

# PRODUCT DATASHEET LED TUBE T9 C 22 EM VALUE 11W 865 G10Q

LED TUBE T9 EM VALUE | Circular LED tube 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
- Domestic applications
- Decorative applications

- Quick, simple and safe replacement without rewiring
- Energy savings of up to 50 % (compared to T9 fluorescent lamp)
- Also suitable for operation at low temperatures
- Operation directly on 230 V AC mains possible

#### Product features

**Product benefits** 

- 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  | 11 W          |
|--|---------------|
| Construction wattage                                     | 11.00 W       |
| Nominal voltage  | 220240 V      |
| Operating mode   | CCG, AC Mains |
| Nominal current  | 51 mA         |
| Type of current  | AC            |
| Inrush current   | 11 A          |
| Operating frequency                                      | 50/60 Hz      |
| Mains frequency  | 50/60 Hz      |
| Max. lamp number on MCB B10 A                            | 25            |
| Max. lamp number on MCB B10 A - CCG without compensation | 94            |
| Max. lamp number on MCB B10 A - CCG with compensation    | 16            |
| Max. lamp number on MCB B16 A                            | 31            |
| Max. lamp number on MCB B16 A - CCG without compensation | 150           |
| Max. lamp number on MCB B16 A - CCG with compensation    | 20            |
| Total harmonic distortion                                | < 20 %        |
| Power factor $\lambda$                                   | > 0.90        |

# Photometrical data

| Luminous flux                           | 1320 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           |



EPREL data spectral diagram PROF LEDr 4000K

# Light technical data

| Beam angle          | 110°    |
|---------------------|---------|
| Warm-up time (60 %) | 0.00 s  |
| Starting time       | < 0.5 s |

# Dimensions & Weight



| Overall length   | 212.00 mm |
|------------------|-----------|
| Diameter         | 212.00 mm |
| Tube diameter    | 30 mm     |
| Maximum diameter | 212 mm    |
| Product weight   | 158.00 g  |

# Temperatures & operating conditions

| Ambient temperature range            | -20+45 °C <sup>1)</sup> |
|--------------------------------------|-------------------------|
| Maximum temperature at to test point | 75 °C                   |

<sup>1)</sup> 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 | 0.96    |
| Rated lamp survival factor at 6,000 h        | ≥ 0.90  |

# Additional product data

| Base (standard designation) | G10q   |
|-----------------------------|--------|
| Mercury content             | 0.0 mg |
| Mercury-free                | Yes    |

# Capabilities

# Certificates & Standards

| Energy efficiency class                      | E 1)            |
|--|-----------------|
| Energy consumption                           | 11.00 kWh/1000h |
| Type of protection                           | IP20            |
| Standards                                    | CE / EAC / UKCA |
| Photobiological safety group acc. to EN62778 | RG0             |

<sup>1)</sup> Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

# Country-specific categorizations

|  | Order reference              | LEDTUBE T9C EM |
|--|------------------------------|----------------|
|  | 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) | 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 |
| Claim of equivalent power                           | Yes          |
| Length  | 212.00 mm    |
| Height  | 212.00 mm    |
| Width   | 212.00 mm    |

| Chromaticity coordinate x                            | 0.3123          |
|--|-----------------|
| Chromaticity coordinate y                            | 0.3282          |
| 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   | 1340166         |
| Model number   | AC45072,AC45072 |

#### 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.
- All electrical connections must be made by a qualified person.
- Disconnect mains before installation.
- Lamp not suitable for emergency operation.

#### DOWNLOAD DATA

| DOWNLOAD DATA |  |                                       |  |  |  |  |
|---------------|--|---------------------------------------|--|--|--|--|
|               | Documents and certificates             | Document name                         |  |  |  |  |
| PDF           | User instruction / safety instructions | LED TUBE T9C EM                       |  |  |  |  |
| PDF           | Legal information                      | Informationstext 18 Abs 4 ElektroG    |  |  |  |  |
| POF           | Declarations of conformity             | LEDTUBE T9C EM                        |  |  |  |  |
| POF           | Declarations of conformity UKCA        | UKCA declaration_LEDTUBE T9C EM       |  |  |  |  |
|               |  |                                       |  |  |  |  |
|               | Photometric and lighting design files  | Document name                         |  |  |  |  |
|               | IES file (IES)                         | LEDTUBE T9C EM V 22 11W 865 G10Q      |  |  |  |  |
|               | LDT file (Eulumdat)                    | LEDTUBE T9C EM V 22 11W 865 G10Q LEDV |  |  |  |  |
|               | UGR file (UGR table)                   | LEDTUBE T9C EM V 22 11W 865 G10Q      |  |  |  |  |

LEDTUBE T9C EM V 22 11W 865 G10Q

LEDTUBE T9C EM V 22 11W 865 G10Q

Light distribution curve type cone

Light distribution curve type polar

| Photometric and lighting design files | Document name                               |  |
|---------------------------------------|---|--|
| Spectral power distribution           | EPREL data spectral diagram PROF LEDr 4000K |  |
|                                       |   |  |
| Tender texts                          | Document name                               |  |
| Tender documents                      | LED TUBE T9 EM V 11W 865 G10Q-EN            |  |

#### LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4099854042485 | Folding box<br>1             | 38 mm x 220 mm x 224 mm              | 229.00 g     | 1.87 dm <sup>3</sup> |
| 4099854042492 | Shipping box                 | 397 mm x 251 mm x 255 mm             | 2840.00 g    | 25.41 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/ledtube

#### 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.