

**BMW Keyless Ride System
Manufactured by Huf Hülsbeck & Fürst**

Type Approval information summary to be used for application and certification issues

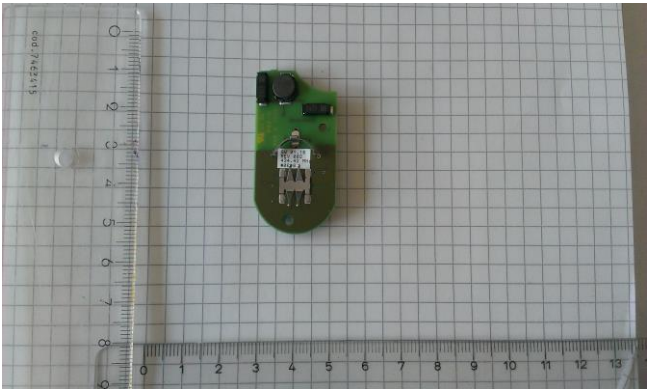
Basic product information:

Brand	BMW
Manufacturer	Huf Hülsbeck & Fürst GmbH & Co. KG
Kind of Device / Function	keyless Ride System with RF transceiver for BMW Motorcycles
Models	ID Device : HUF5750 ELV incl. ECU: HUF8465
Technology/Wirelessprotocol	RF
Antenna info (type/gain)	PCB Loop antenna
LF frequency:	125 and 134.45 kHz
Modulation	FSK
Carrier frequency model	HUF5750 + HUF8465 : 434.42 MHz (1 channel) Rest of the World
Power supply	Lithium battery
Output power	HUF5750+ HUF8465 : -17.6 dBm EIRP
Number of Channels	1 - 2
Dimensions (w / l / d)	64 mm x 34.5 mm x 18.3 mm
Temperature range	-20°C ... +60°C (Remote function, due to battery) -20°C ... +85°C (Transponder function)
Manufactured in [year]	2013
Supply voltage:	Maximum 3.2V Typical 3.0V Minimum 2.2V
Standard(s) Applied	EN60950-1; EN301489-1 & -3; EN300220-1 & -2; EN300330-1 & -2; FCC Part 15.231&15.209
Made in Country	Germany

External Picture(s)



Internal Picture (s)





Short Description:

The motorbike's KR-system is part of the BMW motorcycle version K48. It allows the user to mobilize or immobilize the motorcycle by use of a valid remote key. It's available for three different RF- carrier frequencies: 315,0 MHz (Japan), 433,92 MHz (Korea) and 434,42 MHz (RoW).

The KR-system consists the two main components:

- BMW Keyless Ride ECU
- BMW Keyless Ride ID Device

The interactions between the KR ECU and the ID device (remote key) are performed in the two different ways:

1. Normal mode: The unidirectional RF- communication uses the multi-band RF-Receiver which is the user standard mode.
2. Emergency mode: The bidirectional LF- communication based on Transponder LF-Base station and it's helpful in cases when the ID device battery is discharged.

Contacts - Radio Type Approval

Applicant / Authorized for type approval:

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Manufacturer:

(Same as applicant)