

# ISO 7240-3:2010-12 (E)

## Fire detection and alarm systems - Part 3: Audible alarm devices

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		vi
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms, definitions and abbreviated terms .....</b>	<b>2</b>
<b>3.1</b>	<b>Terms and definitions .....</b>	<b>2</b>
<b>3.2</b>	<b>Abbreviated terms .....</b>	<b>3</b>
<b>4</b>	<b>Requirements .....</b>	<b>3</b>
<b>4.1</b>	<b>Compliance .....</b>	<b>3</b>
<b>4.2</b>	<b>Sound pressure level .....</b>	<b>3</b>
<b>4.3</b>	<b>Frequency and sound pattern .....</b>	<b>4</b>
<b>4.4</b>	<b>Audible alarm devices (a.a.d.s) with voice .....</b>	<b>4</b>
<b>4.5</b>	<b>Synchronization -- Optional function .....</b>	<b>4</b>
<b>4.6</b>	<b>Construction .....</b>	<b>5</b>
<b>4.7</b>	<b>On-site adjustment of the mode of operation .....</b>	<b>5</b>
<b>4.8</b>	<b>Durability .....</b>	<b>6</b>
<b>4.9</b>	<b>Marking and data .....</b>	<b>6</b>
<b>4.10</b>	<b>Requirements for software-controlled a.a.d.s .....</b>	<b>7</b>
<b>5</b>	<b>Tests .....</b>	<b>8</b>
<b>5.1</b>	<b>General .....</b>	<b>8</b>
<b>5.2</b>	<b>Reproducibility .....</b>	<b>11</b>
<b>5.3</b>	<b>Operational performance .....</b>	<b>11</b>
<b>5.4</b>	<b>Durability .....</b>	<b>12</b>
<b>5.5</b>	<b>Dry heat (operational) .....</b>	<b>12</b>
<b>5.6</b>	<b>Dry heat (endurance) .....</b>	<b>13</b>
<b>5.7</b>	<b>Cold (operational) .....</b>	<b>14</b>
<b>5.8</b>	<b>Damp heat, cyclic (operational) .....</b>	<b>15</b>
<b>5.9</b>	<b>Damp heat, steady state (endurance) .....</b>	<b>16</b>
<b>5.10</b>	<b>Damp heat, cyclic (endurance) .....</b>	<b>16</b>
<b>5.11</b>	<b>Sulfur dioxide (SO<sub>2</sub>) corrosion (endurance) .....</b>	<b>17</b>
<b>5.12</b>	<b>Shock (operational) .....</b>	<b>18</b>
<b>5.13</b>	<b>Impact (operational) .....</b>	<b>19</b>
<b>5.14</b>	<b>Vibration, sinusoidal (operational) .....</b>	<b>20</b>
<b>5.15</b>	<b>Vibration, sinusoidal (endurance) .....</b>	<b>21</b>
<b>5.16</b>	<b>Electromagnetic compatibility (EMC), immunity (operational) .....</b>	<b>21</b>
<b>5.17</b>	<b>Enclosure protection .....</b>	<b>23</b>
<b>5.18</b>	<b>Operational performance for a.a.d.s with voice .....</b>	<b>24</b>
<b>5.19</b>	<b>Sequence timing for a.a.d.s with voice .....</b>	<b>24</b>
<b>5.20</b>	<b>Synchronization (optional) .....</b>	<b>25</b>
<b>6</b>	<b>Test report .....</b>	<b>26</b>
<b>Annex A (normative)</b>	<b>Sound pressure level test for a.a.d .....</b>	<b>28</b>
<b>Annex B (normative)</b>	<b>Comparative sound pressure level test during environmental conditioning .....</b>	<b>32</b>
<b>Annex C (informative)</b>	<b>Comparison of flammability test requirements in various standards .....</b>	<b>37</b>
<b>Bibliography .....</b>		<b>39</b>