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UNITED KINGDOM CONFORMITY ASSESSMENT

**UK TYPE EXAMINATION CERTIFICATE**

2

**Radio Equipment Regulations**

SI 2017:1206 (as amended) – Schedule 3, Part B

3 UK Type Examination  
Certificate No.:**EMA22RER0070**

4 Equipment:

**Antenna,  
Model: 4821.01,  
Variants: refer to section 15,  
Trademark: Antennensysteme**

5 Manufacturer:

**Desay SV Automotive Europe GmbH**

6 Address:

**In der Buttergrube 3-7, 99428 Weimar-Legefild, Germany**

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Element Materials Technology, Approved Body number 0891 in accordance with Regulation 46 of the Radio Equipment Regulations 2017, SI 2017:1206 (as amended), certifies that this equipment has been found to comply with the Essential Requirements relating to the design and construction of radio equipment given in the following Regulations: **6(1)(a) - Health and safety, 6(1)(b) - Electromagnetic compatibility, 6(2) – Radio spectrum.**

The examination and test results are recorded in the confidential reports:

**17/05-0070, 20/10-0047.**

9 Compliance with the Essential Requirements, with the exception of those listed in section 19 of the schedule to this certificate, has been assured by compliance with:

**EN 303 354 V1.1.1 (2017-03) Draft EN 301 489-1 V2.2.0 (2017-03) EN 62368-1:2014+A11:2017  
EN 50083-2:2012**

10 This TYPE EXAMINATION certificate relates only to the design and construction of the specified equipment in accordance with the Regulations. Further requirements of this Regulations apply to the manufacture and supply of this equipment. These are not covered by this certificate.

11 This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the rules of the Element Materials Technology Radio Certification Scheme and remains valid for only so long as the equipment conforms to the type described herein.

12 Any deviation to the design and construction of the specified equipment that is not certified by Element Materials Technology shall render this certificate invalid.



Josh Batty, Deputy Certification Manager

Issue date: 2022-08-23

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13 **SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE**

14 **CERTIFICATE NUMBER EMA22RER0070**

15 **General description of equipment included within the scope of this certificate**

Multifunction antenna for vehicular use. The active antenna will be connected to the GNSS/AM/FM/DAB receiver of the vehicle. The antenna incorporates passive antenna for mobile MIMO 4G/3G/2G. The conformity of the model 4821.01 covers the conformity of the model group “B1 X3” as listed in the follow tables below.

<i>Rundfunk -LP-Typ</i>	<i>GPS-LP-Typ</i>	<i>Leadantennen</i>	<i>Bezeichnung</i>	<i>Kundensachnummer (wenn gegeben)</i>
kein	B1	(Leer)	3772.02 Ant. GPS, GLONASS; FAKRAF-C	A 004 820 86 75
			4576.01 Klebeant. 2G,3G,4G,GNSS (RIO)	U1.28205-6018
			4576.02 Klebeant. 2G,3G,4G,GNSS	
			4576.03 Klebeant. 2G,3G,4G,GNSS 0,3 m	83.28205-6536
			4576.04 Klebeant. 2G,3G,4G,GNSS, 4,0m FAKRAF	252.907.247.C
			4576.05 Klebeant. 2G,3G,4G,GNSS; 2,0m FAKRAF	2854596
			4809.01 KOMBIANT. GPS/GLONASS, GSM/UMTS	A 002 827 20 01
X3			<b>3777.02D. ANT. AM/FM, DAB, GSM, UMTS, LTE, GPS</b>	<b>81.28205-6100</b>
			3796.01D. ant. AM/FM, DAB, GSM, UMTS, LTE, GNSS	81.28205-6101
			3796.02D. ant. AM/FM, GSM, UMTS, LTE, GNSS	252.907.247.D
			3796.03D. ant. AM/FM, DAB, GSM, UMTS, LTE, GNSS	A 005 820 64 75
	kein	(Leer)	4822.01 Antennenfuß AM/FM	2394917
			4822.02 Antennenfuß AM/FM	2394917
	B1	Leadantenne B1, X3	4821.03 Antennenfuß Multifunktion	2714385
	<b>C1</b>		<b>3799.01D. ant. AM/FM, DAB, GSM, UMTS, LTE, GNSS</b>	<b>A 005 820 74 75</b>
			<b>3799.02D. ant. AM/FM, DAB, GSM, UMTS, LTE, GNSS</b>	
			<b>3799.03D. ant. AM/FM, DAB, GSM, UMTS, LTE, GNSS</b>	
			<b>3799.30D. ant. AM/FM, DAB, GSM, UMTS, LTE, GNSS</b>	

16 **Technical description**

Frequency band: 0.1 – 1.710 MHz, 87- 108 MHz, 174 - 230 MHz, 1571.42 - 1610 MHz  
 Transmit power: N/A  
 Type of antenna and gain: Amplifier Gain:  
 AM: 5 ± 2 dB  
 FM: 5 ± 2 dB  
 DAB: 5 ± 2 dB  
 GNSS: 24 ± 4 dB

17 **Technical Documents describing the certified equipment**

The list of technical documents is given in Appendix A to this schedule.

18 **Test report No. (associated with this certificate issue):** **Product Safety:** 20/10-0047  
**RF Exposure:** N/A  
**EMC:** 17/05-0070  
**Radio:** 17/05-0070

## SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE

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### 19 Essential Requirements (Regulation 6)

Covered by application of the standards listed in section 9 of this certificate and the assessment conducted in the test report/s listed in section 8 of this certificate.

A gap analysis was conducted to identify differences between EN 301 489-1 V1.9.2, as listed on the Designated Standards list, and the version adopted for testing by the test laboratory, Draft EN 301 489-1 V2.2.0. It is noted from the gap analysis that the essential requirements for this specific equipment were not affected by the changes to the standard.

A gap analysis was conducted to identify differences between EN 50083-2:2012+A1:2015, as listed on the Designated Standards list, and the version adopted for testing by the test laboratory, EN 50083-2:2012. It is noted from the gap analysis that the essential requirements for this specific equipment were not affected by the changes to the standard.

A gap analysis was conducted to identify differences between EN 62368-1:2014, as listed on the Designated Standards list, and the version adopted for testing by the test laboratory, EN 62368-1:2014 +A11:2017. It is noted from the gap analysis that the essential requirements for this specific equipment were not affected by the changes to the standard.

### 20 "Restrictions on Use", if any:

None.

### 21 "Routine tests", if any:

None.

### 22 Other information, if any:

Designated standard not available covering this type of equipment. For radio and EMC requirements from EN 303 354 V1.1.1 (2017-03) and EN 50083-2:2012+A1:2015 which were deemed most relevant of the available standard.

This UK RER application is applied for based on original RED application with certificate number 20/10-0047 and issue date: 2021-05-10.

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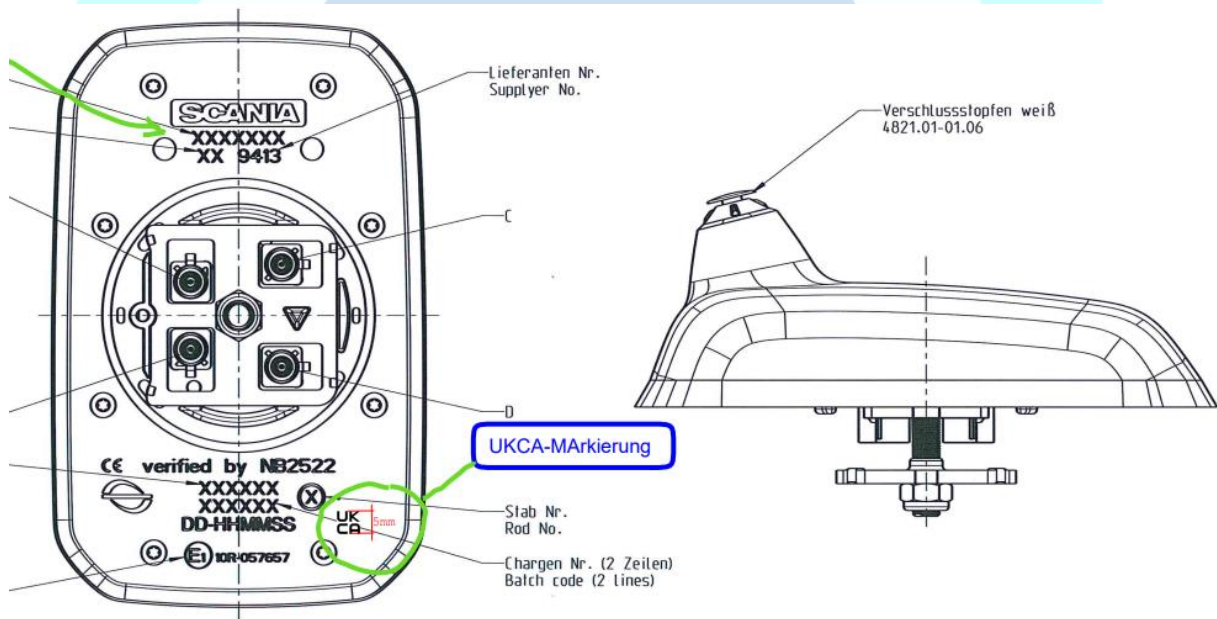
**23 Photographs**

4821.01:



**24 Details of markings**

Product Label and Label Location 4821.01:



## SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE

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### 25 Certificate History

Original certificate      2022-08-23      First issue.

This certificate is a consolidated certificate and reflects the latest status of the certification, including all variations and amendments.

### 26 Notes to UKCA marking

In respect of UKCA Marking, Element Materials Technology accepts no responsibility for the compliance of the product against all applicable Regulations in all applications.

### 27 Notes to this certificate

Element Materials Technology certification reference: TRA-055404-00 I4 (GU-STCQ-0004).

Throughout this certificate, the date format yyyy-mm-dd (year-month-day) is used.

Approved Body 0891 is the designation for Element Materials Technology Warwick Ltd.

### 28 Conditions for the validity of this certificate

This certificate remains valid for so long as:

- (i) The equipment listed in section 4 is manufactured in accordance with the technical documents listed in Appendix A of this certificate.
- (ii) The standards listed in section 9 of this certificate continue to satisfy the Essential Requirements relating to the design and construction of radio equipment given in the Regulation 6, as listed in section 8 of this certificate, and the generally acknowledged state of the art (e.g. as determined by the publishers of those standards).

**SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE**  
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**APPENDIX A - LIST OF TECHNICAL DOCUMENTS**

<b>Title:</b>	<b>Document/file name:</b>	<b>Rev. Level:</b>	<b>Issue date:</b>
Technical File	0047 (4821.03 Series)	initial	05.10.2021

