



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx DEK 17.0021X

Issue No: 0

Certificate history:

Issue No. 0 (2017-05-08)

Status: **Current**

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Date of Issue: **2017-05-08**

Applicant: **Beckhoff Automation GmbH & Co. KG**
Hülsthorstweg 20
33415 Verl
Germany

Equipment: **Embedded PC Series CX9020**

Optional accessory:

Type of Protection: **Ex nA and Ex tc**

Marking:

Ex nA IIC T4 Gc and
Ex tc IIIC T135 °C Dc

*Approved for issue on behalf of the IECEx
Certification Body:*

R. Schuller

Position:

Certification Manager

*Signature:
(for printed version)*

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands





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Manufacturer: **Beckhoff Automation GmbH & Co. KG**
Hülsthorstweg 20
33415 Verl
Germany

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[NL/DEK/ExTR16.0086/01](#)

Quality Assessment Report:

[DE/BVS/QAR16.0010/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Embedded PC Series CX9020 for use in I/O and Fieldbus systems.

The type code, the ambient temperature range and the temperature class of the modules shall be taken from Table 1, see Annex.

Electrical data

The electrical data of the supply and the input and output circuits shall be taken from Table 1, see Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:

For Ex nA:

The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.

The equipment shall be installed in a suitable enclosure providing a degree of protection of at least IP54 according to IEC 60079-15, taking into account the environmental conditions under which the equipment is used.

Provisions shall be made to prevent the rated voltage from being exceeded by transient disturbances of more than 119 V.

For Ex t:

The equipment shall be installed in a suitable enclosure providing a degree of protection of IP54 according to IEC 60079-31 for group IIIA or IIIB and IP6X according to IEC 60079-31 for Group IIIC, taking into account the environmental conditions under which the equipment is used.

Annex:

[DEK 17.0021X - issue 0 - ExTR16.0086-01.pdf](#)

**Annex 1 to Certificate of Conformity IECEx DEK 17.0021X, issue 0 /
Testreport NL/DEK/ExTR16.0086/01**

Table 1

Description	Type/MLFB No.	Temp. code	Ambient Range	Technical Data	Supply Volt.
CX9020 Basic CPU module	CX9020-xxxx	T4	-25...+60°C	----	24Vdc
i.MX535 1GHz 1024MB Emb.-CPU CX9020	CX9020.3-V1	T4	-25...+60°C	----	----
Backplane + Netzteil CX9020	CX9320.2-V1	T4	-25...+60°C	----	----
Power supply	CX2125.3	T4	-25...+60°C	----	24Vdc
Batteriehälter CX2020, CX9020	CX2325.0	T4	-25...+60°C	----	----
2x Eth. 4x USB 1x DVI Interface CX9020	CX9220.1	T4	-25...+60°C	----	----
Optional interfaces	CX9020-xxxx	T4	-25...+60°C	----	----
Accessories	CX9020-U900	T4	-25...+60°C	----	----
Optional interfaces					
audio interface	CX9020-N020	T4	-25...+60°C	----	----
RS232 interface, D-sub plug, 9-pin	CX9020-N030	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin	CX9020-N031	T4	-25...+60°C	----	----
PROFIBUS master, D-sub socket,9-pin	CX9020-M310	T4	-25...+60°C	----	----
PROFIBUS slave, D-sub socket,9-pin	CX9020-B310	T4	-25...+60°C	----	----
CANopen master, D-sub plug, 9-pin	CX9020-M510	T4	-25...+60°C	----	----
CANopen slave, D-sub plug, 9-pin	CX9020-B510	T4	-25...+60°C	----	----
PROFINET RT, controller interface, Ethernet (2 x RJ45)	CX9020-M930	T4	-25...+60°C	----	----
PROFINET RT, device, Ethernet (2x RJ 45 switch)	CX9020-B930	T4	-25...+60°C	----	----
EtherNet/IP slave, Ethernet (2 x RJ 45 switch)	CX9020-B950	T4	-25...+60°C	----	----
Accessories					
internal, capacitive 1-second UPS to ensure secure backup of persistent application data on the microSD card	CX9020-U900	T4	-25...+60°C	----	----