

ELECTRONICS REGIONAL TEST LABORATORY (WEST)		REPORT NO.	
MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (STQC DTE)		ERTL (W)/ 2004EMI 346	
SUBJECT: EMC TESTING ON AC CURRENT TRANSDUCER		DATE	PAGE
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1. SCOPE

1.1 Service Request No ERTL (W)/2005 / 20051975

1.1.1 Service Request finalised on 10-NOV-2005

1.2 Requested by MECO INSTRUMENTS PVT.LTD.

(Name and address of manufacturer) 301, BHARAT INDL. ESTATE,
T.J. ROAD, SEWAREE,
MUMBAI - 400 015

1.3	Item No.	Description	Qty	Manufacturer	Type No.	Sr. No.
	1.	AC CURRENT TRANSDUCER	01	MECO INSTRUMENTS PVT.LTD.	CMT	055483

1.4 Test specifications IEC 61000-4-12 :2000.

1.5 Laboratory Ambient
1. Temp : 25 ± 2 °C
2. Humidity : 55 ± 5%

1.6 Test Equipment used:
1. Test generator (Schaffner NSG 505 HF)
2. Coupling network (Schaffner NSG 523)
3. Interference voltage distributor accessory (Schaffner)



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2.0 Equipment Under test (EUT) Description:**2.1 AC CURRENT TRANSDUCER** finds application in industrial use.**2.2 Performance Function of Equipment under Test (EUT)**

- Connect 230 V AC / 50 Hz single phase supply to Aux terminal.
- Apply input current 0 – 5A on input terminal.
- Connect 0 - 500 ohms load resistor to output terminals.
- Measure output current on output terminals, it is between 4 - 20mA.

2.3 Functional check for all immunity tests.**Performance Criteria- 'A'**

The EUT shall continue to operate as intended during and after the test . No degradation of performance or loss of function is allowed.

Performance Criteria –'B'

The EUT shall continue to operate as intended during and after the test . During the test, degradation of performance is however allowed. No change of actual operating state or stored data is allowed.

Performance Criteria – 'C'

Temporary loss of function is allowed , provided the function is self – recoverable or can be restored by the operation of the controls.



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3.0 Test Results:**3.1 HIGH FREQUENCY DISTURBANCE.****Test Rationale:**

To check oscillatory wave immunity requirements for Electrical/Electronic equipment connected to low voltage power supply.

a Test Condition:

Specification

As per IEC 61000-4-12.

Set-up

As per IEC 61000-4-12.

Mode of simulation:

Transverse (Differential mode): 1 kV peak

Frequency:

1MHz Damped Oscillatory

Test level

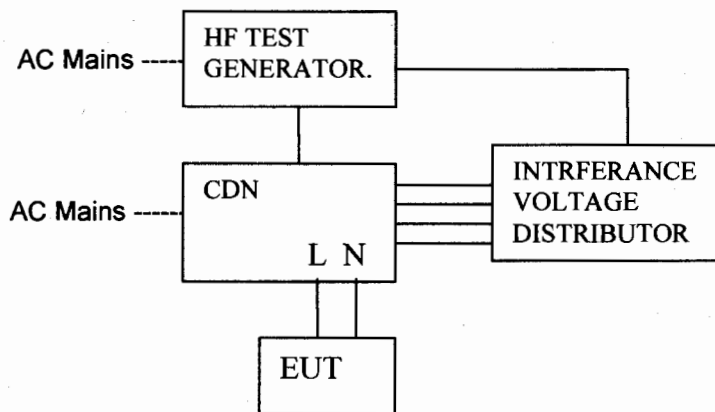
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Duration:

2 seconds

Application:

On Aux. Terminal 230VAC main supply through CDN.

b EUT in normal operating condition.**c Test procedure:****d Requirement:**

Performance Criterion B, temporary degradation or loss of function is allowed during the test. After the test EUT shall function normal.

e Observations

Output of the EUT was found fluctuating during the test which was self recoverable and after the test it was functioning normal as per sr. no.2.2.

f Results

Complied (Meets Performance Criterion B)



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4.0 General Remarks: Testing was carried out on 2/12/ 2005 at ERTL(W), MUMBAI

REPORT APPROVED BY

REPORT RELEASED BY


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HEAD (EMI)

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