
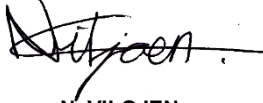




Mining And Surface Certification (Pty) Ltd

2015/021934/07

THIS CERTIFICATE IS ISSUED AS AN I.A. CERTIFICATE IN TERMS OF THE MINE HEALTH AND SAFETY ACT, ACT NO 29 OF 1996 (AND REGULATIONS), THE OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993) AND REGULATION 17 OF THE ELECTRICAL MACHINERY REGULATIONS

IA CERTIFICATE	MASC S/26-8158X	Issue	0
Issue Date	10 April 2026	Expiry Date	10 April 2029
** Based on Certificate No	IECEX DEK 17.0019X	Issue / Variations / Amendment	1
Requested by	Beckhoff Automation (Pty) Ltd 7 Ateljee Street, Randpark Ridge, Randburg		
Manufacturer	Beckhoff Automation GmbH & Co. KG Hülsthorstweg 20, 33415 Verl Germany		
Description	<p>The Embedded PC Series CX51xx, CX53xx and CX56xx is a control system for use in machine and system engineering for automation, visualization and communication. The embedded PC is designed for DIN rail installation in a control cabinet or terminal box and is used together with Bus or EtherCAT Terminals to receive digital and analog signals from sensors and output them to actuators or forward them to higher-level controllers.</p> <p>Embedded PC Series CX51xx, CX53xx and CX56xx comprises different embedded PC's, which differ in terms of processor type, RAM, Extension modules, I/O options, optional interface and housing size. Depending on the model code and the options, the Embedded PC consists of components as listed in Annex 1.</p> <p>Ambient temperature range: -25 °C to +60 °C.</p> <p><u>Electrical data</u> Supply: 24 Vdc, max. 4 A.</p>		
Equipment	Embedded PC Series	Type	CX5100, CX5300 and CX5600
MARKING: Original marking as per certificate ** remains applicable. IA number must be added.	Type: Ex Marking: IA Number: Warnings:	Embedded PC Series CX5100, CX5300 and CX5600 Ex ec IIC T4 Gc MASC S/26-8158X (To be additionally marked on equipment) See Base Certificate ** (original marking must be applied)	
Quality Assurance report (QAR) / Notification (QAN):	DE/BVS/QAR16.0010/10		
Compliance: The equipment as described above has been allocated the rating <u>Explosion Protected 'as above'</u> utilizing the SANS/IEC Standards: <ul style="list-style-type: none"> SANS (IEC) 60079-0: 2019 Equipment - General requirements SANS (IEC) 60079-7: 2019 Equipment protection by increased safety "e" <i>Note: This certificate covers only the listed standards and does not imply compliance to any other standard, related or inferred. It is up to the manufacturer to ensure that the product complies to all relevant standards for the application.</i>			
Specific conditions of use "X": <ul style="list-style-type: none"> Refer to Annex A below for more details. 			
Conditions of manufacture: <ul style="list-style-type: none"> Refer to Annex A below for more details. 			
 S. JORDAAN TECHNICAL SPECIALIST		 N. VILOJEN TECHNICAL OFFICER	
<small>This certificate covers all units sold as long as the QAR/QAN remains valid.</small>			
<small>According to the relevant requirements of the MHS Act and the OHS Act, production units of explosion protected equipment are required to comply with third party quality assurance (an approved mark scheme or batch testing by an accredited test laboratory).</small>			

Apparatus in hazardous locations is subject to the following provisions as applicable, which shall be adhered to:
 SANS 10086 requirements;
 Any conditions mentioned in the above certificate;
 Any relevant requirements of the MHS Act;
 Any restrictions and conditions enforced by the chief inspector of mines, principal inspector (Group I equipment) or chief inspector of factories (Group II equipment).

This certificate may only be reproduced in full
 The certificate is not transferable and remains the property of the issuing body.

IA CERTIFICATE: MASC S/26-8158X
Equipment: Embedded PC Series CX5100, CX5300 and CX5600
(Expiry date: 10 April 2029)

ANNEX A

This document is based on and must be read in conjunction with certificate IECEx DEK 17.0019X.	
Description (According to Base Certificate) **	
"Refer to description in Base Certificate ** (and any applicable schedules/issues/variations)."	
Standard compliance	See Base Certificate **
Specific conditions of use ("X")	<ul style="list-style-type: none"> • 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 60079-0, 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.
Conditions of manufacture	<ul style="list-style-type: none"> • None.
Conditions of Certification	<ul style="list-style-type: none"> • This IA Certificate covers all units sold from the date of this document to the expiry date of this certificate. • As per ARP 0108: 2018 / NCoP 2398: 2022 (as applicable) a maximum three yearly review is required on this IA Certificate (expiry is determined as per the QAR/QAN/QMS expiry date). • The apparatus must be additionally marked with the MASC marking details above. • This approval only covers the equipment as certified above and does not include any scheduled additions or variations / amendments / new issues to the certificate(s), made after the above date. • The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by the certificate on which this IA Certificate is based and any other conditions in this IA Certificate. • The certification on which this IA Certificate is based must remain valid. • The extent of the requirements in the ARP 0108:2018 / NCoP 2398: 2022 (as applicable), SANS 10108 and any other applicable regulations on the certification of the equipment must remain unchanged. • The Ex-quality assurance notification/report for the equipment must remain valid.
Conclusion:	<ul style="list-style-type: none"> • From the above and the selective examination of the documentation, nothing contrary to the requirements of the applicable standards was found, provided that the equipment / component is used as described in the above document / certificate and according to the MASC conditions below. A MASC IA certificate is issued based on the work done as per the Base Certificate **. • The routine tests for production units according to the Base Certificate ** must be complied with (if applicable).

This document is issued based on Mining And Surface Certification's Standard Contract terms and conditions available on request.

While every endeavour is made to ensure that a test / assessment / inspection is representative and accurately performed, and that a report / certificate is accurate in the quoted results and conclusions drawn from the test / assessment / inspection, MASC or its directors/employees shall in no way be liable for any error made in carrying out the test / assessment or for any erroneous statement, whether in fact or in opinion, contained in a report / certificate issued pursuant to a test / assessment / inspection.

MASC takes no responsibility for any non-conformances, exclusions, or any results / assessments / inspections not in compliance with the standards. By marking the equipment in accordance with the documentation / standard, the manufacturer / applicant attests on his own responsibility that the equipment / installation has been designed and constructed in accordance with the applicable requirements of the relevant standards and documentation, that the routine verifications / routine tests have been correctly completed and the equipment / installation complies with the documentation and standard(s).

This document is only for use and application in South Africa. It is issued based on National interpretations and accepted practices.

This document may only be reproduced in full.
This certificate is not transferable and remains the property of the issuing body.
This document will not be supported by MASC for certification purposes outside the borders of South Africa.

Mining And Surface Certification (Pty) Ltd Reg No: 2015/021934/07
Directors: Roelof Viljoen & Francois du Toit
Unit #5, Lelyta Park, 45 Jurg Avenue, Hennospark Ext 87, Centurion, 0157
P.O. Box 14344, Clubview, 0014
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IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEX DEK 17.0019X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 1 [Issue 0 \(2017-05-05\)](#)
Date of Issue: 2025-11-28
Applicant: **Beckhoff Automation GmbH & Co. KG**
Hülsthorstweg 20
33415 Verl
Germany
Equipment: **Embedded PC Series CX5100, CX5300 and CX5600**
Optional accessory:
Type of Protection: **Ex ec**
Marking: Ex ec IIC T4 Gc

Approved for issue on behalf of the IECEx
Certification Body:

L.G. van Schie

Position:

Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

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





IECEX Certificate of Conformity

Certificate No.: **IECEX DEK 17.0019X**

Page 2 of 4

Date of issue: 2025-11-28

Issue No: 1

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

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

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 equipment 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 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with 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/ExTR16.0085/02](#)

Quality Assessment Report:

[DE/BVS/QAR16.0010/10](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX DEK 17.0019X**

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Date of issue: 2025-11-28

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Embedded PC Series CX51xx, CX53xx and CX56xx is a control system for use in machine and system engineering for automation, visualization and communication. The embedded PC is designed for DIN rail installation in a control cabinet or terminal box and is used together with Bus or EtherCAT Terminals to receive digital and analog signals from sensors and output them to actuators or forward them to higher-level controllers.

Embedded PC Series CX51xx, CX53xx and CX56xx comprises different embedded PC's, which differ in terms of processor type, RAM, Extension modules, I/O options, optional interface and housing size. Depending on the model code and the options, the Embedded PC consists of components as listed in Annex 1.

Ambient temperature range: -25 °C to +60 °C.

Electrical data

Supply: 24 Vdc, max. 4 A.

SPECIFIC CONDITIONS OF USE: YES as shown below:

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 60079-0, 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.



IECEX Certificate of Conformity

Certificate No.: **IECEX DEK 17.0019X**

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Date of issue: 2025-11-28

Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Removal of the marking "Ex tc IIIC T135°C Dc"

Assessed per IEC 60079-0:2017 (Ed. 7) and IEC 60079-7:2017 (Ed. 5.1)

Addition of the Embedded PC Series CX53xx and CX56xx

Annex:

[227063700-Annex.pdf](#)

Table 1

Description	Type/Beckhoff No.	Temp. code	Ambient Range	Technical Data	Supply Volt.
CX5120-xxxx Embedded PC with Intel® Atom™ processor	CX5120-xxxx	T4	-25...+60°C	----	24Vdc
<i>Optional interfaces CX51x0</i>	CX51x0-xxxx	T4	-25...+60°C	----	----
CX5130-xxxx Embedded-PC with Intel®-Atom™-Prozessor	CX5130-xxxx	T4	-25...+60°C	----	24Vdc
<i>Optional interfaces CX51x0</i>	CX51x0-xxxx	T4	-25...+60°C	----	----
CX5140-xxxx Embedded PC with Intel® Atom™ processor	CX5140-xxxx	T4	-25...+60°C	----	24Vdc
<i>Optional interfaces CX51x0</i>	CX51x0-xxxx	T4	-25...+60°C	----	----
CX5330-xxxx Embedded PC with Intel Atom® x6214RE	CX5330-xxxx	T4	-25...+60°C	----	24Vdc
<i>Optional interface CX53x0</i>	CX53x0-xxxx	T4	-25...+60°C	----	----
CX5340-xxxx Embedded PC with Intel Atom® x6425RE	CX5340-xxxx	T4	-25...+60°C	----	24Vdc
<i>Optional interface CX53x0</i>	CX53x0-xxxx	T4	-25...+60°C	----	----
CX5620-xxxx Embedded PC with AMD Ryzen™ R1102G	CX5620-xxxx	T4	-25...+60°C	----	24Vdc
<i>Optional interfaces CX56x0</i>	CX56x0-xxxx	T4	-25...+60°C	----	----
CX5630-xxxx Embedded PC with AMD Ryzen™ R1505G	CX5630-xxxx	T4	-25...+60°C	----	24Vdc
<i>Optional interfaces CX56x0</i>	CX56x0-xxxx	T4	-25...+60°C	----	----
Optional interfaces CX51x0					
DVI-D interface	CX51x0-N010	T4	-25...+60°C	----	----
RS232 interface, D-sub plug, 9-pin	CX51x0-N030	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as an end point, without echo, termination on	CX51x0-N031	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as an end point, with echo, termination on	CX51x0-N031-0001	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as drop point, without echo, termination off	CX51x0-N031-0002	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as drop point, with echo, termination off	CX51x0-N031-0003	T4	-25...+60°C	----	----
RS422 interface, D-sub socket, 9-pin, configuration as full duplex end point, termination on	CX51x0-N031-0004	T4	-25...+60°C	----	----
PROFIBUS master, D-sub socket, 9-pin	CX51x0-M310	T4	-25...+60°C	----	----
PROFIBUS slave, D-sub socket, 9-pin	CX51x0-B310	T4	-25...+60°C	----	----
CANopen master, D-sub plug, 9-pin	CX51x0-M510	T4	-25...+60°C	----	----
CANopen slave, D-sub plug, 9-pin	CX51x0-B510	T4	-25...+60°C	----	----
PROFINET RT, controller interface, Ethernet (2 x RJ45)	CX51x0-M930	T4	-25...+60°C	----	----
PROFINET RT, device, Ethernet (2x RJ 45 switch)	CX51x0-B930	T4	-25...+60°C	----	----
EtherNet/IP slave, Ethernet (2 x RJ 45 switch)	CX51x0-B950	T4	-25...+60°C	----	----
EtherCAT slave, EtherCAT IN and OUT (2 x RJ 45)	CX51x0-B110	T4	-25...+60°C	----	----
Optional interfaces CX53x0					
DVI-D interface, additional DVI-D port for clone or extended display mode. Is not supported by TwinCAT/BSD.	CX53x0-N010	T4	-25...+60°C	----	----
DisplayPort interface, additional DisplayPort for clone or extended display mode. Is not supported by TwinCAT/BSD.	CX53x0-N011	T4	-25...+60°C	----	----
RS232 interface, D-sub plug, 9-pin (RXD, TXD, RTS, CTS)	CX53x0-N030	T4	-25...+60°C	----	----

Description	Type/Beckhoff No.	Temp. code	Ambient Range	Technical Data	Supply Volt.
RS485 interface, D-sub socket, 9-pin, configuration as an end point, without echo, termination on	CX53x0-N031	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as an end point, with echo, termination on	CX53x0-N031-0001	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as drop point, without echo, termination off	CX53x0-N031-0002	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as drop point, with echo, termination off	CX53x0-N031-0003	T4	-25...+60°C	----	----
RS422 interface, D-sub socket, 9-pin, configuration as full duplex end point, termination on	CX53x0-N031-0004	T4	-25...+60°C	----	----
2 x EtherCAT master interface	CX5330-M112	T4	-25...+60°C	----	----
EtherCAT slave, EtherCAT IN and OUT (2 x RJ 45)	CX53x0-B110	T4	-25...+60°C	----	----
Optional interfaces CX56x0					
DVI-D interface	CX56x0-N010	T4	-25...+60°C	----	----
DisplayPort interface	CX56x0-N011	T4	-25...+60°C	----	----
RS232 interface, D-sub plug, 9-pin	CX56x0-N030	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as an end point, without echo, termination on	CX56x0-N031	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as an end point, with echo, termination on	CX56x0-N031-0001	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as drop point, without echo, termination off	CX56x0-N031-0002	T4	-25...+60°C	----	----
RS485 interface, D-sub socket, 9-pin, configuration as drop point, with echo, termination off	CX56x0-N031-0003	T4	-25...+60°C	----	----
RS422 interface, D-sub socket, 9-pin, configuration as full duplex end point, termination on	CX56x0-N031-0004	T4	-25...+60°C	----	----
PROFIBUS master, D-sub socket, 9-pin	CX56x0-M310	T4	-25...+60°C	----	----
PROFIBUS slave, D-sub socket, 9-pin	CX56x0-B310	T4	-25...+60°C	----	----
CANopen master, D-sub plug, 9-pin	CX56x0-M510	T4	-25...+60°C	----	----
CANopen slave, D-sub plug, 9-pin	CX56x0-B510	T4	-25...+60°C	----	----
PROFINET RT, controller interface, Ethernet (2 x RJ45)	CX56x0-M930	T4	-25...+60°C	----	----
PROFINET RT, device, Ethernet (2x RJ 45 switch)	CX56x0-B930	T4	-25...+60°C	----	----
EtherNet/IP slave, Ethernet (2 x RJ 45 switch)	CX56x0-B950	T4	-25...+60°C	----	----
EtherCAT slave, EtherCAT IN and OUT (2 x RJ 45)	CX56x0-B110	T4	-25...+60°C	----	----
2 x EtherCAT master interface	CX56x0-M112	T4	-25...+60°C	----	----