Project: MDE_HUF_1302#BMW#KRS

BMW Keyless Ride System
Manufactured by Huf Hülsbeck & Fürst

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

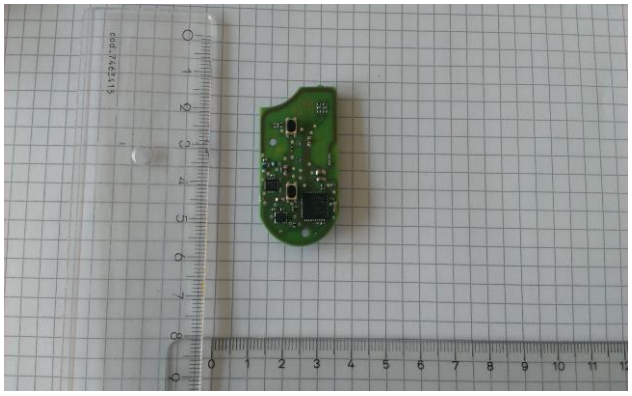
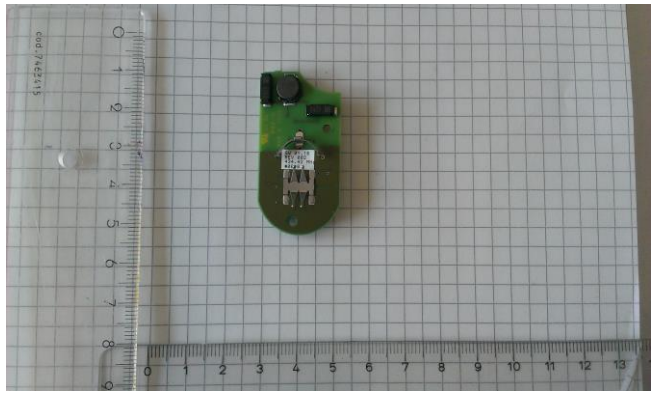
Basic product information:

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:

7 layers AG
Borsigstr. 11
40880 Ratingen, Germany
www.7layers.de

Mr Ahmed Gatri
Phone: +49 (0)2102 749 255
Fax: +49 (0)2102 749 350
Email: Ahmed.Gatri@7Layers.com

Ms Glenda Claussen
Phone: +49 (0) 2102 749 387
Fax: +49 (0) 2102 749 350
Email: Glenda.Claussen@7Layers.com

Mr Berthold Braun
Phone: +49 (0) 2102 749 454
Fax: +49 (0) 2102 749 350
Email:Berthold.Braun@7Layers.com

Applicant:

Huf Hülsbeck & Fürst GmbH & Co. KG
Huf Group Headquarters
Steeger Straße 17
D-42551 Velbert
http://www.huf-group.com

Dipl.-Ing. Thomas Herzog
Phone: +49 (0) 2051 / 272 – 877
Fax: +49 (0) 2051 / 272 - 6990
eFax: +49 (0) 2051 / 272700 - 877
Email: Thomas.Herzog@huf-group.com

Manufacturer:

(Same as applicant)