Certificate / Certificat
Zertifikat / 合格証

Weidmüller 070902 P0002 C003

exida hereby confirms that the:

Temperature / mA Converter
ACT20X-(2)HTI-(2)SAO-S/P
Device version 2

Weidmüller Interface GmbH CO KG
Detmold, Germany

Has been assessed per the relevant requirements of:

IEC 61508 : 2000 Parts 1 - 7

and meets requirements providing a level of integrity to:

Systematic Capability: SC 2 (SIL 2 Capable)

Random Capability: Type B Device

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

Safety related function:
The Temperature / mA Converter shall convert various input signals from hazardous areas to a 4..20 mA current output signal.

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

_____
Evaluating Assessor

_____
Certifying Assessor

The manufacturer
may use the mark:

Revision 2.3 February 4, 2021
Surveillance Audit Due
February 28, 2023

CERTIFIED • IEC 61508
exida • SIL 2 CAPABLE
FS

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17065
PRODUCT CERTIFICATION
BODY

Systematic Capability: SC 2 (SIL 2 Capable)

Random Capability: Type B Device

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

Temperature / mA Converter

ACT20X-(2)HTI-(2)SAO-S/P

Weidmüller Interface GmbH CO KG

Detmold, Germany

Systematic Capability :

The product has met manufacturer design process requirements of Safety Integrity Level (SIL) 2. These are intended to achieve sufficient integrity against systematic errors of design by the manufacturer.

A Safety Instrumented Function (SIF) designed with these products must not be used at a SIL level higher than the statement without "prior use" justification by end user or diverse technology redundancy in the design.

Random Capability:

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

Summary for the Temperature / mA Converter ACT20X-(2)HTI-(2)SAO-S/P:

	Type B device			
	IEC 61508:2000 Failure rates			
	λ_{Safe}	λ_{DD}	λ_{DU}	$\lambda_{No\ effect}$
Current output	31	367	61	203

All failure rates are given in $FIT=10^{-9}/h$

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 subsystem must be checked to assure compliance with minimum hardware fault tolerance (HFT) requirements.

The following documents are mandatory parts of this certificate:

0709-02-C R012 V2 R2 Assessment Report

Safety manual ACT20X-(2)HTI-(2)SAO-S V0.1

exida®

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Sellersville, PA 18960

T-061, V3R1