

## Warranty

Riga, 22nd March, 2019

Vizulo Solutions confirms FIVE (5) year warranty for Vizulo outdoor luminaires Stork, Stork little brother, Mini Martin, Micro Martin, Owl, Mustang, Luscinia, Woodpecker, Bell, Orris, Crocus, which are being sold in Estonian Market.

Five (5) years warranty is in force if installation and exploitation from Vizulo have been followed.

All components used in above mentioned luminaires will be able to substitute with the same components or their alternatives in the period of 10 years after sales.

Export Manager

  
Mirdza Vizulis  
SABIEDRIBA AR IEROBEZOTU ATBILDĪBĪBU  
VIZULO  
SOLUTIONS  
LATVIJAS REPUBLIKA

VIZULO SIA  
Mukusalas street 41,  
Riga, LV-1004, Latvia

## EU DECLARATION OF CONFORMITY

Riga, 04.04.2017.

Internal reference No: DC-MRS-040417-EN

Manufacturer: VIZULO SIA, Mukusalas street 41, Riga, LV-1004, Latvia  
Product name: VIZULO MINI MARTIN  
Type: LED street luminaire  
Model: MRS 000 000 000 0000 00 001 (see anex): 220 ... 240 V, 8 ... 110 W, 2700 ... 6500 K, Class I, IP66  
MRS 000 000 000 0000 00 002 (see anex): 220 ... 240 V, 8 ... 110 W, 2700 ... 6500 K, Class II, IP66

The product (range) is in conformity with the provisions:

- |  |   |
|--|---|
| <p><b>1. Electromagnetic Compatibility Directive</b><br/>EN 55015<br/><br/>EN 61547<br/>EN 61000-3-2<br/><br/>EN 61000-3-3</p>                           | <p><b>EMC 2014/30/EU</b><br/>Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment<br/>Equipment for general lighting purposes - EMC immunity requirements<br/>Electromagnetic compatibility (EMC) - Limits - Limits for harmonic current emissions (equipment input current <math>\leq 16</math> A per phase)<br/>Electromagnetic compatibility (EMC) - Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <math>\leq 16</math> A per phase and not subject to conditional connection</p> |
| <p><b>2. Low Voltage Directive</b><br/>EN 60598-1<br/>EN 60598-2-3<br/><br/>EN 62031<br/>EN 61347-1<br/>EN 61347-2-13<br/><br/>EN 62493<br/>EN 62384</p> | <p><b>LVD 2014/35/EU</b><br/>Luminaires – General requirements and tests<br/>Luminaires – Particular requirements - Luminaires for road and street lighting<br/>LED modules for general lighting – Safety specifications<br/>Lamp controlgear – General and safety requirements<br/>Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules<br/>Assessment of lighting equipment related to human exposure to electromagnetic fields<br/>DC or AC supplied electronic control gear for LED modules - Performance requirements</p>  |
| <p><b>3. Restriction of Hazardous Substances in Electrical and Electronic Equipment</b><br/>EN 62321</p>   | <p><b>ROHS 2011/65/EU</b><br/>Electrotechnical products - Determination of levels of six regulated substances</p>   |
| <p><b>4. Radio equipment directive</b></p>   | <p><b>RED 2014/53/EU</b></p>  |
| <p><b>5. Other</b><br/>EN 60068-2-6<br/>EN 60068-2-27<br/>EN 62717</p>   | <p>Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)<br/>Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock<br/>LED modules for general lighting - Performance requirements</p>   |

Other qualifications:

The management system of VIZULO SIA including the implementation meets the requirements of the standards:  
ISO9001:2008; ISO14001:2004

The Mini Martin range has been successfully tested to photobiological safety according EN 62471:

8 ... 110 W,  $\leq 4000$  K      RG1 (risk group 1)  
8 ... 78 W,  $> 4000$  K      RG1 (risk group 1) after 3.61 m

Authorized signature

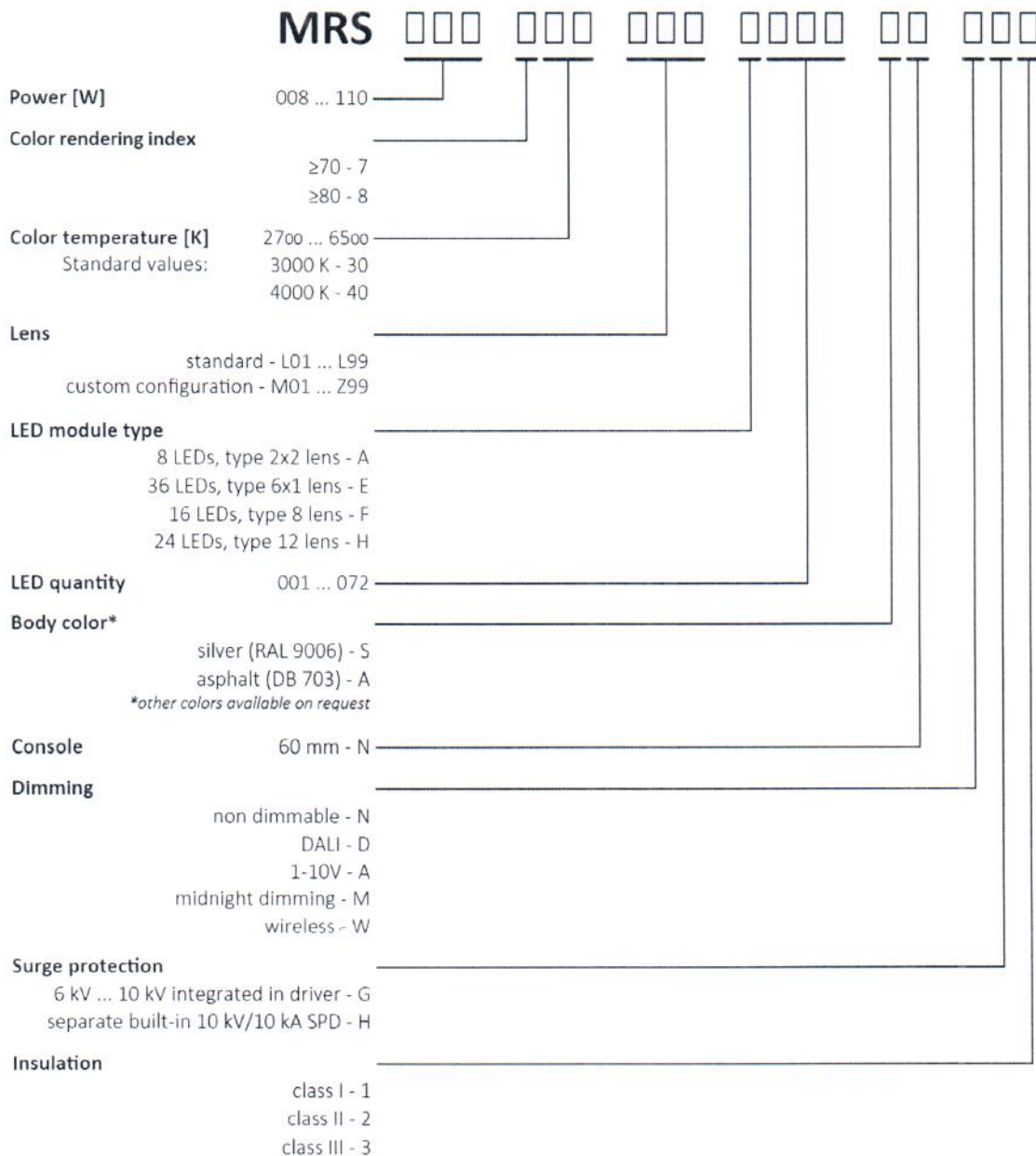
  
Sergejs Burtovojis  
Senior Research and Development Engineer

The CE marking was affixed in: 15



## Annex

### Models and description



Authorized signature

  
Sergejs Burtovojs  
Senior Research and Development Engineer

# CERTIFICATE

Issued to:  
Applicant:  
**SIA VIZULO**  
**Ganibu dambis 7a**  
**LV-1045 Riga**  
**Latvia**

Manufacturer/Licensee:  
**SIA VIZULO**  
**Ganibu dambis 7a**  
**LV-1045 Riga**  
**Latvia**

Product : Street luminaires with LED light source  
Trade name : VIZULO  
Model : MINI MARTIN  
Type reference key : MRS □□□ □□□ □□□ □□□ □□ □□ (See Appendix I for more details).

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 EN 60598-1:2015, EN 60598-2-3:2003
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 2171759

DEKRA hereby grants the right to use the ENEC KEMA-KEUR certification mark.

The ENEC KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration of the ENEC KEMA-KEUR certification agreement and under the conditions of the ENEC KEMA-KEUR certification agreement.


This certificate is issued on: 14 June 2016 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 2193409.03

DEKRA Certification B.V.



drs. G.J. Zoetbrood  
Managing Director



Danielle Trijbels  
Certification Manager

© Integral publication of this certificate is allowed

ACCREDITED BY THE  
DUTCH ACCREDITATION  
COUNCIL



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

product	:	Street luminaires with LED light source
trade name	:	VIZULO
model	:	Mini Martin LED street luminaire
type reference key	:	MRS □□□ □□□ □□□ □□□□ □□ □□□ (See Appendix I for more details)
rated voltage	:	220-240 V
nature of supply	:	ac
rated frequency	:	50-60 Hz
rated current	:	40mA - 340mA
rated input power range	:	8 - 78 W
ambient temperature range (ta)	:	-30 ... +50 °C (for ROAL and Tridonic LED drivers only) -40 ... +50 °C (for all other LED drivers)
class	:	I
degree of protection against dust and moisture	:	IP66
degree of protection against external mechanical impact	:	IK08 for glass cover, IK09 for housing.
description	:	Street lighting luminaire for post or pole mounting

**Additional information**

- For explanation of the type reference product key code, see Appendix I.
- These products have been tested according the EN 62471:2008 - Photo-biological safety.  
8 W up to 78 W, up to 4000 K versions comply with non-GLS - Risk-group1 (no labeling required).  
8 W up to 78 W, 5000 K and higher versions comply with non-GLS – Risk Group 2 (warning label required). RG2 to RG1 threshold distance is 3.61m (based upon evaluation of whole luminaire according to IEC TR 62778).

**TESTS****Test requirements**Main test requirements:

EN 60598-1:2015

EN 60598-2-3:2003 + A1:2011

Additional test requirements:

EN 62031:2008 + A1:2013 + A2:2015

**Test results**

The test results are laid down in DEKRA test file 2193409.00.

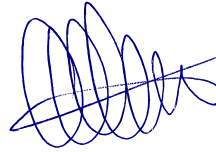
**Remark**

This certificate supersedes certificate no. 2187670.03, dated 13 January 2016 which is herewith declared invalid.

**Conclusion**

The examination proved that all test requirements were met.

Tested by : A.P. van der Veen

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke at the end.

Checked by : T.H.J.M. Michels

A handwritten signature in blue ink, written in a cursive style with the name "Michels" clearly legible.

**Factory location**

SIA VIZULO  
Ganibu dambis 7a  
LV-1045, Riga  
Latvia

**List of components**

Component	Trade name	Type/model	Approval mark
LED driver	Osram	OT 40/120...277/1A0 4DIMLT2 E	ENEC
LED driver	Osram	OT 60/170...240/1A0 4DIMLT2 E	ENEC
LED driver	Osram	OT 90/170...240/1A0 4DIMLT2 E	ENEC
LED driver	Osram	OT 165/170...240/1A0 4DIMLT2 E	ENEC
LED driver	Osram	OT 50/120...277/800 2DIMLT2 P	ENEC
LED driver	Osram	OT 100/120...277/800 2DIMLT2 P	ENEC
LED driver	Osram	OT 50/120...277/700 P5	ENEC
LED driver	Osram	OT 100/120...277/700 P5	ENEC
LED driver	Tridonic	LCA 30W 250–700mA one4all C PRE OTD	ENEC
LED driver	Tridonic	LCA 60W 350–1050mA one4all C PRE OTD	ENEC
LED driver	Tridonic	LCA 75W 250–750mA one4all C PRE OTD	ENEC
LED driver	Tridonic	LCA 120W 350–1050mA one4all C PRE OTD	ENEC
LED driver	Tridonic	LCA 30W 200–550mA 1–10 V C ADV OTD	ENEC
LED driver	Tridonic	LCA 60W 300–1050mA 1–10 V C ADV OTD	ENEC
LED driver	Tridonic	LCA 120W 300–1050mA 1–10 V C ADV OTD	ENEC
LED driver	Roal	RSOZ70, 70W 0.35-2.1A	ENEC
Surge protection device	Philips	929000886906, Xtreme Surge Protector I, Uc = 255 V, Uoc = 10 kV	KEMA-KEUR
LED module	Vizulo	VBSR-013-L-01 (8 LEDs, class I) VBSR-014-L-01 (8 LEDs, class I/II) VBSR-014-L-02 (36 LEDs, class I)	*
Cable	E.M.C. Colosio	H05RR-F - 3/5 x 0,75/1/1,5 mm <sup>2</sup>	<HAR>
Cable	LAPP cable	H05RR-F - 3/5 x 0,75/1/1,5 mm <sup>2</sup>	<HAR>
Cable	EUPEN	H05RR-F - 3/5 x 0,75/1/1,5 mm <sup>2</sup>	<HAR>
Cable	ICC	H05RR-F - 3/5 x 0,75/1/1,5 mm <sup>2</sup>	<HAR>
Cable	IRCE	H05RR-F - 3/5 x 0,75/1/1,5 mm <sup>2</sup>	<HAR>
Wiring	Alphawire	1855; 6715	*
Wiring	E.M.C. Colosio	H05V2-U, 0,75 mm <sup>2</sup> , 90°C, 300 V	<HAR>
Connector	Wago	2061 series, 320 V, 12 A	*
Terminal block	Stucchi	1673/A/43, 2 pole with PE	ENEC
Connector	Colosio	M140MN/3, 2 pole with PE, IP68	ENEC
Connector	Colosio	M140MN/6, 5 poles with PE, IP68	ENEC

Component	Trade name	Type/model	Approval mark
MCPCB	Polytronic Technology Corp	-	*
LED	Lumileds	Luxeon T; Luxeon TX	*/UL
LED	Cree	XT-E	*/UL
1) * indicates a component tested as part of the appliance			



**APPENDIX I - Type reference key code:**

