

## Electronic Power Switches for HS Lamps up to 600 W and HM Lamps up to 700 W



For high pressure sodium lamps (HS) and mercury vapour lamps (HM)  
For power reduction by using ballasts with multiple voltage tapping and superimposed ignitors

PR 12 K LC and PR 12 K D are also suitable for power switching of LED drivers and electronic ballasts.

Casing: PC

Max. permitted casing temperature  $t_c$ : 80 °C

Screw terminals: 0.75–2.5 mm<sup>2</sup>

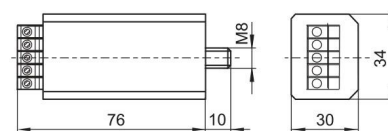
Fastening: male nipple with pre-assembled washer and nut

For luminaires of protection class I and II

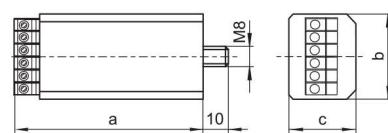
Circuit diagrams for power reduction

see pages 96–97.

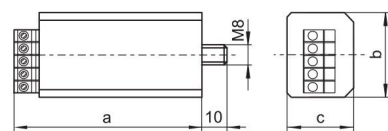
**PU 12 K/PR 12 KD/PR 12 K LC**



**PU 120 K**



**PU 121 K**



### Advantages of PR 12 K LC

- intelligent, auto-adaptive concept
- eliminates the time-consuming task of continually adjusting the times of power-reduced operation to suit constantly changing day-night cycles
- removes the need for making adjustments due to daylight-saving times
- easy programming via dial
- no additional control line necessary
- optimal suitable for the supplementary integration into existing luminaires
- suitable for luminaires of protection class I and II

Type	Ref. No.	Voltage AC V, Hz	Max. contact current		Inherent heating K	Integrated delay switching	Control phase for power reduction (circuitry logic)	Casing			Weight g
			A/λ	A/λ				a mm	b mm	c mm	
<b>Power reduction with control phase</b>											
PU 12 K	<b>140621</b>	230, 50 / 220, 60	8/0.5	12/1	< 25	—	disconnect or connect	74	34	27	100
PU 120 K	<b>140622*</b>	230, 50 / 220, 60	8/0.5	12/1	< 10	327 sec.	disconnect	74	34	27	100
PU 121 K	<b>140623*</b>	230, 50 / 220, 60	8/0.5	12/1	< 25	327 sec.	connect	74	34	27	100
<b>Power reduction without control phase</b>											
PR 12 K LC****	<b>142170**</b>	220–230 ±10%, 50 220 ±10%, 60	8/0.5	12/1	< 12	selectable	without control phase	76	34	31	100
PR 12 K D****	<b>142150***</b>	220–230 ±10%, 50 220 ±10%, 60	8/0.5	12/1	< 12	selectable	without control phase	76	34	31	100

\* For full-load lamp start

\*\* Time of power-reduced operation selectable, starting point of switching-time changes automatically to suit constantly changing day-night cycles

\*\*\* Power reduction after a constant switching-time (delay switching); switching-time selectable: 3 | 3.5 | 4 | 4.5 | 5 | 5.5 | 6 hrs at 50 Hz

\*\*\*\* 120–240 V ±10% on request

## Electronic Superimposed Ignitors with Power Switch for HS Lamps 50 to 250 W



For ignition and power reduction of high pressure sodium lamps (HS)

Casing: PC

Control voltage: 230 V ±10%

Response/cut-out voltage: 170–198 V

Phasing of the ignition voltage:

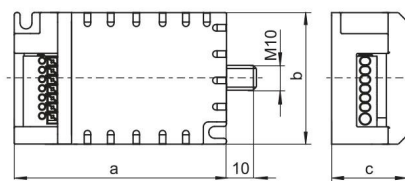
60–90 °el and 240–270 °el

Max. permitted casing temperature  $t_c$ : 80 °C

Push-in terminals: 0.75–1.5 mm<sup>2</sup>

Fastening: male nipple with pre-assembled washer and nut

For luminaires of protection class I and II



Applicable for positive switch logic allowing for terminal pin assignment of power switch

- Full load lamp start is guaranteed
- Switching to power reduced operation after delay time of approx. 5 min.

Type	Ref. No.	Voltage AC V, Hz	Max. lamp current A	Number of ignition pulses per mains period	Internal loss W	Inherent heating K	Ignition voltage kV	Load capacity pF	Programmed switch-off time sec./Hz	Casing			Weight g
										a	b	c	
<b>HS lamps 50 and 70 W</b>													
ZPU 70 K D20	<b>142098</b>	230, 50/220, 60	2	4	< 2	< 15	1.8–2.3	20–200	1216/50–60	96	50	32	240
<b>HS lamps 70 (DE) to 250 W</b>													
ZPU 250 K D20	<b>142099</b>	230, 50/220, 60	3	6	< 2	< 15	4–5	20–50	1216/50–60	96	50	32	240

Circuit diagrams see page 95