

Type-examination certificate no. 6442/3.e

Object: contactor

Mark: Allen-Bradley

Type designation: 100S-D210/250/300/420* safety contactors
104S-D210/250/300/420* safety reversing contactors
100S-DS1-11 auxiliary switches, side-mounted

Technical details concerning safety: mirror contacts according to IEC 60947-4-1, Annex F
details concerning useful life B10 and reliability see supplementary sheet 1/1

Manufacturer's address: Rockwell Automation AG
Industriestrasse 20
CH-5000 Aarau

Address of applicant: Rockwell Automation AG
Industriestrasse 20
CH-5000 Aarau

Special conditions, enclosures: see supplementary sheet 1/1

Expires on: 30 September 2019

The sample examined satisfies the health and safety requirements according to Article 3 of the Federal Law on product safety of 12 June 2009 its amendments.

This certificate is valid in conjunction with the general conditions listed on the back and any possible enclosures mentioned above.

Place and date:
Lucerne, 15 September 2014

Suva
Accredited Certification Body SCESp 008
Technology Sector

The Safety Engineer
Peter Kocher



Head of Certification
Guido Schmitter



Allen-Bradley Automation

Supplementary sheet to Certificate no. 6442/3.e

Lucerne, 15 September 2014

The type-examination certificate is valid for the following types:

safety contactors:	safety reversing contactors:
100S-D210*22C	104S-D210*22C
100S-D250*22C	104S-D250*22C
100S-D300*22C	104S-D300*22C
100S-D420*22C	104S-D420*22C

explanation:

* : stands for coil voltage codes (conventional and electronically controlled, not safety-relevant)
22C : auxiliary contacts: 2 NO, 2 NC

For safety-related applications only undelayed NC contacts may be used.

auxiliary switches:

100S-DS1-11 : 1 NO, 1 NC

In context with this type-examination certificate the meaning of the term mirror contacts is as follows:
If any main contact is closed, then no mirror contact (auxiliary contact) is closed.
(IEC 60947-4-1, Annex F)

Manual operation is prevented by design.

Details concerning useful life B10 according to IEC 60947-4-1, Annex K:

Type	B10	conditions
100S-D250*	800'000	AC-3
104S-D250*	800'000	AC-3

Details concerning reliability according to MIL-HDBK-217F Notice 1 and Notice 2:

Type		MTTF	MTTFd
100S-D210E*	104S-D210E*	39.1 years	704 years
100S-D250E*	104S-D250E*	39.1 years	704 years
100S-D300E*	104S-D300E*	39.1 years	704 years
100S-D420E*	104S-D420E*	26.7 years	493 years

These values are valid for all electronically-controlled coil variants.

The electronically-controlled coils have two different modes:

- E-Mode (default): not safety-relevant
- EI-Mode (jumper selectable): enables the additional control inout, safety-relevant

Last page of the supplementary sheet to Certificate no. 6442/3.e

General conditions

This certificate is valid only for products bearing the trademark and type shown on the front page. Each product must be marked with a nameplate, a sticker, a label or a stamp so that it can be clearly identified.

The manufacturer or supplier undertakes to deliver under the trademark and type stated on the front page only products that are identical with the certified type in all aspects that can influence its safety. Failure to comply with this condition will automatically invalidate this certificate.

When assessing the product mentioned on the front page, it has been assumed that its design and manufacture comply with the acknowledged rules of technology.

In the event of a sale, the technical instructions must be supplied in the official language of the user's country. They must include the information on safety required for the intended use of the object, its operation, necessary checks, maintenance and the precautions to be taken when operating the object. The instructions are binding for the user. If organizational measures are required to guarantee safety, they must be agreed upon in advance with the buyer and user of the product.

The user must employ the product for its intended purpose and with due care. In particular, he must comply with any special conditions of use and take the necessary organizational measures.

The manufacturer is obliged to report to Suva without delay any complaints regarding the product or product category described on the front page as well as the remedying of faults.

Reference to this certificate in quotations, brochures, advertisements or other publicity media may only be made if accompanied by its number.

Upon request, the term of validity of the certificate is extended if the product and the applicable conditions of use still meet valid safety requirements. However, if recent experience or findings show that adequate safety is no longer guaranteed, the certificate can be cancelled by Suva at any time.

Certification Body SCESp 008; European notified body, identification number 1246

Suva, Technology Sector, P.O. Box 4358, CH-6002 Lucerne
Phone + 41 (0) 41 419 61 31, Fax + 41 (0) 41 419 58 70
www.suva.ch/certification