

[1]

TYPE EXAMINATION CERTIFICATE



[2]

Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3]

Type Examination Certificate Number: **UL 23 ATEX 3000X Rev. 0**

[4]

Product: **Programmable Controllers, "MOSAIC Series"**

[5]

Manufacturer: **Reer SPA**

[6]

Address: **32 Via Giulio Carcano, Torino, TO, 10153 Italy**

[7]

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

[8]

UL International Demko A/S certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no. **4790732835.1.1.**

[9]

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN IEC 60079-7:2015/A1:2018

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10]

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

[11]

This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.

[12]

The marking of the product shall include the following (marking is provided in the Schedule as a part of item 15, if applicable):

 **II 3 G Ex ec IIC T5...T4 Gc**

Certification Manager

Thomas Wilson

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2024-03-15

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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[14]

Schedule

TYPE EXAMINATION CERTIFICATE No.

UL 23 ATEX 3000X Rev. 0

[15]

Description of Product:

Mosaic is a safety programmable controller able to manage all safety functions of machinery. It is configurable and scalable.
 MOSAIC M1S RV is a standalone module able to control the other expansion modules with 10 digital inputs, 4 OSSD outputs, 4 test outputs for sensor monitoring and 2 inputs for Start/Restart interlock and external control relay
 MOSAIC M1S COM RV is like M1S RV with also Field-bus interface.
 MI804 RV is an additional Input/Output Expansion Unit with 10 digital inputs, 4 OSSD outputs, 4 test outputs for sensor monitoring and 4 signalling outputs.
 MA4 V is an expansion module with 4 analog inputs.
 MBC V is an expansion module for data transmission using CANopen

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1) to the scope of EN 60079-28:2015 .

Temperature range:

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range [°C]	Temperature class
-40°C ≤ Ta ≤ +50°C	T5
-40°C ≤ Ta ≤ +65°C	T4

Electrical data

Models	Power supply	Output
MOSAIC M1S RV	24 Vdc – 3W	24 Vdc – 400mA
MOSAIC M1S COM RV	24 Vdc – 5W	24 Vdc – 400mA
MI804 RV	24 Vdc – 3W	24 Vdc – 400mA
MBC V	24 Vdc – 1W	CANopen - RS485
Models	Power supply	Analog Input
MA4 V	24 Vdc – 2W	4-20mA / 0-10 V

Routine tests:

Routine tests according to EN 60079-7 cl. 7.1 are not required

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

[17]

Specific Conditions of use:


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- The equipment shall only be used in an area of at least pollution degree 2, as defined in EN 60664-1.
- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with EN IEC 60079-0
- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment".
- Vertical Limited position for all models. MOSAIC M1S COM RV shall be installed only on the right of other modules.
- The maximum ambient temperature must be observed in the final application at a distance of 40 mm from the device.

[18]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

The trademark  REER S.p.A. will be used as the company identifier on the marking label.