1 UNITED KINGDOM CONFORMITY ASSESSMENT

UK TYPE EXAMINATION CERTIFICATE

2 **Product or Protective System Intended for use in Potentially Explosive Atmospheres SI 2016:1107 (as amended) – Schedule 3A, Part 1**

3 Type Examination Certificate No.: **EMA21UKEX0029X**

4 Product: **Smart Tachograph DTCO 1381.x**

5 Manufacturer: **Continental Automotive GmbH**

6 Address: **Heinrich Hertz Straße 45, 78052 Villingen-Schwenningen, Germany**

7 This product 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 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, SI 2016:1107 (as amended), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential report **21 203 294629**.

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN IEC 60079-7:2015/A1:2018** **EN 60079-11:2012**

Except in respect of those requirements listed at section 18 of the schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.

11 This TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of this product shall include the following:

Ex II 3 (2) G Ex ec [ib Gb] IIC T6 Gc

This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the Element Materials Technology Ex Certification Scheme.

S P Winsor, Certification Manager

Issue date: 2022-03-11

Unit 1, Pendle Place, Skelmersdale, West Lancashire, WN8 9PN, United Kingdom
Element Materials Technology Warwick Ltd
Company Reg No. 02536659

13 SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE

14 CERTIFICATE NUMBER EMA21UKEX0029X

15 Description of Product

The smart tachograph DTCO 1381.x is used together with a displacement and speed sensor type KITAS 21XX.xx to monitor vehicles for the transport of flammable liquids or gases.

The Smart Tachograph DTCO 1381.x is intended to be installed in the driver's cab of a motor vehicle. The digital tachograph type DTCO 1381.x is also associated electrical equipment with intrinsically safe circuits.

Type key:

Smart Tachograph DTCO 1381 R3.x
Smart Tachograph DTCO 1381 R4.x

Permissible ambient temperature range: –20 °C to +65 °C

Technical specifications:

Supply circuit…… (Connections A1[30] and A5[31a] on connector)	continuous supply from the vehicle battery Un = 24V or 12V
Ignition system…….. (connections A2[58d], A3[15], and A6[31] on the connector)	Supply via the battery disconnect and ignition switch from the vehicle battery Un = 24V or 12V
Other data and signal circuits…….	electrical data according to the manufacturer's specifications
Supply and Signal circuits…… (Ports B1, B2, B3 and B4 on connector)	in type of protection intrinsic safety Ex ib IIC maximum values: Uo = 9.7 V I = 36 mA Po = 320 mW Characteristic: trapezoidal only for connection to the position and speed sensor type KITAS 2171.xx according to the UKEX type examination certificate EMA21UKEX0031X or type KITAS 2185.XX according to the UKEX type examination certificate EMA21UKEX0030X

A line length of 20 m is permitted for interconnection. The intrinsically safe circuits are galvanically connected to the non-intrinsically safe circuits.

16 Test report No. (associated with this certificate issue): 21 203 294629.

13 SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE

14 CERTIFICATE NUMBER EMA21UKEX0029X

17 Specific Conditions of Use

1. The Smart Tachograph DTCO 1381.x may only be installed in the radio compartment provided for this purpose anywhere in the driver's cab of a motor vehicle.
2. The connection and disconnection of non-intrinsically safe circuits, as well as the actuation switching elements and issuing or inserting chip cards is only permitted if there is no explosive atmosphere.
3. The Smart Tachograph DTCO 1381.x must not be operated in a potentially explosive atmosphere when the main battery switch is closed.
4. The accessible non-metallic surfaces are protected from unacceptable electrostatic to protect charging.
5. The Smart Tachograph DTCO 1381.x must be installed in such a way that at least one equivalent degree of protection of IP 54 is achieved after testing the heat resistance according to EN IEC 60079-0.

Attention is drawn to the operating and installation instructions which may contain useful information in relation to conditions of use.

18 Essential Health and Safety Requirements (Regulations Schedule 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant test reports.

19 Drawings and Documents

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

20 Routine Tests

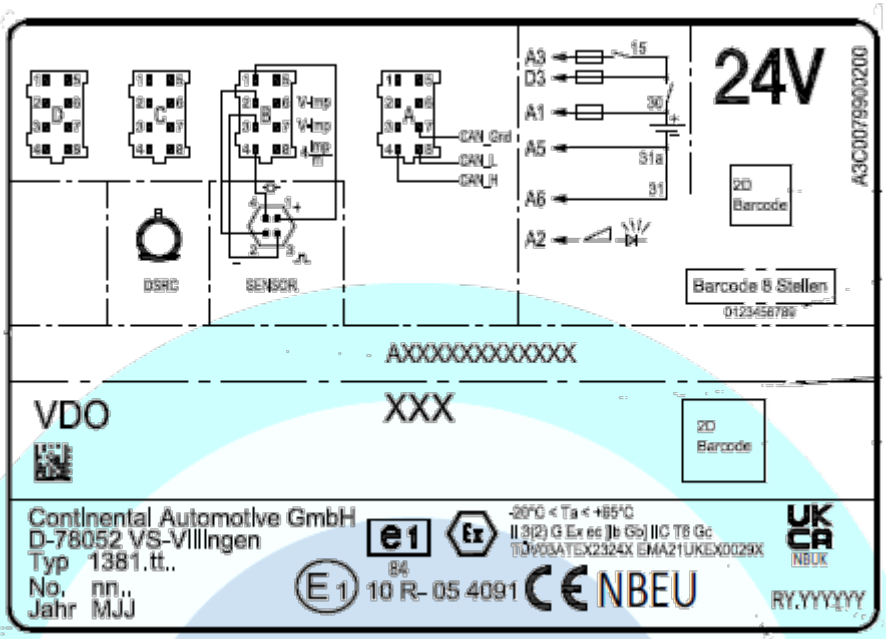
None.

21 Specific Conditions for Manufacture

None.

22 Photographs

23 Details of Markings



24 Certificate History

Original certificate 2022-03-11 First issue.

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

25 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.

26 Notes to this certificate

Element Materials Technology certification reference: TUNQ-054818-00 i2 (GU-TUNQ-0016).

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.

27 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 documents listed in Appendix A of this certificate.

(ii) The standards listed in section 9 of this certificate continue to satisfy the Essential Health and Safety Requirements of Schedule 1 of the Regulations SI 2016:1107 (as amended by SI 2019:696) and the generally acknowledged state of the art (e.g. as determined by the publishers of those standards).

SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE

CERTIFICATE NUMBER EMA21UKEX0029X

APPENDIX A - TECHNICAL DOCUMENTS

Title:	Drawing No.:	Rev. Level:	Date:
Element list of scheduled drawings for this certificate	Scheduled drawings list for EMA21UKEX0029X	1	2022-03-10