adésys
IN CONTROL

EN

Quickstart SV-line

Please consider the environment before printing

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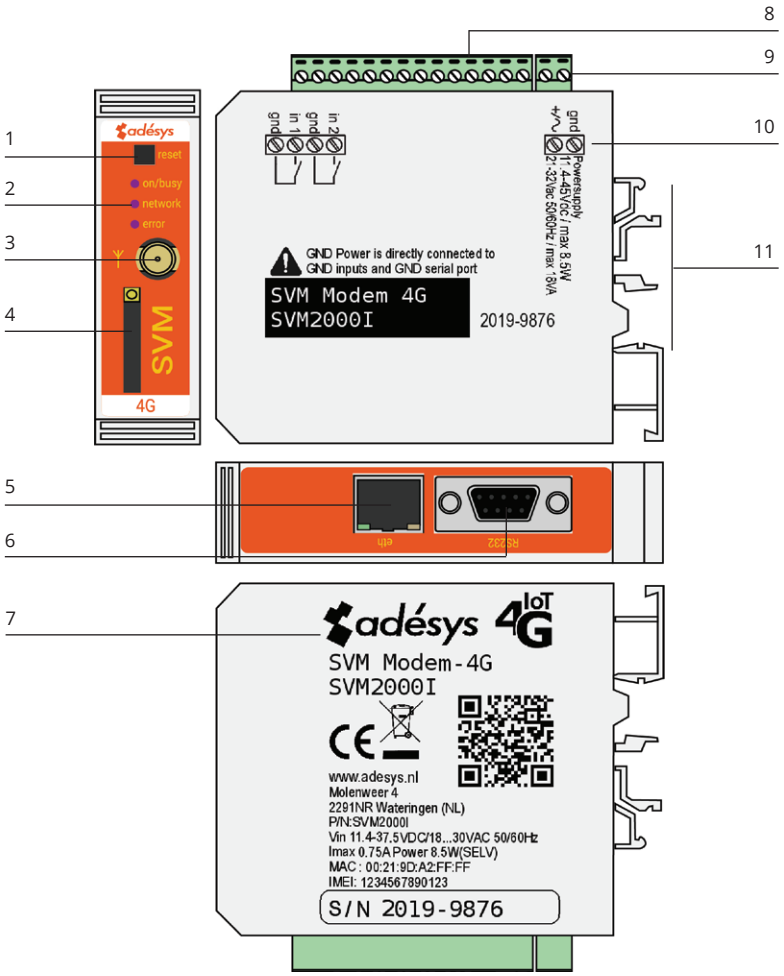
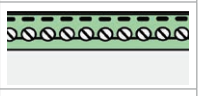
1. Identification SV-product line



Description		
1	Reset button	
2	LED status indicator: on/busy, network, error	
3	Antenna connection type SMA female	
4	SIM card holder	
5	Ethernet connection	
6	Serialae interface RS-232, 9 pole D-sub connection (not applicable for SVA and SVL)	
7	Information sticker	
8	Input/output connection terminals	
9	Supply voltage connection terminals	
10	Connection sticker	
11	DIN-rail mounting clamp	

LED functionality	
Number of flashes for error (red)	
1x	Problem with GSM module
2x	No SIM card detected
3x	Incorrect pin code
4x	PUK code necessary
5x	Power failure
6x	No SMS central number / no antenna level
7x	No telephone number coupled to input / 2G/4G connection cannot be established / Ethernet error
8x	Connection to external server cannot be established
Number of flashes for network (orange)	
off	No antenna
constant	Connected to external server
1x	Antenna level 1% < > 20%
2x	Antenna level 21% < > 40%
3x	Antenna level 41% < > 60%
4x	Antenna level 61% < > 80%
5x	Antenna level 81% < > 100%
1x long	In case of modem emulation, ring signal
faster	Estabilishing connection (clientmode)
Number of flashes for on/busy (green)	
off	SV is switched off
constant	SV is switched on
faster	Staring up / sending message
1x	Input 1 active
2x	Input 2 active
3x	Input 3 active
4x	Input 4 active
5x	Input 5 active
6x	Input 6 active
7x	Input 7 active
8x	Input 8 active

2. Technical specifications

System properties			
SVX0000-I	Type: **a**larm dialler |Web **l**ogger|**m**odem Number of digital inputs Number of GPIO inputs (analogue) Number of PT100 inputs Number of Relay outputs I=4G variant | R=3G variant		
Input/output options (differs for each SV model)			**No.**
Digital contact input (NO/NC)			4 - 8
Pulse counter			4 - 8
Digital voltage input (5 - 24VDC)			4 - 8
Analogue voltage input (0 - 10VDC)			4 - 8
Analogue current input (0 - 20mA)			4 - 8
PT100 input (80 - 157Ω)			0 - 4
Open collector output			4 - 8
Relay output			0 - 2
Hardware	**4201 4G**	**4211 4G**	**4200 3G**
Type I/O	SVA4002-I SVL0400-I SVL0402-I SVL0800-I	SVA2000-I SVA8000-I SVM0000-I SVM2000-I SVM8000-I	SVL0040-R SVL0022-R SVL0420-R
Digital contact inputs max. contactresistance max. Vin_{low}	0 - 8 1kΩ 1V	0 - 8 1kΩ 0.4V	0 - 8 1kΩ 1V
Pulse counter Filter (pulse duration Tmin) • fast • average • slow max. contactresistance @ active max. Vin_{low} Pulse levels • $Vmin_{high}$ • $Vmax_{low}$ • $Vmax_{level}$	0 - 8 1.2 - 20ms 20 - 100ms > 100ms 1kΩ 1V 2V 1.5V 30V	-	0 - 8 1.2 - 20ms 20 - 100ms > 100ms 1kΩ 1V 2V 1.5V 30V
Digital voltage input (5 - 24VDC) Abs. Vmax level $Vnom_{max}$ $Vmin_{hoog}$ $Vmax_{laag}$	4 - 8 30V 24V 2.0V 1.5V	4 - 8 30V 24V 2.5V 2.0V	4 - 8 30V 24V 2.0V 1.5V
Analogue voltage input (0 - 10VDC) Range Abs. Vmax level $Vmax_{nom}$	4 - 8 0 - 10VDC 30V 24V	-	4 - 8 0 - 10VDC 30V 24V
Analogue current input (0 - 20mA) Range Input power limited (in case up to max 30V at input during current mode mode)	4 - 8 4 - 20mA ca. 240mA for 10ms, than 500ms out	-	4 - 8 4 - 20mA ca. 240mA for 10ms, than 500ms out
PT100 input (80 - 157Ω) 2 wire 3 wire Range Vin_{max}	- 	-	 4 2 -50°C ... +150°C 30V
Open Collector (OC) output Swithchable voltage level Imax per output Outputs are protected against overload. Detection / disconnection mechanism per 4 outputs arranged: short-circuit current	4 SELV 45mA 1 - 4 5 - 8 < 600mA during <500us	-	4 SELV 45mA 1 - 4 5 - 8 < 600mA during <500us
Relay output Relay modes (P/NO/NC) Imax per output Switchable voltage level Life expectancy	0 - 2 1A SELV 30VDC/1A (resistive) 1 x 10^5 operations at 20°C, 1 Hz	-	0 - 2 1A SELV 30VDC/1A (resistive) 1 x 10^5 operations at 20°C, 1 Hz
Ethernet	Type	10Base-T/ 100Base-TX	
	Auto MDIX	Yes	
Mobile network	4G: GSM/GPRS/ EDGE/ LTE Cat-M1	Global-Band FDD-LTE B1/B2/B3/B4/B5/B8/B12/B13/B17/ B18/B19/B20/B25/B26/B28/B39 (B39 CAT-M1 only) GSM/GPRS/EDGE 850/900/1800/1900 MHz (Quadband)	
	3G: GSM/GPRS/ EDGE/UMTS	GSM/GPRS/EDGE 850/900/1800/ 1900 MHz (Quadband) UMTS/HSPA+ 800/850/900/1900/ 2100 MHz (Pentaband)	
	Antenna connection	Connector type SMA female	

Power supply	Nominal	1-2 Watt (2W whilst the supercap is charging)
	Peak	8.5 Watt / 18VA (AC)
	Imax	0.75A @ Vin = 11.4V
	Power supply range	15 - 35VDC (SELV) 20 - 30VAC (SELV)
	Built-in emergency power supply	Supercap (loaded after a few minutes) so that a power failure can still be reported
Service life (Calculated MTBF)	88167 hours (=10 years), according to component-counting method	
Enclosure and operating conditions		
Enclosure	DIN-rail (TS35) montage; behuizing brandvertragend UL94-V0	
Dimmensions (WxHxD)	23 x 95 x 102 (mm)	
Weight	125gr	
Operating temperature	-20°C ... +50°C	
Air humidity	20% - 85% (not condensed)	
IP code	IP10	
Maximum heigth	Up to 2000 metres (above 2000 metres the maximum operating temperature is reduced by 1.5°C per 300 metres up to a maximum heigth of 4000 metres)	
Regulations		
EMC	Emission: EN 301 489-01 V1.9.2 & EN 301 489-03 V1.4.1 (Class B) Immunity: EN 301 489-01 V1.9.2 & EN 301 489-03 V1.4.1(Class A)	
Safety (CE)	EN 60950-1 (2006) + A11 (2009) + A1 (2010) + A12 (2011) + AC(2011) + A2 (2013)	
Alert functions		
Number of dialing numbers	3 call lists, each containing 8 dialing numbers per call list, maximum of 20 digits per dialing number	
Notifications	SMS message or text message over IP network	

3. General

3.1. Overview SV-product line

SVA alarm dialler
Industrial 4G sms/e-mail alarm dialler for monitoring of your technical processes.

- Digital contacts
- Alerting with acceptance time
- Status overview via Checkmyprocess.com
- Remote management with Checkmyprocess.com

SVL Weblogger
Industrial 4G Weblogger for sending alerts in relation to limit values being exceeded.

- General Purpose Input Output
- History (logging) and status overview with Checkmyprocess.com
- Remonte management with Checkmyprocess.com

SVM 4G modem
Industrial 4G modem/SMS alarm dialler for connection to applications in the field.

- Digital contacts
- Connecting PLC via ethernet or RS232

SVM-X56 4G modem
Industrial 4G modem/SMS alarm dialler for remote access to Priva building management systems.

- Digital contacts
- Connecting Priva installation via internet

3.2. Safety criteria

Before using the SV, there are several criteria that the user should meet.

- The SV should be installed in a controlled environment (for reasons of fire prevention).
- The SV should be supplied with power using a SELV-type power supply.
- External Ethernet should not be connected directly to an SV, but should be connected via an overvoltage protection device.
- To reduce the probability of damage to the equipment, the SV should be placed in an environment protected against electrostatic discharge (ESD).
- The SV is intended for use as a modem or alarm dialer. The SV is not intended for use as part of a critical safety system in a critical proces
- Do not use a prepaid SIM card

3.3. Environment

This product contains materials that can harm the environment. For the sake of the environment, if the product has to be replaced at the end of its service life please do not dispose of it through the household waste. Please return the device to your supplier or hand it over to a designated depot.

3.4. Warranty and repair

Adésys performs a series of extensive tests on each SVM before dispatch. Adésys uses a warranty period of 1 year.

Warranty claims are invalidated if:

- the defect is caused by gross negligence or inexpert installation
- the device has been opened and/or repairs or modifications have been performed without the permission of Adésys
- it is found that the serial number has been removed or damaged.

Please get in touch with Adésys customer service if you have any questions regarding the warranty or repairs.

3.5. Liability

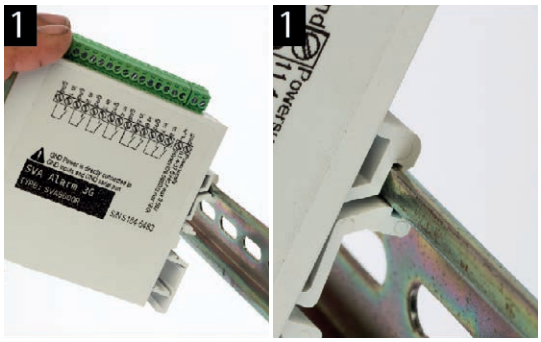
Adésys accepts no liability for consequential loss in the event of the stagnation of the alarm. An alarm dialler does not provide a 100% guarantee against damage, it is merely a tool to prevent damage. You should therefore discuss the remaining risk with your insurer.

4. Connection

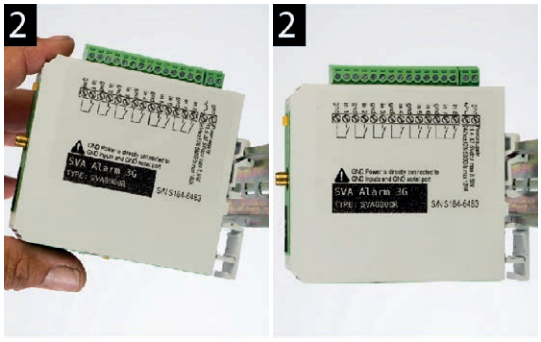
To connect the SV correctly, we recommend using exclusively Camden CTB922HE/# type connectors.

4.1. Positioning, affixing and removal: DIN rail

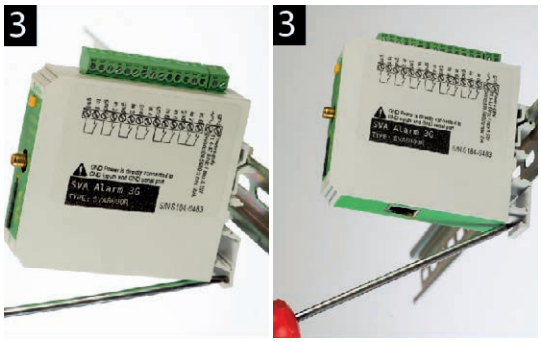
The SV should be affixed to a DIN rail before connection:



[1] Put the SVA onto the DIN rail at an angle. It is important that the SVA's DIN rail clip is positioned on
the top of the DIN rail.



[2] Tilt the SV to clip it into place. Then check wether it is securely seated.



[3] To remove the SV from a DIN rail, place a screwdriver on the bottom of the DIN rail clip. Then use it as a lever. After approx. 3 mm the SVM can be tilted to release it from the DIN rail.

4.2. SIM card

The SIM card format that has to be placed in the sled is the mini SIM card format. Only insert the SIM card when the device is off.

4.3. Antenna

Connect the antenna cable to the SVM's antenna connection. The antenna should be affixed to as high a point as possible to obtain the best possible range.

4.4. Power supply

Connect the SVM to a DC power supply of 15 to 35VDC (at least 8.5 W) or a transformer of 20 to 30VAC. The power supply input of the SVM is not galvanically isolated from the other connections. The GND connection of the power supply connector is directly connected internally to the GND connection of the input connector and the COM port.

4.5. Reset key

The reset key has four functions: first of all, it is used to interrupt the alarm. Pressing this briefly ends the current notification; the SMS messages that have not yet been sent are not sent.

A second function of the reset key is to restart the dialer. The dialer can be restarted by holding this key down for a period of 8 seconds. This only occurs if a power supply is connected.

If no power supply is connected, the reset key functions as an off button. Holding the key down for a period of 8 seconds switches off the dialer.

The fourth functionality is for when there is something wrong and there seem to be no connection. By pushing the reset key for a duration of 3 seconds, releasing it 3 seconds and doing this 3 times the DHCP will be enabled. This ensures that the detector can be accessed again via Ethernet.

5. Setting of the SV-product line

5.1. SV-prog

Setting up the SVA can be done in two ways, the fully adjustable way of the SV-prog tool and a limited adjustable way via Remote Setup. The SV-prog program can be downloaded for free from the Adésys website (www.adesys.nl).

As soon as the SV has been switched on, the tool will display this in the overview after a few seconds and the SVA can be configured by clicking it. When search diallers is pressed, SV-prog shows all accessible diallers.

5.2. Checkmyproces.com

For the use of the limited adjustability via Checkmyproces.com it is important that the following values are added to the firewall as an exception.

Data connection

url:	http://svx.meetcentrale.nl:80/severa
protocol:	http
port:	80

System settings

url:	mqtt.meetcentrale.nl
protocol:	mqtt
port:	1883

For the exact operation of Checkmyproces.com you can consult the manual.

6. Accessories

Ethernet cable
Length: 1 metre
Type: Cat 5E
100 MHz

SV-61: Adapter plub
Type: Sub-D9-RJ45

(only enclosed with SVM-X56)

Quickstart
Installation manual in:
- Englisch (EN)
- Dutch (NL)
- German (DE)
- French (FR)

Molenweer 4
2291 NR Wateringen
The Netherlands

+31 174 794022
www.adesys.nl
info@adesys.nl

Available in our SV-product line

- SVA alarm dialler
- SVL Weblogger
- SVM 4G modem
- SVM-X56 Priva special
- Our specials: customized solutions

Visit the various product pages on the website for more information about these products.

Complete manual available on website

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