



TYPE APPROVAL CERTIFICATE

Certificate No:
TAE00001XY
Revision No:
2

This is to certify:

That the Pilot Device

with type designation(s)
P9...Series

Issued to

**ABB Electrification Sweden AB, Motor Starting & Safety
Västerås, Sweden**

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2021-11-15**

This Certificate is valid until **2026-08-27**.

for **DNV**

DNV local station: **Sweden CMC**

Approval Engineer: **Nicolay Horn**

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Trond Sjøvåg
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.



Name and place of manufacturer

Ansa Borima Ltd.
East Industrial Zone, 5500 Lovech, Bulgaria

Product description

Actuator Type: Push button, Selector Switch, Indicator lamp, Toggle switch, Joystick, Potentiometer, Lever operator, Reset, Mushroom head.

Body Type: Contact block, Lamp power supply, Flashing lamp power supply, Acoustic alarm.

Conventional free air thermal current Ith:	10 A
Conventional enclosed thermal current Ithe:	10 A
Rated insulation voltage Ui:	600/690 V *See application limitation
Rated impulse voltage Uimp:	6 kV
Rated frequency fe:	50/60 Hz
Utilization category:	AC15
Rated current Ie:	1,2 up to 10 A
Rated operational voltage Ue:	24 up to 600 V
Utilization category:	DC13
Rated current Ie:	0,2 up to 2,5 A
Rated operational voltage Ue:	24 up to 300 V
Degree of protection:	Up to IP66

Application/Limitation

Temperature class: B
Humidity class: B
Vibration class: A

With Uimp = 6 kV the max rated voltage is normally 600V when used in a IT (ship) net. It can be used in directly earthed net up to 400/690 V.

Type Approval documentation

Tests carried out

Regulations for the Performance of Type Tests, Edition 2003
EN 60947-5-1 (1992)

Marking of product

GE – Type designation – Rated voltage – Rated current

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and 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