# One-day workshop on "Significance Of Ingress Protection And Testing Modalities"

Date: 24.11-2023, Friday
Time 10.00AM to 3.30 PM





ensured learning opportunity technique and procedure for Environmental Ingress protection





Degree of Ingress protection IEC 60529



1<sup>st</sup> characteristic numeral

**1X to 6X** 

2<sup>nd</sup>

characteristic numeral

X1 to X9



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# CENTRAL POWER RESEARCH INSTITUTE ELECTRICAL APPLIANCES TECHNOLOGY DIVISION

# **About the Workshop**

Many products undergo a variety of tests before they reach the market. These tests include product safety testing, various environmental protections, electromagnetic compatibility, vibration testing and many others.

Products used in indoor or outdoor are often tested against "ingress," that is, the product's resistance to foreign objects, dust water, and. There are several reasons for ingress testing, including safety, functionality and product marketing.

Many products require insulation from outside elements in order to function properly. Those outside elements include mist, steam, sprayed water, sand, oil and even fingers, just to name a few. Ingress protection testing helps determine whether a particular product is going to function appropriately when placed in the field.

Different products require different levels of testing and different types of testing. Generally, ingress protection is divided into testing for ingress from foreign objects or liquids. With many products, the point where it would be most likely to fail comes at a seam between two parts.

The workshop will be focused on the degree of ingress protection in terms of standards in use, technical challenges in testing, feasibility and safety, testing and certification, beside the equipment and instruments required for testing. The workshop is informative and beneficial to all spheres of personnel.

#### **Participants**

The workshop will be focused on the degree of ingress protection. The participants are envisaged from various areas like; product designers & practicing engineers, manufacturer, maintenance & developers, consultants, academic institutes, Govt. organization's etc..

## **Topics covered**

- Understanding IP ratings
- > Introduction to standards
- > Failures and Case studies
- > IP test Facilities available at CPRI
- > questions if any
- Procedure to get tested for ingress protection
- Lab visit / practical demonstration

# Registration

| S1. | Institutions                                   | Discount in fee (Rs.) per   |
|-----|--|-----------------------------|
| No. |  | person + GST as             |
|     |  | applicable                  |
| 1.  | General Registration fee                       | Rs. 5,000/- ( No discount)  |
| 2.  | Faculty Members of Educational                 | Rs. 3500/- (30% discount)   |
|     | Institutions                                   |                             |
| 3.  | Students of Educational institutions           | Rs. 2500/- (50% discount)   |
| 4.  | Group discount for private organizations       |                             |
|     | for the nomination of                          |                             |
|     | a) Minimum 3 participants                      | Rs. 4500/- (10% discount)   |
|     | b) Minimum 4 or more participants              | Rs. 4000/- (20% discount)   |
| 5   | State Govt/ Central Govt/ Public sector/       | Rs. 3500/- (30% discount)   |
|     | Power sector Utilities etc.                    |                             |
| 6   | Exclusive Non-residential training             | A minimum 10 number         |
|     | programmes will be conducted for               | participants per batch will |
|     | customer from Govt/ semi Govt/ Public          | be charged at approved      |
|     | sector / utilities/ academic institutions etc. | rates as above. Beyond 10   |
|     |  | persons pro rata charges    |
|     |  | will be applicable.         |

# **Mode of Payment**

Please make the payment through the link. <a href="https://cpri.res.in/online-testing/pay">https://cpri.res.in/online-testing/pay</a> online and update us. Do contact 080-22072262 in case of any clarifications.

# **Faculty**

The lecture will be provided by experienced in-house Faculty member and external experts who have through knowledge on Ingress protection standards and testing.

### **Travel and Accommodation**

- Bangalore is well connected by Road, Rail and Air
- Participants have to make their own travel arrangements
- Guest house accommodation on twin share basis can be provided on chargeable basis subject to availability at CPRI.

#### Venue:

CCAR Auditorium, Central Power Research Institute Prof. Sir. C V Raman Road, Sadashivanagar P O, Bangalore- 560 080

#### Landmark:

CPRI is situated in between Mekhri Circle and Yeshwanthpur. Near Indian Institute of Science (commonly known as Tata Institute)

#### **CPRI'S PROFILE**

Central Power Research Institute (CPRI) set up in 1960 by the Government of India, functions as a National organization for applied research in power sector and also serves as an Independent Laboratory for testing and certification of power equipment. CPRI provides consultancy services on various facets of power sector. CPRI has expertise in the area of Simulation, System Analysis and Testing and Diagnostics. CPRI laboratories have modern equipment needed for Power system simulation, Short circuit testing, Diagnostics of equipment, Materials engineering, Seismic qualification etc. The institute has made immense contribution to the advancement of research and development in power sector besides finding solution to various problems faced by power utilities and industries in areas of transmission and distribution.

CPRI is continually setting new standards in training and continuing education from basic theoretical information to practical hands-on electrical equipment training. CPRI courses have made substantial impact on the level of training and education to India's electricity utilities, manufacturing companies, transmission and distribution companies.

#### Coordinator(s) Details

Registration may kindly be sent by email / fax / post to

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