

# ISO 7240-5:2003-12 (E)

## Fire detection and alarm systems - Part 5: Point-type heat detectors

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	General requirements .....	2
4.1	General .....	2
4.2	Classification .....	2
4.3	Position of heat-sensitive elements .....	3
4.4	Individual alarm indication .....	3
4.5	Connection for ancillary devices .....	3
4.6	Monitoring of detachable detectors .....	3
4.7	Manufacturer's adjustments .....	3
4.8	On-site adjustment of response behaviour .....	3
4.9	Marking .....	4
4.10	Data .....	4
4.11	Requirements for software-controlled detectors .....	4
5	Tests .....	6
5.1	General .....	6
5.2	Directional dependence .....	10
5.3	Static response temperature .....	10
5.4	Response times from the typical application temperature .....	10
5.5	Response times from 25 °°°°C .....	11
5.6	Response times from high ambient temperature, dry heat (operational) .....	11
5.7	Variation in supply parameters .....	12
5.8	Reproducibility .....	12
5.9	Cold (operational) .....	13
5.10	Dry heat (endurance) .....	14
5.11	Damp heat, cyclic (operational) .....	15
5.12	Damp heat, steady state (endurance) .....	16
5.13	Sulfur dioxide (SO <sub>2</sub> ) corrosion (endurance) .....	17
5.14	Shock (operational) .....	18
5.15	Impact (operational) .....	19
5.16	Vibration, sinusoidal (operational) .....	20
5.17	Vibration, sinusoidal (endurance) .....	21
5.18	Electromagnetic compatibility (EMC), immunity tests (operational) .....	22
6	Additional tests for detectors with class suffixes .....	23
6.1	Plunge test for suffix-S detectors .....	23
6.2	Test for suffix-R detectors .....	24
7	Test report .....	25
Annex A (normative) Heat tunnel for response time and response temperature measurements .....		26
Annex B (informative) Construction of the heat tunnel .....		27
Annex C (informative) Derivation of upper and lower limits of response times .....		29
Annex D (informative) Apparatus for impact test .....		32