

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the Fire Detector**

with type designation(s)

**Optical UV-Flame Detector 800/24VST-K-N, 800/24VST-K-NT, 800/24VST-K-M, 800/24VST-K-EW; 800/24VST-K-NT A, 800/24VST-K-EW A**

Issued to

**Egon Harig GmbH  
Oststeinbek, Germany**

is found to comply with

**DNV GL class programme DNVGL-CP-0203 – Type approval – Electronic and programmable equipment and systems  
IEC 60092-504 Ed. 4.0 (2016-09) Electrical installations in ships – Part 504: Automation, control and instrumentation****Application :****Product(s) approved by this certificate is/are accepted for installation on vessels classed by DNV GL.****Location classes:****Temperature B****Humidity B****Vibration A****EMC B****Enclosure Required protection according to the Rules shall be provided upon installation on board.**Issued at **Hamburg** on **2019-08-06**for **DNV GL**This Certificate is valid until **2024-08-05**.DNV GL local station: **Hamburg CMC**Approval Engineer: **Heinz Scheffler**

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**Joannis Papanuskas  
Head of Section**

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.



## Product description

### Optical UV-Flame Detector typs:

- 800/24VST-K-x
- 800/24VST-K-y
  - x = N: Relays K1 and K2 with potential-free contacts
  - y = NT, NT A, M, EW, EW A: Relays K1 and K2 with signal lines adaptation for the relevant fire alarm control panel

### Technical data:

- Alarm sensibility: according to EN54 part 10, class 1
- Power supply: 24V DC
- Current Consumption in Operation: approximately 33mA (at 24V DC)
- Current Consumption at Alarm Indication: approximately 52mA (at 24V DC)
- Outputs:
  - 1 potential-free close contact for voltage and failure monitoring (closed in operation)
  - 1 potential-free close contact for fire alarm monitoring
- Output contacts rating: 30V DC, 1 A
- Supervision angle adjustable:
  - 90° with diaphragm 30mm
  - 45° with diaphragm 50mm
  - 28° with diaphragm 69mm
- Housing material: PC-LEXAN 241R

## Application/Limitation

Observe the DNVGL RU Ship Pt 6 Additional class notations.  
Function of the potential free contact is part of the relevant project.

## Type Approval documentation

**Test reports:** 072276.079.19 V1; BMA 14075; BMA 08104; L1251-03; 05-10/2003

**Documents:** Datasheet 4.3125.1-1, Operating Instructions 4.3125.2-1, Description 4.9071.1-1; Production instruction 4.03301.1; Drawing Overview List 4.03301, Rev. 18

## Tests carried out

- IEC 60092-504:2016
- IEC 60533:2015
- EN 54-10:2002 incl. A1:2005

## Marking of product

The products to be marked with:

- Model name
- Manufacturer name
- Serial number

Job Id: **262.1-030831-1**  
Certificate No: **TAA00002F1**

### **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