ISO 22041:2019 (E)

Refrigerated storage cabinets and counters for professional use — Performance and energy consumption

Contents

Foreword

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Requirements
 - 4.1 Condensate drainage
 - 4.2 Operating characteristics
 - 4.2.1 Classification according to temperature
 - 4.2.2 Defrosting
 - 4.2.3 Electrical energy consumption

5 Test conditions

- 5.1 General
- 5.2 Tests outside test room
- 5.3 Tests inside test room
- 5.3.1 General
- 5.3.2 Test conditions
- 5.3.2.1 General
- 5.3.2.2 Test room General design, walls, floor and radiant heat
- 5.3.2.3 Test room climate definition
- 5.3.2.3.1 Test room climate classes
- 5.3.2.3.2 Climate measuring point
- 5.3.2.3.3 Temperature gradient
- 5.3.2.4 Test packages characteristics
- 5.3.2.5 M-packages
- 5.3.2.6 Test packages life time
- 5.3.2.7 Instruments, measuring equipment and measuring accuracy
- 5.3.2.8 Alternative for filling test packages
- 5.3.3 Preparation of test cabinet
- 5.3.3.1 Cabinet selection, installation and positioning within the test room
- 5.3.3.2 Air movement
- 5.3.3.3 Loading the cabinet
- 5.3.3.3.1 General
- 5.3.3.3.2 Loading heights
- 5.3.3.3.3 M-package locations
- 5.3.3.4 Running in
- 5.3.3.5 Stable conditions
- 5.3.3.6 Test conditions
- 5.3.3.6.1 Test period
- 5.3.3.6.2 Doors/drawers opening scheme
- 5.3.3.6.2.1 For vertical and counter cabinet refrigerators
- 5.3.3.6.2.2 For vertical and counter cabinet freezers
- 5.3.3.6.3 General test conditions for all types of products
- 5.3.3.7 Lighting
- 5.3.3.8 Power supply
- 5.3.3.9 Testing several cabinets in the same room
- 5.3.4 Temperature test
- 5.3.4.1 Test conditions
- 5.3.4.2 Temperature curves of M-packages

- 5.3.5 Electrical energy consumption test
- 5.3.5.1 Test conditions
- 5.3.5.2 Energy measurement

6 Test procedures

- 6.1 Calculation of net volume
- 6.2 Load line and cabinet label marking durability
- 6.3 Tests outside test room Linear dimensions, areas and volumes
- 6.4 Tests inside test room
- 6.4.1 Test conditions
- 6.4.2 Cabinet preparation
- 6.4.3 Temperature test
- 6.4.4 Electrical energy consumption test
- 7 Template for information to be declared
- 8 Load limit marking
- Annex A (informative) Information and accessories to be provided by the manufacturer for the performance and reproducibility of tests

Page count: 33