

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Rotating electrical machines – Dimensions and output series –  
Part 1: Frame numbers 56 to 400 and flange numbers 55 to 1080**

**Machines électriques tournantes – Dimensions et séries de puissances –  
Partie 1: Désignation des carcasses entre 56 et 400 et des brides  
entre 55 et 1080**





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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ROTATING ELECTRICAL MACHINES –  
DIMENSIONS AND OUTPUT SERIES –****Part 1: Frame numbers 56 to 400 and flange  
numbers 55 to 1080**

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International Standard IEC 60072-1 has been prepared by IEC technical committee 2: Rotating machinery.

This seventh edition cancels and replaces the sixth edition published in 1991. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) modification of the series title;
- b) complete revision on the basis of EN 50347;
- c) integration of the relationships between frame size, shaft extensions, rated outputs and flange numbers;
- d) additional tolerances and measurements for shafts;

- e) modification of Annex A with additional frame numbers and relationships between frame size and rated power.

The text of this International Standard is based on the following documents:

Draft	Report on voting
2/2059/CDV	2/2082/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all parts in the IEC 60072 series, published under the general title *Rotating electrical machines – Dimensions and output series*, can be found on the IEC website.

Future documents in this series will carry the new general title as cited above. Titles of existing documents in this series will be updated at the time of the next edition.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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# ROTATING ELECTRICAL MACHINES – DIMENSIONS AND OUTPUT SERIES –

## Part 1: Frame numbers 56 to 400 and flange numbers 55 to 1080

### 1 Scope

This part of IEC 60072 is applicable for the majority of rotating electrical machines for industrial purposes within the dimension range and output powers:

Foot- mounted: shaft heights: 56 mm to 400 mm.

Flange- mounted: pitch circle diameter of flange: 55 mm to 1 080 mm.

It specifies the fixing dimensions, shaft extension dimensions and the assignment of output powers and frame sizes.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60079-0, *Explosive atmospheres – Part 0: Equipment – General requirements*

ISO 128-3:2020, *Technical product documentation (TPD) – General principles of representation – Part 3: Views, sections and cuts*

ISO 273, *Fasteners – Clearance holes for bolts and screws*

ISO 286 (all parts), *Geometrical product specifications (GPS) – ISO code system for tolerances on linear sizes*

ISO 1101, *Geometrical product specifications (GPS) – Geometrical tolerancing – Tolerances of form, orientation, location and run-out*

ISO 2768-1, *General tolerances – Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
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