

# PRODUCT DATASHEET

## LED PAR38 120 30° P 13.5W 827 E27

LED PAR38 P | LED reflector lamps PAR38 with retrofit screw base



PERFOR-  
MANCE  
CLASS

### Areas of application

- Shops and exhibition rooms
- Domestic applications
- Commercial applications
- Accent lighting
- Outdoor use in suitable outdoor luminaires only

### Product benefits

- Quick, simple and safe replacement without rewiring
- Design, dimensions, luminous flux comparable to an incandescent or halogen lamp
- Low maintenance costs thanks to long lifetime
- No UV and near-IR radiation in the light beam
- Instant 100 % light, no warm-up time
- Lower energy consumption than incandescent or halogen lamps

### Product features

- LED alternative to high voltage halogen lamps
- High color consistency:  $\leq 6$  SDCM
- Not dimmable
- Base: E27
- Lamp made of glass
- Good quality of light; color rendering index CRI  $\geq 80$
- Lifetime up to 25,000 h



– Type of protection: IP65

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**TECHNICAL DATA****Electrical data**

|                                        |             |
|----------------------------------------|-------------|
| Nominal wattage                        | 13.5 W      |
| Construction wattage                   | 13.50 W     |
| Nominal voltage                        | 220...240 V |
| Operating mode                         | AC Mains    |
| Claimed equiv. conventional lamp power | 120 W       |
| Nominal current                        | 68 mA       |
| Type of current                        | AC          |
| Inrush current                         | 0.143 A     |
| Operating frequency                    | 50/60 Hz    |
| Mains frequency                        | 50/60 Hz    |
| Max. lamp number on MCB B10 A          | 117         |
| Max. lamp number on MCB B16 A          | 188         |
| Total harmonic distortion              | ≤ 130 %     |
| Power factor $\lambda$                 | ≥ 0.40      |

**Photometrical data**

|                                         |            |
|-----------------------------------------|------------|
| Luminous intensity                      | 2600 cd    |
| Luminous flux                           | 1035 lm    |
| Nominal useful luminous flux 90°        | 1035 lm    |
| Luminous efficacy                       | 76 lm/W    |
| Lumen main.fact.at end of nom.life time | 0.96       |
| Light color (designation)               | Warm White |
| Color temperature                       | 2700 K     |
| Color rendering index Ra                | 80         |
| Light color                             | 827        |
| Standard deviation of color matching    | ≤6 sdcn    |
| Rated peak intensity                    | 2600 cd    |
| Flickering metric (Pst LM)              | 1.0        |
| Stroboscope effect metric (SVM)         | 0.4        |



Bridgelux 27E-13H-9B 2700K

Light technical data

|                     |          |
|---------------------|----------|
| Beam angle          | 30 °     |
| Warm-up time (60 %) | < 0.50 s |
| Starting time       | < 0.5 s  |

Dimensions & Weight

|                  |           |
|------------------|-----------|
| Overall length   | 134.00 mm |
| Diameter         | 122.00 mm |
| Maximum diameter | 122 mm    |
| Product weight   | 260.00 g  |

Temperatures & operating conditions

|                                      |              |
|--------------------------------------|--------------|
| Ambient temperature range            | -20...+40 °C |
| Maximum temperature at tc test point | 80.1 °C      |

Lifespan

|                                              |         |
|----------------------------------------------|---------|
| Lifespan L70/B50 at 25 °C                    | 25000 h |
| Number of switching cycles                   | 100000  |
| Lumen maintenance at end of service lifetime | 0.96    |

Additional product data

|                             |        |
|-----------------------------|--------|
| Base (standard designation) | E27    |
| Mercury content             | 0.0 mg |
| Mercury-free                | Yes    |

|                  |                                                                                                                                                                                                                                                                                                                                              |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design / version | Spot                                                                                                                                                                                                                                                                                                                                         |
| Product remark   | All technical parameters apply to the entire lamp / Due to the complex production process for light-emitting diodes, the typical values shown for the technical LED parameters are purely statistical values that do not necessarily match the actual technical parameters of each individual product, which can vary from the typical value |

### Capabilities

|          |    |
|----------|----|
| Dimmable | No |
|----------|----|

### Certificates & Standards

|                                              |                 |
|----------------------------------------------|-----------------|
| Energy efficiency class                      | F 1)            |
| Energy consumption                           | 14.00 kWh/1000h |
| Type of protection                           | IP65            |
| Standards                                    | CE / UKCA / EAC |
| Photobiological safety group acc. to EN62778 | RG1             |

1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

### Country-specific categorizations

|                 |                |
|-----------------|----------------|
| Order reference | LED PAR3812030 |
|-----------------|----------------|

### LOGISTICAL DATA

|                              |              |
|------------------------------|--------------|
| Temperature range at storage | -20...+80 °C |
|------------------------------|--------------|

### Energy labelling regulation data acc EU 2019/2015

|                                                     |              |
|-----------------------------------------------------|--------------|
| Lighting technology used                            | LED          |
| Non-directional or directional                      | DLS          |
| Mains or non-mains                                  | MLS          |
| Light source cap-type (or other electric interface) | E27          |
| Connected light source (CLS)                        | No           |
| Color-tuneable light source                         | No           |
| Envelope                                            | No           |
| High luminance light source                         | No           |
| Anti-glare shield                                   | No           |
| Correlated colour temperature type                  | SINGLE_VALUE |
| Standby power                                       | 0 W          |
| Claim of equivalent power                           | Yes          |
| Length                                              | 134.00 mm    |

|                                                      |                         |
|------------------------------------------------------|-------------------------|
| Height                                               | 122.00 mm               |
| Width                                                | 122.00 mm               |
| Chromaticity coordinate x                            | 0.4578                  |
| Chromaticity coordinate y                            | 0.4101                  |
| R9 Colour rendering index                            | 1                       |
| Beam angle correspondence                            | NARROW_CONE_90          |
| Survival factor                                      | 0.90                    |
| Displacement factor                                  | 0.5                     |
| LED light source replaces a fluorescent light source | No                      |
| EPREL ID                                             | 1368218,2176428,2366003 |
| Model number                                         | AC45626,AC70601,AC84511 |

### Safety advice

- Do not touch the lamp if broken.
- Must not be used if outer bulb is defective.

### DOWNLOAD DATA

| Documents and certificates                                                         |                                     | Document name                   |
|------------------------------------------------------------------------------------|-------------------------------------|---------------------------------|
|  | Declarations of conformity          | PAR38 M3                        |
|  | Declarations of conformity          | LED PAR20 PAR38 E27             |
|  | Declarations of conformity          | LED lamp                        |
|  | Declarations of conformity UKCA     | LED PAR20 PAR38 E27             |
|  | Declarations of conformity UKCA     | LED lamp                        |
| Photometric and lighting design files                                              |                                     | Document name                   |
|  | IES file (IES)                      | LPPAR3812030 12.5W 827 230V E27 |
|  | LDT file (Eulumdat)                 | LPPAR3812030 12.5W 827 230V E27 |
|  | Light distribution curve type polar | LPPAR3812030 12.5W 827 230V E27 |

| Photometric and lighting design files                                             |                             | Document name              |
|-----------------------------------------------------------------------------------|-----------------------------|----------------------------|
|  | Spectral power distribution | Bridgelux 27E-13H-9B 2700K |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854067822 | Folding box<br>1             | 127 mm x 129 mm x 170 mm             | 375.00 g     | 2.79 dm <sup>3</sup>  |
| 4099854067839 | Shipping box<br>6            | 402 mm x 278 mm x 196 mm             | 2619.00 g    | 21.90 dm <sup>3</sup> |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

## References / Links

- For further products and actual information concerning LED lamps see [www.ledvance.com/ledlamps](http://www.ledvance.com/ledlamps)
- For Guarantee see [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee)

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