

PRODUCT DATASHEET

LED TUBE T8 18 EM MOTION SENSOR 600 mm 6.8W 840

LED TUBE T8 EM MOTION SENSOR | LED tubes with integrated microwave sensor for electromagnetic control gear (CCG), shatterproof



Areas of application

- General illumination within ambient temperatures from -20...+50 °C
- Corridors, stairways, parking garages
- Domestic applications
- Secondary rooms, garages, storerooms, cellars

Product benefits

- Energy savings of up to 67 % compared to conventional fluorescent lamp
- Quick, simple and safe replacement of fluorescent lamps
- Suitable for closed luminaires thanks to microwave technology
- No bending thanks to glass tube
- Shatter protection thanks to special PET coating
- 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
- Integrated microwave sensor with motion detection
- Automatic dimming to 20 % light output after 5 minutes without motion detection



- Automatic light switch off 7 minutes after the last motion detection
- Microwave sensor with 5,8 GHz
- Motion detection up to 5 m

TECHNICAL DATA

Electrical data

Nominal wattage	6.8 W
Nominal voltage	220...240 V
Operating mode	Conventional control gear (CCG), AC Mains
Nominal current	32 mA
Type of current	AC
Inrush current	2.76 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	217
Max. lamp number on MCB B10 A - CCG without compensation	217
Max. lamp number on MCB B10 A - CCG with compensation	27
Max. lamp number on MCB B16 A	272
Max. lamp number on MCB B16 A - CCG without compensation	272
Max. lamp number on MCB B16 A - CCG with compensation	32
Total harmonic distortion	< 20 %
Power factor λ	> 0.90

Photometrical data

Luminous flux	1100 lm
Luminous efficacy	161 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 sdcn
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	603.00 mm
Length with base excl. base pins/connection	600.00 mm
Diameter	26.70 mm
Product weight	110.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C ¹⁾
Maximum temperature at tc test point	65 °C

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

Lifespan

Lifespan L70/B50 at 25 °C	60000 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
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Certificates & Standards

Energy efficiency class	G ¹⁾
Energy consumption	7.00 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 18 E
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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 W
Claim of equivalent power	No
Length	603.00 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	1351267
Model number	AC45302,AC45302

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.
- Recommended maximum mounting height: 5 m
- 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
	User instruction / safety instructions	LEDTUBE T8 EM MS
	Legal information	Informationstext 18 Abs 4 ElektroG
	Legal information	Safety insert_G11243847
	Declarations of conformity	LEDTUBE T8 EM MS
	Declarations of conformity UKCA	LEDTUBE T8 EM MS
Photometric and lighting design files		Document name
	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
4099854045387	Sleeve 1	27 mm x 27 mm x 710 mm	155.00 g	0.52 dm ³
4099854045394	Shipping box 8	755 mm x 143 mm x 100 mm	1595.00 g	10.80 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.