PRODUCT DATASHEET
LED TUBE T8 36 EM ENERGY EFFICIENCY CLASS A 1200 mm 10W 840

LED TUBE T8 EM ENERGY EFFICIENCY CLASS A | Highly efficient LED tubes for electromagnetic control gear (CCG)

SUPERIOR CLASS

Areas of application

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

Product benefits

- Highest energy savings possible thanks to energy efficiency class A
- High color homogeneity
- Energy savings of up to 72 % 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
- Extremly high efficiency of 210 lm/W
- T8 LED tube made of glass with G13 base
- Low flicker according to EU 2019-2020 (SVM ≤ 0.4 / PstLM ≤ 1)
- Mercury-free and RoHS compliant
- Type of protection: IP20

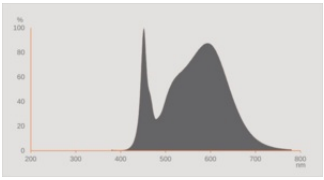
TECHNICAL DATA

Electrical data

Nominal wattage	10 W
Construction wattage	10.00 W
Nominal voltage	220…240 V
Operating mode	CCG, AC Mains
Nominal current	47 mA
Type of current	AC
Inrush current	3 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	85
Max. lamp number on MCB B10 A - CCG without compensation	49
Max. lamp number on MCB B10 A - CCG with compensation	12
Max. lamp number on MCB B16 A	125
Max. lamp number on MCB B16 A - CCG without compensation	79
Max. lamp number on MCB B16 A - CCG with compensation	19
Total harmonic distortion	22 %
Power factor λ	0.90

Photometrical data

Luminous flux	2100 lm
Luminous efficacy	210 lm/W
Lumen main.fact.at end of nom.life time	0.96
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

Overall length	1212.00 mm
Length with base excl. base pins/connection	1200.00 mm
Diameter	26.70 mm
Product weight	234.00 g

Temperatures & operating conditions

Ambient temperature range	-20…+50 °C [1)]
Maximum temperature at tc test point	75 °C

1) 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	0.96
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	A [1)]
Energy consumption	10.00 kWh/1000h
Type of protection	IP20
Standards	CE / UKCA / EAC
Photobiological safety group acc. to EN62778	RG0

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

Country-specific categorizations

Order reference	LEDTUBE T8 36 E

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	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	1212.00 mm
Height	26.70 mm
Width	26.70 mm

Chromaticity coordinate x	0,3818
Chromaticity coordinate y	0,3797
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	1791821
Model number	AC57044,AC57044

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.
- All electrical connections must be made by a qualified person.
- Disconnect mains before installation.

DOWNLOAD DATA

	Documents and certificates	Document name
PDF	User instruction / safety instructions	LEDTUBE T8 EM EECA
PDF	Legal information	Informationstext 18 Abs 4 ElektroG
PDF	Declarations of conformity	LEDTUBE T8 EM EECA
PDF	Declarations of conformity UKCA	LEDTUBE T8 EM EECA

	Photometric and lighting design files	Document name
IES	IES file (IES)	LEDTUBE T8 36 EM EECA 1200 10W 840
LDT	LDT file (Eulumdat)	LEDTUBE T8 36 EM EECA 1200 10W 840

	Photometric and lighting design files	Document name
	UGR file (UGR table)	LEDTUBE T8 36 EM EECA 1200 10W 840
	Light distribution curve type polar	LEDTUBE T8 36 EM EECA 1200 10W 840
	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
4099854223358	Sleeve 1	27 mm x 27 mm x 1,310 mm	311.00 g	0.95 dm^3
4099854223365	Shipping box 8	1,355 mm x 143 mm x 100 mm	3066.00 g	19.38 dm^3

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 current information see www.ledvance.com/osram-led-tube

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.