

CERTIFICATE

(1) Type Examination

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) Type Examination Certificate Number: **DEKRA 13ATEX0019 X** Issue Number: **2**

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

(5) Manufacturer: **Hirschmann Automation and Control GmbH**

(6) Address: **Stuttgarter Strasse 45-51, 72654 Neckartenzlingen, Germany**

(7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the directive.

The examination and test results are recorded in confidential test report no. 215984000, issue 2.

(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

EN 60079-11 : 2012

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment 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, examination and tests of the specified equipment and not to the manufacturing process and supply of this equipment.

(12) The marking of the equipment shall include the following:



**II 3 G
II 3 G**

**Ex nA IIC T4 Gc or
Ex nA ic IIC T4 Gc**

This certificate is issued on 10 August 2015 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.

R. Schuller
Certification Manager

(13) **SCHEDULE**



(14) **to Type Examination Certificate DEKRA 13ATEX0019 X**

Issue No. 2

(13) **SCHEDULE**

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Issue No. 2

(15) **Description**

Modular Industrial Communication Equipment (MICE), consisting of Industrial Ethernet Switches Series MS20 and MS30, Backplane Extension MB20 and Media Modules Series MM2x and MM3x.

The rail mounted modules are intended for use in industrial automation applications and 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"

Marking

Switches Series MS20 and MS30:



II 3 G Ex nA ic IIC T4 Gc

Backplane extension MB20 and Media Modules Series MM2x and MM3x:



II 3 G Ex nA IIC T4 Gc

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"

Relay contacts (Industrial Ethernet Switches Series MS20 and MS30), in type of protection intrinsic safety Ex ic IIC, for connection to intrinsically safe circuits, with following max. values: $U_i = 30V$, $I_i = 90\text{ mA}$, $C_i = 2\text{ nF}$, $L_i = 1\text{ }\mu\text{H}$.

Installation instructions

The manual provided with the equipment shall be followed in detail to assure safe operation.

(16) **Test Report**

No. 215984000, issue 2.

(13) **SCHEDULE**

(14) **to Type Examination Certificate DEKRA 13ATEX0019 X**

Issue No. 2

(17) **Special conditions for safe use**

1. The modules shall be installed in a suitable enclosure in accordance with EN 60079-15, taking into account the environmental conditions under which the equipment will be used.
2. Provisions shall be made to prevent the rated voltage from being exceeded by transient disturbances of more than 119 V.
3. 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.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 215984000, issue 2.