

CU/XLPE/PVC

Cable refer to BS 7889
0.6/1kV



Certificate

BASEC
BRITISH APPROVALS SERVICE FOR CABLES

Application

Unarmoured power cables suitable for installation in areas with reduced risk of mechanical damage, on tray, in free air or clipped direct. Also suitable for conduit or trunking installation when additional mechanical protection is required.

Construction

No.	Classification	Code	Construction detail
①	Conductor	CU	Annealed copper conductor BS EN60228(IEC60228) Class 2
②	Insulation	XLPE	XLPE according to BS 7655-1.3 GP8
③	Outer sheath	PVC	PVC according to BS7655-4.2 TYPE 9 Sheath color: Black

Cable marking

The outer sheath is marked in embossed or ink printed as follows:

PRYSMIAN(S) BASEC BS7889 ELECTRIC CABLE 600/1000V SIZE YYYY XXXXm



Core Identification

No. of cores	Detail
1 core	Black
Other Harmonized colours available as customer requirement	

Applicable Standards

Design guidelines	BS 7889
Flame retardant properties	IEC60332-1

Technical Data

Rated voltage	0.6/1 kV
Test voltage	3.5kV/5min
Temperature range	-15℃-90℃

Bending radius

Minimum bending radius	Cable diameter D mm	
	D≤25	D>25
Normal	4D	6D
Notes: D =overall diameter of cable		

BASEC Approved Cables

CU/XLPE/PVC BS7889 0.6/1kV

No. of cores	×	C.S.A	Shape of Conductor	Nominal thickness of insulation	Nominal thickness of sheath	Approx. overall diameter	Approx. weight	DC resistance at max.20°C
n		mm^2		mm	mm	mm	Kg/km	Ω/km
1	×	1.5	circular	0.7	1.4	5.8	46	12.1
1	×	2.5	circular	0.7	1.4	6.2	58	7.41
1	×	4	circular	0.7	1.4	6.7	74	4.61
1	×	6	circular	0.7	1.4	7.3	96	3.08
1	×	10	circular	0.7	1.4	8.3	141	1.83
1	×	16	circular	0.7	1.4	9.4	203	1.15
1	×	25	circular	0.9	1.4	11.1	305	0.727
1	×	35	circular	0.9	1.4	12.2	402	0.524
1	×	50	circular*	1.0	1.4	12.9	502	0.387
1	×	70	circular*	1.1	1.4	14.8	707	0.268
1	×	95	circular*	1.1	1.5	16.6	966	0.193
1	×	120	circular*	1.2	1.5	18.2	1201	0.153
1	×	150	circular*	1.4	1.6	20.3	1478	0.124
1	×	185	circular*	1.6	1.6	22.4	1812	0.0991
1	×	240	circular*	1.7	1.7	25.1	2365	0.0754
1	×	300	circular*	1.8	1.8	27.7	2974	0.0601
1	×	400	circular*	2.0	1.9	31.5	3812	0.0470
1	×	500	circular*	2.2	2.0	35.0	4854	0.0366
1	×	630	circular*	2.4	2.2	39.4	6183	0.0283
1	×	800	circular*	2.6	2.3	44.1	7909	0.0221
1	×	1000	circular*	2.8	2.4	49.7	10191	0.0176

Note *: compacted conductor

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No. of cores	×	C.S.A	Current rating-three phase AC			Voltage drop-three phase AC			Short circuit current (1s)
			Horizontal flat touching free air	Trefoil touching free air	Horizontal flat spaced free air	Horizontal flat touching free air	Trefoil touching free air	Horizontal flat spaced* free air	
n		mm²	A	A	A	mV/A/m	mV/A/m	mV/A/m	kA(1s)
1	×	1.5	—	—	—	27.000	27.000	27.000	0.21
1	×	2.5	—	—	—	16.000	16.000	16.000	0.36
1	×	4	—	—	—	10.000	10.000	10.000	0.57
1	×	6	—	—	—	6.800	6.800	6.800	0.86
1	×	10	—	—	—	4.000	4.000	4.000	1.43
1	×	16	—	—	—	2.500	2.500	2.500	2.29
1	×	25	141	135	182	1.600	1.600	1.650	3.58
1	×	35	176	169	226	1.150	1.150	1.200	5.01
1	×	50	216	207	275	0.870	0.870	0.890	7.15
1	×	70	279	268	353	0.620	0.610	0.650	10.01
1	×	95	342	328	430	0.460	0.450	0.490	13.59
1	×	120	400	383	500	0.380	0.370	0.420	17.16
1	×	150	464	444	577	0.320	0.310	0.370	21.45
1	×	185	533	510	661	0.280	0.260	0.330	26.46
1	×	240	634	607	781	0.240	0.220	0.290	34.32
1	×	300	736	703	902	0.210	0.195	0.270	42.90
1	×	400	868	823	1085	0.195	0.175	0.260	57.20
1	×	500	998	946	1253	0.180	0.160	0.250	71.50
1	×	630	1151	1088	1454	0.170	0.150	0.240	90.09
1	×	800	1275	1214	1581	0.165	0.145	0.240	114.40
1	×	1000	1436	1349	1775	0.165	0.140	0.240	143.00

Note Current ratings at ambient temprature 30℃

*: Flat spaced by one cable diameter

BASEC
BRITISH APPROVALS SERVICE FOR CABLES

Certificate No:
225/001/002
Issue No: 6

Certificate of Product Approval

Licensee:
Suzhou Draka Cable Co., Ltd.
No. 88 Kangyuan Road, Xiangcheng Economic Development District, Suzhou, 215131, China

Factory:
No. 88 Kangyuan Road, Xiangcheng Economic Development District, Suzhou, 215131, China

Standard:
BS 7889:2012

Description:
Non-armoured power cables with PVC sheathing

Details:
N/A

Materials:
Insulation GP 8, Sheath Type 9

Brand Name:
N/A

Origin Mark:
PRYSMIAN (S) or DRAKA (S)

Permissible Approval Marks:

BASEC name | BASEC roundel

Signed for and on behalf of
BASEC Group Ltd

Date: 02/02/2024

Date of original issue: 10/07/2018

Check BASEC website to verify validity.

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BSF079 Issue 5 (20-03-2023)

UKAS PRODUCT CERTIFICATION 0004

Expiry date:
01/06/2027

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Type(s) and Range(s) of Approval

Table / Clause	Code Designation	Conductor Class	Range of Cores	Min Nominal Size -sqmm	Max Nominal Size - sqmm
2	N/A	Class 2	1	1.5	1000

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