

**Belken Power**

**Cables and wires**  
Product Catalogue

Email: [info@belkenpower.com](mailto:info@belkenpower.com)  
Website: [www.belkenpower.com](http://www.belkenpower.com)





# Content

---

## Bare wires

---

AAC	4
AAAC	5
ACSR	6

---

## Installation cables

---

MMJ	7
XMJ	8
XMJ-UV	9
XMJ-HF	10
CYKY	11

---

## Power cables rated voltage 0.6/1 kV

---

1-AYY, 1-YY	12
1-AYKY, 1-CYKY	13
1-AYKYDY, 1-CYKYDY	14
YAKY, YnAKY, KYK, YnKY	15
YAKXS, YnAKXS, YKXS, YnKXS	16
YAKYFtly, YnAKYFtly, YKYFtly, YnKYFtly	17
YAKYFoy, YnAKYFoy, YKYFoy, YnKYFoy	18
NYY	19
NAYY, NYY	20
NA2XY, N2XY	21
NA2X2Y, N2X2Y	22
NAYBY, NYBY	23
NAYRGY, NYRGY	24
NYCY	25
E-AYY, E-YY	26
E-AY2Y, E-Y2Y	27
AMCMK, MCMK	28
AXMK, AXMK-PE	29
AXMK-lighting	30
XMK, XMK-PE	31

---

## Wires for overhead power transmission lines

---

AMKA	32
EX	33
1-AES	34
NFA2X	35
AsXS, AsXSn	36
CCX-WK, PAS-W, SAX-W	37

---

## Wires for overhead tower transmission lines

---

CCSX-WK	38
CCST-WK	39
Technical tables	40

---

## Power cables rated voltage 3,6/6 kV

---

6-AYKCY, 6-CYKCY	51
6-AYKCY, 6-CYKCY	52
6-AYKCYDY, 6-CYKCYDY	53
YAKY, KYK	54
YAKY, KYK	55
YAKYFtly, YKYFtly	56
YAKYFoy, YKYFoy	57
YHAKXS, YHKXS	58
XHAKXS, XHKXS	59
XUHAKXS, XUHKXS	60
XRUHAKXS, XnRUHAKXS, XRUHKXS, XnRUHKXS	61

---

## Power cables rated voltage 6/10 kV

---

10-AXEKCY, 10-CXEKCY	62
10-AXEKCE, 10-CXEKCE	63
10-AXEKVCE, 10-CXEKVCE	64
10-AXEKVCEY, 10-CXEKVCEY	65
10-AXEKVCVE, 10-CXEKVCVE	66
YHAKXS, YHKXS	67
XHAKXS, XHKXS	68
XUHAKXS, XUHKXS	69
XRUHAKXS, XnRUHAKXS, XRUHKXS, XnRUHKXS	70
NA2XSY, N2XSY	71
NA2XSYBY, N2XSYBY	72
NA2XSYGY, N2XSYGY	73
NA2XSEYBY, N2XSEYBY	74
NA2XSEYGY, N2XSEYGY	75
NA2XS2Y, N2XS2Y	76
NA2XS(F)2Y, N2XS(F)2Y	77
NA2XS(FL)2Y, N2XS(FL)2Y	78
AHXAMK-W	79
AHXAMK-WS	80
AHXAMK-WM	81
AHXAMK-WP	82
AHXCMK-WTC/PE (-WTC/PE (WTL); -WTC/PE (WTR))	83
AXCEL-F(WP)	84

## Content

---

### Power cables rated voltage 8,7/15 kV

---

YHAKXS, YHKXS	85
XHAKXS, XHKXS	86
XUHAKXS, XUHKXS	87
XRUHAKXS, XnRUHAKXS, XRUHKXS, XnRUHKXS	88

---

### Power cables rated voltage 12,7/22 kV

---

22-AXEKCY, 22-CXEKCY	89
22-AXEKCE, 22-CXEKCE	90
22-AXEKVCE, 22-CXEKVCE	91
22-AXEKVCEY, 22-CXEKVCEY	92
22-AXEKVCVE, 22-CXEKVCVE	93

---

### Power cables rated voltage 12/20 kV

---

YHAKXS, YHKXS	94
XHAKXS, XHKXS	95
XUHAKXS, XUHKXS	96
XRUHAKXS, XnRUHAKXS, XRUHKXS, XnRUHKXS	97
NA2XSY, N2XSY	98
NA2XS2Y, N2XS2Y	99
NA2XS(F)2Y, N2XS(F)2Y	100
NA2XS(FL)2Y, N2XS(FL)2Y	101
AHXAMK-W	102
AHXAMK-WS	103
AHXAMK-WM	104
AHXAMK-WP	105
AHXCMK-WTC/PE (-WTC/PE (WTL); -WTC/PE (WTR))	106
AXCEL-F(WP)	107

---

### Power cables rated voltage 20/35 kV

---

35-AXEKCY, 35-CXEKCY	108
35-AXEKCE, 35-CXEKCE	109
35-AXEKVCE, 35-CXEKVCE	110
35-AXEKVCEY, 35-CXEKVCEY	111
35-AXEKVCVE, 35-CXEKVCVE	112

### Power cables rated voltage 18/30 kV

---

YHAKXS, YHKXS	113
XHAKXS, XHKXS	114
XUHAKXS, XUHKXS	115
XRUHAKXS, XnRUHAKXS, XRUHKXS, XnRUHKXS	116
NA2XSY, N2XSY	117
NA2XS2Y, N2XS2Y	118
NA2XS(F)2Y, N2XS(F)2Y	119
NA2XS(FL)2Y, N2XS(FL)2Y	120
AHXAMK-W	121
AHXAMK-WS	122
AHXAMK-WM	123
AHXAMK-WP	124
AHXCMK-WTC/PE (-WTC/PE (WTL); -WTC/PE (WTR))	125
AXCEL-F(WP)	126

### Power cables rated voltage 20,8/36 (42) kV

---

EAXeCeWB	127
----------	-----

---

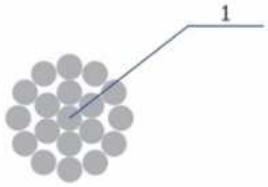
### Power cables rated voltage 64/110 kV

---

A2XS(FL)2Y, 2XS(FL)2Y	128
Technical tables	129

# Bare wires

AAC, EN 50182



**Application** For overhead power transmission lines having relatively short spans.

**Construction** 1. Conductor: Aluminum acc. to EN 60889, RM ( round, stranded).

## Parameters



Operating conductor temperature, °C

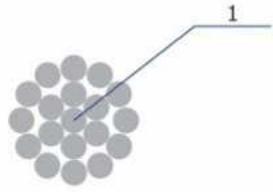
max +80

## Wire sizes

Country	Minimum conductor size, mm <sup>2</sup>	Maximum conductor size, mm <sup>2</sup>
Austria	24-AL1	1000-AL1
Belgium	49-AL1	147-AL1
Finland	107-AL1	1095-AL1
Germany	16-AL1	1000-AL1
Norway	25-AL1	911-AL1
Spain	28-AL1	638-AL1
Switzerland	25-AL1	802-AL1
Sweden	62-AL1	911-AL1
England	23-AL1	628-AL1
Italy	25-AL1	767-AL1

# Bare wires

AAAC, EN 50182



**Application** For overhead power transmission lines having relatively long spans.

**Construction** 1. Conductor: Aluminum alloy acc. to EN 50183, RM ( round, stranded).

**Parameters**



Operating conductor temperature, °C

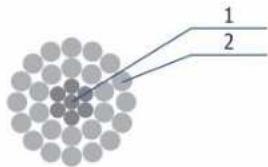
max +80

**Wire sizes**

Country	Minimum conductor size, mm <sup>2</sup>	Maximum conductor size, mm <sup>2</sup>
Austria	24-AL3	1000-AL3
Belgium	34-AL4	926-AL4
Finland	178-AL2	638-AL3
France	22-AL4	1596-AL4
Germany	16-AL3	1000-AL3
Norway	46-AL6 46-AL7	865-AL6 865-AL7
Spain	28-AL2	638-AL2
Switzerland	16-AL3	802-AL3
Sweden	62-AL7	911-AL7
England	19-AL3 239-AL5	996-AL3 996-AL5
Italy	35-AL2	403-AL2
Portugal	34-AL4	1144-AL4

# Bare wires

ACSR, EN 50182



**Application** For overhead power transmission lines having long spans.

**Construction**

1. Core: steel wire or steel stranded wires acc. to EN 50189;
2. Conductor: Aluminum acc. to EN 60889, RM (stranded, round).

**Parameters**



Operating conductor temperature, °C

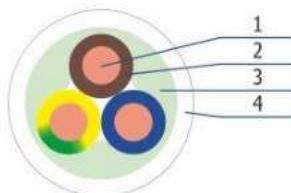
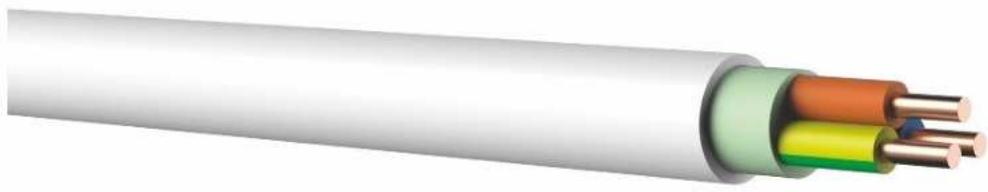
max +80

**Wire sizes**

Country	Minimum conductor size, mm <sup>2</sup>	Maximum conductor size, mm <sup>2</sup>
Austria	34-AL1/6-ST1A	1288-AL1/183-ST1A
Belgium	51-AL1/30-ST1A or ST3D	645-AL1/82-ST1A or ST3D
Finland	34-AL1/6-ST1A	148-AL1/67-ST1A
France	28-AL1/9-ST1A 94-AL1/22-ST6C	234-AL1/55-ST1A 957-AL1/228-ST6C
Germany	15-AL1/3-ST1A	1046-AL1/45-ST1A
Norway	606-AL1/77-ST5E	766-AL1/97-ST5E
Spain	27-AL1/4-ST1A	566-AL1/72-ST1A
Switzerland	22-AL1/4-ST1A	748-AL1/97-ST1A
Sweden	54-AL1/9-ST1A	251-AL1/65-ST1A
England	11-AL1/2-ST1A	528-AL1/69-ST1A
Italy	42-AL1/7-ST1A	1657-AL1/209-ST1A
	42-AL1/7-ST3D 42-AL1/7-ST4A	1657-AL1/53-ST3D 1657-AL1/209-ST4A

# Installation cables

MMJ, SFS 2091



---

Application	For indoor and outdoor installation. Unfit for laying in ground.
-------------	--

---

Construction	1. Conductor: Copper acc. to EN 60228. Class 1 - RE (solid, round), Class 2 – RM (round, stranded); 2. Insulation: PVC (color code acc. to HD 308); 3. Filling: EPDM; 4. Sheath: PVC (white color).
--------------	--

---

## Parameters

Exploitation temperature range, °C	from -50 up to 50
Short-circuit temperature, °C	160
Bending radius	12D
Fire properties	EN 60332-1-2
Operating conductor temperature, °C	max +70
Cabling (inside/outside)	inside/outside
Installation temperature, °C	-15
Frequency, Hz	50
Testing voltage, kV	2,5
Rated voltage, kV	300/500V, 450/750V

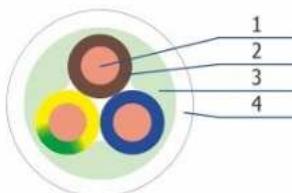
## Wire sizes

---

Number of conductors	2 – 5
Cross-section of conductors, mm <sup>2</sup> (conductor type):	
MMJ 300/500 V	1.5 – 2.5 (RE)
MMJ 450/750 V	6 – 25 (RM)

# Installation cables

XMJ, SFS 2091; EVS 720



**Application** For indoor and outdoor installation. Unfit for laying in ground.

**Construction**

1. Conductor: Copper acc. to EN 60228. Class 1 - RE (solid, round), Class 2 – RM (round, stranded);
2. Insulation: XLPE (color code acc. to HD 308);
3. Filling: EPDM;
4. Sheath: PVC (white color).

## Parameters

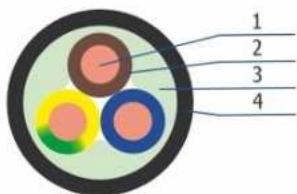
	Exploitation temperature range, °C	from -50 up to 50
	Short-circuit temperature, °C	250
	Bending radius	12D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-15
	Frequency, Hz	50
	Testing voltage, kV	2,5
	Rated voltage, kV	300/500V, 450/750V

## Wire sizes

Number of conductors	2 – 5
Cross-section of conductors, mm <sup>2</sup> (conductor type):	
XMJ 300/500 V	1.5 – 2.5 (RE)
XMJ 450/750 V	4 – 25 (RM)

# Installation cables

XMJ-UV, SFS 2091; EVS 720



**Application** For indoor and outdoor installation. Unfit for laying in ground.

**Construction**

1. Conductor: Copper acc. to EN 60228. Class 1 - RE (solid, round), Class 2 – RM (round, stranded);
2. Insulation: XLPE (color code acc. to HD 308);
3. Filling: EPDM;
4. Sheath: UV-stabilized PVC (black color).

## Parameters

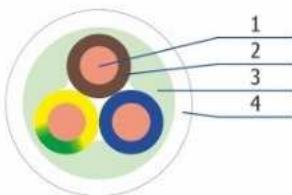
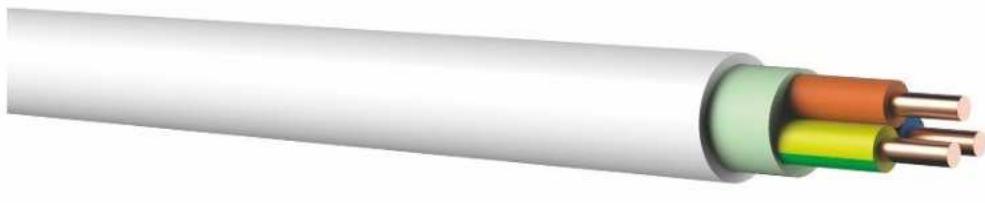
	Exploitation temperature range, °C	from -50 up to 50
	Short-circuit temperature, °C	250
	Bending radius	12D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-15
	Frequency, Hz	50
	Testing voltage, kV	2,5
	Rated voltage, kV	300/500V, 450/750V

## Wire sizes

Number of conductors	2 – 5
Cross-section of conductors, mm <sup>2</sup> (conductor type):	
XMJ-UV 300/500 V	1.5 – 2.5 (RE)
XMJ-UV 450/750 V	4 – 25 (RM)

# Installation cables

XMJ-HF, SFS 2091; EVS 720



**Application** For indoor and outdoor installation. Unfit for laying in ground. For installation in fire hazardous zones.

**Construction**

1. Conductor: Copper acc. to EN 60228. Class 1 - RE (solid, round), Class 2 – RM (round, stranded);
2. Insulation: XLPE (color code acc. to HD 308);
3. Filling: Halogen free compound;
4. Sheath: Halogen free compound (white color).

## Parameters

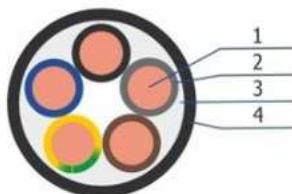
	Exploitation temperature range, °C	from -50 up to 50
	Short-circuit temperature, °C	250
	Bending radius	12D
	Fire properties	EN 60332-3-23
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-15
	Frequency, Hz	50
	Testing voltage, kV	2,5
	Rated voltage, kV	300/500V, 450/750V

## Wire sizes

Number of conductors	2 – 5
Cross-section of conductors, mm <sup>2</sup> (conductor type):	
XMJ-HF 300/500 V	1.5 – 2.5 (RE)
XMJ-HF 450/750 V	4 – 25 (RM)

# Installation cables

CYKY (-J, -O), ČSN 34 7411



Application	For fixed installation in drained ground, under plaster or in the air. Unfit for installation in water.
-------------	---

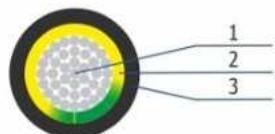
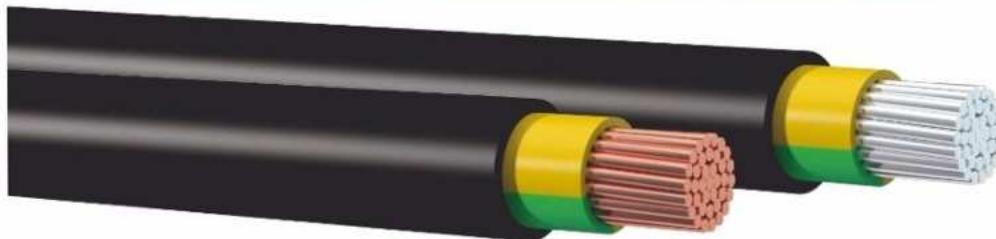
Construction	1. Conductor: Copper acc. to EN 60228. Class 1 - RE (solid, round); 2. Insulation: PVC (color code acc. to HD 308, -J - with Y/G core, -O - without Y/G core); 3. Filling: EPDM; 4. Sheath: PVC (black color).
--------------	---

Parameters	Exploitation temperature range, °C from -50 up to 50
	Short-circuit temperature, °C 160
	Bending radius for cables with a diameter ≤20 mm for cables with a diameter above 20 mm 6D 12D
	Fire properties EN 60332-1-2
	Operating conductor temperature, °C max +70
	Cabling (inside/outside) inside/outside
	Installation temperature, °C -15
	Frequency, Hz 50
	Testing voltage, kV 2,5
Cable sizes	Rated voltage, kV 300/500V, 450/750V

Number of conductors	2	3	4	5	7 and more
Minimum conductor size, mm <sup>2</sup>			1.5		
Maximum conductor size, mm <sup>2</sup>	4.0	6.0	16.0	16.0	4.0

# Power cables rated voltage 0.6/1 kV

1-AYY (-J, -O), 1-YY (-J, -O), ČSN 347659, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 2 - RMC (stranded, round, compacted);
2. Insulation: PVC (color code acc. HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Cover: PVC sheath (black color).

## Parameters

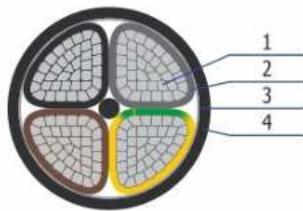
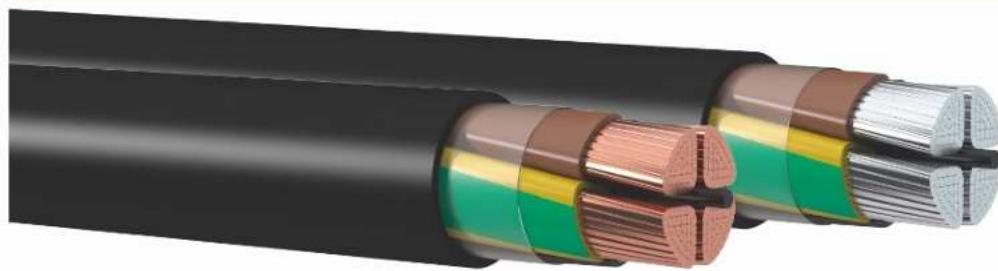
	Exploitation temperature range, °C	from -50 to 50
	Short-circuit temperature, °C	160 ( $S \leq 300 \text{ mm}^2$ ); 140 ( $S > 300 \text{ mm}^2$ )
	Bending radius	15D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>	25	16
Maximum conductor size, mm <sup>2</sup>		630

# Power cables rated voltage 0.6/1 kV

1-AYKY (-J, -O), 1-CYKY (-J, -O), ČSN 347659, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: EPDM or plastic tape;
4. Cover: PVC sheath (black color).

## Parameters

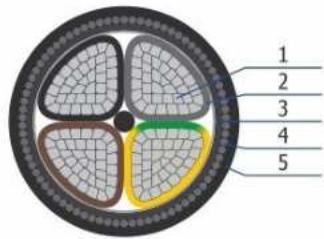
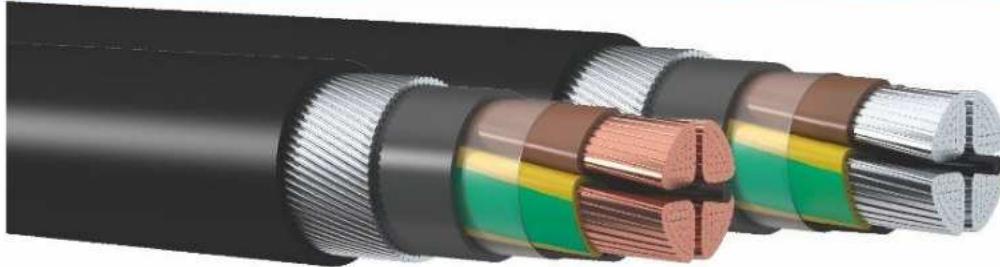
	Exploitation temperature range, °C	from -50 to 50
	Short-circuit temperature, °C	160
	Bending radius	12D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Al	Cu		Al	Cu	Al	Cu	Al	Cu
Number of conductors	3	2		3	3+1		4	5	
Minimum conductor size, mm <sup>2</sup>	25	1,5	1,5	50+35	35+25	25	1,5	-	1,5
Maximum conductor size, mm <sup>2</sup>	240	16	240	240+120		300		-	16

# Power cables rated voltage 0.6/1 kV

1-AYKYDY (-J, -O), 1-CYKYDY (-J, -O), ČSN 347659, HD 603, IEC 60502-1



Application	Power cables suitable for laying in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.
-------------	--

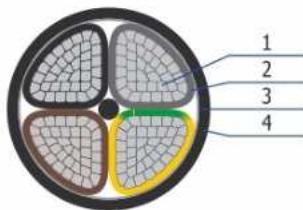
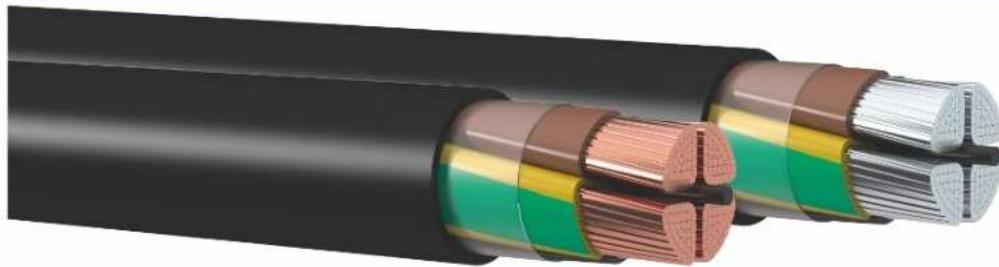
Construction	<ol style="list-style-type: none"> <li>Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);</li> <li>Insulation: PVC (color code acc. HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);</li> <li>Filler/inner covering: PVC;</li> <li>Armor: Galvanized round steel wires;</li> <li>Cover: PVC.</li> </ol>
--------------	--

Parameters	<table border="1"> <tr> <td></td><td>Exploitation temperature range, °C</td><td>from -50 to 50</td></tr> <tr> <td></td><td>Short-circuit temperature, °C</td><td>160</td></tr> <tr> <td></td><td>Bending radius</td><td>12D</td></tr> <tr> <td></td><td>Fire properties</td><td>EN 60332-1-2</td></tr> <tr> <td></td><td>Operating conductor temperature, °C</td><td>max +70</td></tr> <tr> <td></td><td>Cabling (inside/outside)</td><td>inside/outside</td></tr> <tr> <td></td><td>Installation temperature, °C</td><td>-5</td></tr> <tr> <td></td><td>Frequency, Hz</td><td>50</td></tr> <tr> <td></td><td>Testing voltage, kV</td><td>4</td></tr> <tr> <td></td><td>Rated voltage, kV</td><td>0,6/1</td></tr> </table>		Exploitation temperature range, °C	from -50 to 50		Short-circuit temperature, °C	160		Bending radius	12D		Fire properties	EN 60332-1-2		Operating conductor temperature, °C	max +70		Cabling (inside/outside)	inside/outside		Installation temperature, °C	-5		Frequency, Hz	50		Testing voltage, kV	4		Rated voltage, kV	0,6/1						
	Exploitation temperature range, °C	from -50 to 50																																			
	Short-circuit temperature, °C	160																																			
	Bending radius	12D																																			
	Fire properties	EN 60332-1-2																																			
	Operating conductor temperature, °C	max +70																																			
	Cabling (inside/outside)	inside/outside																																			
	Installation temperature, °C	-5																																			
	Frequency, Hz	50																																			
	Testing voltage, kV	4																																			
	Rated voltage, kV	0,6/1																																			
Cable sizes	<table border="1"> <thead> <tr> <th></th> <th>Al</th> <th>Cu</th> <th>Al</th> <th>Cu</th> <th>Al</th> <th>Cu</th> <th>Al</th> <th>Cu</th> </tr> </thead> <tbody> <tr> <td>Number of conductors</td> <td>3</td> <td>2</td> <td>3</td> <td>3+1</td> <td>4</td> <td></td> <td>5</td> <td></td> </tr> <tr> <td>Minimum conductor size, mm<sup>2</sup></td> <td>25</td> <td>1,5</td> <td>1,5</td> <td>95+70</td> <td>25</td> <td>1,5</td> <td>-</td> <td>1,5</td> </tr> <tr> <td>Maximum conductor size, mm<sup>2</sup></td> <td>240</td> <td>16</td> <td>240</td> <td>240+120</td> <td>300</td> <td></td> <td>-</td> <td>16</td> </tr> </tbody> </table>		Al	Cu	Al	Cu	Al	Cu	Al	Cu	Number of conductors	3	2	3	3+1	4		5		Minimum conductor size, mm <sup>2</sup>	25	1,5	1,5	95+70	25	1,5	-	1,5	Maximum conductor size, mm <sup>2</sup>	240	16	240	240+120	300		-	16
	Al	Cu	Al	Cu	Al	Cu	Al	Cu																													
Number of conductors	3	2	3	3+1	4		5																														
Minimum conductor size, mm <sup>2</sup>	25	1,5	1,5	95+70	25	1,5	-	1,5																													
Maximum conductor size, mm <sup>2</sup>	240	16	240	240+120	300		-	16																													

	Al	Cu	Al	Cu	Al	Cu	Al	Cu
Number of conductors	3	2	3	3+1	4		5	
Minimum conductor size, mm <sup>2</sup>	25	1,5	1,5	95+70	25	1,5	-	1,5
Maximum conductor size, mm <sup>2</sup>	240	16	240	240+120	300		-	16

# Power cables rated voltage 0.6/1 kV

YAKY, YnAKY (-J, -O), YKY, YnKY (-J, -O), HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: EPDM or plastic tape;
4. Cover: PVC sheath (black color), YnAKY, YnKY - PVC sheath (black color).

## Parameters

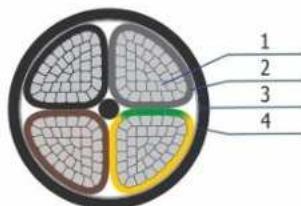
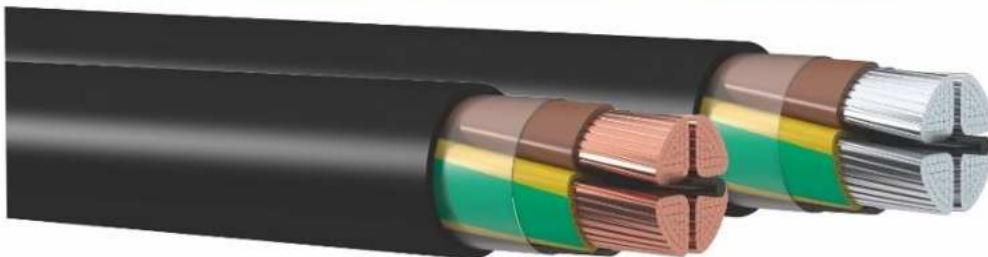
	Exploitation temperature range, °C	from -30 to 50
	Short-circuit temperature, °C	160 ( $S \leq 300 \text{ mm}^2$ ); 140 ( $S > 300 \text{ mm}^2$ )
	Bending radius	15D (single core); 12D (multi core)
	Fire properties	EN 60332-1-2; EN 60332-3-24 (for YnAKY, YnKY)
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0.6/1

## Cable sizes

	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu
Number of conductors	1			2			3		3+1		4	
Minimum conductor size, mm <sup>2</sup>	10	1	-	1	10	1	25+16		10	1	10	1
Maximum conductor size, mm <sup>2</sup>	630		-	16	240		300+150		300	240	185	

# Power cables rated voltage 0.6/1 kV

YAKXS, YnAKXS (-J, -O), YKXS, YnKXS (-J, -O), HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

- Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
- Insulation: XLPE (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
- Filler/inner covering: EPDM or plastic tape;
- Cover: PVC sheath (black color), YnAKXS, YnKXS - PVC sheath (black color).

## Parameters

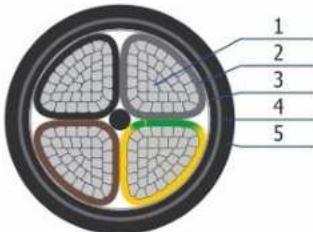
	Exploitation temperature range, °C	from -30 to 50
	Short-circuit temperature, °C	250
	Bending radius	15D (single core); 12D (multi core)
	Fire properties	EN 60332-1; EN 60332-3-24 (for YnAKXS, YnKXS)
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu
Number of conductors	1		2		3		4		5	
Minimum conductor size, mm <sup>2</sup>	10	1	-	1	-	1	25	1	16	1
Maximum conductor size, mm <sup>2</sup>	500		-	16	-	240	240		185	

# Power cables rated voltage 0.6/1 kV

YAKYFtly, YnAKYFtly (-J, -O), YKYFtly, YnKYFtly (-J, -O), HD 603, IEC 60502-1



## Application

Power cables suitable for laying in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: PVC;
4. Armor: Galvanized steel tapes applied with overlap;
5. Cover: PVC sheath (black color), YnAKYFtly, YnKYFtly - PVC sheath (black color).

## Parameters

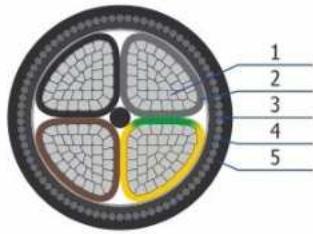
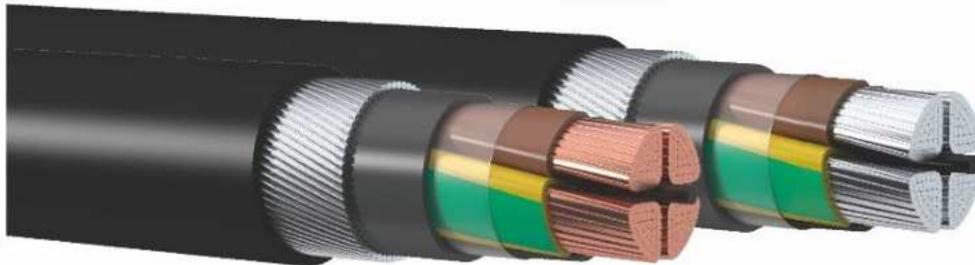
	Exploitation temperature range, °C	from -30 to 50
	Short-circuit temperature, °C	160
	Bending radius	12D
	Fire properties	EN 60332-1; EN 60332-3-24 (for YnAKYFtly, YnKYFtly)
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Cu	Al	Cu	Al	Cu	Al	Cu	-	Cu
Number of conductors	2		3		4		3+1	-	5
Minimum conductor size, mm <sup>2</sup>	1	10	1	10	1		25+16	-	1
Maximum conductor size, mm <sup>2</sup>	16	240	95	300			300+150	-	35

# Power cables rated voltage 0.6/1 kV

YAKYFoy, YnAKYFoy (-J, -O), YKYFoy, YnKYFoy (-J, -O), HD 603, IEC 60502-1



## Application

Power cables suitable for laying in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: PVC;
4. Armor: Galvanized round steel wires;
5. Cover: PVC sheath (black color), YnAKYFoy, YnKYFoy - PVC sheath (black color).

## Parameters

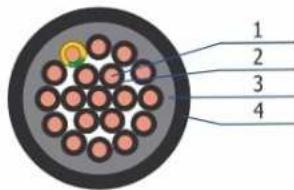
	Exploitation temperature range, °C	from -30 to 50
	Short-circuit temperature, °C	160
	Bending radius	12D
	Fire properties	EN 60332-1; EN 60332-3-24 (for YnAKYFoy, YnKYFoy)
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Cu	Al	Cu	Cu	Al	Cu	-	Cu
Number of conductors	2		3	3+1		4	-	5
Minimum conductor size, mm <sup>2</sup>	1	10	1	25+16	10	1	-	1
Maximum conductor size, mm <sup>2</sup>	16		240	300+150		300	-	35

# Power cables rated voltage 0.6/1 kV

NYY (-J, -O), multicore, DIN VDE 0276-627, HD 627, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Copper acc. to EN 60228, Class 1 - RE (solid, round);
2. Insulation: PVC (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: EPDM;
4. Cover: PVC sheath (black color).

## Parameters

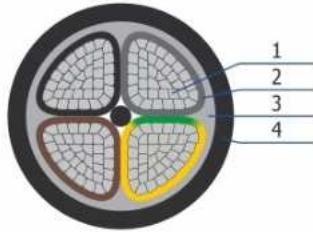
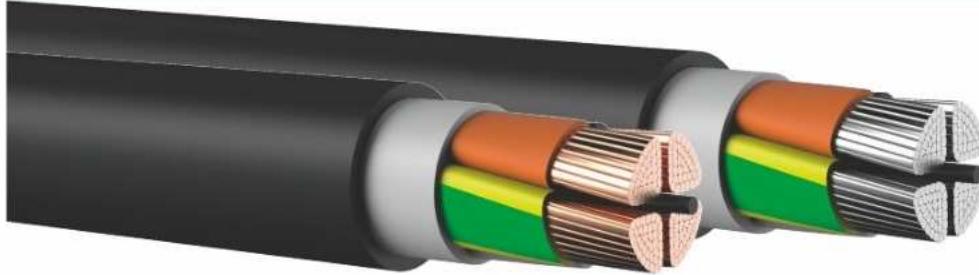
	Exploitation temperature range, °C	from -50 to 50
	Short-circuit temperature, °C	160
	Bending radius	12D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

Number of conductors	7-24	24-40
Minimum conductor size, mm <sup>2</sup>		1,5
Maximum conductor size, mm <sup>2</sup>	4	2,5

# Power cables rated voltage 0.6/1 kV

NAYY (-J, -O), NYY (-J, -O), DIN VDE 0276-603, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (standed, round), Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: EPDM;
4. Cover: PVC sheath (black color).

## Parameters

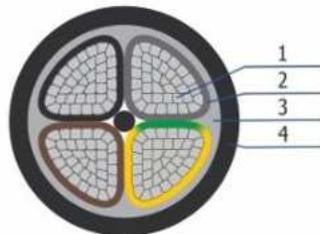
	Exploitation temperature range, °C	from -50 to 50
	Short-circuit temperature, °C	160
	Bending radius	15D (single core); 12D (multi core)
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	-	Cu	-	Cu	-	Cu	Al	Cu	-	Cu
Number of conductors	-	1	-	3	-	3+1	4	-	-	5
Minimum conductor size, mm <sup>2</sup>	-	10	-	16	-	25+16	25	4	-	4
Maximum conductor size, mm <sup>2</sup>	-	500	-	16	-	240+120	185	16	-	16

# Power cables rated voltage 0.6/1 kV

NA2XY (-J, -O), N2XY (-J, -O), DIN VDE 0276-603, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

- Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
- Insulation: XLPE (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
- Filler/inner covering: EPDM;
- Cover: PVC sheath (black color).

## Parameters

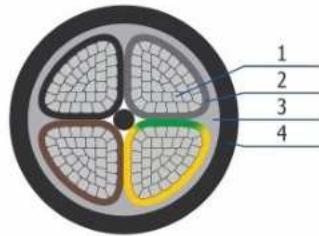
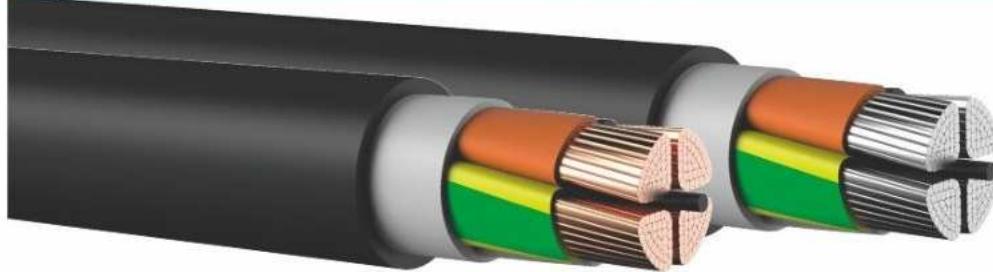
	Exploitation temperature range, °C	from -50 to 50
	Short-circuit temperature, °C	250
	Bending radius	15D (single core); 12D (multi core)
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Al	Cu	Al	Cu
Number of conductors	1		4	
Minimum conductor size, mm <sup>2</sup>	50		25	16
Maximum conductor size, mm <sup>2</sup>	500		240	185

# Power cables rated voltage 0.6/1 kV

NA2X2Y (-J, -O), N2X2Y (-J, -O), DIN VDE 0276-603, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
2. Insulation: XLPE (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: EPDM;
4. Cover: Weather-resistant black color PE.

## Parameters

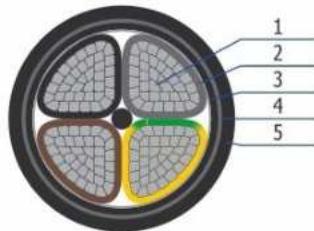
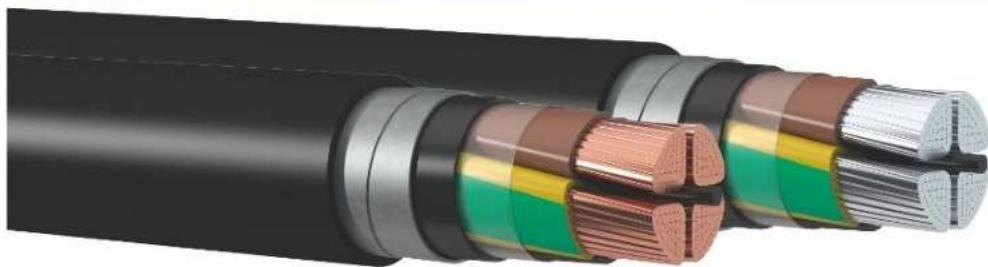
	Exploitation temperature range, °C	from -50 to 50
	Short-circuit temperature, °C	250
	Bending radius	15D (single core); 12D (multi core)
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-20
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Al	Cu	Al	Cu
Number of conductors	1		4	
Minimum conductor size, mm <sup>2</sup>	50		25	16
Maximum conductor size, mm <sup>2</sup>	500		240	185

# Power cables rated voltage 0.6/1 kV

NAYBY (-J, -O), NYBY (-J, -O), DIN VDE 0276-603, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: PVC;
4. Armor: Galvanized steel tapes applied with overlap;
5. Cover: PVC sheath (black color).

## Parameters

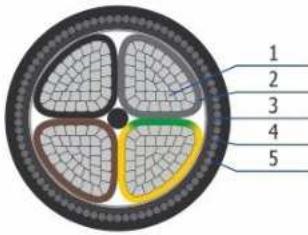
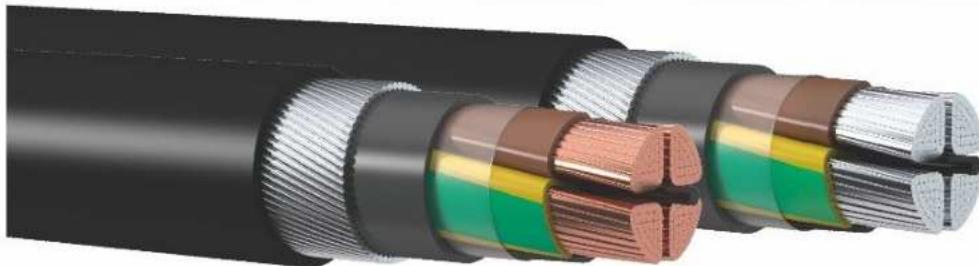
	Exploitation temperature range, °C	from -50 to 50
	Short-circuit temperature, °C	160
	Bending radius	12D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Al	Cu	Al	Cu	Cu	Al	Cu	Al	Cu
Number of conductors	2		3		3+1		4		5
Minimum conductor size, mm <sup>2</sup>	4	1,5	4	1,5	35+16	4	1,5	4	1,5
Maximum conductor size, mm <sup>2</sup>	50	35	240		240+120	300	240	300	70

# Power cables rated voltage 0.6/1 kV

NAYRGY (-J, -O), NYRGY (-J, -O), DIN VDE 0276-603, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: PVC;
4. Armor: Galvanized round steel wires;
5. Cover: PVC sheath (black color).

## Parameters

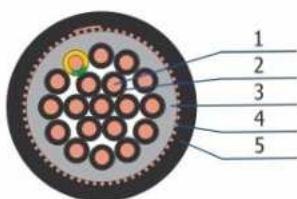
	Exploitation temperature range, °C	from -50 to 50
	Short-circuit temperature, °C	160
	Bending radius	12D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu
Number of conductors	2		3		3+1		4		5	
Minimum conductor size, mm <sup>2</sup>	2,5	1,5	6	1,5	25+16	35+16	6	10	6	1,5
Maximum conductor size, mm <sup>2</sup>	35		240		240+120		240	300	25	70

# Power cables rated voltage 0.6/1 kV

NYCY, DIN VDE 0276-603, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Copper acc. to EN 60228, Class 1 - RE (solid, round);
2. Insulation: PVC (color code acc. to HD 603 clause 4);
3. Filler/inner covering: EPDM+PVC or PVC;
4. Screen: Copper wires and copper tape, applied helically;
5. Cover: PVC sheath (black color).

## Parameters

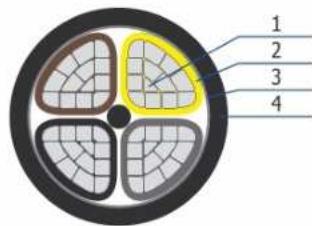
	Exploitation temperature range, °C	from -50 to 50
	Short-circuit temperature, °C	160
	Bending radius	12D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

Number of conductors	1-61
Minimum conductor size, mm <sup>2</sup>	1,5
Maximum conductor size, mm <sup>2</sup>	16

# Power cables rated voltage 0.6/1 kV

E-AYY, E-YY, HD 603-3A, IEC 60502-1



## Application

The cables are designed for single cable lines laying in cable structures and premises. It is required to use fire protection means in case of group laying. The cables can be laid without restriction on difference in levels along the laying route including laying on vertical sections of the route.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: polypropylene cords/ EPDM or plastic tape;
4. Cover: PVC sheath (black color).

## Parameters

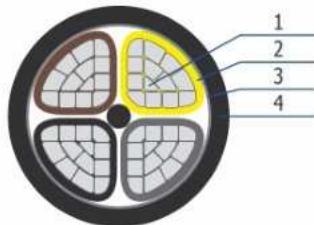
	Exploitation temperature range, °C	from -50 up to 50
	Short-circuit temperature, °C S ≤ 300 mm <sup>2</sup> S > 300 mm <sup>2</sup>	160 140
	Bending radius single core multi core	15D 12D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-5
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu
Number of conductors	1		2		3		4		5	
Minimum conductor size, mm <sup>2</sup>	25	16	-	1,5	25	1,5	25	1,5	25	16
Maximum conductor size, mm <sup>2</sup>	630		-	16	400		400		240	

# Power cables rated voltage 0.6/1 kV

E-AY2Y, E-Y2Y, HD 603-3A, IEC 60502-1



## Application

The cables are designed for single cable lines laying in cable structures and premises. It is required to use fire protection means in case of group laying. The cables can be laid without restriction on difference in levels along the laying route including laying on vertical sections of the route.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 1 - SE (solid, shaped), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603 clause 4, -J - with Y/G core, -O - without Y/G core);
3. Filler/inner covering: polypropylene cords/ EPDM or plastic tape;
4. Cover: Weather-resistant black color PE.

## Parameters

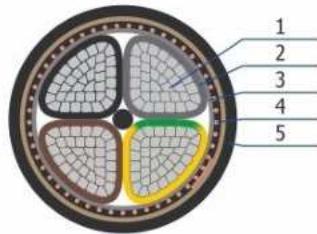
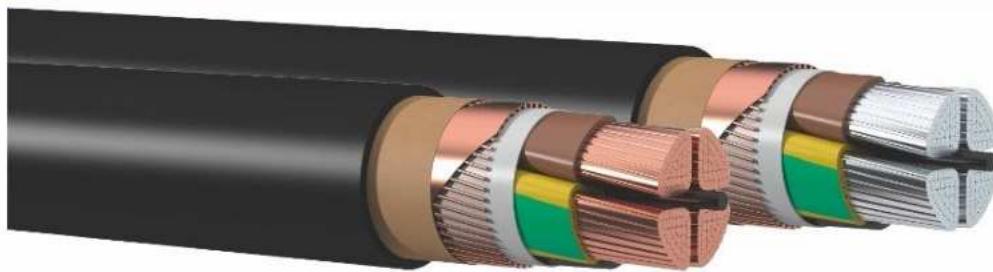
	Exploitation temperature range, °C	from -50 up to 50
	Short-circuit temperature, °C S ≤ 300 mm <sup>2</sup> S > 300 mm <sup>2</sup>	160 140
	Bending radius single core multi core	15D 12D
	Fire properties	
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-20
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu
Number of conductors	1		2		3		4		5	
Minimum conductor size, mm <sup>2</sup>	25	16	-	1,5	25	1,5	25	1,5	25	16
Maximum conductor size, mm <sup>2</sup>	630	-	16		400		400		240	

# Power cables rated voltage 0.6/1 kV

AMCMK, MCMK, SFS 4880, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228, Class 1 - RE (solid, round), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped), FLEX - for annealed cores;
2. Insulation: PVC (color code acc. to HD 603 clause 4);
3. Filler/inner covering: EPDM+PVC or PVC;
4. Screen: Copper wires and copper tape, applied helically;
5. Cover: PVC sheath (black color).

## Parameters

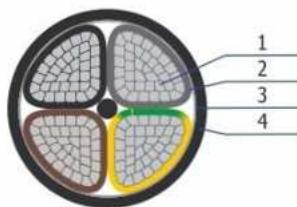
	Exploitation temperature range, °C	from -30 to 50
	Short-circuit temperature, °C	160
	Bending radius	12D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-15
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	Cu	Al	Cu	Al	Cu
Number of conductors	2+1		3+1		4+1
Minimum conductor size, mm <sup>2</sup>	6+6	16+10	6+6	16+10	6+6
Maximum conductor size, mm <sup>2</sup>	10+10	240+72	240+120	300+88	300+150

# Power cables rated voltage 0.6/1 kV

AXMK, AXMK-PE, SFS 4879, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228, Class 1 - RE (solid, round), Class 2 - RM (stranded, round), Class 2 - SM (stranded, shaped), FLEX - for annealed cores;
2. Insulation: XLPE (color code acc. to HD 603 clause 4);
3. Filler/inner covering: EPDM or plastic tape;
4. Cover: PVC sheath (black color). Weather-resistant black color PE (for AXMK-PE).

## Parameters

	Exploitation temperature range, °C	from -30 to 50
	Short-circuit temperature, °C	250
	Bending radius	15D (single core); 12D (multi core)
	Fire properties	EN 60332-1-2 (for cable with PVC sheath)
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-15
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

Number of conductors	1	4	5
Minimum conductor size, mm <sup>2</sup>	35	16	16
Maximum conductor size, mm <sup>2</sup>	1000	300	300

# Power cables rated voltage 0.6/1 kV

AXMK-lighting, IEC 60502-1, HD 603-5D



## Application

The cables are designed for outdoor fixed installation and for laying in ground.

## Construction

1. Main conductors: Aluminium acc. to EN 60288, Class 1 – RE (solid, round), Class 2 – RM (stranded, round), annealed;
2. Pilot conductor: Copper acc. to EN 60288, Class 1 – RE (solid, round);
3. Insulation: XLPE (color code acc. to HD 308);
4. Inner covering: plastic tape;
5. Cover: PVC sheath (black color).

## Parameters

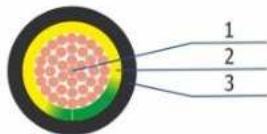
	Exploitation temperature range, °C	from -30 up to 50
	Short-circuit temperature, °C	250
	Bending radius	12D
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-15
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

	AI
Number of main conductors	4
Cross-section of main conductors, mm <sup>2</sup>	16 RE; 25 RM; 35 RM
Number of pilot conductors	1
Cross-section of pilot conductors, mm <sup>2</sup>	2.5 RE

# Power cables rated voltage 0.6/1 kV

XMK, XMK-PE, SFS 4879, HD 603, IEC 60502-1



## Application

Power cables suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected. Suitable for plough cabling.

## Construction

1. Conductor: Copper acc. to EN 60228, Class 2 - RM (stranded, round), FLEX - for annealed cores;
2. Insulation: XLPE (color code acc. to HD 603 clause 4);
3. Cover: PVC sheath (black color). Weather-resistant black color PE (for XMK-PE).

## Parameters

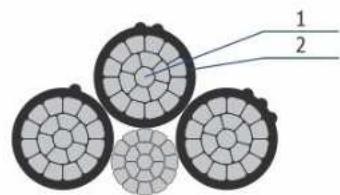
	Exploitation temperature range, °C	from -30 to 50
	Short-circuit temperature, °C	250
	Bending radius	15D
	Fire properties	EN 60332-1-2 (for cable with PVC sheath)
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-15
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

Number of conductors	1
Minimum conductor size, mm <sup>2</sup>	35
Maximum conductor size, mm <sup>2</sup>	800

# Wires for overhead power transmission lines

AMKA, SFS 2200:2005, HD 626-5D



Application	Bundled assembled insulated cores, twisted around an un-insulated messenger, for overhead power distribution and service.
-------------	---

Construction	<ol style="list-style-type: none"><li>Conductor: Aluminum acc. to EN 60228, Class 1 - solid, round (for 16 mm<sup>2</sup> conductor only); Class 2 - stranded, compacted;</li><li>Insulation: Weather-resistant black color PE. Core identification with embossing.</li></ol>
--------------	---

Parameters	Value
	Exploitation temperature range, °C from -30 to 70
	Short-circuit temperature, °C 135
	Bending radius 18D
	Operating conductor temperature, °C max +70
	Cabling (inside/outside) outside
	Installation temperature, °C -20
	Frequency, Hz 50
	Testing voltage, kV 2,5
	Rated voltage, kV 0,6/1
Cable sizes	

# Wires for overhead power transmission lines

EX, HD 626-3I



**Application** For operation in overhead power transmission lines.

**Construction**

1. Conductor: Aluminum acc. to EN 60228. Class 2 - RM (stranded, round, compacted);
2. Insulation: Black weather-resistant thermoplastic PE.

## Parameters

	Exploitation temperature range, °C	from -50 up to 50
	Short-circuit temperature, °C	135
	Bending radius	18D
	Fire properties	-
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	outside
	Installation temperature, °C	-20
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Wire sizes

Number of main conductors	2 – 4
Cross-section of conductors, mm <sup>2</sup>	25; 50; 95

# Wires for overhead power transmission lines

1-AES, HD 626-3I

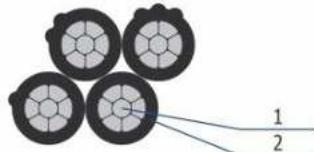


Application	Bundled assembled insulated cores, bunched together, for overhead power distribution and service.																												
Construction	1. Conductor: Aluminum acc. to EN 60228, Class 2 - RM stranded, compacted; 2. Insulation: Weather-resistant black color PE. Core identification with embossing.																												
Parameters	<table><tbody><tr><td></td><td>Exploitation temperature range, °C</td><td>from -50 to 70</td></tr><tr><td></td><td>Short-circuit temperature, °C</td><td>135</td></tr><tr><td></td><td>Bending radius</td><td>18D</td></tr><tr><td></td><td>Operating conductor temperature, °C</td><td>max +70</td></tr><tr><td></td><td>Cabling (inside/outside)</td><td>outside</td></tr><tr><td></td><td>Installation temperature, °C</td><td>-5</td></tr><tr><td></td><td>Frequency, Hz</td><td>50</td></tr><tr><td></td><td>Testing voltage, kV</td><td>4</td></tr><tr><td></td><td>Rated voltage, kV</td><td>0,6/1</td></tr></tbody></table>			Exploitation temperature range, °C	from -50 to 70		Short-circuit temperature, °C	135		Bending radius	18D		Operating conductor temperature, °C	max +70		Cabling (inside/outside)	outside		Installation temperature, °C	-5		Frequency, Hz	50		Testing voltage, kV	4		Rated voltage, kV	0,6/1
	Exploitation temperature range, °C	from -50 to 70																											
	Short-circuit temperature, °C	135																											
	Bending radius	18D																											
	Operating conductor temperature, °C	max +70																											
	Cabling (inside/outside)	outside																											
	Installation temperature, °C	-5																											
	Frequency, Hz	50																											
	Testing voltage, kV	4																											
	Rated voltage, kV	0,6/1																											
Cable sizes																													

Number of conductors	2	4	4+1	4+2
Minimum conductor size, mm <sup>2</sup>	16	16	50+16	50+16
Maximum conductor size, mm <sup>2</sup>	25	120	120+25	120+25

# Wires for overhead power transmission lines

NFA2X, VDE 0276-626, HD 626-4F



**Application** Bundled assembled insulated cores, bunched together, for overhead power distribution and service.

**Construction**

1. Conductor: Aluminum acc. to EN 60228, Class 2 - RM stranded, compacted;
2. Insulation: Weather-resistant XLPE (black color). Core identification with embossing.

## Parameters

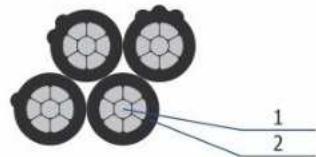
	Exploitation temperature range, °C	from -30 to 80
	Short-circuit temperature, °C	130
	Bending radius	18D
	Operating conductor temperature, °C	max +80
	Cabling (inside/outside)	outside
	Installation temperature, °C	-20
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

## Cable sizes

Number of conductors	1	2	4	4+1	4+2
Minimum conductor size, mm <sup>2</sup>	16	16	16	25+16	25+16
Maximum conductor size, mm <sup>2</sup>	120	35	120	120+35	120+35

# Wires for overhead power transmission lines

AsXS, AsXSn, HD 626-4F, TU BY 300528652.049-2017

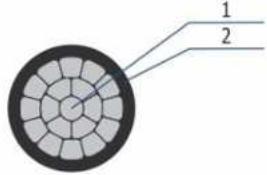


Application	AsXS - for operation in overhead power transmission lines; AsXSn - for installation in fire hazardous zones.	
Construction	1. Conductor: Aluminum acc. to EN 60228. Class 2 - RM (stranded, round, compacted); 2. Insulation: Black weather-resistant XLPE (AsXS), black weather-resistant flame-retardant XLPE (AsXSn).	
Parameters		
Wire sizes	Exploitation temperature range, °C	from -50 up to 50
	Short-circuit temperature, °C	250
	Bending radius	18D
	Fire properties	EN 60332-1-2 (for AsXSn)
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	outside
	Installation temperature, °C	-20
	Frequency, Hz	50
	Testing voltage, kV	4
	Rated voltage, kV	0,6/1

Number of conductors	1	2	4
Minimum conductor size, mm <sup>2</sup>		16	
Maximum conductor size, mm <sup>2</sup>		120	

# Wires for overhead power transmission lines

CCX-WK, PAS-W, SAX-W, EN 50397-1

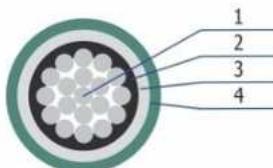


Application	For overhead power transmission lines.																																										
Construction	1. Conductor: Aluminum alloy, type AL3 acc. to EN 50183, RM (stranded, round, compacted), watertight; 2. Insulation: Black weather-resistant XLPE.																																										
Parameters	<table border="1"><tr><td></td><td>Exploitation temperature range, °C</td><td>from -50 up to 50</td></tr><tr><td></td><td>Short-circuit temperature, °C</td><td>200</td></tr><tr><td></td><td>Bending radius</td><td>15D</td></tr><tr><td></td><td>Fire properties</td><td>-</td></tr><tr><td></td><td>Operating conductor temperature, °C</td><td>max +80</td></tr><tr><td></td><td>Cabling (inside/outside)</td><td>outside</td></tr><tr><td></td><td>Installation temperature, °C</td><td>-20</td></tr><tr><td></td><td>Initial modulus of elasticity of conductor, N/mm<sup>2</sup></td><td>61000</td></tr><tr><td></td><td>Final modulus of elasticity of conductor, N/mm<sup>2</sup></td><td>62500</td></tr><tr><td></td><td>Coefficient of linear expansion of conductor, 1/°C</td><td>23×10<sup>-6</sup></td></tr><tr><td></td><td>Tensile strength, MPa</td><td>min 295</td></tr><tr><td></td><td></td><td>Frequency, Hz</td><td>50</td></tr><tr><td></td><td></td><td>Rated voltage, kV</td><td>12/20</td></tr></table>			Exploitation temperature range, °C	from -50 up to 50		Short-circuit temperature, °C	200		Bending radius	15D		Fire properties	-		Operating conductor temperature, °C	max +80		Cabling (inside/outside)	outside		Installation temperature, °C	-20		Initial modulus of elasticity of conductor, N/mm <sup>2</sup>	61000		Final modulus of elasticity of conductor, N/mm <sup>2</sup>	62500		Coefficient of linear expansion of conductor, 1/°C	23×10 <sup>-6</sup>		Tensile strength, MPa	min 295			Frequency, Hz	50			Rated voltage, kV	12/20
	Exploitation temperature range, °C	from -50 up to 50																																									
	Short-circuit temperature, °C	200																																									
	Bending radius	15D																																									
	Fire properties	-																																									
	Operating conductor temperature, °C	max +80																																									
	Cabling (inside/outside)	outside																																									
	Installation temperature, °C	-20																																									
	Initial modulus of elasticity of conductor, N/mm <sup>2</sup>	61000																																									
	Final modulus of elasticity of conductor, N/mm <sup>2</sup>	62500																																									
	Coefficient of linear expansion of conductor, 1/°C	23×10 <sup>-6</sup>																																									
	Tensile strength, MPa	min 295																																									
		Frequency, Hz	50																																								
		Rated voltage, kV	12/20																																								
Wire sizes																																											

Number of conductors	1
Minimum conductor size, mm <sup>2</sup>	35
Maximum conductor size, mm <sup>2</sup>	240

# Wires for overhead power transmission lines

CCSX-WK, EN 50397-1



**Application** For overhead power transmission lines.

**Construction**

1. Conductor: Aluminum alloy, type AL3 acc. to EN 50183, RM (stranded, round, compacted), watertight;
2. Conductor screen: Conducting XLPE;
3. Insulation: XLPE (natural color);
4. Sheath: Black weather-resistant thermoplastic HDPE (green color).

## Parameters

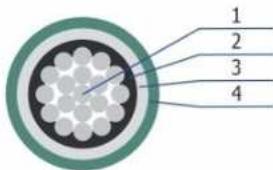
	Exploitation temperature range, °C	from -50 up to 50
	Short-circuit temperature, °C	250
	Bending radius	15D
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	outside
	Installation temperature, °C	-20
Initial modulus of elasticity of conductor, N/mm <sup>2</sup>		61000
Final modulus of elasticity of conductor, N/mm <sup>2</sup>		62500
Coefficient of linear expansion of conductor, 1/°C		23×10 <sup>-6</sup>
Tensile strength, MPa		min 295
	Frequency, Hz	50
	Rated voltage, kV	12/20

## Wire sizes

Number of conductors	1
Minimum conductor size, mm <sup>2</sup>	35
Maximum conductor size, mm <sup>2</sup>	240

# Wires for overhead power transmission lines

CCST-WK, EN 50397-1



Application	For overhead power transmission lines.																																											
Construction	<ol style="list-style-type: none"><li>Conductor: Aluminum alloy, type AL3 acc. to EN 50183, RM (stranded, round, compacted), watertight;</li><li>Conductor screen: Conducting PE;</li><li>Insulation: Thermoplastic PE (natural color);</li><li>Sheath: Black weather-resistant thermoplastic HDPE (green color).</li></ol>																																											
Parameters	<table><tbody><tr><td></td><td>Exploitation temperature range, °C</td><td>from -50 up to 50</td></tr><tr><td></td><td>Short-circuit temperature, °C</td><td>200</td></tr><tr><td></td><td>Bending radius</td><td>15D</td></tr><tr><td></td><td>Fire properties</td><td>-</td></tr><tr><td></td><td>Operating conductor temperature, °C</td><td>max +70</td></tr><tr><td></td><td>Cabling (inside/outside)</td><td>outside</td></tr><tr><td></td><td>Installation temperature, °C</td><td>-20</td></tr><tr><td colspan="2">Initial modulus of elasticity of conductor, N/mm<sup>2</sup></td><td>61000</td></tr><tr><td colspan="2">Final modulus of elasticity of conductor, N/mm<sup>2</sup></td><td>62500</td></tr><tr><td colspan="2">Coefficient of linear expansion of conductor, 1/°C</td><td>23×10<sup>-6</sup></td></tr><tr><td colspan="2">Tensile strength, MPa</td><td>min 295</td></tr><tr><td colspan="2"></td><td>50</td></tr><tr><td colspan="2"></td><td>Rated voltage, kV</td></tr><tr><td>Wire sizes</td><td>12/20</td><td></td></tr></tbody></table>			Exploitation temperature range, °C	from -50 up to 50		Short-circuit temperature, °C	200		Bending radius	15D		Fire properties	-		Operating conductor temperature, °C	max +70		Cabling (inside/outside)	outside		Installation temperature, °C	-20	Initial modulus of elasticity of conductor, N/mm <sup>2</sup>		61000	Final modulus of elasticity of conductor, N/mm <sup>2</sup>		62500	Coefficient of linear expansion of conductor, 1/°C		23×10 <sup>-6</sup>	Tensile strength, MPa		min 295			50			Rated voltage, kV	Wire sizes	12/20	
	Exploitation temperature range, °C	from -50 up to 50																																										
	Short-circuit temperature, °C	200																																										
	Bending radius	15D																																										
	Fire properties	-																																										
	Operating conductor temperature, °C	max +70																																										
	Cabling (inside/outside)	outside																																										
	Installation temperature, °C	-20																																										
Initial modulus of elasticity of conductor, N/mm <sup>2</sup>		61000																																										
Final modulus of elasticity of conductor, N/mm <sup>2</sup>		62500																																										
Coefficient of linear expansion of conductor, 1/°C		23×10 <sup>-6</sup>																																										
Tensile strength, MPa		min 295																																										
		50																																										
		Rated voltage, kV																																										
Wire sizes	12/20																																											

Number of conductors	1
Minimum conductor size, mm <sup>2</sup>	35
Maximum conductor size, mm <sup>2</sup>	240

## Technical tables

Table 1 - Main exploitation characteristics of power cables 0,6/1 kV.

Parameters	Value
Max. permissible temperature of conductor:	
for PVC insulation	70°C
for XLPE insulation	90°C
Max. permissible short circuit temperature:	
for PVC insulation size up to 300 mm <sup>2</sup>	160°C
for PVC insulation size above 300 mm <sup>2</sup>	140°C
for XLPE insulation	250°C
Default ambient temperature:	
soil	+20°C
air	+25°C
Termail resistivity of soil	1.0 K*m/W
Load factor of cables in the ground	0,7
Depth of laying	700 mm
Distance between individual cables laid flat	70 mm
Moisture migration	NO

Table 2 - Soil characteristics.

Termail resistivity of soil (K*m/W)	Soil conditions	Weather conditions
0,70	very damp	damp
1,00	damp	regular precipitation
2,00	dry	seldom rain
3,00	very dry	no/few rain

Table 3 - Current carrying capacity for 3-, 4-, 5-core cables single laid in the ground, used in three-phase networks with balanced load.

Conductor size mm <sup>2</sup>	Current carrying capacity			
	Al		Cu	
	PVC-insulation	XLPE-insulation	PVC-insulation	XLPE-insulation
A				
1	-	-	18	21
1,5	-	-	26	30
2,5	-	-	34	40
4	30	35	44	52
6	40	45	56	64
10	54	65	75	86
16	77	92	98	111
25	99	111	128	143
35	118	132	157	173
50	142	157	185	205
70	176	195	228	252

## Technical tables

Conductor size mm <sup>2</sup>	Current carrying capacity			
	Al		Cu	
	PVC-insulation	XLPE-insulation	PVC-insulation	XLPE-insulation
A				
95	211	233	275	303
120	242	266	313	346
150	270	299	353	390
185	308	340	399	441
240	363	401	464	511
300	412	455	524	580
400	475	526	600	663
500	540	610	675	755

Table 4 - Current carrying capacity for 3-, 4-, 5-core cables single laid in the air, sheltered from direct sun-light, used in three-phase networks with balanced load.

Conductor size mm <sup>2</sup>	Current carrying capacity			
	Al		Cu	
	PVC-insulation	XLPE-insulation	PVC-insulation	XLPE-insulation
A				
1	-	-	15	19
1,5	-	-	19,5	25
2,5	-	-	26,5	33
4	28	33	36	43
6	36	42	45	55
10	50	58	63	76
16	61	77	85	100
25	88	104	112	135
35	108	126	138	166
50	131	152	168	202
70	167	195	214	256
95	201	241	258	317
120	234	280	299	369
150	267	320	343	423
185	306	371	393	487
240	359	452	462	573
300	400	521	510	663
400	470	615	593	775
500	550	715	680	880

## Technical tables

Table 5 - Current carrying capacity for 3-, 4-, 5-core cables single laid in the air, sheltered from direct sun-light, used in three-phase networks with balanced load.

Conductor size	Current carrying capacity							
	Al				Cu			
	PVC-insulation		XLPE-insulation		PVC-insulation		XLPE-insulation	
mm <sup>2</sup>	●●●	●●●●	●●●	●●●●●	●●●	●●●●	●●●	●●●●●
A								
1	-	-	-	-	18	22	22	27
1,5	-	-	-	-	33	29	32	39
2,5	-	-	-	-	33	39	43	51
4	33	38	36	43	43	51	55	66
6	42	49	47	55	55	65	68	82
10	56	67	62	74	75	88	90	109
16	74	88	81	98	107	127	115	139
25	96	114	105	126	137	163	149	179
35	127	151	137	164	165	195	178	213
50	151	179	163	195	195	230	211	251
70	186	218	201	238	239	282	259	307
95	223	261	240	284	287	336	310	366
120	254	297	274	323	326	382	352	416
150	285	332	308	361	366	428	396	465
185	323	376	350	408	414	483	449	526
240	378	437	408	476	481	561	521	610
300	427	495	462	535	542	632	587	689
400	485	560	525	610	630	725	669	788
500	550	635	600	690	698	810	748	889
630	625	720	680	780	805	920	875	1010
800	710	810	770	880	915	1035	995	1140
1000	790	910	860	990	1020	1140	1120	1260

Table 6 - Current carrying capacity for 1-core cables single laid in the air, sheltered from direct sun-light, used in three-phase networks with balanced load.

Conductor size	Current carrying capacity							
	Al				Cu			
	PVC-insulation		XLPE-insulation		PVC-insulation		XLPE-insulation	
mm <sup>2</sup>	●●●	●●●●	●●●	●●●●●	●●●	●●●●	●●●	●●●●●
A								
1	-	-	-	-	18	23	22	28
1,5	-	-	-	-	21	26,5	26	33
2,5	-	-	-	-	28	36	35	43
4	31	37	35	45	39	47	45	58
6	40	47	45	57	50	60	59	73
10	55	64	62	78	70	82	80	99
16	74	85	84	103	94	109	106	133
25	98	113	111	138	125	145	144	180
35	119	138	136	169	156	179	176	220
50	146	169	167	208	186	218	216	268

## Technical tables

Conductor size	Current carrying capacity							
	Al				Cu			
	PVC-insulation		XLPE-insulation		PVC-insulation		XLPE-insulation	
mm <sup>2</sup>								
A								
70	184	214	213	264	237	276	275	341
95	222	264	263	325	287	340	339	420
120	258	308	307	380	332	396	396	490
150	297	353	354	436	382	453	455	562
185	339	407	410	505	436	523	527	651
240	400	487	494	608	513	625	630	779
300	459	561	570	702	582	718	725	898
400	554	680	672	830	696	866	848	1058
500	639	788	779	963	794	996	970	1220
630	725	900	890	1100	900	1140	1100	1400
800	835	1030	1020	1260	1095	1370	1340	1680
1000	925	1140	1130	1410	1220	1500	1500	1850

Table 7 - Permissible 1-second short circuit current density depending on the initial temperature of conductor cables PVC insulated.

Cable size	Max. permissible short circuit temperature (°C)	Initial temperature of conductor (°C)					
		70	60	50	40	30	20
		The density of 1-second short-circuit current (A/mm <sup>2</sup> )					
Cu < 300 mm <sup>2</sup>	160	115	122	129	136	143	150
Cu > 300 mm <sup>2</sup>	140	103	111	118	126	133	140
Al < 300 mm <sup>2</sup>	160	76	81	85	90	95	99
Al > 300 mm <sup>2</sup>	140	68	73	78	83	88	93

Table 8 - Permissible 1-second short circuit current density depending on the initial temperature of conductor cables XLPE insulated.

Conductor	Max. permissible short circuit temperature (°C)	Initial temperature of conductor (°C)							
		90	80	70	60	50	40	30	20
		The density of 1-second short-circuit current (A/mm <sup>2</sup> )							
Cu	250	143	149	154	159	165	170	176	181
Al	250	94	98	102	105	109	113	116	120

## Technical tables

Table 9 - Load factors for single and multi-core XLPE cables in the ground.

Table 10 - Load factors for single and multi-core PVC cables in the ground.

Table 11 - Load factors for single -core XLPE insulated cables in the ground depending on laying of cable system.

Laying method							a = 70 mm					
Number of cable systems	Thermal resistivity of soil [K*m/W]											
	0,7			1			1,5			2,5		
	Load factor											
	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7
1	1,09	1,04	0,99	1,11	1,05	1	1,13	1,07	1,01	1,17	1,09	1,03
2	0,97	0,9	0,84	0,98	0,91	0,85	1	0,92	0,86	1,02	0,94	0,87
3	0,88	0,8	0,74	0,89	0,82	0,75	0,9	0,82	0,76	0,92	0,83	0,76
4	0,83	0,75	0,69	0,84	0,76	0,7	0,85	0,77	0,7	0,82	0,78	0,71

## Technical tables

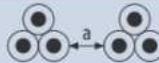
Laying method								a = 70 mm				
Number of cable systems	Thermal resistivity of soil [K*m/W]											
	0,7			1			1,5			2,5		
	Load factor											
	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7
5	0,79	0,71	0,65	0,8	0,72	0,66	0,8	0,73	0,66	0,81	0,73	0,67
6	0,76	0,68	0,62	0,77	0,69	0,63	0,77	0,7	0,63	0,78	0,7	0,64
8	0,72	0,64	0,58	0,72	0,65	0,59	0,73	0,65	0,59	0,74	0,66	0,59
10	0,69	0,61	0,56	0,69	0,62	0,56	0,7	0,62	0,56	0,7	0,63	0,57

Table 12 - Load factors for single -core XLPE insulated cables in the ground depending on laying of cable system.

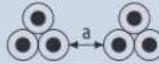
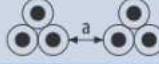
Laying method								a = 250 mm				
Number of cable systems	Thermal resistivity of soil [K*m/W]											
	0,7			1			1,5			2,5		
	Load factor											
	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7
1	1,09	1,04	0,99	1,11	1,05	1	1,13	1,07	1,01	1,17	1,09	1,03
2	1,01	0,94	0,89	1,02	0,95	0,89	1,04	0,97	0,9	1,06	0,98	0,91
3	0,94	0,87	0,81	0,95	0,88	0,82	0,97	0,89	0,82	0,99	0,9	0,83
4	0,91	0,84	0,78	0,92	0,84	0,78	0,93	0,85	0,79	0,95	0,86	0,79
5	0,88	0,8	0,74	0,89	0,81	0,75	0,9	0,82	0,75	0,91	0,83	0,76
6	0,86	0,79	0,72	0,87	0,79	0,73	0,88	0,8	0,73	0,89	0,81	0,74
8	0,83	0,76	0,7	0,84	0,76	0,7	0,85	0,77	0,7	0,86	0,78	0,71
10	0,81	0,74	0,68	0,82	0,74	0,68	0,83	0,75	0,68	0,84	0,76	0,69

Table 13 - Load factors for single -core PVC insulated cables in the ground depending on laying of cable system.

Laying method								a = 70 mm				
Number of cable systems	Thermal resistivity of soil [K*m/W]											
	0,7			1			1,5			2,5		
	Load factor											
	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7
1	1,01	1,02	0,99	1,04	1,05	1	1,07	1,06	1,01	1,11	1,08	1,01
2	1,94	0,89	0,84	0,97	0,91	0,85	0,99	0,92	0,86	1,01	0,93	0,87
3	0,86	0,79	0,74	0,89	0,81	0,75	0,9	0,83	0,76	0,91	0,83	0,77
4	0,82	0,75	0,69	0,84	0,76	0,7	0,85	0,77	0,71	0,86	0,78	0,71
5	0,78	0,71	0,65	0,8	0,72	0,66	0,8	0,73	0,66	0,81	0,73	0,67
6	0,75	0,68	0,62	0,77	0,69	0,63	0,77	0,7	0,64	0,78	0,7	0,64
8	0,71	0,64	0,58	0,72	0,65	0,59	0,73	0,65	0,59	0,74	0,66	0,6
10	0,68	0,61	0,55	0,69	0,62	0,56	0,69	0,62	0,56	0,7	0,63	0,57

## Technical tables

Table 14 - Load factors for single -core PVC insulated cables in the ground depending on laying of cable system.

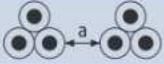
Laying method							a = 250 mm					
Number of cable systems	Thermal resistivity of soil [K*m/W]											
	0,7			1			1,5			2,5		
	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7
1	1,01	1,02	0,99	1,04	1,05	1	1,07	1,06	1,01	1,11	1,08	1,01
2	0,97	0,95	0,89	1	0,96	0,9	1,03	0,97	0,91	1,06	0,98	0,91
3	0,94	0,88	0,82	0,97	0,88	0,82	0,97	0,89	0,83	0,98	0,9	0,84
4	0,91	0,84	0,78	0,92	0,85	0,79	0,93	0,86	0,79	0,95	0,87	0,8
5	0,88	0,81	0,75	0,89	0,82	0,76	0,9	0,82	0,76	0,91	0,83	0,77
6	0,86	0,79	0,73	0,87	0,8	0,74	0,88	0,81	0,74	0,89	0,81	0,75
8	0,83	0,76	0,7	0,84	0,77	0,71	0,85	0,78	0,71	0,86	0,78	0,72
10	0,82	0,75	0,69	0,82	0,75	0,69	0,83	0,76	0,69	0,84	0,76	0,7

Table 15 - Load factors for single -core XLPE insulated cables in the ground depending on laying of cable system.

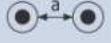
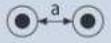
Laying method							a = 70 mm					
Number of cable systems	Thermal resistivity of soil [K*m/W]											
	0,7			1			1,5			2,5		
	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7
1	1,08	1,05	0,99	1,13	1,07	1	1,18	1,09	1,01	1,19	1,11	1,03
2	1,01	0,93	0,86	1,03	0,94	0,87	1,05	0,95	0,88	1,06	0,96	0,88
3	0,92	0,84	0,77	0,93	0,85	0,77	0,95	0,86	0,78	0,96	0,86	0,79
4	0,88	0,8	0,73	0,89	0,8	0,73	0,9	0,81	0,74	0,91	0,82	0,74
5	0,84	0,76	0,69	0,85	0,77	0,7	0,87	0,78	0,7	0,87	0,78	0,71
6	0,82	0,74	0,67	0,83	0,75	0,68	0,84	0,75	0,68	0,85	0,76	0,69
8	0,79	0,71	0,64	0,8	0,71	0,65	0,81	0,72	0,65	0,81	0,72	0,65
10	0,77	0,69	0,62	0,78	0,69	0,63	0,78	0,7	0,63	0,79	0,7	0,63

Table 16 - Load factors for single -core PVC insulated cables in the ground depending on laying of cable system.

Laying method							a = 70 mm					
Number of cable systems	Thermal resistivity of soil [K*m/W]											
	0,7			1			1,5			2,5		
	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7
1	0,96	0,97	0,98	1,01	1,01	1	1,07	1,05	1,01	1,16	1,1	1,02
2	0,92	0,89	0,86	0,96	0,94	0,87	1	0,95	0,88	1,05	0,97	0,89
3	0,88	0,84	0,77	0,91	0,85	0,78	0,95	0,86	0,79	0,96	0,87	0,79
4	0,86	0,8	0,73	0,89	0,81	0,74	0,9	0,82	0,74	0,91	0,82	0,75

## Technical tables

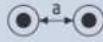
Laying method							a = 70 mm					
Number of cable systems	Thermal resistivity of soil [K*m/W]											
	0,7			1			1,5			2,5		
	Load factor											
	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7
5	0,84	0,76	0,7	0,85	0,77	0,7	0,87	0,78	0,71	0,87	0,79	0,71
6	0,82	0,74	0,68	0,83	0,75	0,68	0,84	0,76	0,69	0,85	0,76	0,69
8	0,79	0,71	0,65	0,8	0,72	0,65	0,81	0,72	0,65	0,81	0,73	0,66
10	0,77	0,69	0,63	0,78	0,7	0,63	0,79	0,7	0,63	0,79	0,71	0,64

Table 17 - Load factors for 3-, 4-, 5-core XLPE insulated cables in the ground depending on laying of cable system.

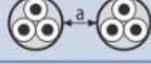
Laying method							a = 70 mm					
Number of cable systems	Thermal resistivity of soil [K*m/W]											
	0,7			1			1,5			2,5		
	Load factor											
	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7
1	1,02	1,03	0,99	1,06	1,05	1	1,09	1,06	1,01	1,11	1,07	1,02
2	0,95	0,89	0,84	0,98	0,91	0,85	0,99	0,92	0,86	1,01	0,94	0,87
3	0,86	0,8	0,74	0,89	0,81	0,75	0,9	0,83	0,77	0,92	0,84	0,77
4	0,82	0,75	0,69	0,84	0,76	0,7	0,85	0,78	0,71	0,86	0,78	0,72
5	0,78	0,71	0,65	0,8	0,72	0,66	0,81	0,73	0,67	0,82	0,74	0,67
6	0,75	0,68	0,63	0,77	0,69	0,63	0,78	0,7	0,64	0,79	0,71	0,65
8	0,71	0,64	0,59	0,72	0,65	0,59	0,73	0,66	0,6	0,74	0,66	0,6
10	0,68	0,61	0,56	0,69	0,62	0,56	0,7	0,63	0,57	0,71	0,63	0,57

Table 18 - Load factors for 3-, 4-, 5-core PVC insulated cables in the ground depending on laying of cable system.

Laying method							a = 70 mm					
Number of cable systems	Thermal resistivity of soil [K*m/W]											
	0,7			1			1,5			2,5		
	Load factor											
	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7	0,5	0,6	0,7
1	0,91	0,92	0,94	0,97	0,97	1	1,04	1,03	1,01	1,13	1,07	1,02
2	0,86	0,87	0,85	0,91	0,9	0,86	0,97	0,93	0,87	1,01	0,94	0,88
3	0,82	0,8	0,75	0,86	0,82	0,76	0,91	0,84	0,77	0,92	0,84	0,78
4	0,8	0,76	0,7	0,84	0,77	0,71	0,86	0,78	0,72	0,87	0,79	0,73
5	0,78	0,72	0,66	0,81	0,73	0,67	0,81	0,74	0,68	0,82	0,75	0,68
6	0,76	0,69	0,64	0,77	0,7	0,64	0,78	0,71	0,65	0,79	0,72	0,65
8	0,72	0,65	0,59	0,73	0,66	0,6	0,74	0,67	0,61	0,75	0,67	0,61
10	0,69	0,62	0,57	0,7	0,63	0,57	0,71	0,64	0,58	0,71	0,64	0,58

## Technical tables

---

Table 19 - Load factors for 3-, 4-, 5-core insulated cables depending on ambient temperature.

Ambient temperature (°C)	Correction factor			
	In ground		In air	
	PVC-insulation	XLPE-insulation	PVC-insulation	XLPE-insulation
10	1,1	1,07	1,15	1,12
15	1,05	1,04	1,1	1,08
20	1	1	1,06	1,04
25	0,95	0,95	1	1
30	0,89	0,93	0,94	0,96
35	0,84	0,89	0,89	0,92
40	0,77	0,85	0,82	0,87
45	0,71	0,8	0,76	0,83
50	0,63	0,76	0,68	0,79

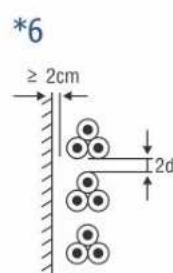
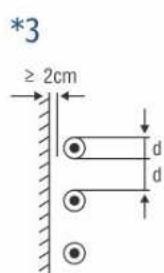
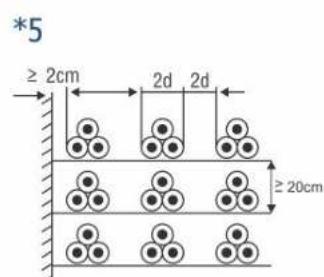
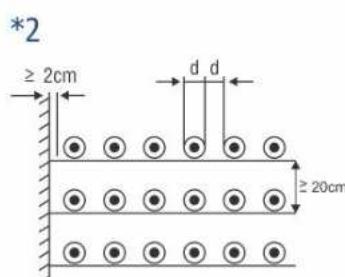
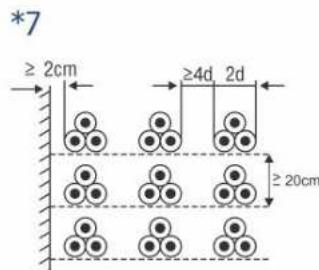
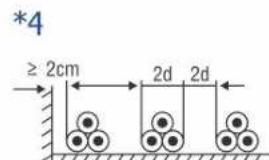
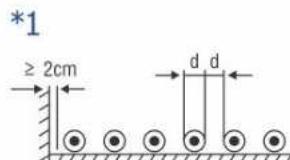
Table 20 - Load factors for insulated cables size from 1,5 up to and including 10 mm<sup>2</sup>.

Number of cores	Installation	
	In ground	In air
5	0,7	0,75
7	0,6	0,65
10	0,5	0,55
14	0,45	0,5
19	0,4	0,45
24	0,35	0,4
40	0,3	0,35
61	0,25	0,3

# Technical tables

Table 21 - Reduction factors for cables laid in air single and bunched.

Way of laying	Number of cables on shelves or ladders	Single laying The distance between cables = cable diameter, distance from the wall $\geq 20\text{mm}$				Bunched laying The distance between cables = $2 \times \text{cable diameter}$ , distance from the wall $\geq 20\text{mm}$			
		Number of systems				Number of systems			
		1	2	3		1	2	3	
On the floor	-	0,92	0,89	0,88	*1	0,95	0,9	0,88	*4
On the shelves	1	0,92	0,89	0,88	*2	0,95	0,9	0,88	*5
	2	0,87	0,84	0,83		0,9	0,85	0,83	
	3	0,84	0,82	0,81		0,88	0,83	0,81	
	6	0,82	0,8	0,79		0,86	0,81	0,79	
On cable ladders	1	1	0,97	0,96	*2	1	0,98	0,96	*5
	2	0,97	0,94	0,93		1	0,95	0,93	
	3	0,96	0,93	0,92		1	0,94	0,92	
	6	0,94	0,91	0,9		1	0,93	0,9	
On the supports or wall	-	0,94	0,91	0,89	*3	0,89	0,86	0,84	*6
Way of laying without reduction factors		Single installation with increased spacing results in increased losses, these losses can be taken into account by reducing the operating temperature. The change in the ambient temperature must be taken into account by using the conversion factors.							*7

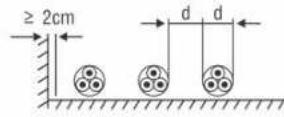


## Technical tables

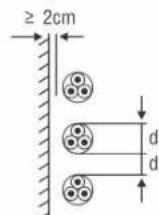
Table 22 - Reduction factors for cables laid in air single and bunched.

Way of laying	Number of cables on shelves or ladders	The distance between cables = cable diameter, distance from the wall $\geq 20\text{mm}$						Bunched installation side by side and on adjacent walls					
		Number of cables						Number of cables					
		1	2	3	6	9		1	2	3	6	9	
On the floor	-	0,95	0,9	0,88	0,85	0,84	*1	0,9	0,84	0,8	0,75	0,73	*6
On the shelves	1	0,95	0,9	0,88	0,85	0,84		0,95	0,84	0,8	0,75	0,73	
	2	0,9	0,85	0,83	0,81	0,8	*2	0,95	0,8	0,76	0,71	0,69	*7
	3	0,88	0,83	0,81	0,79	0,78		0,95	0,78	0,74	0,7	0,68	
	6	0,86	0,81	0,79	0,77	0,76		0,95	0,76	0,72	0,68	0,66	
On cable ladders	1	1	0,98	0,96	0,93	0,92		0,95	0,84	0,8	0,75	0,73	
	2	1	0,95	0,93	0,9	0,89	*3	0,95	0,8	0,76	0,71	0,69	*8
	3	1	0,94	0,93	0,89	0,88		0,95	0,78	0,74	0,7	0,68	
	6	1	0,93	0,9	0,87	0,86		0,95	0,76	0,72	0,68	0,66	
On the supports or wall	-	1	0,93	0,9	0,87	0,86	*4	0,95	0,78	0,73	0,68	0,66	*9
Way of laying without reduction factors	The number of cables arranged one over the other is not limited						*5	The number of cables arranged side by side is not limited					
													*10

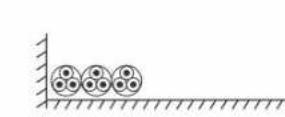
\*1



\*4



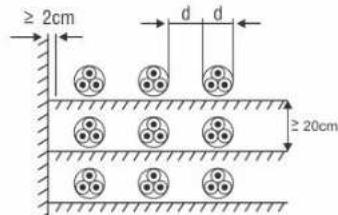
\*6



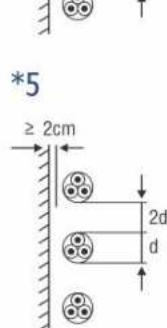
\*9



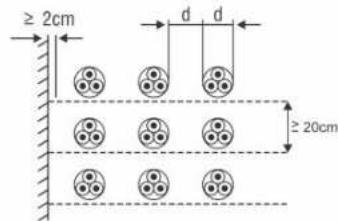
\*2



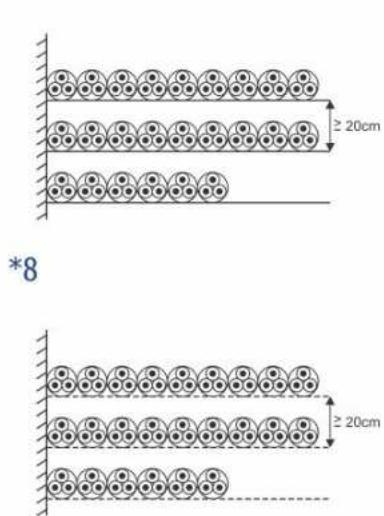
\*5



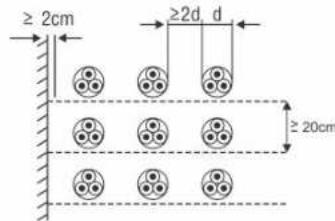
\*3



\*8

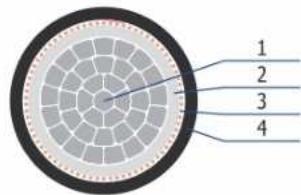


\*10



# Power cables rated voltage 3,6/6 kV

6-AYKCY, 6-CYKCY, CSN 347659, IEC 60502-2



## Application

Power cables for medium voltage distribution with PVC insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Insulation: PVC (natural color);
3. Screen: Copper wires and copper tape, applied helically;
4. Cover: PVC sheath (black color).

## Parameters

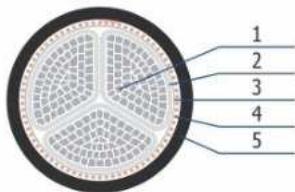
	Exploitation temperature range, °C	from -30 to +70
	Short-circuit temperature, °C	+160
	Bending radius	before 20 mm - 6d, over 20 before 40 mm - 12d, over 40 mm - 15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	12,5
	Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		25
Maximum conductor size, mm <sup>2</sup>		630

# Power cables rated voltage 3,6/6 kV

6-AYKCY, 6-CYKCY, CSN 347659, IEC 60502-2



## Application

Power cables for medium voltage distribution with PVC insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603);
3. Filler/inner covering: EPDM+PVC, PVC or plastic tape;
4. Screen: Copper wires and copper tape, applied helically;
5. Cover: PVC sheath (black color).

## Parameters

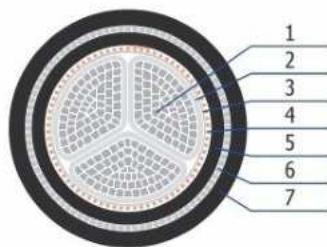
	Exploitation temperature range, °C	from -30 to +70
	Short-circuit temperature, °C	+160
	Bending radius	before 20 mm - 6d, over 20 before 40 mm - 12d, over 40 mm - 15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	12,5
	Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors		3
Minimum conductor size, mm <sup>2</sup>		25
Maximum conductor size, mm <sup>2</sup>		240

# Power cables rated voltage 3,6/6 kV

6-AYKCYDY, 6-CYKCYDY, CSN 347659, IEC 60502-2



## Application

Power cables for medium voltage distribution with PVC insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603);
3. Filler/inner covering: EPDM+PVC, PVC or plastic tape;
4. Screen: Copper wires and copper tape, applied helically;
5. Inner covering: PVC;
6. Armor: Galvanized round steel wires;
7. Cover: PVC sheath (black color).

## Parameters

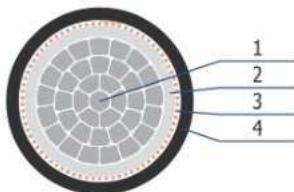
	Exploitation temperature range, °C	from -30 to +70
	Short-circuit temperature, °C	+160
	Bending radius	before 20 mm - 6d, over 20 before 40 mm - 12d, over 40 mm - 15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	12,5
	Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors	3	
Minimum conductor size, mm <sup>2</sup>	25	
Maximum conductor size, mm <sup>2</sup>	240	

# Power cables rated voltage 3,6/6 kV

YAKY, YKY, singlecore, IEC 60502-2



## Application

Power cables for medium voltage distribution with PVC insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Insulation: PVC (natural color);
3. Screen: Copper wires and copper tape, applied helically;
4. Cover: PVC sheath (black color).

## Parameters

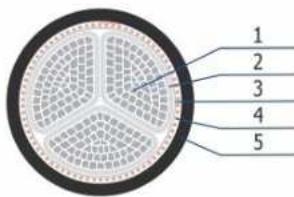
Exploitation temperature range, °C	from -50 to +50
Short-circuit temperature, °C	+150
Bending radius	10d
Fire properties	EN 60332-1-2
Operating conductor temperature, °C	max +70
Cabling (inside/outside)	inside/outside
Installation temperature, °C	min -5
Frequency, Hz	50
Testing voltage, kV	12,5
Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>	25/16	16/16
Maximum conductor size, mm <sup>2</sup>	1000/50	630/50

# Power cables rated voltage 3,6/6 kV

YAKY, YKY, multicore, IEC 60502-2



## Application

Power cables for medium voltage distribution with PVC insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603);
3. Filler/inner covering: EPDM+PVC, PVC or plastic tape;
4. Screen: Copper wires and copper tape, applied helically;
5. Cover: PVC sheath (black color).

## Parameters

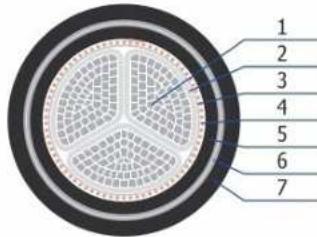
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+150
	Bending radius	10d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	12,5
	Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors		3
Minimum conductor size, mm <sup>2</sup>	25/16	16/16
Maximum conductor size, mm <sup>2</sup>		300/50

# Power cables rated voltage 3,6/6 kV

YAKYFtly, YKYFtly, IEC 60502-2



## Application

Power cables for medium voltage distribution with PVC insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603);
3. Filler/inner covering: EPDM+PVC, PVC or plastic tape;
4. Screen: Copper wires and copper tape, applied helically;
5. Inner covering: PVC;
6. Armor: Galvanized steel tapes applied with overlap;
7. Cover: PVC sheath (black color).

## Parameters

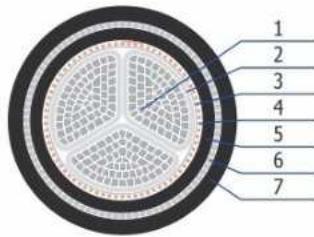
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+150
	Bending radius	10d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	12,5
	Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors		3
Minimum conductor size, mm <sup>2</sup>	25/16	16/16
Maximum conductor size, mm <sup>2</sup>		300/50

# Power cables rated voltage 3,6/6 kV

YAKYFoy, YKYFoy, IEC 60502-2



## Application

Power cables for medium voltage distribution with PVC insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - SM (stranded, shaped);
2. Insulation: PVC (color code acc. to HD 603);
3. Filler/inner covering: EPDM, plastic tape;
4. Screen: Copper wires and copper tape, applied helically;
5. Inner covering: PVC;
6. Armor: Galvanized round steel wires;
7. Cover: PVC sheath (black color).

## Parameters

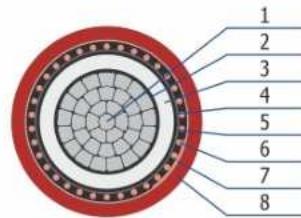
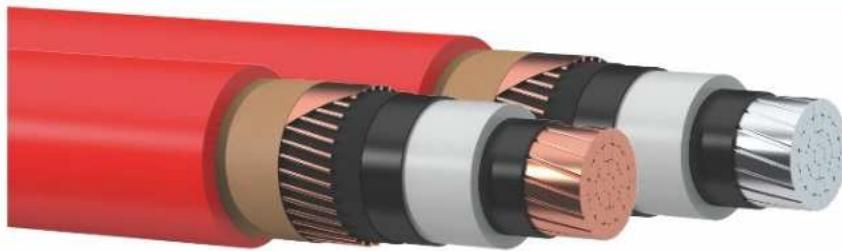
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+150
	Bending radius	10d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +70
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	12,5
	Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors		3
Minimum conductor size, mm <sup>2</sup>	25	16
Maximum conductor size, mm <sup>2</sup>		300

# Power cables rated voltage 3,6/6 kV

YHAKXS, YHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

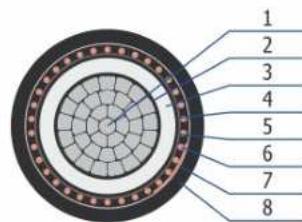
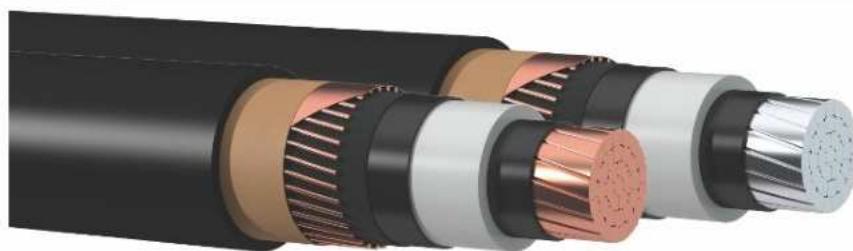
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	12,5
	Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 3,6/6 kV

XHAKXS, XHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

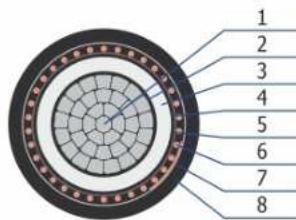
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	12,5
	Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 3,6/6 kV

XUHAKXS, XUHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

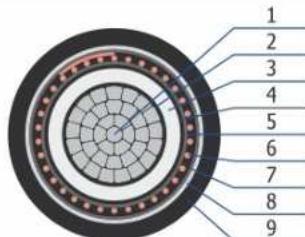
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	12,5
	Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 3,6/6 kV

XRUHAKXS, XnRUHAKXS, XRUHKXS, XnRUHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected. "n" - increased flame retardance properties.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE. For cables with index "n" - weather-resistant PE (red color).

## Parameters

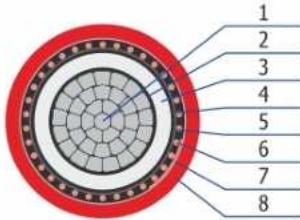
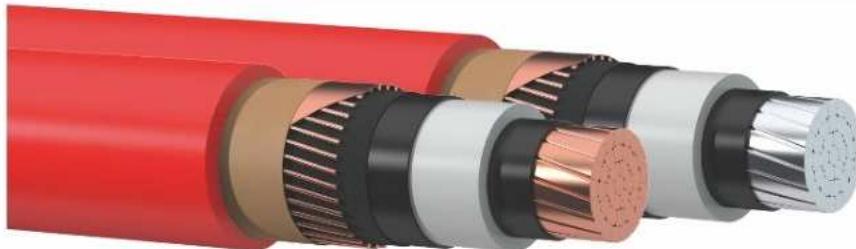
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2 (for cables with index «n»)
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	12,5
	Rated voltage, kV	3,6/6

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 6/10 kV

10-AXEKCY, 10-CXEKCY, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

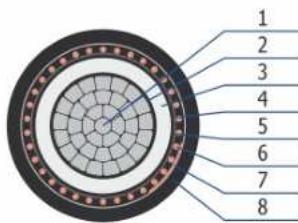
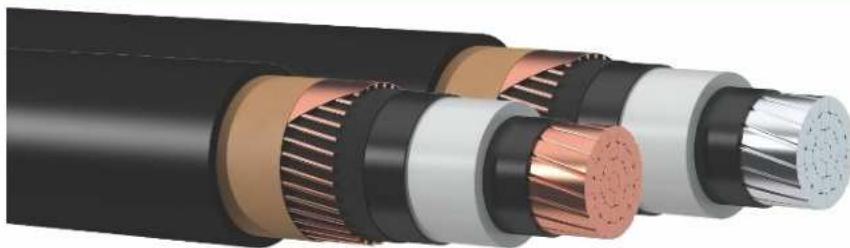
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -15
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors	1	
Minimum conductor size, mm <sup>2</sup>	35/16	
Maximum conductor size, mm <sup>2</sup>	500/35	

# Power cables rated voltage 6/10 kV

10-AXEKCE, 10-CXEKCE, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

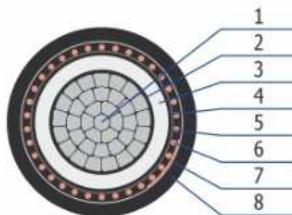
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 6/10 kV

10-AXEKVCE, 10-CXEKVCE, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

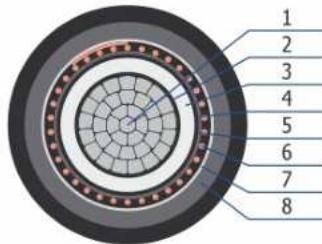
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 6/10 kV

10-AXEKVCEY, 10-CXEKVCEY, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Combined: weather-resistant black color PE + PVC sheath (black color).

## Parameters

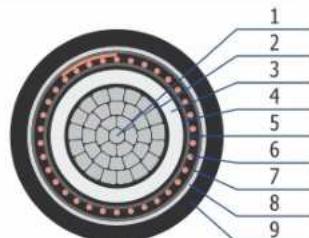
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -15
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 6/10 kV

10-AXEKVCVE, 10-CXEKVCVE, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swelling tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swelling tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE.

## Parameters

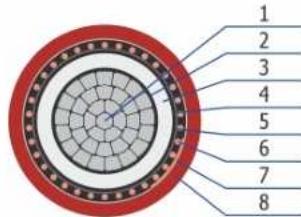
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	20d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 6/10 kV

YHAKXS, YHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

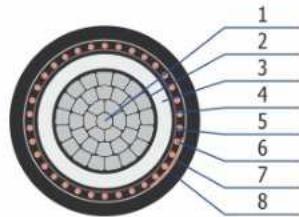
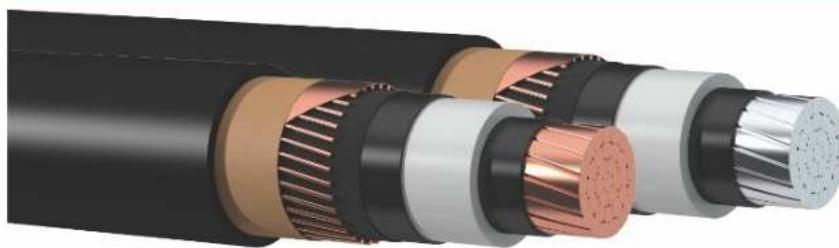
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 6/10 kV

XHAKXS, XHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted)
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

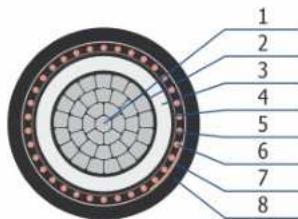
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 6/10 kV

XUHAKXS, XUHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

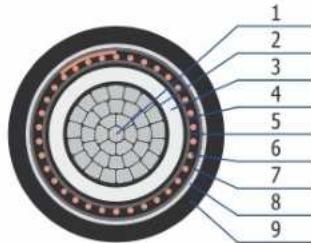
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 6/10 kV

XRUHAKXS, XnRUHAKXS, XRUHKXS, XnRUHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected. "n" - increased flame retardance properties.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE. For cables with index "n" - weather-resistant PE (red color).

## Parameters

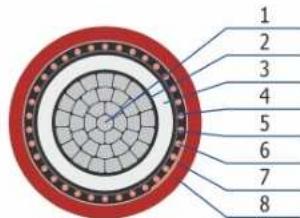
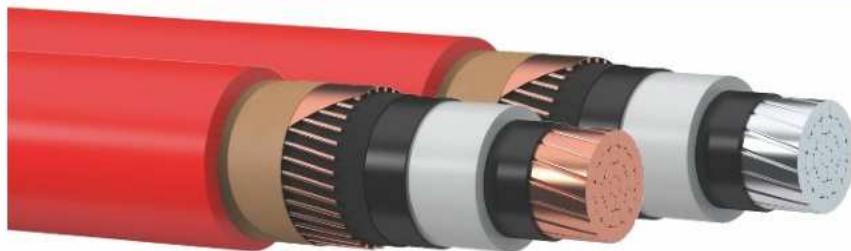
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2 for cables with index «n»
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>	50/16	25/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 6/10 kV

NA2XSY, N2XSY, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation:XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

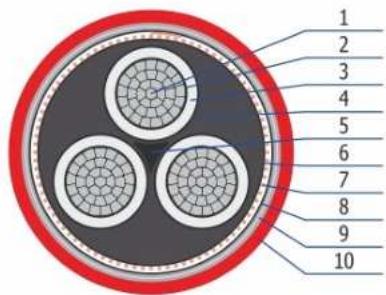
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>	50/16	25/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 6/10 kV

NA2XSYBY, N2XSYBY, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Assembly of cores: Three insulated cores are laid-up (pre-assembled);
6. Filler/inner covering: Semiconducting compound. Semiconducting nonwoven tape;
7. Screen: Copper wires and copper tape, applied helically;
8. Inner covering: PVC;
9. Armor: Galvanized steel tapes applied with overlap;
10. Cover: PVC sheath (red color).

## Parameters

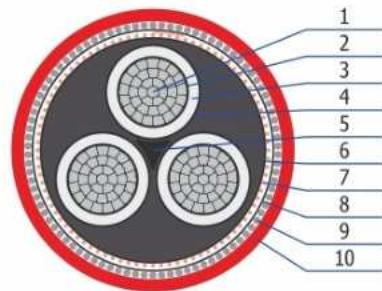
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		3
Minimum conductor size, mm <sup>2</sup>	50/16	25/16
Maximum conductor size, mm <sup>2</sup>		300/25

# Power cables rated voltage 6/10 kV

NA2XSYGY, N2XSYGY, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Assembly of cores: Three insulated cores are laid-up (pre-assembled);
6. Filler/inner covering: Semiconducting compound. Semiconducting nonwoven tape;
7. Screen: Copper wires and copper tape, applied helically;
8. Inner covering: PVC;
9. Armor: Galvanized round steel wires;
10. Cover: PVC sheath (red color).

## Parameters

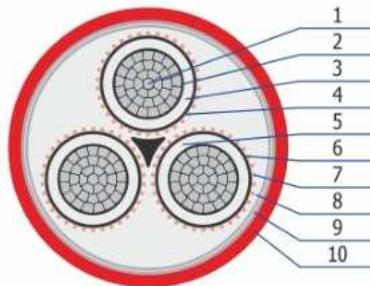
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		3
Minimum conductor size, mm <sup>2</sup>	50/16	25/16
Maximum conductor size, mm <sup>2</sup>		300/25

# Power cables rated voltage 6/10 kV

NA2XSEYBY, N2XSEYBY, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and individual concentric copper screen over each core. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Assembly of cores: Three screened cores are laid-up (pre-assembled);
8. Filler/inner covering: EPDM+PVC;
9. Armor: Galvanized steel tapes applied with overlap;
10. Cover: PVC sheath (red color).

## Parameters

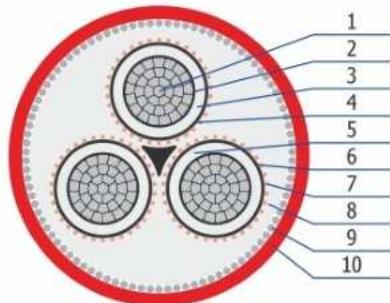
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		3
Minimum conductor size, mm <sup>2</sup>	50/16	25/16
Maximum conductor size, mm <sup>2</sup>		300/25

# Power cables rated voltage 6/10 kV

NA2XSEYGY, N2XSEYGY, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and individual concentric copper screen over each core. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts, in areas with high risk of mechanical damage.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Assembly of cores: Three screened cores are laid-up (pre-assembled);
8. Filler/inner covering: EPDM+PVC;
9. Armor: Galvanized round steel wires;
10. Cover: PVC sheath (red color).

## Parameters

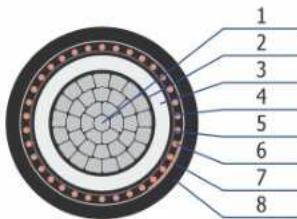
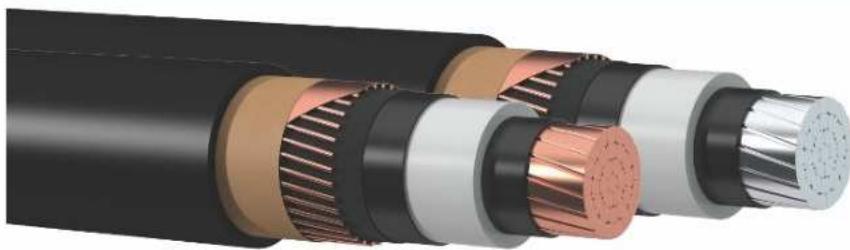
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		3
Minimum conductor size, mm <sup>2</sup>	50/16	25/16
Maximum conductor size, mm <sup>2</sup>		300/25

# Power cables rated voltage 6/10 kV

NA2XS2Y, N2XS2Y, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

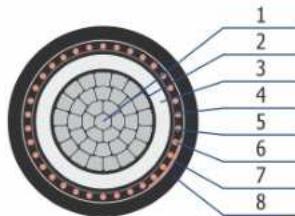
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>	50/16	25/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 6/10 kV

NA2XS(F)2Y, N2XS(F)2Y, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

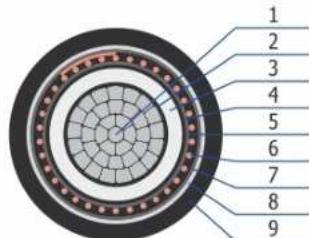
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>	50/16	25/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 6/10 kV

NA2XS(FL)2Y, N2XS(FL)2Y, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE.

## Parameters

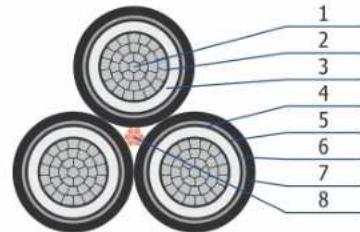
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

	Al	Cu
Number of conductors	1	
Minimum conductor size, mm <sup>2</sup>	50/16	25/16
Maximum conductor size, mm <sup>2</sup>	1000/35	

# Power cables rated voltage 6/10 kV

AHXAMK-W, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors, laid-up around earth conductor. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE;
8. Assembly of cores: Individually sheathed cores are laid-up around a bare earth conductor.

## Parameters

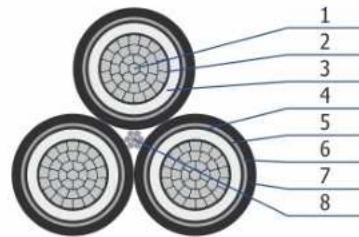
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	35/35
Maximum conductor size, mm <sup>2</sup>	300/70

# Power cables rated voltage 6/10 kV

AHXAMK-WS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors, laid-up around steel messenger. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE;
8. Assembly of cores: Individually sheathed cores are laid-up around a steel messenger.

## Parameters

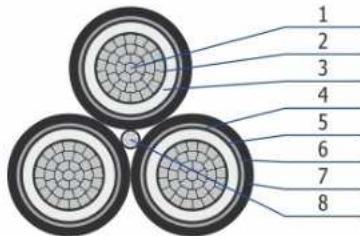
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	25/62
Maximum conductor size, mm <sup>2</sup>	300/62

# Power cables rated voltage 6/10 kV

AHXAMK-WM, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors, laid-up around insulated steel messenger. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE;
8. Assembly of cores: Individually sheathed cores are laid-up around an insulated steel messenger.

## Parameters

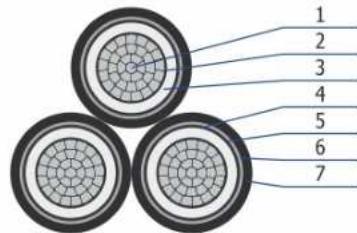
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	25/62
Maximum conductor size, mm <sup>2</sup>	300/62

# Power cables rated voltage 6/10 kV

AHXAMK-WP, HD 620-10F, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damage is not expected, in wet locations.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE.

## Parameters

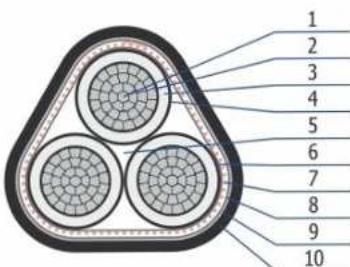
	Exploitation temperature range, °C	from -60 up to 50
	Short-circuit temperature, °C	250
	Bending radius	12D
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-20
	Frequency, Hz	50
	Testing voltage, kV	30
	Rated voltage, kV	6/10

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	50
Maximum conductor size, mm <sup>2</sup>	300

# Power cables rated voltage 6/10 kV

AHXCMK-WTC/PE AHXCMK-WTC/PE (WTL) AHXCMK-WTC/PE (WTR), HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Assembly of cores: Three insulated cores are laid-up (pre-assembled). For WTL, WTR - laid-up with interstice swelling fillers;
6. Inner covering: Semiconducting nonwoven tape. For WTL, WTR - semiconducting water-swellable tape;
7. Screen: Copper wires and copper tape, applied helically;
8. Inner covering: Plastic tape. For WTL, WTR - non-conducting water-swellable tape;
9. Radial water barrier: For WTR - aluminum/plastic laminate tightly attached to outer sheath;
10. Cover: Weather-resistant black color PE.

## Parameters

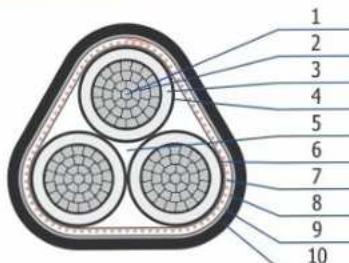
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

Number of conductors	1	3
Minimum conductor size, mm <sup>2</sup>	35/16	35/16
Maximum conductor size, mm <sup>2</sup>	800/50	300/35

# Power cables rated voltage 6/10 kV

AXCEL-F / AXCEL-F (WP), HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Assembly of cores: Three insulated cores are laid-up (pre-assembled). For WP - laid-up with interstice swelling fillers;
6. Inner covering: Semiconducting nonwoven tape. For WP - semiconducting water-swellable tape;
7. Screen: Copper wires and copper tape, applied helically;
8. Inner covering: Plastic tape. For WP - non-conducting water-swellable tape;
9. Radial water barrier: For WP - aluminum/plastic laminate tightly attached to outer sheath;
10. Cover: Weather-resistant black color PE.

## Parameters

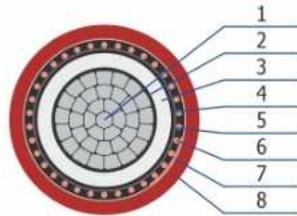
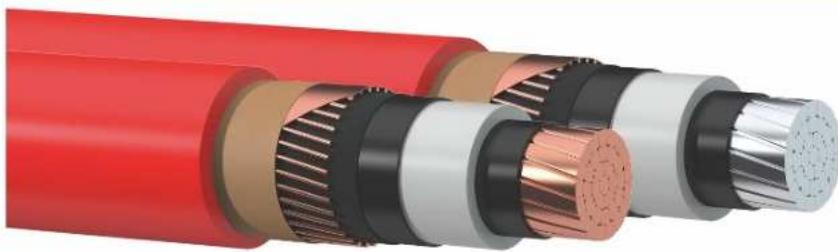
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	21
	Rated voltage, kV	6/10

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	10/10
Maximum conductor size, mm <sup>2</sup>	300/25

# Power cables rated voltage 8,7/15 kV

YHAKXS, YHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

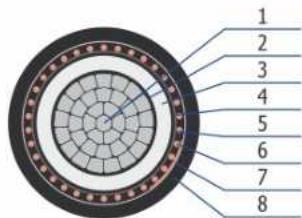
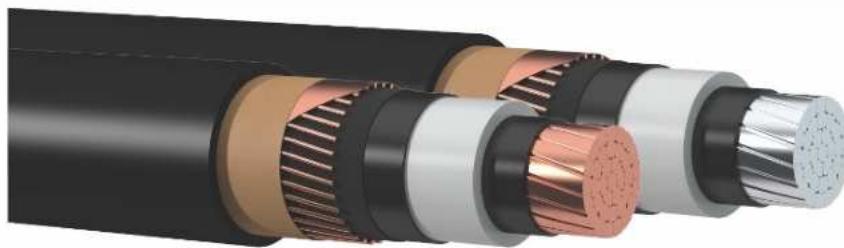
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	30,5
	Rated voltage, kV	8,7/15

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 8,7/15 kV

XHAKXS, XHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

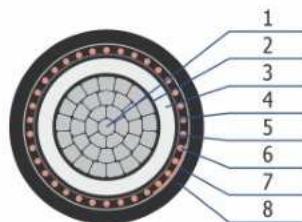
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	30,5
	Rated voltage, kV	8,7/15

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 8,7/15 kV

XUHAKXS, XUHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

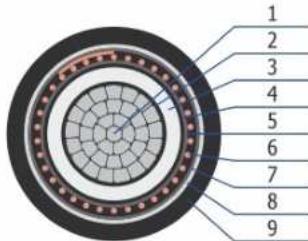
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	30,5
	Rated voltage, kV	8,7/15

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 8,7/15 kV

XRUHAKXS, XnRUHAKXS, XRUHKXS, XnRUHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected. "n" - increased flame retardance properties.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE. For cables with index "n" - weather-resistant PE (red color).

## Parameters

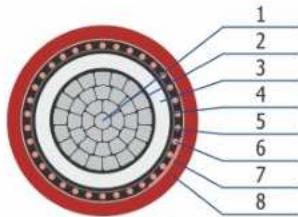
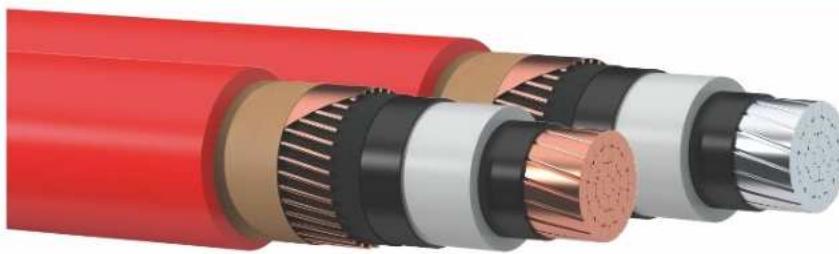
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2 (for cables with index «n»)
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	30,5
	Rated voltage, kV	8,7/15

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 12,7/22 kV

22-AXEKCY, 22-CXEKCY, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation:XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

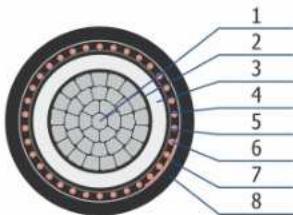
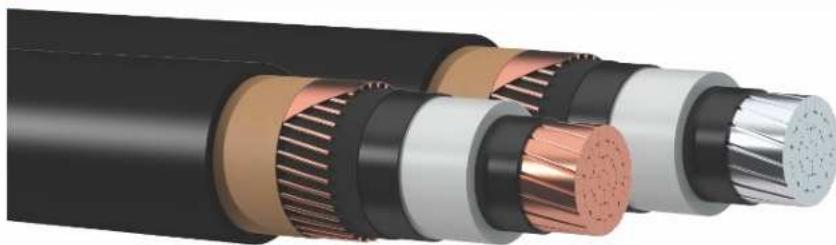
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -15
	Frequency, Hz	50
	Testing voltage, kV	50
	Rated voltage, kV	12,7/22

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 12,7/22 kV

22-AXEKCE, 22-CXEKCE, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

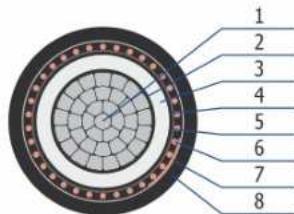
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	50
	Rated voltage, kV	12,7/22

## Cable sizes

	Al	Cu
Number of conductors	1	
Minimum conductor size, mm <sup>2</sup>	35/16	
Maximum conductor size, mm <sup>2</sup>	500/35	

# Power cables rated voltage 12,7/22 kV

22-AXEKVCE, 22-CXEKVCE, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

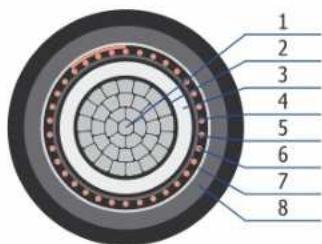
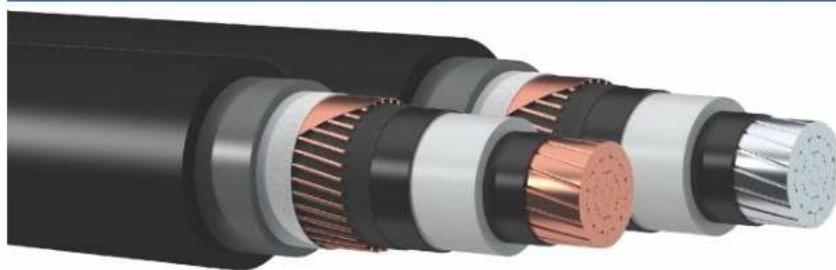
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	50
	Rated voltage, kV	12,7/22

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 12,7/22 kV

22-AXEKVCEY, 22-CXEKVCEY, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Combined weather-resistant black color PE + PVC sheath (black color).

## Parameters

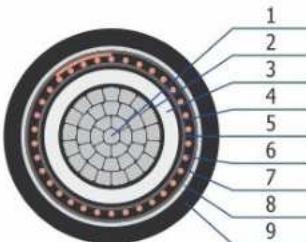
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -15
	Frequency, Hz	50
	Testing voltage, kV	50
	Rated voltage, kV	12,7/22

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 12,7/22 kV

22-AXEKVCVE, 22-CXEKVCVE, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE.

## Parameters

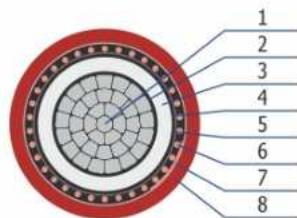
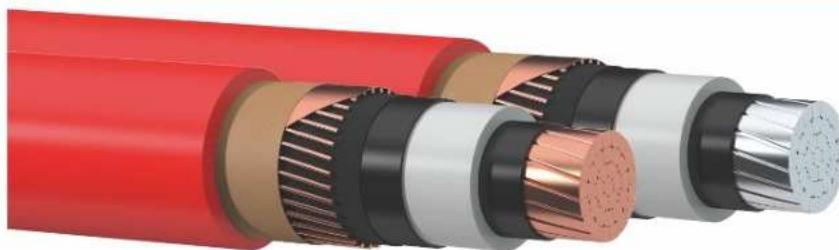
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	20d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	50
	Rated voltage, kV	12,7/22

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 12/20 kV

YHAKXS, YHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

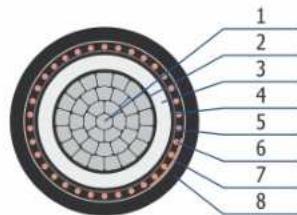
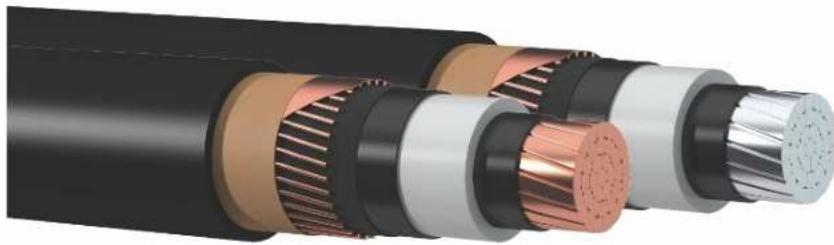
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 12/20 kV

XHAKXS, XHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

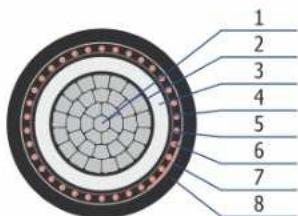
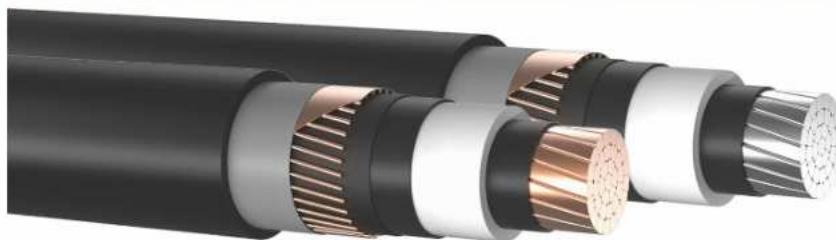
## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50



# Power cables rated voltage 12/20 kV

XUHAKXS, XUHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

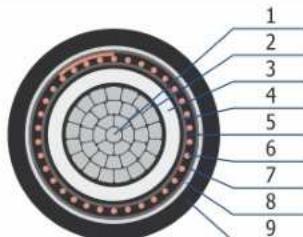
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 12/20 kV

XRUHAKXS, XnRUHAKXS, XRUHKXS, XnRUHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected. "n" - increased flame retardance properties.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE. For cables with index "n" - weather-resistant PE (red color).

## Parameters

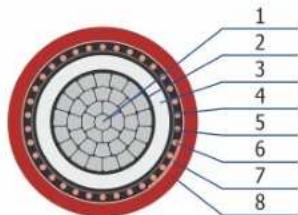
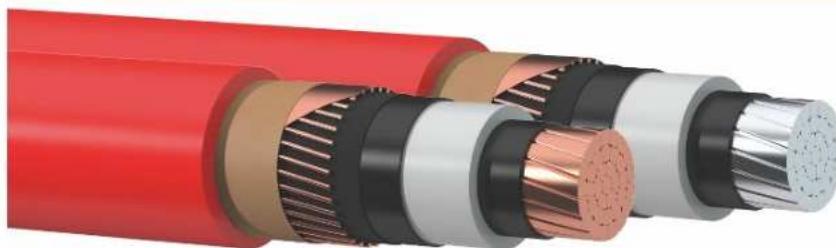
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2 for cables with index «n»
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		35/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 12/20 kV

NA2XSY, N2XSY, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

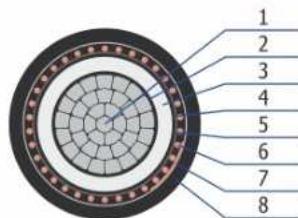
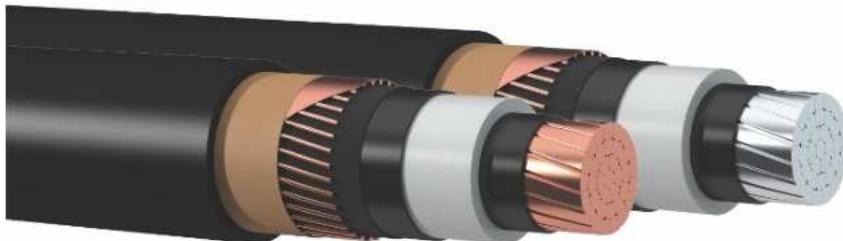
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>	50/16	35/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 12/20 kV

NA2XS2Y, N2XS2Y, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

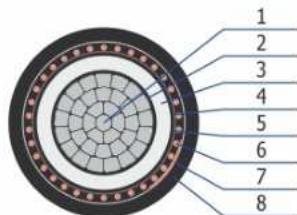
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>	50/16	35/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 12/20 kV

NA2XS(F)2Y, N2XS(F)2Y, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

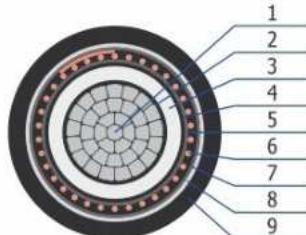
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>	50/16	35/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 12/20 kV

NA2XS(FL)2Y, N2XS(FL)2Y, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE.

## Parameters

	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

	Al	Cu
Number of conductors	1	
Minimum conductor size, mm <sup>2</sup>	50/16	35/16
Maximum conductor size, mm <sup>2</sup>	1000/35	



# Power cables rated voltage 12/20 kV

AHXAMK-W, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE;
8. Assembly of cores: Individually sheathed cores are laid-up around a bare earth conductor.

## Parameters

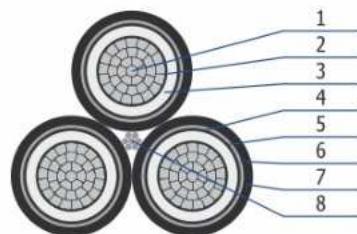
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	35/35
Maximum conductor size, mm <sup>2</sup>	300/70

# Power cables rated voltage 12/20 kV

AHXAMK-WS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors, laid-up around steel messenger. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE;
8. Assembly of cores: Individually sheathed cores are laid-up around a steel messenger.

## Parameters

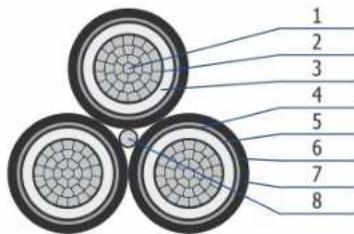
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	25/67
Maximum conductor size, mm <sup>2</sup>	300/67

# Power cables rated voltage 12/20 kV

AHXAMK-WM, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE;
8. Assembly of cores: Individually sheathed cores are laid-up around an insulated steel messenger.

## Parameters

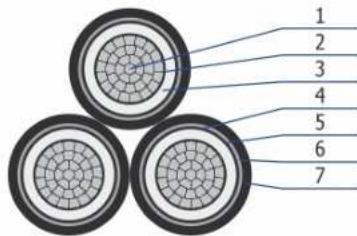
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	25/62
Maximum conductor size, mm <sup>2</sup>	300/62

# Power cables rated voltage 12/20 kV

AHXAMK-WP, HD 620-10F, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damage is not expected, in wet locations.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE.

## Parameters

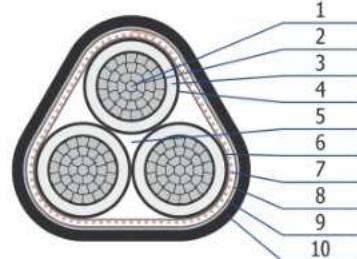
	Exploitation temperature range, °C	from -60 up to 50
	Short-circuit temperature, °C	250
	Bending radius	12D
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-20
	Frequency, Hz	50
	Testing voltage, kV	50
	Rated voltage, kV	12/20

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	50
Maximum conductor size, mm <sup>2</sup>	300

# Power cables rated voltage 12/20 kV

AHXCMK-WTC/PE / AHXCMK-WTC/PE (WTL) / AHXCMK-WTC/PE (WTR), HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Assembly of cores: Three insulated cores are laid-up (pre-assembled). For WTL, WTR - laid-up with interstice swelling fillers;
6. Inner covering: Semiconducting nonwoven tape. For WTL, WTR - semiconducting water-swellable tape;
7. Screen: Copper wires and copper tape, applied helically;
8. Inner covering: Plastic tape. For WTL, WTR - Semiconducting water-swellable tape;
9. Radial water barrier: For WTR - aluminum/plastic laminate tightly attached to outer sheath;
10. Cover: Weather-resistant black color PE.

## Parameters

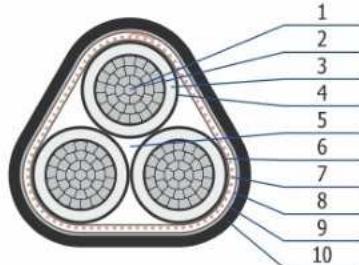
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

## Cable sizes

Number of conductors	1	3
Minimum conductor size, mm <sup>2</sup>	35/16	35/16
Maximum conductor size, mm <sup>2</sup>	800/50	300/35

# Power cables rated voltage 12/20 kV

AXCEL-F / AXCEL-F (WP), HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Assembly of cores: Three insulated cores are laid-up (pre-assembled). For WP - laid-up with interstice swelling fillers;
6. Inner covering: Semiconducting nonwoven tape. For WP - semiconducting water-swellable tape;
7. Screen: Copper wires and copper tape, applied helically;
8. Inner covering: Plastic tape. For WP - Semiconducting water-swellable tape;
9. Radial water barrier: For WP - aluminum/plastic laminate tightly attached to outer sheath;
10. Cover: Weather-resistant black color PE.

## Parameters

	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	42
	Rated voltage, kV	12/20

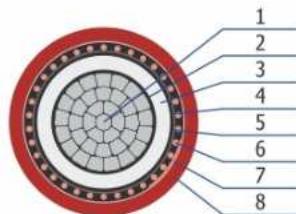
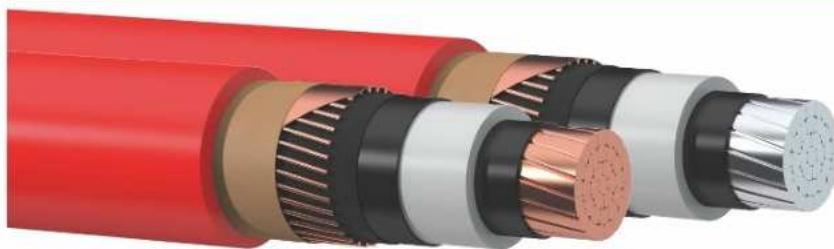
## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	10/10
Maximum conductor size, mm <sup>2</sup>	240/25



# Power cables rated voltage 20/35 kV

35-AXEKCY, 35-CXEKCY, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

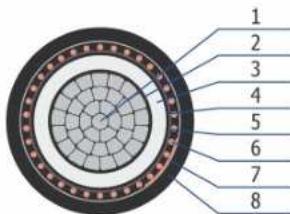
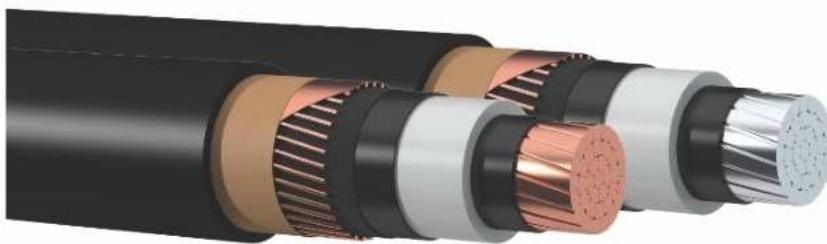
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -15
	Frequency, Hz	50
	Testing voltage, kV	75
	Rated voltage, kV	20/35

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 20/35 kV

35-AXEKCE, 35-CXEKCE, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

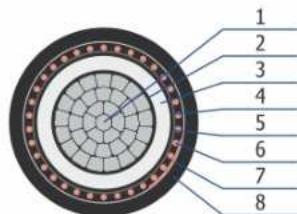
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	75
	Rated voltage, kV	20/35

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 20/35 kV

35-AXEKVCE, 35-CXEKVCE, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

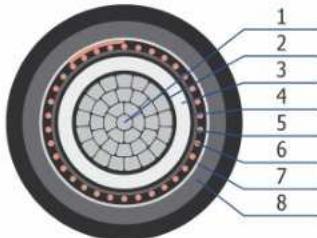
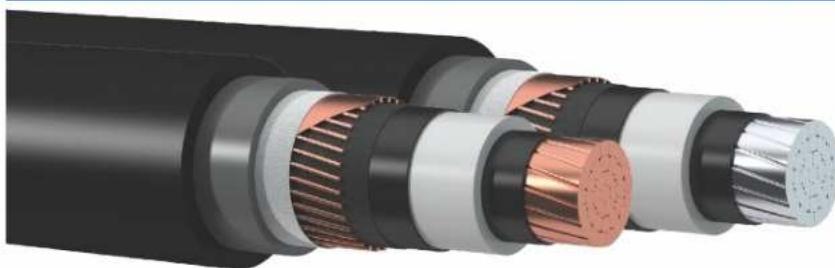
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	75
	Rated voltage, kV	20/35

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 20/35 kV

35-AXEKVCEY, 35-CXEKVCEY, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Combined: weather-resistant black color PE + PVC sheath (black color).

## Parameters

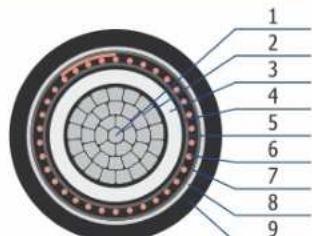
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -15
	Frequency, Hz	50
	Testing voltage, kV	75
	Rated voltage, kV	20/35

## Cable sizes

	Al	Cu
Number of conductors	1	
Minimum conductor size, mm <sup>2</sup>	50/16	
Maximum conductor size, mm <sup>2</sup>	500/35	

# Power cables rated voltage 20/35 kV

35-AXEKVCVE, 35-CXEKVCVE, PNE 347625, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE.

## Parameters

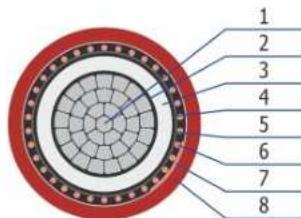
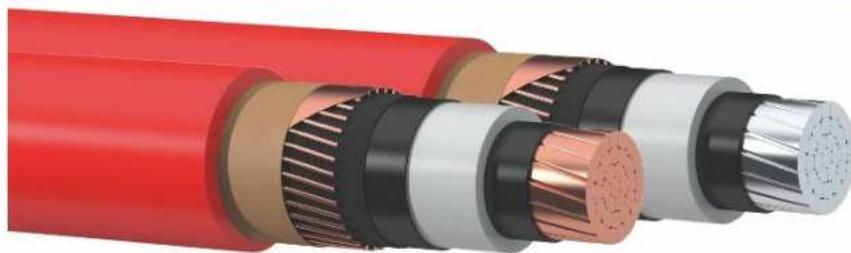
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	20d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	75
	Rated voltage, kV	20/35

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		500/35

# Power cables rated voltage 18/30 kV

YHAKXS, YHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

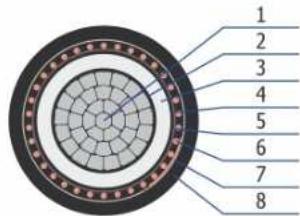
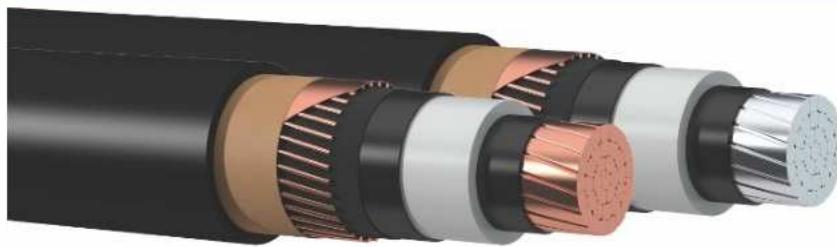
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 18/30 kV

XHAKXS, XHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

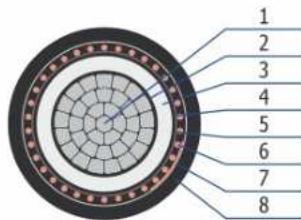
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 18/30 kV

XUHAKXS, XUHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

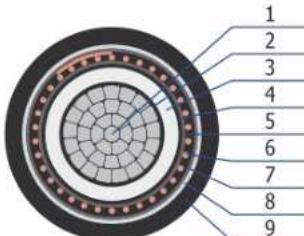
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 18/30 kV

XRUHAKXS, XnRUHAKXS, XRUHKXS, XnRUHKXS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected. "n" - increased flame retardance properties.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE. For cables with index "n" - weather-resistant PE (red color).

## Parameters

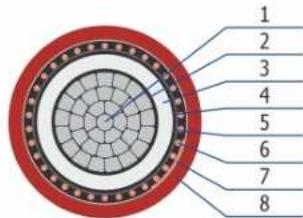
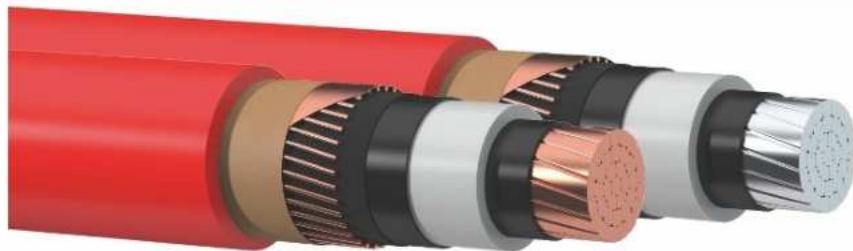
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2 for cables with index «n»
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		1000/50

# Power cables rated voltage 18/30 kV

NA2XSY, N2XSY, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: PVC sheath (red color).

## Parameters

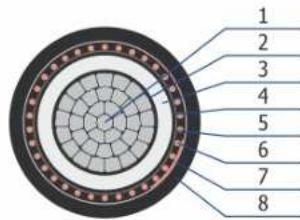
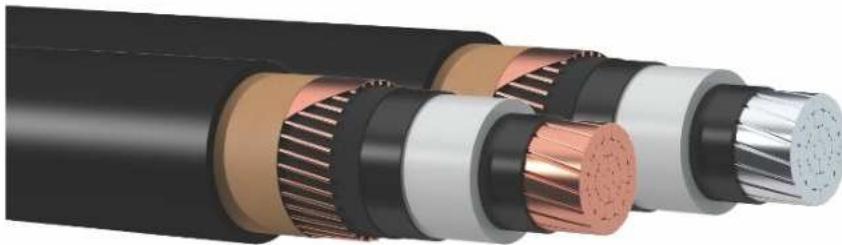
	Exploitation temperature range, °C	from -50 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	EN 60332-1-2
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -5
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 18/30 kV

NA2XS2Y, N2XS2Y, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation and concentric copper screen. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting nonwoven tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Polyester tape;
8. Cover: Weather-resistant black color PE.

## Parameters

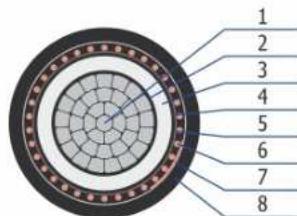
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 18/30 kV

NA2XS(F)2Y, N2XS(F)2Y, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen and longitudinal sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Non-conducting water-swellable tape;
8. Cover: Weather-resistant black color PE.

## Parameters

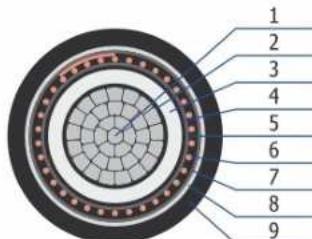
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 18/30 kV

NA2XS(FL)2Y, N2XS(FL)2Y, VDE 0276-620, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation, concentric copper screen, longitudinal and radial sealing. Suitable for laying in buildings, power stations, in open air, in ground, in cable trays and ducts where mechanical damages are not expected.

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE.

## Parameters

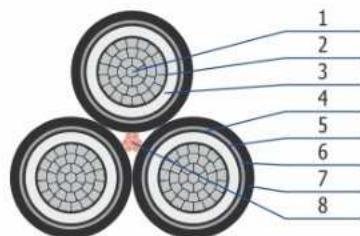
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	15d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		50/16
Maximum conductor size, mm <sup>2</sup>		1000/35

# Power cables rated voltage 18/30 kV

AHXAMK-W, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE;
8. Assembly of cores: Individually sheathed cores are laid-up around a bare earth conductor.

## Parameters

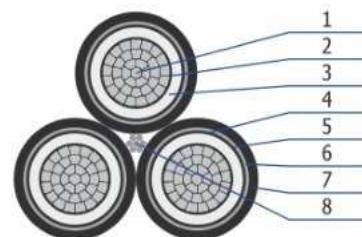
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	35/35
Maximum conductor size, mm <sup>2</sup>	240/70

# Power cables rated voltage 18/30 kV

AHXAMK-WS, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors, laid-up around steel messenger. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE;
8. Assembly of cores: Individually sheathed cores are laid-up around a steel messenger.

## Parameters

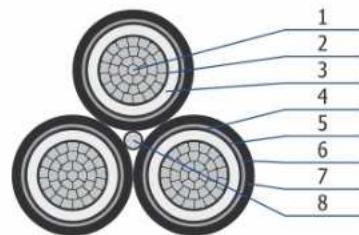
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	25/67
Maximum conductor size, mm <sup>2</sup>	240/67

# Power cables rated voltage 18/30 kV

AHXAMK-WM, HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE;
8. Assembly of cores: Individually sheathed cores are laid-up around an insulated steel messenger.

## Parameters

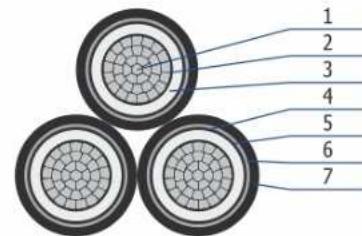
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	25/62
Maximum conductor size, mm <sup>2</sup>	240/62

# Power cables rated voltage 18/30 kV

AHXAMK-WP, HD 620-10F, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damage is not expected, in wet locations.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
7. Cover: Weather-resistant black color PE.

## Parameters

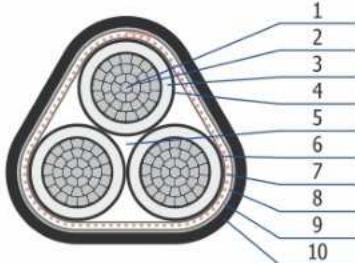
	Exploitation temperature range, °C	from -60 up to 50
	Short-circuit temperature, °C	250
	Bending radius	12D
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	50
Maximum conductor size, mm <sup>2</sup>	240

# Power cables rated voltage 18/30 kV

AHXCMK-WTC/PE / AHXCMK-WTC/PE (WTL) / AHXCMK-WTC/PE (WTR), HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Assembly of cores: Three insulated cores are laid-up (pre-assembled). For WTL, WTR - laid-up with interstice swelling fillers;
6. Inner covering: Semiconducting nonwoven tape. For WTL, WTR - semiconducting water-swellable tape;
7. Screen: Copper wires and copper tape, applied helically;
8. Inner covering: Plastic tape. For WTL, WTR - Semiconducting water-swellable tape;
9. Radial water barrier: For WTR - aluminum/plastic laminate tightly attached to outer sheath;
10. Cover: Weather-resistant black color PE.

## Parameters

	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

Number of conductors	1	3
Minimum conductor size, mm <sup>2</sup>	35/16	35/16
Maximum conductor size, mm <sup>2</sup>	800/50	300/50



# Power cables rated voltage 18/30 kV

AXCEL-F / AXCEL-F (WP), HD 620, IEC 60502-2



## Application

Power cables for medium voltage distribution with pre-assembled XLPE-insulated conductors. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damages are not expected, in wet locations. Suitable for plough cabling.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Assembly of cores: Three insulated cores are laid-up (pre-assembled). For WP - laid-up with interstice swelling fillers;
6. Inner covering: Semiconducting nonwoven tape. For WP - semiconducting water-swellable tape;
7. Screen: Copper wires and copper tape, applied helically;
8. Inner covering: Plastic tape. For WP - Semiconducting water-swellable tape;
9. Radial water barrier: For WP - aluminum/plastic laminate tightly attached to outer sheath;
10. Cover: Weather-resistant black color PE.

## Parameters

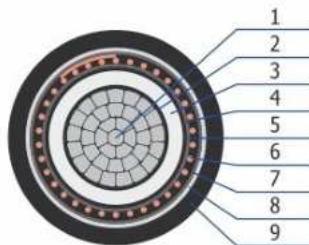
	Exploitation temperature range, °C	from -60 to +50
	Short-circuit temperature, °C	+250
	Bending radius	12d
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	min -20
	Frequency, Hz	50
	Testing voltage, kV	63
	Rated voltage, kV	18/30

## Cable sizes

Number of conductors	3
Minimum conductor size, mm <sup>2</sup>	50/16
Maximum conductor size, mm <sup>2</sup>	240/25

# Power cables rated voltage 20,8/36 (42) kV

EAXeCeWB, HD 620-10B, IEC 60502-2



## Application

Power cables for medium voltage distribution with XLPE insulation. Suitable for laying in buildings, in open air, in ground, in cable trays and ducts where mechanical damage is not expected, in wet locations.

## Construction

1. Conductor: Aluminum acc. to EN 60228 (water tight). Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE.

## Parameters

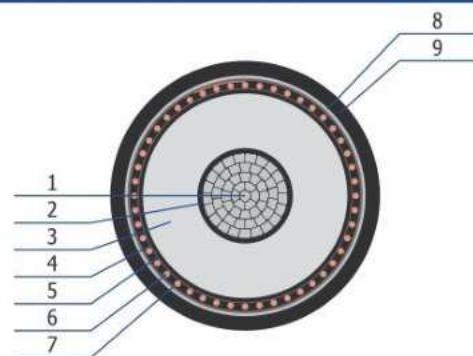
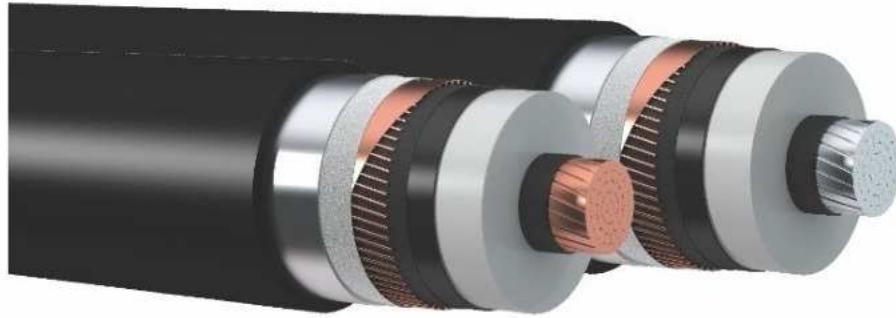
	Exploitation temperature range, °C	from -60 up to 50
	Short-circuit temperature, °C	250
	Bending radius	15D
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-20
	Frequency, Hz	50
	Testing voltage, kV	83,2
	Rated voltage, kV	20,8/36

## Cable sizes

Number of conductors	1
Minimum conductor size, mm <sup>2</sup>	50/16
Maximum conductor size, mm <sup>2</sup>	240/35

# Power cables rated voltage 64/110 kV

A2XS(FL)2Y, 2XS(FL)2Y, IEC 60840



## Application

For installation underground (in cable trenches), irrespective of corrosiveness of soil, if the cable is protected from mechanical damage; for installation in water (in non-navigational water basins).

## Construction

1. Conductor: Aluminum or copper acc. to EN 60228. Class 2 - RMC (stranded, round, compacted);
2. Conductor screen: Semi-conducting XLPE;
3. Insulation: XLPE;
4. Insulation screen: Semi-conducting XLPE;
5. Inner covering: Semiconducting water-swellable tape;
6. Screen: Copper wires and copper tape, applied helically;
7. Inner covering: Semiconducting water-swellable tape;
8. Radial water barrier: Aluminum/plastic laminate tightly attached to outer sheath;
9. Cover: Weather-resistant black color PE.

## Parameters

	Exploitation temperature range, °C	from -60 up to 50
	Short-circuit temperature, °C	250
	Bending radius	15D
	Fire properties	-
	Operating conductor temperature, °C	max +90
	Cabling (inside/outside)	inside/outside
	Installation temperature, °C	-20
	Frequency, Hz	50
	Testing voltage, kV	160
	Rated voltage, kV	64/110

## Cable sizes

	Al	Cu
Number of conductors		1
Minimum conductor size, mm <sup>2</sup>		185/95
Maximum conductor size, mm <sup>2</sup>		1600/300

# Technical tables

## Electrical specifications of cables

Continuous current carrying capacity	Current-carrying capacity of cables is calculated under load factor K=1.0 for ambient temperature 25 °C – for cable laying in air and 15 °C – for cable laying in ground. Rated conditions at cable laying in ground: - depth of laying – 0.7 m; - rated thermal resistance of normalized soil – 1.2 K·m/W. Cable currents are calculated for copper screens, grounded from both ends of the cable. For single-conductor cables the currents are calculated for laying in trefoil formation – side by side, for laying in flat formation – at distance between cables in the clear, equals to cable diameter. Cable currents for cases, not indicated above, are calculated with methods, stipulated in IEC 60287.
--------------------------------------	--

Table 23 – Current carrying capacity of cables with PVC insulation for rated voltage of 3.6/6 kV

Nominal conductor cross-section, mm <sup>2</sup>	Rated current-carrying capacity, A			
	aluminium conductor		copper conductor	
	in air	in ground	in air	in ground
25	85	90	110	122
35	105	110	135	147
50	125	130	165	175
70	155	160	210	215
95	190	195	255	260
120	220	220	300	295
150	250	250	335	335
185	290	285	385	380
240	345	335	460	445

Table 24 – Allowed 1-second short circuit current of cables with PVC insulation for rated voltage of 3.6/6 kV

Nominal conductor cross-section, mm <sup>2</sup>	Allowed 1-second short circuit current, kA, for cables	
	with copper conductor	with aluminum conductor
25	2,78	1,81
35	3,86	2,50
50	5,23	3,38
70	7,54	4,95
95	10,48	6,86
120	13,21	8,66
150	16,30	10,64
185	20,39	13,37
240	26,80	17,54

Remark: short circuit currents are calculated at conductor temperature prior to short current, equals to 70 °C, and ultimate conductor short circuit temperature, equals to 160 °C.

## Technical tables

Table 25 – Current carrying capacities of single-conductor cables with XLPE insulation for rated voltage of 3.6/6 kV, A

Nominal conductor cross-section, mm <sup>2</sup>	Laid in ground				Laid in air			
	with copper conductor		with aluminum conductor		with copper conductor		with aluminum conductor	
	in the following formation:							
	flat	trefoil	flat	trefoil	flat	trefoil	flat	trefoil
35	221	193	172	147	250	203	188	155
50	250	225	195	170	290	240	225	185
70	310	275	240	210	360	300	280	230
95	336	326	263	253	448	387	349	300
120	380	370	298	288	515	445	403	346
150	416	413	329	322	574	503	452	392
185	466	466	371	364	654	577	518	450
240	531	537	426	422	762	677	607	531
300	590	604	477	476	865	776	693	609
400	533	677	525	541	959	891	787	710
500	697	759	587	614	1081	1025	900	822
630	792	848	653	695	1213	1166	1026	954
800	825	933	719	780	1349	1319	1161	1094
1000	900	980	790	820	1415	1433	1345	1200

Table 26 – Current carrying capacities of single-conductor cables with XLPE insulation for rated voltage of 6/10 and 8.7/15 kV, A

Nominal conductor cross-section, mm <sup>2</sup>	Laid in ground				Laid in air			
	with copper conductor		with aluminum conductor		with copper conductor		with aluminum conductor	
	in the following formation:							
	flat	trefoil	flat	trefoil	flat	trefoil	flat	trefoil
35	220	193	172	147	217	192	189	150
50	250	225	195	170	290	240	225	185
70	310	275	240	210	360	300	280	230
95	336	326	263	253	448	387	349	300
120	380	370	298	288	515	445	403	346
150	416	413	329	322	574	503	452	392
185	466	466	371	364	654	577	518	450
240	531	537	426	422	762	677	607	531
300	590	604	477	476	865	776	693	609
400	633	677	525	541	959	891	787	710
500	697	759	587	614	1081	1025	900	822
630	762	848	653	695	1213	1166	1026	954
800	825	933	719	780	1349	1319	1161	1094
1000	900	1003	800	845	1423	1411	1220	1180

## Technical tables

Table 27 – Current carrying capacities of single-conductor cables with XLPE insulation for rated voltage of 12/20; 12.7/22; 18/30; 20/35 kV, A

Nominal conductor cross-section, mm <sup>2</sup>	Laid in ground				Laid in air			
	with copper conductor		with aluminum conductor		with copper conductor		with aluminum conductor	
	in the following formation:							
	flat	trefoil	flat	trefoil	flat	trefoil	flat	trefoil
50	230	225	185	175	290	250	225	190
70	290	270	225	215	365	310	280	240
95	336	326	263	253	446	389	348	301
120	380	371	298	288	513	448	402	348
150	417	413	330	322	573	507	451	394
185	466	466	371	365	652	580	516	452
240	532	538	426	422	760	680	605	533
300	582	605	477	476	863	779	690	611
400	635	678	526	541	957	895	783	712
500	700	762	588	615	1081	1027	897	824
630	766	851	655	699	1213	1172	1023	953
800	830	942	722	782	1351	1325	1159	1096
1000	906	1007	805	850	1430	1415	1230	1186

Continuous current carrying capacity of three-conductor armored and unarmored cables shall correspond to ones, indicated in Tables 28, 29.

Table 28 – Current carrying capacities of three-conductor cables with XLPE insulation when laid in ground.

Nominal conductor cross-section, mm <sup>2</sup>	Current when laid in ground, A			
	cables with copper conductors		cables with aluminum conductors	
	6/10 and 8.7/15 kV	12/20 and 18/30 kV	6/10 and 8.7/15 kV	12/20 and 18/30 kV
35	175	-	136	-
50	207	207	156	161
70	253	248	193	199
95	300	300	233	233
120	340	341	265	265
150	384	384	300	300
185	433	433	338	339
240	500	500	392	392
300	563	563	456	456

Table 29 – Current carrying capacities of three-conductor cables with XLPE insulation when laid in air.

Nominal conductor cross-section, mm <sup>2</sup>	Current when laid in ground, A			
	cables with copper conductors		cables with aluminum conductors	
	6/10 and 8.7/15 kV	12/20 and 18/30 kV	6/10 and 8.7/15 kV	12/20 and 18/30 kV
35	173	-	134	-
50	206	215	159	163
70	255	264	196	204
95	329	331	255	256
120	374	376	291	292
150	423	426	329	331

## Technical tables

Nominal conductor cross-section, mm <sup>2</sup>	Current when laid in ground, A			
	cables with copper conductors		cables with aluminum conductors	
	6/10 and 8.7/15 kV	12/20 and 18/30 kV	6/10 and 8.7/15 kV	12/20 and 18/30 kV
185	479	481	374	375
240	562	564	441	442
300	630	630	490	490

Current carrying capacities are indicated for ambient temperature 15 °C when laid in ground and 25 °C when laid in air.

At other assumed ambient temperature it is necessary to use correction factors, indicated in Table 30.

Table 30 – Correction factors for ambient temperature.

Laying conditions	Correction factors at ambient temperature, °C											
	-5	0	5	10	15	20	25	30	35	40	45	50
In ground	1,13	1,1	1,06	1,03	1,0	0,97	0,93	0,89	0,86	0,82	0,77	0,73
In air	1,21	1,18	1,14	1,11	1,07	1,04	1,0	0,96	0,92	0,88	0,83	0,78

Current carrying capacities of cables, laid in ground in ducts, more than 10 m in length, shall be decreased by multiplication of capacity values, indicated in Tables 25-27 (values for laying in ground), by factor of 0,94, in case if single-conductor cables are laid in separate ducts, and by factor of 0,9, in case if three single-conductor cables are laid in the same duct. Current carrying capacities of three-conductor cables, laid in ground in ducts, are indicated in Table 31.

Table 31 – Current carrying capacities of three-conductor cables, laid in ground in ducts.

Nominal conductor cross-section, mm <sup>2</sup>	Current-carrying capacity of cables, A			
	with copper conductors		with aluminum conductors	
	6/10 and 8.7/15 kV	12/20 and 18/30 kV	6/10 and 8.7/15 kV	12/20 and 18/30 kV
35	152	-	118	-
50	180	180	135	140
70	220	215	170	175
95	264	264	205	205
120	303	303	233	233
150	342	342	267	267
185	385	385	300	300
240	450	450	353	353
300	507	507	410	410

Current carrying capacities of several cables, laid in ground, including those laid in ducts, shall be decreased by multiplication of current values, indicated in Tables 25 – 27 (values for laying in ground), by factors, indicated in Table 32.

Table 32 – Current decreasing coefficient in relation to the number of cables and distance between them.

Distance between cables in the clear, mm	Factor for the following number of cables:					
	1	2	3	4	5	6
100	1	0,90	0,85	0,80	0,78	0,75
200	1	0,92	0,87	0,84	0,82	0,81
300	1	0,93	0,90	0,87	0,86	0,85

## Technical tables

---

Allowed 1-second short circuit currents shall be not more than ones, indicated in Table 33.

Table 33 – Allowed 1-second short circuit current of cables.

Nominal conductor cross-section, mm <sup>2</sup>	Allowed 1-second short circuit current, kA, of a cable	
	with copper conductors	with aluminum conductors
35	5,0	3,3
50	7,15	4,7
70	10,0	6,6
95	13,6	8,9
120	17,2	11,3
150	21,5	14,2
185	26,5	17,5
240	34,3	22,7
300	42,9	28,2
400	57,2	37,6
500	71,5	47,0
630	90,1	59,2
800	114,4	75,2
1000	142,9	94,5

Remark: short circuit currents are calculated at conductor temperature prior to short current, equals to 90 °C, and ultimate conductor short circuit temperature, equals to 250 °C.

---

Table 34 – Allowed 1-second short circuit current in copper screen.

Nominal copper screen cross-section, mm <sup>2</sup>	1-second short circuit current, kA, not more than
16	3,1
25	4,8
35	6,7
50	9,6
70	13,4

Remark: short circuit currents are calculated at screen temperature prior to short current, equals to 50 °C, and ultimate short circuit temperature of the screen, equals to 350 °C.

---

For other cross-sections of copper screen allowed 1-second short circuit current shall be calculated in accordance with the formula:

$$I_{K3} = k \cdot S_3$$

where  $I_{K3}$  – allowed 1-second short circuit current in copper screen, kA;  
 $k$  – factor, equals to 0,191 kA/mm<sup>2</sup>;  
 $S_3$  – nominal cross-section of copper screen, mm<sup>2</sup>.

For duration of short circuit, different from 1 second, the values of short circuit current, indicated in Tables 11 and 12, shall be multiplied by the correction factor K, calculated according to the formula:

$$k = \frac{1}{\sqrt{t}}$$

where  $t$  – short circuit duration, c.

## Technical tables

Table 35 - DC resistance of cable conductors at 20°C.

Nominal conductor cross-section, mm <sup>2</sup>	Electrical resistance of 1 km conductor at 20 °C, Ohm, not more than	
	of copper conductor	of aluminum conductor
35	0,524	0,868
50	0,387	0,641
70	0,268	0,443
95	0,193	0,320
120	0,153	0,253
150	0,124	0,206
185	0,0991	0,164
240	0,0754	0,125
300	0,0601	0,100
400	0,0470	0,0778
500	0,0366	0,0605
630	0,0283	0,0469
800	0,0221	0,0367
1000	0,0176	0,0291

Table 36 - DC resistance of cable conductors at 90°C.

Nominal conductor cross-section, mm <sup>2</sup>	Electrical resistance of 1 km conductor at 90 °C, Ohm, not more than			
	with copper conductor		with aluminum conductor	
	in the following formation:			
	flat	trefoil	flat	trefoil
35	0,668	0,668	1,113	1,113
50	0,494	0,494	0,822	0,822
70	0,342	0,342	0,568	0,568
95	0,246	0,247	0,410	0,411
120	0,196	0,196	0,325	0,325
150	0,159	0,159	0,264	0,265
185	0,127	0,128	0,211	0,211
240	0,0971	0,0979	0,161	0,161
300	0,0779	0,0789	0,129	0,130
400	0,0615	0,0630	0,101	0,102
500	0,0487	0,0507	0,0788	0,0801
630	0,0387	0,0412	0,0618	0,0635
800	0,0314	0,0345	0,0492	0,0514
1000	0,0263	0,0299	0,0399	0,0428

Remark: AC resistance of conductors is calculated for single-conductor cables with XLPE insulation for rated voltage of 6/10 kV.

## Technical tables

Assumed values of capacitance of cables with XLPE insulation as well as parameters, related to capacitance, are indicated in Table 37.  
 Table 37 - Cable capacitance.

Nominal conductor cross-section, mm <sup>2</sup>	Rated voltage, kV	Capacity, µF/km	Charging current, A/km	Earth fault current, A/km
35	3,6/6	0,26	0,30	0,89
50		0,29	0,33	1,00
70		0,34	0,38	1,14
95		0,38	0,43	1,28
120		0,41	0,47	1,40
150		0,45	0,51	1,53
185		0,49	0,55	1,66
240		0,53	0,60	1,81
300		0,55	0,62	1,85
400		0,57	0,65	1,94
500		0,60	0,68	2,04
630		0,68	0,77	2,30
800		0,76	0,86	2,57
1000		0,86	0,97	2,91
35		0,21	0,39	1,17
50		0,23	0,44	1,31
70		0,26	0,49	1,48
95		0,29	0,55	1,65
120	6/10	0,32	0,60	1,80
150		0,35	0,65	1,96
185		0,38	0,71	2,13
240		0,42	0,79	2,38
300		0,46	0,87	2,60
400		0,51	0,97	2,90
500		0,57	1,07	3,22
630		0,64	1,21	3,63
800		0,72	1,35	4,06
1000		0,81	1,53	4,58
35		0,17	0,46	1,39
50		0,19	0,51	1,54
70		0,21	0,58	1,73
95		0,23	0,64	1,92
120		0,25	0,70	2,09
150		0,28	0,75	2,26
185		0,30	0,81	2,44
240		0,33	0,91	2,73
300		0,36	0,99	2,96
400	8,7/15	0,40	1,10	3,29
500		0,44	1,21	3,64
630		0,50	1,37	4,10
800		0,56	1,52	4,57
1000		0,63	1,71	5,14

## Technical tables

Nominal conductor cross-section, mm <sup>2</sup>	Rated voltage, kV	Capacity, μF/km	Charging current, A/km	Earth fault current, A/km
35	12/20	0,15	0,56	1,67
50		0,16	0,61	1,84
70		0,18	0,69	2,06
95		0,20	0,76	2,28
120		0,22	0,82	2,47
150		0,24	0,89	2,67
185		0,25	0,96	2,87
240		0,28	1,06	3,19
300		0,31	1,15	3,46
400		0,34	1,28	3,83
500		0,37	1,41	4,23
630		0,42	1,58	4,75
800		0,47	1,76	5,27
1000		0,52	1,97	5,92
35		0,15	0,59	1,77
50		0,16	0,65	1,94
70		0,18	0,73	2,18
95		0,20	0,80	2,41
120		0,22	0,87	2,61
150		0,24	0,94	2,82
185		0,25	1,01	3,04
240		0,28	1,13	3,38
300		0,31	1,22	3,66
400		0,34	1,35	4,05
500		0,37	1,49	4,48
630		0,42	1,67	5,02
800		0,47	1,86	5,58
1000		0,52	2,09	6,27
50	18/30	0,13	0,72	2,15
70		0,14	0,80	2,39
95		0,15	0,87	2,62
120		0,17	0,94	2,82
150		0,18	1,01	3,03
185		0,19	1,08	3,24
240		0,21	1,19	3,58
300		0,23	1,29	3,86
400		0,25	1,41	4,24
500		0,27	1,55	4,66
630	20/35	0,31	1,73	5,20
800		0,34	1,91	5,74
1000		0,38	2,14	6,42
50		0,13	0,80	2,39
70		0,14	0,88	2,65
95		0,15	0,97	2,91
120		0,17	1,04	3,13
150		0,18	1,12	3,37
185		0,19	1,20	3,60
240		0,21	1,32	3,97

## Technical tables

Nominal conductor cross-section, mm <sup>2</sup>	Rated voltage, kV	Capacity, µF/km	Charging current, A/km	Earth fault current, A/km
300	20/35	0,23	1,43	4,28
400		0,25	1,57	4,72
500		0,27	1,73	5,18
630		0,31	1,92	5,77
800		0,34	2,13	6,38
1000		0,38	2,38	7,13

Table 38 - Assumed values of inductance of single-core cables with XLPE insulation.

Nominal conductor cross-section, mm <sup>2</sup>	Inductance, mH/km, of cables for rated voltage of									
	3.6/6 kV		6/10 kV		8.7/15 kV		12/20 and 12.7/22 kV		18/30 and 20/35 kV	
	in the following formation:									
	flat	trefoil	flat	trefoil	flat	trefoil	flat	trefoil	flat	trefoil
35	0,632	0,447	0,617	0,432	0,649	0,464	0,664	0,479	-	-
50	0,609	0,424	0,595	0,410	0,625	0,441	0,639	0,454	0,670	0,485
70	0,585	0,400	0,571	0,386	0,600	0,415	0,613	0,428	0,642	0,457
95	0,565	0,380	0,552	0,368	0,580	0,395	0,592	0,407	0,620	0,435
120	0,551	0,366	0,539	0,354	0,565	0,380	0,577	0,392	0,604	0,419
150	0,538	0,353	0,526	0,342	0,551	0,366	0,563	0,378	0,588	0,404
185	0,527	0,342	0,516	0,331	0,540	0,355	0,550	0,366	0,575	0,390
240	0,512	0,327	0,503	0,318	0,524	0,339	0,534	0,349	0,558	0,373
300	0,502	0,317	0,495	0,311	0,513	0,328	0,523	0,338	0,545	0,360
400	0,493	0,308	0,489	0,305	0,504	0,319	0,513	0,328	0,534	0,349
500	0,483	0,298	0,481	0,296	0,492	0,307	0,501	0,316	0,522	0,337
630	0,474	0,289	0,472	0,287	0,484	0,299	0,492	0,307	0,511	0,326
800	0,466	0,281	0,463	0,279	0,474	0,289	0,482	0,297	0,500	0,315
1000	0,457	0,272	0,456	0,271	0,465	0,280	0,472	0,288	0,488	0,304

## Technical tables

### Current-carrying capacity of cables for rated voltage of 64/110 kV

Nominal conductor cross-section, mm <sup>2</sup>	Current-carrying capacity, cables laid in ground in trefoil formation, cables screens are connected and grounded from both ends, A, no more than			
	Copper conductor			
	One circuit		Two circuits	
	Load factor = 0.8	Load factor = 1.0	Load factor = 0.8	Load factor = 1.0
185	502	429	452	382
240	572	489	515	434
300	632	538	567	476
350	678	577	608	508
400	723	612	645	539
500	798	673	709	590
630	859	721	760	630
800	932	779	820	677
1000	1009	840	884	729
1200	1081	895	944	775
1400	1119	928	977	802
1600	1175	970	1020	835

Cable currents are calculated for laying in ground in trefoil formation side by side, laying depth – 1.5 m, distance between circuits – 0.8 m, rated thermal resistance of soil – 1.2 K·m/W, ambient temperature - 15°C.

Nominal conductor cross-section, mm <sup>2</sup>	Current-carrying capacity, cables laid in ground in trefoil formation, cables screens are connected and grounded from both ends, A, no more than			
	Aluminum conductor			
	One circuit		Two circuits	
	Load factor = 0.8	Load factor = 1.0	Load factor = 0.8	Load factor = 1.0
185	396	340	358	303
240	455	389	409	345
300	507	432	455	383
350	545	462	490	408
400	587	497	524	439
500	654	553	583	486
630	719	605	637	530
800	787	659	694	575
1000	864	722	759	628
1200	938	779	820	675
1400	990	820	865	710
1600	1041	863	905	744

Cable currents are calculated for laying in ground in trefoil formation side by side, laying depth – 1.5 m, distance between circuits – 0.8 m, rated thermal resistance of soil – 1.2 K·m/W, ambient temperature - 15°C.

# Technical tables

## Current-carrying capacity of cables for rated voltage of 64/110 kV

Nominal conductor cross-section, mm <sup>2</sup>	Current-carrying capacity, cables laid in ground in trefoil formation, cables screens are cross-bonded, A, no more than			
	Copper conductor			
	One circuit		Two circuits	
	Load factor = 0.8	Load factor = 1.0	Load factor = 0.8	Load factor = 1.0
185	518	445	469	397
240	597	512	539	455
300	674	576	607	512
350	736	625	656	551
400	787	670	706	593
500	884	751	790	663
630	993	841	884	740
800	1146	968	1017	849
1000	1285	1083	1137	947
1200	1410	1183	1242	1031
1400	1505	1263	1324	1100
1600	1608	1345	1410	1170

Cable currents are calculated for laying in ground in trefoil formation side by side, laying depth – 1.5 m, distance between circuits – 0.8 m, rated thermal resistance of soil – 1.2 K·m/W, ambient temperature - 15°C.

Nominal conductor cross-section, mm <sup>2</sup>	Current-carrying capacity, cables laid in ground in trefoil formation, cables screens are cross-bonded, A, no more than			
	Aluminum conductor			
	One circuit		Two circuits	
	Load factor = 0.8	Load factor = 1.0	Load factor = 0.8	Load factor = 1.0
185	404	347	366	310
240	467	400	421	356
300	528	452	475	401
350	560	485	515	435
400	619	527	555	467
500	699	594	625	524
630	792	671	705	591
800	904	764	803	670
1000	1020	860	902	752
1200	1127	946	994	825
1400	1220	1020	1050	887
1600	1308	1094	1147	950

Cable currents are calculated for laying in ground in trefoil formation side by side, laying depth – 1.5 m, distance between circuits – 0.8 m, rated thermal resistance of soil – 1.2 K·m/W, ambient temperature - 15°C.

# Technical tables

## Current-carrying capacity of cables for rated voltage of 64/110 kV

Nominal conductor cross-section, mm <sup>2</sup>	Current-carrying capacity, cables laid in ground in flat formation, cables screens are connected and grounded from both ends, A, no more than			
	Copper conductor			
	One circuit		Two circuits	
	Load factor = 0.8	Load factor = 1.0	Load factor = 0.8	Load factor = 1.0
185	480	407	427	357
240	537	453	475	396
300	581	488	511	425
350	615	515	540	448
400	644	538	564	466
500	693	576	604	497
630	737	610	639	524
800	785	648	677	554
1000	841	691	721	588
1200	879	720	751	611
1400	903	740	770	625
1600	931	760	790	641

Cable currents are calculated for laying in ground in flat formation, distance between axes of adjacent cables –  $2 \times D_{outer}$ , laying depth – 1.5 m, distance between circuits – 0.8 m, rated thermal resistance of soil – 1.2 K·m/W, ambient temperature - 15°C.

Nominal conductor cross-section, mm <sup>2</sup>	Current-carrying capacity, cables laid in ground in flat formation, cables screens are connected and grounded from both ends, A, no more than			
	Aluminum conductor			
	One circuit		Two circuits	
	Load factor = 0.8	Load factor = 1.0	Load factor = 0.8	Load factor = 1.0
185	391	333	348	293
240	442	375	392	328
300	486	410	429	358
350	520	438	457	372
400	549	460	482	400
500	599	501	524	433
630	649	540	564	465
800	703	583	608	500
1000	758	626	652	534
1200	802	659	687	561
1400	830	686	713	580
1600	865	708	736	598

Cable currents are calculated for laying in ground in flat formation, distance between axes of adjacent cables –  $2 \times D_{outer}$ , laying depth – 1.5 m, distance between circuits – 0.8 m, rated thermal resistance of soil – 1.2 K·m/W, ambient temperature - 15°C.

## Technical tables

### Current-carrying capacity of cables for rated voltage of 64/110 kV

Nominal conductor cross-section, mm <sup>2</sup>	Current-carrying capacity, cables laid in ground in flat formation, cables screens are cross-bonded, A, no more than			
	Copper conductor			
	One circuit		Two circuits	
	Load factor = 0.8	Load factor = 1.0	Load factor = 0.8	Load factor = 1.0
185	539	463	483	409
240	622	533	556	470
300	704	602	627	529
350	767	653	682	573
400	824	701	731	614
500	927	787	821	687
630	1045	885	922	770
800	1176	993	1033	861
1000	1368	1153	1197	996
1200	1510	1267	1315	1091
1400	1632	1365	1418	1175
1600	1749	1463	1515	1254

Cable currents are calculated for laying in ground in flat formation, distance between axes of adjacent cables – 2 × D<sub>outer</sub>, laying depth – 1.5 m, distance between circuits – 0.8 m, rated thermal resistance of soil – 1.2 K·m/W, ambient temperature - 15°C.

Nominal conductor cross-section, mm <sup>2</sup>	Current-carrying capacity, cables laid in ground in flat formation, cables screens are cross-bonded, A, no more than			
	Aluminum conductor			
	One circuit		Two circuits	
	Load factor = 0.8	Load factor = 1.0	Load factor = 0.8	Load factor = 1.0
185	421	361	377	319
240	486	417	435	367
300	551	470	491	414
350	602	513	535	451
400	647	551	574	482
500	732	621	647	542
630	830	703	732	612
800	943	797	828	691
1000	1078	908	943	785
1200	1195	1003	1041	864
1400	1300	1087	1123	935
1600	1400	1171	1211	1003

Cable currents are calculated for laying in ground in flat formation, distance between axes of adjacent cables – 2 × D<sub>outer</sub>, laying depth – 1.5 m, distance between circuits – 0.8 m, rated thermal resistance of soil – 1.2 K·m/W, ambient temperature - 15°C.

## Technical tables

Table 39 - Reel dimensions.

Drum type	T-8	T-10	T-12	T-14	T-16	T-17	T-18	T-20	T-22	T22E	T-24	T24E	T-25	T25E	T-26	T26E	T-28					
Flange diameter (D), mm	800	1000	1220	1400	1600	1700	1800	2000	2200	2200	2390	2400	2500	2500	2650	2500	2800					
Barrel diameter (D1), mm	450	545	650	710	800	900	900	1000	1320	1020	1020	1020	1500	1020	1500	1300	1300					
Traverse width (L), mm	230	500	500	650	800	900	900	900	980	1370	1000	1310	1210	1310	1310	1260	1380					
Outer cable diameter, mm	5	2077	7917	13067	24216	40464	49480															
	7	972	4015	6485	12188	20593	25133															
	10	494	1909	3179	5922	10116	12370	14703														
	13	273	1108	1900	3442	5670	6977	8389	10628													
	15	215	810	1361	2554	4385	5398	6322	8200													
	17	163	651	1032	2027	3367	4051	4851	6125													
	20	118	443	752	1393	2435	2980	3676	4479	4972	8998	7986										
	23	89	326	581	1041	1835	2288	2689	3345	3564	6604	5985	7795	6012	9025	7764	7136	11253				
	25	81	317	495	885	1619	1979	2352	2952	3115	5504	5168	6718	5293	7476	6947	6393	9676				
	27		240	392	739	1229	1523	1855	2375	2689	4901	4387	5692	4273	6390	5768	5318	7911				
	30		175	303	582	1015	1275	1581	2050	2235	3970	3592	4681	3676	5313	4616	4370	6614				
	33			291	465	852	1043	1319	1576	1687	3190	2949	3834	2836	4117	3666	3492	5391				
	35				227	448	795	982	1110	1338	1650	2839	2613	3452	2461	3721	3531	3096	4901			
	37					214	362	673	837	958	1307	1380	2503	2378	3082	2345	2905	3106	2719	4113		
	40						348	563	675	898	1095	1140	2138	1909	2670	2011	2576	2640	2304	3595		
	43							274	518	625	728	898	1062	1795	1641	2140	1698	2316	2280	1985	3198	
	45								417	534	633	911	887	1764	1597	2105	1593	1993	1999	1942	2792	
	47									514	609	764	853	1540	1399	1799	1359	1773	1882	1633	2497	
	50										495	588	738	698	1289	1221	1588	1323	1457	1634	1598	2375
	55											579	637	1028	1011	1292	1073	1219	1297	1279	1847	
	60											468	507	970	814	1069	844	1049	1045	1093	1558	
	65												341	483	813	681	908	641		1015	869	1286
	70																615		788	709	1194	
	75																	588		757	642	1005
	80																	448		597	503	829
	85																	423		568	478	796
	90																	398		429		
	95																	283		403		
	100																	287		408		

