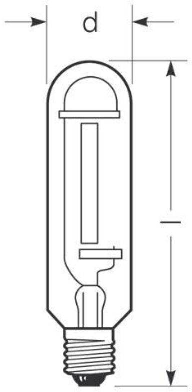
High pressure sodium lamp
RNP-T 100W/230/E40 EX

Radium

Product Datasheet Date: 31.05.2026



A+	9000	2000K	20 000h

General Data

Code Radium	34418369
Désignation	RNP-T 100W/230/E40 EX
EAN 10 (unité)	4008597183690
Unité de transport (pièces)	12
EAN 40 (carton)	4008597483691
Poids brut du carton en kg	2.256
Longueur box in m	0.27
Largeur du carton en m	0.22
Hauteur du carton en m	0.28
Product weight	130 g
Product status	● Inactif

Electric Parameters

Wattage	97.0 W
Lamp nominal wattage	100 W
Lamp voltage	100 V
Mains voltage	230 V
Ignition voltage	4.0 up to 5.0

Electric Parameters

Nominal current (A)	1.2 A
Nominal choke current	1.2 A
Compensation capacitor for 50Hz operation	12 µF
Running up current max.	125%
Fuse	Daelay-action; min. double nominal current
Controllable (in suitable circuit)	up to 50%

Light Application Parameters

Luminous flux	9000 lm
Rated lamp luminous flux	9000 lm
Efficacy / Luminous efficiency	92.78 lm/W
Total mains efficacy	97 lm/W
Colour temperature	2000 K
Color rendering index	25
Lumen maintenance at 2000h	0.92
Lumen maintenance at 4000h	0.90
Lumen maintenance at 6000h	0.89
Lumen maintenance at 8000h	0.88
Lumen maintenance at 12000h	0.88
Lumen maintenance at 16000h	0.87
Lumen maintenance at 20000h	0.86

Service Life

Average life	20000 h
B5 - Service life 5% failures	8000 h
B10 - Service life 10% failures	11000 h
Lamp survival factor at 2000h	0.99
Lamp survival factor at 4000h	0.98
Lamp survival factor at 6000h	0.95
Lamp survival factor at 8000h	0.90
Lamp survival factor at 12000h	0.87
Lamp survival factor at 16000h	0.74
Lamp survival factor at 20000h	0.50

Specification

Energylabel notice	old label, no EPREL registration, no EU data sheet
Energylabel (E -> A++)	A+
Diameter	47 mm
Length	210 mm
Total length max.	210 mm
Burning position	h180
Mercury content	19.0 mg
Lamp shape	Tube, single-ended
Model	Clear
Base	E40

Notes on Operation

Burning position	h180

Information especially for EPREL

Energylabel notice	old label, no EPREL registration, no EU data sheet

Miscellaneous

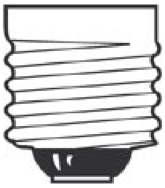
EU-date of phase-out	13.04.2015
EU Directive	TIM

Notes

Standard high pressure sodium lamp, tubular bulb clear, base E40, for sales outside EU, without CE-marking.

Please, refer to www.radium.de/recycling for notes on disposal of burned-out lamps as well as lamp breakage.
The "lifespan L70" described for LED lamps indicates the number of hours when the luminous flux has decreased to 70% of its initial value.
The optinal field 'info about service life' contains the frame conditions according to standards based on which the specific service life has been determined. So, for example, "12B50, 50Hz" means that the mean service life (B50) has been determined with a 12h switching cycle at mains (frequency 50Hz), "3B50, HF" is based on a 3h switching cycle at electronic control gear (high frequency).

Culot

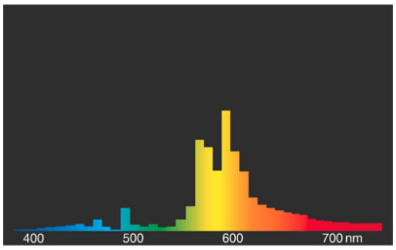


E40
IEC/EN 60061-1
sheet 7004-24-6

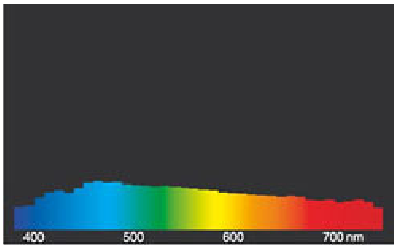
Courbes spectrales

Da das Tageslicht eine Mischung von direktem Sonnenlicht und Himmelslicht darstellt, wechselt seine spektrale Zusammensetzung bedingt durch Tageszeit und Wetter ständig. Die Normlichtart D65 entspricht einem Tageslicht mit einer Farbtemperatur von ungefähr 6500 K.
Jeder Entladungslampentyp hat eine seiner Füllung entsprechende, individuelle spektrale Strahlungsverteilung. Daraus ergeben sich dann so wichtige Eigenschaften wie Lichtfarbe oder Farbwiedergabe. Natriumdampflampen sind sehr wirtschaftlich, durch das gelbe Licht haben RNP Lampen eine

hohe Lichtausbeute aber eine eher bescheidene Farbwiedergabe.
Beim Anlauf von RNP-Lampen ist der volle Lichtstrom nach ca. 6-10 Minuten erreicht.
Sichtbarer Bereich von 380 bis 780 nm; Bildhöhe entspricht der relativen spektralen Emission (400mW/klm)pro 10nm.

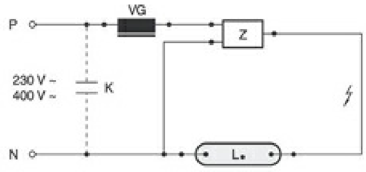


RNP Standard/Super



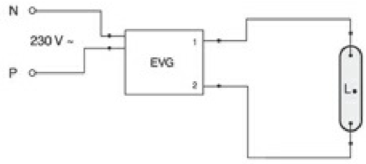
Tageslicht (D 65)

Exemple(s) de circuit



Standard circuit HID with external ignitor
Key:
L. = lamp
VG = electromagnetic ballast (KVG/VVG)
P = phase
N = zero potential
K = p. f. correction capacitor
Z = ignitor

The required control gear (here ignitor and ballast) for the lamps operation is usually mounted in the suitable luminaire in an appropriate electric circuit. Changes of any kind are to be conducted by qualified and specialised staff, only. Thus, this circuit example is to be understood merely as a technical background information for interested users.



ECG-operation
Key:
L. = lamp
EVG = electronic ballast
P = phase
N = zero potential

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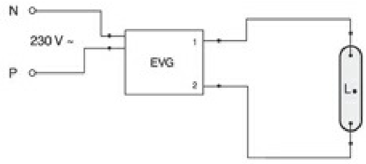

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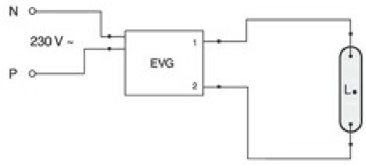

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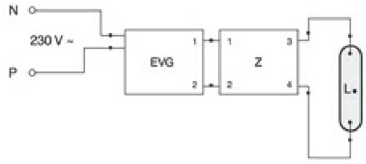

ECG-operation with additional ignitor
Key:
L. = lamp
EVG = electronic ballast
P = phase
N = zero potential
Z = ignitor

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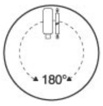
Particularités



Notices explicatives générales

The technical design data in accordance with DIN and IEC. The producer does not take any responsibility for damage to persons or property in case of unsuitable operation or handling of the product. Operating data and dimensions are valid within the usual tolerances. Related lamp types (different bases, mains voltages) may be available on request. Sale and delivery are effected in accordance with the Radium Terms of Delivery and Payment valid on the day of conclusion of contract. Packing units offer economical advantages to the purchase and logistic department. Please match your quantity volume accordingly. For orders of a minimum quantity (clefts) with a lamp model the amount lower than the volume of each packaging unit, we will invoice 10 % additional charge per lamp type. Technical changes and terms of delivery are reserved. Manipulation of any kind to packaging or product is not permissible as this will violate Radium brand rights. Furthermore, technical properties of the product can change to its disadvantage or even destruction. Therefore, Radium cannot be responsible for consequential damages.
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All technical data without guarantee.