

TYPE APPROVAL CERTIFICATE

Certificate No:
TAA00001BN
Revision No:
1

This is to certify:

That the **Peripheral Equipment**

with type designation(s)

AGI 407, AGI 410, AGI 415, AGI 421

Issued to

DEIF A/S

Skive, Midtjylland, Denmark

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.

Type	Temperature	Humidity	Vibration	EMC	Enclosure
AGI 407	C	B	A	B	C / IP66 (front), IP20 (rear)
AGI 410	C	B	A	B	C / IP66 (front), IP20 (rear)
AGI 415	C	B	A	B	C / IP66 (front), IP20 (rear)
AGI 421	C	B	A	B	C / IP66 (front), IP20 (rear)

Issued at **Hamburg** on **2022-07-22**

for **DNV**

This Certificate is valid until **2027-07-21**.

DNV local station: **Denmark CMC**

Approval Engineer: **Didier Girardin**

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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.

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 300,000 USD.



Product description

AGI 407	<ul style="list-style-type: none"> - 7" TFT color display, resolution 800x480 pixel, 16M colors. - Dimmable LED backlight - Projected capacitive touchscreen. True glass design. Multitouch operation - 3 Ethernet ports - SD Card slot - 2 Plug-in module slots for system expansion - Standard Compass Safe Distance: 85 cm - Steering Compass Safe Distance: 40 cm
AGI 410	<ul style="list-style-type: none"> - 10.1" TFT color display, resolution 1280x800 pixel, 16M colors. - Dimmable LED backlight - Projected capacitive touchscreen. True glass design. Multitouch operation - 3 Ethernet ports - SD Card slot - 2 Plug-in module slots for system expansion - Standard Compass Safe Distance: 115 cm - Steering Compass Safe Distance: 75 cm
AGI 415	<ul style="list-style-type: none"> - 15.6" TFT color display, resolution 1366x768 pixel, 16M colors. - Dimmable LED backlight - Projected capacitive touchscreen. True glass design. Multitouch operation - 3 Ethernet ports - SD Card slot - 2 Plug-in module slots for system expansion - Standard Compass Safe Distance: 180 cm - Steering Compass Safe Distance: 130 cm
AGI 421	<ul style="list-style-type: none"> - 21.5" TFT color display, resolution 1920x1080 pixel, 16M colors. - Dimmable LED backlight - Projected capacitive touchscreen. True glass design. Multitouch operation - 3 Ethernet ports - SD Card slot - 2 Plug-in module slots for system expansion - Standard Compass Safe Distance: 220 cm - Steering Compass Safe Distance: 130 cm

MODEL NAME:

Model name can be followed by 1 or 2 or 3 characters.

BRANDING:

DEIF

OPTIONAL MODULES	
Module name	Description
EXM CAN	CAN Interface - DB9 CAN connector
EXM AGIO06	Compact I/O Module - 8 Digital Inputs - 6 Digital Outputs - 1 Relay Output
EXM AGIO03	Multifunction I/O Module - 20 Digital Inputs configurable as counter/encoder channels - 12 Digital Outputs - 8 Analog Inputs configurable for voltage, current or temperature measurement - 1 PT100 input for cold junction compensation of thermocouples - 4 Analog Outputs configurable for voltage or current

MODULE NAME

Module name can be followed by 1 or 2 or 3 or 4 or 5 characters

Optional modules are type approved with TAA00000AS.

Application/Limitation

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

If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. 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.

Type Approval documentation

Hidden

According to TAA000013Z - 262.1-023796-1

Note: validity of present ML certificate to be considered under reserve of available and valid TAA000013Z certificate.

Tests carried out

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

For the bridge mounted components, the 'Compass safe distance' was measured according to section 11.2 of IEC 60945 4th edition (2002).

Marking of product

Model name and part number: As listed under Product description

Serial number: Unique for each delivered item

Periodical assessment

The assessment is done in connection with TAA000013Z - 262.1-023796-1

END OF CERTIFICATE