# Certificate

(2) Number of Certificate:

**DEKRA** 

(5)

ZP/C002/22

- (3) Product: 2003 Trip Block TCimp
- (4) Manufacturer: Institute Mihajlo Pupin Automation & Control Systems Ltd.
  - Address: Volgina 15 11 060 Belgrade Serbia
- (6) The design and construction of these products and any acceptable variation thereto are specified in the schedule to this certificate.
- (7) The certification body of DEKRA Testing and Certification GmbH certifies that these products have been found to comply with the applicable requirements pursuant to the standard(s) referred in section 8. The examination and test results are recorded in the test and assessment report FSAR\_22092020\_V2\_Pupin\_2003TripBlockTCimp.
- (8) The applicable requirements are assured by compliance with the following standard(s):

IEC 61508-1:2010

IEC 61508-2:2010

VDE 2180-4:2010

The 2003 Trip Block TCimp is SIL 3 capable and can be used in safety related systems.

- (9) This certificate only relates to the design, examination und tests of the specified products in accordance with the mentioned standard(s). Further requirements apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (10) This certificate is valid until 2027-03-02.

DEKRA Testing and Certification GmbH Bochum, 2022-03-03

Managing Director

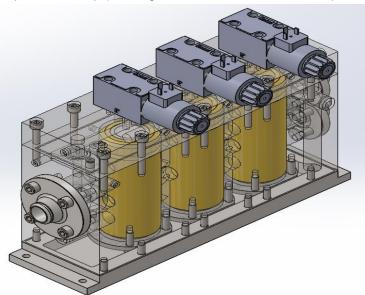
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#### Certificate (12) ZP/C002/22

**DEKRA** 

## (13) 13.1 Subject and Type:

2003 Trip Block TCimp (drawing number TCF.1617.0001-rev1)



## 13.2 Parameters

<u>13.2 Parameters</u>		
Parameters	Abbreviation	Data
Mode of operation		/Low/demand/mode
Hardware fault tolerance	HFT	0
Equipment type	XI <del>.</del> ////////////////////////////////////	/Type/A
Average Probability of failure	PFDAVG	$\Lambda$ $\Lambda$ $54 \times \Lambda$ $0^{4}$
Mean Time To Failure Spuriously	MTTFS	<158 years
Safety Integrity Level	SIL	/SIL/3
Mean Time To Restoration	MTTR	/ /12 hours
Prove Check Interval	///////////////////////////////////////	/24 hours
Reaction time	TR	0.05/ to/0.1 seconds

### (14) Test and Assessment Report(s)

FSAR\_22092020\_V2\_Pupin\_2003TripBlockTCimp dd. 2022-02-21

# (15) Special Conditions for Safe Use

The User Manual need to be read thoroughly before and during use, especially for Part 6 TCimp Testing.

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