

# Medium Voltage ABC 33kV Type B

**Description:** 33 kV Aluminium, 3 Core XLPE Insulated + PVC insulated Steel Catenary Type B

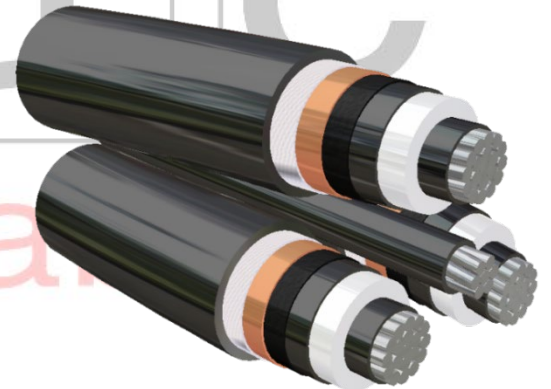
**Code:** 50mm<sup>2</sup> Steel Catenary  
70mm<sup>2</sup> Steel Catenary

F7JA 3nnn ZZ SGB 0K0S  
F7JA 3nnn ZZ SHB 0K0S

**Specification:** SANS 1713

*Last updated January 2026*

Size Code	...3nnn...	3050	3070	3095	3120	3150	3185
<b>PHYSICAL</b>							
Conductor size	mm <sup>2</sup> nom	10,0	12,0	13,5	14,5	16,0	8,5
Conductor diameter	mm app.	27,6	29,5	31,4	32,3	33,8	26,2
Diameter over insulation	mm app.	34,3	36,4	38,3	39,4	40,9	32,9
Core diameter (PVC Sheath)	mm app.	80,04	84,26	89,94	92,06	94,96	77,24
Assembled diameter)	mm app.	4,27	4,78	5,42	5,81	6,30	3,91
Cable mass	kg/m app.	2804	3061	3922	4118	4363	2609
Gross mass (500m)	kg app.	1201	1264	1349	1381	1424	1159
Bending radius	mm min.	232	283	325	367	420	188
Current ratings	Amps	10,0	12,0	13,5	14,5	16,0	8,5
<b>ELECTRICAL</b>							
DC Resistance @ 20°C	Ω/km	0,641	0,443	0,320	0,253	0,206	0,164
AC Resistance @ 90°C	Ω/km	0,822	0,568	0,411	0,325	0,265	0,211
Reactance	Ω/km	0,153	0,143	0,134	0,128	0,126	0,122
Impedance	Ω/km	0,836	0,586	0,432	0,349	0,293	0,244
<b>SHORT CIRCUIT RATINGS</b>							
Symmetrical (250 °C)	kA (1sec)	4,7	6,6	9,0	11,3	14,2	17,5
Earth Fault (250 °C)	kA (1sec)	2,0	2,1	2,3	2,4	2,5	2,6
<b>Finished code</b>		<b>...SGB</b>	<b>...SGB</b>	<b>...SGB</b>	<b>...SHB</b>	<b>...SHB</b>	<b>...SHB</b>
Steel Carrier size		50	50	50	70	70	70
Design Load (UTS/2,5)	kN max	24,6	24,6	24,6	34,9	34,9	34,9
Conductor diameter	mm app.	9,0	9,0	9,0	10,8	10,8	10,8
Core diameter (PVC sheath)	mm app.	11,5	11,5	11,5	13,5	13,5	13,5



DISCLAIMER: CBI reserves the right to change product specifications from time to time to effect improvements and /or enhancements and accepts no liability arising from any difference between the published parameters of this data sheet and the finished product, unless by prior written agreement.

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