

# CERTIFICATE

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

Licensee:  
**Helvar Oy Ab**  
**Yrittajantie 23**  
**03600 Karkkila, Finland**

Product : Built-in LED controlgear  
 Trade name(s) : Helvar  
 Type(s)/model(s) : LL35HE-DA-80-400, 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

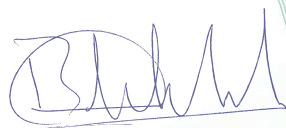
DEKRA hereby grants the right to use the ENEC certification mark.

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 11 July 2022 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 35-124556

DEKRA Certification B.V.



B.T.M. Holtus  
 Managing Director



K. Lin  
 Certification Manager

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 DUTCH ACCREDITATION  
 COUNCIL



**SPECIFICATION OF THE CERTIFIED PRODUCT****Product data**

Product	: Built-in LED controlgear
Trade name(s)	: Helvar
Type(s)/model(s)	: LL35HE-DA-80-400, 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 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 438824400.

**Additional information**

The list of components is laid down in test report 4388244.50, 4388244.51.

**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

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		