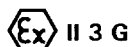





- (1) **EC-TYPE EXAMINATION CERTIFICATE**
- (2) **Equipment or protective system intended for use in potentially explosive atmospheres - Directive 94/9/EC**
- (3) **EC-Type Examination Certificate Number: KEMA 97ATEX4940 X**
- (4) **Equipment or protective system: ALTUS 3100...B. series relays**
- (5) **Manufacturer: Micro Motion, Inc.**
- (6) **Address: 7070 Winchester Circle, Boulder CO 80301, USA**
- (7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) KEMA, notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 report no. 74940.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- prEN 50021 : 1998**
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-Type Examination Certificate relates only to the design and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.
- (12) The marking of the equipment or protective system shall include the following:



EEx nV II T4

Arnhem, 2 February 1999  
by order of the Board of Directors of N.V. KEMA

  
C.M. Boschloo  
Certification Manager

° This Certificate may only be reproduced in its entirety and without any change



## SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 97ATEX4940 X

(15) **Description**

The ALTUS 3100 series relay units contain three solid state switches controlled by discrete outputs of e.g. the Batch Controller of the ALTUS 3300 series and are used for interfacing with high-energy solenoids, pump starters and similar devices.

**Electrical data**

Model 3100A..B.

Input circuits .....	4 ... 32 Vdc
Output circuits .....	24 ... 250 Vac, 0,04 ... 5 A

Model 3100B..B.

Input circuits .....	4 ... 32 Vdc
Output circuits .....	0 ... 70 Vdc, 0,02 ... 5 A

**Routine tests**

The ALTUS 3100 series relays must be submitted to routine tests according to prEN 50021:1998, Clauses 27.1, 27.2.1 and 27.2.2.

(16) **Report**

KEMA No. 74940

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

1. The ALTUS 3100 series relays shall be installed in an enclosure providing a degree of ingress protection of at least IP40 according to EN 60529, taking into account the environmental conditions into which the equipment will be installed and clause 6 of prEN 50021:1998.
2. Cable entries for the enclosure shall comply with clause 7.2.6 of prEN 50021:1998
3. The external metal parts of the relays (heat sinks) must be connected to the potential equalizing system within the hazardous area.
4. Ambient temperature range -20 °C ... +60 °C.

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

Essential Health and Safety Requirements not covered by standards listed at (9)	
Clause	Subject
1.0.5	Marking
1.0.6	Instructions

These Essential Health and Safety Requirements are examined and positively judged. The results are laid down in the report listed at (16).

## SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 97ATEX4940 X

(19) **Test documentation**

signed

- |    |                               |            |
|----|-------------------------------|------------|
| 1. | Description (4 pages)         | 29.01.1999 |
| 2. | Drawing No. 3300646 Rev.C )   |            |
|    | 3300604 Rev.C )               |            |
|    | 3300834 Rev.B )               |            |
|    | 3300474 Rev.A (5 sheets) )    |            |
|    | 3300476 Rev.A (5 sheets) )    |            |
|    | 3300473 Rev.A (4 sheets) )    |            |
|    | 3300475 Rev.A (4 sheets) )    |            |
|    | ES-3300473 Rev.A )            |            |
|    | ES-3300475 Rev.A )            |            |
|    | 3300481 Rev.A (3 sheets) )    | 20.10.1998 |
|    | 3300480 Rev.A (3 sheets) )    |            |
|    | E-0609700 Rev.A (3 sheets) )  |            |
|    | E-0609800 Rev.A (3 sheets) )  |            |
|    | E-0609600 Rev.A (3 sheets) )  |            |
|    | 3100182 Rev.A (3 sheets) )    |            |
|    | 3100584 Rev.A (3 sheets) )    |            |
|    | ER-3100341 Rev.D (8 sheets) ) |            |
|    | 3300645 Rev.A (3 sheets) )    |            |
| 3. | Samples                       |            |