

# product specification

## DC - UPS: LDR40MH24/12-W



- Buffering of 12 Volt and 24 Volt systems
- No charger necessary
- Extra low safety voltage  
PELV (EN 50178) SELV (EN 60950)
- Short circuit proof, overload- and open circuit protected
- High storage capacity
- Operating status shown by LED
- Simple accu exchange
- Safeguard against total discharge
- Vibration proof, suitable for the tropics - epoxy resin casted
- Conforms to EMC and low voltage directive  $\text{CE}$
- Input 85 - 270 V<sub>AC</sub> or 120 - 400 V<sub>DC</sub>
- Safety acc. to VDE, EN, UL, CSA

### Application

The accupac with electronic charging controller LDR40MH24/12-W is used for buffering 12V and 24V-systems.

The accupac LDR is connected between the line voltage and the system, to power it with with DC voltage. If the line power fails, the system is supplied from the NiMH-accumulators, which are integrated in the LDR. The duration of the supply depends on the quantity of the load current of the system.

During mains operation the internal switch mode power supply supplies the DC-consumer and simultaneously charges the accumulators with optimal loading techniques.

Thereby the output voltage follows the accu voltage. During mains operation and emergency operation an output current of 4.0 Amp. at 24 V<sub>DC</sub> and 2.0 Amp. at 12 V<sub>DC</sub> can be obtained permanently. Temporary the output current can exceed the nominal current up to 25%. The output is short circuit proof and protected against polarity reversal.

To avoid an unallowable heating of the accu, the LDR is equipped with a temperature-depending power reduction control.

### Functional principle

At the first operation of the LDR, the accumulator is charged. This is shown by the LED "Laden/charge". When the accu is charged, the LED "Akku voll" will light green. The LED "Eingang/input" lights at power on. Too high temperature is indicated by the LED "Temperatur".

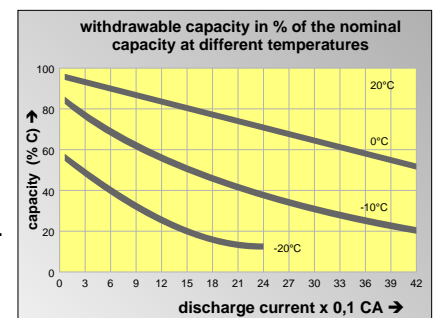
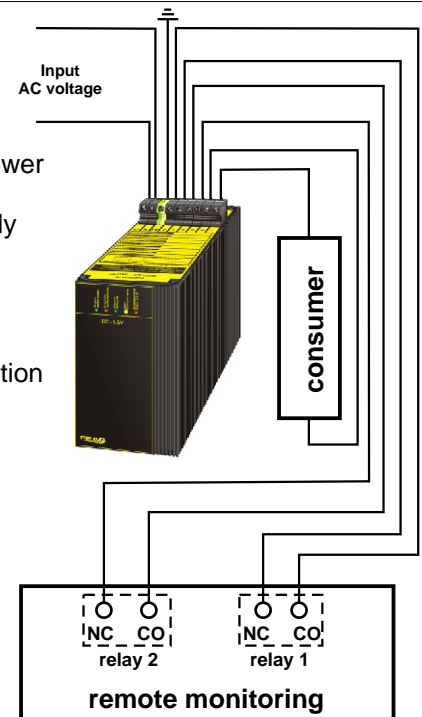
The LED "cut-off warning" will light red, when the batteries are nearly discharged and before the LDR's protection against low discharge will switch off the system. The DC-consumer system is then unsupplied.

To enable remote monitoring of the accupac, it has 2 build-in relays.

After a power failure and the return of the line voltage afterwards the maximal output current is available immediately. Simultaneously the accu is charging. When fully charged, the accu is switched to trickle charging to compensate the loss of self-discharging. The LDR is now ready for operation.

### Design

The internal power supply is completely casted, if necessary the accus can be replaced easily. The LDR is delivered in an aluminium housing for wall mounting with screws.



Please read the data sheets and the operating instructions for further information.