PRODUCT DATASHEET
LED TUBE T8 EM ULTRA OUTPUT V 1200 mm 20W 865

LED TUBE T8 EM ULTRA OUTPUT V | Economic LED tubes with extra high light output for electromagnetic control gear (CCG) and AC mains

VALUE CLASS

Areas of application

- General illumination within ambient temperatures from -20…+45 °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 50 % (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 ≤ 1)
- Tube made of glass
- High luminous flux for sophisticated lighting tasks

- Mercury-free and RoHS compliant
- Uniform illumination
- Type of protection: IP20

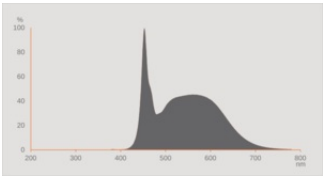
TECHNICAL DATA

Electrical data

Nominal wattage	20 W
Construction wattage	20.00 W
Nominal voltage	220…240 V
Operating mode	CCG, AC Mains
Nominal current	100 mA
Type of current	AC
Inrush current	11.2 A
Suitable for DC input	Yes
Input voltage DC	186…260 V
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	55
Max. lamp no. on circuit break. B10 A - CCG without compensation	53
Max. lamp no. on circuit break. B10 A - CCG with compensation	32
Max. lamp no. on circuit break. 16 A (B)	69
Max. lamp no. on circuit break. B16 A - CCG without compensation	57
Max. lamp no. on circuit break. B16 A - CCG with compensation	40
Total harmonic distortion	< 55 %
Power factor λ	0.90

Photometrical data

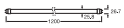
Luminous flux	2400 lm
Luminous efficacy	120 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool Daylight
Color temperature	6500 K
Color rendering index Ra	80
Light color	865
Standard deviation of color matching	≤6 sdcm
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0.4



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
Maximum temperature at tc test point	70 °C

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

Dimmable	No

Certificates & Standards

Energy efficiency class	E [1)]
Energy consumption	20.00 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 U

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	1213.00 mm
Height	26.80 mm
Width	26.80 mm
Chromaticity coordinate x	0.313

Chromaticity coordinate y	0.337
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	1333968,1529805
Model number	AC45375,AC51387

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

DOWNLOAD DATA

	Documents and certificates
PDF	User instruction
PDF	Declarations Of Conformity CE
PDF	Declarations Of Conformity UKCA

	Photometric and lighting design files
IES	IES file (IES)
LDT	LDT file (Eulumdat)
	UGR file (UGR table)
	LDC typ polar
	Spectral power distribution

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854038525	Sleeve 1	1,255 mm x 29 mm x 29 mm	215.00 g	1.06 dm^3
4099854038532	Shipping box 10	1,290 mm x 170 mm x 95 mm	2766.00 g	20.83 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.