Power Copper Conductors According to IEC 60228

Tinned conductors

Cross section	cl.2	cl.5	Cross section	cl.2	cl.5
mm²	Ohm/km	Ohm/km	mm²	Ohm/km	Ohm/km
1.0	18.2	20	70	0.270	0.277
1.5	12.2	13.7	95	0.195	0.210
2.5	7.56	8.21	120	0.154	0.164
4	4.70	5.09	150	0.126	0.132
6	3.11	3.39	185	0.100	0.108
10	1.84	1.95	240	0.0762	0.0817
16	1.16	1.24	300	0.0607	0.0654
25	0.734	0.795	400	0.0475	0.0495
35	0.529	0.565	500	0.0369	0.0391
50	0.391	0.393	630	0.0286	0.0292

Plain conductors

Cross section	cl.2	cl.5	Cross section	cl.2	cl.5
mm²	Ohm/km	Ohm/km	mm²	Ohm/km	Ohm/km
1	18.1	19.5	70	0.268	0.272
1.5	12.1	13.3	95	0.193	0.206
2.5	7.41	7.98	120	0.153	0.161
4	4.61	4.95	150	0.124	0.129
6	3.08	3.30	185	0.0991	0.106
10	1.83	1.91	240	0.0754	0.0801
16	1.15	1.21	300	0.0601	0.0641

25	0.727	0.780	400	0.0470	0.0486
35	0.524	0.554	500	0.0366	0.0384
50	0.387	0.386	630	0.0283	0.0287

Correction factors according to IEC 60228

IEC 60228 standard provides electrical resistance of copper conductors at an ambient temperature of 20°C.

For other temperatures, correction factors are applied as below:

Temperature (°C)	Kt
5	1.064
10	1.042
15	1.020
20	1.000
25	0.980
30	0.962
35	0.943
40	0.926
45	0.909
50	0.893
55	0.877
60	0.862
65	0.847
70	0.833
75	0.820
80	0.806
85	0.794
90	0.781
95	0.769
100	0.758