

ANNEXURE -II**Gapless Surge Arrester – Technical parameters**

Sr. No.	Description	Parameter
a.	Rated arrester voltage (Minimum)	132 kV
b.	Rated system voltage	145 kV
c.	Rated system frequency	50Hz
d.	System neutral earthing	Earthed through NGR
e.	Installation	Outdoor
f.	Nominal discharge current	20kA of 8/20 microsec wave.
g.	Class of arrester	20kA heavy duty type
h.	Minimum discharge capacity	12 kJ/kV (referred to rated voltage)
i.	Continuous operating voltage at 50°C (Minimum)	106 kV
j.	Maximum switching surge residual voltage (1kA)	280 kVp
k.	Maximum residual voltage at	
(i)	10kA	314kVp
(ii)	20kA nominal discharge current	334kVp
l.	Long duration discharge class	4
m.	High current short duration test value (4/10micro-sec.wave)	100kAp
n.	Current for pressure relief test	40kArms
o.	Low current long duration test value (2000microsec.)	1000Apeak
p.	Min. total creepage distance	4495 mm.
q.	One minute dry power frequency withstand voltage of arrester housing	275kVrms
r.	Impulse withstand voltage of arrester housing with 1.2/50 micro-sec. wave	+ 650KVp
s.	Pressure relief class	A
t.	RIV at 92 kVrms.	Less than 500 microvolts
u.	Partial discharge at 1.05 continuous over voltage	Not more than 50pC
v.	Seismic acceleration	As specified in section project
w.	Reference ambient temperature	50 deg C