Technical requirements for transformer 35/6 kV

Item	Description	Required by NPC "Ukrenergo"	Guaranteed by the Manufacturer
1	**The basic parameters**		
	Manufacturer		
2	Factory type (brand)		
3	Transformer type	power, oil, two-winding	
4	Standard technical conditions	DSTU EN (IEC) 60076	
5	The nominal capacity of the transformer, kVA	2500	
6	Rated voltage of windings kV – HV – LV	 35 6	
7	Maximum operating voltage HV, kV	40.5	
8	Diagram and connection group of windings	Yn0d11	
9	Rated frequency, Hz	50	
10	Number of phases	3	
11	Short-circuit voltage, %, not more	6.5	
12	No-load current, %	1	
13	No-load losses, kW, not more	According to the regulations on eco-design of power transformers	
14	Losses on short circuit kW max	According to the regulations on eco-design of power transformers	
15	The type of voltage regulation	OLTC	
16	Internal insulation	IEC 60076-3	
	Construction Requirements		
17	Design	three-phase	
18	Installation (external, internal)	external	
20	Type of cooling system	Natural	
21	Winding Material		
22	Input types: – HV – LV	 Bushing Cable connection	
	OLTC – tapping range and steps	4x±2.5%	
23	Dimensions (length, width, height) mm		
24	Weight, t: – transport - full		
	Values of climatic factors of environment:		
25	Location category	U1 (for the region with moderate climate, to be outdoor located)	
26	Operating temperature range, °C	from - 40 to +40	

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27	The pressure of the wind in the glaze conditions, Pa	200	
28	Wind pressure, Pa	400	
29	The thickness of the glaze wall, mm	22	
30	Height above sea level, m, not more	1000	
31	Seismic area, on a scale MSK-64	6	
32	Pollution degree of the atmosphere in accordance with 1.IEC/TS 60815-1	C	
33	Unified specific creepage distance in accordance with 1.IEC/TS 60815-1, cm/kV, not less	41	
	Safety requirements		
34	Control and monitoring of temperature modes are not limited to the maximum output power	Yes	
35	Insulation class according to State Standard 8865	F	
36	Class resistance to the environment (E0, E1, E2)		
37	Flammability class (F0, F1)		
38	Security requirements, including fire	GOST 12.2.007.0-75 GOST 12.2.007.2-75 GOST 12.1.004-91	
39	The permissible noise levels	DSTU EN (IEC) 60076-10	
40	Number and date of issue of security certificate		
	Reliability requirements		
41	Durability, years, at least	30	
42	Shelf life up to commissioning (when stored under cover or indoors), months, not less	12	
43	The warranty period from the date of commissioning, years, not less	5	
	Scope of delivery		
44	Three phase Transformer	Yes	
45	Thermal control system complete with temperature sensors and controlling devices	Yes	
46	Spare parts according to the equipment supply list	Yes	
47	Datasheet of transformer, configuration sheet, maintenance documentation, and modes of operation (permissible systematic and accidental overload), assembly and dimensional drawings, wiring diagrams, protocols (acts) acceptance tests in Ukrainian language	Yes	
48	Certificates of - compliance - origin	 Yes Yes	

Item	Description	Required by NPC "Ukrenergo"	Guaranteed by the Manufacturer
49	Marking, packing and conservation	State Standard 15150-69 State Standard 14192-96	