

TECHNICAL TALK ON “MITIGATING HARMONICS IN HVAC AND ELECTRICAL SYSTEMS”

Organised by Building Services Technical Division, IEM

BEM Approved CPD/PDP Hours: 2 Hours

Ref No: IEM20/HQ/014/T

Date : 04 MARCH 2020 (Wednesday)
Time : 5.30 p.m. – 7.30 p.m.
Venue : Auditorium Malakoff,
Ground Floor, Wisma IEM, Petaling Jaya, Selangor
Speaker : MR VINOD JETHANI

SYNOPSIS

This presentation will focus on: **Mitigating Harmonics in HVAC and Electrical Systems** – One of the most misunderstood design elements in an HVAC building is the role Harmonics play in the electrical system. Harmonics are harmful, energy-wasting currents which flow in the electrical system.

Harmonic Distortion - A by product of modern electronics, occurs when large numbers of personal computers, uninterruptible power supplies (UPS), variable-frequency drives (VFDs), and other devices using solid-state power-switching supplies to convert (AC) power to (DC) power are present.

In HVAC systems - Harmonic in the power supply can raise the temperature of electrical equipment and therefore inhibit performance, as a result of the increased application of high-speed switching equipment, this has become an increasing problem. Let us make our electrical system clean power and further improve building efficiency.

The presentation will further touch on:

- Fundamentals of “Harmonics”
- The Ideal vs. Distorted Waveform
- Definition of Harmonics
- Calculation of THiD
- Harmonic Producing Loads
- Standards and Recommendations
- Harmonic Mitigation Techniques & Software Tools

SPEAKER BIODATA

Mr Vinod Jethani has a background in Mechanical Engineering, he has been associated with HVAC industry for more than 23 years, currently he is working with Danfoss as Business Driver, Commercial Buildings – Asia Pacific Region based in Kuala Lumpur since July 2017 and currently, Vinod is based in Singapore.

He completed his Mechanical Engineering degree (MEng) in 1996 from Devi Ahilya Vishwavidyalaya University, Indore India. Vinod has been engaged in execution of several infrastructure buildings i.e. Airports, Hospitals, Hotels, Office Buildings, Pharmaceuticals, Semiconductor facilities etc.

Ir. YAP CHEE HONG

Chairman

Building Services Technical Division (BSTD)

ANNOUNCEMENT TO NOTE FEES

(Effective 1st October 2017)

Members

Registration Fee	:	No Charge
Administrative Fee	:	
<u>Online</u>		RM15
<u>Walk In</u>		RM20

Non-Members

Registration Fee	:	RM50
Administrative Fee	:	RM20

- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- **To secure your seat, kindly register online at www.myiem.org.my**

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CPD Hours Validation:

Name:

Membership No.:

Signature:

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For intending participants who choose to ‘walk in without prior registration’,
IEM SHALL NOT be responsible for any direct or consequential losses”.**