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## PLANTASTAR-T

High-pressure sodium vapor lamps for open and enclosed luminaires



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### Areas of application

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

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### Product benefits

- Shorter production times
- Control over blossoming

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### 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



# Product family datasheet

## Technical data

Product description	Electrical data					Photometrical data					
	Nominal wattage	Rated wattage	Lamp current	Nominal voltage	Ignition voltage	Photon flux	Photon flux efficacy	Color rendering index Ra	Color temperature	Rated LLMF at 2,000 h	Rated LLMF at 4,000 h
PLANTASTAR 250 W E40	250.00 W	255.00 W	2.95 A	100 V	4.0 / 5.0 kVp <sup>1)</sup>	420 µmol/s	1.6 µmol/s/W	20	2000 K	0.98	0.97
PLANTASTAR 400 W E40	400.00 W	400.00 W	4.52 A	100 V	4.0 / 5.0 kVp <sup>1)</sup>	725 µmol/s	1.7 µmol/s/W	25	2000 K	0.98	0.97
PLANTASTAR 600 W 400 V E40	600.00 W	620.00 W	3.44 A	210 V	4.0 / 5.0 kVp <sup>1)</sup>	1150 µmol/s	1.8 µmol/s/W	25	2000 K	0.98	0.97
PLANTASTAR 600 W 230 V E40	600.00 W	600.00 W	6.06 A	230 V	4.0 / 5.0 kVp <sup>1)</sup>	1100 µmol/s	1.73 µmol/s/W	25	2000 K	0.98	0.97

Product description	Rated LLMF					Dimensions & weight				Temperatures & operating conditions		Lifespan
	Rated LLMF at 6,000 h	Rated LLMF at 8,000 h	Rated LLMF at 12,000 h	Rated LLMF at 16,000 h	Rated LLMF at 20,000 h	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	0.96	0.95	0.94	0.94		47.0 mm	257.0 mm	158.0 mm	148.00 g	400 °C	250 °C	0.99
PLANTASTAR 400 W E40	0.96	0.95	0.94	0.94		47.0 mm	285.0 mm	175.0 mm	174.00 g	400 °C	250 °C	0.99
PLANTASTAR 600 W 400 V E40	0.95	0.94	0.93	0.92	0.91	47.0 mm	285.0 mm	175.0 mm	182.00 g	450 °C	250 °C	0.99
PLANTASTAR 600 W 230 V E40	0.96	0.95	0.94	0.94	0.94	47.0 mm	285.0 mm	175.0 mm	187.00 g	450 °C	250 °C	0.99

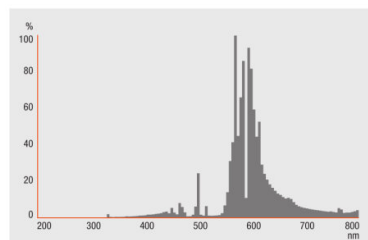
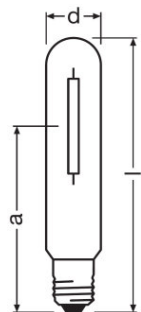
# Product family datasheet

Product description	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	Lifespan B50	Lifespan B10	Lifespan B5	Rated lamp survival factor at 16,000 h	Rated lamp survival factor at 20,000 h	Additional product data	
										Base (standard designation)	Design / version
PLANTASTAR 250 W E40	0.99	0.98	0.98	0.97	32000 h	24000 h	20000 h			E40	Clear
PLANTASTAR 400 W E40	0.99	0.98	0.98	0.97	32000 h	24000 h	20000 h			E40	Clear
PLANTASTAR 600 W 400 V E40	0.98	0.98	0.97	0.95	24000 h	16000 h	12000 h	0.95	0.75	E40	Clear
PLANTASTAR 600 W 230 V E40	0.99	0.98	0.97	0.96	32000 h	24000 h	20000 h	0.95	0.93	E40	Clear

Product description	Mercury content	Capabilities			Country specific categorizations
		Dimmable	Burning position	Enclosed luminaire required	ILCOS
PLANTASTAR 250 W E40	21.0 mg <sup>2)</sup>	No	Any	No	ST-250-H/E-E40-47/257
PLANTASTAR 400 W E40	21.0 mg <sup>2)</sup>	No	Any	No	ST-400-H/E-E40-47/285
PLANTASTAR 600 W 400 V E40	22.0 mg <sup>2)</sup>	No	Any	No	ST-600-E/E-E40-47/285
PLANTASTAR 600 W 230 V E40	21.0 mg <sup>2)</sup>	No	Any	No	ST-600-H/E-E40-47/285

1) Minimum

2) Maximum



## Product family datasheet

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

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

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### Application advice

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

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### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321240620	PLANTASTAR 250 W E40	Shipping carton box 12	270 mm x 346 mm x 222 mm	20.74 dm <sup>3</sup>	2933.00 g

## Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4050300620084	PLANTASTAR 400 W E40	Shipping carton box 12	268 mm x 345 mm x 221 mm	20.43 dm <sup>3</sup>	2694.00 g
4008321284303	PLANTASTAR 600 W 400 V E40	Shipping carton box 12	266 mm x 216 mm x 342 mm	19.65 dm <sup>3</sup>	2784.00 g
4050300620107	PLANTASTAR 600 W 230 V E40	Shipping carton box 12	266 mm x 342 mm x 217 mm	19.74 dm <sup>3</sup>	2850.00 g

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.

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### Disclaimer

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