

DIN EN 54-3:2006-08 (E)

Fire detection and fire alarm systems - Part 3: Fire alarm devices - Sounders

Contents	Page
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
4 Requirements	7
4.1 Compliance	7
4.2 Sound level	8
4.3 Frequency and sound pattern	8
4.4 Durability	8
4.5 Construction	8
4.6 Marking and data	9
5 Tests	10
5.1 General	10
5.2 Reproducibility	11
5.3 Operational performance	12
5.4 Durability	13
5.5 Dry heat (operational)	14
5.6 Dry heat (endurance)	15
5.7 Cold (operational)	16
5.8 Damp heat, cyclic (operational)	17
5.9 Damp heat, steady state (endurance)	18
5.10 Damp heat, cyclic (endurance)	19
5.11 Sulphur dioxide (SO₂) corrosion (endurance)	20
5.12 Shock (operational)	21
5.13 Impact (operational)	22
5.14 Vibration, sinusoidal, (operational)	23
5.15 Vibration, sinusoidal (endurance)	24
5.16 Electromagnetic compatibility (EMC), immunity (operational)	25
5.17 Enclosure protection	26
Annex A (normative) Sound level test for fire alarm sounders	28
A.1 General	28
A.2 Mounting arrangements	28
A.3 Instrumentation	28
A.4 Background noise level	28
A.5 Measurement of sound level	28
Annex B (normative) Comparative sound level test during environmental conditioning	31
B.1 General	31
B.2 Test chamber	31
B.3 Mounting arrangements	32
B.4 Instrumentation	32
B.5 Background noise level	32
B.6 Test procedure	32

Annex C (normative) Audible fire alarm devices - Voice sounders	36
C.1 Voice sounder	36
C.2 General requirements	36
C.3 Additional requirements	36
C.4 General testing	38
C.5 Additional testing for voice sounders	38
Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Directive (89/106/EEC)	41
ZA.1 Scope and relevant clauses	41
ZA.2 Procedures for the attestation of conformity of sounders covered by this standard	42
ZA.3 CE marking and labelling and accompanying documentation	47
ZA.4 EC certificate and declaration of conformity	48
Bibliography	50