

PRODUCT FAMILY DATASHEET

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

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



TECHNICAL DATA

Product description	Electrical data					Photometrical data						
	Rated wattage	Lamp current	Nominal wattage	Nominal voltage	Ignition voltage	Photon flux	Photon flux efficacy	Color temperature	Rated LLMF at 2,000 h	Rated LLMF at 4,000 h	Rated LLMF at 6,000 h	Rated LLMF at 8,000 h
PLANTASTAR 250 W E40	255.00 W	2.95 A	250.00 W	100 V	4.0 / 5.0 kVp ¹⁾	420 µmol/s	1.6 µmol/s/W	2000 K	0.98	0.97	0.96	0.95
PLANTASTAR 400 W E40	400.00 W	4.52 A	400.00 W	100 V	4.0 / 5.0 kVp ¹⁾	725 µmol/s	1.7 µmol/s/W	2000 K	0.98	0.97	0.96	0.95
PLANTASTAR 600 W 400 V E40	620.00 W	3.44 A	600.00 W	210 V	4.0 / 5.0 kVp ¹⁾	1150 µmol/s	1.8 µmol/s/W	2000 K	0.98	0.97	0.95	0.94
PLANTASTAR 600 W 230 V E40	600.00 W	6.06 A	600.00 W	230 V	4.0 / 5.0 kVp ¹⁾	1100 µmol/s	1.73 µmol/s/W	2000 K	0.98	0.97	0.96	0.95

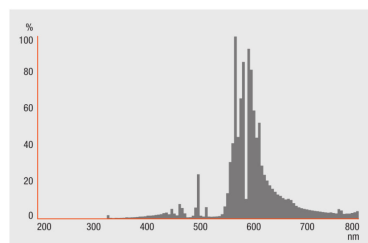
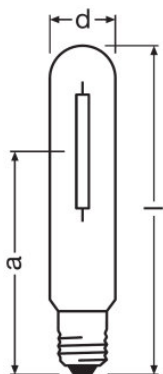
Product description						Dimensions & weight				Temperatures & operating conditions		Lifespan
	Rated LLMF at 12,000 h	Rated LLMF at 16,000 h	Rated LLMF at 20,000 h	Luminous flux	Color rendering index Ra	Diameter	Length	Light center length (LCL)	Product weight	Max. permitted outer bulb temperature	Max. permitted edge temperature	Rated lamp survival factor at 2,000 h
PLANTASTAR 250 W E40	0.94	0.94	0.94	31900 lm	25	47.0 mm	257.0 mm	158.0 mm	148.00 g	400 °C	250 °C	0.99
PLANTASTAR 400 W E40	0.94	0.94	0.94	54800 lm	25	47.0 mm	285.0 mm	175.0 mm	174.00 g	400 °C	250 °C	0.99
PLANTASTAR 600 W 400 V E40	0.93	0.92	0.91	83700 lm	25	47.0 mm	285.0 mm	175.0 mm	182.00 g	450 °C	250 °C	0.98
PLANTASTAR 600 W 230 V E40	0.94	0.94	0.94	90000 lm	25	47.0 mm	285.0 mm	175.0 mm	187.00 g	450 °C	250 °C	0.99

Product description												Additional product data	
	Rated lamp survival factor at 4,000 h	Rated lamp survival factor at 6,000 h	Rated lamp survival factor at 8,000 h	Rated lamp survival factor at 12,000 h	Rated lamp survival factor at 16,000 h	Rated lamp survival factor at 20,000 h	Lifespan B50	Lifespan B10	Lifespan B5	Operation mode LLMF/LSF	Base (standard designation)	Design / version	
PLANTASTAR 250 W E40	0.99	0.98	0.97	0.96	0.95	0.93	32000 h	24000 h	20000 h	50 Hz	E40	clear	
PLANTASTAR 400 W E40	0.99	0.98	0.97	0.96	0.95	0.93	32000 h	24000 h	20000 h	50 Hz	E40	clear	
PLANTASTAR 600 W 400 V E40	0.98	0.97	0.97	0.96	0.95	0.94	24000 h	16000 h	12000 h	ECG	E40	clear	
PLANTASTAR 600 W 230 V E40	0.99	0.98	0.97	0.96	0.95	0.93	32000 h	24000 h	20000 h	50 Hz	E40	clear	

Product description	Mercury content	Capabilities			Certificates & standards	Country-specific categorizations
		Dimmable	Burning position	Enclosed luminaire required	Energy consumption	ILCOS
PLANTASTAR 250 W E40	24.0 mg ²⁾	No	Any	No	281 kWh/1000h	ST-250-H/E-E40-47/257
PLANTASTAR 400 W E40	21.0 mg ²⁾	No	Any	No	440 kWh/1000h	ST-400-H/E-E40-47/285
PLANTASTAR 600 W 400 V E40	20.4 mg ²⁾	No	Any	No	682 kWh/1000h	ST-600-E/E-E40-47/285
PLANTASTAR 600 W 230 V E40	21.0 mg ²⁾	No	Any	No	690 kWh/1000h	ST-600-H/E-E40-47/285

1) Minimum

2) Maximum



PLANTASTAR 250 W E40, PLANTASTAR 400 W E40, PLANTASTAR 600 W 400 V E40, PLANTASTAR 600 W 230 V E40

PLANTASTAR 250 W E40, PLANTASTAR 400 W E40, PLANTASTAR 600 W 400 V E40, PLANTASTAR 600 W 230 V E40

APPLICATION ADVICE

For more detailed application information and graphics please see product datasheet.

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4008321240637	Shipping carton box 12	266 mm x 216 mm x 342 mm	2574.00 g	19.65 dm ³
4050300620091	Shipping carton box 12	266 mm x 216 mm x 342 mm	2694.00 g	19.65 dm ³
4008321284310	Shipping carton box 12	266 mm x 216 mm x 342 mm	2670.00 g	19.65 dm ³
4050300620114	Shipping carton box 12	266 mm x 216 mm x 342 mm	2850.00 g	19.65 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.

DISCLAIMER

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