

AX1 for marine applications

Equipment used for marine applications is subject to certain strains not occurring through normal use on land. It deals with powerful mechanical movement caused by waves, vibrations from large diesel engines and corrosion stresses from exposure to an atmosphere saturated with salt.

A certificate from an approved authority of certification is required in order to sell AX1 for marine applications. We have chosen Det Norske Veritas and the requisite tests were performed at Swedish National Testing and Research Institute in Borås, Sweden. In addition to the standard tests according to IEC, the following supplementary tests were performed successfully:

- Vibration tests on two assembled and fully equipped AX1-panels. All points of resonance with a resonance amplification of more than 5 times have been tested. At the same time an earthquake test has also been conducted, although not being a specific demand for marine usage.
- Climate tests at 95 % relative humidity. The tests, also these performed on two fully equipped panels, have been conducted during 2 twenty-four hour periods with different temperature oscillating cycles.
- Operating tests during fluctuating auxiliary power supply. The tests have been conducted at min 75 % and max 130 % of the nominal voltage.

What is unique with AX1 is that the whole switchgear has been successfully tested according to DNV's instructions.



Henrik Breder, Christer Arnborg and Lars Hermansson have all been involved in testing AX1 according to DNV's specifications.