

Intelligent lamp pole receiver LCR 270

The specialist for energy saving control of lighting inside the lamp pole

Beside the classic ripple control processing of up to two relays the LCR270 can also control the dimming input of the lamp control gear. The integrated remotely programmable switch clock completes the control capability of this receiver. For this reason the LCR270 provides various options to reduce the illumination level when admissible.

Digital filtering of the ripple control signal is done by a microcontroller in most modern technology using an algorithm developed by Elster.

Functionality

- Processing of all common ripple control protocols and their specific pulse patterns
- Internal clock with optional buffering by a super cap or a battery, flexible synchronisation using VERSACOM Protocol
- Switch clock depending on week-days, with remote parameterisation using the 'VERSACOM' protocol (DIN 43861-301)
- Switch clock for a year with calculated dawn and dusk times for street light control. The time schedule of switching is calculated according to the geographical position. It can also be modified manually
- Interface (DALI or 1-10V) for control of the dimming function of the lamp control gear
- Programming and test via the electrical interface (USB) is possible without the 230VAC power supply
- Anti tampering and supervision
 - Automatic refreshing of relay positions every 60 seconds
 - Counter for number of switching actions per relay
 - Log file for storage of pulse pattern and signal levels of last telegrams received (minimum 10 telegrams)
 - Log file for storage of events (power failure, low network frequency, signal absence)
- Learning function and signal absence sensing
- Switching delay (1 s – 24 h) related to command
- User friendly programming tool *LCRset6*
- The receiver can be equipped with one or two 16A soldered output relays for reliable switching of parallel compensated lamps
- Standard cable terminal box for lamp poles with input terminals for up to 3 cables 5 x 16 mm²

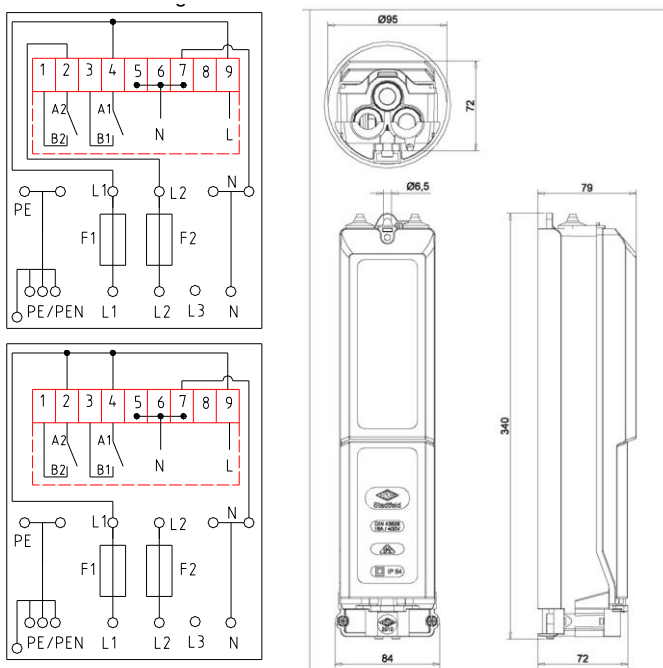


Technical Data

subject to alterations

Power supply	Voltage Un	230V + 11%...-22%
	Frequency of power supply	50Hz +1%...-2%
	Power consumption	< 1W/10VA kap.
	Lightning impulse strength	8kV 1,2/50 according to DIN EN 61 000-4-5
Filter data	Audio frequency	158Hz – 1600Hz
	Selection of audio frequency	any frequency can be set
	Minimum respond signal voltage	Uf > 0.5% Un
	None respond signal voltage	Unf < 0.3% Un or according to agreement
	Maximum signal level	8-15 times Uf (dependent on frequency)
Real time backup	Supercap	> 48 h without power
	Battery	> 3 years without power at 25° Celsius > 10 years with power
	Time deviation	< 2 s/day
Output data	Number of Relays	1 to 2 (bistabil)
	Nominal switching voltage Uc	250V, 50Hz or 60Hz
	Nominal switching current Ic	16A
	Relays type (status a/b programmable)	Normally open, floating contact
	Terminal size	3 x 16 mm ² (input) 2 x 1,5 mm ² (internal connection)
Suitable for load at	Filament lamp	up to 2500 W
	Fluorescent lamp parallel compensated	up to 1300 W / 140 µF
	Mercury vapour- or sodium vapour high	up to 2000 W / 140 µF
	Pressure lamps parallel compensated	
Interface	Parameter setting	RS232 / USB
	Dimming (optional)	DALI or 1 – 10 V
Climatic conditions	Operating temperature	-20...+60°C
	Storage temperature	-30...+60°C
Housing	Dimensions	H = 340 mm, W = 84 mm, D = 79 mm for poles inner diameter 95 mm and greater
	Protection class	IP54

Connection examples and dimensions



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