protection and Coordination of Industrial and Commercial Power Systems, Institute of Electrical and Electronics Engineers.

IEEE 400.1 (2007): Guide for Field Testing of Laminated Dielectric, Shielded Power Cable Systems Rated 5 kV and Above with High Direct Current Voltage, Institute of Electrical and Electronics Engineers.

IEEE 400.2 (2013): Guide for Field Testing of Shielded Power Cable Systems Using Very Low Frequency (VLF)(less than 1 Hz), Institute of Electrical and Electronics Engineers.

IEEE 450: Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications, Institute of Electrical and Electronics Engineers. ****2002 edition ending 4/24/16; 2010 edition beginning 4/25/16****

IEEE 1106: Installation, Maintenance, Testing, and Replacement of Vented Nickel-Cadmium Batteries for Stationary Applications, Institute of Electrical and Electronics Engineers. ****2005 edition ending 4/24/16; 2015 edition beginning 4/25/16****

IEEE 1188 (2005): Maintenance, Testing, and Replacement of Valve-Regulated Lead-Acid (VRLA) Batteries for Stationary Applications, Institute of Electrical and Electronics Engineers.

IEEE C2-2012 (2012): National Electrical Safety Code (NESC), Institute of Electrical and Electronics Engineers.

IEEE C37.1 (2007): SCADA and Automation Systems, Institute of Electrical and Electronics Engineers.

IEEE C37.2 (2008): Electrical Power System Device Function Numbers, Acronyms, and Contact Designations, Institute of Electrical and Electronics Engineers.

IEEE C37.20.1 (2015): Standard for Metal-Enclosed Low-Voltage (1000 Vac and below, 3200 Vdc and below) Power Circuit Breaker Switchgear, Institute of Electrical and Electronics Engineers.

IEEE C37.20.4: Indoor AC Switches (1 kV to 38 kV) for Use in Metal-Enclosed Switchgear, Institute of Electrical and Electronics Engineers. ****2001 edition ending 4/24/16; 2013 edition beginning 4/25/16****

IEEE C37.96 (2012): AC Motor Protection, Institute of Electrical and Electronics Engineers.

IEEE C37.99: Guide for Protection of Shunt Capacitor Banks, Institute of Electrical and Electronics Engineers. ****2000 edition ending 4/24/16; 2012 edition beginning 4/25/16****

IEEE C57.13: Standard Requirements for Instrument Transformers, Institute of Electrical and Electronics Engineers. ****1993 edition ending 4/24/16; 2008 edition beginning 4/25/16****

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Level III Selected General References, continued

- IEEE C57.104 (2008): Guide for the Interpretation of Gases Generated in Oil-Immersed Transformers, Institute of Electrical and Electronics Engineers.
- IEEE C57.106 (2006): Approved Draft Guide for Acceptance and Maintenance of Insulating Mineral Oil in Electrical Equipment, Institute of Electrical and Electronics Engineers.
- IEEE C57.111 (2002): Guide for Acceptance of Silicone Insulating Fluid and Its Maintenance in Transformers, Institute of Electrical and Electronics Engineers.
- IEEE C57.125 (1991): Guide for Failure Investigation, Documentation, and Analysis for Power Transformers and Shunt Reactors, Institute of Electrical and Electronics Engineers. ****ending 4/24/16****
- Kuphaldt, Tony R. "Boolean Arithmetic." In All About Circuits. Vol. IV. EE Tech Media.
- Kuphaldt, Tony R. "Lessons in Electric Circuits." In All About Circuits. Vol. IV. EE Tech Media.
- M5400 Sweep Frequency Response Analyzer User Guide. Doble Engineering.
- Material Safety Data Sheets, C&D Technologies.
- NEMA ICS 2-2000 (R2005): Controllers, Contactors and Overload Relays Rated 600 V. National Electrical Manufacturers Association.
- NEMA ICS 19 (2007): Diagrams, Device Designations and Symbols. National Electrical Manufacturers Association.
- NFPA 70B: Electrical Equipment Maintenance, National Fire Protection Association. ****2010 edition ending 4/24/16; 2013 edition beginning 4/25/16****
- NFPA 70E: Electrical Safety in the Workplace, National Fire Protection Association. ****2009 ending 4/24/16; 2015 edition beginning 4/25/16****
- NICET Code of Ethics.
- Omega User's Guide (457-0949), 2002. Omega Engineering.
- Power System Relaying, 3rd edition. Stanley H. Horowitz, Wiley.
- The Relay Testing Handbook: Principles and Practice, 2012. Chris Werstuijk, Valence Electrical Training Services.
- SEL-421 Relay: Protection and Automation System Instruction Manual User's Guide (20111215), 2011. Schweitzer Engineering Laboratories.
- TechTopics No. 50: Ground sensor current transformer cable routing, 2012. Siemens.
- TechTopics No. 98: Ground protection in metal-clad switchgear - ground sensor current transformers vs. residual connection of current transformers, 2014. Siemens.
- Ugly's Electrical References, 4th edition. George V. Hart, Jones & Bartlett Learning.
- Voltage, Current, Resistance, and Ohm's Law. SparkFun.
- Watt-Hour Meter Maintenance and Testing, Volume 3-10, 2000. Bureau of Reclamation, Facilities Engineering Branch.

➤ This listing is not intended to be complete or representative.

March 31, 2016