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|---------------------------------|--|------------------|
| Type Test Certificate of | Special test to prove suitability to climatic class C2, to environmental class E3 and to fire behaviour test class F1 | |
| Apparatus | Enclosed three-phase dry-type power transformer, with encapsulated windings, for continuous duty, with cooling by air natural convection | |
| Designation | TTR-A ECO A0-10% Ak | |
| | Rated power 1500 kVA ; Rated voltages 11/0,4 kV ; Rated frequency 50 Hz | |
| Manufacturer | S.E.A. Società Elettromeccanica Arzignanese S.p.A. Via Leonardo Da Vinci, 14 – 36071 Tezze di Arzignano (VI) Italy | |
| Client | S.E.A. Società Elettromeccanica Arzignanese S.p.A. Via Leonardo Da Vinci, 14 – 36071 Tezze di Arzignano (VI) Italy | |
| Tested by | CESI S.p.A. Milan, Italy | |
| Tests date | from May 14, 2015 | to July 29, 2015 |

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 (2004-05)
 Clauses 26.3.2, 27.4 and 28.3
IEC 60076-16 (2011-08)
 Clause 7.4.5

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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Issue date January 13, 2016

Prepared PSV - Beccarini Pierangelo
B6000647 2925 AUT

Verified PMV - Magistris Paolo, PSV - Vidori Mauro
B6000647 3845 VER B6000647 2158654 VER

Approved PMI - The Manager - Arcidiaco Lorenzo
B6000647 821814 APP

CESI S.p.A.
 Testing & Certification Division
 Testing Operations Area
 "Milan Platform"
 Manager

PAD B6000647 (2179387) - CONFIDENTIAL USE

Mod. RPRO v. 8

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1 RATINGS ASSIGNED BY THE MANUFACTURER AS PROVED BY THE TESTS

| Dry-type cast resin power transformer | |
|--|--|
| Manufacturer | S.E.A. Società Elettromeccanica Arzignanese S.p.A. |
| Designation | TTR-A ECO A0-10% Ak |
| Serial number | 109159 |
| Rated power | 1500 kVA |
| Number of phases | 3 |
| Rated voltage of the high-voltage winding (primary winding) | 11 kV |
| Rated voltage of the low-voltage winding (secondary winding) | 400 V |
| Rated current of the high-voltage winding (primary winding) | 78,73 A |
| Rated current of the low-voltage winding (secondary winding) | 2165 A |
| Rated frequency | 50 Hz |
| Connection symbol | Dyn11 |
| Climatic class | C2 |
| Environmental class | E3 |
| Fire behaviour class | F1 |
| Insulation system temperature | F |

2 ADDITIONAL TYPE TESTS

This Certificate also verifies:

- Checking of gases emission, according to IEC 60076-11 clause 28.2

3 REFERENCE DOCUMENTS

The following reference documents are integral part of this Certificate:

| No. | Description | CESI registration |
|-----|-------------------------|-------------------|
| 1 | Test Report | B5007459-1 |
| 2 | Test Report | B5010494-1 |
| 3 | Test Report | B5012975-1 |
| 4 | Test Report | B5013287-1 |
| 5 | Inspection Report | B5016017 |
| 6 | Manufacturer's drawings | B5014117 |

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 | B5007459-1 B5010494-1 B5012975-1 |
| IEC 60076-16 clause 7.4.5 | Environmental class E3: Condensation test | B5013287-1 |
| IEC 60076-11 clause 26.3.2 | Environmental class E3: Humidity penetration test | B5013287-1 |
| IEC 60076-11 clause 28.3 | Fire behaviour test | B5016017 |
| IEC 60076-11 clause 28.2 | Checking of gases emission | B5016017 |

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 B5014117 No.1 to 7 have been returned to the Client.