ISO 17657-3:2005-09 (E)

Resistance welding - Welding current measurement for resistance welding - Part 3: Current sensing coil

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Physical environment and operating conditions 2

5 Classification of current sensing coils and designation of product 2
5.1 Class of current sensing coils 2
5.2 Standard values of the conversion coefficient 2
5.3 Designation of products 3

6 Requirements for current sensing coils 3
6.1 Current sensing coil and connecting lead 3
6.2 Conversion coefficient 3
6.3 Measuring accuracy 4
6.4 Mechanical strength 4
6.5 Setting position error 4
6.6 Influence of ambient temperature 4
6.7 Thermal property of cover materials 4
6.8 Test 4

7 Test procedures 5
7.1 Conversion coefficient 5
7.2 Measuring accuracy 6
7.3 Mechanical tests 6
7.4 Setting position error test 8
7.5 Thermal test 8
7.6 Contact test 8

8 Marking 8

Annex A (informative) Design of current sensing coils 9

Annex B (informative) Governing parameters of the conversion coefficient 12

Annex C (informative) Type of current sensing coils and their recommended specification range 13

Annex D (informative) Frequency response of current sensing coils 17