



SYNERGY CABLES[®]

Synergy cables Ltd.
Sapirim Industrial park
P.O.Box 102, Sderot,80100, Israel
TEL 972-8-6809444, FAX 972-8-6890014
<http://www.synergy-cables.com>

MEDIUM VOLTAGE POWER CABLES

N2XSY; NA2XSY

According to VDE 0276: XLPE Insulated, PVC Sheathed,

6/10 kV; 12/20 kV; 18/30 kV

APPLICATION

For indoor or outdoor installation in open air in tray, trough and conduit or for direct burial in free draining soil, water or inside duct where no mechanical damage is to be expected. Power cable for utilities medium voltage underground distribution systems and in commercial buildings, industrial plants, power stations and substations. For rated voltages U_0/U_m : 6/10(12) kV; 12/20(24) kV or 18/30(36) kV at maximum conductor temperatures of 90 °C for continuous normal operation and 250 °C for short circuit.

DESIGN STANDARD

HD 620 S3 P10, section C (VDE 0276)

CONSTRUCTION

Stranded, round and compacted aluminum or copper conductor acc. to EN 60228, class 2, has a triple single head extruded smooth conductor screen, XLPE (cross-linked polyethylene) insulation and bonded insulation screen, all dry nitrogen cured; semi conducting separating tape; metal screen made of annealed copper wires uniformly spaced around the cable and a counter spiral of copper tape; surface printed, red, lead free PVC over sheath is extruded over all.

VDE MARK

The cables bear the corresponding VDE Mark.

PACKAGING

Standard supply lengths are given in the tables hereunder. Other bobbin lengths or cut to length - available upon request.

N2XSY 6/10 kV, 12/20 kV, 18/30 kV XLPE-insulated
Cu-conductor, single core, screened, PVC-jacket



NA2XSY 6/10 kV, 12/20 kV, 18/30 kV XLPE-insulated
Al-conductor, single core, screened, PVC-jacket





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Technical data

No., nominal cross sectional area of conductors and screen	Minimum No. of wires in conductor	Nominal insulation thickness	Nominal over sheath thickness	Approximate outer diameter	Approximate cable weight	Minimum bending radius x1.5D	Max. conductor DC resistance at 20 °C	Short circuit rating Conductor (1 sec) (1)	Current rating (2)				Reactance @ 50 Hz (5)	Capacitance	Standard supply lengths
															
									In air (3)	In ground (4)	In air (3)	In ground (4)			
No. x mm ² /mm ²	-	mm	mm	mm	kg/km	mm	Ω/km	kA	A	A	A	A	Ω/km	μF/km	m
N2XSY 6/10 (12) kV COPPER CONDUCTOR															
1x35 RM/16	6	3.4	2.5	24	870	360	0.524	5.0	197	187	235	212	0.133	0.23	1000
1x50 RM /16	6	3.4	2.5	26	1010	390	0.387	7.2	236	220	282	249	0.126	0.26	1000
1x70 RM /16	12	3.4	2.5	27	1230	405	0.268	10.0	294	268	350	302	0.119	0.29	1000
1x95 RM /16	15	3.4	2.5	29	1520	435	0.193	13.6	358	320	426	359	0.113	0.33	1000
1x120 RM /16	18	3.4	2.5	31	1770	465	0.153	17.1	413	363	491	405	0.108	0.36	1000
1x150 RM /16*	18	3.4	2.5	32	2040	480	0.124	21.4	474	400	564	414	0.105	0.39	1000
1x150 RM /25	18	3.4	2.5	32	2130	480	0.124	21.4	473	399	556	409	0.105	0.39	1000
1x185 RM /16*	30	3.4	2.5	34	2420	510	0.0991	26.4	537	458	627	495	0.101	0.43	1000
1x185 RM /25	30	3.4	2.5	34	2510	510	0.0991	26.4	535	457	625	493	0.101	0.43	1000
1x240 RM /16*	34	3.4	2.5	36	2980	540	0.0754	34.3	633	518	742	530	0.098	0.47	1000
1x240 RM /25	34	3.4	2.5	36	3065	540	0.0754	34.3	630	515	724	521	0.098	0.47	1000
1x300 RM /25	34	3.4	2.5	38	3670	570	0.0601	42.9	723	579	824	582	0.094	0.52	500
1x400 RM /35	53	3.4	2.5	42	4620	630	0.0470	57.2	832	650	913	635	0.091	0.59	500
1x500 RM /35	53	3.4	2.5	45	5610	675	0.0366	71.5	954	728	1031	697	0.089	0.64	500
1x630 RM /35	53	3.4	2.5	49	7040	735	0.0283	90.0	1100	816	1171	767	0.085	0.73	500
1x800 RM /35	53	3.4	2.6	54	8560	810	0.0221	114.3	1239	896	1298	831	0.083	0.82	500
1x1000 RM /35	53	3.4	2.7	58	10670	870	0.0176	142.9	1375	968	1420	888	0.080	0.91	500
NA2XSY 6/10 (12) kV ALUMINUM CONDUCTOR															
1x35 RM/16	6	3.4	2.5	24	650	360	0.868	3.3	154	142	185	149	0.133	0.23	1000
1x50 RM /16	6	3.4	2.5	26	715	390	0.641	4.7	184	168	222	175	0.126	0.26	1000
1x70 RM /16	12	3.4	2.5	27	810	405	0.443	6.6	231	205	277	214	0.119	0.29	1000
1x95 RM /16	15	3.4	2.5	29	920	435	0.320	9.0	281	245	338	255	0.113	0.33	1000
1x120 RM /16	15	3.4	2.5	31	1030	465	0.253	11.4	326	278	391	290	0.108	0.36	1000
1x150 RM /16*	15	3.4	2.5	32	1135	480	0.206	14.2	369	311	442	324	0.105	0.39	1000
1x150 RM /25	15	3.4	2.5	32	1225	480	0.206	14.2	368	311	438	322	0.105	0.39	1000
1x185 RM /16*	30	3.4	2.5	34	1270	510	0.164	17.5	426	352	509	367	0.101	0.43	1000
1x185 RM /25	30	3.4	2.5	34	1355	510	0.164	17.5	425	351	504	364	0.101	0.43	1000
1x240 RM /16*	30	3.4	2.5	36	1485	540	0.125	22.7	503	408	601	424	0.098	0.47	1000
1x240 RM /25	30	3.4	2.5	36	1575	540	0.125	22.7	502	407	591	418	0.098	0.47	1000
1x300 RM /25	30	3.4	2.5	38	1790	570	0.100	28.4	576	458	675	470	0.094	0.52	500
1x400 RM /35	53	3.4	2.5	42	2225	630	0.0778	37.8	675	522	770	524	0.091	0.59	500
1x500 RM /35	53	3.4	2.5	45	2555	675	0.0605	47.3	783	592	881	590	0.089	0.64	500
1x630 RM /35	53	3.4	2.5	49	3040	735	0.0469	59.6	914	672	1015	660	0.085	0.73	500
1x800 RM /35	53	3.4	2.6	54	3635	810	0.0367	75.7	1049	751	1149	728	0.083	0.82	500
1x1000 RM /35	53	3.4	2.7	58	4380	870	0.0291	94.6	1190	831	1288	794	0.080	0.91	500



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Technical data (continued)

No., nominal cross sectional area of conductors and screen	Minimum No. of wires in conductor	Nominal insulation thickness	Nominal over sheath thickness	Approximate outer diameter	Approximate cable weight	Minimum bending radius x1.5D	Max. conductor DC resistance at 20 °C	Short circuit rating Conductor (1 sec) (1)	Current rating (2)				Reactance @ 50 Hz (5)	Capacitance	Standard supply lengths
															
									In air (3)	In ground (4)	In air (3)	In ground (4)			
No. x mm ² /mm ²	-	mm	mm	mm	kg/km	mm	Ω/km	kA	A	A	A	A	Ω/km	μF/km	m
N2XSXY 12/20 (24) kV COPPER CONDUCTOR															
1x35 RM/16	6	5.5	2.5	29	1030	435	0.524	5.0	203	183	237	191	0.144	0.166	1000
1x50 RM /16	6	5.5	2.5	30	1175	450	0.387	7.2	242	216	285	225	0.136	0.182	1000
1x70 RM /16	12	5.5	2.5	32	1400	480	0.268	10.0	302	264	354	274	0.129	0.203	1000
1x95 RM /16	15	5.5	2.5	33	1705	495	0.193	13.6	368	315	431	328	0.122	0.227	1000
1x120 RM /16	18	5.5	2.5	35	1970	525	0.153	17.1	424	358	497	371	0.117	0.247	1000
1x150 RM /16*	18	5.5	2.5	36	2250	540	0.124	21.4	481	400	561	415	0.113	0.264	1000
1x150 RM /25	18	5.5	2.5	36	2340	540	0.124	21.4	479	399	554	410	0.113	0.264	1000
1x185 RM /16*	30	5.5	2.5	38	2645	570	0.0991	26.4	552	452	643	467	0.109	0.289	1000
1x185 RM /25	30	5.5	2.5	38	2730	570	0.0991	26.4	551	450	634	461	0.109	0.289	1000
1x240 RM /16*	34	5.5	2.5	40	3215	600	0.0754	34.3	649	522	753	538	0.105	0.316	1000
1x240 RM /25	34	5.5	2.5	40	3300	600	0.0754	34.3	646	519	738	528	0.105	0.316	1000
1x300 RM /25	34	5.5	2.5	43	3910	645	0.0601	42.9	741	584	840	590	0.101	0.345	500
1x400 RM /35	53	5.5	2.5	46	4885	690	0.0470	57.2	853	657	933	640	0.098	0.382	500
1x500 RM /35	53	5.5	2.5	49	5895	735	0.0366	71.5	978	736	1056	706	0.095	0.419	500
1x630 RM /35	53	5.5	2.6	54	7365	810	0.0283	90.0	1127	827	1198	778	0.091	0.475	500
1x800 RM /35	53	5.5	2.7	58	8940	870	0.0221	114.3	1270	910	1332	843	0.088	0.526	500
1x1000 RM /35	53	5.5	2.8	63	11080	945	0.0176	142.9	1412	986	1464	904	0.086	0.584	500
NA2XSXY 12/20 (24) kV ALUMINUM CONDUCTOR															
1x50 RM /16	6	5.5	2.5	30	885	450	0.641	4.7	188	168	221	175	0.136	0.182	1000
1x70 RM /16	12	5.5	2.5	32	990	480	0.443	6.6	234	205	276	214	0.129	0.203	1000
1x95 RM /16	15	5.5	2.5	33	1115	495	0.320	9.0	285	245	336	255	0.122	0.227	1000
1x120 RM /16	15	5.5	2.5	35	1235	525	0.253	11.4	330	279	389	290	0.117	0.247	1000
1x150 RM /16*	15	5.5	2.5	36	1345	540	0.206	14.2	373	311	439	324	0.113	0.264	1000
1x150 RM /25	15	5.5	2.5	36	1435	540	0.206	14.2	373	311	436	322	0.113	0.264	1000
1x185 RM /16*	30	5.5	2.5	38	1490	570	0.164	17.5	430	352	506	367	0.109	0.289	1000
1x185 RM /25	30	5.5	2.5	38	1575	570	0.164	17.5	430	352	501	364	0.109	0.289	1000
1x240 RM /16*	30	5.5	2.5	40	1720	600	0.125	22.7	507	408	594	424	0.105	0.316	1000
1x240 RM /25	30	5.5	2.5	40	1810	600	0.125	22.7	506	407	587	419	0.105	0.316	1000
1x300 RM /25	30	5.5	2.5	43	2040	645	0.100	28.4	581	458	671	471	0.101	0.345	500
1x400 RM /35	53	5.5	2.5	46	2495	690	0.0778	37.8	677	522	763	525	0.098	0.382	500
1x500 RM /35	53	5.5	2.5	49	2840	735	0.0605	47.3	785	593	875	592	0.095	0.419	500
1x630 RM /35	53	5.5	2.6	54	3365	810	0.0469	59.6	919	675	1009	663	0.091	0.475	500
1x800 RM /35	53	5.5	2.7	58	4010	870	0.0367	75.7	1054	756	1142	731	0.088	0.526	500
1x1000 RM /35	53	5.5	2.8	63	4790	945	0.0291	94.6	1196	836	1280	799	0.086	0.584	500



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Technical data (continued)

No. x mm ² /mm ²	Minimum No. of wires in conductor	Nominal insulation thickness	Nominal over sheath thickness	Approximate outer diameter	Approximate cable weight	Minimum bending radius x15D	Max. conductor DC resistance at 20 °C	Short circuit rating Conductor (1 sec) (1)	Current rating (2)				Reactance @ 50 Hz (5)	Capacitance	Standard supply lengths
															
									In air (3)	In ground (4)	In air (3)	In ground (4)			
N2XSXY 18/30 (36) kV COPPER CONDUCTOR															
1x50 RM /16	6	8.0	2.5	35	1410	525	0.387	7.2	246	216	283	225	0.147	0.142	1000
1x70 RM /16	12	8.0	2.5	36	1650	540	0.268	10.0	306	263	352	274	0.139	0.157	1000
1x95 RM /16	15	8.0	2.5	38	1965	570	0.193	13.6	372	315	428	328	0.131	0.173	1000
1x120 RM /16	18	8.0	2.5	40	2235	600	0.153	17.1	429	358	493	372	0.126	0.188	1000
1x150 RM /16*	18	8.0	2.5	41	2535	615	0.124	21.4	486	401	558	415	0.122	0.199	1000
1x150 RM /25	18	8.0	2.5	41	2625	615	0.124	21.4	484	400	551	411	0.122	0.199	1000
1x185 RM /16*	30	8.0	2.5	43	2945	645	0.0991	26.4	557	453	639	468	0.117	0.217	1000
1x185 RM /25	30	8.0	2.5	43	3030	645	0.0991	26.4	556	451	630	462	0.117	0.200	1000
1x240 RM /16*	34	8.0	2.5	45	3530	675	0.0754	34.3	654	523	747	539	0.113	0.235	1000
1x240 RM /25	34	8.0	2.5	45	3615	675	0.0754	34.3	652	521	734	529	0.113	0.235	1000
1x300 RM /25	34	8.0	2.5	47	4250	705	0.0601	42.9	746	586	835	592	0.109	0.256	500
1x400 RM /35	53	8.0	2.5	51	5245	765	0.0470	57.2	859	658	931	645	0.105	0.282	500
1x500 RM /35	53	8.0	2.6	54	6300	810	0.0366	71.5	985	741	1052	711	0.101	0.307	500
1x630 RM /35	53	8.0	2.7	59	7820	885	0.0283	90.0	1135	832	1196	787	0.097	0.346	500
1x800 RM /35	53	8.0	2.9	63	9470	945	0.0221	114.3	1280	917	1329	849	0.094	0.381	500
1x1000 RM /35	53	8.0	3.0	68	11610	1020	0.0176	142.9	1423	997	1462	910	0.091	0.422	500
NA2XSXY 18/30 (36) kV ALUMINUM CONDUCTOR															
1x50 RM /16	6	8.0	2.5	35	1125	525	0.641	4.7	191	168	220	175	0.147	0.142	1000
1x70 RM /16	12	8.0	2.5	36	1245	540	0.443	6.6	237	205	274	214	0.139	0.157	1000
1x95 RM /16	15	8.0	2.5	38	1380	570	0.320	9.0	289	245	334	255	0.131	0.173	1000
1x120 RM /16	15	8.0	2.5	40	1510	600	0.253	11.4	333	278	386	291	0.126	0.188	1000
1x150 RM /16*	15	8.0	2.5	41	1625	615	0.206	14.2	377	311	436	325	0.122	0.199	1000
1x150 RM /25	15	8.0	2.5	41	1710	615	0.206	14.2	376	311	433	322	0.122	0.199	1000
1x185 RM /16*	30	8.0	2.5	43	1790	645	0.164	17.5	434	353	501	367	0.117	0.217	1000
1x185 RM /25	30	8.0	2.5	43	1880	645	0.164	17.5	433	352	497	364	0.117	0.200	1000
1x240 RM /16*	30	8.0	2.5	45	2035	675	0.125	22.7	511	408	588	424	0.113	0.235	1000
1x240 RM /25	30	8.0	2.5	45	2125	675	0.125	22.7	509	407	582	420	0.113	0.235	1000
1x300 RM /25	30	8.0	2.5	47	2375	705	0.100	28.4	585	459	665	472	0.109	0.256	500
1x400 RM /35	53	8.0	2.5	51	2855	765	0.0778	37.8	680	522	758	528	0.105	0.282	500
1x500 RM /35	53	8.0	2.6	54	3245	810	0.0605	47.3	789	595	868	594	0.101	0.307	500
1x630 RM /35	53	8.0	2.7	59	3830	885	0.0469	59.6	922	677	1002	666	0.097	0.346	500
1x800 RM /35	53	8.0	2.9	63	4505	945	0.0367	75.7	1057	759	1133	735	0.094	0.381	500
1x1000 RM /35	53	8.0	3.0	68	5320	1020	0.0291	94.6	1199	842	1271	806	0.091	0.422	500

* For cables in earth, 16mm² is permissible.

- The conductor short circuit rating is based on an initial conductor temperature of 90 °C and a final temperature of 250 °C.
- Current rating based upon operation at 90 °C conductor, three-phase a.c. load in trefoil touching formation or flat formation with one cable diameter clearance. The screens are bonded and earthed at both ends of the cables. According to VDE 0276-620.
- Cable laid in freely circulating air at 30 °C, protected against direct thermal radiation due to sun, etc.
- Cable directly buried at 0.7 m deep in soil at 20 °C, with 1.2 K*m/W thermal resistivity.
- Calculated inductive reactance per core in trefoil touching formation. The screens are bonded and earthed at both ends of the cables.

TEMPERATURE RATING FACTORS

Ambient Temperature °C	20	25	30	35	40	45	50	55	60	65
Correction factor air	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65
Correction factor ground	1.00	0.96	0.93	0.89	0.85	0.80	0.76	-	-	-



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MEDIUM VOLTAGE POWER CABLES

N2XS2Y; NA2XS2Y

According to VDE 0276: XLPE Insulated, PE Sheathed,
6/10 kV; 12/20 kV; 18/30 kV

APPLICATION

For indoor or outdoor installation in open air in tray, trough and conduit or for direct burial in free draining soil, water or inside duct where no mechanical damage is to be expected. Power cable for utilities medium voltage underground distribution systems and in commercial buildings, industrial plants, power stations and substations. For rated voltages $U_0/U(U_m)$: 6/10(12) kV; 12/20(24) kV or 18/30(36) kV at maximum conductor temperatures of 90 °C for continuous normal operation and 250 °C for short circuit.

DESIGN STANDARD

HD 620 S3 P10, section C (VDE 0276)

CONSTRUCTION

Stranded, round and compacted aluminum or copper conductor acc. to EN 60228, class 2, has a triple single head extruded smooth conductor screen, XLPE (cross-linked polyethylene) insulation and bonded insulation screen, all dry nitrogen cured; semi conducting separating tape; metal screen made of annealed copper wires uniformly spaced around the cable and a counter spiral of copper tape; surface printed, black PE over sheath is extruded over all.

VDE MARK

The cables bear the corresponding VDE Mark.

PACKAGING

Standard supply lengths are given in the tables hereunder. Other bobbin lengths or cut to length - available upon request.

N2XS2Y 6/10 kV, 12/20 kV, 18/30 kV XLPE-insulated
Cu-conductor, single core, screened, PE-jacket



NA2XS2Y 6/10 kV, 12/20 kV, 18/30 kV XLPE-insulated
Al-conductor, single core, screened, PE-jacket





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Technical data

No. x mm ² /mm ²	Minimum No. of wires in conductor	Nominal insulation thickness mm	Nominal over sheath thickness mm	Approximate outer diameter mm	Approximate cable weight kg/km	Minimum bending radius x15D mm	Max. conductor DC resistance at 20 °C Ω/km	Short circuit rating Conductor (1 sec) (1) kA	Current rating (2)				Reactance @ 50 Hz (5) Ω/km	Capacitance μF/km	Standard supply lengths m
															
									In air (3) A	In ground (4) A	In air (3) A	In ground (4) A			
N2XS2Y 6/10 (12) kV COPPER CONDUCTOR															
1x35 RM/16	6	3.4	2.5	24	800	360	0.524	5.0	197	187	235	212	0.133	0.23	1000
1x50 RM /16	6	3.4	2.5	26	930	390	0.387	7.2	236	220	282	249	0.126	0.26	1000
1x70 RM /16	12	3.4	2.5	27	1150	405	0.268	10.0	294	268	350	302	0.119	0.29	1000
1x95 RM /16	15	3.4	2.5	29	1420	435	0.193	13.6	358	320	426	359	0.113	0.33	1000
1x120 RM /16	18	3.4	2.5	31	1670	465	0.153	17.1	413	363	491	405	0.108	0.36	1000
1x150 RM /16*	18	3.4	2.5	32	1940	480	0.124	21.4	474	400	564	414	0.105	0.39	1000
1x150 RM /25	18	3.4	2.5	32	2030	480	0.124	21.4	473	399	556	409	0.105	0.39	1000
1x185 RM /16*	30	3.4	2.5	34	2310	510	0.0991	26.4	537	458	627	495	0.101	0.43	1000
1x185 RM /25	30	3.4	2.5	34	2400	510	0.0991	26.4	535	457	625	493	0.101	0.43	1000
1x240 RM /16*	34	3.4	2.5	36	2860	540	0.0754	34.3	633	518	742	530	0.098	0.47	1000
1x240 RM /25	34	3.4	2.5	36	2950	540	0.0754	34.3	630	515	724	521	0.098	0.47	1000
1x300 RM /25	34	3.4	2.5	38	3540	570	0.0601	42.9	723	579	824	582	0.094	0.52	500
1x400 RM /35	53	3.4	2.5	42	4480	630	0.0470	57.2	832	650	913	635	0.091	0.59	500
1x500 RM /35	53	3.4	2.5	45	5460	675	0.0366	71.5	954	728	1031	697	0.089	0.64	500
1x630 RM /35	53	3.4	2.5	49	6880	735	0.0283	90.0	1100	816	1171	767	0.085	0.73	500
1x800 RM /35	53	3.4	2.6	54	8380	810	0.0221	114.3	1239	896	1298	831	0.083	0.82	500
1x1000 RM /35	53	3.4	2.7	58	10460	870	0.0176	142.9	1375	968	1420	888	0.080	0.91	500
NA2XS2Y 6/10 (12) kV ALUMINUM CONDUCTOR															
1x35 RM/16	6	3.4	2.5	24	575	360	0.868	3.3	154	142	185	149	0.133	0.23	1000
1x50 RM /16	6	3.4	2.5	26	635	390	0.641	4.7	184	168	222	175	0.126	0.26	1000
1x70 RM /16	12	3.4	2.5	27	725	405	0.443	6.6	231	205	277	214	0.119	0.29	1000
1x95 RM /16	15	3.4	2.5	29	830	435	0.320	9.0	281	245	338	255	0.113	0.33	1000
1x120 RM /16	15	3.4	2.5	31	930	465	0.253	11.4	326	278	391	290	0.108	0.36	1000
1x150 RM /16*	15	3.4	2.5	32	1030	480	0.206	14.2	369	311	442	324	0.105	0.39	1000
1x150 RM /25	15	3.4	2.5	32	1120	480	0.206	14.2	368	311	438	322	0.105	0.39	1000
1x185 RM /16*	30	3.4	2.5	34	1160	510	0.164	17.5	426	352	509	367	0.101	0.43	1000
1x185 RM /25	30	3.4	2.5	34	1245	510	0.164	17.5	425	351	504	364	0.101	0.43	1000
1x240 RM /16*	30	3.4	2.5	36	1370	540	0.125	22.7	503	408	601	424	0.098	0.47	1000
1x240 RM /25	30	3.4	2.5	36	1455	540	0.125	22.7	502	407	591	418	0.098	0.47	1000
1x300 RM /25	30	3.4	2.5	38	1665	570	0.100	28.4	576	458	675	470	0.094	0.52	500
1x400 RM /35	53	3.4	2.5	42	2090	630	0.0778	37.8	675	522	770	524	0.091	0.59	500
1x500 RM /35	53	3.4	2.5	45	2410	675	0.0605	47.3	783	592	881	590	0.089	0.64	500
1x630 RM /35	53	3.4	2.5	49	2880	735	0.0469	59.6	914	672	1015	660	0.085	0.73	500
1x800 RM /35	53	3.4	2.6	54	3460	810	0.0367	75.7	1049	751	1149	728	0.083	0.82	500
1x1000 RM /35	53	3.4	2.7	58	4175	870	0.0291	94.6	1190	831	1288	794	0.080	0.91	500



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Technical data (continued)

No. x mm ² /mm ²	Minimum No. of wires in conductor	Nominal insulation thickness mm	Nominal over sheath thickness mm	Approximate outer diameter mm	Approximate cable weight kg/km	Minimum bending radius x15D mm	Max. conductor DC resistance at 20 °C Ω/km	Short circuit rating Conductor (1 sec) (1) kA	Current rating (2)				Reactance @ 50 Hz (5) Ω/km	Capacitance μF/km	Standard supply lengths m
															
									In air (3) A	In ground (4) A	In air (3) A	In ground (4) A			
N2XS2Y 12/20 (24) kV COPPER CONDUCTOR															
1x35 RM/16	6	5.5	2.5	29	935	435	0.524	5.0	203	183	237	191	0.144	0.166	1000
1x50 RM /16	6	5.5	2.5	30	1075	450	0.387	7.2	242	216	285	225	0.136	0.182	1000
1x70 RM /16	12	5.5	2.5	32	1300	480	0.268	10.0	302	264	354	274	0.129	0.203	1000
1x95 RM /16	15	5.5	2.5	33	1595	495	0.193	13.6	368	315	431	328	0.122	0.227	1000
1x120 RM /16	18	5.5	2.5	35	1855	525	0.153	17.1	424	358	497	371	0.117	0.247	1000
1x150 RM /16*	18	5.5	2.5	36	2130	540	0.124	21.4	481	400	561	415	0.113	0.264	1000
1x150 RM /25	18	5.5	2.5	36	2220	540	0.124	21.4	479	399	554	410	0.113	0.264	1000
1x185 RM /16*	30	5.5	2.5	38	2520	570	0.0991	26.4	552	452	643	467	0.109	0.289	1000
1x185 RM /25	30	5.5	2.5	38	2605	570	0.0991	26.4	551	450	634	461	0.109	0.289	1000
1x240 RM /16*	34	5.5	2.5	40	3080	600	0.0754	34.3	649	522	753	538	0.105	0.316	1000
1x240 RM /25	34	5.5	2.5	40	3170	600	0.0754	34.3	646	519	738	528	0.105	0.316	1000
1x300 RM /25	34	5.5	2.5	43	3770	645	0.0601	42.9	741	584	840	590	0.101	0.345	500
1x400 RM /35	53	5.5	2.5	46	4730	690	0.0470	57.2	853	657	933	640	0.098	0.382	500
1x500 RM /35	53	5.5	2.5	49	5735	735	0.0366	71.5	978	736	1056	706	0.095	0.419	500
1x630 RM /35	53	5.5	2.6	54	7190	810	0.0283	90.0	1127	827	1198	778	0.091	0.475	500
1x800 RM /35	53	5.5	2.7	58	8735	870	0.0221	114.3	1270	910	1332	843	0.088	0.526	500
1x1000 RM /35	53	5.5	2.8	63	10845	945	0.0176	142.9	1412	986	1464	904	0.086	0.584	500
NA2XS2Y 12/20 (24) kV ALUMINUM CONDUCTOR															
1x50 RM /16	6	5.5	2.5	30	790	450	0.641	4.7	188	168	221	175	0.136	0.182	1000
1x70 RM /16	12	5.5	2.5	32	890	480	0.443	6.6	234	205	276	214	0.129	0.203	1000
1x95 RM /16	15	5.5	2.5	33	1005	495	0.320	9.0	285	245	336	255	0.122	0.227	1000
1x120 RM /16	15	5.5	2.5	35	1120	525	0.253	11.4	330	279	389	290	0.117	0.247	1000
1x150 RM /16*	15	5.5	2.5	36	1225	540	0.206	14.2	373	311	439	324	0.113	0.264	1000
1x150 RM /25	15	5.5	2.5	36	1315	540	0.206	14.2	373	311	436	322	0.113	0.264	1000
1x185 RM /16*	30	5.5	2.5	38	1365	570	0.164	17.5	430	352	506	367	0.109	0.289	1000
1x185 RM /25	30	5.5	2.5	38	1450	570	0.164	17.5	430	352	501	364	0.109	0.289	1000
1x240 RM /16*	30	5.5	2.5	40	1585	600	0.125	22.7	507	408	594	424	0.105	0.316	1000
1x240 RM /25	30	5.5	2.5	40	1675	600	0.125	22.7	506	407	587	419	0.105	0.316	1000
1x300 RM /25	30	5.5	2.5	43	1900	645	0.100	28.4	581	458	671	471	0.101	0.345	500
1x400 RM /35	53	5.5	2.5	46	2345	690	0.0778	37.8	677	522	763	525	0.098	0.382	500
1x500 RM /35	53	5.5	2.5	49	2680	735	0.0605	47.3	785	593	875	592	0.095	0.419	500
1x630 RM /35	53	5.5	2.6	54	3190	810	0.0469	59.6	919	675	1009	663	0.091	0.475	500
1x800 RM /35	53	5.5	2.7	58	3810	870	0.0367	75.7	1054	756	1142	731	0.088	0.526	500
1x1000 RM /35	53	5.5	2.8	63	4560	945	0.0291	94.6	1196	836	1280	799	0.086	0.584	500



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Technical data (continued)

No. x mm ² /mm ²	Minimum No. of wires in conductor	Nominal insulation thickness mm	Nominal over sheath thickness mm	Approximate outer diameter mm	Approximate cable weight kg/km	Minimum bending radius x15D mm	Max. conductor DC resistance at 20 °C Ω/km	Short circuit rating Conductor (1 sec) (1) kA	Current rating (2)				Reactance @ 50 Hz (5) Ω/km	Capacitance μF/km	Standard supply lengths m
									In air (3) A	In ground (4) A	In air (3) A	In ground (4) A			
N2XS2Y 18/30 (36) kV COPPER CONDUCTOR															
1x50 RM /16	6	8.0	2.5	35	1295	525	0.387	7.2	246	216	283	225	0.147	0.142	1000
1x70 RM /16	12	8.0	2.5	36	1530	540	0.268	10.0	306	263	352	274	0.139	0.157	1000
1x95 RM /16	15	8.0	2.5	38	1840	570	0.193	13.6	372	315	428	328	0.131	0.173	1000
1x120 RM /16	18	8.0	2.5	40	2100	600	0.153	17.1	429	358	493	372	0.126	0.188	1000
1x150 RM /16*	18	8.0	2.5	41	2400	615	0.124	21.4	486	401	558	415	0.122	0.199	1000
1x150 RM /25	18	8.0	2.5	41	2485	615	0.124	21.4	484	400	551	411	0.122	0.199	1000
1x185 RM /16*	30	8.0	2.5	43	2800	645	0.0991	26.4	557	453	639	468	0.117	0.217	1000
1x185 RM /25	30	8.0	2.5	43	2890	645	0.0991	26.4	556	451	630	462	0.117	0.200	1000
1x240 RM /16*	34	8.0	2.5	45	3375	675	0.0754	34.3	654	523	747	539	0.113	0.235	1000
1x240 RM /25	34	8.0	2.5	45	3465	675	0.0754	34.3	652	521	734	529	0.113	0.235	1000
1x300 RM /25	34	8.0	2.5	47	4090	705	0.0601	42.9	746	586	835	592	0.109	0.256	500
1x400 RM /35	53	8.0	2.5	51	5080	765	0.0470	57.2	859	658	931	645	0.105	0.282	500
1x500 RM /35	53	8.0	2.6	54	6115	810	0.0366	71.5	985	741	1052	711	0.101	0.307	500
1x630 RM /35	53	8.0	2.7	59	7600	885	0.0283	90.0	1135	832	1196	787	0.097	0.346	500
1x800 RM /35	53	8.0	2.9	63	9230	945	0.0221	114.3	1280	917	1329	849	0.094	0.381	500
1x1000 RM /35	53	8.0	3.0	68	11340	1020	0.0176	142.9	1423	997	1462	910	0.091	0.422	500
NA2XS2Y 18/30 (36) kV ALUMINUM CONDUCTOR															
1x50 RM /16	6	8.0	2.5	35	1010	525	0.641	4.7	191	168	220	175	0.147	0.142	1000
1x70 RM /16	12	8.0	2.5	36	1125	540	0.443	6.6	237	205	274	214	0.139	0.157	1000
1x95 RM /16	15	8.0	2.5	38	1255	570	0.320	9.0	289	245	334	255	0.131	0.173	1000
1x120 RM /16	15	8.0	2.5	40	1375	600	0.253	11.4	333	278	386	291	0.126	0.188	1000
1x150 RM /16*	15	8.0	2.5	41	1485	615	0.206	14.2	377	311	436	325	0.122	0.199	1000
1x150 RM /25	15	8.0	2.5	41	1575	615	0.206	14.2	376	311	433	322	0.122	0.199	1000
1x185 RM /16*	30	8.0	2.5	43	1645	645	0.164	17.5	434	353	501	367	0.117	0.217	1000
1x185 RM /25	30	8.0	2.5	43	1735	645	0.164	17.5	433	352	497	364	0.117	0.200	1000
1x240 RM /16*	30	8.0	2.5	45	1885	675	0.125	22.7	511	408	588	424	0.113	0.235	1000
1x240 RM /25	30	8.0	2.5	45	1970	675	0.125	22.7	509	407	582	420	0.113	0.235	1000
1x300 RM /25	30	8.0	2.5	47	2215	705	0.100	28.4	585	459	665	472	0.109	0.256	500
1x400 RM /35	53	8.0	2.5	51	2690	765	0.0778	37.8	680	522	758	528	0.105	0.282	500
1x500 RM /35	53	8.0	2.6	54	3050	810	0.0605	47.3	789	595	868	594	0.101	0.307	500
1x630 RM /35	53	8.0	2.7	59	3605	885	0.0469	59.6	922	677	1002	666	0.097	0.346	500
1x800 RM /35	53	8.0	2.9	63	4265	945	0.0367	75.7	1057	759	1133	735	0.094	0.381	500
1x1000 RM /35	53	8.0	3.0	68	5050	1020	0.0291	94.6	1199	842	1271	806	0.091	0.422	500

* For cables in earth, 16mm² is permissible.

- The conductor short circuit rating is based on an initial conductor temperature of 90 °C and a final temperature of 250 °C.
- Current rating based upon operation at 90 °C conductor, three-phase a.c. load in trefoil touching formation or flat formation with one cable diameter clearance. The screens are bonded and earthed at both ends of the cables. According to VDE 0276-620.
- Cable laid in freely circulating air at 30 °C, protected against direct thermal radiation due to sun, etc.
- Cable directly buried at 0.7 m deep in soil at 20 °C, with 1.2 K*m/W thermal resistivity.
- Calculated inductive reactance per core in trefoil touching formation. The screens are bonded and earthed at both ends of the cables.

TEMPERATURE RATING FACTORS

Ambient Temperature °C	20	25	30	35	40	45	50	55	60	65
Correction factor air	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65
Correction factor ground	1.00	0.96	0.93	0.89	0.85	0.80	0.76	-	-	-



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MEDIUM VOLTAGE POWER CABLES

N2XS(F)2Y; NA2XS(F)2Y

According to VDE 0276: XLPE Insulated, PE Sheathed,
6/10 kV; 12/20 kV; 18/30 kV

APPLICATION

For indoor or outdoor installation in open air in tray, trough and conduit or for direct burial in free draining soil, water or inside duct where no mechanical damage is to be expected. Power cable for utilities medium voltage underground distribution systems and in commercial buildings, industrial plants, power stations and substations. For rated voltages $U_0/U(U_m)$: 6/10(12) kV; 12/20(24) kV or 18/30(36) kV at maximum conductor temperatures of 90 °C for continuous normal operation and 250 °C for short circuit.

DESIGN STANDARD

HD 620 S3 P10, section C (VDE 0276)

CONSTRUCTION

Stranded, round and compacted aluminum or copper conductor acc. to EN 60228, class 2, has a triple single head extruded smooth conductor screen, XLPE (cross-linked polyethylene) insulation and bonded insulation screen, all dry nitrogen cured; semi conducting water blocking separating tape; metal screen made of annealed copper wires uniformly spaced around the cable and a counter spiral of copper tape; water blocking separating tape; surface printed, black PE over sheath is extruded over all.

VDE MARK

The cables bear the corresponding VDE Mark.

PACKAGING

Standard supply lengths are given in the tables hereunder. Other bobbin lengths or cut to length - available upon request.

N2XS(F)2Y 6/10 kV, 12/20 kV, 18/30 kV XLPE-insulated
Cu-conductor, single core, screened, PE-jacket



NA2XS(F)2Y 6/10 kV, 12/20 kV, 18/30 kV XLPE-insulated
Al-conductor, single core, screened, PE-jacket





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Technical data

No. x mm ² /mm ²	Minimum No. of wires in conductor	Nominal insulation thickness mm	Nominal over sheath thickness mm	Approximate outer diameter mm	Approximate cable weight kg/km	Minimum bending radius x15D mm	Max. conductor DC resistance at 20 °C Ω/km	Short circuit rating Conductor (1 sec) (1) kA	Current rating (2)				Reactance @ 50 Hz (5) Ω/km	Capacitance μF/km	Standard supply lengths m
															
									In air (3) A	In ground (4) A	In air (3) A	In ground (4) A			
N2XS(F)2Y 6/10 (12) kV COPPER CONDUCTOR															
1x35 RM/16	6	3.4	2.5	24	800	360	0.524	5.0	197	187	235	212	0.133	0.23	1000
1x50 RM /16	6	3.4	2.5	26	930	390	0.387	7.2	236	220	282	249	0.126	0.26	1000
1x70 RM /16	12	3.4	2.5	27	1150	405	0.268	10.0	294	268	350	302	0.119	0.29	1000
1x95 RM /16	15	3.4	2.5	29	1420	435	0.193	13.6	358	320	426	359	0.113	0.33	1000
1x120 RM /16	18	3.4	2.5	31	1670	465	0.153	17.1	413	363	491	405	0.108	0.36	1000
1x150 RM /16*	18	3.4	2.5	32	1940	480	0.124	21.4	474	400	564	414	0.105	0.39	1000
1x150 RM /25	18	3.4	2.5	32	2030	480	0.124	21.4	473	399	556	409	0.105	0.39	1000
1x185 RM /16*	30	3.4	2.5	34	2310	510	0.0991	26.4	537	458	627	495	0.101	0.43	1000
1x185 RM /25	30	3.4	2.5	34	2400	510	0.0991	26.4	535	457	625	493	0.101	0.43	1000
1x240 RM /16*	34	3.4	2.5	36	2860	540	0.0754	34.3	633	518	742	530	0.098	0.47	1000
1x240 RM /25	34	3.4	2.5	36	2950	540	0.0754	34.3	630	515	724	521	0.098	0.47	1000
1x300 RM /25	34	3.4	2.5	38	3540	570	0.0601	42.9	723	579	824	582	0.094	0.52	500
1x400 RM /35	53	3.4	2.5	42	4480	630	0.0470	57.2	832	650	913	635	0.091	0.59	500
1x500 RM /35	53	3.4	2.5	45	5460	675	0.0366	71.5	954	728	1031	697	0.089	0.64	500
1x630 RM /35	53	3.4	2.5	49	6880	735	0.0283	90.0	1100	816	1171	767	0.085	0.73	500
1x800 RM /35	53	3.4	2.6	54	8380	810	0.0221	114.3	1239	896	1298	831	0.083	0.82	500
1x1000 RM /35	53	3.4	2.7	58	10460	870	0.0176	142.9	1375	968	1420	888	0.080	0.91	500
NA2XS(F)2Y 6/10 (12) kV ALUMINUM CONDUCTOR															
1x35 RM/16	6	3.4	2.5	24	575	360	0.868	3.3	154	142	185	149	0.133	0.23	1000
1x50 RM /16	6	3.4	2.5	26	635	390	0.641	4.7	184	168	222	175	0.126	0.26	1000
1x70 RM /16	12	3.4	2.5	27	725	405	0.443	6.6	231	205	277	214	0.119	0.29	1000
1x95 RM /16	15	3.4	2.5	29	830	435	0.320	9.0	281	245	338	255	0.113	0.33	1000
1x120 RM /16	15	3.4	2.5	31	930	465	0.253	11.4	326	278	391	290	0.108	0.36	1000
1x150 RM /16*	15	3.4	2.5	32	1030	480	0.206	14.2	369	311	442	324	0.105	0.39	1000
1x150 RM /25	15	3.4	2.5	32	1120	480	0.206	14.2	368	311	438	322	0.105	0.39	1000
1x185 RM /16*	30	3.4	2.5	34	1160	510	0.164	17.5	426	352	509	367	0.101	0.43	1000
1x185 RM /25	30	3.4	2.5	34	1245	510	0.164	17.5	425	351	504	364	0.101	0.43	1000
1x240 RM /16*	30	3.4	2.5	36	1370	540	0.125	22.7	503	408	601	424	0.098	0.47	1000
1x240 RM /25	30	3.4	2.5	36	1455	540	0.125	22.7	502	407	591	418	0.098	0.47	1000
1x300 RM /25	30	3.4	2.5	38	1665	570	0.100	28.4	576	458	675	470	0.094	0.52	500
1x400 RM /35	53	3.4	2.5	42	2090	630	0.0778	37.8	675	522	770	524	0.091	0.59	500
1x500 RM /35	53	3.4	2.5	45	2410	675	0.0605	47.3	783	592	881	590	0.089	0.64	500
1x630 RM /35	53	3.4	2.5	49	2880	735	0.0469	59.6	914	672	1015	660	0.085	0.73	500
1x800 RM /35	53	3.4	2.6	54	3460	810	0.0367	75.7	1049	751	1149	728	0.083	0.82	500
1x1000 RM /35	53	3.4	2.7	58	4175	870	0.0291	94.6	1190	831	1288	794	0.080	0.91	500



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Technical data (continued)

No. x mm ² /mm ²	Minimum No. of wires in conductor	Nominal insulation thickness mm	Nominal over sheath thickness mm	Approximate outer diameter mm	Approximate cable weight kg/km	Minimum bending radius x15D mm	Max. conductor DC resistance at 20 °C Ω/km	Short circuit rating Conductor (1 sec) (1) kA	Current rating (2)				Reactance @ 50 Hz (5) Ω/km	Capacitance μF/km	Standard supply lengths m
															
									In air (3) A	In ground (4) A	In air (3) A	In ground (4) A			
N2XS(F)2Y 12/20 (24) kV COPPER CONDUCTOR															
1x35 RM/16	6	5.5	2.5	29	935	435	0.524	5.0	203	183	237	191	0.144	0.166	1000
1x50 RM /16	6	5.5	2.5	30	1075	450	0.387	7.2	242	216	285	225	0.136	0.182	1000
1x70 RM /16	12	5.5	2.5	32	1300	480	0.268	10.0	302	264	354	274	0.129	0.203	1000
1x95 RM /16	15	5.5	2.5	33	1595	495	0.193	13.6	368	315	431	328	0.122	0.227	1000
1x120 RM /16	18	5.5	2.5	35	1855	525	0.153	17.1	424	358	497	371	0.117	0.247	1000
1x150 RM /16*	18	5.5	2.5	36	2130	540	0.124	21.4	481	400	561	415	0.113	0.264	1000
1x150 RM /25	18	5.5	2.5	36	2220	540	0.124	21.4	479	399	554	410	0.113	0.264	1000
1x185 RM /16*	30	5.5	2.5	38	2520	570	0.0991	26.4	552	452	643	467	0.109	0.289	1000
1x185 RM /25	30	5.5	2.5	38	2605	570	0.0991	26.4	551	450	634	461	0.109	0.289	1000
1x240 RM /16*	34	5.5	2.5	40	3080	600	0.0754	34.3	649	522	753	538	0.105	0.316	1000
1x240 RM /25	34	5.5	2.5	40	3170	600	0.0754	34.3	646	519	738	528	0.105	0.316	1000
1x300 RM /25	34	5.5	2.5	43	3770	645	0.0601	42.9	741	584	840	590	0.101	0.345	500
1x400 RM /35	53	5.5	2.5	46	4730	690	0.0470	57.2	853	657	933	640	0.098	0.382	500
1x500 RM /35	53	5.5	2.5	49	5735	735	0.0366	71.5	978	736	1056	706	0.095	0.419	500
1x630 RM /35	53	5.5	2.6	54	7190	810	0.0283	90.0	1127	827	1198	778	0.091	0.475	500
1x800 RM /35	53	5.5	2.7	58	8735	870	0.0221	114.3	1270	910	1332	843	0.088	0.526	500
1x1000 RM /35	53	5.5	2.8	63	10845	945	0.0176	142.9	1412	986	1464	904	0.086	0.584	500
NA2XS(F)2Y 12/20 (24) kV ALUMINUM CONDUCTOR															
1x50 RM /16	6	5.5	2.5	30	790	450	0.641	4.7	188	168	221	175	0.136	0.182	1000
1x70 RM /16	12	5.5	2.5	32	890	480	0.443	6.6	234	205	276	214	0.129	0.203	1000
1x95 RM /16	15	5.5	2.5	33	1005	495	0.320	9.0	285	245	336	255	0.122	0.227	1000
1x120 RM /16	15	5.5	2.5	35	1120	525	0.253	11.4	330	279	389	290	0.117	0.247	1000
1x150 RM /16*	15	5.5	2.5	36	1225	540	0.206	14.2	373	311	439	324	0.113	0.264	1000
1x150 RM /25	15	5.5	2.5	36	1315	540	0.206	14.2	373	311	436	322	0.113	0.264	1000
1x185 RM /16*	30	5.5	2.5	38	1365	570	0.164	17.5	430	352	506	367	0.109	0.289	1000
1x185 RM /25	30	5.5	2.5	38	1450	570	0.164	17.5	430	352	501	364	0.109	0.289	1000
1x240 RM /16*	30	5.5	2.5	40	1585	600	0.125	22.7	507	408	594	424	0.105	0.316	1000
1x240 RM /25	30	5.5	2.5	40	1675	600	0.125	22.7	506	407	587	419	0.105	0.316	1000
1x300 RM /25	30	5.5	2.5	43	1900	645	0.100	28.4	581	458	671	471	0.101	0.345	500
1x400 RM /35	53	5.5	2.5	46	2345	690	0.0778	37.8	677	522	763	525	0.098	0.382	500
1x500 RM /35	53	5.5	2.5	49	2680	735	0.0605	47.3	785	593	875	592	0.095	0.419	500
1x630 RM /35	53	5.5	2.6	54	3190	810	0.0469	59.6	919	675	1009	663	0.091	0.475	500
1x800 RM /35	53	5.5	2.7	58	3810	870	0.0367	75.7	1054	756	1142	731	0.088	0.526	500
1x1000 RM /35	53	5.5	2.8	63	4560	945	0.0291	94.6	1196	836	1280	799	0.086	0.584	500



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Technical data (continued)

No. x mm ² /mm ²	Minimum No. of wires in conductor	Nominal insulation thickness mm	Nominal over sheath thickness mm	Approximate outer diameter mm	Approximate cable weight kg/km	Minimum bending radius x15D mm	Max. conductor DC resistance at 20 °C Ω/km	Short circuit rating Conductor (1 sec) (1) kA	Current rating (2)				Reactance @ 50 Hz (5) Ω/km	Capacitance μF/km	Standard supply lengths m
															
									In air (3) A	In ground (4) A	In air (3) A	In ground (4) A			
N2XS(F)2Y 18/30 (36) kV COPPER CONDUCTOR															
1x50 RM /16	6	8.0	2.5	35	1295	525	0.387	7.2	246	216	283	225	0.147	0.142	1000
1x70 RM /16	12	8.0	2.5	36	1530	540	0.268	10.0	306	263	352	274	0.139	0.157	1000
1x95 RM /16	15	8.0	2.5	38	1840	570	0.193	13.6	372	315	428	328	0.131	0.173	1000
1x120 RM /16	18	8.0	2.5	40	2100	600	0.153	17.1	429	358	493	372	0.126	0.188	1000
1x150 RM /16*	18	8.0	2.5	41	2400	615	0.124	21.4	486	401	558	415	0.122	0.199	1000
1x150 RM /25	18	8.0	2.5	41	2485	615	0.124	21.4	484	400	551	411	0.122	0.199	1000
1x185 RM /16*	30	8.0	2.5	43	2800	645	0.0991	26.4	557	453	639	468	0.117	0.217	1000
1x185 RM /25	30	8.0	2.5	43	2890	645	0.0991	26.4	556	451	630	462	0.117	0.200	1000
1x240 RM /16*	34	8.0	2.5	45	3375	675	0.0754	34.3	654	523	747	539	0.113	0.235	1000
1x240 RM /25	34	8.0	2.5	45	3465	675	0.0754	34.3	652	521	734	529	0.113	0.235	1000
1x300 RM /25	34	8.0	2.5	47	4090	705	0.0601	42.9	746	586	835	592	0.109	0.256	500
1x400 RM /35	53	8.0	2.5	51	5080	765	0.0470	57.2	859	658	931	645	0.105	0.282	500
1x500 RM /35	53	8.0	2.6	54	6115	810	0.0366	71.5	985	741	1052	711	0.101	0.307	500
1x630 RM /35	53	8.0	2.7	59	7600	885	0.0283	90.0	1135	832	1196	787	0.097	0.346	500
1x800 RM /35	53	8.0	2.9	63	9230	945	0.0221	114.3	1280	917	1329	849	0.094	0.381	500
1x1000 RM /35	53	8.0	3.0	68	11340	1020	0.0176	142.9	1423	997	1462	910	0.091	0.422	500
NA2XS(F)2Y 18/30 (36) kV ALUMINUM CONDUCTOR															
1x50 RM /16	6	8.0	2.5	35	1010	525	0.641	4.7	191	168	220	175	0.147	0.142	1000
1x70 RM /16	12	8.0	2.5	36	1125	540	0.443	6.6	237	205	274	214	0.139	0.157	1000
1x95 RM /16	15	8.0	2.5	38	1255	570	0.320	9.0	289	245	334	255	0.131	0.173	1000
1x120 RM /16	15	8.0	2.5	40	1375	600	0.253	11.4	333	278	386	291	0.126	0.188	1000
1x150 RM /16*	15	8.0	2.5	41	1485	615	0.206	14.2	377	311	436	325	0.122	0.199	1000
1x150 RM /25	15	8.0	2.5	41	1595	615	0.206	14.2	376	311	433	322	0.122	0.199	1000
1x185 RM /16*	30	8.0	2.5	43	1645	645	0.164	17.5	434	353	501	367	0.117	0.217	1000
1x185 RM /25	30	8.0	2.5	43	1735	645	0.164	17.5	433	352	497	364	0.117	0.200	1000
1x240 RM /16*	30	8.0	2.5	45	1885	675	0.125	22.7	511	408	588	424	0.113	0.235	1000
1x240 RM /25	30	8.0	2.5	45	1970	675	0.125	22.7	509	407	582	420	0.113	0.235	1000
1x300 RM /25	30	8.0	2.5	47	2215	705	0.100	28.4	585	459	665	472	0.109	0.256	500
1x400 RM /35	53	8.0	2.5	51	2690	765	0.0778	37.8	680	522	758	528	0.105	0.282	500
1x500 RM /35	53	8.0	2.6	54	3050	810	0.0605	47.3	789	595	868	594	0.101	0.307	500
1x630 RM /35	53	8.0	2.7	59	3605	885	0.0469	59.6	922	677	1002	666	0.097	0.346	500
1x800 RM /35	53	8.0	2.9	63	4265	945	0.0367	75.7	1057	759	1133	735	0.094	0.381	500
1x1000 RM /35	53	8.0	3.0	68	5050	1020	0.0291	94.6	1199	842	1271	806	0.091	0.422	500

- * For cables in earth, 16mm² is permissible.
- (1) The conductor short circuit rating is based on an initial conductor temperature of 90 °C and a final temperature of 250 °C.
- (2) Current rating based upon operation at 90 °C conductor, three-phase a.c. load in trefoil touching formation or flat formation with one cable diameter clearance. The screens are bonded and earthed at both ends of the cables. According to VDE 0276-620.
- (3) Cable laid in freely circulating air at 30 °C, protected against direct thermal radiation due to sun, etc.
- (4) Cable directly buried at 0.7 m deep in soil at 20 °C, with 1.2 K*m/W thermal resistivity.
- (5) Calculated inductive reactance per core in trefoil touching formation. The screens are bonded and earthed at both ends of the cables.

TEMPERATURE RATING FACTORS

Ambient Temperature °C	20	25	30	35	40	45	50	55	60	65
Correction factor air	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65
Correction factor ground	1.00	0.96	0.93	0.89	0.85	0.80	0.76	-	-	-



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MEDIUM VOLTAGE POWER CABLES

N2XS(FL)2Y; NA2XS(FL)2Y

According to VDE 0276: XLPE Insulated, PE Sheathed,
6/10 kV; 12/20 kV; 18/30 kV

APPLICATION

For indoor or outdoor installation in open air in tray, trough and conduit or for direct burial in free draining soil, water or inside duct where no mechanical damage is to be expected. Power cable for utilities medium voltage underground distribution systems and in commercial buildings, industrial plants, power stations and substations. For rated voltages $U_0/U(U_m)$: 6/10(12) kV; 12/20(24) kV or 18/30(36) kV at maximum conductor temperatures of 90 °C for continuous normal operation and 250 °C for short circuit.

DESIGN STANDARD

HD 620 S3 P10, section C (VDE 0276)

CONSTRUCTION

Stranded, round and compacted aluminum or copper conductor acc. to EN 60228, class 2, has a triple single head extruded smooth conductor screen, XLPE (cross-linked polyethylene) insulation and bonded insulation screen, all dry nitrogen cured; semi conducting water blocking separating tape; metal screen made of annealed copper wires uniformly spaced around the cable and a counter spiral of copper tape; water blocking separating tape; radial water blocking barrier made of aluminum laminated foil, bonded to the outer sheath, surface printed, black PE over sheath is extruded over all.

VDE MARK

The cables bear the corresponding VDE Mark.

PACKAGING

Standard supply lengths are given in the tables hereunder. Other bobbin lengths or cut to length - available upon request.

N2XS(FL)2Y 6/10 kV, 12/20 kV, 18/30 kV XLPE-insulated
Cu-conductor, single core, screened, laminated AL foil, PE-jacket



NA2XS(FL)2Y 6/10 kV, 12/20 kV, 18/30 kV XLPE-insulated
Al-conductor, single core, screened, laminated AL foil, PE-jacket



Technical data

Medium Voltage Power Cables	Page 13 of 18	05/05/2023
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No., nominal cross sectional area of conductors and screen	Minimum No. of wires in conductor	Nominal insulation thickness	Nominal over sheath thickness	Approximate outer diameter	Approximate cable weight	Minimum bending radius x20D	Max. conductor DC resistance at 20 °C	Short circuit rating Conductor (1 sec) (1)	Current rating (2)				Reactance @ 50 Hz (5)	Capacitance	Standard supply lengths
															
									In air (3)	In ground (4)	In air (3)	In ground (4)			
No. x mm ² /mm ²	-	mm	mm	mm	kg/km	mm	Ω/km	kA	A	A	A	A	Ω/km	μF/km	m
N2XS(FL)2Y 6/10 (12) kV COPPER CONDUCTOR															
1x35 RM/16	6	3.4	2.5	26	840	520	0.524	5.0	197	187	235	212	0.133	0.23	1000
1x50 RM /16	6	3.4	2.5	27	970	540	0.387	7.2	236	220	282	249	0.126	0.26	1000
1x70 RM /16	12	3.4	2.5	29	1190	580	0.268	10.0	294	268	350	302	0.119	0.29	1000
1x95 RM /16	15	3.4	2.5	30	1480	600	0.193	13.6	358	320	426	359	0.113	0.33	1000
1x120 RM /16	18	3.4	2.5	32	1720	640	0.153	17.1	413	363	491	405	0.108	0.36	1000
1x150 RM /16*	18	3.4	2.5	33	2000	660	0.124	21.4	474	400	564	414	0.105	0.39	1000
1x150 RM /25	18	3.4	2.5	33	2090	660	0.124	21.4	473	399	556	409	0.105	0.39	1000
1x185 RM /16*	30	3.4	2.5	35	2390	700	0.0991	26.4	537	458	627	495	0.101	0.43	1000
1x185 RM /25	30	3.4	2.5	35	2470	700	0.0991	26.4	535	457	625	493	0.101	0.43	1000
1x240 RM /16*	34	3.4	2.5	37	2940	740	0.0754	34.3	633	518	742	530	0.098	0.47	1000
1x240 RM /25	34	3.4	2.5	37	3020	740	0.0754	34.3	630	515	724	521	0.098	0.47	1000
1x300 RM /25	34	3.4	2.5	40	3630	800	0.0601	42.9	723	579	824	582	0.094	0.52	500
1x400 RM /35	53	3.4	2.5	43	4570	860	0.0470	57.2	832	650	913	635	0.091	0.59	500
1x500 RM /35	53	3.4	2.5	46	5570	920	0.0366	71.5	954	728	1031	697	0.089	0.64	500
1x630 RM /35	53	3.4	2.5	50	6980	1000	0.0283	90.0	1100	816	1171	767	0.085	0.73	500
1x800 RM /35	53	3.4	2.6	55	8560	1100	0.0221	114.3	1239	896	1298	831	0.083	0.82	500
1x1000 RM /35	53	3.4	2.7	60	10600	1200	0.0176	142.9	1375	968	1420	888	0.080	0.91	500
NA2XS(FL)2Y 6/10 (12) kV ALUMINUM CONDUCTOR															
1x35 RM/16	6	3.4	2.5	26	625	520	0.868	3.3	154	142	185	149	0.133	0.23	1000
1x50 RM /16	6	3.4	2.5	27	685	540	0.641	4.7	184	168	222	175	0.126	0.26	1000
1x70 RM /16	12	3.4	2.5	29	785	580	0.443	6.6	231	205	277	214	0.119	0.29	1000
1x95 RM /16	15	3.4	2.5	30	890	600	0.320	9.0	281	245	338	255	0.113	0.33	1000
1x120 RM /16	15	3.4	2.5	32	1000	640	0.253	11.4	326	278	391	290	0.108	0.36	1000
1x150 RM /16*	15	3.4	2.5	33	1100	660	0.206	14.2	369	311	442	324	0.105	0.39	1000
1x150 RM /25	15	3.4	2.5	33	1190	660	0.206	14.2	368	311	438	322	0.105	0.39	1000
1x185 RM /16*	30	3.4	2.5	35	1230	700	0.164	17.5	426	352	509	367	0.101	0.43	1000
1x185 RM /25	30	3.4	2.5	35	1320	700	0.164	17.5	425	351	504	364	0.101	0.43	1000
1x240 RM /16*	30	3.4	2.5	37	1440	740	0.125	22.7	503	408	601	424	0.098	0.47	1000
1x240 RM /25	30	3.4	2.5	37	1530	740	0.125	22.7	502	407	591	418	0.098	0.47	1000
1x300 RM /25	30	3.4	2.5	40	1750	800	0.100	28.4	576	458	675	470	0.094	0.52	500
1x400 RM /35	53	3.4	2.5	43	2190	860	0.0778	37.8	675	522	770	524	0.091	0.59	500
1x500 RM /35	53	3.4	2.5	46	2520	920	0.0605	47.3	783	592	881	590	0.089	0.64	500
1x630 RM /35	53	3.4	2.5	50	2980	1000	0.0469	59.6	914	672	1015	660	0.085	0.73	500
1x800 RM /35	53	3.4	2.6	55	3590	1100	0.0367	75.7	1049	751	1149	728	0.083	0.82	500
1x1000 RM /35	53	3.4	2.7	60	4310	1200	0.0291	94.6	1190	831	1288	794	0.080	0.91	500

Technical data (continued)



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No., nominal cross sectional area of conductors and screen	Minimum No. of wires in conductor	Nominal insulation thickness	Nominal over sheath thickness	Approximate outer diameter	Approximate cable weight	Minimum bending radius x20D	Max. conductor DC resistance at 20 °C	Short circuit rating Conductor (1 sec) (1)	Current rating (2)				Reactance @ 50 Hz (5)	Capacitance	Standard supply lengths
															
									In air (3)	In ground (4)	In air (3)	In ground (4)			
No. x mm ² /mm ²	-	mm	mm	mm	kg/km	mm	Ω/km	kA	A	A	A	A	Ω/km	μF/km	m
N2XS(FL)2Y 12/20 (24) kV COPPER CONDUCTOR															
1x35 RM/16	6	5.5	2.5	30	990	600	0.524	5.0	203	183	237	191	0.144	0.166	1000
1x50 RM /16	6	5.5	2.5	31	1130	620	0.387	7.2	242	216	285	225	0.136	0.182	1000
1x70 RM /16	12	5.5	2.5	33	1360	660	0.268	10.0	302	264	354	274	0.129	0.203	1000
1x95 RM /16	15	5.5	2.5	34	1660	680	0.193	13.6	368	315	431	328	0.122	0.227	1000
1x120 RM /16	18	5.5	2.5	36	1910	720	0.153	17.1	424	358	497	371	0.117	0.247	1000
1x150 RM /16*	18	5.5	2.5	37	2200	740	0.124	21.4	481	400	561	415	0.113	0.264	1000
1x150 RM /25	18	5.5	2.5	37	2285	740	0.124	21.4	479	399	554	410	0.113	0.264	1000
1x185 RM /16*	30	5.5	2.5	39	2600	780	0.0991	26.4	552	452	643	467	0.109	0.289	1000
1x185 RM /25	30	5.5	2.5	39	2690	780	0.0991	26.4	551	450	634	461	0.109	0.289	1000
1x240 RM /16*	34	5.5	2.5	41	3160	820	0.0754	34.3	649	522	753	538	0.105	0.316	1000
1x240 RM /25	34	5.5	2.5	41	3250	820	0.0754	34.3	646	519	738	528	0.105	0.316	1000
1x300 RM /25	34	5.5	2.5	44	3865	880	0.0601	42.9	741	584	840	590	0.101	0.345	500
1x400 RM /35	53	5.5	2.5	48	4840	960	0.0470	57.2	853	657	933	640	0.098	0.382	500
1x500 RM /35	53	5.5	2.5	50	5850	1000	0.0366	71.5	978	736	1056	706	0.095	0.419	500
1x630 RM /35	53	5.5	2.6	55	7300	1100	0.0283	90.0	1127	827	1198	778	0.091	0.475	500
1x800 RM /35	53	5.5	2.7	59	8910	1180	0.0221	114.3	1270	910	1332	843	0.088	0.526	500
1x1000 RM /35	53	5.5	2.9	64	11000	1280	0.0176	142.9	1412	986	1464	904	0.086	0.584	500
NA2XS(FL)2Y 12/20 (24) kV ALUMINUM CONDUCTOR															
1x50 RM /16	6	5.5	2.5	31	845	620	0.641	4.7	188	168	221	175	0.136	0.182	1000
1x70 RM /16	12	5.5	2.5	33	955	660	0.443	6.6	234	205	276	214	0.129	0.203	1000
1x95 RM /16	15	5.5	2.5	34	1070	680	0.320	9.0	285	245	336	255	0.122	0.227	1000
1x120 RM /16	15	5.5	2.5	36	1185	720	0.253	11.4	330	279	389	290	0.117	0.247	1000
1x150 RM /16*	15	5.5	2.5	37	1300	740	0.206	14.2	373	311	439	324	0.113	0.264	1000
1x150 RM /25	15	5.5	2.5	37	1385	740	0.206	14.2	373	311	436	322	0.113	0.264	1000
1x185 RM /16*	30	5.5	2.5	39	1440	780	0.164	17.5	430	352	506	367	0.109	0.289	1000
1x185 RM /25	30	5.5	2.5	39	1530	780	0.164	17.5	430	352	501	364	0.109	0.289	1000
1x240 RM /16*	30	5.5	2.5	41	1670	820	0.125	22.7	507	408	594	424	0.105	0.316	1000
1x240 RM /25	30	5.5	2.5	41	1755	820	0.125	22.7	506	407	587	419	0.105	0.316	1000
1x300 RM /25	30	5.5	2.5	44	1990	880	0.100	28.4	581	458	671	471	0.101	0.345	500
1x400 RM /35	53	5.5	2.5	48	2455	960	0.0778	37.8	677	522	763	525	0.098	0.382	500
1x500 RM /35	53	5.5	2.5	50	2795	1000	0.0605	47.3	785	593	875	592	0.095	0.419	500
1x630 RM /35	53	5.5	2.6	55	3310	1100	0.0469	59.6	919	675	1009	663	0.091	0.475	500
1x800 RM /35	53	5.5	2.7	59	3945	1180	0.0367	75.7	1054	756	1142	731	0.088	0.526	500
1x1000 RM /35	53	5.5	2.9	64	4715	1280	0.0291	94.6	1196	836	1280	799	0.086	0.584	500

Technical data (continued)



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No. x mm ² /mm ²	Minimum No. of wires in conductor	Nominal insulation thickness mm	Nominal over sheath thickness mm	Approximate outer diameter mm	Approximate cable weight kg/km	Minimum bending radius x20D mm	Max. conductor DC resistance at 20 °C Ω/km	Short circuit rating Conductor (1 sec) (1) kA	Current rating (2)				Reactance @ 50 Hz (5) Ω/km	Capacitance μF/km	Standard supply lengths m
															
									In air (3) A	In ground (4) A	In air (3) A	In ground (4) A			
N2XS(FL)2Y 18/30 (36) kV COPPER CONDUCTOR															
1x50 RM /16	6	8.0	2.5	36	1360	720	0.387	7.2	246	216	283	225	0.147	0.142	1000
1x70 RM /16	12	8.0	2.5	38	1600	760	0.268	10.0	306	263	352	274	0.139	0.157	1000
1x95 RM /16	15	8.0	2.5	39	1910	780	0.193	13.6	372	315	428	328	0.131	0.173	1000
1x120 RM /16	18	8.0	2.5	41	2175	820	0.153	17.1	429	358	493	372	0.126	0.188	1000
1x150 RM /16*	18	8.0	2.5	42	2470	840	0.124	21.4	486	401	558	415	0.122	0.199	1000
1x150 RM /25	18	8.0	2.5	42	2560	840	0.124	21.4	484	400	551	411	0.122	0.199	1000
1x185 RM /16*	30	8.0	2.5	44	2885	880	0.0991	26.4	557	453	639	468	0.117	0.217	1000
1x185 RM /25	30	8.0	2.5	44	2975	880	0.0991	26.4	556	451	630	462	0.117	0.200	1000
1x240 RM /16*	34	8.0	2.5	46	3465	920	0.0754	34.3	654	523	747	539	0.113	0.235	1000
1x240 RM /25	34	8.0	2.5	46	3550	920	0.0754	34.3	652	521	734	529	0.113	0.235	1000
1x300 RM /25	34	8.0	2.5	49	4190	980	0.0601	42.9	746	586	835	592	0.109	0.256	500
1x400 RM /35	53	8.0	2.6	53	5205	1060	0.0470	57.2	859	658	931	645	0.105	0.282	500
1x500 RM /35	53	8.0	2.7	56	6250	1120	0.0366	71.5	985	741	1052	711	0.101	0.307	500
1x630 RM /35	53	8.0	2.8	60	7740	1200	0.0283	90.0	1135	832	1196	787	0.097	0.346	500
1x800 RM /35	53	8.0	2.9	65	9380	1300	0.0221	114.3	1280	917	1329	849	0.094	0.381	500
1x1000 RM /35	53	8.0	3.0	69	11500	1380	0.0176	142.9	1423	997	1462	910	0.091	0.422	500
NA2XS(FL)2Y 18/30 (36) kV ALUMINUM CONDUCTOR															
1x50 RM /16	6	8.0	2.5	36	1070	720	0.641	4.7	191	168	220	175	0.147	0.142	1000
1x70 RM /16	12	8.0	2.5	38	1190	760	0.443	6.6	237	205	274	214	0.139	0.157	1000
1x95 RM /16	15	8.0	2.5	39	1325	780	0.320	9.0	289	245	334	255	0.131	0.173	1000
1x120 RM /16	15	8.0	2.5	41	1450	820	0.253	11.4	333	278	386	291	0.126	0.188	1000
1x150 RM /16*	15	8.0	2.5	42	1570	840	0.206	14.2	377	311	436	325	0.122	0.199	1000
1x150 RM /25	15	8.0	2.5	42	1660	840	0.206	14.2	376	311	433	322	0.122	0.199	1000
1x185 RM /16*	30	8.0	2.5	44	1730	880	0.164	17.5	434	353	501	367	0.117	0.217	1000
1x185 RM /25	30	8.0	2.5	44	1820	880	0.164	17.5	433	352	497	364	0.117	0.200	1000
1x240 RM /16*	30	8.0	2.5	46	1970	920	0.125	22.7	511	408	588	424	0.113	0.235	1000
1x240 RM /25	30	8.0	2.5	46	2060	920	0.125	22.7	509	407	582	420	0.113	0.235	1000
1x300 RM /25	30	8.0	2.5	49	2310	980	0.100	28.4	585	459	665	472	0.109	0.256	500
1x400 RM /35	53	8.0	2.6	53	2815	1060	0.0778	37.8	680	522	758	528	0.105	0.282	500
1x500 RM /35	53	8.0	2.7	56	3195	1120	0.0605	47.3	789	595	868	594	0.101	0.307	500
1x630 RM /35	53	8.0	2.8	60	3745	1200	0.0469	59.6	922	677	1002	666	0.097	0.346	500
1x800 RM /35	53	8.0	2.9	65	4415	1300	0.0367	75.7	1057	759	1133	735	0.094	0.381	500
1x1000 RM /35	53	8.0	3.0	69	5210	1380	0.0291	94.6	1199	842	1271	806	0.091	0.422	500

- * For cables in earth, 16mm² is permissible.
 (1) The conductor short circuit rating is based on an initial conductor temperature of 90 °C and a final temperature of 250 °C.
 (2) Current rating based upon operation at 90 °C conductor, three-phase a.c. load in trefoil touching formation or flat formation with one cable diameter clearance. The screens are bonded and earthed at both ends of the cables. According to VDE 0276-620.
 (3) Cable laid in freely circulating air at 30 °C, protected against direct thermal radiation due to sun, etc.
 (4) Cable directly buried at 0.7 m deep in soil at 20 °C, with 1.2 K*m/W thermal resistivity.
 (5) Calculated inductive reactance per core in trefoil touching formation. The screens are bonded and earthed at both ends of the cables.

TEMPERATURE RATING FACTORS

Ambient Temperature °C	20	25	30	35	40	45	50	55	60	65
Correction factor air	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65
Correction factor ground	1.00	0.96	0.93	0.89	0.85	0.80	0.76	-	-	-



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MEDIUM VOLTAGE POWER CABLES

N2XSEY; NA2XSEY

**According to VDE 0276: Three-Core XLPE Insulated, PVC Sheathed,
6/10 kV**

APPLICATION

3-core cable designed for replacement of bare overhead lines outdoors, trough and conduit or for direct burial in free draining soil, water or inside duct where no mechanical damage is to be expected. Power cable for utilities medium voltage underground distribution systems and in commercial buildings, industrial plants, power stations and substations. For rated voltages $U_0/U(U_m)$: 6/10(12) kV; at maximum conductor temperatures of 90 °C for continuous normal operation and 250 °C for short circuit.

DESIGN STANDARD

HD 620 S3 P10, section C (VDE 0276)

CONSTRUCTION

Stranded, round and compacted aluminum or copper conductor acc. to EN 60228, class 2, has a triple single head extruded smooth conductor screen, XLPE (cross-linked polyethylene) insulation and bonded insulation screen, all dry nitrogen cured; semi conducting separating tape; metal screen applied on each insulated core and made of annealed copper wires uniformly spaced around the cable and a counter spiral of copper tape; inner covering made of extruded thermoplastic compound, surface printed, red lead free PVC over sheath is extruded over all.

VDE MARK

The cables bear the corresponding VDE Mark.

PACKAGING

Standard supply lengths are given in the tables hereunder. Other bobbin lengths or cut to length - available upon request.

N2XSEY 3 x . . . 6/10 kV, XLPE-insulated
Cu-conductor, PVC-jacket



NA2XSEY 3 x . . . 6/10 kV, XLPE-insulated
Al-conductor, PVC-jacket





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Technical data

No. nominal cross sectional area of conductors and screen	Minimum No. of wires in conductor	Nominal insulation thickness	Nominal sheath thickness	Approximate outer diameter	Approximate cable weight	Minimum bending radius	Max. conductor DC resistance at 20 °C	Short circuit rating Conductor (1 sec) (1)	Current rating (2)		Charging current	Reactance @ 50 Hz (5)	Capacitance	Standard supply lengths
									In air (3)	In ground (4)				
No. x mm ² /mm ²		mm	mm	mm	kg/km	mm	Ω/km	kA	A	A	A/km	Ω/km	μF/km	m
N2XSEY 3x ... 6/10 (12) kV COPPER CONDUCTOR														
3x35/16	6	3.4	2.5	46	2990	690	0.524	5.0	191	181	0.42	0.117	0.23	1000
3x50/16	6	3.4	2.5	49	3525	735	0.387	7.2	229	214	0.47	0.111	0.26	1000
3x70/16	12	3.4	2.6	53	4380	795	0.268	10.0	277	257	0.46	0.101	0.25	1000
3x95/16	15	3.4	2.8	57	5465	855	0.193	13.6	349	313	0.60	0.100	0.33	1000
3x120/16	18	3.4	2.9	60	6455	900	0.153	17.1	401	355	0.66	0.095	0.36	500
3x150/25	18	3.4	3.0	63	7630	945	0.124	21.4	456	398	0.71	0.093	0.39	500
3x185/25	30	3.4	3.1	67	9025	1005	0.0991	26.4	524	449	0.79	0.090	0.43	500
3x240/25	34	3.4	3.3	73	11080	1095	0.0754	34.3	615	519	0.86	0.087	0.47	500
NA2XSEY 3x ... 6/10 (12) kV ALUMINIUM CONDUCTOR														
3x35/16	6	3.4	2.5	46	2350	690	0.868	3.3	148	140	0.42	0.117	0.23	1000
3x50/16	6	3.4	2.5	49	2660	735	0.641	4.7	178	166	0.47	0.111	0.26	1000
3x70/16	12	3.4	2.6	53	3140	795	0.443	6.6	222	203	0.46	0.101	0.25	1000
3x95/16	15	3.4	2.8	57	3680	855	0.320	8.9	270	242	0.60	0.100	0.33	1000
3x120/16	18	3.4	2.9	60	4220	900	0.253	11.3	312	276	0.66	0.095	0.36	500
3x150/25	18	3.4	3.0	63	4850	945	0.206	14.1	354	309	0.71	0.093	0.39	500
3x185/25	30	3.4	3.1	67	5525	1005	0.164	17.4	408	351	0.79	0.090	0.43	500
3x240/25	34	3.4	3.3	73	6555	1095	0.125	22.6	481	406	0.86	0.087	0.47	500

- (1) The conductor short circuit rating is based on an initial conductor temperature of 90 °C and a final temperature of 250 °C.
- (2) Current rating based upon operation at 90 °C conductor, three-phase a.c. load. The screens are bonded and earthed at both ends of the cables. According to VDE 0276-620.
- (3) Cable laid in freely circulating air at 30 °C, protected against direct thermal radiation due to sun, etc.
- (4) Cable directly buried at 0.7 m deep in soil at 20 °C, with 1.2 K*m/W thermal resistivity.
- (5) Calculated inductive reactance per core. The screens are bonded and earthed at both ends of the cables.

TEMPERATURE RATING FACTORS

Ambient Temperature °C	20	25	30	35	40	45	50	55	60	65
Correction factor air	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65
Correction factor ground	1.00	0.96	0.93	0.89	0.85	0.80	0.76	-	-	-