



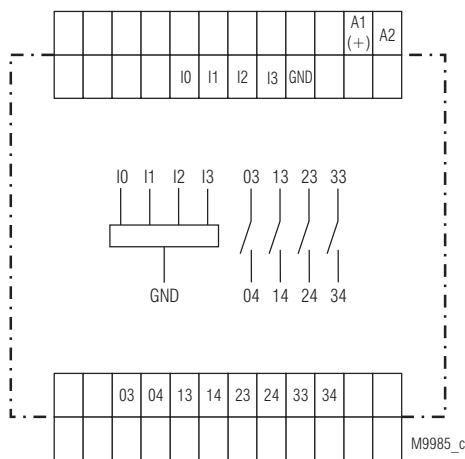
Ihre Vorteile

- Easy remote control via Handy
- Easy configuration via Handy
- Large input voltage range AC/DC 24...230V
no interfacing necessary
- Large auxiliary voltage range AC/DC 19...30 V or AC/DC 85...265 V
no extra power supplies necessary
- SMS-status request of all in- and outputs by configurable shortcuts
- SMS messages with free text
- Cyclic message of the SMS module to signalize operation with
configurable time interval

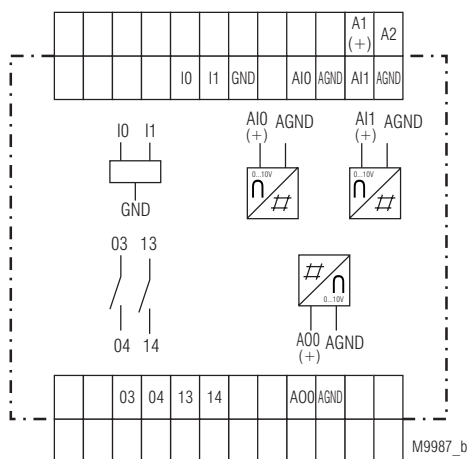
Features

- 4 digital inputs and 4 relay outputs
- Variant RP 5812/001 with 2 digital and 2 analogue inputs each
as well as 1 analogue- and 2 relay outputs
- Automatic message via SMS in the case of status change
- Quad-Band GSM-Module for 850, 900, 1800 and 1900 MHz
(GSM = Global System for Mobile)
- Protection of SIM-card with PIN
- Password protection against unauthorised access
- Dialogue language for user can be chosen: german, english or french
- Selectable authorization levels for up to 16 users
- Assignment of I/Os to different users
- Automatic transfer of SMS when digital inputs change state, at rising,
falling or both edges
- Automatic transfer of SMS by analogue inputs
 - when exceeding lower and upper limits
 - when signal is within or outside a window
 - when signal returns to good state
- Adjustable
 - Hysteresis of analogue inputs
 - Time delay for every input
 - Repeat time for SMS-transmitting
 - Output status after starting the unit
 - Time interval for activation of the output
- Sending of device status to the system administrators
- SMS-counter to monitor the remaining account
- No interruption of operation after voltage failure because of integrated
Li-Ionen battery
- Width: 70 mm

Circuit diagrams



RP 5812S, RP 5812PS, RP 5812PC



RP 5812S/001, RP 5812PS/001, RP 5812PC/001

Approval and marking



Application

- Remote control and operation of
 - Machinery and installations at industry and building automation.
 - small power plants
 - Remote buildings
 - Unmanned production plants
 - Air-conditioning and refrigeration systems
 - Heating systems
 - Elevators and escalator
 - Alarm system, burglar alarms
 - Smoke, fire and gas warning systems
 - Doors, gates and windows
 - Flood warning systems
- Level alarm in pumping stations
- Shut off of rented equipment when not paid
- Service request on beverage and food selling machines
- Level monitoring in silos, tanks, etc.

Indication	
green LED „U _H “:	on when supply connected
yellow LED „GSM“	
off:	SMS-Telecontrol module is off
flashes 600ms on / 600 ms off:	SMS-Telecontrol module SMS telecontrol module searches for network and logs on
flashes 75ms on / 3s off:	SMS-Telecontrol module is registered in GSM network.
on:	Data transmission in GSM network takes place
yellow LED „Status“	
off:	Configuration correct, SMS telecontrol module works without failure
flashes:	Indication of failure code, see table
on:	“Fault indication by flashing code” SMS transmission

Settings



Safety remarks

- The SMS telecontrol module must not be used for safety relevant control functions because of availability.
- The usage of the SMS telecontrol module in medically used rooms must be evaluated thoroughly as medical equipment as well as e.g. pace makers may react sensitively on the radiofrequency of the SMS telecontrol module. Also be aware that the radio frequency of the SMS telecontrol module may disturb the function of insufficiently protected PCs, monitors and other electronic equipment.
- Due to network status delays in transmission are possible.

General settings

- If the SMS telecontrol module was disconnected for a longer period, (e.g. when delivered) the battery must be charged. For charging the SMS telecontrol module needs to be connected to the supply voltage for up to 6 h. Only after this time a proper operation is possible.



Attention

On delivery the battery is disconnected. Before the batteries can be charged the connection has to be made by changing the slideswitch at the bottom edge of the unit in ON position.

- On delivery status a SIM card with pin 1234 has to be inserted. This pin can be changed by an SMS command. After the change only the SIM card with the changed PIN has to be used. If the PIN on the SIM card is different to the one in the configuration the SIM card may be locked when connecting to the GSM network. A locked SIM card can be unlocked by placing it in a mobile Phone and entering the PUK or Master PIN.
- If the Reset/Default Konf. button on the front of the unit is pressed for 3-4 seconds while the unit is on power, the SMS telecontrol module makes a reset. This means, that the connection to an SMS network is disconnected and reconnected. When pressing the reset button for more than 5 sec the configuration is reset to default and the unit makes a reset.
- Because of the internal battery, the function of the SMS telecontrol module is also available if the powersupply is disconnected.



Attention

It is your responsibility as an end user to dispose old batteries correctly. Of course, you may return replaced batteries to us.

Settings

Set up procedure of SMS-Telecontrol module

- Wiring the in- and output as well as the auxiliary supply connections
- Insert the SIM-card with PIN 1234 into the SMS-Telecontrol module
- Energizing of SMS-Telecontrol module
- Send the necessary configuration commands via SMS to the SMS telecontrol module (see manual)

Examples for configuration and communication of the SMS module via SMS:

Demand:

The SMS module, that is located in the pump station, shall get the name“Pump station“ and answer with this name.

The following SMS is edited and sent:

CFGDN\$Pump station#

Demand:

Input I0 shall send an SMS on the neagive edge of the input signal

The following SMS is edited and sent:

DISEND\$0\$FE#

Demand:

Input I0 shall be named „ Pump“

The following SMS is edited and sent:

DISYMB\$0\$Pump#

Demand:

The status „0“ of input I0 shall be named „ Pump stopped“

The following SMS is edited and sent:

DITXTLO\$0\$Pump stopped#

An SMS generated and sent by the SMS module caused by a defective pump appears as follows:

„Pump station:Pump stopped“

Demand:

The actual status of the (2 or 4) digital inputs shall be called up.

The following SMS is edited and sent:

?DIAL#

Answer: „Pump station:Pump stopped; Level to high“

and for the 2 analogue inputs:

?AIAL#

Answer: „Pump station: Level:180cm; pump temp: 85°C“

Technical Data

Input

Auxiliary voltage A1-A2 (U_H): AC/DC 19 ... 30 V, AC/DC 85 ... 265V,

Nominal consumption A1-A2: max. 7,4 VA at AC 230V
max. 3,9 W at DC 24V

Nominal frequency

A1-A2 bei AC: 50 Hz

Inputs (digital)

RP 5812: 4; I0 ... I3
AC/DC 24 V ... 230 V galvanic separation

RP 5812/001: 2; I0 ... I1
AC/DC 24 V ... 230 V galvanic separation

Inputs (analogue)

RP 5812/001: 2; AI0 ... AI1
DC 0 .. 10 V resolution 100 mV

Outputs

Contacts:

RP 5812: 4 NO contacts

RP 5812/001: 2 NO contacts

Thermal current I_{th} : 2A

Switching capacity

to AC 15: 3A / AC 230 V IEC/EN 60947-5-1

Electrical life

to AC15 at 1A / 230V: ≥ 1,5 x 10⁶ switch. cycl. IEC/EN 60 947-5-1

Max. fuse rating: 4A gL IEC/EN 60947-5-1

Mechanical life: ≥ 30 x 10⁶ switching cycles

Output (analogue)

RP 5812/001: AO0
DC 0..10V resolution 100 mV

Technical Data	
GSM	
Frequency band:	850 / 900 / 1800 / 1900 MHz
Powerclass:	GSM 850 / 900 MHz: 4 (2 W) GSM 1800 / 1900 MHz: 1 (1 W)
SIM-card:	1.8V and 3 V SIM cards are supported
Aerial jach:	SMA (male)
General Data	
Nominal operating mode:	continuous operation
Temperature range:	0 ... + 40°C
Clearance and creepage distance:	
Rated impuls voltage / pollution degree:	4 kV / 2 IEC 60 664-1
EMC	
Electrostatic discharge:	8 kV (air) IEC/EN 61 000-4-2
HF irradiation:	10 V / m IEC/EN 61 000-4-3
Fast transients:	2 kV IEC/EN 61 000-4-4
Surge between wires for power supply:	1 kV IEC/EN 61 000-4-5
wire and ground:	2 kV IEC/EN 61 000-4-5
Interference suppression:	Limit value class B EN 55011
Degree of protection:	
Housing, Cover	IP 30 IEC/EN 60 529
Terminals	IP 20 IEC/EN 60 529
Housing:	thermoplastic with VO behaviour acc. to UL subject 94
Vibration resistance:	Amplitude 0,35 mm Frequency 10 ... 55 Hz IEC/EN 60 068-2-6 00 / 040 / 04 IEC/EN 60 068-1
Climate resistance:	
Terminal designation:	EN 50 005
Wire connection:	DIN 46 228/-1/-2/-3/-4
fixed screw terminal (S):	0,2 ... 4 mm ² solid or 0,2 ... 1,5 mm ² stranded wire with sleeve
plug in screw terminal (PS):	0,1 ... 2,5 mm ² solid or 0,1 ... 1,5 mm ² stranded wire with sleeve
plug in cage clamp terminals (PC):	0,2 ... 2,5 mm ² solid or 0,2 ... 1,5 mm ² stranded wire with sleeve
Wire fixing:	
fixed screw terminal (S),	
plug in screw terminal (PS):	Captive plus-minus-terminal screws M2,5 with self raising terminal box
plug in cage clamp terminals (PC):	spring terminal for direct plug in of wires, screw driver 0,6 x 3,5 for spring releasing
Mounting:	DIN rail IEC/EN 60175
Weight:	216 g
Dimensions	
Width x height x depth:	70 x 95 x 80 mm

Standard types	
RP 5812S AC/DC 19 ... 30 V	
Article number:	0063601
• Auxiliary voltage U _H :	AC/DC 19 ... 30 V
• Inputs:	4 digital inputs AC/DC 24 ... 230 V
• Outputs:	4 relay outputs NO contacts
• Width:	70 mm
RP 5812S/001 AC/DC 19 ... 30 V	
Article number:	0063602
• Auxiliary voltage U _H :	AC/DC 19 ... 30 V
• Inputs:	2 digital inputs AC/DC 24 ... 230 V 2 analogue inputs 0 ... 10 V
• Outputs:	2 relay outputs NO contacts 1 analog Ausgang 0 ... 10 V
• Width:	70 mm

Ordering example	
RP 5812	/ 0 0 AC/DC 19 ... 30 V
	Auxiliary voltage
	Inputs / Outputs
0:	4 digital inputs, 4 relay outputs
1:	2 digital inputs, 2 analogue inputs 2 relay outputs, 1 analogue outputs
	Type of Terminals
S:	Terminal blocks fixed, with screw terminals
PC (plug in cageclamp):	pluggable terminal blocks with cage clamp terminals
PS (plug in screw):	pluggable terminal blocks with screw terminals
	Type

Accessories	
RP 5810/900:	GSM-aerial, 90° angle Article number: 0062212
RP 5810/901:	GSM magnetic foot areal with 2,5 m connecting lead Article number: 0062213

Fault indication by flashing code	
The actual state of the SMS telecontrol module is indicated by the flashing code on the status LED. The number of flashing pulses followed by a longer space relates to the failure code in the following table. After a longer space the flashing cycle is repeated until the actual state on the unit changes.	
State LED	Description
OFF	No status for indication, normal operation
ON	SMS transmission
2 * flashes	Internal system failure, please contact the manufacturer
3 * flashes	Invalid configuration. When this failure occurs, the unit tries to reset the configuration to factory settings followed by a device test. If the failure remains, please contact manufacturer.
4 * flashes	No access on SIM-card Cause: no SIM-card inserted or invalid PIN for inserted SIM card
5 * flashes	No GSM network available Cause: insufficient radio signal, Areal placed at inconvenient location.
6 * flashes	In the configuration the service center for SMS transmission is not yet defined. Cause: The CFGINT command sequence SMS has not been sent to the module
7 * flashes	No administrator for using are defined. Cause: The CFGINT command sequence SMS has not been sent to the module

LEDs for each I/O on the front of the unit indicate the status of the in- and outputs.

