



in partnership with

ESEF

Certificate of conformity
N° 01-45-051-03

TYPE TEST CERTIFICATE OF SHORT-CIRCUIT PERFORMANCE

TEST OBJECT: Oil immersed three-phase transformer
(According to the Identification File appended to UTC Letter n° 18-2018-UTC-Ex, dated 25/02/2018)

DESIGNATION: Serial number 0100117F0026
Rated Voltage: 20 kV / 400 V Rated Power: 630 kVA Rated Frequency: 50 Hz

MANUFACTURER: Union Transformers Company (UTC), Damascus, Syria

TESTED FOR: Union Transformers Company (UTC)

DATE(S) OF TESTS: from 11/06 to 5/07/2018

TESTED BY: EDF R&D / LME, Les Renardières, France (short-circuit tests)
LCIE, Fontenay-aux-Roses, France (routine tests before and after short-circuit, under supervision and witnessing by LME)

The test object, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with

IEC 60076-5 (2006-02): sub-clause 4.2
IEC 60076-1 (2011-04): sub-clause 11.1.2.1

This Type Test Certificate has been issued by ASEFA in partnership with ESEF following exclusively the STL Guides.

The results are shown in the record of Proving Tests and the oscillograms attached hereto. The values obtained and the general performance are considered to comply with the above Standard and to justify the ratings assigned by the manufacturer as listed on page n° 3.

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

This Certificate comprises test reports n°: LME HM-21/20-2017-0801/2, dated 12/07/2018,
LCIE 152643-714581, dated 12/07/2018.

Only integral reproduction of this Certificate or reproduction of this page accompanied by any page(s) on which are stated the endorsed ratings of the test object, are permitted without written permission from ASEFA.

Date of issue : August 8, 2018

Le Président de l'ASEFA / The chairman of ASEFA

Po.

Certificate of conformity – Template E

33, av du général leclerc
92260 Fontenay-aux-roses – France
tél. 01 40 95 61 02
e-mail : contact@asefa-cert.com



Accréditation
n° 8-0037
Portée disponible sur /
Scope available on
www.cofrac.fr



LCIE

33, Avenue du Général Leclerc
LCIE
92260 FONTENAY-AUX-ROSES
FRANCE



Accréditation
n° 1-0311
Portée disponible sur /
Scope available on
www.cofrac.fr

Test laboratory approved
by ASEFA under reference : E02

ASEFA File n° : 45-051-03

TEST REPORT

N° 152643-714581

Issued to : Union Transformers Company (UTC)
Adra industrial City
Damascus-SYRIA

Product tested : Transformer 630 kVA

Reference : n° 0100117F0026

According to Identification File : Identification type of liquid immersed three phases distribution transformer (appended to letter ref.18-2018-UTC-Ex, dated 25/02/2018).

Rated characteristics : 20 kV/ 0.4kV 50 Hz, Three phases immersed in oil.

Manufacturer : UTC
Place of manufacture : UTC- Damascus- Syrie.

Tests performed

Reference document(s) :

- IEC 60076-1 (2011), IEC 60076-2(2011) et IEC 60076-3 (2013)

Tests performed :

- **60076-1 : General**
 - § 11.2, Measurement of winding resistance
 - § 11.3, Measurement of voltage ratio and check of phase displacement
 - § 11.4 Measurement of short circuit impedance and load loss.
 - § 11.5 Measurement of no-load loss and current
 - § 11.8 Over pressure test
- **60076-2 Temperature rise test**
- **60076-3 Dielectrics tests**
 - § 13.2 Full wave lightning impulse test on HV winding (LI).
 - § 10.0 Applied voltage test (AV)
 - § 11.2 Inducting voltage test (IVV)

Date of receipt : May 15th, 2018.

Date or period of test : June 11st at July 05th 2018 .

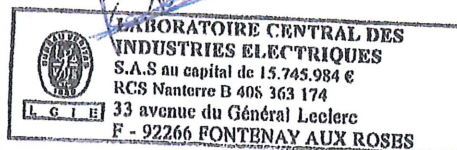
This test report comprises : 09 pages

Date of issue: July 12nd , 2018

The Technical Manager,

Name : Pascal RODDE

Signature :



This document results from tests carried out on a sample. It does not prejudice the compliance of the whole manufactured products with the tested specimen. This test report shall only be reproduced in the full. The COFRAC accreditation only attests the technical capability of the testing laboratory for the tests covered by the accreditation.

Lay out Version I