

OVE Austrian Electrotechnical Association
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OVE Certification
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ENEC Certification Body registered under ID # 11.

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LICENCE

to use the European Mark



Licence No.: **85175-036**

Date of issue: Wien, 2022 03 02
Rev. No.: 01 Wien, 2025 07 30

OVE the Austrian Electrotechnical Association as signatory to the **"Agreement on the use of a commonly agreed Mark of Conformity for certain electrical equipment complying with European Standards"** hereby grants the right to label the products mentioned hereunder and listed in the Annex with the Mark(s) shown above to the following company

Licensee: **Thorn Lighting Ltd**
Durhamgate, Spennymoor,
County Durham
DL16 6HL
United Kingdom

Product: **Luminaires for road and street lighting**

Trade Mark: **THORN**

Series/Type: **CARAT CL2**

Basis for this given right is the conformity of the products with the requirements of the relevant Standard(s) as listed in the Annex and the fulfilment of articles 8 and 9 of the ENEC-Agreement by the manufacturer. This licence refers to the tested specimen and to all products manufactured strictly identical to the submitted one.

This licence has been issued under the presumption and conditional on the fact that the licensee holds all necessary legal rights with regard to the product presented for testing and certification.

Österreichischer Verband für Elektrotechnik
Head of OVE Certification

T. Neumayer

Digitally signed by T. Neumayer
Email: t.neumayer@ove.at

Dipl.-Ing. T. Neumayer



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<i>Hersteller Manufacturer</i>	Thorn Lighting Ltd Durhamgate, Spennymoor, County Durham DL16 6HL United Kingdom
<i>Fertigungsstätte(n) Factory location(s)</i>	Thorn Lighting Ltd Durhamgate, Spennymoor, County Durham DL16 6HL United Kingdom
<i>Typenbezeichnung Type reference</i>	CT S 12L-... CT S 24L-... CT S 36L-... CT L 36L-... CT L 48L-... CT L 60L-... see type code on page 6.
* <i>Prüfbericht Test Report</i>	TR 85175-0040-02 ECS, TR 85175-0040-04 ECS
* <i>Nationale Bestimmung(en) National Standard(s)</i>	OVE EN IEC 60598-1:2022-04-01 OVE EN IEC 60598-1/A11:2023-02-01 ÖVE/ÖNORM EN 60598-2-3:2012-01-01
* <i>Europanorm(en) European Standard(s)</i>	EN IEC 60598-1:2021 EN IEC 60598-1:2021/A11:2022 EN 60598-2-3:2003 + A1:2011
* <i>Ersatz für Zertifikat Superseded licence</i>	85175-036 dated 2022 03 02 Items modified are marked with an asterisk (*)
* <i>Anmerkung(en) Remark(s)</i>	--

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Bemessungsversorgungsspannung
Rated supply voltage

220-240V, 50/60Hz

Anzahl und Leistung der Lampen
Rated wattage and number of lamps

**1x LEM R12 (CT . 12L)
2x LEM R12 (CT . 24L)
4x LEM R12 (CT . 48L)
1x LEM R36 (CT . 36L)
1x LEM R36 and 2x LEM R12 (CT . 60L)**

Lampentyp(en)
Lamp identification

**LED modules LEM R12 (12 LEDs) or LEM R36 (36 LEDs)
at max. 1050 mA (CT S 12L, CT S 24L, CT L 36L) or
at max. 800 mA (CT S 36L, CT L 48L, CT L 60L).**

Schutzgrad
Degree of protection

IP66

Netzanschluss
Supply connection

Screwless terminals, or pre-wired

Befestigungsfläche
Supporting surface

Normally flammable surface.

Schutzklasse
Class of protection

CI.II

Umgebungstemperatur ta
Rated ambient temperature ta

Ta 25°C (MSU) or Ta 35°C (MLE/MTP)

Beschreibung des Aufbaus
Description of construction

**LED lantern for road and street lighting. Different
mountings (MSU or MLE/MTP).
Enclosure: 4 & 5 mm glass retained against gasket, die
cast aluminium.**

Zusatzinformation
Additional information

**Classified as risk group 2 (moderate risk) according to
EN 62471:2008.**

**The luminaire should be positioned so that prolonged
staring into the luminaire at a distance closer than 1,5 m
is not expected.**

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<i>Bauteil</i> <i>Component</i>	<i>Code</i> <i>Code</i>	<i>Hersteller</i> <i>Manufacturer</i>	<i>Typenbezeichnung</i> <i>Type Reference</i>	<i>Konformitätszeichen</i> <i>Mark(s) of conformity</i>
<i>LED module</i>	A*	Zumtobel	LEM R12... tc=105°C; RG2; max. 1050mA	ÖVE
	A*	Zumtobel	LEM R36... tc=105°C; RG2; max. 1050mA	ÖVE
<i>LED driver</i>	B	Tridonic	LCO 14/100-500/38 NF C ADV3	ENEC 11
	B	Tridonic	LCO 60/200-1050/100 NF C ADV3	ENEC 11
	B	Tridonic	LCO 90/200-1050/165 NF C ADV3	ENEC 11
	B	Tridonic	LCO 40/200-1050/64 NF C ADV3	ENEC 11
	B	Tridonic	LCO 135/200-1050/220 NF C ADV3	ENEC 11
	B	Tridonic	LCO 14/100-500/38 o4a NF C EXC3	ENEC 11
	B	Tridonic	LCO 40/200-1050/64 o4a NF C EXC3	ENEC 11
	B	Tridonic	LCO 60/200-1050/100 o4a NF C EXC3	ENEC 11
	B	Tridonic	LCO 90/200-1050/165 o4a NF C EXC3	ENEC 11
	B	Tridonic	LCO 135/200-1050/220 o4a NF C EXC3	ENEC 11
	B	Osram	OT 75/170-240/1A0 4DIMLT2 G2 CE	ENEC 10
	B	Osram	OT 165/170-240/1A0 4DIMLT2 G2 CE	ENEC 10
	B	Osram	OT DX 40/220-240/1A0 DIMA LT2E	ENEC 10
	B	Osram	OT DX 75/220-240/1A0 DIMA LT2E	ENEC 10
	B	Osram	OT DX 110/220-240/1A0 DIMA LT2 E	ENEC 10
	B	Osram	OT DX 165/220-240/1A0 DIMA LT2 E	ENEC 10
*	B	Philips	Xi SR 165W 0.2-1.0A SNEMP 230V C170 sXt	ENEC 05
*	B	Philips	Xi SR 40W 0.2-1.0A SNEMP 230V C123 sXt	ENEC 05
*	B	Philips	Xi SR 75W 0.2-1.0A SNEMP 230V C150 sXt	ENEC 05
*	B	Philips	Xi SR 110W 0.2-1.0A SNEMP 230V C150 sXt	ENEC 05
*	B	Philips	Xi FP 75W 0.3-1.0A SNLDAE 230V C133 sXt	ENEC 05
*	B	Philips	Xi FP 110W 0.3-1.0A SNLDAE 230V C133 sXt	ENEC 05
*	B	Philips	Xi FP 165W 0.3-1.0A SNLDAE 230V C170 sXt	ENEC 05
<i>Surge Protector</i>	B	Citel	MLPC1-230L-5 230-277V; 5A	CB_HU-001850
* <i>Terminals</i>	A	Electro-Terminal	SLK 3 450V; 24A; T110; 2,5mm²	ENEC 10
* <i>Internal wiring</i>	B	BLF	SILHSIL U 300V; 180°C; 0,75mm²	VDE
*	B	BLF	SIL0100 U 300V; 180°C; 0,75mm²	VDE
*	B	BLF	UG4G4 450/750V; 180°C; 0,75mm²	IMQ
<i>Cable gland</i>	A	Wieland	BMOS-EU-22 IP66; -20°C to +100°C	VDE
* <i>Main cable</i>	A	Pecso Cavi	H07RN-F 2x1,5mm² / 4x1,5mm² 450/750 V	HAR
*	B	Ozguven Kablo	318* AG Grade 300/500V; 70°C; 2x1,5mm²	BASEC

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* Nema Socket B	B	Tyco	PN7 2213627-2 AC 150/240/300V; 15/7.5/6A DC 30V; 1.5A Signal Contacts	CB_US 32907-M3- UL
* Zhaga Socket	B	Tyco	2213858-1 AC/DC 250V; 5A; IP66	CB_US 34131-M1- UL
A	The component is replaceable with another one, also certified, with equivalent characteristics.			
A*	The component is replaceable with another one according to ETF5-OSM-LUM/DSH 2057			
B	The component is replaceable if authorised by the test house.			
C	Integrated component tested together with the appliance.			
D	Alternative component.			

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Typecode:

CT ...**L**...-... **CL2**

Colour

ANT, ANT-S Anthracite
BK Black
GY Light gray
R...different RAL colours

Mounting

MSU, MSUL Suspended mounting (MSU)
L42 Lateral mounting (MLE)
T60, T76..... Post top mounting (MTP)

Wiring (optional)

DSxPre-wired 1,5mm², x m (DACH)
USxPre-wired 1,5mm², x m (UK)
WSxPre-wired 1,5mm², x m (H07RN-F)
WTx.....Pre-wired 2,5mm², x m (H07RN-F)

Temperature (optional)

MTMedium ambient temperature 35°C

CL2Protection Class II

Controls (optional)

N7..... NEMA socket
ZD, ZU, ZUD ... Zhaga socket

SPSurge Protection (optional)

LV.....Internal Louvre (optional)

IK.....Impact protection IK10 (optional)

HFX.....DALI2 (optional)

Bi-Power (optional)

BPx xxx ...Bi-Power
BPLBi-Power Power Line
LRTLight Reduction Twin Phase
MLD1.....Multi Layer Dimming Scenario 1

CLO.....Constant Light Output (optional)

Optics

Photometric code

722-40CRI 70, 2200-4000K
722-30CRI 70, 2200-3000K
7xx.....CRI 70, max 4000K
8xx.....CRI 80, max 4000K

LED module current

25 to 105 mA (x10)

Number of LEDs

12L, 24L, 36L, 48L, 60L

Size

SSmall
LLarge

Series

CTCARAT

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