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# ieema journal

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## Hon'ble Power Minister of India Shri RK Singh Inaugurates BuildELEC InteLECT DistribuELEC 2024



Hon'ble Cabinet Minister of Power and  
New & Renewable Energy,  
**Shri RK Singh**

### Inside...

**37 Cover Story**  
**The Zip Zap Zoom of E Vehicles**  
eMobility, EVs & Charging Infrastructure

**82 Insight**  
Dr. Deepak Lakhapati

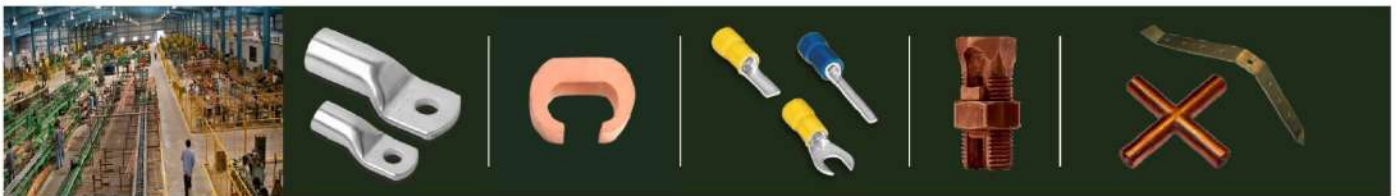


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# INSULEC

1-2 February 2024

HOLIDAY INN  
Mumbai International Airport  
Mumbai

## 11<sup>th</sup> International Conference on Electrical & Electronic Insulating Materials & Systems



### The Conference will be of special interest to:

- Manufacturers of all types of electrical and Electronic Insulating Materials
- Users of Insulating materials/ Insulators, Consultants and Researchers
- Practicing Engineers and Designers of Electrical Machines and Electrical Insulation Systems

For more details, contact:

**Seetharaman K**

Mob: +91 9980004982 | Email: k.seetharaman@ieema.org

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## CONTENTS

Volume 15 Issue No. 06 February 2024 CIN U99999MH1970GAP014629  
Official Organ of Indian Electrical & Electronics Manufacturers' Association  
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10

### From the President's Desk

12

### Samvaad

14

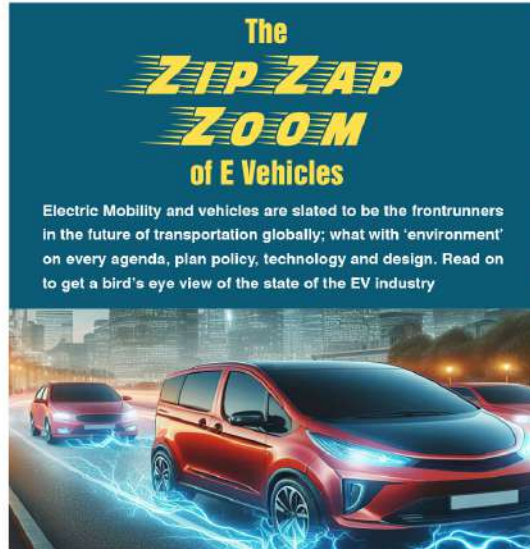
### IEEMA Events BUILDELEC INTELECT DISTRIBUELEC 2024

Read about DistribuELEC Intellect BuildELEC 2024 held in Mumbai and inaugurated by Power and New & Renewable Energy Minister Shri RK Singh

38

### Cover Story The Zip Zap Zoom of E Vehicles

Read about the key factors, market dynamics, and the global impact of this brand new 'Boss Baby' of the electric industry!



46

### ieema Thinktank

Voices the concerns, transformational ideas and most valuable outlook from thought leaders of the power industry. This month we feature:

**Mustafa Wajid,**  
**Sundaresan SA**  
**Dr Amitabh Saran**

56

### Case Study Electric Vehicle Technology & Advancement



Electric vehicle technology and advancement by Dr. Rajesh Kumar Arora and Divyanshu Arora

In an era marked by pressing environmental concerns and a growing need for sustainable transportation solutions, this article aims to provide a comprehensive understanding of the core elements that underpin the EV revolution. This article explores the fundamental aspects of electric vehicles (EVs), shedding light on their history, types, key components, performance characteristics, challenges, and future prospects.



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# Don't give Lightning and Surge Voltage a chance



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Sub Panel



Surge Arrester  
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Building Connections





68

Case Study

Energy Conservation in Transportation: Promoting Sustainable Mobility

through Alternative Fuels and Electric Vehicles

Energy Conservation in Transportation Promoting Sustainable Mobility through Alternative Fuels and Electric Vehicles Sumbul Munshi IEI Paper September 2023 by Sumbul Munshi and Saumitra Pathak



68

Energy Conservation in Transportation:

Promoting Sustainable Mobility through Alternative Fuels and Electric Vehicles

82

Insight

Natural Disaster Management & Power Restoration



Natural Disaster Management & Power Restoration

IEEMA columnist Dr. Deepak Lakhapatil in his regular column illustrates his experiences from Oman where he restored power lines and tackled other issues related to the damage caused by cyclones, storms and hurricanes

Dr. Deepak Lakhapatil in his regular column illustrates his experiences from Oman where he restored power lines and tackled other issues related to the damage caused by cyclones, storms and hurricanes.

88

Special Feature

Asset Management of Distribution Transformer Fleet

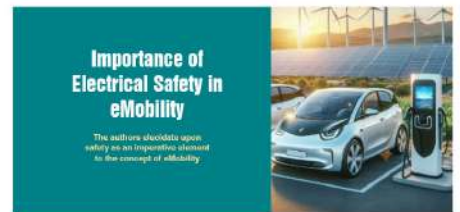
Trafotch 2023 Winning Paper – 1st Runner Up Distribution Transformers, as defined in the standard[1], are transformers with capacity under 2500kVA and operating at voltage levels lower than 33kV.

These are often located near load centers and form an essential part of utilities' connect with the consumers.

94

Guest Article

Importance of Electrical Safety in eMobility



Importance of Electrical Safety in EMobility by P. K. Bhattacharyya and Srinivas Rao G

98

Guest Article

Effect of Site Conditions on Performance of Energy Efficient Motors



Effect of Site Conditions on Energy Efficient Motors by Sachin S Pilkhane & Tushar Gayahaukar

88



Asset Management of Distribution Transformer Fleet

by Analysis of Winding Failure

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102

## Guest Article

### Solutions For E-Mobility



#### Solutions For E-Mobility

The author presents a study of the topology in a charging station

Asheen Dalera presents a study of the topology in a charging station

104

## Ministry Updates

### Compensation Methodology for Operating a Thermal (Coal) Generating unit below 55% Minimum Power Level



#### Compensation Methodology for Operating a

Thermal (Coal) Generating unit below 55% Minimum Power Level

Penetration of large-scale renewable generation in the grid is bringing a new set of challenges in the power sector.

109

## Product Showcase

&

## Advertorial



Schneider's purpose is to empower all to make the most of our energy and resources, bridging progress and sustainability for all.

110

## News Analysis

### Trend In Exports And Imports Of Electrical Products



#### Trend in Exports and Imports of Electrical Products

112

## Power Scenario

- Global Scenario
- Indian Scenario

114

## IEEMA Database

- Basic Prices & Indices
- Production Statistics

116

## Impact News - National News

- CERC Issues Draft Central Electricity Regulatory Commission Regulations 2023

## Power Industry

- Worldwide electricity generation from coal hit record highs in 2023, while thermal coal exports surpassed 1 billion metric tons for the first time as coal's use in power systems continues to grow despite widespread efforts to cut back on fossil fuels.

121

## Advt Index

122

## Shocks & Sparks

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#### Designed by:

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#### Regd Office - Mumbai

501, Kakad Chambers, 132, Dr A Besant Road, Worli, Mumbai 400 018.

Phones: +91(0) 22 24930532 / 6528

Fax: +91(0) 22 2493 2705

Email: pooja.tawte@ieema.org

#### Corporate Office - New Delhi

Rishyamook Building, First floor, 85 A, Panchkuian Road, New Delhi 110001. Phones:

+91 (0) 11-23363013, 14, 16

Fax: +91 (0) 11-23363015

Email: delhi@ieema.org

#### Branch Office - Bengaluru

204, Swiss Complex, 33, Race Course Road, Bengaluru 560 001.

Phones: +91 (0) 80 2220 1316 / 1318

Fax: +91 (0) 80 220 1317

Email: bangalore@ieema.org

#### Branch Office - Kolkata

503 A, Oswal Chambers, 2, Church Lane, Kolkata 700 001.

Phones: +91 (0) 33 2213 1326

Fax: +91 (0) 33 2213 1326

Email: kolkata@ieema.org

Website: [www.ieema.org](http://www.ieema.org)

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#### Representatives:

##### Guwahati (Assam) - Nilanka Chaliha

Email: nilanka.chaliha@ieema.org

Mobile: +91 9706389965

##### Chandigarh (Punjab & Haryana)

Rajnish Kaushik

Email: rajnish.kaushik@ieema.org

Mobile: +91 9991110246

##### Jaipur (Rajasthan)

Devesh Vyas

Email: devesh.vyas@ieema.org

Mobile: +91 8955093854

##### Lucknow (U.P. and Uttarakhand) -

Anuj Kumar Chaturvedi

Email: anuj.chaturvedi@ieema.org

Mobile: +91 9839603195

##### Srinagar (Jammu & Kashmir)

Mohammad Irfan Parray

Email: irfan.parray@ieema.org

Mobile: +91 9858455509

For subscription queries write to:  
[ishita.mehta@ieema.org](mailto:ishita.mehta@ieema.org)