The manufacturer may use the mark:



#### Reports:

HON11/09-030 R002 V1 R1 Assessment Report HON 06/05-18 R002 V1 R1 **FMEDA** Report

#### Validity:

This assessment is valid for the ST3000 Pressure Transmitter, Series 100 and 900, SL option, with HART 6.x

This assessment is valid until October 5. 2014.

Revision 1.0 October 5, 2011



# Certificate / Certificat Zertifikat / 合格証

HON 1109030 C001

exida hereby confirms that the:

ST3000 Pressure Transmitter, Series 100 and 900, SL option, with HART 6.x

## Honeywell International, Inc. Fort Washington, PA - USA

Has been assessed per the relevant requirements of:

IEC 61508 : 2000 Parts 1-7

and meets requirements providing a level of integrity to:

## Systematic Integrity: SIL 3 Capable

## **Random Integrity: Type B Element**

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

#### Safety Function:

The ST3000 Transmitter will measure Pressure within the stated safety accuracy.

Application Restrictions:

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



Evaluating Assessor

Rudolf P. Chalus

Certifying Assessor

Page 1 of 2

ST3000 Pressure Transmitter, Series 100 and 900, SL option, with HART 6.x

Honeywell International, Inc.

Fort Washington, PA - USA



64 N Main St Sellersville, PA 18960

Form	Version	Date
C61508	2.7-3	Mar 2011

# Certificate / Certificat / Zertifikat / 合格証

## HON 1109030 C001

## Systematic Integrity: SIL 3 Capable Random Integrity: Type B Element

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

SIL 3 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 "prior use" justification by end user or diverse technology redundancy in the design.

### IEC 61508 Failure Rates in FIT\*

Device	$\lambda_{sd}$	$\lambda_{su}$	$\lambda_{dd}$	$\lambda_{du}$	SFF
ST3000 pressure transmitter	0	70	427	40	92.5%

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.

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