

Table 4F3A - flexible cords, non-armoured (copper conductors)

CURRENT CARRYING CAPACITY

Current-carrying capacity Conductor cross-sectional Single-phase A.C. area	Current-carrying capacity		Maximum mass supportable by Three-phase A.C. twin flexible cord (see Regulations 522.7.2 and 559.6.1.5)
	D.C. or single-phase A.C.	Three-phase A.C.	
mm ²	A	A	kg
0.5	3	3	2
0.75	6	6	3
1	10	10	5
1.25	13	-	5
1.5	16	16	5
2.5	25	20	5
4	32	25	5

RATING FACTOR FOR AMBIENT TEMPERATURE

60°C thermoplastic or thermosetting insulated cords:

Ambient temperature	35°C	40°C	45°C	50°C	55°C
Rating Factor	0.91	0.82	0.71	0.58	0.41

90°C thermoplastic or thermosetting insulated cords:

Ambient temperature	35°C to 50°C	55°C	60°C	65°C	70°C
Rating Factor	1	0.96	0.83	0.67	0.47

Glass fibre cords:

Ambient temperature	35°C to 150°C	155°C	160°C	165°C	170°C	175°C
Rating Factor	1	0.92	0.82	0.71	0.57	0.4

180° C thermoplastic or thermosetting insulated cords:

Ambient temperature	35°C to 120°C	125°C	130°C	135°C	140°C	145°C
Rating Factor	1	0.96	0.85	0.74	0.6	0.42

VOLTAGE DROP

TABLE 4F3B Conductor operating temperature: 60°C

Conductor cross-sectional area	D.C. or single-phase A.C.	Three-phase A.C.
mm ²	A	mV/A/m
0.5	93	80
0.75	62	54
1	46	40
1.25	37	-
1.5	32	27
2.5	19	16
4	12	10

NOTE: *The tabulated values above are for 60°C thermoplastic or thermosetting insulated flexible cords and for other types of flexible cords they are to be multiplied by the following factors:

FOR: 90°C thermoplastic or thermosetting insulated	1.09
180°C thermosetting insulated	1.31
185°C glass fibre	1.43