



Certificate / Certificat Zertifikat / 合格証

MII 1506150 C001

exida hereby confirms that the:

STZ Dual Sensor Transmitter

**Moore Industries – International
North Hills, CA - USA**

The manufacturer
may use the mark:



Revision 2.2 October 9, 2018
Surveillance Audit Due
October 1, 2021

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 B Element

SIL 2 @ HFT=0; SIL 3 @ HFT = 1; Route 2_H

**PFD_{avg} and Architecture Constraints
must be verified for each application**

Safety Function:

The STZ Series Transmitter receives sensor signals from one or two sensors and transmits a proportional signal within its stated safety accuracy.

Application Restrictions:

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



ANSI Accredited Program
ISO/IEC 17065
PRODUCT CERTIFICATION BODY
#1004



Evaluating Assessor

Certifying Assessor

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Random Capability: Type B Element

SIL 2 @ HFT=0; SIL 3 @ HFT = 1; Route 2_H

**PFD_{avg} and Architecture Constraints
must be verified for each application**

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. This device meets *exida* criteria for Route 2_H.

IEC 61508 Failure Rates in FIT*

Options and configuration of model STZ/TPRG/4-20MA/12-42DC	λ_S	λ_{DD}	λ_{DU}
STZ/TPRG/4-20MA/12-42DC [DIN]	218	163	40
STZ/TPRG/4-20MA/12-42DC/ -AIS [DIN]	235	205	41
STZ/TPRG/4-20MA/12-42DC [HPP]	199	129	29
STZ/TPRG/4-20MA/12-42DC [HP]	206	136	36

* FIT = 1 failure / 10⁹ hours

SIL Verification:

The Safety Integrity Level (SIL) of an entire Safety Instrumented Function (SIF) must be verified via a calculation of 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.

The following documents are a mandatory part of certification:

Assessment Report: MII 15-06-150 R001 V2 R0

Safety Manual: STZ_Installation_Manual_Moore_Industries_238-760-00F



80 N Main St
Sellersville, PA 18960

STZ Dual Sensor
Transmitter