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# CERTIFICATE OF CONFORMITY

## No. DZC.522.35.2022

**Issue No. 01 of 2022.03.22**

| | |
|---|---|
| *Name and address of the certificate holder:* | **Zakład Aparatury Elektrycznej ERGOM Sp. z o.o.<br>10 Nowe Sady Str.,<br>94-102 Łódź, Poland** |
| *Name of the product:* | **Terminal lugs / Through connectors** |
| *Type:* | **KRA 16-300 / LAP 16-300** |
| *Manufacturer:* | **Zakład Aparatury Elektrycznej ERGOM Sp. z o.o.<br>10 Nowe Sady Str.,<br>94-102 Łódź, Poland** |
| *Parameters and application of the product:* | **According to appendix<br>Connection and termination of aluminium cables with class 2 conductors with parameters according to appendix** |
| *The product meets requirements of:* | **EN IEC 61238-1-1:2019, EN IEC 61238-1-3:2019** |
| *According to the reports made by:* | **Instytut Energetyki; ZAE ERGOM** |
| *Number of the test reports:* | **EWP/49/E/2015-1, EWP/49/E/2015-2, EWP/57/E/2017-1, EWP/35/E/2016-4, EWP/57/E/2017-2; ERGOM/01/12/2016** |
| *Period of validity:* | **from 22nd of March 2022 until 24th of March 2025** |

**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

Warsaw, 2022.03.22

dr hab. inż. Tomasz Gałka prof. IEn

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# APPENDIX TO CERTIFICATE OF CONFORMITY
## No. DZC.522.35.2022
### Issue No. 01 of 2022.03.22

**LIST OF EVIDENCED PARAMETERS**

| Name / Al connector type | Terminal lug[1] / KRA 16-300 | Through connector[1] / LAP 16-300 |
|---|---|---|
| Class<br>- electrical<br>- mechanical | <br>A<br>1 | <br>A<br>1 |
| Construction / cross-section of Al cables / conductors [$mm^2$] | RM<br>16 ÷ 300 | RM<br>16 ÷300 |
| Initial scatter $\delta$[2] | ≤ 0,30 | ≤ 0,30 |
| Mean scatter $\beta$[3] | ≤ 0,30 | ≤ 0,30 |
| Resistance factor ratio $\lambda$[4] | ≤ 2,0 | ≤ 2,0 |
| Change in resistance factor D[5] | ≤ 0,15 | ≤ 0,15 |
| Maximum temperature $\theta_{max}$[6] | ≤ $\theta_{ref}$ | ≤ $\theta_{ref}$ |
| Permissible tensile force [N] | ≤ 40 x A[7] Al | ≤ 40 x A[7] Al |

NOTES:

1) [1] Terminal lugs of type KRA 16-300 has common name of "Aluminium terminals, longitudinally sealed, KRA 16-300 type". Through connectors LAP 16-300 has common name of "Compression connectors with barrier, LAP 16-300 type"
2) [2] The average value of the resistance factors of six connectors (lugs) before the first heating cycle.
3) [3] 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.
4) [4] Resistance factor ratio of tested connector (lug) during the heat cycle test in relation to the initial resistance factor.
5) [5] The value specifies the size of the resistance factor change based on last 11 measurements readings.
6) [6] Temperature of the connector (lug) referenced to the temperature of the reference section.
7) [7] Nominal cross-sectional area