



Content
Community
Connection

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Power Factor Correction Training

Contact us Today for a FREE quotation to deliver this course at your company's location.

<https://www.electricityforum.com/onsite-training-rfq>

Power Factor Correction Training - Our 6-hour live online instructor-led course explains the three types of power factor, from a cause and effect basis and then teaches the intricacies of each type along with the methods to improve each power factor. The course demonstrates how to size power factor capacitors for various types of situations and the pitfalls to be avoided. Several real life examples are worked as a group to demonstrate the techniques used to perform analysis of power factor, size power factor equipment and to quantify the expected results and ROI.

Upon completion of this course, participants should have a meaningful understanding of the various types of power factor, the impact that low power factor has on electric power systems, the causes of low power factor, methods to analyze power factor and methods to improve power factor.

This course is applicable to electrical industry professionals serving either industrial, commercial and institutional power systems. For maximum benefit of this course, students should have an understanding of basic electrical principles such as Ohms law, power, electrical metering, motors and general electrical equipment and systems.

Related Courses

[Power Quality Analysis Training](#)

[Power Quality Troubleshooting and Problem Solving](#)

[Power Quality and Harmonics Training](#)

[Power Quality in Motor Control Applications](#)

[Power Quality Considerations for Energy Efficiency Retrofits](#)

WHO SHOULD ATTEND

- Industrial, Commercial, Institutional Electrical Engineers, And Electrical Maintenance Personnel
- Consulting Electrical Engineers
- Project Engineers
- Design Engineers
- Field Technicians
- Electrical Technicians
- Plant Operators
- Plant Engineers
- Electrical Supervisors
- Managers In Charge Of Plant Electrical Infrastructure

STUDENTS RECEIVE

- This Course Includes Our Latest Power Quality And Grounding Handbook!! (Value \$20)
- **\$100 Coupon** Toward Any Future Electricity Forum Event (Restrictions Apply)
- .6 Continuing Education Unit (CEU) Credits
- **FREE** Magazine Subscription (Value \$25.00)

- Course Materials In PDF Format

COURSE OUTLINE

Power Factor Correction Training - Course Outlin

Introduction to Power Factor

- Definition of power factor
- Benefits of high power factor
- Problems with low power factor
- Types of Power Factor

Fundamental Frequency (Displacement) Power Factor

- Motor currents and PF
- Typical PF by industry
- Lagging (inductive) current
- Leading (capacitive) current
- How much capacitance to add
- Harmonic resonance
- Detuning capacitors to avoid resonance
- Capacitor boosting (Voltage, kVAR, current)
- Local vs. Centralized capacitors
- Fixed vs. automatic PF capacitor systems
- Capacitor switching device ratings
- Cost of low power factor

Distortion Power Factor

- Estimating distortion PF based on harmonic current distortion
- Causes of low distortion power factor (harmonic distortion)

- Typical current distortion by equipment
- What does harmonic current distortion look like?
- Improving distortion PF

Total (true rms) Power Factor

- Function of both displacement and distortion PF
- Best practices
- Decisions to be made about total PF

COURSE SCHEDULE:

Start: 10 a.m. Eastern Time

Finish: 4:30 p.m. Eastern Time

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