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UNITED KINGDOM CONFORMITY ASSESSMENT

UK TYPE EXAMINATION CERTIFICATE

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Product or Protective System Intended for use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

3 Type Examination Certificate No.: TÜV 21 UKEX 7074 X Issue: 00

4 Product: Power Supply Module PSM24-3G.1

5 Manufacturer: Hans Turck GmbH & Co KG

6 Address: Witzlebenstraße 7
45472 Mülheim an der Ruhr, Germany

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

8 TÜV Rheinland UK Ltd, Approved Body number 2571, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 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 557 / UKEx 7074.00 / 21.

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

EN IEC 60079-0:2018
EN IEC 60079-15:2018

EN IEC 60079-7:2015 /
A1:2018

EN 60079-11:2012

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

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:



II 3 (2) G Ex ec nC ic [ib Gb] IIC T4 Gc

This certificate and its schedules may only be reproduced in its entirety and without change.

TÜV Rheinland UK Ltd

Solihull, 2022-06-29

Dipl.-Ing. Klauspeter Graffi

This Type Examination Certificate without signature shall not be valid. Alterations are subject to approval by
TÜV Rheinland UK Ltd, 1011 Stratford Road, Shirley, Solihull, B90 4BN, Tel. +44 (0) 121 7969400
A UKAS accredited certification body, No. 8400

13 SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE

14 CERTIFICATE NUMBER TÜV 21 UKEX 7074 X

15 Description of Product

The power supply module, type PSM24-3G.1 is a component part of the explosion protected Remote I/O-fieldbus system "excom" and it is intended for the application in hazardous areas of category 3.

General product information

The equipment is exclusively operated in combination with the module subrack of type MT16-3G ... or type MT24-3G ... certified by the 3rd supplement to EC-type for the application in areas of category 3.

The power supply module is designed to types of protection Ex ic IIC and Ex ec IIC . As a central unit it supplies the excom fieldbus system with defined power. Up to two Gateways and 24 separately certified excom modules may be connected.

With this combination the intrinsically safe field circuits of the respective excom modules may be led into hazardous areas of category 1.

Inside the area of zone 2 the power supply module - as all other modules of the excom fieldbus system - may be plugged or unplugged during operation.

The permissible range of the ambient temperature is -40 °C up to 70 °C.

Technical Data

Voltage supply	type of protection Ex ec nc IIC
(plug connector J1 pins 1...4L+, 11...14L-)	$U_B = 19,2 \dots 32 \text{ V DC}$
	$U_m = 40 \text{ V}$
PA	EMV-relevance,
(plug connector J1 pins 21...24)	no protective function
System-internal output voltage	type of protection Ex ec nC IIC
(plug connector J2 pins 1...4, 7...10)	Operational maximum values:
	$U = 40 \text{ VAC}_{ss}$
	$f = 314 \text{ kHz}$
	$P \leq 60 \text{ W}$

External Clock..... type of protection Intrinsic Safety Ex ic IIC
 (plug connector J2 pins 13, 14) system-internal circuit
 without external connection facilities

Fault signal..... type of protection Intrinsic Safety Ex ib IIC
 (plug connector J2 pins 15, 16) system-internal circuit
 without external connection facilities

16 Test report No. (associated with this certificate issue): 557 / UKEx 7074.00 / 21

17 Specific Conditions of Use

The equipment must only be installed in an environment with a maximum pollution degree of 2. When used in zone 2:

- 1) the equipment must be mounted in a separately approved housing according to EN IEC 60079-0 with a degree of protection of at least IP54 according to IEC 60529.
- 2) with its housing must be installed and operated in areas with pollution degree 2 as defined in IEC 60664-1.

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 reports.

19 Drawings and Documents

Reg. no.	Document title:	Document no.:	Rev.:	Date:
1.	Approval documentation PSM24-3G.1 (284 p.)	Approval documentation PSM24-3G.1 signed.pdf	01	23.02.2022