SHORT CIRCUIT CURRENT OF CONDUCTORS FOR 1 sec.

Nominal cross sectional area (mm²)	PVC insulated cables (70ºC is to be considered as conductor temp. at the start of short circuit and final temp. is 160ºC) (kA)	XLPE insulated cables (90ºC is to be considered as conductor temp. at the start of short circuit and final temp. is 250ºC) (kA)
1.5	0.173	0.215
2.5	0.288	0.358
4	0.460	0.572
6	0.690	0.858
10	1.15	1.43
16	1.84	2.29
25	2.87	3.57
35	4.02	5.00
50	5.75	7.15
70	8.05	10.0
95	10.9	13.6
120	13.8	17.2
150	17.2	21.4
185	21.3	26.5
240	27.6	34.3
300	34.5	42.9
400	41.2	57.2
500	51.5	71.5
630	64.9	90
800	82.4	114
1000	103	143

The maximum short circuit current for times between 0.2 and 5 seconds may be calculated with the following formula:

$$I_k = \frac{I_1}{\sqrt{t_k}}$$

Where

I_k : short circuit current in amps during the time t_k ;

I_1 : short circuit current in amps during the time of 1 sec.

t_k : short circuit current duration, seconds.