

3.1 230kV Line (Overland Portion)

Parameter Insulator Set Type		Suspension/ Jumper Suspension	Heavy Suspension	Tension (Twin)	Upright Low Duty	Inverted Low Duty
Pollution category		Heavy III				
Nominal creepage	mm	6000				
Insulator type		Cap & pin type disc insulators				
Insulator unit reference		U120BP	U210BP	U210BP	U120BP	U120BP
Type of Shed profile		Fog	Fog	Fog	Fog	Fog
Glaze colour		Grey	Brown	Brown	Grey	Grey
Unit puncture voltage	kV	110	125	125	110	110
Number of insulator units per string		16	14	2 x 14	16	16
Dielectric material		Porcelain				
Dry lightning impulse withstand voltage	kV	1050				
Wet power frequency withstand voltage	kV	460				
Power arc for insulator set						
• Current	kA	31,5				
• Duration	s	0.5				
Power arc for string insulator units: Current for duration	kA for s	12 for 0.1 or 6 for 0.2				
Arc gap nominal	mm	2100	2100	2100	1910	1910
RIV level per unit	dB	36				
RIV level per set	dB	45				
Test voltage for RIV & Corona	kV	150				
Mechanical/electromechanical failing load	kN	120	210	2 x 210	120	120

3.2 230kV Line (Overland Portion)

Parameter Insulator Set Type		Suspension/ Jumper Suspension	Heavy Suspension	Tension (Twin)	Upright Low Duty	Inverted Low Duty
Pollution category		Medium II				
Nominal creepage	mm	4900				
Insulator type		Cap & pin type disc insulators				
Insulator unit reference		U120B	U210B	U210B	U120B	U120B
Glaze colour		Grey	Brown	Brown	Grey	Grey
Unit puncture voltage	kV	110	125	125	110	110
Number of insulator units per string		17	14	2 x 14	17	17
Dielectric material		Porcelain				
Dry lightning impulse withstand voltage	kV	1050				
Wet power frequency withstand voltage	kV	460				
Power arc for insulator set						
• Current	kA	31,5				
• Duration	s	0.5				
Power arc for string insulator units: Current for duration	kA for s	12 for 0.1 or 6 for 0.2				
Arc gap nominal	mm	2100	2100	2100	1910	1910
RIV level per unit	dB	36				
RIV level per set	dB	45				
Test voltage for RIV & Corona	kV	150				
Mechanical/electromechanical failing load	kN	120	210	2 x 210	120	120

4. 230kV Line (River crossing Portion)

Parameter		Suspension	Tension
Insulator Set Type			
Pollution category		Heavy III	
Nominal creepage	mm	6000	
Insulator type		Cap & pin type disc insulators	
Insulator unit reference		U210BP	U300BP
Type of Shed profile		Fog	Fog
Glaze colour		Grey	Brown
Unit puncture voltage	kV	125	140
Number of insulator units per string		2x 14	2x 13
Dielectric material		Porcelain	
Dry lightning impulse withstand voltage of insulator set	kV	1050	
Standard Switching Impulse withstand voltage of insulator set	kV	460	
Power arc for insulator set			
• Current	kA	31.5	
• Duration	s	0.5	
Power arc for string insulator units: Current for duration	kA for s	12 for 0.1 or 6 for 0.2	
Arc gap nominal	mm	2100	2100
RIV level per unit	dB	36	
RIV level per set	dB	45	
Test voltage for RIV & Corona	kV	150	
Mechanical/electromechanical failing load	kN	2x 210	2x 300

