SVENSK STANDARD SS-EN 45510-2-5

Fastställd	Utgåva	Sida	Ingår i
2002-11-06	1	1 (1+31)	SEK Område 2

Svenska Elektriska Kommissionen, SEK

Vägledning vid upphandling av kraftverksutrustning – Del 2-5: Elutrustning – Motorer

Guide for procurement of power station equipment – Del 2-5: Electrical equipment – Motors

Som svensk standard gäller europastandarden EN 45510-2-5:2002. Den svenska standarden innehåller den officiella engelska språkversionen av EN 45510-2-5:2002.

Nationellt förord

Standarden skall användas tillsammans med tidigare utgiven svensk standard SS-EN 45510-1.

ICS 27.100; 29.160.30

Denna standard är fastställd av Svenska Elektriska Kommissionen, SEK,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
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EUROPEAN STANDARD **EN 45510-2-5**

NORME EUROPÉENNE

EUROPÄISCHE NORM August 2002

ICS 27.100; 29.160.30

English version

Guide for procurement of power station equipment Part 2-5: Electrical equipment - Motors

Guide pour l'acquisition d'équipements destinés aux centrales de production d'électricité
Partie 2-5: Equipements électriques - Moteurs

Leitfaden für die Beschaffung von Ausrüstungen für Kraftwerke
Teil 2-5: Elektrische Ausrüstung - Motoren

This European Standard was approved by CEN and CENELEC on 2001-03-06.

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CENELEC Central Secretariat:
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Ref. No. EN 45510-2-5:2002 E

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Foreword

This standard takes the form of a recommendation and is therefore entitled a "Guide".

This Guide for procurement has been prepared by the CEN/CENELEC Joint Task Force Power Engineering (JTFPE) of which the secretariat is held by the British Standards Institution.

The text of the draft was submitted to the formal vote and was approved by CEN and CENELEC as EN 45510-2-5 on 2001-03-06.

The following dates were fixed:

- *latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement* *(dop)* *2003-03-01*

- *latest date by which the national standards conflicting with the EN have to be withdrawn* *(dow)* *2004-04-01*

This Guide for procurement has been prepared under mandates given to CEN and CENELEC by the European Commission and the European Free Trade Association.

This Guide for procurement is a part of a series of Guides mandated to cover the procurement of power station plant and equipment in conformity with European Procurement Directives. The Guides are:

EN 45510: Guide for procurement of power station equipment

Part 1: Common clauses

Part 2-1: Electrical equipment - Power transformers
Part 2-2: Electrical equipment - Uninterruptible power supplies
Part 2-3: Electrical equipment - Stationary batteries and chargers
Part 2-4: Electrical equipment - High power static convertors
Part 2-5: Electrical equipment - Motors
Part 2-6: Electrical equipment - Generators
Part 2-7: Electrical equipment - Switchgear and controlgear
Part 2-8: Electrical equipment - Power cables
Part 2-9: Electrical equipment - Cabling systems

Part 3-1: Boilers - Water tube boilers
Part 3-2: Boilers - Shell boilers
Part 3-3: Boilers - Boilers with fluidized bed firing

Part 4-1: Boiler auxiliaries - Equipment for reduction of dust emissions
Part 4-2: Boiler auxiliaries - Gas-air, steam-air and gas-gas heaters
Part 4-3: Boiler auxiliaries - Draught plant
Part 4-4: Boiler auxiliaries - Fuel preparation equipment
Part 4-5: Boiler auxiliaries - Coal handling and bulk storage plant
Part 4-6: Boiler auxiliaries - Flue gas desulphurization (De-SO_x) plant
Part 4-7: Boiler auxiliaries - Ash handling plant
Part 4-8: Boiler auxiliaries - Dust handling plant
Part 4-9: Boiler auxiliaries - Sootblowers
Part 4-10: Boiler auxiliaries - Flue gas denitrification (De-NO_x) plant
Part 5-1: Turbines - Steam turbines
Part 5-2: Turbines - Gas turbines
Part 5-3: Turbines - Wind turbines
Part 5-4: Turbines - Hydraulic turbines, storage pumps and pump-turbines

Part 6-1: Turbine auxiliaries - Deaerators
Part 6-2: Turbine auxiliaries - Feedwater heaters
Part 6-3: Turbine auxiliaries - Condenser plant
Part 6-4: Turbine auxiliaries - Pumps
Part 6-5: Turbine auxiliaries - Dry cooling systems
Part 6-6: Turbine auxiliaries - Wet and wet/dry cooling towers
Part 6-7: Turbine auxiliaries - Moisture separator reheaters
Part 6-8: Turbine auxiliaries - Cranes
Part 6-9: Turbine auxiliaries - Cooling water systems

Part 7-1: Pipework and valves - High pressure piping systems
Part 7-2: Pipework and valves - Boiler and high pressure piping valves

Part 8-1: Control and instrumentation

EN 45510-1 contains those clauses common to all the above Guides giving the provisions of a non ***equipment*** *specific nature for use in the procurement of power station plant. EN 45510 is the responsibility of JTFPE. The so called "common clauses", as appropriate, also appear in italics in the documents specific to particular* ***equipment****.*

In this Guide, words in bold type indicate that they have the meaning given in the definitions, clause 3.

In this Guide, words and sentences not in italics are specific to this Guide and refer to the particular **equipment** covered.

1 Scope

*This standard gives guidance on writing the technical **specification** for the procurement of* motors *for use in electricity generating stations (power stations). This Guide for procurement is not applicable to **equipment** for use in the nuclear reactor plant area of nuclear power stations. Other possible applications of such **equipment** have not been considered in the preparation of this Guide.*

This Guide covers motors within installations primarily concerned with the generation of electrical power. However, as a complete electrical drive system is not defined in this Guide, attention is drawn to the possible additional electrical and mechanical stresses to which the motor may be subjected e.g. by a static AC converter/inverter. Reference should be made to IEC 60034-17.

*The **equipment** covered by this Guide is defined by its function rather than design type. Therefore, the guidance to the **specification** is stated in performance terms rather than being specified by a detailed description of the **equipment** to be supplied.*

*This Guide indicates to potential **purchasers** how their **specification** should be prepared so that:*

*- the **equipment** type and capacity interfaces correctly with other elements of the systems;*
- predicted performance is achieved;
*- ancillary **equipment** is properly sized;*
*- **reliability, availability** and safety requirements are achieved;*
- proper consideration is given to the evaluation process and the quality measures to be applied.

*This Guide does not determine the type of **specification** (e.g. detailed, performance, functional) or the extent of supply for any given contract which is normally decided on the basis of the **purchaser's** project strategy. It does not cover:*

*- any commercial, contractual or legal issues which are normally in separate parts of an **enquiry**;*
- any allocation of responsibilities which are determined by the contract.

*This Guide does not prescribe the arrangement of the documents in the **enquiry.***

*NOTE As a comprehensive European environmental policy is still under preparation, this Guide does not address the environmental implications of the **equipment**.*

2 Normative references

This Guide for Procurement incorporates by dated or undated reference, provisions from other publications. These normative references are cited in 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 Guide only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

European Standards

EN ISO 9001	*Quality systems - Model for quality assurance in design, development, production, installation and servicing*
EN ISO 9002	*Quality systems - Model for quality assurance in production, installation and servicing*
EN 45510-2-7	Guide for procurement of power station equipment – Part 2-7: Electrical equipment - Switchgear and controlgear
EN 45510-2-9[1)]	Guide for procurement of power station equipment – Part 2-9: Electrical equipment - Cabling systems

[1)] In preparation.