

# TYPE EXAMINATION CERTIFICATE



## Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

- [3] Type Examination Certificate Number: **DEMKO 20 ATEX 2379X Rev. 0**
- [4] Product: **HiD2038, HiD2038\*\***
- [5] Manufacturer: **Pepperl+Fuchs SE**
- [6] Address: **Lilienthalstrasse 200, 68307 Mannheim, Germany**
- [7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S 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 Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.
- The examination and test results are recorded in confidential report no. **4789401947.3.1**
- [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**
- except in respect of those requirements listed at item 18 of the Schedule.
- [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 of the specified product, and not to specific items of product subsequently manufactured.
- [12] The marking of the product shall include the following:

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

**Certification Manager**  
Jan-Erik Storgaard



This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

**Date of issue:** 2020-07-23

**Certification Body**

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark  
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**Schedule**  
**TYPE EXAMINATION CERTIFICATE No.**  
**DEMKO 20 ATEX 2379X Rev. 0**

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Description of Product:

The HiD2038 is designed as increased safety "Ex ec" equipment to be installed in a zone 2 gas area.  
The smart-current-driver HiD2038 has two channels. It repeats the input signal from a control system to drive SMART I/P converters, electrical valves and positioners.  
Digital communication may be superimposed on the analogue values and may be transferred in both directions.  
The device is powered from nominal 24V dc.  
The devices can be directly connected to an appropriately certified termination-board.

Nomenclature for type HiD2038

The product name is HiD2038\*\*:

- The asterisks shown in the type code can be omitted or replaced by a combination of tokens, indicating different versions that have no influence on the approval.
- The appropriate type name is shown on the type label.

Performance testing

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1) to the scope of EN 60079-28:2015.

Temperature range:

The ambient temperature range is -40 °C to +70 °C.

Electrical data

Supply: 19 to 30VDC, ≤ 64 mA  
Inputs/Outputs: 4 to 20 mA

Routine tests:

None

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Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [ 8 ] on page 1 of this Type Examination Certificate.

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Special Conditions of Use:

- The device must be installed and operated only in an environment of overvoltage category II (or better) according to EN 60664-1.
- The device must be installed and operated only in a controlled environment that ensures a pollution degree 2 (or better) according to EN 60664-1.
- The device must be installed and operated only in surrounding enclosures that
  - comply with the requirements for surrounding enclosures according to EN 60079-0,
  - are rated with the degree of protection IP54 according to EN 60529.
- Connection or disconnection of energized non-intrinsically safe circuits is only permitted in the absence of a potentially explosive atmosphere.
- The equipment shall be installed on a suitably certified P+F H-System termination board which incorporates an appropriate mechanical retaining system and transient protection not exceeding 140 % of the peak rated voltage value of the equipment.
- When installed in a suitable enclosure, the surrounding air temperature of the equipment must be within the rated ambient temperature range taking into account factors such as heat generated by other equipment in the enclosure during operation.

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Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

