

Certificate



Functional Safety Management

FS Management (TÜV Rheinland)

IEC 61511-1:2016 - SIS Integration (Phase 4), SIS Service (Phase 6 and 7)
FSM 163 - Centralized Group Certification

Certificate No.

968/FSM 163.01/19

Certified Company & Location

ABB Group Headquarters
Industrial Automation Division
Business Line Energy Industries
Affolternstrasse 44
8050 Zurich
Switzerland



Scope of Certification

Centralized Group Certification for IEC 61511-1:2016
considering the following Safety Life-Cycle Phases

Phase 4 - Design and Engineering for SIS Integration
Phase 6 - Operation and Maintenance for SIS Service
Phase 7 - Modification for SIS Service

Details and limitations regarding the **Technical Scope and Local Scope of Certification** of committed Local Business Lines are listed in the attached **Certificate Appendix 968/FSM163.01/19**, which forms integral part of this certificate.

The certified company organization and its **committed Local Business Lines** as listed in attached **Certificate Appendix** have successfully demonstrated during an audit process that a **Functional Safety Management System** has been implemented and applied.

This certification is related to **IEC 61511-1:2016** for **Process Industry**, up to and including **Systematic Capability 3 (SC3)** and **Safety Integrity Level 3 (SIL3)**, limited to the **Logic Solver Sub-System**.

IEC 61511 is the basic standard for this FSM Certification; however relevant clauses of the **IEC 61508:2010** standard are used complementarily.

This certificate does not imply approval or certification for specific SIS Integrations.

Validity

This certificate is valid until 2022-12-31

Cologne, 2019-11-19

Dr.-Ing. Thorsten Gantevoort

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

TÜV Rheinland
Industrie Service GmbH
Automation and Functional Safety
Am Grauen Stein
51105 Cologne - Germany

Certification Body Safety & Security for Automation & Grid
Further information referring to the scope of certification, see <http://www.tuvasi.com>

Certificate Appendix

This appendix forms integral part of Certificate No. 968/FSM 163.01/19, dated 2019-11-19

Certificate Holder	ABB Group Headquarters Industrial Automation Division Business Line Energy Industries Affolternstrasse 44 8050 Zurich Switzerland
Legal Responsibility	ABB Limited Daresbury Park, Daresbury Warrington Cheshire WA4 4BT United Kingdom
Overall FSM Responsibility	ABB IAEN FSM Technical Authority Industrial Automation Energy Industries

Details and limitations regarding the Local Scope of Certification *:

This FSM Certification only refers to company locations, as listed below, and their involved departments, which comply with the organizational FSM requirements for the considered Scope of Certification.

Details and limitations regarding the Technical Scope of Certification **::

This FSM Certification is related for Process Industry, up to and including Systematic Capability 3 (SC3) and Safety Integrity Level 3 (SIL3), **limited to the Logic Solver Sub-System**.

Full phase responsibility for SIS Integrations according to IEC 61511-1:2016, Safety Life-Cycle Phase 4 - Design and Engineering,

considering the following phase activities:

SIS design, configuration, application program development, assembly, test and safety parameters calculation.

Limited phase responsibility for SIS Services according to IEC 61511-1:2016, Safety Life-Cycle Phase 6 - Operation and Maintenance,

considering the following services on behalf of Plant Operators / End Users regarding "SIS Preventative Maintenance and SIS Corrective Maintenance":

Repair like for like, inspection, proof testing.

Note: Operational responsibilities are excluded.

Limited phase responsibility for SIS Services according to IEC 61511-1:2016, Safety Life-Cycle Phase 7 - Modification,

considering the following services on behalf of Plant Operators / End Users regarding "Installed SIS modification related to SIS Integration of Phase 4 - Design and Engineering":

Factory based phase 4 activities.

Levels of Certification ***:

Regarding the definition of **Maturity Levels** see latest **Certification Regulation** or information published on <https://www.certipedia.com/fs-products>.

ABB IAEN Local Business Line	# of Offices	ABB Company Location *	Technical Scope of Certification **	Maturity Level ***
Canada	1	ABB Inc. 3450 Harvester Rd. Burlington, Ontario L7N 3W5 Canada	SIS Integration – Phase 4 SIS Service – Phase 7	4
Czech Republic (EUOPC)	1	ABB s.r.o. Operation Centre Europe Nova Karolina Park 28. října 3348/65 702 00 Ostrava Czech Republic	SIS Integration – Phase 4 SIS Service – Phase 7	4
Denmark	1	ABB A/S Emil Neckermans Vej 14 5220 Odense SO Denmark	SIS Integration – Phase 4 SIS Service – Phase 7	4
Germany	1	ABB Automation GmbH Energy Industries Local Product Group Chemicals & Refining Stierstädter Str. 5 60488 Frankfurt Germany	SIS Integration – Phase 4 SIS Service – Phase 7	4
India (INOPC)	1	ABB Global Industries & Services Private Limited Bhoruka Tech Park, 2nd Floor, Block 1 Whitefield Road, Mahadevapura Pura 560 048 Bangalore, Karnataka India	SIS Integration – Phase 4 SIS Service – Phase 7	4
Norway	4	ABB AS Energy Industries Ole Deviks Vei 10 0666 Oslo Norway	SIS Integration – Phase 4 SIS Service – Phase 7	4
		ABB AS Energy Industries Kokstadvegen 23B 5257 Kokstad, Bergen Norway	SIS Integration – Phase 4 SIS Service – Phase 7	4
		ABB AS Energy Industries Christian August Thorings Vei 7 4033 Stavanger Norway	SIS Integration – Phase 4 SIS Service – Phase 7	4
		ABB AS Energy Industries Hamnegata 14 5411 Stord Norway	SIS Integration – Phase 4 SIS Service – Phase 7	4

ABB IAEN Local Business Line	# of Offices	ABB Company Location *	Technical Scope of Certification **	Maturity Level ***
Italy	2	ABB S.p.A. Industrial Automation Division Business Line Energy Industries Via Lama, 33 20099 - Sesto San Giovanni (Milan) Italy	SIS Integration – Phase 4 SIS Service – Phase 7	4
		ABB S.p.A. Industrial Automation Division Business Line Energy Industries Via Albareto, 35 16153–Genova Sestri Ponente (Genoa) Italy	SIS Integration – Phase 4 SIS Service – Phase 7	4
Poland	1	ABB Sp. z o.o. Branch in Wroclaw Industrial Automation Division Business Line Energy Industries 48/60 Dlugosza St., Bldg. D 51-162 Wroclaw Poland	SIS Integration – Phase 4 SIS Service – Phase 7	4
Singapore	1	ABB Pte Ltd. Singapore Safety Execution Centre 2 Ayer Rajah Crescent Singapore 139935	SIS Integration – Phase 4 SIS Service – Phase 7	4
United Kingdom	2	ABB Limited. Howard Road Eaton Socon St Neots Cambridgeshire United Kingdom	SIS Integration – Phase 4 SIS Service – Phase 7	4
		ABB Limited. Hareness Road Altens Industrial Estate Aberdeen United Kingdom	SIS Integration – Phase 4 SIS Service – Phase 7 SIS Service – Phase 6	4

Head of Certification Body for Certification of Management Processes

TÜV Rheinland Industrie Service GmbH
Automation - Functional Safety & Cyber Security
Am Grauen Stein

51105 Cologne – Germany

Email: FSM.Services@de.tuv.com

Further information and validity of certification can be found on <https://www.certipedia.com/fs-products>.