

BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा

प्रत्यागामी आंतरिक दहन इंजन चालित प्रत्यावर्ती धारा जनरेटिंग सेट - भाग 12: सुरक्षा सेवाओं के
लिए आपातकालीन पावर सप्लाई
(पहला पुनरीक्षण)

Draft Indian Standard

**RECIPROCATING INTERNAL COMBUSTION ENGINE DRIVEN ALTERNATING
CURRENT GENERATING SETS – PART 12: EMERGENCY POWER SUPPLY TO
SAFETY SERVICES**
(First Revision)

ICS: 13.100; 27.020; 29.160.40

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Automotive Prime Movers, Transmissions Systems and Internal Combustion Engines Sectional Committee, TED 02

NATIONAL FOREWORD

This draft Indian Standard (Part 12) which is identical with ISO 8528-12:2022 ‘Reciprocating Internal Combustion Engine Driven Alternating Current Generating Sets — Part 12: Emergency power supply to safety services’ issued by International Organization for Standardization (ISO), will be adopted by the Bureau of Indian Standards on the recommendations of Automotive Prime Movers, Transmissions Systems and Internal Combustion Engines Sectional Committee and approval of the Transport Engineering Division Council.

This standard was originally published in 2012 which was identical with ISO 8528-12: 1997. This first revision of the standard has been undertaken to align it with ISO 8528-12:2022.

The main changes in this revision are as follows:

- 1) Structure updated according to the current ISO template;
- 2) Normative references updated;
- 3) Previous Clause 4 deleted – the symbols used in ISO 8528-5 now apply;
- 4) Clause 7 split into subclauses;
- 5) Hanging paragraphs removed from Clauses 8 and 9;
- 6) Values in Table 3 modified based on the values in ISO 8528-5:2022, Table 4; and
- 7) Minor editorial changes.

This standard is one of the series of Standards published on Reciprocating internal combustion engine driven alternating current generating sets. Other standards in this series are:

- 1) Part 1 Applications, ratings and performance
- 2) Part 2 Engines
- 3) Part 3 Alternating current generators for generating sets
- 4) Part 4 Control gear and switch gear
- 5) Part 5 Generating sets.
- 6) Part 6 Test methods
- 7) Part 7 Technical declaration for specification and design
- 8) Part 8 Requirements and tests for low-power generating sets
- 9) Part 9 Measurement and evaluation of mechanical vibrations
- 10) Part 10 Measurement of airborne noise by the enveloping surface method

The text of ISO standard is proposed for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, references appear to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 8528-1: 2018 Reciprocating internal combustion engine driven alternating current generating sets — Part 1: Application, ratings and performance	IS/ISO 8528-1: 2018 Reciprocating Internal Combustion Engine Driven Alternating Current Generating Sets Part 1 Application, Ratings and Performance (<i>First Revision</i>)	Identical under single numbering
ISO 8528-2: 2018 Reciprocating internal combustion engine driven alternating current generating sets — Part 2: Engines	IS/ISO 8528-2: 2018 Reciprocating internal combustion engine driven alternating current generating sets - Part 2: Engines	Identical under single numbering
ISO 8528-3: 2020 Reciprocating internal combustion engine driven alternating current generating sets — Part 3: Alternating current generators for generating sets	IS/ISO 8528-3: 2020 Reciprocating internal combustion engine driven alternating current generating sets Part 3: Alternating current generators for generating sets	Identical under single numbering
ISO 8528-4: 2005 Reciprocating internal combustion engine driven alternating current generating sets — Part 4: Controlgear and switchgear	IS/ISO 8528-4: 2005 Reciprocating internal combustion engine driven alternating current generating sets: Part 4 controlgear and switchgear	Identical under single numbering

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 8528-5: 2022 Reciprocating internal combustion engine driven alternating current generating sets — Part 5: Generating sets	IS/ISO 8528-5: 2018 Reciprocating Internal Combustion Engine Driven Alternating Current Generating Sets Part 5 Generating Sets (First Revision)	Identical under single numbering
ISO 8528-6: 2005 Reciprocating internal combustion engine driven alternating current generating sets — Part 6: Test methods	IS/ISO 8528-6: 2005 Reciprocating internal combustion engine driven alternating current generating sets: Part 6 test methods	Identical under single numbering
IEC 60622 Secondary cells and batteries containing alkaline or other non-acid electrolytes — Sealed nickel-cadmium prismatic rechargeable single cells	IS 16049: 2013/IEC 60622: 2002 Secondary cells and batteries containing alkaline or other non - Acid electrolytes - Sealed nickel - Cadmium prismatic rechargeable single cells	Identical under single numbering
IEC 61951-1 Secondary cells and batteries containing alkaline or other non-acid electrolytes — Secondary sealed cells and batteries for portable applications — Part 1: Nickel-Cadmium	IS 16048 (Part 1): 2021/IEC 61951-1 : 2017 Secondary Cells and Batteries Containing Alkaline or Other Non-acid Electrolytes — Secondary Sealed Cells and Batteries for Portable Applications Part 1 Nickel-cadmium (First Revision)	Identical under single numbering

The technical committee has reviewed the provisions of following International Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with this standard:

<i>International Standard</i>	<i>Title</i>
IEC 60896-11	Stationary lead-acid batteries — Part 11: Vented types — General requirements and methods of tests
IEC 60896-21	Stationary lead-acid batteries — Part 21: Valve regulated types — Methods of test

IEC 60623	Secondary cells and batteries containing alkaline or other non-acid electrolytes — Vented nickel-cadmium prismatic rechargeable single cells
IEC 60364-7-710	Low-voltage electrical installations — Part 7-710: Requirements for special installations and locations — Medical locations

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

SCOPE

This document applies to generating sets driven by reciprocating internal combustion (RIC) engines for emergency power supply to safety services.

This document applies, for example, to safety equipment in hospitals, high-rise buildings and public gathering places. It establishes the special requirements for the performance, design and maintenance of generating sets used in these applications referred to previously and takes into account the provisions of ISO 8528-1 to ISO 8528-6 and ISO 8528-10.

FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 8528-12 :2022 or CONTACT:

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