S24-177

High Candela Strobe

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 06/09/16

Features

- Nominal Voltage 24 VDC
- Fixed177 candela strobe
- Super-Slide® Bracket - ease of supervision testing
- Checkmate® - Instant voltage verification
- Unit Dimensions: 5” (12.7 cm) high x 4.5” (11.43 cm) wide x 2.5” (6.35 cm) deep.
- Synchronize strobe and/or horn with AVSM Control Module
- Pre wire entire system, install mounting bracket, then install signals
- Documented lower installation and operating costs
- Input terminals 12 to 18 AWG
- Switch selection for high or low dBA
- Switch for chime, whoop, mechanical and 2400Hz tone
- Switch for continuous or temporal 3 (not available on whoop tone)
- Tamper proof re-entrant grill
- Surface mount with the AV-BB
- Silence horn while strobes remain flashing
- Faceplate available in red or off-white

SIGNALING UL LISTED
S3247

7135-0328:0217 (HS24-177)
7125-0328:0216 (S24-177)

Applications

The S/HS24-177 Series is a low profile strobe, or horn/strobe combination that offers dependable audible and visual alarms with the absolute lowest current available.

The S/HS24-177 Series has a minimum flash rate of 1Hz regardless of input voltage.

The S/HS24-177 Series is shipped with the standard 4” mounting plate which incorporates the popular Super-Slide® feature that allows the installer to easily test for supervision. The product also features a locking mechanism which secures the product to the bracket without any screws showing.

The S/HS24-177 Series also features the patented Checkmate® -Instant Voltage Verification feature which allows the installer to measure the voltage drop and match it to the blueprint.

The S/HS-177 Series appliances are ANSI/UL 464, ANSI/UL 1971 and/or ANSI/UL 1638 listed for use with fire protective systems and are warranted for five years from date of purchase.

Product Listings

- ANSI/UL 464, ANSI/UL 1971 and/or ANSI/UL 1638 Listed

Product Compliance

- NFPA 72
- Americans with Disabilities Act (ADA)
- IBC/IFC/IRC
- City & State Ordinances/Laws/Regulations
- Quality Management System is certified to: ISO 9001:2008

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Tone Switch Locations

TONE	SWITCH POSITION		
	3	4	5
Mechanical Temporal 3	ON	ON	ON
Mechanical - Continuous	OFF	ON	ON
2400Hz - Temporal 3	ON	OFF	ON
2400Hz - Continuous	OFF	OFF	ON
Chime - Temporal 3	ON	ON	OFF
Chime - Continuous	OFF	ON	OFF
Whoop	ON	OFF	OFF
Whoop	OFF	OFF	OFF

***NOTES*:**

- Switch Positions 1 and 2 in the OFF position to select isolated horn and strobe power inputs
- Switch Position 6 ON = HIGH dBA
- Switch Position 6 OFF = LOW dBA

Super Slide® Mounting Bracket

Allows the installer to pre-wire the system, test for system supervision, remove the signal head until occupancy, switch out signals without changing mounting brackets and has locking edge connector for snap-in-place installation.

Checkmate® Instant Voltage Verification

It is often necessary to confirm the voltage drop along a line of devices. The access holes are provided in the back of the terminal block to allow the voltage to be measured directly without removing the device. Typically, this would be done at the end of line to confirm design criteria. Most measurements will be taken using the S+ and S- locations although access is provided to other locations.

***NOTE*: Care should be taken to not short the test probes.**

To remove bezel, grip both sides of bezel and pull in a download and outward motion.

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S24-177 VDC Low Profile Evacuation Strobe

Model Number	Item Number	Nominal Voltage	Strobe Candela
S24-177R	4890014	24 VDC	177
S24-177W	4890015	24 VDC	177
S24-177PR	4890016	24 VDC	177
S24-177 PW	4890017	24 VDC	177

Model Designations:

P = Plain (no lettering)

R = Red faceplate W = White Faceplate.

Plain units are non-returnable.

Al

White - 4890263

Agent Bezel Available:
Red - 4890262
White - 4890263

HS24-177 24 VDC Fixed Candela, Low Profile Evacuation Horn/Strobe

Model Number	Item Number	Nominal Voltage	Strobe Candela	Reverberant dBA @ 10ft., per ANSI/UL 464	In Anechoic Room dBA @ 10ft.
HS24-177R	4890034	24 VDC	177	70-82	100
HS24-177W	4890035	24 VDC	177	70-82	100
HS24-177PR	4890036	24 VDC	177	70-82	100
HS24-177PW	4890037	24 VDC	177	70-82	100

S/HS24-177 Series Current Ratings (mA)

	24VDC (16-33 Volts)	
Candela	24 VDC	UL Max[1]
177cd	96mA	213mA

HS-24 Horn Decibel and Current Ratings			
Horn Mode	Minimum dBA @ 10ft. per ANSI/UL 464 (HIGH)	Minimum dBA @ 10ft. per ANSI/UL 464 (LOW)	Regulated 12VDC Max. Operating @ High Setting (mA)
Temp 3 2400Hz	78	71*	28
Temp 3 Mechanical	76	70*	25
Temp 3 Chime	70*	66*	15
Continuous 2400Hz	81	74*	28
Continuous Mechanical	80	72*	25
Continuous Chime	70*	66*	15
Whoop	82	69*	56

NOTES:

- Operating temperature: 32°to 120°F (0° to 49°C). The 177 Series is not listed for outdoor use.

  The sound output for the temporal 3 tone is rated lower since the time the horn is off is averaged into the sound output rating. While the horn is producing a tone in the temporal 3 mode its sound pressure is the same as the continuous mode.

- For nominal and peak current across UL regulated voltage range for filtered DC power and unfiltered (FWR [Full Wave Rectified]) power, see installation manual.

* Operating the horn in this mode at this voltage will result in not meeting the minimum ANSI/UL 464 reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high dBA setting for public mode application (not applicable when using the chime tone. The chime tone is always private mode).

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

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Architect & Engineering Specifications

The audible and/or visible signal shall be Potter S24-177 strobe and Potter HS24-177 horn/strobe Series or be listed by Underwriters Laboratories, Inc. per ANSI/UL 1971 and/or ANSI/UL 464. The notification appliance shal California State Fire Marshal (CSFM).

The notification appliance (combination audible/visible) shall produce a peak sound output of 100dBA or greater at 24VDC as measured in an anechoic chamber. The signaling appliance shall also have the capability to silence the audible signal while leaving the visible signal energized with the use of a single pair of power wires. Additionally, the user shall be able to select either continuous or temporal tone output with the temporal signal having the ability to be synchronized.

Unit shall be capable of being installed so that any unauthorized attempt to change the candela setting will result in a trouble signal at the fire alarm control panel.

The audible/visible and visible signaling appliance shall also maintain a minimum flash rate of 1Hz or up to 2Hz regardless of power input voltage.

The appliance shall be polarized to allow for electrical supervision of the system wiring. The unit shall be provided with a mounting bracket with terminals and barriers for input/output wiring and be able to mount to a single gang or double gang box or double workbox without the use of an adapter plate. The unit shall have an input voltage range of 16-33 volts with either direct current or full wave rectified power for 24VDC models.

The appliance shall be capable of testing supervision without disconnecting wires, verify voltage without removing unit and be capable of mounting to a surface back box.

Conventional Wiring Diagrams for Emergency Notification Evacuation Series

***NOTES*:**

- All strobes are designed to flash as specified with continuous applied voltage. Strobes should not be used on coded or pulsing signaling circuits. However, use of the Potter AVSM control module or Gentex synchronization protocol is permitted to synchronize the strobe, horn, and/or mute the horn.
- **FOR SYNCHRONIZATION WIRING INFORMATION, REFERENCE AVSM CONTROL MODULE DATA SHEET (8830064) AND/OR AVSM CONTROL MODULE MANUAL FOR SYNCHRONIZATION MODULE WIRING DIAGRAMS. AVSM CONTROL MODULE DATA SHEET CAN BE OBTAINED AT http://pottersignal.com OR CALL POTTER ELECTRIC AT 1-800-325-3936.**