Short Circuit Current Ratings

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The short circuit currents quoted here are for cables operating normally at maximum conductor temperature of 90℃.

XLPE insulation is actually capable of withstanding short-term temperature up to 250℃.

According to ICEA P-32-382 Curves based on formula:

I: Short circuit current (kA)
A: Conductor area (mm^2)

T1: Operating temperature (85℃)

T2: Short circuit temperature (250℃)

t: Short circuit duration (sec)
T1 = 90, T2 = 250

Nominal Area	Short Circuit Current(kA)													
	Duration of Short Circuit in Second													
(mm^2)	0.03	0.05	0.07	0.1	0.14	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
1.5	1.26	0.98	0.83	0.69	0.58	0.49	0.40	0.35	0.31	0.28	0.26	0.24	0.23	0.22
2.5	2.02	1.56	1.32	1.10	0.93	0.78	0.64	0.55	0.49	0.45	0.42	0.39	0.37	0.35
4	3.25	2.52	2.13	1.78	1.50	1.26	1.03	0.89	0.80	0.73	0.67	0.63	0.59	0.56
6	4.86	3.77	3.18	2.66	2.25	1.88	1.54	1.33	1.19	1.09	1.01	0.94	0.89	0.84
10	8.19	6.34	5.36	4.49	3.79	3.17	2.59	2.24	2.01	1.83	1.70	1.59	1.50	1.42
16	12.99	10.06	8.50	7.11	6.01	5.03	4.11	3.56	3.18	2.90	2.69	2.52	2.37	2.25
25	20.6	15.9	13.5	11.3	9.5	8.0	6.5	5.6	5.0	4.6	4.3	4.0	3.8	3.6
35	28.5	22.1	18.7	15.6	13.2	11.1	9.0	7.8	7.0	6.4	5.9	5.5	5.2	4.9
50	38.6	29.9	25.3	21.2	17.9	15.0	12.2	10.6	9.5	8.6	8.0	7.5	7.1	6.7
70	55.9	43.3	36.6	30.6	25.9	21.6	17.7	15.3	13.7	12.5	11.6	10.8	10.2	9.7
95	77.5	60.0	50.7	42.4	35.9	30.0	24.5	21.2	19.0	17.3	16.0	15.0	14.1	13.4
120	97.9	75.8	64.1	53.6	45.3	37.9	31.0	26.8	24.0	21.9	20.3	19.0	17.9	17.0
150	120.3	93.1	78.7	65.9	55.7	46.6	38.0	32.9	29.5	26.9	24.9	23.3	22.0	20.8

185	150.8	116.8	98.8	82.6	69.8	58.4	47.7	41.3	36.9	33.7	31.2	29.2	27.5	26.1
240	198.3	153.6	129.8	108.6	91.8	76.8	62.7	54.3	48.6	44.3	41.0	38.4	36.2	34.3
300	248.7	192.6	162.8	136.2	115.1	96.3	78.6	68.1	60.9	55.6	51.5	48.2	45.4	43.1
400	329.3	255.1	215.6	180.4	152.5	127.6	104.1	90.2	80.7	73.6	68.2	63.8	60.1	57.0
500	401.0	310.6	262.5	219.6	185.6	155.3	126.8	109.8	98.2	89.7	83.0	77.7	73.2	69.5