User Manual

Key: **5WK4 5694**

User Manual

of the

Siemens VDO

Radio Frequency Transmitter

type 5WK45694

1. GENERAL DESCRIPTION OF THE RF TRANSMITTER

The RF remote control system consists of a RF transmitter and a RF receiver mounted on a control unit. The RF transmitter is mechanically integrated in the head of the key. This transmitter is used to transmit information for locking or unlocking the vehicle by a unidirectional RF transmission line for normal remote operation by pressing a button. Also is implemented the function of the Immobilizer in the transmitter with a bidirectional LF – transmission (passive).

In general the following functions are provided:

- Lock the car
- Unlock the car
- Unlock the boot lid of the car
- Approach light
- Panic alarm
- Immobilizer

2. POWER SUPPLY

The transmitter is provided with 1 lithium battery (CR 2032) that gives a power supply of +3V.

3. BUTTONS

There are five buttons with following functions:

| Action: | Usage: |
|---|----------------------------------|
| Pressing the lock button | Central locking |
| | Activation of Alarm system |
| | Deactivation of Panic Alarm |
| Pressing the lock button for 1,5 sec. | Comfort closing |
| Pressing the unlock button | Central unlocking |
| | Deactivation of Alarm system |
| | Deactivation of Panic Alarm |
| Pressing the unlock button for 1,5 sec. | Comfort opening |
| Pressing the unlock button twice within 10 sec. | Two-step unlocking |
| Pressing the approach light button | De-/activation of Approach Light |
| | Deactivation of Panic Alarm |
| | |
| Pressing the approach light button for 1,5 sec. | |
| Pressing the boot lid button | Unlocking of Boot lid |
| | Deactivation of Panic Alarm |
| Pressing the panic button for 3 sec or pressing | Activation of Panic Alarm |
| it twice within 3 sec. | Deactivation of Panic Alarm |

During activation, the button is forced to the ground via a "pull-up" within the microcontroller.

4. TYPICAL USAGE PATTERN (for Europe only)

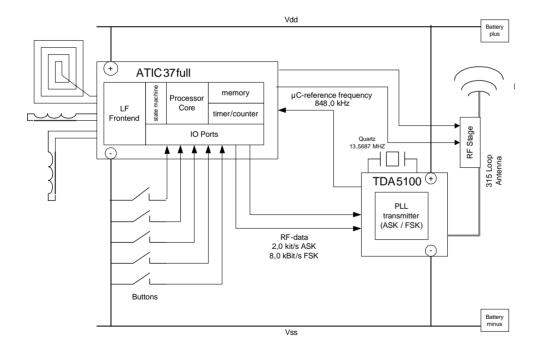
- 10 lock/unlock operations in 24 hours with complete transmission duration of 1.0 seconds (100ms/operation)
- 4 lock/unlock operations in 24 hours with transmission duration of 40 seconds (10 seconds for 1 operation; max. value)
- → total transmission duration of 41 seconds within 24 hours

Transmitter ON 1.7 seconds / hour

Transmitter OFF 3598.3 seconds / hour

<u>Duty Cycle</u>: $T_{ON} / T_{(ON+OFF)} \times 100\% = 1.7 / 3600 \times 100\% = 0.05\%$

5. BLOCK DIAGRAM OF THE TRANSMITTER



FCC ID:KR55WK45694

6. TECHNICAL DATA

Carrier frequency: 315 MHz \pm 0.05%

Output power: < 10 mW
Type of modulation: ASK / FSK

Method of frequency generation: PLL Number of channels: 1

Power supply: battery (CR 2032)

Type of battery: lithium Transmission range: < 50 m

NOTE:

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

7. LABEL DESIGN CANADA, MEXICO, USA

Siemens VDO 5WK45694

IC: 267T-5WK45694 FCC ID:KR55WK45694

Entry Owners Manual, Canada, USA:

NOTE

This device complies with part 15 of the FCC Rules and RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept interference received, including interference that may cause undesired operation.

COUTION

Changes or modifications not expressly approved by the manufacturer could avoid the user's authority to operate the equipment.