



CERTIFICATE NUMBER 23-2438668-PDA
EFFECTIVE DATE 29-Dec-2023
EXPIRY DATE 28-Dec-2028
ABS TECHNICAL OFFICE Houston ESD - Electrical

CERTIFICATE OF Product Design Assessment

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

HORNER APG, LLC

located at

59 S. STATE AVE., , INDIANAPOLIS, IN, United States, 46201

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: Programmable Logic Controller
Model: HE-X4A, HE-X4R, HE-X7A, HE-X7R, HE-X10A, HE-X10R
Endorsements:
Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 28/Dec/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

Soheni Haque

Soheni Haque, Sr. Managing Principal Engineer

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)

HORNER APG, LLC

59 S. STATE AVE.

INDIANAPOLIS IN

United States 46201

Telephone: 317-492-9099

Fax: 317-639-4279

Email: Jason.belton@heapg.com

Web: www.heapg.com

Tier: 2 - PDA Issued

Product: Programmable Logic Controller
Model: HE-X4A, HE-X4R, HE-X7A, HE-X7R, HE-X10A, HE-X10R
Endorsements:

Intended Service:
Marine & Offshore Applications - Programmable controllers for use in hazardous areas

Description:
A programmable Logic Controller (PLC) is used to control digital and analog inputs and outputs.

Rating:
1. Primary Power Range: 10 - 30 VDC
2. Operating Temperature: -40 °C to +60 °C
3. Hazardous Area Rating: Class I, Div. 2 Groups A, B, C, D; Class II, Division 2, Groups F and G; Class III Hazardous Locations

Service Restriction:
1. Unit Certification is not required for this product. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
2. Not to be used in Control, Monitoring, and Safety Systems of Propulsion Systems (Machinery, Boilers, and Vital Auxiliary Pumps) for ACC and ACCU Classed Vessels unless tested as per 4-9-9/Table 1 of ABS Marine Vessels Rules.
3. The product is not approved for use in Category II or III systems as defined in 4-9-3 of the ABS Marine Vessels Rules.

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

Notes/Drawing/Documentation:
Drawing No.PCBPLC028-R4.15 DSN RoHS, X4 PLC Board (HE-X4A, X7A, X10A)
Drawing No.PCBPLC029-R4.0 DSN RoHS, X4 PLC Board (HE-X4R, X7R, X10R)
UL Certificate No. E180220, Report Reference E180220-20180924 issued 15 March 2021.
CEI Test Report 23E10679-1 issue dated 14 November 2023 - Radiated Emissions, Immunity (Electromagnetic field).

Terms of Validity:
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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.

STANDARDS

HORNER APG, LLC

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ABS Rules:

2023 Rules for Conditions of Classification, Part 1, 1-1-4/7.7, 1-1-A3, 1-1-A4, which cover the following:
2023 Marine Vessel Rules: 4-8-3/13, 4-8-4/27.5.1

2023 Rules for Conditions of Classification, Part 1 - Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which cover the following:

2023 Mobile Offshore Units Rules: 4-3-3/9.1.2

National:

N/A

International:

N/A

Government:

N/A

EUMED:

N/A

OTHERS:

N/A