



ORISSA POWER TRANSMISSION CORPORATION LIMITED

(A Government of Orissa Undertaking)

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OFFICE OF THE SENIOR GENERAL MANAGER (CPC)

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CLARIFICATION:II

CLARIFICATION II TO THE TENDER NOTICE NO. 47/2011-12 (PACKAGE-I)

**Tender Specification: Sr. G.M, CPC-TENDER-INSULATOR-56/2011-12
REF: SECTION-IV (TECHNICAL SPECIFICATION): CL. No. 3.1.2 & CL. No. 4.6 (a) & (b). and GTP for 70 KN,90 KN, 120 KN & 160 KN.**

The above clause may be read as indicated below:-

(A) 3.1.2 PRINCIPAL PARAMETERS OF THE DISC INSULATORS:-

Sl. No.	Type of String.	Size of disc. Insulator (mm)	Minimum creepage distance of each disc (mm),	No. of standard discs 132 KV /220 KV	Electro-mechanical strength of insulator string fittings (KN)
1.	Single suspension	255 x 145	320	1x9/1x14	70 KN/90 KN Normal Disc Insulator
2.	Double suspension.	-do-	-do-	2x9/2x14	70 KN/90 KN Normal Disc Insulator
3	Single suspension	255 x 145	430	1x9/1x14	70 KN/90 KN Antifog Insulator
4	Double suspension.	-do-	-do-	2x9/2x14	70 KN/90 KN Antifog Disc Insulator
5	Single Tension	280x145	430	1x10/1x15	120 KN Antifog Disc Insulator
6	Double Tension	-do-	-do-	2x10/2x15	120 KN Antifog Disc Insulator
7	Single Tension	305x170	475	1x10/1x15	160 KN Antifog Disc Insulator
8	Double Tension	-do-	-do-	2x10/2x15	160 KN Antifog Disc Insulator

(B) 4.6 DIMENSIONAL TOLERANCE OF INSULATOR DISCS:

It shall be ensured that the dimensions of the disc insulators are within the limits specified below:

(a)

Sl. No.	Diameter of Disc (mm)	Standard mm	in	Maximum	Minimum
1.	70 KN/90 KN & 120 KN	255/255 & 280		As per IS	As per IS

2.	160 KN	305	As per IS	As per IS
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(b)

Sl. No.	Ball to Ball spacing Between Discs (mm)	Standard mm	in	Maximum	Minimum
1.	70 KN/90 KN/120 KN	145		As per IS	As per IS
2.	160 KN	170		As per IS	As per IS

**(C) GUARANTEED TECHNICAL PARTICULAR
FOR NORMAL DISC INSULATORS:-**

Sl. No.	DESCRIPTION	90 KN	70 KN
1.	Manufacture's name & address		
2	Type of Insulator	Ball & socket	Ball & socket
3	Size of ball & socket	16B	16B
4	Dimensions (in mm)		
(a)	Disc diameter	255	255
(b)	Unit spacing	145	145
(c)	Creepage distance of the single insulator-mm	320	320
5	Electro-mechanical strength of single insulator- in KN	90	70
6	Materials of shell	Porcelain	Porcelain
7.	Electrical value		
7.1	Power frequency Withstand voltage disc (a) Dry-kV (rms) (b) Wet-kV (rms)	70 40	70 40
7.2	Power frequency flash over voltage single-disc (a) Dry-kV (rms) (b) Wet-kV (rms)	75 45	75 45
7.3	Impulse withstand voltage 1.2/50 micro second (a) Positive -kV(peak). (b) Negative -kV (peak)	110 110	110 110
7.4	Impulse Flash over voltage 1.2/50 micro second . (a) Positive -kV(peak) (b) Negative -kV (peak)	120 120	120 120

**(D) GUARANTEED TECHNICAL PARTICULARS
FOR ANTIFOG DISC INSULATORS**

Sl. No.	DESCRIPTION	70 KN	90 KN	120KN	160 KN
1.	Manufacture's name & address				
2	Type of Insulator	Ball & socket	Ball & socket	Ball & socket	Ball & socket
3	Size of ball & socket	16B	16B	20	20
4	Dimensions				
(a)	Disc diameter	255	255	280	305
(b)	Unit spacing	145	145	145	170
(c)	Creepage distance of the single insulator-mm	430	430	430	475
5	Electro-mechanical strength	70	90	120	160

	of single insulator-kN				
6	Materials of shell	Porcelain	Porcelain	Porcelain	Porcelain
	Electrical value				
7.					
7.1	Power frequency Withstand voltage disc (a) Dry-kV (rms) (b) Wet-kV (rms)	80 45	80 45	85 50	90 50
7.2	Power frequency flash over voltage single-disc (a) Dry-kV (rms) (b) Wet-kV (rms)	85 50	85 50	90 55	95 55
7.3	Impulse withstand voltage 1.2/50 micro second 1.Positive –kV(peak) 2.Negative –kV (peak)	125 125	125 125	130 130	135 135
7.4	Impulse Flashover voltage 1.2/50 micro second 1.Positive –kV(peak) 2.Negative –kV (peak)	135 130	135 130	140 135	145 140

*** Tolerance as per relevant IS (Latest edition).**

All Other terms and conditions of the contract/specification shall remain unaltered.

**Sd/-
Sr. General Manager,CPC**