DKS850 · STREET LIGHTING

DKS850 7100LM 77W A 717 I NB1 D76 IC0

Asymmetric · 1700K · IP66 · IK09 · RAL 7035,DB703



APPLICATION

VIKING GEN2: LED street luminaire VIKING GEN2 is a high-efficiency LED street luminaire for roads, urban and residential streets, car parks and industrial sites. It is manufactured and assembled in the EU from European components and is Zhaga-D4i certified for smart city integration. Efficacy: up to 180 lm/W (system) Lifetime: up to 100,000 h (L90B10) Housing: die-cast aluminium, IP66 Electrical safety: available in Class I or Class II insulation with identical power, luminous flux and photometric performance Surge protection: dedicated SPD for each insulation class Driver: Philips Xitanium with DALI, CLO, AstroDIM and Zhaga Book 18 Configuration: multiple optics, lumen packages, CCTs and mounting options to suit different road classes The result is low maintenance and a low total cost of ownership.

7100 lm	77 W	92 lm/W	1700K	≥70	IP66	IK09	100 000 h
SYSTEM FLUX	INPUT POWER	EFFICACY	CCT	CRI	INGRESS	IMPACT	L90B10

ELECTRICAL PARAMETERS

Nominal supply voltage	**230 (220–240) V AC**	Supply voltage range	**198–264 V AC**
Type of supply current	**AC**	Supply frequency	**50–60 Hz**
Rated input power	**77W**	Power factor (PF)	**0.99**
Driver efficiency at nominal load	**93%**	Total harmonic distortion (THDi)	**<9%**
Protection class (electric shock)	**I**	Surge protection (CM / DM)	**6/10 kV**
Inrush current / time	**45A/270µs**	Driver type	**Philips Xitanium**
Number of luminaires on MCB 16A type B	**<17**		

PHOTOMETRIC PARAMETERS

Luminous flux — system	**7100lm**	Luminous flux — LED module	**8100lm**
Luminous efficacy — system	**92lm/W**	Correlated colour temperature (CCT)	**1700K**
Colour rendering index Ra (CRI)	**≥70**	Init. CRI tolerance	**±3**
Light distribution type	**Asymmetric**	Luminaire beam spread	**Wide beam**
Optic type	**Asymmetrical street**	Light output ratio (LOR)	**0.87**
Photobiological safety class	**RG1**	Flicker — Output PstLM / SVM	**≤ 0.3 / ≤ 0.1**
Colour consistency (SDCM)	**< 3 MacAdam steps**	Upward light output ratio (ULOR)	**0**
Luminous flux tolerance	**±5 %**		

CONSTRUCTION & MATERIALS

Luminaire type	**Street**	Light source type	**LED**
Light source replaceable	**yes**	Cap / base type	**Integrated**
Housing material	**Aluminium alloy**	Housing coating	**Powder coating**
Optic material	**PMMA**	Optical cover material	**Tempered flat glass**
Housing colour (RAL)	**RAL 7035,DB703**	Mounting type	**Post-top, side-entry**
Cutout size	**N/A**	Overall dimensions (H × W × L)	**624(501)x240x108**
Weight (net)	**5.3kg**	Windage projection area (side / below)	**0,020 sq.m/ 0,132 sq.m**
Number of light sources	**3 pcs**	Number of gear units	**1 pcs**

PROTECTION & ENVIRONMENT

IP rating — enclosure	**IP66**	Impact resistance class IK	**IK09**
Operating temperature range	**-40...+35 °C**	Storage temperature range	**-40...+65 °C**
Glow-wire test	**650 °C / 5 s**	Relative humidity (max)	**N/A**

CONTROL & DIMMING

Dimmable	**YES**	Control protocol / interface	**Zhaga D4i, DALI**
Dimming range	**10-100%**	Auto-dimming (chronoSTEP)	**Yes, 5 step**
Built-in motion / presence sensor	**On request**	Built-in daylight sensor	**On request**
LED lumen maintenance compensation (CLO)	**Available, On request**	ZHAGA / NEMA socket compatibility	**Available on request. Up and down**

RELIABILITY & LIFETIME

Constant Light Output (CLO)	**Available, On request**	Light source lifetime	**100000@L90 B10h**
Lumen maintenance @ 50 000 h	**L95B5**	Lumen maintenance @ 100 000 h	**L90 B10**
Control gear failure rate @ 50 000 h	**5 %**	Control gear failure rate @ 100 000 h	**10%**
Maximum case temperature Tc	**75°C**		

CERTIFICATIONS

Warranty period	**5 years**	CE marking	**CE marked**
ENEC mark	**ENEC marked**	ENEC+ mark	**ENEC+ marked**
UKCA marking	**UKCA marked**	D4i certified (DALI)	**D4i Zhaga marked**
EU RoHS compliant	**Yes**	Light source energy efficiency class	**E**

STANDARDS & SUSTAINABILITY

Applicable standard	**EN-IEC 62722-2-2**	ETIM Class	**EC000062**
D-Mark (EN 60598-2-24)	**Not determined**	Non-virgin material ratio	**Not determined**
Sustainability rating	**Not determined**	EAN / UPC	**Not determined**

Environmental data. Embedded carbon, recyclable content and sustainability ratings are provided per article where determined.

Documents. Photometric files (IES / LDT) and installation instructions are available at takton.ee.