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ENEC Certification Body registered under ID # 11.

Validity of ENEC Licences can be checked at [www.enec.com](http://www.enec.com)

# LICENCE

to use the European Mark



Licence No. **85175-028**

Date of issue: Wien, 2018 11 21

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: **Flow**

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 Testing & Certification

Digitally signed by W. Martin  
Email=w.martin@ove.at  
Dipl.-Ing. W. Martin



## **OVE Testing & Certification**

Accredited by the Federal Ministry for Digital and Economic Affairs as Certification Body for products within the scope as given in the official decree and published under [www.bmdw.gv.at/akkreditierung](http://www.bmdw.gv.at/akkreditierung).



<p><i>Hersteller</i> <i>Manufacturer</i></p>	<p><b>Thorn Lighting Ltd</b> <b>Durhamgate, Spennymoor,</b> <b>County Durham</b> <b>DL16 6HL</b> <b>United Kingdom</b></p>
<p><i>Fertigungsstätte(n)</i> <i>Factory location(s)</i></p>	<p><b>Thorn Lighting Ltd</b> <b>Durhamgate, Spennymoor,</b> <b>County Durham</b> <b>DL16 6HL</b> <b>United Kingdom</b></p>
<p><i>Typenbezeichnung</i> <i>Type reference</i></p>	<p><b>FW ..L ... CL2 ..., see also page 5.</b></p>
<p><i>Prüfbericht</i> <i>Test Report</i></p>	<p><b>TR 85175-0031-02 ECS</b></p>
<p><i>Nationale Bestimmung(en)</i> <i>National Standard(s)</i></p>	<p><b>ÖVE/ÖNORM EN 60598-1:2015-11-01</b> <b>ÖVE/ÖNORM EN 60598-2-3:2012-01-01</b></p>
<p><i>Europannorm(en)</i> <i>European Standard(s)</i></p>	<p><b>EN 60598-1:2015</b> <b>EN 60598-2-3:2003 + A1:2011</b></p>
<p><i>Ersatz für Zertifikat</i> <i>Superseded licence</i></p>	<p>--</p>
<p><i>Anmerkung(en)</i> <i>Remark(s)</i></p>	<p><b>CTF Stage 3</b></p>

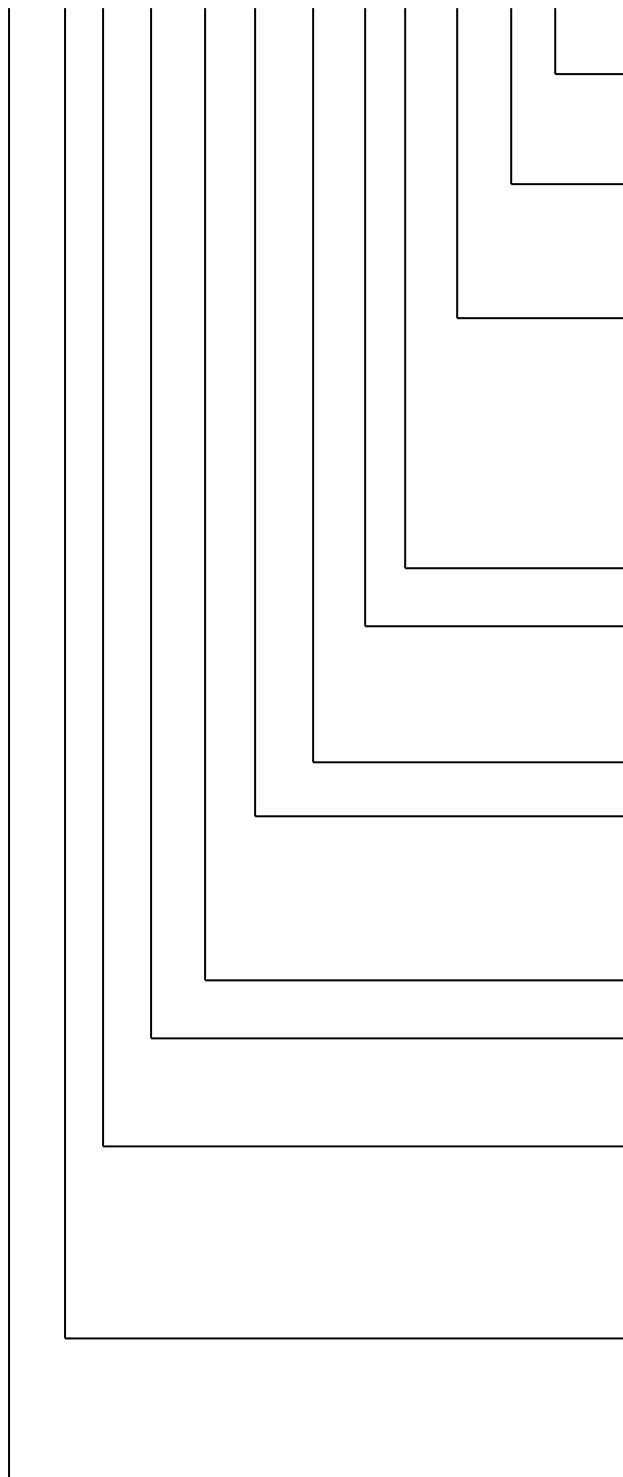
<i>Nennspannung</i> <i>Rated voltage</i>	<b>220-240 V, 50/60 Hz</b>
<i>Anzahl und Leistung der Lampen</i> <i>Rated wattage and number of lamps</i>	<b>FW 12L: 1x LEM R12, FW 24L: 2x LEM R12, FW 36L: 1x RLE36.</b>
<i>Lampentyp(en)</i> <i>Lamp identification</i>	<b>LED modules LEM R12 37W ... 49x147 (ILCOS: DSL) and RLE36 ... 149x147 (ILCOS: DSH)</b>
<i>Schutzgrad</i> <i>Degree of protection</i>	<b>IP66</b>
<i>Netzanschluss</i> <i>Supply connection</i>	<b>Screwless terminals</b>
<i>Befestigungsfläche</i> <i>Supporting surface</i>	<b>Normally flammable surface</b>
<i>Schutzklasse</i> <i>Class of protection</i>	<b>CI.II</b>
<i>Beschreibung des Aufbaus</i> <i>Description of construction</i>	<b>Luminaire is fitted with LED PCB's &amp; optical clusters for light distribution. There are 5 mounting brackets allowing 6 fixing positions. Internal tool free gear tray. Enclosure: Die cast aluminium. Flat Glass is glued to casting.</b>
<i>Zusatzinformation</i> <i>Additional information</i>	<b>Classified as risk group 2 (moderate risk) according EN 62471:2008.</b>  <b>The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 1,5 m is not expected.</b>

<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 control gear</i>	<b>B</b>	<b>Tridonic</b>	<b>LCA 120W C PRE OTD</b>	<b>ENEC 11</b>
	<b>B</b>	<b>Tridonic</b>	<b>LCA 75W C PRE OTD</b>	<b>ENEC 11</b>
	<b>B</b>	<b>Tridonic</b>	<b>LCA 60W C PRE OTD</b>	<b>ENEC 11</b>
	<b>B</b>	<b>Tridonic</b>	<b>LCA 30W C PRE OTD</b>	<b>ENEC 11</b>
<i>SPD</i>	<b>B</b>	<b>Citel</b>	<b>MLPC1-230L-5</b>	<b>CB_HU-001850</b>
<i>Terminals</i>	<b>A</b>	<b>Electro Terminal</b>	<b>SLK 3 450V, 24A, T110</b>	<b>ENEC 10</b>
<i>Multipolar Disconnecter</i>	<b>C</b>	<b>MT Light Tech</b>	<b>5 poles 250V; 6A; T140°C</b>	<b>Checked within appliance</b>
<i>Internal wiring</i>	<b>A</b>	<b>BLF</b>	<b>SILHSIL U 300V; 0,75mm<sup>2</sup>; 180°C</b>	<b>VDE</b>
<i>Mains supply cable</i>	<b>A</b>	<b>Interchangeable</b>	<b>H07RN-F</b>	<b>HAR</b>
<i>Cable Gland</i>	<b>A</b>	<b>Bimed Tecknic</b>	<b>BMOS-EU-22 IP 66; 100°C</b>	<b>VDE</b>
<i>LED Modules</i>	<b>A*</b>	<b>Thorn</b>	<b>LEM R12... 3000K/4000K; 1050mA</b>	<b>ÖVE</b>
	<b>A*</b>	<b>Thorn</b>	<b>RLE36... 3000K/4000K; 1050mA</b>	<b>ÖVE</b>

- 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 OD-5002-3:2015  
B The component is replaceable if authorised by the test house.  
C Integrated component tested together with the appliance.  
D Alternative component.

Typecode:

**FW** ..... **CL2** .....



**Colour of luminaire**

ANT ..... Texturised dark grey full body included spigot and body  
Rxxxx.....RALxxxx

**Wiring** (optional)

blank.....not pre-wired  
W6 .....6m pre-wired  
... .....XXm wiring

**Mounting**

T60F .....D60 street spigot to be post top mounted +5° tilt  
L60E .....D60 street spigot to be lateral mounted 0° tilt  
MTPA.....Amenity D60 bracket to be post top mounted  
T76F .....Spigot D76 to be post top mounted +5° tilt  
L42E .....Spigot D42 to be lateral mounted 0° tilt  
MSU .....Suspended - 34G  
MCA .....Catenary suspension

**HFX** .....DALI dimmable

Optional:

blank.....Clear glass  
LV .....Internal louvers  
PR .....Additional comfort foil (glare control)

**CL2**.....Protection class II

**Options**

BPS .....BP switch (On/Off)  
CLO .....Constant Light Output  
LRT.....Light Reduction Twin phases  
SP.....Additional Surge protection device

**Optics**

**Photometric code**

L730 .....3000K, CRI 70  
L740 .....4000K, CRI 70

**Current of LED module**

35 .....350mA  
50 .....500mA  
70 .....700mA  
85 .....850mA  
105 .....1050mA

**Number of LEDs**

12L .....12 LEDs  
24L .....24 LEDs  
36L .....36 LEDs

**Series FLOW**