



Confirmation of Product Type Approval 11/MAY/2009

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This is to certify that, pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 18/OCT/2010. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 05/MAY/2014 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

DANFOSS DRIVES USDDE

Model Name(s): VLT® HVAC Drive series FC102, VLT® AQUA Drive series FC202 and VLT® Automation Drive FC300 series type FC301/302.

Presented to:

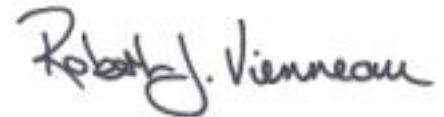
DANFOSS DRIVES USDDE
NORTH AMERICA MOTION CONTROLS
4401 N. BELL SCHOOL ROAD
LOVES PARK
IL 61111
United States

Intended Service:	Marine and Offshore Installations.
Description:	FC 102, FC202 and FC30x series configurations are as per attached product description.
Ratings:	Whole range of ratings is as per the configurations in attached product description sheet.
Service Restrictions:	Unit Certification is required for drive units where required for essential services as per 4-8-3/5.11 and 4-8-5/5.17.9 of the Rules.
Comments:	1) Tests and approval are for the basic components. Each configuration and external connection is to be specifically approved. 2) Main propulsion control systems are assigned with System Category II in accordance with 4-9-6/Table 2 of the SVR. If the subject drives are used in main propulsion system, evidence of documentation as required by 4-9-6/Table 3 of the SVR is to be submitted for review when requested.
Notes / Documentation:	Approval documentation : Danak/Delta Test report Project Nos.: E400877; A401850, A401850-01 and A402498; Test Reports A402342, P407-151/152/154 and P420-316/341/366/367/395/423/539/540/541/543-547/549/550/552/553/554/561/563/575/576
Term of Validity:	This Design Assessment Certificate number 09-LD456425-PDA, dated 06/May/2009 will expire on 05/May/2014 or at an earlier date should there be alterations to the product's design or changes to the referenced ABS Rules and

other specifications, which affect the product. Product use on or after 1 January 2010, will be subject to compliance with the ABS Rules or specifications in effect when the vessel, MODU or facility is contracted. The product's acceptability on board ABS-classed vessels or facilities is defined in the service restrictions of this certificate.

ABS Rules:

2009 Steel Vessel Rules 1-1-4/7.7, 4-8-3/1.7, 4-8-3/1.9, 4-8-3/1.11, 4-8-3/1.17, 4-8-3/7.5, and 4-9-7/Table 9 and Table 10

National Standards:**International Standards:****Government Authority:****EUMED:****Others:****ABS Programs**

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.