

Type Approval Certificate Extension

This is to certify that Certificate No. 98/10011 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER Mitsubishi Electric Corporation

PLACE OF PRODUCTION Himeji Works,
840 Chiyodamachi, Himeji-shi, Hyogo-ken, Japan

DESCRIPTION Programmable logic controller

TYPE MELSEC FX2N Series

Comprising:

Basic unit	FX2N	-16MR, -32MR, -48MR, -64MR, -80MR, -128MR,	-16MT, -32MT, -48MT, -64MT, -80MT, -128MT
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Extension unit	FX2N	-32ER, -48ER,	-32ET, -48ET
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Extension block	EX2N-16EX, -16EYR, -16EYT
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Special function block	FX2N-4AD, -4AD-PT, -4AD-TC, -4DA, -1HC, -1PG-E, -232IF
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Certificate No. 98/10011(E1)

Issue Date 5 August 2003

Expiry Date 4 August 2008

Sheet 1 of 2

Lloyd's Register Asia, registered office:
71 Fenchurch Street, London EC3M 4BS


Y. Hara
Yokohama Plan Approval Services
Lloyd's Register Asia

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

APPLICATION Marine, offshore and industrial applications for use in environmental categories ENV1 and ENV2 as defined in LR's Test Specification No. 1-1996.

ADDITIONAL TEST Low temperature test at 0°C

DESIGN CODE Manufacturer's specification No. JY992D66301A

" This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Asia of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 98/10011(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 98/10011 to which this extension should be attached.

Certificate No. 98/10011(E1)
Issue Date 5 August 2003
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Sheet 2 of 2

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Y. Hara
Yokohama Plan Approval Services
Lloyd's Register Asia

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DESIGN APPRAISAL DOCUMENT

Date	5 August 2003	Quote this reference on all future communications	YPA/T/YHA/ W0239291 (E03-45)
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THE LR TYPE APPROVAL SYSTEM, 1996.
Issued to: MITSUBISHI ELECTRIC CORPORATION
for: PROGRAMMABLE LOGIC CONTROLLER - MELSEC FX2N
TYPE APPROVAL CERTIFICATE No. 98/10011(E1)

The undernoted documents have been reviewed for compliance with the requirements of the LR Type Approval System, 1996 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Request Form
 Hardware Manual, July 1997
 Catalogue, FX2N Series, Sep. 1997

23 May 2003
 JY992D66301A
 E-173-7-C2749-A

TEST REPORTS

Lloyd's Register Witness Test Report, 3-24-1998
 EMC Test Report, September 19, 1997
 EMC Test Report, November 13, 1997
 Lloyd's Register Witness Test Report, 6-18-1998
 Additional Test

BZ-5391
 TAD979162
 TAD97X261
 BZ-5395


Supplementary Type Approval Terms and Conditions

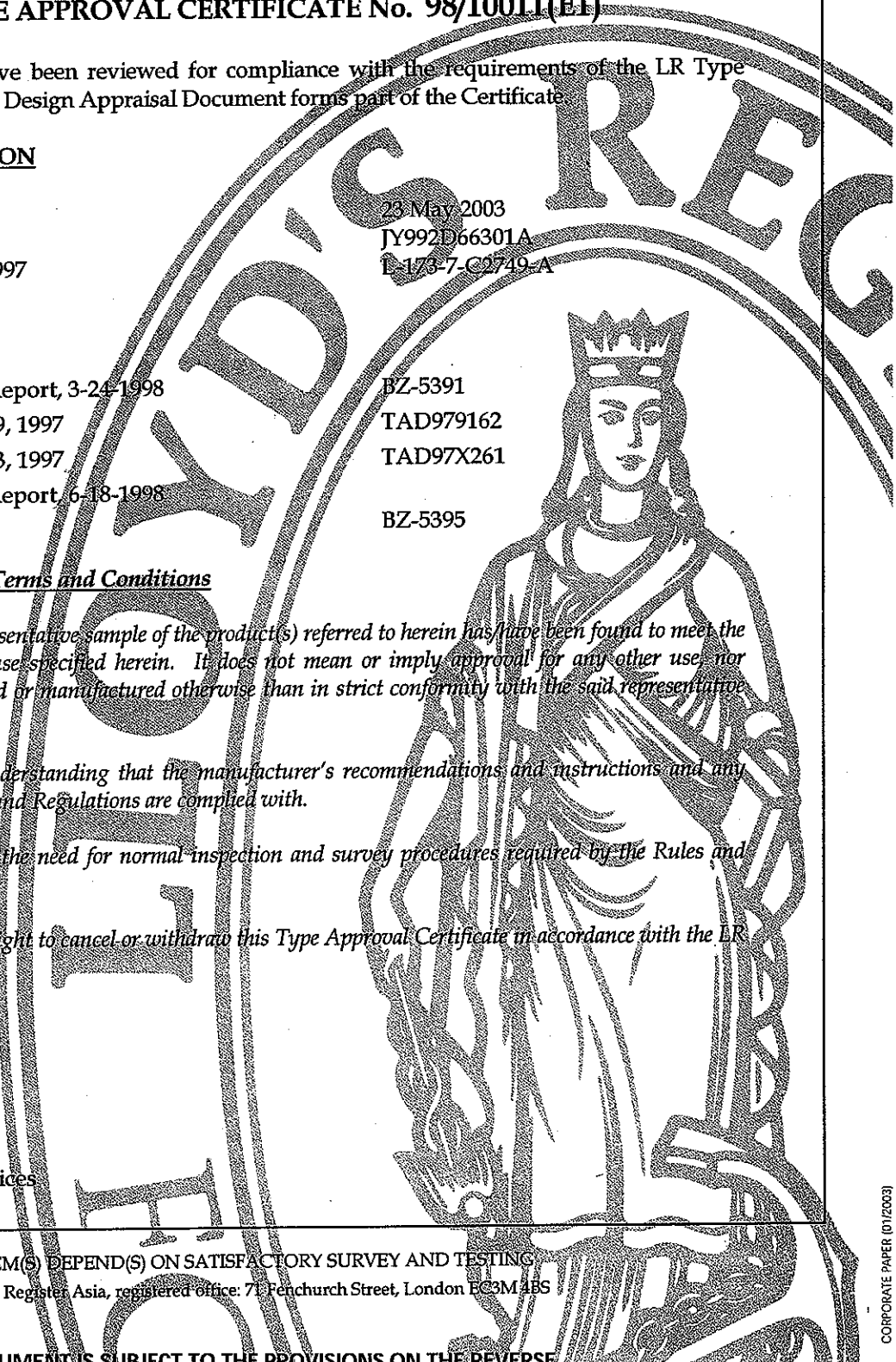
Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register Asia reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

Y. Hara 
 Electrical Engineer Surveyor
 Engineering Services Group
 Yokohama Plan Approval Services
 Email: yasunori.hara@lr.org



Control Units

Producer/Licence No.	Item Description	Technical Details	Category/Additional Tests	Remarks	Cert. No.
Mitsubishi Electric Corporation, Himeji Works, 840 Chiyodamachi, Himeji-shi, Hyogo-ken, Japan	Programmable logic controller Type MELSEC FX2N series comprising:- Base unit FX2N-16M (R,T) FX2N-32M (R,T) FX2N-48M (R,T) FX2N-64M (R,T) FX2N-80M (R,T) FX2N-128M (R,T) Extension unit FX2N-32E (R,T) FX2N-48E (R,T) Extension block FX2N-16EX FX2N-16EY (R,T) Special function block FX2N-4AD FX2N-4AD-PT FX2N-4AD-TC FX2N-4DA FX2N-1HC FX2N-1FG-E FX2N-22IF	Power supply 100 to 240V ac Input 24V dc 8 inputs and outputs (relay or transistor) 16 inputs and outputs (relay or transistor) 24 inputs and outputs (relay or transistor) 32 inputs and outputs (relay or transistor) 40 inputs and outputs (relay or transistor) 64 inputs and outputs (relay or transistor) 16 inputs and outputs (relay or transistor) 24 inputs and outputs (relay or transistor) 16 inputs only 16 outputs only (relay or transistor) A/D converter PT100 probe interface Thermo-couple interface D/A converter High speed counter Pulse output	ENV1 ENV2 (1996) Low temp at 0°C	Expires: 4 August 2008 See Manual JY992D66301A	98/10011(E1)

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