(1) # Certificate of Conformity

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – **Directive 2014/34/EU**

(3) Certificate Number

EPS 24 ATEX 1 226 U **Revision 0**

(4) Component: M100-I/O-System
modules: AIM112, AIO112, AIO104/I, BPS1xx, BPR1xx, COM1xx, DIS1xx, DOS1xx, DOH108, EAS102, EII102, NEC102, PSI135, UIO106

(5) Manufacturer: Bachmann electronic GmbH

(6) Address: Kreuzaeckerweg 33
6800 Feldkirch
Austria

(7) This component and any acceptable variation thereto are specified in the annex to this Certificate of Conformity and the documentation therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH certifies based on a voluntary assessment that this component 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 of the Directive 2014/34/EU. The examination and test results are recorded in the confidential documentation under the reference number 23TH0357.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-7:2015,
EN IEC 60079-7:2015/A1:2018

(10) The sign "U" placed behind the certificate number indicates that this certificate shall not be confounded with certificates issued for equipment or protective systems. This certificate is valid for a component without an autonomous function in sense of article 2 (3) and does not authorize for the CE-marking to be applied according to article 13 (3) of the Directive. This component certificate only serves as a basis for the issuing of certificates for equipment or protective systems.

(11) This Certificate of Conformity relates only to the design and the construction of the specified component in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this component and its placing on the market. Those requirements are not covered by this certificate.

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

Ex II 3G Ex ec IIC Gc

Certification department of explosion protection

Tuerkheim, 2025-01-27

Ulrich Feike

(13) # Annex

(14) **Certificate of Conformity EPS 24 ATEX 1 226 U** **Revision 0**

(15) Description of component:

The M100 I/O system is an extension of the modular M200 control system that focuses on distributed detection, processing, and output of signals. The system extension consists of freely-configurable substations and it can be connected on standardized fieldbus systems by means of specific bus couplers (node adapters). The M100 I/O system is a generic modular system (hardware and software components) from which different devices and function units can be created for different applications. The M100 I/O system is intended for the automation of electrical systems or machines and is designed for installation in switch cabinets.

The individual modules of the M100-I/O-System are classified as components. For the determination of the temperature class the following table may be used:

Module	Delta T [K]*
AIM112	63.4
AIO104/I	52.6
AIO112	68.2
BPR1xx / BPS1xx	37.0
COM1xx	26.0
DIS1xx	37.4
DOH108	51.9
DOS1xx	39.5
EAS102	24.9
EII102	36.8
NEC102	31.8
PSI135	40.5
UIO106	53.4

*Delta T stands for the difference between the maximum measured surface temperature and the ambient temperature.

Environmental data:

-30 °C ≤ T_S ≤ +70 °C

Electrical data:

24 VDC (via external power supply)
12 VDC (via backplane, supplied by node adapter NEC102 or power supply module PSI135)

(16) Reference number: 23TH0357

(17) Notes for manufacture, installation and operation:

The M100-I/O-System must be installed in a cabinet, housing or enclosed operating room with an ingress protection degree of at least IP54 according to EN IEC 60079-0.

The M100-I/O-System shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1 or IEC 61010-1.

Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals.

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection

Tuerkheim, 2025-01-27

Ulrich Feike