TYPE EXAMINATION CERTIFICATE



Equipment or Protective System intended for use in Potentially Explosive Atmospheres

Directive 2014/34/EU

- [3] Type Examination Certificate Number: **DEMKO 12 ATEX 1062524X Rev. 3**
- [4] Product: Anybus X-gateway Modbus series, Model AB90 and Model AB95, followed by numbers 00 to 99, followed by additional suffixes numbers or letters. Model HMS-EN2MB-R and Anybus X-gateway option boards, Model ABCC followed by letters or numbers.
- [5] Manufacturer: HMS Industrial Networks AB

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- [6] Address: Stationsgatan 37, 302 45 Halmstad, Sweden
- [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. 4787906461-12ATEX1062524X

[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:



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: 2012-04-20 Re-issued: 2017-03-26



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>

These devices are open-type devices intended for installation in an ultimate enclosure. These devices are for use in industrial automation applications. The Anybus X-gateway AB90 and AB95 series and model HMS-EN2MB-R includes a number of products (for different networks) comprising of a main carrier board, with one of several types of secondary board from the ABCC range, all within a polymeric enclosure. The secondary boards are an internal part of the equipment, and are included in this certification.

Nomenclature:

Cat. No. AB90. AB95

AB9 X YY -Z II III IV

I. Prefix for article number. AB9 – Anybus X Gateway.

II. Module type.

X – 0 Modbus-TCP series with ABCC30 option board
 X – 5 Modbus-TCP series with ABCC40 option board

III. Product configuration.

YY - 00 to 99 individual product configuration based on option board, software, etc.

Model AB9000 - Anybus X-Gateway Modbus-TCP series with ABCC30-ECT Option Board *

Model AB9001 - Anybus X-Gateway Modbus-TCP series with ABCC30-DPV Option Board *

Model AB9002 - Anybus X-Gateway Modbus-TCP series with ABCC30-DEV Option Board *

Model AB9003 - Anybus X-Gateway Modbus-TCP series with ABCC30-CNT Option Board *

Model AB9004 - Anybus X-Gateway Modbus-TCP series with ABCC30-COP Option Board *

Model AB9005 - Anybus X-Gateway Modbus-TCP series with ABCC30-RTU Option Board *

Model AB9006 - Anybus X-Gateway Modbus-TCP series with ABCC30-EIP/2P Option Board *

Model AB9007 - Anybus X-Gateway Modbus-TCP series with ABCC30-PRT Option Board *

Model AB9008 - Anybus X-Gateway Modbus-TCP series with ABCC30-EIT/2P Option Board *

Model AB9009 - Anybus X-Gateway Modbus-TCP series with ABCC30-CCL Option Board *

Model AB9500 - Anybus X-Gateway Modbus-TCP series with ABCC40-ECT Option Board *

Model AB9501 – Anybus X-Gateway Modbus-TCP series with ABCC40-DPV Option Board *

Model AB9502 – Anybus X-Gateway Modbus-TCP series with ABCC40-DEV Option Board *

Model AB9503 - Anybus X-Gateway Modbus-TCP series with ABCC40-CEG/CFN Option Board *

Model AB9504 - Anybus X-Gateway Modbus-TCP series with ABCC40-PRTFO Option Board *

Model AB9505 - Anybus X-Gateway Modbus-TCP series with ABCC40-EPL Option Board *

Model AB9506 - Anybus X-Gateway Modbus-TCP series with ABCC40-EIP/2P Option Board *

Model AB9507 - Anybus X-Gateway Modbus-TCP series with ABCC40-PRT Option Board *

Model AB9508 - Anybus X-Gateway Modbus-TCP series with ABCC40-EIT/2P Option Board *

Model AB9509 - Anybus X-Gateway Modbus-TCP series with ABCC40-CCL Option Board *

* See nomenclature for option boards below

IV. Configuration version.

Z – Any or no suffix may follow (numbers or letters).

Cat. No. HMS-EN2MB-R - Any or no suffix may follow (numbers or letters).

 ${\sf Model\ HMS-EN2MB-R-Anybus\ X-Gateway\ Modbus-TCP\ series\ with\ Anybus\ EEM-EIP\ Option\ Board\ ^*}$

^{*} See nomenclature for option boards below

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Cat. No. ABCC (for secondary boards, internal part of the equipment)

Prefix- XX XXX

I. Prefix ABCC Anybus

II. Series for ABCC prefix

30 40

Series for Anybus prefix

EEM

III. Product configuration for ABCC prefix

ECT - EtherCAT interface, 2x RJ-45 sockets

DPV - Profibus DPV1 interface , 1x 9-pin D-type socket

DEV - DeviceNet interface ,5-pole plug and socket terminal

CNT - ControlNet interface, 2x BNC connectors

COP - CANopen slave interface , 1x 9-pin D-type socket

RTU - Modbus RTU slave interface , 1x 9-pin D-type socket

EIP/2P - Ethernet IP interface, 2x RJ-45 sockets

PRT - Profinet interface, 2x RJ-45 sockets

EIT/2P - Modbus TCP interface, 2x RJ-45 sockets

CCL - CC-Link slave interface, 5-pole plug and socket terminal

CEG/CFN - Common Ethernet Gigabit/CC-Link IE Field Network, 2 RJ45 Sockets

PRTFO - Profinet Fiber Optics, 2 SC-RJ connectors

EPL - Ethernet Powerlink, 2 RJ45 sockets

Product configuration for Anybus Prefix

EEM-EIP- Ethernet IP, 2x RJ-45 sockets

Other letter/number combinations may be used based upon differences of configuration of software

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 and Exception 3 to the scope of EN 60079-28:2015.

Temperature range:

The ambient temperature range is -25°C to +60 °C.

Electrical data

24Vdc, 300mA

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[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.

Special Conditions of Use: [17]

- Must be installed within a suitable ATEX certified IP54 rated end-use enclosure, pollution degree 2 as per EN 60664-1.
- Must be installed with a suitable transient protection device on the supply that does not exceed 140% of the nominal rated supply voltage (33.6 Vdc).

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

Additional information

will be used as an optional company identifier on the marking label.