Smart Output Module

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Simons≡Voss
technologies

Smart Output Module

Content

1.0   Important Information

- Installation of a SimonsVoss Smart Output Module requires knowledge in the areas of approvals for electronic and electrical installation and in the use of SimonsVoss software and the SimonsVoss System 3060. For this reason, only trained and expert personnel should install the unit.

SimonsVoss Technologies AG will not accept any liability for damages caused by incorrect installation.

- Incorrectly installed Smart Output Modules may block an entrance or opening. SimonsVoss AG is not liable for the consequences of incorrect installation, such as blocked access to injured or endangered persons, property damage or other damages.

- Should products from other manufacturers be driven with a Smart Output Module, the guarantee and installation conditions given by the respective manufacturer of these devices must be observed.

- Should the maximum permissible currents (see Technical Data) be exceeded at the outputs or should the maximum voltages be exceeded at the inputs of the Smart Output Module, the result can be damage to the module.

2.0   Product Description

The Smart Output Module is a product that provides eight floating relay outputs, which can be driven via a single Smart Relay, type SREL.ADV. Depending on the transponder ID, one or more outputs can be switched for some programmable time. This assignment (profile) can be selected as needed. This means that the Smart Output Module is suitable, for example, for implementing an authorisation-dependent elevator controller or a driver for opening lockers. Should more than eight outputs be required, up to 16 modules can be connected to one type SREL.ADV Smart Relay.

3.0   Before Ordering

3.1   Smart Relay

At least one type SREL.ADV Smart Relay is necessary for operating a Smart Output Module. Please read the Smart Relay Product Manual for information on ordering.

3.2   Determine the Number of Modules that are Needed

Up to 16 external modules can be connected to one type SREL.ADV Smart Relay. If you select the "Signalling" option in the configuration, the number of outputs per

Smart Output Module is reduced from eight to four. Each module has a separate configuration in the software.

3.3 Obtain and Dimension the Power Supply

The type SREL.ADV Smart Relay and up to eight type SOM8 external modules can be operated with one power supply (SREL.NT). For the data regarding the power supplies, take the technical specifications (currents, voltages and powers) of the Smart Relay and the modules into consideration.

3.4 Determine the Installation Technique and the Installation Site

The modules are attached to DIN rails. The length of these DIN rails depends on the number of modules that have to be attached next to one another. The Smart Relay Advanced units are typically not mounted on DIN rails, but instead are installed at the place where the transponders should be read.

3.5 Cable Types and Paths

There should be enough room around a Smart Output Module to allow all cables to be laid without kinking them too much. We recommend cable type IY(ST)Y (Twisted-Pair, shielded cable), strand diameter 0.6 mm.

3.6 Outside Installation

A suitable IP 65 (SOM.IP65G) housing must be provided for outside installation.

3.7 Guidelines

The installation should be performed according to VDE guidelines, by experts who have been

4.0   Before Installation

- Unpack the Smart Output Module and inspect it for external damages.
- Connect the Smart Output Module to a type SREL.ADV Smart Relay (see Connection to the Smart Relay) and provide both units with voltage over the power supply.
- Note the polarity.
- Activate the Smart Relay with a transponder in the condition as received from the factory. This activates all Smart Output Module outputs, which is shown by all LED's on the Smart Output Module lighting (green).
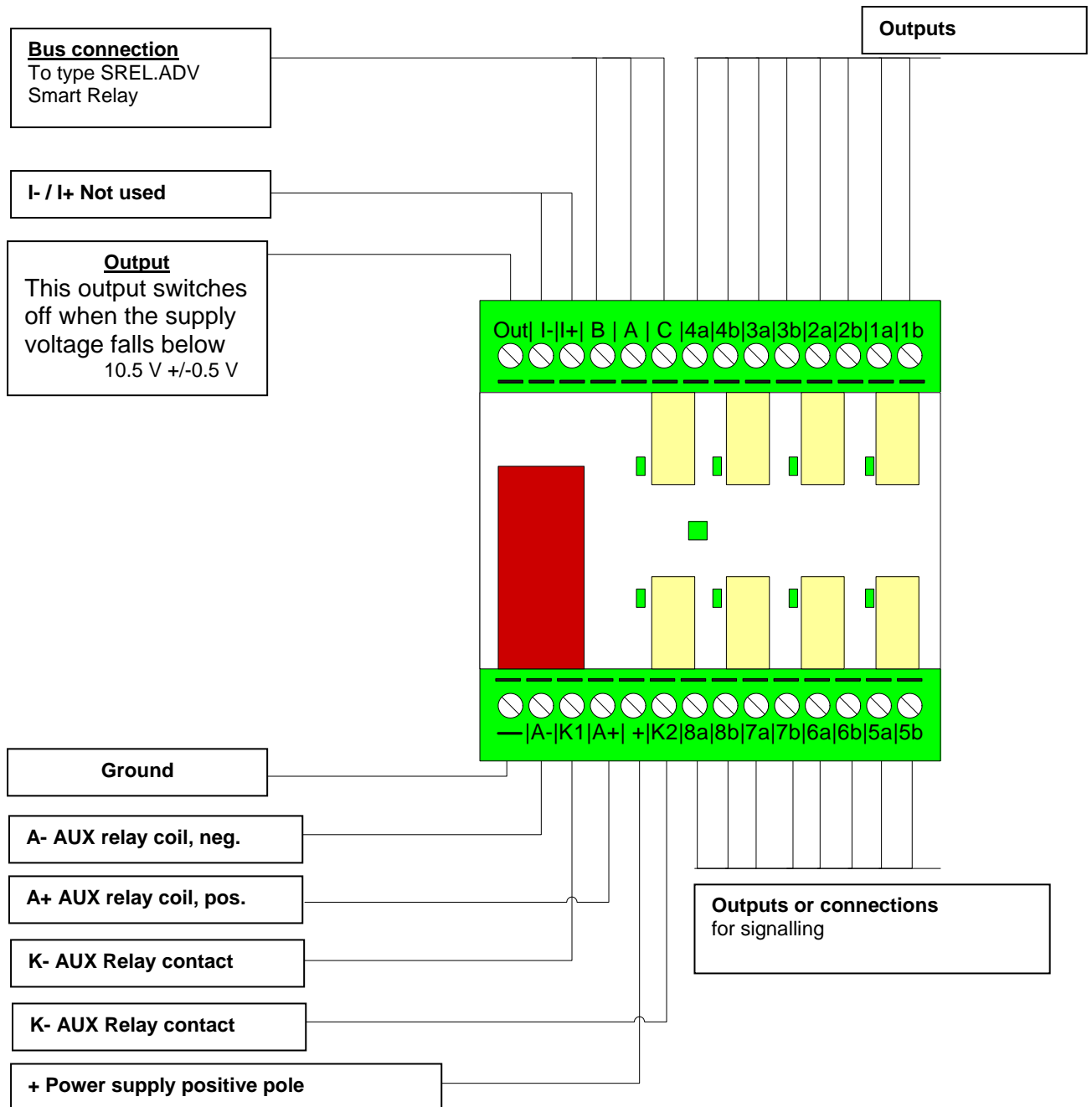
5.0   Installation

- Cut the DIN rails to size and tighten the screws.
- Switch off the supply voltage.
- Mount the units on the DIN rail (latch).
- Connect all cables (see Terminal Assignments and Connection Examples).
- Be sure to pay attention to the polarity when connecting the supply voltage.
- Switch on the supply voltage.
- Program the Smart Relay and the Smart Output Module with the SimonsVoss software (see Programming and Configuration).
- Then test the function with authorised transponders.

Smart Output Module

6.0   Connections

6.1   Terminal Assignments

Bus connection
To type SREL.ADV
Smart Relay

Outputs

I- / I+ Not used

Output
This output switches
off when the supply
voltage falls below
10.5 V +/-0.5 V

Out| I-|I+| B | A | C |4a|4b|3a|3b|2a|2b|1a|1b

—|A-|K1|A+| +|K2|8a|8b|7a|7b|6a|6b|5a|5b

Ground

A- AUX relay coil, neg.

A+ AUX relay coil, pos.

K- AUX Relay contact

K- AUX Relay contact

+ Power supply positive pole

Outputs or connections
for signalling

6.2 Connection Assignments

Name	Symbol	Description
Output	Out	If the supply voltage falls below 10.0 VDC +/- 0.5V, this output switches off. Typically, this output is connected to A-, if it is necessary to switch the AUX relay before the switching functions fail. This is an open collector output.
Isolated digital input	I- I+	Not used at this time
Bus connection to the type SREL.ADV Smart Relay	A B C	These terminals are connected to the terminals with the same names on the type SREL.ADV Smart Relay.
Outputs	1a 1b 2a 2b 3a 3b 4a 4b	Floating outputs (make contacts) that are switched depending on the transponder authorisation.
Outputs or connections for signalling	5a 5b 6a 6b 7a 7b 8a 8b	Depending on the configuration Either: floating outputs (make contacts), that are switched depending on the transponder authorisation. Or: floating connections that generate an alternating signal when the assigned output is activated. Assignment: 1 -> 5 2 -> 6 3 -> 7 4 -> 8
Name	Symbol	Description
Ground	▬	Connection for the power supply ground
Plus	+	Connection for +12 VDC
AUX relay coil	A- A+	To switch the AUX relay, this coil must be supplied with 12 VDC.
AUX relay contacts	K1 K2	Floating outputs (make contacts) of the AUX relay.