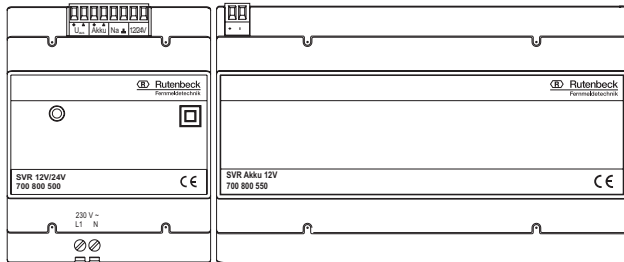




Rutenbeck
Fernmeldetechnik



SVR 12V/24V and SVR Akku 12V
Installation instructions

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General

The **SVR 12/24V** is a universal power supply for mounting on a Din-rail. The output voltage can be set by a wire strap from 13.8V to 27.6V. The standard output voltage is 13.8V.

It is possible to expand the **SVR 12/24V** to a 12 V UPS (uninterrupted power supply) with a **SVR Akku 12 V**.

A 24 V UPS can be realized by connecting two **SVR Akku 12 V** in series.

The operation of a TCR with an electrical load at 4 outputs can

be maintained for at least three hours and without an electrical load at the outputs approximately 20 hours.

The device is protected against overload and is also short-circuit-proof.

Due to the wide range input, the **SVR 12/24V** can be used worldwide.

The connection takes place with screw terminals.

External accumulators can be connected to the **SVR 12/24V**.

The **SVR 12/24V** is suitable for all TCR-devices.

Installation

Putting into Operation

The mounting and installation of the **SVR 12/24V** and the **SVR Akku 12V** should only be performed by a qualified electrician.

In order to fulfil the general safety regulations of telecommunication systems and to avoid interference, the DIN VDE 0100 Part 520 and the prEN 50174-2:1998, sections 5.4 and 5.5 must be followed.

A physical separation or suitable separating pieces shall be provided (distance or shielding).

Installation

- 1 To install the **SVR 12/24V** to the TCR/TCR Alarm, connect the terminal U_{out} (+ and **⏚**) by an installation cable with + and -.

For easier installation of the wires, the upper terminal block can be pulled out.

- 2 For the Power-fail-signal connect Na and **⏚** with M1, M2, M3 or M4 and M (see page 5).
- 3 Place the jumper S3 to left position 12 V (see page 5).
- 4 Make all connections to the ac-

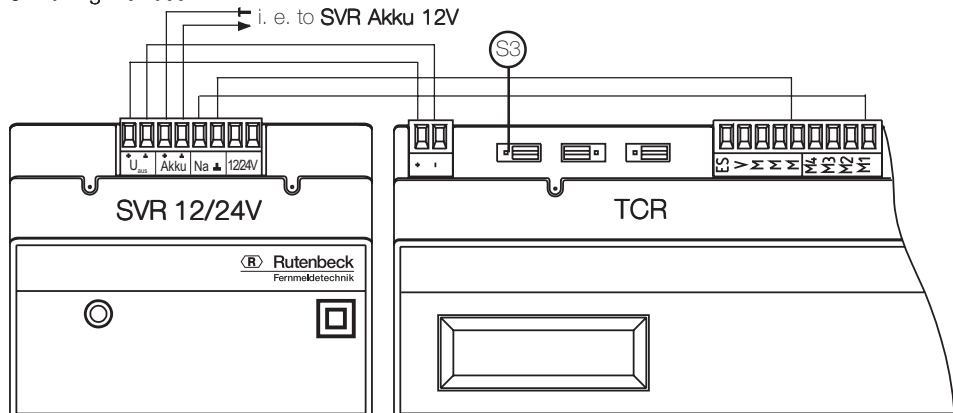
cumulator as shown on page 6, 7 and 8.

Note that a wire strap at the terminal 12/24V of the **SVR 12/24V** has to be made according to page 8.

- 5 Connect the 230 V-supply at the screw terminal L1 and N. The green LED lights up when the 230 V-supply is connected.
- 6 We recommend a separate circuit breaker for the power supply in the electrical distribution box.

Installation

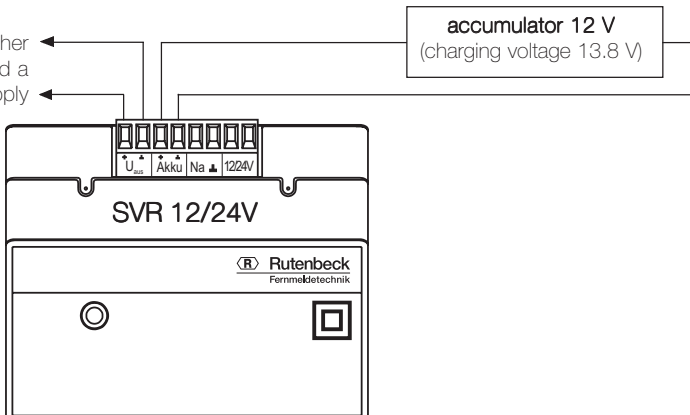
Connection of Remote Switching Devices



Installation

Connection of External Accumulator

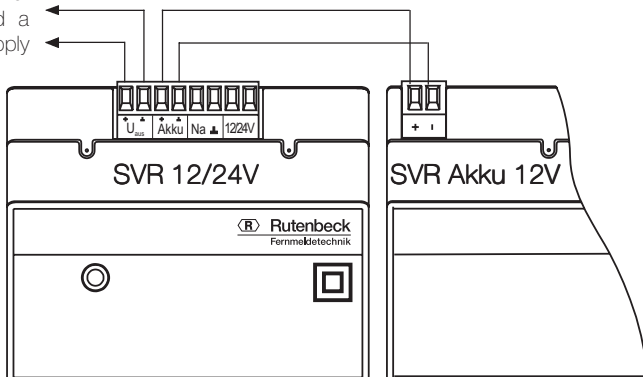
i. e. to **TCR** or other devices, which need a 12V supply



Installation

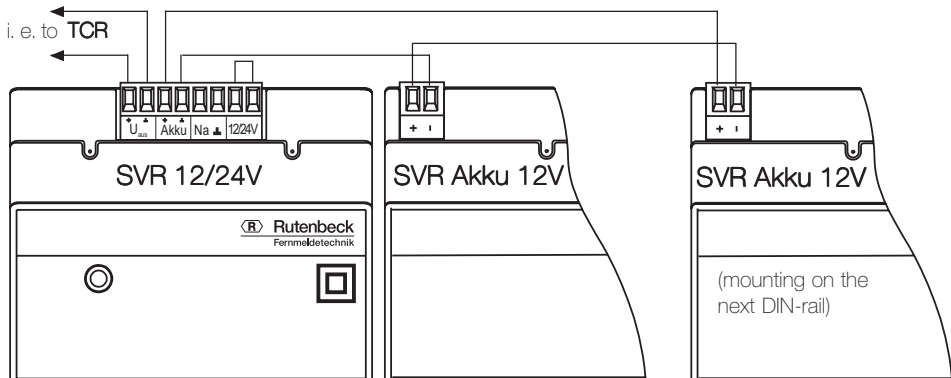
Connection of the UPS SVR Akku 12V

i. e. to **TCR** or other
devices, which need a
12 V supply




Installation

Connection of a 24 V UPS with SVR
Akku 12V



Hints for the End User

- 1 Used accumulators can be returned to the retailer, where the **SVR Akku 12V** was purchased, or to the pollutant depot of your community. The accumulators will be recycled according to the “recycling management law” and “waste management law” and disposed in an environment-friendly way.
- 2 The consumers are legally obligated to return used accumulators.
- 3 The sign  indicates, that the accumulators are not allowed to be thrown away, but instead must be returned.

cumulators away!

The sign “Pb” indicates, that the accumulators contain the harmful substance lead.

It is forbidden to throw the ac-

Technical Data

SVR 12/24V

I x w x h (in mm):	72 x 90 x 65 mm (4 module width)
Weight:	180 g
Color:	light grey (similar RAL 7035)
Material:	PC plastic
Input voltage:	92 to 265 V AC/47 to 63 Hz
Output voltage:	13.8 V DC/1%(terminal 7-8 without connection) 27.6 V DC/ 1% (terminal 7-8 connected)
Output current:	1.5 A; voltage limitation at about 1.7 A
Ripple voltage:	< 100 mV
Power consumption:	about 2 W without load, about 4 W with full load
Operation indication:	yes (LED)
Power-fail-signal:	yes (open collector 30 V/50 mA)
Class:	II, no PE
Protection class:	IP 20 according to EN 60 529
Operating temperature:	-5° C to +45° C

Technical Data

SVR Akku 12V

I x w x h (in mm):	144 x 90 x 65 mm (8 module width)
Weight:	650 g
Color:	light grey (similar RAL 7035)
Material:	PC plastic
Nominal voltage:	12 V DC
Power supply:	only with SVR 12/24V
Accumulator capacitance:	1 Ah
Buffering time:	s. table on page 12
Fuse:	self-recovering (integrated)
Class:	II, no PE
Protection class:	IP 20 according to EN 60 529
Operating temperature:	-5° C to +45° C

Technical changes reserved

Buffering time

The following table shows the discharge characteristics of the SVR 12 Akku with different load.

	current	time
TCR/TCR Alarm idle	40 mA	> 20 h
TCR/TCR Alarm telephone line occupied	90 mA	14 h
TCR/TCR Alarm idle + 1 output set on(50 mA)	90 mA	14 h
TCR/TCR Alarm idle + 2 outputs set on(50 mA each)	140 mA	6 h
TCR/TCR Alarm idle + 3 outputs set on(50 mA each)	190 mA	4 h
TCR/TCR Alarm idle + 4 outputs set on(50 mA each)	240 mA	3 h
TCR/TCR Alarm idle + all outputs set on(50 mA each)	290 mA	2,5 h
TCR easy idle	17 mA	> 20 h
TCR easy + relais set on	53 mA	18 h
TCR easy + TCR Z easy (1 relais set on)	88 mA	14 h
TCR easy + TCR Z easy (2 relais set on)	123 mA	6 h
TCR easy + TCR Z easy (3 relais set on)	158 mA	4,5 h
TCR easy + TCR Z easy (4 relais set on)	193 mA	4 h

Guarantee

We guarantee the perfect function of the **SVR 12/24V** and of the **SVR Akku 12V** for 2 years after date of purchase (receipt) providing that it was professionally installed and operated.

For further questions contact our Rutenbeck-Hot-Line:
+49 36925 90090

Service

In case of a malfunction, consult your dealer or send the device with receipt and a short description of the malfunction with appropriate postage to:

Rutenbeck Service-Center
Gewerbegebiet
Im Meilesfelde 5
99819 Marksuhl
Germany

Phone: +49 36925 90091
Fax: +49 36925 90092

Manufacturer's Declaration

We, Wilhelm Rutenbeck GmbH & Co. KG declare, that the **SVR 12/24 V** and the **SVR Akku 12V** are in accordance with the basic requirements of the Council Directive 1999/5/EC of the European Communities.

The complete declaration of conformity can be found under www.rutenbeck.de in the down-load-sector.

The **SVR 12/24 V** and the **SVR Akku 12V** are being manufactured within a comprising quali-

ty assurance system according to ISO 9001:2000 with registration number **000886QM**.

The testing of the requirements regarding EMC and safety regulations takes place in the certified Rutenbeck testing laboratory (**Q812412N**) registered by CETECOM ICT Services GmbH (notified body with EC identification number **0682**).



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