



**Current Ratings – Table 4L4A Multicore armoured cables having thermosetting insulation (Aluminium conductors).  
BS5467, BS6724**

**Current – carrying capacity (amperes):**

Ambient temperature: 30°C , Conductor operating temperature: 90°C

Notes:

1. 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.
2. 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).
3. 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<br><b>1</b> | Reference method 1<br>(clipped direct)                |  | Reference method 11<br>(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<br><b>2</b> | 1 three or four caore cable, three phase a.c<br><b>3</b> | 1 two core cable, single phase a.c or d.c<br><b>4</b>  | 1 three or four core cable, three phase a.c<br><b>5</b> |
| (mm <sup>2</sup> )                         | (A)   | (A)  | (A)  | (A)   |
| 16   | 82  | 71   | 85   | 74  |
| 25   | 108   | 92   | 112  | 98  |
| 35   | 132   | 113  | 138  | 120   |
| 50   | 159   | 137  | 166  | 145   |
| 70   | 201   | 174  | 211  | 185   |
| 95   | -   | 214  | 254  | 224   |
| 120  | -   | 249  | -  | 264   |
| 150  | -   | 384  | -  | 305   |
| 185  | -   | 328  | -  | 350   |
| 240  | -   | 386  | -  | 418   |
| 300  | -   | 441  | -  | 488   |

**Table 4E4B**

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

| Conductor cross sectional area<br><b>1</b> | Two core cable, d.c<br><b>2</b> | Two core cable, single phase a.c<br><b>3</b> |       |      | Three or four core cable, three phase a.c<br><b>4</b> |       |      |
|--|---------------------------------|--|-------|------|---|-------|------|
| (mm <sup>2</sup> )                         | (mV/A/m)                        | (mV/A/m)                                     |       |      | (mV/A/m)  |       |      |
| 16   | 4.8                             | 4.8  |       |      | 4.2   |       |      |
|  |                                 | R  | X     | Z    | R   | X     | Z    |
| 25   | 3.1                             | 3.1  | 0.165 | 3.1  | 2.7   | 0.140 | 2.7  |
| 35   | 2.2                             | 2.2  | 0.160 | 2.2  | 1.90  | 0.140 | 1.95 |
| 50   | 1.60                            | 1.65   | 0.160 | 1.65 | 1.40  | 0.135 | 1.45 |
| 70   | 1.10                            | 1.10   | 0.155 | 1.15 | 0.96  | 0.135 | 0.97 |
| 95   | 0.82                            | 0.82   | 0.150 | 0.84 | 0.71  | 0.130 | 0.72 |
| 120  | -                               | -  | -     | -    | 0.56  | 0.130 | 0.58 |
| 150  | -                               | -  | -     | -    | 0.45  | 0.130 | 0.47 |
| 185  | -                               | -  | -     | -    | 0.37  | 0.130 | 0.39 |
| 240  | -                               | -  | -     | -    | 0.28  | 0.125 | 0.31 |
| 300  | -                               | -  | -     | -    | 0.23  | 0.125 | 0.26 |