

सी पी आर आई  
भारत

**CPRI  
INDIA**

परीक्षण रिपोर्ट  
TEST REPORT





# परीक्षण रिपोर्ट TEST REPORT

केन्द्रीय विद्युत अनुसंधान संस्थान

( विद्युत मंत्रालय, भारत सरकार के अधीन एक स्वायत्त सोसायटी )

**CENTRAL POWER RESEARCH INSTITUTE**

(An Autonomous Society under the Ministry of Power, Govt. of India)

एस टी एल के सदस्य

Member of STL

स्विचगियर परीक्षण तथा विकास केन्द्र

SWITCHGEAR TESTING & DEVELOPMENT STATION

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**CENTRAL POWER RESEARCH INSTITUTE**  
(Member of STL)



**CPRI**

**TEST REPORT**

**Test Report No.** : 2017/STL/475      **Dated :** - 5 JUN 2017

**Name and Address of the Customer** : M/s Murthy Industries,  
Plot No. 99/12, Industrial Park,  
'D' Block, Auto Nagar,  
Visakhapatnam – 530 012

**Name and Address of the Manufacturer** : M/s Murthy Industries,  
Plot No. 99/12, Industrial Park,  
'D' Block, Auto Nagar,  
Visakhapatnam – 530 012

**Particulars of Sample(s) Tested** : 415V, 250A, LT Panel

**Condition of sample(s) on receipt** : New

**Type** : Electrical Control Panel  
**Designation** : Main Distribution Board  
**Serial Number(s)** : 2669  
**Number of Sample(s) Tested** : One  
**CPRI sample code number(s)** : STDSSTL17S0272  
**Sealing of the sample, if any** : NIL

**Particulars of test(s) conducted** : Degree of Protection IP-55 (Category –2)

**Date(s) of Test(s)** : 11/04/2017 & 12/04/2017  
**Test(s) in accordance with Standard/specification** : As per Cl.8.2.7 of IS:8623 (Part-1),1993/IEC pub 439-1(1985)  
**Sampling Plan** : NIL  
**Customer's Requirement** : NIL  
**Deviations, if any** : NIL

**Name of the witnessing persons**

**Customer's Representatives** : 1) Mr. K.R Murthy, Director  
2) Mr. M. Kanaka Raju, Supervisor

**Other than Customer's Representatives** : NIL

**Test subcontracted with name and address of the laboratory** : NONE

**Documents constituting this report (in words)**

**No. of Sheet(s)** : FIVE  
**No. of Oscillogram(s)** : NIL  
**No. of Graph(s)** : NIL  
**No. of Photograph(s)** : NIL  
**No. of Test Circuit Diagram(s)** : NIL  
**No. of drawing(s)** : ONE

(LEENA H. ROY)  
TEST ENGINEER



(D. KRISHNAMURTHY)  
ADDITIONAL DIRECTOR



CENTRAL POWER RESEARCH INSTITUTE  
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CPRI

TEST REPORT


Test Report No: 2017/STL/475

Date :

- 5 JUN 2017

SUMMARY OF TEST

1. Test conducted : Degree of Protection IP - 55 (Category -2)
2. Rating for which tested : 1.1) Protection against access to hazardous parts IP-5X  
1.2) Ingress protection against solid particles IP-5X  
2) Ingress protection against liquid IP-X5
3. DOCUMENTS CONSTITUTING THIS REPORT :
  - 3.1 Supplementary test report : NIL
  - 3.2 Oscillogram No(s) : NIL
  - 3.3 Drawing of the equipment tested : MI/72/17-18 Rev. 01 Sheet 01 of 01
  - 3.4 Test circuit drawing No(s). : NIL
  - 3.5 Photograph No(s). : NIL

  
(LEENA H. ROY)  
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TEST REPORT

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Date :

5 JUN 2017

DESCRIPTION OF THE SAMPLE TESTED

(As assigned by the manufacturer)

Sample	:	LT Panel
Rated voltage (V)	:	415
Rated current (Amps)	:	250
Frequency (Hz)	:	50
Insulation level (V)	:	660
No. of phases	:	3PH + N
No. of poles	:	-
Dimensions of the sample	:	As per drawing
Rated short time current	:	-
Category of enclosure	:	2

  
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**TEST REPORT**

Test Report No: 2017/STL/475

Date : **5 JUN 2017**

**SCHEDULE OF TESTS**

- 1) Test conducted : Degree of Protection IP-5X (Category -2)  
Date of test : 11/04/2017 & 12/04/2017  
Condition of sample before test : New  
Test Details : As per Standard
- i) The test wire of 1.0mm diameter was applied on all possible openings with a force of 1N as per standard  
ii) The test object was placed inside closed chamber in which talcum powder (unscented) was maintained in suspension by air current as per standard. The other parameters maintained were as follows :

Differential Pressure maintained	Duration of the test
NIL	8 hours

- Observations : (i) The wire of specified diameter did not enter the enclosure  
(ii) No traces of powder observed inside the sample after 5X test

- 2) Test conducted : Degree of Protection IP -X5  
Date of test : 12/04/2017  
Condition of sample before test : As such after IP 5X test.  
Test details : Sample was placed in normal position and test was conducted by spraying the enclosure from all practicable directions with a stream of water from a standard test nozzle as per standard.

Size of the nozzle used (mm)	Distance of the nozzle from the sample(mtr)	Water Delivery rate(litre/minute)	Duration of the test (minute)
6.3	3.0	12.5	3.0

- Observations : i) Small traces of water observed inside the sample after X5 test.  
ii) The equipment withstood HV test at 2.5 kV for one minute between all live parts connected together and body

**CONCLUSION** : The test results indicate that the sample tested complies with the requirement of Cl. 8.2.7 of IS : 8623 (Part-1), 1993/IEC pub 439-1, 1985.

  
(LEENA H. ROY)  
TEST ENGINEER



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NOTE

- The Test results relate only to the item(s) tested.
- Publication or reproduction of the test report /Certificate in any form other than by complete set of the whole test report /Certificate and in the language written is not permitted without the written consent of CPRI.
- Any Corrections/erasure invalidates the test Report/Certificate.
- NABL has Accredited this laboratory as per ISO 17025-2005 standard, vide certificate no. T-0011 for the tests carried out.
- Any anomaly/discrepancy in the test report /Certificate should be brought to the notice of CPRI within 45 days from the date of issue.
- The verification of the sample drawings by CPRI is limited to dimensional checks only wherever possible.
- CPRI Issues two kinds of documents:

Test Report:

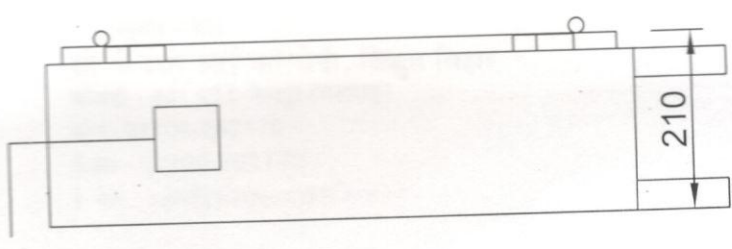
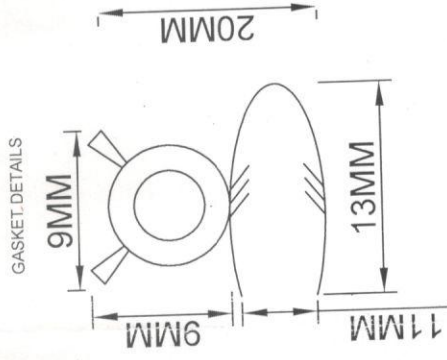
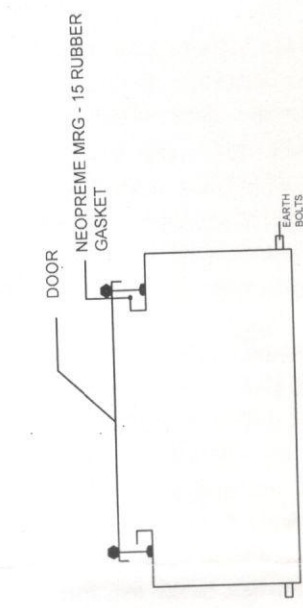
The test report is issued when the sample is tested for specific test required by the customer either in accordance with National/International standards or as per customer's requirements but no certification on the performance of the sample tested. The test report will contain the record of the values of test parameters as obtained during testing, the physical condition of the apparatus during testing, the physical condition of the apparatus during/after the test(s), copy(ies) of Oscillogram(s), record of supplementary test(s) if any conducted but no certification on the performance of the apparatus tested.

Test Certificate:

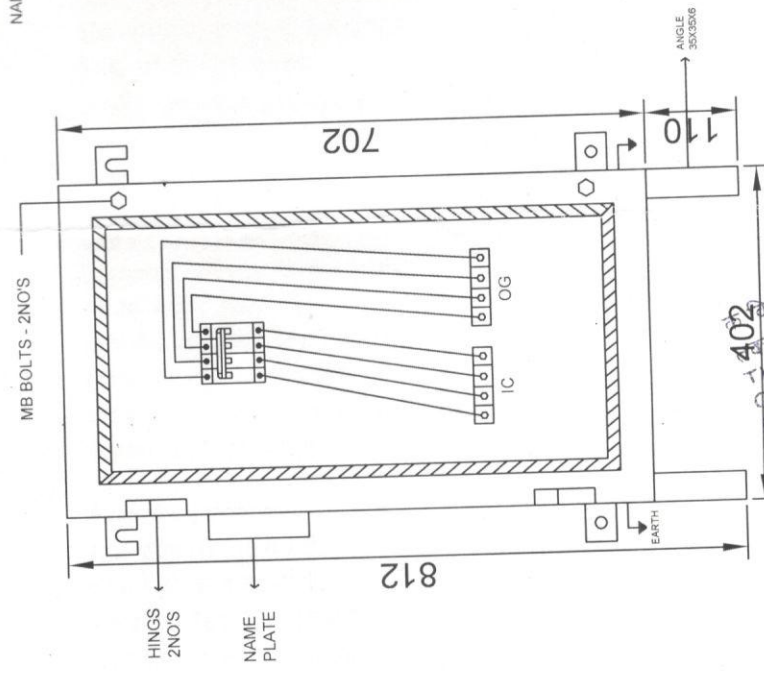
The test certificate is issued on request and payment of the prescribed charges only when the apparatus of particular type and rating has satisfactorily passed all the specified tests in compliance with condition stipulated in a published National/International Standards.

- All Documents constituting this test report/certificate are stitched together with a Continuous silk thread/silk ribbon, the two ends of which have been brought over the front sheet of this test report/certificate and sealed with a CPRI logo printed paper sticker/embossed.

  
(LEENA H. ROY)  
TEST ENGINEER



SIDE VIEW DOOR CLOSED



FRONT VIEW DOOR OPEN

**NOTE:**

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED
2. TOLERANCE IS +
3. PANEL TYPE IN DOOR OUTDOOR 415V AC/DC FOR IP55 - CAT - II, IS/IEC 60629 - 2 - 2013-08
4. FABRICATED WITH 2MM THICK CRCA SHEET.
5. PAINTS IVORY COLOR - GRAY

The Verification of this Drawing by  
 Chemis Limited Where Possible  
 Pertaining to...  
 10/33

**MANUFACTURING:**  
**M/S MURTHY INDUSTRIES**  
 PLOT NO. 99/12, INDUSTRIAL PARK, 'D' BLOCK,  
 AUTO NAGAR, VISAKHAPATNAM - 530012.  
 PH NO: 9848541669, Email: murthyindustries@gmail.com.

TITLE:	LT DISTRIBUTION PANEL IP55 - CAT II	NAME	P. GANESH	SIG		DATE	08.04.2017
SR.NO	2669	DRAWN:					
YEAR OF MFG	APRIL-2017	CHECKED BY:	K.R.MURTHY				08.04.2017
SHEET NO	1 OF 1	APPROVED BY:	K.R.MURTHY				08.04.2017
		MATL.	2MM THICK CRCA				
		DRG.NO	MI/ 72 / 17 - 18 Rev01				



## सी पी आर आई संगठन

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## केन्द्रीय विद्युत अनुसंधान संस्थान

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(An Autonomous Society under the Ministry of Power, Govt. of India)

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