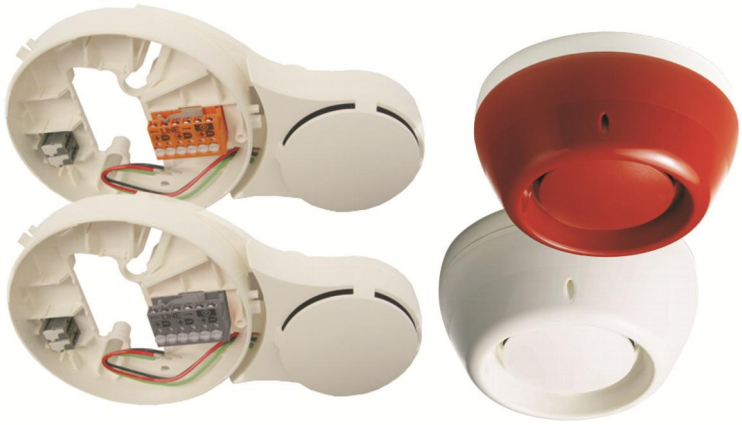
SIEMENS

Sinteso™

Sounder base, alarm sounder

FDSB291, FDSB292, FDS221-R, FDS221-W



Addressed (FDnet), collective

- **Sounder base FDSB291**
  - 11 tones to choose from, 2 programmable alarm levels
  - Sound level up to 88 dB(A); can be set on two levels
  - Compatible with all addressed point detectors from the Sinteso product line
  - Supply and communication via FDnet
- **Sounder base FDSB292**
  - One intermittent tone, one alarm level
  - Sound level 84 dB(A)
  - Compatible with neural fire detectors FDOOT241-9, FDOOT241-A9 in collective mode
  - Supply via detector loop
- **Alarm sounders FDS221-R, FDS221-W**
  - 11 tones to choose from, 2 programmable alarm levels
  - Sound level up to 99 dB(A); can be set on three levels
  - Supply and communication via FDnet

Properties

- **Eco-friendly**
  - Environmentally friendly processing
  - Reusable materials
  - Electronic parts and synthetic materials can be easily separated
- **Sounder base FDSB291 properties**
  - Addressed base
  - Adjustable sounds and sound levels, sounds synchronized for all alarm devices
  - Connection for an external alarm indicator
  - Screwless connection terminals
  - No auxiliary supply; supply takes place via FDnet
  - Incl. 2 micro terminals DBZ1190-AA
  - Space for auxiliary terminals; e.g., for connecting an alarm indicator
- **Sounder base FDSB292 properties**
  - Collective base
  - One tone, one sound level, no tone synchronization
  - Connection for an external alarm indicator
  - Screwless connection terminals
  - No auxiliary supply; supply takes place via detector line
  - Incl. 2 micro terminals DBZ1190-AA
  - Space for auxiliary terminals; e.g., for connecting an alarm indicator
- **Properties of alarm sounders FDS221-R, FDS221-W**
  - Protected electronics, high-quality components
  - Integrated line separator
  - Adjustable sounds and sound levels, sounds synchronized for all alarm devices
  - Screwless connection terminals
  - No auxiliary supply; supply takes place via FDnet
  - Compatible with addressed detector base
  - Option of using base accessories and sealing element
  - Very low operating current
  - Periodic test of acoustic part (inaudible)
  - Monitoring of device status

Use

Sounder base FDSB291, FDSB292 applications

- Hotel rooms
- Sick rooms
- Care homes, living rooms, and lounges

Alarm sounders FDS221-R, FDS221-W applications

- Along escape routes
- Corridors
- Staircases

Intended use

The sounder base FDSB291 and the alarm sounder FDS221-x are intended for use as alarm devices on an FDnet detector line in conjunction with a fire control panel FC20xx ('Sinteso' product line).

The sounder base FDSB292 is intended for use as an alarm device on a collective detector line in conjunction with a collective fire control panel.

Functions

Sounder bases FDSB291, FDSB292

- The sounder base FDSB291 provides an acoustic alarm in the addressed fire detection system
- The sounder base FDSB292 provides an acoustic alarm on a collective detector line. If the detector line is migrated to FDnet, the behavior of the sounder bases FDSB291 and FDSB292 is identical
- In the event of a fire alarm, the detector LED flashes and an acoustic signal sounds

Alarm sounders FDS221-R, FDS221-W

- Sound level of alarm sounding in the event of a fire alarm; clearly recognizable as a danger signal

Type Overview

Sounder base

Type	Designation	Order number	Weight [kg]
FDSB291	Sounder base (FDnet)	A5Q00001647	0.070
FDSB292	Sounder base (collective)	A5Q00013755	0.070

Accessories for sounder base

Accessories			
FDBZ291	Designation plate	A5Q00002621	0.002
DBZ1190-AA	Micro terminal	BPZ:4677080001	0.001
DBZ1190-AB	Connection terminal	BPZ:4942340001	0.001

Alarm sounder

Type	Designation	Order number	Weight [kg]
FDS221-R	Alarm sounder (red)	A5Q00004117	0.110
FDS221-W	Alarm sounder (white)	A5Q00006711	0.110

Alarm sounder accessories

Accessories			
FDB221	Detector base, addressable	A5Q00001664	0.026
FDB222	Flat, addressable detector base	S54319-F1-A1	0.024
FDBZ295	Sealing element	S54319-F10-A1	0.062
FDB291	Base attachment	A5Q00001603	0.035
FDBZ291	Designation plate	A5Q00002621	0.002
FDB293	Base attachment humid	A5Q00003945	0.320
FDB295	Base attachment wet	S54319-F21-A1	0.286
DBZ1193A	Designation plate	BPZ:4864330001	0.076
DBZ1194	Protective cage	BPZ.4677110001	0.138
DBZ1190-AA	Micro terminal	BPZ:4677080001	0.001
DBZ1190-AB	Connection terminal	BPZ:4942340001	0.001

Sounder base accessories

Designation plate FDBZ291

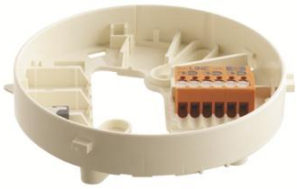
- For labeling with the location address
- Can only be used without detector base seal FDBZ295

DBZ1190-AA micro terminal and DBZ1190-AB connection terminal

- Micro terminal DBZ1190-AA
  - Cable cross section up to max. 0.5 mm²
- Connection terminal DBZ1190-AB
  - Cable cross section up to max. 2.5 mm²
  - For connecting two external alarm indicators or the cable shielding

Alarm sounder accessories

Addressable detector base FDB221 / FDB221-AA



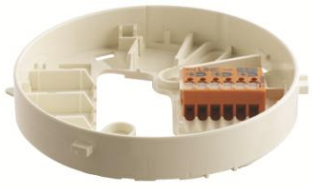
Function:

- Detector base with stilts for fire detectors with addressable signal processing
- 'Orange' connection terminals, 0.2…1.5 mm² conductor cross-section
- FDB221-AA also contains micro terminal DBZ1190-AA

Use:

- For recess-mounted cable entry
- For surface-mounted cable entry up to a cable diameter of 6 mm

Flat, addressable detector base FDB222



Function:

- Flat detector base for fire detectors with addressable signal processing
- 'Orange' connection terminals, 0.2…1.5 mm² conductor cross-section

Use:

- For flush mounting; only for recess-mounted cable entry

Sealing element FDBZ295

Function:

- For improving the protection category. However, detectors can no longer be installed or removed using the detector exchanger.

Note: Cannot be used in conjunction with designation plate FDBZ291!

Base attachment FDB291

Function:

- For routing surface-mounted cables larger than Ø 6 mm
- Detector base is secured with a snap fastener

Designation plate FDBZ291

- For labeling with the location address
- Can only be used without detector base seal FDBZ295

Base attachment humid FDB293

- For achieving a higher protection category
- For mounting in wet or humid environments
- Required when using detector heating unit FDBH291
- Required when using protective cage DBZ1194 or EMC-protective cage FDBZ294
- Mounted between detector base and ceiling
- Detector base mounted quickly: The detector base simply clicks into place in base attachment humid FDB293.

Base attachment wet FDB295

- Base attachment wet with additional integrated rubber seal for mounting in wet or humid environments
- For achieving a higher protection category
- For mounting in wet or humid environments
- Required when using detector heating unit FDBH291
- Required when using protective cage DBZ1194
- Mounted between detector base and ceiling
- Detector base mounted quickly: The detector base simply clicks into place in base attachment wet FDB295.

Designation plate DBZ1193A

- For labeling with the location address
- Can only be used with base attachment wet FDB295

Protective cage DBZ1194	
	• To protect the point detector from damage • Can only be mounted in combination with the base attachment humid FDB293 or base attachment wet FDB295

DBZ1190-AA micro terminal and DBZ1190-AB connection terminal	
	• Micro terminal DBZ1190-AA – Cable cross section up to max. 0.5 mm² • Connection terminal DBZ1190-AB – Cable cross section up to max. 2.5 mm² – For connecting two external alarm indicators or the cable shielding

Product documentation

Document ID	Title
007025	Technical manual Sounder base FDSB291
008109	Technical manual Alarm sounder FDS221
008114	Installation Sounder base FDSB291, FDSB292
008168	Installation Alarm sounder FDS221
008331	List of compatibility (for 'Sinteso™' product line)
009769	Technical manual Sounder base FDSB292

Related documents such as environmental declarations, CE declarations, etc., can be downloaded at the following Internet address:

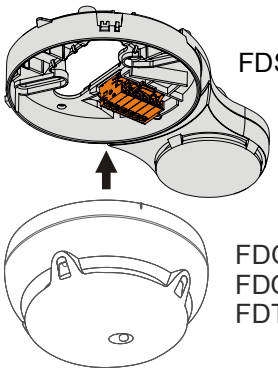
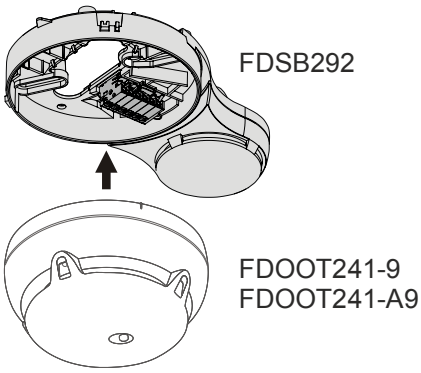
http://siemens.com/bt/download

Notes

Installation

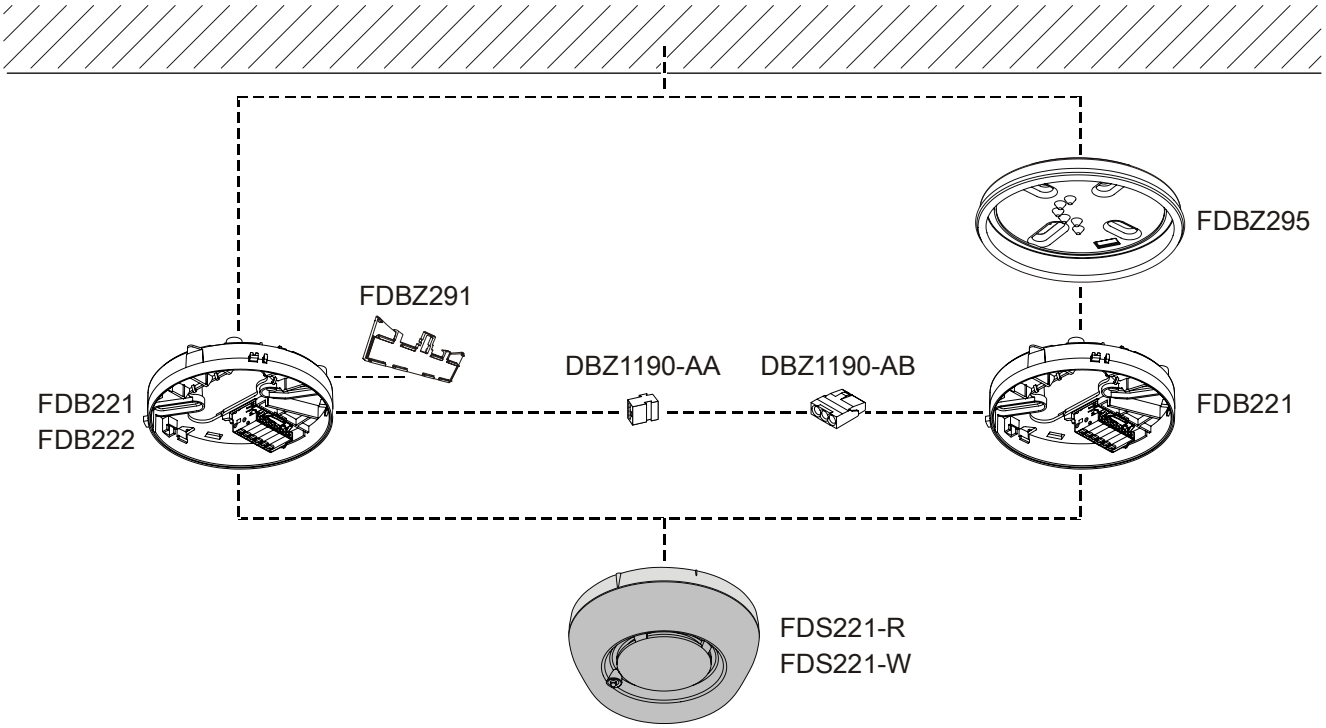
Sounder base installation

- Sounder bases FDSB291, FDSB292 form a single unit together with the point detector
- The sounder base is mounted on the ceiling
- For recess-mounted cable entry
- For surface-mounted cable entry up to a max. cable diameter of 6 mm

Sounder base FDSB291 (FDnet)	Sounder base (collective) FDSB292
	

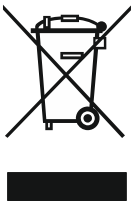
Alarm sounder installation

- Insert alarm sounders FDS221-R, FDS221-W directly in the detector base and mount on walls or ceilings
- For recess-mounted cable entry
- In the case of recess-mounted cable entry for a higher IP protection category, use sealing element FDBZ295
- For surface-mounted cable entry with a cable diameter of up to 6 mm with detector base FDB221.
  Otherwise, use base attachment FDB291, base attachment humid FDB293, or base attachment wet FDB295.



Alarm sounders and accessories

Disposal



The device is considered an electronic device for disposal in accordance with the European Guidelines and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Technical data

Supply	FDS221-R, FDS221-W	FDSB291	FDSB292
Operating voltage	DC 12…33 V	DC 12…33 V	
Operating current (quiescent) • Sound activated	Max. 250 µA 3.5 mA	Max. 150 µA 1.2 mA	
Sounds	11 2 alarm levels 3 sound levels	11 2 alarm levels 2 sound levels	1 1 alarm level 1 sound level
Sound level	80…99 dB(A)	80…88 dB(A)	84 dB(A)
Ext. Alarm indicator (AI)	2	1	
Operating temperature	-25…+70 °C	-25…+70 °C (observe point detector data)	
Storage temperature	-30…+75 °C	-30…+75 °C	
Air humidity	≤95 % rel.	≤95 % rel.	
Communication protocol	FDnet	FDnet	Collective
Conductor cross-section on detector base	According to detector base	0.2…1.5 mm²	
Color	~RAL 3000 flame red ~RAL 9010, pure white	~RAL 9010, pure white	
Protection category (IEC 60529) with • Base FDB221 or FDB222 • Base attachment FDB291 • Base FDB221 and sealing element FDBZ295 • Base attachment humid FDB293, base attachment wet FDB295	Wall mounting with feed line from below → IP43, otherwise IP40 IP44 IP54	IP43 - - - -	
Standards	EN 54-3, EN 54-17	EN 54-3	
Approvals • VdS • LPCB • FM • DNV GL (marine)	 G204073 531p 3029351 MEDB00003UV	 G204062 531u 3029351 MEDB00003UV	
System compatibility FDnet	FS20, AlgoRex, SIGMASYS	FS20, AlgoRex, SIGMASYS	-

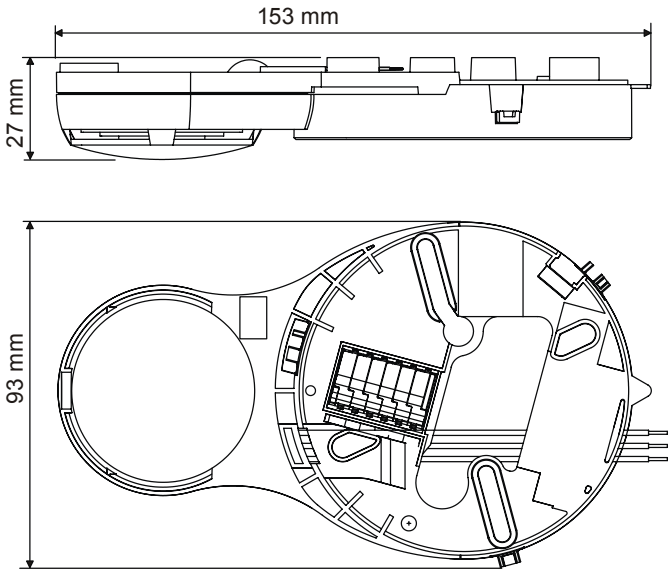
07 CE 0786	**FDS221-R**	Siemens Schweiz AG; Theilerstrasse 1a CH-6300 Zug Technical data: see doc. **008109**
FDS221-R - Sounder incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings.		
305/2011/EU (CPR): EN 54-3 / EN 54-17 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581		
The declared performance and conformity can be seen in the Declaration of Performance (DoP) and the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or https://siemens.com/bt/download		
DoP No.: 0786-CPR-20012; DoC No.: CED-FDS221		

07 CE 0786	**FDS221-W**	Siemens Schweiz AG; Theilerstrasse 1a CH-6300 Zug Technical data: see doc. **008109**
FDS221-W - Sounder incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings.		
305/2011/EU (CPR): EN 54-3 / EN 54-17 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581		
The declared performance and conformity can be seen in the Declaration of Performance (DoP) and the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or https://siemens.com/bt/download		
DoP No.: 0786-CPR-20012; DoC No.: CED-FDS221		

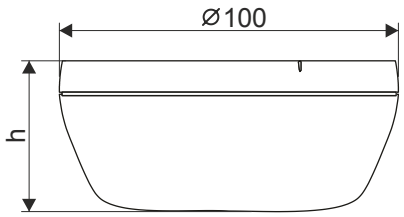
07 CE 0786	**FDSB291 / FDSB292**	Siemens Schweiz AG; Theilerstrasse 1a CH-6300 Zug Technical data: see doc. **007025/009769**
FDSB291/FDSB292 - Sounder for use in fire detection and fire alarm systems installed in buildings.		
305/2011/EU (CPR): EN 54-3 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581		
The declared performance and conformity can be seen in the Declaration of Performance (DoP) and the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or https://siemens.com/bt/download		
DoP No.: 0786-CPR-20013; DoC No.: CED-FDSB291-FDSB292		

Dimensional drawings

FDSB291, FDSB292



FDS221-X



Detector base	h
With base FDB221	52.5 mm
With base FDB222	47.5 mm
With base FDB221 and sealing element FDBZ295	55 mm

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