ERTL (W) / 98 EMI 0090

सत्यमेव जयते

TEST/CALIBRATION REPORT

EMC / EMI Test Report
for
MECO Analog Maximum Demand Ammeter

Testing as per EN 50082-2 (Edition 1995)

ELECTRONICS REGIONAL TEST LABORATORY (WEST)
DEPARTMENT OF ELECTRONICS, (STQC Dte.)
Government of India.
Plot F 7/8, M. I. D. C. Area, Opp. Seepz,
Andheri (E), Mumbai - 400 093.

MEMORANDUM

The Test/Calibration Report issued by ERTL (W) is a record of the measurements conducted on the products submitted to it for testing / calibration and the results thereof. Unless otherwise specified in the report, the results are applicable only to those products which have been tested/calibrated and do not apply to other products even though declared to be identical.

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LIABILITY CLAUSE

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2. The report shall not be regarded in any way diminishing the normal contractual responsibilities/obligations between the customer and ERTL (W).

3. The results reported in this report are valid only at the time of and under the stated conditions of the measurements.

ELECTRONICS REGIONAL TEST LABORATORY (WEST) **DEPARTMENT OF ELECTRONICS (STQC Dte.)**	**REPORT NO.:** **ERTL(W)/98EMI00090**		
SUBJECT : TESTING OF ANALOGUE MAXIMUM DEMAND AMMETER	**DATE:** 25 AUG 1998	**PAGE** 1	**OF** 6

1. SCOPE

1.1 Service Request No. : ERTL(W) 9801029 Dt. 17-AUG-98

1.1.1 Service Request finalised on : 17-AUG-98

1.2 Requested by (Name and address of organisation) :

MECO INSTRUMENTS P. LTD.
301, BHARAT IND. ESTATE,
T.J. ROAD, SEWRI,
MUMBAI-400015,

1.3

Item No.	Description	Qty	Manufacturer and Type No.	Serial Nos.
1.	Analogue Maximum Demand Ammeter (600/5A)	01	M/s Meco Instruments PVT LTD Model No. : BM 96S Accuracy Class : 1.5	Not marked

1.4 Test specifications : EN 50082-2,1995 Edition

1.5 Lab Ambient : Temperature : 25 °C
Humidity : 57 % RH

1.6 Test Equipment used :

1) EMI/029 : Static Discharge Simulator
2) EMI/033 : EFT Simulator
3) EMI/034 : G-Strip Immunity Chamber
4) EMI/036 : Signal Generator
5) EMI/037 : RF Amplifier

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2.0 Test Results:

Sr. No	Test Parameter	Test Condition	Requirement	Observations	Remarks
2.1	Electrostatic Discharge	**Amplitude :** Air Discharge: 8KV Contact Discharge: 4KV **Polarity:** Positive and Negative	*Performance criteria 'B'	No degradation of performance of the $EUT was observed during and after the test	Complied

* FOR PERFORMANCE CRITERIA SEE ANNEXURE ' A'
$ EUT: EQUIPMENT UNDER TEST

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Sr. No.	Test Parameter	Test Condition	Requirement	Observations	Remarks
2.2	Radiated Susceptibility	**Frequency Range :** 80 - 1000MHz **Amplitude :** 10 V/m **Modulation:** 80% A.M. at 1KHz	*Performance Criteria 'A'.	Fluctuations in display pointer of EUT was observed. However the observed fluctuation could not be objectively verified.	Please see General remarks at Clause 3.1

* FOR PERFORMANCE CRITERIA SEE ANNEXURE 'A'

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Sr. No	Test Parameter	Test Condition	Requirement	Observations	Remarks
2.3	Electrical Fast Transients	**Amplitude** : Common Mode : 1KV **Polarity:** Positive and Negative **Pulse repetition Frequency:** 5KHz	*Performance criteria 'B'	No degradation of performance of the EUT was observed during and after the test	Complied

*FOR PERFORMANCE CRITERIA PLEASE SEE ANNEXURE 'A'

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3.0 General Remarks:

3.1 No decision regarding compliance/ non-compliance could be offered in respect of the test at Sr.no.2.2 , since this fluctuations in the readings could not be objectively verified. could not be objectively verified.

REPORT APPROVED BY

REPORT RELEASED BY

HEAD (EMI/EMC)

OIC (CSC)

Annexure 'A'

Performance Criteria as per European Norms.

Performance Criteria 'A': The EUT shall continue to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the EUT is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible loss is not specified by the manufacture then either of these may be derived from the product description and documentation and what the user may reasonably expect from the EUT if used as intended.

Performance Criteria 'B': The EUT shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the EUT is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test , degradation of performance is however allowed. No change of actual operating state or stored data is allowed. If the minimum performance level or the permissible loss is not specified by the manufacture then either of these may be derived from the product description and documentation and what the user may reasonably expect from the EUT if used as intended.

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OUR ACCREDITATION STATUS

- ERTL (West) set up under the STQC Directorate, Dept. of Electronic, Govt. of India has been accreditated under number of national / international systems.
- ERTL test reports have a wide acceptance in Govt. Departments, Private and Public Sector units in India.
- Besides, ERTL also have following accreditations.

SYSTEM	AREA	STATUS
IECQ, Geneva (International Electrotechnical Commission System for Component Qualification Approval)	Component Testing * Resistors (Fixed) * Capacitors (Fixed)	Accreditated as ITL (Independent Test Laboratory)
NABL (C), India [National Accreditation Board for Test & Calibration Laboratories (Calibration System)]	Calibration * Electronic Measurements * Electrical Measurements	Accreditated as Echelon II level Calibration Laboratory
NABL (T), India [National Accreditation Board for Test & Calibration Laboratories (Testing System)]	Components & Equipments	Recommended for Accreditation
UL, U.S.A. (Underwriters Laboratory)	Safety Testing of * Information Technology Products * Audio Video Products. * Picture Tubes * H. V. Products	Facilities Approved
UL, I.I.S.	Follow-up Services Inspection in Electrical Product (s)	International Inspection Centre - 512
IECEE - CB Scheme	* Information Technology Products * Mains Operated Electronic Consumer Products * Safety critical components such as Switches Cables Fuses Capacitors	Approved as a CB test Laboratory