DIN EN ISO 8528-13:2017-03 (E)

Reciprocating internal combustion engine driven alternating current generating sets - Part 13: Safety (ISO 8528-13:2016, Corrected ve rsion 2016-10-15)

Contents

Page

European foreword ... **4**

Foreword ... **5**

1 Scope ... **7**

2 Normative references ... **7**

3 Terms and definitions ... **9**

4 General ... **11**

5 Hazards ... **11**

6 Safety requirements and tests ... **11**

6.1 General ... 11
6.2 Starting system ... 11
6.2.1 Requirements ... 11
6.2.2 Verification ... 12
6.3 Stopping ... 12
6.3.1 Requirements ... 12
6.3.2 Verification ... 12
6.4 Emergency stopping ... 13
6.4.1 Requirements ... 13
6.4.2 Verification ... 13
6.5 Control devices ... 13
6.5.1 Design, safety and mechanical strength ... 13
6.5.2 Identification ... 14
6.5.3 Accessibility ... 14
6.6 Monitoring devices ... 15
6.6.1 Requirements ... 15
6.6.2 Verification ... 15
6.7 Warning devices ... 15
6.7.1 Requirements ... 15
6.7.2 Verification ... 15
6.8 Guarding ... 15
6.8.1 General ... 15
6.8.2 Guarding against mechanical hazards ... 16
6.8.3 Guarding against hot surfaces ... 16
6.9 Stability for low power generating sets ... 20
6.9.1 Not in operation ... 20
6.9.2 In operation ... 21
6.10 Lighting ... 21
6.10.1 Requirements ... 21
6.10.2 Verification ... 21
6.11 Handling ... 21
6.11.1 Requirements ... 21
6.11.2 Verification ... 22
6.12 Mechanical strength ... 22
6.12.1 Requirements ... 22
6.12.2 Verification ... 22

6.13 Fire protection ... 23
6.13.1 General ... 23
6.13.2 Requirements ... 23
6.13.3 Verification ... 23
6.14 Hoses, pipes and electrical harnesses of the RIC engine ... 23
6.14.1 Requirements ... 23
6.14.2 Verification ... 24
6.15 Electrical equipment ... 24
6.15.1 Generating sets ... 24
6.15.2 Other electrical equipment ... 26
6.16 Noise ... 26
6.16.1 Requirements ... 26
6.16.2 Verification ... 26
6.17 Access systems ... 26
6.17.1 Requirements ... 26
6.17.2 Verification ... 26
6.18 Access to service points ... 26
6.18.1 Requirements ... 26
6.18.2 Verification ... 26
6.19 Gaseous and particulate exhaust emissions ... 27
6.19.1 Requirements ... 27
6.19.2 Verification ... 27
6.20 Drainage ... 27
6.20.1 Requirements ... 27
6.20.2 Verification ... 27

7 Operating and maintenance instructions ... 27
7.1 Requirements ... 27
7.2 Verification ... 28

8 Safety labels ... 28
8.1 Requirements ... 28
8.2 Verification ... 29

9 Marking ... 29
9.1 Requirements ... 29
9.2 Verification ... 30

Annex A (normative) **List of hazards ... 31**

Annex B (normative) **Application of IEC 60204-1:2009 for generating sets ... 33**

Annex C (normative) **Instruction manual — Safety guide additional requirements for low-power generating sets for use by laymen ... 45**

Annex ZA (informative) **Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC ... 47**

Bibliography ... 48