



The manufacturer may use the mark:



Revision 1.5 Jun 14, 2016  
Surveillance Audit Due  
July 1, 2019



ANSI Accredited Program  
PRODUCT CERTIFICATION  
#1004

# Certificate / Certificat Zertifikat / 合格証

FRS 1103091 C001

exida hereby confirms that the:

**DeltaV SIS with Electronic Marshalling  
Emerson Process Management  
Fisher Rosemount Systems, Inc.  
Austin, TX - USA**

Has been assessed per the relevant requirements of:

**IEC 61508 : 2010 Parts 1-7  
Logic Solver Requirements: NFPA 72:2007,  
NFPA 85:2007, NFPA86:2011, NFPA87:2011,  
EN50156-1:2004, EN54-2-A1:2006,  
EN50402-1-A1:2004, EN298:2012**

and meets requirements providing a level of integrity to:

**Systematic Capability: SC3 (SIL 3 Capable)  
Random Capability: Type B Element  
SIL 3 @ HFT=0**

**Therefore can be used as part of a safety instrumented  
system as per IEC 61511.**

**PFD<sub>AVG</sub> and Architecture Constraints must be verified for  
each application.**

**Safety Function:** DeltaV SIS 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.



*John C. Yozallinas*  
Evaluating Assessor

*[Signature]*  
Certifying Assessor

# Certificate / Certificat / Zertifikat / 合格証

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**Random Capability: Type B Element**

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DeltaV SIS with  
Electronic Marshalling

## **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 without further "prior use" justification by end user per IEC 61511.

## **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 PFD<sub>AVG</sub> 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 subsystem must be checked to assure compliance with minimum hardware fault tolerance (HFT) requirements.

The following documents are a mandatory part of certification:

**Assessment Report:** Emerson FRS 11-03-091 R002 V1 R5

**Safety Manual for DeltaV SIS:** D800058X022, December 2014

**Application Standards:** NFPA 72:2007, NFPA 85:2007, NFPA86:2011, NFPA87:2011, EN50156-1:2004, EN54-2-A1:2006, EN50402-1-A1:2004, EN298:2012

The DeltaV SIS Logic Solver was evaluated as the logic solver portion of a System per the relevant requirements of the listed application standards. All requirements of any Application Standard and the Authority Having Jurisdiction must be met for any particular application. Any additional regulatory requirements that exist must be followed.



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T-002, V3R9