

## TABLE 4D4A Multicore 70°C armoured thermoplastic insulated cables (Copper conductors)

CURRENT-CARRYING CAPACITY (amperes):

Air Ambient temperature : 30°C  
Ground Ambient temperature : 20°C  
Conductor operating temperature: 70°C

Conductor cross-sectional area	Reference Method C (clipped direct)		Reference Method E (on a perforated horizontal or vertical cable tray or in free air)		Reference Method D (direct in ground or in duct in ground, in or around buildings)	
	1 two core cable, single phase a.c. or d.c.	1 three or four core cable, three phase a.c.	1 two core cable, single phase a.c. or d.c.	1 three or four core cable, three phase a.c.	1 two core cable, single phase a.c. or d.c.	1 three or four core cable, three phase a.c.
1	2	3	4	5	6	7
(mm <sup>2</sup> )	(A)	(A)	(A)	(A)	(A)	(A)
1.5	21	18	22	19	22	19
2.5	28	25	31	26	29	24
4	38	33	41	35	37	30
6	49	42	53	45	46	38
10	67	58	72	62	60	50
16	89	77	97	83	78	64
25	118	102	128	110	99	82
35	145	125	157	135	119	98
50	175	151	190	163	140	116
70	222	192	241	207	173	143
95	269	231	291	251	204	169
120	310	267	336	290	231	192
150	356	306	386	332	261	217
185	405	348	439	378	292	243
240	476	409	516	445	336	280
300	547	469	592	510	379	316
400	621	540	683	590	-	-

VOLTAGE DROP (per ampere per metre)

## TABLE 4D4B

Conductor operating temperature: 70°C

Conductor cross-sectional area	Two core cable, d.c.	Two core cable, single phase a.c.			Three or four core cable, three phase a.c.		
1	2	3			4		
(mm <sup>2</sup> )	(mV/A/m)	(mV/A/m)			(mV/A/m)		
1.5	29	29			25		
2.5	18	18			15		
4	11	11			9.5		
6	7.3	7.3			6.4		
10	4.4	4.4			3.8		
16	2.8	2.8			2.4		
		r	x	z	r	x	z
25	1.75	1.75	0.170	1.75	1.50	0.145	1.50
35	1.25	1.25	0.165	1.25	1.10	0.145	1.10
50	0.93	0.93	0.165	0.94	0.80	0.140	0.81
70	0.63	0.63	0.160	0.65	0.55	0.140	0.57
95	0.46	0.47	0.155	0.50	0.41	0.135	0.43
120	0.36	0.38	0.155	0.41	0.33	0.135	0.35
150	0.29	0.30	0.155	0.34	0.26	0.130	0.29
185	0.23	0.25	0.150	0.29	0.21	0.130	0.25
240	0.180	0.190	0.150	0.24	0.165	0.130	0.21
300	0.145	0.155	0.145	0.21	0.135	0.130	0.185
400	0.105	0.115	0.145	0.185	0.100	0.125	0.160

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