

CERTIFICATE

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

Licensee:
Helvar Oy Ab
Yrittajantie 23
03600 Karkkila, Finland

Product : Electronic controlgear (LED driver)
 Trade name(s) : Helvar
 Type(s)/model(s) : LL35HE-DA-80-400, LL50HE-DA-80-550, LL80HE-DA-100-800 and LL80HE-DA-150-850

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(s) EN 61347-1:2015, EN 61347-1:2015/A1:2021, EN 61347-2-13:2014, EN 61347-2-13:2014/A1:2017 and EN IEC 62384:2020
- an inspection of the factory location according to CENELEC Operational Document CIG 021
- a DEKRA certification agreement with the number 4351636

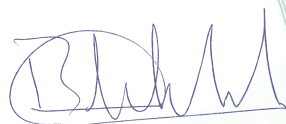
DEKRA hereby grants the right to use the ENEC certification mark.

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

This certificate is issued on 8 September 2022 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 35-125225

DEKRA Certification B.V.



B.T.M. Holtus
 Managing Director



K Xu
 Certification Manager

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 DUTCH ACCREDITATION
 COUNCIL



SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

| | |
|------------------------|--|
| Product | : Electronic controlgear (LED driver) |
| Trade name(s) | : Helvar |
| Type(s)/model(s) | : LL35HE-DA-80-400, LL50HE-DA-80-550, LL80HE-DA-100-800 and LL80HE-DA-150-850 |
| Rated voltage | : 220-240 Vac |
| Rated frequency | : 50-60 Hz |
| Additional information | : built-in, auto-wound controlgear, non-Inherently short-circuit proof, 120 °C thermal protection, EL-mark, EOFi:0,15 |

Product data – type LL35HE-DA-80-400

| | |
|----------------------------|--------------|
| PF | : 0,55C-0,98 |
| Ambient temperature (ta) | : -40-60 °C |
| Max. case temperature (tc) | : 80 °C |

Product data – type LL50HE-DA-80-550

| | |
|----------------------------|--------------|
| PF | : 0,45C-0,98 |
| Ambient temperature (ta) | : -40-55 °C |
| Max. case temperature (tc) | : 80 °C |

Product data – type LL80HE-DA-100-800

| | |
|----------------------------|--------------|
| PF | : 0,43C-0,98 |
| Ambient temperature (ta) | : -40-50 °C |
| Max. case temperature (tc) | : 85 °C |

Product data – type LL80HE-DA-150-850

| | |
|----------------------------|--------------|
| PF | : 0,43C-0,98 |
| Ambient temperature (ta) | : -40-50 °C |
| Max. case temperature (tc) | : 85 °C |

TESTS**Test requirements**

EN 61347-1:2015
EN 61347-1:2015/A1:2021
EN 61347-2-13:2014
EN 61347-2-13:2014/A1:2017
EN IEC 62384:2020

Test result

The test results are laid down in DEKRA test file 439216200.

Additional information

This certificate replaces certificate No. 35-124556 which we hereby declare invalid.

The list of components is laid down in test report 4392162.50, 4392162.51.

Conclusion

The examination proved that all requirements were met.

Factory locations

Helvar Oy Ab
Yrittajantie 23
03600 Karkkila, Finland

Trade name: Helvar stands for

Helvar

Model description:

| Model No. | Input | | Output | | | | DIP (1 2) | ta (°C) | tc (°C) |
|---------------------------|--------------------------|----------------|-----------------|------------------|--------------------------------|--------------|-----------------|------------|------------|
| | Voltage (VAC/ VDC) | PF | Current (mA) | Voltage (Vdc) | No load voltage (Vdc) | Power (W) | | | |
| LL80HE- DA-150- 850 | 220- 240 | 0,43C- 0,98 | 350 | 35-220 | 250 | 77 | 0 0 | -40- 50 | 85 |
| | | | 500 | 35-160 | | 80 | 1 0 | | |
| | | | 700 | 35-114 | | 80 | 0 1 | | |
| | | | 850 | 35-94 | | 80 | 1 1 | | |
| LL80HE- DA-100- 800 | 220- 240 | 0,43C- 0,98 | 350 | 35-228 | 350 | 80 | 0 0 | -40- 50 | 85 |
| | | | 500 | 35-160 | | 80 | 1 0 | | |
| | | | 700 | 35-114 | | 80 | 0 1 | | |
| | | | 800 | 35-100 | | 80 | 1 1 | | |
| LL35HE- DA-80-400 | 220- 240 | 0,55C- 0,98 | 100 | 35-220 | 250 | 22 | 0 0 | -40- 60 | 80 |
| | | | 200 | 35-176 | | 35 | 1 0 | | |
| | | | 350 | 35-100 | | 35 | 0 1 | | |
| | | | 400 | 35-87,5 | | 35 | 1 1 | | |
| LL50HE- DA-80-550 | 220- 240 | 0,45C- 0,98 | 200 | 35-220 | 250 | 44 | 0 0 | -40- 55 | 80 |
| | | | 350 | 35-143 | | 50 | 1 0 | | |
| | | | 400 | 35-125 | | 50 | 0 1 | | |
| | | | 550 | 35-91 | | 50 | 1 1 | | |