***भारतीय मानक***

***Indian Standard***

 **TED 02 (23615) F**

**IS/ISO 8528 (Part 12): 2022**

**प्रत्यागामी आंतरिक दहन इंजन चालित प्रत्यागामी धारा उदभवन करने वाले सेट भाग 12 सुरक्षा सेवाओं हेतु आपातकालीन बिजली आपूर्ति**

 (*पहला पुनरीक्षण*)

**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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मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली 110002

MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG

NEW DELHI 110002

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 **January 2024 Price Group**

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

NATIONAL FOREWORD

This Indian Standard (*First Revision*) (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), was 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 brought out to align it with ISO 8528-12:2022.

The major 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 the ISO Standard has been approved as suitable 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:

* 1. Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
	2. 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, reference appears 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:

|  |  |  |
| --- | --- | --- |
| *International Standard* | *Corresponding Indian Standard* | *Degree of Equivalence* |
| ISO 8528-1: 2018Reciprocating internal combustion engine driven alternating current generating sets — Part 1: Application,ratings and performance | IS/ISO 8528-1: 2018Reciprocating internal combustion engine driven alternating current generating sets — Part 1: Application, ratings and performance (*First Revision*) | Identical under single numbering |
| ISO 8528-2: 2018Reciprocating internal combustion engine driven alternating current generating sets — Part 2: Engines | IS/ISO 8528-2: 2018Reciprocating internal combustion engine driven alternating current generating sets — Part 2: Engines | Identical under single numbering |
| ISO 8528-3: 2020Reciprocating internal combustion engine driven alternating current generating sets — Part 3: Alternating current generators forgenerating sets | IS/ISO 8528-3: 2020Reciprocating internal combustion engine driven alternating current generating sets — Part 3: Alternating current generators for generating sets | Identical under single numbering |
| ISO 8528-4: 2005Reciprocating internal combustion engine driven alternating current generating sets — Part 4: Controlgearand switchgear | IS/ISO 8528-4: 2005Reciprocating internal combustion engine driven alternating current generating sets — Part 4: controlgear and switchgear | Identical under single numbering |
| ISO 8528-5: 2022Reciprocating internal combustion engine driven alternating current generatingsets — Part 5: Generating sets | IS/ISO 8528-5: 2018Reciprocating internal combustion engine driven alternating current generating sets — Part 5: Generating sets (*First Revision*) | Identical under single numbering |
| ISO 8528-6: 2005Reciprocating internal combustion engine driven alternating current generatingsets — Part 6: Test methods | IS/ISO 8528-6: 2005Reciprocating internal combustion engine driven alternating current generating sets — Part 6: Test methods | Identical under single numbering |
| IEC 60622: 2002Secondary cells and batteries containing alkaline or other non-acid electrolytes — Sealed nickel-cadmium prismatic rechargeable singlecells | IS 16049: 2013/IEC 60622: 2002Secondary cells and batteries containing alkaline or other non - acid electrolytes — sealed nickel - cadmium prismatic rechargeablesingle cells | Identical under single numbering |
| IEC 61951-1: 2017Secondary 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: 2017Secondary 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:

|  |  |
| --- | --- |
| *International Standard* | *Title* |
| IEC 60896-11: 2002 | Stationary lead-acid batteries — Part 11: Vented types — General requirements and methods of tests |
| IEC 60896-21: 2004 | Stationary lead-acid batteries — Part 21: Valve regulated types — Methods of test |
| IEC 60623: 2017 | Secondary cells and batteries containing alkaline or other non- acid electrolytes — Vented nickel-cadmium prismatic rechargeable single cells |
| IEC 60364-7-710: 2021 | 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.