

Test Report

Report No	243/4911548	This Report consists of 7 pages
Client	National Cables Industry PO Box 27472 Sharjah United Arab Emirates	
Authority & date	Clients order dated 28 August 2006	
Items tested	1 sample of Electric Cable	
Specification	BS 7211:1998 Including AMD 14201 AMD 15653 Excluding clause 6.2 spark test on Insulation and 13.5 absence of faults on Insulation	
Results	The sample submitted complied with the requirements of the Specification. For the tests which were requested	
Prepared by	S Daniell <i>S. Daniell</i>	Technician
Authorized by	C Yogaratnam <i>C. Yogaratnam</i>	Technical Engineer
Issue Date	20 December 2006	
Conditions of issue	This Test Report is issued subject to the conditions stated in current issue of <i>PS082</i> 'General conditions relating to acceptance of testing'. The results contained herein apply only to the particular sample/s tested and to the specific tests carried out, as detailed in this Test Report. The issuing of this Test Report does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by BSI of any product. No extract, abridgement or abstraction from a Test Report may be published or used to advertise a product without the written consent of the Managing Director, BSI Product Services, who reserves the absolute right to agree or reject all or any of the details of any items or publicity for which consent may be sought.	



0135

1) Introduction

This report relates to tests conducted on a sample of Electric cable submitted by National Cables Industry, Sharjah, United Arab Emirates.

This report applies only to the particular sample tested and to the specific tests carried out and detailed within the report. It does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by BSI of this or any related products.

2) Samples

The client submitted one sample of Electric cable described as follows:-

1x25 mm² Blue insulation

3) Testing

The sample submitted was subjected to the tests specified in BS 7211:1998 Table 3a Excluding clause 6.2 spark testing of insulation and 13.5 absence of faults on insulation, these test are in the final stage of manufacture.

Ozone resistance test was sub-contracted

The client resubmitted another sample of Blue insulated cable, to retest repeat interval of marking

4) Results

The results of the tests carried out are detailed in the following report

5) Conclusion

The sample submitted complied with the requirements of the Specifications for the tests which were requested

TESTING OF CABLE MANUFACTURED TO BS 7211:1998 TABLE 3a

Circular Cable 1 core **Conductor size:** 25 sq.mm

ASSESSMENT

Indication of origin

Marking printed on insulation:-
"NCI HO7Z-R, 450/750 VOLTS 1x25 MM2 BS 7211 UAE FREETOX" PASS

Legible:- PASS Durable:- PASS Repeat interval:- 240 mm PASS PASS

Construction

Outer Covering: BLUE INSULATION
Type of conductor: PLAIN ANNEALED Cu
Filler: NONE
Circuit Protective Conductor: N/A

Overall assessment of construction PASS

Voltage test on non sheathed cable @ 2500 V PASS

Date samples received:- 02/11/06	Testing commenced:- 14/11/06	Tested by:- S.Daniell
Date job raised:- 02/11/06	Testing completed:- 20/12/06	Checked by:- C.Yogaratnam

N/A = Not Applicable N/R = Not Requested N/T = Not Tested

TESTING OF CABLE MANUFACTURED TO BS 7211:1998 TABLE 3a

Circular Cable 1 core Conductor size: 25 sq.mm

ASSESSMENT

Tests on individual cores

Core I.D. and sequence	BLUE	PASS
Green/Yellow Proportion		N/A
Core colour indelibility	P	PASS
Conductors		
Number of wire	7	PASS
Class of conductor	2	PASS
Conductor resistance @ 20° C (ohms/km)	0.711	PASS
Insulation Thickness		
Mean (mm)	1.33	PASS
Min (mm)	1.18	PASS

Overall assessment:- **PASS**

Date samples received:- 02/11/06	Testing commenced:- 14/11/06	Tested by:- S.Daniell
Date job raised:- 02/11/06	Testing completed:- 20/12/06	Checked by:- C.Yogaratnam

N/A = Not Applicable

N/R = Not Requested

N/T = Not Tested

TESTING OF CABLE MANUFACTURED TO BS 7211:1998 TABLE 3a

Circular Cable 1 core **Conductor size:** 25 sq.mm

ASSESSMENT

Tests on complete cable

Mean Overall Diameter Circular Cable:- (mm) 8.8 **PASS**

Fire performance test **PASS**

Tensile tests on Cores

Compound EI 5
Core I.D. and sequence BLUE
Tensile strength unaged (N/mm²) 13.3
Elongation at Break-unaged (%) 180
% Var Tensile strength, aged 135° C 9
% Var.Elongation @ break after ageing 135° C -2

Assessment of tensile tests on cores **PASS**

Overall assessment:- PASS

Date samples received:- 02/11/06	Testing commenced:- 14/11/06	Tested by:- S.Daniell
Date job raised:- 02/11/06	Testing completed:- 20/12/06	Checked by:- C.Yogarathnam

N/A = Not Applicable

N/R = Not Requested

N/T = Not Tested

TESTING OF CABLE MANUFACTURED TO BS 7211:1998 TABLE 3a

Circular Cable 1 core

Conductor size: 25 sq.mm

ASSESSMENT

Tests on individual cores

Compound	EI 5	
Core I.D. and sequence	BLUE	
Hot set test Max Elongation %	75	PASS
Hot set test Permanent Elongation	8	PASS
Cold Bend @ -15° C	P	PASS
Cold Impact @ -15° C	P	PASS
Hot pressure (%)	28	PASS
Insulation resistance @ 90° C (Mohms.km)	6.79	PASS
Ozone resistance (low concentration)	P	PASS

Overall assessment :- PASS

Date samples received:- 02/11/06	Testing commenced:- 14/11/06	Tested by:- S.Daniell
Date job raised:- 02/11/06	Testing completed:- 20/12/06	Checked by:- C.Yogarathnam

N/A = Not Applicable N/R = Not Requested N/T = Not Tested

TESTING OF CABLE MANUFACTURED TO BS 7211:1998 TABLE 3a

Circular Cable 1 core

Conductor size: 25 sq.mm

ASSESSMENT

pH & conductivity determination

		Result
	Insulation	-
Colour	BLUE	-
Specified minimum pH value	4.3	-
Measured minimum pH value	5.93	PASS
Specified maximum conductivity (µS/mm)	10	-
Measured maximum conductivity (µS/mm)	0.26	PASS

Smoke density determination

		Result
Specified minimum light transmittance (%)	60	-
Measured minimum light transmittance (%)	89.4	PASS

The sample complied with the requirements of the standard

Date samples received:- 02/11/06	Testing commenced:- 14/11/06	Tested by:- S.Daniell
Date job raised:- 02/11/06	Testing completed:- 20/12/06	Checked by:- C.Yogarathnam

N/A = Not Applicable

N/R = Not Requested

N/T = Not Tested