Technical requirements for auxiliary transformer 6/0.4 kV

Item	Description	Required by NPC "Ukrenergo"	Guaranteed by the Manufacturer
	The basic parameters		
1	Manufacturer		
2	Factory type (brand)		
3	Transformer type	power, oil, two-winding	
4	Standard technical conditions	State Standard 11677-85 and other IEC standards	
5	The nominal capacity of the transformer, kVA	630	
6	Rated voltage of windings kV – HV – LV	6 0.4	
7	Maximum operating voltage HV, kV	7.2	
8	Diagram and connection group of windings	Y/Yn-0	
9	Rated frequency, Hz	50	
10	Number of phases	3	
11	Short-circuit voltage, %, not more	5,5	
12	No-load current, %		
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	No-load tap changing 2x± 2,5 %	
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	
23	Dimensions (length, width, height) mm		
24	Weight, t: – transport		

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	- full		
	Values of climatic factors of environment:		
25	Location category	U1	
26	Operating temperature range, °C	from - 40 to +40	
27	The pressure of the wind in the glaze conditions, Pa	200	
28	Wind pressure, Pa	450	
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 IEC/TS 60815-1: 2008	C	
33	Unified specific creepage distance in accordance with 1.IEC/TS 60815-1: 2008, mm/kV, not less	41,0	
	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	
	Contents of delivery		
44	Transformer three-phase, complete	Yes	
45	Thermal control system complete with temperature sensors and controlling devices	Yes	
46	Spare parts according to the equipment supply list	Yes	

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