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N. R.E.A. 429222

PAD B4004271 (1910458) - USO RISERVATO

Schema di certificazione



PRD N. 018B
ISP N. 024E
Membro degli Accordi di Mutuo
Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC
Mutual Recognition Agreements
Regulations ACCREDIA RT-06

HV-E-C-S 10/2011

CERTIFICATE

No. B4004271

**Type Conformity Certificate
in accordance with
CENELEC HD 629.1 S2 (2006-02)
CENELEC HD 629.1 S2/A1 (2008-09)**

Applicant	ELCON MEGARAD S.p.A. Via Nazionale, 110 – Arcella (Avellino) – Italy
Certified product	Heat shrinkable outdoor termination for single core extruded power cables
Designation	ELCOTERM TES 3675T
Manufacturer	ELCON MEGARAD S.p.A. Via Nazionale, 110 – Arcella (Avellino) – Italy
Main ratings	$U_0/U/U_m$: 18/30/36 kV

This document attests that the certified product, subjected to all the type tests and verifications prescribed by the normative reference documents, was found in conformity with them.

This certificate applies only to the samples tested and identified; the responsibility for declaring the conformity of other products having the same designation rests with the applicant.

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This certificate is composed of 1 page and is based on the
Evaluation Report CESI B4004267 that is integral part of it

Issue date
2014/02/20

Prepared
Stefano Bossi

Stefano Bossi

Expiry date
2024/02/19

Approved
Fiorenzo Bregani

CESI S.p.A.
Testing & Certification Division
Business Area Certification
In Responsible
Fiorenzo Bregani

EVALUATION REPORT

APPROVED

B4004267

Client

ELCON MEGARAD S.p.A.
Via Nazionale, 110 – Arcella (Avellino) – Italy

Subject

Certification of type conformity according to CENELEC HD 629.1 S2 (2006-02) + HD 629.1 S2/A1 (2008-09) of heat shrinkable outdoor termination for single core 18/30 kV ($U_m=36$ kV) extruded power cables, type ELCOTERM TES 3675T, manufactured by ELCON MEGARAD S.p.A. Via Nazionale, 110 – Arcella (Avellino) – Italy

Notes

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N. of pages annexed -

Issue date February 20th, 2014

Prepared TCE/CER/PRO – Stefano BOSSI

Approved TCE/CER/PRO – Giorgio CRIPPA

CESI S.p.A.

Testing & Certification Division
Business Area Certification




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1 GENERAL

Subject of this Report is the evaluation of the activities carried out for the certification of type conformity according to CENELEC HD 629.1 S2 (2006-02) + HD 629.1 S2/A1 (2008-09) of heat shrinkable outdoor termination for single core 18/30 kV ($U_m=36$ kV) 240 mm² extruded power cables, type ELCOTERM TES 3675T, manufactured by ELCON MEGARAD S.p.A. Via Nazionale, 110 – Arcella (Avellino) – Italy.

This activity has been carried out by CESI as Product Certification Body, in the field of ACCREDIA accreditation No.018B of conformity with the Standard EN 45011 and the application guidelines IAF-GD5.

2 RATINGS

Manufacturer	ELCON MEGARAD S.p.A.
Factory	Via Nazionale, 110 – Arcella (Avellino) – Italy
Type	ELCOTERM TES 3675T
Installation instructions	737/E
$U_o/U/U_m$	18/30/36 kV
Description	Heat shrinkable outdoor termination

3 IDENTIFICATION OF THE TESTED SAMPLES

The dimensions of the tested samples were found in compliance with those indicated in the installation instructions supplied by the Manufacturer (reference document 4.2[2]).

4 REFERENCE DOCUMENTS

4.1 Normative documents

- [1] CENELEC HD 629.1 S2 (2006-02): "Test requirements on accessories for use on power cables of rated voltage from 3,6/6(7,2) kV up to 20,8/36(42) kV. Part 1: Cables with extruded insulation".
- [2] CENELEC HD 629.1 S2/A1 (2008-09): "Test requirements on accessories for use on power cables of rated voltage from 3,6/6(7,2) kV up to 20,8/36(42) kV. Part 1: Cables with extruded insulation".

4.2 Technical documents

The technical documents supplied by the Manufacturer have been divided in the following way:

- list of all the technical documents supplied;
- technical document used by CESI to identify the tested object;
- technical documents not used by CESI to identify the tested object.

The list of the technical documents has been stamped with CESI registration number and the stamp "CESI Inspection service verified by". These stamps guarantee that the compliance of the list with the documents supplied by the Manufacturer has been verified.

The original of this list, stamped by CESI, has been returned to the Manufacturer. A copy is kept by CESI.

The technical documents verified by CESI, used for the product identification, have been stamped with CESI registration number and the stamp "CESI Inspection service verified by". These stamps guarantee that the product has been identified and found in compliance with them.

The originals of these documents, stamped by CESI, have been returned to the Manufacturer. CESI does not keep copy of them.

The technical documents not verified by CESI, supplied only for completeness, have been stamped with CESI registration number. The meaning of this stamp is that CESI has considered the documents only for completeness (since they are mentioned in the list), without any check of their contents.

The originals of these documents, stamped by CESI, have been returned to the Manufacturer. CESI does not keep copy of them.

- [1] ELCON MEGARAD list of documents (CESI registration number B4002123).
- [2] ELCON MEGARAD documents verified by CESI (CESI registration number B2030431/1-2)
- [3] ELCON MEGARAD documents not verified by CESI (CESI registration number B4002124/1 to 16).

4.3 Reports of tests performed in IPH laboratories

- [1] IPH Test Report No. 2100.2110837.0469 Rev. 01 (CESI registration number B3000327).

4.4 Reports of tests performed in ELCON MEGARAD laboratories

- [1] ELCON MEGARAD Test Report No. 390_12 dated 2012/12/14 (CESI registration number B2038608).
- [2] ELCON MEGARAD Test Report No. 421_13 dated 2014/02/18 (CESI registration number B4004263).

4.6 CESI Inspection Reports

- [1] CESI Inspection Report B2038869, relevant to the tests inspected in ELCON MEGARAD laboratories and described in ELCON MEGARAD Test Report No. 390_12.
- [2] CESI Inspection Report B4004264, relevant to the tests inspected in ELCON MEGARAD laboratories and described in ELCON MEGARAD Test Report No. 421_13.

5 TESTS PERFORMED

The tests carried out are listed in the following table, which indicates for each test the reference normative document and item, the document containing the test results and the test results.

Normative document	Clause	Test	Reference document	Test results
4.1[1][2]	Table 4 Seq. A1 Item 1	DC voltage dry	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A1 Item 2	AC voltage dry	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A1 Item 3	AC voltage wet	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A1 Item 4	Partial discharge at ambient temperature (*)	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A1 Item 5	Impulse voltage at elevated temperature	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A1 Item 6	Heating cycle voltage in air	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A1 Item 7	Immersion	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A1 Item 8	Partial discharge at elevated and ambient temperature (*)	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A1 Item 12	Impulse voltage at ambient temperature	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A1 Item 13	AC voltage dry	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A1 Item 15	Examination	4.6[1]	Passed
4.1[1][2]	Table 4 Seq. A2 Item 1	DC voltage dry	4.3[1]	Passed
4.1[1][2]	Table 4 Seq. A2 Item 2	AC voltage dry	4.3[1]	Passed
4.1[1][2]	Table 4 Seq. A2 Item 9	Thermal short circuit (screen)	4.3[1]	Passed
4.1[1][2]	Table 4 Seq. A2 Item 10	Thermal short circuit (conductor)	4.3[1]	Passed
4.1[1][2]	Table 4 Seq. A2 Item 11	Dynamic short circuit	4.3[1]	Passed
4.1[1][2]	Table 4 Seq. A2 Item 12	Impulse voltage at ambient temperature	4.3[1]	Passed
4.1[1][2]	Table 4 Seq. A2 Item 13	AC voltage dry	4.3[1]	Passed
4.1[1][2]	Table 4 Seq. A2 Item 15	Examination	4.3[1]	Passed
4.1[1][2]	Table 4 Seq. A3 Item 14	Salt fog	4.6[2]	Passed
4.1[1][2]	Table 4 Seq. A3 Item 15	Examination	4.6[2]	Passed

(*) The test was performed at 1,73 U₀ and 2U₀.

6 NON CONFORMITIES

During the activity no non conformities were found.

7 EVALUATION OF THE CONFORMITY

On the basis of the results obtained, it is possible to conclude that the heat shrinkable outdoor termination for single core 18/30 kV ($U_m=36$ kV) extruded power cables type ELCOTERM TES 3675T, manufactured by ELCON MEGARAD S.p.A. Via Nazionale, 110 – Arcella (Avellino) – Italy, is in compliance with the requirements of CENELEC HD 629.1 S2 (2006-02) + HD 629.1 S2/A1 (2008-09).