

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

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

---

<b>Contents</b>		<b>Page</b>
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 (SO <sub>2</sub> ) 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

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