

CURRENT CARRYING CAPACITY AND VOLTAGE DROP

Cable Type: Flexible Cords PVC Insulated and PVC Sheathed BS 6500

Nom Cross- Sectional Area mm ²	Current Carrying Capacity D.C. or Single - Phase A.C. or 3 Phase A.C. A	Volt Drop Per Ampere Per Metre	
		D.C. or Single- Phase A.C.	3 Phase A.C.
		mV	mV
0.5	3	83	72
0.75	6	56	48
1.0	10	43	37
1.5	15	31	26
2.5	20	18	16
4	25	11	9.6

Correction factor for Ambient Temperature

70°C For PVC Cords

Ambient Temperature	35°C	40°C	45°C	50°C	55°C
Correction Factor	0.96	0.92	0.87	0.71	0.50

SHORT CIRCUIT RATING OF SINGLE CORE PVC INSULATED UNARMoured CABLE TO BS 6004

Conductor Size mm ²	One Second Rating A
1.5	143
2.5	240
4	382
6	570
10	960
16	1530
25	2400
35	3350
50	4600
70	6600
95	9100
120	11500
150	14200
185	17800
240	23400
300	29300
400	37500
500	47300

The above ratings are based on the following conditions:

- i) Conductor temperature before fault 70°C
- ii) Conductor temperature after fault 130°C

It is assumed that all the heat generated during the fault is retained in the conductor.

For short circuit ratings other than one second, the appropriate rating given in the above table shall be divided by the square root of the fault time in seconds.