

Intelligent Ripple Control Receiver LCR170

The LCR170 is a high-quality ripple control receiver including switch clock. It can be used for various control functions and being installed in metering cabinets, switching boxes and subdistribution housings.

Four bistable relays - each with two separate terminals - allow flexible potential-free connections. Relay contacts with gold-plating ensure particularly permanent contact voltages of 5 VDC.



LCR 170



Compact Receiver for Din-Rail
Mounting



Simple Programming without
power supply



4 flexible 8A Relays

Functionality

- Processing of all common ripple control protocols and their specific pulse patterns
- Internal clock with optional buffering by a supercap or a battery, flexible time synchronisation using VERSACOM Protocol (DIN 43861-301)
- Switch clock depending on weekdays, with remote parameterisation using the VERSACOM protocol
- Switch clock for a year with calculated dawn and dusk times for illumination control (e.g. street light) (option)
- Programming, test and readout of status via the electrical USB interface is possible without mains power supply
- Four output relays, potential-free, 8A normally closed contact, AgNi contacts with gold-plating, good for low loads (5V, 2mA – 30V, 50mA), resistant against corrosion and pollution
- 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)
- Cyclic switching function
- Switching delay (1 s – 24 h)
- Passing contact function (1 s – 24 h)
- User friendly programming tool LCRset6 usable for all Receivers of the LCR Family

Technical Data

subject to alterations

Power Supply	Voltage Un Frequency of power supply Lightning impulse strength	230V +15% ... -20% 50Hz +2%...-2% 4kV 1,2/50 according DIN EN 61 000-4-5
Filter Data	Audio Frequency Selection of audio frequency Minimum respond signal voltage None respond signal voltage Maximum signal level	158 Hz – 1600 Hz any frequency can be set Uf > 0.5 % Un Unf < 0.3 % Un or according to agreement 8-15 times Uf (dependent on frequency)
Real time clock with backup	Supercap (Option) Battery (Option) Time deviation	> 48 h without power > 3 years without power at 25 °C, lifetime (powered) > 10 Jahre < 2 s/Day
Output Data	Number of relays Nominal switching voltage Uc Nominal switching current Ic Relay type Contact Material Terminal size	4 (bistabil) 250VAC, 50Hz oder 60Hz, 30VDC 8A, cos phi = 1, 5A, cos phi = 0,4, Normally closed, potentialfree AgNi with gold plating (good for low loads: 5V, 2mA to 30 V, 50 mA) 1 x 2,5 mm ² or 2 x 1,5 mm ²
Climate Conditions	Operating temperature Storage temperature	-20... + 60 °C -30... + 60 °C, non-condensating
Housing		Small casing for DIN rail mounting (DIN 43880), polycarbonate, non-inflammable, self-extinguishing synthetic material, RAL 7035
Protection Class		IP51
Dimensions		H = 92 mm, W = 72 mm, D = 60 mm 4 pitches according DIN 43880

Connection Diagram

