



**PHYSICAL ONE DAY SEMINAR ON
“INTRODUCTION TO INNOVATIVE LOW-VOLTAGE (LV)
ELECTRICAL CONNECTION METHODS THAT IMPROVE
SAFETY AND RELIABILITY WHILE ENSURING COMPLIANCE
TO MS IEC 60364-5-52 AND ASSOCIATED STANDARDS”**

SPEAKERS;
Mr. CHRISTOPHE DOUZET
Mrs. SMITHA HARSHA VARDHANA
MRS KARINE POLYCARPE
Mr. JULIEN BROUSSEAU

Date : 10TH JULY 2023 (Monday)
Time : 9.00 A.M. – 5.30 P.M.
Venue : SUMMIT HOTEL, PETALING JAYA, SELANGOR

BEM Approved CPD/PDP Hours: 5.0
IEM23/HQ/238/S

LIMITED TO 100 REGISTERED PARTICIPANTS ONLY
(First-Come-First-Serve Basis)

Closing Date: 03RD JULY 2023 2022
(Or at Earlier Date; Once the Numbers Reach 100 participants)

NO online registration will be allowed after the Closing Date

Organized & Hosted by:
Building Services Technical Division (BSTD), IEM
In Collaboration with Global Lightning Technologies (M) Sdn Bhd & nVent

Cancellation Policy

No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with 7 days prior notification and substitute will be charged according to membership status.

Personal Data Protection Act

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

MAIN SYNOPSIS

An introduction to innovative low-voltage (LV) electrical connection methods that improve safety and reliability while ensuring compliance to MS IEC 60364-5-52 and associated standards.

At the end of the training course, participants would be able to:

- understand how to select, design and specify high-power LV connections (e.g. transformer to main switchboard, switchboard to MCC) using a revolutionary alternative to cable and busduct.
- select and specify innovative component solutions that allow easier compliance to IEC 61439-1 while ensuring long-term improved performance.
- Size and select surge protection devices using IEC 61643-11 and IEC 62305 as a baseline.

TOPICS PRESENTED

Topic 1 :

Introducing : nVent ERIFLEX Flexbus Low-Voltage Power Distribution - Reliable Flexible Electrical Connection Solution

The nVent ERIFLEX Flexbus System is an innovative connection solution between two pieces of electrical equipment (such as a transformer, switchboard or generator. This unique concept brings an alternative solution to the market by providing faster installation and reducing total install cost.

Flexbus Advanced maintains a high level of reliability and creates an easy and customizable connection on-site without additional design study, specific specialized workforce or expensive tools.

Flexbus Advanced is a complete low-voltage power connection system designed for multiple applications that include connections from transformer to switchgear, interconnection between transformers, connections from or to generator, switchgear interconnection and machine connection.

Advanced Technology insulation sets the standard in the electrical market, with all products being low smoke, halogen-free, flame retardant (LSHFFR) and high temperature.

Topic 2 :

Benefits of Using Third Party Short-circuit Tested Conductors According To IEC 61439-1:2020 and Third Party Tested Power and Distribution Blocks According To IEC 60947-7-1

Learning Objectives

- Understand the specifics of IEC 61439-1:2020 as pertaining to conductors
- Learn about third party short-circuit tested conductors
- Understand other benefits associated with the use of such conductors
- Understand the specifics of IEC 61439-1:2020 as pertaining to terminals for external conductors
- Understand what IEC 60947-7-1 is
- Understand how terminals who meet IEC 60947-7-1 can help you exceed the requirements of IEC 61439-1:2020
- Select products which meet IEC 60497-7-1

Agenda

- Insight about IEC 61439-1
- Example of short-circuit tested conductors
- Other benefits of these conductors
- Terminals for external cables and IEC 61439-1
- Insight about IEC 60947-7-1
- Example of products tested according to IEC 60947-7-1

Topic 3

Surge Protection Fundamentals in accordance with IEC 62305 and IEC 61643-11

Learning Objectives

- Understand how Lightning Enters Power lines
- Understand the lightning protection design process and risk assessment as per IEC 62305-2
- Understand what are Surge Protection Devices and Transient Voltages
- Learn about types of SPD devices, their advantages and short comings
- Learn about the different class tests as per IEC 61643-11
- Understand key performance parameters that one can use, in making the appropriate selection of SPD's
- Learn about Surge Filtering

Agenda

- How Lightning Enters Powerlines
- Introduction to Surge Protection
- The Appropriate Selection of SPD's
- nVent ERICO Transient Discriminating Technology and other benefits of nVent ERICO SPD including high temporary overvoltage withstand
- Surge reduction filters, a premium surge protection which provides significantly lower let through voltages and voltage rise time in comparison with other types of SPD's which are wired in shunt

SEMINAR SPEAKERS

SPEAKER 1



MR CHRISTOPHE DOUZET

CHRISTOPHE is the Global Director for the nVent ERIFLEX product range. He has been working at nVent since 2007 in the product management team and is responsible for the product offering and strategy of the nVent ERIFLEX product line. He played an active role in the product development and launch of the nVent ERIFLEX Flexbus solution. Prior to nVent, his experience was in the HV transmission lines accessories and heavy industrial equipment for power plants.

SPEAKER 2



**MRS. SMITHA
HARSHAVARDHANA**

SMITHA has been working as an Application Engineer in nVent since 2016. She holds a Master's Degree in Power Engineering from NTU Singapore & a Bachelor's Degree in Electrical & Electronics from India. She has around 20 years of experience in electrical power engineering, including electrical system design, equipment sizing and specification, and earthing and lightning protection design.

SPEAKER 3



MRS KARINE POLYCARPE

KARINE has been working for nVent since 2016. She holds a Master's Degree in engineering and business from France and has been working in the electrical industry for more than 10 years. Amongst others, she spent 3 years in India working on electrical connections for heavy industrial applications. She is currently a business developer specializing in the roll-out of nVent ERIFLEX Flexbus in Asia.

SPEAKER 4



MR JULIEN BROUSSEAU

JULIEN has been working for nVent since 2007 starting as an engineering intern in the USA before holding various engineering and sales positions across nVent in the Netherlands, China and Singapore. He is currently leading our development efforts in the fast growing e-mobility and energy storage verticals markets. Julien holds a bachelor and masters degree in mechanical engineering from Cleveland State University, Ohio, USA.

PROGRAMME

TIME	PROGRAMME	SPEAKERS
08:30 - 09:00	<i>Registration of Participants</i>	
09:00 - 09:05	Welcome Address & Opening Speech	BSTD Representative
09:05 - 12:30	<p>Introducing : nVent ERIFLEX Flexbus Low-Voltage Power Distribution - Reliable Flexible Electrical Connection Solution Tested and Compliant to MS IEC 60364-5-52</p> <p>9h05 - 10h Flexbus introduction - Value proposition - System overview .</p> <p>10h-10h45 Flexbus products in details</p> <p>Low Smoke Halogen Free Flame Retardant Insulation - Temperature Rise - Conductor Arrangement - Skin Effect - Short-Circuit Insulation Thermal resistance- Reinforced Insulation.</p>	Christophe Douzet/ Smitha HarshaVardhana

10.45 - 11.00	Morning Coffee & Tea Break	
	11h-11h30 FleXbus Conductors in details Voltage Drop - Harmonics 11h30- 12h30 Related Standards nVent ERIFLEX Flexbus Performance Assessment vs. IEC 60228; IEC 60502-2 and IEC 60364	Christophe Douzet/ Smitha HarshaVardhana
1230- 1330	Lunch Break	
13:30 - 1500	Benefits of Using Third Party Short-circuit Tested Conductors According To IEC 61439-1:2020 and Third Party Tested Power and Distribution Blocks According To IEC 60947-7-1	Julien Brousseau/ Karine Polycarpe
15:00 - 15:15	Afternoon Coffee & Tea Break	
15:15 - 16:45	Surge Protection Fundamentals in accordance with IEC 62305 and IEC 61643- 11	Smitha HarshaVardhana
16:45 - 17:00	Q & A Session and Discussion End of Course	

“IEM reserves the right to alter or cancel the programme due to unforeseen circumstances at its discretion”

For further details, kindly contact:

The Institution of Engineers, Malaysia
Bangunan Ingenieur, Lots 60/62, Jalan 52/4, P.O. Box 223 (Jalan Sultan),
46720 Petaling Jaya, Selangor

Tel: 603-7968 4001/2 **Fax :** 603-7957 7678 **Email :** shahrul@iem.org.my / amira@iem.org.my

REGISTRATION FORM

PHYSICAL ONE DAY SEMINAR ON

"INTRODUCTION TO INNOVATIVE LOW-VOLTAGE (LV) ELECTRICAL CONNECTION METHODS THAT IMPROVE SAFETY AND RELIABILITY WHILE ENSURING COMPLIANCE TO MS IEC 60364-5-52 AND ASSOCIATED STANDARDS"

10TH JULY 2023 via **PHYSICAL EVENT@SUMMIT HOTEL, PJ)**

Tel: 603-7968 4001/2 Fax: 03-7957 7678

Email: shahrul@iem.org.my / amira@iem.org.my

PARTICIPANT COMMITMENT FEES (Fees are lower due to the event being sponsored)

IEM Member	RM50.00
Non IEM Member	RM 80.00

No	Name(s)	IEM Membership No.	Grade	Fee (RM)*
SUB TOTAL				
<i>Please ADD + 6% SST</i>				
TOTAL PAYABLE				

PAYMENT DETAILS :

Cash RM _____

Cheque No. _____ for the amount of RM _____ (non-refundable) and made payable to "THE INSTITUTION OF ENGINEERS, MALAYSIA" and crossed 'A/C Payee Only'.

(SHOULD PAYMENT IS MADE, KINDLY EMAIL THE 'BANK-IN-SLIP' TO IEM FOR VERIFICATION BEFORE THE EVENT FOR EASY REGISTRATION)

FULL PAYMENT must be settled before commencement of the seminar, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non-refundable.

For **ONLINE REGISTRATIONS**, please note that **PAYMENT MUST be made BEFORE the CLOSING DATE**. If payment is not received within the stipulated time, the registration fee will be reverted to the normal registration fee.

Contact Person: _____

Designation: _____

Name of Organization : _____

Address : _____

Telephone No. : _____ (O)

Fax No : _____ (O)

Handphone: _____ (HP)

Email: _____

Signature & Stamp _____

Date _____

TERMS & CONDITIONS:

- For ONLINE REGISTRATIONS, only ONLINE PAYMENT is applicable [via RHB and Maybank2u – Personal Saving & Personal Current ; Credit Card - Visa/Master.
- Payment via CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL ORDER / LO / WALK -IN will be considered as NORMAL REGISTRATION
- The Organising Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.