Switch Units for Electronic Operating Devices with 1–10 V Interface

Vossloh-Schwabe's switch units are designed to enable one-step power reduction of lamps (FL, CFL, LED, HS, HI and C-HI) with the help of the respective electronic ballast or converter.

To this end, the switch units utilises the $1-10\,\mathrm{V}$ interface of the control gear unit. The switch unit is mainly intended for outdoor luminaires in systems with or without a control phase.

Shape: 56x28x27 mm

Casing: PC

Screw terminals: 0.75-2.5 mm²

Circuit diagram SU 1-10 V K

SU

Max. permissible casing temperature t_c : 80 °C Min. permissible ambient temperature t_a : -30 °C Fastening: plastic male nipple with pre-assembled

washer and nut

Power reduction SU 1–10 V K for lighting systems featuring an L_{ST} control phase

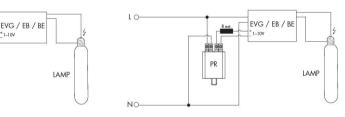
The switch unit employs a positive switching to reduce power, i.e. power is reduced when the control phase is switched off ($L_{ST}=0$ V). The 1–10 V interface of the electronic ballast is addressed at the moment that power reduction is effected.

Power reduction PR 1–10 V K LC for lighting systems without a control phase

This switch unit can be used to effect power reduction in lighting systems that do not feature a control phase.

The 1–10 V interface is addressed on the basis of the fundamental operating principle used by Vossloh-Schwabe's PR 12 K LC power switch (details of which can be made available on request). This power switch is capable of determining the starting time of reduced-power operation over the measured operating time of a lighting system. As a result, it is no longer necessary to spend valuable time modifying the power-reduction unit to suit the continually changing day-night cycle; changing the clocks in line with daylight saving measures in the summer and winter is equally unnecessary. The 1–10 V interface of the electronic ballast is addressed as soon as the system is switched to reduced power.

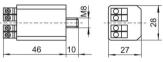
Circuit diagram PR 1-10 V K LC





2

3



5

6

7

8

Туре	Ref. No.	Control voltage LST	Externally (on site) connected resistor (R _{ext.})	Self-heating	Weight
		V, 50/60 Hz	kΩ (min. 0.1 W)	K	g
For lighting systems with control phase					
SU 1-10 V K	149992	220-240 V ±10%	1–70	< 10	50
For lighting systems without control phase					
PR 1-10 V K LC	149993	_	1–70	< 10	50

10