



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 14.0078X Issue No: 0 Certificate history:
Issue No. 0 (2015-03-17)

Status: **Current** Page 1 of 3

Date of Issue: **2015-03-17**

Applicant: **Hirschmann Automation and Control GmbH**
Stuttgarter Strasse 45-51
72654 Neckartenzlingen
Germany

Electrical Apparatus: **Modular Industrial Communication Equipment (MICE); Industrial Ethernet
Switch Series MS20 and MS30, Backplane Extension MB20 and Media
Modules MM2x and MM3x Series**

Optional accessory:

Type of Protection: **Ex nA**

Marking: **Ex nA IIC T4 Gc**

Approved for issue on behalf of the IECEx
Certification Body:

R. Schuller

Position:

Certification Manager

Signature:
(for printed version)


2015-03-17

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: **Hirschmann Automation and Control GmbH**
Stuttgarter Strasse 45-51
72654 Neckartenzlingen
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 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

*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/ExTR14.0086/00](#)

Quality Assessment Report:

[NL/DEK/QAR14.0021/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Modular Industrial Communication Equipment (MICE); Industrial Ethernet Switch Series MS20 and MS30, Backplane Extension MB20 and Media Modules MM2x and MM3x Series.

The rail mounted modules are intended for use in industrial automation applications, communicate via electrical or optical interfaces.

Ambient temperature range: 0 °C to +60 °C for Temperature range parameter "S"
-40 °C to +70 °C for Temperature range parameters "T" and "E"
Restriction to MM30 and MM31 Series:
-40 °C to +60 °C (option parameter T and E).

Electrical data

Supply: 18 ... 32 Vdc, 4.0 ... 2.25 A for voltage range parameter "A"
18 ... 60 Vdc, 4.0 ... 1.2 A for voltage range parameter "C"

CONDITIONS OF CERTIFICATION: 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 60079-15, taking into account the environmental conditions under which the equipment will be used.

When the temperature under rated conditions exceeds 70 °C at the cable or conduit entry point, or 80 °C at the branching point of the conductors, the temperature specification of the selected cable shall be in compliance with the actual measured temperature values.

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

Annex:

[DEK 14.0078X - issue 0 - ExTR14.0086.00.pdf](#)

Annex 1 to Certificate of Conformity IECEx DEK 14.0078X, issue 0 / Testreport NL/DEK/ExTR14.0086/00

Table 1

MB20 Backplane Extension

MB20-2	T	B	H	H
I	II	III	IV	V

- I: (Pos. 1-6) Backplane extension
MB20-2 2 mountable Media Modules, Fast Ethernet 10/100
- II: (Pos. 7) Temperature range
S Standard 0°C up to 60°C
T Extended -40°C up to 70°C
E Extended -40°C up to 70°C inclusive conformal coating
- III: (Pos. 8) Approvals
B UL508, ISA 12.12.01, ATEX 95 (Zone2) / IECEx
X Any other letter: ATEX 95 (Zone2) and other approvals – customer specific
- IV: (Pos. 9,10) optional: OEM type
HH Standard
x y Any other letters (customer specific)

May be followed by additional suffixes

MS20/30 Modular Switch Series

MS30-	08	02	S	A	B	E
I	II	III	IV	V	VI	VII

- I: (Pos. 1-5) Switch type/ model
MS20- Modular Switch without gigabit ports
MS30- Modular Switch gigabit ports
- II: (Pos. 6, 7) Number of 10/100 Mbps -ETHERNET Ports
08 6x10/100 Mbps Ethernet
16 16x10/100 Mbps Ethernet
24 24x10/100 Mbps Ethernet
- III: (Pos. 8,9) Number of Gigabit-ETHERNET Ports
00 0x1000 Mbps Ethernet
02 2x1000 Mbps Ethernet
- IV: (Pos. 10) Temperature range
S Standard 0°C up to 60°C
T Extended -40°C up to 70°C
E Extended -40°C up to 70°C inclusive conformal coating
- V: (Pos. 11) Voltage range 1
A 18 – 32Vdc
C 18 – 60 Vac
- VI: (Pos. 12) Approvals
B UL508, ISA 12.12.01, ATEX 95 (Zone2) / IECEx
X Any other letter: ATEX 95 (Zone2) and other approvals – customer specific

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- XI: (Pos. 13) Software version
 P Professional
 E Enhanced
 X Any other letter (downgrade of "P" or "E" - customer specific)

May be followed by additional suffixes

MM2x / MM3x Media Module Series

MM2	0-	M2	M2	T1	T1	S	A	H	H
I	II	III	IV	V	VI	VII	VIII	IX	X

- I: (Pos. 1-3) Media type
 MM2 Fast Ethernet 10/100
 MM3 Gigabit Ethernet 10/100/1000
- II: (Pos. 4, 5) Technology
 0 Standard
 1 Realtime
- III: (Pos. 6, 7) Port type 1
 T1 Twisted pair / RJ45 10/100/1000 (housing: small)
 T5 Twisted pair / M12 10/100
 M2 Multimode / SC (100 Mbit)
 M4 Multimode / ST (100 Mbit)
 S2 Singlemode / SC (100 Mbit)
 S4 Singlemode / ST (100 Mbit)
 L2 Singlemode LH / SC (100 Mbit)
 G2 Singlemode LH / SC (100 Mbit)/ 200 km
 O6 SFP slot / SFP (1000 Mbit)
 O7 SFP slot + RJ45 (1000 Mbit)
 Z6 SFP slot /SFP (100 Mbit)
- IV: (Pos. 8, 9) Port type 2
 Same as under item III
- V: Port type 3
 Same as under item III, additional:
 99 port not mounted (housing: small)
- VI: (Pos. 10, 11) Port type 4
 Same as under item III, additional:
 99 port not mounted (housing: small)
- VII: (Pos. 12) Surrounding air temperature range & coating
 S 0°C up to +60°C
 T -40°C up to +70°C
 E -40°C up to +70°C inclusive conformal coating of PCB's
- VIII: (Pos. 13) Approvals / Qualification
 B UL508, ISA 12.12.01, ATEX 95 (Zone2) / IECEx
 x any other letter: ATEX 95 (Zone2) / IECEx and other approvals – customer specific

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- IX (Pos. 14, 15) optional: OEM type
HH Standard
xx Customer specific (x – any suffixes)

May be followed by additional suffixes