

Single Core, Aluminium, XLPE Insulated, MDPE. (Type A) armoured.
 Longitudinally water blocked cable.

SIZE CODE: XLAWB 1x(conductor size)MDPE 33kV

Application

For use in power circuits of 19/33kV systems. Installed in cable trays and ducts.

Specification: SANS 1339

Voltage Rating: 19/33kV

Construction

Single core, circular Aluminum stranded conductor (water blocked), XLPE insulated, copper tape screened, flame retardant PVC bedded, Aluminium wire armoured, medium density Polyethylene sheathed.

Physical properties and dimensions											Electrical Properties										
Conductor size	Conductor diameter	Insulation diameter	Insulation thickness	Bedding diameter	Armour wire diameter	Armour wire area	Cable diameter	Cable mass	Gross mass (500m)	Bending radius	Current rating			Resistance		Inductive reactance	Impedance	Capacitance	Short circuit ratings		Zero sequence Impedance (Z ₀)
											Amps	Ω/km max		Ω /km	Ω /km				μF/km	Symmetrical	
												air	ground			ducts	dc @ 20°C	ac @ 90°C			
mm ² Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm Nom.	mm ²	mm Nom.	kg/m Nom.	kg Nom.	mm min.											
50	8.2	27.8	8.0	32.5	2.0	163.4	41.0	1.69	1 294	819	165	145	116	0.641	0.822	0.168	0.839	0.141	4.1	20.2	0.174
70	9.9	29.5	8.0	34.2	2.0	169.6	42.7	1.84	1 371	853	205	175	140	0.443	0.568	0.158	0.590	0.157	5.9	21.0	0.167
95	11.8	31.4	8.0	36.0	2.0	179.1	44.7	1.96	1 431	895	245	210	168	0.320	0.411	0.147	0.436	0.174	8.2	22.1	0.159
120	13.1	32.7	8.0	37.3	2.0	185.4	46.0	2.18	1 542	921	280	240	192	0.253	0.325	0.142	0.355	0.186	10.4	22.9	0.153
150	14.8	34.4	8.0	39.2	2.5	245.4	49.1	2.54	1 719	983	315	265	212	0.206	0.265	0.139	0.299	0.201	12.8	30.4	0.116
185	16.3	35.9	8.0	40.8	2.5	255.3	50.9	2.76	1 830	1018	360	300	240	0.164	0.211	0.134	0.250	0.214	16.0	31.6	0.111
240	18.9	38.5	8.0	43.3	2.5	270.0	53.4	3.08	1 988	1069	415	345	276	0.125	0.161	0.237	0.286	0.237	21.0	33.4	0.105
300	21.2	40.8	8.0	45.8	2.5	284.7	56.2	3.44	2 168	1123	470	386	309	0.100	0.129	0.123	0.179	0.257	26.3	35.2	0.100
400	23.9	43.5	8.0	48.5	2.5	299.4	59.1	3.86	2 379	1181	620	510	408	0.078	0.101	0.119	0.156	0.280	33.8	37.0	0.095
500	27.2	46.8	8.0	52.0	2.5	319.1	62.8	4.42	2 662	1255	780	635	508	0.061	0.079	0.211	0.225	0.308	43.4	39.5	0.089
630	31.2	50.8	8.0	56.0	2.5	338.7	67.0	5.09	2 993	1339	975	805	644	0.047	0.063	0.202	0.211	0.343	56.0	41.9	0.084

Standard installation conditions

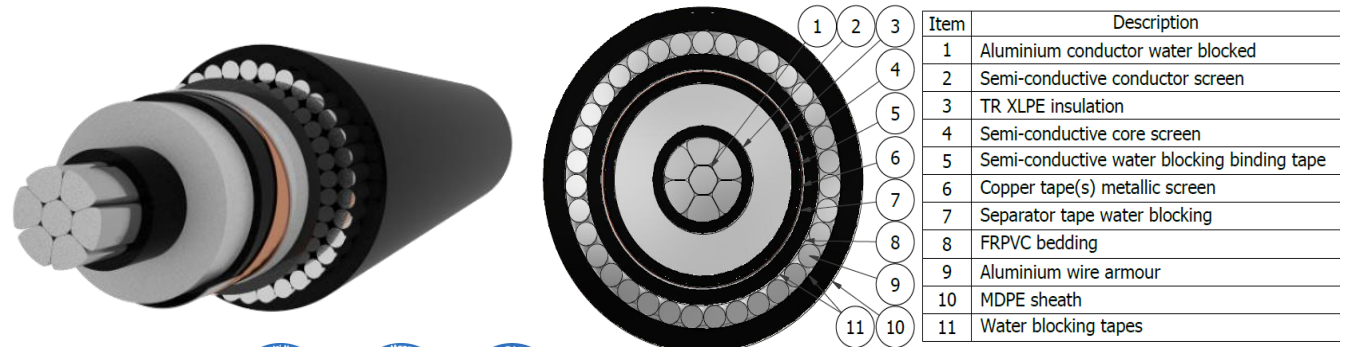
Soil thermal resistivity: 1.2K.m/W

Ambient air temperature: 30°C

Soil temperature: 25°C

Burial depth: 800mm

Solid bonded earth system



Revision: R00 03/11/2017



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