



AC 117

INSTYTUT ENERGETYKI
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CERTIFICATE OF CONFORMITY

No. DZC.522.95.2023

Issue No. 01 of 2023.10.20

*Name and address of
the Certificate Holder:*

**PROTEKTEL Sp. z o.o.
92 Marszałka Józefa Piłsudskiego Str.
06-300 Przasnysz**

Name of the product:

Surge arrester

Type:

PROXAR-IIN AC

Manufacturer:

**PROTEKTEL Sp. z o.o.
92 Marszałka Józefa Piłsudskiego Str.
06-300 Przasnysz**

*Parameters and
application of the product:*

**According to appendix
Surge arrester designed for protection of overvoltage of AC power
network**

*The product meets
requirements of:*

IEC 60099-4:2014 (ed. 3.0)

*According to the evaluation
report made by:*

Instytut Energetyki

*Number of the
evaluation report:*

DZC.522.95.2023

Period of validity:

from 20th of October 2023 until 19th of October 2026

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
INSTYTUT ENERGETYKI**

J. Kupecki
dr hab. inż. Jakub Kupecki, prof. IEn

Warsaw, 2023.10.20



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APPENDIX TO THE CERTIFICATE OF CONFORMITY
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LIST OF EVIDENCED PARAMETERS

Rated voltage [U_r]	6 kV ÷ 120 kV
Continuous operating voltage [U_c]	4,8 kV ÷ 96 kV
Residual voltage at nominal discharge current [U_{res}]	15,4 kV ÷ 311 kV
Reduced Voltage at switching impulse current [U_{ps}]	12 kV ÷ 242,6 kV
Nominal discharge current [I_n] (8/20 μ s)	10 kA
Switching current impulse (30/60 μ s)	0,5 kA
Discharge current withstand strength at: - high current impulse (4/10 μ s) - long-duration current impulse in 2 ms (based on Q_{rs})	100 kA 600 A
Short-circuit withstand current (0, 2 s)	50 kA
Rated repetitive charge transfer rating [Q_{rs}]	1,6 C
Rated thermal energy [W_{th}]	7,0 kJ/kV (U_r)
Single impulse energy capability (virtual impulse duration 2 ms ÷ 4 ms)	3,5 kJ/kV (U_r)
Class and designation of the arrester	station – SL
Partial discharge level at $1,05 \times U_c$	$\ll 10$ pC ¹⁾
Mechanical endurance: - 1000 cycles (SLL) - bending moment (SSL)	1000 Nm 1600 Nm
Mechanical strength against torsional load	300 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. ¹⁾During the initial measurements in the type tests, the results were less than 5 pC.

