

OVE Austrian Electrotechnical Association
Eschenbachgasse 9, 1010 Wien, Austria
ZVR: 327279890 | DVR: 1055887 | www.ove.at

OVE Testing & Certification
Kahlenberger Str. 2A, 1190 Wien, Austria
T +43 1 370 58 06 | F +43 1 370 58 06-199



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. **80585-010**

Date of issue: Wien, 2017 03 03

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**
Route de Paix
27705 Les Andelys
France

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

Trade Mark: **THORN**

Series/Type: **Isaro2**

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 of Science, Research and Economy as Certification Body for products within the scope as given in the official decree and published under www.en.bmwf.gv.at/accreditation



<p><i>Hersteller</i> <i>Manufacturer</i></p>	<p>THORN Route de Paix 27705 Les Andelys France</p>
<p><i>Fertigungsstätte(n)</i> <i>Factory location(s)</i></p>	<p>Thorn Lighting Ltd Durhamgate, DL16 6HL Spennymoor, County Durham United Kingdom</p>
<p><i>Typenbezeichnung</i> <i>Type reference</i></p>	<p>Series Isaro2 Small: ISARO2 12L...CL1... ISARO2 24L...CL1... ISARO2 36L...CL1...</p> <p>Series Isaro2 Large: ISARO2 48L...CL1... ISARO2 60L...CL1... ISARO2 72L...CL1...</p> <p>See type code on page 5.</p>
<p><i>Prüfbericht</i> <i>Test Report</i></p>	<p>TR 80585-0003-01 ECS TR 80585-0003-02 ECS</p>
<p><i>Nationale Bestimmung(en)</i> <i>National Standard(s)</i></p>	<p>ÖVE/ÖNORM EN 60598-1:2015-11-01 ÖVE/ÖNORM EN 60598-2-3:2012-01-01</p>
<p><i>Europannorm(en)</i> <i>European Standard(s)</i></p>	<p>EN 60598-1:2015 EN 60598-2-3:2003 + A1:2011</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>Classified as risk group 2 (moderate risk) according to EN 62471:2008.</p> <p>The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 1,5 m is not expected.</p> <p>SMT-procedure</p>

<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>	ISARO2 12L: 1x LED module with 12 LEDs ISARO2 24L: 2x LED module with 12 LEDs ISARO2 36L: 1x LED module with 36 LEDs ISARO2 48L: 4x LED module with 12 LEDs ISARO2 60L: 1x LED module with 36 LEDs + 2x LED module with 12 LEDs ISARO2 72L: 2x LED module with 36 LEDs
<i>Lampentyp(en)</i> <i>Lamp identification</i>	LED modules RLE49 (12 LEDs) or RLE149 (36 LEDs)
<i>Schutzgrad</i> <i>Degree of protection</i>	IP66
<i>Netzanschluß</i> <i>Supply connection</i>	Screwless terminals
<i>Befestigungsfläche</i> <i>Supporting surface</i>	Normally flammable surface
<i>Schutzklasse</i> <i>Class of protection</i>	CI.I
<i>Beschreibung des Aufbaus</i> <i>Description of construction</i>	Small size LED road lighting lantern with 12 to 72 LEDs with several optic. Housing made of die-cast Aluminium. Enclosure with toughened flat glass (fracture in small pieces). Supplied with Ø60mm spigot adaptor which can be fitted for post-top (0°/5°/10° tilt) or side-entry (-20°/-15°/-10°/-5°/0° tilt).
<i>Zusatzinformation</i> <i>Additional information</i>	Certified for LED modules driven at max. 700mA.

<i>Bauteil Component</i>	<i>Code Code</i>	<i>Hersteller Manufacturer</i>	<i>Typenbezeichnung Type Reference</i>	<i>Konformitätszeichen Mark(s) of conformity</i>
LED Module	B	THORN	STARK RLE49	ÖVE
	B	THORN	STARK RLE149	ÖVE
LED control gear	B	Osram	OT 40W 4DIM	ENEC 10
	B	Osram	OT 60W 4DIM	ENEC 10
	B	Osram	OT 90W 4DIM	ENEC 10
	B	Osram	OT 165W 4DIM	ENEC 10
Terminals	A	Electro Terminal	SLK/3 450V, 24A, T110	ENEC 10
	A	Adels	1000K; 500V, 41A, T85	ENEC 10
Internal wiring	B	Omerin	RECSC 300/300V, 180°C	VDE
	A	Draka	FQ 105C 300/500V, 105°C	SEMKO
	A	Omerin	H05SJ-K	HAR
External wiring	A	Several	H07RN-F	HAR
Power switch	A	OMT	0125 250V, 10A, T120	IMQ
	A	OMT	0127 250V, 16A, T120	IMQ
Fuse holder	A	Stucchi	682/A 250V, 6,3A, T70	IMQ
Cable gland	A	Bimed	BM22-L / BLMN-22 PA-6, IP68, 100°C	VDE

- A The component is replaceable with another one, also certified, with equivalent characteristics.
 B The component is replaceable if authorised by the test house.
 C Integrated component tested together with the appliance.
 D Alternative component.

Typecode:

ISARO2 ..L.. -... .. CL1 M.. R....

