

TYPE EXAMINATION CERTIFICATE



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

- [3] Type Examination Certificate Number: **DEMKO 16 ATEX 1761X Rev. 3**
- [4] Product: **Panel PC, Models eSMART*******
- [5] Manufacturer: **Exor International S.p.A.**
- [6] Address: **Via Monte Fiorino 9, San Giovanni Lupatoto, VR, 37057 Italy**
- [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. **DK/ULD/ExTR16.0031/03.**
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0:2018
EN 60079-11:2012**

**EN IEC 60079-7: 2015 +A1:2018
EN 60079-31:2014**

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:

For part numbers with second-last digit different from "X":

 **II 3 G Ex ic ec IIC T6 Gc**

For part numbers with second-last digit equal to "X" only:

 **II 3 G Ex ic ec IIC T6 Gc**

 **II 3 D Ex tc IIC T85°C Dc**

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: 2017-03-30

Re-issued: 2021-07-29

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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Schedule

TYPE EXAMINATION CERTIFICATE No.

DEMKO 16 ATEX 1761X Rev. 3

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Description of Product:

eSMART series devices are Panel PC with communication interface. For part numbers with second-last digit equal to "X" the face of HMI is intended to be installed through the wall of an Ex certified industrial control panel/enclosure with provisions for Zone 2/22 wiring method and where a tool is required to gain access. For part numbers with second-last digit different from "X", the equipment shall be installed within an Ex certified industrial control panel/enclosure with provisions for Zone 2/22 wiring method and where a tool is required to gain access. eSMART series devices are microcomputer based and communicate via interfaces through cord. All models are to be powered by a Class 2 or limited power supply (LPS).

Nomenclature Product Model name:

eSMART	04	M	*****
I	II	III	IV

I – Product model name: eSMART series

II – Display touchscreen:

04 - TFT color 4.3" widescreen display touchscreen

07 - TFT color 7" widescreen display touchscreen

10 - TFT color 10" widescreen display touchscreen

III – Operator interface (CPU):

M – High performance operator interface

Blank or any alphanumerical character – Operator interface

IV – Optional – blank or one to eight digit – any alphanumerical character related decorative (no change significant circuits or electrical and mechanical construction)

Nomenclature – Part Number

ESMA	04	M	U3	X	1
I	II	III	IV	V	VI

I – Product identification:

ESMA - eSMART series

II – Display touchscreen:

04 - TFT color 4.3" widescreen display touchscreen

07 - TFT color 7" widescreen display touchscreen

10 - TFT color 10" widescreen display touchscreen

III – Operator interface (CPU):

M – High performance operator interface

Blank or any alphanumerical character – Operator interface

IV – Any alphanumerical character, 2 or 3 digits, no safety relevant

V – Hazardous locations type of protection:

X – Suitable for "Ex ic ec" and "Ex tc" applications

Any alphanumerical character – Suitable for "Ex ic ec" applications only

VI – Any alphanumerical character, 1 digit, no safety relevant

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 0 °C to +50 °C.

Electrical data

eSMART04: 24 Vdc, 0.25 A Max., Class 2

eSMART07: 24 Vdc, 0.30 A Max., Class 2

eSMART10: 24 Vdc, 0.38 A Max., Class 2

Routine tests:

Routine tests are not required.

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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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Schedule TYPE EXAMINATION CERTIFICATE No. DEMKO 16 ATEX 1761X Rev. 3

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Special Conditions of Use:

For part numbers with second-last digit equal to "X" only:

- For EPL Gc,
 - The equipment shall only be used in an area of at least pollution degree 2, as defined in EN 60664-1.
 - The equipment shall be installed through the wall of an enclosure that provides a minimum ingress protection of IP54 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 equipment.
- For EPL Dc,
 - The equipment shall be installed through the wall of an enclosure that provides a minimum ingress protection of IP6X in accordance with EN IEC 60079-0, suitable for the applicable Dust Group, Temperature Classification and Ambient temperature range.
- Provision shall be made to prohibit the product from being exposed to UV radiation while in use.
- Care shall be taken not to rub or buff the touchscreen surface in a way that might cause the accumulation of static charges.
- These devices have only been evaluated for low risk of mechanical impact.
- Ambient temperature and Temperature Class – see instructions.

For part numbers with second-last digit different from "X":

- The equipment shall only be used in an area of at least pollution degree 2, as defined in EN 60664-1.
- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 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 equipment.
- Ambient temperature and Temperature Class – see instructions.



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Essential Health and Safety Requirements

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

Additional information

For part numbers with second-last digit equal to "X" only: The eSMART series has in addition passed the tests for Ingress Protection to IP 66 (face of HMI to mounting panel only) in accordance with EN 60529:1991+A1:2000+A2:2013.

The trademark  or  will be used as the company identifier on the marking label.