PRODUCT DATASHEET
ST8AU-EM 23.1 W/4000K 1500 mm EM

SubstiTUBE Advanced Ultra Output | LED tubes for electromagnetic control gears

AREAS OF APPLICATION

- General illumination within ambient temperatures from -20...+50 °C
- Illumination of production areas
- Traffic zones and corridors
- Supermarkets and department stores

PRODUCT BENEFITS

- No bending thanks to glass technology
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 63 % (compared to T8 fluorescent lamp on CCG)
- Very high resistance to switching loads
- High luminous flux for sophisticated lighting tasks
- Also suitable for operation at low temperatures
- Instant-on light, therefore ideally suitable in combination with sensor technology

PRODUCT FEATURES

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- Tube made of glass
- For especially uniform illumination
- Bright, robust and durable
- Mercury-free and RoHS compliant

– Type of protection: IP20

TECHNICAL DATA

Electrical data

Rated wattage	23.10 W
Nominal voltage	220…240 V
Operating frequency	50…60 Hz
Nominal wattage	23.10 W
Nominal current	0.106 A
Type of current	AC
Max. lamp no. on circuit break. 10 A (B)	43
Max. lamp no. on circuit break. B10 A - CCG without compensation	43
Max. lamp no. on circuit break. B10 A - CCG with compensation	8
Max. lamp no. on circuit break. B16 A - CCG without compensation	69
Max. lamp no. on circuit break. B16 A - CCG with compensation	14
Max. lamp no. on circuit break. 16 A (B)	69
Total harmonic distortion	< 20 %
Power factor λ	> 0.90

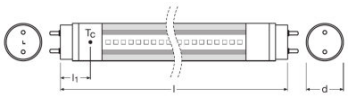
Photometrical data

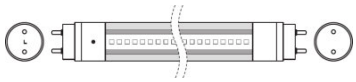
Rated color temperature	4000 K
Nominal luminous flux	3700 lm
Rated luminous flux	3700 lm
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Luminous flux	3700 lm
Color rendering index Ra	83
Standard deviation of color matching	≤5 sdcm

Light technical data

Starting time	< 0.5 s
Warm-up time (60 %)	< 0.50 s
Rated beam angle (half peak value)	190.00 °

Dimensions & weight





Length with base excl. base pins/connection	1500.00 mm
Tube diameter	25.8 mm
Base diameter	26.7 mm
Product weight	225.00 g
Overall length	1513 mm

Temperatures & operating conditions

Ambient temperature range	-20…+50 °C
Maximum temperature at tc test point	75 °C

Lifespan

Nominal lamp life time	50000 h
Rated lamp life time	50000 h
Number of switching cycles	200000

Additional product data

Base (standard designation)	G13
Mercury-free	Yes
Product remark	When used to replace a T8 fluorescent lamp the total energy efficiency and light distribution depends on the design of the lighting system/Not usable in luminaires with serial lamp connection, i.e. more than one tube at one magnetic ballast (tandem circuitry)

Capabilities

Dimmable	No

Certificates & standards

Type of protection	IP20
Standards	CE
Energy efficiency class	A++

Energy consumption	24 kWh/1000h

Country-specific categorizations

Order reference	ST8AU-1.5M 23,1

Logistical data

Temperature range at storage	-20...+80 °C

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.

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075454705	Sleeves 1	1605 mm x 29 mm x 29 mm	259.00 g	1.35 dm^3
4058075454712	Shipping carton box 10	1652 mm x 210 mm x 115 mm	3530.00 g	39.90 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.

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.