

Classification Report



BASEC Client **Energya Power Cables Factory Egypt**

Report No. M3CPRT2198-1 Classification

Number of pages in this Report: 8

Issue Date **26 September 2019**

Items Tested 3 samples of Power Cable

Specification(s) BS EN 13501-6:2014

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Laboratory Manager

Issue Date: 26 September 2019

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Notified Body No. 2661

Introduction

This classification report defines the classification assigned to the product, power cable, in accordance with the procedures given in BS EN 13501-6:2014.



CLASSIFICATION OF REACTION TO FIRE FOR ELECTRIC CABLES IN ACCORDANCE WITH BS EN 13501-6:2014

Sponsor:	Energya Power Cables Factory Egypt
Prepared for:	Energya Power Cables Factory Egypt, 10th of Ramadan City, Industrial Zone, Area A1, Cairo
Prepared by:	British Approvals Service for Cables, Presley House, Presley Way, Crownhill Milton Keynes, MK8 0ES, United Kingdom
Notified Body No.	2661
Product name:	BS 6724 Family 4 (LSF)
Classification report No.	M3CPRT2198-1 Classification
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Details of classified product

General

The BS 6724 Family 4 (LSF) cables are classified in accordance with the procedures given in BS EN 13501-6:2014 and is defined as a power cable according to BS EN 50575:2014+A1:2016.

Product description

The power cables 'BS 6724 Family 4 (LSF)' are described in Sample details below.

Traceability

The test samples were submitted by the manufacturer and received on 2 September 2019.

Sample details

Parameter	Details
Test sponsor	Energys Power Cables Factory Egypt
Manufacturer of sample	Energys Power Cables Factory Egypt
Place of manufacture	10th of Ramadan City, Industrial Zone, Area A1, Cairo
Cable submitted for test	
BS 6724 1x150mm LSF AWA	Single core power cable. Class 2 (stranded) copper conductors, XLPE Insulation, LSHF bedding, aluminium wire armour, binder tape, LSHF sheath. OD = 28.0mm
BS 6724 1x500mm LSF AWA	Single core power cable. Class 2 (stranded) copper conductors, XLPE Insulation, LSHF bedding, aluminium wire armour, binder tape, LSHF sheath. OD = 44.3mm
BS 6724 1x1000mm LSF AWA	Single core power cable. Class 2 (stranded) copper conductors, XLPE Insulation, LSHF bedding, aluminium wire armour, binder tape, LSHF sheath. OD = 61.9mm

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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	Energya Power Cables Factory Egypt	M3CPRT2198	BS EN 60332-1-2:2004+A11:2016 BS EN 50399:2011+A1:2016

Results

BS 6724 1x150mm LSF AWA

Test method	Parameter	No. tests runs	Results	
			Continuous parameter	Compliance parameters
BS EN 50399:2011 +A1:2016	FS	1	1.10m	$\leq 1.5\text{m} = \text{B2ca}$ Compliant
	THR _{1200s}		15.8MJ	$\leq 30\text{MJ} = \text{Cca}$ Compliant
	Peak HRR		21.9kW	$\leq 30\text{kW} = \text{B2ca}$ Compliant
	FIGRA		66.6W/s	$\leq 150\text{W/s} = \text{B2ca}$ Compliant
	TSP _{1200s}	1	19.5m ²	$\leq 50\text{m}^2 = \text{s1}$ compliant
	Peak SPR		21.90m ² /s	$\leq 0.25\text{m}^2/\text{s} = \text{s1}$ compliant
BS EN 60332-1-2:2004 +A11:2016	Flaming droplets/particles	1	>10s	flaming drops >10s = d2 Compliant
	H	1	94mm	$\leq 425\text{mm} = \text{Eca}$ compliant

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Results

BS 6724 1x500mm LSF AWA

Test method	Parameter	No. tests runs	Results	
			Continuous parameter	Compliance parameters
BS EN 50399:2011 +A1:2016	FS	1	1.25m	$\leq 1.5\text{m} = \text{B2ca}$ Compliant
	THR _{1200s}		30.3MJ	$\leq 70\text{MJ} = \text{Dca}$ Compliant
	Peak HRR		38.7kW	$\leq 60\text{kW} = \text{Cca}$ Compliant
	FIGRA		67.2W/s	$\leq 150\text{W/s} = \text{B2ca}$ Compliant
	TSP _{1200s}	1	28.2m ²	$\leq 50\text{m}^2 = \text{s1}$ compliant
	Peak SPR		0.05m ² /s	$\leq 0.25\text{m}^2/\text{s} = \text{s1}$ compliant
BS EN 60332-1-2:2004 +A11:2016	Flaming droplets/particles	1	>10s	flaming drops >10s = d2 Compliant
	H	1	118mm	$\leq 425\text{mm} = \text{Eca}$ compliant

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Results

BS 6724 1x1000mm LSF AWA

Test method	Parameter	No. tests runs	Results	
			Continuous parameter	Compliance parameters
BS EN 50399:2011 +A1:2016	FS	1	1.45m	$\leq 1.5\text{m} = \text{B2ca}$ Compliant
	THR _{1200s}		21.8MJ	$\leq 30\text{MJ} = \text{Cca}$ Compliant
	Peak HRR		38.2kW	$\leq 60\text{kW} = \text{Cca}$ Compliant
	FIGRA		35.5W/s	$\leq 150\text{W/s} = \text{B2ca}$ Compliant
	TSP _{1200s}	1	14.9m ²	$\leq 50\text{m}^2 = \text{s1}$ compliant
	Peak SPR		0.04m ² /s	$\leq 0.25\text{m}^2/\text{s} = \text{s1}$ compliant
BS EN 60332-1-2:2004 +A11:2016	Flaming droplets/particles	1	>10s	flaming drops >10s = d2 Compliant
	H	1	110mm	$\leq 425\text{mm} = \text{Eca}$ compliant

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Classification and field of application

Reference of classification

This classification has been carried out in accordance with BS EN 13501-6:2014.

Classification

The power cables in relation to reaction to fire behaviour are classified:

D_{ca}

The additional classification in relation to smoke production is:

s1

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

d2

The additional classification in relation to acidity is:

-

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

Fire Behaviour		Smoke Production			Flaming Droplets			Acidity	
D _{ca}	-	s	1	,	d	2	,	-	-

Reaction to fire classification: D_{ca}-s1,d2

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 CE marking under the Construction Products Regulation.

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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Field of application

This classification is valid for the power cables 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	Number of Cores	Conductor size	Reaction to Fire Classification
Energys Power Cables Factory Egypt	BS 6724 Family 4 (LSF)	1	150mm ² -1000mm ²	D _{ca} -s1,d2

This classification is valid for cables for general application 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, that the product placed in the marketplace, named in the 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.

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