

TABLE BEC 100. Current ratings and Resistance values for Tri-rated single core, heat resistant 105°C PVC flexibles to BS6231/UL/CSA

CONDUCTOR SIZE SQ.MM	MAXIMUM CURRENT RATING AMPS	MAXIMUM CONDUCTOR RESISTANCE @ 20°C OHMS/KM
0.5	11	39.0
0.75	14	26.0
1.0	17	19.5
1.5	21	13.3
2.5	30	7.98
4.0	41	4.95
6.0	53	3.30
10.0	75	1.91
16.0	100	1.21
25.0	136	0.780
35.0	167	0.554
50.0	204	0.386
70.0	259	0.272
95.0	321	0.206
120.0	374	0.161
150.0	429	0.129
185.0	496	0.106
240.0	595	0.0801
300.0	685	0.0601

Current ratings based on:

- (1) Single conductor in free air
- (2) Conductor temperature of 90°C
- (3) Ambient temperature of 45°C

Rating factors:

For ambient temperatures above 45°C, the following multiplying factors should be applied.

Ambient temperature: 45°C 50°C 55°C 60°C 65°C 70°C 75°C
 Close protection 1.00 0.97 0.90 0.82 0.73 0.63 0.52
 (1.45 x overload protection).

Fuses to BS3036 1.00 0.98 0.95 0.92 0.89 0.83 0.68

Correction factors for cables in groups:

Number of cables: 2 3 4 5 6 7 8
 Factor: 0.80 0.70 0.65 0.60 0.56 0.53 0.50

TABLE BEC 101. Current ratings for BS6195 types 4A and 4C Coil Lead flexibles.

CONDUCTOR SIZE SQ.MM	CURRENT TO GIVE APPROX 50°C RISE IN FREE AIR (AMPS)	
	VOLTAGE CATEGORY A,C & D	VOLTAGE CATEGORY E & F
0.5	10	-
0.75	14	-
1.0	19	-
1.5	24	-
2.5	33	-
4.0	45	-
6.0	60	-
10.0	90	-
16.0	120	114
25.0	160	152
35.0	220	209
50.0	270	257
70.0	330	314
95.0	400	380
120.0	450	428
150.0	520	494
185.0	600	570
240.0	720	684
300.0	800	-
400.0	1000	-

Current ratings based on:

- (1) Single conductor in free air
- (2) Conductor temperature of 90°C
- (3) Ambient temperature of 40°C

Rating factors for cables in groups:

Number of cables: 2 3 4 5 6 7 8
 Factor: 0.80 0.70 0.65 0.60 0.56 0.53 0.50

Adjustment for ambient temperature:

Ambient temperature: °C 25 30 35 40 45 50 55 60 65
 Permitted rise: °C 65 60 55 50 45 40 35 30 25
 Rating factor: 1.14 1.09 1.05 1.00 0.95 0.90 0.84 0.77 0.71

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