



**Instytut
Energetyki**

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AC 117

CERTIFICATE OF CONFORMITY

No. DZC.522.131.2024

Issue No. 01 of 2024.11.04

Name and address of the certificate holder: PROTEKTEL Sp. z o.o.
ul. Piłsudskiego 92
06-300 Przasnysz

Name of the product: Metal-oxide surge arresters without gaps

Type: PROXAR-IIIN AC

Manufacturer: PROTEKTEL Sp. z o.o.
ul. Piłsudskiego 92
06-300 Przasnysz

Parameters: According to the appendix

Application of the product: Protection of devices against the effects of atmospheric and switching overvoltages in MV and HV power systems

The product meets requirements of: IEC 60099-4:2014 (ed. 3.0)

According to the report made by: Instytut Energetyki - Państwowy Instytut Badawczy

Number of the evaluation report: DZC.522.131.2024

Period of validity: from 04th of November 2024 until 03rd of November 2027

The right to use the certificate of conformity within its validity period applies only to:

- these copies that meet the requirements specified above and have the same characteristics (parameters) as the model / product samples submitted for testing
- certificate holder or his authorized representative

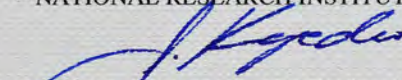
The list of evidenced parameters is included in the appendices to the certificate of conformity.

Number of appendices: 1

THE SYSTEM OF PRODUCT CERTIFICATION PC_1a (Program 1a acc. to PN-EN ISO/IEC 17067:2014-01)
(product parameters confirmed by type test)



DIRECTOR OF
INSTITUTE OF POWER ENGINEERING
– NATIONAL RESEARCH INSTITUTE


Prof. Jakub Kupecki, Full Professor

Warsaw, 2024.11.04



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APPENDIX TO THE CERTIFICATE OF CONFORMITY
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LIST OF EVIDENCED PARAMETERS

Rated voltage [U_r]	1,0 kV ÷ 228 kV
Continuous operating voltage [U_c]	0,8 kV ÷ 182 kV
Residual voltage at nominal discharge current [U_{res}]	2,4 kV ÷ 547 kV
Reduced voltage at switching impulse current [U_{ps}]	2,0 kV ÷ 463 kV
Nominal discharge current [I_n] (8/20 μ s)	10 kA
Switching current impulse (30/60 μ s)	1 kA
Discharge current withstand strength: - high current impulse (4/10 μ s) - long-duration current impulse in 2 ms (based on Q_{rs})	100 kA 1000 A
Short-circuit withstand current (0,2 s)	65 kA
Rated repetitive charge transfer rating [Q_{rs}]	2,4 C
Rated thermal energy [W_{th}]	11 kJ/kV (U_r)
Single impulse energy capability (virtual impulse duration: 2 ÷ 4 ms) applied in Q_{rs} verification test	5,9 kJ/kV (U_r)
Class and designation of the arrester	station – SM
Partial discharge level at $1,05 \times U_c$	$\ll 10$ pC
Mechanical endurance: - 1000 cycles (SLL) - bending moment (SSL)	4000 Nm 2500 Nm
Mechanical strength against torsional load	200 Nm
Power-frequency versus time characteristic (TOV)	positive result
1000 h weather ageing: - in salt mist - resistance of the housing material to UV radiation	positive result positive result

NOTES: -

