Category Level 1: Electrical Systems and Lighting and Components and Accessories and Supplies - UNSPSC Code: 39

Category Level 2 : Electrical equipment and components and supplies - UNSPSC Code: 3912

Category Level 3 : Electrical switches and accessories - UNSPSC Code: 391222

Category Level 4: Disconnectors (Isolators) for Voltages >1KV with Post Insulators - UNSPSC Code: 39122233

S.No.	Parameters	Field type	Field Category	Value 1	Value 2	Value 3	Value 4	Value 5	Value 6	Value 7	Value 8	Value 9	Value 10	Value 11	Value 12
1	**GROUP: GENERIC**														
2	Alternating Current Disconnectors (Isolators) for Voltages Above 1 000 V generally conforming to IS:9921 (Part 1):1981, (Part 2):1982, (Part 3): 1982, (Part 4): 1985 and (Part 5):1985	Enumerable	Mandatory	Yes											
3	The isolators to be provided under this specification are intended to be used on	Enumerable	Mandatory	3 phase A.C. 50 cycles, effectively grounded system.											
4	Operating Mechanism	Enumerable	Golden, Filter, Mandatory	Manual											
5	Type	Enumerable	Mandatory	Outdoor type											
6	Rated voltages of 72.5 kV and below (in kV)	Enumerable	Golden, Filter, Mandatory	12	36										
7	Rated insulation level (Rated lightining impulse withstand voltage) To earth and between poles / Across the isolating distance (in kV peak value)	Enumerable	Golden, Filter, Mandatory	60/70 (List 1)	145/165 (List 1)	75/85 (List 2)	170/195 (List 2)								
8	Rated insulation level (Rated one minute power frequency withstand voltage) To earth and between poles / Across the isolating distance (in kV rms value)	Enumerable	Golden, Filter, Mandatory	28/32	70/80										
9	Rated frequency	Enumerable	Mandatory	50 Hz											
10	Rated normal current (in A)	Enumerable	Golden, Filter, Mandatory	200	400	630	800	1250	1600	2000	2500	4000			
11	Rated short time withstand current (in kA)	Enumerable	Golden, Filter, Mandatory	8	10	12.5	16	20	25	31.5	40	50	63	80	100
12	Rated peak withstand current (in kA)	Enumerable	Golden, Filter, Mandatory	20	25	32	40	50	63	80	100	125			
13	Rated duration in short circuit (in seconds)	Enumerable	Golden, Filter, Mandatory	1	3										

14	Rated pressure of compressed gas supply for operation (KPa)	Enumerable	Golden, Filter, Mandatory	500	1000	1600	2000	3000							
15	Temeprature rise	Enumerable	Mandatory	as per Table 4 of IS:IS : 9921(Part II) - 1982 latest											
16	Rated contact zone	Enumerable	Mandatory	as per Cl.3.10 of IS : 9921(Part II) - 1982 latest											
17	padlocking arrangements for locking in both end position to avoid unintentional operation	Enumerable	Mandatory	Yes with 5 lever brass padlocks having high neck with three keys											
20	**Group: SERVICE CONDITION**														
22	The ambient air temperature	Enumerable	Mandatory	<40 deg. C	<45 deg. C										
23	The minimum ambient air temperature	Enumerable	Golden, Filter, Mandatory	-5 deg.C	0 deg.C										
24	The altitude	Enumerable	Mandatory	<1000 m											
25	The ambient air is not materially polluted by dust, smoke, corrosive and/or flammable gases, vapours or salt.	Enumerable	Mandatory	Yes											
26	Four outdoor disconnetcors and earthing switches the ice coatiing	Enumerable	Mandatory	<1 mm											
27	Four outdoor disconnetcors and earthing switches, the wind pressure	Enumerable	Mandatory	< 700 N/m2											
28	Relative Humidity	Enumerable	Mandatory	<95%	<100%										
29	**GROUP: CONSTRUCTIONAL**														
30	No. of post per phase of isolators	Enumerable	Golden, Filter, Mandatory	3											
31	No. of pole	Enumerable	Golden, Filter, Mandatory	Triple pole, single											
32	Isolator break type	Enumerable	Golden, Filter, Mandatory	Double											
33	All isolators shall operate through 90 degree from their fully closed position to fully open position	Enumerable	Mandatory	Yes											

34	Isolators shall be supply with post insulators with mounting structures	Enumerable	Golden, Filter, Mandatory	Yes											
35	The isolators shall be suitable for	Enumerable	Mandatory	Mounting on the Boards standard structures											
36	The isolators shall be supplied with base channels along with fixing nuts, bolts and washers for mounting on the structured	Enumerable	Mandatory	Yes											
37	The maximum temperature attained by any part of the equipment when in service at site under continues full load conditions and exposed to the direct rays of Sun shall not exceed	Enumerable	Mandatory	<45 deg. C											
38	The Isolators and Isolators with earth switch inclusive of their operating mechanism should be such that they cannot come out of their open or close position by gravity wind pressure, vibrations reasonable shocks or accidental touching of connecting rods of the operating mechanism	Enumerable	Mandatory	Yes											
39	**GROUP: POST INSULATOR**														
40	No. of insulators per stack	Enumerable	Golden, Filter, Mandatory	2	3										
41	No. of stack with each isolator	Enumerable	Golden, Filter, Mandatory	9											
42	The insulator stack shall conform to the latest applicable Indian or IEC standard and in particulars to the IS: 2544 specification for porcelain post insulators	Enumerable	Mandatory	Yes											
43	Each cap and base shall be of	Enumerable	Golden, Filter, Mandatory	High-grade cast steel	Malleable steel casting										
44	Nominal system voltage KV (rms)	Enumerable	Golden, Filter, Mandatory	11 KV	33 KV										
45	Highest system voltage KV (rms)	Enumerable	Golden, Filter, Mandatory	12 KV	36 KV										
46	Dry P.F. One minute with stand KV (rms)	Enumerable	Golden, Filter, Mandatory	35 KV	75 KV										

47	Wet PF one minute withstand KV (rms)	Enumerable	Golden, Filter, Mandatory	35 KV	75 KV										
48	P.F. Puncture withstand test voltage KV	Enumerable	Mandatory	1.3 time the actual dry flash over voltage of the unit											
49	Impulse voltage withstand test KV (peak)	Enumerable	Golden, Filter, Mandatory	75 KV	170 KV										
50	Creepage distance mm (min)	Enumerable	Golden, Filter, Mandatory	320	580										
51	Tensile strength in KN	Enumerable	Golden, Filter, Mandatory	10 KN	16 KN										
54	**GROUP: MAIN CONTACTS**														
55	All isolators shall have heavy duty self aligning and high pressure line type fixed contacts of modern design and made of	Enumerable	Mandatory	Hard drawn electrolytic copper											
56	Fixed contact type	Enumerable	Mandatory	Reverse loop type											
57	This spring fixed contact shall be made of	Enumerable	Mandatory	Stainless steel											
58	The pad for connection of terminal connector shall be	Enumerable	Mandatory	Aluminum with 12 mm											
59	The switch blades forming the moving contacts shall be made from	Enumerable	Mandatory	Tubular section of hard drawn electrolytic copper											
60	The surfaces of the contacts shall be rendered smooth and coating is	Enumerable	Mandatory	silver plated											
61	Arcing contacts / Horn	Enumerable	Golden, Filter, Mandatory	Yes	No										
62	**GROUP: CONNECTORS**														
63	The connectors for 11KV isolator shall be made of	Enumerable	Golden, Filter, Mandatory	Aluminium alloy LM-9	Aluminium alloy LM-25										
64	The terminal connector shall be manufactured and tested as per IS: 5561.	Enumerable	Mandatory	Yes											

65	All nuts and bolts shall be made of	Enumerable	Mandatory	Stainless Steel											
66	**GROUP: PIPE**														
67	Operating handle pipe shall be ISI marked	Enumerable	Mandatory	Class B											
68	Inetrnal dia of pipe	Enumerable	Golden, Filter, Mandatory	24 mm	32 mm	38 mm									
69	**GROUP:BASE CHANNEL**														
70	The Isolator shall be mounted on base fabricated from steel channel section of adequate size	Enumerable	Golden, Filter, Mandatory	75mm x 40mm x 6 mm	100mm x 50mm x 6mm										
71	To withstand total weight of isolator and insulator and also all the forces that may encounter by the isolator during services, suitable holes shall be provided on this base channel to facilitates it's mounting on standard structures.	Enumerable	Mandatory	Yes											
72	The steel channel in each phase shall be mounted in vertical position and over it two mounting plates with suitable nuts and bolts shall be provided for minor adjustment at site	Enumerable	Mandatory	Yes											
73	Plate thickenss	Enumerable	Mandatory	8 mm											
74	**GROUP: WARRANTY**														
75	On site Warranty for complete equipments (inm Years)	Enumerable	Golden, Filter, Mandatory	2	3										
76	Installation and commissioning	Enumerable	Golden, Filter, Mandatory	Yes	No										
77	**GROUP: CERTIFICATION**														
78	Availability of type test report for the Isolators and Insulators from Central Govt., lab/NABL/ILAC accrediated lab to conformity of the speficiation	Enumerable	Mandatory	Yes											

79	Type test reports shall be furnished as and when requested to do so by Purchaser,Indentor,Consignee etc.,	Enumerable	Mandatory	Yes											