



**Instytut  
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AC 117

# **CERTIFICATE OF CONFORMITY**

**No. DZC.522.14.1.2025**

**Issue No. 01 of 2025.02.10**

*Name and address of  
the certificate holder:*

**RADPOL S.A.  
ul. Batorego 14  
77-300 Czluchów**

*Name of the product:*

**Heat shrink transition cable joints**

*Type:*

**JHP-20-CF/CXd 3/1 and JHP-20-CF/CXd 3/1 (S)**

*Manufacturer:*

**RADPOL S.A.  
ul. Batorego 14  
77-300 Czluchów**

*Parameters:*

**According to the appendix**

*Application of the product:*

**Joints designed for connecting cables with impregnated paper insulation  
to single-core cables with extruded insulation in power systems with  
rated voltage up to 20 kV**

*The product meets  
requirements of:*

**HD 629.2 S2:2006 i HD 629.2 S2:2006/A1:2008**

*According to the  
report made by:*

**Institute of Power Engineering - National Research Institute**

*Number of the evaluation  
report:*

**DZC.522.14.2025**

*Period of validity:*

**from 10<sup>th</sup> of February 2025 until 09<sup>th</sup> of February 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

*Hercog*  
Dr. Jarosław Hercog, PhD

Warsaw, 2025.02.10





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## APPENDIX TO THE CERTIFICATE OF CONFORMITY

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### LIST OF EVIDENCED PARAMETERS

|                                                                                                                       |                                                                  |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Joint type                                                                                                            | JHP-20-CF/CXd 3/1<br>JHP-20-CF/CXd 3/1 (S)                       |
| Rated voltage $U_0 / U (U_m)$                                                                                         | 12/20 (24) kV                                                    |
| Rated cross-section of the Al (RE or RM) or Cu (RM) cable conductor                                                   | 95 ÷ 240 mm <sup>2</sup>                                         |
| Maximum outside diameter of paper insulated cable                                                                     | 88 mm                                                            |
| Maximum outside diameter of extruded insulation cable                                                                 | 42 mm                                                            |
| Tests acc HD 629.2 S2:2006 i HD 629.2 S2:2006/A1:2008, Table 4                                                        | Test sequences I B1, II B1 i I-II B2                             |
| DC withstand voltage 6 $U_0$ during 15 min, dry                                                                       | No breakdown                                                     |
| AC withstand voltage 4,5 $U_0$ during 5 min, 3 $U_0$ during 4 h and 2,5 $U_0$ during 15 min, dry                      | No breakdown                                                     |
| Impact test at ambient temperature 4 kg / 1 m                                                                         | Positive                                                         |
| Lightning impulse withstand voltage at elevated temperature and at ambient temperature (10 impulses of each polarity) | 125 kV<br>No breakdown                                           |
| Heating cycles voltage in air: 63 cycles (5 h / 3 h) at 1,5 $U_0$                                                     | No breakdown                                                     |
| Heating cycles voltage in water: 63 cycles (5 h / 3 h) at 1,5 $U_0$                                                   | No breakdown                                                     |
| Short-circuit thermal withstand current of the 306,5 mm <sup>2</sup> cable screen during 1s <sup>1)</sup>             | 11,8 kA                                                          |
| Short-circuit thermal withstand current of the 120 mm <sup>2</sup> aluminum cable conductor during 1s                 | 16,2 kA                                                          |
| Dynamic short circuit withstand current 120 mm <sup>2</sup> aluminum cable conductor                                  | 40 kA                                                            |
| Assembly instructions, packing lists                                                                                  | 1692: 2011-03-02 / 2011-05-12<br>1692.1: 2011-03-02 / 2011-05-12 |

#### NOTES: -

- <sup>1)</sup>The thermal short-circuit current tests of the cable screen were performed at the initial temperature of cable equal to the ambient temperature.
- The given parameters are assigned to JHP-20-CF-CXd 3/1 and JHP-20-CF-CXd 3/1(S) type joints with cables with the following parameters:

Cable with paper insulation: Number of phases: 3 or 1. Main conductor: aluminium or copper, round. Insulation: impregnated paper. Insulation screen: semiconducting paper.

Cable with XLPE insulation: Number of phases: 1. Main conductor: aluminium or copper, round. Insulation: XLPE. Insulation screen: cross-linked polyethylene.





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3. Connectors used in the joints should have documented tests according to IEC 61238-1-3:2018 ed. 1.0.
4. The certificate covers also the accessories with lower  $U_0$  provided that the radial electrical stress at the insulation screen of the cable of lower  $U_0$  is not greater than that of the test cable.

