TYPE TEST REPORT

Product description:	NHXH FE180 E90 cable family
Tested Models:	Power Cable
Manufacturer:	ALKAN KABLO VE ELEKTRONÍK SANAYÍ VE TİCARET LTD. ŞTİ. Muallimköy Mahallesi Gazidede Caddesi No:119 41400 Gebze / KOCAELİ Tel.: (+90) 0 262 777 00 58 (pbx)

Test specification:	EN 50575:2014		
Application:	Full application		
Result:	Pass ⊠	Fail 🗌	
Remarks:	None		

Customer:	ALKAN KABLO VE E TİCARET LTD. ŞTİ. Muallimköy Mahalles Gazidede Caddesi No:119 41400 Gebze Tel. (+90) 0 262 777 (+90) 0 216 564 (+90) 0 549 616 (+90) 0 262 777 http://www.alkankabinfo@alkankablo.com	i 7 / KOCAELi 7 00 58 (pbx) 1 57 40 (pbx) 6 69 84(pbx) 7 00 68 (Fax lo.com			
Purchase Order:	TEST.20240101 dated: 02.01.2024				
Order Confirmation:	CO 2016-0297-00	dated:	05.01.2024		

Samples receiving date:	20.02.2024			
Tests date:	from:	05.02.2024	to:	2024.25.02





Test Laboratory

TESTED - Test and Measurement Division

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Test site

TESTED - Test and Measurement Division

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Written by

Verified and approved

Test Engineer

Test and Measurement Division Manager

00	06.02.2024	Formal issue	
Rev.	Date	Description	

Results of tests and controls reported in this document refer only to samples as tested and described. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.Partial reproductions of this document are absolutely forbidden, except with written authorization by TESTED.





1. SAMPLING

1.1 SAMPLES ORIGIN

Received samples:

Tested samples:

HW revision:

SW/FW revision:

The samples under test were supplied by the Manufacturer.

The information relating to the initial sampling are not known.

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Selection method of the laboratory:	☐ Random taking ☐ N/A		
1.2 ADDITIONAL INFORMATION			
Manufacturing plant address:	ALKAN KABLO VE ELEKTRONİK SANAYİ VE TİCARET LTD. ŞTİ. Muallimköy Mahallesi Gazidede Caddesi No:119 41400 Gebze / KOCAELİ		
Type of unit:	☐ Prototype / Pre-series	Series	
Serial number:	Not present		

Not declared

Not declared





2. TEST INFORMATIONS

Unless otherwise specified, during the tests the sample/s was/were been configured following the methods and procedure specified in the reference standard.

2.1 CONDITIONS DURING TESTING

2.1.1 PERSONNEL PRESENT TO THE TESTS

Test performed by:

OSMAN DEMIR - TESTED - Test and Measurement Division

Other people present: /

2.1.2 TESTS SEQUENCE

If reference standard prescribe a specific test sequence, the tests are performed according the sequence required, otherwise the tests are reported into this document in the order "as performed".

Selection of test per sample

Sample N	Test	Result	Notes
1	All tests except for the IP degree of protection	Compliant	1
2	NHXH FE 180 E90 cable family	Compliant	1

4.1.2 MODIFICATIONS TO SAMPLES

Test sample/s was/were not modified during the tests.

2.1.3 ENVIRONMENTAL CONDITIONS

The laboratory environmental conditions are recorded during the tests and for each test, the ranges that the laboratory ensures are listed in the relative paragraph. These ranges are in conformity to the limits prescribed by the reference standards.

2.1.4 ABBREVIATIONS

Test Report = TR
Equipment Under Test = EUT
Not Declared = N/D
NCR = No Calibration Required
N/Av = Not Available
N/D = Not Declared

N/R = Not Required (by the applicant, customer or manufacturer)

No. = Number

 $x \dots y = from x to y$

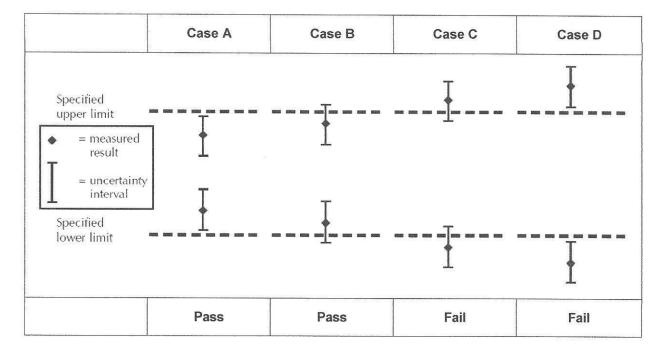
2.2 CRITERIA ADOPTED FOR COMPLIANCE EVALUATION

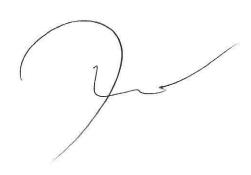
If applicable for compliance evaluation of test results, the Laboratory adopts the following criteria:

- Reference standard specifies uncertainty for measurements:
 - measurements uncertainty permitted;
 - instruments accuracy;
 - application of measurements uncertainty to the measured values;

in this case the measurement complies with the requirement if the measured value is within the limits, or with the correction due to the Laboratory uncertainty.

Reference standard doesn't specify uncertainty for measurements:
 Calculate uncertainty for measurement and compare the measured result with uncertainty band to defined acceptable limit. The measurement complies with the requirement if the probability it being within the limit is at least 50%:





3. TEST INSTRUMENTATION

Description	Manufacturer	Model	Intek ID	Last Calibration	Calibration Due
-	METREL MI	2094 CE	MULTITE STER	2024-07	2023-07
					A
				Personal State of the Control of the	

3.1 INSTRUMENTATION ACCURACY

If reference standard doesn't specify otherwise, accuracy of used instrumentation for the tests is in accordance to the limits indicated in the IEC document - CTL Decision Sheet DSH251B 2009 Developed by WG4-WG1 "Measurements accuracy".

4. EUT DOCUMENTATION

List of the documentation supplied to the laboratory:

Description	Code	Date - revision
User manual	Not available	Version 1.8
Cable data-sheet	Not available	1

A copy of this documentation is archived in TESTED.

5. ANNEXES LIST

Annex N.		Description	
01	TRF for EN 50575:2014	1	
	1111 101 E14 30373.2014		1145-1111

End of test report.





TEST REPORT

NO-2024-03-01

TEST REPORT

EN 50575:2014

Part 1: General requirements

Report Reference No. -2024-03-01 Date of issue: 2024.02.03 Testing Laboratory.....: **TESTED - Test and Measurement Division** Ferhatpaşa Mah. Yeditepe Cad. NO: 115/5 Ataşehir-İstanbul /TURKİYE Address: Testing location: **TESTED - Test and Measurement Division** Ferhatpaşa Mah. Yeditepe Cad. NO: 115/5 Ataşehir- İstanbul /TURKİYE Testing location / address: **ALKAN KABLO** Applicant's name ALKAN KABLO VE ELEKTRONÍK Address: SANAYI VE TICARET LTD. STI. Muallimköy Mahallesi Gazidede Caddesi No:119 41400 Gebze / KOCAELI Test specification: Standard....: EN 50575:2014 Non-standard test method..... N/A Test Report Form No.: 2024-03-01 Test item description NHXH FE180 E90 cable family Trade Mark: Manufacturer: **ALKAN KABLO**

Power cable / NHXH FE180 E90 cable family

0,6/1 kV

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Model and/or Type reference:

Rating(s)....:



TEST REPORT

NO-2024-03-01

Details of classified product

General

The cable NHXH FE180 E90 is classified in accordance with the procedures given in EN 50575:2014 and is defined as an electric cable according to BS EN 50575:2014+A1:2016.

Product description

The Electric Cable is described in the 'Sample details' below.

Traceability

The test samples were submitted by the manufacturer and received on 6th FEBRUARY 2024.

Sample details

Parameter	Details
Test sponsor	ALKAN KABLO VE ELEKTRONİK SANAYİ VE TİCARET LTD. ŞTİ.
Manufacturer of sample	ALKAN KABLO VE ELEKTRONİK SANAYİ VE TİCARET LTD. ŞTİ. , Gazidede Caddesi No:119 41400 Gebze / KOCAELİ
Trade name	NHXH FE180 E90
Sample description	Class 1 or Class 2 Copper Conductor, XLPE Insulation, HFR Sheath
Cables submitted for test	ď
NHXH FE180 E90	1x1.50 sqmm 5x240 sqmm

Italicised text is information supplied by the sponsor

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TEST REPORT

NO-2024-03-01

Reports & results in

support of this

classificationReports

Name of Laboratory	Name of test sponsor	Test reports Nos.	Test method/field of applicationrules
BASEC	ALKAN KABLO VE ELEKTRONİK SANAYİ VE TİCARET LTD. ŞTİ.	NO - 2024-03-01	BS EN 50575:2014+A1:2016.

Results

Test method	Parameter	No. test	Result s		
rest method	i didilictei	s	Continuous parameter	Compliance parameters	
BS EN 50575:2014+A1:2016	Н	1	1x1.50 sqmm 5x40 sqmm	≤ 425mm = B2ca- s1b,d1,a1 compliant	





Classification and field of application

Reference of classification

This classification has been carried out in accordance with BS EN 50575:2014+A1:2016.

Classification

The NHXMH FE180 E90 Cable in relation to reaction to fire behaviour is classified:

B2ca

The additional classification in relation to smoke production is:

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The additional classification in relation to flaming droplets / particles is:

d1

The additional classification in relation to acidity is:

a1

The format of the reaction to fire classification for electric cables is:

Fire Behaviour		Smoke Production		Flaming Droplets			Acidity	
B2ca	-	s1	-	d1	_		a1	_

Reaction to Fire Classification:

B2ca-s1b.d1.a1

The classification assigned to the products in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and UKCA marking under the Construction Products Regulation, as amended by the construction Products (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/465)

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of samples tested.

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COLENOISM

Field of application

This classification is valid for the Electric Cable described in 'Sample details' and listed below as determined in the extended application process according to PD-CLC/TS 50576:2016.

Identification	Cores approved	Sizes approved	Reaction to Fire Classificatio n
	1 to 4	1.50sqmm to 240sqmm	
NHXH FE180 E90	5	1.50sqmm to 240sqmm	
	6	1.50sqmm to 240sqmm	B2 ca
	7,8	1.50sqmm to 240sqmm	
	9 to 10, 12 to 16, 18 to 20	1.50sqmm to 240sqmm	
×	21, 22, 24, 25, 27, 30, 32, 33, 34, 36, 40, 42,	1.50sqmm, 240sqmm	
	NHXH FE180 E90	1 to 4 5 NHXH FE180 E90 6 7, 8 9 to 10, 12 to 16, 18 to 20 21, 22, 24, 25, 27, 30, 32, 33, 34, 36,	1 to 4 1.50sqmm to 240sqmm 1.50sqmm to 240sqmm 1.50sqmm to 240sqmm 7,8 1.50sqmm to 240sqmm 7,8 1.50sqmm to 240sqmm 9 to 10, 12 to 16, 18 to 20 21, 22, 24, 25, 27, 30, 32, 33, 34, 36, 40, 42, 1.50sqmm, 240sqmm 1.50sqmm to 240sqmm

This classification is valid for cables for general applications in construction works subject to reaction to fire requirements.

Limitations

This classification will be valid whilst;

- The test methods remain unchanged.
- The product standard or technical approval remains unchanged,
- Constructional or material modifications do not exceed limits of the field of application.

The manufacturer has made a declaration, which is held on file, which the product placed in the marketplace, named in product description section of this report and produced at the manufacturing plant listed therein, is exactly the same as the product that was tested.

This classification document does not represent type approval or certification of the product.

Results:

This type-test report performed by the given test specification contains

- the measuring data, results and statements according to the reference of the product-type by System '1"3 in Annex V. of regulation 305/2011/EU, for reasons of determination of the essential characteristics in the declaration of performance

- verdicts "PASSED" the standard requirements "CPR Class: B2ca-s1b,d1,a1"