

## CONTENTS

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| FOREWORD .....                                                           | 3  |
| INTRODUCTION .....                                                       | 6  |
| 1 Scope .....                                                            | 7  |
| 2 Normative references .....                                             | 8  |
| 3 Definitions .....                                                      | 8  |
| 4 General requirement .....                                              | 9  |
| 5 General conditions for the tests .....                                 | 9  |
| 6 Classification .....                                                   | 10 |
| 7 Marking and instructions .....                                         | 10 |
| 8 Protection against access to live parts .....                          | 13 |
| 9 Starting of motor-operated appliances .....                            | 14 |
| 10 Power input and current .....                                         | 14 |
| 11 Heating .....                                                         | 14 |
| 12 Void .....                                                            | 16 |
| 13 Leakage current and electric strength at operating temperature .....  | 16 |
| 14 Transient overvoltages .....                                          | 16 |
| 15 Moisture resistance .....                                             | 17 |
| 16 Leakage current and electric strength .....                           | 17 |
| 17 Overload protection of transformers and associated circuits .....     | 17 |
| 18 Endurance .....                                                       | 17 |
| 19 Abnormal operation .....                                              | 17 |
| 20 Stability and mechanical hazards .....                                | 21 |
| 21 Mechanical strength .....                                             | 21 |
| 22 Construction .....                                                    | 22 |
| 23 Internal wiring .....                                                 | 24 |
| 24 Components .....                                                      | 24 |
| 25 Supply connection and external flexible cords .....                   | 25 |
| 26 Terminals for external conductors .....                               | 25 |
| 27 Provision for earthing .....                                          | 25 |
| 28 Screws and connections .....                                          | 25 |
| 29 Clearances, creepage distances and solid insulation .....             | 25 |
| 30 Resistance to heat and fire .....                                     | 25 |
| 31 Resistance to rusting .....                                           | 26 |
| 32 Radiation, toxicity and similar hazards .....                         | 26 |
| Annexes .....                                                            | 29 |
| Bibliography .....                                                       | 30 |
| Figure 101 – Examples of immediate surrounds of air-outlet grilles ..... | 27 |
| Figure 102 – Examples of the immediate surrounds of fireguards .....     | 28 |
| Table 101 – Temperature rises for surfaces .....                         | 16 |