UNITED KINGDOM CONFORMITY ASSESSMENT

CERTIFICATE

(1) Type Examination

(2) **Product or Protective System intended for use in potentially explosive atmospheres - UKSI 2016:1107 (as amended) - Schedule 3A, Part 6**

(3) Type Examination Certificate Number: **DEKRA 21UKEX0181X** Issue Number: **0**

(4) Product: **Solenoid / alarm driver, Type 9203B1.., Type 9203B2.. and Type 9203A...**

(5) Manufacturer: **PRelectronics A/S**

(6) Address: **Lerbakken 10, 8410 Rønde, Denmark**

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

(8) DEKRA Certification B.V., 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 2016, UKSI 2016:1107 (as amended).

The examination and test results are recorded in confidential report NL/KEM/ExTR09.0001/06.

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

EN IEC 60079-0 : 2018 **EN 60079-7 : 2015 + A1 : 2018** **EN IEC 60079-15 : 2019**

except in respect of those requirements listed at item 18 of the Schedule to this certificate.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the 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 and not to the manufacturing process and its monitoring.

(12) The marking of the product shall include the following:

II 3 G **Ex ec nC IIC T4 Gc**

Date of certification: 9 June 2022

DEKRA Certification B.V.

R. Schuller
Certification Manager

2716:3

DEKRA Certification B.V. Meander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands
T +31 88 96 83000 F +31 88 96 83100 www.dekra-product-safety.com Registered Arnhem 09085396

(13) # SCHEDULE

(14) **to Type Examination Certificate DEKRA 21UKEX0181X** Issue No. **0**

(15) **Description**

Solenoid / Alarm drivers, Type Type 9203B1.., Type 9203B2.. and Type 9203A..., for rail mounting, are 24 V powered isolating barriers, converting digital signals from PLC's and other equipment into signals for driving valves, solenoids and light emitting diodes located in an explosive atmosphere.

Solenoid / Alarm driver Type 9203.... is supplied via terminals, or via Power Rail Type 9400.
Removable display module 4501 can be used for programming of the Solenoid / Alarm driver.

Ambient temperature range -20 °C to +60 °C.

Electrical data

Supply (terminals 31, 32 and rear contacts): U = 19.2 ... 31.2 Vdc.

Digital input (terminals 11, 12 and 13, 14): U ≤ 28 Vdc

Status-Relay output (terminals 33, 34):
U ≤ 32 Vac or 32 Vdc, I ≤ 0.5 Aac or I ≤ 1 Adc respectively.
If the Pulse Isolator is installed outside the hazardous area, the following data for the relay contacts apply:
U ≤ 110 Vdc or 125 Vac, I ≤ 0.3 Adc or I ≤ 0.5 Aac respectively.

Solenoid / Alarm driver, Type 9203A..., output circuits (terminals 41 ... 44 resp. 51 ... 54):
in type of protection Ex ec, with U_{max} = 28 V, I_{max} = 135 mA and P_{max} = 0.95 W.

Supply (terminals 31, 32 and rear contacts): U = 19.2 ... 31.2 Vdc.

Digital input (terminals 11, 12 and 13, 14): U ≤ 28 Vdc

Status-Relay output (terminals 33, 34):
U ≤ 32 Vac or 32 Vdc, I ≤ 0.5 Aac or I ≤ 1 Adc respectively.
If the Pulse Isolator is installed outside the hazardous area, the following data for the relay contacts apply:
U ≤ 110 Vdc or 125 Vac, I ≤ 0.3 Adc or I ≤ 0.5 Aac respectively.

Solenoid / Alarm driver, Type 9203A..., output circuits (terminals 41 ... 44 resp. 51 ... 54):
in type of protection Ex ec, with U_{max} = 28 V, I_{max} = 135 mA and P_{max} = 0.95 W.

(13) # SCHEDULE

(14) **to Type Examination Certificate DEKRA 21UKEX0181X** Issue No. **0**

Type designation

Detailed Nomenclature of the approved Solenoid / Alarm driver, Type 9203B1.., Type 9203B2.. and Type 9203A... is as follows:

Type	Installation	Current Output	Channels	Input
9203	Non Ex / Zone 2 :A	Low current :1	Single :A	Standard : -
			Double :B	
	Ex-Barrier / Zone 2 :B			PNP : 1
		High current :2	Single :A	NPN : 2

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

NL/KEM/ExTR09.0001/06.

(17) **Specific conditions of use**

The Solenoid / Alarm driver shall be installed in an enclosure in type of protection Ex e, providing a degree of protection of at least IP54 in accordance with EN IEC 60079-0, and providing a pollution degree 2 or better, as defined in EN 60664-1. Cable entry devices and blanking elements shall fulfil the same requirements.

Removable Display Module 4501, when connected to the Solenoid / Alarm driver, may not be damaged and shall be free of dust and moisture.

(18) **Essential Health and Safety Requirements**

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, compliance with all other requirements is demonstrated in the report.

(19) **Test documentation**

As listed in Report number NL/KEM/ExTR09.0001/06.