

# 230kV WATER TIGHT POWER CABLES (127/230/245kV) N2XS(FL)2YBY



**CONSTRUCTION:**

Stranded and compacted copper conductor, inner semi conductor, XLPE insulation, outer semi conductor, Water blocking semi conducting tape, copper wire screen plus copper tape applied helically, water blocking tape, PE-AL-PE (AL copolymer coated) water tight tape applied longitudinally, PE inner sheath, Aluminum tape armor, PVC outer sheath

**ABBREVIATION:**

Cu/SC/XLPE/SC/WBSCT/CWS/WBT/PE-AL-PE/PE/ATA/PVC

**STANDARD:**

IEC 62067, IEC 60228

**DIMENSIONAL AND MECHANICAL DATA:**

Number of cores x cross section / Screen cross section	Conductor diameter	Insulation thickness	Diameter over insulation	AL copolymer coated tape thickness	Aarmor tape thickness	Outer sheath thickness	Overall diameter
No.xmm <sup>2</sup>	mm	mm	mm	mm	mm	mm	mm
1x500 RM/150	26.5	24	79.5	0.3	0.8	4.3	104
1x630 RM/150	30.2	24	83	0.3	0.8	4.5	108
1x800 RM/150	34.5	24	87.5	0.3	0.8	4.6	113
1x1000 RM/150	39	24	92	0.3	0.8	4.8	118
1x1200 RM/150	42	24	95	0.3	0.8	4.9	122
1x1600 RM/150	51.2	24	104	0.3	0.8	5.2	132
1x2000 RM/150	56.5	24	109	0.3	0.8	5.4	137
1x2500 RM/150	61	24	114	0.3	0.8	5.6	143

**ELECTRICAL DATA:**

Number of cores x cross section / Screen cross section	Max. DC resistance of conductor at 20°C	Max. AC resistance of conductor at 90°C	Reactance		Capacitance
			Trefoil	Flat	
No.xmm <sup>2</sup>	Ω/km	Ω/km	Ω/km	Ω/km	μF/km
1x500 RM/150	0.0366	0.0486	0.135	0.193	0.137
1x630 RM/150	0.0283	0.0391	0.130	0.188	0.147
1x800 RM/150	0.0221	0.0320	0.126	0.184	0.160
1x1000 RM/150	0.0176	0.0270	0.122	0.180	0.172
1x1200 RM/150	0.0151	0.0204	0.119	0.177	0.180
1x1600 RM/150	0.0113	0.0160	0.113	0.171	0.206
1x2000 RM/150	0.0090	0.0127	0.110	0.168	0.220
1x2500 RM/150	0.0072	0.0101	0.108	0.166	0.233

Current ratings: see current ratings page 124

Max. conductor temperature in continuous operation: 90°C

Max. conductor temperature in short circuit: 250°C

Technical data : see page 127

Conductor sizes including and above 1000mm<sup>2</sup> are segmental