

User Manual / Functional Description

for

SIEMENS VDO

R230 Remote Control Transmitter

Type 5WK4 7291-2

Functional Description – R230 Remote control transmitter

The R230 radio control transmitter is a key which enables convenient vehicle access. All the driver needs to do in order to lock/unlock the vehicle is simply to carry the key along with him. The vehicle activates the key by an inductive telegram, if the driver pulls or pushes the door handle. As a reaction the key checks the code and transmits a response on radio frequency. If the identification number is correct, the vehicle will be unlocked or locked or the engine will be started.

Variants

Siemens type designation	Frequency
5WK4 7291	433.92 MHz (ECE)
5WK4 7292	315 MHz (USA)

Typical usage pattern

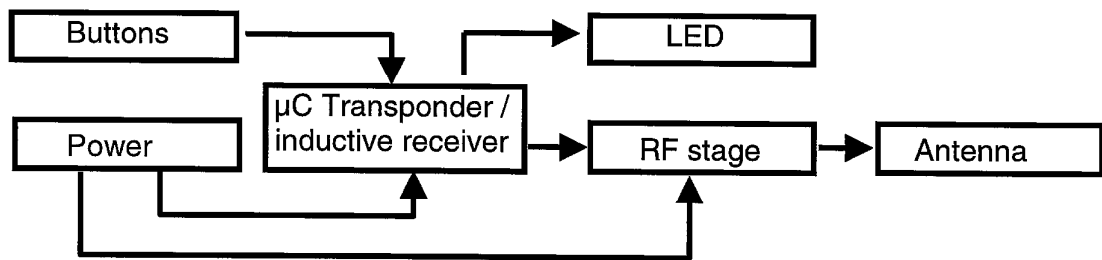
20 lock / unlock operations in 24 hours with a typical transmission duration of 175 milliseconds → 0.146 s transmission duration/hour

Transmitter ON 0.146 seconds / hour

Transmitter OFF 3,599.854 seconds / hour

Duty Cycle: $T_{ON} / T_{(ON+OFF)} \times 100\% = 0.31125 / 3,600 \times 100\% = 0,004\%$

Block diagram of the R230 remote control transmitter



Technical Data:

Carrier frequency ECE:	433.92 MHz $\pm$ 90 kHz
Carrier frequency USA:	315 MHz $\pm$ 75 kHz
Output power/field strength:	< 10 mW
Type of modulation:	FSK
Method of frequency generation:	Crystal
Number of channels:	1
Power supply:	battery (CR 2025)
Type of battery:	lithium
Transmission range:	< 5m

Label design

Europe: (433.92 MHz)

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5WK4 7291



USA / Canada: (315 MHz)

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5WK4 7292

FCC ID:KR55WK47292

CAN: 267 xxx xxxx

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.

If there are some problems or questions emerging, please do not hesitate to contact:

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