

PRODUCT DATASHEET LED TUBE T8 36 EM 1200 mm 15W 840

LED TUBE T8 EM | Economic LED tubes for electromagnetic control gear (CCG)



Areas of application

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

Product benefits

- High color homogeneity
- Energy savings of up to 69 % 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
- T8 LED tube made of glass with G13 base
- Low flicker according to EU 2019-2020 (SVM ≤ 0.4 / PstLM $\leq 1)$
- Mercury-free and RoHS compliant
- Single and tandem operation on conventional control gear (≤0.9m versions)
- Type of protection: IP20





TECHNICAL DATA

Electrical data

Nominal wattage	15 W
Construction wattage	15.00 W
Nominal voltage	220240 V
Operating mode	Conventional control gear (CCG), AC Mains
Nominal current	76 mA
Type of current	AC
Inrush current	8.4 A
Input voltage DC	186260 V
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	74
Max. lamp number on MCB B10 A - CCG without compensation	71
Max. lamp number on MCB B10 A - CCG with compensation	28
Max. lamp number on MCB B16 A	92
Max. lamp number on MCB B16 A - CCG without compensation	89
Max. lamp number on MCB B16 A - CCG with compensation	36
Total harmonic distortion	< 52 %
Power factor λ	0.90

Photometrical data

Luminous flux	1800 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



Overall length	1213.00 mm
Length with base excl. base pins/connection	1200.00 mm
Diameter	26.80 mm
Tube diameter	25.8 mm
Maximum diameter	28 mm
Product weight	175.00 g

Temperatures & operating conditions

Ambient temperature range	-20+45 °C ¹⁾
Maximum temperature at tc test point	70 °C

¹⁾ Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

Lifespan

Lifespan L70/B50 at 25 °C	30000 h
Number of switching cycles	200000
Lumen maintenance at end of service lifetime	0.70

May 05, 2025, 05:59:21 LED TUBE T8 36 EM 1200 mm 15W 840

Rated lamp survival factor at 6,000 h	≥ 0.90
nateu iamp suivivai iactor at 0,000 m	2 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	15.00 kWh/1000h
Type of protection	IP20
	CE / EAC / UKCA
Standards	
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lover the content of the content o	RG0 west efficiency)
Photobiological safety group acc. to EN62778	
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations	west efficiency)
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference	west efficiency)
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA	west efficiency) LEDTUBE T8 36 E
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage	west efficiency) LEDTUBE T8 36 E
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015	west efficiency) LEDTUBE T8 36 E -20+80 °C
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used	west efficiency) LEDTUBE T8 36 E -20+80 °C
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional	vest efficiency) LEDTUBE T8 36 E -20+80 °C LED NDLS
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low 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	LEDTUBE T8 36 E -20+80 °C LED NDLS MLS
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low 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)	LEDTUBE T8 36 E -20+80 °C LED NDLS MLS G13
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low 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)	LEDTUBE T8 36 E -20+80 °C LED NDLS MLS G13 No
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low 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	LEDTUBE T8 36 E -20+80 °C LED NDLS MLS G13 No No
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low 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	west efficiency) LEDTUBE T8 36 E -20+80 °C LED NDLS MLS G13 No No No No
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low 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	LEDTUBE T8 36 E -20+80 °C LED NDLS MLS G13 No No No No No

No

Claim of equivalent power

Length	1213.00 mm
Height	26.80 mm
Width	26.80 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	1334015,1529781
Model number	AC45422,AC51434,AC45422,AC51434

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 OSRAM
PDF	Legal information	Informationstext 18 Abs 4 ElektroG
PDF	Declarations of conformity	LEDTUBE T8 EM
PDF	Declarations of conformity	LED TUBE T8 EM
PDF	Declarations of conformity UKCA	LED TUBE T8 EM

	Documents and certificates	Document name
POF	Declarations of conformity UKCA	LEDTUBE T8 EM
	Photometric and lighting design files	Document name
	IES file (IES)	LEDTUBE T8 36 EM 1200 15W 840 OSRAM
	LDT file (Eulumdat)	LEDTUBE T8 36 EM 1200 15W 840 OSRAM
	UGR file (UGR table)	LEDTUBE T8 36 EM 1200 15W 840 OSRAM
	Light distribution curve type polar	LEDTUBE T8 36 EM 1200 15W 840 OSRAM
	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
4099854039140	Sleeve 1	27 mm x 27 mm x 1,310 mm	263.00 g	0.95 dm ³
4099854039157	Shipping box 8	1,355 mm x 143 mm x 100 mm	2682.00 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.