

CERTIFICATE

**Machinery Directive 2006/42/EC Annex. IX - EC type-examination
certificate for safety components (rif. Annex IV – 21)**

Certificate n°: TÜV IT 0948 15 MAC 0072 B

Date of submission: 05/02/2015

Name and address of manufacturer: LEUZE Electronic GmbH+Co. KG
In der Braike 1
73277 OWEN

Product: Logic unit for the control of the safety
functions controlling mechanical sensors,
magnetic sensors and emergency stop
devices

Model: MSI-MC310

Test report: TR 0948 MAC 0005_R.03, 29.03.2015

Reference Standards: EN ISO 13849-1:2008 - EN ISO 13849-2:2008
EN 60947-5-3:2014, EN ISO 14119:2013

**We herewith certify that the safety component 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: 18/09/2015
Expiry date: 29/03/2020



SGQ N° 049A SSI N° 005G PRD N° 061B
SGA N° 018D ITX N° 001L ISP N° 057E
SCR N° 009F PRS N° 077C LAB N° 0076

Membro degli Accordi di Mutuo Riconoscimento
EA, IAF e ILAC

Signatory of EA, IAF and ILAC Mutual Recognition
Agreements



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



Dr. Gennaro Oliva
Industrie Service Manager

Further information are enclosed. Please see remarks on reverse.

Annex to the EC-type examination certificate n° TÜV IT 0948 15 MAC 0072 B

1. Scope

The electronic board MSI-MC310 is designed to control the risks of the machines (interlocked guards, emergency stop) up to Category 4 in accordance with EN ISO 13849-1 (EN 954-1).

In connection with magnetic sensors, they are also designed to have an increased resistance to failures according to the requirements of EN 60947-5-3.

MSI-MC310:

- Up to two sensors with direct connection to the terminals of the control unit,
- Up to 30 sensors with external connections (set to N.O., parallel to N.C.).

The devices are listed in Annex IV point 21 of Machinery Directive 2006/42/EC as belonging to the category "21. Logic units to ensure safety functions".

2. Main technical data

Supply:	24 V _{AC} ± 10% (50 ÷ 60 Hz) 24 V _{DC} ± 10%
Current consumption:	10 ÷ 110 mA @ 24 V _{DC} 30 ÷ 150 mA @ 24 V _{AC}
Short-circuit protection:	PTC 750 mA
Degree of protection:	IP20
Ambient temperature, operation:	0 °C ÷ 55 °C
Ambient temperature, storage:	- 25 °C ÷ 70 °C
Maximum voltage on the safe outputs (terminals 13-14, 23-24):	240 V _{AC}
Max. switched current:	3 A
Max. switching power:	720 W
Maximum voltage on the auxiliary outputs N.C. :	24 V _{AC/DC}
Maximum current on the auxiliary outputs N.C. :	1,5 A
Mechanical life time:	10 ⁷ cycles

Classification accordance with IEC 60947-5-3¹: PDF-S, PDF-M (with one sensor)

PL in accordance with EN ISO 13849-1: d, e

¹in connection with the following sensors classified as devices interlock type 4, according EN ISO 14119:

Connectable sensors: MC388-S1xxxxx, MC336-S1xxxxx, MC330-S1xxxxx

3. Conditions

The validity of the EC type-examination certificate is subject to review every five years. In the event that the validity of the EC-type examination certificate is not renewed, the manufacturer shall cease the placing on the market of the machinery concerned.

The applicant shall inform TÜV Italia of all modifications to the approved type. TÜV Italia may or not confirm the validity of the EC-type examination certificate issued.

4. Notes

The manufacturer shall retain a copy of this certificate, of the technical file and of all the relevant documents for a period of 15 years from the date of issue of the certificate.

This annex is an integral part of the EC-type examination certificate n° TÜV IT 0948 15 MAC 0072 B.

Sesto San Giovanni, 18/09/2015