Synergy Cables Ltd.
Sapirim Industrial Park, 1 Eshel Street P.O.B.102,
Sderot ISRAEL 8701002
TEL 972-8-6809444, FAX 972-8-6890014
http://www.synergy-cables.com

1. Applications

For indoor or outdoor installation in the open-air in-tray, trough, and conduit or for direct burial in free-draining soil or inside duct where no mechanical damage is to be expected. Power cable for utilities low voltage underground distribution systems and in commercial buildings, industrial plants, power stations and substations. For systems operating at not more than 0.6 kV between a conductor to earth or 1 kV between conductors at a maximum conductor temperature of 90 °C for continuous normal operation and 250 °C for short circuit.

2. Reference Standards and documents

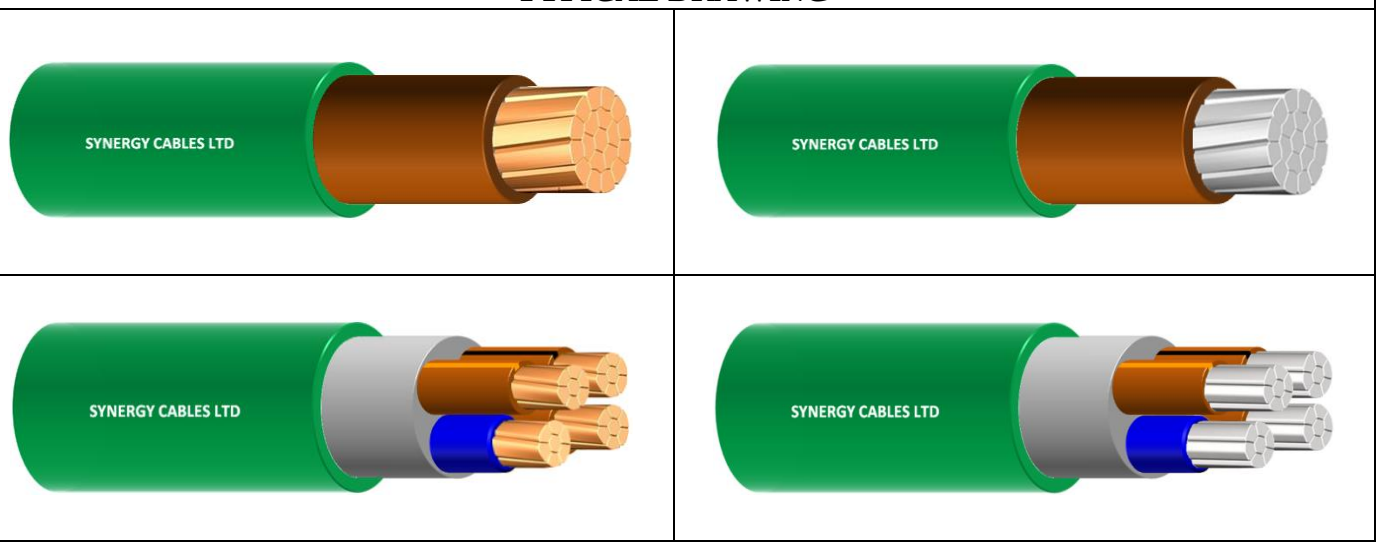
The cables covered by this specification manufactured and tested as per the following references:

2.1	Conforms to IEC 60502-1 Standard: *"Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1,2 kV) up to 30 kV (Um = 36 kV)" – "Part 1: Cables for rated voltages of 1 kV (Um = 1,2 kV) and 3 kV (Um = 3,6 kV)".*
2.2	Conforms to SI 1516-1 Standard: *"Extruded solid dielectric insulated power cables for rated voltages from 1 kV to 30 kV"*.
2.3	Conforms to IEC 60228 Standard: *"Conductors of insulated cables*
2.4	Conforms to European Union Regulation (EC) No. 1907/2006, concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (*REACH Regulation*).
2.5	Conforms to EU Directive No. 2002/95/CE on Restriction on Hazardous Substances, (*RoHS Directive*).
2.6	Conforms to IEC 60332-1 (*Flame propagation test*)

3. Low-Voltage Cables Construction

A copper single wire round, compacted circular stranded conductor, aluminum compacted circular stranded, conductor has an extruded cross-linked polyethylene (XLPE) colored insulation applied around the conductor. The cores twisted together and covered with an extruded inner covering. A green PVC outer sheath with printed marking extruded overall.

TYPICAL DRAWING



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4. Low-Voltage Cable Data

4.1 N2XY FR1 SINGLE CORE COPPER CONDUCTOR

Construction and Dimensional Data

Catalog number	Conductor cross-sectional area	Nominal		Minimum at any point	Approximate		Minimum bending radius	Max. conductor resistance at 20°C	Short circuit rating, 1sec (1)	Current rating (2)		Voltage drop ac (5)	
		Conductor diameter	Insulation thickness	Sheath thickness	Outer diameter	Cable weight				In Air (3)	Buried (4)	Single phase	Three phase
	mm²	mm	mm	mm	mm	kg/km	mm	Ω/km	kA	A		mV/A/m	
18110102	10	3.8	0.7	0.92	8.5	140	120	1.83	1.4	74	57	4.7	4.0
18110162	16	4.7	0.7	0.92	9.5	200	135	1.15	2.3	99	73	2.9	2.5
18110252	25	5.9	0.9	0.92	11.0	300	160	0.727	3.6	130	94	1.9	4.6
18110352	35	7.0	0.9	0.92	11.5	390	175	0.524	5.0	162	113	1.3	1.2
18110502	50	8.3	1.0	0.92	13.0	530	195	0.387	7.1	199	134	0.99	0.85
18110702	70	9.9	1.1	0.92	15.0	730	225	0.268	10.0	257	166	0.68	0.59
18110952	95	11.7	1.1	1.00	17.0	1,010	255	0.193	13.6	315	196	0.49	0.43
18111202	120	13.2	1.2	1.00	18.5	1,225	280	0.153	17.1	368	223	0.39	0.34
18111502	150	14.5	1.4	1.08	20.5	1,510	310	0.124	21.4	426	252	0.32	0.28
18111852	185	16.3	1.6	1.08	23.0	1,875	345	0.0991	26.4	490	283	0.29	0.22
18112402	240	18.6	1.7	1.16	25.5	2,420	385	0.0754	34.3	583	326	0.19	0.17
18113002	300	20.9	1.8	1.24	28.0	3,010	420	0.0601	42.9	675	368	0.16	0.14
18114002	400	23.7	2.0	1.32	31.5	3,855	475	0.0470	57.2	790	409	0.13	0.11
18115002	500	26.5	2.2	1.40	35.0	4,860	525	0.0366	71.5	908	471	0.105	0.091
18116302	630	31.0	2.4	1.56	40.5	6,335	610	0.0283	90.0	1044	526	0.087	0.075

1. *Short-circuit current calculated for adiabatic heating considering a temperature rise from 90ºC up to 250ºC in 1.0 sec.*
2. *Current rating based on the value listed in Israeli Electrical Code 2014, for a conductor working temperature of 90ºC, load factor LF = 1.0 (100%)*
3. *Current rating in free air, ambient temperature =35ºC as per table 90.8 from Israeli Electrical Code.*
4. *Current rating for cables in buried duct as per table 90.6 form Israeli Electrical Code, duct buried at 0.8m depth, ambient temperature=30ºC, in soil having thermal resistivity of 2.5 K*m/W.*
5. *Calculated for cables in touching-trefoil formation, conductor temperature = 90ºC, System frequency = 50 Hz, load power factor (cos φ)= 1.0*

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4.2 NA2XY FR1 SINGLE CORE ALUMINUM CONDUCTOR

Construction and Dimensional Data

Catalog number	Conductor cross-sectional area	Nominal		Minimum at any point	Approximate		Minimum bending radius	Max. conductor resistance at 20°C	Short circuit rating, 1sec (1)	Current rating (2)		Voltage drop ac (5)	
		Conductor diameter	Insulation thickness	Sheath thickness	Outer diameter	Cable weight				In Air (3)	Buried (4)	Single phase	Three phase
	mm²	mm	mm	mm	mm	kg/km	mm	Ω/km	kA	A		mV/A/m	
3371016	16	4.73	0.7	0.92	9.0	105	135	1.91	1.5	77	57	4.90	4.24
3371025	25	6.0	0.9	0.92	10.5	150	160	1.20	2.4	99	73	3.08	2.66
3371035	35	7.0	0.9	0.92	11.5	190	175	0.868	3.3	124	87	2.22	1.93
3371050	50	8.3	1.0	0.92	13.0	230	195	0.641	4.7	153	104	1.65	1.42
3371070	70	10.2	1.1	0.92	15.5	315	235	0.443	6.6	198	128	1.14	0.98
3371095	95	11.7	1.1	1.00	17.0	415	255	0.320	9.0	243	153	0.82	0.71
3371120	120	13.2	1.2	1.00	18.5	490	280	0.253	11.3	284	173	0.65	0.56
3371150	150	14.5	1.4	1.08	20.5	595	310	0.206	14.2	329	195	0.53	0.46
3371185	185	16.3	1.6	1.08	23.0	720	345	0.164	17.5	379	219	0.42	0.37
3371240	240	18.6	1.7	1.16	25.5	925	385	0.125	22.7	452	253	0.32	0.28
3371300	300	20.9	1.8	1.24	28.0	1,135	420	0.100	28.4	525	286	0.26	0.22
3371400	400	24.0	2.0	1.32	32.0	1,470	480	0.0778	37.8	636	324	0.20	0.18
3371500	500	26.5	2.2	1.40	35.0	1,815	525	0.0605	47.3	739	377	0.16	0.14
3371630	630	31.0	2.4	1.56	40.5	2,315	610	0.0469	59.6	863	427	0.13	0.11
3371800	800	35.0	2.6	1.64	45.0	2,925	675	0.0367	75.6	1005	497	0.103	0.089

1. *Short-circuit current calculated for adiabatic heating considering a temperature rise from 90ºC up to 250ºC in 1.0 sec.*
2. *Current rating based on the value listed in Israeli Electrical Code 2014, for a conductor working temperature of 90ºC, load factor LF = 1.0 (100%)*
3. *Current rating in free air, ambient temperature =35ºC as per table 90.8 form Israeli Electrical Code.*
4. *Current rating for cables in buried duct as per table 90.6 from Israeli Electrical Code, duct buried at 0.8m depth, ambient temperature=30ºC, in soil having thermal resistivity of 2.5 K*m/W.*
5. *Calculated for cables in touching-trefoil formation, conductor temperature = 90ºC, System frequency = 50 Hz, load power factor (cos φ)= 1.0*

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4.3 N2XY FR1 MULTI CORE COPPER CONDUCTOR

Construction and Dimensional Data

Catalog number	Conductor ** cross-sectional area	Nominal		Minimum at any point	Approximate		Minimum bending radius	Max. conductor resistance at 20°C	Short circuit rating, 1sec (1)	Current rating (2)		Voltage drop ac (5)	
		Conductor diameter	Insulation thickness	Sheath thickness	Outer diameter	Cable weight				In Air (3)	Buried (4)	Single phase	Three phase
	mm²	mm	mm	mm	mm	kg/km	mm	Ω/km	kA	A		mV/A/m	
28320296	2x1.5	1.354	0.7	1.24	10.5	140	160	12.1	0.21	25	24	30.86	-
28330296	2x2.5	1.727	0.7	1.24	11.0	185	165	7.41	0.36	35	32	18.90	-
18340296	2x4	2.19	0.7	1.24	12.0	230	180	4.61	0.57	47	41	11.75	-
18114796	2x6	2.68	0.7	1.24	13.0	290	195	3.08	0.86	60	52	7.85	-
18114996	2x10	3.8	0.7	1.24	15.0	420	225	1.83	1.4	86	68	4.67	-
18108996	2x16	4.7	0.7	1.24	17.0	585	255	1.15	2.3	110	88	2.93	-
18115796	2x25	5.9	0.9	1.24	20.0	855	300	0.727	3.6	143	113	1.85	-
18116196	2x35	7.0	0.9	1.24	23.0	1,130	345	0.524	5.0	178	136	1.34	-
18116496	2x50	8.3	1.0	1.24	26.0	1,520	390	0.387	7.1	216	161	0.988	-
18120701	2x70	9.9	1.1	1.24	29.5	2,060	445	0.268	10.0	277	198	0.690	-
18120951	2x95	11.7	1.1	1.40	34.0	2,825	510	0.193	13.6	338	234	0.495	-
18121201	2x120	13.2	1.2	1.48	37.5	3,445	565	0.153	17.1	394	267	0.394	-
18121501	2x150	14.5	1.4	1.56	41.0	4,225	615	0.124	21.4	454	301	0.321	-
18121851	2x185	16.3	1.6	1.64	46.0	5,250	690	0.0991	26.4	520	338	0.258	-
18122401	2x240	18.6	1.7	1.96	51.5	6,750	775	0.0754	34.3	615	390	0.199	-
28320396	3x1.5G	1.354	0.7	1.24	11.0	170	165	12.1	0.21	25	24	30.86	-
28330396	3x2.5G	1.727	0.7	1.24	11.5	210	175	7.41	0.36	35	32	18.90	-
18340396	3x4G	2.19	0.7	1.24	12.5	270	190	4.61	0.57	47	41	11.75	-
18350396	3x6G	2.68	0.7	1.24	13.5	345	205	3.08	0.86	60	52	7.85	-
18102196	3x10G	3.8	0.7	1.24	16.0	510	240	1.83	1.4	86	68	4.67	-
18102296	3x16G	4.7	0.7	1.24	18.0	730	270	1.15	2.3	110	88	2.93	-
18130252	3x25G	5.9	0.9	1.24	22.0	1,100	330	0.727	3.6	143	113	1.85	-
18130352	3x35G	7.0	0.9	1.24	24.5	1,450	370	0.524	5.0	178	136	1.34	-
18130502	3x50G	8.3	1.0	1.24	27.5	1,940	415	0.387	7.1	216	161	0.988	-
18130702	3x70G	9.9	1.1	1.32	32.0	2.690	480	0.268	10.0	277	198	0.690	-
18130952	3x95G	11.7	1.1	1.40	36.0	3,670	540	0.193	13.6	338	234	0.495	-
18131202	3x120G	13.2	1.2	1.48	40.0	4,500	600	0.153	17.1	394	267	0.394	-
18131502	3x150G	14.5	1.4	1.64	45.0	5,525	675	0.124	21.4	454	301	0.321	-
18131852	3x185G	16.3	1.6	1.72	49.5	6,895	745	0.0991	26.4	520	338	0.258	-
18132402	3x240G	18.6	1.7	1.88	55.0	8,855	825	0.0754	34.3	615	390	0.199	-
18133002	3x300G	20.9	1.8	2.04	61.0	11,015	915	0.0601	42.9	711	441	0.159	-

1. *Short-circuit current calculated for adiabatic heating considering a temperature rise from 90°C up to 250°C in 1.0 sec.*
2. *Current rating based on the value listed in Israeli Electrical Code 2014, for a conductor working temperature of 90°C load factor LF = 1.0 (100%)*
3. *Current rating for one cable in free air, ambient temperature =35°C, as per table 90.7 from Israeli Electrical Code.*
4. *Current rating for one cable in buried duct as per table 90.6 form Israeli Electrical Code, duct buried at 0.8m depth, ambient temperature=30°C, in soil having thermal resistivity of 2.5 K*m/W.*
5. *Calculated for one cable, conductor temperature = 90°C, System frequency = 50 Hz, load power factor (cos φ)= 1.0*

** *"G"- this indicates the presence Y/G core in cable construction.*

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4.3 N2XY FR1 MULTI CORE COPPER CONDUCTOR

Construction and Dimensional Data (continued)

Catalog number	Conductor ** cross-sectional area	Nominal		Minimum at any point	Approximate		Minimum bending radius	Max. conductor resistance at 20°C	Short circuit rating, 1sec (1)	Current rating (2)		Voltage drop ac (5)	
		Conductor diameter	Insulation thickness	Sheath thickness	Outer diameter	Cable weight				In Air (3)	Buried (4)	Single phase	Three phase
	mm²	mm	mm	mm	mm	kg/km	mm	Ω/km	kA	A		mV/A/m	
28320496	4x1.5	1.354	0.7	1.24	11.5	195	175	12.1	0.21	22	20	-	26.7
28330496	4x2.5	1.727	0.7	1.24	12.5	245	190	7.41	0.36	31	27	-	16.4
18340496	4x4	2.19	0.7	1.24	13.5	320	205	4.61	0.57	40	34	-	10.2
18350496	4x6	2.68	0.7	1.24	15.0	410	225	3.08	0.86	52	43	-	6.80
18102796	4x10	3.8	0.7	1.24	17.5	625	265	1.83	1.4	72	57	-	4.04
18102596	4x16	4.7	0.7	1.24	19.5	900	295	1.15	2.3	96	73	-	2.54
18111296	4x25	5.9	0.9	1.24	24.0	1,380	360	0.727	3.6	122	94	-	1.60
18106696	3x25+16	5.9+4.7	0.9+0.7	1.24	24.0	1,345	360	0.727 +1.15	3.6+2.3	122	94	-	1.60
18106596	3x25+16G												
18109296	4x35	7.0	0.9	1.24	27.0	1,805	405	0.524	5.0	152	113	-	1.16
18118196	3x35+16	7.0+4.7	0.9+0.7	1.24	26.0	1,650	390	0.524 +1.15	5.0+2.3	152	113	-	1.16
18106396	3x35+16G												
18110496	4x50	8.3	1.0	1.32	30.5	2,440	460	0.387	7.1	184	134	-	0.856
18106896	3x50+25	8.3+5.9	1.0+0.9	1.24	30.5	2,310	460	0.387 +0.727	7.1+3.6	184	134	-	0.856
18106496	3x50+25G												
18111796	4x70	9.9	1.1	1.40	35.5	3,395	535	0.268	10.0	236	166	-	0.598
18107496	3x70+35	9.9+7.0	1.1+0.9	1.32	34.5	3,155	520	0.268 +0.524	10.0+5.0	236	166	-	0.598
18117596	3x70+35G												
18102996	4x95	11.7	1.1	1.48	40.0	4,670	600	0.193	13.6	286	196	-	0.429
18107596	3x95+50	11.7+8.3	1.1+1.0	1.48	40.0	4,370	600	0.193 +0.387	13.6+7.1	286	196	-	0.429
18107796	3x95+50G												
18109596	4x120	13.2	1.2	1.64	44.5	5,715	670	0.153	17.1	332	223	-	0.341
18107096	3x120+70	13.2+9.9	1.2+1.1	1.56	45.0	5,475	675	0.153 +0.268	17.1+10.0	332	223	-	0.341
18108896	3x120+70G												
18112096	4x150	14.5	1.4	1.72	49.0	7,025	735	0.124	21.4	383	252	-	0.278
18107196	3x150+70	14.5+9.9	1.4+1.1	1.64	45.0	6.080	675	0.124 +0.268	21.4+10.0	383	252	-	0.278
18107296	3x150+70G												
18107896	4x185	16.3	1.6	1.88	55.0	8.765	825	0.0991	26.4	438	283	-	0.223
18106996	3x185+95	16.3+11.7	1.6+1.1	1.80	50.5	7,725	760	0.0991 +0.193	26.4+13.6	438	283	-	0.223
18106995	3x185+95G												
18119496	4x240	18.6	1.7	2.04	61.5	11,305	925	0.0754	34.3	516	326	-	0.172
18107696	3x240+120	18.6+13.2	1.7+1.2	1.96	56.5	9,925	850	0.0754 +0.153	34.4+17.1	516	326	-	0.172
18107695	3x240+120G												

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4.3 N2XY FR1 MULTI CORE COPPER CONDUCTOR

Construction and Dimensional Data (continued)

Catalog number	Conductor ** cross-sectional area	Nominal		Minimum at any point	Approximate		Minimum bending radius	Max. conductor resistance at 20°C	Short circuit rating, 1sec (1)	Current rating (2)		Voltage drop ac (5)	
		Conductor diameter	Insulation thickness	Sheath thickness	Outer diameter	Cable weight				In Air (3)	Buried (4)	Single phase	Three phase
	mm²	mm	mm	mm	mm	kg/km	mm	Ω/km	kA	A		mV/A/m	
28320596	5x1.5G	1.354	0.7	1.24	12.5	220	190	12.1	0.21	22	20	-	26.7
28330596	5x2.5G	1.727	0.7	1.24	13.5	285	205	7.41	0.36	31	27	-	16.4
18340596	5x4G	2.19	0.7	1.24	14.5	375	220	4.61	0.57	40	34	-	10.2
18350596	5x6G	2.68	0.7	1.24	16.0	490	240	3.08	0.86	52	43	-	6.8
18103396	5x10G	3.8	0.7	1.24	19.0	765	285	1.83	1.4	72	57	-	4.04
18103896	5x16G	4.7	0.7	1.24	22.0	1,130	330	1.15	2.3	96	73	-	2.54
18104096	5x25G	5.9	0.9	1.24	26.0	1,695	390	0.727	3.6	122	94	-	1.6
18109496	5x35G	7.0	0.9	1.24	29.0	2,225	435	0.524	5.0	152	113	-	1.16
18111596	5x50G	8.3	1.0	1.40	34.0	3,060	510	0.387	7.1	184	134	-	0.856
18112296	5x70G	9.9	1.1	1.48	38.5	4,210	580	0.268	10.0	236	166	-	0.598
18112696	5x95G	11.7	1.1	1.64	44.0	5,800	660	0.193	13.6	286	196	-	0.429
18112496	5x120G	13.2	1.2	1.72	49.0	7,100	735	0.153	17.1	332	223	-	0.341
18112796	5x150G	14.5	1.4	1.88	54.0	8,690	810	0.124	21.4	383	252	-	0.278
18112896	5x185G	16.3	1.6	2.04	60.5	10,876	910	0.0991	26.4	438	283	-	0.223
18112996	5x240G	18.6	1.7	2.20	67.5	13,970	1015	0.0754	34.3	516	326	-	0.172

1. *Short-circuit current calculated for adiabatic heating considering a temperature rise from 90ºC up to 250ºC in 1.0 sec.*
2. *Current rating based on the value listed in Israeli Electrical Code 2014, for a conductor working temperature of 90ºC load factor LF = 1.0 (100%)*
3. *Current rating for one cable in free air, ambient temperature =35ºC, as per table 90.7 from Israeli Electrical Code.*
4. *Current rating for one cable in buried duct as per table 90.6 form Israeli Electrical Code, duct buried at 0.8m depth, ambient temperature=30ºC, in soil having thermal resistivity of 2.5 K*m/W.*
5. *Calculated for one cable, conductor temperature = 90ºC, System frequency = 50 Hz, load power factor (cos φ)= 1.0*

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4.4 NA2XY FR1 MULTI CORE ALUMINUM CONDUCTOR

Construction and Dimensional Data

Catalog number	Conductor ** cross-sectional area	Nominal		Minimum at any point	Approximate		Minimum bending radius	Max. conductor resistance at 20°C	Short circuit rating, 1sec (1)	Current rating (2)		Voltage drop ac (5)	
		Conductor diameter	Insulation thickness	Sheath thickness	Outer diameter	Cable weight				In Air (3)	Buried (4)	Single phase	Three phase
	mm²	mm	mm	mm	mm	kg/km	mm	Ω/km	kA	A		mV/A/m	
3372016	2x16	4.73	0.7	1.24	17.0	385	255	1.91	1.5	87	68	4.90	-
3372025	2x25	6.0	0.9	1.24	20.5	550	310	1.20	2.4	104	86	3.08	-
3372035	2x35	7.0	0.9	1.24	23.0	720	345	0.868	3.3	130	104	2.23	-
3372050	2x50	8.3	1.0	1.24	26.0	910	390	0.641	4.7	157	123	1.64	-
3372070	2x70	10.2	1.1	1.24	30.5	1,245	460	0.443	6.6	203	152	1.14	-
3372095	2x95	11.7	1.1	1.40	34.0	1,610	510	0.320	9.0	247	179	0.82	-
3372120	2x120	13.2	1.2	1.48	37.5	1,935	565	0.253	11.3	288	205	0.65	-
3372150	2x150	14.5	1.4	1.56	41.5	2,355	625	0.206	14.2	332	232	0.53	-
3372185	2x185	16.3	1.6	1.64	46.0	2,890	690	0.164	17.5	381	259	0.42	-
3372240	2x240	18.6	1.7	1.80	51.5	3,695	775	0.125	22.7	451	299	0.32	-
3373016	3x16G	4.73	0.7	1.24	18.0	430	270	1.91	1.5	87	68	4.90	-
3373025	3x25G	6.0	0.9	1.24	22.0	645	330	1.20	2.4	104	86	3.08	-
3373035	3x35G	7.0	0.9	1.24	24.5	835	370	0.868	3.3	130	104	2.23	-
3373050	3x50G	8.3	1.0	1.24	27.5	1,030	415	0.641	4.7	157	123	1.64	-
3373070	3x70G	10.2	1.1	1.32	32.5	1,455	490	0.443	6.6	203	152	1.14	-
3373095	3x95G	11.7	1.1	1.40	36.0	1,850	540	0.320	9.0	247	179	0.82	-
3373120	3x120G	13.2	1.2	1.48	40.0	2,240	600	0.253	11.3	288	205	0.65	-
3373150	3x150G	14.5	1.4	1.64	44.0	2,725	660	0.206	14.2	332	232	0.53	-
3373185	3x185G	16.3	1.6	1.72	49.5	3,355	745	0.164	17.5	381	259	0.42	-
3373240	3x240G	18.6	1.7	1.88	55.0	4,280	825	0.125	22.7	451	299	0.32	-
3373300	3x300G	20.9	1.8	2.04	61.0	5,270	915	0.100	28.4	521	339	0.26	-

1. *Short-circuit current calculated for adiabatic heating considering a temperature rise from 90°C up to 250°C in 1.0 sec.*
2. *Current rating based on the value listed in Israeli Electrical Code 2014, for a conductor working temperature of 90°C load factor LF = 1.0 (100%)*
3. *Current rating for one cable in free air, ambient temperature =35°C, as per table 90.7 from Israeli Electrical Code.*
4. *Current rating for one cable in buried duct as per table 90.6 form Israeli Electrical Code, duct buried at 0.8m depth, ambient temperature=30°C, in soil having thermal resistivity of 2.5 K*m/W.*
5. *Calculated for one cable, conductor temperature = 90°C, System frequency = 50 Hz, load power factor (cos φ)= 1.0*

** *"G"- this indicates the presence Y/G core in cable construction.*

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4.4 NA2XY FR1 MULTI CORE ALUMINUM CONDUCTOR

Construction and Dimensional Data (continued)

Catalog number	Conductor ** cross-sectional area	Nominal		Minimum at any point	Approximate		Minimum bending radius	Max. conductor resistance at 20°C	Short circuit rating, 1sec (1)	Current rating (2)		Voltage drop ac (5)	
		Conductor diameter	Insulation thickness	Sheath thickness	Outer diameter	Cable weight				In Air (3)	Buried (4)	Single phase	Three phase
	mm²	mm	mm	mm	mm	kg/km	mm	Ω/km	kA	A		mV/A/m	
3374016	4x16	4.73	0.7	1.24	19.5	500	295	1.91	1.5	74	57	-	4.24
3374025	4x25	6.0	0.9	1.24	24.5	765	370	1.20	2.4	93	73	-	2.67
33709695	3x25+16	6.0+4.73	0.9+0.7	1.24	24.5	780	370	1.20+1.91	2.4+1.5	93	73	-	2.67
33709696	3x25+16G												
3374035	4x35	7.0	0.9	1.24	26.5	985	400	0.868	3.3	115	87	-	1.93
33709796	3x35+16	7.0+4.73	0.9+0.7	1.24	26.0	940	390	0.868+1.91	3.3+1.5	115	87	-	1.93
33709795	3x35+16G												
3374050	4x50	8.3	1.0	1.32	30.5	1,225	460	0.641	4.7	140	104	-	1.42
33710296	3x50+25	8.3+6.0	1.0+0.9	1.24	30.5	1.245	460	0.641+1.20	4.7+2.4	140	104	-	1.42
33710295	3x50+25G												
3374070	4x70	10.2	1.1	1.40	36.0	1,735	540	0.443	6.6	180	128	-	0.98
33711096	3x70+35	10.2+7.0	1.1+0.9	1.32	35.0	1,695	525	0.443+0.868	6.6+3.3	180	128	-	0.98
33711095	3x70+35G												
3374095	4x95	11.7	1.1	1.48	40.0	2,250	600	0.320	9.0	218	153	-	0.71
33711996	3x95+50	11.7+8.3	1.1+1.0	1.48	40.0	2,250	600	0.320+0.641	9.0+4.7	218	153	-	0.71
33707796	3x95+50G												
3374120	4x120	13.2	1.2	1.64	44.5	2,705	670	0.253	11.3	252	173	-	0.56
33713096	3x120+70	13.2+10.2	1.2+1.1	1.56	45.0	2,825	675	0.253+0.443	11.3+6.6	252	173	-	0.56
33713095	3x120+70G												
3374150	4x150	14.5	1.4	1.72	49.0	3,295	735	0.206	14.2	292	195	-	0.46
33714096	3x150+70	14.5+10.2	1.4+1.1	1.64	45.0	2,855	675	0.206+0.443	14.2+6.6	292	195	-	0.46
33714095	3x150+70G												
3374185	4x185	16.3	1.6	1.88	55.0	4,050	825	0.164	17.5	333	219	-	0.366
33715096	3x185+95	16.3+11.7	1.6+1.1	1.80	50.5	3,550	760	0.164+0.320	17.5+9.0	333	219	-	0.366
33715095	3x185+95G												
3374240	4x240	18.6	1.7	2.04	61.5	5,210	925	0.125	22.7	393	253	-	0.280
33716096	3x240+120	18.6+13.2	1.2+1.2	1.96	56.5	4,555	850	0.125+0.253	22.7+11.3	393	253	-	0.280
33716095	3x240+120G												
3375016	5x16G	4.73	0.7	1.24	22.0	630	330	1.91	1.5	74	57	-	4.24
3375025	5x25G	6.0	0.9	1.24	26.5	930	400	1.20	2.4	93	73	-	2.67
3375035	5x35G	7.0	0.9	1.24	29.0	1,215	435	0.868	3.3	115	87	-	1.93
3375050	5x50G	8.3	1.0	1.40	34.0	1,540	510	0.641	4.7	140	104	-	1.42
3375070	5x70G	10.2	1.1	1.48	40.0	2,190	600	0.443	6.6	180	128	-	0.98
3375095	5x95G	11.7	1.1	1.64	44.5	2,820	670	0.320	9.0	218	153	-	0.71
3375120	5x120G	13.2	1.2	1.72	49.5	3,385	745	0.253	11.3	252	173	-	0.56
3375150	5x150G	14.5	1.4	1.88	54.5	4,105	820	0.206	14.2	292	195	-	0.46

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4.4 NA2XY FR1 MULTI CORE ALUMINUM CONDUCTOR

Construction and Dimensional Data (continued)

Catalog number	Conductor ** cross-sectional area	Nominal		Minimum at any point	Approximate		Minimum bending radius	Max. conductor resistance at 20°C	Short circuit rating, 1sec (1)	Current rating (2)		Voltage drop ac (5)	
		Conductor diameter	Insulation thickness	Sheath thickness	Outer diameter	Cable weight						Conductor diameter	Insulation thickness
	mm²	mm	mm	mm	mm	kg/km	mm	Ω/km	kA	A		mV/A/m	
3375185	5x185G	16.3	1.6	2.04	61.0	5,060	915	0.164	17.5	333	219	-	0.366
3375240	5x240G	18.6	1.7	2.20	68.0	6,445	1020	0.125	22.7	393	253	-	0.280

1. *Short-circuit current calculated for adiabatic heating considering a temperature rise from 90°C up to 250°C in 1.0 sec.*
2. *Current rating based on the value listed in Israeli Electrical Code 2014, for a conductor working temperature of 90°C load factor LF = 1.0 (100%)*
3. *Current rating for one cable in free air, ambient temperature =35°C, as per table 90.7 from Israeli Electrical Code.*
4. *Current rating for one cable in buried duct as per table 90.6 form Israeli Electrical Code, duct buried at 0.8m depth, ambient temperature=30°C, in soil having thermal resistivity of 2.5 K*m/W.*
5. *Calculated for one cable, conductor temperature = 90°C, System frequency = 50 Hz, load power factor (cos φ)= 1.0*

** *"G"- this indicates the presence Y/G core in cable construction.*

Rated Voltage 0.6/1 kV

Conductor Flexibility – Stranded CL. 2

Minimum Bending Radius during Pull 15 x D

Maximum Conductor Temperature in Service 90°C

Lead Free

Flame Retardant IEC 60332 - 1