## Technical Specification for Three Phase Liquid-Immersed Transformer 15,75 / 0.42kVA



offered									
Description	Unit	63	100	160	250	400	630	800	1000
·		kVA	kVA	kVA	kVA	kVA	kVA	kVA	kVA
Ratings									
Applied standard		IEC 60076							
Rated voltage	kV	15,75 / 0.42							
Rated power	kVA	63	100	160	250	400	630	800	1000
Windings material		Al / Al							
Max. rated voltage, HV side (Um)	kV	17.5							
HV rated lightning impulse	LAZ								
withstand voltage (1.2/50μs)	kV	95							
HV rated power frequency	kV	38							
withstand voltage (1 min) LV Rated lightning impulse									
withstand voltage (1.2/50µs)	kV	-							
LV Rated power frequency	1,,,								
withstand voltage (1 min)	kV	8							
Vector group symbol	-	Dyn5							
Rated frequency	Hz	50							
Type of regulation - off load	%	± 3 x 2.5							
Impedance voltage (at 75°C)	%	4.5	4.5	4.5	4.5	4.5	6	6	6
uk (±10% tolerance)	/0	7.5	7.3	7.3			Ů	Ů	U
Altitude above sea level	m	1000							
Type of cooling		ONAN							
Design (maximum ambient) temperature:	°C	40							
Maximum temperature rise in top oil	К	60							
Maximum winding temperature rise	K	65							
Losses, acc. to EN 50588-1:2015 and EU Reg	ulation N	№ 548/2	2014						
* No-load losses	W	105	145	210	300	430	600	650	770
* Load losses (at 75°C)	W	1270	1750	2350	3250	4600	6500	8400	10500
* Total losses	W	1375	1895	2560	3550	5030	7100	9050	11270
	M	ain Acc	essorie	es					
HV bushings type (DIN 42531)		20Nf250							
LV bushings type (DIN 42539)		3/250	3/250	3/250	3/630	3/630	3/1000	3/1000	3/2000
Tap changer	1	Yes							
LV terminal flags	1	No	No	No	No	No	Yes	Yes	Yes
Oil temperature indicator	1	Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	Yes*
Oil level indicator		Yes							
Pressure relief valve	1	Yes							
Oil draining device		Yes							
on araning acvice		153							

	Bidirectional wheels		Yes							
3	General Data									
	Total Weight	kg	650	815	1030	1215	1655	2300	2860	3305
	Oil Weight	kg	165	210	255	290	370	525	650	710
	Overall Dimensions									
	a) Length (A) tolerance (±50)	mm	905	1035	1095	1115	1215	1435	1490	1685
	b) Width (B) tolerance (±50)	mm	750	750	820	840	890	975	1015	1015
	c) Height (C) tolerance (±50)	mm	1305	1330	1405	1520	1630	1650	1830	1900
	d) Wheel track / Skid base (D)	mm	520	520	520	520	670	670	670	820

Insulated Liquid

Inhibited naphthenic, PCB free transformer iol, in accordance with IEC 60296-2012.

## Protective coatings

The outer surfaces of the tank and other metal structures, exposed to the atmospheric conditions should be treated as follows:

- Blast cleaning to minimum Sa 2½ near "white metal". Use a spray nozzle technology with grains
  of steel that makes the surface rough in order to apply the primer with a higher grade;
- Degreasing and cleaning;
- Priming use an anticorrosive primer PF-07, applied by industrial equipment for fully cover by flow coating or brush for confined spaces. Primer's viscosity by VZ-4 - 18÷20. D.F.T. - 25 ± 5µm;
- Painting middle coat use an alkyd enamel RAL 7033 with viscosity by VZ-4 18÷20.
   Applied by flowcoat for coverage of 30 ± 5μm;
- Painting final coat use an alkyd enamel RAL 7033 with viscosity by VZ-4 18÷20.
   Applied by spray gun for coverage of 20 ± 5μm;

The total thickness of the outer coating is minimum 75  $\pm$  5 $\mu$ m

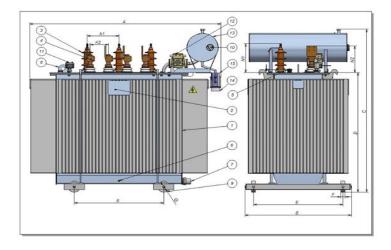
6 Testing

The transformer will be subjected to routine and type tests according to IEC 60076 Standards, also in accordance with the Client's requirements.

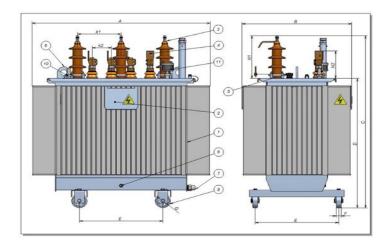
Transportation

Transformers are transported fully assembled and filled with insulating liquid, on wooden sledges to the possibility of lifting by a forklift truck.

\*with contacts



- 1. Tank
- 2. Rating plate
- 3. HV Bushing
- 4. LV Bushing
- 5. Tap changer
- 6. Earthing nut
- 7. Oil draining device
- 8. Lifting lugs
- 9. Bidirectional wheels
- 10. Oil level indicator
- 11. Bimetallic thermometer



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- 10. Oil level indicator
- 11. Contact thermometer
- 12. Buchholz relay
- 13. Expand vessel
- 14. Dehydrating breather
- 15. Protection box