Swistec

Ripple Control Receiver SRlux

The SRlux is a state-of-the-art ripple control receiver of the newest generation, especially designed for street light control applications. The receiver disposes of two relays (16 A change-over contact) and can directly be installed into cable boxes inside lamp posts. The optional available analogue output of 0-10 V allows control of street light dimmers.

Features

- 2 relays 230 V with 1 closing contact each
- Analogue voltage output 0-10 V (optional) for control of street light dimmers
- Compatible with all telegram systems commonly used (incl. DIN 43861-301)
- Swistra functionalities (optional)
- Reaction on loss and return of power individually programmable
- Time Program Functions, astronomical calendar
- Network wide clock synchronisation
- Optical interface in accord. with IEC 62056-21 for parameterization
- Waterproof casing (optional)

Technology

All Swistec ripple control receivers use state-of-the-art, recently developed filter algorithms capable of reliably processing ripple control signals with operating voltages below 0.3% Un – a result of state-of-the-art processor technology combining high CPU power with little power consumption.

Outputs

The SRlux disposes of 2 switches with 1 closing contact each.

The contacts used in this receiver type have especially been designed to meet the requirements for of street lighting operation. They withstand the typical lamp loads or electronic ballasts. The ratings are listed overleaf.

For direct control of street light dimmers, an analogue voltage output 0-10 V is available (optional).

Time Program Functions

- Internal clock (remotely synchronized) for autonomous operation of up to 8 work schedules with 15 switching times each
- Free assignment of work schedules to the relays
- Real-time clock with super-cap (option), voltage interruptions can be bridged for a minimum of 48 hours
- Astronomical calendar

Programming

The programming is done via the standard optical interface (acc. to IEC 62056-21). The programming application is running on PCs, laptops or tablets under Windows XP or Windows 7.

Technical Data

Right of any modification is reserved / Release 2.0

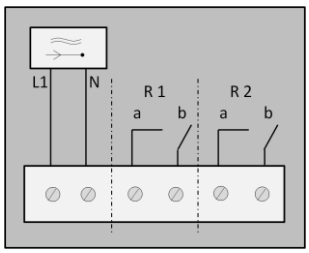
Power supply:	•	Mains voltage	230 VAC (-20% … +15%)
	•	Frequency range of mains voltage	50 Hz (-2% …+1%)
	•	Power consumption (supply)	< 1 W / 10 V kap.
	•	Surge voltage resistance	8 kV 1,2/50 µs accord. IEC 60060-1
	•	Terminal sizes	Supply and relays 1 x 2.5 mm²
Filter data:	•	Operating frequency	110 – 2000 Hz / programmable
	•	Operating voltage	Uf ≥ 0.3% Un
	•	Non-operating voltage	Unf ≥ 0.1% Un ; Unf < Uf
	•	Maximum control voltage	8-15 times Uf (depending on frequency)
	•	Swistra functions	Available, optional
Output data:	•	Number of relays	2, bistable
	•	Number of outputs (w/o option)	1 closing contact each, free of potential
	•	Number of outputs (with option 0..10 V)	1 closing contact each, potential from mains
	•	Nominal switching voltage Uc	230 V, 50 Hz
	•	Nominal switching current Ic	40 A, cos phi = 1 20 A, lamp load
	•	Voltage output (optional)	0 – 10 VDC
Real-time clock:	•	Accuracy	+/- 20 x 10^{-6}
	•	Power reserve (option)	> 48 h, SuperCap optional
Resistance to climate conditions:	•	Operating temperature	-20 ... +60°C
	•	Storage temperature	-30 ... +60°C
Design:	•	Protection	IP 51 (optional available: waterproof casing)
	•	Size (height x width x depth)	84 x 60 x 43 mm

Field of application

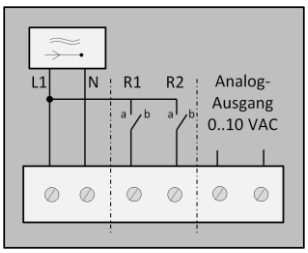
Lamp types / ballasts	Max. load
Incandescent lamp	2`500W
Fluorescent lamp, non compensated	2`500W
Fluorescent lamp, parallel compensated	1`300W / 140µF
Fluorescent lamp, duo-combination	2 x 2`500W
Halogen lamp (230VAC)	2`500W
Low voltage halogen lamp with transformer	500VA
Mercury arc / sodium discharge lamp, non compensated	2`000W
Mercury arc / sodium discharge lamp, parallel compensated	2`000W / 140µF

SRlux without terminal cover, for direct integration into the connection box of a street light pole

Circuit diagram



SRlux without options



SRlux with analog output 0..10 VAC

Swistec

Intelligent Energy Management Systems

Ripple Control | Smart Solutions | Transformers

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