

PRODUCT DATASHEET LED TUBE T8 EM ULTRA OUTPUT 6kV S 1200 mm 14W 840

LED TUBE T8 EM ULTRA OUTPUT 6 kV S | High performance LED tubes for electromagnetic control gear (CCG) and AC mains, 6 kV surge protection, shatterproof



Areas of application

- General illumination within ambient temperatures from -20...+50 $^{\circ}\text{C}$
- Rail stations, overground and underground
- Illumination of production areas
- Traffic zones and corridors
- Industry

Product benefits

- No bending thanks to glass tube
- Shatter protection thanks to special PET coating
- Support the implementation of the HACCP concepts from production through to presentation
- Very high resistance to switching loads
- High luminous flux for sophisticated lighting tasks
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 62 % (compared to T8 fluorescent lamp)
- 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





- High surge protection: up to 6 kV (L-N)
- Low flicker according to EU 2019-2020 (SVM \leq 0.4 / PstLM \leq 1)
- Lamp tube made of glass with splinter protection e.g. for food industry applications
- ENEC 10 VDE mark
- For especially uniform illumination
- Lifetime up to 75,000 h
- Type of protection: IP20
- Mercury-free and RoHS compliant

TECHNICAL DATA

Electrical data

Nominal wattage	14 W
Construction wattage	14.00 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains
Nominal current	64 mA
Type of current	AC
Inrush current	6.36 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	16
Max. lamp number on MCB B10 A - CCG without compensation	22
Max. lamp number on MCB B10 A - CCG with compensation	18
Max. lamp number on MCB B16 A	20
Max. lamp number on MCB B16 A - CCG without compensation	36
Max. lamp number on MCB B16 A - CCG with compensation	31
Total harmonic distortion	< 20 %
Power factor λ	0.90
Surge capability (L-N)	6 kV

Photometrical data

Luminous flux	2600 lm
Luminous efficacy	185 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	≤5 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
Tube diameter	25.8 mm
Maximum diameter	27 mm
Product weight	191.00 g

Temperatures & operating conditions

Ambient temperature range	-20+50 °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	75000 h
Number of switching cycles	200000
Lumen maintenance at end of service lifetime	0.70

Additional product data Base (standard designation) G13 Mercury content 0.0 mg Mercury-free Yes Capabilities Dimmable No Certificates & Standards Energy efficiency class B19 Energy consumption 14.00 kWh/1000h Type of protection Protection Protection G12 Standards CE / UKCA / VDE / ENEC / EAC Photobiological safety group acc. to EN82778 R00 1) Energy efficiency class EEC) on a scale of A (Inghest efficiency) to G (crest efficiency) Country-specific categorizations Order reference LEDTUBE TS EM U LOGISTICAL DATA Temperature range at storage 2090 °C Energy labelling regulation data acc EU 2019/2015 Light source cap-type (or other electric interface) G13 Connected light source (CLS) Connected light source (CLS) Connected light source (CLS) Connected light source No Energy labelling regulation of the electric interface) No Energy labelling regulation data acc EU 2019/2015 Light source cap-type (or other electric interface) G13 Connected light source (CLS) Connected light source (CLS) No Correlated colour temperature type SinStile_VALUE Standby power SinStile_VALUE Claim of capulation power				
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Correlated colour temperature type SINGLE_VALUE Standby power <0.5 W	High luminance light source	No		
Standby power <0.5 W	Anti-glare shield	No		
	Correlated colour temperature type	SINGLE_VALUE		
Claim of equivalent power No	Standby power	<0.5 W		
		V VV		

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	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	1554355
Model number	AC52160

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

DOWNLOAD DATA				
	Documents and certificates	Document name		
PDF	User instruction / safety instructions	LED TUBE T8 EM		
PDF	Legal information	Informationstext 18 Abs 4 ElektroG		
PDF	Declarations of conformity	LED TUBE T8 EM		
PDF	Declarations of conformity UKCA	LED TUBE T8 EM		
	Photometric and lighting design files	Document name		
	IES file (IES)	LEDTUBE T8 EM UO S 1200 14W 840		
	LDT file (Eulumdat)	LEDTUBE T8 EM UO S 1200 14W 840		
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K		

Tender texts	Document name
Tender documents	LED TUBE T8 EM ULTRA OUTPUT 6 kV S 1200 mm 14W 840-EN

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854147791	Sleeve 1	1,305 mm x 29 mm x 29 mm	220.00 g	1.10 dm ³
4099854147807	Shipping box 10	1,335 mm x 180 mm x 95 mm	2740.00 g	22.83 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/ledtube

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.