



simons  Voss

Transponder 3064

Manual

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Simons  Voss
technologies

Contents

1	Safety instructions	3
2	General	4
2.1	How it works.....	4
2.2	Incorporating the transponder in different locking systems.....	4
2.3	Higher-ranking locking level.....	5
3	Special models	7
3.1	Password transponder.....	7
3.2	Switch transponder	7
3.3	Explosion protection transponder (EX protection).....	7
3.4	Bonded transponder	7
3.5	Transponder with integrated RFID chip.....	7
3.6	Fire service key tube transponder	8
3.7	G2 battery replacement transponder.....	8
4	Explosion protection transponder	9
4.1	General.....	9
4.2	Industrial standards.....	9
4.3	Classification.....	9
5	Additional functions.....	10
5.1	Time zone control.....	10
5.2	Date of validity	10
5.3	Activation transponder.....	10
6	Battery replacement.....	11
6.1	Battery Replacement 3064.....	11
7	Loss of the transponder	12
7.1	Emergency opening	12
7.2	Replacement transponder [G1].....	12
8	Overview of differences between G1 and G2 Protocols	13
9	Technical data	14
10	Declaration of conformity	15
11	Help and other information	16

1 Safety instructions

- ❑ The transponder casing is protected against splash water. However, it is not watertight!

Only use batteries which have been approved by SimonsVoss (see *Technical data [▶ 14.]*).

- ❑ The batteries used may pose a fire or burn hazard if handled incorrectly. Do not recharge, open, heat or burn these batteries. Do not short-circuit!
- ❑ Dispose of old or used batteries correctly. Store out of children's reach.
- ❑ Damage may be caused to the transponder if you reverse the polarity!
- ❑ Do not touch the contacts on the new batteries with your hands when replacing the old ones. Use cotton gloves free of fat or grease.
- ❑ The electronics must not be subject to mechanical stress or damaged in any way.
- ❑ Access through a door may be blocked due to defective or incorrectly programmed products. SimonsVoss Technologies GmbH is not liable for any consequences, such as blocked access to injured persons or those at risk, physical damage or any other losses.
- ❑ SimonsVoss Technologies GmbH accepts no liability for any damage caused by incorrect fitting or installation.
- ❑ Modifications or further technical developments cannot be excluded and may be implemented without notice.
- ❑ This documentation has been compiled based on the best knowledge available to us. Nevertheless, errors cannot be ruled out. SimonsVoss Technologies GmbH accepts no liability in such a case.
- ❑ Should there be differences in the content of other language versions of this documentation, the German version applies in cases of doubt.

2 General

Transponder 3064 is a digital "key" which is programmed with locking plan software and functions using contactless, wireless communication. All functions are activated by pressing a button. These include authorisation identification and the opening and locking of doors, gates, barriers, furniture locks and similar items. The transponder communicates with digital components – cylinders, SmartRelays and activation units – by sending and receiving constantly changing crypto codes, which ensure that the system cannot be misused.

As System 3060 functions using active transponder technology, the transponder features its own power source, a battery. Advantages over passive technologies include lower power requirements in the cylinder and the greater operating range.

SimonsVoss supplies different transponder models. These models are described in this document.

The second transponder generation G2 replaces the first generation G1. G2 features a more efficient communication protocol than G1. It will allow you to create larger, more efficient locking systems. Authorisations are also written on both the locking cylinder and the transponder, making programming more flexible.

A G2 system can also form a virtual network, i.e. authorisations and blocking lists are written on the transponder and transmitted to the locking system.

This manual looks at the specific differences between transponders. Read the G2 manual for more details.

The G2 transponder features both the G1 and G2 protocols and can thus be programmed for both locking system generations.

2.1 How it works

To carry out an action, the user holds the transponder close to the digital lock and presses the transponder button. The transponder may be held at a distance of up to 40 cm for locking cylinders and SmartHandles and up to 120 cm for SmartRelays. The transponder and locking device then exchange keys and authorisation data. The user can only perform the required action, such as opening or locking the door, if the transponder is authorised for the digital lock.

2.2 Incorporating the transponder in different locking systems

Each transponder can be used in three [G1] or four [G2] completely separate locking systems, providing no areas of validity are programmed. Each locking system receives its own password and is managed separately.

The following screen shows an example of use.

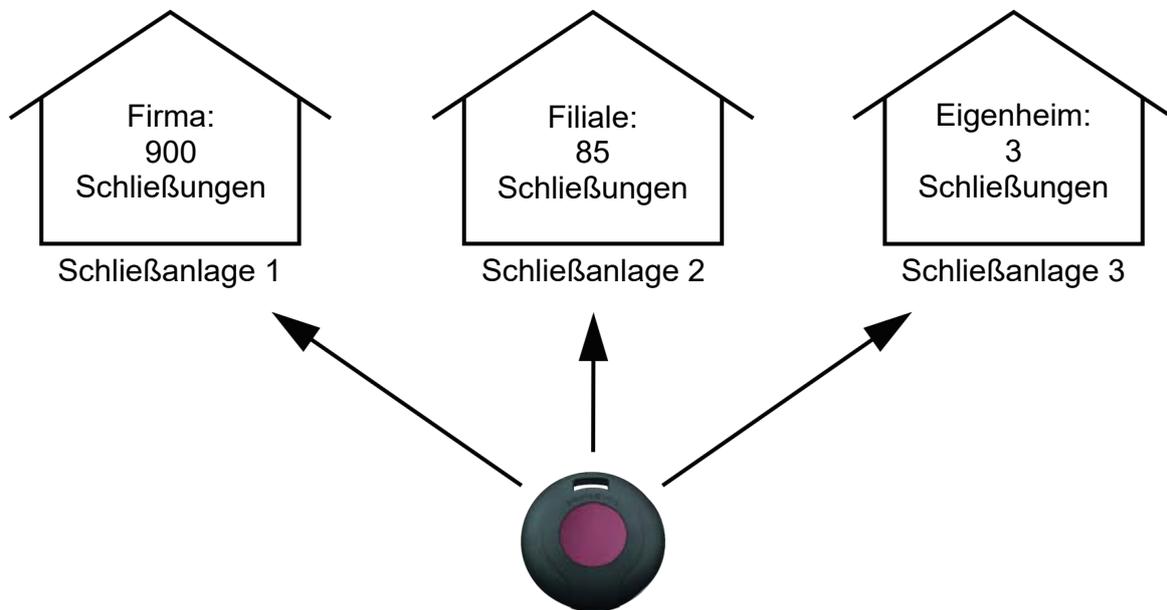


Fig. 1: A transponder for several separate locking systems

2.3 Higher-ranking locking level

Transponders can be authorised for more than three [G1] or four [G2] locking systems. To ensure this is the case, higher-ranking locking levels need to be set up in the locking systems concerned. A maximum of three higher-ranking locking levels can be set up per locking system (green, blue and red).



CAUTION

Opening deactivated locking devices using the red level

Transponders which have been assigned to the red locking level can also open deactivated locking devices using a block lock function.

- Assign the red locking level to emergency services such as the fire service only.



IMPORTANT

Reprogramming a higher-ranking locking level

Higher-ranking locking levels can only be programmed directly on the locking device.

200 [G1] or 1024 [G2] transponder IDs (TIDs) are reserved for each level in LSM. Authorisations for different transponders in the higher-ranking locking levels may be different.

The following screen shows an example of use.

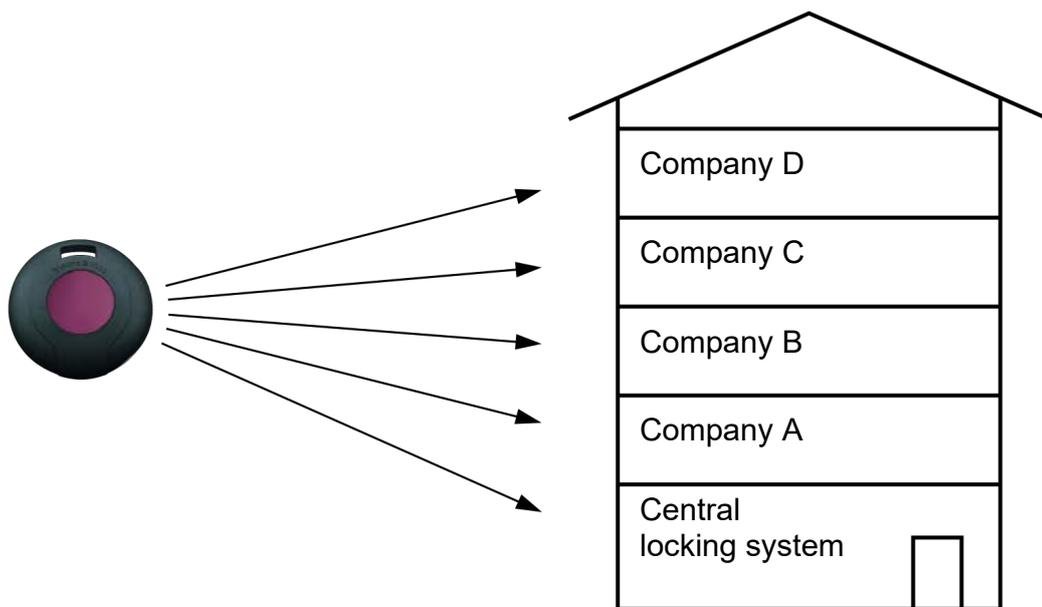


Fig. 2: Higher-ranking transponder

Four companies are based in an office building with a main lock which is used by all the companies. Each company manages its own locking system with its own password. Each employee receives a transponder which is authorised for two locking systems, the main lock and their company's own system. The building management or on-site technicians and cleaning staff require access to all levels. The fire service, for example, requires a transponder which is valid for all five locking systems in the building. They also require access if the alarm system is activated and the block lock function has disabled the locking cylinders. Higher-ranking locking levels are created in each of the five locking systems to provide access to all five locking systems. Each level receives the same password for all locking systems.

3 Special models

3.1 Password transponder

Instead of being entered manually, the locking system password can be transmitted by radio using a special transponder. Standard transponders cannot be used as a password transponder.

3.2 Switch transponder

For this type of transponder, a two-wire cable (about 1 m long) is connected to the switch contacts on the button and fed to the outside. When the two wires are connected, the transponder interconnects and is able to trigger actions.

Examples of use:

- Linking third-party systems
- Remote activation of a digital locking cylinder or SmartRelay

3.3 Explosion protection transponder (EX protection)

This transponder has the same functions as a Transponder 3064, but it is also approved for use in Explosion Protection Zone 1 (see *Explosion protection transponder* [▶ 9]).

3.4 Bonded transponder

This transponder is almost identical to the standard transponder, but has a bonded casing. This prevents the end user from misusing the transponder electronics or opening the casing.

3.5 Transponder with integrated RFID chip

Transponders can be supplied with different integrated RFID chips as an option. These RFID Chips do not necessarily need to be programmed with the LSM software. The active transponder and passive RFID part are independent from one another.

The following different RFID technologies are available:

- EM® 4102
- HITAG® 1
- HITAG® 2
- MIFARE® Classic
- MIFARE® DESFire
- LEGIC® MIM 256

■ LEGIC® advant 128

3.6 Fire service key tube transponder

Almost identical to the standard transponder, but has a narrower casing (33 mm) and can be kept in a standardised fire service key tube.

3.7 G2 battery replacement transponder

A G2 battery replacement transponder can be created in the LSM software (Version 3.0 or higher) for G2 locking systems. If the battery is low, the locking device will switch to freeze mode and can no longer be opened with normal transponders. The battery replacement transponder can eliminate freeze mode when activated on the cylinder. The locking device can then be opened with an authorised transponder. This means you no longer need to take the programming device to enable the locking device.



CAUTION

Depleting batteries through misuse

The battery is depleted further each time it opens a locking device in conjunction with a battery replacement transponder. This may lead to the batteries being fully discharged if the transponder is not used for its intended purpose! The batteries must be replaced immediately in such cases.

4 Explosion protection transponder

4.1 General

This transponder is a special product which can be carried and used in Zone 1 potentially explosive areas. Zone 1 refers to an area where a potentially explosive atmosphere sometimes occurs during day-to-day operations. The following aspects must be taken into account:

- The casing must not be opened.
- Unlike with Standard Transponders 3064, only SimonsVoss may change the battery in this transponder.
- As a general rule, users must comply with explosion protection regulations such as the German Operating Regulations BGR132 when using the device in Zone 1.

4.2 Industrial standards

This transponder has been tested in accordance with applicable explosion protection standards.

Refer to the following for further information:

- Directive 94/9/EC
- EN 60079-0 (Equipment for explosive atmospheres)
- EN 60079-11 (Equipment protection by intrinsic safety "i")

4.3 Classification

The transponder is classified as follows:

Explosion Protection Zone	1
Intrinsic safety	ib
Explosion group	IIC
Temperature class	T3
Device group	II2 G

This applies to areas where a potentially explosive atmosphere may occur due to gases, vapours or mist. The information given refers to an ambient temperature between -20°C and +40°C in the area of use.

5 Additional functions

The functions described below can be activated in the LSM software.

5.1 Time zone control

Transponders can be programmed to have locking authorisation for digital access control locking devices at certain times only (time zones). Such time zones are added to the LSM software and the transponders are then allocated to the relevant time zone group.

Example: Mr Smith receives the following authorisations:

Monday to Friday	Between 09:00 and 18:30
Saturday	Between 09:00 and 12:45
Sunday	No authorisation

5.2 Date of validity

Transponder authorisations can be linked to a validity date. The locking device does not need to be an access control locking device.

- Transponders which are valid **from** a specific point in time
(e.g. from 08:00 on July 12, 2005)
- Transponders which are valid **until** a specific point in time
(e.g. until 17:00 on July 12, 2005)
- Transponders which are valid **for** a specific time period
(e.g. between 1 July, 2003 until 31 July, 2005)



IMPORTANT

Data record creation

A data record is created each time for the activation or expiry date.

5.3 Activation transponder

As the result of a Block Lock function, all authorised transponders are blocked for digital locking devices in a safety area when the alarm system is activated to prevent false alarms.

Transponders can be programmed which eliminate this blocking mode and can then be used in an emergency by the fire service, for example (see *Higher-ranking locking level* [► 5]). The door can then only be opened using an authorised transponder.

6 Battery replacement

6.1 Battery Replacement 3064

The transponder battery can be replaced at any time when the battery warning is active (see Locking Cylinder 3061 manual – Battery warning).

1. Carefully open the casing at the notches, so that you can see the battery.
2. Open the battery holder.
3. Remove the battery.
4. Insert a new battery.
5. Close the battery holder.
6. Press the casing together again.
 - ↳ Casing lid clicks back into place.
 - ↳ Battery is replaced.



WARNING

Risk of explosion due to incorrect battery replacement

A battery fitted incorrectly into an explosion protection transponder may ignite an explosive atmosphere. Therefore, only SimonsVoss Technologies GmbH may replace the battery in explosion protection transponders.



CAUTION

Lack of power supply on battery replacement

The transponder may lose data due to the interruption in power supply. Do not interrupt the power supply for longer than two minutes. Do not press the button when there is no power and avoid short circuits.

7 Loss of the transponder

7.1 Emergency opening

You may carry out an emergency opening with the SmartCD and PDA and by entering the locking system password.

7.2 Replacement transponder [G1]

If a transponder is lost, it can be blocked in the locking plan and a replacement transponder added. If the locking system is operated in overlay mode [G1], the transponder is automatically disabled as soon as the replacement transponder is activated on the locking device (see LSM manual for programming).

8 Overview of differences between G1 and G2 Protocols

	G1	G2
Locks per locking cylinder on a transponder	16,000	64,000
Number of locking systems	3	4 [G2] + 3 [G1]
Max. number of TIDs per higher-ranking locking level	200	1024
Time zone groups	5+1	100+1
Physical access lists storable	n/a	1000
Locking plan information	Locking devices	Transponders or locking devices

9 Technical data

Housing	Material	Weatherproof plastic (polyamide)
	Colours	Casing: black Buttons: different colours
	Diameter	42.0 mm
	Height	13.7 mm
Ambient conditions	Temperature range	-20 °C to 60 °C
	Standard protection rating	IP65 IP66 (.SPEZ version)
	Environmental Class	III
Batteries	Type	CR2032
	Manufacturer	Varta, (Panasonic, Sony)
	Quantity	1x
	Voltage	3 V
	Battery life	G1: up to 100,000 activations or up to 10 years on standby G2: up to 400,000 activations or up to 10 years on standby

Radio emissions

SRD	24.50 kHz - 25.06 kHz	-20 dB μ A/m (10 m distance)
RFID (depending on equipment)	13.564 MHz - 13.564 MHz	-19.57 dB μ A/m (10 m distance)

There are no geographical restrictions within the EU.

10 Declaration of conformity

The company SimonsVoss Technologies GmbH hereby declares that article TRA2 complies with the following guidelines:

- 2014/53/EU "Radio equipment"
- 2014/30/EU "EMC"
- 2011/65/EU "RoHS"
- 2012/19/EU "WEEE"
- and regulation (EG) 1907/2006 "REACH"

The full text of the EU Declaration of conformity is available at the following internet address: <https://www.simons-voss.com/en/certificates.html>.



11 Help and other information

Information material/documents

You will find detailed information on operation and configuration and other documents under Informative material/Documents in the Download section on the SimonsVoss website (<https://www.simons-voss.com/en/downloads/documents.html>).

Declarations of conformity

You will find declarations of conformity for this product in the Certificate section on the SimonsVoss website (<https://www.simons-voss.com/en/certificates.html>).

Information on disposal

- Do not dispose the device (TRA2) in the household waste. Dispose of it at a collection point for electronic waste as per European Directive 2012/19/EU.
- Recycle defective or used batteries in line with European Directive 2006/66/EC.
- Observe local regulations on separate disposal of batteries.
- Take the packaging to an environmentally responsible recycling point.



Hotline

If you have any questions, the SimonsVoss Service Hotline will be happy to help you on +49 (0)89 99 228 333 (German fixed network; call charges vary depending on the operator).

Email

You may prefer to send us an email.

support@simons-voss.com

FAQs

You will find information and help for SimonsVoss products in the FAQ section on the SimonsVoss website (<https://faq.simons-voss.com/otrs/public.pl>).

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This is SimonsVoss

SimonsVoss is a technology leader in digital locking systems.

The pioneer in wirelessly controlled, cable-free locking technology delivers system solutions with an extensive product range for SOHOs, SMEs, major companies and public institutions.

SimonsVoss locking systems unite intelligent functions, optimum quality and award-winning German-made design. As an innovative system provider, SimonsVoss attaches great importan-

ce to scalable systems, effective security, reliable components, high-performance software and simple operation.

Our commercial success lies in the courage to innovate, sustainable thinking and action, and heartfelt appreciation of employees and partners. With its headquarters in Unterföhring, near Munich, and its production site in Osterfeld, eastern Germany, the company employs around 300 staff in eight countries.

SimonsVoss is a company in the ALLEGION Group, a globally active network in the security sector. Allegion is represented in around 130 countries worldwide (www.allegion.com).

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