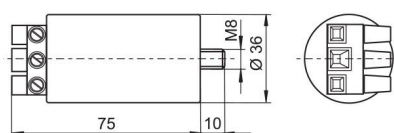


Electronic Superimposed Ignitors for HS Lamps up to 70 W

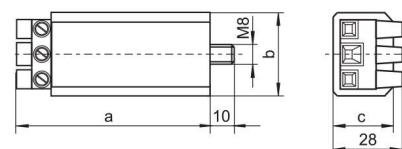
Standard version or with automatic switch-off
 For high pressure sodium lamps (HS) and ceramic discharge lamps CHI-TT/ET with base E27
 Phasing of the ignition voltage: 60–90 °el and 240–270 °el
 Max. permitted casing temperature: 105 °C
 Fastening: male nipple with pre-assembled washer and nut
 For luminaires of protection class I and II



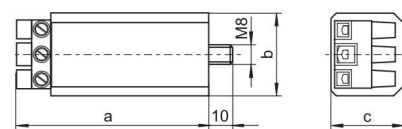
Al casing



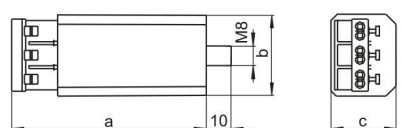
PC casing – K



PC casing – K D20



PC casing – with push-in terminals



Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp A	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Switch-off time sec./Hz	Casing d (∅) mm	a mm	b mm	c mm	Weight g
Aluminium casing (Al) with screw terminals: 0.75–4 mm²													
Z 70 S	140413	220–240	2	< 0.6	< 5	1.8–2.3	20–200	—	35	76	—	—	135
Plastic casing (PC) with screw terminals: 0.75–4 mm²													
Z 70 K	140481	220–240	2	< 0.6	< 5	1.8–2.3	20–200	—	—	78	34	27	125
Z 70 K D20	141580*	220–240	2	< 0.6	< 5	1.8–2.3	20–100	1216/50–60	—	80	34	30	145
Plastic casing (PC) with push-in terminals: 0.5–2.5 mm²													
Z 70 K D20	142330*	220–240	2	< 0.6	< 5	1.8–2.3	20–100	1216/50–60	—	83	34	30	145

* With IPP technology

Electronic Superimposed Ignitors for HS Lamps 70 (DE) to 250 W and HI Lamps 35 to 250 W

Standard version or with automatic switch-off for high pressure sodium lamps (HS), metal halide lamps (HI) and ceramic discharge lamps (C-HI)

Phasing of the ignition voltage:

60–90 °el and 240–270 °el

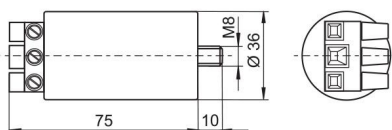
Max. permitted casing temperature: 105 °C

Fastening: male nipple with pre-assembled washer and nut

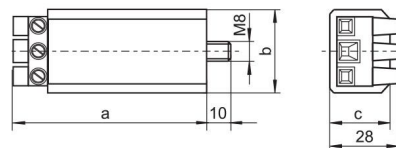
For luminaires of protection class I and II



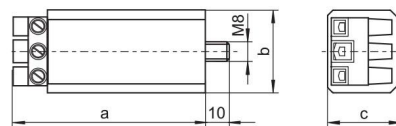
Al casing



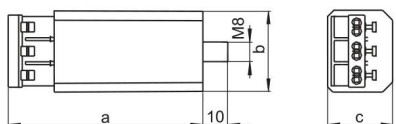
PC casing – K



PC casing – K D20



PC casing – with push-in terminals



Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Switch-off time sec./Hz	Casing d (∅) mm	a mm	b mm	c mm	Weight g
Aluminium casing (Al) with screw terminals: 0.75–4 mm²													
Z 250 S	140425	220–240	3.5	< 1.8	< 20	4–5	20–100	—	35	76	—	—	140
Plastic casing (PC) with screw terminals: 0.75–4 mm²													
Z 250 K	140489	220–240	3.5	< 1.8	< 20	4–5	20–100	—	—	78	34	27	130
Z 250 K D20	141581*	220–240	3.5	< 1.8	< 20	4–5	20–100	1216/50–60	—	80	34	30	145
Plastic casing (PC) with push-in terminals: 0.5–2.5 mm²													
Z 250 K D20*	142350*	220–240	3.5	< 1.8	< 20	4–5	20–100	1216/50–60	—	83	34	30	145

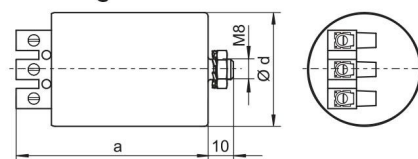
* With IPP technology

Electronic Superimposed Ignitors for HS Lamps 70 (DE) to 400 W and HI Lamps 35 to 400 W



Standard version or with automatic switch-off
 For high pressure sodium lamps (HS), metal halide lamps (HI) and ceramic discharge lamps (C-HI)
 Phasing of the ignition voltage: 60–90 °el and 240–270 °el
 Max. permitted casing temperature: 105 °C
 Screw terminals: 0.75–4 mm²
 Fastening: male nipple with pre-assembled washer and nut
 For luminaires of protection class I and II

Al casing



Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Switch-off time sec./Hz	Casing d (∅) mm	a mm	b mm	c mm	Weight g
Aluminium casing (Al)													
Z 400 S	140427	220–240	5	< 3	< 25	4–5	20–100	—	45	76	—	—	250
Z 400 S D20	141583*	220–240	5	< 3	< 25	4–5	20–100	1216/50–60	45	90	—	—	280

* With IPP technology

Electronic Superimposed Ignitors for HS Lamps 70 (DE) to 400 W and HI Lamps 35 to 400 W

Standard version or with automatic switch-off
Compact shape

For high pressure sodium lamps (HS),
metal halide lamps (HI) and
ceramic discharge lamps (C-HI)

Ignition voltage: 4–5 kV

Phasing of the ignition voltage:

60–90 °el and 240–270 °el

Max. permitted casing temperature: 105 °C

Fastening: male nipple with pre-assembled
washer and nut

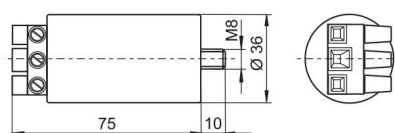
For luminaires of protection class I and II

For luminaires of protection class I

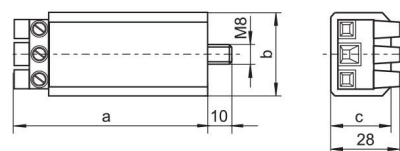
(140594, 147707)



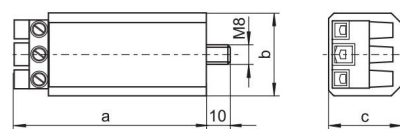
Al casing



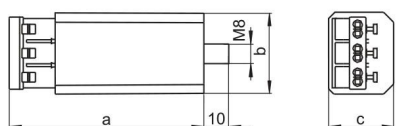
PC casing – K



PC casing – K D20



PC casing – with push-in terminals



Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Switch-off time sec./Hz	Casing d (∅) mm	a mm	b mm	c mm	Weight g
Aluminium casing (Al) with screw terminals: 0.75–4 mm²													
Z 400 M	140594	220–240	5	< 3	< 35	4–5	20–50	—	35	76	—	—	140
Z 400 M VS-Power	147707**	220–240	5	< 3	< 35	4–5	20–50	—	35	76	—	—	140
Z 400 M S	140693	220–240	5	< 3	< 35	4–5	20–50	—	35	76	—	—	140
Plastic casing (PC) with screw terminals: 0.75–4 mm²													
Z 400 M K	140597	220–240	5	< 3	< 35	4–5	20–50	—	—	78	34	27	130
Z 400 M K VS-Power	142897**	220–240	5	< 3	< 35	4–5	20–50	—	—	78	34	27	130
Z 400 M K D20	141582*	220–240	5	< 3	< 35	4–5	20–50	1216/50–60	—	80	34	30	145
Plastic casing (PC) with push-in terminals: 0.5–2.5 mm²													
Z 400 M K D20	142370*	220–240	5	< 3	< 35	4–5	20–50	1216/50–60	—	83	34	30	145

Recommended for outdoor lighting

* With IPP technology

** Not suitable for C-HI lamps

Electronic Superimposed Ignitors for HS Lamps 600 and 750 W



Standard version

For high pressure sodium lamps (HS)

Phasing of the ignition voltage:

60–90 °el and 240–270 °el

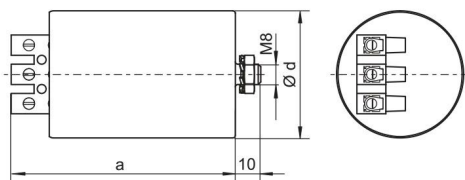
Max. permitted casing temperature: 105 °C

Screw terminals: 0.75–4 mm²

Fastening: male nipple with pre-assembled washer and nut

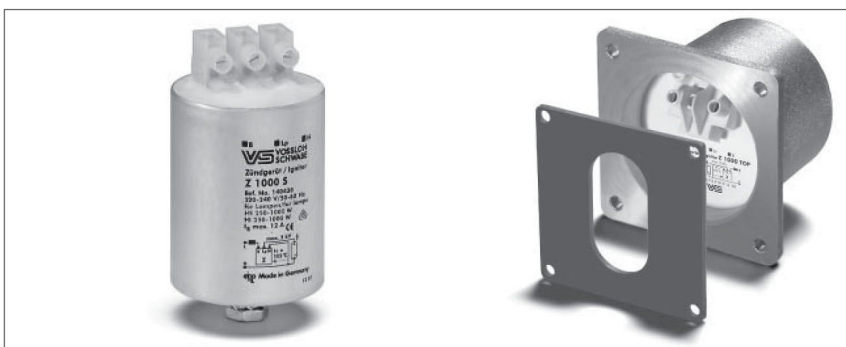
For luminaires of protection class I and II

Al casing



Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Switch-off time sec./Hz	Casing				Weight g
									d (Ø) mm	a mm	b mm	c mm	
Aluminium casing (Al)													
Z 750 S	146990	220–240	8	< 3	< 20	4–5	20–100	—	50	90	—	—	360

Electronic Superimposed Ignitors for HS and HI Lamps 250 to 1000 W



Standard version or with automatic switch-off
For high pressure sodium lamps (HS)
and metal halide lamps (HI)

Phasing of the ignition voltage:

60–90 °el and 240–270 °el

Max. permitted casing temperature: 105 °C

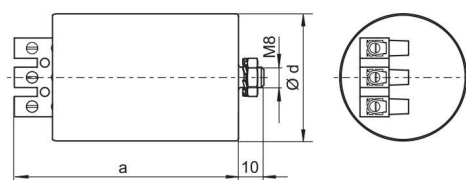
Screw terminals: 0.75–2.5 mm²

(Z 1000 S: 0.75–4 mm²)

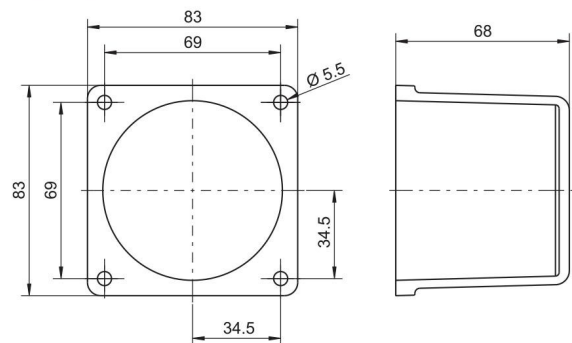
Fastening: male nipple with pre-assembled
washer and nut

For luminaires of protection class I and II

Al casing



Z 1000 TOP



Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Switch-off time sec./Hz	Casing				Weight g
									d (∅) mm	a mm	b mm	c mm	
Z 1000 S	140430	220–240	12	< 6	< 35	4–5	20–100	—	50	80	—	—	340
Z 1000 TOP	140607**	220–240	12	< 6	< 35	4–5	20–100	—	—	83	83	68	620
Z 1000 S D20	141584*	220–240	12	< 6	< 35	4–5	20–100	1216/50–60	50	80	—	—	340

* With IPP technology

** For flange-mounting with gasket for degree of protection IP55

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Electronic Superimposed Ignitors for HS and HI Lamps up to 1000 W



Standard version

For high pressure sodium lamps (HS) and metal halide lamps (HI)

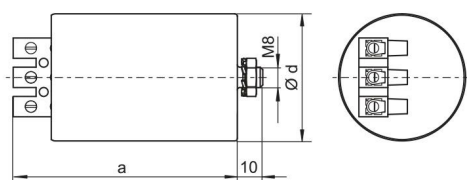
For long lead lengths

Max. permitted casing temperature: 105 °C

Screw terminals: 0.75–2.5 mm²

Fastening: male nipple with pre-assembled washer and nut

Al casing



For HS and HI lamps 150 to 1000 W

Phasing of the ignition voltage: 60–90 °el

For luminaires of protection class I

Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Switch-off time sec./Hz	Casing			Weight g
									d (∅) mm	a mm	b mm	

Aluminium casing (Al)

Z 1000 L	140471*	220–240	12	< 6	< 35	4–5	20–2000	—	50	97	—	—	340
----------	----------------	---------	----	-----	------	-----	---------	---	----	----	---	---	-----

* Not suitable for HI lamps types ND1, WDL or for HS lamps types S, de-Luxe, Comfort or similar

For HS lamps 600 to 1000 W/400 V and HI lamps 1000 W/400 V

Phasing of the ignition voltage:

60–90 °el and 240–270 °el

For luminaires of protection class I and II

Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Switch-off time sec./Hz	Casing			Weight g
									d (∅) mm	a mm	b mm	

Aluminium casing (Al)

Z 1000 S/400 V	140496	380–415	6	< 3.3	< 28	4–5	20–2000	—	45	84	—	—	295
----------------	---------------	---------	---	-------	------	-----	---------	---	----	----	---	---	-----

Electronic Superimposed Ignitors for Projection Lamps up to 1200 W

Standard version

For high-pressure discharge lamps

Phasing of the ignition voltage:

60–90 °el and 240–270 °el

Max. permitted casing temperature: 105 °C

Screw terminals: 0.75–2.5 mm²

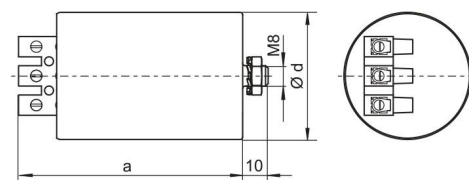
Fastening: male nipple with pre-assembled

washer and nut

For luminaires of protection class I



Al casing



Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Switch-off time sec./Hz	Casing				Weight g
									d (Ø) mm	a mm	b mm	c mm	
Z 1200/2.5	140608*	220–240	15	< 7.5	< 40	2–2.5	20–200	—	50	80	—	—	330
Z 1200/9	140609**	220–240	15	< 10	< 40	7–8	20–50	—	50	135	—	—	650

* For lamps, e.g. HSR, MSR, SN

** For lamps, e.g. HMI, HTI, CDI, RSI, CSR

1

2

3

4

5

6

7

8

9

10

Electronic Superimposed Ignitors for HI Lamps up to 3500 W

Standard version

For metal halide lamps (HI)

Phasing of the ignition voltage:

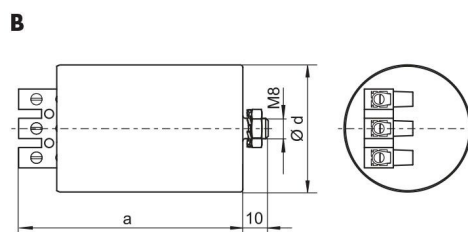
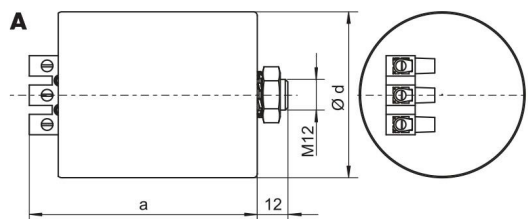
60–90 °el and 240–270 °el

Max. permitted casing temperature: 105 °C

Screw terminals: 0.75–2.5 mm²

Fastening: male nipple with pre-assembled washer and nut

For luminaires of protection class I and II



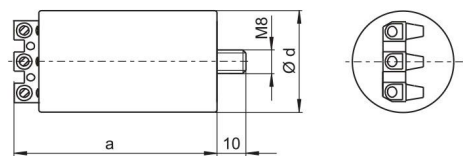
Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Switch-off time sec./Hz	Drawing	Casing			Weight g	
										d (Ø) mm	a mm	b mm		c mm
Aluminium casing (Al)														
Z 2000 S	140432	220–240	20	< 6	< 30	4–5	20–100	—	A	65	96	—	—	640
Z 2000 S/400 V	140497	380–415	12.7	< 5	< 32	4–5	20–2000	—	B	50	88	—	—	340
Z 3500 S/400 V	140499	380–415	20	< 7	< 35	4–5	20–100	—	A	65	96	—	—	650

Pulse Ignitors for HS and HI Lamps up to 1000 W

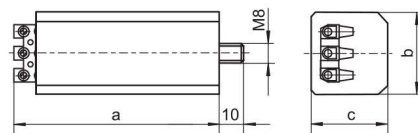
With automatic switch-off
 For high pressure sodium lamps (HS),
 metal halide lamps (HI) and
 ceramic discharge lamps (C-HI)
 Max. permitted casing temperature: 95 °C
 Screw terminals: 0.75–2.5 mm²
 Fastening: male nipple with pre-assembled
 washer and nut
 For luminaires of protection class I
 This pulse ignitor is only for use with ballasts that
 have a dedicated tapping, as this determines the
 size of the ignition voltage.



Al casing



PC casing



For HS lamps 50 to 1000 W, HI lamps 35 to 1000 W and C-HI lamps 35 to 400 W

Type	Ref. No.	Voltage AC 50–60 Hz V	Number of ignition pulses per mains period	Ignition voltage kV	Load capacity pF	Programmed switch-off time sec./Hz	Casing			Weight g
							a mm	b mm	c mm	

Plastic casing (PC)

PZ 1000 K D20	142784*	220–240 ±10%	≥ 2	1.8–2.3/4–5	20–1000	1216/50–60	74	34	27	100
---------------	----------------	--------------	-----	-------------	---------	------------	----	----	----	-----

With IPP technology

* Suitable ballasts (type: NaHJ...PZT) are available on request

For HS lamps 600 to 1000 W/400 V and HI lamps 1000 W/400 V

Type	Ref. No.	Voltage AC 50–60 Hz V	Number of ignition pulses per mains period	Ignition voltage kV	Load capacity pF	Programmed switch-off time sec./Hz	Casing				Weight g
							d (Ø) mm	a mm	b mm	c mm	

Aluminium casing (Al)

PZ 1000/400 V A5	142783*	380–420	≥ 1	4–5	20–800	300/50	40	80	—	—	155
------------------	----------------	---------	-----	-----	--------	--------	----	----	---	---	-----

* Suitable ballasts (type: NaHJ...PZT) are available on request

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Pulse Ignitors for HS Lamps 50 to 1000 W

Standard version

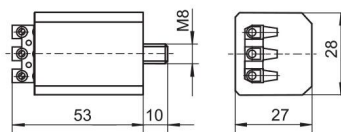
For standard high pressure sodium lamps (HS)

Max. permitted casing temperature: 95 °C

Screw terminals: 0.5–1.5 mm²

Fastening: male nipple with pre-assembled washer and nut

For luminaires of protection class I



Type	Ref. No.	Voltage AC 50–60 Hz V	Number of ignition pulses per mains period	Ignition voltage kV	Load capacity pF	Programmed switch-off time sec.	Casing			Weight g
							d (∅) mm	a mm	b mm	

Plastic casing (PC)

PZS 1000 K	140613	220–240	approx. 1/sec.	approx. 4	20–4000	—	—	50	28	27	50
------------	---------------	---------	----------------	-----------	---------	---	---	----	----	----	----

Not suitable for HS lamps types Plus, Super, XL, HO

Suitable ballasts (type: NaH...P) are available on request

Pulse Ignitors for HI Lamps 250 to 2000 W, Ignition Voltage up to 1 kV

Standard version

For metal halide lamps (HI)

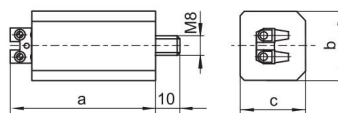
with ignition voltage of 0.9 kV

Max. permitted casing temperature: 95 °C

Screw terminals: 0.5–2.5 mm²

Fastening: male nipple with pre-assembled washer and nut

For luminaires of protection class I



Type	Ref. No.	Voltage AC 50–60 Hz V	Number of ignition pulses per mains period	Ignition voltage kV	Load capacity pF	Programmed switch-off time sec.	Casing			Weight g
							a mm	b mm	c mm	

Plastic casing (PC)

PZI 1000/1 K	140617	220–240	≥ 1	0.7–0.9	max. 10000	—	57	28	27	50
--------------	---------------	---------	-----	---------	------------	---	----	----	----	----

Suitable ballasts see page 31, 32 and 33

Instant Restrike Ignitors for High-pressure Discharge Lamps up to 600 W

For high pressure sodium lamps (HS), metal halide lamps (HI), ceramic discharge lamps (C-HI) and projection lamps in accordance with the lamp table shown below
For installation as a symmetric ignition device (whereby the ignition voltage is split equally over both lamp electrodes)

For installation in luminaires of protection class I
Max. permitted ambient temperature t_a : 60 °C

Mains connection: screw terminal 3-poles,
0.75–2.5 mm²

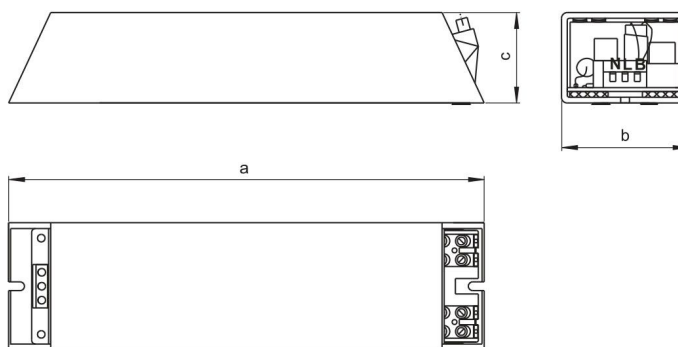
Lamp connection: screw terminal 0.75–2.5 mm²
for circuit 1 and 2

Fastening: 2 mounting slots for screws M4

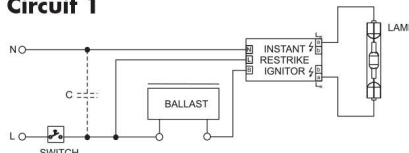
Material: plastic casing made of ABS

CAUTION

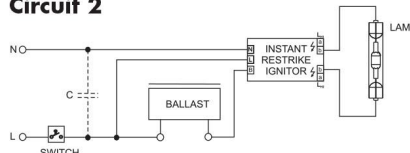
Defective lamps must be replaced immediately



Circuit 1



Circuit 2

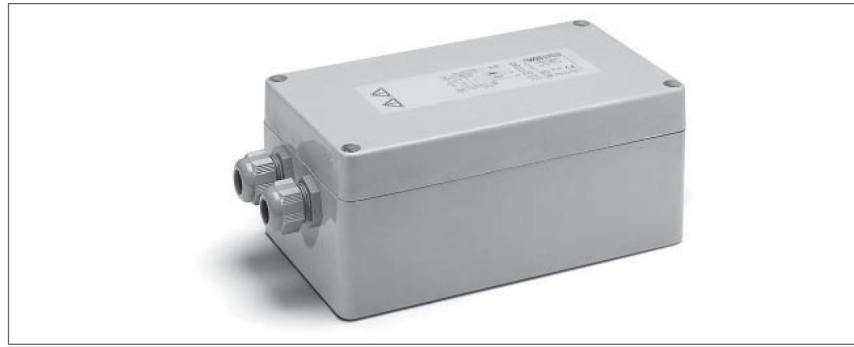


Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage* kV	Ignition time sec.	Load capacity pF	Casing			Weight g
									a mm	b mm	c mm	
HZ 600 K	147790	230 ±10%	8	< 4	< 10	20–30	approx. 6	5–30	247	66	47	1000

* Depending on the respective circuit; the ignition voltage is split equally over both lamp electrodes

Lamp table						
Circuit 1				Circuit 2		
Lamp type	Base	VS lampholder type	Catalogue page	Lamp type	Base	VS lampholder type
CDM-TD 70 W	RX7s	306	77	HBO 50 W	SFa8-2	—
HC-TS 70 W	RX7s	306	77	MSR 125 HR	GZX9.5	—
HI 70 W (DE)	RX7s	306	77	HBO 200 W	SFc10-4	—
HS 70 W (DE)	RX7s	306	77	HBO 200 W	SFc10-4	—
RC-TS 70 W	RX7s	306	77	MSR 200 HR	GZX9.5	—
HS 150 W (DE)	RX7s	306	77	HTI 250 W	FaX1.5	—
HMI 200 W	X515	—	—	HMI 400 W/SE	GZZ9.5	—
HMI 200 W/X	GZY9.5	—	—	HMP 400 W	FaX1.5	—
MSI 200 W	GZY9.5	—	—	HTI 400 W	FaX1.5	—
RSI 200 W	X515	—	—	RSI 400 W	GZX9.5	—
HS 250 W (DE)	Fc2	O25	77–78	HBO 500 W	SFcY13-5	—
HS 400 W (DE)	Fc2	O25	77–78	HMP 575 W	SFc10-4 / G22	—
MSR 400 HR	GZZ9.5	—	—	HMI 575 W	SFc10-4	—
MSI 575 W	SFc10	—	—	RSI 575 W	G22	—
MSR 575 HR	G22	—	—	HTI 600 W	FaX1.5	—

Instant Restrike Ignitors for High-pressure Discharge Lamps 1000 W/230 V and 2000 W/400 V



For high pressure sodium lamps (HS), metal halide lamps (HI), ceramic discharge lamps (C-HI) in accordance with the lamp table shown below For installation as a symmetric ignition device (whereby the ignition voltage is split equally over both lamp electrodes)

Degree of protection: IP65

For installation in luminaires of protection class I

Max. permitted ambient temperature t_a : 60 °C

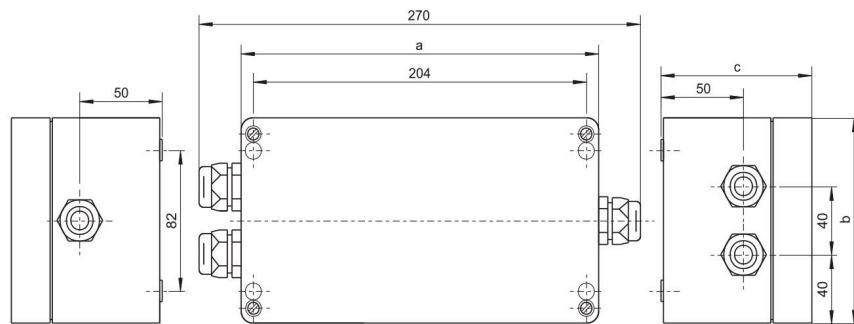
Mains connection: screw terminal 3-poles, max. 4 mm²

Earth connection: screw terminal max. 4 mm²

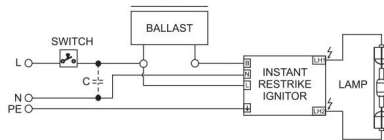
Lamp connection: screw terminal max. 4 mm²

Fastening: 4 holes Ø 6.3 mm in the base of casing

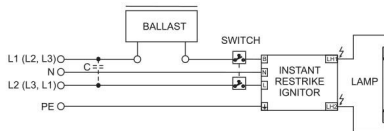
Material: casing made of fibreglass-reinforced polyester



Circuit diagram HZ 1000 K/230V



Circuit diagram HZ 2000 K/400 V



CAUTION

Defective lamps must be replaced immediately

Type	Ref. No.	Voltage AC 50–60 Hz V	Max. lamp current A	Internal loss W	Inherent heating K	Ignition voltage* kV	Ignition time sec.	Load capacity pF	Casing			Weight g
									a mm	b mm	c mm	
HZ 1000 K	147791	230 ±10%	12	< 5	< 10	36	approx. 6	5–50	218	120	92	3745
HZ 2000 K/400 V	147793	400 ±10%	12.7	< 5	< 10	36	approx. 6	5–30	218	120	92	3745

* The ignition voltage is split equally over both lamp electrodes

Lamp table HZ 1000 K

Lamp type	Lamp manufacturer	Base	VS lampholder type	Catalogue page	Lamp type	Base	VS lampholder type	Catalogue page
CDM-TD 150 W	Philips	RX7s	306	77	HI 400 W (DE)	Fc2	O25	77–78
HCHTS 150 W	Osram	RX7s	306	77	HS 400 W (DE)	Fc2	O25	77–78
HI 150 W (DE)		RX7s	306	77	HI 1000 W (DE)	Fc2	O25	77–78
HS 150 W (DE)		RX7s	306	77	HS 1000 W (DE)	Cable, K12s-7	211	79
HI 250 W (DE)		Fc2	O25	77–78	–	–	–	–
HS 250 W (DE)		Fc2	O25	77–78	–	–	–	–

Lamp table HZ 2000 K/400 V

Lamp type	Base	VS lampholder type	Catalogue page	Note
HI 2000 W (DE)	Cable, K12s-7	211	79	not suitable for HR-ITS 2000 W/N/L, HQ-ITS 2000 W/N/L