

# tifica

## Components and Systems

Holder of the Approval

Novar GmbH Dieselstraße 2

**D-41469** Neuss

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 lates:

This certificate may only be 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.

required documentation

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

Approval No.. No. of pages:

Valid from:

Valid to:

G 206090

6

05.09.2006

04.09.2010

Subject matter of the Approval:

Optical Smoke Detector Scattered-Light Type Type O/So-802382

in Automatic Fire Detection Systems

Basis for approval:

DIN EN 54, Part 7 (03/01) - Smoke Detectors

DIN EN 54, Part 3 (08/06) - Sounders

DIN EN 54, Part 17 (03/06) - Short Circuit Isolators

VdS 2504 (12/96) - Smoke Detectors, Sect. 5.6

VdS 2344 (12/05) - Procedure Guidelines

Köln (Cologne), 11.09.2006

Schüngel

Managing Director

Lüttenberg

Head of the Vd\$ Certification Body



Zertifizierungsstelle Amsterdamer Str. 174 D-50735 Köln

A company of 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





### Enclosure 1 Sheet 1

To Certificate of Approval No.  $G\ 206090$ 

Date 11.09.2006

### The approved component/system comprises the following parts:

Description of component	Туре	Applicant's Registration No.	Approval number of component (only complete for system approval)
Optical smoke detector scattered- light type with integrated sounder (with ring feeder isolator)	O/So-802382		
Detector base standard	805590		



Enclosure 2 Sheet 1

To Certificate of Approval No.  $G\ 206090$ 

Date 11.09.2006

The approved component/system is described as follows:

Type of document	Manufacturer's identification	Date	Number of Pages
VdS Hardware Test Report No. BMA 03048 dated 16.09.2003 VdS Software Test Report No. SW-2004229 dated 11.08.2005 VdS Hardware Test Report No. BMA 05084 dated 29.08.2005 VdS Hardware Test Report No. BMA 06074 dated 01.09.2006			
Optical Smoke Detector Scattered- Light Type with integrated sounder O/So-802382:			
Operating instructions fire detector IQ8quad with integrated sounder	798931.10	05.2005	2
Parts list smoke detector with integrated sounder O/So-802382	802382/00 Index 0.2	26.07.05	1
Parts list PCA of O/So-802382	779226/00 Index G	25.07.05	6
Circuit diagram of O/So-802382	779226/02 Index G	21.06.05	2
Component mounting diagram of O/So-802382	779226/03 Index G	21.06.05	2
Layout plan LP complete (all layers)	734949/15/16/25/26 Index G	21.06.05	4
Mechanics fire detector:		3	
Mechanical drawing optical chamber top S-QUAD sensor / sounders	5255/1/2 Index J	22.02.2005	2



Enclosure 2 Sheet 2

To Certificate of Approval No. G 206090 Date 11.09.2006

The approved component/system is described as follows:

Type of document	Manufacturer's identification	Date	Number of Pages
Mechanical drawing optical chamber top and insect screen for S-QUAD sensor / sounders	5255/3 Index J	22.02.2005	1
Mechanical drawing optical chamber top for S-QUAD sensor / sounders, LED hood details	5255/4 Index J	22.02.2005	1
Mechanical drawing S-Quad chamber top electrical continuity features	5255/5 Index J	22.02.2005	1
Mechanical drawing S-QUAD / IQ8Quad optical chamber top, weld lug details	5255/6 Index J	22.02.2005	1
Mechanical drawing optical chamber platform (and sound horn) for S-QUAD sensor / sounders	5256/1 Index H	26.01.2005	1
Mechanical drawing optical chamber platform detail for S-QUAD detectors	5256/2 Index H	25.01.2005	1
Mechanical drawing optical chamber platform and sound horn for S-QUAD detectors	5256/3 Index H	25.01.2005	1
Mechanical drawing IP / baffle ring for S-QUAD detectors	5257 Index P	22.10.2004	
Mechanical drawing Piezo clamp for S-QUAD and IQ8Quad sensor sounders	5258/1 Index M	10.02.2005	1
Mechanical drawing Lightpipe / CAP for S-QUAD sensor/ sounder	5260/1 Index G	23.09.2004	1
Mechanical drawing Lightpipe / CAP for S-QUAD detectors with CO gas detection	5260/2 Index B	06.07.2004	1



#### Sheet 3 Enclosure 2

To Certificate of Approval No.  $G\ 206090$  Date 11.09.2006

#### The approved component/system is described as follows:

Type of document	Manufacturer's identification	Date	Number of Pages
Mechanical drawing Lightpipe / CAP for S-QUAD detectors with heat detection only	5260/3 Index A	30.03.2004	1
Mechanical drawing outer housing for S-QUAD sensor / sounder (detector)	5261/1 Index L	21.10.2004	2
Mechanical drawing insect screen for IQ8 S-QUAD detectors	5542 Index C	10.02.2005	1
Mechanical drawing Abdeckplatte S/F 744355	744355 Index b	03.03.2005	1
Detector base: 805590	709022	01 2005	2
Installation instructions detector base IQ8Quad	798932	01.2005	2
Base body (CH)	744341 Index E	16.04.2004	1
Parts list detector base NMG	805590/00	26.07.2004	1
Label for detector base	7527	18.08.2004	1



Enclosure 3 Sheet 1

To Certificate of Approval No.:  $G\ 206090$  Date 11.09.2006

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

Detector type O/So-802382 of series IQ8Quad of the company Novar GmbH is an adressable smoke detector with integrated sounder for operation in automatic fire detection and fire alarm systems.

The smoke detector with integrated sounder type O/So-802382 comprises a line isolating function acc. to prEN 54, part 17.

The smoke detector with integrated sounder type O/So-802382 comprises a sounder type A, which fulfills the requirements of DIN EN54, part 3.

The detector is intended for a use as adressable sounder without a further power supply for the direct connection to the esserbus®-Plus analog ring feeder of fire detection system 8000 as well. The power required for an alarm is provided directly by the esserbus®-Plus analog ring feeder.

For it's function as addressable sounder the detector also comprises an isolating function that in case of a short circuit on a ring feeder isolates the defective line segment, maintains operation of all ring feeder elements and itself carries out an alarm.

The adressable sounders were tested with two different tones, adjustable via the customer data editor Tools 8000 (from Version 1.07).

The following tones are tested and approved for the use in fire detection and fire alarm systems:

No. Tone Frequency Tone 6 Continuous tone 970Hz

Tone 10 Alternating tone 570Hz to 1200Hz Repetition Frequency 1 Hz

Voltage supply: 19 V (pulsed by communication 0V-9V-19V) (via analog ring feeder) 42 V (pulsed by communication 0V-9V-42V)

Nominal voltage (without alarm): 19 V DC Quiescent current (medium): approx. 50 μA

Communication current: approx. 9 mA (pulsed)

Alarm current: approx. 18 mA (without communication)