



CERTIFICATE NUMBER	23-2437839-PDA
EFFECTIVE DATE	15-Sep-2023
EXPIRY DATE	14-Sep-2028
ABS TECHNICAL OFFICE	Houston ESD - Offshore Equipment

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

GE ENERGY POWER CONVERSION UK LTD

located at

**THOMSON HOUSTON WAY, OFF TECHNOLOGY DRIVE, , RUGBY,
WARWICKSHIRE, United Kingdom, CV211BD**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: **Controllers**
Model: **HPCi Industrial Controller V8.1.0**
Endorsements: **CyberSecurity**
Tier: **2 - PDA Issued**

This Product Design Assessment (PDA) Certificate remains valid until 14/Sep/2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Mohamed C Boukamcha

Mohamed C Boukamcha,Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

GE ENERGY POWER CONVERSION UK LTD

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Email: michael.autherson@ge.com
Web: www.gepowerconversion.com

Tier: 2 - PDA Issued

Product: **Controllers**
Model: **HPCi Industrial Controller V8.1.0**
Endorsements: **CyberSecurity**

Intended Service:
Marine Automation and DP Systems.

Description:
The RXi-132 controller is designed to meet GE PC requirements for Drive and Automation applications across all business segments, and Remote Monitoring and Diagnostics. These controllers feature, flexible architecture, future proof HPCi Platform & high reliability Computing.

Rating:
Various CPU performance
0, 2, or 4 PCI or PCIe slots on riser modules
5x Ethernets 10/100/1000Base-T
Up to 4 RS232 or opto-coupled 422/485 ports
Internal and External USB ports (2.0/3.0)
SATA interface for 2.5" SSD & CFAST slot

Service Restriction:
Unit Certification is not required for this product.

If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:
The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:
Drawing No. Achilles, Achilles Certificate HPCi, Revision: 1, Pages: 1
Drawing No. Architecture, HPCi UML Architecture, Revision: 1, Pages: 1
Drawing No. Architecture Data Sheet, Data Sheet - HPCi Controller, Revision: 1, Pages: 1
Drawing No. Correspondence, Client Correspondence, Revision: -, Pages: 2
Drawing No. Correspondence, online application - PDA request HPCi Controller model V8, Revision: -, Pages: 1
Drawing No. Hardware HPCi, Hardware Platform, Revision: 1, Pages: 1
Drawing No. IEC62443, IEC62443 4-2 SL1 Certification, Revision: 1, Pages: 1
Drawing No. NESSUS, NESSUS Scan Report, Revision: 1, Pages: 1
Drawing No. Reference Document, Reference Table for all documents and information, Revision: 1, Pages: 1
Drawing No. Risk Assessment, High Level Risk Assessment 8.1, Revision: 1, Pages: 1
Drawing No. SMS Manual, Security Management Suite Manual, Revision: 1, Pages: 1
Drawing No. UL Certificate, UL Certificate HPCi, Revision: 1, Pages: 1
Drawing No. Vulnerability Report, Vulnerability Report, Revision: 1, Pages: 1

Terms of Validity:
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Tier: 2 - PDA Issued

Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

2023 ABS Rules for Conditions of Classification, Part 1-Ships 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:
2023 ABS CyberSafety for Equipment Manufacturers, Volume 7

2023 ABS Rules for Conditions of Classification, Part 1 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:
2023 ABS CyberSafety for Equipment Manufacturers, Volume 7

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA