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N. R.E.A. 429222

CERTIFICATE

No. B3000471

**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 indoor termination for single core extruded power cables
Designation	ELCOTERM TIS 3673T
Manufacturer	ELCON MEGARAD S.p.A. Via Nazionale, 110 – Arcella (Avellino) – Italy
Main ratings	U₀/U/U_m: 18/30/36 kV Conductor cross-section: 240 mm²

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 B3000467 that is integral part of it

Issue date
2013/01/10

Prepared
Stefano Bossi

Expiry date
2023/01/09

Approved
Fiorenzo Bregani

Testing & Certification Division
Business Area Certification
Responsabile
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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

EVALUATION REPORT

APPROVED B3000467

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 indoor termination for single core 18/30 kV ($U_m=36$ kV) extruded power cables, type ELCOTERM TIS 3673T, manufactured by ELCON MEGARAD S.p.A. Via Nazionale, 110 – Arcella (Avellino) – Italy

Notes -

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N. of pages 6 **N. of pages annexed** -

Issue date January 10th, 2013

Prepared TCE/CER/PRO – Stefano BOSSI

Approved TCE/CER/PRO – Giorgio CRIPPA



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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 indoor termination for single core 18/30 kV ($U_m=36$ kV) extruded power cables, type ELCOTERM TIS 3673T, 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 TIS 3673T
Installation instructions	736/E
$U_o/U/U_m$	18/30/36 kV
Description	Heat shrinkable indoor termination
Conductor cross-section	240 mm ²

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 document verified by CESI, used for the product identification, has 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 it.

The original of this document, stamped by CESI, has been returned to the Manufacturer. CESI does not keep copy of it.

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 seek of documentation 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 B3000419).
- [2] ELCON MEGARAD documents verified by CESI (CESI registration number B2030429/1-2)
- [3] ELCON MEGARAD documents not verified by CESI (CESI registration numbers B3000420/1 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 FGH laboratories

- [1] FGH Test Certificate No. H 12058 (CESI registration number B2033668).

4.5 Reports of tests performed in ELCON MEGARAD laboratories

[1] ELCON MEGARAD Test Report No. 390_12 (CESI registration number B2038608).

4.6 CESI Inspection Report

[1] CESI Inspection Report B2038869, relevant to the tests inspected in ELCON MEGARAD laboratories.

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 3 Seq. A1 Item 1	DC voltage dry	4.6[1]	Passed
4.1[1][2]	Table 3 Seq. A1 Item 2	AC voltage dry	4.6[1]	Passed
4.1[1][2]	Table 3 Seq. A1 Item 3	Partial discharge at ambient temperature (*)	4.6[1]	Passed
4.1[1][2]	Table 3 Seq. A1 Item 4	Impulse voltage at elevated temperature	4.6[1]	Passed
4.1[1][2]	Table 3 Seq. A1 Item 5	Heating cycle voltage in air	4.6[1]	Passed
4.1[1][2]	Table 3 Seq. A1 Item 6	Partial discharge at elevated and ambient temperature (*)	4.6[1]	Passed
4.1[1][2]	Table 3 Seq. A1 Item 10	Impulse voltage at ambient temperature	4.6[1]	Passed
4.1[1][2]	Table 3 Seq. A1 Item 11	AC voltage dry	4.6[1]	Passed
4.1[1][2]	Table 3 Seq. A1 Item 13	Examination	4.6[1]	Passed
4.1[1][2]	Table 3 Seq. A2 Item 1	DC voltage dry	4.3[1]	Passed
4.1[1][2]	Table 3 Seq. A2 Item 2	AC voltage dry	4.3[1]	Passed
4.1[1][2]	Table 3 Seq. A2 Item 7	Thermal short circuit (screen)	4.3[1]	Passed
4.1[1][2]	Table 3 Seq. A2 Item 8	Thermal short circuit (conductor)	4.3[1]	Passed
4.1[1][2]	Table 3 Seq. A2 Item 9	Dynamic short circuit	4.3[1]	Passed
4.1[1][2]	Table 3 Seq. A2 Item 10	Impulse voltage at ambient temperature	4.3[1]	Passed
4.1[1][2]	Table 3 Seq. A2 Item 11	AC voltage dry	4.3[1]	Passed
4.1[1][2]	Table 3 Seq. A2 Item 13	Examination	4.3[1]	Passed
4.1[1][2]	Table 3 Seq. A3 Item 12	Humidity	4.4[1]	Passed
4.1[1][2]	Table 3 Seq. A3 Item 13	Examination	4.4[1]	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 indoor termination for single core 18/30 kV ($U_m=36$ kV) extruded power cables type ELCOTERM TIS 3673T, 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).