Amendment to Test Report

This Amendment is valid only together with the main Test Report

Report No .....:	**327249**
Main Report No .....:	See Project history
Date of issue .....:	19.09.2017
Total number of pages .....:	7
Applicant's Name .....:	Elis Elektro AS
Address .....:	Jerikoveien 16, 1067 Oslo, Norway
Test specification	
Standard.....:	EN 60998-2-3: 2004 (see also EN 60998-1: 2004) and IEC 61545:1996
Test procedure .....:	Nemko
Non-standard test method .....:	

Test item description .....:	Connecting Device for AL-conductor
Trade Mark .....:	L&G
Manufacturer .....:	Zhejiang Yuelong Machinery Electrical Co., Ltd. #199 Yaao Road, Daqiao Town, Nanhu District, Jiaxing, China
Model/Type reference .....:	L&G XJ(c)-LJ(s)
Ratings .....:	AL25-50/Cu16 750V AC / 50Hz

Testing procedure and testing location:			
☐	**CB Testing Laboratory**:	Nemko AS	
Testing location/ address ..... :		Gaustadalleen 30, 0373 OSLO, NORWAY	
☐	**Associated CB Laboratory:**		
Testing location/ address ..... :			
	Tested by (name + signature) .....:	Thomas Volan	Thomas Volan
	Approved by (name + signature) ..:	Tore Ledaal	Tore Ledaal
☐	**Testing procedure: TMP/CTF Stage 1**		
Testing location/ address ..... :			
	Tested by (name + signature) .....:		
	Approved by (name + signature) ..:		
☐	**Testing procedure: WMT/CTF Stage 2**		
Testing location/ address ..... :			
	Tested by (name + signature) .....:		
	Witnessed by (name + signature) .:		
	Approved by (name + signature) ..:		
☐	**Testing procedure: SMT/CTF Stage 3 or 4**		
Testing location/ address ..... :			
	Tested by (name + signature) .....:		
	Witnessed by (name + signature) .:		
	Approved by (name + signature) ..:		
	Supervised by (name + signature):		

List of Attachments (including a total number of pages in each attachment):

Summary of testing:	
Tests performed (name of test and test clause): See project history	**Testing location:** Nemko AS Gaustadalleen 30, 0373 OSLO Norway
Summary of compliance with National Differences **List of countries addressed:** ☐ **The product fulfils the requirements of**	

Copy of marking plate
The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks. No changes

Calibration	All instruments used in the tests given in this test report are calibrated and traceable to national or international standards. Further information about traceability will be given on request.
Measurement uncertainty	Measurement uncertainties are calculated for all instruments and instrument set-ups given in this report. Calculations are based on the principles given in the standard EA-4/02 (Dec. 1999), IEC Guide 115:2007 and other relevant internal Nemko-procedures. Further information about measurement uncertainties will be given on request.
Evaluation of results	If not explicitly stated otherwise in the standard, the test is passed if the measured value is equal to or below (above) the limit line, regardless of the measurement uncertainty. If the measured value is above (below) the limit line, the test is not passed - ref IEC Guide 115:2007. The instrumentation accuracy is within limits agreed by IECEE-CTL.

Possible test case verdicts:	
- test case does not apply to the test object ..... :	Not Applicable (N/A)
- test object does meet the requirement ..... :	Pass (P)
- test object does not meet the requirement..... :	Fail (F)
Testing ..... :	-
Date of receipt of test item ..... :	August 2017
Date(s) of performance of tests ..... :	September 2017

General remarks:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.
"(see Enclosure #)" refers to additional information appended to the report.
"(see appended table)" refers to a table appended to the report.

Throughout this report a ☐ comma / ☒ point is used as the decimal separator.

Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided ..... :	☐ **Yes** ☒ **Not applicable**

When differences exist; they shall be identified in the General product information section.

Name and address of factory (ies) ..... :	Zhejiang Yuelong Machinery Electrical Co., Ltd. #199 Yaao Road, Daqiao Town, Nanhu District, Jiaxing, China

General product information:

1-pole separate entity terminal, non-reusable. With insulating piercing clamping unit for connecting 25 - 50mm² stranded Al-conductor only. With permanent mounted 16mm² Cu flexible wire, current rating as for 16mm² Cu-conductor, all colours, with end sleeve.

Project history:		
Nemko Report/ Order No.:	Modification to the appliances:	Changes/ Modifications in clause(s):
81497	Main report	
223729	Including 25mm² ALU cable	11.17
239864	Testing for circular cable	11.17
249225	New manufacturer and production site.	No testing
327249	Temperature rise testing of samples exposed to salt mist, cyclic and to ENV, heat, damp Steadystate.	-

Elis Elektro AS

Order number 327249.

Testing performed: Tempereture rise of clamping unit: L&G XJ(c)-LJ(s). Temperature rise of samples exposed to salt mist, cyclic and to ENV, heat, damp Steadystate. Wired samples of the connecting device have been provided by Elis Elektro with the following cables, tested at specified current at room temperature for 48 hours. Samples exposed to environmental treating are tested for temperature rise together with samples not exposed to environmental treating for comparison.

Cable	Current	Room temp.
25mm²	80A	22°C
50mm²	80A	22°C

The temperatures were measured with thermocouples placed at the following places of the connecting device:

Measuring point #1: Outside at the side of the housing.

Measuring point #2: Outside at the underside of the housing.

Measuring point #3: Inside the the housing.

Environment	With Cable	Measuring point #1	Measuring point #2	Measuring point #3
Samples exposed to salt mist, cyclic	**Al 25/Cu16**	38,6°C	37,9°C	46,3°C
Same as above	**Al 50/Cu16**	36,2°C	35,9°C	41,2°C
Samples exposed to ENV, heat, damp Steadystate	**Al 25/Cu16**	37,7°C	36,4°C	41,5°C
Same as above	**Al 50/Cu16**	33,0°C	33,7°C	37,3°C

Environment	With Cable	Measuring point #1	Measuring point #2	Measuring point #3
Samples not exposed to environmental testing.	**Al 25/Cu16** Sample 1	36,7°C	34,2°C	38,8°C
Same as above	**Al 25/Cu16** Sample 2	37,7°C	36,4°C	44,3°C
Same as above	**Al 50/Cu16** Sample 3	31,8°C	32,4°C	37,6°C
Same as above	**Al 50/Cu16** Sample 4	32,6°C	33,7°C	36,2°C

Photos: