

TABLE BEC 108. Current ratings for XLPE cable to IEC502 (Continued)
CABLES IN AIR

Rating factors for variation in ambient temperature and/or conductor temperature.

Conductor temperature °C	AIR TEMPERATURE °C						
	25	30	35	40	45	50	55
90	1.00	0.95	0.91	0.86	0.81	0.75	0.70
85	0.95	0.91	0.86	0.81	0.75	0.70	0.64

TABLE BEC 109. Current-carrying capacities and associated volt drops for single-core cables insulated with impregnated paper (BS6480), Lead sheathed, with PVC oversheath, non-armoured (Copper conductors).**

Conductor operating temperature: 80°C

Nominal cross-sectional area of conductor	(CLIPPED DIRECT)					(DEFINED CONDITIONS)							
	2 cables single-phase a.c. or d.c.			3 or 4 cables three-phase a.c.		2 cables flat or vertical, single phase a.c. or d.c.			3 or 4 cables flat or vertical three-phase a.c.		3 cables in trefoil, three phase a.c.		
	Current carrying capacity	Volt drop per ampere per metre a.c. d.c.		Current carrying capacity	Volt drop per amp per metre	Current carrying capacity	Volt drop per ampere per metre a.c. d.c.		Current carrying capacity	Volt drop per amp per metre	Current carrying capacity	Volt drop per amp per metre	
mm ²	A	mV	mV	A	mV	A	mV	mV	A	mV	A	mV	
50	190	0.93	0.93	180	0.82	230	0.94	0.93	220	0.84	205	0.81	
70	240	0.64	0.64	230	0.61	290	0.68	0.64	280	0.61	255	0.58	
95	300	0.48	0.47	285	0.48	355	0.56	0.47	345	0.47	315	0.43	
120	350	0.40	0.37	340	0.39	415	0.48	0.37	405	0.41	370	0.35	
150	405	0.33	0.30	390	0.35	475	0.42	0.30	460	0.38	420	0.30	
185	470	0.29	0.24	450	0.31	550	0.36	0.24	535	0.35	485	0.25	
240	580	0.25	0.18	575	0.28	675	0.38	0.18	670	0.33	580	0.22	
300	670	0.22	0.14	660	0.26	770	0.36	0.14	760	0.32	670	0.20	
400	775	0.20	0.11	765	0.23	890	0.31	0.11	870	0.30	775	0.18	
500	895	0.18	0.09	870	0.21	1000	0.29	0.09	975	0.28	885	0.17	
630	1030	0.17	0.07	990	0.18	1150	0.27	0.07	1100	0.26	1020	0.16	
800	1160	0.16	0.05	1100	0.17	1290	0.26	0.05	1220	0.24	1150	0.15	
1000	1280	0.16	0.04	1190	0.15	1420	0.25	0.04	1330	0.22	1270	0.15	

CORRECTION FACTORS FOR AMBIENT TEMPERATURE

Ambient temperature:	25°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C
Correction factor:	1.05	0.95	0.89	0.82	0.75	0.68	0.61	0.53	0.43	0.30

CORRECTION FACTORS FOR ** UNSERVED LEAD-SHEATHED CABLES.

Cross sectional area of conductor mm ² :	50 to 185	240 to 500	630 to 1000
2 or 3 cables, flat formation	0.95	1.00	1.01
3 cables, trefoil formation	0.93	0.94	0.96

battindustrial.sales@batt.co.uk