

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Peripheral Equipment

with type designation(s)
Touch Screen graphic terminals

Issued to

DIGITAL ELECTRONICS CORPORATION
Osaka, Osaka Pref, Japan

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :

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

Location classes: See page 2

This Certificate is valid until **2020-06-30**.

Issued at **Høvik** on **2016-05-18**

DNV GL local station: **Kobe**

Approval Engineer: **Nils Jarem**

for **DNV GL**

Odd Magne Nesvåg
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

Pro-Face Graphic Operator Interfaces as listed below:

Pro-face Reference	Temperature Class	Humidity Class	Vibration Class	EMC Class	Enclosure Class	Notes
GP4105G1D	B	B	A	B*	B	IP65 (front panel only)
GP4105W1D						
GP4106G1D						
GP4106W1D						
GP4107G1D						
GP4107W1D						
PFXGM4201TAD	B	B	A	B*	B	IP65 (front panel only)
PFXGM4301TAD						
PFXXM4200TP						
PFXXM4300TP						
PFXGM4B01D						
PFXLM4301TADAC	B	B	A	B*	B	IP65 (front panel only)
PFXLM4301TADAK						
PFXLM4301TADDC						
PFXLM4301TADDK						
PFXLM4201TADAC						
PFXLM4201TADAK						
PFXLM4201TADDC						
PFXLM4201TADDK						
PFXLM4B01DAC						
PFXLM4B01DAK						
PFXLM4B01DDC						
PFXLM4B01DDK						
PFXZXMADSM31						
PFXZXMADSM51						
ST401-AG41-24V	A	A	A	B*	B	IP65 (front panel only)
ST403-AG41-24V						
AGP3300-T1-D24	A	A	A	A*	B	IP65 (front panel only)
AGP3400-T1-D24						
AGP3450-T1-D24						
AGP3500-T1-D24						
AGP3550-T1-D24						
AGP3600-T1-D24						
AGP3650-T1-D24						
AGP3750-T1-D24						

* To comply with EMC requirements, see application/limitation

Place of manufacture

Wuxi Pro-face Electronics Ltd.
No.20 Hanjiang Road
National Hi-tech Industrial Development Zone
Wuxi, Jiangsu 214028
P.R. CHINA

Approval conditions

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.

Application/Limitation

Products have been tested up to 20% nominal voltage variation as for equipment not connected to the battery during charging.

To cover EMC class A and B requirements for devices marked with * above, installation requirements according to Certification Note, doc. No.:10DD-4GD00017, must be followed.

For installation on bridge, the equipment to be installed not less than 5m away from magnetic compass as required in 11.2 of IEC60945.

Type Approval documentation

[illegible]

Job Id: **262.1-009048-3**
Certificate No: **TAA00000CD**

Tests carried out

Applicable tests according to Standard for Certification No. 2.4, April 2006.

Marking of product

Products will be marked as

Pro-face

Digital Electronics Corp. Japan

In addition, model number and rating as listed under the product description shall be included.

Job Id: **262.1-009048-3**
Certificate No: **TAA00000CD**

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 at least every second year and at renewal of this certificate.

END OF CERTIFICATE