# **CPRI**

### **TEST REPORT**



# **Central Power Research Institute**

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

### **CENTRAL POWER RESEARCH INSTITUTE**

#### **TEST REPORT**



Test Report Number: 344EATDIP12S0173 Dated:22.06.2012 Name & Address of the Customer M/s LAKSHMI ELECTRICAL WORKS. PU – 1, Electrical & Electronics Industrial Estate, Thuvakudi, Trichy - 15. Name & Address of the Manufacturer M/s LAKSHMI ELECTRICAL WORKS, PU - 1, Electrical & Electronics Industrial Estate. Thuvakudi, Trichy - 15. Particulars of sample tested Condition of the sample on Receipt New Type Outdoor (415V AC/DC) Designation CONTROL JUNCTION BOX Serial Number LEW/JN/002/2012 Number of samples tested One only Date (s) of Test (s) 13.06.2012 and 14.06.2012 CPRI sample code no(s) EATDIP12S0173 Particulars of tests conducted Test in accordance with Standard / specification IP 55 Tests as per IS/IEC 60947-1:2004 Standard. Sampling Plan Not applicable 5 Customer's requirement IP 55 Tests as per IS/IEC 60947-1: 2004 Standard. 1. 2. Insulation Resistance Measurement at 500V DC and 3. Power frequency High Voltage test at 2.0kV AC to be applied for one minute between all live terminals shorted together and body of Control Junction Box, to be conducted before and after IP Test. Deviations if any -Nil-Name of the witnessing persons Customer's representative Mr. P. Ramesh and Mr. S. Lino Other than customer's representatives None Test subcontracted with address of the laboratory None Documents constituting this report (In words) Number of sheets Three Only Number of oscillograms -Nil-Number of graphs -Nil-Number of photos -Nil-Number of test circuit diagrams -Nil-

Na (NAGARAJA RÃO V. N.) **Test Engineer** 

Number of drawings



(M. SIDDHARTHA BHATT) Additional Director

Six only. Drg. No. LEW/BHEL/RPT/JB/B085/2011-2012, Page No. 1 of 5 to Page No. 5 of 5 and a Note page.

ELECTRICAL APPLIANCES TECHNOLOGY DIVISION CENTRAL POWER RESEARCH INSTITUE PROF SIRICLY, RAMAN ROAD, SADASHIVANAEXRA P.O BENGALURU (\$20080, INDIA Sheet No. 1 of 3

### **CENTRAL POWER RESEARCH INSTITUTE**



#### Test Report Number: 344EATDIP12S0173

Date:22.06.2012

Sample Description: Control Junction Box - fitted with only terminal block inside.

#### TEST RESULTS:

SL. NO.	PARTICULARS		OBSERVATIONS/VALUES OBTAINED			
	TESTS CONDUCTED	REFERENCE CLAUSE		UBSERVA	TIONS/VALUES	OBTAINED
1.0	IP 5X test as per IS/IEC 60947-1: 2004 Standard	Clause C.13.4 & C.13.5.2 Protection against ingress of solid foreign objects – Dust test.	<ul> <li>Very thin layer of dust found uniformly spread all over the bottom gland plate inside the Control Junction Box.</li> <li>Fine layer of dust found on the terminal block, inside surface of front door and the entire vertical surface inside the Control Junction Box.</li> </ul>			
2.0	IP X5 test as per IS/IEC 60947-1: 2004 Standard.	<b>Clause C.14.0</b> Protection against harmful ingress of water –Hose jet of 6.3 mm dia, from 3 m distance with water flow at 0.3 bar pressure.	<ul> <li>Few drops of water found on the LHS Front corner on the bottom gland plate inside the control junction Box.</li> </ul>			
3.0	ELECTRICAL TESTS CONDUCTED		1	Before P 5X Test	After IP 5X Test / Before IP X5 Test	After IP X5 Test
3.1	Insulation Resistance Test at 500V DC applied for one minute between all terminals of terminal block shorted together and body of Control Junction Box.			>1.0 GΩ	>1.0 GΩ	>1.0 GΩ
3.2	Power frequency High Voltage Test at 2.0kV AC applied for one minute between all terminals of terminal block shorted together and body of Control Junction Box.			Withstood	Withstood	Withstood

Revendance P