ROBOT FLEET SAFETY CERTIFICATION RECORDS

ROBOT FLEET SAFETY CERTIFICATION RE

Polar Dynamics Robotics, Inc.

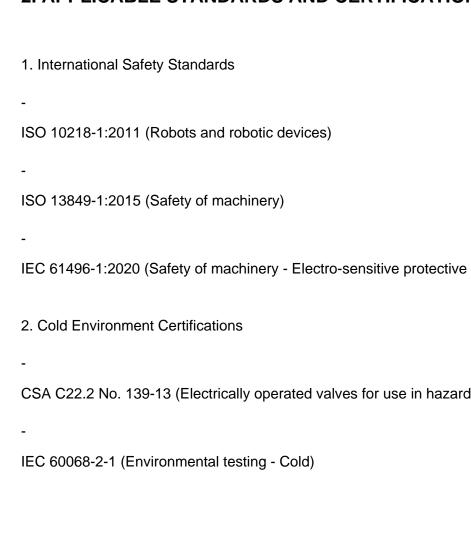
Document Reference: PDR-CERT-2024-001

Last Updated: January 11, 2024

1. CERTIFICATION OVERVIEW

- 1. This document certifies that the autonomous mobile robot (AMR) fle
- 2. All certifications herein apply to the BlueCore(TM) Series 3000 and

2. APPLICABLE STANDARDS AND CERTIFICATION



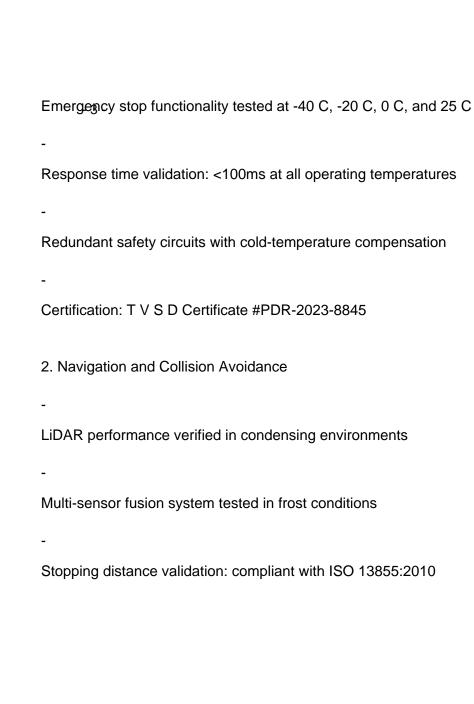
- 2 NEMA 250 Type 4X (Enclosure environmental ratings)
 3. Industry-Specific Compliance
 FDA 21 CFR Part 110 (Current Good Manufacturing Practice)
 ANSI/RIA R15.06-2012 (Industrial Robots and Robot Systems Safety

3. SAFETY FEATURES VALIDATION

OSHA 29 CFR 1910.212 (Machinery and Machine Guarding)

1. Emergency Systems

-



- - 4 -

Certification: SGS Certificate #NAV-2023-PDR-442

3. Battery Safety Systems

-

Cold-weather battery management system certification

-

Thermal runaway prevention protocols validated

-

Charging safety interlocks verified

-

Certification: UL Certificate #E485721

4. TESTING METHODOLOGY AND RESULTS

1. Envirgamental Chamber Testing

-

Duration: 1,000 hours continuous operation

-

Temperature cycles: -40 C to 25 C

-

Humidity range: 20% to 95% RH

-

Test Report: TR-PDR-2023-112

2. Load Testing

_

Maximum rated load: 1,500 kg

-

Safety factor validation: 1.5x rated load

- 6 -

Dynamic stability testing at maximum speed

_

Test Report: TR-PDR-2023-113

3. Software Safety Validation

-

BlueCore(TM) OS version 4.2.1 safety protocols

-

Navigation algorithm freeze protection

-

Sensor data integrity verification

_

Validation Report: VR-PDR-2023-089

5. MAINTENANCE AND INSPECTION REQUIREMEN

1. Scheduled Inspections		
-		
Daily: Safety sensor cleaning and verification		
-		
Weekly: Emergency stop system testing		
-		
Monthly: Full system diagnostic review		
-		
Quarterly: Third-party safety audit		
2. Documentation Requirements		
-		
Maintenance logs must be retained for 5 years		

	8 - Incident reports must be filed within 24 hours	
	Safety audit reports must be archived for 7 years	
6. CERTIFICATION VALIDITY		
	1. This certification is valid for all BlueCore(TM) Series 3000 and 4000	
	2. Certification period: January 1, 2024 through December 31, 2024	
	3. Renewal Requirements	
	- Annual safety system revalidation	
	- Updated environmental testing	

- - 9 Compliance with any new applicable standards

7. CERTIFICATION AUTHORITY

The undersigned hereby certifies that all safety validations and testing procedures have been performed in accordance with applicable standards

CERTIFIED BY:

regulations.

/s/ Dr. James Barrett

_

Dr. James Barrett

Chief Robotics Officer

Polar Dynamics Robotics, Inc.

Date: January 11, 2024

/s/ Sarah Nordstrom

_

Sarah Nordstrom

Chief Operating Officer

Polar Dynamics Robotics, Inc.

Date: January 11, 2024

8. DISCLAIMER

This certification record is confidential and proprietary to Polar Dynam Robotics, Inc. Any unauthorized reproduction, distribution, or modifical strictly prohibited. While all reasonable care has been taken in preparations.

certification, the Company makes no warranties regarding the continuperformance of safety systems beyond regular maintenance and inspintervals.