

# **User Manual / Functional Description**

**of the**

**Siemens VDO**

**Radio Frequency Transmitter**

**type**

**5WK4 7899**

**5WK4 8025**

## 1. SYSTEM OVERVIEW

The transmitter key consists of the fork (fork-shaped plastic component with a steel shank and the slide-in module with a hole for the key ring, and three buttons). The shank location is described below as "front", and the side of the slide-in module which contains the buttons, is described as "top". The key ring hole is thus located on the back on the left.

### General functions of the buttons

Whenever a button is actuated, a telegram is emitted containing the information as to which button has been actuated. Two successive button actuations are only recognized if they are effected with an interval of at least 65 ms. However, each button actuation gives rise to at least four successive telegrams, even if another button is being actuated while they are emitted. If the button is not released, max. 50 identical telegrams are emitted. If the button is released after more than 4 telegrams have been emitted, the telegram being generated is emitted, then the function is aborted. Each new button actuation results in a new computation of the alternate code, and in a new telegram sequence being sent. The control unit receives the various telegrams generated by button actuation, and is capable of distinguishing, via the alternate code, between continued actuation and several separate, successive actuations of the button.

### Designation and functions of the buttons

Button position	Button number	Name	Effect
Front	1	Unlock	Unlocking the vehicle
Center	2	Lock	Locking the vehicle
Rear	3	Trunk Release	Unlocking the trunk

### 3. TECHNICAL DESCRIPTION

Temperature range, storage :	-40... +85 °C
Temperature range, operation:	-20... +65 °C
Service voltage:	2.0... 3.4 V
Carrier frequency:	315.00 ± 100 kHz
Output power, unmodulated:	< 75.6 dBµV/m
Oscillator build-up time:	< 80 µs
Data transmission rate:	2000 Bd
Modulation:	OOK (ASK)
Telegram length:	100 ms (52 ms data, 48 ms pause)
No. of telegrams:	4... 50
Bit coding:	Biphase Code (Manchester Code)
Telegram:	Ford Shark Protocol Version 1.3

### 4. VARIANTS

5WK4 7899 315 MHz - 3 buttons - Transponder DST Wedge

5WK4 8025 315 MHz - 3 buttons - Transponder DST Glass

### 5. LABEL DESIGN Canada, USA

#### **Siemens VDO 5WK4 7899**

IC:267T-5WK47899  
FCC ID:KR55WK47899

#### **Siemens VDO 5WK4 8025**

IC:267T-5WK47899  
FCC ID:KR55WK47899

#### **Owner Manual:**

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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Canada:**

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.