DIN EN 14470-1:2023-09 (E)

Fire safety storage cabinets - Part 1: Safety storage cabinets for flammable liquids

Contents

Page

European foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 7

4 Classification 8

5 Construction 8
5.1 Fire protection 8
5.2 Access opening 8
5.3 Construction materials and surface areas 9
5.4 Weight load 9
5.5 Ventilation 9
5.6 Storage level 10
5.7 Spill containment sump 10
5.8 Penetrations for pipes, hoses and electrical cables 10
5.9 Storage levels and doors 10

6 Fire resistance 10

7 Information to be supplied 11

8 Marking and labelling 12
8.1 Openings for the inlet and outlet air 12
8.2 Equipotential bonding 12
8.3 Labelling of the front 12

Annex A (normative) Type test to determine protection level, hence classification 13

A.1 Principle 13
A.2 Testing apparatus and means 13
A.3 Test models 13
A.3.1 Quantity and description of test models 13
A.3.2 Preliminary examination of the test model 13
A.4 Preparation of fire test 14
A.4.1 Installation of test model 14
A.4.2 Temperature measuring point placement in the test model 14
A.4.3 Temperature measuring device placement in the furnace 17
A.5 Test report 18
A.6 Technical documentation by the manufacturer 19

Annex B (normative) Construction alterations 20

B.1 General information 20
B.2 Construction modifications that shall be assessed 20
B.2.1 Subsequent change of outer dimensions 20
B.2.2 Subsequent change of access openings 20

B.2.3 Subsequent variation and extension of interior equipment 20
B.2.4 Changes in components and materials 21
B.2.5 Additional penetrations 21
B.2.6 Additional superimposed load 24
B.3 Test report - Construction alterations 24

Annex C (normative) Mechanical and aerotechnical tests 25

C.1 General information 25
C.2 Mechanical tests 25
C.3 Aerotechnical tests 25
C.4 Test report - Mechanical and aerotechnical tests 26

Bibliography 27