

# PRODUCT DATASHEET HID LED HIGHBAY UNIVERSAL P 25000 LM 160W 840 E40

HID LED Highbay Universal P | LED replacement for HID lamps for high-bay luminaires



#### Areas of application

- LED alternative for applications requiring a high luminous flux
- Industrial and storage facilities
- Outdoor applications only in suitable luminaires

#### Product benefits

- Direct replacement for traditional HID lamps thanks to CCG and ignitor compatibility
- Operation on AC mains for highest energy efficiency possible
- Energy savings of up to 68 % when replacing traditional HQI lamps
- Effective thermal management for wide operating temperature range
- Low maintenance costs thanks to long lifetime
- Instant 100 % light, no warm-up time

#### Product features

- Type of protection: IP40
- High surge protection: up to 4 kV (L-N)





## TECHNICAL DATA

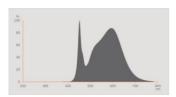
## Electrical data

Nominal wattage	160 W
Construction wattage	160.00 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains, ignitor
Claimed equiv. conventional lamp power	400 W
Nominal current	750 mA
Type of current	AC
Inrush current	5.2 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	8
Max. lamp number on MCB B10 A - CCG without compensation	7
Max. lamp number on MCB B10 A - CCG with compensation	6
Max. lamp number on MCB B16 A	12
Max. lamp number on MCB B16 A - CCG without compensation	11
Max. lamp number on MCB B16 A - CCG with compensation	10
Total harmonic distortion	20 %
Power factor $\lambda$	> 0.90
Surge capability (L-N)	4 kV

## Photometrical data

Luminous intensity	11771 cd
Luminous flux	25000 lm
Nominal useful luminous flux 90°	25000 lm
Luminous efficacy	156 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	11771 cd
Rated LLMF at 6,000 h	0.80

Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0,4



EPREL data spectral diagram PROF LEDr 4000K

# Light technical data

Beam angle	100 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

## Dimensions & Weight



Overall length	263.00 mm
Diameter	250.00 mm
Product weight	1330.00 g

# Temperatures & operating conditions

Ambient temperature range	-40+50 °C <sup>1)</sup>
Maximum temperature at tc test point	80 °C

<sup>1)</sup> Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

# Lifespan

Lifespan L70/B50 at 25 °C	50000 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)	E40			
Mercury content	0.0 mg			
Mercury-free	Yes			
Capabilities				
Dimmable	No			
Certificates & Standards				
Energy efficiency class	D 1)			
Energy consumption	160.00 kWh/1000h			
Type of protection	IP40			
Standards	CE / EAC / UKCA			
Photobiological safety group acc. to EN62778	RG1			
Description of the contraction of the contract	sst efficiency)			
Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lower transformation).	st efficiency)			
Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lower transformation).	HID LED HB UN P			
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Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowe Country-specific categorizations  Order reference  LOGISTICAL DATA  Temperature range at storage	HID LED HB UN P			
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowe Country-specific categorizations  Order reference  LOGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015	HID LED HB UN P -40+80 °C			
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowe Country-specific categorizations  Order reference  LOGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used	HID LED HB UN P  -40+80 °C  LED			
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowe Country-specific categorizations  Order reference  LOGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional	HID LED HB UN P  -40+80 °C  LED  DLS			
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowe Country-specific categorizations  Order reference  LOGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains	HID LED HB UN P  -40+80 °C  LED  DLS  MLS			
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowe Country-specific categorizations  Order reference  LOGISTICAL 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)	HID LED HB UN P  -40+80 °C  LED  DLS  MLS  E40			
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1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowe Country-specific categorizations  Order reference  LOGISTICAL 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	HID LED HB UN P  -40+80 °C  LED  DLS  MLS  E40  No  No  No			
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1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowe Country-specific categorizations  Order reference  LOGISTICAL 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	HID LED HB UN P  -40+80 °C  LED  DLS  MLS  E40  No  No  No  No  No  No			

Length	263.00 mm
Height	250.00 mm
Width	250.00 mm
Chromaticity coordinate x	0.382
Chromaticity coordinate y	0.38
R9 Colour rendering index	1
Beam angle correspondence	WIDE_CONE_120
Survival factor	0,90
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1160651
Model number	AC41486,AC41486

#### **EQUIPMENT / ACCESSORIES**

- Safety sling for lamp included

#### Safety advice

- The bulb may be larger and heavier than the replaced bulb. Before installation it must be checked, if the luminaire and especially the holder is capable of carrying the weight of the lamp. Safety sling has to be installed.
- To ensure full light efficiency and product lifetime, it is recommended to detach any glass or cover of the luminaire.
- Only suitable for temperatures of up to 50  $^{\circ}\text{C}$  inside of the luminaire.
- Not suitable for operation with electronic control gear.
- All electrical connections must be made by a qualified person.

## DOWNLOAD DATA

	Documents and certificates	Document name	
PDF	User instruction / safety instructions	HID LED HIGHBAY UNIVERSAL	
PDF	Legal information	Informationstext 18 Abs 4 ElektroG	
PDF	Declarations of conformity	CE Declaration HID LED HB UN Ledvance	
PDF	Declarations of conformity UKCA	HID LED HIGHBAY UN	

Photometric and lighting design	gn files	Document name	
IES file (IES)		HID LED HB 160W-840 230VUN E40	
LDT file (Eulumdat)		HID LED HB 160W 840 230VUN E40	
UGR file (UGR table)		HID LED HB 160W-840 230VUN E40	
Light distribution curve type cone		HID LED HB 160W-840 230VUN E40	
Light distribution curve type p	oolar	HID LED HB 160W-840 230VUN E40	
Spectral power distribution		EPREL data spectral diagram PROF LEDr 4000K	
Tender texts	Document name		
Tender documents	HID LED Highbay (	Jniversal P 25000 LM 160W 840 E40-en	

#### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075780422	Folding box 1	255 mm x 255 mm x 320 mm	1650.00 g	20.81 dm <sup>3</sup>
4058075780439	Shipping box 4	530 mm x 530 mm x 348 mm	8274.00 g	97.75 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.

## **DISCLAIMER**

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