



**INSTYTUT ENERGETYKI**

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**IE<sub>n</sub> CERTIFICATE**

**No. 014/2021**

**Issue No. 01 of 2021.08.12**

**(STATEMENT)**

*Name and address of  
the Certificate Holder:*

**ORW-ELS Sp. z o.o.  
ul. Leśna 2  
37-310 Nowa Sarzyna, Poland**

*Name of the product:*

**Early streamer emission lightning conductor**

*Type:*

**GROMOSTAR / PiX3**

*Manufacturer:*

**ORW-ELS Sp. z o.o.  
ul. Leśna 2  
37-310 Nowa Sarzyna, Poland**

*Parameters and  
application of product:*

**According to appendix  
Lightning conductor assigned for lightning protection systems of  
objects.**

*The product meets  
requirements of the:*

**NF C 17-102:2011 and IEC 62561-1:2017**

*According to the  
report made by:*

**Instytut Energetyki**

*Number of the  
evaluation report:*

**DZC/84c/E/2021**

*Period of validity:*

**from 12<sup>th</sup> of August 2021 until 11<sup>th</sup> of August 2024**

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

based on the type 1a product certification program acc. to PN-EN ISO/IEC 17067:2014-01)  
(product parameters confirmed by type test)



DIRECTOR OF  
INSTYTUT ENERGETYKI

*Tomasz Gałka*  
dr hab. inż. Tomasz Gałka, prof. IEn

Warsaw, 2021.08.12

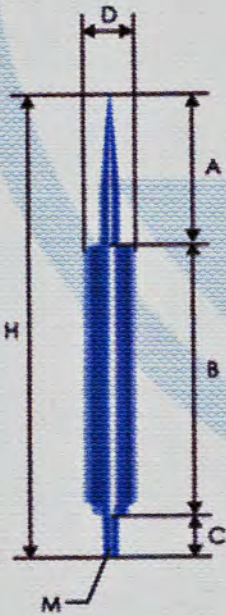


**APPENDIX TO THE CERTIFICATE OF IEN**  
**No. 014/2021**  
**Issue No. 01 of 2021.08.12**

LIST OF EVIDENCED PARAMETERS

Material	GROMOSTAR / PiX3	
	Stainless steel lightning rot (Inox)	Copper lightning rot (Cu)
Dimensions <sup>1)</sup> [mm]	H - 474; D - 50,8; A - 148; B - 286; C - 40	H - 474; D - 63; A - 148; B - 286; C - 40
Environmental testing in <sup>2), 3)</sup> : - Salt mist atmosphere - Moist sulfur atmosphere (667 ppm ± 25 ppm)	positive result	
Current impulse withstand test <sup>3)</sup> (impulse current 100 kA; wave 50/350 µs; charge quantity 2,5 MJ/Ω)	positive result	
Advance of time test <sup>4)</sup>	ΔT=60 µs for reference wave with rise time 650 µs	

**NOTICES:**



- <sup>1)</sup> – dimensions according to the drawing
- <sup>2)</sup> – Tests carried out acc. to PN-EN ISO 9227:2007 (salt mist) and PN-EN ISO 6988:2000 (moist sulfur atmosphere).
- <sup>3)</sup> – The scope of tests meets the requirements of the following standards: IEC 62561-1:2017 (class H) and NF C 17-102:2011.
- <sup>4)</sup> – The scope of tests meets the requirements of the NF C 17-102:2011.
- Requirements for the design and creation of the lightning protection system with early streamer emission lightning conductor shall comply the requirements of NF C 17-102:2011.
- Tests confirmed in this certificate applies also to early streamer emission lightning conductor in the varieties presented under the trade names: GROMOSTAR T/ PiX3a, JONOSTAR, JONOSTAR T.

