

Length **645 mm****APPLICATION**

MALMÖ is a high-performance LED street luminaire developed for roads, residential areas, parking facilities and public spaces. Its robust die-cast aluminium housing, IP66 protection and IK08 impact resistance ensure reliable operation in demanding outdoor environments. Premium LEDIL optics provide precise and uniform light distribution while reducing glare and unnecessary light spill. Combined with reliable Philips Xitanium drivers, MALMÖ delivers excellent energy efficiency of up to 170 lm/W and long-lasting performance. Available in two housing sizes and a wide range of power and optical configurations, the luminaire can be adapted to different road classes and project requirements. DALI, 1–10 V, night dimming, CLO and Zhaga Book 18 options make MALMÖ ready for both conventional installations and modern smart-city lighting systems.

|                                |                             |                             |                     |                   |                        |                       |                            |
|--------------------------------|-----------------------------|-----------------------------|---------------------|-------------------|------------------------|-----------------------|----------------------------|
| <b>15400</b> lm<br>SYSTEM FLUX | <b>120</b> W<br>INPUT POWER | <b>128</b> lm/W<br>EFFICACY | <b>3000K</b><br>CCT | <b>≥70</b><br>CRI | <b>IP66</b><br>INGRESS | <b>IK09</b><br>IMPACT | <b>100 000</b> h<br>L90B10 |
|--------------------------------|-----------------------------|-----------------------------|---------------------|-------------------|------------------------|-----------------------|----------------------------|

**ELECTRICAL PARAMETERS**

|                                        |                           |                                  |                         |
|----------------------------------------|---------------------------|----------------------------------|-------------------------|
| Nominal supply voltage                 | <b>230 (220–240) V AC</b> | Supply voltage range             | <b>198–264 V AC</b>     |
| Type of supply current                 | <b>AC</b>                 | Supply frequency                 | <b>50–60 Hz</b>         |
| Rated input power                      | <b>120W</b>               | Power factor (PF)                | <b>0.98</b>             |
| Driver efficiency at nominal load      | <b>91%</b>                | Total harmonic distortion (THDi) | <b>6.50%</b>            |
| Protection class (electric shock)      | <b>I</b>                  | Surge protection (CM / DM)       | <b>6/10 kV</b>          |
| Inrush current / time                  | <b>45A/270µs</b>          | Driver type                      | <b>Philips Xitanium</b> |
| Number of luminaires on MCB 16A type B | <b>&lt;10</b>             |                                  |                         |

**PHOTOMETRIC PARAMETERS**

|                                 |                             |                                     |                        |
|---------------------------------|-----------------------------|-------------------------------------|------------------------|
| Luminous flux — system          | <b>15400lm</b>              | Luminous flux — LED module          | <b>17900lm</b>         |
| Luminous efficacy — system      | <b>128lm/W</b>              | Correlated colour temperature (CCT) | <b>3000K</b>           |
| Colour rendering index Ra (CRI) | <b>≥70</b>                  | Init. CRI tolerance                 | <b>±3</b>              |
| Light distribution type         | <b>Asymmetric</b>           | Luminaire beam spread               | <b>Wide beam</b>       |
| Optic type                      | <b>Asymmetrical street</b>  | Light output ratio (LOR)            | <b>0.87</b>            |
| Photobiological safety class    | <b>RG1</b>                  | Flicker — Output PstLM / SVM        | <b>≤ 0.26 / ≤ 0.07</b> |
| Colour consistency (SDCM)       | <b>&lt; 3 MacAdam steps</b> | Upward light output ratio (ULOR)    | <b>0</b>               |
| Luminous flux tolerance         | <b>±5 %</b>                 |                                     |                        |

**CONSTRUCTION & MATERIALS**

|                                        |                               |                                |                             |
|----------------------------------------|-------------------------------|--------------------------------|-----------------------------|
| Luminaire type                         | <b>Street</b>                 | Light source type              | <b>LED</b>                  |
| Light source replaceable               | <b>yes</b>                    | Cap / base type                | <b>Integrated</b>           |
| Housing material                       | <b>Aluminium alloy</b>        | Housing coating                | <b>Powder coating</b>       |
| Optic material                         | <b>PMMA</b>                   | Optical cover material         | <b>Tempered flat glass</b>  |
| Housing colour (RAL)                   | <b>RAL 7035,DB703</b>         | Mounting type                  | <b>Post-top, side-entry</b> |
| Cutout size                            | <b>N/A</b>                    | Overall dimensions (H × W × L) | <b>645(525)x264x76</b>      |
| Weight (net)                           | <b>6.5kg</b>                  | Effective projected area       | <b>0.03</b>                 |
| Windage projection area (side / below) | <b>0,040 sq.m/ 0,138 sq.m</b> | Number of light sources        | <b>3 pcs</b>                |
| Number of gear units                   | <b>1 pcs</b>                  |                                |                             |

## PROTECTION & ENVIRONMENT

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

## CONTROL & DIMMING

|                                          |                              |                                   |                    |
|------------------------------------------|------------------------------|-----------------------------------|--------------------|
| Dimmable                                 | <b>No</b>                    | Control protocol / interface      | <b>on/off</b>      |
| Dimming range                            | <b>N/A</b>                   | Auto-dimming (chronoSTEP)         | <b>Yes, 5 step</b> |
| Built-in motion / presence sensor        | <b>On request</b>            | Built-in daylight sensor          | <b>On request</b>  |
| LED lumen maintenance compensation (CLO) | <b>Available, On request</b> | ZHAGA / NEMA socket compatibility | <b>No</b>          |

## RELIABILITY & LIFETIME

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

## CERTIFICATIONS

|                   |                |                                      |            |
|-------------------|----------------|--------------------------------------|------------|
| Warranty period   | <b>5 years</b> | CE marking                           | <b>Yes</b> |
| ENEC mark         | <b>No</b>      | ENEC+ mark                           | <b>No</b>  |
| UKCA marking      | <b>Yes</b>     | D4i certified (DALI)                 | <b>No</b>  |
| EU RoHS compliant | <b>Yes</b>     | Light source energy efficiency class | <b>C</b>   |

## STANDARDS & SUSTAINABILITY

|                          |                         |                           |                       |
|--------------------------|-------------------------|---------------------------|-----------------------|
| Applicable standard      | <b>EN-IEC 62722-2-2</b> | ETIM Class                | <b>Not determined</b> |
| Recyclable content ratio | <b>Not determined</b>   | Non-virgin material ratio | <b>Not determined</b> |
| Sustainability rating    | <b>Not determined</b>   | EAN / UPC                 | <b>Not determined</b> |

**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](http://takton.ee).