



**Instytut
Energetyki**

**INSTITUTE OF POWER ENGINEERING
– NATIONAL RESEARCH INSTITUTE**
Certification and Inspection Department
Mory 8, 01-330 Warsaw
phone +48 22 34 51 200
instytut.energetyki@ien.com.pl



AC 117

CERTIFICATE OF CONFORMITY

**No. DZC.522.107.2024
Issue No. 01 of 2024.09.16**

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-IN 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 power systems

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

According to the report made by: Institute of Power Engineering - National Research Institute

Number of the evaluation report DZC.522.107.2024

Period of validity: from 16th of September 2024 until 15th of September 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)



pp of the DIRECTOR OF
INSTITUTE OF POWER ENGINEERING
– NATIONAL RESEARCH INSTITUTE

Prof. Grzegorz Tchorek, DSc, PhD

Warsaw, 2024.09.16



Instytut
Energetyki



AC 117

APPENDIX TO THE CERTIFICATE OF CONFORMITY

No. DZC.522.107.2024

Issue No. 01 of 2024.09.16

LIST OF EVIDENCED PARAMETERS

Rated voltage [U_r]	1,2 kV ÷ 48 kV
Continuous operating voltage [U_c]	1,0 kV ÷ 38,4 kV
Residual voltage at nominal discharge current [U_{res}]	3,2 ÷ 129,6 kV
Nominal discharge current [I_n] (8/20 μ s)	10 kA
Capability at specified impulse current: - one high current impulse (4/10 μ s) - two lighting current impulses 8/20 μ s (based on Q_{rs})	100 kA 0,55 C
Short-circuit withstand current (0,2 s)	31,5 kA
Rated repetitive charge transfer rating [Q_{rs}]	0,4 C
Rated thermal charge transfer rating [Q_{th}]	1,1 C
Class and designation of the arrester	Distribution – DH
Partial discharge level at $1,05 \times U_c$	$\ll 10$ pC ¹⁾
Mechanical strength: SSL SLL	336 Nm 210 Nm
Mechanical strength against torsional load	50 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
Work conditions	Normal

NOTES: -

- ¹⁾During the initial measurements in the type tests, the results were less than 5 pC.

