

PRODUCT DATASHEET LED TUBE T9 C 40 EM 24W 865 G10q

SubstiTUBE T9 EM | Circular LED tube for electromagnetic control gear (CCG)



Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Corridors, stairways, parking garages
- Domestic applications
- Decorative applications

Product benefits

- Quick, simple and safe replacement without rewiring
- Energy savings of up to 50% (compared to T9 fluorescent lamp on CCG)
- Also suitable for operation at low temperatures

Product features

- LED alternative to classic T9 fluorescent lamps in CCG luminaires
- Uniform illumination
- Lifetime: up to 30,000 h
- Mercury-free and RoHS compliant





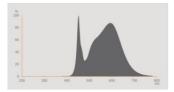
TECHNICAL DATA

Electrical data

Nominal wattage	24 W
Construction wattage	24.00 W
Nominal voltage	220240 V
Nominal current	107 mA
Type of current	AC
Inrush current	16 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	16
Max. lamp no. on circuit break. B10 A - CCG without compensation	37
Max. lamp no. on circuit break. B10 A - CCG with compensation	11
Max. lamp no. on circuit break. 16 A (B)	19
Max. lamp no. on circuit break. B16 A - CCG without compensation	66
Max. lamp no. on circuit break. B16 A - CCG with compensation	14
Total harmonic distortion	< 20 %
Power factor λ	> 0.90

Photometrical data

Luminous flux	2900 lm
Luminous efficacy	120 lm/W
Lumen main.fact.at end of nom.life time	0.96
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	110 °
Warm-up time (60 %)	0.00 s
Starting time	< 0.5 s
Rated beam angle (half peak value)	110.00 °

Dimensions & Weight



Overall length	400.00 mm
Diameter	400.00 mm
Tube diameter	30 mm
Maximum diameter	400 mm
Product weight	290.00 g

Temperatures & operating conditions

Ambient temperature range	-20+45 °C
Maximum temperature at tc test point	75 °C

Lifespan

Lifespan	30000 h
Number of switching cycles	200000
Lumen maintenance at end of serv	0.96
Rated lamp survival factor at 6,000	≥ 0.90

Additional product data

Base (standard designation)	G10q
Mercury content	0.0 mg
Mercury-free	Yes
Product remark	Available from June 2023

Capabilities

Certificates & Standards

Energy efficiency class	E 1)
Energy consumption	24.00 kWh/1000h
Type of protection	IP20
Standards	CE / EAC / UKCA
Photobiological safety group acc. to EN62778	RG0

 $^{1) \ {\}sf Energy \ efficiency \ class \ (EEC) \ on \ a \ scale \ of \ A \ (highest \ efficiency) \ to \ G \ (lowest \ efficiency)}$

Country-specific categorizations

Order reference LED	-DILIBE 19(" FM
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LOGISTICAL DATA

Temperature range at storage	-20+80 °C
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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)	G10q
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	not applicable
Networked standby power for CLS	not applicable
Claim of equivalent power	Yes
Length	400.00 mm

Height	400.00 mm
Width	400.00 mm
Chromaticity coordinate x	0.3123
Chromaticity coordinate y	0.3282
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	1340163
Model number	AC45085

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.

DOWNLOAD DATA

	Documents and certificates
PDF	User instruction
PDF	Declarations Of Conformity CE
	Photometric and lighting design files
	IES file (IES)
<u></u>	LDT file (Eulumdat)
	Spectral power distribution
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LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854042744	Folding box 1	38 mm x 408 mm x 446 mm	476.00 g	6.91 dm ³

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854042751	Shipping box 10	397 mm x 329 mm x 386 mm	2982.00 g	50.42 dm³

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-substitube

Legal advice

- When used to replace a T9 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.