




# CERTIFICATE FI 27467 A2

Our Ref. 266159

<b>Product</b>	Optocoupler
<b>Type</b>	4N5X., EL060L., EL045X., EL0452., EL0501., EL050L., EL354L., EL357L., EL355L., EL101X., EL0701., EL0700., EL061A., EL0601., CNY17F1-X., EL610., EL852., ELD205., EL111X., EL161X., ELD206., EL151X., EL851., ELD211., CNY171-X., ELM302X., EL0551., EL053X., EL063X., EL0661., EL073X., ELM305X., ELM307X., ELM303X., ELM301X., ELM304X., ELM306X., ELM308X., EL451., EL452., EL061N., EL053L., EL0500., EL0600., EL0611.
<b>Trade mark</b>	EVERLIGHT
<b>Certificate Holder/ Manufacturer</b>	Everlight Electronics Co., Ltd. No. 6-8, Zhonghua Rd., Shulin Dist., NEW TAIPEI CITY 23860, TAIWAN
<b>Technical information</b>	250Vrms
<b>Other information</b>	In detail, see appendix 1 and 2 The symbol "." in type numbering can be blank, A-Z or numbers and denote different pin shape. The symbol "X" in type numbering denotes part numbers, see appendix 2.
<b>The product is certified according to the following standard(s)</b>	EN 60065:2002 + A1:2006 + A11:2008 + A2:2010 + A12:2011 EN 60335-1:2012 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 EN 61347-1:2008 + A1:2011
<b>Validity</b>	This certificate is valid until 01 January 2016 unless the standard in question has been amended or superseded with significant changes in requirements, in which case, SGS Fimko has the right to shorten the validity of the certificate based on the legislation of the European Union. This certificate includes the right to use the FI mark under the condition that changes (if any) will be checked at SGS Fimko before the product is brought onto market and that the conditions for FI certification are met.
<b>Date of issue</b>	10 April 2014
<b>Signature</b>	<b>SGS Fimko Ltd</b>  Matti Huttunen Certification Engineer



This certificate has 1 appendix



This certificate is issued by the company under its General Conditions for Certification Services accessible at <http://www.sgs.fi/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitations of liability defined therein and in the Test Report here above mentioned which findings are reflected in this certificate. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

**Manufacturing sites**

Everlight Electronic (China) Co., Ltd.  
No. 2135 Zhong Shan North Road, Wujiang Economy Development Zone (Yun Xi Area), Songling Town, Wujiang City, 215200 JIANGSU, CHINA

**Additional information**

The product has certificate P11214766/A4 issued by Nemko AS in accordance with the Nordic Certification Service system.

Models: 4N5X., EL852., EL851.  
Minimum external creepage distance is measured 7.7mm  
Minimum internal creepage distance is measured 5.5mm  
Minimum distance through insulation is measured 0.5mm  
Tested for reinforced insulation  
Maximum operating temperature 100°C

Models: ELD206., ELD211., EL061A., EL061N., EL050L., EL060L., EL0551., EL0533., EL063X., EL0661., EL073X., EL053L., EL0500., EL0501., EL0701., EL0452., EL0453., EL0600., EL0601., EL0611., EL0700., ELD205.  
Minimum external creepage distance is measured 4.4mm  
Minimum internal creepage distance is measured 3.5mm  
Minimum distance through insulation is measured 0.4mm  
Tested for basic and supplementary insulation  
Maximum operating temperature 100°C

Models: CNY-171-X., CNY17F1-X., EL610.  
Minimum external creepage distance is measured 7.7mm  
Minimum internal creepage distance is measured 6.0mm  
Minimum distance through insulation is measured 0.5mm  
Tested for reinforced insulation  
Maximum operating temperature 110°C

Models: EL111X., EL161X., EL151X., EL101X., EL357L., EL355L., EL354L.  
Minimum external creepage distance is measured 8.1mm  
Minimum internal creepage distance is measured 5.2mm  
Minimum distance through insulation is measured 0.4mm  
Tested for reinforced insulation  
Maximum operating temperature 110°C

Models: ELM304X., ELM306X., ELM307X., ELM303X., ELM302X., ELM305X., ELM301X., ELM308X., EL451., EL452.,  
Minimum external creepage distance is measured 5.0mm  
Minimum internal creepage distance is measured 4.0mm  
Minimum distance through insulation is measured 0.4mm  
Tested for reinforced insulation  
Maximum operating temperature 110°C

Thermal cycling test. 10 cycles. Each cycle: 68 h in 100°C or 110°C, 1 h in 25°C, 2 h in 0°C and 1 h in 25°C.  
After the cycling test a humidity test for 48 h in 93 % relative humidity.

Appendix 2 to Certificate: 27467 A2

The symbol "X" in type denotes X = Part. No. as follows:

0, 1, 2, 3, 4, 5, 6, 7, 8, 9 (4N5X., EL111X., EL161X., EL151X., EL101X.)  
1, 2, 3, 4 (CNY171-X., CNY17F1-X)  
0, 1, 2, 3, 4 (ELM304X., ELM306X., ELM307X., ELM303X., ELM302X.,  
ELM305X., ELM301X., ELM308X.)  
0, 1, L, A, N (EL063X.)  
0, 1 (EL073X.)  
3, 4 (EL045X.)  
0, 1, 3 (EL053X)

The products fulfil following IEC standards:

IEC 60065:2001 (Ed 7) + A1:2005 + A2:2010  
IEC 60950-1:2005 (Ed 2) + A1:2009 + A2:2013  
IEC 60335-1 (Ed 5)  
IEC 61347-1 (Ed 2) + A1:2010

This certificate replaces previous certificate FI 27467 A1 dated 30 November 2012 due to updated standard and technical modifications. The type EL101X is tested for 5000m. Electric strength test; 4800Vac/1min for reinforced insulation and 2400V ac/1min for basic and supplementary insulation.

Our ref. no. 266159-4