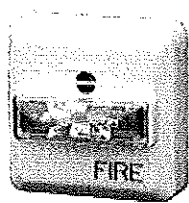


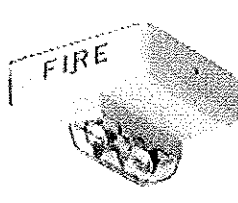
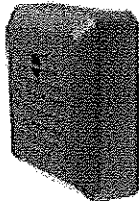
'08 Series Notification Appliances

ZH & ZR – Strobes, Horns, & Horn / Strobes

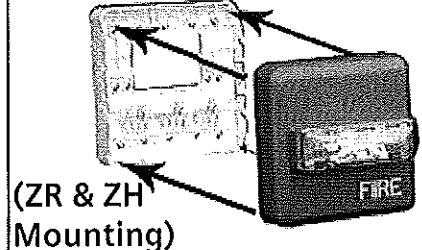
Application: Indoor



ZH Series



ZR Series



Product Overview

- Strobes can be synchronized using the Siemens DSC sync modules, FS-250 panel, XLS panel, or PAD-3 power supply with built-in sync protocol
- Selectable Continuous Horn or Temporal (Code-3) Tones with 90 or 95 dBA selectable setting (ZH)
- Ceiling-mount models feature field-selectable Candela settings of 15/30/75/95cd and 115/177cd
- Wall-mount models feature field-selectable Candela settings of 15/30/75/110cd and 135/185cd
- Base plate is protected by a disposable cover, and the appliances can quickly snap onto the base after the walls are painted
- Strobes produce 1 flash per second
- "Special Applications" listed with Siemens panels
- EZ Mount Universal Mounting Plate (ZBB) – uses single plate for ceiling and wall mount installations
- EZ Mount design – with separate base plate – provides ability to pre-wire the base and test the circuit wiring before the walls are covered
- ©UL Listed & ©ULC Listed;
FM, CSFM & NYMEA Approved
- ADA / NFPA compliant

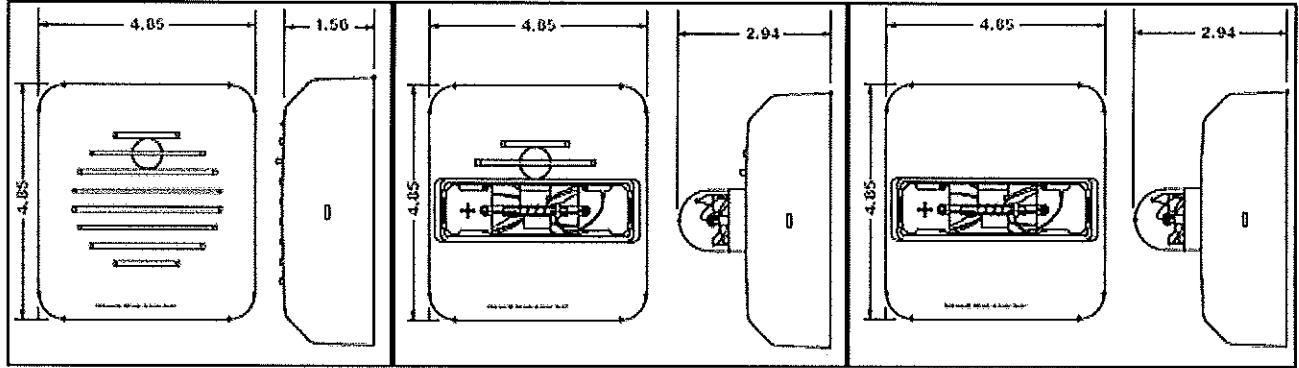
Specifications

- **General**
 - Audible/Visual notification appliances shall be listed for indoor use only
 - Appliances shall be listed under ©UL Standard 1971 (Standard for Safety Signaling Devices for Hearing Impaired) and ©UL Standard 464 (Fire Protective Signaling)
 - Appliances shall use a universal back plate, which shall allow mounting to a single-gang, double-gang, 4-inch-square, 4"-octal, or a 3-1/2"-octal backbox
 - Two-wire appliance wiring shall be capable of directly connecting to the mounting back plate
 - Continuity check shall occur for entire NAC circuit prior to attaching any audible / visual-notification appliances
 - Dust cover shall fit and protect the mounting plate
 - Dust cover shall be easily removed when the appliance is installed over the back plate
 - Removal of an appliance shall result in a trouble condition by the Fire Alarm Control Panel (FACP)

Specifications – (continued)

- **Strobes**
 - Strobe appliances shall produce a minimum flash rate of 60 flashes per minute (1 flash per second) over the Regulated Input Voltage Range, and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens
 - Strobes shall be available with two or four field-selectable settings in one unit, and shall be rated – per @UL 1971 – for up to:
 - 15/30/75/110cd for wall mounted
 - 135/185cd for wall mounted
 - 15/30/75/95cd for ceiling mounted
 - 115/177cd for ceiling mounted
 - Strobes shall operate over an extended temperature range of 32°F to 120°F (0°C to 49°C), and be listed for maximum humidity of 95% RH
 - Strobe inputs shall be polarized for compatibility with standard reverse-polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP)
- **Audibles and Audible / Strobe Combinations**
 - Horns and horn / strobes shall be listed for indoor use under @UL Standard 464
 - Horns shall be able to produce continuous synchronized output or a temporal code-3 synchronized output
 - Horns shall have at least 2 sound-level settings of 90 and 95 dBA
- **Synchronization Modules**
 - The strobe portion, when synchronization is required, shall be compatible with DSC sync modules, FS-250 panel, XLS panel, or PAD-3 power supply with built-in sync protocol
 - The strobes shall not drift out of synchronization at any time during operation
 - Audibles and strobes shall be able to synchronize on a 2-wire circuit with the capability to silence the audible, if required
 - Strobes shall revert to a non-synchronized flash-rate, if the sync module or Power Supply should fail to operate (i.e. – contacts remain closed)
 - All notification appliances shall be listed for Special Applications:
 - Strobes are designed to flash at 1-flash-per-second minimum over their “Regulated Input Voltage Range”
 - **Note:** 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 Standard 1971
 - Series ZH Strobe products are listed under @UL Standards 1971 and 464 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%)
 - Series ZH horns are listed under @UL Standard 464 for audible signal appliances (Indoor use only)

Mounting Diagram



(Shown In Inches)

Mounting Options

Figure 3: Installation

Figure 4: Removal (See step 8 below)

1. Install mounting plate as shown in figure 1 to a single-gang, double-gang, 4" square, 4" octagon, or a 3 1/2" octagon backbox with the provided pan head screws. To remove dust cover, place thumb and index finger on top edges of cover and pull off cover.
2. Connect field wiring per figures 2 and 3.
3. Address wires back into backbox.
4. Place dust cover over mounting plate to protect the terminals while performing wiring continuity check.
5. Remove dust cover before snapping or installing the appliance onto the mounting plate per fig 3.
6. Important: Device only has one mounting orientation. Match the top of the base to the top of the device.
7. If it is desired to further secure the device to the base, then two optional screws are provided. To install these screws punch out the screw holes located at the top and bottom of the device.
8. To remove the appliance, push a small flat-bladed screwdriver into the side opening. The screwdriver must clear the snap release opening by 1/4" to disengage the snap. Do not pry off housing with the screw driver. Apply pressure with screw driver, inserted in either side opening, as shown in Fig 4 to release the housing.

Technical Data

| | | ZH and ZH-MC Horn Reverberant dBA per UL464 [ZH-MC and ZH at 24V] | | |
|----------------------------|------|--|-----|-------|
| | | 16.0V | 24V | 33.0V |
| Continuous Horn | High | 83 | 87 | 90 |
| | Low | 77 | 81 | 83 |
| Code 3 Horn or March Time* | High | 79 | 82 | 86 |
| | Low | 72 | 76 | 79 |

*Available in sync mode only

| ZH Horn Current Draw | | |
|----------------------|--------------|-------------|
| In (Amps) | Horn Setting | 16-33 Volts |
| DC | High* | 0.044 |
| | Low* | 0.018 |
| FWR | High* | 0.075 |
| | Low* | 0.045 |

*Current Draw is the same for the Continuous Horn, Code 3 Horn, and March Time Settings.

Technical Data – (continued)

| UL Listed Models and Ratings | | | | | |
|------------------------------|---|---|------|-----------------|---------------------------|
| Models* | Operating Voltage (Special Application) [Per UL 1971] (VDC/VRMS) | Voltage Range [Per UL- 5526-02] (VDC/VRMS) | Horn | Mounting | Strobe Candela (cd) |
| ZR-MC | 16.0-33.0 | 20.0-31.0 | — | Wall | 15/30/75/110 |
| ZR-HMC | 16.0-33.0 | 20.0-31.0 | — | Wall | 135/185 |
| ZR-MC-C | 16.0-33.0 | 20.0-31.0 | — | Ceiling | 15/30/75/95 |
| ZR-HMC-C | 16.0-33.0 | 20.0-31.0 | — | Ceiling | 115/177 |
| ZH-MC | 16.0-33.0 | 20.0-31.0 | X | Wall | 15/30/75/110 |
| ZH-HMC | 16.0-33.0 | 20.0-31.0 | X | Wall | 135/185 |
| ZH-MC-C | 16.0-33.0 | 20.0-31.0 | X | Ceiling | 15/30/75/95 |
| ZH-HMC-C | 16.0-33.0 | 20.0-31.0 | X | Ceiling | 115/177 |
| ZH | 16.0-33.0 | 20.0-31.0 | X | Wall or Ceiling | — |

* Available in red and white

| UL Current Ratings (ZR Strobe Only) Maximum RMS Current (AMPS) | | | | | | | | | | | | | |
|---|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | MC | | | | HMC | | MC-C | | | | HMC-C | |
| | | 15cd | 30cd | 75cd | 110cd | 135cd | 185cd | 15cd | 30cd | 75cd | 95cd | 115cd | 177cd |
| DC | 16-33VDC | 0.064 | 0.098 | 0.175 | 0.233 | 0.318 | 0.445 | 0.069 | 0.111 | 0.200 | 0.264 | 0.318 | 0.445 |
| FWR | 16-33VRMS | 0.108 | 0.164 | 0.268 | 0.368 | 0.482 | 0.684 | 0.117 | 0.180 | 0.297 | 0.398 | 0.482 | 0.684 |

| UL Current Ratings ZH Horn/Strobe Maximum RMS Current (AMPS) | | | | | | | | | | | | | | |
|---|-----------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | Horn Setting | MC | | | | HMC | | MC-C | | | | HMC-C | |
| | | | 15cd | 30cd | 75cd | 110cd | 135cd | 185cd | 15cd | 30cd | 75cd | 95cd | 115cd | 177cd |
| DC | 16-33VDC | High* | 0.078 | 0.113 | 0.195 | 0.259 | 0.371 | 0.506 | 0.087 | 0.131 | 0.222 | 0.292 | 0.371 | 0.506 |
| | | Low* | 0.070 | 0.107 | 0.188 | 0.246 | 0.324 | 0.455 | 0.075 | 0.121 | 0.213 | 0.277 | 0.324 | 0.455 |
| FWR | 16-33VRMS | High* | 0.141 | 0.200 | 0.302 | 0.406 | 0.521 | 0.722 | 0.149 | 0.216 | 0.331 | 0.436 | 0.521 | 0.722 |
| | | Low* | 0.123 | 0.179 | 0.290 | 0.391 | 0.497 | 0.699 | 0.131 | 0.195 | 0.319 | 0.421 | 0.497 | 0.699 |

* Current Draw is the same for the Continuous Horn;
Code 3 Horn and March Time Settings

Details for Ordering – (Including Mounting Options & Agency Approvals)

| | | Agency Approvals | | | | | | |
|-----------------|----------------|--|----------------------|----|-----|----|------|--|
| Model Number | Part Number | Description | Mounting Options* | UL | ULC | FM | CSFM | |
| ZH-R | 500-636159 | Z Horn: Red | B,D,E,F | X | X | X | X | |
| ZH-W | 500-636160 | Z Horn: White | B,D,E,F | X | X | X | X | |
| ZH-MC-R | 500-636161 | Z Horn: Multi Candela (Wall), Red | B,D,E,F | X | X | X | X | |
| ZH-MC-W | 500-636162 | Z Horn: Multi Candela (Wall), White | B,D,E,F | X | X | X | X | |
| ZH-HMC-R | 500-636163 | Z Horn: Hi Multi Candela (Wall), Red | B,D,E,F | X | X | X | X | |
| ZH-HMC-W | 500-636164 | Z Horn: Hi Multi Candela (Wall), White | B,D,E,F | X | X | X | X | |
| ZH-MC-CR | 500-636165 | Z Horn: Multi Candela (Ceiling), Red | B,D,E,F | X | X | X | X | |
| ZH-MC-CW | 500-636166 | Z Horn: Multi Candela (Ceiling), White | B,D,E,F | X | X | X | X | |
| ZH-HMC-CR | 500-636167 | Z Horn: Hi Multi Candela (Ceiling), Red | B,D,E,F | X | X | X | X | |
| ZH-HMC-CW | 500-636168 | Z Horn: Hi Multi Candela (Ceiling), White | B,D,E,F | X | X | X | X | |
| ZR-MC-R | 500-636169 | Z Strobe: Multi Candela (Wall), Red | B,D,E,F | X | X | X | X | |
| ZR-MC-W | 500-636170 | Z Strobe: Multi Candela (Wall), White | B,D,E,F | X | X | X | X | |
| ZR-HMC-R | 500-636171 | Z Strobe: Hi Multi-Candela (Wall), Red | B,D,E,F | X | X | X | X | |
| ZR-HMC-W | 500-636172 | Z Strobe: Hi Multi-Candela (Wall), White | B,D,E,F | X | X | X | X | |
| ZR-MC-CR | 500-636173 | Z Strobe: Multi Candela (Ceiling), Red | B,D,E,F | X | X | X | X | |
| ZR-MC-CW | 500-636174 | Z Strobe: Multi Candela (Ceiling), White | B,D,E,F | X | X | X | X | |
| ZR-HMC-CR | 500-636175 | Z Strobe: Hi Multi Candela (Ceiling), Red | B,D,E,F | X | X | X | X | |
| ZR-HMC-CW | 500-636176 | Z Strobe: Hi Multi Candela (Ceiling), White | B,D,E,F | X | X | X | X | |
| ZBB-R | 500-636193 | Accessory -- (Includes base, dust cover, mounting screws and installation sheet) | | | | | | |
| ZBB-W | 500-636194 | Accessory -- (Includes base, dust cover, mounting screws and installation sheet) | | | | | | |

X = listed / approved

* = Refer to catalog sheet #: 2585 for detailed mounting options

Notice: This marketing catalog sheet is not intended to be used for system design or installation purposes.
For the most up-to-date information, refer to each product's installation instructions.

SIEMENS Industry, Inc.
Building Technologies Division

Fire Safety
8 Fernwood Road
Florham Park, NJ 07932
Tel: (973) 593-2600
FAX: (908) 547-6877
URL: www.SBT.Siemens.com/FIS

(51)
Printed in U.S.A.

Fire Safety
2 Kenview Boulevard
Brampton, Ontario
L6T 5E4 / Canada
Tel: (905) 799-9937
FAX: (905) 799-9858

December 2009
Supersedes sheet dated 7/07
(Rev. 1)