

PRODUCT DATASHEET LED TUBE T8 EM V 900 mm 10W 830

LED TUBE T8 EM V | 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
- Industry
- Warehouses
- Cooling and storage rooms
- Domestic applications
- Supermarkets and department stores

Product benefits

- No bending thanks to glass tube
- Energy savings of up to 69 % (compared to T8 fluorescent lamp)
- Quick, simple and safe replacement without rewiring
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Very high resistance to switching loads
- 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
- Low flicker according to EU 2019-2020 (SVM ≤ 0.4 / PstLM $\leq 1)$
- $-\,$ Single and tandem operation on conventional control gear ($\!\leq 0.9$ m versions)
- Tube made of glass
- Mercury-free and RoHS compliant
- Uniform illumination
- Type of protection: IP20





TECHNICAL DATA

Electrical data

Nominal wattage	10 W
Construction wattage	10.00 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains
Nominal current	47 mA
Type of current	AC
Inrush current	10 A
Suitable for DC input	Yes
Input voltage DC	186260 V
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	65
Max. lamp number on MCB B10 A - CCG without compensation	60
Max. lamp number on MCB B10 A - CCG with compensation	21
Max. lamp number on MCB B16 A	82
Max. lamp number on MCB B16 A - CCG without compensation	75
Max. lamp number on MCB B16 A - CCG with compensation	27
Total harmonic distortion	< 30 %
Power factor λ	0.90

Photometrical data

Luminous flux	1080 lm
Luminous efficacy	108 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Warm White
Color temperature	3000 K
Color rendering index Ra	80
Light color	830
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 3000K

Light technical data

Beam angle	190 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

Dimensions & Weight



Overall length	908.00 mm
Length with base excl. base pins/connection	900.00 mm
Diameter	26.80 mm
Tube diameter	25.8 mm
Maximum diameter	28 mm
Product weight	143.00 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
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

Certificates & Standards

Energy efficiency class	F 1)
Energy consumption	10.00 kWh/1000h
Type of protection	IP20
Standards	CE / EAC / UKCA
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 EM V
LOGISTICAL DATA	
Temperature range at storage	-20+80 °C

Energy labelling regulation data acc EU 2019/2015

Lighting technology usedLEDNon-directional or directionalNDLSMains or non-mainsMLSLight source cap-type (or other electric interface)G13Connected light source (CLS)NoColor-tuneable light sourceNoEnvelopeNoHigh luminance light sourceNoAnti-glare shieldNoCorrelated colour temperature typeSINGLE_VALUEStandby power<0.5 WClaim of equivalent powerNoHeight908.00 mm		
Mains or non-mains Light source cap-type (or other electric interface) Connected light source (CLS) No Color-tuneable light source No Envelope No Anti-glare shield No Correlated colour temperature type Standby power Claim of equivalent power Length MLS G13 No No No No No No SINGLE_VALUE 908.00 mm	Lighting technology used	LED
Light source cap-type (or other electric interface) 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 Standby power Claim of equivalent power Length G13 No No No No No SINGLE_VALUE 908.00 mm	Non-directional or directional	NDLS
Connected light source (CLS) Color-tuneable light source No Envelope No High luminance light source No Anti-glare shield Correlated colour temperature type Standby power Claim of equivalent power Length No No No SINGLE_VALUE 908.00 mm	Mains or non-mains	MLS
Color-tuneable light source Envelope No High luminance light source No Anti-glare shield Correlated colour temperature type Standby power Claim of equivalent power Length No No No No No No No No No N	Light source cap-type (or other electric interface)	G13
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 908.00 mm	Connected light source (CLS)	No
High luminance light source Anti-glare shield No Correlated colour temperature type SINGLE_VALUE Standby power <0.5 W Claim of equivalent power No Length 908.00 mm	Color-tuneable light source	No
Anti-glare shield Correlated colour temperature type SINGLE_VALUE Standby power Vo W Claim of equivalent power No Length 908.00 mm 	Envelope	No
Correlated colour temperature type SINGLE_VALUE Standby power Vo Claim of equivalent power No Length 908.00 mm 	High luminance light source	No
Standby power < 0.5 W Claim of equivalent power No Length 908.00 mm	Anti-glare shield	No
Claim of equivalent power No Length 908.00 mm	Correlated colour temperature type	SINGLE_VALUE
Length 908.00 mm	Standby power	<0.5 W
	Claim of equivalent power	No
Height 26.80 mm	Length	908.00 mm
	Height	26.80 mm

Width	26.80 mm
Chromaticity coordinate x	0.44
Chromaticity coordinate y	0.403
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	1333981,1529827
Model number	AC45388,AC51400

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
PDF	User instruction / safety instructions	LED TUBE T8 EM V LEDVANCE
PDF	Legal information	Informationstext 18 Abs 4 ElektroG
PDF	Declarations of conformity	LEDTUBE T8 EM
POF	Declarations of conformity	LED TUBE T8 EM
PDF	Declarations of conformity UKCA	LED TUBE T8 EM
PDF	Declarations of conformity UKCA	LEDTUBE T8 EM

Photometric and lighting design files	Document name
IES file (IES)	LEDTUBE T8 EM V 900 10W 830 LEDV
LDT file (Eulumdat)	LEDTUBE T8 EM V 900 10W 830 LEDV
UGR file (UGR table)	LEDTUBE T8 EM V 900 10W 830 LEDV
Light distribution curve type polar	LEDTUBE T8 EM V 900 10W 830 LEDV
Spectral power distribution	EPREL data spectral diagram PROF LEDr 3000K

Tender texts	Document name
Tender documents	LED TUBE T8 EM V 900 mm 10W 830-EN

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854039102	Sleeve 1	955 mm x 28 mm x 28 mm	171.00 g	0.75 dm ³
4099854039119	Shipping box 10	990 mm x 170 mm x 100 mm	2213.00 g	16.83 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.