

PRODUCT DATASHEET PLANTASTAR 600 W 400 V E40

PLANTASTAR®-T | High-pressure sodium vapor lamps for open and enclosed luminaires



Areas of application

- Greenhouses
- Suitable for growth of fruit due to emission of photosynthesis optimised light
- Application only in suitable luminaires

Product benefits

- Shorter production times
- Control over blossoming

Product features



- Provides light for the photosynthesis in plants
- Photon flux: > 90 % after 12,000 h
- High-pressure sodium lamp especially for greenhouse lighting

TECHNICAL DATA

Electrical data

| Nominal wattage | 600 W | |
|------------------------|---|--|
| Nominal voltage | 400 V | |
| Ignition voltage | 4.0/5.0 kVp ¹⁾ | |
| Operating mode | Conventional control gear (CCG) and ignitor | |
| Nominal current | 3.44 A | |
| PFC capacitor at 50 Hz | 65 μF | |

1) Minimum / Maximum

Photometrical data

| Luminous flux | 86500 lm |
|--------------------------|----------|
| Luminous efficacy | 138 lm/W |
| Color temperature | 2000 К |
| Color rendering index Ra | ≤25 |
| Light color | 220 |
| Rated LLMF at 2,000 h | 0.98 |
| Rated LLMF at 4,000 h | 0.97 |
| Rated LLMF at 6,000 h | 0.95 |
| Rated LLMF at 8,000 h | 0.94 |
| Rated LLMF at 12,000 h | 0.93 |
| Rated LLMF at 16,000 h | 0.92 |
| Rated LLMF at 20,000 h | 0.91 |
| UV protection | No |

Dimensions & Weight

| Overall length | 285.00 mm |
|---------------------------|-----------|
| Length | 285.00 mm |
| Light center length (LCL) | 175,0 mm |
| Diameter | 47 mm |
| Product weight | 150.00 g |

Temperatures & operating conditions

| Maximum permitted outer bulb temperature | 450 °C |
|--|--------|
| Maximum permitted base edge temperature | 250 °C |

Lifespan

| Rated lamp survival factor at 2,000 h | 0.98 |
|--|---------|
| Rated lamp survival factor at 4,000 h | 0.98 |
| Rated lamp survival factor at 6,000 h | 0.97 |
| Rated lamp survival factor at 8,000 h | 0.97 |
| Rated lamp survival factor at 12,000 h | 0.96 |
| Rated lamp survival factor at 16,000 | 0.95 |
| Rated lamp survival factor at 20,000 h | 0.94 |
| Lifespan B10 | 16000 h |
| Lifespan B5 | 12000 h |
| Lifespan B50 | 24000 h |

Additional product data

| Base (standard designation) | E40 |
|-----------------------------|--------------------------|
| Mercury content | 21.6 mg ¹⁾ |
| Design / version | Clear |
| Product remark | Not for general lighting |

1) _{Maximum}

Capabilities

| Dimmable | No |
|-----------------------------|-----|
| Burning position | Any |
| Enclosed luminaire required | No |
| Hot restart | No |

Certificates & Standards

| Energy consumption | 628.00 kWh/1000h |
|--------------------|-------------------|
| Energy consumption | 620.00 kmil 1000m |

Country-specific categorizations

| ILCOS | ST-600-E/E-E40-47/285 |
|-----------------|-----------------------|
| Order reference | PLANTASTAR 600W |

DOWNLOAD DATA

| | Documents and certificates |
|-----|----------------------------|
| PDF | User instruction |

| | Documents and certificates |
|-----|-------------------------------|
| POF | Declarations Of Conformity CE |
| POF | Certificates |
| | |

 Photometric and lighting design files

 Spectral power distribution

LOGISTICAL DATA

| Product code | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume |
|---------------|------------------------------|--------------------------------------|--------------|-----------|
| 4008321284303 | Sleeve 1 | 52 mm x 52 mm x 325 mm | 190.00 g | 0.88 dm³ |
| 4008321284310 | Shipping box 12 | 266 mm x 216 mm x 342 mm | 2670.00 g | 19.65 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.

DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.