



National Standards Authority of Ireland

IRISH STANDARD

**I.S. EN 61491:1999**

ICS 25.040  
35.240.50

**ELECTRICAL EQUIPMENT OF INDUSTRIAL  
MACHINES SERIAL DATA LINK FOR  
REAL-TIME COMMUNICATION BETWEEN  
CONTROLS AND DRIVES  
(IEC 61491:1995, MODIFIED)**

National Standards  
Authority of Ireland  
Glasnevin, Dublin 9  
Ireland

Tel: +353 1 807 3800  
Fax: +353 1 807 3838  
<http://www.nsaie.ie>

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EUROPEAN STANDARD

**EN 61491**

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ICS 35.240.50

Descriptors: Machines, electrical equipment, digitally controlled drives, interface for numerical control, transfer medium, data transfer, protocol structure, data contents, layers, error handling, functional sequences, identification numbers

English version

**Electrical equipment of industrial machines  
Serial data link for real-time communication between  
controls and drives  
(IEC 61491:1995, modified)**

Équipement électrique des machines  
industrielles  
Liaison des données sérielles pour  
communications en temps réel entre  
unités de commande et dispositifs  
d'entraînement  
(CEI 61491:1995, modifiée)

Elektrische Ausrüstung von  
Industriemaschinen  
Serielle Datenverbindung für  
Echtzeit-Kommunikation zwischen  
Steuerungen und Antrieben  
(IEC 61491:1995, modifiziert)

This European Standard was approved by CENELEC on 1998-08-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60874-2	1993	Connectors for optical fibres and cables Part 2: Sectional specification for fibre optic connector-type F-SMA	-	-
ISO/IEC 646	1991	Information technology - ISO 7-bit coded character set for information interchange	-	-
ISO/IEC 3309	1993	Information technology Telecommunications and information exchange between systems High-level data link control (HDLC) procedures Frame structure	-	-
ISO/IEC 7498-1	1994	Information technology - Open systems interconnection - Basic reference model: The basic model	EN ISO/IEC 7498-1	1995
ISO 7776	1986	Information processing systems Data communications - High-level data link control procedures - Description of the X.25 LAPB-compatible DTE data link procedures	-	-

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