

CERTIFICAT



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認證證書



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Italia

CERTIFICATE

Machinery Directive 2006/42/EC Annex. IX
EC type-examination certificate for logic units to ensure safety functions
(ref. Annex IV – 21)

Certificate No.: TUV IT 0948 10 MAC 008 B Rev.06
Name and address of manufacturer: STEM S.r.l.
Via della Meccanica, 2
27010, Cura Carpignano (PV)
Italy
Designation: Safety module
Model/type: NC11 01
☐ Single sample ☒ Group of samples
Reference Standards: EN ISO 13849-1:2023 - EN ISO 13849-2:2012
EN 60204-1:2018
Test report: RRTR-25-0948-MAC-722379812-04

We herewith certify, as per Notified Body no.0948, that the product for the respective scope of application stated in the annex to this EC type-examination certificate meets the requirements of the Directive:

2006/42/CE

Issue date: 27/03/2025
Expiry date: 29/03/2030



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TÜV Italia S.r.l.
Notified Body, Identification N° 0948

Alberto Carelli

Industrie Service Division Manager

First Issue date: 30/03/2010
Expiration date of the last certification cycle: 29/03/2025



Annex to EC type-examination certificate n° TUV IT 0948 10 MAC 008 B Rev.06

1. Scope:

The NC11 01 safety module controls the status of one or more magnetic sensors (max 2 sensors) with three N.O. contacts activated by coded magnetic units. The output is closed only if the three N.O. contacts of each sensor are closed.

The opening of even just one contacts of the sensor, determines a safety situation, placing the safety output in the open state.

The control unit starts automatically by positioning the magnetic actuator in the activation zone of the respective sensors.

The component falls under Annex IV point 21 of the Machinery Directive 2006/42/EC as it belongs to the category *"Logic units to ensure safety functions"*.

2. Reference Standard:

EN ISO 13849-1:2023 - EN ISO 13849-2:2012

EN 60204-1:2018

The standards cited on the reference certificate of this Annex (see above)

☒ have been fully applied

☐ have been partially applied

3. Main technical characteristics

NC11 01: General characteristics

Power supply: 24 V ac $\pm 10\%$ (50 ÷ 60 Hz); 24 V dc $\pm 10\%$

Current consumption (mA): 45

Internal fuse on the supply: PTC 750 mA

Housing material: PA 6.6

Assembly: 35 mm DIN standard rail



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Protection degree: IP20

Working temperature: 0°C ÷ +50°C

Storage temperature: -25°C ÷ +70°C

Connection type: screw terminals (setting torque: 0,5 Nm)

Maximum safety output switching voltage (terminals 3-4): 250 V ac/dc

Maximum safety output switching current: 4 A

Maximum safety output switching power (resistive load): 1000 VA

Mechanical life: 10⁷ cycles

SIGNALLING:

POWER, Green LED = power

S1, Green LED = Sensor 1

S2, Green LED = Sensor 2

TERMINALS:

A1: Power supply +24 V dc / 24 V ac

A2: Power supply GND / 24 V ac

Inputs:

1-2-3-4: sensor 1 inputs

5-6-7-8: sensor 2 inputs

Outputs:

13-14: Safety output

Reliability data



Safety category and PL EN ISO 13849-1:2023	1 PL c		
nop (n. of operation / years)	34000	13200	N. cycles/ years
MTTF _d (AC-1: I laod = 4A)	39	100	years
PFH _d	2,93x10 ⁻⁶	1,14x10 ⁻⁶	
B10 _d	AC-1 (4A) = 4x10 ⁵ ; AC-15 (1A) = 1,4x10 ⁶		N. cycles
TM	20		years

4. Conditions of validity of the certificate

The validity of the EC type examination certificate is subject to review every five years. If the validity is not extended, the manufacturer has the obligation to stop placing the machine on the market.

The manufacturer has the obligation to communicate any modification made to the approved type. TÜV Italia reserves the right to confirm the validity of the EC type examination certificate issued.

5. Note

In accordance with the provisions of the Machinery Directive 2006/42/EC, the applicant must inform the notified body regarding the modifications, even of minor importance, that he has made or intends to make to the model of the machine to which the certificate refers.

Copy of the test report n.: **RRTR-25-0948-MAC-722379812-04** is delivered to the Manufacturer.

This annex is an integral part of the EC type examination certificate n°

TUV IT 0948 10 MAC 008 B Rev.06

Milan, 27/03/2025



Information regarding the TÜV Italia Certificate

This certificate is only valid for the referenced company and its facilities stated on the certificate. Only the Certification Body is allowed to transfer (assign) it to a third party.

The right to use the marking depicted on the certificate covers solely products, which match with the type approval and the specifications within the test report or within its complementary (additional) agreements.

Each product has to contain (be accompanied) the necessary operating and assembly instructions. Each product must bear the clearly visible identification of the manufacturer or importer as well as a type plate, in order to identify the compliance of the type approval with the product placed on the market.

The holder of the TÜV Italia certificate is obliged to continuously observe if the manufacture of the marked products complies with the test requirements; he is obliged to perform the control tests defined within the test requirements or by the Certification Body in an orderly manner.

Aside from the conditions referenced above, the conditions within the General Contract are effective for the TÜV Italia certificate.

It is valid as long as the state of the art requirements on which the test (approval) was based, are effective, if it was not withdrawn prior on conditions within the General Contract.

If this certificate expires or is withdrawn it has to be returned to the Certification Body immediately.