



Certificate No. : T-0071

ELECTRICAL RESEARCH AND DEVELOPMENT ASSOCIATION

(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India)

ERDA Road, Makarpura Industrial Estate, Vadodra-390 010, India.

EPABX : +91 (0265) 2642942, 2642964, 2642377, 3043128 / 29 / 30 / 31 / 33

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Web : http://www.erda.org



TEST REPORT

SHEET 01 OF 03

NAME AND ADDRESS OF CUSTOMER CAS ELECTRICAL & AUTOMATION PVT. LTD. A/170, H.B. TOWN, ROAD NO.-5, SODEPUR, KOLKATA, PIN-700110 WEST BENGAL, INDIA	TEST REPORT NO.: RP-1415-007282 DATE: 13/06/2014	
	CUSTOMER REF. NO. Nil	DATED 09/06/2014
	DATE OF SAMPLE RECEIPT 09/06/2014	DATE OF TESTING 10/06/2014 to 12/06/2014
	SAMPLE IDENTIFICATION ERDA Sample Code No.: ERDA-00048589 Drg. No.: ECP/1299-13/WWP (Rev.-0) (Sheet 1) & (Sheet 2) (Total 2 sheets) Sr. No.: Nil	
SAMPLE DESCRIPTION PLC CUM MCC PANEL Containing: Terminals	TEST SPECIFICATION Cl. No. 7.1.12 of IEC 60947-1:2011	
TEST DETAILS 1.0 IP 65 tests		
Enclosures: i) Photograph No.: a) ERDA-00048589/1 b) ERDA-00048589/2 c) ERDA-00048589/3 ii).Drg. No.: ECP/1299-13/WWP (Rev.-0) (Sheet 1) & (Sheet 2) (Total 2 sheets)		
Test witnessed by: Mr. Akhilesh Tiwari (Project Co-ordinator) of M/s. CAS Electrical & Automation P. Ltd.		
Note: i) Top & bottom joints were sealed with silicon sealant from inside & outside. ii) Foam gasket was applied on all joints of inner compartment.		
Remarks: Sample conforms to the requirement of IP 65 tests as per the standard.		
 PREPARED BY	 CHECKED BY	 APPROVED BY

Note: 1. This report relates only to the particular sample received for testing in good condition at ERDA.

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4. Only the tests asked for by the customer have been carried out.

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TEST RESULTS

IP 65 tests: (Protection against ingress of dust, protection against access to hazardous parts with a wire greater than 1.0 mm and protection against water jets-As per Cl. No. 7.1.12 of IEC 60947-1:2011)

1.0 IP 6X test:

1.1 Protection against ingress of dust-As per Cl. No. 13.4 & 13.6 of IEC 60529:2001

The sample was kept as in normal use inside the test chamber. The required amount of talcum powder was maintained in suspension throughout the test. The pressure inside the enclosure was maintained to 200 mm column of water below atmosphere. The test was continued for 8 hrs.

After the test, following observation was made:

i) No dust was found inside the enclosure.

1.2 Protection against access to hazardous parts with a wire greater than 1.0 mm-As per Cl. No. 12.2 & 12.3 of IEC 60529:2001

The sample was checked from all practically possible areas with a straight rigid steel wire free from burrs having 1.0 mm diameter up to 100 mm length with a force of 1N.

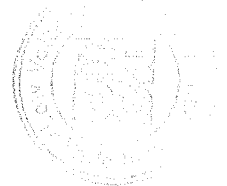
After the test, following observation was made:

i) The wire did not enter inside the enclosure.

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2.0 IP X5 test: (Protection against water jets-As per Cl. No. 14.2.5 & 14.3 of IEC 60529:2001)

The sample was kept as in normal use. The sample was subjected to a stream of water from a nozzle of 6.3 mm inner diameter from all practically possible directions at a delivery rate of 12.5 l/min. The distance between nozzle and equipment was maintained approximately 3.0 m. The test was continued for 9 minutes & 15 seconds.

After the test, following observation was made:

- i) No water was found inside the enclosure.

2.1 After IP X5 test

The following test was carried out.

- a) High voltage test

The sample was subjected to test voltage of 2.0kV (RMS) at 50 Hz (As specified by the customer) for one minute between all live parts connected together and the body. The sample withstood the test voltage.

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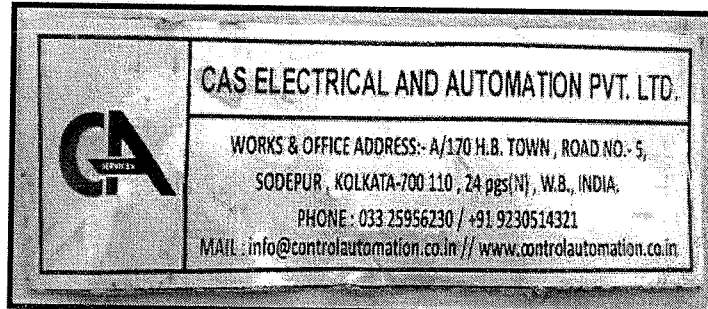
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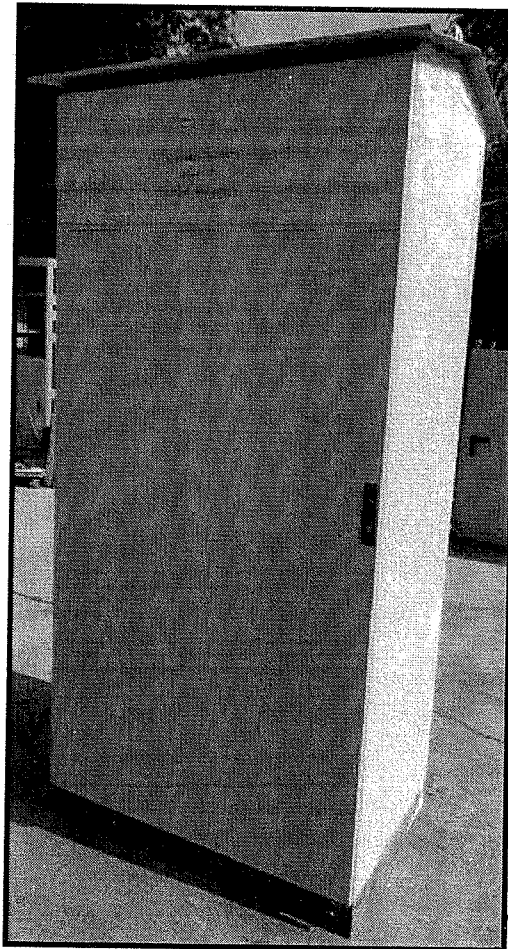
DATE: 13/06/2014



A. K. Sankar

PHOTOGRAPH NO.: ERDA-00048589 / 1

NAME PLATE



A. K. Sankar

PHOTOGRAPH NO.: ERDA-00048589 / 2

PLC CUM MCC PANEL

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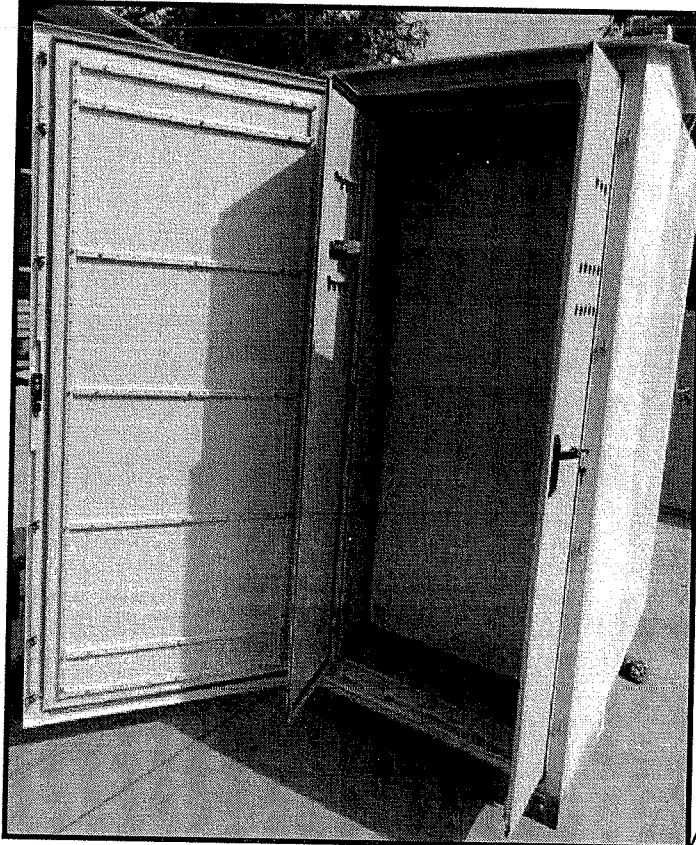
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Dr. V. K. Kulkarni

PHOTOGRAPH NO.: ERDA-00048589/3

PLC CUM MCC PANEL

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