

<b>Type Test Certificate of</b>	Special test to prove suitability to climatic class C2, to environmental class E2 and to fire behaviour test class F1
<b>Apparatus</b>	Dry-type power transformer
<b>Designation</b>	TRASFORMATORE  Rated power 1000 kVA ; Rated voltages 15/0,4 kV ; Rated frequency 50 Hz
<b>Manufacturer</b>	A.L. S.r.l. - Matera - Italy
<b>Client</b>	ALTRAFO S.r.l. - Matera - Italy
<b>Tested by</b>	CESI S.p.A. Milan, Italy
<b>Tests date</b>	from March 11, 2013 to May 8, 2013

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in the reference documents identified in this Certificate, has been subjected to the series of proving tests in accordance with

**IEC 60076-11 (2004)**  
Clauses 27.4, 26.3.2 and 28.3

**This Type Test Certificate has been issued by CESI in accordance with above mentioned Standard(s).**

The results are shown in the record of Proving Tests and the oscillograms attached in the Test Reports. The values obtained and the general performance are considered to comply with the above Standard(s) and to justify the ratings assigned by the Manufacturer as listed on page No. 3.

The Certificate applies only to the apparatus tested. The responsibility for conformity of any apparatus having the same designations with that tested rests with the Manufacturer.

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**No. of pages** 4 **No. of pages annexed** -

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## 1 RATINGS ASSIGNED BY THE MANUFACTURER AS PROVED BY THE TESTS

<b>Dry-type power transformer</b>	
Designation	TRASFORMATORE
Rated power	1000 kVA
Number of phases	3
Rated voltage of the high-voltage winding (primary winding)	15 kV
Rated voltage of the low-voltage winding (secondary winding)	400 V
Rated current of the high-voltage winding (primary winding)	38,49 A
Rated current of the low-voltage winding (secondary winding)	1443 A
Rated frequency	50 Hz
Connection symbol	Dyn11
Climatic class	C2
Environmental class	E2
Fire behaviour class	F1
Insulation system temperature	F

## 2 ADDITIONAL TYPE TESTS

Checking of gases emission.

## 3 REFERENCE DOCUMENTS

The following reference documents are integral part of this Certificate:

No.	Description	CESI registration
1	CESI Test Report	B3006646
2	CESI Test Report	B3007311
3	CESI Inspection Report	B3013566
4	Manufacturer's drawings	B3010004 No.1 to 3

## 4 ADDITIONAL REFERENCES

Not applicable.

## 5 RECORD OF PROVING TESTS

The table below lists all the tests performed and the references to the relevant Test Reports containing the test values.

No. Standard and clause	Description of tests	Reference documents
IEC 60076-11 clause 27.4	Thermal shock test	B3006646 B3007311
IEC 60076-11 clause 26.3.2	Condensation and humidity penetration test	B3006646
IEC 60076-11 clause 28.3	Fire behaviour test	B3013566
IEC 60076-11 clause 28.2	Checking of gases emission	B3013566

## 6 IDENTIFICATION OF THE APPARATUS

The Manufacturer guarantees that the tested apparatus is manufactured according to the submitted drawings.

CESI checked that these drawings adequately represent in shape and dimensions the essential details and the main parts of the tested apparatus.

These drawings, identified by CESI and numbered B3010004 No.1 to 3 have been returned to the Client.