



# PRODUCT DATASHEET

## LED TUBE T8 EM PC V 1800 mm 23W 840

LED TUBE T8 EM PLASTIC V | Economic LED tubes for electromagnetic control gears (CCG)



### Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Corridors, stairways, parking garages
- Domestic applications

### Product benefits

- Extremely break resistant thanks to cover made of polycarbonate
- High color homogeneity
- Energy savings of up to 68 % compared to conventional T8 fluorescent lamps
- Instant flickerfree starting

### Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- T8 LED tube made of plastic with G13 base
- Low flicker according to EU 2019-2020 (SVM  $\leq 0,4$  / PstLM  $\leq 1$ )
- Mercury-free and RoHS compliant
- Single and tandem operation on conventional control gear (0.6 m version)
- Type of protection: IP20



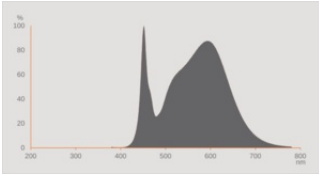
## TECHNICAL DATA

### Electrical data

Nominal wattage	23 W
Construction wattage	23.00 W
Nominal voltage	220...240 V
Operating mode	CCG, AC Mains
Nominal current	120 mA
Type of current	AC
Inrush current	23.2 A
Suitable for DC input	Yes
Input voltage DC	186...260 V
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	5
Max. lamp number on MCB B10 A - CCG without compensation	5
Max. lamp number on MCB B10 A - CCG with compensation	2
Max. lamp number on MCB B16 A	6
Max. lamp number on MCB B16 A - CCG without compensation	7
Max. lamp number on MCB B16 A - CCG with compensation	4
Total harmonic distortion	55 %
Power factor $\lambda$	0.90

### Photometrical data

Luminous flux	2600 lm
Luminous efficacy	113 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	$\leq 6$ sdcM
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	> 190 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

### Dimensions & Weight

Overall length	1777.00 mm
Length with base excl. base pins/connection	1800.00 mm
Diameter	26.80 mm
Tube diameter	25.8 mm
Maximum diameter	28 mm
Product weight	165.00 g

### Temperatures & operating conditions

Ambient temperature range	-20...+45 °C
Maximum temperature at tc test point	70 °C

### Lifespan

Lifespan L70/B50 at 25 °C	30000 h
Number of switching cycles	200000
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)	G13
Mercury content	0.0 mg
Mercury-free	Yes

### Capabilities

Dimmable	No
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### Certificates & Standards

Energy efficiency class	E <sup>1)</sup>
Energy consumption	23.00 kWh/1000h
Type of protection	IP20
Standards	CE / EAC / UKCA
Photobiological safety group acc. to EN62778	RG0

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

### Country-specific categorizations

Order reference	LEDTUBE T8 EM P
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### LOGISTICAL DATA

Temperature range at storage	-20...+80 °C
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### Energy labelling regulation data acc EU 2019/2015

Lighting technology used	LED
Non-directional or directional	NDLS
Mains or non-mains	MLS
Light source cap-type (or other electric interface)	G13
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	<0.5 W
Claim of equivalent power	No
Length	1777.00 mm
Height	26.80 mm
Width	26.80 mm
Chromaticity coordinate x	0.38
Chromaticity coordinate y	0.38
R9 Colour rendering index	0.00
Beam angle correspondence	SPHERE_360

Survival factor	0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1334029,1529801
Model number	AC45436,AC51448







**EQUIPMENT / ACCESSORIES**

- Suitable for operation on magnetic control gear

**Safety advice**

- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- The Tc Point is located underneath the product label on the front side of the lamp.
- Not suitable for emergency lighting

**DOWNLOAD DATA**

Documents and certificates		Document name
	User instruction	LED TUBE T8 EM PC V LEDVANCE
	Declarations Of Conformity CE	LEDTUBE T8 EM
	Declarations Of Conformity CE	LED TUBE T8 EM
	Declarations Of Conformity UKCA	LED TUBE T8 EM
	Declarations Of Conformity UKCA	LEDTUBE T8 EM
Photometric and lighting design files		Document name
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K

**LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854039423	Sleeve 1	1,865 mm x 29 mm x 29 mm	213.00 g	1.57 dm <sup>3</sup>

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854039430	Shipping box 25	1,918 mm x 163 mm x 175 mm	6359.00 g	54.71 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.

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### References / Links

– For current information see [www.ledvance.com/ledtube](http://www.ledvance.com/ledtube)

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### Legal advice

– When used to replace a T8 fluorescent lamp the total energy efficiency and light distribution depends on the design of the lighting system.

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### DISCLAIMER

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