## 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 12 ATEX 1103387X Rev. 2**
- [4] Product: PS3500 Series, comprised of Model PS3500-PM-1.24.15 Power Supply, Model PS3500-TB-3 and Model PS3500-TB-6 Backplanes and PS3500-DM Diagnostic Module
- [5] Manufacturer: Pepperl+Fuchs SE

[1]

- [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. US/UL/ExTR13.0091/01.

[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 60079-11:2012 EN 60079-15: 2019

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:

Ex II 3 G Ex ic ec nC IIC T4 Gc (Diagnostics Module)

Ex ec nC IIC T4 Gc (Power Supply)

Ex ec IIC T4 Gc (Backplane Units)

# 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:** 2013-02-01 **Re-issued:** 2021-10-25

**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 12 ATEX 1103387X Rev. 2

#### [15] <u>Description of Equipment:</u>

The PS3500 Series are open type devices intended for installation into an enclosure having a cover or door that can only be opened using a tool. The power supply PS3500-PM-1.24.15 and the diagnostics module PS3500-DM are mounted on PS3500-TB-3 Backplane (3-position Backplane) or PS3500-TB-6 Backplane (6-position Backplane). When the PS3500-TB-3 is used, one Diagnostic Module is used along with three Power Supplies; if the PS3500-TB-6 is used, one Diagnostic Module is used along with six Power Supplies.

The diagnostics module utilizes a relay evaluated as a sealed device "nC", normally non-arcing components "ec" and contains four switches that are intrinsically safe with level of protection "ic".

The power supply module utilize normally non-arcing components "ec" and a relay evaluated as a sealed device "nC".

The backplanes utilize normally non-arcing components "ec"

#### 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: -25 °C to +70 °C.

#### Electrical data

Model	Input		Output, Maximum		Relay Alarm output
	Voltage	Current	Voltage	Current	
Backplanes PS3500- TB-3 and PS3500-TB-6	90-250 Vac, 44-66Hz	6.5A max per slot			
	90-300 Vdc			-	-
Power Supply PS3500- PM-1.24.15	90-250 Vac, 44-66Hz 90-300 Vdc	6.5A	22.5 - 30 Vdc	15 A at 45°C and 3.75A at 70°C	30 Vdc, 2A maximum, 50 Vdc, 0.6A maximum
Diagnostic Module PS3500-DM	90-250 Vac, 44-66Hz 90–300 Vdc (SL1 pins 2A, 2C, 2E)	100 mA	-	-	30 Vdc, 2 A maximum, 50 Vdc, 0.6 A maximum (SL1 pins 32A, 32C, 32E)

#### Routine tests:

None

#### [16] <u>Descriptive Documents</u>

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 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,
  - o are rated with the degree of protection IP54 according to EN 60529.

## [18] <u>Essential Health and Safety Requirements</u>

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

