

UL Type Examination Certificate

ATEX Directive 2014/34/EU

Certificate

UL 21 ATEX 2536X
Rev. 2

Issue date
2021-05-11

Re-issued
2025-09-04

This is to acknowledge that

ExRobotics B.V.

Delftechpark 26, Delft 2628 XH, Netherlands

has had

ExR-2 Robot Operator and ExR-2 Docking Station

evaluated and meets the requirements of the standards

EN ISO 80079-36:2016

EN ISO 80079-37:2016

Test Report No. **US/UL/ExTR21.0025/02.**



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This is to certify that the sample(s) of the product described herein ("Certified Product") has been investigated and found in compliance with the above mentioned harmonized Standard(s) per Article 12 of Directive 2014/34/EU of the European Parliament and of the Council relating to equipment and protective systems for use in potentially explosive atmospheres indicated on this Certificate, in accordance with the UL Type Examination Certificate Scheme Requirements.
The responsibilities of manufacturers, their authorized representatives are provided in Articles 6 and 7 of the Directive 2014/34/EU. This remains the responsibility of the manufacturer and authorized representative and is not covered as part of this certificate.
This certificate and test results obtained apply only to the product sample(s) submitted by the Applicant. UL International Demko A/S (UL) did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established follow-up service for inspection or other surveillance of the product. The Certificate Holder is solely and fully responsible for conformity of all products to all applicable Standards, specifications, requirements or Directives/Regulations. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

UL TYPE EXAMINATION CERTIFICATE

TECHNICAL DETAILS/SCHEDULE

Description of product

The ExR-2 Robot Operator is a remotely operated vehicle that is used to inspect oil and gas facilities. The ExR-2 Docking Station is provided as one method of charging the ExR-2 Robot Operator and is permissible for charging within the Hazardous (Explosive) Atmosphere. The vehicle is constructed of certified components including cameras, lights, motors, and various sensors. The various components are interconnected with certified cable glands and suitable cables.

Nomenclature

N/A

Ex marking

 II 2 G Ex h IIB T4 Gb

Temperature range

The ambient temperature range is -40°C ... -20°C to 50°C ... 55°C.

Trademark



Ratings

Electrical data

ExR -2 Docking Station: 100V to 240Vac, 1300W max

ExR-2 Robot Operator: $U_m = 240V$, 45Vdc max, 1300W max

Intrinsically safe specifications

U_m : 240 V

Routine tests

- Routine Dielectric Strength Test in accordance with Clause 5.2.2 of EN 60079-5 shall be performed on each lot of Swarco glass beads.
- Routine Pressure Test in accordance with Clause 5.2.1 of EN 60079-5 shall be performed on each ELE Electronics Box at a pressure of 50kPa for a duration of not less than 10 seconds. No permanent deformation of the enclosure is to exceed 0.5mm in any dimension.

Descriptive documents

The scheduled drawings are listed in the report no. provided under item "Test Report No." on page 1 of this UL Type Examination Certificate.

Specific Conditions of Use

- The Dome PTZ, when fitted, may be used only in locations with a low risk of mechanical impact
- Potential electrostatic charging hazard – see instructions
- Do not repair the flameproof joints of robots or any of their components.
- Flameproof joints are closed using fasteners with a yield stress $\geq 450 \text{ Nmm}^2$ except for:
 - The Dome PTZ module, use fasteners with a yield stress of $\geq 640 \text{ N/mm}^2$.
 - Det-tronics hydrocarbon gas module, use fasteners with a yield stress of $\geq 65000 \text{ psi}$ (448 N/mm^2).