

# Detection Bases

## Intelligent Audible (Sounder) Base [designed for sleeping areas] Model ABHW-4S

### ARCHITECT AND ENGINEER SPECIFICATIONS

- Meets NFPA 72 code requirements for 'low-frequency, 520 Hz square-wave tones in sleeping areas'
- Meets NFPA 720 carbon-monoxide (CO) requirement for 'Temporal 4 tone with 520 Hz in sleeping areas'
- Minimizes footprint on the wall or ceiling
  - One (1) box solution
- Provides highly flexible programming and configuration options with independently controlled outputs by device
- Supports six (6) field-configurable audible -tone patterns:
  - Steady
  - American National Standards Institute (ANSI) Temporal 3
  - ANSI Temporal 4 Carbon Monoxide [CO]
  - Temporal 4 Low Power
  - March time 120 (and **Canadian** March time 30)
    - can also follow the Siemens fire alarm control panel (FACP) notification appliance circuit (NAC) output
- Compatible with Cerberus PRO intelligent detectors and Siemens 'H' / 'S'-series devices

### Product Overview

The Model ABHW-4S Audible Base from Siemens Industry Inc. is an intelligent, supervised detector base designed for use in sleeping areas of a building. Each Model ABHW-4S base generates a 520 Hz square-wave audio signal, complying with NFPA 72 Standard, as well as <sup>®</sup>UL / <sup>®</sup>ULC Listed applications.

Model ABHW-4S provides six (6) field-configurable tone patterns: two (2) volume levels are used with compatible Siemens detectors and FACPs. Steady; Temporal 3 pattern; Temporal 4 pattern; Temporal 4 with low-power; March Time 120, and **Canadian** March Time 30 are supported by each intelligent audible base for sleeping areas.

Model ABHW-4S is fully compatible with all Siemens addressable detectors listed in the detector tables included in this document.

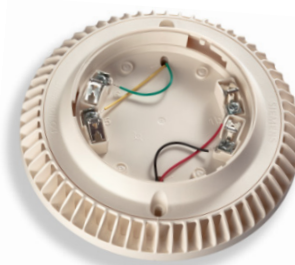
(Refer to the **Details for Ordering** section on Page 2).

When used in conjunction with other listed, compatible Siemens fire-safety components, Model ABHW-4S may be used in lieu of single / multiple station smoke alarms to achieve enhanced, system-level functionality.

Model ABHW-4S meets the requirements specified in <sup>®</sup>UL268, <sup>®</sup>ULC-S525, <sup>®</sup>ULC-S529 and also <sup>®</sup>UL464, <sup>®</sup>UL2075 including 520Hz, low-frequency requirements for 'Sleeping Area'.

## Cerberus<sup>®</sup> PRO

Fire Safety Products



Model ABHW-4S  
(Front View)



Model ABHW-4S  
(Back View)

- Bases for sleeping areas compatible with:
  - Cerberus PRO fire alarm control panels (FACPs)
  - FireFinder<sup>®</sup> XLS FACPs
  - Siemens PAD-series NAC Extenders
- <sup>®</sup>UL268, <sup>®</sup>UL464 & <sup>®</sup>UL2075 Listed; <sup>®</sup>ULC-S525, <sup>®</sup>ULC-S529 Listed; FM (#3150, #3230 & #3010) and CSFM (#7300-0067:0271) Approved

### Specifications

Model ABHW-4S consists of a standard Siemens — Fire Safety Series '11' detector-base layout — combined with supportive circuitry for Cerberus PRO FACPs and Model 'HFP' / 'SFP'-series detectors.

Additionally, each Model ABHW-4S base houses a pre-wired, audible sounder device, capable of generating a 520 Hz square-wave tone that produces a signal up to 85dBa at 10 ft. (3.1m) for localized annunciation.

Several power options are available for the Model ABHW-4S audible base, and can therefore be powered in an ordinary four-wire configuration, via use of any one (1) of the following: notification-appliance circuit (NAC); a Siemens PAD-series NAC extender; Model ZIC-4A, or any <sup>®</sup>UL Listed, 24VDC regulated power supply.

**Note:** See the Model ABHW-4S Installation and Operation Manual (IOM: **A6V10405588**) for further information.

All Model ABHW-4S bases are capable of sounding simultaneously, individually or in any combination — depending on the detector type, and when it is used and configured with a compatible Siemens FACP.

**Note:** When Model ABHW-4S bases are used with Model 'H' / 'S'-series devices, functionality is limited, and is similar to the Model ADBH-11 audible base.

# 9910

Intelligent Audible Base (for Sleeping Areas)

## Specifications — (continued)

Model ABHW-4S is a  $\text{UL}$  /  $\text{ULC}$  Listed supplementary smoke-detection device that meets or exceeds the 85dB at 10 ft. (3.1m) audibility requirement specified in  $\text{UL268}$ ,  $\text{ULC-S525}$ ,  $\text{ULC-S529}$  — as well as  $\text{UL464}$  /  $\text{UL2075}$ , including low-frequency requirement of 520Hz for 'Sleeping Areas'.

### Compatibility with SIEMENS FACPs

Model ABHW-4S functions with the following:

FACP	System Type
FireFinder® XLS	Person Machine Interface (PMI) v10.02 (or later)
	Zeus Custom-Configuration Software v10.02 (or later)
	Device Loop Card (Model DLC) v6.01 (or later)
Model FC901	Cerberus PRO 50-point addressable FACP v01.04.20 (24), Software-tool v01.02.16 (53)
Models FC922 / FC924	Software-tool v6.0.0R1 (or later)

## Application Data

The smoke detectors used with Model ABHW-4S are subject to the maximum 30 ft. center spacing (900 sq. ft.) as referred to in the National Fire Protection Association Standard 72.

This spacing, however, is based on ideal conditions — namely: smooth ceiling; no air movement, and no physical obstructions between the fire source and the detector.

The aforementioned center-spacing format should be referred to as a guide for detector-installation layout. Do not mount detectors in areas close to ventilating or air-conditioning outlets. Exposed joists or beamed ceilings may also effect safe spacing limitations for detectors.

It is mandatory for NFPA 72 guidelines and good engineering judgment be applied to device placements, spacing.

## Technical Data

### Connections

Admissible Cross-Section Cable:	12 – 18 AWG (American Wire Gauge)
Design:	Two (2) back-end blocks of up to four (4) screw terminals on each side

### Physical Properties

Operating Temperature:	32 – 120°F (0° – 49°C)
Operating Humidity:	10 – 95%, non-condensing
Sound Output:	High: $\geq 85$ dB Low: $\geq 75$ dB
Tones:	Steady; Temporal 3; Temporal 4; Temporal 4 low power; March time 120; Canadian March time 30
Mounting Box:	4-inch (10.2 cm.) square gang box

**Note:** A 4" (10.2 cm.) octagon box is not compatible with Model ABHW-4S.

## SIEMENS Cerberus® PRO

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**NOTICE** — The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice. The devices described here have specific instruction sheets that cover various technical, limitation and liability information. Copies of these instruction sheets and the *General Product Warning and Limitations* document, which also contains important information, are provided with the product and, are available from the Manufacturer. Data contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact the Manufacturer.

## Technical Data — (continued)

### Electrical Ratings

Operating Voltage:	Loop power:	16 – 33 VDC
	External power:	16 – 33 VDC
Supervisory Current (max)	From SLC loop:	250 $\mu$ A
	From external source:	1.0 mA
Alarm Current (max)	External Power:	High dBA: 65 mA @ 33VDC
		High dBA: 90 mA @ 24VDC
		High dBA: 165 mA @ 16VDC
		High dBA: 0.85 mA (from loop)
		Low dBA: 28 mA @ 33VDC
		Low dBA: 33 mA @ 24VDC
		Low dBA: 45 mA @ 16VDC
		Low dBA: 1.6 mA (from loop)

## Details for Ordering

Model	Part Number	Description
ABHW-4S	S54320-F14-A1	Audible (Sounder) Base [designed for sleeping areas]
ABHW-4SZ	S54320-F14-A2	Sleeping-Room Version (520 Hz) Audible Base, COO – USA

### Compatible Intelligent Detectors

Model	Part Number	Description
OP921	S54320-F4-A2	Optical Detector
HI921	S54320-F5-A2	Heat Detector
OH921	S54320-F6-A2	Optical / Heat Detector
OOH941	S54320-F7-A2	Dual-Optical Heat Detector
OOHC941	S54320-F8-A2	Dual-Optical Heat (w/ CO) Detector

### Compatible Remote Lamps

Model	Part Number	Description
RL-HW	500-033310	Remote Alarm Lamp, Wall
RL-HC	500-033230	Remote Alarm Lamp, Ceiling

### Compatible Model 'H' / 'S' Series Detectors

Model	Part Number	Description
HFP-11	500-033290	'H'-Series Optical / Heat Detector
HFPO-11	500-034800	'H'-Series Optical Detector
HFPT-11	500-033800	'H'-Series Heat Detector
SFP-11	500-033290C	'S'-Series Optical / Heat Detector
SFPO-11	500-034800C	'S'-Series Optical Detector
SFPT-11	500-033380C	'S'-Series Heat Detector

**Notes:** Models SFP-11, SFPO-11 and SFPT-11 detectors are approved exclusively in **Canadian** installations. Model 'H' / 'S'-series bases are limited in audible-base functionality. Contact Siemens Tech Support at 1-800 248-7976 for more details.