



**Instytut  
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AC 117

# **CERTIFICATE OF CONFORMITY**

**No. DZC.522.10.1.2025**

**Issue No. 01 of 2025.03.25**

*Name and address of  
the certificate holder:*

**Zakład Aparatury Elektrycznej ERGOM Sp. z o.o.  
Nowe Sady 10  
94-102 Łódź, Poland**

*Name of the product:*

**Terminal lugs**

*Type:*

**KRA 16-400**

*Manufacturer:*

**Zakład Aparatury Elektrycznej ERGOM Sp. z o.o.  
Nowe Sady 10  
94-102 Łódź, Poland**

*Parameters:*

**According to the appendix**

*Application of the product:*

**Termination of aluminium cables with class 2 conductors**

*The product meets  
requirements of:*

**EN IEC 61238-1-1:2019, EN IEC 61238-1-3:2019**

*According to the  
reports made by:*

**Institute of Power Engineering – National Research Institute**

*Numbers of the type test  
reports:*

**EWP/49/E/2015-1, EWP/49/E/2015-2, DZC.4032.137.1.2.2024.2025,  
DZC.4032.134.1.2.2024.2025, EWM.4032.173.2024.R2.EN,  
EWM.4032.173.2024.R1.EN**

*Period of validity:*

**from 25<sup>th</sup> of March 2025 until 24<sup>th</sup> of March 2028**

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

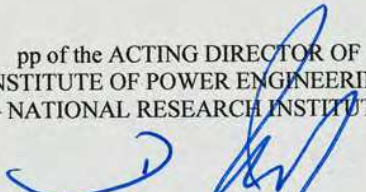
The list of evidenced parameters is included in the appendices to the certificate of conformity.

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 ACTING DIRECTOR OF  
INSTITUTE OF POWER ENGINEERING  
– NATIONAL RESEARCH INSTITUTE

  
Dariusz Zienkiewicz, M.Sc. Eng

Warsaw, 2025.03.25





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## APPENDIX TO THE CERTIFICATE OF CONFORMITY

No. DZC.522.10.1.2025

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### LIST OF EVIDENCED PARAMETERS

Name / Al connector type	Terminal lug <sup>1)</sup> / KRA 16-400
Class - electrical - mechanical	A 1
Construction / cross-section of Al cables / conductors [mm <sup>2</sup> ]	RMC <sup>2)</sup> , RM, SM / 16 ÷ 400
Initial scatter $\delta^3)$	$\leq 0,30$
Mean scatter $\beta^4)$	$\leq 0,30$
Resistance factor ratio $\lambda^5)$	$\leq 2,0$
Change in resistance factor $D^6)$	$\leq 0,15$
Maximum temperature $\theta_{\max}^7)$	$\leq \theta_{\text{ref}}$
Permissible tensile force [N]	$\leq 40 \times A^8)$ Al

#### NOTES:

- 1) <sup>1)</sup> Terminal lugs of type KRA 16-400 has common name of "Aluminium longitudinally sealed tubular cable lugs, KRA 16-400 type".
- 2) <sup>2)</sup> In the technical documentation of cable and wire manufacturers, the RMC designation is also known as RMV.
- 3) <sup>3)</sup> The average value of the resistance factors of six connectors (lugs) before the first heating cycle.
- 4) <sup>4)</sup> The average value of the resistance factors of six connectors (lugs) calculated from last 11 measurements readings. It specifies if all connectors (lugs) of given type are characterized by similar changes in resistance during the heat cycles.
- 5) <sup>5)</sup> Resistance factor ratio of tested connector (lug) during the heat cycle test in relation to the initial resistance factor.
- 6) <sup>6)</sup> The value specifies the size of the resistance factor change based on last 11 measurements readings.
- 7) <sup>7)</sup> Temperature of the connector (lug) referenced to the temperature of the reference section.
- 8) <sup>8)</sup> Nominal cross-sectional area.

