[1]

# TYPE EXAMINATION CERTIFICATE

⟨Ex⟩

[2]      **Component intended for use on/in an Equipment or Protective System
Potentially Explosive Atmospheres
Directive 2014/34/EU**

[3]      Type Examination Certificate Number: **UL 24 ATEX 3251U** Rev. 0

[4]      Component      : **RFID Reader – Model RFID20**

[5]      Manufacturer   : **Pepperl+Fuchs SE**

[6]      Address        : **Lilienthalstrasse 200, 68307 Mannheim, Germany**

[7]      This Component 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 26 February 2014.

The examination and test results are recorded in confidential report no. **DK/ULD/ExTR24.0021/00**.

[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 60079-31:2014** | **EN IEC 60079-31:2024** |

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

[10]     The sign "U" placed behind the certificate number indicates that this certificate should not be confused with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems. "Schedule of limitations" is listed under item 17 of this certificate.

[11]     This Type Examination Certificate relates only to the technical design of the specified product and not to specific items of component subsequently manufactured.

[12]     The marking of the component shall include the following:

⟨Ex⟩ **II 3 G      Ex ec IIC Gc**

⟨Ex⟩ **II 3 D      Ex tc IIIC Dc**

**Certification Manager**
Thomas Wilson

This is to certify that the sample(s) of the Component described herein ("Certified Component") 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 component 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 component. The Manufacturer are 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:** 2025-01-21

**Certification Body**      UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

# Schedule
## TYPE EXAMINATION CERTIFICATE No.
## UL 24 ATEX 3251U Rev. 0

[15] Description of Component:
The RFID20, RFID Reader Unit is used for user authentication and logging into the application running on a host server.
The RFID Reader is a Zone 2/22 Ex component and shall be used together with a Zone 2/22 enclosure.

Nomenclature:

| I | II | III | IV | V | VI | VII | VIII |
|---|----|-----|-----|-----|------|------|------|
| RFID20- | *- | L | NF- | ** | **- | N | ** |

| I | Type | RFID20 | RFID Reader |
|---|------|--------|-------------|
| II | Reader | A | Elatec Reader TWN4 MultiTech 3 M LF HF |
| | | B | Elatec Reader TWN4 MultiTech 3 LEGIC M LF HF |
| III | Certification | L | Zone 2/22, Division 2 |
| IV | Mounting options | NF | Flush Mount |
| V | Interface | UA | USB with Type A connector |
| | | UB | USB with Cable ends with crimped ferrules |
| VI | Cable length | 06 | standard 60 cm cable for installation in FLX System Housing |
| | | 18 | 1.8 m cable for standalone application |
| VII | Special accessories | N | none |
| VIII | Option | N0 | Standard |
| | | XX | Other options without impact on explosion protection (Can be replaced by any alphanumerical character) |

Temperature range:
The service temperature range is -20 °C to +70°C.

Electrical data
RFID20-A – fitted withTWN4 MultiTech 3 M LF HF
4.3Vdc to 5.5Vdc; 120mA maximum.

RFID20-B – fitted with TWN4 MultiTech 3 LEGIC M LF HF
4.3Vdc to 5.5Vdc; 200mA maximum.

Routine tests:
None

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

[17] Schedule of Limitations:
- These devices shall be installed into an opening of a suitable panel/enclosure in accordance with the end-product requirements and taking the enclosure material, mounting means, spacings and segregation requirements into account. The wall thickness of the enclosure in which the RFID Reader is intended to build in shall be between 1,5 mm and 4 mm.
- For proper fit and sealing of RFID Reader the mechanical cut-out and stud pattern should be followed and integrated into installed panel/enclosure.
- Devices are suitable for a maximum Service Temperature of -20°C to +70°C.
- The need to re-conduct a temperature test or temperature evaluation at the end-product shall be considered.
- The devices 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.
- For Zone 2 installation, the device shall be installed in the wall of a panel/enclosure that provides a minimum ingress protection of IP 54 in accordance with EN IEC 60079-0.
- For Zone 22 installation, the device shall be installed in the wall of a panel/enclosure that provides a minimum ingress protection of IP 6X in accordance with EN IEC 60079-0.
- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the device.
- Avoid electrostatic charges which could result in electrostatic discharges while installing, operating, or maintaining the device.
- Mount the device in a location with low electrostatic charge. Information on electrostatic hazards can be found in the technical report CLC/TR 60079-32-1.
- The device contains a Micro USB Connector, a UART Connector and a SAM Slot (SAM Card Holder). These connections have not been evaluated for use in the Hazardous Area and must not be used.
- Mount the device in such a way that it is protected from direct sunlight.

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- Impacts from heavy or sharp-edged objects on the device have to be avoided. The maximum impact energy for the housing parts is 4 J.
- The device has to be mounted in an area with a lower risk of mechanical impact.

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

         Additional information
         The RFID20 has in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529:1991+A1:2000+A2:2013.

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