DKS850 · STREET LIGHTING

# DKS850 22700lm 133W B 730 I NB1T 40-60 IC0

Asymmetric · 3000K · 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.

| 22700 lm | 133 W | 171 lm/W | 3000K | ≥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 | **133W** | Power factor (PF) | **0.99** |
| Driver efficiency at nominal load | **93%** | Total harmonic distortion (THDi) | **<8%** |
| Protection class (electric shock) | **I** | Surge protection (CM / DM) | **6/10 kV** |
| Inrush current / time | **41A/440µs** | Driver type | **Philips Xitanium** |
| Number of luminaires on MCB 16A type B | **<7** | | |

## PHOTOMETRIC PARAMETERS

| | | | |
|---|---|---|---|
| Luminous flux — system | **22700lm** | Luminous flux — LED module | **25700lm** |
| Luminous efficacy — system | **171lm/W** | Correlated colour temperature (CCT) | **3000K** |
| 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 | **≤ 0.26 / ≤ 0.07** |
| 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) | **724(602)x301x113** |
| Weight (net) | **6.6kg** | Windage projection area (side / below) | **0,049 sq.m/ 0,193 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 | **On/off** | 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 | **C** |

## 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.