

MARINE DIVISION
17 Bis Place des Reflets - La Défense 2
92400 Courbevoie - France
Tel. 33 1 42 91 53 48
Fax 33 1 42 91 28 94



Published on <http://www.veristar.com>

Certificate N°:
08569/B0 BV

The attached Schedule forms part of the certificate

File Number : AP 3129
Product Code : 4501H

**BUREAU
VERITAS**

CERTIFICATE OF TYPE APPROVAL

This is to certify that the product identified below was found to be in compliance with the relevant hereunder stated Regulations & standards

PROGRAMMABLE LOGIC CONTROL UNITS MELSEC FX2N Series.

MANUFACTURED BY:

Mitsubishi Electric Europe BV German Branch
Ratingen - GERMANY

SPECIFIED REGULATIONS & STANDARDS :
BV Rules for the Classification of Steel Ships.

The Approval is valid until : 01.09.2005

BUREAU VERITAS HAMBURG

At Paris la Défense, on : 10.08.2004



J.BENOIT
For the Secretary

This Certificate remains valid until the date stated on, hereunder, unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory into service.

This Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested.

This Certificate is not valid without the stamp of the above mentioned BUREAU VERITAS Inspection Center.

The manufacturer should notify BUREAU VERITAS of any modification or changes to the equipment in order to obtain a valid Certificate.

The latest published Regulations or Standards referred to, above, and the Marine Division General Conditions are applicable.



**BUREAU
VERITAS**
MARINE DIVISION

File Number : AP 3129

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

MELSEC FX2N Series

Basic unit:	FX2N	- 16 MR - 32 MR - 48 MR - 64 MR - 80 MR - 128 MR	- 16 MT - 32 MT - 48 MT - 64 MT - 80 MT - 128 MT		
Extension unit:	FX2N	- 32 ER - 48 ER	- 32 ET - 48 ET		
Extension block:	FX2N	- 16 EX	- 16 EYR	- 16 EYT	
Special function block:	FX2N	- 4 AD - 1HC	- 4 AD-PT - 1PG-E	- 4 AD-TC - 232 IF	- 4 DA

Note: Types MR and ER may be followed by -ES/UL
 MT and ET may be followed by -ESS/UL
 EX and EYR may be followed by -ES/UL
 EYT may be followed by -ESS/UL.

2. DESIGN DRAWINGS and/or SPECIFICATIONS

As per the Manufacturer's Technical Catalogue 1998 MELSEC FX0S, FX0N, FX2N and MELSEC FX2N Series N° JY992D66301-C.

3. TYPE TEST REPORTS / LABORATORY RECOGNITION STATUS

Type test reports: TAD97X261, dated: November 13, 1997
 TAD979162, dated: September 19, 1997
 BZ-5391, dated: March 24, 1998
 BZ-5395, dated: June 18, 1998.

4. MATERIALS and/or COMPONENTS REQUIRED TO BE TYPE APPROVED

Sensors/actuators required by the Rules and connected to FX2N series are normally to be type approved.

5. OTHER MATERIALS and/or COMPONENTS

Nil.

6. APPLICATION / LIMITATION OF USE

Approval also valid for ships to be granted with the notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.

Within the scope of above mentioned notations (except PORT), it is reminded that:

- unless where justified, safeguards are to independent from control and alarm circuits,
- machinery protections required by the Rules and processed by FX2N series are to be duplicated by another and different system.

7. PRODUCTION SURVEY REQUIREMENTS

Arrangements shall be made for a Society's Surveyor to carry out, on a periodic basis, visits of the Manufacturer's premises and product audits.

8. ON BOARD INSTALLATION & MAINTENANCE REQUIREMENTS

The equipment, once installed on board ship, is to be tested in accordance with the above referred Regulations under the supervision of a Society's Surveyor.

9. MARKING FOR IDENTIFICATION

- Trade name.
- Date of manufacture and serial number.
- Equipment type or model identification under which it was type-tested.

10. OTHERS

10.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **MITSUBISHI ELECTRIC EUROPE BV German Branch, Ratingen - Germany**, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

10.2 - This certificate supersedes the Type Approval Certificate N° 08569/A0 BV, issued on 02/04/1999 by the Society.

***** Last page (End of Document) *****

BUREAU VERITAS HAMBURG