

Operating Manual/Functional Description

for

SIEMENS

VENUS Radio Frequency System

Chip Card 315 MHz

Functional Description - VENUS Radio Frequency System

The VENUS radio frequency system is an optional unit which enables convenient vehicle operation. All the driver needs to do in order to use the vehicle is simply to carry a chip card along with him. The vehicle activates the chip card by induction.

The card can be excited by pressing a button, or by inductive activation to emit a code to the vehicle. If this code is assessed as "valid", the vehicle is locked or unlocked.

If the engine of an unlocked vehicle is to be started, the chip card must be located inside the vehicle. If the code emitted by the chip card is valid, the engine can be started.

To open and close the vehicle by remote control, and to start the engine, the chip card emits an FSK signal (Frequency Shift Keying) up to three times for 20 ms to 60 ms, on a mid-frequency of approx. 315 MHz. The frequency deviation ranges from 20kHz to 100kHz. The signal is modulated with 1kHz. The system uses the Manchester code.

List of components

MLFB Number	Component
5WK4 8028	Chip card

FCC ID: KR55WK48028

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.

Description of the test setup for the VENUS radio frequency system

The test setup comprises the following parts:

- Card in normal mode
- Chip card in test mode „Continuous transmission“

Start-up

When operating the chip card in normal mode, the chip card activates the two status LEDs (green) on actuation of the button, and emits a radio frequency telegram first. Then the LED on the chip card goes on briefly.

When operating the chip card in continuous mode, the chip card can be activated by pressing the button continuously, until the LED goes out. Then, the button must be released and the chip card begins to emit permanently in the continuous mode.

The chip card only stops the transmission process after the button is pressed once again. There is no LED signal for switching off.

To terminate the activated test mode, the user may also remove the batteries. The test mode is retained even if the batteries have been removed; however, in this case, it is not active.

This procedure does not correspond to the standard mode of operation of the chip card !!!

This procedure was intended to simplify radiation measurement. In normal mode, the chip card only emit at intervals of max. 0.06 seconds.

Should you have any queries or problems, please do not hesitate to contact:

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