TYPE APPROVAL CERTIFICATE

This is to certify:

that the 460 Network Components

with type designation(s)
Auto Configuration Adapter ACA

issued to

Hirschmann Automation and Control GmbH
Neckartenzlingen, Baden-Württemberg, Germany

is found to comply with
  DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Location classes:

Temperature	**D**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**Required protection according to the Rules shall be provided upon installation on board.**

Issued at **Hamburg** on **2026-01-26**

This Certificate is valid until **2030-09-15**.
DNV local unit: **Augsburg**

Approval Engineer: **Holger Jansen**

for **DNV**
Digitally signed by: Dariusz Lesniewski
Location: DNV SE, Germany

Product description

The Auto Configuration Adapter ACA21-…, ACA22-… and ACA31 are devices for storing and updating configuration data and software for Hirschmann Industrial Ethernet devices:

- ACA21-USB EEC:
    - USB-Standard: USB 1.1
    - Storage Capacity: 64MB
    - Connection Type: USB-Plug, Cable length 50cm
    - Rated voltage: 5VDC
- ACA22-USB EEC:
    - USB-Standard: USB 2.0
    - Storage Capacity: 512MB
    - Connection Type: USB-Plug, Cable length 50cm
    - Rated voltage: 3.3VDC
- ACA31:
    - SD card with 512MB

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Type Approval documentation

Test reports: PTR_94350001_EN50121-4_2016_1v0; PTR_95312009_EMC01_3v0; PTR_95312009_PS01_3v0; TRP_91299015_EMC01_1v2; TRP_95312009_EMC01_1v0; TRP_95312009_EMC01_2v0; TRP_95312009_PE01_2v0; TRP_95312009_PS01_2v0; PB-343e/14; TRP_95312009 PE01 1v0; TRP 95312009 PS01 1v0; TRP 95312009 S01 1v0; TRP 95312009 S02 1v0; TRP_95312009_EMC01_1v1
Documents: Startup instructions ACA21-.../ACA22...Release 04 11/2018; ACA31_techdata; ATP IG UFD NANODURA datasheet_B800Pi_V3.0.1_HAC_20190912_AF512UFNDNC-HAC3B03S (4); ATP_IG_NANODURA_spec_v1.1_20140129(AF512UFNDNC-HAC3B01S); ATP_IG_NANODURA_spec_v2.3_HAC_20170522_AF512UFNDNC-HAC3B02S
Type Approval Assessment Report issued at Augsburg on 2026-01-21

Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 2021

Marking of product

The products to be marked with:
- Model name
- Manufacturer name
- Serial number

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:
- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE