

LCR-Series DIN-Rail Power

10 to 100 Watt 24V Switch Mode Power Supply -10°C...+60°C
90-264Vac Input

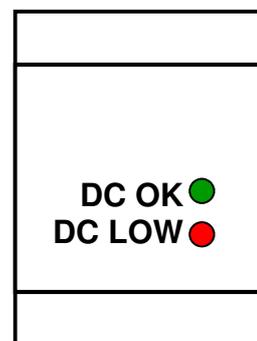
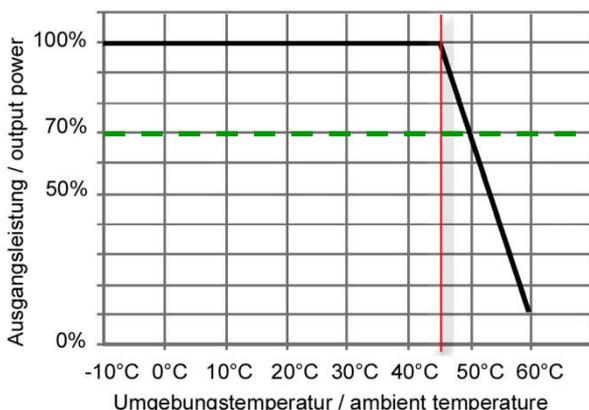
Short Specification:

- Housing for circuit breaker boxes
- Natural cooling
- Galvanic insulated
- Shortcircuit protected
- Low- & over-voltage protection
- Over temperature protection
- Softstart
- Auto-recovery after faulty operation
- Hold-up time >80ms (230Vac)
- No base load required



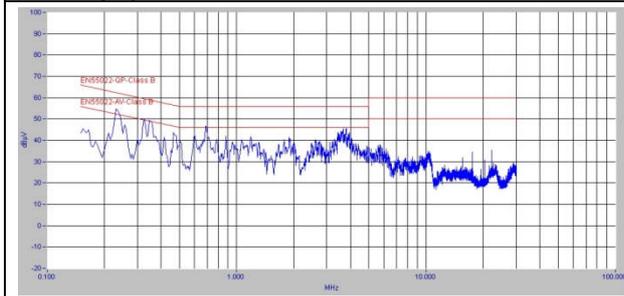
Technische Daten

| Model | LCR010.24 | LCR030.24 | LCR060.24 | LCR100.24 |
|----------------------------------|---|-----------------|-----------------|-----------------|
| Part Number | 3041095001TP | 3041096001TP | 3041097001TP | 3041098001TP |
| Nominal Power | 10W | 30W | 60W | 100W |
| DC Output Voltage | 24V | 24V | 24V | 24V |
| DC Nominal Current | 420mA | 1,25A | 2,5A | 4,2A |
| DC Voltage Adjustable Range | 24-28V | 24-28V | 24-28V | 24-28V |
| DC Over Voltage Protection | 33V | 32V | 30V | 30V |
| DC Current Limiting (typical) | 750mA (Hiccup) | 1,7A (Hiccup) | 3,0A (Hiccup) | 5,5A (Hiccup) |
| Ripple 230Vac 20MHz Nominal Load | 7mVss | 7mVss | 7mVss | 8mVss |
| Frequency @ Nominal Current | 119 KHz | 40 KHz | 66 KHz | 59 KHz |
| Load Regulation (static) | ± 0,02% | ± 0,01% | ± 0,01% | ± 0,015% |
| Load Regulation (dynamically) | ± 0,02% | ± 0,02% | ± 0,02% | ± 0,02% |
| Load Regulation Time (typical) | 4,4ms | 5,8ms | 4,2ms | 4,5ms |
| Start Time (typical) | 80ms | 630ms | 1010ms | 1090ms |
| Efficiency 100/230Vac (typical) | 78/82% | 84/85% | 84/85% | 85/86% |
| Hold-up Time 230Vac Nominal Load | 90ms | 160ms | 80ms | 80ms |
| Short Circuit Current | 1,13A | 3,9A | 4,5A | 8,2A |
| Inrush Current @ Cold Start | 41A | 41A | 81A | 51A |
| EMI | EN55022 class B | EN55022 class B | EN55022 class A | EN55022 class A |
| Net Weight | 70 gram | 190 gram | 250 gram | 370 gram |
| MTBF (IEC61709) 40°C | 299.743h | 287.223h | 250.132h | 248.172h |
| MTTF (IEC60050) 40°C/230Vac/70% | 70.382h | 70.286h | 63.412h | 43.591h |
| Base Load | None | | | |
| Short Circuit Resistance | Continuous(auto-recovery) | | | |
| Cooling | Natural Cooling | | | |
| Ambient Temperature Operation | - 10°C...+60°C | | | |
| Over Temperature Protection | Yes (shutdown, auto-recovery) | | | |
| Storage Temperature Range | -40 °C...+75°C | | | |
| AC Input | 90...264Vac 47...63Hz , 140...340Vdc | | | |
| AC Nominal Input Voltage | 100...240Vac | | | |
| EMI | FCC / CISPR22 | | | |
| EMC | EN55011, EN55022, EN61000-3-2, EN61000-4-2/3/4/5/6/8/11, EN61000-6-2, EN61204-3 | | | |
| Safety | EN60950-1, EN60204-1 | | | |
| Safety Class (PELV) | II A | | | |
| Relative Humidity Operation | 20-90% non condensing | | | |
| Relative Humidity Storage | 20-90% non condensing | | | |
| Altitude Operation (maximum) | 3000m height above sea level | | | |
| Galvanic Isolation | AC-Input/DC-Output : 3KV, Input/Floating-GND 2KV, Output/Floating-GND 500Vdc | | | |
| Mechanical Dimensions | See drawing page 6 | | | |
| Housing | Plastic: PFA, burn proof class: 94V-0, IP20 Housing for circuit breaker boxes according to DIN VDE0603 | | | |
| Screw-type Terminals | AWG 18 – AWG13 (0,8 - 2,5mm ²), wire protection | | | |
| DIN-Rail (EN60715) | TS35/7.5 and TS35/15 | | | |
| Guarantee | 2 years delivery date | | | |

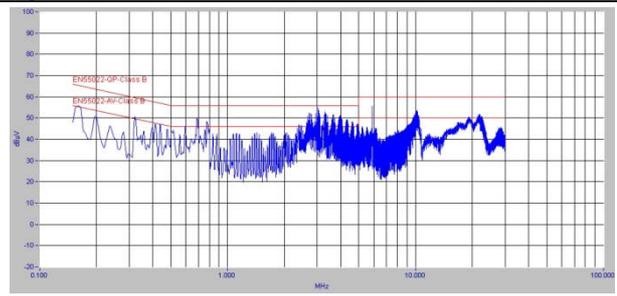


Signalization

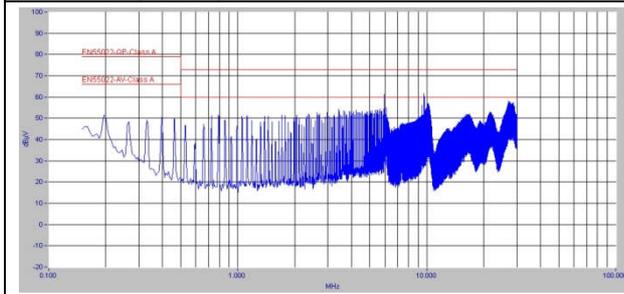
EMI Diagraphs "Mains-Born Disturbances" Quasi-Peak-Recording EMI-Receiver AFJ ER55C



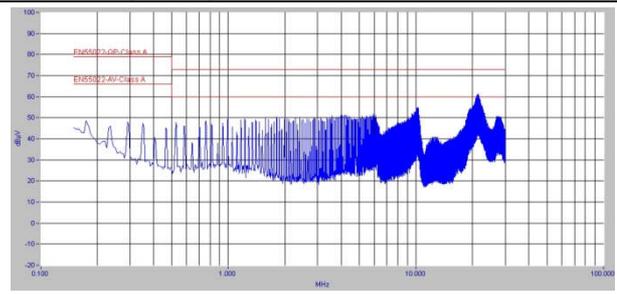
LCR010.24 (class B)



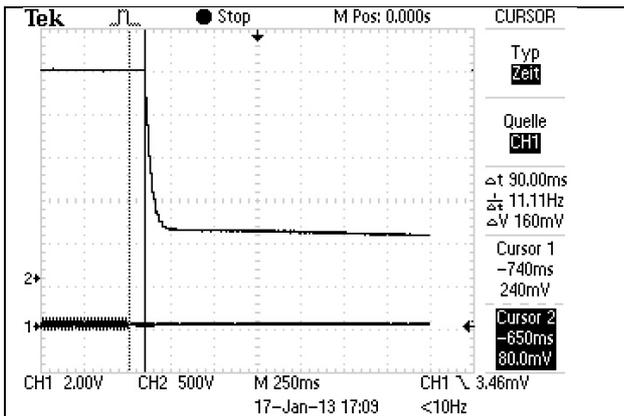
LCR030.24 (class B)



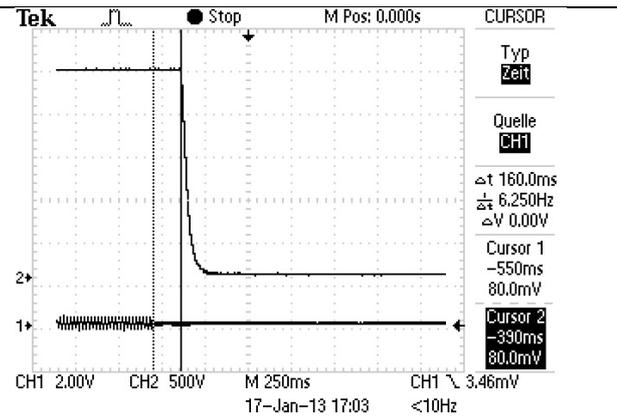
LCR060.24 (class A)



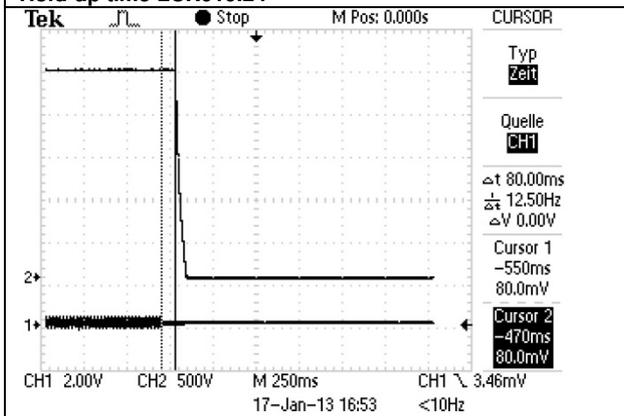
LCR100.24 (class A)



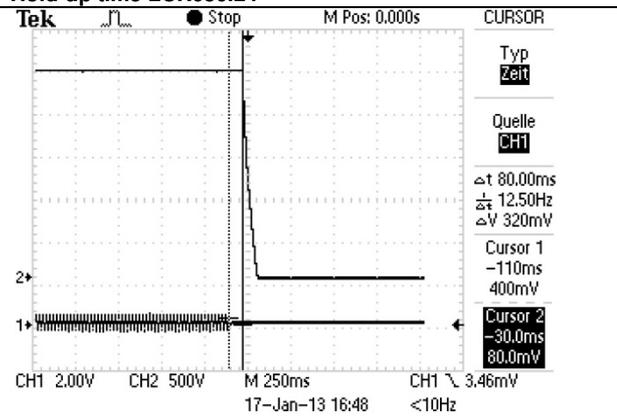
Hold-up time LCR010.24



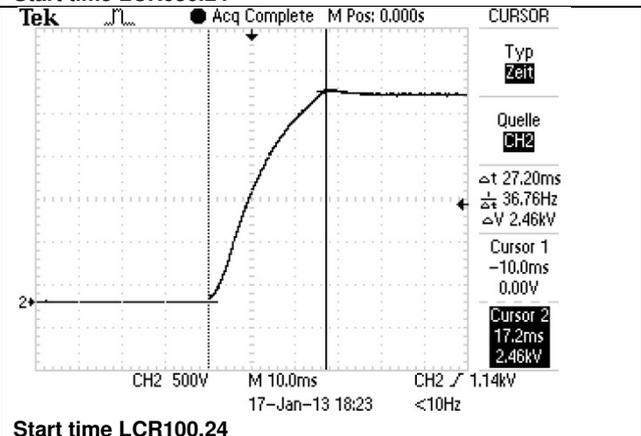
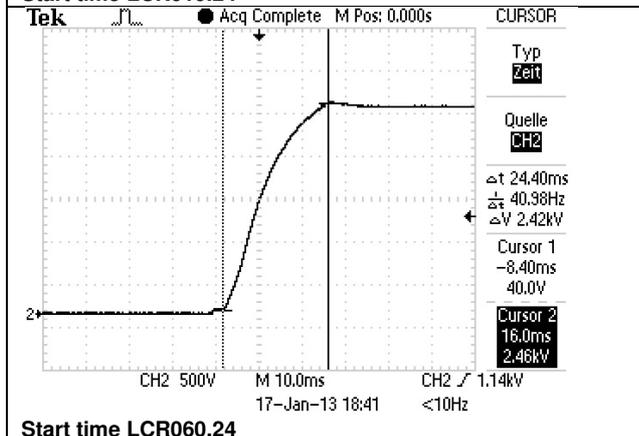
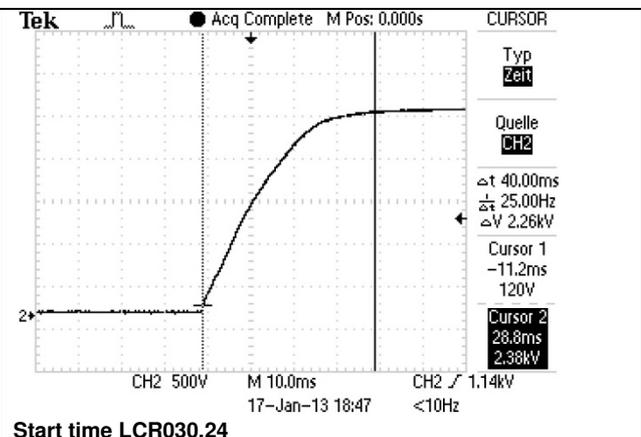
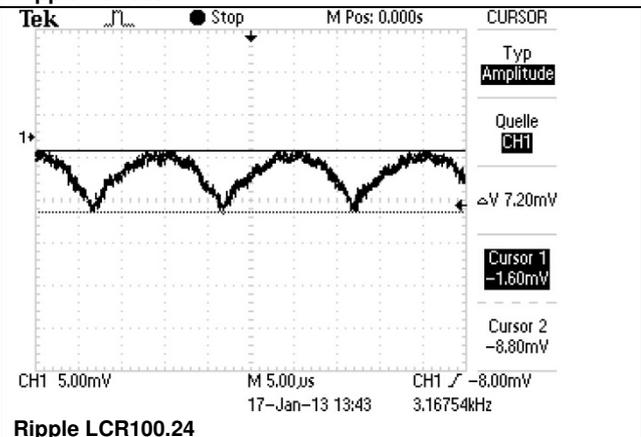
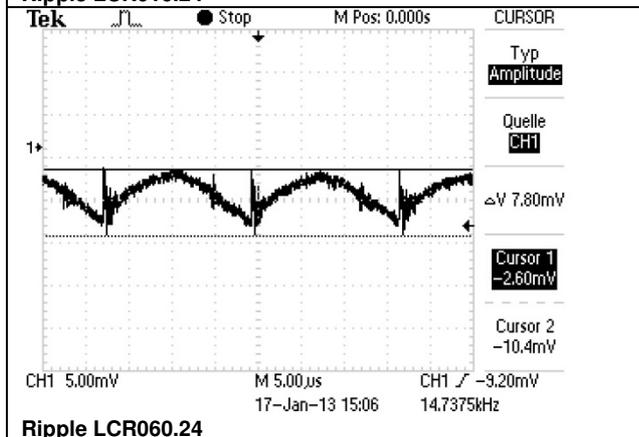
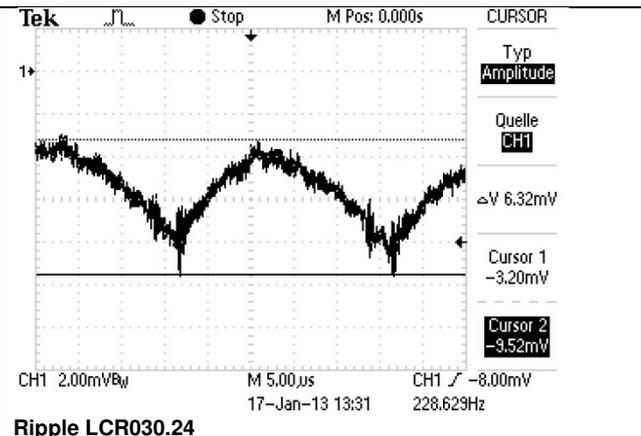
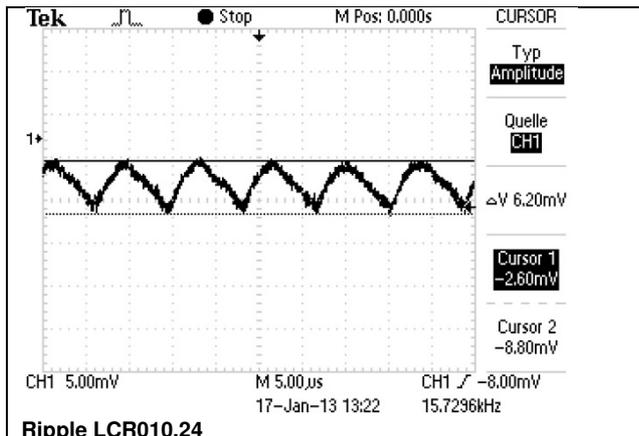
Hold-up time LCR030.24

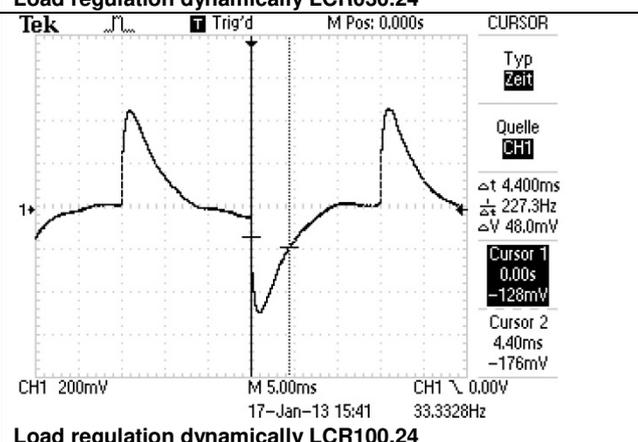
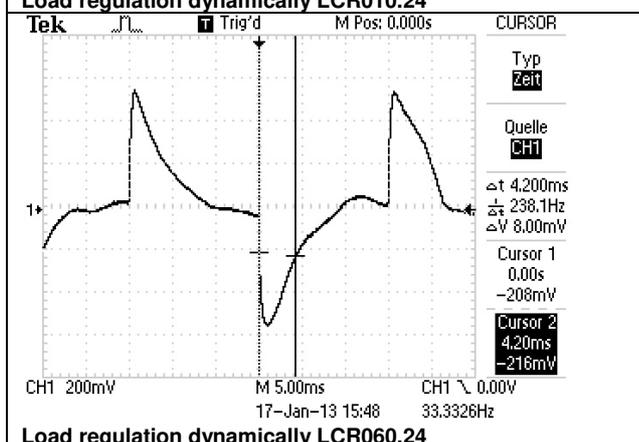
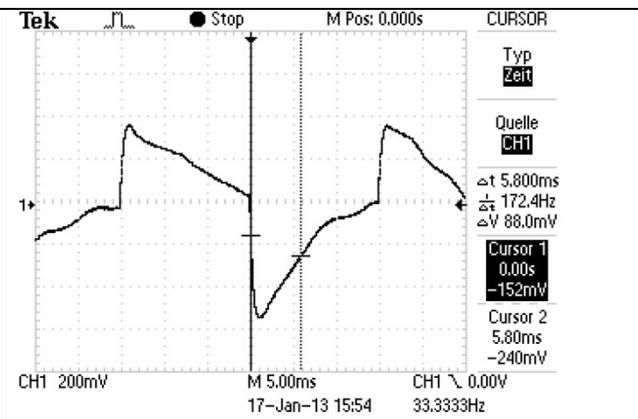
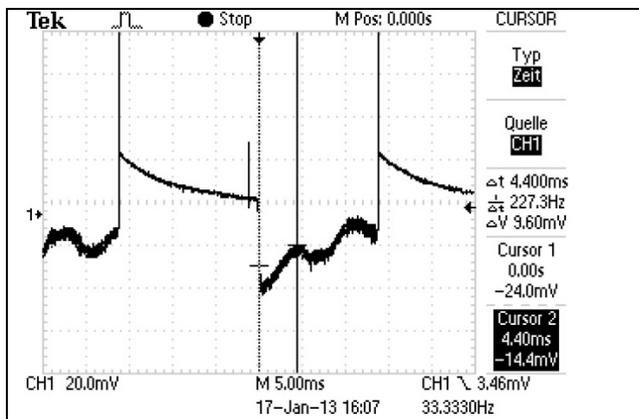
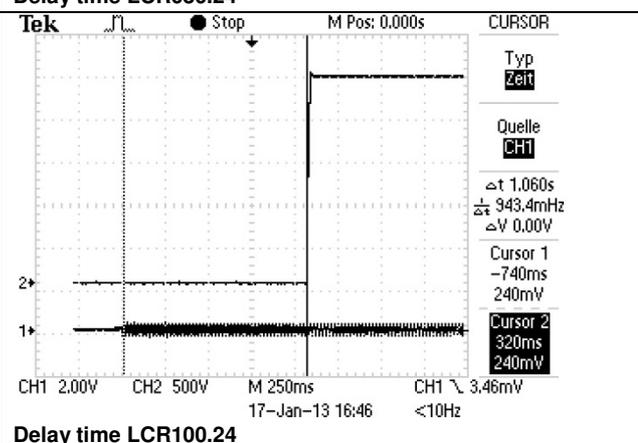
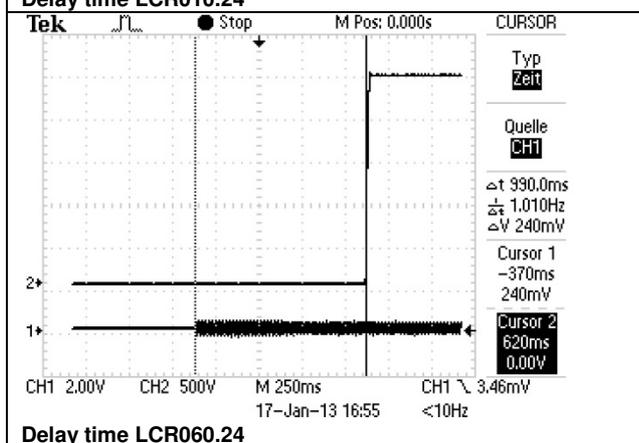
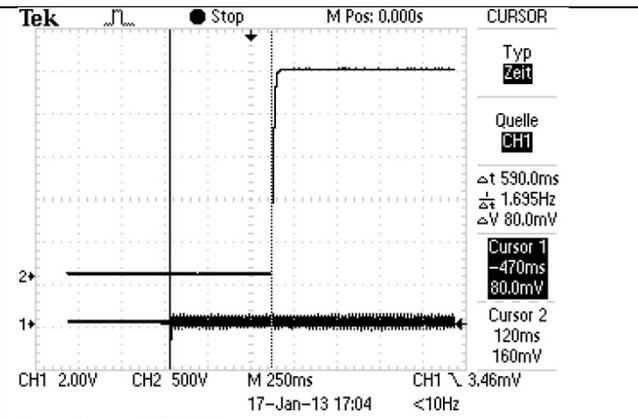
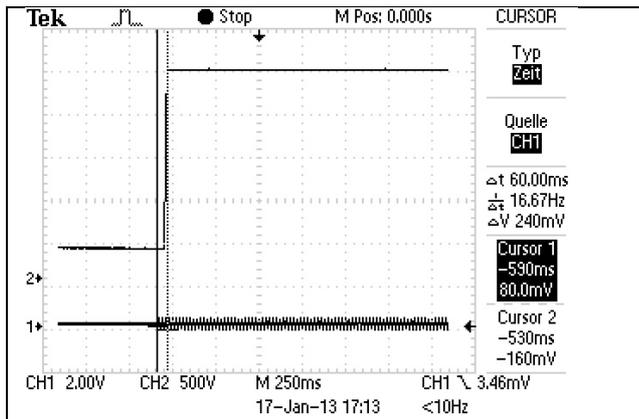


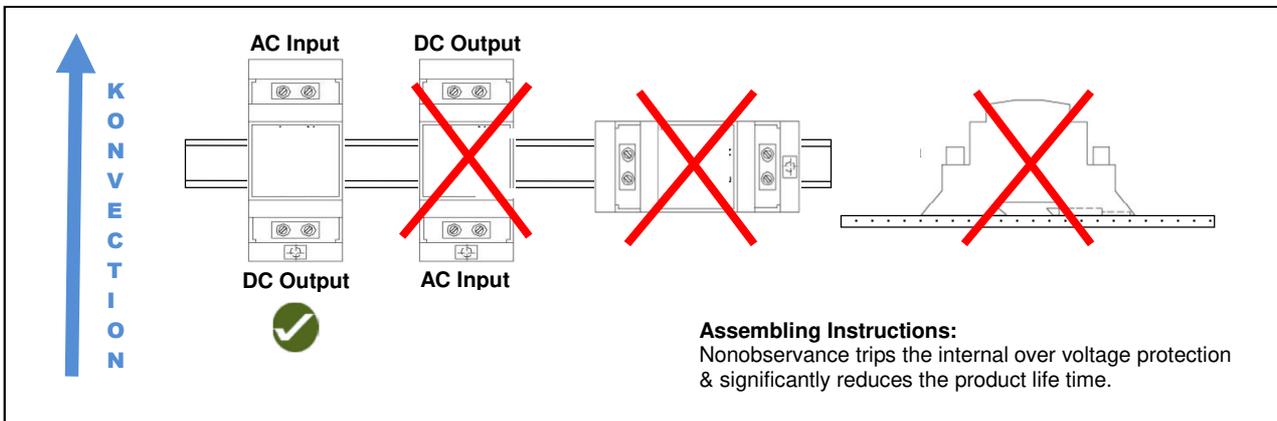
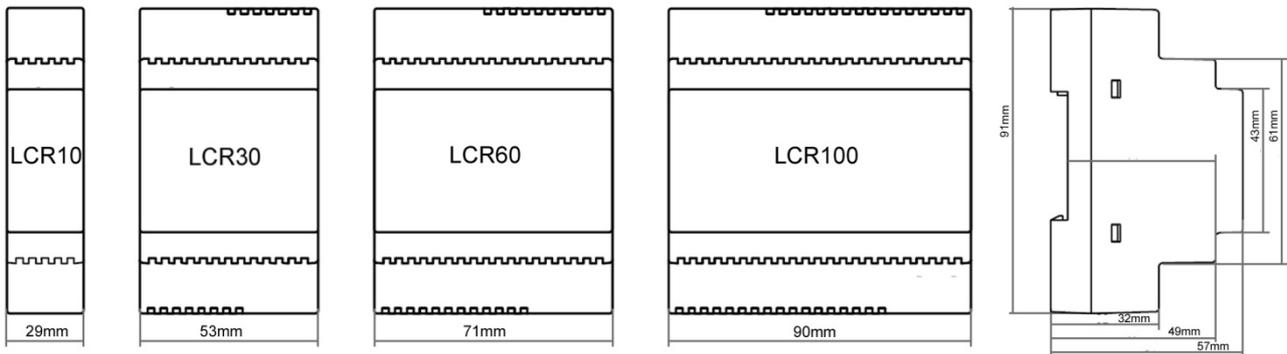
Hold-up time LCR060.24



Hold-up time LCR100.24







Safety Instructions: Please read all warnings and advices carefully before installing or operating the device. Retain this operation manual always ready to hand. The device must be installed by specialist staff only.

Installation:

- 1.) The device is designed for systems fulfilling the safety norms of dangerous voltages/energy and fire prevention
- 2.) Installation is restricted to specialists only, make sure that the AC wire system is free of voltage
- 3.) Opening the device, making any modifications to it, dismantling any screws from it, operating the device out of specification and/or using it in appropriate area will inevitably result in loosing manufactureres guarantee; we decline taking any responsibility for risk of damages caused to someones health or to any installed system.
- 4.) Attention: The device has an internal input fuse. It is necessary to wire an automatic circuit braker to the line. We suggest to use a 16A-type with B-characteristic. It essential to install a line switch before the device.

Warnings:

Disregard these warnings can cause fire, electric shock, serious accident and death.

1. Before connecting the device to the AC wire system make all wires free of voltage and assure accidently switch on
2. Allow neat and professional cabling
3. Never open nor try to repair the device by yourself. Inside are dangerous voltages that can cause electric shock hazard.
4. Avoid metal pieces or other conductive material to fall into the device
5. Do not operate the device under damp or wet conditions
6. It is verboten to operate the device under Ex conditions or in an Ex-Area 

All parameters base on 15 minutes run-in @ full load / 25°C / 230Vac 50/60Hz, as otherwise stated.