



# केन्द्रीय विद्युत अनुसंधान संस्थान

(भारत सरकार की सोसाइटी, विद्युत मंत्रालय)

प्रो सर सी. वी. रामन रोड, सदाशिवनगर डाक घर, पो. वा. सं. 8066, बंगलूर - 560 080

## CENTRAL POWER RESEARCH INSTITUTE

(A Govt of India Society under M.n. of Power)

Prof. Sir C.V. Raman Road, Sadashivanagar P.O., P.B. No. 8066, Bangalore - 560 080, India

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By Post

2/I/DCCD(FRLS)/14-15

Dt.07/01/2015

M/s. Monarch Industrial Products (I) Pvt. Ltd.,  
Post Box No. 3,  
No.25, SIDCO Industrial Estate,  
Theni – 625 531. Tamil Nadu

**Sub : Fire Survival Test on Monarch Make Flame Guard Coating coated on cable**

**Ref No : Letter dt. 16.12.2014**

**Kind Attn : Mr. Nandhakumar.N, Senior Executive /Mr. Rajaram S, Senior Manager**

**Dear sir**

This has reference to your letter dated 16.12.2014 regarding Fire Survival Test on Monarch Make Flame Guard Coating coated on cable.

As requested the test has been completed and the test report No. DCCD – 14349 dated, 05.01.2015 is enclosed.

Any discrepancy in the test report may please be informed within forty five days from the date of receipt of the test report.

In order to prevent tampering of test report, CPRI has introduced hologram on the first page of the test report with effect from 01.10.2007

The receipt of the test report may please be acknowledged.

Thanking you and assuring you our services at all times,

Yours faithfully,

(K.Mallikarjunappa)  
Joint Director

**CPRI**

## **TEST REPORT**



**Central Power Research Institute**

(A Govt. of India Society,  
P.B. No.8066, Sadashivanagar Post Office  
Prof. Sir.C.V. Raman Road,  
Bangalore - 560 080(INDIA)

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## TEST REPORT

<b>Test Report Number</b>	: DCCD-14349	Dated: 05-01-2015
<b>Name &amp; Address of the Customer</b>	: M/s. Monarch Industrial Products (I) Pvt. Ltd., Post Box No. 3, No.25, SIDCO Industrial Estate, Theni – 625 531. Tamil Nadu	
<b>Name &amp; Address of the Manufacturer</b>	: M/s. Monarch Industrial Products (I) Pvt. Ltd., Post Box No. 3, No.25, SIDCO Industrial Estate, Theni – 625 531. Tamil Nadu	
<b>Particulars of sample tested</b>	: Monarch Make Flame Guard CP Range Coating coated on 3 X 2.5 Sq mm, 1100 V Armoured Cable	
<b>Condition of the Sample on Receipt</b>	: New	
Type	: Water Based Acrylic system	
Designation	: Monarch Make Flame Guard CP Range Coating coated on 3 X 2.5 Sq mm, 1100 V Armoured Cable	
Serial Number	: Nil	
Number of samples tested	: One	
Date(s) of Test(s)	: 01.01.2015	
CPRI sample code no	: DCCDFRLS14S0184	
<b>Particulars of tests conducted</b>	: Fire Survival test (Resistance to Fire alone)	
<b>Test in accordance with standard/specification</b>	: As per Customer Request	
Sampling plan	: Not applicable	
Customer's requirement	: Nil	
Deviations if any	: Temperature of the Flame 950 Deg C & Duration of the test=20 minutes	
<b>Name of the witnessing persons</b>		
Customer's representatives	: None	
Other than Customer's representatives	: None	
Test subcontracted with address of the laboratory	: None	
<b>Documents constituting this report (in words)</b>		
Number of Sheets	: Three	
Number of oscillograms	: Nil	
Number of graphs	: Nil	
Number of photos	: Nil	
Number of Test Circuit Diagrams	: Nil	
Number of Drawings	: Nil	

  
(R. Arunjothi)  
Test Engineer



  
(K. Mallikarjunappa)  
Joint Director

# CENTRAL POWER RESEARCH INSTITUTE



## TEST REPORT

Test Report No. : DCCD-14349

Date: 05.01.2015

## TEST RESULTS

### FIRE SURVIVAL TEST (RESISTANCE TO FIRE ALONE )

Reference Specification : As per Customers Request  
Thickness of the Coating : 1.8 mm  
No. of specimen tested : One

### Test Details

Sample length : 1.2 metres  
Cable supporting system : The cable was supported, by metallic rings placed 300 mm apart and this assembly was supported by metallic stand, all rigidly earthed.  
Source of heat : Tubular Type Gas Burner with Regulated LPG & Air mixture to achieve a flame temperature of  $950 \text{ }^{\circ}\text{C} \pm 40 \text{ }^{\circ}\text{C}$ .

Continuity Checking Arrangement : During the test a current was passed through the cores of the cable and this was provided by a three phase star-connected transformer of sufficient capacity to maintain the test voltage up to the maximum leakage current allowable i.e 3 A.

At the opposite end of the cable, lamps were connected to the cores with a power rating such that each core carries a current of approximately 0.25 A at the rated voltage of the cable.

Test voltage between cores : 1100 V AC applied, between the phases of the cable and a load carrying a current of 0.25 A was maintained .

Test Duration : 20 minutes

### **Observation :**

The cable with coating ( **FlameGuard CP** ) withstands both voltage and fire application for a duration of 20 minutes.

*R. Arunjothi*  
(R.Arunjothi)  
**Test Engineer**

# CENTRAL POWER RESEARCH INSTITUTE



**CPRI**

## TEST REPORT

**Test Report No.:DCCD-14349**

**Date: 05.01.2015**

- a) The test results relate only to the item(s) tested.
- b) Publication or reproduction of this test report in any form other than by complete set of the whole report and in the language written is not permitted without the written consent of CPRI.
- c) Any Correction/erasure invalidates the test report.
- d) Any anomaly/discrepancy in this test report should be brought to the notice of CPRI within 45 days from the date of issue.

*R. Arunjothi*  
(R. Arunjothi)  
**Test Engineer**