

PARTIAL DISCHARGE COURSE

May 18-20, 2021

Denver, CO

Partial discharges (PD) are small electrical sparks that occur as the stator winding insulation deteriorates. By measuring PD, one can plan when to do maintenance or when to rewind a stator.

Seminar Objectives

- to understand the basics of stator winding insulation systems and why they deteriorate
- to understand basic PD theory
- to understand how PD detection devices work
- to interpret the test data collected and relate the data to specific failure mechanisms, to enable you to plan maintenance



Who Should Attend?

The course is designed for engineering and maintenance personnel who either purchase, install, test, maintain and/or repair motors and/or generators. Consultants, manufacturers and repair shop personnel would also benefit from this course. The course is mainly intended for those involved with motors or generators rated 3kV and above.

Instructor: Dr. Nicolas Dehlinger

Dr. Nicolas Dehlinger is a Rotating Machine Engineer at Iris Power (Qualitrol). Nicolas Dehlinger graduated from the Université Laval, Québec, Canada, in 2007 (M.Sc.) and in 2011 (Ph.D.), with a specialization in Electrical Machine Design. Since 2010, he has been working as an electrical design engineer for GE (formerly Alstom) in Tracy, Canada and in Denver, USA. He was mainly involved in generator refurbishment projects, repair/testing and assessment of generator windings and cores. In 2017, Dr. Dehlinger has joined the Iris Power team, where he is mainly involved with technical advice, training, installation, testing and commissioning services on on-line and off-line condition monitoring equipment for high voltage rotating machines.

AGENDA

Day 1

8:30 a.m. – 4:30 p.m.

Motor & Generator Stator Windings

- Stator Winding Design
- Coil Manufacturing Process
- Failure Mechanisms

Day 2

8:30 a.m. – 4:30 p.m.

PD Theory

- PD as a Symptom
- Partial Discharge or Corona
- Void Formation
- Electrical Discharges

PD Detection

- On-line and Off-line testing
- PD sensors
- Noise Cancellation

Day 3

8:30 a.m. – noon

Interpreting Test Results

- Data Presentation
- Trend Analysis
- Polarity Predominance
- Load Effect
- Temperature Effect
- Non-classic PD pulses
- Multiple Failure Mechanisms
- PD Characteristics of Failure Mechanisms

Registration form on page 2

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To register for the seminar please send completed form with credit card information to fax 905-677-8498 or e-mail to khoward@qualitrolcorp.com.

Name: _____
Title _____
Company: _____
Address: _____
City, State _____
Postal/Zip: _____ Phone: _____
E-mail : _____
Special Dietary needs: _____

Please print e-mail address clearly

Payment made via: (check one box)

Master Card

P.O. # _____

Visa

Card # : _____
Expiration Date: _____ CVS # _____
Card Holder Name: _____
Signature: _____

REGISTRATION **Only 35 seats available, so register now.**

Registration includes lunch and breaks daily. A complete set of notes is also included.

**PRICE DOES NOT INCLUDE HOTEL
ACCOMMODATIONS.**

Confirmation will be issued upon receipt of payment.

COST **\$1295.00 USD**

Send registration to:

Karen Howard

Fax: 905-677-8498

Phone: 905-364-4568

khoward@qualitrolcorp.com

LOCATION/VENUE

Hilton Garden Inn Denver Downtown

1400 Welton S

Denver, CO

80202

+1 303-603-8000

Room Rate: \$199.00 US
(includes breakfast)

Book room before April 27, 2021
for Group rate

CANCELLATION POLICY

Cancellation received 30 days prior to seminar date will result in a \$75.00 US processing fee. Withdrawal received up to one week prior to the seminar will be subjected to a charge of \$150.00 US. There will be no refunds a week prior to the seminar. Delegate substitution is permitted.



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