Certificate no.:
TAA00003FW

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Peripheral Equipment

with type designation(s)
AT238CBK4-PMAN 23.8 Inch

issued to
OBEY CO., LIMITED.
Shenzhen, Guangdong Province, China

is found to comply with
DNV 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.

Location classes:

Temperature	**A**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**B**

Issued at **Hamburg** on **2024-10-17**
This Certificate is valid until **2029-10-16**.
DNV local unit: **China South NB**

for **DNV**

Approval Engineer: **Torsten Dzillak**

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.

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 USD 300 000.

Product description

The Model: AT238CBK4-PMAN 23,8" LCD Touch Panel incorporates a 16.7M color, active matrix thin-film-transistor LCD panel to provide high quality display performance. Its LED backlight significantly reduces power consumption and eliminates mercury (compared to CCFL-backlit panels). Other features that enhance this LCD monitor's performance are Plug & Play compatibility, on-screen display (OSD) controls.

Power Consumption (W) 60W
Input Voltage DC 9V-36V, AC100-240 VAC, 50-60 Hz

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, 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 Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Product certificate

Each delivery of the application system is to be certified according to Pt.4 Ch.9 Sec.1. The certification test is to be performed at the manufacturer of the application system according to an approved test program before the system is shipped to the yard. After the certification the clause for application software control will be put into force.

Clause for application software control

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Compass safe distances:

- Standard Compass Safe Distance: 500 cm
- Steering Compass Safe Distance: 500 cm

Type Approval documentation

Tests carried out

Applicable tests according to Class Guideline DNV-CG-0339, August 2021.

Marking of product

The products to be marked with:
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 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