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CATALOGUE SHEET
Oil-immersed Distribution Transformer
2500 kVA 10/0.69 kV

Technical Parameters		
	Description	**Value**
1	Transformer Type	MarkoEco2 2500/10-0.69 AkAAo (Tier2)
2	Construction Type	
•	hermetically sealed	YES
•	with conservator	NO
3	**Rated Power (kVA)**	**2500 kVA**
4	Frequency (Hz)	50 Hz
5	PRIMARY WINDING - H.V.	
•	rated voltage (V)	**10000 V**
•	tapping	±3×2,5%
•	windings material	Aluminium (Al)
•	insluation level Um/AC/LI	12/28/75
6	SECONDARY WINDING - L.V.	
•	rated voltage (V)	**690 V**
•	windings materia	Aluminium (Al)
•	insluation level Um/AC/LI	1.1/8/–
7	**Vector Group**	**Dd0**
8	Standards	EN 60076, EN 50588-1, EN 50708-1
9	Cooling	ONAN
10	Mounting	Outdoor / Indoor
11	Altitude	do 1000 m
12	Ambient Temperature	-25 °C ... +40 °C
13	Nominal temperature increase	
•	oil	60 K
•	windings	65 K
14	**No-Load Losses (W)**	**1575 W**
15	**Load Losses (W)**	**18500 W**
16	**Short Circuit Impedance (%)**	**6%** (±10%)
17	Approximate Dimensions	
•	length (mm)	2100 mm
•	width (mm)	1300 mm
•	height (mm)	2200 mm
•	wheel gauge (mm)	1070 mm
18	Approximate Weight	
•	aluminium (kg)	670 kg
•	core (kg)	2120 kg
•	tank (kg)	1180 kg
•	oil (kg)	1100 kg
•	total mass (kg)	5400 kg
19	Corossion Protection	Galvanization plus RAL7033 final coating

Standard Equipment			
Item		szt.	Additional Description
1	Porcelain insulators on the MV side	3	
2	Porcelain insulators on the LV side	4	
3	Tap changer	1	+/- 3 x 2,5% (knob)
4	Nameplate	2	
5	Lifting lugs	2	
6	Earthing terminals	3	
7	Bidirectional castor wheels	4	
8	Thermometer pocket	1	
9	Oil valve	1	
10	Lockable oil filling cap	1	
11	Ekrany elektrostatyczne	-	implementation for photovoltaic solutions
12	Electrostatic shields	-	
Additional equipment			
1	Anti-vibration pads		
2	TOC MV transformer terminals		
3	TOC LV transformer terminals		
4	EUROMOLD ® 250A		
5	Integrated OLTC by Reinhausen		
6	Paint-free version		
7	Version with conservator		

Technical Description

Product Name:
Hermetically Sealed Oil Transformer

Typ: MarkoEco2

A hermetically sealed power transformer designed for both indoor and outdoor installations.

Constructed using aluminum technology, naturally cooled (ONAN), and compliant with European directives and IEC standards.

Certified for electromagnetic compatibility (EMC), compliant with the **EcoDesign Directive (Tier 2)** and EU Regulation 548/2014.

Certificate: BGTCLVVX22072021
Standards: IEC 61000-3-2:201, EN 60076, EN 50588-1, EN 50708-1
Directive Compliance: EU Regulation 548/2014, **EcoDesign (EU) 2019/1783 – Tier II**

Applications

1.Industrial installations and manufacturing plants
- Power supply for halls with CNC machines, assembly lines, and automation systems.
- Voltage stabilization under conditions of large load fluctuations.
- Integration with UPS units and backup power systems.

Photovoltaic (PV) installations
- Designed for converting inverter output voltage to LV/MV levels.
- Supports both rooftop and ground-mounted PV farms compliant with EN 50588-1 requirements.

Prefabricated container substations
- Can be integrated with ready-to-install E-House - modules.
- Simplified logistics thanks to compact dimensions and mobile castor wheels.

Emergency and backup power systems
- Operates in cooperation mode with power generators.
- Provides redundancy for critical infrastructure such as cold storage facilities, server rooms, and security systems.

Commercial buildings and local networks
- Office buildings, shopping centers, and logistics facilities.
- Integration with SCADA/BMS monitoring and control systems.