

CERTIFICAT

CERTIFICADO

СЕРТИФИКАТ

認證證書

CERTIFICATE

ZERTIFIKAT



Italia

COMPLIANCE

with IEC EN 61508

Certificate No.: TUV IT 22 SIL 0054

CERTIFICATE OWNER: Isolcell S.p.A.
via A. Meucci 7
39055 Laives (BZ)
Italy

WE HEREWITH CONFIRM THAT
THE N2ORS SYSTEM – FIRE PREVENTION / FIRE PROTECTION APPLICATION
MEETS THE SIL REQUIREMENTS DETAILED IN THE ANNEXED TABLES
FOR THE SAFETY FUNCTION:

“The N2ORS system is able to detect, generate and maintain inside one or more rooms the concentration of oxygen within two pre-set lower and upper thresholds”

Examination result: The above reported N2ORS system - Fire Prevention / Fire Protection Application was found to meet the standard defined requirements of the safety levels detailed in the following table according to IEC EN 61508

Examination parameters: Construction/Functional characteristics and reliability and availability parameters of the above N2ORS system - Fire Prevention / Fire Protection Application

Expiry Date: May, 10th 2025

Reference Standard: IEC EN 61508:2010 Part 2, 4, 6, 7

Sesto San Giovanni, May, 11st 2022

TÜV ITALIA Srl



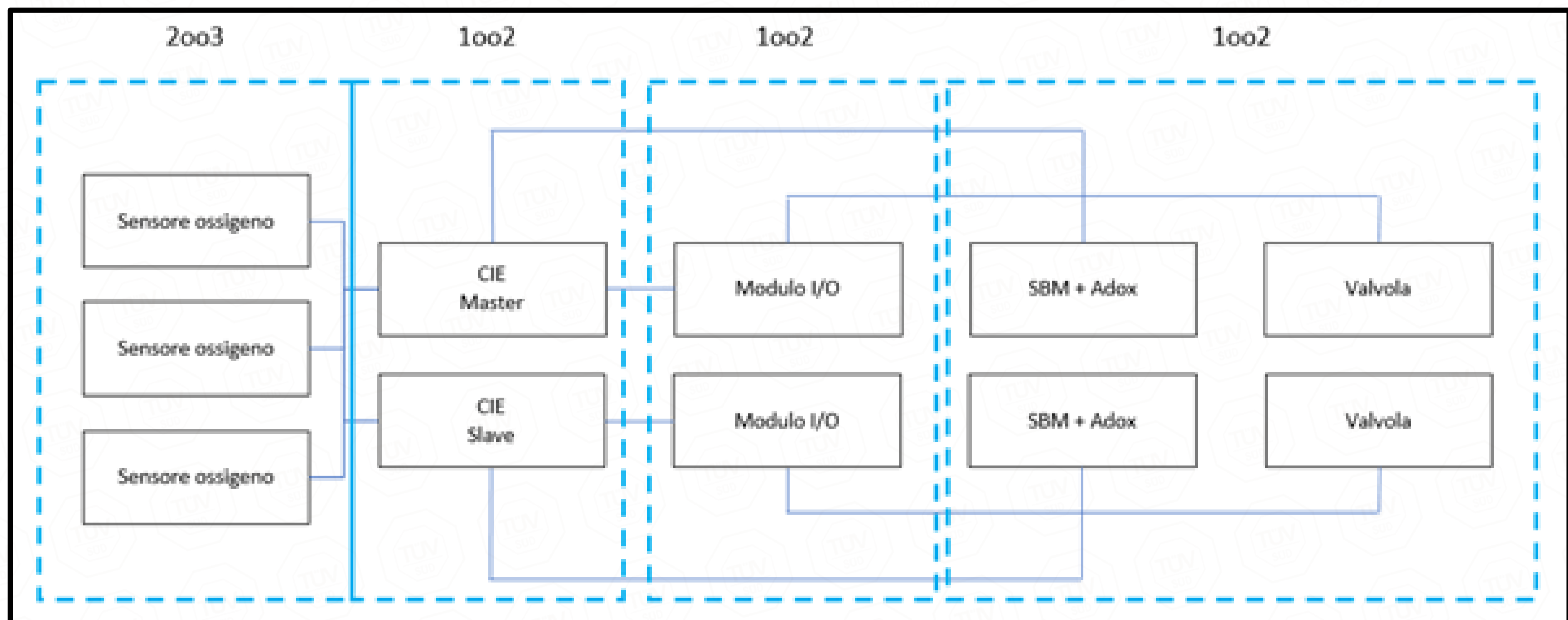
TÜV ITALIA Srl
Industrie Service Division
Managing Director

Alberto Carelli



Italia

<i>E/EE/EP safety-related system (final element)</i>	N2ORS system - Fire Prevention / Fire Protection Application produced by Isolcell S.p.A.
<i>Configuration</i>	Energize to trip (upper limit)
<i>System type</i>	Type B
<i>Systematic Capability</i>	SC3
<i>Safety Function Definition</i>	<i>The N2ORS system is able to detect, generate and maintain inside one or more rooms the concentration of oxygen within two pre-set lower and upper thresholds</i>
<i>Max SIL⁽¹⁾</i>	SIL3
PFH_{AVG}	5,30E-08
<i>Mission Time</i>	10 years
<i>Hardware Safety Integrity</i>	Route 1 _H
<i>Systematic Safety Integrity</i>	Route 1 _S
Remarks	
<i>(1) SIL3 has been reached considering the configuration represented in the block diagram reported below</i>	



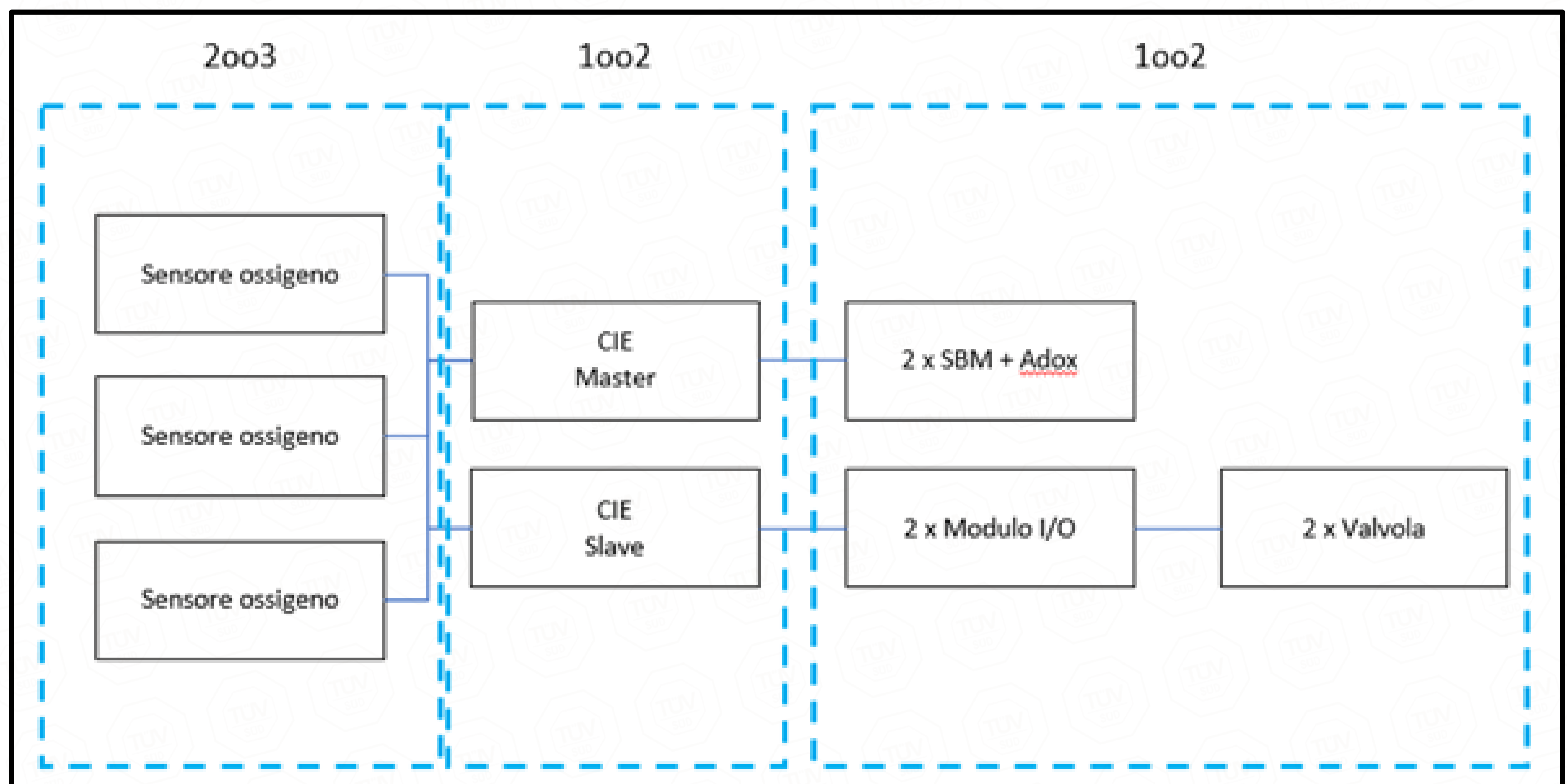
NOTE: The present table is integral part of the Document: TUV IT 22 SIL 0054
Date: May, 11^s 2022



Italia

CERTIFICAT ◆ CERTIFICADO ◆ СЕРТИФИКАТ ◆ 認證證書 ◆ CERTIFICATE ◆ ZERTIFIKAT

<i>E/EE/EP safety-related system (final element)</i>	N2ORS system - Fire Prevention / Fire Protection Application produced by Isolcell S.p.A.
<i>Configuration</i>	De-energize to trip (lower limit)
<i>System type</i>	Type B
<i>Systematic Capability</i>	SC3
<i>Safety Function Definition</i>	<i>The N2ORS system is able to detect, generate and maintain inside one or more rooms the concentration of oxygen within two pre-set lower and upper thresholds</i>
<i>Max SIL⁽¹⁾</i>	SIL3
PFH_{AVG}	4,53E-08
<i>Mission Time</i>	10 years
<i>Hardware Safety Integrity</i>	Route 1 _H
<i>Systematic Safety Integrity</i>	Route 1 _S
Remarks <i>(1) SIL3 has been reached considering the configuration represented in the block diagram reported below</i>	



NOTE: The present table is integral part of the Document: TUV IT 22 SIL 0054
Date: May, 11st 2022