



# Koppeltron

## Power cable NAYY-J/-O



**Application:** For fixed installation indoors, outdoors, in the ground, in water and in concrete.

### Construction and technical data:

<b>CPR-classification according to EN 50575:</b>	Eca
<b>Standard:</b>	VDE 0276-603
<b>Conductor material:</b>	aluminium
<b>Insulation:</b>	PVC DIV 4
<b>Sheathing material:</b>	PVC DMV5
<b>Colour of outer sheath:</b>	black
<b>Flame-retardant:</b>	VDE 0482-332-1-2/IEC 60332-1-2
<b>UV-resistant:</b>	yes
<b>For outdoor use:</b>	yes
<b>Max. temperature at conductor, °C:</b>	70 °C
<b>Permitted outer cable temperature, fixed, °C:</b>	70 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-5 - +70 °C
<b>Meter mark:</b>	yes



*The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.*

**NAYY-J**

**Nominal voltage U<sub>o</sub>:** 0.6 kV

**Nominal voltage U:** 1 kV

**Maximum permitted operating voltage in** 1.2 kV

**three-phase systems:**

**Nominal voltage DC (core-earth/core-core):** 1,8/1,8 kV

**Test voltage:** 4 kV

**Protective conductor:** yes

**Core identification:** colours acc. to VDE 0293 (HD308)

part no.	part name		RI [Ohm/km]	Wi [mm]	Ibl [A]	Ibe [A]	Ik [kA]	Lb [mH/km]	Wm [mm]	Rbv [mm]	Ø [mm]	Fzv [N]	Al	G [kg]
090215	1X16	RE	1.91	1			1.21		1.8	158	10.5	480	46.4	145
090216	1X25	RE	1.2	1.2	87	106	1.9		1.8	180	12	750	72.5	195
090217	1X35	RE	0.869	1.2	107	127	2.66	0.333	1.8	203	13.5	1050	101.5	255
090218	1X50	RMv	0.641	1.4	131	151	3.8	0.325	1.8	231	15.4	1500	145	298
090219	1X70	RMv	0.443	1.4	166	185	5.32	0.309	1.8	255	17	2100	203	383
090220	1X95	RMv	0.32	1.6	205	222	7.22	0.302	1.8	285	19	2850	275	490
090221	1X120	RMv	0.253	1.6	239	253	9.12	0.294	1.8	300	20	3600	348	575
090222	1X150	RMv	0.206	1.8	273	284	11.4	0.29	1.8	330	22	4500	435	695
090223	1X185	RMv	0.164	2	317	322	14.1	0.287	1.8	375	25	5550	536	845
090205	1X240	RMv	0.125	2.2	378	375	18.2	0.281	1.8	420	28	7200	696	1100
090224	1X300	RMv	0.1	2.4	437	425	22.8	0.279	1.9	450	30	9000	870	1379
090225	1X400	RMv	0.0778	2.6	513	487	27.2	0.275	2	510	34	12000	1160	1615
090226	1X500	RMv	0.0605	2.8	600	558	34	0.272	2.1	555	37	15000	1450	2015
090227	1X630	RMv	0.0469	2.8	701	635	42.8	0.271	2.2	645	43	18900	1827	2472
090228	1X800	RMv	0.0367	3	1080	1166	54.4		2.4	675	45	24000	2320	3120
090111	4X6	RE		1	25	35	0.56		1.8	204	17	720	70	377
090278	4X10	RE	3.08	1	34	47	0.94		1.8	285	19	1200	116	470
090197	4X16	RE	1.9	1.2	50	63	1.21	0.285	1.8	288	24	1920	186	750
090193	4X25	RE	1.2	1.2	82	102	1.9	0.28	1.8	300	25	3000	290	950
090093	4X25	RM	1.2	1.2	82	102	1.9	0.28	1.8	300	25	3000	290	950
090194	4X35	RE	0.869	1.2	100	123	2.66	0.271	1.8	354	28.1	4200	406	1120
090001	4X50	SE	0.641	1.4	119	144	3.8	0.27	1.9	354	29.5	6000	580	1151
090002	4X70	SE	0.443	1.4	152	179	5.32	0.262	2.1	420	35	8400	812	1549
090008	4X95	SE	0.32	1.6	186	215	7.22	0.261	2.2	468	39	11400	1102	2030
090003	4X120	SE	0.253	1.6	216	245	9.12	0.256	2.4	516	43	14400	1392	2400
090004	4X150	SE	0.206	1.8	246	275	11.4	0.256	2.5	552	46	18000	1740	3030
090005	4X185	SE	0.164	2	285	313	14.1	0.256	2.7	612	51	22200	2146	3650
090009	4X240	SE	0.125	2.2	338	364	18.2	0.254	2.9	672	56	28800	2784	4800
090280	4X300	SE	0.1	2.4	400	419	22.8	0.279	3	983	65.5	36000	3480	5685
090187	5X10	RE	3.08	1	34	47	0.94	0.31	1.8	232	19.3	1500	145	585
090183	5X16	RE	1.9	1	50	63	1.21	0.294	1.8	262	22.5	2400	232	938
090188	5X25	RE	1.2	1.2	82	102	1.9	0.289	1.8	325	27.1	3750	362.5	1188
090363	5X25	RM	1.2	1.2	82	102	1.9	0.289	1.8	325	27.1	3750	362.5	1188
090189	5X35	RE	0.869	1.2	100	123	2.66	0.285	1.8	362	30.2	5250	507.5	1375
090364	5X35	RM	0.869	1.2	100	123	2.66	0.285	1.8	362	30.2	5250	507.5	1375
090181	5X50	RMv	0.641	1.4	119	144	3.8	0.27	1.8	432	36.2	7500	725	1720
090184	5X70	RMv	0.443	1.4	152	179	5.32	0.262	2.1	492	44	10500	1015	2240
090185	5X95	RMv	0.32	1.6	186	215	7.22	0.261	2.1	564	47	14250	1378	3060
090186	5X120	RMv	0.253	1.6	216	245	9.12	0.256	2.4	612	53	18000	1740	3580
090191	5X150	RMv	0.206	1.8	246	275	11.4	0.256	2.5	672	56	22500	2175	4400
090182	5X185	RMv	0.164	2	285	313	14.1	0.256	2.7	804	59	27750	2683	5481
090192	5X240	RMv	0.125	2.2	338	364	18.2	0.254	2.9	852	71	36000	3480	7000
090116	4X50	SMv	0.641	1.4	119	144	3.8	0.27	1.9	354	29.5	6000	580	1151

part no.	part name		RI [Ohm/km]	Wi [mm]	l <sub>bl</sub> [A]	l <sub>be</sub> [A]	l <sub>k</sub> [kA]	L <sub>b</sub> [mH/km]	W <sub>m</sub> [mm]	R <sub>bv</sub> [mm]	Ø [mm]	F <sub>zv</sub> [N]	AI	G [kg]
090117	4X70	SMv	0.443	1.4	152	179	5.32	0.262	2.1	420	33.4	8400	812	1549
090018	4X95	SMv	0.32	1.6	186	215	7.22	0.261	2.2	468	39	11400	1102	2030
090019	4X120	SMv	0.253	1.6	216	245	9.12	0.256	2.4	516	43	14400	1392	2400
090020	4X150	SMv	0.206	1.8	246	275	11.4	0.256	2.5	552	46	18000	1740	3030
090021	4X185	SMv	0.164	2	285	313	14.1	0.256	2.7	612	51	22200	2146	3650
090022	4X240	SMv	0.125	2.2	338	364	18.2	0.254	2.9	696	58	28800	2784	4800
090123	4X300	SMv	0.1	2.4	400	419	22.8	0.279	3	786	65.5	36000	3480	5685

## NAYY-O

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**Test voltage:** 4 kV

**Protective conductor:** no

**Core identification:** colours acc. to VDE 0293 (HD308)

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090174	1X16	RE	1.91	1			1.21		1.8	157	10.5	480	46.4	145
090175	1X25	RE	1.2	1.2	87	106	1.9		1.8	180	12	750	72.5	195
090176	1X35	RE	0.869	1.2	107	127	2.66	0.333	1.8	203	13.5	1050	101.5	255
090196	1X35	RM	0.869	1.2	107	127	2.66	0.333	1.8	203	13.5	1050	101.5	255
090177	1X50	RE	0.641	1.4	131	151	3.8	0.325	1.8	225	15	1500	145	298
090179	1x50	RMv	0.641	1.4	131	151	3.8	0.325	1.8	225	15.4	1500	145	298
090037	1X70	RMv	0.443	1.4	166	185	5.32	0.309	1.8	204	17	2100	203	383
090038	1X95	RMv	0.32	1.6	205	222	7.22	0.302	1.8	285	19	2850	275	490
090039	1X120	RMv	0.253	1.6	239	253	9.12	0.294	1.8	300	20	3600	348	575
090040	1X150	RMv	0.206	1.8	273	284	11.4	0.29	1.8	330	22	4500	435	695
090041	1X185	RMv	0.164	2	317	322	14.1	0.287	1.8	375	25	5550	536	845
090035	1X240	RMv	0.125	2.2	378	375	18.2	0.281	1.8	420	28	7200	696	1100
090027	1X300	RMv	0.1	2.4	437	425	22.8	0.279	1.9	450	30	9000	870	1379
090042	1X400	RMv	0.0778	2.6	513	487	27.2	0.275	2	510	34	12000	1160	1615
090043	1X500	RMv	0.0605	2.8	600	558	34	0.272	2.1	555	37	15000	1450	2015
090034	1X630	RMv	0.0469	2.8	701	635	42.8	0.271	2.2	645	43	18900	1827	2472
090173	1X800	RMv	0.0367	3	809	716	54.4		2.4	675	45	24000	2320	3120
090277	2X10	RE	3.08	1			1.36		1.8	198	16.5		58	370
090138	3X300	SE	0.1	2.4	400	419	22.8		3	708	59	27000	2610	4500
090044	4X16	RE	1.9	1	50	63	1.21	0.285	1.8	288	24	1920	186	750
090229	4X25	RE	1.2	1.2	82	102	1.9	0.28	1.8	300	25	3000	290	950
090522	4X25	RM	1.2	1.2	82	102	1.9		1.8	300	25	3000	290	950
090230	4X35	RE	0.869	1.2	100	123	2.66	0.271	1.8	338	28.1	4200	406	1120
090231	4X50	SE	0.641	1.4	119	144	3.8	0.27	1.9	360	30	6000	580	1151
090516	4X50	SMv	0.641	1.4	119	144	3.8	0.27	1.9	360	29.5	6000	580	1151
090232	4X70	SE	0.443	1.4	152	179	5.32	0.262	2.1	420	35	8400	812	1549
090523	4X70	SMv	0.443	1.4	152	179	5.32	0.262	2.1	420	33.4	8400	812	1549
090233	4X95	SE	0.32	1.6	186	215	7.22	0.261	2.2	468	39	11400	1102	2030
090517	4X95	SMv	0.32	1.6	186	215	7.22	0.261	2.2	468	39	11400	1102	2030
090234	4X120	SE	0.253	1.6	216	245		0.256	2.4	516	43	14400	1392	2400
090518	4X120	SMv	0.253	1.6	216	245	9.12	0.256	2.4	516	43	14400	1392	2400
090235	4X150	SE	0.206	1.8	246	275	11.4	0.256	2.5	552	46	18000	1740	3030
090519	4X150	SMv	0.206	1.8	246	275	11.4	0.256	2.5	552	46	18000	1740	3030
090236	4X185	SE	0.164	2	285	313	14.1	0.256	2.7	612	51	22200	2146	3650

part no.	part name		RI [Ohm/km]	Wi [mm]	Ibl [A]	Ibe [A]	Ik [kA]	Lb [mH/km]	Wm [mm]	Rbv [mm]	Ø [mm]	Fzv [N]	Al	G [kg]
090520	4X185	SMv	0.164	2	285	313	14.1	0.254	2.7	612	51	22200	2146	3650
090237	4X240	SE	0.125	2.2	338	364	18.2	0.254	2.9	672	56	28800	2784	4800
090521	4X300	SMv	0.1	2.4	400	419	22.8	0.279	3	786	65.5	36000	3480	5685

RI	Conductor resistance
Wi	Insulation wall thickness
Ibl	Ampacity in air (30 °C)
Ibe	Ampacity in ground (20 °C)
Ik	Short-circuit current (1 s)
Lb	Specific inductivity
Wm	Wall thickness of sheath
Rbv	Bending radius, fixed installation
Ø	outer diameter approx.
Fzv	Tensile strength (during installation)
Al	Aluminium weight (GER)
G	net weight per 1000