INSTYTUT ENERGETYKI
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AC 117

CERTIFICATE OF CONFORMITY

No. DZC.522.92.1.2023

Issue No. 01 from 2023.09.08

Name and address of the certificate holder:	**ERKO sp. z o.o. sp. k. Lipowa 24 Str., 11-042 Jonkowo, Poland**
Name of the product:	**Through connectors**
Type:	**ZSNP**
Manufacturer:	**ERKO sp. z o.o. sp. k. Lipowa 24 Str., 11-042 Jonkowo, Poland**
Production plant:	**ERKO sp. z o.o. sp. k., Czeluśnica 80 (k. Jasła), 38-204 Tarnowiec, Poland**
Parameters and application of product:	**According to appendix Connection of power cables with aluminium conductors with parameters according to appendix**
The product meets requirements of the:	**EN IEC 61238-1-1:2019**
According to the reports made by:	**Instytut Energetyki; ERKO**
Number of the test reports:	**EWP/46/E/2019-3-1, EWP/46/E/2019-19, EWP/46/E/2019-24, EWP/46/E/2019-2, EWP/46/E/2019-4, EWP/46/E/2019-8, EWP/46/E/2019-15, EWP/46/E/2019-14, EWP/46/E/2019-13; 6/2017, 4/2019, 7/2019, 9/2019, 11/2017, 4/2018, 1/2019, 9/2018, 8/2018**
Period of validity:	**from 08th of September 2023 until 07th of September 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 1 acc. to PN-EN ISO/IEC 17067:2014-01)
(product parameters confirmed by type tests)

pp of the DIRECTOR OF
INSTYTUT ENERGETYKI

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Warsaw, 2023.09.08

dr hab. Grzegorz Tchorek, prof. IEn

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APPENDIX TO THE CERTIFICATE OF CONFORMITY
No. DZC.522.92.1.2023
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LIST OF EVIDENCED PARAMETERS

Name / connector type	ZSNP 1625 16 - 25	ZSNP 2595 25 - 95	ZSNP 25150 25 - 150	ZSNP 120240 120 - 240
Class - electrical - mechanical	A 1			
Construction / cross-section of Al cables / conductors [mm^2]	RM, RMC, SM / 16 ÷ 240 RE / 16 SE / 25 ÷ 240 class 5 / 25			
Initial scatter δ [1)]	≤ 0,30			
Mean scatter β [2)]	≤ 0,30			
Resistance factor ratio λ [3)]	≤ 2,0			
Change in resistance factor D [4)]	≤ 0,15			
Maximum temperature θ_{max} [5)]	≤ θ_{ref}			
Permissible tensile force [N]	≤ 40 x A [6)] Al			

NOTES:

1) [1)] The average value of the resistance factors of six connectors before the first heating cycle.
2) [2)] The average value of the resistance factors of six connectors calculated from last 11 measurements readings. It specifies if all connectors of given type are characterized by similar changes in resistance during the heat cycles.
3) [3)] Resistance factor ratio of tested connector during the heat cycle test in relation to the initial resistance factor.
4) [4)] The value specifies the size of the resistance factor change based on last 11 measurements readings.
5) [5)] Temperature of the connector referenced to the temperature of the reference section.
6) [6)] Nominal cross-sectional area.