



Content
Community
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Power Quality in Motor Control Applications

Course details: <https://electricityforum.com/electrical-training/pq-and-motor-controls>

COURSE DATES AND TIMES

Power Quality in Motor Control Applications Training - Upon completion of our 6-hour live online instructor-led course, students will have a meaningful understanding of the various types of power quality disturbances associated with typical motor control techniques. They should understand the causes of these problems as well as typical means of solving or preventing these problems.

Related Courses

[Power Quality Analysis Training](#)

[Power Quality Troubleshooting and Problem Solving](#)

[Power Quality and Harmonics Training](#)

[Power Factor Correction Training](#)

[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)
- 0.6 Continuing Education Unit (CEU) Credits (6 Professional Development Hours)
- **FREE** Magazine Subscription (Value \$25.00)
- Course Materials In PDF Format

COURSE OUTLINE

Power Quality in Motor Control Applications - Course Outline

Input Circuit power quality – AC Motors

- Across the line motor starting
- Power Factor
- Voltage sags due to inrush current
- Reduced Voltage Solid State Starters
- Harmonics during starting
- Power factor after started

Input Circuit power quality – AC motor drives

- 6-pulse, 12-pulse & 18-pulse input rectifiers
- Problems caused by harmonics
- Harmonic resonance
- IEEE-519 limits for harmonic distortion
- Harmonic mitigation
- Input transient suppression

Input circuit power quality – Other power electronics equipment

- 1-phase motor drives
- Typical distortion
- Harmonic mitigation
- Active front end converters
- Typical harmonics
- Harmonic mitigation
- SCR Controllers (DC motor drives)
- Voltage notching
- Remedies for notching

Output Circuit power quality

- Effect of Pulsed voltage on motors
- Voltage reflection & voltage doubling
- Motor Bearing current
- Typical solutions for motor protection

Electromagnetic Interference (EMI)

- Definition of EMI and RFI
- Sources of EMI
- Typical remedies to protect against EMI

Wrap up

COURSE SCHEDULE:

Start: 10 a.m. Eastern Time

Finish: 4:30 p.m. Eastern Time

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

<https://electricityforum.com/onsite-requestforquote>