

(Accredited by the National Accreditation Board for Testing and Calibration Laboratories, Govt. of India) ERDA Road, Makarpura Industrial Estate, Vadodara-390 010, India.

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TEST REPORT

SHEET 1 OF 4

N	AME & ADDRESS OF CUSTOMER	REPORT No.: LSCS/324 DATE: 11.10.2010		
SA	AMCON INDUSTRIAL CONTROLS PVT.	CUSTOMER REF.NO:	DATED:	
LT	rD.	S.I.C./	28.09.2010	
05	OT NO. 23, SURVEY NO. 165 A/2 & 3, SWAL IND. ESTATE, NH 3,	DATE OF SAMPLE RECEIPT:	DATE OF TESTING:	
	LLAGE – ASANGAON, TALSHAHAPUR, IST. THANE – 421 601	29.09.2010	01.10.2010	
-	MADE DECORPORATION			

SAMPLE DESCRIPTION

STANDARD PANEL (65kA, 4000A)

Rated Operational Voltage(Ue): 415 V
Rated Operational Current (Ie): 4000 A
Rated Frequency : 50 Hz
Rated insulation voltage (Ui) : 690 V
No. of Phase : TPN
Rated short time withstand current & its
duration :

 65 kArms for 1 sec. with an initial peak of 143 kA between phases

 39 kArms for 1 sec. with an initial peak of 81.9 kA between adjacent phase & Neutral

SAMPLE IDENTIFICATION

ERDA IDENTIFICATION NO.:

LSCS-10-174/01

TYPE DESIGNATION: 4000A PCC

Sr. No. : SICPL - 001

DRAWING NO .:

SICPL-104 REV. 00 SHEET 01 OF 09 TO SHEET 09 OF 09 (TOTAL 9 SHEETS)

Quantity (Tested): 1 No.

TEST DETAILS

Verification of the short circuit withstand Strength (Cl. No. 8.2.3)

TEST SPECIFICATIONS

IS 8623 (Part 1): 1993 / IEC Pub. 439 - 1 (1985)

ENCLOSURES:

NUMBER OF OSCILLOGRAM : TWO NUMBER OF PHOTOGRAPH : ONE NUMBER OF TEST CIRCUIT DIAGRAM : TWO

NUMBER OF DRAWINGS : NINE SHEETS

TEST WITNESSED BY: Mr. ARUN J. FARDE, Mr. NILESH P. DERE

REMARKS: The sample **conforms** to the requirements of verification of the short circuit withstand strength as per 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.

2. This report cannot be reproduced in part under any circumstances.

3. Publication of this report requires prior permission in writing from Director, ERDA.

4. Only test asked by customer have been carried out.



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Oscillogram No.	337/01 to 337/02
Photograph No.	LSCS-10-174/337
Test circuit diagram No.	OLSC/SWG/47 OLSC/SWG/49
Drawing No.	SICPL-104 REV. 00 SHEET 01 OF 09 TO SHEET 09 OF 09

(Keowalle) PREPARED BY

CHECKED BY





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SHEET 3 OF 4

VERIFICATION OF THE SHORT-CIRCUIT WITHSTAND STRENGTH

(Cl.No.8.2.3)

The verification of the short circuit withstand strength test was performed on the sample connected to source as per test circuit diagram No.: OLSC/SWG/47 &49. The outgoing terminals were shorted by means of the shorting-links of negligible impedance. The 3-phase Short-circuit current path through Main-busbar is as shown in drawing SICPL-104 REV. 00 SHEET 3 OF 9. The sample was connected to earth through fine wire fuse.

Note: Incoming ACB unit was bypassed to carry out the test.

Condition of the equipment under test: New

Test No.	Oscillogram No.	Short circuit current (kA)		Duration (sec.)	Observation During test	Remarks	
		Peak	Rms	Average	1		
1.	337/01	- 144.472 -	65.143 66.457 65.847	65.816	1.007	No abnormality	Between phase
2.	337/02	83.594	39.532	-	1.005	No abnormality	Between R-Phase & Neutral

Observations after test:

- No abnormality was observed.
- Busbar connections were not loosened.
- No deformation in busbars.
- Busbar supports were intact.
- Fine wire fuse in earth circuit found intact.

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SHEET 4 OF 4

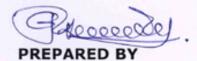
TEST RESULTS AFTER VERIFICATION OF THE SHORT- CIRCUIT WITHSTAND STRENGTH

a) INSULATION RESISTANCE TEST

Sr. No.	Test	Test voltage (V DC)	I.R. Value (MΩ)	
			Required	Measured
1.	Between all live parts and the interconnected exposed conductive parts of the assembly.	500	> 0.5	> 0.5
2.	Between each pole and all the other poles connected for this test to the interconnected exposed conductive parts of the assembly.	500	> 0.5	> 0.5

b) VERIFICATION OF DIELECTRIC PROPERTIES

Sr. No.	Test	Applied voltage (kV)	Duration (Sec.)	Remarks
1.	Between all live parts and the interconnected exposed conductive parts of the assembly.	3	60	Withstood
2.	Between each pole and all the other poles connected for this test to the interconnected exposed conductive parts of the assembly.	3	60	Withstood







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