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.522.99.1.2025

Issue No. 01 of 2025.09.05

Name and address of the certificate holder:	**PROTEKTEL Sp. z o.o. ul. Piłsudskiego 92 06-300 Przasnysz**
Name of the product:	**Surge arresters without gaps**
Type:	**PROXAR-IVN AC**
Manufacturer:	**PROTEKTEL Sp. z o.o. ul. Piłsudskiego 92 06-300 Przasnysz**
Parameters:	**According to appendix**
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.522.99.1.2025**
Period of validity:	**from 05th of September 2025 until 04th of September 2028**

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

- **those copies that have the features, construction and equipment as the product samples submitted for testing**
- **certificate holder or his authorized representative**

The list of technical data 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)

PAŃSTWOWY INSTYTUT BADAWCZY * INSTYTUT ENERGETYKI

DEPUTY DIRECTOR OF
INSTITUTE OF POWER ENGINEERING
– NATIONAL RESEARCH INSTITUTE

Prof. Grzegorz Tchorek, DSc, PhD

Warsaw, 2025.09.05

Instytut Energetyki

PCA Polskie Centrum Akredytacji – Certyfikacja Wyrobów

AC 117

APPENDIX TO THE CERTIFICATE OF CONFORMITY
No. DZC.522.99.1.2025
Issue No. 01 of 2025.09.05
LIST OF EVIDENCED PARAMETERS OF THE PRODUCT

Rated voltage [U_r]	1 kV ÷ 120 kV
Continuous operating voltage [U_c]	0,8 kV ÷ 96 kV
Residual voltage at nominal discharge current [U_{res}]	2,6 kV÷ 311 kV
Reduced voltage at switching impulse currenr [U_{ps}]	2,2 kV÷ 258 kV
Nominal discharge current [I_n] (8/20 µs)	20 kA
Switching current impulse (30/60 µs)	2 kA
Discharge current withstand strength: - high current impulse (4/10 µs) - long-duration current impulse in 2 ms (based on Q_{rs})	 100 kA 1100 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}]	12 kJ/kV (U_r)
Single impulse energy capability (virtual impulse duration: 2 ÷ 4 ms) applied in Q_{rs} verification test	6,5 kJ/kV (U_r)
Class and designation of the arrester	station – SH
Partial discharge level at 1,05×U_c	<< 10 pC [1)]
Mechanical endurance: - 1000 cycles (SLL) - bending moment (SSL)	 6000 Nm 2400 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: -

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