



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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GOVINDPURA, BHOPAL - 462 023

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CPRI

TEST REPORT

Test Report Number : CPRIPLSTNC19T0097 Dated : 13.05.2019

Name & Address of the Customer : M/s Murthy Industries,
Plot No. 99/12, D Block, Near Industrial Park
Autonagar, Visakhapatnam, Andhra Pradesh-530012

Name and Address of the Manufacturer : M/s Murthy Industries,
Plot No. 99/12, D Block, Near Industrial Park
Autonagar, Visakhapatnam, Andhra Pradesh-530012

Particulars of sample tested : 415 V, 250A, LT Panel

Condition of sample on receipt : New

Type : Electrical Control Panel

Description of test sample : Main Distribution Panel

Serial Number : LT Panel

Number of samples tested : 769

Date(s) of Test(s) : One

CPRI sample code number(s) : 07/02/2019 & 08/02/219

Detail(s) of sealing(s) of sample(s) : STNC19S0054

Particulars of tests conducted : No

Test(s) in accordance with : Degree of Protection IP-65

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 : Mr. K. Ramana Murthy

Customer's representatives : Mr. P. Srinivasa Rao

Other than customer's representatives : NIL

Test subcontracted with name and address of the laboratory : NONE

Documents constituting this report (in words) : NONE

Number of sheets : FIVE

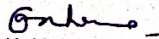
Number of oscillograms : NIL

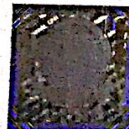
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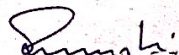
Number of photos : NIL

Number of Test circuit Diagrams : NIL

Number of Drawings : TWO


(A.K. Khanra)
Test Engineer




(Sumbul Munshi)
Joint Director
Approved by

ULR - TC5181190STCT0097F

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Sheet 1 of 5

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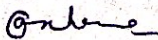
TEST REPORT

Test Report Number: CPRIBPLSTNC19T0097

Date : 13.05.2019

SUMMARY OF TEST

1. Test conducted : Degree of Protection IP - 65
2. Rating for which tested : 1.1) Protection against access to hazardous parts IP-6X
1.2) Ingress protection against solid particles IP-6X
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 : 1) MURTHY/19/769 Rev 01 Sheet 1 of 2
2) MURTHY/19/769 Rev 01 Sheet 2 of 2
 - 3.4 Test circuit drawing No(s). : NIL
 - 3.5 Photograph No(s). : NIL


(A.K. Khanra)
Test Engineer

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Sheet 2 of 5

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TEST REPORT

Test Report Number: CPRIBPLSTNC19T0097

Date : 13.05.2019

DESCRIPTION OF THE SAMPLE TESTED
(As assigned by the manufacturer)

Sample	:	LT Panel
Rated voltage (Volts)	:	415
Rated current (Amps)	:	250
Frequency (Hz)	:	50
Insulation level (V)	:	660
No. of phases	:	3 Phase + Neutral
No. of poles	:	-
Dimensions of the sample (mm)	:	As per drawing


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CPRI

TEST REPORT

Test Report Number: CPRIBPLSTNC19T0097

Date : 13.05.2019

SCHEDULE OF TESTS

1) Test conducted : Degree of Protection IP-6X
Date of test : 07/02/2019 & 08/02/219
Condition of sample before test : New
Test Details : As per Standard

1.1) The test wire of 1.0 mm diameter was applied on all possible openings with a force of 1N as per standard.

1.2) The test object is placed inside a closed chamber in which talcum powder (unscented) is maintained in suspension by air current as per standard as given below.

Differential Pressure maintained	Duration of the test
200mm of water column	8 hours


Observations : 1) The wire of specified diameter did not enter the enclosure
2) No traces of powder observed inside the sample after IP-6X test.

2) Test conducted : Degree of Protection IP -X5
Date of test : 08/02/2019
Condition of sample before test : As such after IP 6X 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 : No traces of water observed inside the sample after IP-X5 test.

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


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Sheet 4 of 5

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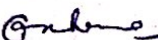
TEST REPORT

Test Report Number: CPRI BPLSTNC19T0097

Date : 13.05.2019

NOTE

- a) The Test results relate only to the item(s) tested.
- b) 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.
- c) Any Corrections/erasure invalidates the test Report/Certificate.
- d) NABL has Accredited this laboratory as per ISO/IEC 17025-2005 standard, vide certificate no. TC-5181 for the tests carried out.
- e) Any anomaly/discrepancy in the test report /Certificate should be brought to the notice of CPRI within 45 days from the date of issue.
- f) The verification of the sample drawings by CPRI is limited to dimensional checks only wherever possible.
- g) All documents constituting the 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 the test report / certificate and sealed with a CPRI logo printer paper sticker/embossed.

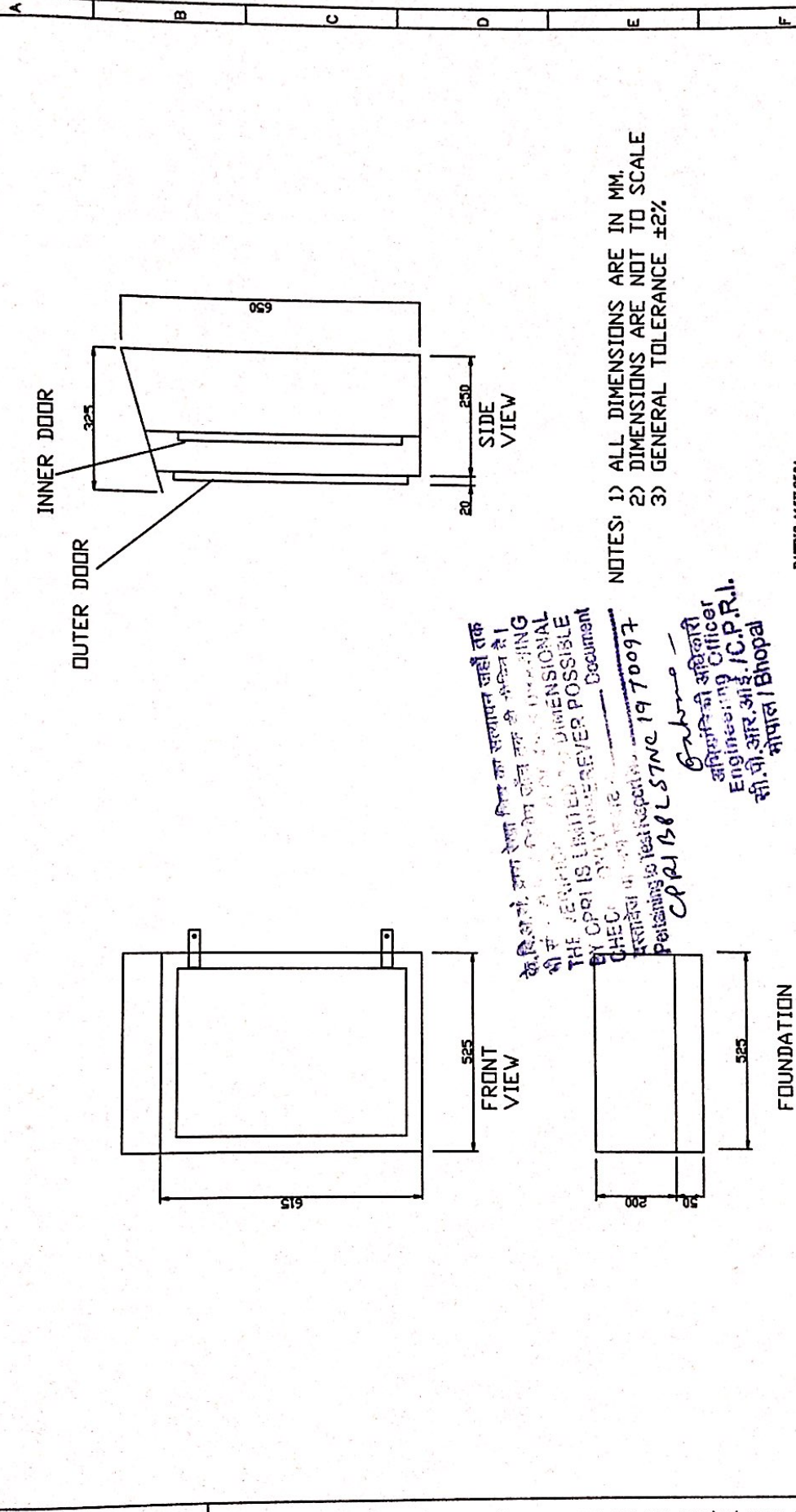

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Sheet 5 of 5

1 2 3 4 5 6 7 8 9 10



NOTES: 1) ALL DIMENSIONS ARE IN MM.
 2) DIMENSIONS ARE NOT TO SCALE
 3) GENERAL TOLERANCE $\pm 2\%$

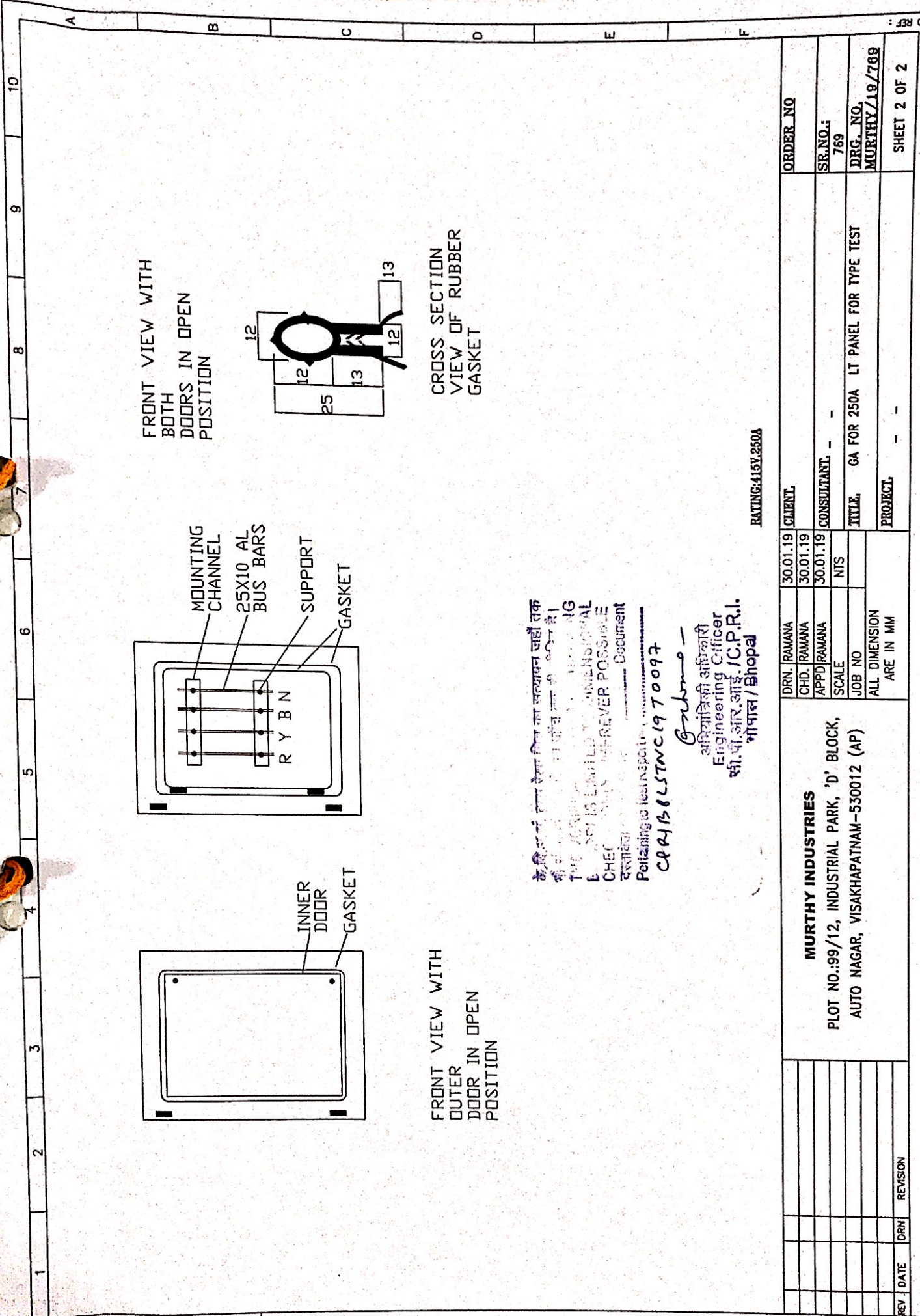
के.वि.आर्.आ. द्वारा बनाया गया है।
 यह दस्तावेज़ केवल निर्माण के लिए है।
 इस दस्तावेज़ में कोई भी परिवर्तन
 के बिना नहीं किया जा सकता है।
 THE VERIFICATION OF DIMENSIONAL
 BY C.P.R.I. IS LIMITED TO DIMENSIONAL
 CHECK ONLY. THEREFORE POSSIBLE
 DEVIATION IN DIMENSIONAL
 PENDING TO TEST REPORT.
 C.P.R.I. BLS/STNC/19/70097
 G. S. Singh
 अधिकांश अधिकारी
 Engineering Officer
 सी.पी.आर.आ.ई./C.P.R.I.
 भोपाल/Bhopal

RAITNG-1157.250A

REV	DATE	BY	REVISION FOR COMMENTS
01	08.02.19	RAM	DRN
			REVISION
DRN: RAMANA 30.01.19 CHD: RAMANA 30.01.19 APPD: RAMANA 30.01.19 SCALE: NTS JOB NO: ALL DIMENSION ARE IN MM CLIENT: MURTHY INDUSTRIES CONSULTANT: - - - TITLE: GA FOR 250A LT PANEL FOR TYPE TEST PROJECT: - - -			
ORDER NO: - SR.NO.: 789 DRG. NO. MURTHY/19/789			SHEET 1 OF 2

IF IN DOUBT, ASK

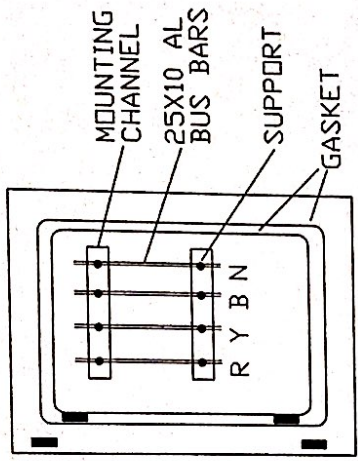
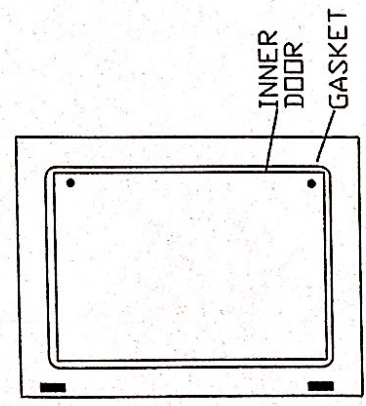
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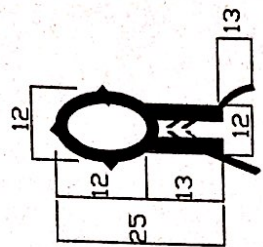
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FRONT VIEW WITH OUTER DOOR IN OPEN POSITION



CROSS SECTION VIEW OF RUBBER GASKET



किसी व्यक्ति या संस्था द्वारा प्रतिलिपि तैयार नहीं की जाये।
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 CHECKED BY: *[Signature]* / Bhopal
 Engineering Officer
 श्री. पी. आर. आर्. / C.P.R.I.
 री. आ. आ. / Bhopal

RATING: 415V, 250A

REV / DATE	DRN	REVISION	MURTHY INDUSTRIES PLOT NO.: 99/12, INDUSTRIAL PARK, 'D' BLOCK, AUTO NAGAR, VISAKHAPATNAM-530012 (AP)		
			DRN / RAMANA	30.01.19	CLIENT
			CHD. / RAMANA	30.01.19	
			APPD / RAMANA	30.01.19	CONSULTANT - -
			SCALE	NTS	
			JOB NO		TITLE GA FOR 250A LT PANEL FOR TYPE TEST
			ALL DIMENSION ARE IN MM		
			ORDER NO		
			SR. NO.:	769	
			DRG. NO.	MURTHY/18/789	
			PROJECT	- -	SHEET 2 OF 2

सी पी आर आई संगठन

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फैक्स : 080-23601213, 23602277
वेब साईट : <http://powersearch.cpri.res.in>
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फैक्स : 0120-2402824
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(विद्युत मंत्रालय, भारत सरकार के अधीन एक स्वायत्त सोसायटी)

Central Power Research Institute

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

स्विचगियर परीक्षण तथा विकास केन्द्र

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