PRODUCT DATASHEET
LED TUBE T8 EM CHIP CONTROL S 1500 mm 23W

LED TUBE T8 EM CHIP CONTROL S | High performance LED tubes for electromagnetic control gear (CCG) and AC mains, with UV filter sleeve

SUPERIOR CLASS

Areas of application

- Micro chip and semiconductor production
- Applications where UV and blue light percentage have to be reduced to a minimum
- Industry

Product benefits

- Excellent UV filter
- Very high resistance to switching loads
- 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
- Excellent filter performance below 500 nm
- Low flicker according to EU 2019-2020 (SVM ≤ 0.4 / PstLM ≤ 1)
- ENEC 10 VDE mark

- Lifetime up to 50,000 h
- Type of protection: IP20
- Mercury-free and RoHS compliant

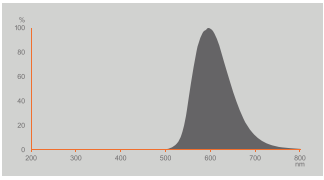
TECHNICAL DATA

Electrical data

Nominal wattage	23 W
Construction wattage	23.00 W
Nominal voltage	220…240 V
Operating mode	CCG, AC Mains
Nominal current	108 mA
Type of current	AC
Inrush current	8.48 A
Suitable for DC input	Yes
Input voltage DC	186…260 V
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	4
Max. lamp number on MCB B10 A - CCG without compensation	43
Max. lamp number on MCB B10 A - CCG with compensation	3
Max. lamp number on MCB B16 A	7
Max. lamp number on MCB B16 A - CCG without compensation	68
Max. lamp number on MCB B16 A - CCG with compensation	5
Total harmonic distortion	6 %
Power factor λ	0.90

Photometrical data

Luminous flux	2500 lm
Luminous efficacy	108 lm/W
Lumen main.fact.at end of nom.life time	0.96
Light color (designation)	Yellow
Color temperature	2000 K
Color rendering index Ra	35
Light color	320
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



Spectral graph LEDTUBE T8 CHIP

Light technical data

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

Dimensions & Weight

Overall length	1513.00 mm
Length with base excl. base pins/connection	1500.00 mm
Diameter	26.70 mm
Tube diameter	25.80 mm
Maximum diameter	27 mm
Product weight	320.00 g

Temperatures & operating conditions

Ambient temperature range	-20…+45 °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	50000 h
Number of switching cycles	200000
Lumen maintenance at end of service lifetime	0.96
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 consumption	23.00 kWh/1000h
Type of protection	IP20
Standards	CE / UKCA / VDE / ENEC / EAC
Photobiological safety group acc. to EN62778	RG0

Country-specific categorizations

Order reference	LEDTUBE T8 EM C

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
Standby power	0 W
Claim of equivalent power	No
Length	1513.00 mm
Height	26.70 mm
Width	26.70 mm
Chromaticity coordinate y	0.4482
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

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	LEDTUBE T8 EM CHIP S
PDF	On-Pack-Info	ELR - exempt lamps
PDF	Legal information	Informationstext 18 Abs 4 ElektroG
PDF	Declarations of conformity	LED tube
PDF	Declarations of conformity UKCA	LED tube

	Photometric and lighting design files	Document name
IES	IES file (IES)	LEDTUBE T8 EM CHIP S 23W 1500
LDT	LDT file (Eulumdat)	LEDTUBE T8 EM CHIP S 23W 1500
	UGR file (UGR table)	LEDTUBE T8 EM CHIP S 23W 1500
	Light distribution curve type polar	LEDTUBE T8 EM CHIP S 23W 1500
	Spectral power distribution	Spectral graph LEDTUBE T8 CHIP

	Tender texts	Document name
TXT	Tender documents	LED TUBE T8 EM CHIP CONTROL S 1500 mm 23W-EN

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854271496	Sleeve 1	1,555 mm x 29 mm x 29 mm	354.00 g	1.31 dm^3
4099854271502	Shipping box 10	1,590 mm x 170 mm x 95 mm	4291.00 g	25.68 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.