

# PRODUCT DATASHEET LED Star MR 16 35 36° 3.8W 840 GU5.3

LED STAR MR16 12 V | Low-voltage LED reflector lamps MR16 with retrofit pin base



#### Areas of application

- Shops
- Hospitality
- Museums, art galleries
- Residential interiors
- As a downlight for marking walkways, doors, stairs, etc.
- Spotlighting for accents
- Display cabinets and shop windows
- Spotlighting heat-sensitive objects such as food, plants, etc.
- Outdoor use in suitable outdoor luminaires only

#### **Product benefits**

- Low energy consumption
- Easy replacement of halogen lamps due to compact full glass design and single optic
- Instant 100 % light, no warm-up time
- Ideal for economical spotlighting

#### **Product features**

- LED alternative to low voltage halogen lamps
- Mercury-free lamps





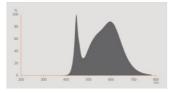
# **TECHNICAL DATA**

# Electrical data

Nominal wattage	3.8 W
Construction wattage	3.80 W
Nominal voltage	12 V
Operating mode	12V AC
Claimed equiv. conventional lamp power	35 W
Nominal current	460 mA
Type of current	AC/DC
Inrush current	12.8 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	28
Max. lamp no. on circuit break. 16 A (B)	36
Total harmonic distortion	< 120 %
Power factor λ	> 0.50

# Photometrical data

Luminous intensity	700 cd
Luminous flux	345 lm
Nominal useful luminous flux 90°	345 lm
Luminous efficacy	90 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	80
Light color	840
Standard deviation of color matching	≤6 sdcm
Rated peak intensity	700 cd
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0,4



# Light technical data

Beam angle	36 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

# **Dimensions & Weight**

Overall length	44.00 mm
Diameter	50.00 mm
Maximum diameter	50 mm
Product weight	30.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+40 °C
Maximum temperature at tc test point	83.1 °C

#### Lifespan

Lifespan L70/B50 at 25 °C	15000 h
Number of switching cycles	100000
Lumen maintenance at end of service lifetime	0.70
Rated lamp survival factor at 6,000 h	≥ 0.90

# Additional product data

Base (standard designation)	GU5.3
Mercury content	0.0 mg
Mercury-free	Yes

February 06, 2024, 15:55:40 LED Star MR 16 35 36° 3.8W 840 GU5.3

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 <sup>1)</sup>
Energy consumption	4.00 kWh/1000h
Type of protection	IP20
Standards	CE / UKCA / EAC
Photobiological safety group acc. to EN62778	RG1
Denergy efficiency class (EEC) on a scale of A (highest efficiency) to G (locountry-specific categorizations  Order reference	LEDSMR163536 3,
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Country-specific categorizations  Order reference  OGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015	LEDSMR163536 3, -20+80 °C
Country-specific categorizations  Order reference  OGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used	LEDSMR163536 3,  -20+80 °C
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional	LEDSMR163536 3,  -20+80 °C  LED  DLS
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains	LEDSMR163536 3,  -20+80 °C  LED  DLS  NMLS
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)	LEDSMR163536 3,  -20+80 °C  LED  DLS  NMLS  GU5.3
Country-specific categorizations  Order reference  OGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)	LEDSMR163536 3,  -20+80 °C  LED  DLS  NMLS  GU5.3  No
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source	LEDSMR163536 3,  -20+80 °C  LED  DLS  NMLS  GU5.3  No  No
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope	LEDSMR163536 3,  -20+80 °C  LED  DLS  NMLS  GU5.3  No  No  No
Country-specific categorizations  Order reference  OGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source	LEDSMR163536 3,  -20+80 °C  LED  DLS  NMLS  GU5.3  No  No  No  No
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source  Anti-glare shield	LEDSMR163536 3,  -20+80 °C  LED  DLS  NMLS  GU5.3  No  No  No  No  No  No

Yes

44.00 mm

Claim of equivalent power

Length

Height	50.00 mm
Width	50.00 mm
Chromaticity coordinate x	0.382
Chromaticity coordinate y	0.380
R9 Colour rendering index	1
Beam angle correspondence	NARROW_CONE_90
Survival factor	0,9
Displacement factor	/
LED light source replaces a fluorescent light source	No
EPREL ID	1235164,1368251
Model number	AC42778,AC45634

#### **DOWNLOAD DATA**

	Documents and certificates
PDF	Declarations Of Conformity CE

# Photometric and lighting design files IES file (IES) LDT file (Eulumdat) LDC typ polar Spectral power distribution

#### **LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075796812	Folding box 1	49 mm x 49 mm x 95 mm	40.00 g	0.23 dm <sup>3</sup>
4058075796829	Shipping box 6	168 mm x 111 mm x 71 mm	260.00 g	1.32 dm³

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
- For Guarantee see www.ledvance.com/guarantee
- Further information see www.ledvance.com/low-voltage-ledlamps

#### **DISCLAIMER**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.