POTTER
The Symbol of Protection

CS/CHS
SELECTABLE CANDEL
CEILING MOUNT

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 12/07/16

LISTED
S3247

Product includes a 5 year warranty

Features

- Nominal voltage 24 VDC
- Tamperproof field selectable candela options 15, 30, 75, 95, 115, & 150
- Super-Slide® Bracket - Ease of Supervision Testing
- Checkmate® - Instant Voltage Verification
- Synchronize strobe and/or horn with Gentex AVSM Control Module
- Prewire 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 Selection for 2400Hz or mechanical Tone
- Switch Selection for Continuous or Temporal 3
- Tamperproof re-entrant grill
- Surface mount with the CLNGBB (Ceiling Surface Mount Back Box)
- Silence audible while visual appliance will remain flashing (for use in accepted jurisdictions)
- Faceplate available in red or off-white

Operating Temperature:

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

Unit Dimensions

- 6" (15.24 cm) x 2.6" (6.604 cm)

Description

The Potter CS/CHS Series is a ceiling mount strobe or horn/strobe combination that offers dependable audible and visual alarms and the lowest current consumption.

The CS/CHS offers tamperproof field selectable candela options of 15, 30, 75, 95, 115 and 150 candela.

The CHS horn offers a continuous or synchable temporal three in 2400Hz and mechanical tone. All tones are easy for the professional to change in the field by using switches. The models are shipped from the factory in the temporal three alarm mode.

The CS Series has a very minimal operating current and has a minimum flash rate of 1Hz regardless of input voltage.

The Ceiling Mount Series comes standard with the 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 CS/CHS also features the patented Checkmate® - Instant Voltage Verification feature which allows the installer to check the voltage drop draw without removing the signal.

The CS Series appliances are ANSI/UL 464 and ANSI/UL 1971 listed for use with fire protective systems.

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Mounting Super-Slide®

Checkmate® Instant Voltage Verification

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 the line to confirm design criteria. Most measurements will be taken using the S+ and S- locations although access is provided to other locations. NOTICE: CARE SHOULD BE TAKEN TO NOT SHORT THE TEST PROBES.

Switch Locations

Switch positions 1 and 2 in the down position to select isolated horn and strobe power inputs. Switch 3 selects between temporal or non-temporal tone. Up is temporal. Switch 4 selects between mechanical or high frequency tone. Up is mechanical. Switch 5 selects between high or low dBA. Up is high dBA.

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CS Series 24 Volt Ceiling Mount Selectable Strobe

Model Number	Part Number	Nominal Voltage	Candela
CS-24R	4890020	24 VDC	15, 30, 75, 95, 115, 150
CS-24W	4890021	24 VDC	15, 30, 75, 95, 115, 150
CS-24PR	4890022	24 VDC	15, 30, 75, 95, 115, 150
CS-24PW	4890023	24 VDC	15, 30, 75, 95, 115, 150

CHS Series 24 Volt Ceiling Mount Selectable Horn/Strobe

Model Number	Part Number	Nominal Voltage	Candela	Reverberant dBA @ 10 ft. per ANSI/UL 464	In Anechoic Room dBA @ 10 ft.
CHS-24R	4890040	24 VDC	15, 30, 75, 95, 115, 150	81-86	90
CHS-24W	4890041	24 VDC	15, 30, 75, 95, 115, 150	81-86	90
CHS-24PR	4890042	24 VDC	15, 30, 75, 95, 115, 150	81-86	90
CHS-24PW	4890043	24 VDC	15, 30, 75, 95, 115, 150	81-86	90

Model Designations:

C = Ceiling Mount S = Strobe HS = Horn/Strobe
R = Red Faceplate W = White Faceplate

All units are available in plain (no lettering).
Plain units are non-returnable.

CS24 Product Strobe Current Ratings (mA)

	Candela	15 cd	30 cd	75 cd	95 cd	115 cd	150 cd
24 VDC (16-33 Volts)	24 VDC	72 mA	101 mA	167 mA	200 mA	214 mA	286 mA
	UL Max[1]	120 mA	120 mA	200 mA	220 mA	290 mA	321 mA

CHS24 Product Horn Decibel and Current Ratings (mA)

Horn Mode	Minimum dBA @ 10 ft. per ANSI/UL 464 (HIGH)	Minimum dBA @ 10 ft. per ANSI/UL 464 (LOW)	Regulated 24 VDC Max. Operating @ High Setting (mA)
Temp 3 2400Hz	83	75	23
Temp 3 Mechanical	81	73*	22
Continuous 2400Hz	86	78	23
Continuous Mechanical	84	76	22

NOTES:

- 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.
- Potter does not recommend using a coded or pulsing signaling circuit with any of our strobe products.
- 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).
- 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 visible and audible/visible signal shall be Gentex model GCS or GCC or approved equal and shall be listed by Underwriters Laboratories Inc. per ANSI/UL 1971 for the GCS and ANSI/UL 464 for the GCC. The notification appliance shall also be listed with the California State Fire Marshal (CSFM).

The notification appliance (combination audible/visible units and audible units only) shall produce a peak sound output of 90dBA or greater as measured at 24VDC 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.

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 have an operating current of 72mA or less at 24VDC for the 15 candela strobe circuit.

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 with barriers for input/output wiring and be able to mount to a single gang or double gang box or double workbox with 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.

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

Conventional CS/CHS Series Wiring Diagrams

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 Gentex 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 (8830050) AND/OR AVSM CONTROL MODULE MANUAL FOR SYNCHRONIZATION MODULE WIRING DIAGRAMS. AVSM CONTROL MODULE DATA SHEET AND MANUAL CAN BE OBTAINED AT http://www.pottersignal.com OR CALL POTTER ELECTRIC AT 1-800-325-3936.**