Certificate / Certificat
Zertifikat / 合格証

GE 070611 C001

exida hereby confirms that the:

Mark* VIeS Safety Controller
* Trademark of General Electric company

**General Electric
Salem, VA - USA**

Has been assessed per the relevant requirements of:

IEC 61508 : 2010   Parts 1-7

**EN50402:2005+A1:2008 (Logic Solver)
EN50156:2015 (Logic Solver)**

and meets requirements providing a level of integrity to:

**Systematic Capability: SC 3 (SIL 3 Capable)
Random Capability: Type B Element**

**SIL 3 @ HFT=1; High and Low Demand; Route 1_H
SIL 2 @ HFT=0; Low Demand only; Route 1_H**

**PFH/PFD_{AVG} and Architecture Constraints
must be verified for each application**

Safety Function:
The Mark VIeS will perform the configured safety logic and execute the automatic diagnostics in the specified time period.

Application Restrictions:
The unit must be properly designed into a Safety Instrumented Function per the Safety Manual requirements.

_____
Evaluating Assessor

_____
Certifying Assessor

The manufacturer
may use the mark:

Revision 4.0 December 15, 2022
Surveillance Audit Due
December 1, 2025

ANAB
ANSI National Accreditation Board
A C C R E D I T E D
ISO/IEC 17065
PRODUCT CERTIFICATION
BODY
#1004

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Systematic Capability: SC 3 (SIL 3 Capable)

Random Capability: Type B Element

SIL 3 @ HFT=1; High and Low Demand; Route 1_H

SIL 2 @ HFT=0; Low Demand only; Route 1_H

**PFH/PFD$_{AVG}$ and Architecture Constraints
must be verified for each application**

Mark VIeS Safety Controller

Systematic Capability:

The product has met manufacturer design process requirements of Safety Integrity Level (SIL) 3. These are intended to achieve sufficient integrity against systematic errors of design by the manufacturer.

A Safety Instrumented Function (SIF) designed with this product must not be used at a SIL level higher than stated.

Random Capability:

The SIL limit imposed by the Architectural Constraints must be met for each element.

SIL Verification:

The Safety Integrity Level (SIL) of an entire Safety Instrumented Function (SIF) must be verified via a calculation of PFH or PFD$_{avg}$ considering redundant architectures, proof test interval, proof test effectiveness, any automatic diagnostics, average repair time and the specific failure rates of all products included in the SIF. Each element must be checked to assure compliance with minimum hardware fault tolerance (HFT) requirements.

For detailed information on failure rates of the Mark VIeS Controller system see the *exida* exSILentia tool or contact the manufacturer.

The following documents are a mandatory part of certification:

Assessment Report: GE 07-06-11 R002 V4R1 or later

Safety Manual: Mark* VIeS Safety Control Functional Safety Instruction, GEH-6723 Rev W or later