TYPE EXAMINATION CERTIFICATE



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

- Type Examination Certificate Number: DEMKO 13 ATEX 1205911X Rev. 8 [3]
- Product: Industrial Visunet eXTreme PC Series RM/PC9715 and RM/PC9719 [4]
- Manufacturer: Pepperl + Fuchs GmbH [5]

[2]

- Address: Lilienthalstrasse 200, 68307 Mannheim, Germany [6]
- This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to. [7]
- [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. 4788220129

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

> EN 60079-0:2012+A11:2013 EN 60079-11:2012 EN 60079-15:2010

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

- 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 [10] schedule to this certificate.
- This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently [11] manufactured.
- [12] The marking of the product shall include the following:

II 3 G Ex ic nA nC IIC T4 Gc

Ex ic nA nC [ic] 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: 2013-06-02 Re-issued: 2017-11-28

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

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[15] <u>Description of Product:</u>

Models RM/PC9715 and RM/PC9719 are industrial computers that can either be installed into a panel/suitable enclosure or utilized by themselves. They are provided with either a 15" or 19" screen and can be either DC or AC power devices. They are suitable for an Ingress Protection of IP66. The units also have an optional Heater when operated in -40°C. These units do have the option of providing intrinsically safe "ic" circuit via two [ic] USB ports that are located in the back of the unit's junction box, and one, I.S. (level "ic")\ USB inputs located on the front bezel.

Models RM/PC9715 and RM/PC9719 utilize a touchscreen and a relay that are Sealed Devices "nC", a Membrane Keypad that is intrinsically safe "ic" and non-sparking components that are "nA". They also contain protective circuitry that provides "ic" circuits for two rear USB ports, when installed in accordance with Control Drawing No. 116-B017.

Models RM/PC9715 and RM/PC9719 are identical in all aspects except in screen size. Model RM/PC9715 utilizes a 15" screen while Model RM/PC9719 utilizes a 19" screen.

| PC9715 | - | R | W3 | Q1 | AC | XT1 | Α | F0 | LL | SH | N |
|--------|---|---|-------|----|----|-----|-----|------|----|----|----|
| | | | _ 111 | IV | V | VI | VII | VIII | IX | Х | ΧI |

| Part | Description | Designation | Designation Description |
|------|-------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | PC9715 | PC, 15.0", XGA (1024 x 768 pixel) |
| | | RM9715 | RM, 15.0" |
| U | Series Designation: Monitor Type, Display Size: | PC9719 RM9719 | PC, 19.0", SXGA (1280 x 1024 pixel) RM, 19.0" |
| 11 | Screen Type | R | Touchscreen, Resistive 5-wire, hardened glass |
| H U | I M UI' M UI M L | W3 | ATEX II 3 G, Class I, Division 2 |
| IV | Protection Processor Board Specification | WS | ABCD, Class I, Zone 2 T4 and cULus Certified |
| | | L2 | ATEX II 3 G, T4 |
| | | Qx | Q = Intel Quad Core i7 processor 2.1 GHz, 120 GB SSD, "x" = any letter or number to indicate any combination of either 4GB RAM or 8GB RAM, with or without SD card reader, and specific OS. |
| | | Сх | C = Intel Dual Core Celeron processor 1.6 GHz, 4GB RAM, 120 GB SSD, "x" = any letter or number to indicate with or without SD card reader, and specific OS. |
| V | Power Supply | AC | 100-240 Vac, 50/60Hz |
| V | | DC | 18-30 Vdc |
| VI | | -XT1 | Cast Aluminum Housing, IP66 |
| | Housing | -ХТу | Cast Aluminum Housing, IP66 Y = any letter or number to indicate custom logo |

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| Part | Description | Designation | Designation Description |
|------|------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| VII | - VIII- VIII- 1 | Α | Rear junction box with cable glands (4 x M20, 2 x M16) |
| | I/O Connections | В | Rear junction box with cable glands (4 x M20, 2 x M16), 1 x USB (ic) Type A on front panel. |
| | | E | Rear junction box with armored cable glands (4 x M20 armored, 2 x M16 non-armored) - "L2" option only |
| | | F | Rear junction box with armored cable glands (4 x M20 armored, 2 x M16 non-armored); 1 x USB (ic) Type A on front panel - "L2" option only |
| VIII | Function Keys | F0 | No Function Keys |
| | | F1 | Function Keys, F1-F4 |
| IX | Network Features | TE/ | 2 x LAN |
| | | LW | 2 x LAN x WiFi (2 x SMA Coax) |
| | | LF | 1 x ST Fiber, 1 x LAN |
| | | FW | 1 x LAN, 1 x ST Fiber, 1 x WiFi (2 x SMA Coax) |
| х | Special | S0 | No special accessories |
| | Accessories | SH | Heater (Both AC and DC) |
| XI | Ontions | N0 | No Option |
| | Options | U1 | I.S. (level "ic") USB ports (rear) |

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 not covered in this certificate.

Temperature range:

The ambient temperature range is: -20°C ≤ Tamb ≤ 65°C

Ambient temperature range with Heater Option: $-40^{\circ}\text{C} \le \text{Tamb} \le 65^{\circ}\text{C}$

Electrical data

| Models | AC Option | DC Option |
|-----------|------------------------------------------------|-----------------------------------|
| RM/PC9715 | 100-240 Vac, 1.5A, 50/60Hz | 18-30 Vdc, 7A |
| RM/PC9719 | 100-240 Vac, 2A, 50/60Hz with heater option | 18-30 Vdc, 20A with heater option |

When U1 option is used, the following are the entity parameters for the USB inputs for rear I/O:

| [ic] Field Parameters | | | | |
|-----------------------|------|--|--|--|
| U ₀ (V) | 4.92 | | | |
| I _o (mA) | 183 | | | |
| C _o (µF) | 52 | | | |
| L ₀ (μH) | 800 | | | |
| P _o (mW) | 567 | | | |

The following are the entity parameters for the USB inputs for front I/O:

| [ic] Field Parameters | | | | | |
|-----------------------|-----------|--|--|--|--|
| U _o (V) | 5.0 | | | | |
| I _o (mA) | 240 | | | | |
| C₀ (µF) (Group IIB) | 60 | | | | |
| C₀ (µF) (Group IIC) | 12 | | | | |
| L₀ (µH) | 24 | | | | |
| V _{oc} | 5.0 | | | | |
| U _m | 30 (SELV) | | | | |

Routine tests:

No routine tests necessary.

[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.

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Special Conditions of Use: [17]

- Equipment is to be used in an area of not more than pollution degree 2 as defined in EN 60664-1.
- Installation in accordance with Control Drawing No. 116-B017 is required when I/O Connection designation B and/or option U1 is

[18] **Essential Health and Safety Requirements**

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

<u>Additional information</u>
The Models PC9715 and PC9719 have in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529:1991+A1:2000+A2:2013.