

CERTIFICATE

Issued to:
Applicant:
Helvar Oy Ab
Yrittäjätie 23
03600 Karkkila, Finland

Licensee:
Helvar Oy Ab
Yrittäjätie 23
03600 Karkkila, Finland

Product : Built-in LED controlgear
Trade name(s) : Helvar
Type(s)/model(s) : LL1x10-42-E-DA, LL1x110-E-DA and LL1x23-80-DA

The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

DEKRA hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to the standard EN 61347-1:2015, EN 61347-2-13:2014, EN 61347-2-13:2014/A1:2017, EN 62384:2006 and EN 62384:2006/A1:2009
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 4351636

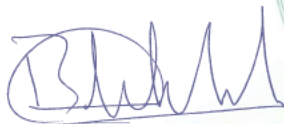
DEKRA hereby grants the right to use the ENEC certification mark.

The ENEC certification mark may be applied to the product as specified in this certificate for the duration of the ENEC certification agreement and under the conditions of the ENEC certification agreement.

This certificate is issued on 22 March 2021 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 35-118237

DEKRA Certification B.V.



B.T.M. Holtus
Managing Director



K. Lin
Certification Manager

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COUNCIL



SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

Product	: Built-in LED controlgear
Trade name(s)	: Helvar
Type(s)/model(s)	: LL1x10-42-E-DA, LL1x110-E-DA and LL1x23-80-DA
Rated voltage	: 220-240 VAC/VDC
Rated frequency	: 50-60 Hz
Power factor	: 0,98
Max. case temperature (tc)	: 75 °C
Ambient temperature (ta)	: -20-50 °C
No load voltage	: 400 V
Additional information	: non-inherently short-circuit proof, 120 °C thermal protection, EL mark

Product data – type LL1x10-42-E-DA

Input current	: 0,20-0,22 A
Output current	: 1) 120 mA 2) 350 mA
Output Working voltage	: 1) 80...350 Vdc 2) 50...120 Vdc
Output power	: 42 W

Product data – type LL1x110-E-DA

Input current	: 0,44-0,60 A
Output current	: 1) 350 mA 2) 700 mA
Output Working voltage	: 1) 120...314 Vdc 2) 50...157 Vdc
Output power	: 110 W

Product data – type LL1x23-80-DA

Input current	: 0,22-0,42 A
Output current	: 1) 150 mA 2) 350 mA
Output Working voltage	: 1) 150...350 Vdc 2) 64...228 Vdc
Output power	: 1) 52,5 W 2) 80 W

TESTS**Test requirements**

EN 61347-1:2015
EN 61347-2-13:2014
EN 61347-2-13:2014/A1:2017
EN 62384:2006
EN 62384:2006/A1:2009

Test result

The test results are laid down in DEKRA test file 437161700.

Additional information

The list of components is laid down in test report 4371617.50, 4371617.51.

Conclusion

The examination proved that all requirements were met.

Factory locations

Helvar Oy Ab
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03600 Karkkila, Finland

Trade name : Helvar stands for

Helvar