CPRI

## **TEST REPORT**





# **Central Power Research Institute**

(A Govt. of India Society)
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### CPRI

**TEST REPORT** 

**Test Report Number** 

SC11324A

Dated: 14th 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

Pre-casted INTESS' Earth Electrode

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

One 12<sup>th</sup> July, 2011

SC11S1144

Particulars of tests conducted

Test in accordance with

Standard / specification Sampling plan

Customer's requirement

Deviations if any

Short-time current

Customer's instruction

Not applicable

40.0 kA rms for 1.0 s

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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 Four Number of oscillograms One Number of graphs Nil Number of photos Two Number of test circuit diagrams One Number of drawings One

(G. Venkataramanaiah)
Test Engineer

**AUTHORISED SIGNATORIES** 

D. Krishnamurhy Joint Director



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Report Number: SC11324A

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

Test sample

Earthing Electrode

Туре

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Designation

Pre-casted INTESS' Earth Electrode

Serial Number

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Length & diameter of the Earthing electrode

3.0 m & 100.0 mm

Material of Casting

Conductive concrete 'MARCONITE'

Length & diameter of the Rod

3.0 m & 40.0 mm

Material of Rod

Copper bonded steel

Rated short-time withstand current

40.0 kA rms for 1.0 s

### Documents attached to this report

Oscillogram number (s)

SC11324A.S001

Photo number (s)

SC11324A.PB1 & SC11324A.PA1

Test circuit diagram number (s)

CRTL/SC/STC-01A

Drawing number (s)

IE 40 005 00



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Report Number: SC11324A

## **CPRI**

#### Schedule of tests

#### SHORT-TIME CURRENT TEST

#### **Test conditions**

Source

Short-circuit generator

Number of phases Frequency Single 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   | Curre | nt (kA) | Duration | Ambient  | Observations  |
|---------------|-------|---------|----------|----------|---|
| Number        | Peak  | RMS     | (s)      | Temp. °C |   |
| SC11324A.S001 | 80.52 | 40.13   | 1.11     | 29       | During test: No abnormality After test: No visible damage to the Earthing electrode |



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**CPRI** 



Mounting arrangement (Before test)

SC11324A.PB1



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Condition of the sample (After test)

SC11324A.PA1