



सत्यमेव जयते

TEST / CALIBRATION REPORT

TYPE TEST OF
ANALOG INSULATION TESTER
MODEL : MC907A-2



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

Government of India

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ELECTRONICS REGIONAL TEST LABORATORY (WEST) DEPARTMENT OF INFORMATION TECHNOLOGY		REPORT NO. ERTL (W)/2004E&S285	
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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	Description	Qty	Manufacturer	Type No.	Serial Nos.
	ANALOG INSULATION TESTER	01	MECO INSTRUMENTS PVT. LTD	MC907A-2	1224/4

1.4 Test specifications : TYPE TESTING AS PER IS 10656

1.5 Lab Ambient : Temperature: $(25 \pm 2)^\circ \text{C}$
RH : $(55 \pm 5) \%$

1.6	Test Equipment used :	
	1. HIGH STABILTIY DECADE MEGAOHM BOX	S&C /156
	2. HV PROBE	S&C /14(A)
	3. DMM	E&S/122
	4. VIBRATION MACHINE	ENV/62
	5. SHOCK TEST MACHINE	E&S/11
	6. TEMP. TEST CHAMBER	ENV/28
	7. HUMIDITY CHAMBER	ENV/58
	8. OSCILLOSCOPE	E&S/77
	9. WI TESTER	E&S/66
	10. INSU TESTER	E&S/123



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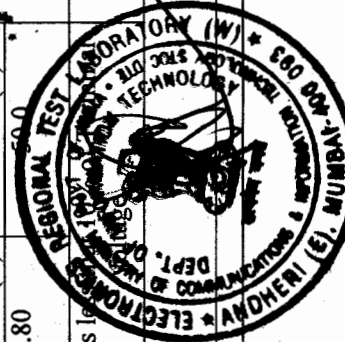
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2.0 TEST RESULTS

Sr.No.	Test/Parameter	Test Condition	Requirement	Observation		Remark
				Measured value(Ω)	Std. Value(Ω)	
2.1	Initial measurement	As per cl.9.0	As per cl. 9.1	5 M	4.9M	Complied
				50M	48.8M	
				500M	485M	
2.2	HIGH VOLTAGE TEST	2 kV AC for 1 min. between all the terminals connected together and the case	As per cl. 9.2(terminal voltage) No break down, arcing or sparking shall occur.	1000V	1120 V	Complied
2.3	INSULATION RESISTANCE TEST	At 500 V DC between all the terminals connected together and the case	50Mohm	>50Mohm		Complied
2.4	TEST FOR LIMITS OF ERROR					
2.4.1	Error due to variation of level.	A change of 5 degrees in the level of the tester in any direction	Deviation of the pointer from its initial position should be less than 0.5 mm	Deviation of the pointer from its initial position observed be less than 0.5 mm		Complied
2.4.2	Error due to variation of Ambient Temperature	a) at 47 deg.c b) at 7 deg.c	Deviation Shall not exceed $\pm 5\%$	Measured value(Ω)	Std. Value(Ω)	Complied
				a)48.70M b)48.50M	50.0M 50.0M	
2.4.3	Error due to variation of Excessive Humidity	At 27 deg.c, 90% RH for 24 Hours	Deviation Shall not exceed $\pm 5\%$	Measured value(Ω)	Std. Value(Ω)	Complied
				48.80	50.0	
2.4.4	Ripple at Meas. Terminal	As per cl 11.6.4	Less than 10% of Terminal voltage	Ripple is less than 10% of terminal voltage		Complied



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2.0 TEST RESULTS (CONTINUED)

Sr.No.	Test/Parameter	Test Condition	Requirement	Observation		Remark
				Measured value(Ω)	Std. value(Ω)	
2.5	Dust test	Temp. 40+2 and RH 80% Duration: 4 hrs.	Conditioning	Conditioned		---
2.5.1	Post measurement	As per cl.9.0	Resistance: $\pm 5\%$	5 M	4.95M	Complied
				50M	48.8M	
				500M	480M	
2.6	Vibration Test	As per cl 11.8, Accordance with IS 9000 (Part 8) Freq. 10 to 150 Hz Amplitude: 0.15mm Duration:6 hrs	Conditioning	Terminal voltage: $\pm 25\%$		Complied
				1000V		
				Conditioned		
2.6.1	Post measurement	As per cl.9.0	Resistance: $\pm 5\%$	5 M	5.10M	Complied
				50M	49.18M	
				500M	482M	
2.7	Bump Test	As per cl 11.9, Accordance with IS 9000 (Part 7/sec 2)) No. of bumps:4000 Acc.: 100 m/s ² Pulse duration:6 ms	Conditioning	Terminal voltage: $\pm 25\%$		Complied
				1000V		



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2.0 TEST RESULTS (CONTINUED)

Sr.No.	Test/Parameter	Test Condition	Requirement	Observation		Remark
				Measured value(Ω)	Std. value(Ω)	
2.7.1	Post measurement	As per cl.9.0	Resistance: $\pm 5\%$	5 M	5.10M	Complied
				50M	50.0M	
				500M	485M	
2.8	Dry heat Test	As per cl 11.10, Accordance with IS 9000 (Part 3/sec 2) Duration: 16 Hrs.	Terminal voltage: $\pm 25\%$	1000V	1112 V	---
				Conditioned		
2.8.1	Post measurement	As per cl.9.0	Resistance: $\pm 5\%$	5 M	5.05M	Complied
				50M	50.0M	
				500M	485M	
2.9	Cold Test	As per cl 11.11 Accordance with IS 9000 (Part 2/sec 2) Temp.: -10 deg.c Duration: 16 Hrs.	Terminal voltage: $\pm 25\%$	1000V	1114 V	---
				Conditioned		



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2.0 TEST RESULTS (CONTINUED)

Sr.No.	Test/Parameter	Test Condition	Requirement	Observation		Remark
				Measured value(Ω)	Std. value(Ω)	
2.9.1	Post measurement	As per cl.9.0	Resistance: $\pm 5\%$	5 M	5.10M	Complied
				50M	50.0M	
				500M	500M	
2.10	Damp Heat (cyclic)	As per cl 11.12 of IS 10656 IS 9000(Part 5/sec 2) Number of cycle: 2	Terminal voltage: $\pm 25\%$	1000V	1120 V	
2.10.1	Post measurement	As per cl. 9.0	Resistance: $\pm 5\%$	5 M	5.10M	Complied
				50M	50.0M	
				500M	500M	
			Terminal voltage: $\pm 25\%$	1000V	1110 V	

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3.0 General Remarks : Nil

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HEAD (E&S)

