

# PRODUCT DATASHEET LED TUBE T8 EM VALUE 1800 mm 21.6W 840

LED TUBE T8 EM VALUE | Economic LED tubes for electromagnetic control gear (CCG) and AC mains



#### Areas of application

- General illumination within ambient temperatures from -20...+45  $^{\circ}\text{C}$
- Corridors, stairways, parking garages
- Warehouses
- Cooling and storage rooms
- Domestic applications

#### Product benefits

- Energy savings of up to 69 % (compared to T8 fluorescent lamp)
- Quick, simple and safe replacement with or without rewiring
- No bending thanks to glass technology
- Very high resistance to switching loads
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Also suitable for operation at low temperatures

#### **Product features**

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- Single and tandem operation on conventional control gear (≤ 0.9 m versions)
- Tube made of glass
- Long lifetime up to 50,000 h
- Uniform illumination





- Mercury-free and RoHS compliant
- Type of protection: IP20
- Low flicker according to EU 2019-2020 (SVM  $\leq$  0.4 / PstLM  $\leq$  1)

# TECHNICAL DATA

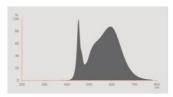
# Electrical data

Nominal wattage	21.6 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains
Nominal current	120 mA
Type of current	AC
Inrush current	17 A
Suitable for DC input	Yes
Input voltage DC	186260 V
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz <sup>1)</sup>
Max. lamp number on MCB B10 A	38
Max. lamp number on MCB B10 A - CCG without compensation	53
Max. lamp number on MCB B10 A - CCG with compensation	12
Max. lamp number on MCB B16 A	61
Max. lamp number on MCB B16 A - CCG without compensation	85
Max. lamp number on MCB B16 A - CCG with compensation	19
Total harmonic distortion	< 25 %
Power factor $\lambda$	0.90

<sup>1) &</sup>lt;sub>DC 0 Hz</sub>

### Photometrical data

Luminous flux	2600 lm
Luminous efficacy	120 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 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

1000 1000

Overall length	1777.00 mm
Length with base excl. base pins/connection	1800.00 mm
Diameter	26.70 mm
Product weight	241.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+45 °C <sup>1)</sup>
Maximum temperature at tc test point	78 °C
Performance temp. acc. to IEC 62717	61 °C <sup>2)</sup>

<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	200000
Lumen maintenance at end of service lifetime	0.70

<sup>2)</sup>  $\ensuremath{\mathsf{Tp}}$  rated.  $\ensuremath{\mathsf{Tp}}$  point coincides with  $\ensuremath{\mathsf{Tc}}$  point - marked on device

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	
Certificates & Standards		
Energy efficiency class	E 1)	
Energy consumption	22.00 kWh/1000h	
Type of protection	IP20	
Standards	CE / EAC / UKCA	
Photobiological safety group acc. to EN62778	RG0	
Order reference	LEDTUBE T8 EM V	
Order reference	LEDTUBE T8 EM V	
LOGISTICAL DATA		
T		
Temperature range at storage	-20+80 °C	
Energy labelling regulation data acc EU 2019/2015	-20+80 °C	
	-20+80 °C	
Energy labelling regulation data acc EU 2019/2015		
Energy labelling regulation data acc EU 2019/2015  Lighting technology used	LED	
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional	LED NDLS	
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains	LED NDLS MLS	
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)	LED NDLS MLS G13	
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)	LED NDLS MLS G13 No	
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	LED NDLS MLS G13 No No	
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	LED NDLS MLS G13 No No No	
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	LED NDLS MLS G13 No No No No	
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	LED NDLS MLS G13 No No No No No	
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  Correlated colour temperature type	LED NDLS MLS G13 No No No No No SINGLE_VALUE	

Length	1777.00 mm
Height	26.70 mm
Width	26.70 mm
Chromaticity coordinate x	0.38
Chromaticity coordinate y	0.38
R9 Colour rendering index	1
Beam angle correspondence	SPHERE_360
Survival factor	0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	2153804
Model number	AC69496,AC69496

### **EQUIPMENT / ACCESSORIES**

- Suitable for operation with low-loss and conventional control gears

# Safety advice

- Not suitable for operation with electronic control gear.
- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- Not suitable for emergency lighting.
- Disconnect mains before installation.

#### **DOWNLOAD DATA**

	Documents and certificates	Document name
POF	User instruction / safety instructions	
POF	Extended installation guide	Installation instructions LED TUBE T8, T5 und DULUX LED 2024 10 EN
PDF	Legal information	Informationstext 18 Abs 4 ElektroG
PDF	Declarations of conformity	LED Tube
PDF	Declarations of conformity UKCA	asset-13265483

Photometric and lighting design files	Document name
Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K

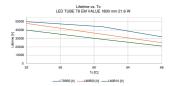
Tender texts	Document name
Tender documents	LED TUBE T8 EM VALUE 1800 mm 21.6W 840-en

### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854434907	Sleeve 1	1,865 mm x 29 mm x 29 mm	289.00 g	1.57 dm <sup>3</sup>
4099854442254	Shipping box	1,918 mm x 170 mm x 95 mm	3739.00 g	30.98 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.

#### ADDITIONAL CATALOG INFORMATION



#### References / Links

- For Guarantee see www.ledvance.com/guarantee

# 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.

## **DISCLAIMER**

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