

[1]

TYPE EXAMINATION CERTIFICATE



[2]

Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

[3]

Type Examination Certificate Number: **DEMKO 12 ATEX 1062524X Rev. 0**

[4]

Equipment: **Anybus X-gateway Ethernet series, Model AB90, followed by numbers 00 to 99, followed by additional suffixes numbers or letters. Anybus X-gateway option boards, Model ABCC followed by letters or numbers.**

[5]

Manufacturer: **HMS Industrial Networks AB**

[6]

Address: **Stationsgatan 37, 30245 Halmstad, Sweden**

[7]

This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8]

UL International Demko A/S certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of **Category 3** equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in confidential report no. **10CA62524**

[9]

Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to Standards:

EN 60079-0:2009

EN 60079-15:2010

[10]

If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11]

This Type examination certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

[12]

The marking of the equipment or protective system shall include the following:



II 3 G Ex nA IIC T4 Gc

Certification Manager

Jan-Erik Storgaard

This certificate may only be reproduced in its entirety and without any change, schedule included

Date of issue: 2012-04-20

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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[13]

[14]

Schedule
TYPE EXAMINATION CERTIFICATE No.
DEMKO 12 ATEX 1062524X Rev. 0
Report: 10CA62524

[15]

Description of Equipment:

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 series 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.

The optical radiation output of the apparatus with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 94/9/EC is not covered in this certificate.

Nomenclature:

Cat. No. AB90.

AB9	X	YY	-Z
I	II	III	IV

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

II. Module type.
X – 0 Anybus Ethernet gateway series.

III. Product configuration.
YY – 00 to 99 individual product configuration based on option board, software, etc.

Model AB9000 – with ABCC-ECT secondary Board *
 Model AB9001 – with ABCC-DPV secondary Board *
 Model AB9002 – with ABCC-DEV secondary Board *
 Model AB9003 – with ABCC-CNT secondary Board *
 Model AB9004 – with ABCC-COP secondary Board *
 Model AB9005 – with ABCC-RTU secondary Board *
 Model AB9006 – with ABCC-EIP/2P secondary Board *
 Model AB9007 – with ABCC-PRT secondary Board *
 Model AB9008 – with ABCC-EIT/2P secondary Board *
 Model AB9009 – with ABCC-CCL secondary Board *

* See nomenclature for ABCC secondary boards below

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

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

ABCC-	XXX
I	II

I. Prefix for secondary board

II. Product configuration
 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 , identical to the ABCC-EIP/2P option board, but differs in software
 EIT/2P – Modbus TCP interface , identical to the ABCC-EIP/2P option board, but differs in software
 CCL – CC-Link slave interface , 5-pole plug and socket terminal

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

Temperature range

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

Electrical data

24Vdc, 300mA

Mounting instructions

Refer to "Instructions".



[13]

[14]

Schedule
TYPE EXAMINATION CERTIFICATE No.
DEMKO 12 ATEX 1062524X Rev. 0
Report: 10CA62524

[16]

Descriptive Documents

Project Report No.: 10CA62524 (Hazardous Location Testing)

Drawings:

Description:	Drawing No.:	Rev. Level:	Date:
Ethernet Gateway Installation Sheet (AB9005)	SP1328	2.01	2012-03
Ethernet Gateway Installation Sheet (AB9007)	SP1330	2.01	2012-03
Ethernet Gateway Installation Sheet (AB9008)	SP1331	2.01	2012-03
Ethernet Gateway Installation Sheet (AB9006)	SP1329	2.01	2012-03
Ethernet Gateway Installation Sheet (AB9000)	SP1323	2.01	2012-03
Ethernet Gateway Installation Sheet (AB9001)	SP1324	2.01	2012-03
Ethernet Gateway Installation Sheet (AB9002)	SP1325	2.01	2012-03
Ethernet Gateway Installation Sheet (AB9004)	SP1327	2.01	2012-03
Ethernet Gateway Installation Sheet (AB9003)	SP1326	2.01	2012-03
Ethernet Gateway Installation Sheet (AB9009)	SP1332	2.01	2012-03
Carrier board BOM (1022)	SDC-7029-009	1.1.2	-
Carrier board Schematics (1022)	SDC-7029-009:1 to SDC-7029-009:9	1.1.2	2011-04-29
ABCC-DPV option board BOM (2701)	SDC-7109-001	2.5.2	-
ABCC-DPV option board Schematics (2701)	SDC-7109-001:1 to SDC-7109-001:5	2.5.2	2010-08-20
ABCC-DEV option board BOM (2702)	SDC-7127-001	2.3.4	-
ABCC-DEV option board Schematics (2702)	SDC-7127-001:1 to SDC-7127-001:5	2.3.4	2010-04-13
ABCC-RTU option board BOM (2709)	SDC-7165-005	2.2.3	-
ABCC-RTU option board Schematics (2709)	SDC-7165-005:1 to SDC-7165-005:5	2.2.3	2010-07-07
ABCC-CNT option board BOM (2712)	SDC-7136-007	1.1.4	-
ABCC-CNT option board Schematics (2712)	SDC-7136-007:1 to SDC-7136-007:5	1.1.4	2011-02-15
ABCC-CCL option board BOM (2714)	SDC-7234-001	1.2.3	-
ABCC-CCL option board Schematics (2714)	SDC-7234-001:1 to SDC-7234-001:6	1.2.3	2010-08-24
ABCC-COP option board BOM (2715)	SDC-7146-001	2.4.4	-
ABCC-COP option board Schematics (2715)	SDC-7146-001:1 to SDC-7146-001:5	2.4.4	2010-07-19
ABCC-ECT option board BOM (2720)	SDC-7303-004	1.1.2	-
ABCC-ECT option board Schematics (2720)	SDC-7303-004:1 to SDC-7303-004:4	1.1.2	2009-03-25
ABCC-ETN option board BOM (2721)	SDC-7256-005	1.1.5	-
ABCC-ETN option board Schematics (2721)	SDC-7256-005:1 to SDC-7256-005:5	1.1.5	2010-08-19
Label Drawing and specifications	SDS-7029-079	1.0	2012-03-05

[17]

Special conditions for safe use:

- Must be installed within a suitable ATEX certified IP54 rated end-use enclosure, pollution degree 2 as per IEC60664-1.
- Must be installed with a suitable transient protection device on the supply that does not exceed 140% of the nominal rated supply voltage.

[18]

Essential Health and Safety Requirements

Met by compliance with the standards EN 60079-0:2009, EN 60079-15:2010.

