

# TYPE APPROVAL CERTIFICATE

**This is to certify:**

**That the Peripheral Equipment**

with type designation(s)  
**HG-V Series Operator Interface**

Issued to

**IDEC Corporation**  
**Osaka City, Osaka Pref., Japan**

is found to comply with  
**DNV GL 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 GL.**

**Temperature B**  
**Humidity B**  
**Vibration A**  
**EMC A**  
**Enclosure IP66F, IP67F**

Issued at **Busan** on **2020-03-05**

This Certificate is valid until **2025-03-04**.

DNV GL local station: **Kobe**

for **DNV GL**

Approval Engineer: **Baeg Soon Choi**

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**Andreas Kristoffersen**  
**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

### HG-V Series Operator Interface

#### Main units

1. HG2G-V5FT22\*\*-\*.\*\*\*\*\* :5.7" VGA TFT Color LCD
2. HG3G-V8XT22\*\*-\*.\*\*\*\*\* :8.4" XGA TFT Color LCD
3. HG3G-VAXT22\*\*-\*.\*\*\*\*\* :10.4" XGA TFT Color LCD
4. HG4G-VCXT22\*\*-\*.\*\*\*\*\* :12.1" XGA TFT Color LCD
5. HG5G-VFXT22\*\*-\*.\*\*\*\*\* :15.0" XGA TFT Color LCD

#### Design Specification

1. Rated Voltage: 24V DC
2. Power Consumption: 18-27W Max.( based on screen size)
3. Inrush Current: 30A Max.
4. Operating Temperature: -20 to +60°C
5. TFT Color LCD Display and Touch Panel
6. Communication Interface:
  - HG2G-V: Serial X2, Ethernet, USB Host, USB Device,SD
  - HG3/4/5G-V: Serial X2, Ethernet, USB Host, USB Device,SD, Audio Out,Video IN x2

#### Place of Manufacturer:

1. CANON ELECTRONICS INC, AKAGI FACTORY  
2167 Morishita, Showa-mura, Tone-gun, Gunna-ken 379-1204 JAPAN
2. IDEC IZUMI TAIWAN CORP  
87 Swi kuan Road, Chu Hou Village, Jen Wu, Kaohsiung, 814 TAIWAN

## Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, 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 GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

## Type Approval documentation

### Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016 and IACS UR E10 Rev.7 Oct 2018

### Marking of product

Manufacturer name -Model 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

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Certificate No: **TAA00002N7**

- 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