

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)



**SHORT CIRCUIT LABORATORY  
CENTRAL POWER RESEARCH INSTITUTE**

**(Member of STL)**

P.B.NO.8066, SADASHIVANAGAR POST OFFICE  
SIR C.V.RAMAN ROAD, BANGALORE - 560 080 (INDIA)  
Phone : +91 (0) 80 - 23602662 Fax : +91 (0) 80 - 23601213

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**CPRI**

**TEST REPORT**

**Test Report Number**

SC11324B

**Dated:** 14<sup>th</sup> July, 2011

**Name & Address of the Customer**

M/s. Inter Tech,  
B 83, Flatted Factory Complex,  
Okhla Industrial Estate, Phase III  
New Delhi – 110 020.

**Name & Address of the Manufacturer**

M/s. Inter Tech,  
B 83, Flatted Factory Complex,  
Okhla Industrial Estate, Phase III  
New Delhi – 110 020.

**Particulars of sample tested  
Condition of the sample on Receipt**

Earthing Electrode  
New

Type  
Designation  
Serial Number  
Number of samples tested  
Date (s) of test (s)  
CPRI sample code no(s).

---  
Pre-casted INTESS' Earth Electrode  
---  
One  
12<sup>th</sup> July, 2011  
SC11S1143

**Particulars of tests conducted**

Short-time current

Test in accordance with  
Standard / specification  
Sampling plan  
Customer's requirement  
Deviations if any

Customer's instruction  
Not applicable  
20.0 kA rms for 1.0 s  
---

**Name of the witnessing persons**

Customer's representative  
Other than customer's representative

Mr. K. K. Gupta, Partner  
None

Test subcontracted with  
address of the laboratory

None

**Documents constituting this report (In words)**

Number of sheets  
Number of oscillograms  
Number of graphs  
Number of photos  
Number of test circuit diagrams  
Number of drawings

Four  
One  
Nil  
Two  
One  
One

  
(G. Venkataramanaiah)  
**Test Engineer**



  
(D. Krishnamurthy)  
**Joint Director**

AUTHORISED SIGNATORIES



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Report Number: SC11324B

**Description of sample tested (ratings as assigned by the manufacturer)**

Test sample	Earthing Electrode
Type	---
Designation	Pre-casted INTESS' Earth Electrode
Serial Number	---
Length & diameter of the Earthing electrode	3.0 m & 75.0 mm
Material of Casting	Conductive concrete 'MARCONITE'
Length & diameter of the Rod	3.0 m & 16.0 mm
Material of Rod	Copper
Rated short-time withstand current	20.0 kA rms for 1.0 s

**Documents attached to this report**

Oscillogram number (s)	SC11324B.S001
Photo number (s)	SC11324B.PB1 & SC11324B.PA1
Test circuit diagram number (s)	CRTL/SC/STC-01A
Drawing number (s)	IE 16 006 00

  
Test Engineer



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Report Number: SC11324B

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**Schedule of tests**

**SHORT-TIME CURRENT TEST**

**Test conditions**

Source Short-circuit generator  
Number of phases Single  
Frequency 50 Hz

Test sample  
Condition of the sample In clean & new condition, one end of the Earthing electrode was connected to source  
Mounting Horizontal & isolated from earth

Test details  
Test circuit number CRTL/SC/STC-01A  
Short-circuit applied On the other end of the Earthing electrode  
Short-circuit point Grounded

**Test results**

Oscillogram Number	Current (kA)		Duration (s)	Ambient Temp. °C	Observations
	Peak	RMS			
SC11324B.S001	39.66	22.69	1.10	29	<b>During test:</b> No abnormality <b>After test:</b> No visible damage to the Earthing electrode

  
Test Engineer



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Mounting arrangement (Before test)

SC11324B.PB1

  
Test Engineer



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Condition of the sample (After test)

SC11324B.PA1

  
Test Engineer