[1] # TYPE EXAMINATION CERTIFICATE

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

[3] Type Examination Certificate Number: **DEMKO 16 ATEX 1780X Rev. 1**

[4] Product: **LB81*.1.EL***

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

[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 equipment or protective system 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. **4787677344**

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

EN 60079-0:2012+A11:2013 **EN 60079-15:2010**

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 nA IIC T4 Gc

Or Alternative

II 3 G Ex nAc IIC T4

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: 2016-10-28

Re-Issued: 2016-11-30

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

[13] [14]

Schedule
TYPE EXAMINATION CERTIFICATE No.
DEMKO 16 ATEX 1780X Rev. 1

[15] Description of Product:

The gateway forms the interface between the I/O modules on the backplane and the process control system. It supports all single width and dual width I/O modules. Thereby signals from NAMUR sensors, mechanical contacts, temperature or 4..20 mA analogue sensors are transferred to a higher-level bus system and signals from a higher level bus system are transferred to solenoids, relays, sounders or alarm LED'S. The gateway can be easily configured via DTM and supports HART.

The optical radiation output of the product LEDs 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.

Nomenclature:
The Model number designates the following:

I	II	III	IV	V
LB81	20	.1	.EL	1

I. Model Series:
LB81

II. Protocol:
20 – EIP
21 - Modbus TCP
22 – Profinet
30 – Profibus
35 – Modbus RTU

III. Revision:
.1 – 1st revision

IV. Connection Method:
.EL – RJ45
V. Functional Information:

* - Where * can be any alphanumeric character indicating approval type

Temperature range:
The ambient temperature range is -40 °C to +60 °C.

Electrical data
Backplane Supply: 12Vdc, 3.9 Watts

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] Special Conditions of Use:

- The equipment shall only be used in an area of not more than pollution degree 2, as defined in EN 60664-1.
- The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with EN 60079-15 and is only accessible with the use of a tool.
- 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 equipment.

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

Additional information
None