



# CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

**UL LLC**

**333 Pfingsten Road, Northbrook, IL 60062, United States**

**ACCREDITATION ID# 0198**

Fulfills the requirements of

**ISO/IEC 17065:2012 Conformity assessment -  
Requirements for bodies certifying products, processes  
and services**

## LIST OF CERTIFICATION SCHEME(S)

UL Functional Safety and Autonomy Safety Schemes

This certificate is valid only when accompanied by a current scope of accreditation document. The current scope of accreditation can be verified at [www.anab.org](http://www.anab.org).

Lori Gillespie, Vice President, MVP SBU

Expiry Date: 01 December 2023



Cert ID # JLIGHALO

# LIST OF STANDARDS

| STANDARD         | STANDARD TITLE  | STANDARD       | STANDARD TITLE   |
|------------------|---|----------------|--|
| ANSI B11.26-2018 | Functional Safety for Equipment: General Principles for the Design of Safety Control Systems Using ISO 13849-1  | EN 50271       | Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen - Requirements and tests for apparatus using software and/or digital technologies |
| EN 50126-1       | Railway Applications – The Specification and Demonstration of Reliability, Availability, Maintainability and Safety (RAMS) – Part 1: Generic RAMS Process       | EN 50402       | Electrical apparatus for the detection and measurement of combustible or toxic gases or vapours or of oxygen - Requirements on the functional safety of gas detection systems        |
| EN 50126-2       | Railway Applications – The Specification and Demonstration of Reliability, Availability, Maintainability and Safety (RAMS) – Part 2: Systems Approach to Safety | EN 50495       | Safety devices required for the safe functioning of equipment with respect to explosion risks  |
| EN 50128         | Railway applications – Communication, signalling and processing systems – Software for railway control and protection systems                                   | EN 50657       | Railways Applications – Rolling stock applications – Software on Board Rolling Stock   |
| IEC 60079-29-3   | Explosive atmospheres – Part 29-3: Gas detectors – Guidance on functional safety of fixed gas detection systems   | IEC 61511-1    | Functional safety – Safety instrumented systems for the process industry sector – Part 1: Framework, definitions, system, hardware and application programming requirements          |
| IEC 61131-6      | Programmable controllers – Part 6: Functional safety  | IEC 61800-5-2  | Adjustable speed electrical power drive systems – Part 5-2: Safety requirements – Functional   |
| IEC 61508-1      | Functional safety of electrical/electronic/programmable electronic safety-related   | IEC 62061      | Safety of machinery – Functional safety of safety-related control systems  |
| IEC 61508-2      | Functional safety of electrical/electronic/programmable electronic safety-related   | IEC 61508-3    | Functional safety of electrical/electronic/programmable electronic safety-related systems – Part 3: Software requirements  |
| ISO 26262-2      | Road vehicles – Functional safety – Part 2: Management of functional safety   | IEC 62745      | Safety of machinery – Requirements for cableless control systems of machinery  |
| ISO 26262-3      | Road vehicles – Functional safety – Part 3: Concept phase   | EN ISO 10218-1 | Robots and robotic devices – Safety requirements for industrial robots – Part 1: Robots (ISO 10218-1:2011)   |

| STANDARD     | STANDARD TITLE   | STANDARD          | STANDARD TITLE   |
|--------------|--|-------------------|--|
| ISO 26262-4  | Road vehicles – Functional safety – Part 4: Product development at the system level  | EN ISO 10218-2    | Robots and robotic devices – Safety requirements for industrial robots – Part 2: Robot systems and integration (ISO 10218- 2:2011) |
| ISO 26262-5  | Road vehicles – Functional safety – Part 5: Product development at the hardware level                                      | EN ISO 13849-1    | Safety of machinery – Safety-related parts of control systems – Part 1: General principles for design (ISO 13849- 1:2015)          |
| ISO 26262-6  | Road vehicles — Functional safety — Part 6: Product development at the software level                                      | ISO 21448         | Road vehicles – Safety of the intended functionality   |
| ISO 26262-7  | Road vehicles — Functional safety — Part 7: Production, operation, service and decommissioning                             | CSA C22.2 No. 0.8 | Safety Functions Incorporating Electronic Technology   |
| ISO 26262-8  | Road vehicles — Functional safety — Part 8: Supporting processes   | UL 991            | Tests for Safety-Related Controls Employing Solid-State Devices  |
| ISO 26262-9  | Road vehicles — Functional safety — Part 9: Automotive safety integrity level (ASIL)-oriented and safety-oriented analyses | UL 1998           | Software in Programmable Components  |
| ISO 26262-12 | Road vehicles — Functional safety — Part 12: Adaptation of ISO 26262 for motorcycles                                       | UL 4600           | Evaluation of Autonomous Products  |
| EN 50129     | Railway applications - Communication, signalling and processing systems - Safety related electronic systems for signaling  | UL 61800-5-2      | Adjustable Speed Electrical Power Drive Systems – Part 5-2: Safety Requirements – Functional                                       |

for programs within the following

## SCOPE OF ACCREDITATION

GRANTED 2023-05-15:

|           |  |
|-----------|--|
| 13.110    | Safety of machinery                        |
| 13.230    | Explosion Protection                       |
| 13.320    | Alarm and warning systems                  |
| 25.040.01 | Industrial automation systems in general   |
| 25.040.10 | Machining centres                          |
| 25.040.20 | Numerically controlled machines            |
| 25.040.30 | Industrial robots. Manipulators            |
| 25.040.40 | Industrial process measurement and control |
| 25.040.99 | Other industrial automation systems        |
| 29.020    | Electrical engineering in general          |

GRANTED 2023-05-15:

|           |   |
|-----------|---|
| 29.260.20 | Electrical apparatus for explosive atmospheres  |
| 29.280    | Electric traction equipment                     |
| 29.200    | Rectifiers. Converters. Stabilized power supply |
| 35.080    | Software  |
| 35.100.01 | Open systems interconnection in general         |
| 35.240.50 | IT applications in industry                     |
| 35.240.60 | IT applications in transport                    |
| 43.040.10 | Electrical and electronic equipment             |
| 45.020    | Railway engineering in general                  |
| 93.100    | Construction of railways                        |

