[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 17 ATEX 1977X Rev. 1**

[4] Product: **HMI touch panel, Model AGI 400 series and accessory module type EXM CAN**

[5] Manufacturer: **DEIF A/S**

[6] Address: **Frisenborgvej 33, 7800 Skive, Denmark**

[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. **4790561669.1.1**

[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**

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 ec IIC T5 Gc

II 3 D Ex tc IIIC T95°C Dc

Certification Manager
Thomas Wilson

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: 2018-03-20
Re-issued: 2023-03-14

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 17 ATEX 1977X Rev. 1

[15] Description of Product:

AGI 400 Series are Human Machine Interfaces (HMIs) with a touch screen display. They are intended to be panel-mounted and only the front face has been investigated as the enclosure and IP66 rating minimum. All models are to be powered by a Class 2 or limited power supply (LPS).

The AGI 400 Series may utilize Optional Accessory Module, model EXM CAN.
Accessory Module is installed using an expansion ports at the rear cover of the HMIs. This Accessory Module is a communication module for the HMIs models covered by this report. The module is secured to the rear cover by two fasteners and one screw.
The EXM CAN module is a communication module designed to let the operator panel connect to the CAN network.

Nomenclature:
AGI 400 Series:

AGI4	**
I	II

I - Product model name:
AGI4 – AGI400 Series

II - Display touchscreen model:
07 - TFT color 7” widescreen display touchscreen
10 - TFT color 10.1” widescreen display touchscreen
15 - TFT color 15.6” widescreen display touchscreen
21 - TFT color 21.5” widescreen display touchscreen

Accessory:

EXM	CAN
I	II

I – PLC’s interface model name:
EXM

II - Module function:
CAN – Communication module (CAN interface)

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 -20°C ≤ Tamb ≤ +60°C.

Electrical data:

Model Type	Power supply voltage	Current consumption
AGI 407	24 Vdc, Class 2	0.7 A at 24Vdc (max)
AGI 410	24 Vdc, Class 2	1.0 A at 24Vdc (max)
AGI 415	24 Vdc, Class 2	1.2 A at 24Vdc (max)
AGI 421	24 Vdc, Class 2	1.7 A at 24Vdc (max)

Accessory module type (24Vdc powered from Operator Interface Terminal):
- EXM CAM: one D-Sub for CAN network interface. Communication protocol CAN 2.0, max speed 1 Mbit. For electrical rating refer to the host HMI models covered by this report.

Routine tests:
Routine tests are not required.

[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.

[13] **Schedule**

[14] **TYPE EXAMINATION CERTIFICATE No.**
DEMKO 17 ATEX 1977X Rev. 1

[17] Special Conditions of Use:

For EPL Gc,

- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1;
- The equipment shall be installed through an end-equipment enclosure that provides a minimum ingress protection of IP54 in accordance with IEC 60079-0, suitable for the applicable Gas Group, Temperature Classification and Ambient temperature range; and
- 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 an end-equipment enclosure that provides a minimum ingress protection of IP6X in accordance with IEC 60079-0, suitable for the applicable Dust Group, Temperature Classification and Ambient temperature range.
- Care shall be taken not to allow layers of dust to form on the graphic panel in a way that might cause the accumulation of static charges.
- Ambient temperature and Temperature Class – see instructions.
- AGI 400 series has only been evaluated for low 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 AGI 400 Series has in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529:1991+A1:2000+A2:2013.

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