



Certificate

of
Approval
of
Components and Systems

Holder of the Approval:

System Sensor Europe
Charles Avenue
GB- Burgess Hill, West Sussex RH15 9UF

Approval No.:	No. of pages:	Valid from:	Valid to:
G 207055	5	03.05.2007	02.05.2011

Subject matter of the Approval:

Multi Sensor Smoke Detector
Type 2251TLE

Use:

in Automatic Fire Detection Systems

Basis for approval:

CEA 4021 (06/99) - Multisensor Detectors
DIN EN 54, Part 5 (03/01) - Heat Detectors
DIN EN 54, Part 7 (03/01) - Smoke Detectors
VdS 2503 (12/96) - Heat Detectors, Sect. 5.6
VdS 2504 (12/96) - Smoke Detectors, Sect. 5.6
VdS 2344 (12/05) - Procedure Guidelines

Köln (Cologne), 04.05.2007

Schüngel

Managing Director

i.V. Lüttenberg

Head of the VdS Certification Body

This approval is valid only for the specified component/system as submitted for the test

- together with the parts listed in enclosure 1
- documented in the technical papers acc. to enclosure 2 (n/a for systems)
- for application in the specified fire protection and security installations. Use of the subject matter of the approval, is subject to the hints/comments of enclosure 3.

The validity of the approval can be extended upon application. Application for extension shall be submitted six months before expiry of the current approval at the latest.

This certificate may only be reproduced in its present form without any modification including all enclosures. All changes of the underlying conditions of this approval shall be reported

by registered mail at once to the VdS Certification Body enclosing the required documentation.

Any advertising with this VdS approved component/system shall reflect the correct contents of the certificate and shall not violate the trade practice rules.



DAT-ZE 005/92-32

VdS Schadenverhütung GmbH
Zertifizierungsstelle
Amsterdamer Str. 174
D-50735 Köln

in the Gesamtverband der Deutschen Versicherungswirtschaft e.V. (German federation of insurance companies)

accredited by the "Deutsche Akkreditierungsstelle Technik (DATech)" as a certification body for the areas of fire protection and security



To Certificate of Approval No. G 207055

Date 04.05.2007

The approved component/system comprises the following parts:

Description of component	Type	Applicant's Registration No.	Approval number of component (only complete for system approval)
Multi Sensor Smoke Detector with IR Sensor Standard Analogous Base Isolator Base Anti Condensation Heater Base 24V Relay Base Analogous Sensor Base (plain)	2251TLE B501 B524IEFT-1 B524HTR B524RTE B501DG		



To Certificate of Approval No. G 207055

Date 04.05.2007

The approved component/system is described as follows:

Type of document	Manufacturer's identification	Date	Number of Pages
BRE Test Report No. TE 224484, dated 25.09.2006			
BRE Software Test Report No. 224484-SW, dated 29.06.2006			
VdS Test Report No. BMA 07028, dated 05.04.2007			
2251TLE:			
Specification 2251TLE	S00-376-000 Rev. B	31.05.2006	27
Manual 2251TLE	I56-2643-003	2006	4
Nameplate, 2251TLE	N04-2506-000 Rev. B	29.09.2006	1
BOM, 2251TLE		29.09.2006	4
Swirl Chamber Base	B07-151-402T Rev. E	24.11.2005	2
Base, LP Intelligent Micro, 16 Tens	B07-207-20 Rev. E	10.04.2006	2
Swirl Chamber Cover Multic.	C58-205-500T Rev. G	17.02.2006	3
Cover, CO/IR Detector	H58-195-100 Rev. C	28.03.2006	1
Screen	S08-39-03T Rev. A	18.10.2005	1
Schematic, CO-IR Detector Communication Board	C37-605-100 Rev. D	30.06.2006	1
Schematic, CO-IR Detector Detection Board	C37-747-00 Rev. C	22.11.2005	1
Artwork, CO-IR Detector Communication Board	P30-605-100 Rev. D	30.06.2006	8
Artwork, CO-IR Detector Detection Board	P30-747-000 Rev. C	22.11.2005	7



To Certificate of Approval No. G 207055

Date 04.05.2007

The approved component/system is described as follows:

Type of document	Manufacturer's identification	Date	Number of Pages
SMD Assy, CO-IR Detector Communication Board	X70-2758-000 Rev. D	30.06.2006	1
RLI Assy, CO-IR Detector Communication Board	X70-2760-000 Rev. A	06.05.2005	1
Man Assy, CO-IR Detector Communication Board	X70-2761-000 Rev. A	06.05.2005	1
SMD Assy, CO-IR Detector Detection Board	X70-2770-000 Rev. C	22.11.2005	1
Man Assy, CO-IR Detector Detection Board	X70-2771-000 Rev. B	20.06.2005	1



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Instructions for the application of the approval component/system (see enclosure 1):

Multi sensor smoke detector type 2251 TLE operates with scattered light and additionally comprises a heat sensor and an IR sensor.

The detector may also be operated exclusively as heat detector. Due to its response behaviour it is assigned to class A1R. If used as heat detector it shall be regarded, that it is only used in rooms with heights not exceeding 7.5 m.

The IR sensor only is a support and is not classified acc. to DIN EN 54-10.

The communication between control and indicating equipment and detector takes place via a special System Sensor data telegram. The detector is addressed by two rotary switches at its bottom.

The detector shall be operated on the ring bus feeder via a screened cable.

The software of the detector may be adjusted at six sensitivity levels. All levels comply with the requirements of the standard. The determination of the sensitivity levels takes place by the current length pulses of the detector. The minimum pulse length shall always be adjusted at the evaluation unit:

<u>Sensitivity</u>	<u>min. pulse length</u>	<u>typ. pulse length</u>
Level 1: (highest sensitivity)	1330 μ s	1400 μ s
Level 2:	1710 μ s	1800 μ s
Level 3:	2090 μ s	2200 μ s
Level 4:	2470 μ s	2600 μ s
Level 5: (lowest sensitivity)	2850 μ s	3000 μ s
Level 6: (operation as heat detector)	3230 μ s	3400 μ s

Technical data:

Nominal operating voltage:	24 V DC
Operating voltage range:	(15 ... 32) V DC
max. quiescent current:	200 μ A at 24 V DC (without data exchange)
max. alarm current:	7 mA at 24 V DC