# **User Manual / Functional Description**

## of the

**Siemens VDO** 

**Immobiliser system type Step7** 

### **Description of the Siemens VDO immobiliser system type Step7**

#### 1. General information

This Siemens VDO system is a vehicle immobilization system. The immobiliser system consists of the transceiver Step 7 and a transponder HITAG 2. The immobilizer Step7 is located near the vehicle's ignition lock. The transponder is located within the ignition key. The transponder is magnetically coupled to the Control Module. The immobilizer Step7 is connected via a wire harness to the bodycontroller.

The communication is done only on one wire without separate clock line. The power supply is done via ignition. Ground line is contacted directely.

#### System Operation

This immobilizer system is a passive immobilization system. The immobilizer Step7 uses a magnetic couple to read the transponder's identification code. The communication between the Immobiliser and transponder is encrypted. The data transfer is via one wire K – line.

The Voltage regulater, which is the power supply for the oscillator is integrated in the Motorola IC MC 33690.

#### 2. Technical Data:

Carrier frequency:

Output power/field strength:

Type of modulation:

Method of frequency generation:

Number of channels:

Power supply:

Type of battery:

Transmission range:

125 kHz ± 0.6%

< 42dBµA/m @ 10m

AM (Amplitude Modulation)

SAW

4

13,5 V DC

vehicle battery

10,5 mm