

Half-Day Seminar on “Fundamental Electrical Low Voltage Design, Calculations, and Power Protection Technologies”

(Co-organised with ABB Malaysia Sdn. Bhd.)

Date : Saturday, 13 December 2025
Time : 9:00 a.m. – 1:00 p.m.
Venue : Renaissance Hotel, Johor Bahru
Speaker : (1) Mr. John Chin, Product Marketing Director, Smart Power and Smart Building
 (2) Mr. Gary Aw, Global Semiconductor Business Development, Power Protection Product Line

Synopsis

The talk aims to elaborate the fundamental of design rules and calculation in accordance with relevant IEC standard, particularly IEC 60364 that ensures continuity of power supply, robustness and compliance. Characteristics of components used in Low Voltage will be explained in detail coupled with how to apply the rightful design. The talk will also elaborate on topics such as loading profile, cable size calculation, short circuit calculation, coordination of breakers and others. The talk expands further with Power Protection Concepts in Semiconductor Industry with application cases.

Participants will gain knowledge on key aspects of low-voltage design, including:

- Loading profiles
- Type of conductors, voltage drop and size selection
- Type of protection devices & selection method
- Short circuit, calculation and let-thru energy limitation
- Breakers' coordination
- Design simulation tool
- Power Protection Concepts

Time	Tentative Programme
8:30 a.m. – 9:00 a.m.	Registration
9:00 a.m. – 9:05 a.m.	Welcome Speech by IEM (SB) Organizing Committee and ABB
9:05 a.m. – 10:30 a.m.	Low Voltage Components and Design Concept
10:30 a.m. – 10:45 a.m.	Coffee Break
10:45 a.m. – 12:45 p.m.	• Short Circuit Introduction and Calculation • DocWeb Introduction (Simulation Tools) • Power Protection Technologies and Case Applications in Semiconductor Industry
12:45 p.m. – 1:00 p.m.	Q&A Session
1:00 p.m.	Closing & End of Talk (LUNCH IS PROVIDED)

About the Speakers:



Mr. John Chin is a dynamic leader who has built a remarkable career transitioning from a hands-on technical role to a senior commercial and marketing position. He began his journey in 2007 as a Project Sales Engineer with EITA Power System, specializing in low-voltage (LV) equipment and managing both project execution and commercial engagements. In 2010, he joined Schneider Electric, where, over a distinguished 14-year tenure, he progressively expanded his expertise across Malaysia, Singapore, and Brunei. During his time there, he played a pivotal role in developing marketing and business strategies that supported the company's ambitious digital and automation transformation, ultimately leading to his leadership position in Services Marketing and Operational Excellence. Today, as the Product Marketing Director for Smart Power & Smart Building at ABB Malaysia, John oversees product technical and commercial management, business strategy, and technical training. His success is driven by a unique ability to integrate deep engineering insight with commercial acumen—delivering exceptional outcomes for both customers and the company.



Mr. Gary Aw has been working in ABB for over 7 years as the Power Protection Global Semiconductor Business Development Manager. Prior to ABB, he worked across various parts of the electronics and semiconductor industry value chain in both commercial and technical field including Dow Chemical/Dow Corning, Broadcom, Infineon and Globalfoundries.

Participant Fees:

Grade	Fee
IEM Members	RM 100.00
Non-IEM Member	RM 150.00

Closing Date: 9 December 2025

Registration will be on a first-come-first-serve basis. Kindly return the reply slip to the IEM (SB) office before **9 December 2025** together with a non-refundable cheque for the participant fees made payable to **The Institution of Engineers, Malaysia (Southern Branch)**. Alternatively, you could bank-in the participant fees into the **Institution's Maybank Current Account (No. 5-013920-15708)**, and to facsimile both the Bank-in and Reply Slips to the Institution. The Institution requests all members co-operation in ensuring fees are paid in advance for the seminar. Please also be reminded that fees will not be refunded to absent participants who have paid, and to also note that all reservations must be paid despite participant cancellations. Thank you for your continuous support of the Institution.

Chairman, Sub-Committee on Seminar and Technical Talk, IEM (SB)



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Calculations and Power Protection Technologies”**

Saturday, 13 December 2025, 9:00 a.m. – 1:00 p.m.
at the Renaissance Hotel, Johor Bahru.

I wish to attend the above talk. I enclosed herewith a cheque no. for the amount of RM.....as payment for the participant fee.

Name of Member: Membership No: I/C No:

Address: Tel(O):(Fax).....

..... Tel (H/P):

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