

TABLE BEC 105. Current ratings for 600/1000 Volts Grade XLPE /Lead sheathed/Armoured/PVC cables to EEMUA133

The maximum sustained ac current ratings given in this table are based, where applicable, on ERA Report 69-30: Part V - sustained current ratings for armoured cables with thermosetting insulation to BS5467. Any other current rating will have been calculated using agreed formulae and methods in IEC287.

Conditions of installation:

Ambient air temperature: 25°C
 Ground thermal resistivity: 1.2K.m/W
 Ground temperature: 15°C
 Depth of laying: 0.5m
 Maximum conductor temperature: 90°C

Nominal area of conductor mm ²	IN GROUND				IN DUCTS				IN AIR			
	2 Core		3 & 4 Core		2 Core		3 & 4 Core		2 Core		3 & 4 Core	
	Rating	Volt Drop per amp per mtr	Rating	Volt Drop per amp per mtr	Rating	Volt Drop per amp per mtr	Rating	Volt Drop per amp per mtr	Rating	Volt Drop per amp per mtr	Rating	Volt Drop per amp per mtr
	amp	mV	amp	mV	amp	mV	amp	mV	amp	mV	amp	mV
1.5	38	31	32	27	31	31	26	27	31	31	26	27
2.5	49	19	42	17	41	19	34	17	41	19	35	17
4	65	12	55	10	53	12	45	10	55	12	47	10
6	81	7.90	69	6.80	67	7.90	56	6.80	70	7.90	59	6.80
10	109	4.70	92	4.10	89	4.70	75	4.10	95	4.70	82	4.10
16	141	2.90	119	2.50	115	2.90	96	2.50	126	2.90	107	2.50
25	183	1.90	152	1.65	148	1.90	124	1.65	164	1.90	140	1.65
35	219	1.35	182	1.15	178	1.35	149	1.15	202	1.35	172	1.15
50	259	1.00	217	0.87	211	1.00	177	0.87	244	1.00	209	0.87
70	317	0.69	266	0.60	260	0.69	218	0.60	306	0.69	263	0.60
95	381	0.52	319	0.45	313	0.52	263	0.45	378	0.52	324	0.45
120	433	0.42	363	0.37	357	0.42	300	0.37	437	0.42	376	0.37
150	485	0.35	406	0.30	401	0.35	338	0.30	499	0.35	430	0.30
185	547	0.29	458	0.26	455	0.29	382	0.26	579	0.29	485	0.26
240	632	0.24	529	0.21	527	0.24	442	0.21	680	0.24	584	0.21
300	708	0.21	592	0.19	592	0.21	496	0.19	775	0.21	666	0.19
400	799	0.19	667	0.17	669	0.19	570	0.17	892	0.19	766	0.17

Rating factors for other ambient temperatures:

Ambient air temperature °C : 25 30 35 40 45 50 55
 rating factor: 1.00 0.95 0.91 0.86 0.80 0.75 0.69

Rating factors for other ground temperatures:

Ground temperature °C: 15 20 25 30 35 40 45
 rating factor: 1.00 0.97 0.93 0.89 0.86 0.82 0.76

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