



**Current Ratings – Table 4E4A Multicore armoured cables having thermosetting insulation (Copper conductors). BS5467, BS6724**

**Current – carrying capacity (amperes):** Ambient temperature: 30°C , Conductor operating temperature: 90°C

Notes:

- Where the conductor is to be protected by a semi-enclosed fuse to BS3036, see item 6.2 of the preface to this appendix with the 16<sup>th</sup> edition regs.
- Where a conductor operates at a temperature exceeding 70°C it shall be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature (see regulation 512-02).
- Where cables in this table are connected to equipment or accessories designed to operate at a temperature not exceeding 70°C, the current ratings given are in the equivalent table for 70°C PVC insulated cables (BS6004, BS6346) shall be used (see also regulation 523-01-01)

Conductor cross-sectional area  <b>1</b>	Reference method 1 (clipped direct)		Reference method 11 (on a perforated horizontal or vertical cable tray) or Reference Method 13 (free air)	
	1 two core cable, single phase a.c or d.c <b>2</b>	1 three or four caore cable, three phase a.c <b>3</b>	1 two core cable, single phase a.c or d.c <b>4</b>	1 three or four core cable, three phase a.c <b>5</b>
(mm <sup>2</sup> )	(A)	(A)	(A)	(A)
1.5	27	23	29	25
2.5	36	31	39	33
4	49	42	52	44
6	62	53	66	56
10	85	73	90	78
16	110	94	115	99
25	146	124	152	131
35	180	154	188	162
50	219	187	228	197
70	279	238	291	251
95	338	289	354	304
120	392	335	410	353
150	451	386	472	406
185	515	441	539	463
240	607	520	636	546
300	698	599	732	628
400	787	673	847	728

**Table 4E4B**

**Voltage drop (per ampere per metre)** Conductor operating temperature: 90°C

Conductor cross sectional area <b>1</b>	Two core cable, d.c	Two core cable, single phase a.c			Three or four core cable, three phase a.c		
	<b>2</b>	<b>3</b>			<b>4</b>		
(mm <sup>2</sup> )	(mV/A/m)	(mV/A/m)			(mV/A/m)		
1.5	31	31			27		
2.5	19	19			16		
4	12	12			10		
6	7.9	7.9			6.8		
10	4.7	4.7			4.0		
16	2.9	2.9			2.5		
		R	X	Z	R	X	Z
25	1.85	1.85	0.160	1.90	1.60	0.140	1.65
35	1.35	1.35	0.155	1.35	1.15	0.135	1.15
50	0.98	0.99	0.155	1.00	0.86	0.135	0.87
70	0.67	0.67	0.150	0.69	0.59	0.130	0.60
95	0.49	0.50	0.150	0.52	0.43	0.130	0.45
120	0.39	0.40	0.145	0.42	0.34	0.125	0.37
150	0.31	0.32	0.145	0.35	0.28	0.125	0.30
185	0.25	0.26	0.145	0.29	0.22	0.125	0.26
240	0.195	0.20	0.140	0.24	0.175	0.125	0.21
300	0.155	0.16	0.140	0.21	0.140	0.120	0.185
400	0.120	0.13	0.140	0.190	0.115	0.120	0.165