



सत्यमेव जयते

TEST / CALIBRATION REPORT

TYPE TEST FOR
5 DIGIT FREQUENCY PANEL METER



ELECTRONICS REGIONAL TEST LABORATORY (WEST)
MINISTRY OF COMMUNICATIONS & INFORMATION TECHNOLOGY, (STQC Dte.)
Government of India

Plot No. F 7 & 8, MIDC Area, Opp. SEEPZ,
Andheri (E), Mumbai - 400 093.
Phone : (022) 2832 5134, 2830 1468, 2830 1138 Fax : (022) 2822 5713
E-mail : ertlbom@bom4.vsnl.net.in

ELECTRONICS REGIONAL TEST LABORATORY (WEST) DEPARTMENT OF INFORMATION TECHNOLOGY	REPORT NO. ERTL (W)/2004E&S279		
SUBJECT:TYPE TEST OF DIGITAL PANEL METER	DATE 9 FEB 2005	PAGE 1	OF 5

1. SCOPE

1.1 Service Request No : ERTL (W)/20042011 Dated: 6th Oct 04

1.1.1 Service Request finalised on : DT. 6th Oct 2004

1.2 Requested by
(Name and address of organisation)
MECO INSTRUMENTS PVT. LTD.
301,BHARAT INDUSTRIAL ESTATE,
T.J.ROAD,SEWREE,
MUMBIA 400 015

1.3	<u>Description</u>	<u>Qty</u>	<u>Manufacturer</u>	<u>Type No.</u>	<u>Serial Nos.</u>
	5 DIGIT PANEL METER (FREQUENCY)	01	MECO INSTRUMENTS PVT. LTD	FDM5BS	040843

1.4 Test specifications TYPE TESTING AS PER IS 13875

1.5 Lab Ambient
Temperature: (25 ± 2) ° C
RH : (55± 5) %

1.6 Test Equipment used :

1.UNIVERSAL CALIBRATOR	S&C/138
2.TEMP-HUMIDITY CHAMBER	ENV/42
3.VIBRATION MACHINE	ENV/62
4. SHOCK TEST MACHINE	ENV/11
5.ENERGY TEST BENCH	E&S/128

Released by _____



SUBJECT: TYPE TEST OF DIGITAL PANEL METER

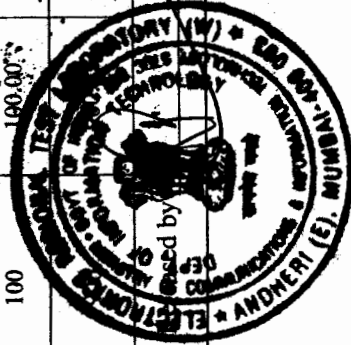
DATE
19 FEB 2005

PAGE
2

OF
5

2.0 TEST RESULTS

Sr.No.	Test/Parameter	Test Condition	Requirement	Observation		Remark
				Set value(Hz)	Measured value(Hz)	
2.1	Intrinsic Error Test	As per Cl. No. 4.2	Error shall be within ± 0.50 Hz	100	100.00	Complied
				350	350.00	
				500	500.02	
				750	750.03	
				900	900.02	
2.2	Influence error Test	As per Cl. No. 4.3				
2.2.1	Error due to Change in Ambient Temperature	Temperature varied from a) 0 deg. C. to b) 50 deg. C. while other conditions at reference value	Deviation shall be 100% of error for a change of ± 10 deg.c	100	100.00	Complied
				900	900.02	
2.2.2	Error due to Change in Relative Humidity	Relative Humidity varied from a)25%. to b) 80%RH while other conditions at reference value	Deviation shall be 100% of error	100	100.00	Complied
				900	900.02	
2.2.3	Error due to Change in Position	The UUT is tilted till it get topple while other conditions at reference value	Deviation shall be 50% of error.	100	100.00	Complied
					900.02	



BR= Reference Value BX=Influential value

**ELECTRONICS REGIONAL TEST LABORATORY (WEST)
DEPARTMENT OF INFORMATION TECHNOLOGY**

REPORT NO. ERTL (W)/2004 E&S 279

SUBJECT: TYPE TEST OF DIGITAL PANEL METER

DATE
19 FEB 2005

PAGE

3

OF

5

2.0 TEST RESULTS (CONTINUED)

Sr.No.	Test/Parameter	Test Condition	Requirement	Observation		Remark
				Set Value (Hz)	BR	
2.2.4	Error due to Change in supply voltage	Supply voltage = $\pm 10\%$ of 230 V AC a) 207 V b) 253 V	Deviation shall be 50% of error	100	100.00	a)100.00 b)100.00
				900	900.02	a)900.02 b)900.02
2.2.5	Error due to Change in supply frequency	Supply frequency = $\pm 10\%$ of 50 Hz a) 45 Hz b) 55 Hz	Deviation shall be 100% of error	100	100.00	a)100.00 b)100.00
				900	900.02	a)900.02 b)900.02



Release

ELECTRONICS REGIONAL TEST LABORATORY (WEST) DEPARTMENT OF INFORMATION TECHNOLOGY	REPORT NO. ERTL (W)/2004 E&S 279		
SUBJECT: TYPE TEST OF DIGITAL PANEL METER	DATE 9 FEB 2005	PAGE 5	OF 5

3.0 General Remarks : Nil.

REPORT APPROVED BY

REPORT APPROVED BY

R. H. S.
HEAD (E&S)

