



NIPPON KAIJI KYOKAI



**TYPE APPROVAL CERTIFICATE  
FOR AUTOMATIC DEVICES AND EQUIPMENT**

Certificate No. TA20102M

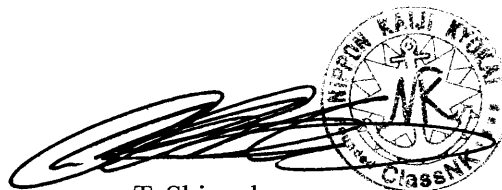
**This is to certify** that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1, Part 7 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" and the relevant Society's Rules.

This certificate is issued to

Applicant:	<b>IDEC CORPORATION</b>
Manufacturer / Place of Manufacturing for Model HG3G-V8, HG3G-VA, HG4G-V, HG5G-V	<b>CANON ELECTRONICS INC. Akagi Plant/ 2167 Morishita, Showa-mura, Tone-gun, Gunma 379-1297, Japan IDEC CORPORATION Amagasaki Plant / 5-8-10 Shioe, Amagasaki-shi, Hyogo 661-0976, Japan</b>
Manufacturer / Place of Manufacturing for Model HG2G-V	<b>IDEC IZUMI TAIWAN CORPORATION / No.87, Swi Kuan Road, Chu Hou Village, Jen Wu Country, Kaohsiung, Hsien 814 Taiwan, R.O.C IDEC CORPORATION Amagasaki Plant / 5-8-10 Shioe, Amagasaki-shi, Hyogo 661-0976, Japan</b>
Product description:	<b>HG-V Series Operator Interface</b>
Model:	<b>HG2G-V, HG3G-V8, HG3G-VA, HG4G-V, HG5G-V</b>
Approval No.:	<b>20A008</b>
Valid until:	<b>4 March 2025</b>

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 5 March 2020.



T. Shimada  
General Manager  
Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

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Attached sheet -1/4 to the Certificate No. TA20102M

**Specification & documents:**

1. Particulars:

Power supply : DC 24V

2. Components and reference drawings:



Components

Type No.	Display	Interface
HG2G-V5FT22TF-%-*****	5.7" VGA TFT Color	Serial x2, Ethernet, USB Host, USB Device, SD
HG2G-V5FT22TG-%-*****		
HG2G-V5FT22TH-%-*****		
HG2G-V5FT22TJ-%-*****		
HG3G-V8XT22MF-%-*****	8.4" XGA TFT Color	Serial x2, Ethernet, USB Host, USB Device, SD, Audio Out, Video IN x2
HG3G-V8XT22MG-%-*****		
HG3G-V8XT22MH-%-*****		
HG3G-V8XT22MJ-%-*****		
HG3G-VAXT22MF-%-*****	10.4" XGA TFT Color	
HG3G-VAXT22MG-%-*****		
HG3G-VAXT22MH-%-*****		
HG3G-VAXT22MJ-%-*****		
HG4G-VCXT22MF-%-*****	12.1" XGA TFT Color	
HG4G-VCXT22MG-%-*****		
HG4G-VCXT22MH-%-*****		
HG4G-VCXT22MJ-%-*****		
HG5G-VFXT22MF-%-*****	15" XGA TFT Color	
HG5G-VFXT22MG-%-*****		
HG5G-VFXT22MH-%-*****		
HG5G-VFXT22MJ-%-*****		

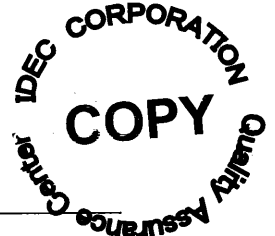
%: Bezel color

\*\*\*\*\*: Manufacturer Control No.

Options

Type No.	Description
HG9Z-2E2PN03	Protective Cover for HG2G-V
HG9Z-2D5PN05	Protective Sheet for HG2G-V
HG9Z-3D8PN02	Protective Sheet for HG3G-V8
HG9Z-3DAPN02	Protective Sheet for HG3G-VA
HG9Z-4DCPN02	Protective Sheet for HG4G-V
HG9Z-5DFPN01	Protective Sheet for HG5G-V
HG9Z-XJ3PN05	Expansion Module Clamp
HG9Z-XJ4PN05	
HG9Z-XJ5PN05	

- To be continued -



## Cables

Type No.	Description
HG9Z-XCM42	USB Maintenance Cable(2m)
HG9Z-XC295	PLC Connection Cable for IDEC MicroSmart(5m)
HG9Z-XC305	PLC Connection Cable for Mitsubishi FX Series(5m)
HG9Z-XC315	PLC Connection Cable for Mitsubishi Q Series(5m)
HG9Z-XC275	PLC Connection Cable for IDEC MicroSmart(5m)
HG9Z-KP1C	PLC Connection Cable for IDEC MicroSmart(2.4m)
HG9Z-KC1C	PLC Connection Cable for IDEC MicroSmart(5m)
HG9Z-KC2C	PLC Connection Cable for IDEC MicroSmart(5m)
HG9Z-XCE11	Panel-mount extension cable(1m) for USB-A Port
HG9Z-XCE21	Panel-mount extension cable(1m) for USB-miniB Port

## Reference drawings :

Y1551-0L01D, Y1546-0L01D, Y1547-0L01D, Y1548-0L01D,  
 B-2070(1), B-2054(1),  
 B-1701(11), EP1708-0,  
 19-R&D-0905 Rev.0, 19-R&D-0906 Rev.0, 19-R&D-0907 Rev.0, 19-R&D-0908, Rev.0,  
 19-R&D-0909 Rev.0  
 19-R&D-0910 Rev.0, 19-R&D-0911 Rev.0,  
 19-R&D-0912 Rev.0, 19-R&D-0913 Rev.0,  
 19-R&D-0914 Rev.0, 19-R&D-0915 Rev.0, 19-R&D-0916 Rev.0, 19-R&D-0917 Rev.0,  
 19-R&D-0918 Rev.0

## 3. Documentation and Test Reports:

- 19-R&D-0901 Software Management Procedure (2019/08/30)
- 19-R&D-0902 Software Development Procedure (2019/08/30)
- 19-R&D-0919 Rev.2 HG5432G-V Test specifications (2019/11/20)
- 19-R&D-0920 Rev.0 HG2G-V EUT Selection Reason (2019/09/02)
- 19-R&D-0921 Rev.0 HG3G-V8 EUT Selection Reason (2019/09/02)
- 19-R&D-0922 Rev.0 HG3G-VA EUT Selection Reason (2019/09/02)
- 19-R&D-0923 Rev.0 HG4G-V EUT Selection Reason (2019/09/02)
- 19-R&D-0924 Rev.0 HG5G-V EUT Selection Reason (2019/09/02)
- 19-R&D-0925 Rev.0 HG2G-V Configuration of Test (2019/09/02)
- 19-R&D-0926 Rev.0 HG3G-V8 Configuration of Test (2019/09/02)
- 19-R&D-0927 Rev.0 HG3G-VA Configuration of Test (2019/09/02)
- 19-R&D-0928 Rev.0 HG4G-V Configuration of Test (2019/09/02)
- 19-R&D-0929 Rev.0 HG45G-V Configuration of Test (2019/09/02)

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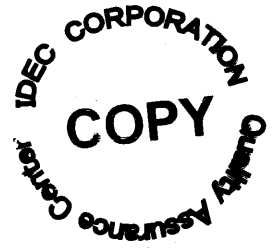
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Attached sheet -3/4 to the Certificate No. TA20102M

- 19-R&D-0930 Rev.0 HG2G-V Test Program and Criteria in Type Tests (2019/09/02)
- 19-R&D-0931 Rev.0 HG543G-V Test Program and Criteria in Type Tests (2019/09/02)
- 19-306-074 Ver.2 Test Report for Class NK (2020/02/17)
- RP304-E19063 Test Result Report (2019/12/18)
- 19-306-080 Vibration Test of HGxG-V Report (2020/02/07)
- KL80190466 JQA Test Report (2019/12/24)
- KL80190517 JQA Test Report (2019/12/24)



- To be continued -



**Test items & approval conditions:**

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test		--
Dry heat test (Temperature : 70°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration : ±0.7g × 1.5 hours)		X
Inclination test		--
Cold test (Temperature : 5°C × 16 hours)		X
Salt mist test		--
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test (Frequency : 80MHz – 6GHz)		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test (Frequency : 150kHz – 6GHz)		X
Conducted emission test		X
Flame retardant test		--

2. Approval condition:

Each equipment is not allowed to be installed in the bridge and on open decks.