

Technical Description

Key W169

Technical Data

HF-Part

Key W169

Software status: Software version: 5.1
Hardware status: HW F
 with mechanical emergency key

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Version :	01

Functional description:

The W211¹ key is a component of a driver authorisation system and has the following function:

Remote control for vehicle access (*German abbreviation: FZB*) via radio and infrared signals

A command is transmitted to the vehicle by the key via a HF transmitter after a button has been pressed on the key.

General technical data:

Temperature range:

Working temperature: -20 ...+65 ° C

Data of the HF-part

Type of data transmission: half duplex

Transmitter:

Transmitting frequency: 433.92 MHz (ECE)
315.00 MHz (USA)

Transmitting frequency tolerance: +/- 80 ppm
(production, aging, temperature)

Transmitting capacity (EIRP): typical -19 dBm @433.92 MHz
max. -22 dBm @315.00 MHz (USA)
max. -41dBm@315MHz (Japan)

Modulation: Frequency shift keying (FSK2, incoherent)

Frequency shift: +/- 14 ...+/-18 kHz, nominal: +/- 16 KHz

Modulation content: Digital data
Data rate: 1 kBit/s
Coding: Manchester²

Data contents: Remote control (1 Kbit/s):
55 zero bits (preamble + 1 start bit + 112 bit data)

¹ Anm. d. Ü.: Muss das nicht "W169" heißen?

² Anm. d. Ü.: Tippfehler in der deutschen Version



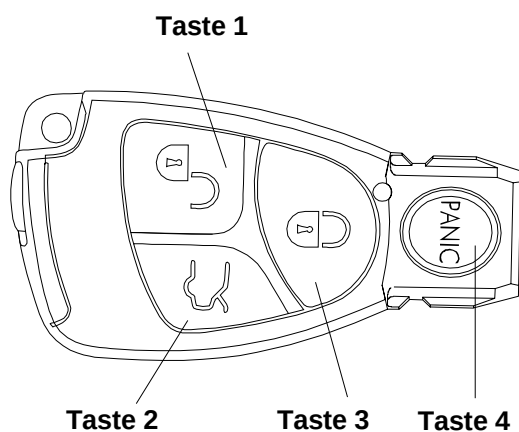
Data burst rate:

Remote control:

typ.10 000/a

Annex No.5

Activating test modes on the Keyless Go key:



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Button 1:	Unlock
Button 2:	Tailgate/boot lid (not applicable for estate vehicles)
Button 3:	Lock
Button 4:	Panic (USA version)

Mechanical emergency key inside housing and latched in place

³ Anm. d. Ü.: In der Grafik: Taste = Button

Key: (set permanently to HF diagnosis, see marking)

The operating mode is switched on and off alternately by briefly pressing the respective button.

HF diagnosis:		
Button		Diagnosis operating mode
Unlocking button	(Button 1)	Transmit low transmission frequency (non-modulated)
Locking button	(Button 3)	Transmit upper transmission frequency (non-modulated)
Tailgate	(Button 2)	Transmit at 1 kHz permanent modulation

15. April 2004

Ref.: FCC ID: IYZW169
Radio equipment authorization to FCC in USA for
RF transmitter Key W169 3312

The transmitter will be supplied as an original equipment device to the car manufacturer. According to 47 CFR 15.19 (Labelling requirements) the car manufacturer will print the following text in the appropriate User Manual of the car:

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 to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Rietheim-Weilheim 15. April 2004

MARQUARDT GmbH


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