Electrical Engineering Day 2021 Smarter electrical design - increase productivity 23rd of June, 9:00 am CEST (UTC +2)

Our Online Symposium is back in a new Style – We are looking forward to our Electrical Engineering Day 2021.

Under the motto "Smarter electrical design - increase productivity", We are once again offering you a wide range of topics relating to electrical planning in the industrial environment. At this all-day event, you can find out firsthand news about standards and their practical implementation, tips & tricks for efficient control cabinet design and options for optimizing your electrical planning.

Exchange ideas with our control cabinet experts in the chat and experience firsthand how you can strengthen your competitiveness by optimizing electrical planning.

Our online event offers you a compact program of various lectures on all aspects of the planning of electrical equipment for machines and systems. Find out about the latest trends and changes in the specialist presentations. Visit the accompanying virtual exhibition stands and get in touch with the experts from SIEMENS, AC&E, EPLAN, TEKIMA, TÜV SÜD, UL and WSCAD.

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08:30 am	Time to get to know the platform			
09:15 am	Industrial Control Panel acc. IEC Standard and Eu- ropean directives ( CE Mark )	SCCR according to North American Standards for Control Panels	Integrated Engineering with TIA Selection Tool and TIA Portal	Canadian Adoption and En- forcement of CSA Standard C22.2 No. 286-17, Indus- trial Control Panels and As- semblies
10:15 am	Visit of the virtual booth			
10:30 am	Become faster in electri- cal engineering with Control Panel Design in the TIA Selection Tool	What you should know about batteries and DC- UPS. How to choose the right battery for your appli- cation?	Industrial Control Panels: IEC vs. UL vs. EAC. Guide to the conformity of electrical panel and plants for the worldwide market	EMC in the area of machine control cabinets - guide- line, standards and practi- cal tips
11:30 am	Visit of the virtual booth			
12:15 pm	When your motor starter also becomes a sensor	Efficient control panel de- sign - save time and space	Unlock your Control Panel with "Line to Load" Com- munication incl. Simocode	Speed up your Electrical Engineering with SIEMENS TIA tools and ELECTRIX
1:15 pm	Visit of the virtual booth			
1:30 pm	Control panels, industrial machineries and plants: the applications and the wiring methods.	Maximum efficiency in con- trols design and build through digitalization with EPLAN and Siemens	Avoid these common mis- takes and choose the right equipment for your panel	Tipps and Tricks for building control panels used in Indus- trial machinery complying NFPA79 / UL508A for the North American Market
2:30 pm	Visit of the virtual booth			
2:45 pm	Communication in the Cabinet made easy	Fastest possible electrical design – with functional modelling and an inte- grated workflow.	Introducing to CE marking	Become faster in electrical engineering with Control Panel Design in the TIA Se- lection Tool
3:45 pm	Visit of the virtual booth			
5:00 pm	End of the Electrical Engineering Day			



## Visit our virtual webcast:

Our electrical engineering experts are available to answer your individual questions at all lectures in the chat.

### Avoid these common mistakes and choose the right equipment for your panel

Explore 12 common mistakes that can be avoided if you choose the right tools for your electrical design and the correct equipment.

Speaker: Siemens

## What you should know about batteries and DC-UPS. How to choose the right battery for your application?

In this webinar, you will learn which points to consider when choosing the right battery. Which battery type in which capacity is the right one for my application?

Furthermore, you will learn to what extent events and environmental conditions influence the lifetime of a battery.

Speaker: Siemens

### SCCR according to North American Standards for Control Panels

According to North American Standards the SCCR value (Short Circuit Current Rating) shall be stated on the name plate of the Control Panel. This value shall of course not be smaller than the possible short circuit current value at the installation place. This presentation guides you in this topic and how to determine the SCCR value for your Control Panel.

Speaker: Siemens

### Industrial Control Panels acc. IEC standards and European Directives (CE Mark)

Most of the global markets require and apply international IEC standards.

In Europe, in addition the relevant European Directives need to be fulfilled for market access. In this workshop, you will get an overview about the most relevant European Directives for electrical equipment of machines as well as for industrial control panels.

Get the key details about the latest requirements and basics concerning IEC standards including an update on the safety standard for electrical machinery equipment addressed by the EN 60204-1.

Speaker: Siemens



## Become faster in electrical engineering with Control Panel Design in the TIA Selection Tool

Switching and protecting motors does not just include the selection of control products. It is more about the dimensioning of several components, cables with calculations that should also comply with certain standards and regulations. What if you could design your load feeders with just a few clicks and receive all the important information such as cable cross-sections and short-circuit calculations? And all according to UL or IEC standards? Our embedded functions for electrical engineering in the TIA Selection Tool can do all of this for you. Let us show you how easy and quick it is and learn more about our new Control Panel Design.

Speaker: Siemens

### EMC in the area of machine control cabinets - guideline, standards and practical tips

What effect does the current EMC Directive 2014/30 / EU have on the control cabinet? Which standards are relevant and must be considered? And how can electromagnetic phenomena be considered during the engineering phase? In this lecture we would like to explain practical tips as well as the current guideline and the relevant standards and their application. *Speaker: Siemens* 

#### Unlock your Control Panel with "Line to Load" Communication

Learn how circuit protection and control devices inside your control panel provide a clear window into the real-time health of your power circuits. This presentation will follow the electrical path from the main breaker down to individual motor loads for full voltage, reduced voltage and variable frequency drives. Using common fieldbus networks including PROFINET or EtherNet/IP, we will show how these solutions provide crucial operational, statistical and diagnostic data to maximize productivity for your machine or process.

Speaker: Siemens

## Integrated Engineering with TIA Selection Tool and TIA Portal

How can you reduce the costs of your industrial control panel? Reduce your engineering time! Engineering time accounts for nearly 50% of the costs of an industrial control panel. An integrated engineering workflow from product selection through automation engineering reduces engineering time and the possibilities of costly errors. In this seminar, we will show you what an integrated engineering workflow looks like in the TIA Selection Tool and TIA Portal and how integrated engineering can reduce your engineering time.

Speaker: Siemens



# Tipps and Tricks for building control panels used in Industrial machinery complying NFPA79 / UL508A for the North American Market

To full fill and to understand the relevant requirements of NFPA79 or UL508A and to pass the approvement of the authority having jurisdiction we want to show you in this short session some simple ways. Let's talk about easy configuration of Feeder, Branch and control circuits and how to use the suitable software tool "Control Panel Designer".

Our solution will contain wire dimensioning, component selection to create a non-fused project with 65 kA High SCCR including terminals.

Speaker: Siemens

## When your motor starter also becomes a sensor

Your ET200SP Motor Starter are more than just a motor starter and protector, it's a sensor! The data in the ET200SP MS gives you the opportunity to reduce down time and plan maintenance to reduce cost. ET200SP Motor Starter gives you the opportunity to make a better decision for a more sustainable and flexible operation.

Easy planning, engineering & operation with hybrid motor starters with Industrial Ethernet communication.

Speaker: Siemens

## Fastest possible electrical design – with functional modelling and an integrated workflow.

In order to stay competitive, companies are looking to increase the efficiency of their overall design process, while ensuring the fastest possible order execution and manufacture of their machine or equipment. In this presentation, we will show how you can leverage NX Industrial Electrical Design to complete the electrical design of industrial equipment in the fastest and most efficient way possible. It all starts with complete electrical schematic design package with integrated 3D cabinet design, built from the ground up to create modular, functional electrical designs which can be easily reused and increase both the efficiency of engineering and quality of design. This modularization provides the basis for efficient configure-to-order design workflows and effective change management to speed up order execution and eliminate costly manual rework. Come see how functional electrical design can help you stay ahead of your competition!

Speaker: Siemens



## Communication in the Control Cabinet made easy

Adding communication to the control panel has many added benefits for both panel builders and endusers. For the end user, communication allows for system level diagnostics that can help avoid costly downtimes. For panel builders, adding communication in the control panel can mean a significant reduction in wiring and assembly time. In this seminar, we will explore technologies such as IO-Link and Industrial Ethernet (PROFINET) enabled pilot devices that add communication in the control panel while reducing overall wiring and assembly time.

Speaker: Siemens

#### Efficient control panel design - Save time and space

The challenges regarding time and cost pressure in electrical engineering and switch cabinet construction are enormously high. We give you tips and tricks for efficient control cabinet construction and show you a selection of selected examples of space and time-saving solutions for the electrical equipment of machines.

Speaker: Siemens

## Industrial Control Panels: IEC vs. UL vs. EAC. Guide to the conformity of electrical panel and plants for the worldwide market: EU, North America, Russia, Australia and Brazil.

Export worldwide is a common topic: Statistics show 49% of the European machinery and plants remain in Europe, the other 51% are exported outside EU. The main question is: Do our electrical panels and machinery meet all the requirements of the destination country?

Our course is a practical export guide that may be of great help for all the designers who need to select components and design rules in the main worldwide markets starting from a Control Panel produced according to the European standard (EN – IEC – ISO) and assessing the "deviations" of each market (North America, Russia and Brazil and Australia).

Speaker: AC&E

#### Maximum efficiency in controls design and build through digitalization with EPLAN and Siemens

Simplify and maximize your engineering efficiency using the EPLAN Software solutions and Siemens components. Through digitalization and the creation of a digital twin, users can benefit from better visualization and efficient engineering during the design process and leverage the digital twin for improving the control panel building process.

Speaker: EPLAN



Control panels, industrial machineries and plants: the applications and the wiring methods. Understanding the USA and Canadian Standards versus European Standards.

USA and Canadian Standards are very different from those ones used in other Countries. During the workshop we will introduce the main regulations for the electrical panels, the industrial machineries and plants, focusing on quality marks and certifications differences. We will compare the wiring methods for cables, cable trays and raceways with specific applications and examples.

Speaker: TEKIMA

### Introducing to CE marking

The presentation provides a guide through the EU directives for CE marking, especially regarding electrical devices and systems. The knowledge about this is significant for the trade in the European economic area and necessary for manufacturers, distributors, importers and authorized representative of such applications.

Speaker: TÜV SÜD

## Canadian Adoption and Enforcement of CSA Standard C22.2 No. 286-17, Industrial Control Panels and Assemblies

Industrial Control Panels Certified for Canada will be required to comply with CSA Standard C22.2 No. 286-17, Industrial Control Panels and Assemblies on and after January 6, 2022. Although C22.2 No. 286 currently applies as the Canadian standard for industrial control panels, the Canadian Electrical Code (CEC) has referred to C22.2 No. 14-13 with respect to industrial control panels. This allowed panels to be certified for Canada to C22.2 No. 14-13. This will change beginning on January 6, 2022. This presentation will be an overview of changes to C22.2 No. 286-17 when compared to the previous edition C22.2 No. 286-15. The presentation will focus on the major changes to the standard and how they will affect designers and builders of industrial control panels destined for the Canadian market. The presentation will also touch on how these changes will affect designers and builders of industrial control panels who certify panels for both the Canadian and US market.

Speaker: UL

#### Speed up your Electrical Engineering with SIEMENS TIA tools and ELECTRIX

Engineering is a lot easier when combining Siemens TIA tools and electrical CAD software right from the start. ELECTRIX - the new electrical design software from WSCAD – comes with the integration of the Siemens product data. Electrical schematics, control cabinet design and automated manufacturing of control cabinets just got much easier and faster.

Speaker: WSCAD