



# Certificate / Certificat Zertifikat / 合格証

MII 1211027 C001

exida hereby confirms that the:

## SSX/SST Isolator/Splitter

The manufacturer  
may use the mark:



Revision 2.3 March 13, 2017  
Surveillance Audit Due  
March 1, 2020

## Moore Industries - International North Hills, CA - USA

Has been assessed per the relevant requirements of:

**IEC 61508 : 2010 Parts 1-7**

and meets requirements providing a level of integrity to:

**Systematic Capability: SC 3 (SIL 3 Capable)**

**Random Capability: Type A, Route 1<sub>H</sub> Device**

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

Safety Function:

The SSX/SST transmits the input signal to the output port(s)  
within the stated safety accuracy.

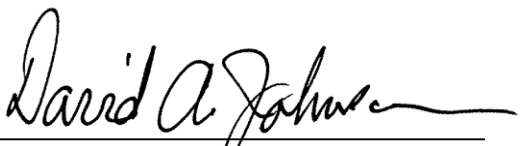
Application Restrictions:

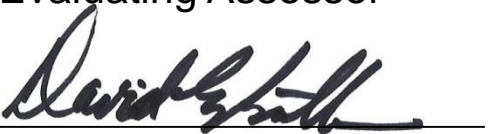
The unit must be properly designed into a Safety Instrumented  
Function per the Safety Manual requirements.



ANSI Accredited Program  
PRODUCT CERTIFICATION  
#1004



  
Evaluating Assessor

  
Certifying Assessor

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**Systematic Capability: SC 3 (SIL 3 Capable)**

**Random Capability: Type A, Route 1<sub>H</sub> Device**

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

SSX/SST  
Isolator/Splitter

**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 for each element.

**IEC 61508 Failure Rates in FIT\***

Model Number	$\lambda_{SD}$	$\lambda_{SU}$	$\lambda_{DD}$	$\lambda_{DU}$
4-20mA loop SSX/4-20MA/4-20MA/12-42DC [DIN]	157	0	0	53
4-20mA loop SST/4-20MA/4-20MA/24DC [DIN]	244	0	0	65
4-20mA loop SST/4-20MA/2X4-20MA/117AC [DIN]	293	0	0	77

Note: See Safety Manual for failure rates for all models.

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: MII 12-11-027 R002 V2 R3

Safety Manual: 206-792-00G May 2016

\* FIT = 1 failure / 10<sup>9</sup> hours



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T-002, V3R2-3