

**GUARANTEED TECHNICAL PARTICULARS FOR 11 KV TPMO SWITCH (AIR  
BREAK SWITCHES**

Sl No.		Min Requirement as per Tech. Spef.
1.	Name of Manufacturer	
2.	Rating	
(a)	Rated Insulation Level	
(b)	Rated Breaking Current	
(c)	Reference to standard	
3.	Constructional Features	
(a)	Weight of complete 11 KV Air break switch	
(b)	Size of blade, width and thickness	
(c)	Type of contacts and material thereof	
	1. Moving Contact	
	2. Fixed Contact	
(d)	Length, Size & Weight of operating rod pipd	
4.	Maximum temperature attained by contacts under continuous maximum rating condition in an ambient temp. of 50 C.	
5.	Maximum current in Amp. that isolator shall be capable of breaking at rated voltage.	
6.	Type of operating device including details of mechanism	
7.	Whether 11 KV Air Break Switches (TPMO) marked with ISI certificate or not.	
8.	Name of manufacturer of Insulator with type test result	
(i)	Is the offered TPMO Type Tested.	
(ii)	If yes, when & where was it type tested.	
(iii)	Is there any deviations in technical specn. of the offered 11 KV TPMO where compared to type tested.	
(vi)	Have you enclosed complete test report and drawing of the design already type tested inform the number of sheets of this report which have been enclosed with tender.	
9. (a)	Whether single break or not	Single break
(b)	No. of poles	3 poles
(c)	Voltage rating	12 KV
(d)	Frequency	50 Hz
(e)	Current rating AMPS	200 Amps
(f)	Normal	200 Amps
(ii)	Maximum with duration	
(g)	Temperature rise of the following at full rated current at ambient	
(i)	Copper contacts with tin coating, in air	
(ii)	Terminals of switches intended to the connected to external conductors by bolts	
(h)	Whether contacts are silver coated or tin coated along with thickness of coating in mm	

(i)	Voltage drop across terminals of poles	
(j)	Short time current and duration	12.5 kA (rms) 31.25 kA peak for (one second)
(k)	Material of fixed contact	Hard drawn Electrolytic copper flat. 30x 2.5 mm (Paired)
(l)	Material of terminal connector	Aluminium Alloy
(m)	Material of moving blade	Hard drawn Electrolytic copper flat 30x5 mm
(n)	Type diameter and length of operating handle	
(o)	Material of arcing horns	M.S. Galvanised 6 mm Rod
(p)	Size and length of base mounting channel	75x40x500 mm
(q)	Whether the TPMO Switch is complete with all accessories	
(r)	Whether dimensional drawing is enclosed with the tender	
(s)	Minimum clearance between phases (The center distance between the insulators of adjacent phases in the assembled position of switch).	550 mm
(t)	Center to center distance between insulators of the consecutive poles of the same phase in the assembled position of switch (in mm).	
(u)	Type of bearing used	BUSH Bearing
(v)	Impulse withstand voltage with 1/50 microsecond wave, positive and negative polarity.	
(i)	Across isolating distance	85 KV (Peak)
(ii)	To earth and between poles	75 KV (Peak)
(w)	One minute power frequency withstand voltage	
(a)	Across isolating distance	32 KV (rms)
(b)	Between poles and earth	28 KV (rms)
(x)	Whether all ferrous parts are hot dip galvanized or not.	

## 10. PARTICULARS FOR INSULATORS

Sl.	Item	
(a)	Type of insulator	11 KV Post Insulator
(b)	Name of manufacturer	
(c)	Height of the Insulator	254 mm
(d)	Diameter of the largest head	
(e)	PCD of insulator pin and cap	

## 11. ELECTRICAL CHARACTERISTICS

Sl. No.	Item	
(a)	(For one insulator)	
(b)	Flash <b>over</b> voltage	
(i)	Dry Power Frequency	
(ii)	Wet power frequency	
(iii)	Impulse voltage of 1.2/59 microsecond (+ve)	75 KV (Peak)
(iv)	Impulse voltage of 1.2/50 microsecond (-ve)	75 KV (Peak)
(d)	Power frequency puncture withstand voltage	110 KV (rms)
(e)	MECHANICAL CHARACTERISTICS :	
(i)	Cantilever strength upright	
(ii)	Cantilever strength under hung	
(iii)	Tensional strength	
(iv)	Tensile strength	
(v)	Compression strength	
(f)	GENERAL CHARACTERISTICS	
(i)	Minium creep age distance	320 mm (minimum)
(ii)	Weight of complete unit	
(g)	Standard to which insulator conforms	
(h)	Wt. of 11 KV TMO Switch complete set	