



KARKIN

# KARKIN ELEKTRİK ELEKTRONİK



CABLE  
KATALOG

 **HASÇELİK**<sup>®</sup>  
KABLO



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# ABOUT KARKIN ELEKTRIK COMPANY



**Leading the Future of Trade, Import & Export**

Founded in 2008, Karkin Electrical Company is a globally recognized trading firm headquartered in Gaziantep, Turkey. As a company registered with the Gaziantep Chamber of Commerce, we specialize in import and export, proudly serving clients across 19 to 20 countries worldwide with high-quality products and exceptional service.



**KARKIN**

# OUR VISSION & MISSION

**We are committed to delivering exceptional quality and efficiency, ensuring the success of our partners through:**

- **Customs clearance and international shipping**
- **Transportation insurance and warehousing**
- **Financial and insurance services**
- **Architectural and construction services**
- **Market research and trade consultancy**

**At Karkin, we uphold the highest standards of transparency, confidentiality, and integrity, building long-term relationships based on trust, reliability, and excellence.**

**Partner with us to unlock new business opportunities and achieve sustainable success.**

**Contact us today to discover how we can support your business.**



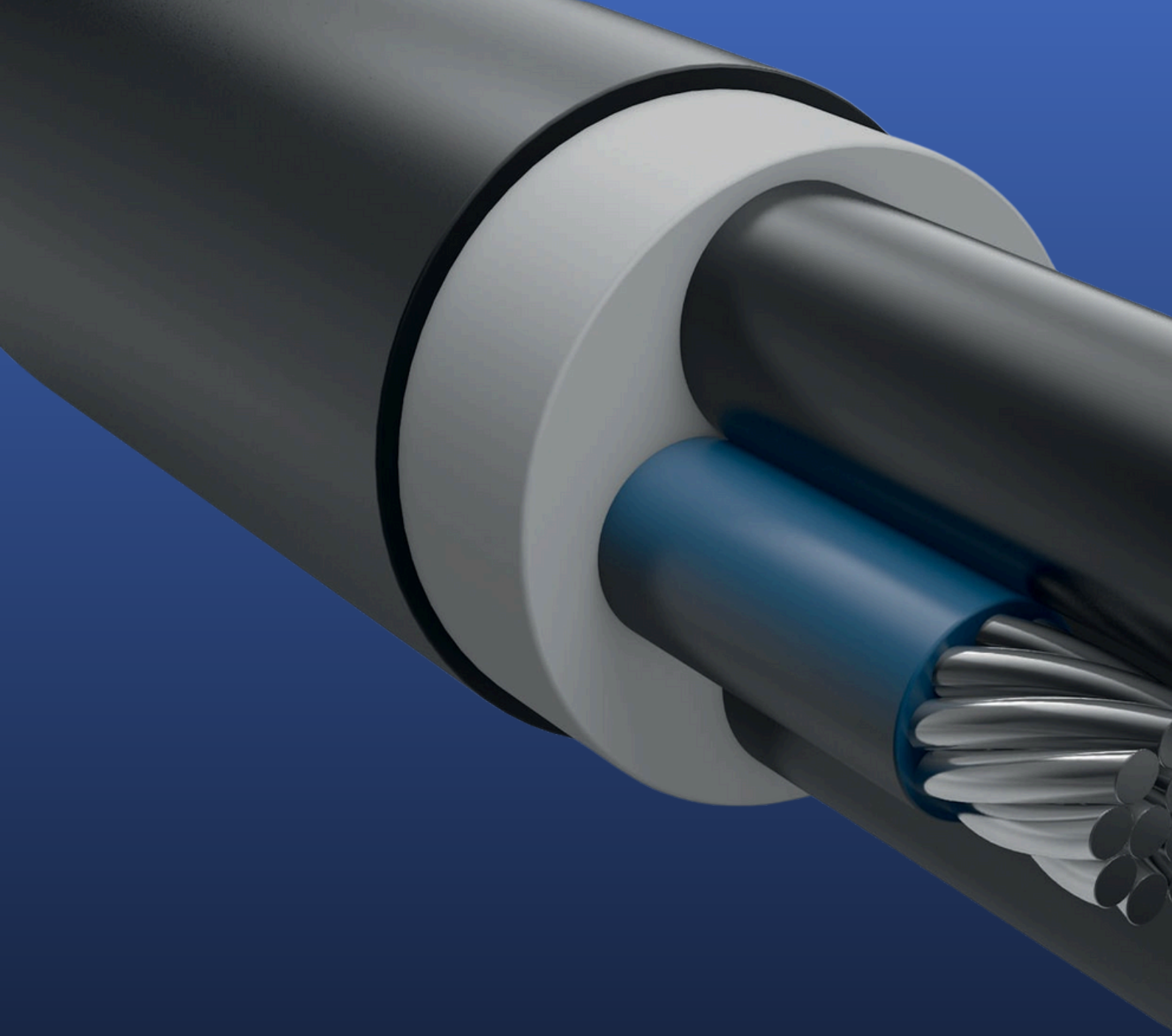
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# OUR EXPERTISE & COMMITMENT

At Karkin, we offer comprehensive trading and consultancy services, seamlessly connecting businesses between Turkish and Chinese markets. With specialized teams in Turkey and China, we provide direct access to over 300 factories and an extensive network of trusted suppliers, ensuring efficiency and reliability at every stage.

## Why Partner with Karkin?

- **Competitive pricing with premium-quality sourcing**
- **Efficient logistics and seamless cross-border transportation**
- **In-depth market research and tailored trade solutions**
- **Strong financial and transportation infrastructure**
- **Equipped with all necessary permits and logistics capabilities, we guarantee smooth, hassle-free deliveries to clients across neighboring countries and global markets.**



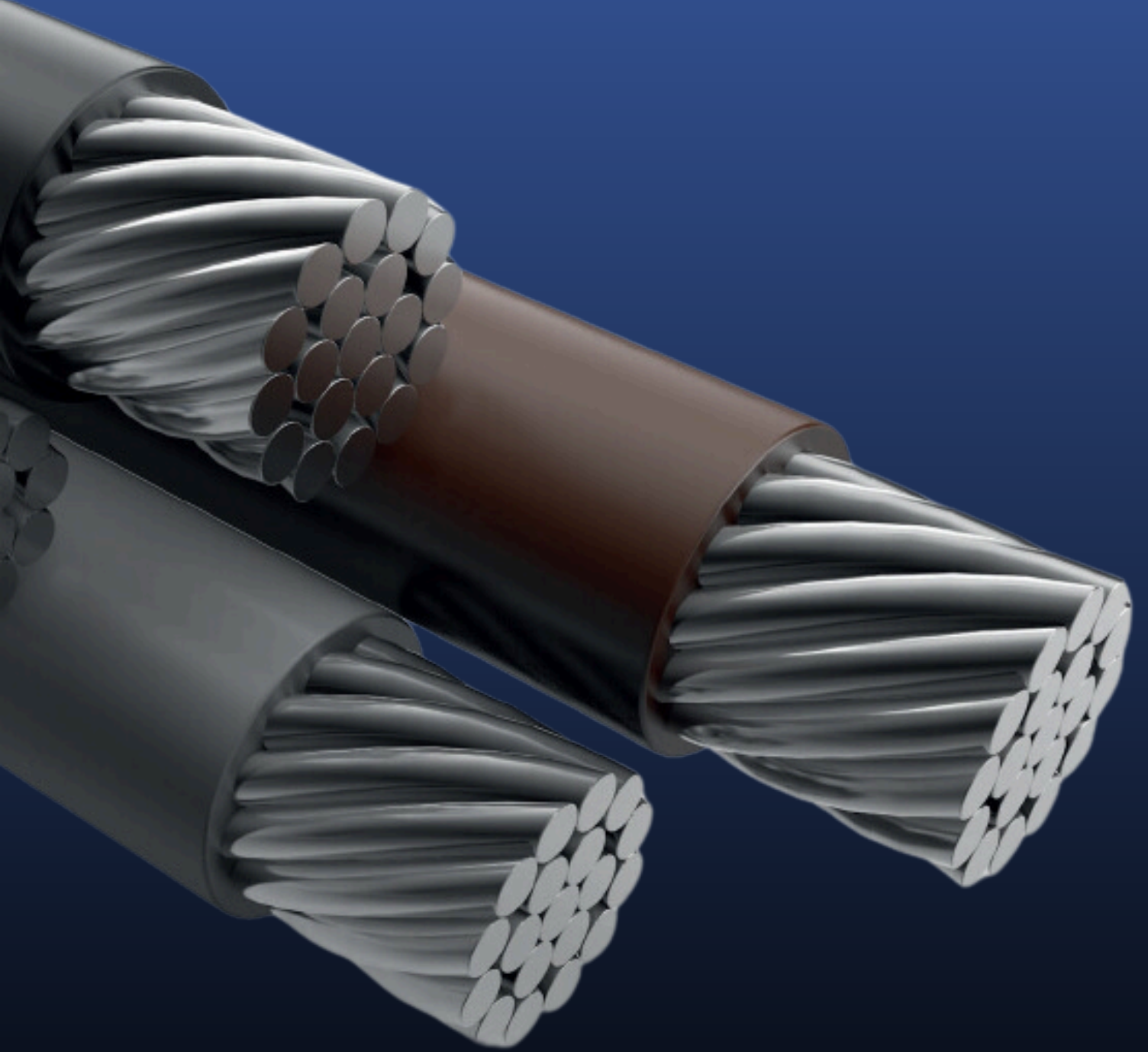
**0,6/1 kV**

**Aluminum Cables**



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تجارة عامة تعينات انشاءات اسيرداد وبصدير . تخلص حمركي . شغل كامل وجرسي





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# 0,6/1 kV AERIAL BUNDLED CONDUCTORS WITH PE - NEUTRAL NON-INSULATED



## APPLICATION:

Aerial outdoor installations, where there is no mechanical damage risk.

Maximum continuous normal operating temperature: 70 °C

Maximum short circuit temperature (Max. 5 minutes) : 135 °C

Standard: HD 626-S1 ,TSE 11654

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

SAP Product Number	Covered Conductors						Neutral			Complete Cable	
	No. X nominal area of the conductors	No. X nominal area of the conductors	Number of Wires Phase Conductor	Diameter of Conductors (Approx.)	Max. Resistance at 20 °C	CMin. Thickness of PE Cover	DNominal Diameter of Neutral (Approx.)	Min. Breaking Load	Max. Resistance at 20 °C	Outer Diameter (Approx.)	Unit Weight (Approx.)
	mm <sup>2</sup>	mm <sup>2</sup>	Adet	mm	Ω/km	mm	mm	kN	Ω/km	mm	kg/km
708301	1x16+25	1x16	7	4,4	1,910	1,4	5,9	7,4	1,38	13,0	140
708304	1x25+35	1x25	7	5,9	1,200	1,4	6,9	10,3	0,986	15,5	190
708307	1x35+50	1x35	7	6,9	0,868	1,6	8,1	14,2	0,72	17,8	260
708309	1x50+70	1x50	7	8,1	0,641	1,6	9,7	20,6	0,493	21,0	360
708311	1x70+95	1x70	7	9,7	0,443	1,8	11,4	27,9	0,363	24,5	505
708322	3x16+25	3x16	7	4,4	1,910	1,4	5,9	7,4	1,38	13,1	270
708324	3x25+35	3x25	7	5,9	1,200	1,4	6,9	10,3	0,986	20,0	390
708326	3x35+50	3x35	7	6,9	0,868	1,6	8,1	14,2	0,72	23,0	530
708328	3x50+70	3x50	7	8,1	0,641	1,6	9,7	20,6	0,493	26,0	700
708322	3x70+95	3x70	7	9,7	0,443	1,8	11,4	27,9	0,363	31,0	990
708336	3x95+95	3x95	19	11,4	0,320	1,8	11,4	27,9	0,363	34,0	1240
708317	3x120+95	3x120	19	12,8	0,253	2,0	11,4	27,9	0,363	37,0	1510
708320	3x150+95	3x150	19	14,1	0,206	2,0	11,4	27,9	0,363	39,5	1780
708300	1x16+1x16+25	1x16	7	4,4	1,91	1,4	5,9	7,4	1,38	16,5	210
708303	1x25+1x16+35	1x25	7	5,9	1,2	1,4	6,9	10,3	0,986	19,5	260
708306	1x35+1x16+50	1x35	7	6,9	0,868	1,6	8,1	14,2	0,72	22,0	330
708321	3x16+1x16+25	3x16	7	4,4	1,91	1,4	5,9	7,4	1,38	16,5	350
708323	3x25+1x16+35	3x25	7	5,9	1,2	1,4	6,9	10,3	0,986	19,5	460
708325	3x35+1x16+50	3x35	7	6,9	0,868	1,6	8,1	14,2	0,72	22,0	610
708327	3x50+1x16+70	3x50	7	8,1	0,641	1,6	9,7	20,6	0,493	26,0	780
708330	3x70+1x16+95	3x70	7	9,7	0,443	1,8	11,4	27,9	0,363	31,0	1080
708335	3x95+1x16+95	3x95	19	11,4	0,320	1,8	11,4	27,9	0,363	34,0	1300
708334	3x95+1x16+120	3x95	19	11,4	0,320	1,8	12,8	27,9	0,363	34,5	1380
708315	3x120+1x16+95	3x120	19	12,8	0,253	2,0	11,4	27,9	0,363	37,0	1570
708319	3x150+1x16+95	3x150	30	14,2	0,206	2,0	11,4	27,9	0,363	39,5	1850



## 0,6/1 kV ABC - AERIAL BUNDLED CONDUCTORS WITH XLPE INSULATION



### APPLICATION:

Aerial outdoor installations, where there is no mechanical damage risk.

Maximum continuous normal operating temperature: 90 °C

Maximum short circuit temperature: 250 °C

Standard: HD 626-S1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

SAP Product Number	No. X nominal area of the conductors	No. X nominal area of the conductors	Nominal insulation thickness					DC resistance (Max.) 20°C				Unit Weight (Approx.)	Current Carrying Capacity of Street Lighting
			Number of Wires Phase Conductor	Diameter of Conductors (Approx.)	Max. Resistance at 20 °C	CMin. Thickness of PE Cover	DNominal Diameter of Neutral (Approx.)	Min. Breaking Load	Max. Resistance at 20 °C	Outer Diameter (Approx.)			
											No.* sqmm		
708346	2x16	6	1,20	-	-	15,0	136	1,910	-	-	83	-	
708395	2x16	6	1,20	-	-	18,0	272	1,910	-	-	83	-	
708347	2x25	6	1,40	-	-	18,0	200	1,200	-	-	112	-	
708396	4x25	6	1,40	-	-	22,0	400	1,200	-	-	112	-	
708863	5x25	6	1,40	-	-	24,0	500	1,200	-	-	112	-	
708864	6x25	6	1,40	-	-	26,0	600	1,200	-	-	112	-	
708840	3x25+25	6	1,40	1,40	-	22,0	400	1,200	1,380	-	112	-	
708366	3x25+54,6	6	1,40	1,60	-	30,0	515	1,200	0,630	-	112	-	
708368	3x35+54,6	6	1,60	1,60	-	33,0	630	0,868	0,630	-	-	-	
708371	3x35+54,6+2x25 (*)	6	1,60	1,60	1,40	33,5	835	0,868	0,630	1,200	-	112	
708375	3x50+54,6	6	1,60	1,60	-	34,0	750	0,641	0,630	-	168	-	
708377	3x50+54,6+2x25 (*)	6	1,60	1,60	1,40	35,0	955	0,641	0,630	1,200	168	112	
708858	4x50	6	1,60	1,60	-	34,0	720	0,641	-	-	168	-	
708399	4x50+2x25 (*)	6	1,60	-	1,40	35,5	920	0,641	-	1,200	168	112	
708384	3x70+54,6+2x25 (*)	12	1,80	1,60	1,40	38,0	1180	0,443	0,630	1,200	213	112	
708389	3x95+54,6	19	1,80	1,60	-	39,5	1210	0,320	0,630	-	258	-	
708390	3x95+54,6+2x25 (*)	19	1,80	1,60	1,40	40,0	1420	0,320	0,630	1,200	258	112	
708861	4x95	19	1,80	-	-	39,5	1340	0,320	-	-	258	-	
708402	4x95+2x25 (*)	19	1,80	-	1,40	40,5	1545	0,320	-	1,200	258	112	
708361	3x150+95+2x25 (*)	19	1,80	1,60	1,40	43,5	2050	0,206	0,343	1,200	344	112	



### 0,6/1 kV HDPE COVERED TWISTED ALUMINUM CONDUCTORS



#### APPLICATION:

Aerial outdoor installations, where there is no mechanical damage risk. Maximum continuous normal operating temperature: 90 °C Maximum short circuit temperature: 200 °C

Standard: HD 626-S1

Power cables with extruded insulation  
Cables for rated voltages of 1 kV ((Um = 1,2 kV)

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness			Overall diameter of Bundled (approx.)	Cable weight (approx.)	DC resistance (Max.) 20°C			Current Carrying Capacity of Phase	Current Carrying Capacity of Street Lighting
			Phase Conductor	Neutral	Street Lighting			Phase Conductor	Neutral	Street Lighting		
			mm	mm	mm			Ω/km	Ω/km	Ω/km		
708664	2x16	6	120	-	-	14,0	131	1,91	-	-	70	-
708665	2x25	6	120	-	-	16,5	185	1,20	-	-	95	-
708666	2x35	6	140	-	-	19,0	258	0,868	-	-	115	-
708667	2x50	6	140	-	-	21,5	295	0,641	-	-	140	-
708952	4x10	6	140	-	-	16,0	154	??	-	-	-	-
708871	4x16	6	120	-	-	17,0	263	1,91	-	-	75	-
708872	4x25	6	140	-	-	21,0	375	1,20	-	-	95	-
708873	4x35	6	140	-	-	23,0	533	0,868	-	-	115	-
708887	4x50	6	160	-	-	27,0	692	0,641	-	-	140	-
708653	3x50+25+16	7	140	1,00	1,00	25,5	598	0,641	1,380	1,20	140	70
708655	3x70+35+16	7	140	1,00	1,00	28,5	915	0,443	0,986	-	180	70
708656	3x95+50+16	19	140	1,00	1,00	32,0	1150	0,320	0,720	1,20	-	70
708650	3x120+70+16	19	160	1,00	1,00	35,5	1435	0,253	0,630	-	250	70
708651	3x120+95+16	19	160	1,00	1,00	36,5	1536	0,253	0,363	1,20	250	70



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## 0,6/1 kV NAYY, SINGLE CORE POWER CABLE WITH ALUMINYUM CONDUCTOR, PVC INSULATION AND PVC JACKET



### APPLICATION:

Indoor or outdoor installations, where there is no mechanical damage risk. Maximum continuous normal operating temperature: 70 °C Maximum short circuit temperature: 160 °C

Standard: IEC 60502-1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

## Electrical and Mechanical Properties – Round Conductors (N)AYY-RM 1 (SINGLE) CORE

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity			
								In Air		Under Ground	
								Flat	Trefoil	Flat	Trefoil
	No.* sqmm		mm	mm	mm	mm	kg/km	Ω/km	Ω/km	Ω/km	Ω/km
708109	1x25	6	1,20	1,4	11,1	190	1,200	110	87	160	106
708110	1x35	6	1,20	1,4	12,2	230	0,868	135	107	193	127
708111	1x50	6	1,40	1,4	13,7	290	0,641	166	131	230	151
708112	1x70	12	1,40	1,4	15,3	380	0,443	210	166	283	185
708113	1x95	15	1,60	1,5	17,6	490	0,32	259	205	340	222
708114	1x120	15	1,60	1,6	19,3	580	0,253	302	239	389	253
708115	1x150	15	1,80	1,6	21,2	720	0,206	345	273	436	284
708116	1x185	30	2,00	1,7	23,4	880	0,164	401	317	496	313
708117	1x240	30	2,20	1,8	26,3	1100	0,125	479	378	578	375
708118	1x300	30	2,40	1,9	28,9	1300	0,100	555	437	656	419
708119	1x400	53	2,60	2,0	32,7	1700	0,0778	653	513	756	487
708120	1x500	53	2,80	2,1	36,0	2250	0,0605	772	600	873	558



**0,6/1 kV NAYY MULTI CORE  
POWER CABLE  
WITH ALUMINYUM CONDUCTOR,  
PVC INSULATION AND  
PVC JACKET**



**APPLICATION:**

Indoor or outdoor installations, where there is no mechanical damage risk.

Maximum continuous normal operating temperature: 70 °C

Maximum short circuit temperature: 160 °C

Standard: IEC 60502-1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

**Electrical and Mechanical Properties – Round Conductors**

**(N)AYY-RM 3+1 CORE**

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DDC resistance @ 20°C	Current Carrying Capacity	
								In Air	Under Ground
								A	A
708133	3x25+16	6	1,20	1,80	24	850	1,200	82	102
708134	3x35+16	6	1,20	1,80	26	980	0,868	100	123
708135	3x50+25	6	1,40	1,90	29	1330	0,641	119	144
708136	3x70+35	12	1,40	2,00	33	1750	0,443	152	179
708137	3x95+50	15	1,60	2,20	38	2300	0,320	186	215
708138	3x120+70	15	1,60	2,30	42	2800	0,253	216	245
708139	3x150+70	15	1,80	2,40	46	3300	0,206	246	275
708140	3x185+95	30	2,00	2,60	52	4150	0,164	285	313
708141	3x240+120	30	2,20	2,80	58	5150	0,125	338	364



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**0,6/1 kV NAYY, MULTI CORE  
POWER CABLE  
WITH ALUMINYUM CONDUCTOR,  
PVC INSULATION AND  
PVC JACKET**



**APPLICATION:**

Indoor or outdoor installations, where there is no mechanical damage risk.

Maximum continuous normal operating temperature: 70 °C

Maximum short circuit temperature: 160 °C

Standard: IEC 60502-1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

**Electrical and Mechanical Properties – Round Conductors**

**(N)AYY-RM 4 CORE**

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DDC resistance @ 20°C	Current Carrying Capacity	
								In Air	Under Ground
	No.* sqmm		mm	mm	mm	kg/km	Ω/km	A	A
708146	4x16	6	1,00	1,80	1,8	640	1,910	-	-
708147	4x25	6	1,20	1,80	1,8	920	1,200	82	102
708148	4x35	6	1,20	1,80	1,8	1100	0,868	100	123
708149	4x50	6	1,40	2,00	2,0	1480	0,641	119	144
708150	4x70	12	1,40	2,10	2,1	1980	0,443	152	179
708151	4x95	15	1,60	2,30	2,3	2600	0,320	186	215
708152	4x120	15	1,60	2,40	2,4	3100	0,253	216	245
708153	4x150	15	1,80	2,60	2,6	3800	0,206	246	275
708154	4x185	30	2,00	2,70	2,7	3700	0,164	285	313
708155	4x240	30	2,20	3,00	3,0	6900	0,125	338	364



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**0,6/1 kV NAYY, MULTI CORE  
POWER CABLE  
WITH ALUMINYUM CONDUCTOR,  
PVC INSULATION AND  
PVC JACKET**



**APPLICATION:**

Indoor or outdoor installations, where there is no mechanical damage risk.

Maximum continuous normal operating temperature: 70 °C

Maximum short circuit temperature: 160 °C

Standard: IEC 60502-1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

**Electrical and Mechanical Properties – Round Conductors**

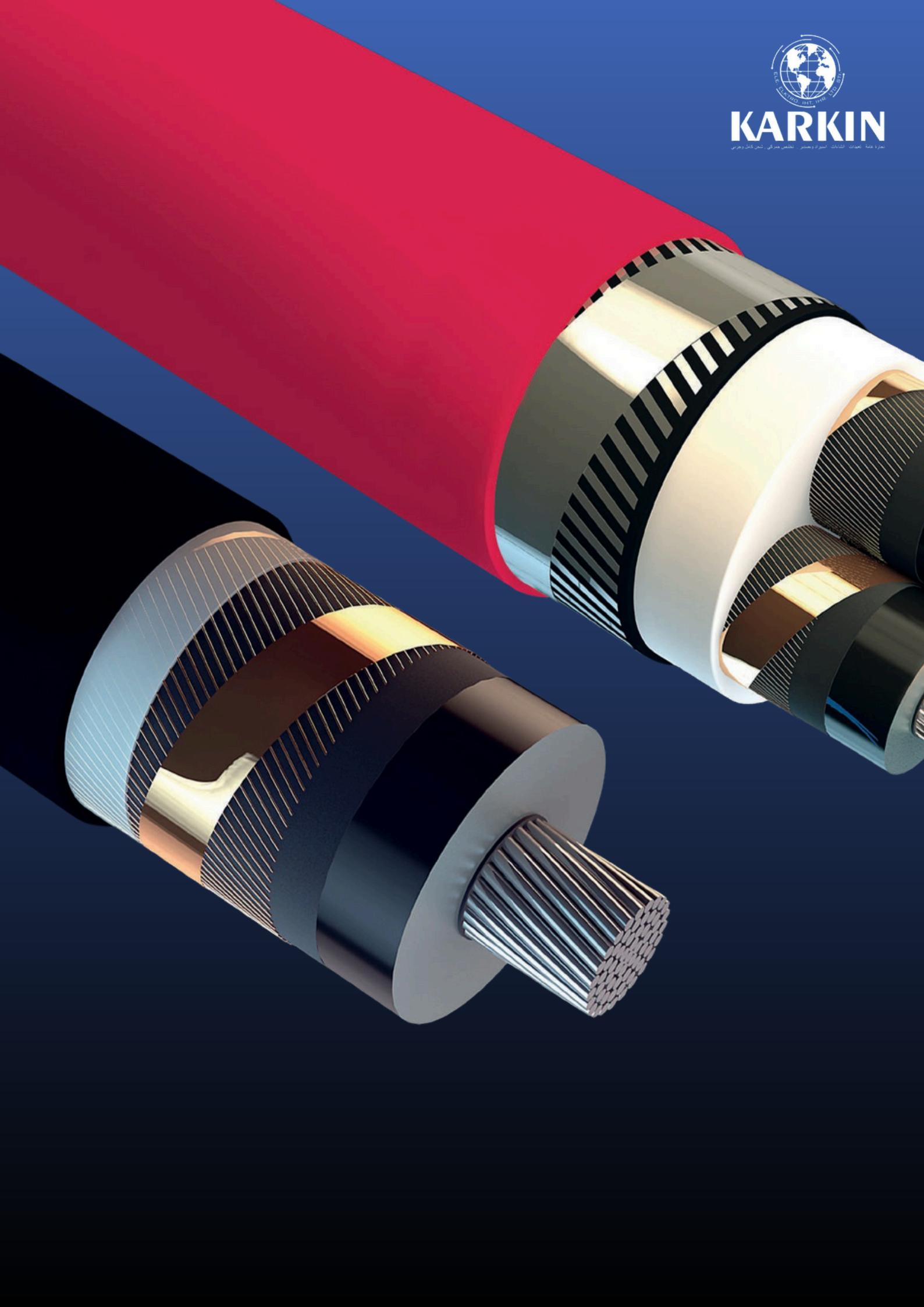
**(N)AYY-SM 3+1 CORE**

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DDC resistance @ 20°C	Current Carrying Capacity	
								In Air	Under Ground
	No.* sqmm		mm	mm	mm	kg/km	Ω/km	A	A
708170	3x70+35	12	1,40	2,00	33,30	1350	0,443	152	179
708171	3x95+50	15	1,60	2,20	37,70	1750	0,320	186	215
708172	3x120+70	15	1,60	2,30	42,00	2250	0,253	216	245
708173	3x150+70	15	1,80	2,40	45,00	2700	0,206	246	275
708174	3x185+95	30	2,00	2,60	50,00	3200	2,164	285	313
708175	3x240+120	30	2,20	2,80	57,00	4000	0,125	338	364



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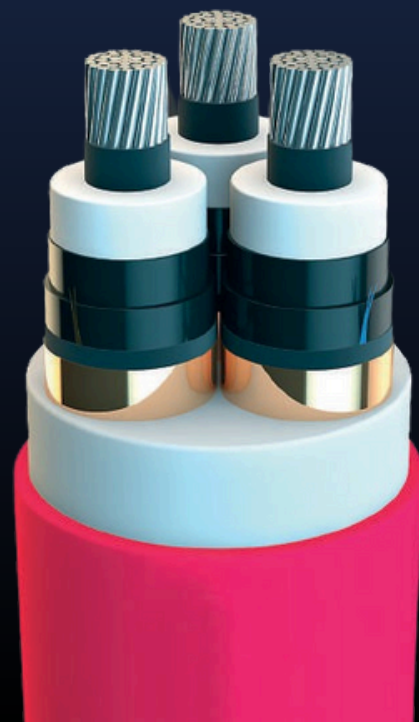
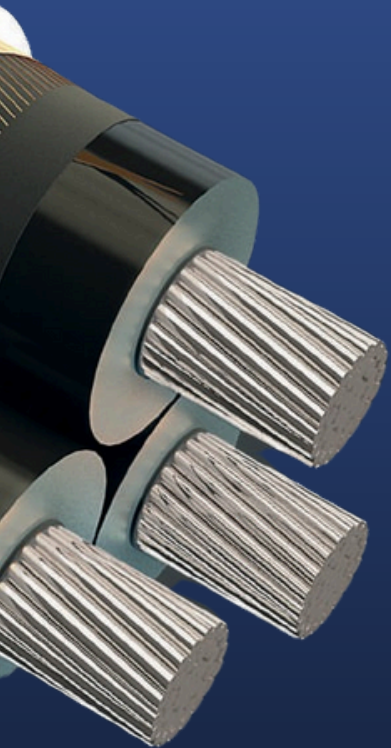
مركزاً على الجودة والابتكار في تصنيع الكابلات والكابلات البحرية





**KARKIN**

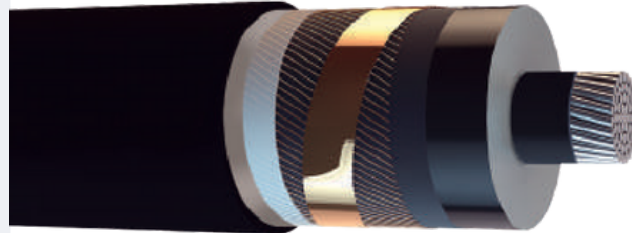
مركز أبحاث وتطوير الكابلات الكهربائية  
KARKIN CABLES RESEARCH AND DEVELOPMENT CENTER



**6-45 kV**  
**Aluminum Cables**



**12/20 kV NA2XS(FL)2Y, XLPE  
Insulated, Aluminum Conductor,  
Water Tight, Aluminum Foil  
Applied Single Core Medium  
Voltage Power Cables**

**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen
- 7 Water Blocking Tape
- 8 Aluminum Foil Longitudinally Applied
- 9 PE Sheath

**Code (N)A2XS(FL)2Y**

**Standartlar IEC 60502-2**

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

**Rated Voltage:  $U_0/U=12/20$  kV**

**Technical Data:**

**Maximum operation temperature: 90 °C**

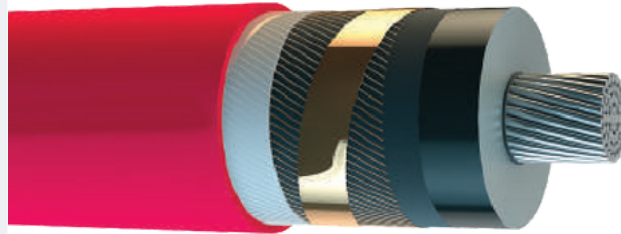
**Short circuit temperature Max. : 250 °C**

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x50/16	5,5	31,0	880	0,641	176	152
1x70/16	5,5	33,0	995	0,443	215	185
1x95/16	5,5	35,0	1.110	0,320	256	221
1x120/16	5,5	36,0	1.210	0,253	290	250
1x150/25	5,5	36,0	1.420	0,206	324	280
1x185/25	5,5	41,0	1.580	0,164	367	317
1x240/25	5,5	43,0	1.800	0,125	425	367
1x300/25	5,5	45,0	2.050	0,100	478	413
1x400/35	5,5	47,0	2.460	0,0778	548	474
1x500/35	5,5	49,5	2.750	0,0605	624	540
1x630/35	5,5	53,5	3.200	0,0469	710	612



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**12/20 kV NA2XSY, XLPE Insulated,  
Aluminum Conductor,  
Single Core Medium Voltage Power  
Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Tape
- 6 Copper Tape Screen \*
- 7 PVC Filler
- 8 PVC Sheath

(\*) In case the buyer requires, screen will be manufactured with copper wire + tape.

**Code (N)A2XStY**

**Standartlar IEC 60502-2**

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

**Rated Coltage:  $U_0/U=12/20$  kV**

**Technical Data:**

**Maximum operation temperature: 90 oC**

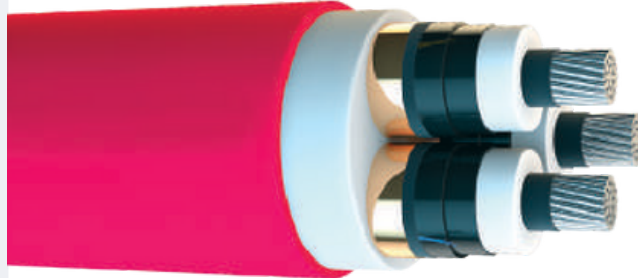
**Short circuit temperature Max. : 250 oC**

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x50/16	5,5	29,0	820	0,641	174	151
1x70/16	5,5	30,0	950	0,443	213	183
1x95/16	5,5	31,5	1.050	0,320	254	219
1x120/16	5,5	33,0	1.180	0,253	288	248
1x150/25	5,5	34,5	1.400	0,206	322	278
1x185/25	5,5	36,5	1.550	0,164	364	315
1x240/25	5,5	39,0	1.800	0,125	420	364
1x300/25	5,5	41,5	2.050	0,100	473	411
1x400/35	5,5	45,0	2.550	0,0778	543	471
1x500/35	5,5	48,0	2.900	0,0605	619	538
1x630/35	5,5	51,0	3.390	0,0469	714	627



**KARKIN**

**12/20 kV NA2XSEY, XLPE Insulated,  
Aluminum Conductor, Three Core  
Medium Voltage Power Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen\*
- 7 PVC Filler
- 8 PVC Sheath

(\* ) In case the buyer requires, screen will be manufactured with copper wire + tape.

**Code (N)A2XSEY**

**Standartlar IEC 60502-2**

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

**Rated Coltage:  $U_0/U=12/20$  kV**

**Technical Data:**

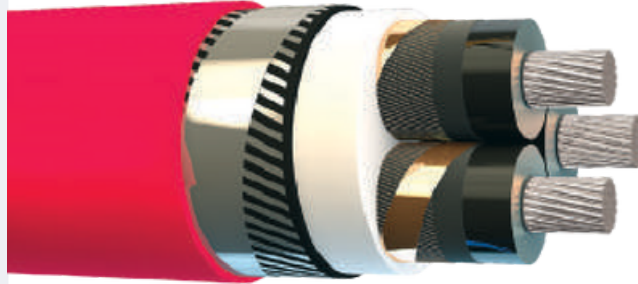
**Maximum operation temperature: 90 oC  
Short circuit temperature Max. : 250 oC**

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Conductor resistance at 20 oC Max.	Current Carrying Capacity
					Earth
mm <sup>2</sup>	mm	mm	kg/km	$\Omega$ /km	A
3x50/16	5,5	55,0	3.400	0,641	144
3x70/16	5,5	59,0	3.900	0,443	176
3x95/16	5,5	63,0	4.500	0,320	210
3x120/16	5,5	66,0	5.100	0,253	238
3x150/25	5,5	70,0	5.650	0,206	267
3x185/25	5,5	74,0	6.450	0,164	302
3x240/25	5,5	79,0	7.500	0,125	349
3x300/25	5,5	84,0	8.700	0,100	394



**KARKIN**

**12/20 kV NA2XSEYFGbY, XLPE  
Insulated, Aluminum Conductor,  
Galvanized  
Steel Wire and Tape Armored,  
Three Core Medium Voltage Power  
Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Tape
- 6 Copper Tape Screen \*
- 7 PVC Filler
- 8 Separation Sheath
- 9 Galvanized Flat Steel Wire
- 10 Galvanized Steel Tape
- 11 PVC Sheath

**Code (N)A2XSEYFGbY**

**Standartlar IEC 60502-2**

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

**Rated Coltage:  $U_0/U=12/20$  kV**

**Technical Data:**

**Maximum operation temperature: 90 oC**

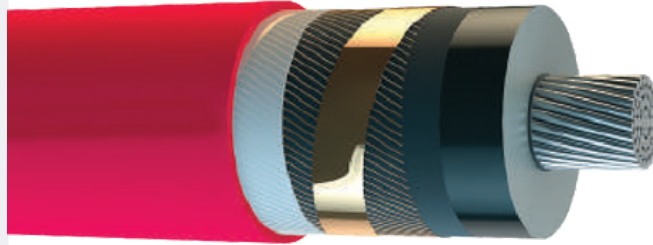
**Short circuit temperature Max. : 250 oC**

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Conductor resistance at 20 oC Max.	Current Carrying Capacity
					Earth
mm <sup>2</sup>	mm	mm	kg/km	$\Omega$ /km	A
3x50/16	5,5	61,0	5.200	0,641	141
3x50/16	5,5	65,0	5.900	0,443	172
3x95/16	5,5	69,0	6.550	0,320	206
3x120/16	5,5	72,5	7.350	0,253	232
3x150/25	5,5	76,5	8.200	0,206	260
3x185/25	5,5	80,5	9.100	0,164	295
3x240/25	5,5	86,0	10.400	0,125	340
3x300/25	5,5	91,0	11.800	0,100	381



**KARKIN**

**18/30 kV NA2XSY, XLPE Insulated,  
Aluminum Conductor,  
Single Core Medium Voltage Power  
Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen
- 7 Separating Tape
- 8 PVC Sheath

**Code (N)A2XSY**

**Standartlar IEC 60502-2**

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

**Rated Voltage:  $U_0/U=18/30$  kV**

**Technical Data:**

**Maximum operation temperature: 90 °C**

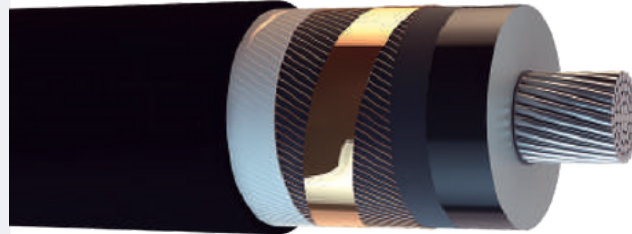
**Short circuit temperature Max. : 250 °C**

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x50/16	8,0	35,0	1.000	0,641	176	151
1x70/16	8,0	36,0	1.150	0,443	211	184
1x95/16	8,0	38,0	1.300	0,320	251	219
1x120/16	8,0	40,0	1.400	0,253	285	249
1x150/25	8,0	42,0	1.600	0,206	318	279
1x185/25	8,0	44,0	1.800	0,164	360	315
1x240/25	8,0	46,0	2.050	0,125	417	365
1x300/25	8,0	49,0	2.300	0,100	470	412
1x400/35	8,0	51,0	2.800	0,0778	538	472
1x500/35	8,0	55,0	3.200	0,0605	614	538
1x630/35	8,0	56,5	3.750	0,0469	698	611



**KARKIN**

**18/30 kV NA2XS(F)2Y, XLPE  
Insulated, Aluminum Conductor,  
Water Tight, Single Core Medium  
Voltage Power Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen
- 7 Water Blocking Tape
- 8 PE Sheath

**Code (N)A2XS(F)2Y**

**Standartlar IEC 60502-2**

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

**Rated Coltage:  $U_0/U=12/20$  kV**

**Technical Data:**

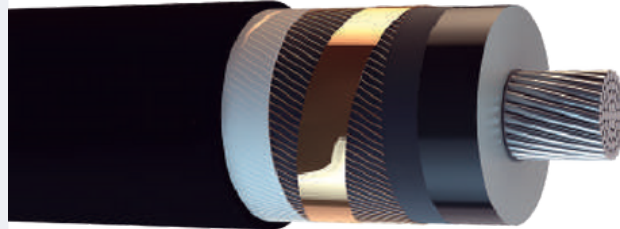
**Maximum operation temperature: 90 oC**

**Short circuit temperature Max. : 250 oC**

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	Earth
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x50/16	8,0	33,5	950	0,641	173	151
1x70/16	8,0	35,5	1.050	0,443	212	185
1x95/16	8,0	37,3	1.200	0,320	253	221
1x120/16	8,0	38,8	1.300	0,253	255	223
1x150/25	8,0	40,4	1.510	0,206	321	280
1x185/25	8,0	42,3	1.650	0,164	362	317
1x240/25	8,0	44,6	1.900	0,125	419	367
1x300/25	8,0	47,0	2.150	0,100	472	414
1x400/35	8,0	50,5	2.550	0,0778	541	475
1x500/35	8,0	53,4	3.000	0,0605	617	542
1x630/35	8,0	57,4	3.400	0,0469	703	616



**18/30 kV NA2XS(FL)2Y, XLPE  
Insulated, Aluminum Conductor,  
Water Tight,  
Aluminum Foil Applied Single Core  
Medium Voltage Power Cables**

**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen
- 7 Water Blocking Tape
- 8 Aluminum Foil Longitudinally Applied
- 9 PE Sheath

Code ( N)A2XS(FL)2Y

Standartlar IEC 60502-2

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**Rated Coltage:  $U_0/U=18/30$  kV**Technical Data:**

Maximum operation temperature: 90 oC

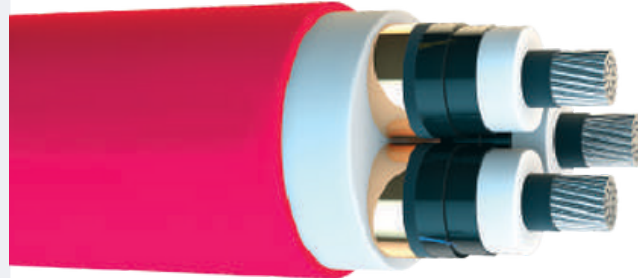
Short circuit temperature Max. : 250 oC

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x50/16	8,0	35,0	1.050	0,641	174	152
1x70/16	8,0	36,0	1.220	0,443	212	185
1x95/16	8,0	37,0	1.350	0,320	253	221
1x120/16	8,0	39,0	1.480	0,253	287	251
1x150/25	8,0	42,0	1.680	0,206	321	281
1x185/25	8,0	43,0	1.850	0,164	363	318
1x240/25	8,0	45,0	2.100	0,125	420	367
1x300/25	8,0	48,0	2.350	0,100	474	415
1x400/35	8,0	51,0	2.800	0,0778	540	475
1x500/35	8,0	53,5	3.100	0,0605	616	541
1x630/35	8,0	57,5	3.550	0,0469	705	617



**KARKIN**

**18/30 kV NA2XSEY, XLPE Insulated,  
Aluminum Conductor,  
Three Core Medium Voltage Power  
Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen\*
- 7 PVC Filler
- 8 PVC Sheath

(\* ) In case the buyer requires, screen will be manufactured with copper wire + tape.

Code (N)A2XSEY

Standartlar IEC 60502-2

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

Rated Coltage:  $U_0/U=18/30$  kV

**Technical Data:**

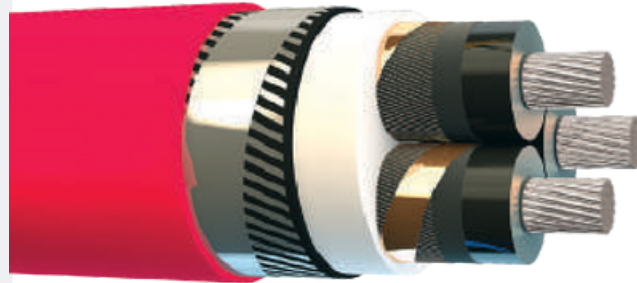
Maximum operation temperature: 90 oC  
Short circuit temperature Max. : 250 oC

Nominal Cross Section mm <sup>2</sup>	Insulation Thickness mm	Overall diameter approx. mm	Net weight approx. kg/km	Current Carrying Capacity
				Earth A
3x50/16	8,0	67,0	4.750	145
3x70/16	8,0	70,5	5.400	177
3x95/16	8,0	74,5	6.100	211
3x120/16	8,0	78,0	6.800	240
3x150/25	8,0	81,0	7.500	268
3x185/25	8,0	85,3	8.350	303
3x240/25	8,0	90,5	9.500	351
3x300/25	8,0	95,5	10.850	396



**KARKIN**

**18/30 kV NA2XSEYFGbY, XLPE  
Insulated, Aluminum Conductor,  
Galvanized  
Steel Wire and Tape Armored,  
Three Core Medium Voltage Power  
Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Tape
- 6 Copper Tape Screen \*
- 7 PVC Filler
- 8 Separation Sheath
- 9 Galvanized Flat Steel Wire
- 10 Galvanized Steel Tape
- 11 PVC Sheath

(\*) In case the buyer requires, screen will be manufactured with copper wire + tape.

**Code (N)A2XSEYFGbY**

**Standartlar IEC 60502-2**

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

**Rated Coltage: U<sub>o</sub>/U=18/30 kV**

**Technical Data:**

**Maximum operation temperature: 90 oC**

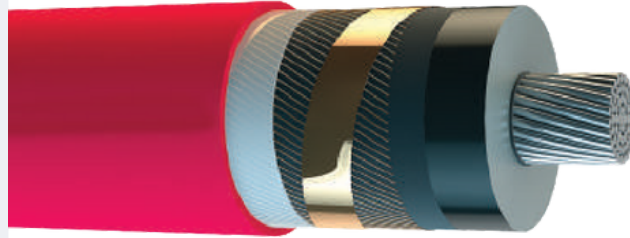
**Short circuit temperature Max. : 250 oC**

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Conductor resistance at 20 oC Max.	Current Carrying Capacity
					Earth
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A
3x50/16	8,0	73,4	6.550	0,640	142
3x70/16	8,0	77,5	7.400	0,440	173
3x95/16	8,0	82,0	8.200	0,320	207
3x120/16	8,0	85,1	8.850	0,255	234
3x150/25	8,0	88,8	9.550	0,200	261
3x185/25	8,0	92,7	10.600	0,165	296
3x240/25	8,0	98,3	12.100	0,125	342
3x300/35	8,0	102,8	13.300	0,088	381



**KARKIN**

**20,3/35 kV NA2XS<sub>Y</sub>, XLPE  
Insulated, Aluminum Conductor,  
Medium Voltage Power Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen
- 7 Separating Tape
- 8 PVC Sheath

**Code (N)A2XS<sub>Y</sub>**

**Standartlar IEC 60502-2**

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

**Rated Voltage:  $U_0/U=20,3/35$  kV**

**Technical Data:**

**Maximum operation temperature: 90 °C**

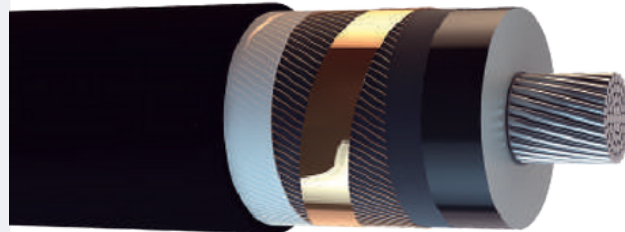
**Short circuit temperature Max. : 250 °C**

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x50/16	9	35,5	1.210	0,641	172	151
1x70/16	9	37,0	1.350	0,443	210	184
1x95/16	9	39,0	1.500	0,320	250	219
1x120/16	9	40,5	1.610	0,253	284	249
1x150/25	9	42,0	1.850	0,206	317	279
1x185/25	9	44,0	2.040	0,164	359	316
1x240/25	9	46,5	2.300	0,125	415	365
1x300/25	9	48,5	2.570	0,100	468	412
1x400/35	9	52,0	3.100	0,0778	536	473
1x500/35	9	55,0	3.500	0,0605	612	539
1x630/35	9	59,5	4.050	0,0469	699	616



**KARKIN**

**20,3/35 kV NA2XS(F)2Y, XLPE  
Insulated, Aluminum Conductor,  
Water Tight,  
Single Core Medium Voltage Power  
Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen
- 7 Water Blocking Tape
- 8 PE Sheath

Code (N)A2XS(F)2Y

Standartlar IEC 60502-2

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

Rated Coltage:  $U_0/U=20,3/35$  kV

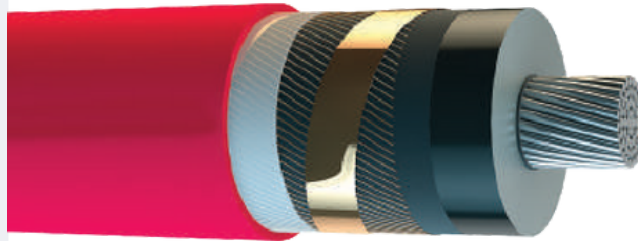
**Technical Data:**

Maximum operation temperature: 90 oC  
Short circuit temperature Max. : 250 oC

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x50/16	9	36,0	1.140	0,641	172	151
1x70/16	9	38,0	1.260	0,443	210	184
1x95/16	9	40,0	1.400	0,320	243	220
1x120/16	9	41,0	1.600	0,253	285	250
1x150/25	9	43,0	1.750	0,206	319	280
1x185/25	9	45,0	1.910	0,164	304	279
1x240/25	9	47,0	2.160	0,125	389	364
1x300/25	9	49,0	2.410	0,100	468	412
1x400/35	9	52,0	2.820	0,0778	536	473
1x500/35	9	55,5	3.200	0,0605	612	540
1x630/35	9	60,0	3.720	0,0469	696	612



### 20,8/36 kV NA2XSY, XLPE Insulated, Aluminum Conductor, Medium Voltage Power Cables



#### CONSTRUCTION:

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen
- 7 Separating Tape
- 8 PVC Sheath

Code (N)A2XSY

Standartlar IEC 60502-2

#### APPLICATION:

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications

#### Voltage Level:

Rated Voltage:  $U_0/U=20,8/36$  kV

#### Technical Data:

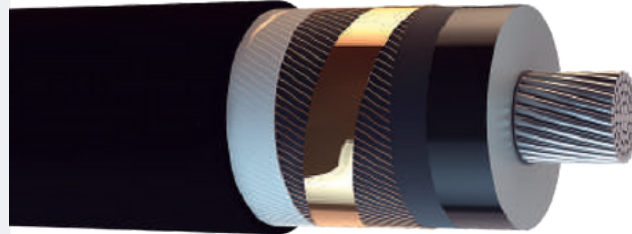
Maximum operation temperature: 90 °C  
Short circuit temperature Max. : 250 °C

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x50/16	8,8	35,5	1.210	0,641	171	150
1x70/16	8,8	37,0	1.350	0,443	209	184
1x95/16	8,8	39,0	1.500	0,320	249	219
1x120/16	8,8	40,5	1.610	0,253	283	249
1x150/25	8,8	42,0	1.850	0,206	317	279
1x185/25	8,8	44,0	2.040	0,164	358	314
1x240/25	8,8	46,5	2.300	0,125	414	365
1x300/25	8,8	48,5	2.570	0,100	467	412
1x400/35	8,8	52,0	3.100	0,0778	535	472
1x500/35	8,8	55,0	3.500	0,0605	610	538
1x630/35	8,8	59,5	4.050	0,0469	694	611



**KARKIN**

**20,8/36 kV NA2XS(F)2Y, XLPE  
Insulated, Aluminum Conductor,  
Water Tight, Single Core Medium  
Voltage Power Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen
- 7 Water Blocking Tape
- 8 PE Sheath

Code (N)A2XS(F)2Y

Standartlar IEC 60502-2

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

Rated Coltage:  $U_0/U=20,8/36$  kV

**Technical Data:**

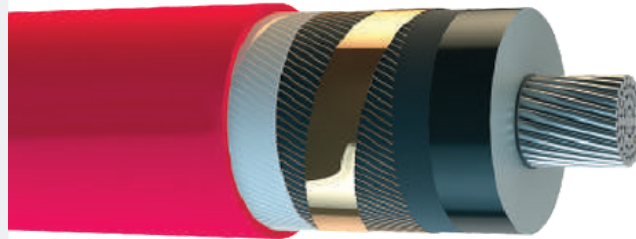
Maximum operation temperature: 90 oC

Short circuit temperature Max. : 250 oC

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x50/16	8,8	36,0	1,140	0,641	173	152
1x70/16	8,8	38,0	1,260	0,443	211	185
1x95/16	8,8	40,0	1,400	0,320	252	221
1x120/16	8,8	41,0	1,600	0,253	285	250
1x150/25	8,8	43,0	1,750	0,206	319	280
1x185/25	8,8	45,0	1,910	0,164	361	317
1x240/25	8,8	47,0	2,160	0,125	418	367
1x300/25	8,8	49,0	2,410	0,100	472	414
1x400/35	8,8	52,0	2,820	0,0778	540	476
1x500/35	8,8	55,5	3,200	0,0605	616	542
1x630/35	8,8	60,0	3,720	0,0469	701	615



**26/45 kV NA2XS<sub>Y</sub>, XLPE Insulated,  
Aluminum Conductor,  
Medium Voltage Power Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen
- 7 Separating Tape
- 8 PVC Sheath

**Code (N)A2XS<sub>Y</sub>**

**Standartlar IEC 60502-2**

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications

**Voltage Level:**

**Rated Voltage:  $U_0/U=26/45$  kV**

**Technical Data:**

**Maximum operation temperature: 90 °C**

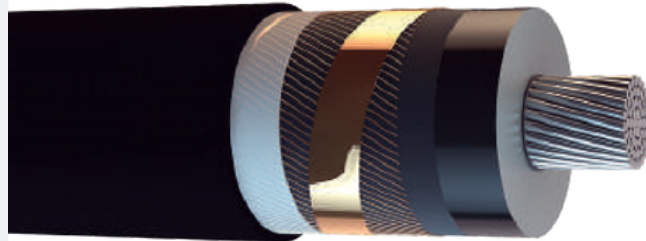
**Short circuit temperature Max. : 250 °C**

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	A
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x95/16	10,5	42,0	1.550	0,320	227	201
1x120/16	10,5	44,0	1.680	0,253	257	228
1x150/25	10,5	45,0	1.830	0,206	288	255
1x185/25	10,5	47,0	2.000	0,164	325	289
1x240/25	10,5	49,0	2.280	0,125	376	334



**KARKIN**

**26/45 kV NA2XS(F)2Y, XLPE  
Insulated, Aluminum Conductor,  
Water Tight,  
Single Core Medium Voltage Power  
Cables**



**CONSTRUCTION:**

- 1 Aluminum Conductor Compacted – Class 2
- 2 Inner Semi Conductive Layer
- 3 XLPE Insulation
- 4 Outer Semi Conductive Layer
- 5 Semi Conductive Swelling Tape
- 6 Copper Wire and Tape Screen
- 7 Water Blocking Tape
- 8 PE Sheath

**Code (N)A2XS(F)2Y**

**Standartlar IEC 60502-2**

**APPLICATION:**

This design of cable is used in underground or cable ducts for urban and industrial areas to supply electrical energy. The design will become capable to operate under wet conditions with additional applications.

**Voltage Level:**

**Rated Voltage:  $U_0/U=26/45$  kV**

**Technical Data:**

**Maximum operation temperature: 90 °C**

**Short circuit temperature Max. : 250 °C**

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Cable Unit Weight (approx.)	Current Carrying Capacity	
					Earth	A
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x95/25	10,5	43,0	1.600	0,320	229	202
1x120/35	10,5	45,0	1.720	0,253	259	229
1x150/35	10,5	46,0	1.870	0,206	290	257
1x185/35	10,5	48,0	2.050	0,164	328	290
1x240/35	10,5	50,0	2.325	0,125	379	337



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**0,6/1 kV**  
**Copper Cables**



KARKIN

**0,6/1 kV NYY, SINGLE CORE  
POWER CABLE  
WITH COPPER CONDUCTOR, PVC  
INSULATION AND  
PVC JACKET**



**APPLICATION:**

Indoor or outdoor installations, where there is no mechanical damage risk.

Maximum continuous normal operating temperature: 70 °C

Maximum short circuit temperature: 160 °C

Standard: IEC 60502-1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

**Electrical and Mechanical Properties – Round Conductors**

**(N)YY-RM 3+1 CORE**

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity			
								In Air		Under Ground	
								Flat	Trefoil	Flat	Trefoil
No.* sqmm	mm	mm	mm	kg/km	Ω/km	A	A	A	A		
708406	1x16	6	1,00	1,4	9,8	240	1,150	107	84	160	107
708407	1x25	6	1,20	1,4	11,4	340	0,727	144	114	208	138
708408	1x35	6	1,20	1,4	12,4	440	0,524	176	139	250	164
708409	1x50	6	1,40	1,4	13,8	600	0,387	214	169	296	195
708410	1x70	12	1,40	1,4	15,6	800	0,268	270	213	365	238
708411	1x95	15	1,60	1,5	17,7	1070	0,193	334	264	438	286
708412	1x120	18	1,60	1,5	19,0	1310	0,153	389	307	501	325
708413	1x150	18	1,80	1,7	21,3	1630	0,124	446	352	563	365
708414	1x185	30	2,00	1,8	23,6	2000	0,0991	516	406	639	413
708415	1x240	34	2,20	1,8	26,2	2560	0,0754	618	483	746	479
708416	1x300	34	2,40	1,9	28,8	3170	0,0601	717	557	848	541
708417	1x400	53	2,60	2,0	32,9	4170	0,0470	843	646	975	614



**KARKIN**

**0,6/1 kV NYY, MULTI CORE POWER  
CABLE  
WITH COPPER CONDUCTOR, PVC  
INSULATION AND  
PVC JACKET**



**APPLICATION:**

Indoor or outdoor installations, where there is no mechanical damage risk.

Maximum continuous normal operating temperature: 70 °C

Maximum short circuit temperature: 160 °C

Standard: IEC 60502-1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

**Electrical and Mechanical Properties – Round Conductors**

**(N)YY-RM 1 (SINGLE) CORE**

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity	
								In Air	
								Flat	Trefoil
	No.* sqmm		mm	mm	mm	kg/km	Ω/km	A	A
708430	3x16+10	6	1,00	1,80	21,20	980	1,150	79	102
708431	3x25+16	6	1,20	1,80	24,50	1400	0,727	106	133
708432	3x35+16	6	1,20	1,80	26,50	1740	0,524	129	159
708433	3x50+25	6	1,40	1,90	30,40	2400	0,387	157	188
708434	3x70+35	12	1,40	2,00	34,80	3260	0,268	199	232
708435	3x95+50	15	1,60	2,20	39,40	4340	0,193	246	280
708436	3x120+70	15	1,60	2,30	43,80	5450	0,153	285	318
708437	3x150+70	15	1,80	2,40	47,40	6500	0,124	326	359
708438	3x185+95	30	2,00	2,60	52,70	8080	0,0991	374	406
708439	3x240+120	30	2,20	2,80	58,80	10260	0,0754	445	473



**KARKIN**

**0,6/1 kV NYY, MULTI CORE POWER  
CABLE  
WITH COPPER CONDUCTOR, PVC  
INSULATION AND  
PVC JACKET**



**APPLICATION:**

Indoor or outdoor installations, where there is no mechanical damage risk.

Maximum continuous normal operating temperature: 70 °C

Maximum short circuit temperature: 160 °C

Standard: IEC 60502-1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ( $U_m = 1,2 \text{ kV}$ )

**Electrical and Mechanical Properties – Round Conductors**

**(N)YY-RM 4 CORE**

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity	
								In Air	
								Flat	Trefoil
	No.* sqmm		mm	mm	mm	kg/km	Ω/km	A	A
708444	4x16	6	1,00	1,80	2,90	1050	1,150	79	102
708445	4x25	6	1,20	1,80	25,40	1530	0,727	106	133
708446	4x35	6	1,20	1,80	28,00	1980	0,524	129	159
708447	4x50	6	1,40	1,90	31,80	2740	0,387	157	188
708448	4x70	12	1,40	2,10	37,00	3700	0,268	199	232
708449	4x95	15	1,60	2,30	41,90	4900	0,193	246	280
708450	4x120	15	1,60	2,40	46,00	6050	0,153	285	318
708451	4x150	15	1,80	2,50	50,80	7500	0,124	326	359
708452	4x185	30	2,00	2,70	56,30	9200	0,0991	374	406
708453	4x240	30	2,20	2,90	63,00	11750	0,0754	445	473



**0,6/1 kV NYY-F, SINGLE CORE  
POWER CABLE  
WITH COPPER CONDUCTOR, PVC  
INSULATION AND  
PVC JACKET**

**APPLICATION:**

Indoor or outdoor installations, where there is no mechanical damage risk.

Maximum continuous normal operating temperature: 70 °C

Maximum short circuit temperature: 160 °C

Standard: IEC 60502-1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

**Electrical and Mechanical Properties – Round Conductors**

SAP Product Number	No. X nominal area of the conductors	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity	
					In Air	Under Ground
	No.* sqmm	mm	kg/km	Ω/km	A	A
-	1x0,5	2,10	11			
-	1x0,75	2,40	13			
-	1x1,0	2,70	15	19,50	12	18
-	1x1,5	2,90	19	13,30	18	22
-	1x2,5	3,60	30	7,98	23	30
-	1x4	4,50	44	4,95	27	38
-	1x6	5,00	65	3,30	31	51
-	1x10	6,50	115	1,91	31	75
-	1x16	8,20	173	1,21	60	92
-	1x25	9,60	275	0,78	82	125
-	1x35	11,30	370	0,554	105	153
	1x50	13,50	508	0,386	130	190
	1x70	15,10	709	0,272	162	247
	1x95	17,50	952	0,206	195	289
	1x120	19,50	1181	0,161	230	341
	1x150	21,20	1482	0,129		390
	1x185	25,30	1843	0,106		446
	1x240	29,70	2463	0,0801		525
	1x300	32,00	2960	0,0623		



**KARKIN**

**0,6/1 kV N2XY, SINGLE CORE  
POWER CABLE WITH COPPER  
CONDUCTOR, XLPE INSULATION  
AND PVC JACKET**



**APPLICATION:**

Indoor or outdoor installations, where there is no mechanical damage risk. Maximum continuous normal operating temperature: 90 °C Maximum short circuit temperature: 250 °C Standard: IEC 60502-1 Power cables with extruded insulation Cables for rated voltages of 1 kV ((Um = 1,2 kV)

**Electrical and Mechanical Properties – Round Conductors**

**(N)2XY-RM 1 (SINGLE) CORE**

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity			
								In Air		Under Ground	
								Flat	Trefoil	Flat	Trefoil
	No.* sqmm		mm	mm	mm	kg/km	Ω/km	A	A	A	A
-	1x16	6	0,70	1,3	9,0	210	1,150	131	102	176	115
-	1x25	6	0,90	1,3	10,7	310	0,727	177	138	229	148
-	1x35	6	0,90	1,3	11,8	410	0,524	217	170	275	177
-	1x50	6	1,00	1,4	12,9	550	0,387	265	207	326	209
-	1x70	12	1,10	1,4	16,0	750	0,268	336	263	400	256
-	1x95	15	1,10	1,4	16,4	990	0,193	415	325	480	307
-	1x120	18	1,20	1,5	18,4	1240	0,153	485	380	548	349
709060	1x150	18	1,40	1,6	20,0	1540	0,124	557	437	616	393
709022	1x185	30	1,60	1,7	22,5	1890	0,0991	646	507	698	445
708917	1x240	34	1,70	1,8	25,1	2420	0,0754	774	604	815	517
708941	1x300	34	1,80	1,8	27,7	2990	0,0601	901	697	927	583
-	1x400	53	2,00	2,0	31,5	3950	0,0470	1060	811	1064	663



**KARKIN**

**0,6/1 kV N2XY, MULTI CORE  
POWER CABLE WITH COPPER  
CONDUCTOR, XLPE INSULATION  
AND PVC JACKET**



**APPLICATION:**

Indoor or outdoor installations, where there is no mechanical damage risk. Maximum continuous normal operating temperature: 90 °C Maximum short circuit temperature: 250 °C

Standard: IEC 60502-1

Power cables with extruded insulation  
Cables for rated voltages of 1 kV ((Um = 1,2 kV)

**Electrical and Mechanical Properties – Round Conductors**

**(N)2XY-RM 3+1 CORE**

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity	
								In Air	
								Flat	Trefoil
No.* sqmm		mm		mm	mm	kg/km	Ω/km	A	A
708288	3x16+10	6	0,70	1,80	19,70	860	1150	98	112
708289	3x25+16	6	0,90	1,80	23,00	1260	0,727	133	145
708290	3x35+16	6	0,90	1,80	25,00	1580	0,524	162	174
708291	3x50+25	6	1,00	1,90	28,00	2200	0,387	197	206
708292	3x70+35	12	1,10	2,00	33,40	3030	0,268	250	254
708293	3x95+50	15	1,10	2,20	36,70	3980	0,193	308	305
708294	3x120+70	18	1,20	2,30	41,90	5100	0,153	359	348
708295	3x150+70	18	1,40	2,40	45,60	6100	0,124	412	392
708296	3x185+95	30	1,60	2,60	50,40	7580	0,0991	475	444
708297	3x240+120	34	1,70	2,80	56,20	9600	0,0754	564	517



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## 0,6/1 kV N2XY, MULTI CORE POWER CABLE WITH COPPER CONDUCTOR, XLPE INSULATION AND PVC JACKET



### APPLICATION:

Indoor or outdoor installations, where there is no mechanical damage risk. Maximum continuous normal operating temperature: 90 °C Maximum short circuit temperature: 250 °C

Standard: IEC 60502-1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

## Electrical and Mechanical Properties – Round Conductors

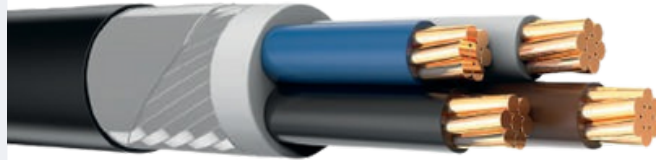
### (N)2XY-RM 4 CORE

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity	
								In Air	
								Flat	Trefoil
	No.* sqmm		mm	mm	mm	kg/km	Ω/km	A	A
709082	4x16	6	0,70	1,80	20,30	930	1,150	98	112
708937	4x25	6	0,90	1,80	24,00	1370	0,727	133	145
-	4x35	6	0,90	1,80	26,60	1800	0,524	162	174
-	4x50	6	1,00	1,90	29,90	2490	0,387	197	206
-	4x70	12	1,10	2,10	35,30	3450	0,268	250	254
709058	4x95	15	1,10	2,30	39,20	4500	0,193	308	305
-	4x120	18	1,20	2,40	43,80	5660	0,153	359	348
-	4x150	18	1,40	2,50	48,90	7050	0,124	412	392
-	4x185	30	1,60	2,70	54,00	8670	0,0991	475	444
-	4x240	34	1,70	2,90	60,50	11050	0,0754	564	517



**KARKIN**

**0,6/1 kV NYFGbY, MULTI CORE  
POWER CABLE WITH COPPER  
CONDUCTOR, PVC INSULATION,  
STEEL WIRE AND TAPE ARMOUR  
PVC JACKET**



**APPLICATION:**

Indoor or outdoor installations, where there is no mechanical damage risk. Maximum continuous normal operating temperature: 70 °C Maximum short circuit temperature: 160 °C

Standard: IEC 60502-1

Power cables with extruded insulation

Cables for rated voltages of 1 kV ((Um = 1,2 kV)

**Electrical and Mechanical Properties – Round Conductors**

**(N)YFGbY–RM 3+1 CORE**

SAP Product Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity	
								In Air	
								Flat	Trefoil
	No.* sqmm		mm	mm	mm	kg/km	Ω/km	A	A
709010	3x25+16	6	1,20	2,00	27,50	2000	0,727	106	133
709011	3x35+16	6	1,20	2,00	29,50	2400	0,524	129	159
709012	3x50+25	6	1,40	2,10	33,50	3200	0,387	157	188
709101	3x70+35	12	1,40	2,30	37,50	4100	0,268	199	232
708965	3x95+50	15	1,60	2,40	42,00	5200	0,193	246	280
709002	3x120+70	15	1,60	2,60	46,00	6400	0,153	285	318
709143	3x150+70	15	1,80	2,70	50,00	7600	0,124	326	359
709144	3x185+95	30	2,00	2,90	55,00	9350	0,0991	374	406
709219	3x240+120	30	2,20	3,10	61,00	11500	0,0754	445	473

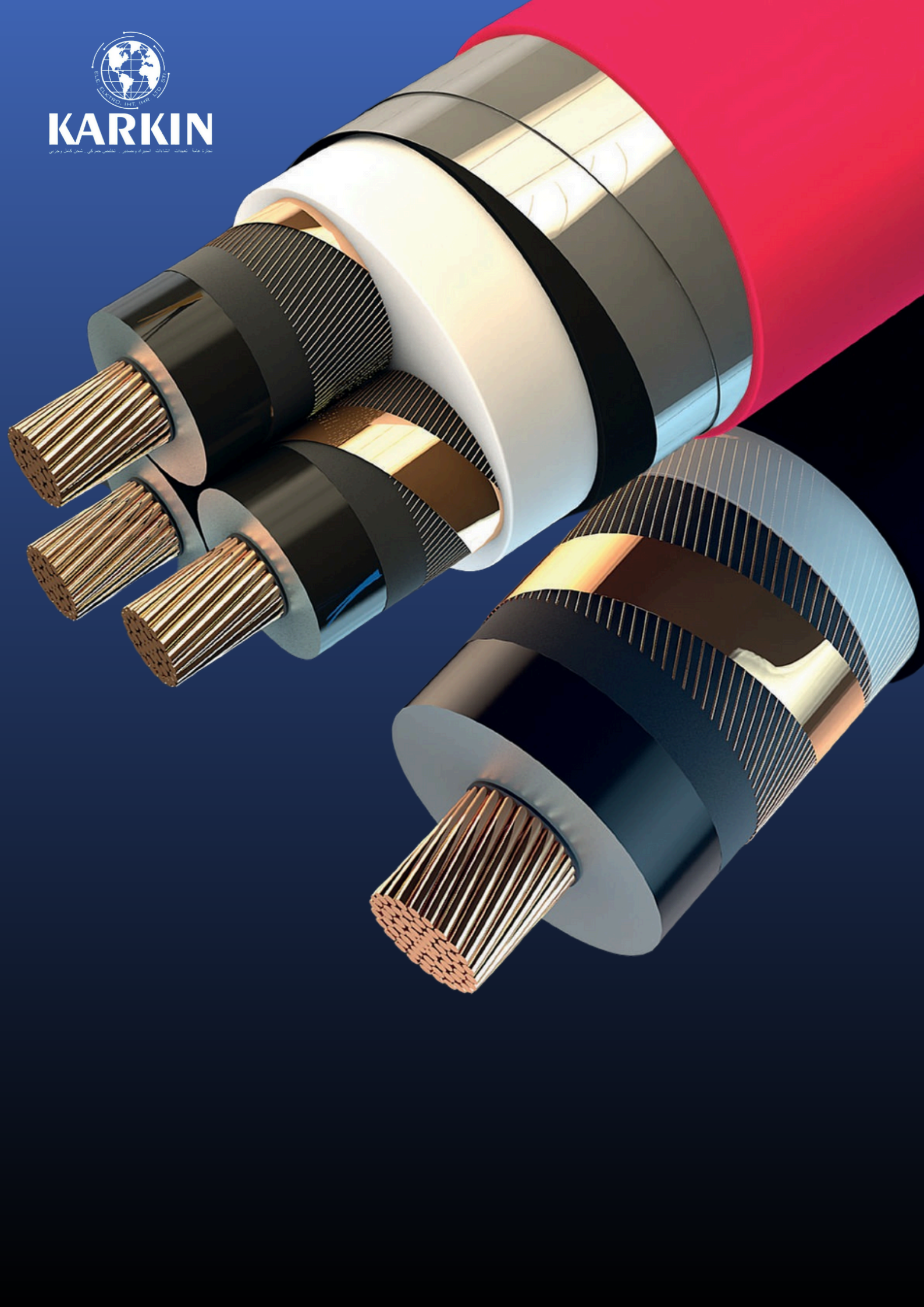
**6/45 kV**

**Copper Cables**



# KARKIN

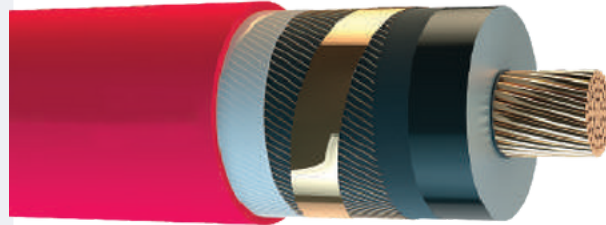
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KARKIN INTERNATIONAL GROUP





KARKIN

## 12/20 kV N2XSY, XLPE Insulated, Copper Conductor, Medium Voltage Power Cables



### CONSTRUCTION:

- 1 Copper Conductor Compacted Class 2
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper wire and tape screen
- 7 Protecting tape
- 8 PVC Separation sheath

Code (N)2XSY

Standartlar TS IEC 60502-2

### APPLICATION:

This design of cable is used for indoor and outdoor applications. Cable will be installed inside a duct, cable tray, or direct burial where there is no mechanical damage risk.

### Voltage Level:

Rated Voltage:  $U_0/U=12/20$  kV

### Technical Data:

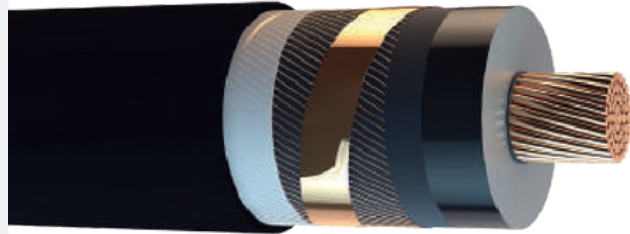
Maximum operation temperature: 90 °C

Short circuit temperature Max. : 250 °C

Nominal Cross Section	Insulation Thickness	Insulation Thicknessr	Net weight approx.	Conductor resistance at 20 °C Max.	Operating Inductance Approx.		Operating Capacity Approx.	In Air	
					Flat mH/km	Trefoil mH/km		A	A
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	Flat mH/km	Trefoil mH/km	μF/km	A	A
1x35/16	5,5	26	930	0,524	0,757	0,488	0,159	192	165
1x50/16	5,5	27	1060	0,387	0,729	0,465	0,175	225	194
1x70/16	5,5	28	1300	0,268	0,695	0,438	0,196	275	237
1x95/16	5,5	29	1580	0,193	0,668	0,419	0,216	327	282
1x120/16	5,5	31	1840	0,153	0,647	0,403	0,235	371	321
1x150/25	5,5	32	2230	0,124	0,622	0,389	0,254	415	359
1x185/25	5,5	34	2580	0,0991	0,605	0,377	0,273	468	405
1x240/25	5,5	36	3130	0,0754	0,581	0,361	0,304	541	468
1x300/25	5,5	40,6	3798	0,0601	0,565	0,350	0,329	610	528
1x400/35	5,5	44,4	4839	0,0470	0,536	0,335	0,368	695	600
1x500/35	5,5	47,6	5904	0,0366	0,519	0,326	0,402	787	677



## 12/20 kV N2XS(F)2Y, XLPE Insulated, Copper Conductor, Medium Voltage Power Cables

**CONSTRUCTION:**

- 1 Copper Conductor Compacted Class 2
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper wire and tape screen
- 7 Water blocking tape
- 8 PE outer sheath

Code (N)2XS(F)2Y

Standartlar IEC 60502-2

**APPLICATION:**

This design of cable is used for indoor and outdoor applications. Cable will be installed inside a duct, cable tray, or direct burial where there is no mechanical damage risk.

**Voltage Level:**Rated Voltage:  $U_0/U=12/20$  kV**Technical Data:**

Maximum operation temperature: 90 °C

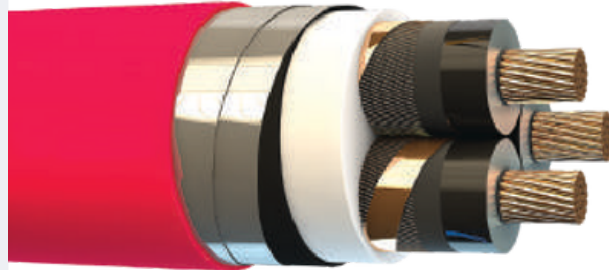
Short circuit temperature Max. : 250 °C

Nominal Cross Section	Insulation Thickness	Insulation Thicknessr	Net weight approx.	Conductor resistance at 20 °C Max.	Operating Inductance Approx.		Operating Capacity Approx.	In Air	
					Flat mH/km	Trefoil mH/km		μF/km	Earth
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	Flat mH/km	Trefoil mH/km	μF/km	A	A
1x35/16	5,5	26,6	930	0,524	0,757	0,488	0,159	193	166
1x50/16	5,5	27,6	1060	0,387	0,729	0,465	0,175	227	195
1x70/16	5,5	28,6	1300	0,268	0,695	0,438	0,196	276	237
1x95/16	5,5	29,6	1580	0,193	0,668	0,419	0,216	330	283
1x120/16	5,5	31,6	1840	0,153	0,647	0,403	0,235	373	321
1x150/25	5,5	32,6	2230	0,124	0,622	0,389	0,254	418	360
1x185/25	5,5	34,6	2580	0,0991	0,605	0,377	0,273	471	407
1x240/25	5,5	36,6	3130	0,0754	0,581	0,361	0,304	545	470
1x300/25	5,5	41,2	3798	0,0601	0,565	0,350	0,329	613	529
1x400/35	5,5	45,0	4839	0,0470	0,536	0,335	0,368	698	601
1x500/35	5,5	48,2	5904	0,0366	0,519	0,326	0,402	792	680



**KARKIN**

**12/20 kV N2XSEYBY, XLPE  
Insulated, Copper Conductor,  
Three Core, Double Galvanized  
Steel Tape Armored, Medium  
Voltage Power Cables**



**CONSTRUCTION:**

- 1 Copper Conductor Compacted Class 2
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper wire and tape screen
- 7 PVC Filler
- 8 PVC Separation sheath
- 9 Double galvanized steel tape
- 10 PVC outer sheath

Code (N)2XSEYBY

Standartlar IEC 60502-2

**APPLICATION:**

Dielectric losses are low within these type of cables. This design is used in feeding urban and industrial region network, underground, indoor, outdoor and cable channel applications.

**Voltage Level:**

Rated Coltage:  $U_0/U=12/20$  kV

**Technical Data:**

Maximum operation temperature: 90 oC

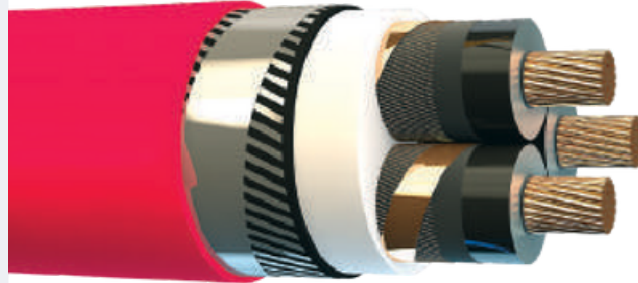
Short circuit temperature Max. : 250 oC

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Conductor resistance at 20 oC Max.	Operating Inductance Approx.	Operating Capacity Approx.	In Air
							Earth
mm <sup>2</sup>	mm	mm	kg/km	$\Omega$ /km	mH/km	$\mu$ F/km	A
3x50/16	5,5	60	6250	0,387	0,40	0,16	182
3x70/16	5,5	65	7300	0,268	0,38	0,17	222
3x95/16	5,5	69	8500	0,193	0,36	0,19	264
3x120/16	5,5	73	9650	0,153	0,34	0,21	298
3x150/25	5,5	77	11400	0,124	0,33	0,23	334
3x185/25	5,5	81	12400	0,0991	0,32	0,24	375
3x240/25	5,5	85	14750	0,0754	0,31	0,28	432



**KARKIN**

**12/20 kV N2XSEYFGbY, XLPE  
Insulated, Copper Conductor,  
Three Core, Galvanized Steel Wire  
and Tape Armored, Medium  
Voltage Power Cables**



**CONSTRUCTION:**

- 1 Copper Conductor Compacted Class 2
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper tape screen (\*)
- 7 PVC Filler
- 8 PVC Separation sheath
- 9 Galvanized flat steel wire armoring
- 10 Galvanized steel tape
- 11 PVC outer sheath

(\*) In case the buyer requires, screen will be manufactured with Copper Wire + Tape

Code (N)2XSEYFGbY

Standartlar VDE 0276, IEC 60502-2

**APPLICATION:**

Dielectric losses are low within these type of cables. This design is used in feeding urban and industrial region network, underground, indoor, outdoor and cable channel applications.

**Voltage Level:**

Rated Coltage:  $U_0/U=12/20$  kV

**Technical Data:**

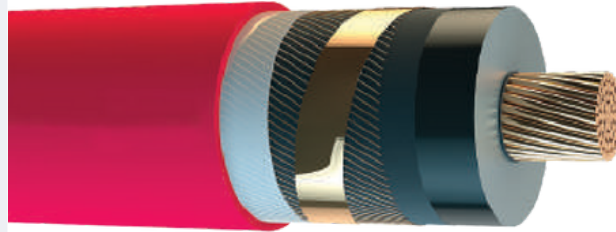
Maximum operation temperature: 90 oC

Short circuit temperature Max. : 250 oC

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Conductor resistance at 20 oC Max.	Operating Inductance Approx.	Operating Capacity Approx.	In Air
							Earth
mm <sup>2</sup>	mm	mm	kg/km	$\Omega$ /km	mH/km	$\mu$ F/km	A
3x50/16	5,5	61	6350	0,387	0,40	0,16	185
3x70/16	5,5	66	7400	0,268	0,38	0,17	222
3x95/16	5,5	70	8600	0,193	0,36	0,19	263
3x120/16	5,5	74	9750	0,153	0,34	0,21	299
3x150/25	5,5	78	11500	0,124	0,33	0,23	334
3x185/25	5,5	82	12500	0,0991	0,32	0,24	376
3x240/25	5,5	86	14900	0,0754	0,31	0,28	433



### 18/30 kV N2XSY, XLPE Insulated, Copper Conductor, Medium Voltage Power Cables



#### CONSTRUCTION:

- 1 Copper Conductor Compacted Class 2
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper wire and tape screen
- 7 Protecting tape
- 8 PVC outer sheath

Code (N)2XSY

Standartlar VDE 0276, IEC 60502-2

#### APPLICATION:

This design of cable is used for indoor and outdoor applications. Cable will be installed inside a duct, cable tray, or direct burial where there is no mechanical damage risk.

#### Voltage Level:

Rated Voltage:  $U_0/U=18/30$  kV

#### Technical Data:

Maximum operation temperature: 90 °C

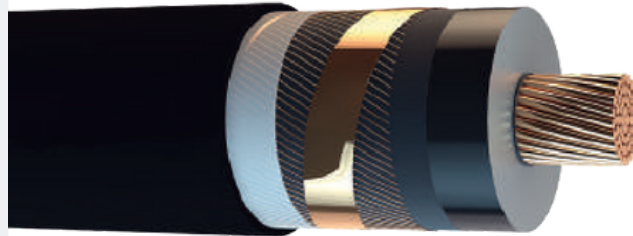
Short circuit temperature Max. : 250 °C

Nominal Cross Section	Insulation Thickness	Insulation Thicknessr	Net weight approx.	Conductor resistance at 20 °C Max.	Operating Inductance Approx.		Operating Capacity Approx.	In Air	
					Flat mH/km	Trefoil mH/km		A	Earth
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	Flat mH/km	Trefoil mH/km	μF/km	A	A
1x35/16	8,0	32	1200	0,524	0,65	0,47	0,12	189	166
1x50/16	8,0	33	1400	0,387	0,63	0,45	0,13	223	195
1x70/16	8,0	35	1650	0,268	0,61	0,42	0,14	272	237
1x95/16	8,0	36	1950	0,193	0,59	0,41	0,16	324	283
1x120/16	8,0	37	2250	0,153	0,58	0,39	0,17	367	321
1x150/25	8,0	40	2650	0,124	0,56	0,38	0,18	411	360
1x185/25	8,0	41	3050	0,0991	0,55	0,37	0,19	464	405
1x240/25	8,0	44	3700	0,0754	0,54	0,35	0,21	536	469
1x300/25	8,0	47	4450	0,0601	0,53	0,34	0,24	605	528
1x400/35	8,0	51	5400	0,0470	0,51	0,33	0,26	688	601



**KARKIN**

**18/30 kV N2XS(F)2Y, XLPE  
Insulated, Copper  
Conductor, Medium Voltage Power  
Cables**



**CONSTRUCTION:**

- 1 Copper Conductor Compacted Class 2
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper tape screen
- 7 Water blocking tape
- 8 PVC outer sheath

Code (N)2XS(F)Y

Standartlar VDE 0276, IEC 60502-2

**APPLICATION:**

This design of cable is used for indoor and outdoor applications. Cable will be installed inside a duct, cable tray, or direct burial where there is no mechanical damage risk.

**Voltage Level:**

Rated Voltage:  $U_0/U=18/30$  kV

**Technical Data:**

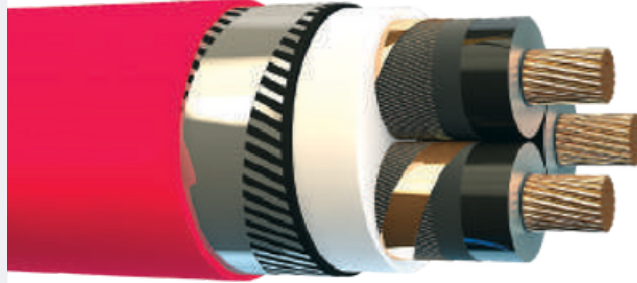
Maximum operation temperature: 90 °C  
Short circuit temperature Max. : 250 °C

Nominal Cross Section	Overall diameter approx	Net weight approx.	Insulation Thickness	Conductor resistance at 20 °C Max.	In Air
					Earth
mm <sup>2</sup>	mm	kg/km	mm	Ω/km	A
3x50/16	61	6350	0,387	0,387	185
3x70/16	66	7400	0,268	0,268	222
3x95/16	70	8600	0,193	0,193	263
3x120/16	74	9750	0,153	0,153	299
3x150/25	78	11500	0,124	0,124	334
3x185/25	82	12500	0,0991	0,0991	376
3x240/25	86	14900	0,0754	0,0754	433



**KARKIN**

**18/30 kV N2XSEYFGbY, XLPE  
Insulated, Copper Conductor,  
Three Core,  
Galvanized Steel Wire and Tape  
Armored, Medium Voltage Power  
Cables**



**CONSTRUCTION:**

- 11 Copper Conductor Compacted Class 2
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper tape screen (\*)
- 7 PVC Filler
- 8 PVC Separation sheath
- 9 Galvanized flat steel wire armoring
- 10 Galvanized steel tape
- 11 PVC outer sheath

(\*) In case the buyer requires, screen will be manufactured with Copper Wire + Tape.

Code (N)2XSEYFGbY

Standartlar VDE 0276, IEC 60502-2

**APPLICATION:**

Dielectric losses are low within these type of cables. This design is used in feeding urban and industrial region network, underground, indoor, outdoor and cable channel applications.

**Voltage Level:**

Rated Coltage:  $U_0/U=18/30$  kV

**Technical Data:**

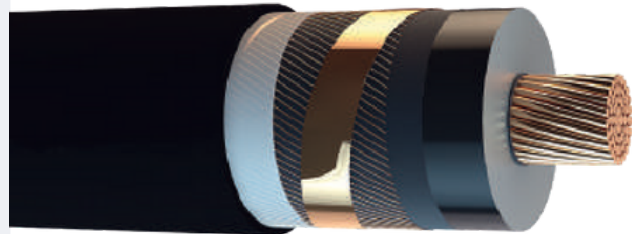
Maximum operation temperature: 90 oC  
Short circuit temperature Max. : 250 oC

Nominal Cross Section	Insulation Thickness	Overall diameter approx.	Net weight approx.	Conductor resistance at 20 oC Max.	Operating Inductance Approx.	Operating Capacity Approx.	In Air
							Earth
mm <sup>2</sup>	mm	mm	kg/km	$\Omega$ /km	mH/km	$\mu$ F/km	A
3x35/16	8,0	72	7350	0,524	0,45	0,12	156
3x50/16	8,0	74	8250	0,387	0,43	0,13	183
3x70/16	8,0	77	9300	0,268	0,41	0,14	223
3x95/16	8,0	81	10600	0,193	0,39	0,15	266
3x120/16	8,0	85	10800	0,153	0,37	0,16	301
3x150/25	8,0	91	12800	0,124	0,36	0,17	336
3x185/25	8,0	93	15000	0,0991	0,35	0,19	379
3x240/25	8,0	98	17500	0,0754	0,33	0,21	436



**KARKIN**

**18/30 kV N2XS(F)2Y, XLPE  
Insulated, Copper Conductor,  
Medium Voltage Power Cables**



**CONSTRUCTION:**

- 11 Copper Conductor Compacted Class 2
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper tape and wire screen
- 7 Water tight tape
- 8 PE sheath

(\* ) In case the buyer requires, screen will be manufactured with Copper Wire + Tape.

Code (N)2XS(F)2Y

Standartlar IEC 60502-2

**APPLICATION:**

This design of cable is used for indoor and outdoor applications. Cable will be installed inside a duct, cable tray, or direct burial where there is no mechanical damage risk.

**Voltage Level:**

Rated Voltage:  $U=18/30$  kV

**Technical Data:**

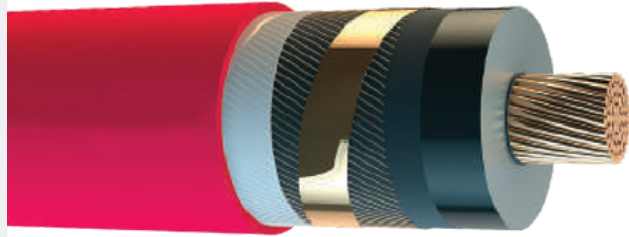
Maximum operation temperature: 90 °C  
Short circuit temperature Max. : 250 °C

Nominal Cross Section	Insulation Thickness	Overall diameter approx	Net weight approx.	Conductor resistance at 20 °C Max.	In Air	
					Earth	
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	A	A
1x50/25	8,0	36	1430	0,387	223	195
1x70/25	8,0	38	1680	0,268	273	238
1x95/25	8,0	40	1970	0,193	326	284
1x120/35	8,0	41	2330	0,153	369	322
1x150/35	8,0	43	2650	0,124	414	362
1x185/35	8,0	45	3030	0,0991	467	408
1x240/45	8,0	47	3600	0,0754	539	472
1x300/35	8,0	49	4220	0,0601	609	532
1x400/35	8,0	52	5220	0,0470	693	605



KARKIN

## 20,3/35 N2XSY, kV XLPE Insulated, Copper Conductor, Medium Voltage Power Cables



### CONSTRUCTION:

- 1 Copper conductor
- 2 Inner semi conductive layer
- 3 XLPE insulation
- 4 Outer semi conductive layer
- 5 Semi conductive tape
- 6 Copper wire screen
- 7 Protecting tape
- 8 PVC outer sheath

Code (N)2XSY

Standartlar IEC 60502-2

### APPLICATION:

This design of cable is used for indoor and outdoor applications. Cable will be installed inside a duct, cable tray, or direct burial where there is no mechanical damage risk.

### Voltage Level:

Rated Voltage:  $U_0/U=20,3/35$  kV

### Technical Data:

Maximum operation temperature: 90 °C

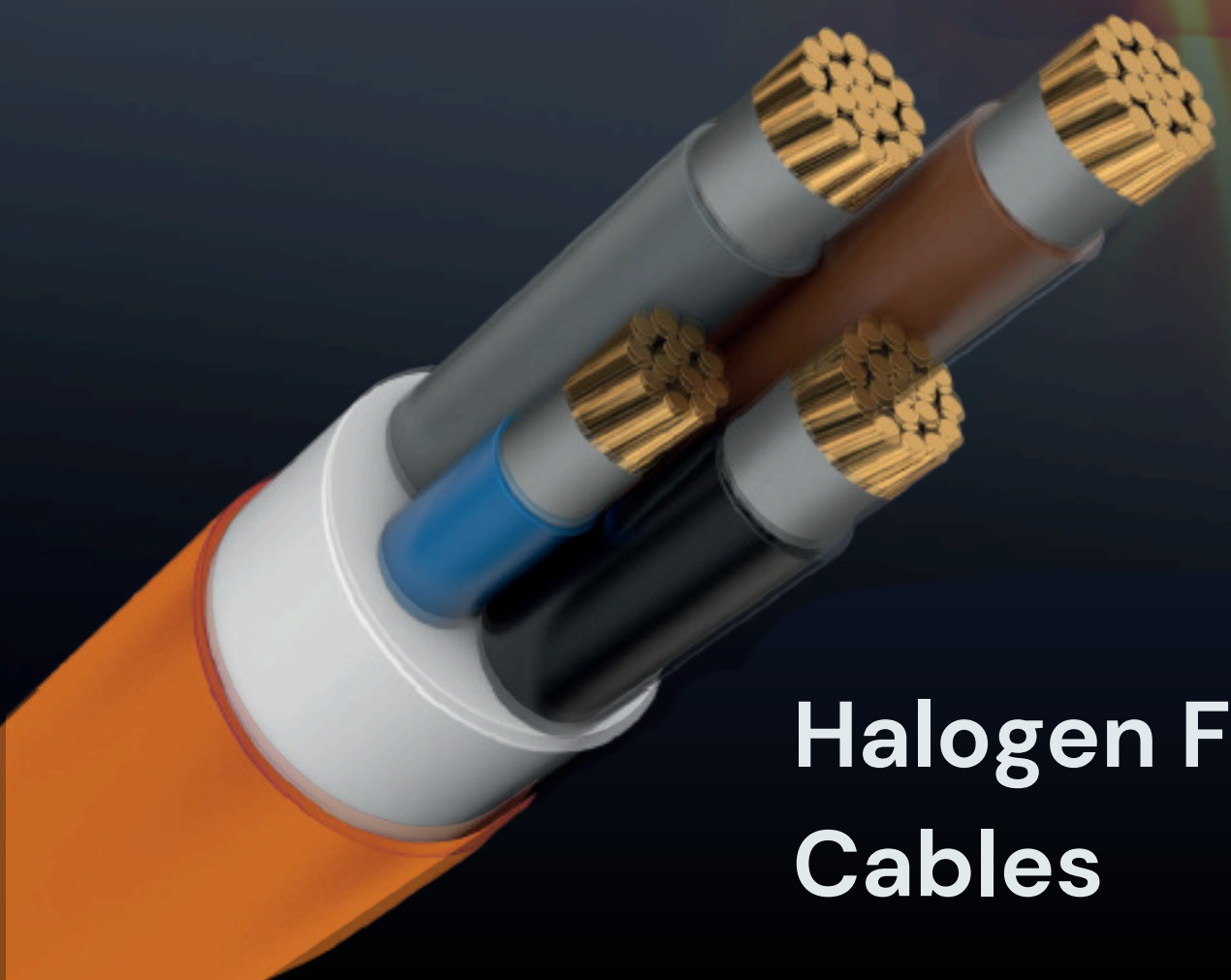
Short circuit temperature Max. : 250 °C

Nominal Cross Section	Insulation Thickness	Insulation Thicknessr	Net weight approx.	Conductor resistance at 20 °C Max.	Operating Inductance Approx.		Operating Capacity Approx.	In Air	
					Flat mH/km	Trefoil mH/km		μF/km	Earth
mm <sup>2</sup>	mm	mm	kg/km	Ω/km	Flat mH/km	Trefoil mH/km	μF/km	A	A
1x35/16	9,0	35	1370	0,524	0,77	0,51	0,11		
1x50/16	9,0	36	1535	0,387	0,75	0,48	0,12	222	195
1x70/16	9,0	38	1800	0,268	0,71	0,46	0,14	270	237
1x95/16	9,0	40	2100	0,193	0,68	0,44	0,15	323	283
1x120/16	9,0	42	2400	0,153	0,66	0,42	0,16	365	321
1x150/25	9,0	43	2810	0,124	0,64	0,40	0,17	410	360
1x185/25	9,0	45	3220	0,0991	0,62	0,39	0,18	462	406
1x240/25	9,0	48	3830	0,0754	0,60	0,37	0,20	534	470
1x300/25	9,0	50	4450	0,0601	0,58	0,36	0,23	603	530
1x400/35	9,0	53	5550	0,0470	0,55	0,35	0,25	687	603
1x500/35	9,0	56	6700	0,0366	0,48	0,32	0,27	780	682



**KARKIN**

مركز عمارة للمعدات الكهربائية والاسلاك والبصريات - تخصص محرم في - عمان - عمان - عمان



**Halogen Free  
Cables**



# KARKIN

مركز عالمي للخدمات الهندسية والبناء والتشييد والتكامل الكهربائي





## 300/500 V NHXMH, MULTI CORE POWER CABLE WITH COPPER CONDUCTOR, XLPE INSULATION AND HFFR JACKET

**TECNICAL DATA:**

These cables are produced according to TSEK VDE 0250.

Maximum operating temperature : 90 °C

Maximum short circuit temperature : 250 °C

Test Standarts:

FR (Flame Retardant) Test: IEC 60332 -1-2 and IEC 60332 -3-24 Cat.C

LS (Low Smoke) Test: IEC 61034 -1/2

HF (Halogen Free) Test: IEC 60754 -1/2

Droplet Test: IEC 60332-1-3

**APPLICATION:**

Schools, hospitals, Information Technology Center,  
meeting rooms, shopping centers and sensitive of fire areas.

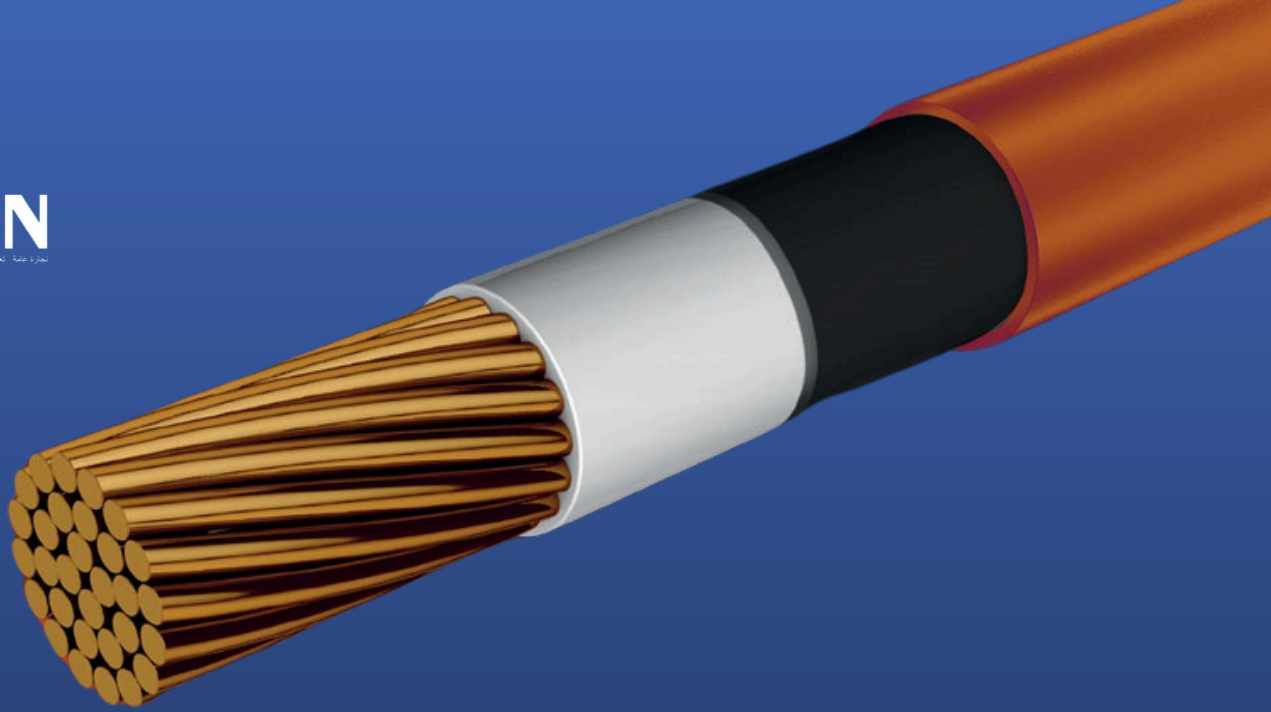
### Electrical and Mechanical Properties – Round / Sector Conductors (N)HXMH-RM/RE

Nominal Cross Section	Insulation Thickness	Insulation Thickness	Net weight approx.	Conductor resistance at 20 °C Max.	Operating Inductance Approx.	Operating Capacity Approx.
	No.* sqmm	mm	kg/km	Ω/km	A	
<b>2 Conductors</b>						
-	2X1,5 RE	9,00	100	12,00	26	1.000
-	2X2,5 RE	10,50	130	7,40	36	1.000
-	2X4 RE	12,00	173	4,63	49	1.000
-	2X6 RE	12,50	230	3,10	60	1.000
-	2X10 RM	16,00	345	1,85	80	1.000
<b>3 Conductors</b>						
-	3x1,5 RE	10,50	120	12,00	26	1.000
-	3x2,5 RE	12,00	145	7,40	36	1.000
-	3x4 RE	13,00	212	4,63	49	1.000
-	3x6 RE	14,50	295	3,10	60	1.000
-	3x10 RM	16,50	470	1,85	80	1.000
<b>4 Conductors</b>						
-	4x1,5 RE	11,50	145	12,00	22	1.000
-	4x2,5 RE	12,50	195	7,40	30	1.000
-	4x4 RE	13,50	286	4,63	39	1.000
-	4x6 RE	15,50	380	3,10	51	1.000
-	4x10 RM	18,50	570	1,85	72	1.000
-	4X16 RM	20,00	900	1,12	95	1.000
-	4X25 RM	25,00	1.250	0,71	128	1.000
-	4X35 RM	27,00	1.600	0,51	155	1.000
<b>5 Conductors</b>						
-	5x1,5 RE	13,00	200	12,00	17	1.000
-	5x2,5 RE	14,00	350	7,40	23	1.000
-	5x4 RE	14,50	420	4,63	29	1.000
-	5x6 RE	16,50	500	3,10	38	1.000
-	5x10 RM	19,00	730	1,85	55	1.000
-	5X16 RM	23,00	730	1,12	71	1.000
-	5X25 RM	27,50	730	0,71	93	1.000



**KARKIN**

مركز عالمي للخدمات الهندسية والكهربائية والكيميائية والبيئية  
KARKIN INT. INC. CO. LTD.

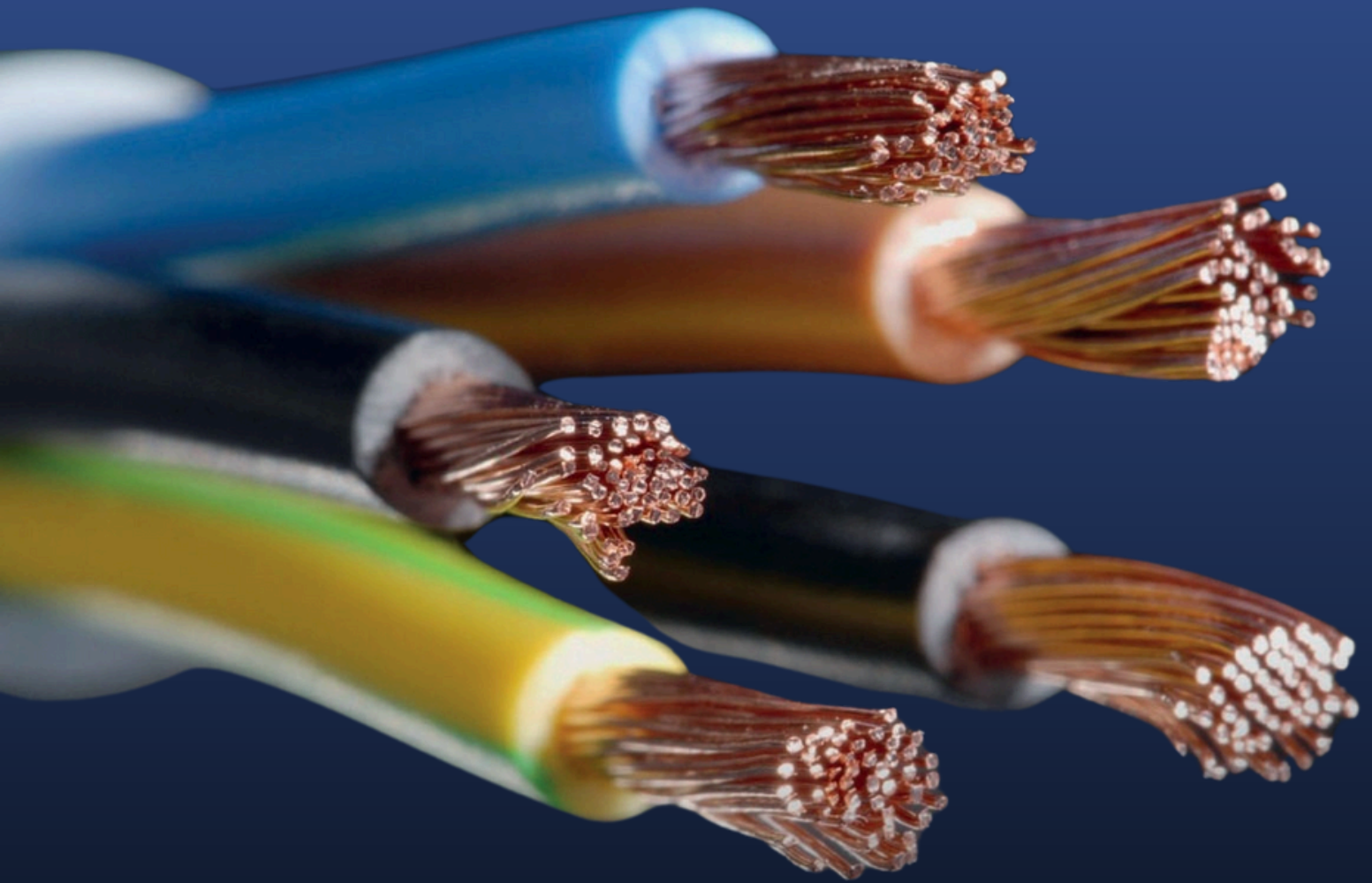


**0,3/0,6 kV**  
**Cables**



**KARKIN**

مركز عالمي للخدمات الهندسية والبناء والتشييد - تخصص في مشاريع البنية التحتية والكهرباء



**0,3/0,6 kV**  
**Cables**



**300/500-450/750 V NYA, SINGLE CORE POWER CABLE WITH COPPER CONDUCTOR, PVC INSULATION AND NO JACKET**



**APPLICATION:**

Used in active devices connections, covered, dry places, in distribution panels, on and under plaster as laid in conduit.

Maximum continuous normal operating temperature: 70 °C

Standard: TS EN 50525-2-31

Cables for rated voltages of 450/750V

**Electrical and Mechanical Properties**

**(N)YA HO5V-R, HO5V-U, HO7V-R, HO7V-U – RE/RM**

SAP Product Number	Nominal area of the conductors	Overall diameter (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity		Delivery Length
					In Air	Under Ground	
	No.* sqmm	mm	kg/km	Ω/km	A	A	m
-	0,5 RE	2,1	8	36	11	-	100
-	0,75 RE	2,2	11	24,5	15	-	100
-	1 RE	2,4	14	18,1	19	11	100
-	1,5 RE	2,8	21	12,1	24	15	100
-	2,5 RE	3,3	32	7,41	32	20	100
-	4 RE	3,8	46	4,61	42	25	100
-	6 RE	4,3	65	3,08	54	33	100
-	10 RE	5,6	108	1,83	73	45	100
-	10 RM	6,0	111	1,83	73	45	1000
-	16 RM	7,0	170	1,15	98	61	1000
-	25 RM	8,5	260	0,727	129	83	1000
-	35 RM	9,5	355	0,524	158	103	1000
-	50 RM	11,0	490	0,387	198	132	1000
-	70 RM	13,0	694	0,268	245	165	1000
-	95 RM	15,0	938	0,193	292	197	1000
-	120 RM	16,5	1172	0,153	344	235	1000
-	150 RM	18,0	1465	0,124	391	-	1000
-	185 RM	20,0	1808	0,0991	448	-	1000
-	240 RM	23,0	2343	0,0754	528	-	1000



**300/500-450/750 V NYAF, SINGLE CORE POWER CABLE WITH COPPER CONDUCTOR, PVC INSULATION AND NO JACKET**



**APPLICATION:**

Used in active devices connections, covered, dry places, in distribution panels, on and under plaster as laid in conduit.  
Maximum continuous normal operating temperature: 70 °C  
Standard: TS EN 50525-2-31 Cables for rated voltages of 450/750V

**Electrical and Mechanical Properties**

**(N)YAF H05V-K, H07V-K**

SAP Product Number	Nominal area of the conductors	Overall diameter (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity		Delivery Length
					In Air	Under Ground	
	No.* sqmm	mm	kg/km	Ω/km	A	A	m
-	0,5	2,0	9	38	11	-	100
-	0,75	2,3	11	26	16	-	100
-	1	2,5	14	19,5	20	11	100
-	1,5	3,0	20	13,3	24	15	100
-	2,5	3,6	32	7,98	32	20	100
-	4	4,2	46	4,95	42	25	100
-	6	4,8	65	3,3	54	33	100
-	10	6,5	115	1,91	73	45	100
-	16	8,0	175	1,21	98	61	1000
-	25	10,0	270	0,78	129	83	1000
-	35	11,0	350	0,554	158	103	1000
-	50	13,5	525	0,386	198	132	1000
-	70	15,0	700	0,272	245	165	1000
-	95	17,5	900	0,206	292	197	1000
-	120	19,5	1200	0,161	344	235	1000
-	150	22,0	1500	0,129	391	-	1000
-	185	24,0	1860	0,106	448	-	1000
-	240	27,5	2400	0,0801	528	-	1000

**KARKIN**

**300/500-450/750 V NYM,  
MULTIPLE CORE POWER CABLE  
WITH COPPER CONDUCTOR, PVC  
INSULATION  
AND PVC JACKET**

**APPLICATION:**

Used in wet and damp places without mechanical stress, in distribution panels,  
on and under plaster as laid in conduit or in fixed plants.  
Maximum continuous normal operating temperature: 70 °C  
Standard: TS EN 50525-2-31 TS HD 21.4 S2  
Cables for rated voltages of 600 V ((Um = 750 V)  
Cables for rated voltages of 450/750V

**Electrical and Mechanical Properties  
(N)YM, NVV – RE/RM**

Nominal Cross Section	Insulation Thickness	Insulation Thicknessr	Net weight approx.	Conductor resistance at 20 oC Max.	Current Carrying Capacity		Delivery Length
					In Air	Under Ground	
	No.* sqmm	mm	kg/km	Ω/km	A	A	m
<b>2 Core</b>							
-	2x1,5 RE	10,1	183	12,1	22	32	1.000
-	2x2,5 RE	10,8	186	7,41	30	42	1.000
-	2x4 RE	12,6	263	4,61	40	54	1.000
-	2x6 RE	13,0	322	3,08	51	68	1.000
-	2x10 RM	15,1	441	1,83	70	90	1.000
-	2x16 RM	16,9	601	1,15	94	116	1.000
-	2x25 RM	21,2	964	0,727	119	150	1.000
-	2x35 RM	22,9	1210	0,524	148	181	1.000
<b>3 Core</b>							
-	3x1,5 RE	10,5	172	12,1	22	32	1.000
-	3x2,5 RE	11,3	215	7,41	30	42	1.000
-	3x4 RE	13,2	306	4,61	40	54	1.000
-	3x6 RE	14,3	386	3,08	51	68	1.000
-	3x10 RM	16,0	539	1,83	70	90	1.000
-	3x16 RM	18,0	750	1,15	94	116	1.000
-	3x25 RM	22,1	1175	0,727	119	150	1.000
-	3x35 RM	24,4	1530	0,524	148	181	1.000
<b>4 Core</b>							
-	4x1,5 RE	11,2	199	12,1	22	32	1.000
-	4x2,5 RE	12,2	254	7,41	30	42	1.000
-	4x4 RE	14,3	364	4,61	40	54	1.000
-	4x6 RE	15,4	461	3,08	51	68	1.000
-	4x10 RM	18,7	716	1,83	70	90	1.000
-	4x16 RM	20,5	965	1,15	94	116	1.000
-	4x25 RM	24,1	1455	0,727	119	150	1.000
-	4x35 RM	27,1	1904	0,524	148	181	1.000



**KARKIN**

**300/300-300/500 V NYMH,  
MULTIPLE CORE POWER CABLE  
WITH COPPER CONDUCTOR, PVC  
INSULATION  
AND PVC JACKET**



**APPLICATION:**

Used in covered, dry places with little mechanical enforcement,  
in distribution panels,  
on and under plaster as laid in conduit or in fixed plants.  
Maximum continuous normal operating temperature: 70 °C  
Standard: TS EN 50525-2-31 TS EN 50525-2-11  
Cables for rated voltages of 600 V ((Um = 750 V)

**Electrical and Mechanical Properties**

**(N)YMH,(N)YMHY H03VV-F, H05VV-F**

Nominal Cross Section	Nominal area of the conductors	Overall diameter of Bundled (approx.)	Cable Unit Weight (approx.)	DC resistance @ 20°C	Current Carrying Capacity	Delivery Length
	No.* sqmm	mm	kg/km	Ω/km	A	m
<b>2 Core</b>						
-	2x0,5	5,5	48	39	8	1.000
-	2x0,75	6,2	55	26	13	1.000
-	2x41	6,6	80	19,5	16	1.000
-	2x1,5	7,6	105	13,3	20	1.000
-	2x2,5	9,8	160	7,98	27	1.000
-	2x4	11	210	4,95	34	1.000
<b>3 Core</b>						
-	3x0,5	5,4	55	39	8	1.000
-	3x0,75	6,5	65	26	13	1.000
-	3x41	7,2	80	19,5	16	1.000
-	3x1,5	8,5	110	13,3	20	1.000
-	3x2,5	10	165	7,98	27	1.000
-	3x4	11,4	230	4,95	34	1.000
<b>4 Core</b>						
-	4x0,5	6,4	65	39	8	1.000
-	4x0,75	7,1	75	26	13	1.000
-	4x41	7,8	95	19,5	16	1.000
-	4x1,5	9,5	140	13,3	20	1.000
-	4x2,5	11	200	7,98	27	1.000
-	4x4	12,5	290	4,95	34	1.000
<b>5 Core</b>						
-	5x0,75	8	100	26	13	1.000
-	5x41	8,5	115	19,5	16	1.000
-	5x1,5	10,5	170	13,3	20	1.000
-	5x2,5	12,5	260	7,98	27	1.000
-	5x4	14,5	370	4,95	34	1.000

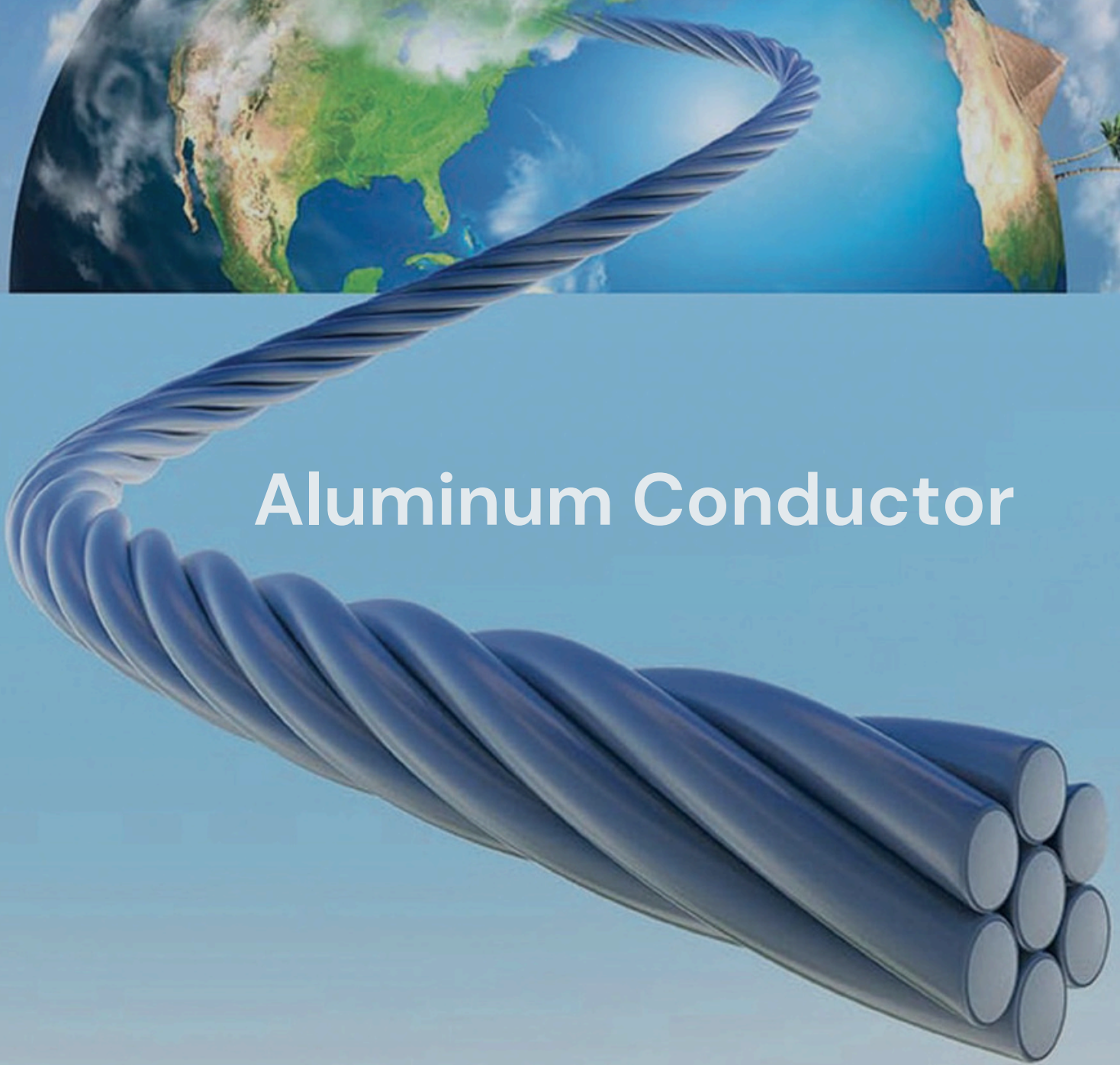


**KARKIN**

ALUMINUM CONDUCTOR CABLES



# Aluminum Conductor





# AAC



## All Aluminium Conductor Technical Specifications

Related Standart : TS EN 50182 (TS IEC 61089)

### GENERAL INFORMATION:

AAC conductors are composed of several wires stranded over each layer. All wires have same outer diameter. Most common AAC conductors are composed of 7, 19, 37 and 61 wires. AAC conductors that are used for insulated cables as compacted will be composed of various number of wires.

### APPLICATION:

- \*Substation
- \*Electricity Distribution Lines
- \*Insulated Cables as Cable core

CODE NUMBER	CODE NUMBER		CROSS SECTIONAL AREA		NUMBER and DIAMETER of WIRES		OVERALL DIAMETER	RATED BREAKING STRENGTH	D.C. RESISTANCE	UNIT WEIGHT	CURRENT CARRYING CAPACITY
	CODE	SECTION	TOTAL CONDUCTOR	COPPER EQUIVELANT	NUMBER	DIAMETER					
21	ROSE	4	21,1	13,3	7	2,0	5,9	416	1,356	58	104
27	LILY	3	26,6	16,7	7	2,2	6,6	514	1,078	73	124
34	IRIS	2	33,5	21,1	7	2,5	7,4	637	0,854	92	136
42	PANS	1	42,5	26,7	7	2,8	8,3	777	0,674	117	157
53	POPY	1\0	53,5	33,6	7	3,1	9,4	941	0,535	147	180
67	ASTER	2\0	67,1	42,2	7	3,5	10,5	1185	0,425	184	207
85	PHLOX	3\0	84,9	53,4	7	3,9	11,6	1435	0,337	233	237
107	OXLIP	4\0	107,4	67,5	7	4,4	13,3	1814	0,266	294	273
126	VALERIAN	250000	126,4	79,5	19	2,9	14,6	2261	0,228	348	305
135	DAISY	266800	135,3	85,1	19	3,0	15,1	2421	0,213	372	313
152	PEONY	300000	151,3	95,5	19	3,2	16,0	2671	0,190	418	340



# AAC



## All Aluminium Conductor Technical Specifications

Related Standart : DIN 48201 (old code) EN 50182 (new code)

Code	New Code	SECTION	Composition		Diameter	Rated Strenght	Electrical Resistance	Cable Weight	Current Carrying Capacity I(A)
			N°	Ømm					
16	16-AL1	15,89	7	1,70	5,1	2,84	1,802	43,4	110
25	24-AL1	24,25	7	2,10	6,3	4,17	1,181	66,3	145
35	34-AL1	34,46	7	2,50	7,5	5,74	0,833	93,9	180
50	49-AL1	49,48	7	3,00	9,0	7,95	0,579	135,2	225
50	48-AL1	48,36	19	1,80	9,0	8,44	0,595	132,9	225
70	66-AL1	65,82	19	2,10	10,5	11,25	0,437	180,9	270
95	93-AL1	93,27	19	2,50	12,5	15,65	1,309	256,3	340
120	117-AL1	117	19	2,80	14,0	18,75	0,246	321,5	390
150	147-AL1	147,1	37	2,25	15,7	25,25	0,196	405,7	455
185	182-AL1	181,6	37	2,50	17,5	30,45	0,159	500,9	520
240	243-AL1	242,5	61	2,25	20,2	39,35	0,119	871,1	625
300	299-AL1	299,4	61	2,50	22,5	47,55	0,097	828,5	710
400	400-AL1	400,1	61	2,89	26,0	60,70	0,072	1107,1	855
500	500-AL1	499,8	61	3,23	29,1	74,50	0,058	1382,9	990
625	626-AL1	626,3	91	2,96	32,6	95,00	0,046	1379,7	1140
800	802-AL1	802,1	91	3,35	36,8	118,20	0,036	2228,3	1340
1000	1000-AL1	999,7	91	3,74	41,1	145,50	0,029	2777,3	1540



**Case 1**

Steel core only greased

**Case 2**

All the conductor is greased except the outer layer

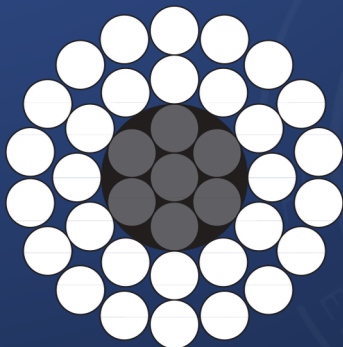
**Case 3**

All the conductor is greased including the outer layer

**Case 4**

All the conductor is greased except the outer surface of the outer layer

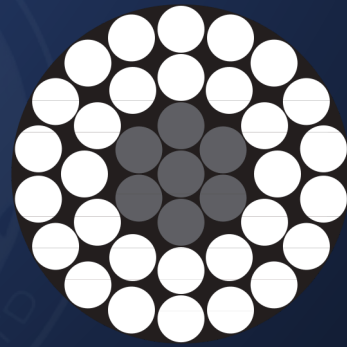
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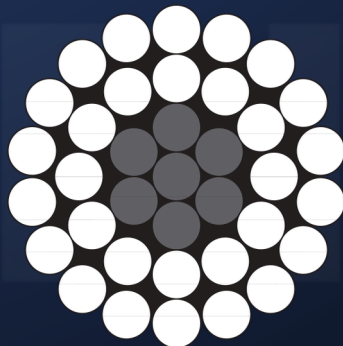
Case 2 :



Case 3 :



Case 4 :





## Aluminum Wires

Number Of Wires	Number Of Wires	Number Of Wires	Number Of Wires	Number Of Wires	Number Of Wires
2,00	± 0,03 mm	3,14	187	9,00	8,48
2,50	± 0,03 mm	4,90	181	5,80	13,24
2,65	± 0,03 mm	5,51	179	5,10	14,89
3,00	± 0,03 mm	7,06	176	4,00	19,08
3,25	± % 1	8,29	173	3,40	22,40
3,50	± % 1	9,61	171	2,90	25,97
3,75	± % 1	11,03	170	2,60	29,81
4,00	± % 1	12,56	168	2,30	33,94
4,50	± % 1	15,89	165	1,80	42,95

- Alüminyum teller 2,00 – 4,50 mm arasında isteğe göre her çapta üretilir.
- Alüminyum tellerin 200C'deki öz direnci 0,028264  $\Omega$  mm<sup>2</sup>/m
- Alüminyum tellerin yoğunluğu 2,703 g/cm<sup>3</sup>
- İletkenlik 61.0 IACS Min.

### Packaging Types





# Aluminum Wires Rods



**Material :** Continuous Casting FC Grade Aluminium Wire Rod.

## Technical Specifications :

**Guaranteed chemical composition : EN AW 1370 (EAL 99,7)**

Al%	IMPURITIES, % MAX										OTHER IMPURITIES, %	
	Fe	Si	Cu	Zn	Ti	V	Mn	Cr	Mg	B	Each	Total
Min 99,7	0,20	0,10	0,02	0,04	0,006	0,003	0,01	0,01	0,02	0,005	0,005	0,01

## Dimensions, linear mass:

The primary, Aluminium Wire will be delivered in following diameter and unit weight range

Nominal diameter, [mm]	Deviation range (mm)	Linear mass [kg/m]
9,5	± 0,5	0,191
12,0	± 0,5	0,305

The linear mass is calculated for the density of 2,7 kg/dm<sup>3</sup>.

The cross-section of the wire rod is similar to a circle section, with three flattened sides. Wire ovality (the difference between the large and small dimensions of a section) will not exceed the value of the deviation range in table no.2

## TMechanical and electric characteristics:

Alloy denomination	Metallurgical delivery state	Mechanical characteristics			Electric characteristics	
		R <sub>p</sub> Mpa		Usual Elongation A <sub>100</sub> %	R temperature : 20°C	
		Min	Max			Resistivity μcm max.
EN AW 1370 (EAL 99,7)	H 16	120	140	10	2,801	61,55
	H 14	115	130	14	2,801	61,55
	H13	105	120	16	2,801	61,55
	H 12	95	110	20	2,801	61,55
	H 11	80	95	25	2,785	61,90



# Aluminum Wires Rods

## Material :

Continuous Casting 6101 T4 Almetec Grade Aluminium Wire Rod.

## Technical Specifications :

Guaranteed chemical composition : EN 1715

Chemical Compositing of Alloying Elements, % According to EN 573-3							OTHER IMPURITIES, %	
Si	Fe	Cu	Mn	Mg	Zn	B	Each	Total
0,30	0,10	0,05	0,05	0,35	0,01	0,003	0,03	0,1
0,60	0,30			0,60				

## Dimensions, linear mass :

The 6101 Alloy Aluminium Wire will be delivered in following diameter and unit weight range

Nominal diameter, [mm]	Deviation range (mm)	Linear mass [kg/m]
9,5	± 0,5	0,191
12,0	± 0,5	0,305

The linear mass is calculated for the density of 2,7 kg/dm<sup>3</sup>.

The cross-section of the wire rod is similar to a circle section, with three flattened sides. Wire ovality (the difference between the large and small dimensions of a section) will not exceed the value of the deviation range in table no.2

## Mechanical and electric characteristics:

Alloy denomination	Metallurgical delivery state	Mechanical characteristics		Electric characteristics temperature : 20°C	
		Tensile Strength Mpa Min	Usual Elongation $A_{100}$ %	Resistivity $\mu\text{cm}$ max	Conductivity %IACS max.
6101 T4	AlmgSi	150	20	3,45	51,29

## Material :

Continuous Casting 6201 T4 Alloy Grade Aluminium Wire Rod.

## Technical Specifications :

Guaranteed chemical composition : EN 1715

Chemical Compositing of Alloying Elements, % According to EN 573-3							OTHER IMPURITIES, %	
Si	Fe	Cu	Mn	Mg	Zn	B	Each	Total
0,50	0,5	0,1	0,03	0,60	0,03	0,01	0,03	0,1
0,90				0,90				

## Dimensions, linear mass :

The 6201 Alloy Aluminium Wire will be delivered in following diameter and unit weight range

Nominal diameter, [mm]	Deviation range (mm)	Linear mass [kg/m]
9,5	± 0,5	0,191
12,0	± 0,5	0,305

The linear mass is calculated for the density of 2,7 kg/dm<sup>3</sup>.

The cross-section of the wire rod is similar to a circle section, with three flattened sides. Wire ovality (the difference between the large and small dimensions of a section) will not exceed the value of the deviation range in table no.2

## Mechanical and electric characteristics:

Alloy denomination	Metallurgical delivery state	Mechanical characteristics		Electric characteristics temperature : 20°C	
		Tensile Strength Mpa Min	Usual Elongation $A_{100}$ %	Resistivity $\mu\text{cm}$ max	Conductivity %IACS max.
6201 T81	Almg0,7Si	160	21	3,55	49,74



**KARKIN**  
شركة كركين كابلات  
KARKIN CABLES

Dünyanın enerjisini iletiyoruz...

*we are transmitting world's energy...*



**0,3/0,6 kV**

**Cables**



# ACSR

TS EN 50182 (TS IEC 61089)

## Aluminium Conductors Steel Reinforced Technical Specifications



### ACSR Aluminum Conductors Steel reinforced GENERAL INFORMATION:

ACSR conductors are composed of several aluminum and steel wires. Steel wires are always central and aluminum wires stranded over steel wire strands. Steel wires are galvanized (zinc coated) and mostly composed of 1, 7, 19 or 37 wires. Wire outer diameters of steel and aluminum will be same or different but all steel wires have same diameter as well aluminum wires have same diameter. Function of galvanized steel wires is suspension of conductor on the line.

### APPLICATION:

- \*Substation
- \*Electricity Distribution Lines
- \*Electricity Transmission Lines

Code Number	Canadian Standard		Section				Dia and no of Wires				Overall Diameter		Rated Strength KG	D.C. Resistance 20 °C Ohm/km	Unit Weight			Total Weight	
							Aluminium		Steel						Al kg/Km	Steel Kg/Km	Total Kg/Km	Al %	Steel %
	Type	Section	Al mm <sup>2</sup>	Steel mm <sup>2</sup>	Total mm <sup>2</sup>	Copper Equivalent mm <sup>2</sup>	No Of Wires	Wire Diameter mm	No Of Wires	Wire Diameter mm	Steel Core mm	Total Conductor mm							
17\3	Tuhrus	5	16,83	2,8	19,63	10,6	6	1,89	1	1,89	1,89	5,67	655	1,075	46	22	68	67,9	32,1
21\4	Swan	4	21,18	3,53	24,71	13,3	6	2,12	1	2,12	2,12	6,36	831	1,355	58	28	86	67,9	32,1
27\4	Swallow	3	26,69	4,45	31,14	16,8	6	2,38	1	2,38	2,38	7,14	1023	1,074	73	35	108	67,9	32,1
34\6	Sparrow	2	33,59	5,6	39,19	21,1	6	2,67	1	2,67	2,67	8,01	1264	0,854	92	44	136	67,9	32,1
42\7	Robin	1	42,41	7,07	49,48	26,7	6	3,00	1	3,00	3,00	9,00	1579	0,677	116	55	171	67,9	32,1
54\9	Rawen	1\0	53,52	8,92	62,44	33,7	6	3,37	1	3,37	3,37	10,11	1945	0,536	147	69	216	67,9	32,1
67\11	Quail	2\0	67,33	11,22	78,55	43,3	6	3,78	1	3,78	3,78	11,34	2420	0,426	185	87	272	67,9	32,1
85\14	Pigeon	3\0	85,12	14,18	99,3	53,5	6	4,25	1	4,25	4,25	12,75	3035	0,337	234	110	344	67,9	32,1
135\7	Waxwing	266800	134,98	7,5	142,48	84,9	18	3,09	1	3,09	3,09	15,45	3220	0,213	372	58	430	86,4	13,6
135\22	Partridge	266800	134,87	21,99	156,86	84,8	26	2,57	7	2,57	6,00	16,28	5099	0,214	372	172	544	68,5	31,5
152\8	Pheobe	300000	152,09	8,45	160,54	95,6	18	3,28	1	3,28	3,28	16,40	3628	0,190	419	66	485	86,4	13,6
152\25	Ostrich	300000	152,19	24,71	174,9	65,7Q	26	2,73	7	2,12	6,36	17,28	5736	0,190	420	193	613	68,5	31,5
242\39	Hawk	477000	241,65	39,19	280,84	152	26	3,44	7	2,67	8,01	21,77	8798	0,120	667	306	973	68,5	31,5
403\65	Drake	795000	402,56	65,44	468	253,2	26	4,44	7	3,45	10,35	28,11	14165	0,072	1111	511	1622	68,5	31,5
485\63	Cardinal	954000	484,53	62,81	547,34	304,7	54	3,38	7	3,38	10,14	30,42	15589	0,060	1340	4901	1830	73,2	26,8
654\82	Pheasant	127200	654,08	81,71	726,79	405,7	54	3,90	19	2,34	11,70	35,10	20383	0,045	1794	640	2434	73,6	26,4



KARKIN



# ACSR

EN 50182 ( DIN 48204 )

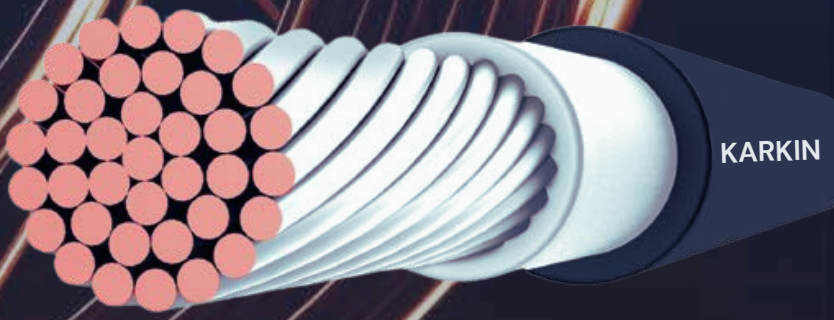
## Aluminium Conductors Steel Reinforced Technical Specifications

Code	New Code	Crossectinal Area			No Of Wires		Wire Diameter		Diameter		Mass per unit lenght kg/km	Rated Strength kN	DC resistance Ω/km	Final modulus of elasticity N/mm2	Coefficient of linear expansion 1/K	Current Carrying Capacity A
		Al	Steel	Total	Al	Steel	Al	Steel	Core	Cond.						
		mm2	mm2	mm2												
16/2,5	15-AL1/3-ST1 A	15,3	2,5	17,8	6	1	1,8	1,8	1,8	5,4	62	5,80	1,876	81,000	0,0000192	105
25/4	24-AL1/4-ST1 A	23,9	4,0	27,8	6	1	2,3	2,3	2,3	6,8	96	8,95	1,201	81,000	0,0000192	140
35/6	34-AL1/6-ST1 A	34,4	5,7	40,1	6	1	2,7	2,7	2,7	8,1	139	12,37	0,834	81,000	0,0000192	170
44/32	44-AL1/32-ST1 A	44,0	31,7	75,6	14	7	2,0	2,4	2,4	11,2	369	44,24	0,657	110,000	0,000015	-
50/8	48-AL1/8-ST1 A	48,3	8,0	56,3	6	1	3,2	3,2	3,2	9,6	195	16,81	0,593	81,000	0,0000192	210
50/30	51-AL1/30-ST1 A	51,2	29,8	81,0	12	7	2,3	2,3	7,0	11,7	375	42,98	0,564	107,000	0,0000153	-
70/12	70-AL1/11-ST1 A	69,9	11,4	81,3	26	7	1,9	1,4	4,3	11,7	282	26,27	0,413	77,000	0,0000189	290
95/15	94-AL1/15-ST1 A	94,4	15,3	109,7	26	7	2,2	1,7	5,0	13,6	381	34,93	0,306	77,000	0,0000189	350
95/55	97-AL1/56-ST1 A	96,5	56,3	152,8	12	7	3,2	3,2	9,6	16,0	707	77,85	0,299	107,000	0,0000153	-
105/75	106-AL1/76-ST1 A	105,7	75,5	181,2	14	7	3,1	2,3	11,3	17,5	885	105,82	0,274	10,0000	0,000015	-
120/20	122-AL1/20-ST1 A	121,6	19,8	141,4	26	7	2,4	1,9	5,7	15,5	491	44,50	0,237	77,000	0,0000189	410
120/70	122-AL1/71-ST1 A	122,1	71,3	193,4	12	7	3,6	3,6	10,8	18,0	895	97,92	0,236	107,000	0,0000153	-
125/30	128-AL1/30-ST1 A	127,9	29,8	157,8	30	7	2,3	2,3	7,0	16,3	587	56,41	0,226	82,000	0,0000178	425
150/25	149-AL1/24-ST1 A	148,9	24,2	173,1	26	7	2,7	2,1	6,3	17,1	601	53,67	0,194	77,000	0,0000189	470
170/40	172-AL1/40-ST1 A	171,8	40,1	211,8	30	7	2,7	2,7	8,1	18,9	788	74,89	0,168	82,000	0,0000178	520
185/30	184-AL1/30-ST1 A	183,8	29,8	213,6	26	7	3,0	2,3	7,0	19,0	788	65,27	0,157	77,000	0,0000189	535
210/35	209-AL1/34-ST1 A	209,1	34,1	243,2	26	7	3,2	2,5	7,5	20,3	844	73,36	0,138	77,000	0,0000189	590
210/50	212-AL1/49-ST1 A	212,1	49,5	261,5	30	7	3,0	3,0	9,0	21,0	973	92,46	0,136	82,000	0,0000178	610
230/30	231-AL1/30-ST1 A	130,9	29,8	260,8	24	7	3,5	2,3	7,0	21,0	871	72,13	0,125	74,000	0,0000196	630
240/40	243-AL1/39-ST1 A	243,1	39,5	282,5	26	7	3,5	2,7	8,0	21,8	980	85,12	0,118	77,000	0,0000189	645
265/35	264-AL1/34-ST1 A	263,7	34,1	297,7	24	7	3,7	2,5	7,5	22,4	994	81,04	0,109	74,000	0,0000196	680
300/50	304-AL1/49-ST1 A	304,3	49,5	353,7	26	7	3,9	3,0	9,0	24,4	1227	105,09	0,094	77,000	0,0000189	740
305/40	305-AL1/39-ST1 A	304,6	39,5	344,1	54	7	2,7	2,7	8,0	24,1	1151	96,80	0,094	70,000	0,0000193	740
340/30	339-AL1/30-ST1 A	339,3	29,8	369,1	48	7	3,0	2,3	7,0	25,0	1171	91,71	0,085	62,000	0,0000205	790
380/50	382-AL1/49-ST1 A	381,7	49,5	431,2	54	7	3,0	3,0	9,0	27,0	1443	121,30	0,075	70,000	0,0000193	840
385/35	386-AL1/34-ST1 A	386,0	34,1	420,1	48	7	3,2	2,5	7,5	26,7	1334	102,56	0,074	62,000	0,0000205	840
435/55	434-AL1/56-ST1 A	434,3	56,3	490,6	54	7	3,2	3,2	9,6	28,0	1641	133,59	0,066	70,000	0,0000193	900
450/40	449-AL1/39-ST1 A	434,3	39,5	488,2	48	7	3,5	2,7	8,0	28,7	1549	119,05	0,064	62,000	0,0000205	920
490/65	490-AL1/64-ST1 A	490,3	63,6	553,8	54	7	3,4	3,4	10,2	30,6	1853	150,81	0,059	70,000	0,0000193	960
495/35	494-AL1/34-ST1 A	494,4	34,1	528,4	48	7	3,7	2,5	7,5	29,9	1633	117,96	0,058	61,000	0,0000205	985
510/45	511-AL1/45-ST1 A	515,0	45,3	558,8	54	7	3,7	2,9	8,6	30,7	1765	133,31	0,056	62,000	0,0000205	995
550/70	550-AL1/71-ST1 A	549,7	71,3	620,9	54	7	3,6	3,6	10,8	32,4	2077	166,32	0,052	70,000	0,0000193	1020
560/50	562-AL1/49-ST1 A	561,7	49,5	611,2	48	7	3,9	3,0	9,0	32,2	1940	146,28	0,051	62,000	0,0000205	1040
570/40	571-AL1/39-ST1 A	571,2	39,5	610,6	45	7	4,0	2,7	8,0	32,2	1887	136,40	0,050	61,000	0,0000205	1050
650/45	653-AL1/45-ST1 A	653,5	45,3	698,8	45	7	4,3	2,9	8,6	34,4	2160	156,18	0,044	61,000	0,0000205	1120
680/85	679-AL1/86-ST1 A	678,6	86,0	764,5	54	19	4,0	2,4	12,0	36,0	2550	206,56	0,042	68,000	0,0000194	1150
1045/45	1046-AL1/45-ST1 A	1045,6	45,3	1090,9	72	7	4,3	2,9	8,6	43,0	3248	218,92	0,027	60,000	0,0000217	1580



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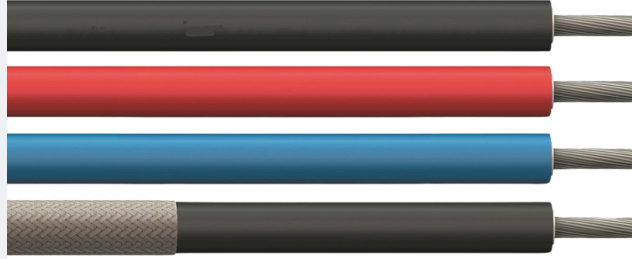
مركز عمارة الاعداد المتكامل والمستمر - مجمع صناعي - شارع الخليل - الرياض

**SOLAR Cables**



**KARKIN**

**SOLAR CABLES (PV) H1Z2Z2-K  
1/1kV AC (1,5/1,5kV DC) Flexible  
HFFR Insulation**



**CONSTRUCTION:**

- 1 Electrolytic tin coated copper conductor–Class 5
- 2 HFFR outer sheath

Code H1Z2Z2-K

Standartlar EN 50618

**APPLICATION:**

This design of cable is used for indoor and outdoor applications. Cable will be installed inside a duct, cable tray, or direct burial where there is no mechanical damage risk.

**Voltage Level:**

**Rated Voltage: 1/1kV AC (1,5/1,5kV DC)**

**Technical Data:**

Maximum operation temperature: 90 °C  
Short circuit temperature Max. : 250 °C

Nominal Cross Section	Conductor diameter max	Outer diameter min	Outer diameter max.	Bending radius fixed min.	Net weight approx.	Conductor resistance at 20 °C Max.	Current carrying capacity for single cable free in air (60°C ambient temp.)	Current carrying capacity for single cable on a surface (60°C ambient temp.)	Short Circuit Current (Is. from 90°C to 250°C)
mm <sup>2</sup>	mm	mm	mm	mm	kg/km	Ω/km	A	A	KA
1x1,5	1,6	4,4	5	15	30	13,7	30	29	0,21
1x2,5	1,9	4,8	5,4	17	41	8,21	41	39	0,36
1x4	2,4	5,3	5,9	18	55	5,09	55	52	0,57
1x6	2,9	5,8	6,4	20	70	3,39	70	67	0,86
1x10	4	7	7,6	23	98	1,95	98	93	1,43
1x16	5,6	9	9,8	30	132	1,24	132	125	2,29
1x25	6,4	10,3	11,2	34	176	0,795	176	167	3,58
1x35	7,5	11,7	12,5	50	218	0,565	218	207	5,01
1x50	9	13,5	14,5	58	276	0,393	276	262	7,15
1x70	10,8	15,5	16,5	66	347	0,277	347	330	10,01
1x95	12,6	17,7	18,7	75	416	0,21	416	395	13,59
1x120	14,2	19,2	20,4	82	488	0,164	488	464	17,16
1x150	15,8	21,4	22,6	91	566	0,132	566	538	21,45
1x185	17,4	23,7	25,1	101	644	0,108	644	612	26,46
1x240	20,4	27,1	28,5	114	775	0,082	775	736	34,32



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# COMPREHENSIVE SERVICES

**We are committed to delivering exceptional quality and efficiency, ensuring the success of our partners through:**

- Customs clearance and international shipping
- Transportation insurance and warehousing
- Financial and insurance services
- Architectural and construction services
- Market research and trade consultancy

At Karkin, we uphold the highest standards of transparency, confidentiality, and integrity, building long-term relationships based on trust, reliability, and excellence.

Partner with us to unlock new business opportunities and achieve sustainable success.

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# EFFORTLESS IMPORTING FROM TURKEY

At Karkin, we simplify the import process, allowing you to source high-quality products from Turkey without the need for travel. Our expert team manages every step with precision and efficiency. Simply provide us with:

- Product specifications, samples, or catalogs
- Your quality standards and pricing expectations
- We conduct extensive market research, leveraging our network of over 300 trusted manufacturers to find the best options tailored to your needs. Before shipment, we provide detailed reports, supplier evaluations, and competitive price comparisons, ensuring maximum value and quality assurance.

With Karkin's expertise in logistics, customs clearance, and secure transportation, we guarantee a seamless, cost-effective, and reliable importing experience—helping you expand your business with confidence.



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## LEADING LARGE-SCALE PROJECTS

We take pride in our extensive expertise in infrastructure development, successfully delivering strategic, high-impact projects, including:

- Comprehensive citywide lighting in Maraa
- Construction of a critical water pipeline in Basida
- Development and operation of a state-of-the-art water station in Sarmada

These projects demonstrate our commitment to innovation, sustainability, and progress, providing world-class consultancy and infrastructure solutions that drive lasting impact.



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