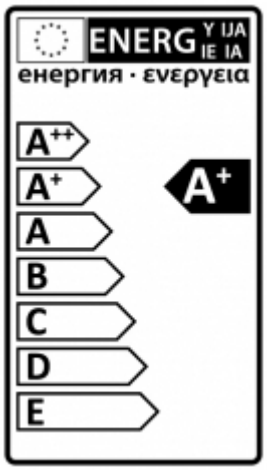
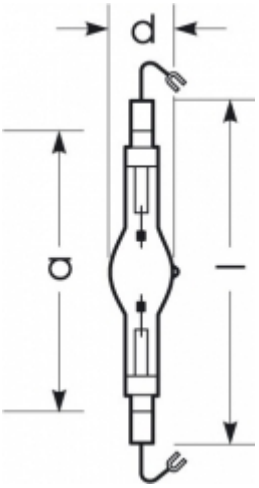
Product Datasheet Date: 22/12/2016

Metal halide lamp with quartz burner HRI-TS 1000W/D/S/PRO/230/K12S

Logistic Data

Article No.	32416576
Code	HRI-TS 1000W/D/S/PRO/230/K12S
Product EAN	4008597165764
Customs tariff no.	85393290
Box quantitiy (pcs.)	10
EAN Box	4008597465765
Gross weight of box in kg	1.425
Length of box in m	0.4
Width of box in m	0.17
Height of box in m	0.27
Pieces per palette	1080
ETIM class	EC000037
ETIM class name	Metal halide lamp without reflector
Old article no.	32410756





Electric Parameters

Lamp nominal wattage	1 kW
Rated wattage	1000.0 W
Mains voltage	230 V
Ignition voltage	4.0 to 5.0
Hot restrike voltage	36 kV
Lamp's nominal current	9.3 A
Nominal choke current	9.5 A
Running up current max.	190%
Compensation capacitor for 50Hz operation	85 µF
Energy Consumption kWh/1000h	1100
Fuse	Daelay-action; min. double Nominal current

Light Application Parameters

Luminous flux	90000 lm
Rated lamp luminous flux	90000 lm
Luminous efficiency	90 lm/W
Radium light colour	daylight
Colour temperature	6100 K
Colour rendering index Ra	90
Coloure rendering index Ra nominal	90
Rated colour rendering index Ra	85
Colour rendering group	90-100 (Klasse 1A)

Service Life

Mean service life	6000 h
Info about service life	12B50, 50Hz
Lamp survival factor at 2000h	0.95
Lamp survival factor at 4000h	0.77
Lamp survival factor at 6000h	0.65
Lamp survival factor at 8000h	0.50
Lumen maintenance at 2000h	0.99
Lumen maintenance at 4000h	0.98
Lumen maintenance at 6000h	0.97
Lumen maintenance at 8000h	0.88
Operation mode for LLMF/LSF	50 Hz

Specification

Diameter max.	36 mm
Length max.	187 mm
Overall length	187 mm
Controllable (in suitable circuit)	No
dimmable	nein
Energylabel from 2013	A+
Mercury content	70.0 mg
Base	cable
Lamp shape	Tube, two bases
Design	clear
Colour	other

Notes on Operation

Starter / Ingnitor	external
Enclosed luminiares required	Yes
Ignition assured down to about (°C)	-20 (with heated ignitor -50)
Re-ignition behaviour	hot restrike possible
Burning position	p15 / s15
External ballast required	Yes
External ignitor required	Yes
Enclosed luminiares required	Yes

Miscellaneous

EU Directive	TIM
ILCOS name	MN-1000/959-H-K12s-36/187
LBS name	HIT-DE-h15-v15 1000W/959 cable

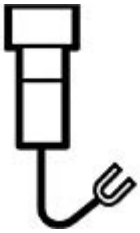
Notes:

Metal halide lamp with quartz burner, short arc lamp with excellent beam control

Please, refer to www.radium.de/recycling for notes on disposal of burned-out lamps as well as lamp breakage.
The 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).

Notes

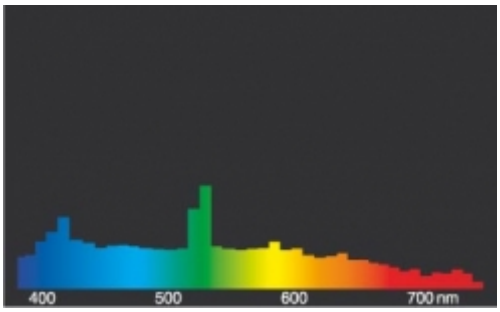
Base



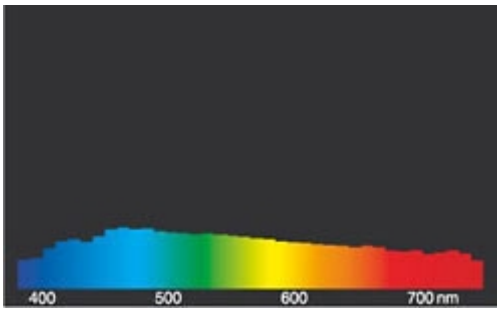
K12s-36
IEC/EN 60061-1
Sheet 7004-168-1

Spectrum

Natural daylight is a mixture of direct sunlight and the light of the sky. Therefore, its spectral composition changes permanently due to the changing time of day. The standardised light classification D65 corresponds to a daylight with a colour temperature of approximately 6500 K.
Every discharge lamp type has got an individual spectral power distribution according to its chemical filling. From this result important properties light colour or colour rendering.
Should the spectral lines be very close together the lamp presumably has got a very good colour rendering index, so, Ra might be near 100. Does the spectrum rather look like single lines or frayed out the colour rendering of the lamp will probably be not as good.
If number and height of the spectral lines within the blue range (around 400 nm) prevails it might be a lamp with a rather cold light colour like for example daylight. On the other hand, should the red (around 700 nm) or the red and yellow (around 600 nm) range be dominant one can assume that the lamp will be a rather warm light colour like WDL.
After the lamp start a metal hlide lamp needs about 2-4 minutes time to reach its full luminous flux, all colours in the spectrum are within the discharge arc then.
Visible region from 380 to 780 nm; height of graph corresponding with relative spectral emission (400mW/klm) per 10nm.

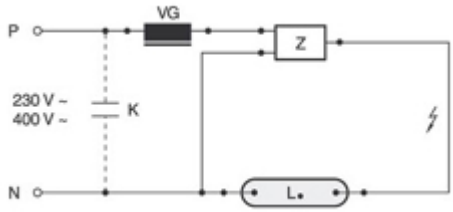


HRI.../D



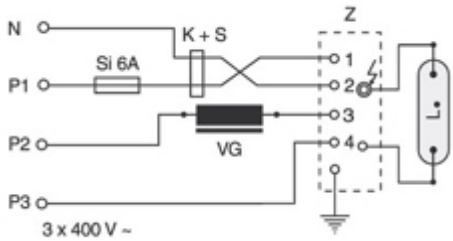
daylight(D 65)

Circuit diagram(s)



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 lamp's 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.



Circuit for 400V-HID-lamps suitable for hot restrike
Key:
L. = lamp
VG = electromagnetic ballast (KVG/VVG)
P = phase
N = zero potential
K = p. f. correction capacitor
Z = ignitor

S = fuse

The required control gear (here fuse, capacitor, ignitor and ballast) for the lamp's 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.

Special features

Please, dump as special waste, **no ordinary household waste!**

General notes

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.