

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

Validity of ENEC Licences can be checked at www.enec.com

LICENCE

to use the European Mark



Licence No.: **85175-035**

Date of issue: Wien, 2022 03 02

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

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

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

Trade Mark: **THORN**

Series/Type: **CARAT CL1**

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

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 85175-0040-01 ECS
<i>Nationale Bestimmung(en) National Standard(s)</i>	OVE EN IEC 60598-1:2022-04-01 ÖVE/ÖNORM EN 60598-2-3:2012-01-01
<i>Europannorm(en) European Standard(s)</i>	EN IEC 60598-1:2021 EN 60598-2-3:2003 + A1:2011
<i>Ersatz für Zertifikat Superseded licence</i>	--
<i>Anmerkung(en) Remark(s)</i>	CTF Stage 3.

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<i>Nennspannung</i> <i>Rated voltage</i>	220-240V, 50/60Hz
<i>Anzahl und Leistung der Lampen</i> <i>Rated wattage and number of lamps</i>	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)
<i>Lampentyp(en)</i> <i>Lamp identification</i>	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).
<i>Schutzgrad</i> <i>Degree of protection</i>	IP66
<i>Netzanschluss</i> <i>Supply connection</i>	Screwless terminals, or pre-wired
<i>Befestigungsfläche</i> <i>Supporting surface</i>	Normally flammable surface
<i>Schutzklasse</i> <i>Class of protection</i>	CI.I
<i>Umgebungstemperatur ta</i> <i>Rated ambient temperature ta</i>	Ta 25°C (MSU) or Ta 35°C (MLE/MTP)
<i>Beschreibung des Aufbaus</i> <i>Description of construction</i>	LED lantern for road and street lighting. Different mountings (MSU or MLE/MTP). Enclosure: 4 & 5 mm glass retained against gasket, die cast aluminium.
<i>Zusatzinformation</i> <i>Additional information</i>	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; 320V max.	ÖVE
	A*	Zumtobel	LEM R36... tc=105°C; RG2; 320V max.	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
<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 11
<i>Internal wiring</i>	A	BLF	SILHSIL U 300V; 180°C; 0,75mm²	VDE
	A	BLF	SIL0100 U 300V; 180°C; 0,75mm²	VDE
<i>Cable gland</i>	A	Wieland	BMOS-EU-22 IP66; -20°C to +100°C	VDE
<i>Main cable</i>	A	Goldwing	H07RN-F 450/750 V	HAR
	D	Goldwing	318* AG Grade 300/500V; 70°C	BASEC
<i>Nema Socket</i>	B	Tyco	PN7 2213627-2 AC 150/240/300V; 15/7.5/6A DC 30V; 1.5A Signal Contacts	CB_US 32907-A1-UL
<i>Zhaga Socket</i>	B	Tyco	2213858-1 AC/DC 250V; 5A	CB_US 34131-UL

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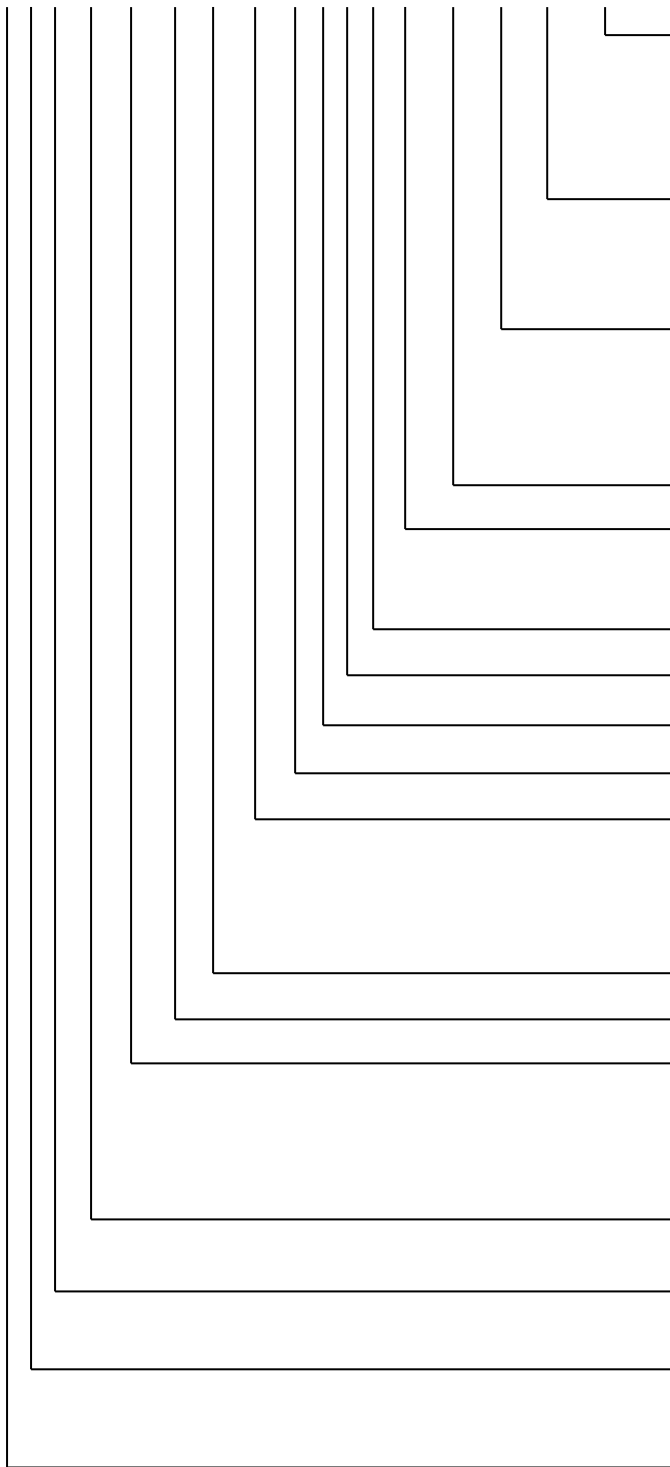
<i>Bauteil</i>	<i>Code</i>	<i>Hersteller</i>	<i>Typenbezeichnung</i>	<i>Konformitätszeichen</i>
<i>Component</i>	<i>Code</i>	<i>Manufacturer</i>	<i>Type Reference</i>	<i>Mark(s) of conformity</i>
A			The component is replaceable with another one, also certified, with equivalent characteristics.	
A*			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 CL1



- 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)
 DSx Pre-wired 1,5mm², x m (DACH)
 USx Pre-wired 1,5mm², x m (UK)
 WSx Pre-wired 1,5mm², x m (H07RN-F)
 WTx Pre-wired 2,5mm², x m (H07RN-F)
- CL1** Protection Class I
- Controls** (optional)
 N7 NEMA socket
 ZD, ZU, ZUD ... Zhaga socket
- SP** Surge Protection (optional)
- LV** Internal Louvre (optional)
- IK** Impact protection IK10 (optional)
- HFX** DALI2 (optional)
- Bi-Power** (optional)
 BPx xxx ... Bi-Power
 BPL Bi-Power Power Line
 LRT Light Reduction Twin Phase
 MLD1 Multi Layer Dimming Scenario 1
- CLO** Constant Light Output (optional)
- Optics**
- Photometric code**
 722-40 CRI 70, 2200-4000K
 722-30 CRI 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**
 S Small
 L Large
- Series**
 CT CARAT

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