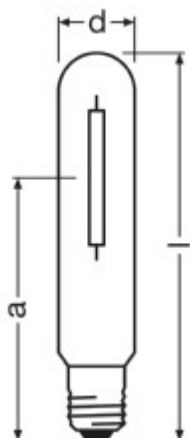


## General product description

- High pressure sodium lamp especially for horticultural lighting
- Ideal for assimilation lighting in horticulture
- Optimized filling with adapted spectra for profitable plant growth
- Photon flux > 90% after 12000 hours
- Lamp replacement after 12000 hours is recommended in order to ensure an optimal and continuous growth
- Centrally-located, durable ceramic arc tube with sodium-amalgam filling
- Advanced Ignition System (AIS), for longer lamp life and reduced starting time
- Advanced Shock Resistance (ASR), flexible mounting of the burner for longer lamp life
- Simple and strong construction, only 5 welding points of electric circuit for longer life
- E40 ceramic base, nickel-plated brass for corrosion resistance, ideal for use in humid environment

## Basic technical description



Product reference	Nominal lamp wattage	Cap	Comp. Cap. @50hz, cos φ ≈0.9	Length max. (l)	Diameter (d)	Weight per piece	Light centre length (a)	Typical lamp voltage <sup>1</sup>	Typical lamp current <sup>1</sup>
	[W]		[µF]	[mm]	[mm]	[g]	[mm]	[V]	[A]
PLANTASTAR 250W inter	250	E40	32	257	47	148	158	100	3.0
PLANTASTAR 400W	400	E40	45	285	47	174	175	102	4.4
PLANTASTAR 600W	600	E40	65	285	47	187	175	112	6.2
PLANTASTAR 600W/400V	600	E40	65	285	47	182	175	200	3.6

## Performance specification

Product reference	Rated lamp wattage	Rated system wattage <sup>2</sup>	Luminous flux	Luminous efficacy	Photon flux	Photon flux efficacy	Recommended use time
	[W]	[W]	[lm]	[lm/W]	[µmol/s]	[µmol/s/W]	[h]
PLANTASTAR 250W inter	255	n.a.	33200	133	420	1.60	12000
PLANTASTAR 400W	400	n.a.	56500	141	725	1.70	12000
PLANTASTAR 600W	600	n.a.	90000	150	1100	1.73	12000
PLANTASTAR 600W/400V	612	n.a.	87000	142	1150	1.80	12000

Product reference	Lamp lumen maintenance factor (LLMF) vs. operation hours						
	2000h	4000h	6000h	8000h	12000h	16000h	20000h
PLANTASTAR 250W inter	98%	97%	96%	95%	94%	-	-
PLANTASTAR 400W	98%	97%	96%	95%	94%	-	-
PLANTASTAR 600W	98%	97%	96%	95%	94%	-	-
PLANTASTAR 600W/400V	98%	97%	96%	95%	94%	-	-

Product reference	Lamp survival factor <sup>3</sup> (LSF) vs. operation hours						
	2000h	4000h	6000h	8000h	12000h	16000h	20000h
PLANTASTAR 250W inter	99%	99%	98%	97%	96%	95%	93%
PLANTASTAR 400W	99%	99%	98%	97%	96%	95%	93%
PLANTASTAR 600W	99%	99%	98%	97%	96%	95%	93%
PLANTASTAR 600W/400V	99%	99%	98%	97%	96%	95%	93%

## Operation conditions

Product reference	Burning position	Max. permitted outer bulb temperature [°C]	Max. permitted base edge Temperature [°C]	Ignition voltage min. <sup>4</sup> / max. <sup>5</sup> [kV]	Required control gear <sup>6</sup>	Suitable OSRAM electronic control gear	Dimming
PLANTASTAR 250W inter	universal	400	250	4 / 5	CCG	n.a.	not allowed
PLANTASTAR 400W	universal	400	250	4 / 5	CCG	n.a.	not allowed
PLANTASTAR 600W	universal	450	250	4 / 5	CCG	n.a.	not allowed
PLANTASTAR 600W/400V	universal	450	250	4 / 5	CCG	n.a.	not allowed

## Safety, materials and environment

Product description	Typical specific effective radiant UV power [mW/1000 lm]	Typical mercury content [mg]
PLANTASTAR 250W inter	<2	20.0
PLANTASTAR 400W	<2	20.0
PLANTASTAR 600W	<2	20.0
PLANTASTAR 600W/400V	<2	24.0

- Compliant with safety specifications according to EN 62035
- Compliant with photo biological safety according to EN 62471
- Compliant with RoHS.
- Only for luminaires with protective shield according to IEC 60598-1
- For operation with an electromagnetic ballast<sup>7</sup> a protection against rectifying effect at end-of-life required

## Logistics data

Product description	ILCOS	EAN 10	EAN 40	Standard pack quantity
PLANTASTAR 250W inter	ST-250-H-E40-47/257	4008321240620	4008321240637	12
PLANTASTAR 400W	ST-400-H-E40-47/285	4050300620084	4050300620091	12
PLANTASTAR 600W	ST-600-H-E40-47/285	4050300620107	4050300620114	12
PLANTASTAR 600W/400V	ST-600-H-E40-47/285	4008321284303	4008321284310	12