

TYPE APPROVAL CERTIFICATE

Certificate No: **TAE00001N1**Revision No: 5

This is to certify:

That the Enclosure for Electrical Equipment

with type designation(s) ASR, ADR & AFS

Issued to

Hoffman Enclosures Inc. Anoka, MN, USA

is found to comply with

DNV rules for classification - Ships, offshore units, and high speed and light craft

Application:

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Degree of protection ASR IP66, ADR IP55 & AFS IP66 Vibration class A

Issued at Høvik on 2023-11-10

This Certificate is valid until 2027-12-31.

DNV local station: Houston

Approval Engineer: Nicolay Horn

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for **DNV**

Digitally Signed By: Elter, Frederik Tore Location: DNV Høvik, Norway

Frederik Tore Elter Head of Section

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



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This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



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Name and place of manufacturer

| Hoffman Schroff Poland Sp.z.o.o | nVent Electrical Products China Co., Ltd. |
|---|--|
| Strefowa 10, Dzierzoniow 58-200 | No. 39A Xiangjiang 2 nd Road Jimo District Qingdao P.R. |
| Poland | China |
| ELDON Romania SRL | Hoffman Schroff Manufacturing S. de R.L. de C.V. |
| Calle Bruxelles no. 4 | Ave. Industrial Falcon 6-8, |
| Industrial Park Graells & Llonch Prejmer | Parque Industrial del Norte, |
| 507165 - Prejmer | 88736 Reynosa, Tamaulipas, |
| Brasov, Romania | Mexico |
| nVents Electrical Products India Pvt Ltd Plot No. 19B, Phase 2, Sector 1. Shyanamangala Cross, KIADB Industrial Area, Bidadi, Ramanagara, Karnataka, 562109, India | |

Product description

Stainless steel enclosures Type ASR

Dimensions:

Min: $H \times W \times D = 180 \times 240 \times 150$ and $300 \times 200 \times 150$

Max: $H \times W \times D = 1400 \times 800 \times 400$

Stainless steel enclosures Type ADR

Dimensions:

Min: $H \times W \times D = 1000 \times 1000 \times 300$ Max: $H \times W \times D = 1200 \times 1200 \times 400$

Stainless steel enclosures Type AFS

Dimensions:

Min: H x W x D = 300 x 200 x 155 Max: H x W x D = 1400 x 800 x 400

Application/Limitation

Enclosure protection: IP 66 for ASR and AFS, IP 55 for ADR, IP 55 for ASR/AFS when suited together,

Type Approval documentation

Catalogue: 'Product_Catalogue_nVent_Hoffman_ENG' (parts).

Drawings: See catalogue.

Test reports: KEMA No. 92.9318.50 dated 1993-08-27, Enclosure systems C-ENC-9601-02500EX (only

relevant for AS, ASR, AD and ADR), KEMA No. 92.9318-KCS/TC 93-1006 dated 94-06-21 and KEMA

No. 2086918.50, dated 2008-01-28.

Tests carried out

Type tests in accordance with IEC 62208: Enclosure protection (IP), impact and static load test. Vibration test (Pt.4, Ch.8.).

Marking of product

nVent Hoffman or Hoffman or nVent Schroff or Schroff - Type designation - Manufacturing place / country

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

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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

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