

# CERTIFICATE ENEC/FI 2014011



Our Ref. 273106-1

**Product** Electronic ballast for tubular fluorescent lamps

**Rating and principal characteristics** See pages 2-3

**Trade mark (if any)** HELVAR

**Type** EL1x54sc, EL1x24sc, EL1x39sc, EL1x49sc, EL1x80sc, EL4x14sc, EL1x55sc, EL2x55sc, EL1x36sc, EL2x36sc, EL1x58sc, EL1x70sc, EL1x18sc, EL2x18sc, EL2x58sc, EL4x18sc, EL1x21sc, EL1x14sc, EL1x28sc, EL1x35sc, EL2x14sc, EL2x21sc, EL2x24sc, EL2x28sc, EL2x35sc, EL2x39sc, EL2x49sc, EL2x54sc

**Name and address of the licensee** Helvar Oy Ab, PL 100, FI-03601 KARKKILA, FINLAND

**Address of the manufacturer** Helvar Oy Ab, Yrittäjätie 23, FI- 03600 KARKKILA, FINLAND

**Is in conformity with** EN 61347-2-3:2011  
EN 61347-1:2008 + A1:2011 + A2:2013  
EN 60929:2011  
IEC 61347-2-3:2011 (Ed 2)  
IEC 61347-1:2007 (Ed 2) + A1:2010 + A2:2012  
IEC 60929:2011 (Ed 4)

**As shown in the Test Report(s) No(s)** 258282-3\_A, 258282-3\_B, 258282-2\_A, 258282-2\_B, 248578-1c, 248578-1d, 258282-1\_A, 258282-1\_B, 258282-3\_A Amendment-1, 221483-1...4, 221483-6...9, 268862-1\_A, 268862-1\_B  
273106-1A...F

**It is authorized to use of the marks** ENEC 16 and FI

**Validity** This certificate is valid until 26 February 2019 unless the standard in question has been amended or superseded with significant changes in requirements, in which case, SGS Fimko has the right to shorten the validity of the certificate based on the legislation of the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 ENEC 16 and 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 ENEC and FI certification are met.

**Directive information** The product(s) fulfils the essential safety requirements for CE conformity marking according to the Low Voltage Directive (2006/95/EC) at the date of issue of this certificate.

**With the following limitations** -

**Date of issue** 26 February 2014

**Signature**

**SGS Fimko Ltd**

*Pasi Orreveläinen*  
Pasi Orreveläinen  
Team Leader



This certificate has 2 pages



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.

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**Rating and principal characteristics**

EL4x14sc, EL4x18sc:

4xFDH-14W-G5 (T5); 220-240V, 50-60Hz; 0,29-0,27A; Tc 80°C; λ 0,98;  
U-out 400V

4xFD-18W-G13 (T8); 220-240V, 50-60Hz; 0,33-0,30A; Tc 80°C; λ 0,98;  
U-out 350V

EL2x55sc, EL2x36sc, EL2x18sc, EL2x58sc, EL2x14sc, EL2x21sc, EL2x24sc,  
EL2x28sc, EL2x35sc, EL2x39sc, EL2x49sc, EL2x54sc:

2xFDH-14W-G5 (T5); 220-240V, 50-60Hz ; 0,15-0,14A ; Tc 80°C; λ 0,98;  
U-out 250V

2xFD-18W-G13 (T8); 220-240V, 50-60Hz ; 0,18-0,15A ; Tc 80°C; λ 0,98;  
U-out 250V

2xFDH-21W-G5 (T5); 220-240V, 50-60Hz ; 0,22-0,20A ; Tc 80°C; λ 0,98;  
U-out 250V

2xFDH-24W-G5 (T5); 220-240V, 50-60Hz ; 0,24-0,20A ; Tc 80°C; λ 0,98;  
U-out 400V

2xFDH-28W-G5 (T5); 220-240V, 50-60Hz ; 0,30-0,28A ; Tc 80°C; λ 0,98;  
U-out 350V

2xFDH-35W-G5 (T5); 220-240V, 50-60Hz ; 0,36-0,34A ; Tc 80°C; λ 0,98;  
U-out 350V

2xFD-36W-G13 (T8) / 2xFSD-36W-2G11 (TC-L); 220-240V, 50-60Hz ;  
0,33-0,30A ; Tc 80°C; λ 0,98 ; U-out 250V

2xFDH-39W-G5 (T5); 220-240V, 50-60Hz ; 0,40-0,36A ; Tc 80°C; λ 0,98;  
U-out 400V

2xFDH-49W-G5 (T5); 220-240V, 50-60Hz ; 0,50-0,46A ; Tc 80°C; λ 0,98;  
U-out 400V

2xFDH-54W-G5 (T5); 220-240V, 50-60Hz ; 0,53-0,49A ; Tc 80°C; λ 0,98;  
U-out 400V

2xFD-55W-2G11 (TC-L); 220-240V, 50-60Hz ; 0,53-0,49A ; Tc 80°C; λ 0,98;  
U-out 350V

2xFD-58W-G13 (T8) ; 220-240V, 50-60Hz ; 0,50-0,46A ; Tc 80°C ; λ 0,98;  
U-out 400V

EL1x14sc, EL1x18sc, EL1x21sc, EL1x28sc, EL1x35sc, EL1x36sc, EL1x55sc,  
EL1x58sc, EL1x70sc, EL1x24sc, EL1x39sc, EL1x49sc, EL1x54sc, EL1x80sc:

1xFDH-14W-G5 (T5); 220-240V, 50-60Hz ; 0,08-0,07A ; Tc 80°C; λ 0,98;  
U-out 250V

1xFD-18W-G13 (T8); 220-240V, 50-60Hz ; 0,09-0,08A ; Tc 70°C; λ 0,98;  
U-out 250V

1xFDH-21W-G5 (T5); 220-240V, 50-60Hz ; 0,11-0,10A ; Tc 80°C; λ 0,98;  
U-out 250V

1xFDH-28W-G5 (T5); 220-240V, 50-60Hz ; 0,15-0,14A ; Tc 80°C; λ 0,98;  
U-out 350V

1xFDH-35W-G5 (T5); 220-240V, 50-60Hz ; 0,18-0,17A ; Tc 80°C; λ 0,98;  
U-out 350V

1xFD-36W-G13 (T8) / 1xFSD-36W-2G11 (TC-L); 220-240V, 50-60Hz ;  
0,17-0,16A ; Tc 80°C; λ 0,98; U-out 250V

1xFSDH-55W-2G11 (TC-L); 220-240V, 50-60Hz ; 0,28-0,26A ; Tc 80°C;  
λ 0,98; U-out 350V

1xFD-58W-G13 (T8) ; 220-240V, 50-60Hz ; 0,27-0,26A ; Tc 80°C ; λ 0,98;  
U-out 400V

1xFD-70W-G13 (T8) ; 220-240V, 50-60Hz ; 0,31-0,27A ; Tc 70°C ; λ 0,98;  
U-out 400V

1xFDH-24W-G5 (T5); 220-240V, 50-60Hz ; 0,13-0,12A ; Tc 80°C; λ 0,98;  
U-out 400V

1xFDH-39W-G5 (T5); 220-240V, 50-60Hz ; 0,20-0,18A ; Tc 80°C; λ 0,98;  
U-out 400V

1xFDH-49W-G5 (T5); 220-240V, 50-60Hz ; 0,25-0,23A ; Tc 80°C; λ 0,98;  
U-out 400V

1xFDH-54W-G5 (T5); 220-240V, 50-60Hz ; 0,28-0,26A ; Tc 80°C; λ 0,98;  
U-out 400V

1xFDH-80W-G5 (T5); 220-240V, 50-60Hz; 0,41-0,38A; Tc 80°C; λ 0,98;  
U-out 400V