

# PRODUCT DATASHEET ST8E-AC 8 W/6500 K 600 mm

LED TUBE T8 ENTRY AC | LED tubes for AC mains



## Product benefits

- No bending thanks to glass technology
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 65 % (compared to T8 fluorescent lamp on CCG)
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Also suitable for operation at low temperatures

#### **Product features**

- T8 LED tube made of glass with G13 base
- Mercury-free and RoHS compliant
- Type of protection: IP20



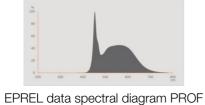
#### **TECHNICAL DATA**

# Electrical data

| Nominal wattage           | 8 W      |
|---------------------------|----------|
| Construction wattage      | 8.00 W   |
| Nominal voltage           | 220240 V |
| Nominal current           | 65 mA    |
| Type of current           | AC       |
| Operating frequency       | 5060 Hz  |
| Mains frequency           | 5060 Hz  |
| Total harmonic distortion | < 150 %  |

# Photometrical data

| Luminous flux                   | 900 lm        |
|---------------------------------|---------------|
| Luminous efficacy               | 112 lm/W      |
| Light color (designation)       | Cool Daylight |
| Color temperature               | 6500 K        |
| Color rendering index Ra        | ≥80           |
| Light color                     | 865           |
| Flickering metric (Pst LM)      | 1             |
| Stroboscope effect metric (SVM) | 0.4           |



EPREL data spectral diagram PRC LEDr 6500K

# Light technical data

| Beam angle          | 190 °     |  |
|---------------------|-----------|--|
| Dimensions & Weight |           |  |
| Overall length      | 602.00 mm |  |

| Diameter | 26.90 mm |
|----------|----------|

| Temperatures & operating conditions       Antioint temperature range     20445 °C       Lifespan     30000 h       Lifespan L70/B50 at 25 °C     30000 h       Additional product data     30000 h       Base (standard designation)     G13       Menoury-free     Yes       Design / variation     Frosted       Cartificates & Standards     Frosted       Type of protection     IP20       Standards     CF / C8       Photosologioni seriety group aco. to ENRI2778     BC0       Country-specific categorizations     Coll       Order reference     ST8=-0.6M BW/86       LOGISTICAL DATA     LD       Temperature range at storage     20480 °C       Engry labeling regulation data acc EU 2019/2015     Lighting teomology used       Lighting teomology used     LED       Non-directional or directional     NDLS       Mesis or non-mains     MLS       Light source (CLS)     No       Color-uncatabilight source     No       Frendege shield     No       Consolid light source     No       Carting as shield | Product weight                                      | 100.00 g        |  |  |
|---|---|-----------------|--|--|
| Lifespen     Lifespen L70/BS0 at 25 °C     Additional product data     Bese (standard desgnation)     Mercury-free     Ves     Design / version     Frostned     Contrilicates & Standards     Type of protection     Standards     Certificates & Standards     Type of protection     Standards     Certificates & Standards     Contry-specific categorizations     Order reference     Standards     Contry-specific categorizations     Order reference     Statistication and statistication     Ifering technology used     LIGSTICAL DATA     Temperature range at storage     -20+80 °C     Energy labelling regulation data acc EU 2019/2015     Lighting technology used   LED     Non-directional or directonal   NDLS     Mains or non-mains   MLS     Light source cap-type (or other electric interface)   G13     Cornected light source   No     Coler-tunestie light source   No     Finelopie   No     Envelopie   No <td colspan="4">Temperatures &amp; operating conditions</td>                           | Temperatures & operating conditions                 |                 |  |  |
| Lilespan L70/B50 at 25 °C 30000 h   Additional product data   Base (standard designation) G13   Mercury-free Yes   Design / version Frosted   Certificates & Standards IP20   Standards CE/ CB   Photobiological safety group acc. to EN62778 RG0   Country-specific categorizations CE/ CB   Order reference ST8E-0.6M BW/86   Energy labeling regulation data acc EU 2019/2015 LED   Lighting tachnology used LED   Non-directional NDLS   Mains or non-mains MLS   Light source (LS) No   Color-tuneable light source No   Fineloge No   Hiegh luminace light source No   Anti-giare shield No   Standards OV   Color-tuneable light source No   Envelope No   Hing an shield No   Color-tuneable light source No   Envelope No  | Ambient temperature range                           | -20+45 °C       |  |  |
| Additional product data     Base (standard designation)   G13     Mercury-free   Yes     Design / version   Frosted     Certificates & Standards   Frosted     Certificates & Standards   EP20     Standards   CE / CB     Photobiological safety group acc. to EN62778   RG0     Country-specific categorizations   CE / CB     Order reference   ST8E-0.6M 8W/86     LOGISTICAL DATA   Temperature range at storage     Temperature range at storage   -20+80 °C     Energy labeling regulation data acc EU 2019/2015   LED     Lighting technology used   LED     Non-directional   NDLS     Mains or non-mains   MLS     Light source (LS)   No     Color-tureable light source   No     Prelepe   No     High huminance light source   No     Anti-glere shield   No     Standary power   OW     Networked standary power for CLS   OW   | Lifespan  |                 |  |  |
| Base (standard designation)   G13     Mercury-free   Yes     Design / version   Frosted     Certificates & Standards   Frosted     Type of protection   IP20     Standards   CE / CB     Photobiological safety group acc. to EN62778   RG0     Country-specific categorizations   Country-specific categorizations     Order reference   ST8E-0.6M 8W/86     LOGISTICAL DATA   Temperature range at storage     Perty labelling regulation data acc EU 2019/2015   LED     Lighting technology used   LED     Non-directional   NDLS     Means or non-mains   MLS     Light source cap-type (or other electric interface)   G13     Connected light source   No     Findage as held   No     High luminance light source   No     Anti-glare shield   No     Standary power for CLS   OW     Claim of equivalent power   Yes   | Lifespan L70/B50 at 25 °C                           | 30000 h         |  |  |
| Mercury-free     Yes       Design / version     Frosted       Certificates & Standards     Frosted       Type of protection     IP20       Standards     CE / CB       Photobiological safety group acc. to EN62778     R30       Country-specific categorizations     Country-specific categorizations       Order reference     ST8E-0.6M 8W/86       LOGISTICAL DATA     Temperature range at storage       Pregy labeling regulation data acc EU 2019/2015     LED       Lighting technology used     LED       Non-directional     NDLS       Mains or non-mains     MLS       Light source cap-type (or other electric interface)     G13       Connected light source     No       Envelope     No       High luminance light source     No       High luminance light source     No       Anti-glare shield     No       Standby power     OW       Other unication of cuts     OW       Calim of equivalent power     Yes  | Additional product data                             |                 |  |  |
| Design / version   Frosted     Certificates & Standards   IP20     Type of protection   IP20     Standards   CE / CB     Photobiological safety group acc. to EN62778   RGO     Country-specific categorizations   Order reference     Order reference   ST8E-0.6M 8W/86     LOGISTICAL DATA   Temperature range at storage     Temperature range at storage   -20+80 °C     Energy labeling regulation data acc EU 2019/2015   LED     Lighting technology used   LED     Non-directional or directional   NDLS     Mains or non-mains   MLS     Light source (CLS)   No     Connected light source   No     Firedope   No     High luminence light source   No     Anti-glare shield   No     Standary power   OW     Networked standby power for CLS   OW     Claim of equivalent power   Yes  | Base (standard designation)                         | G13             |  |  |
| Certificates & Standards     Type of protection   IP20     Standards   CE / CB     Photobiological safety group acc. to EN62778   RG0     Country-specific categorizations   Green reference     Order reference   ST8E-0.6M 8W/96     LOGISTICAL DATA   Temperature range at storage     Temperature range at storage   -20+60 °C     Energy labelling regulation data acc EU 2019/2015   LED     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   No     Finelight source   No     High luminance light source   No     Anti-glare shield   No     Standby power   0 W     Networked standby power for CLS   0 W     Claim of equivalent power   Yes  | Mercury-free  | Yes             |  |  |
| Type of protection   IP20     Standards   CE / CB     Photobiological safety group acc. to EN62778   RG0     Country-specific categorizations     Order reference   ST8E-0.6M 8W/86     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   No     Envelope   No     High luminance light source   No     Anti-glare shield   No     Standby power   0 W     Networked standby power for CLS   0 W  | Design / version                                    | Frosted         |  |  |
| Standards   CE / CB     Photobiological safety group acc. to EN62778   RGO     Country-specific categorizations      Order reference   ST8E-0.6M 8W/86     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 (CLS)   No     Color-tuneable light source   No     Envelope   No     High luminance light source   No     Anti-giare shield   No     Standardy power   OW     Networked standby power for CLS   OW     Claim of equivalent power   Yes  | Certificates & Standards                            |                 |  |  |
| Photobiological safety group acc. to EN62778   RG0     Country-specific categorizations     Order reference   ST8E-0.6M 8W/86     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 (cLS)   No     Color-tuneable light source   No     Envelope   No     High luminance light source   No     Anti-glare shield   No     Standby power   OW     Networked standby power for CLS   OW     Claim of equivalent power   Yes   | Type of protection                                  | IP20            |  |  |
| Country-specific categorizations     Order reference   ST8E-0.6M 8W/86     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 (cp.5)   No     Color-tuneable light source   No     High luminance light source   No     Anti-glare shield   No     Standby power   OW     Networked standby power for CLS   OW     Claim of equivalent power   Yes   | Standards   | CE / CB         |  |  |
| Order reference   ST8E-0.6M 8W/86     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     High luminance light source   No     Anti-glare shield   No     Standby power   OW     Networked standby power for CLS   OW     Clain of equivalent power   Yes   | Photobiological safety group acc. to EN62778        | RG0             |  |  |
| 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     High luminance light source   No     Anti-glare shield   No     Standby power   O W     Networked standby power for CLS   O W     Claim of equivalent power   Yes   | Country-specific categorizations                    |                 |  |  |
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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     Standby power   O W     Networked standby power for CLS   O W     Claim of equivalent power   Yes   | LOGISTICAL DATA                                     |                 |  |  |
| Lighting technology usedLEDNon-directional or directionalNDLSMains or non-mainsMLSLight source cap-type (or other electric interface)G13Connected light source (CLS)NoColor-tuneable light sourceNoEnvelopeNoHigh luminance light sourceNoAnti-glare shieldNoStandby powerO WNetworked standby power for CLSO WClaim of equivalent powerYes   | Temperature range at storage                        | -20+80 °C       |  |  |
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| Mains or non-mainsMLSLight source cap-type (or other electric interface)G13Connected light source (CLS)NoColor-tuneable light sourceNoEnvelopeNoHigh luminance light sourceNoAnti-glare shieldNoStandby powerO WNetworked standby power for CLSO WClaim of equivalent powerYes  | Lighting technology used                            | LED             |  |  |
| Light source cap-type (or other electric interface)G13Connected light source (CLS)NoColor-tuneable light sourceNoEnvelopeNoHigh luminance light sourceNoAnti-glare shieldNoStandby powerO WNetworked standby power for CLSO WClaim of equivalent powerYes   | Non-directional or directional                      | NDLS            |  |  |
| Connected light source (CLS)NoColor-tuneable light sourceNoEnvelopeNoHigh luminance light sourceNoAnti-glare shieldNoStandby power0 WNetworked standby power for CLS0 WClaim of equivalent powerYes   | Mains or non-mains                                  | MLS             |  |  |
| Color-tuneable light sourceNoEnvelopeNoHigh luminance light sourceNoAnti-glare shieldNoStandby power0 WNetworked standby power for CLS0 WClaim of equivalent powerYes   | Light source cap-type (or other electric interface) | G13             |  |  |
| EnvelopeNoHigh luminance light sourceNoAnti-glare shieldNoStandby power0 WNetworked standby power for CLS0 WClaim of equivalent powerYes  | Connected light source (CLS)                        | No              |  |  |
| High luminance light source   No     Anti-glare shield   No     Standby power   0 W     Networked standby power for CLS   0 W     Claim of equivalent power   Yes   | Color-tuneable light source                         | No              |  |  |
| Anti-glare shield No   Standby power 0 W   Networked standby power for CLS 0 W   Claim of equivalent power Yes  | Envelope  | No              |  |  |
| Standby power 0 W   Networked standby power for CLS 0 W   Claim of equivalent power Yes   | High luminance light source                         | No              |  |  |
| Networked standby power for CLS 0 W   Claim of equivalent power Yes   | Anti-glare shield                                   | No              |  |  |
| Claim of equivalent power Yes   | Standby power                                       | 0 W             |  |  |
|   | Networked standby power for CLS                     | 0 W             |  |  |
| Length 602.00 mm  | Claim of equivalent power                           | Yes             |  |  |
|   | Length  | 602.00 mm       |  |  |

| Height   | 26.90 mm                |
|--|-------------------------|
| Width  | 26.90 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                                  | >=0.5                   |
| LED light source replaces a fluorescent light source | Yes                     |
| EPREL ID   | 686640,2076153          |
| Model number   | AC32679,AC32679,AC66709 |

#### 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            | Document name                               |  |
|-----|---------------------------------------|---|--|
| PDF | Declarations of conformity            | LED tube                                    |  |
|     |                                       |   |  |
|     | Photometric and lighting design files | Document name                               |  |
| 1   | Spectral power distribution           | EPREL data spectral diagram PROF LEDr 6500K |  |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854075148 | Sleeve<br>1                  | 610 mm x 28 mm x 28 mm               | 131.00 g     | 0.49 dm <sup>3</sup>  |
| 4099854075155 | Shipping box<br>25           | 660 mm x 155 mm x 165 mm             | 3731.00 g    | 16.88 dm <sup>3</sup> |

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/substitube

#### 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.