Technical sessions for the machine design engineering professional. Efficiency in control panel design. Complete package includes 11 sessions of the control panel track.

Efficiency in control panel design.

Monday, April 23rd
- Softstarters and the universal motor controller: Intelligent motor control
- Wiring and interface cost saving solutions: Connection and electronic products

Tuesday, April 24
- UL 508a Panels (Part 1 of 4): Power Circuit Protection
- UL 508a Panels (Part 2 of 4): Motor Control and Non-motor Circuits
- Softstarters and the universal motor controller: Intelligent motor control

Wednesday, April 25
- UL 508a Panels (Part 3 of 4): The Control Circuit
- UL 508a Panels (Part 4 of 4): Short Circuit Current Ratings
- Benefits of intelligent low voltage motor control centers
- UL 508a Panels (Part 4 of 4): Short Circuit Current Ratings
- Maintenance and installation advantages of low voltage motor control centers
- UL 508a Panels (Part 4 of 4): Short Circuit Current Ratings
- Torque control solutions with softstarters

Class abstracts are on the reverse side
Abstracts

Wiring and interface cost saving solutions: Connection and electronic products
ABB offers several time and cost saving solutions for your panel fabrication needs. This workshop sets forth specific examples of older fabrication technology and describes improvements using new technologies like Interfast pre-wired cabling system; disconnect, test and measurement blocks; electronic timers with push-in terminals; and three-phase input power supplies. You will be given the opportunity to work hands-on with our software configuration tools.

Softstarters and the universal motor controller: Intelligent motor control
Gain a full understanding of various softstarter and universal motor controller functions (UMC) and how they apply to your needs, including innovative approaches to controlling pump, compressor, chiller, conveyor, fan, mixer and crusher applications. This workshop is half lecture and half student hands-on lab.

UL 508a Panels (Part 1 of 4): Power Circuit Protection
This session defines the products and selection criteria for short circuit protective device used as the panel disconnect means. Covering breakers and disconnects (fusible and non fusible). CEU (**must attend a session for all 4 parts of ‘UL 508a Panels’ for credit)

UL 508a Panels (Part 2 of 4): Motor Control and Non-motor Circuits
Moving on from short circuit protective devices, this session defines the products and selection criteria for motor and non-motor circuit control. Covering contactors and softstarters. CEU (**must attend a session for all 4 parts of ‘UL 508a Panels’ for credit)

UL 508a Panels (Part 3 of 4): The Control Circuit
The functions of the control circuit are another critical part of any UL 508a panel, and this session reviews the selection and application of a wide variety of devices. Covering pushbuttons, limit switches, control circuit power generation, and monitoring devices.

UL 508a Panels (Part 4 of 4): Short Circuit Current Ratings
Now familiar with ABB’s broad offering of component devices, this session addresses short circuit current ratings per UL508a / NEC 409. Covering code requirements, component selection, and necessary ratings. CEU (**must attend a session for all 4 parts of ‘UL 508a Panels’ for credit)

Benefits of Intelligent low voltage motor control centers
Downtime can prove extremely costly in critical process applications. Protective and troubleshooting functions possible with intelligent motor control centers improve productivity and minimize downtime. This workshop provides an overview of technology considerations, configuration types, and cost advantages possible with intelligent motor control center applications.
Maintenance and installation advantages of low voltage motor control centers
Downtime can prove extremely costly in critical process applications. Motor control centers offer a more efficient approach to maintenance and retrofit of group motor control applications. This workshop provides an overview of maintenance and installation considerations as well as the trends in motor control center design facilitate these activities.

Torque control solutions with softstarters
This workshop addresses the effects of water hammer in pump applications. Reduced voltage starting/stopping methods greatly reduce the hammer effects. Torque control is a key feature on the ABB PST and PSE model softstarters which can eliminate water hammer altogether. When stopping, torque control optimizes the motor torque all the way down to zero speed. Torque control can also be used when starting, resulting in improved acceleration control. This workshop is half lecture and half student hands-on lab.