

ISO 7240-4:2017-11 (E)

Fire detection and alarm systems - Part 4: Power supply equipment

Contents		Page
Foreword	v	
Introduction	vi	
1 Scope	1	
2 Normative references	1	
3 Terms and definitions	1	
4 Symbols and abbreviated terms	2	
4.1 Symbols	2	
4.2 Abbreviated terms	2	
5 Requirements	2	
5.1 General	2	
5.2 Compliance	2	
5.3 Power sources	3	
5.3.1 General	3	
5.3.2 Main power source	3	
5.3.3 Standby power source	3	
5.4 Charger	4	
5.5 Faults	4	
5.6 Mechanical	5	
5.7 Power supply interface	5	
5.8 Software	5	
5.8.1 General	5	
5.8.2 Program monitoring	5	
5.8.3 Storage of programs and data	6	
5.8.4 Monitoring of memory contents	6	
6 Tests	6	
6.1 General	6	
6.1.1 Standard atmospheric conditions for testing	6	
6.1.2 Mounting and orientation	7	
6.1.3 Electrical connection	7	
6.2 Functional tests	7	
6.2.1 The object of test	7	
6.2.2 Test schedule	7	
6.2.3 Full functional test	8	
6.2.4 Reduced functional test	9	
6.3 Charger and the standby power source test	10	
6.3.1 Test procedure	10	
6.3.2 Requirements	10	
6.4 High battery impedance test	10	
6.4.1 Object of test	10	
6.4.2 General	10	
6.4.3 Test procedure for non-integrated PSE	10	
6.4.4 Requirements for integrated PSE	11	
6.4.5 Test procedure for integrated PSE	11	
6.4.6 Requirements for integrated PSE	12	
6.5 Environmental tests	12	

6.5.1	General	12
6.5.2	Tests for one specimen	13
6.5.3	Tests for more than one specimen	13
6.5.4	Requirements	13
6.6	Cold (operational)	14
6.6.1	Object of test	14
6.6.2	Test procedure	14
6.6.3	Requirements	14
6.7	Damp heat, steady-state (operational)	15
6.7.1	Object of test	15
6.7.2	Test procedure	15
6.7.3	Requirements	15
6.8	Impact (operational) -- Optional test	16
6.8.1	Object of test	16
6.8.2	Test procedure	16
6.8.3	Requirements	16
6.9	Vibration, sinusoidal (operational) -- Optional test	17
6.9.1	Object of test	17
6.9.2	Test procedure	17
6.9.3	Requirements	18
6.10	Electromagnetic compatibility (EMC), Immunity tests (operational)	18
6.11	Damp heat, steady state (endurance)	18
6.11.1	Object of test	18
6.11.2	Test procedure	18
6.11.3	Requirements	19
6.12	Vibration, sinusoidal (endurance) -- Optional test	19
6.12.1	Object of test	19
6.12.2	Test procedure	19
6.12.3	Requirements	20
6.13	Dry heat (operational) (optional)	20
6.13.1	Object of test	20
6.13.2	Test procedure	20
6.13.3	Requirements	21
7	Test report	21
8	Marking	21
9	Data	22
9.1	General	22
9.2	Software documentation	22
9.3	Hardware documentation	23
9.4	Installation and user documentation	23
Annex A (informative)	24
Bibliography	25