

**SINGLE CORE,
ALUMINUM COMPRESSED, BLOCKED STRAND CONDUCTOR
PRIMARY UNDERGROUND DISTRIBUTION CABLE
28 kV, 100 % Insulation Level 280 Mils TR-XLPE, CN WB, LLDPE Jacket**

APPLICATION:

For use on single phase and three phase primary underground distribution systems operating at 28 kV phase to phase at 100% insulation level. Suitable for either direct burial or installation in ducts.

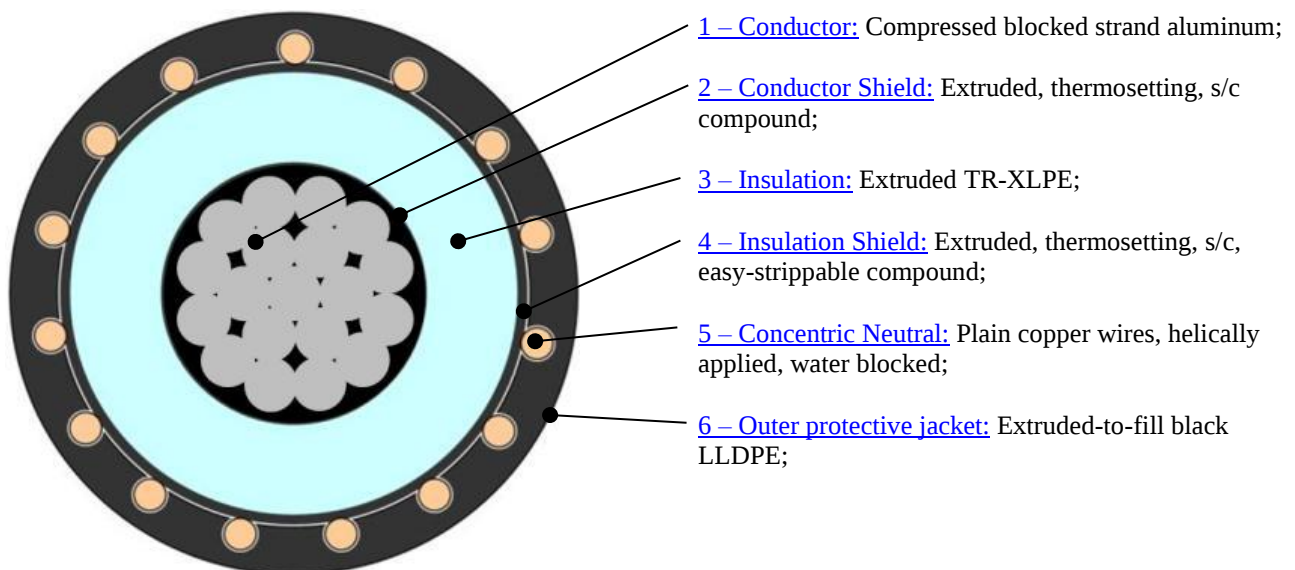
STANDARDS:

CAN/CSA-C68.5-2020 "Primary Shielded and Concentric Neutral Power Cables for Distribution Utilities"

ICEA S-94-649 Std. for "Concentric Neutral Cables Rated 5,000 – 46,000 V".

CONSTRUCTION: aluminum compressed, blocked strand conductor; single head triple extruded conductor shield, TR-XLPE (tree-retardant cross-linked polyethylene) insulation and easy strippable insulation shield, all dry nitrogen cured in one pass process; solid bare copper wires uniformly spaced around the cable as a concentric neutral conductor with the swelling tapes, which are located under and above the copper wires as a longitudinal water blocking barrier; black LLDPE Extruded-to fill jacket .

TYPICAL DESIGN DRAWING



Certificate number - 1745444



Synergy Cables Ltd.
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TECHNICAL PARAMETERS

UD, TRXLPE Insulated, 28000 VOLTS, 100 % INSULATION LEVEL, JACKETED																
Catalog No.	Size AWG or kcmil	Actual diameter, mm	Thickness in mm (3)			Diameters in mm					Neutral No. x AWG Size	Earth-fault current kA/1s (5)	mm Minimum bending radius (6)	Approx. Net Wgt. kg/km	Direct Burial A	Ampacity (1) In Duct (2) A
			Insulation (min /max)	Insulation Shield (min/ max)	Jacket (min. / max.)	Insulation (4)		Insulation Shield		Overall Approx.						
						Min.	Max.	Min.	Max.							
Full Concentric Neutral water blocked																
1AXC612918YY	1/0	9.15	6.73/7.87	0.76/1.52	1.14/2.03	23.241	25.654	24.77	28.19	35.0	16x#14	4.3	≥ 280	1,170	201	170
Cable marking: ** SYNERGY CABLES LTD. 232338 1/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC612938YY	2/0	10.4	6.73/7.87	0.76/1.52	1.14/2.03	24.384	26.797	25.91	29.34	36.0	20x#14	5.3	≥ 290	1,330	229	197
Cable marking: SYNERGY CABLES LTD. 232338 2/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC612958YY	3/0	11.4	6.73/7.87	1.02/1.91	1.14/2.03	25.654	28.067	27.69	31.12	38.5	16x#12	6.8	≥ 310	1,570	258	223
Cable marking: SYNERGY CABLES LTD. 232338 3/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC612978YY	4/0	13.1	6.73/7.87	1.02/1.91	1.14/2.03	27.051	29.464	29.08	32.51	40.0	20x#12	8.5	≥ 320	1,815	292	252
Cable marking: SYNERGY CABLES LTD. 232338 4/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC612998YY	250	14.2	6.73/7.87	1.02/1.91	1.14/2.03	28.448	30.861	30.48	33.91	41.5	23x#12	9.8	≥ 330	2,000	319	275
Cable marking: SYNERGY CABLES LTD. 232338 250 kcmil AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC613018YY	350	16.8	6.73/7.87	1.02/1.91	1.78/3.05	31.115	33.528	33.15	36.58	46.5	21x#10	14.2	≥ 370	2,680	377	331
Cable marking: SYNERGY CABLES LTD. 232338 350 kcmil AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC6130381YY	500	20.1	6.73/7.87	1.02/1.91	1.78/3.05	34.290	36.703	36.32	39.75	50.5	24x#9	20.4	≥ 405	3,485	447	392
Cable marking: SYNERGY CABLES LTD. 232338 500 kcmil AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
2/3 Concentric Neutral water blocked																
1AXC61291823YY	1/0	9.15	6.73/7.87	0.76/1.52	1.14/2.03	23.241	25.654	24.77	28.19	35.0	11x#14	2.9	≥ 280	1,080	201	171
Cable marking: SYNERGY CABLES LTD. 232338 1/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC612938R1YY	2/0	10.4	6.73/7.87	0.76/1.52	1.14/2.03	24.384	26.797	25.91	29.34	35.5	21x#16	3.5	≥ 285	1,180	228	196
Cable marking: SYNERGY CABLES LTD. 232338 2/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC612938R2YY	2/0	10.4	6.73/7.87	0.76/1.52	1.14/2.03	24.384	26.797	25.91	29.34	36.0	13x#14	3.5	≥ 290	1,200	228	197
Cable marking: SYNERGY CABLES LTD. 232338 2/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC612958RYY	3/0	11.4	6.73/7.87	1.02/1.91	1.14/2.03	25.654	28.067	27.69	31.12	37.5	17x#14	4.5	≥ 300	1,380	258	223
Cable marking: SYNERGY CABLES LTD. 232338 3/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC612978R1YY	4/0	13.1	6.73/7.87	1.02/1.91	1.14/2.03	27.051	29.464	29.08	32.51	39.5	21x#14	5.6	≥ 315	1,580	293	253
Cable marking: SYNERGY CABLES LTD. 232338 4/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC612998RYY	250	14.2	6.73/7.87	1.02/1.91	1.14/2.03	28.448	30.861	30.48	33.91	41.5	16x#12	6.8	≥ 330	1,800	321	277
Cable marking: SYNERGY CABLES LTD. 232338 250 kcmil AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC613018RYY	350	16.8	6.73/7.87	1.02/1.91	1.78/3.05	31.115	33.528	33.15	36.58	44.0	22x#12	9.3	≥ 350	2,200	382	334
Cable marking: SYNERGY CABLES LTD. 232338 350 kcmil AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC613038RYY	500	20.1	6.73/7.87	1.02/1.91	1.78/3.05	34.290	36.703	36.32	39.75	50.0	20x#10	13.5	≥ 400	2,985	453	398
Cable marking: SYNERGY CABLES LTD. 232338 500 kcmil AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1/2 Concentric Neutral water blocked																
1AXC6129182YY	1/0	9.15	6.73/7.87	0.76/1.52	1.14/2.03	23.241	25.654	24.77	28.19	35.0	8x#14	2.1	≥ 280	1,025	201	171
Cable marking: SYNERGY CABLES LTD. 232338 1/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC6129382YY	2/0	10.4	6.73/7.87	0.76/1.52	1.14/2.03	24.384	26.797	25.91	29.34	35.5	16x#16	2.7	≥ 285	1,120	228	197
Cable marking: SYNERGY CABLES LTD. 232338 2/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC6129582YY	3/0	11.4	6.73/7.87	1.02/1.91	1.14/2.03	25.654	28.067	27.69	31.12	37.5	13x#14	3.5	≥ 300	1,305	258	223
Cable marking: SYNERGY CABLES LTD. 232338 3/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC6129782YY	4/0	13.1	6.73/7.87	1.02/1.91	1.14/2.03	27.051	29.464	29.08	32.51	39.5	16x#14	4.3	≥ 315	1,490	294	253
Cable marking: SYNERGY CABLES LTD. 232338 4/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC6129982YY	250	14.2	6.73/7.87	1.02/1.91	1.14/2.03	28.448	30.861	30.48	33.91	40.5	19x#14	5.1	≥ 325	1,640	321	277
Cable marking: SYNERGY CABLES LTD. 232338 250 kcmil AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC6130182YY	350	16.8	6.73/7.87	1.02/1.91	1.78/3.05	31.115	33.528	33.15	36.58	43.0	26x#14	7.0	≥ 345	1,995	383	331
Cable marking: SYNERGY CABLES LTD. 232338 350 kcmil AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC6130382YY	500	20.1	6.73/7.87	1.02/1.91	1.78/3.05	34.290	36.703	36.32	39.75	49.0	24x#12	10.2	≥ 390	2,680	458	402
Cable marking: SYNERGY CABLES LTD. 232338 500 kcmil AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC6130582YY	750	24.2	6.73/7.87	1.40/2.29	1.78/3.05	39.116	41.529	41.91	45.34	54.0	35x#12	14.9	≥ 430	3,610	549	495
Cable marking: SYNERGY CABLES LTD. 232338 750 kcmil AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1/3 Concentric Neutral water blocked																
1AXC6129183YY	1/0	9.15	6.73/7.87	0.76/1.52	1.14/2.03	23.241	25.654	24.77	28.19	35.0	6x#14	1.6	≥ 280	990	201	171
Cable marking: SYNERGY CABLES LTD. 232338 1/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC6129383YY	2/0	10.4	6.73/7.87	0.76/1.52	1.14/2.03	24.384	26.797	25.91	29.34	35.5	11x#16	1.8	≥ 285	1,065	228	197
Cable marking: SYNERGY CABLES LTD. 232338 2/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																
1AXC6129583YY	3/0	11.4	6.73/7.87	1.02/1.91	1.14/2.03	25.654	28.067	27.69	31.12	37.0	14x#16	2.4	≥ 295	1,205	259	223
Cable marking: SYNERGY CABLES LTD. 232338 3/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM < YEAR> LTGG SUN RES CSA MARK																



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TECHNICAL PARAMETERS (continued)

Catalog No.	Size AWG or kcmil	Actual diameter, mm	Thickness in mm (3)			Diameters in mm					Neutral No. x AWG Size	Earth-fault current kA/1s (5)	mm Minimum bending radius (6)	Approx. Net Wgt. kg/km	Ampacity (1) Direct Burial A	In Duct (2) A
			Insulation (min /max	Insulation Shield (min/ max	Jacket (min. / max.)	Insulation (4)		Insulation Shield		Overall, Approx						
						Min.	Max.	Min.	Max.							
1/3 Concentric Neutral water blocked																
1AXC612983YY	4/0	13.1	6.73/7.87	1.02/1.91	1.14/2.03	27.051	29.464	29.08	32.51	38.5	17x#16	2.9	≥ 310	1,360	294	253
Cable marking: SYNERGY CABLES LTD. 232338 4/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6129783YY	4/0	13.1	6.73/7.87	1.02/1.91	1.14/2.03	27.051	29.464	29.08	32.51	38.5	18x#16	3.0	≥ 310	1,375	294	253
Cable marking: SYNERGY CABLES LTD. 232338 4/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6129783RYY	4/0	13.1	6.73/7.87	1.02/1.91	1.14/2.03	27.051	29.464	29.08	32.51	39.5	11x#14	2.9	≥ 315	1,395	294	254
Cable marking: SYNERGY CABLES LTD. 232338 4/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC612998R3YY	250	14.2	6.73/7.87	1.02/1.91	1.14/2.03	28.448	30.861	30.48	33.91	40.0	20x#16	3.4	≥ 320	1,495	322	277
Cable marking: SYNERGY CABLES LTD. 232338 250 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6129983YY	250	14.2	6.73/7.87	1.02/1.91	1.14/2.03	28.448	30.861	30.48	33.91	40.0	21x#16	3.5	≥ 320	1,505	322	277
Cable marking: SYNERGY CABLES LTD. 232338 250 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6130183YY	350	16.8	6.73/7.87	1.02/1.91	1.78/3.05	31.115	33.528	33.15	36.58	43.0	18x#14	4.8	≥ 345	1,850	385	332
Cable marking: SYNERGY CABLES LTD. 232338 350 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC613038YY	500	20.1	6.73/7.87	1.02/1.91	1.78/3.05	34.290	36.703	36.32	39.75	48.0	25x#14	6.7	≥ 385	2,395	464	407
Cable marking: SYNERGY CABLES LTD. 232338 500 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC613058YY	750	24.2	6.73/7.87	1.40/2.29	1.78/3.05	39.116	41.529	41.91	45.34	54.0	24x#12	10.2	≥ 430	3,230	560	505
Cable marking: SYNERGY CABLES LTD. 232338 750 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC613078YY	1000	28.2	6.73/7.87	1.40/2.29	1.78/3.05	42,799	45,339	45,59	49.15	58.0	31x#12	13.2	≥ 465	3,990	637	574
Cable marking: SYNERGY CABLES LTD. 232338 1000 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC613098YY	1250	31.5	6.73/7.87	1.40/2.29	1.78/3.05	46.482	49.022	49.28	52.83	61.5	39x#12	16.6	≥ 490	4,700	690	622
Cable marking: SYNERGY CABLES LTD. 232338 1250 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC613118YY	1500	34.3	6.73/7.87	1.40/2.29	1.78/3.05	49.530	51.943	52.32	55.75	66.0	29x#10	19.6	≥ 530	5,540	726	654
Cable marking: SYNERGY CABLES LTD. 232338 1500 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1/6 Concentric Neutral water blocked																
1AXC6129786YY	4/0	13.1	6.73/7.87	1.02/1.91	1.14/2.03	27.051	29.464	29.08	32.51	38.5	9x#16	1.5	≥ 310	1,270	295	254
Cable marking: SYNERGY CABLES LTD. 232338 4/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6129786RYY	4/0	13.1	6.73/7.87	1.02/1.91	1.14/2.03	27.051	29.464	29.08	32.51	39.5	6x#14	1.6	≥ 315	1,305	295	255
Cable marking: SYNERGY CABLES LTD. 232338 4/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6129986YY	250	14.2	6.73/7.87	1.02/1.91	1.14/2.03	28.448	30.861	30.48	33.91	40.0	10x#16	1.7	≥ 320	1,380	323	278
Cable marking: SYNERGY CABLES LTD. 232338 250 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6130186YY	350	16.8	6.73/7.87	1.02/1.91	1.78/3.05	31.115	33.528	33.15	36.58	42.5	14x#16	2.4	≥ 340	1,650	387	334
Cable marking: SYNERGY CABLES LTD. 232338 350 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6130186RYY	350	16.8	6.73/7.87	1.02/1.91	1.78/3.05	31.115	33.528	33.15	36.58	43.0	9x#14	2.4	≥ 345	1,690	387	335
Cable marking: SYNERGY CABLES LTD. 232338 350 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6130386YY	500	20.1	6.73/7.87	1.02/1.91	1.78/3.05	34.290	36.703	36.32	39.75	47.5	20x#16	3.4	≥ 380	2,135	468	410
Cable marking: SYNERGY CABLES LTD. 232338 500 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6130586YY	750	24.2	6.73/7.87	1.40/2.29	1.78/3.05	39.116	41.529	41.91	45.34	53.5	19x#14	5.1	≥ 430	2,895	573	516
Cable marking: SYNERGY CABLES LTD. 232338 750 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6130786YY	1000	28.2	6.73/7.87	1.40/2.29	1.78/3.05	42,799	45,339	45,59	49.15	57.5	25x#14	6.7	≥ 460	3,495	656	592
Cable marking: SYNERGY CABLES LTD. 232338 1000 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6130986YY	1250	31.5	6.73/7.87	1.40/2.29	1.78/3.05	46.482	49.022	49.28	52.83	60.5	31x#14	8.3	≥ 485	4,085	720	649
Cable marking: SYNERGY CABLES LTD. 232338 1250 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC6131186YY	1500	34.3	6.73/7.87	1.40/2.29	1.78/3.05	49.530	51.943	52.32	55.75	65.0	24x#12	10.2	≥ 520	4,800	769	693
Cable marking: SYNERGY CABLES LTD. 232338 1500 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1/9 Concentric Neutral water blocked																
1AXC6129789YY	4/0	13.1	6.73/7.87	1.02/1.91	1.14/2.03	27.051	29.464	29.08	32.51	38.5	6x#16	1.0	≥ 310	1,235	295	254
Cable marking: SYNERGY CABLES LTD. 232338 4/0 AWG AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1/12 Concentric Neutral water blocked																
1AXC613058R1YY	750	24.2	6.73/7.87	1.40/2.29	1.78/3.05	39.116	41.529	41.91	45.34	52.5	15x#16	2.5	≥ 420	2,680	581	523
Cable marking: SYNERGY CABLES LTD. 232338 750 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																
1AXC61305812YY	750	24.2	6.73/7.87	1.40/2.29	1.78/3.05	39.116	41.529	41.91	45.34	53.5	10x#14	2.7	≥ 430	2,735	581	523
Cable marking: SYNERGY CABLES LTD. 232338 750 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǳ <YEAR> LTGG SUN RES CSA MARK																



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TECHNICAL PARAMETERS (continued)

Catalog No.	Size AWG or kcmil	Actual diameter, mm	Thickness in mm (3)			Diameters in mm					Neutral No. x AWG Size	Earth-fault current kA/1s (5)	mm Minimum bending radius (6)	Approx. Net Wgt. kg/km	Ampacity (1)	
			Insulation (min / max)	Insulation Shield (min/ max)	Jacket (min. / max.)	Insulation (4)		Insulation Shield		Overall, Approx					Direct Burial A	In Duct (2) A
						Min.	Max.	Min.	Max.							
1/12 Concentric Neutral water blocked																
1AXC61307812YY	1000	28.2	6.73/7.87	1.40/2.29	1.78/3.05	42,799	45,339	45,59	49,15	56.5	20x#16	3.4	≥ 450	3,225	671	605
Cable marking: SYNERGY CABLES LTD. 232338 1000 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǂ <YEAR> LTGG SUN RES CSA MARK																
1AXC613078RYY	1000	28.2	6.73/7.87	1.40/2.29	1.78/3.05	42,799	45,339	45,59	49,15	57.5	13x#14	3.5	≥ 460	3,280	670	605
Cable marking: SYNERGY CABLES LTD. 232338 1000 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǂ <YEAR> LTGG SUN RES CSA MARK																
1AXC61309812YY	1250	31.5	6.73/7.87	1.40/2.29	1.78/3.05	46,482	49,022	49,28	52.83	60.0	25x#16	4.2	≥ 480	3,765	742	670
Cable marking: SYNERGY CABLES LTD. 232338 1250 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǂ <YEAR> LTGG SUN RES CSA MARK																
1AXC613098RYY	1250	31.5	6.73/7.87	1.40/2.29	1.78/3.05	46,482	49,022	49,28	52.83	60.5	16x#14	4.3	≥ 485	3,815	743	670
Cable marking: SYNERGY CABLES LTD. 232338 1250 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǂ <YEAR> LTGG SUN RES CSA MARK																
1AXC61311812YY	1500	34.3	6.73/7.87	1.40/2.29	1.78/3.05	49,530	51,943	52.32	55.75	64.5	19x#14	5.1	≥ 515	4,390	802	723
Cable marking: SYNERGY CABLES LTD. 232338 1500 kcmil AL WBC TRXLPE 90C 28KV 7.11MM ǂ <YEAR> LTGG SUN RES CSA MARK																

(1) Ampacity values are calculated by CYME/CYMCAP program.

Ampacity calculation based upon operation at 90°C conductor, 20°C ambient, 36inch (3ft) burial depth, earth $\rho = 90$, insulation and shield $\rho = 350$, concentric neutrals bonded at both ends, 100 % load factor.

(2) Buried in duct: 3 cables in touching-trefoil formation:

4/0 AWG - 500kcmil - in a 6" size common duct;

750kcmil - 1250kcmil - in a 8" size common duct;

1500kcmil - in 10" size common duct.

(3) Minimum and maximum point thicknesses as per Table 11 of CAN/CSA-C68.5-2020 Standard;

(4) Minimum and maximum insulation diameters as per Table C.2 of CAN/CSA-C68.5-2020 Standard.

(5) Concentric Neutral temperature rise: from 80°C up to 200°C.

(6) Recommended minimum bending radius as per Appendix E, Clause E.2 of ICEA S-94-649 standard

Note: These limits may not be suitable for conduit bends, sheaves, or other curved surfaces around which the cable may be pulled under tension while being installed due to sidewall bearing pressure limits of the cable.

** Low-temperature marking: LTGG corresponds to -40°C

Specification

SCOPE

This specification describes TRXLPE (tree-retardant cross-linked polyethylene) insulated power cables with concentric neutral for direct burial or installation in ducts. They are intended for use on single phase and three phase primary underground distribution systems not exceeding 35,000 volt phase to phase at maximum conductor temperatures of 90°C for continuous normal operation, 130°C for emergency overload conditions, and 250°C for short-circuit conditions.

CONDUCTOR

Class B compressed blocked strand copper as per Par. 4 of C68.5-20.

CONDUCTOR SHIELD

- The conductors shall be covered with a layer of extruded thermosetting semiconducting compound with a minimum point thickness in accordance with Table 4 of C68.5-20
- The extruded layer shall be firmly bonded to the insulation and shall meet the requirements of Par. 5 of C68.5-20.

INSULATION

- Directly over the conductor shield is applied a homogeneous wall of TR-XLPE (tree-retardant cross-linked polyethylene) material. The minimum point thickness shall be 6.73 mm and the maximum point of thickness shall be 7.87 mm in accordance with Table 11 of C68.5-20.

- Properties of the insulation shall be in accordance with Par. 6 of C68.5-20.

INSULATION SHIELD

- Over the insulation applied an extruded thermosetting semiconducting compound conforming to Par. 7 of C68.5-20. It in intimate contact with the outer surface of the insulation and is easy stripping leaving no conducting particles or other residue on the insulation surface. This layer is legibly identified as being conducting by printing: "Semiconducting – remove when terminated or splicing".
- The thickness of this layer is in accordance with Table 12 of C68.5-20.
- The insulation shield meets the resistivity requirements of Par. 7.7 of C68.5-20.

CONCENTRIC NEUTRAL

- A concentric neutral consisting of annealed bare copper wires helically applied with uniform spacing between wires and two swellable tapes, applied under (semi-conducting) and over the concentric wires as the additional water-blocking barrier as per Par. 8.4 of C68.5-20.
- The minimum number and size of the neutral wires as specified in Par. 8.4. Tables H.1 & H.2 of C68.5-20 as appropriate (informative). Accordingly, other alternate standardized constructions to the ones given in the table overleaf are available. The length of lay shall be not less than 6 nor more than 10 times the diameter over the concentric wire layer.

JACKET

- An insulating linear low-density polyethylene (LLDPE) Extruded-To Fill jacket is applied Overall and meets the requirements of Table 18 of C68.5-20.
- Minimum and maximum point jacket thickness as specified in Table 21 of C68.5-20.

IDENTIFICATION

The outer jacket surface of the cable is suitably marked along its entire length by surface indented print, at a maximum interval of 1 m, with the following information: "SYNERGY CABLES LTD", size ("AWG" or "kcmil") and "CPT" or "SOL", "AL" or "CU", "WBS", "Blocked Strand" if only meets the requirements of Cl. 4.3 or "WBC", "Blocked Cable", if meets the requirements of Cl. 4.3 & 8.4 "TRXLPE", "90C", "28 KV", "7.11 mm", "lightning bolt", "Year of manufacture"; and "Low –temperature marking" in accordance with Table 25, "Sun Res", "CS/CSA Mark" and sequential length marking at regular intervals of 1m.

TESTS

Cables shall be tested in accordance with CSA C68.5-20. Certified Test Reports may be furnished, if requested prior to production of the cables.

CSA Certificate number – 1745444