



**TYPE TEST REPORT**

<b>Product description:</b>	N2XH FE180 E90 cable family
<b>Tested Models:</b>	Power Cable
<b>Manufacturer:</b>	<b>ALKAN KABLO VE ELEKTRONİK SANAYİ VE TİCARET LTD. ŞTİ.</b> Muallimköy Mahallesi Gazidede Caddesi No:119 41400 Gebze / KOCAELİ Tel. : (+90) 0 262 777 00 58 (pbx) (+90) 0 216 564 57 40 (pbx) (+90) 0 549 616 69 84( pbx) (+90) 0 262 777 00 68 (Fax) <a href="http://www.alkankablo.com">http://www.alkankablo.com</a> <a href="mailto:info@alkankablo.com">info@alkankablo.com</a>

<b>Test specification:</b>	EN 50575:2014
<b>Application:</b>	Full application
<b>Result:</b>	<b>Pass</b> <input checked="" type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
<b>Remarks:</b>	None

<b>Customer:</b>	<b>ALKAN KABLO VE ELEKTRONİK SANAYİ VE TİCARET LTD. ŞTİ.</b> Muallimköy Mahallesi Gazidede Caddesi No:119 41400 Gebze / KOCAELİ Tel. : (+90) 0 262 777 00 58 (pbx) (+90) 0 216 564 57 40 (pbx) (+90) 0 549 616 69 84( pbx) (+90) 0 262 777 00 68 (Fax) <a href="http://www.alkankablo.com">http://www.alkankablo.com</a> <a href="mailto:info@alkankablo.com">info@alkankablo.com</a>
<b>Purchase Order:</b>	<b>ODA-U03626</b> <b>dated:</b> 2016-08-31
<b>Order Confirmation:</b>	<b>CO 2016-0297-00</b> <b>dated:</b> 2016-08-31

<b>Samples receiving date:</b>	2024-02.06
<b>Tests date:</b>	<b>from:</b> 2024.02.03 <b>to:</b> 2024.02.06



<b>Test Laboratory</b> <b>TESTED - Test and Measurement Division</b> Ferhatpaşa Mah. Yeditepe Cad. NO: 115/5 Ataşehir- İstanbul /TÜRKİYE Tel +90 543 488 05 65 -90553 902 83 90 Fax +90216 545 5851 url: <a href="https://www.testede.net">https://www.testede.net</a> e-mail: info@testede.net	<b>Test site</b> <b>TESTED - Test and Measurement Division</b> Ferhatpaşa Mah. Yeditepe Cad. NO: 115/5 Ataşehir- İstanbul /TÜRKİYE
--	---

Written by

Verified and approved  
by

Test Engineer

Test and Measurement  
Division Manager

00	06.02.2024	Formal issue
<b>Rev.</b>	<b>Date</b>	<b>Description</b>

*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

The samples under test were supplied by the Manufacturer.

The information relating to the initial sampling are not known.

Received samples:	2
Tested samples:	2
Selection method of the laboratory:	<input type="checkbox"/> Random taking <input checked="" type="checkbox"/> N/A

### 1.2 ADDITIONAL INFORMATION

Manufacturing plant address:	<b>ALKAN KABLO VE ELEKTRONİK SANAYİ VE TİCARET LTD. ŞTİ.</b> Muallimköy Mahallesi Gazidede Caddesi No:119 41400 Gebze / KOCAELİ
Type of unit:	<input type="checkbox"/> Prototype / Pre-series <input checked="" type="checkbox"/> Series
Serial number:	Not present
HW revision:	Not declared
SW/FW revision:	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 DEMİR - 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	<b>Compliant</b>	/
2	N2XH FE180 E90 cable family	<b>Compliant</b>	/

#### 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 ... 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%:

	Case A	Case B	Case C	Case D
Specified upper limit  Specified lower limit				
	Pass	Pass	Fail	Fail



### 3. TEST INSTRUMENTATION

Description	Manufacturer	Model	Intek ID	Last Calibration	Calibration Due
METER MULTITESTER	METREL MI	2094 CE	-	2023-07	2024-07

#### 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	/

A copy of this documentation is archived in TESTED.



**5. ANNEXES LIST**

Annex N.	Description
01	TRF for EN 50575:2014

---

*End of test report.*



**TEST REPORT**  
**EN 50575:2014**  
**Part 1: General requirements**

**Report Reference No.** ..... : **LVD - 2023-00-01 / 02**

**Date of issue** ..... : **2024.02.06**

**Testing Laboratory**..... : **TESTED - Test and Measurement Division**

**Address** ..... : **Ferhatpaşa Mah. Yeditepe Cad. NO: 115/5 Ataşehir- İstanbul /TURKIYE**

**Testing location** ..... : **TESTED - Test and Measurement Division**

**Testing location / address** ..... : **Ferhatpaşa Mah. Yeditepe Cad. NO: 115/5 Ataşehir- İstanbul /TURKIYE**

**Applicant's name** ..... : **ALKAN KABLO**

**Address** ..... : **ALKAN KABLO VE ELEKTRONİK  
SANAYİ VE TİCARET LTD. ŞTİ.  
Muallimköy Mahallesi  
Gazidede Caddesi  
No:119 41400 Gebze / KOCAELİ**


**Test specification:**

**Standard**..... : **EN 50575:2014**

**Non-standard test method**..... : **N/A**

**Test Report Form No.** ..... : **LVD - 2023-00-01 / 02**

**Test item description** ..... : **N2XH FE180 E90 cable family**

**Trade Mark** ..... : 

**Manufacturer** ..... : **ALKAN KABLO**

**Model and/or Type reference** ..... : **Power cable / N2XH FE180 E90 cable family**

**Rating(s)**..... : **0,6/1 kV**





### Details of classified product

#### General

The cable **N2XH 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 6<sup>th</sup> 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	<b>N2XH FE180 E90</b>
Sample description	<i>Class 1 or Class 2 Copper Conductor, XLPE Insulation, HFR Sheath</i>
<b>Cables submitted for test</b>	
<b>N2XH FE180 E90</b>	1x1.50 sqmm 5x240 sqmm

*Italicised text is information supplied by the sponsor*



TESTED ÖLÇÜM VE BELGELENDİRME  
SANAYİ VE TİCARET LİMİTED ŞİRKETİ

# TEST REPORT

LVD - 2023-00-01 / 02

Reports & results in

support of this

classification Reports

Name of Laboratory	Name of test sponsor	Test reports Nos.	Test method/field of application rules
BASEC	ALKAN KABLO VE ELEKTRONİK SANAYİ VE TİCARET LTD. ŞTİ.	LVD - 2023-00-01 / 02	BS EN 50575:2014+A1:2016.

## Results

Test method	Parameter	No. test runs	Results	
			Continuous parameter	Compliance parameters
BS EN 50575:2014+A1:2016	H	1	1x1.50 sqmm 5x240 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 **N2XH FE180 E90** Cable in relation to reaction to fire behaviour is classified:

**B2ca**

The additional classification in relation to smoke production is:

s1

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.



### 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.

Brand Name	Cable Identification	Cores approved	Sizes approved	Reaction to Fire Classification
ALKAN KABLO VE ELEKTRONİK SANAYİ VE TİCARET LTD. ŞTİ.	N2XH FE180 E90	1 to 4	1.50sqmm to 240sqmm	B2 ca
		5	1.50sqmm to 240sqmm	
		6	1.50sqmm to 240sqmm	
		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, 48, 50, 52, 61	1.50sqmm, 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+', '1' or '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**"