Certificate / Certificat
Zertifikat / 合格証

Weidmüller 070902 C005

exida hereby confirms that the:

Universal Converter
ACT20X-HUI-SAO-S/P

Device version 2

Weidmüller Interface GmbH CO KG
Detmold, Germany

Has been assessed per the relevant requirements of:

IEC 61508 : 2010 Parts 1 - 3

and meets requirements providing a level of integrity to:

Systematic Capability: SC 2 (SIL 2 Capable)

Random Capability: Type B Route 2_H Device

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

Safety related function:

The Universal Converter converts various sensor input signals from hazardous areas to a 4..20 mA current output signal. An additional safety related output relay is available.

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 3.0 October 16, 2026
Surveillance Audit Due
November 1, 2029

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

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Systematic Capability: SC 2 (SIL 2 Capable)

Random Capability: Type B Route 2_H Device

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Universal Converter

ACT20X-HUI-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 Universal Converter ACT20X-HUI-SAO-S/P:

IEC 61508:2010 Failure rates in FIT*

	λ_{Safe}	λ_{DD}	λ_{DU}
Resistance / RTD temperature / TC temperature inputs, Current output	0	341	50
Resistance / RTD temperature / TC temperature inputs, Relay output	77	235	70
Current input, Current output	0	487	51
Current input, Relay output	167	297	71
Voltage input, Current output	0	440	64
Voltage input, Relay output	111	379	98

*FIT= 1 failure / 10^9 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 subsystem must be checked to assure compliance with minimum hardware fault tolerance (HFT) requirements.

The following documents are mandatory parts of this certificate:

Weidmüller 24-02-017-C R001 Assessment Report ACT20X V1R0

Safety manual ACT20X-HUI-SAO V0.4

80 N Main St
Sellersville, PA 18960

T-061, V5R3