

# Certificate



Functional  
Safety

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**No.: 968/FSP 2355.00/22**

<b>Product tested</b>	Self-diagnostic software designed for MCUs based on ARM Cortex-M23 or ARM Cortex-M33 core	<b>Certificate holder</b>	Renesas Electronics Corporation 3-2-24 Toyosu Koto-ku Tokyo 135-0061 Japan
<b>Type designation</b>	RA (CM23 / CM33) Groups Diagnostic Software as listed in the current Revision List		
<b>Codes and standards</b>	IEC 61508 Parts 1-7:2010 (in extracts)		
<b>Intended application</b>	The RA (CM23 / CM33) Groups Diagnostic Software complies with the requirements of SC 3 acc. to IEC 61508 and can be used as a compliant software item in safety related applications up to SIL 3 acc. to IEC 61508. The claimed diagnostic coverages of 90% (medium) for CPU and RAM tests and 99% (high) for ROM test can be confirmed.		
<b>Specific requirements</b>	The instructions of the Safety Manual and the User Guide of the respective MCU series shall be considered.		

The issue of this certificate is based upon an evaluation in accordance with the Certification Program CERT FSP1 V1.0:2017 in its actual version, whose results are documented in Report No. 968/FSP 2355.00/22 dated 2022-02-07. This certificate is valid only for products, which are identical with the product tested.

**TÜV Rheinland Industrie Service GmbH**  
Bereich Automation  
Funktionale Sicherheit  
Am Grauen Stein, 51105 Köln

Köln, 2022-02-07

Certification Body Safety & Security for Automation & Grid

Dr.-Ing. Thorsten Gantevoort