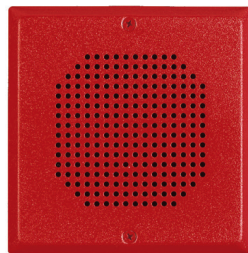


SA-S Supervised Self-Amplified Speakers and Speaker Strobes



Description

SA-S Supervised Self-Amplified Speakers and Speaker Strobes are designed to meet the critical needs for the life safety industry. These speakers and speaker strobes are a perfect fit for SCIF (Sensitive Compartmented Information Facilities) room applications.

Features

- Approvals
 - UL 1480 (speakers)
 - UL 1638, UL 1971 (speaker strobes)
- Power input voltage 16.0 to 33.0 VDC
- Wall or ceiling models
- Speaker strobes utilize Wheelock's synchronizable Multi-Candela Strobe
- 1 watt high efficiency speaker
- Frequency range of 400Hz to 4000Hz
- Mounts onto a 4" square deep backbox with an extension ring and SBB surface backbox



Powering Business Worldwide

Specifications

- Power Input Voltage
 - 16.0- 33.0 VDC
- Appliance Input Level
 - 0.5-V RMS or 25 V RMS (Switch selectable)
- Appliance Input Impedance
 - 0.5-V Setting: Greater than 400 Ohms or equivalent to less than 1/1000 W (0.001 W or 1 mW) load
 - 25-V Setting: Greater than 20 kOhms or equivalent to less than 1/32 W (.03125 W or 31.25 mW) load
- Sound Level Speaker Amplifier Current Draw
 - Level 6 (Loudest): < 120mA RMS
 - Level 5 < 97mA RMS
 - Level 4 < 80mA RMS
 - Level 3 < 68mA RMS
 - Level 2 < 60mA RMS
 - Level 1(Lowest): < 54mA RMS

Note: Please read these specifications and associated installation instructions, before using, specifying, or installing this product. Visit Eaton.com/Lifesafetynotification for current installation instructions.

General Notes

- Strobes are designed to flash at 1 flash per second minimum over their “Regulated Voltage Range.” Note that NFPA-72 specifies a flash rate of 1 to 2 flashes per second and ADA Guidelines specify a flash rate of 1 to 3 flashes per second.
- All candela ratings represent minimum effective Strobe intensity based on UL 1971.
- The volume level has been adjusted to the factory default dBA output. However, the installer may need to adjust the volume setting to better suit the application.

Drawings

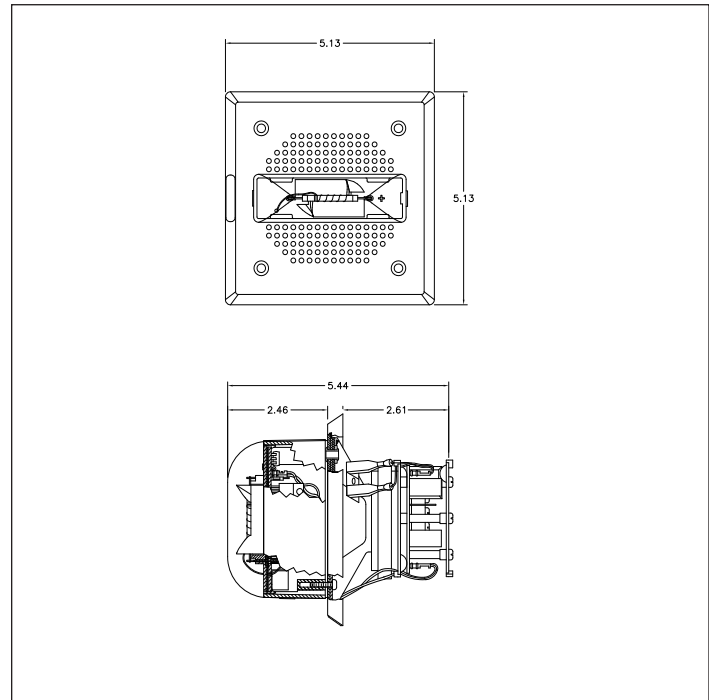


Figure 1. SA-S70 Speaker Strobes - Front & Side Views (wall mount)

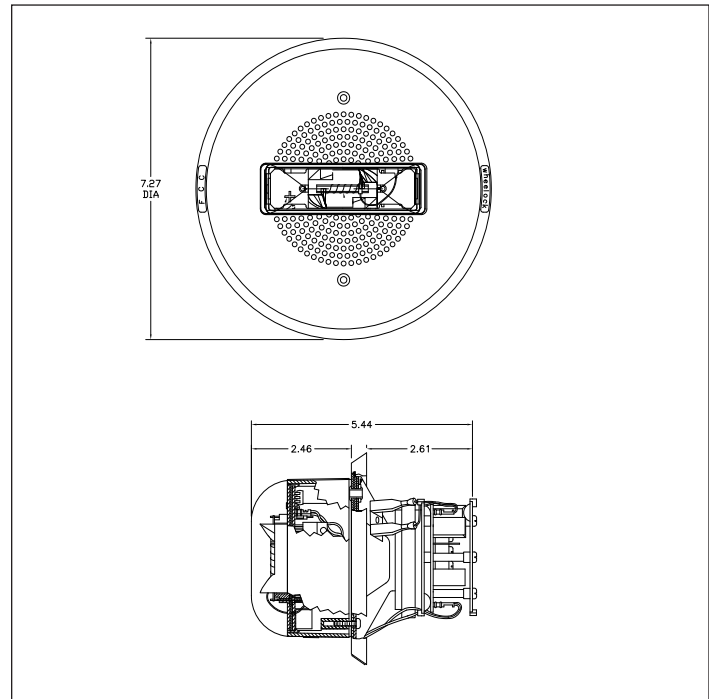


Figure 2. SA-S90 Speaker Strobes - Front & Side Views (ceiling mount)

Table 1. Average Strobe Current

Strobe	UL Max Current ①					Speaker DC Input
	15	30	75	95	110	
SA-S70-MCW						
16-33 VDC	0.060	0.092	0.165		0.220	0.120
16-33 VFWR	0.102	0.155	0.253		0.347	
SA-S90-MCC						
16-33 VDC	0.065	0.105	0.189	0.249		0.120
16-33 VFWR	0.110	0.170	0.280	0.375		

Table 2. dBA Sound Output

Sound level	All SA speakers UL Reverberant	SA-S70-24MCW SA-S90-24MCC Anechoic	SA-S70 SA-S90 Anechoic
6	84	95	97
5	81	92	94
4	77	89	91
3	74	86	88
2	71	83	85
1	68	81	83

① RMS current ratings are per UL maximum RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33v for 24v units). For strobes the UL max current is usually at the minimum listed voltage (16v for 24v units). For audibles the max current is usually at the maximum listed voltage (33v for 24v units). For unfiltered FWR ratings, see installation instructions.

② For information on mounting options, refer to specification sheet TD450028EN.

Table 3. Specification & Ordering Information

Model	Order #	Wall Mount	Ceiling Mount	Strobe Candela	Model Color	Model Color	Mounting ②	Agency Approvals	Lettering
Speakers					Red	White		UL	
SA-S90-R	1000		X		X		Q,U,V	X	N/A
SA-S90-W	1001		X			X	Q,U,V	X	N/A
SA-S70-R	1002	X			X		C,O,P,Q,R,U,Y	X	N/A
SA-S70-W	1003	X				X	C,O,P,Q,R,U,Y	X	N/A
Speaker Strobes									
SA-S90-24MCC-FR	1004		X	15/30/75/95	X		Q,U,V	X	FIRE
SA-S90-24MCC-FW	1005		X	15/30/75/95		X	Q,U,V	X	FIRE
SA-S70-24MCW-FR	1006	X		15/30/75/110	X		C,O,P,Q,R,U,Y	X	FIRE
SA-S70-24MCW-FW	1007	X		15/30/75/110		X	C,O,P,Q,R,U,Y	X	FIRE
SA-S90-24MCC-ALW	6175		X	15/30/75/95		X	Q,U,V	X	ALERT
SA-S70-24MCW-ALR	6328	X		15/30/75/110	X		C,O,P,Q,R,U,Y	X	ALERT
SA-S70-24MCW-ALW	9784	X		15/30/75/110		X	C,O,P,Q,R,U,Y	X	ALERT
SA-S90A-24MCC-ALW	6153		X	11/22/56/71 (Amber)		X	Q,U,V	X	ALERT

Architects and Engineers Specifications

The SA-S Self-Amplified Speakers and Speaker Strobes shall be UL Listed under Standards UL 1480 (Standard for Speakers for Fire Alarm, Emergency, and Commercial and Professional Use). The Speaker Strobe models shall be UL Listed under Standards UL 1971 (Standard for Signaling Devices for the Hearing Impaired) and for indoor fire protection service.

The Series SA-S Self-Amplified Speakers and Speaker Strobes shall provide a choice of 6 different sound output levels and operate with audio input levels of 0.5 V RMS and 25 V RMS, all by means of selectable switch settings.

The Series SA-S Self-Amplified Speakers and Speaker Strobes shall incorporate a high efficiency speaker for maximum output at minimum power across a frequency range of 400Hz to 4000Hz, and feature a sealed back construction for extra protection and improved audibility. All inputs shall be polarized for compatibility with standard reverse polarity supervision of circuit wiring via a Control Panel.

The SA-S Series Multi-Candela Speaker Strobe models shall offer four selectable light output intensities in one unit and can provide a non synchronized strobe appliance when connected directly to a Fire Alarm Control Panel (FACP), or provide a synchronized strobe appliance when used in conjunction with a Dual Sync Module (DSM) or Wheelock's Power Supplies listed for synchronization.

Note: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc., dba Eaton standard terms and conditions.

The ceiling mount Speaker Strobe models shall provide 15/30/75/95 candela options. The wall mount Speaker Strobe models shall provide 15/30/75/110 candela options. All strobe candela options shall be field selectable via a tamper resistant selector switch.

The Strobe uses a Xenon flashtube with solid-state circuitry enclosed in a rugged polycarbonate lens to provide maximum visibility and reliability for effective visible signaling.

The SA-S Series shall be listed for indoor use.

UL



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Printed in USA
Publication No. TD450047EN
February 2021



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